## Consumption Estimates

# State
# Energy Data
# Report

## 1999

## State Energy Data Report 1999

### Consumption Estimates

The *State Energy Data Report 1999* presents estimates of annual energy consumption at the State and national levels by major economic sector and by principal energy type for 1960, 1965, 1970, 1975, 1980, 1985 and 1990 through 1999. Included in the report are documentation describing how the estimates were made for each type of energy, the source references for all input data, and a summary of changes from the *State Energy Data Report 1997*, which was published in September 1999.

Publication of this report is in keeping with responsibilities given to the Energy Information Administration (EIA) in Public Law 95–91 (Department of Energy Organization Act), which states, in part, in Section 205(a)(2), that:

> The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze, and disseminate data and information....

### Contacts

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# State Energy Data Report 1999

## Consumption Estimates

## May 2001

# Contents

# Introduction

## Purpose

The *State Energy Data Report* (*SEDR*) provides annual time series estimates of State-level energy consumption by major economic sectors. The estimates are developed in the Combined State Energy Data System (CSEDS), which is maintained and operated by the Energy Information Administration (EIA). The goal in maintaining CSEDS is to create historical time series of energy consumption by State that are defined as consistently as possible over time and across sectors. CSEDS exists for two principal reasons: (1) to provide State energy consumption estimates to Members of Congress, Federal and State agencies, and the general public and (2) to provide the historical series necessary for EIA's energy models.

## System and Report

Efforts are made to ensure that the sums of the State data equal the national totals as closely as possible for each energy type and end-use sector as published in other EIA publications. Estimates in this *State Energy Data Report* (*SEDR*) are generally comparable to the statistics in the *Annual Energy Review 1999* and the *Monthly Energy Review*, March 2001.

Due to page-size constraints, *SEDR* tables show data for selected years from 1960 through 1989; however, data for all years 1960 forward are maintained in CSEDS, are included in the data files available via Internet, and are covered by the documentation in this report.

Extensive documentation follows the data tables in this report. Appendix A describes how the estimates were derived for each individual energy source and lists the sources of all data series. Appendix B lists alphabetically all of the variable names and formulas used. Appendix C lists the conversion factors used to convert physical units into British thermal units and cites the sources for those factors. Appendix D provides the State resident population statistics that are used in per capita calculations. Appendix E provides metric and other physical conversion factors for measures used in energy analyses. Appendix F contains carbon dioxide emission factors. Appendix G summarizes the changes made since the last report, which was released in September 1999. Appendix H lists other EIA reports containing State-level data.

## Improvements

The methods used toestimate several of the consumption series were refined in this version of CSEDS. Although U.S. total petroleum coke consumption at petroleum refineries remains the same, a more accurate allocating series is used to estimate the State values for 1960 forward. Electricity imports and exports are estimated using less complex methodology assumptions for 1990 forward. Motor gasoline consumption is converted from barrels to British thermal units by using new factors that vary annually for 1994 forward. Estimates of nonutility power producers' electricity generation from renewable energy sources are revised in this report to include estimates for smaller generators and to represent net generation rather than the gross generation previously available.

**Appendix G.** Detailed information about all data revisions in this edition of *SEDR* is contained in Appendix G. All data with revisions since the last edition of CSEDS that are large enough to be seen in the report tables' level of rounding are preceded with an "R" in the report tables.

## Data

**Estimation Methodologies.** CSEDS develops estimates of energy consumption by principal energy sources and major end-use sectors, by State, for a 40-year period. Energy consumption is estimated by using data from existing surveys of energy suppliers that report consumption, sales, or distribution of energy at the State level. Most of the CSEDS estimates rely directly on collected State-level consumption data. (See box below that summarizes the status of current data sources used.) Some consumption estimates in CSEDS are based on a variety of surrogate measures. The measures were selected principally on the basis of applicability as an

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### Collected Data and Estimated Values in CSEDS

**Coal.** U.S. anthracite, bituminous coal and lignite, and total coal consumption data by sector are taken directly from EIA's *Quarterly Coal Report (QCR)* or are unpublished data from EIA's Weekly Coal Production database. Total coal consumption by State and for most sectors is from the *QCR*, except where values are withheld and must be estimated. The State-level disaggregation of the *QCR*'s combined residential and commercial sector and the combined anthracite and bituminous coal and lignite use in all sectors (except electric utilities) are estimates. Data on electric utility coal consumption by State and coal type are data from the Form EIA-759, "Monthly Power Plant Report," database.

**Natural Gas.** Natural gas consumption by State and sector come directly from the EIA's *Natural Gas Annual (NGA)*. Natural gas consumed as lease fuel and plant fuel and natural gas delivered to industrial consumers are combined in CSEDS as industrial sector consumption. Natural gas consumed as vehicle fuel and pipeline fuel are combined in CSEDS as transportation sector consumption.

**Petroleum.** U.S. total consumption for each petroleum product is the "product supplied" data from EIA's *Petroleum Supply Annual*. State values for distillate fuel and residual fuel consumption at electric utilities are unpublished data from EIA's Form EIA-759 database. All other State and sector values for consumption of petroleum products are estimates based on sales data from several sources.

**Renewable Energy**. • Residential and commercial sectors consumption of wood, geothermal, and solar energy are estimated. • Industrial consumption of hydroelectric power is data collected by the Federal Power Commission for 1960 through 1978, CSEDS' estimates for 1979 through 1989, and data collected by EIA on Form EIA-867, "Annual Nonutility Power Producer Report," for nonutility power production for 1989 through 1997 and Form EIA-860B, "Annual Electric Generator Report–Nonutility" for 1998 and 1999. Industrial consumption of geothermal, wind, solar thermal, and photovoltaic energy is also collected on Form EIA-867 and Form EIA-860B. An additional portion of industrial consumption of wood, waste, and geothermal energy is estimated. • State-level transportation use of ethanol is estimated, although the U.S. data are collected on several forms and reported in EIA's *Renewable Energy Annual*. • All sources of renewable energy used for electricity generation at electric utilities (i.e., wood and waste, hydroelectric power, geothermal, wind, solar thermal, and photovoltaic energy) by State are from EIA's *Electric Power Annual (EPA)* or are unpublished data from the Form EIA-759 database.

**Nuclear Electric Power.** Nuclear electricity generation by State is from the *EPA.*

**Electricity.** Electricity consumption is sales data by sector and State from the *EPA* with one exception. The *EPA* "Other" category is allocated to the transportation and commercial sectors in each State by estimation.

**Electrical System Energy Losses and Net Interstate Flow of Electricity.** These series are estimated in CSEDS.

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indicator of consumption, availability, continuity over time, and consistency. For instance, for petroleum, "product supplied" is a surrogate for consumption and is derived by summing field and refinery production, plus imports, minus exports, plus or minus changes in stocks. State-level sales survey data are used to disaggregate the national petroleum product supplied totals to the States. The measures of consumption and estimation methodologies are explained in detail under each energy source in Appendix A.

Methods are also applied to estimate State electrical system energy losses that are not available from any survey. See the box below for a discussion

about losses and how they are reflected in *SEDR* tables. U.S. total electrical system energy losses are allocated to each individual State's end-use sectors in proportion to the sectors' electricity sales. The estimation method does not separately identify electrical system energy losses from interstate flow of electricity. Therefore, specific estimates are developed for Alaska and Hawaii and for the 48 contiguous States.

**Data Sources.** The original source documents cited in Appendix A include descriptions of the data collection methodologies, universes, imputation or adjustment techniques (if any), and errors associated with the processes. Due to the numerous collection forms and procedures

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## Energy Consumption Measures—Total and Site

Sources of energy can be categorized as primary and secondary. Primary sources of energy, such as coal, petroleum, and natural gas are consumed directly. Electricity is a secondary form of energy that is created from primary energy sources. The amount of electricity actually consumed by the end user (site consumption) does not include the energy lost in the generation and delivery of the electricity to the point of use.

Primary sources of energy are measured in applicable physical units. Coal is measured by the short ton (equal to 2,000 pounds); petroleum, by the barrel (equivalent to 42 gallons); and natural gas, by the cubic foot. Energy sources are also measured by their heat content, generally expressed in British thermal units (Btu). For example, in 1999, the average short ton of bituminous coal and lignite consumed at electric utilities contained 20.3 million Btu (Table C13), the average barrel of distillate fuel contained 5.825 million Btu (page 482), and the average cubic foot of natural gas consumed at electric utilities contained 1,019 Btu (Table C3).

Electricity, a secondary form of energy, can also be measured in physical units, commonly kilowatthours, and by heat content. The

conventional thermal conversion factor for electricity consumed by the end user (site consumption) is 3,412 Btu per kilowatthour.

In 1999 electric utilities consumed 33.4 quadrillion Btu of primary energy in order to provide 11.0 quadrillion Btu of electricity for sale. These data indicate that 67 percent of the primary (embodied) energy in the fuels consumed to generate the electricity was used (or "lost") in converting the primary energy to electricity and transmitting and distributing the electricity to the consumers, and 33 percent was used as site (point-of-use) electricity by consumers.

In evaluating energy consumption in this report, tables titled "Total Energy Consumption" include all primary energy sources, including those used to generate electricity; the electricity generated is not included. Tables showing "Total End-Use Sector Consumption" include columns for the primary sources and electricity that are consumed by the sector, as well as a column for the estimated energy lost in the electrical system processes. The "Total" column in those tables includes all energy consumed by the sector and the associated energy lost in the generation and transmission of electricity. The column titled "Net" is site energy consumption—that is, the sum of the primary sources and electricity, excluding the electrical system energy losses.

associated with those reports, it is not possible to develop a meaningful numerical estimate of the overall errors of the integrated data published here.

Reliable, consistent series for long periods of time—especially in the earlier years—are difficult to develop, and estimates and assumptions must be applied to fill data gaps and to maintain definitional consistency. Although CSEDS incorporates the most consistent series and procedures possible, users of this report should recognize the limitations of the data that are due to changing and inadequate data sources.

In reports prepared by the Bureau of Mines in the late 1960's and early 1970's, petroleum consumption was equated to demand. Later, consumption was equated to apparent demand and, more recently, to product supplied. Changes in surveys and reduction of data collections, especially after 1978, disturbed the continuity of some petroleum consumption series, most notably for distillate fuel, residual fuel, kerosene, and liquefied petroleum gases. These and other data inconsistencies are explained in detail under "Additional Notes" for each energy source in Appendix A. All data series with recognized data inconsistencies are footnoted in the *SEDR* tables.

## Comparison with Other Energy Consumption Reports

EIA conducts numerous energy-related surveys. In general, the surveys can be divided into two broad groups. One group of surveys, called supply surveys, is directed to the suppliers and marketers of specific energy sources. Those surveys measure the quantities of specific fuels supplied to the market. The results of supply surveys are combined and published in a number of EIA publications, including the *Monthly Energy Review* and *SEDR*. The second group of surveys, called energy consumption surveys, gathers information directly from end users of energy. Although there are some elements in common, the supply survey data and the consumption survey data have substantially different approaches, capabilities, and objectives. Thus, care must be taken in analyzing *SEDR* data in conjunction with consumption survey data for the following reasons:

- *SEDR* is designed to be a broad accounting of energy consumption, covering all energy use and splitting it into major sectors as clearly as possible. The energy consumption surveys are designed to be comprehensive and representative within individual sectors. However, the sectors are restricted for purposes of creating relatively homogeneous, well-defined populations and for aiding in sampling and data collection. For example, the Commercial Buildings Energy Consumption Survey covers only energy consumption in commercial buildings, while CSEDS includes other commercial consumption, such as street lighting and public services; and the Manufacturing Energy Consumption Survey covers only manufacturing establishments, while CSEDS includes other industrial energy consumption (i.e., mining, construction, agriculture, fisheries, and forestry). Further, the consumption surveys do not cover all energy-using sectors. Therefore, energy consumption surveys cannot be summed together to account for all energy use.

- Energy consumption surveys provide user characteristics that allow for both macro-level (for major sectoral sub-populations) and micro-level (at the unit of data collection) interpretive analysis. The surveys of energy consumption by residential households from the Residential Energy Consumption Survey (Form EIA-457 series) and by commercial buildings from the Commercial Buildings Energy Consumption Survey (Form EIA-871 series) provide detailed information about the energy end users, their size, their stock of energy-consuming equipment and appliances, and their total energy consumption and expenditures. The Manufacturing Energy Consumption Survey (Form EIA-846 series) collects consumption by type of use and fuel switching capability from manufacturing establishments grouped by manufacturing classification. CSEDS, on the other hand, provides limited characterization of the end users of energy but greater geographic and energy product detail, as well as annual historical time series.

- Sectoral classification in CSEDS is generally based on supplier classifications of customer accounts, by whatever means suppliers choose to use. (See discussion in next section.) Sectoral classification for the energy consumption surveys is based upon a categorization, verified by end user, of the primary economic activity of the data collection unit (household, building, or establishment).

- The energy consumption surveys provide data at national and Census region and/or Census division levels, whereas the estimates in CSEDS are on national and State levels.

- The reference periods are also different in that CSEDS covers calendar years from 1960 through 1999, while the consumption surveys are for selected years, and the residential end-use surveys taken prior to 1987 cover a heating season year (i.e., April through March). Beginning with the 1987 residential end-use survey, the reference period is a calendar year.

For a more detailed description of the differences between CSEDS and the energy consumption surveys, see the EIA analysis report *Energy Consumption by End-Use Sector: A Comparison of Measures by Consumption and Supply Surveys*, DOE/EIA-0533, April 1990.

## Energy Consuming Sectors

The consumption estimates in CSEDS are based on data collected by various surveys that do not necessarily define the consuming sectors exactly the same way. Appendix A of this report describes in detail for each energy source how the collected data series are combined and assigned to CSEDS consuming sectors. To the degree possible, energy consumption in this report has been assigned to the five sectors according to the following general definitions:

- **Residential Sector:** An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters.

- **Commercial Sector:** An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment.

- **Industrial Sector:** An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing; agriculture, forestry, and fisheries; mining; and construction. Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. In this report, nonutility power producers are included in the industrial sector.

- **Transportation Sector:** An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. In this report, natural gas used in the operation of natural gas pipelines is included in the transportation sector.

- **Electric Utility Sector:** The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

**Sector Definition Discrepancies.** Although the end-use allocations are made according to these aggregations as closely as possible, some data are collected by using different classifications. For example, electric utilities may classify commercial and industrial users by the quantity of electricity purchased rather than by the business activity of the purchaser. Natural gas used in agriculture, forestry, and fisheries was collected and reported in the commercial sector through 1995. Beginning with 1996 data, deliveries of natural gas for agriculture, forestry, and fisheries are reported in the industrial sector instead. Another example is master-metered condominiums and apartments and buildings with a combination of residential and commercial units. In many cases, the metering and billing practices cause residential energy usage of electricity, natural gas, or fuel oil to be included in the commercial sector. No adjustments for these discrepancies were made.

CSEDS does not provide further disaggregated end-use consumption estimates. For example, the industrial sector cannot be broken down into the chemical or rubber industries, all manufacturing, or agriculture. The input series for the system are provided in broad end-use categories from the data collection forms and are not available by the individual components. Additional disaggregated regional information, such as counties or cities, are also not available from CSEDS.

# 1999 Summaries

## Table 1. Energy Consumption Estimates by Source and End-Use Sector, 1999
(Trillion Btu)

| State | Total Energy [b] | Coal[c] | Natural Gas [d] | Petroleum | Nuclear Electric Power | Hydro-electric Power [e] | Wood and Waste | Other [f] | Net Interstate Flow of Electricity/Losses [g] | Residential | Commercial | Industrial [b] | Transportation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 2,004.8 | 855.4 | 344.5 | 550.9 | 328.2 | 80.3 | 197.8 | 0.2 | -352.4 | 341.0 | 226.3 | 976.7 | 460.7 |
| Alaska | 694.7 | 10.9 | 420.0 | 253.4 | 0.0 | 8.5 | 1.9 | 0.1 | 0.0 | 47.7 | 63.1 | 385.9 | 198.0 |
| Arizona | 1,219.8 | 403.5 | 163.2 | 497.0 | 323.1 | 104.3 | 12.0 | 4.1 | -287.4 | 279.0 | 266.7 | 221.6 | 452.5 |
| Arkansas | 1,203.7 | 266.9 | 265.5 | 384.1 | 137.2 | 27.9 | 185.8 | 1.2 | -65.0 | 193.3 | 123.8 | 589.4 | 297.2 |
| California | 8,375.4 | 64.0 | 2,182.4 | 3,383.2 | 354.5 | 425.0 | 162.3 | 377.6 | 1,420.6 | 1,416.2 | 1,236.5 | 2,823.7 | 2,898.9 |
| Colorado | 1,155.5 | 355.2 | 318.2 | 425.5 | 0.0 | 16.6 | 10.3 | 0.8 | 29.0 | 261.4 | 255.1 | 273.1 | 365.9 |
| Connecticut | 839.3 | 0.1 | 135.0 | 440.1 | 134.6 | 14.3 | 43.5 | 0.3 | 65.7 | 245.2 | 196.8 | 162.4 | 234.9 |
| Delaware | 278.8 | 35.9 | 58.1 | 140.8 | 0.0 | 0.0 | 2.0 | 0.1 | 42.0 | 56.0 | 44.8 | 107.4 | 70.6 |
| Dist. of Col. | 169.8 | 0.1 | 32.9 | 33.6 | 0.0 | 0.0 | 1.3 | (s) | 101.8 | 33.5 | 106.2 | 3.7 | 26.5 |
| Florida | 3,852.9 | 671.6 | 541.7 | 1,912.0 | 334.9 | 1.5 | 159.0 | 32.7 | 199.4 | 1,017.8 | 809.5 | 679.8 | 1,345.8 |
| Georgia | 2,798.1 | 789.6 | 340.6 | 1,044.4 | 334.4 | 28.0 | 254.8 | 0.3 | 6.1 | 553.1 | 416.3 | 957.3 | 871.4 |
| Hawaii | 241.4 | 3.1 | 2.9 | 213.7 | 0.0 | 1.2 | 14.6 | 6.0 | 0.0 | 23.0 | 24.8 | 71.3 | 122.3 |
| Idaho | 518.3 | 7.9 | 71.5 | 169.9 | 0.0 | 139.6 | 28.1 | 1.3 | 99.9 | 95.9 | 86.9 | 209.8 | 125.7 |
| Illinois | 3,882.6 | 836.9 | 1,057.5 | 1,340.2 | 868.3 | 1.5 | 38.1 | 0.7 | -260.5 | 897.4 | 722.0 | 1,272.6 | 990.5 |
| Indiana | 2,735.8 | 1,450.6 | 577.3 | 899.3 | 0.0 | 4.2 | 18.7 | 1.1 | -215.4 | 483.6 | 300.7 | 1,306.2 | 645.4 |
| Iowa | 1,121.7 | 416.0 | 235.7 | 418.8 | 38.7 | 10.2 | 15.2 | 3.7 | -16.3 | 222.5 | 158.5 | 463.3 | 277.5 |
| Kansas | 1,050.0 | 328.8 | 302.2 | 436.7 | 97.3 | 0.1 | 6.4 | 0.3 | -121.7 | 200.9 | 169.2 | 392.2 | 287.8 |
| Kentucky | 1,830.2 | 885.1 | 220.1 | 726.1 | 0.0 | 26.5 | 10.7 | 0.6 | -38.9 | 315.9 | 219.0 | 851.1 | 444.2 |
| Louisiana | 3,615.4 | 227.8 | 1,558.0 | 1,452.0 | 139.3 | 8.3 | 142.1 | 0.5 | 87.3 | 325.0 | 236.5 | 2,249.0 | 804.9 |
| Maine | 528.6 | 2.9 | 6.2 | 250.4 | 0.0 | 81.4 | 122.0 | 0.1 | 46.7 | 97.6 | 57.6 | 260.2 | 113.2 |
| Maryland | 1,378.2 | 303.5 | 201.4 | 584.1 | 141.4 | 14.7 | 36.9 | 0.2 | 95.9 | 358.6 | 337.1 | 277.4 | 405.1 |
| Massachusetts | 1,569.1 | 13.0 | 355.5 | 639.1 | 47.5 | 15.0 | 55.3 | 0.4 | 437.5 | 411.7 | 325.2 | 391.4 | 440.8 |
| Michigan | 3,239.6 | 822.6 | 930.2 | 1,097.9 | 155.0 | 11.2 | 89.4 | 1.4 | 139.9 | 744.3 | 568.1 | 1,082.5 | 844.8 |
| Minnesota | 1,675.3 | 336.0 | 346.3 | 661.0 | 141.5 | 58.5 | 67.3 | 5.6 | 43.4 | 340.2 | 217.9 | 617.7 | 499.6 |
| Mississippi | 1,208.5 | 137.7 | 346.2 | 483.3 | 89.5 | 0.1 | 65.7 | 0.3 | 85.7 | 202.6 | 145.6 | 451.4 | 408.9 |
| Missouri | 1,768.0 | 686.1 | 269.6 | 780.6 | 91.2 | 18.0 | 12.3 | 0.2 | -90.2 | 431.7 | 334.1 | 379.6 | 622.6 |
| Montana | 412.4 | 173.9 | 63.6 | 173.8 | 0.0 | 143.1 | 16.0 | 0.3 | -158.1 | 61.8 | 48.0 | 196.1 | 106.5 |
| Nebraska | 602.0 | 195.9 | 121.3 | 246.0 | 107.2 | 18.0 | 3.7 | 0.3 | -89.9 | 130.0 | 111.3 | 166.2 | 194.4 |
| Nevada | 615.3 | 179.7 | 156.7 | 220.9 | 0.0 | 29.3 | 3.9 | 31.5 | -6.7 | 122.4 | 97.1 | 198.0 | 197.8 |
| New Hampshire | 335.4 | 35.3 | 20.5 | 188.3 | 92.2 | 24.5 | 31.0 | 1.9 | -64.1 | 81.9 | 56.2 | 96.9 | 100.5 |
| New Jersey | 2,588.7 | 68.2 | 640.9 | 1,235.6 | 307.8 | -1.3 | 38.2 | 0.7 | 298.7 | 539.9 | 540.8 | 644.7 | 863.3 |
| New Mexico | 635.0 | 298.0 | 224.7 | 257.4 | 0.0 | 2.5 | 4.4 | 1.2 | -153.1 | 93.2 | 105.6 | 202.4 | 233.9 |
| New York | 4,283.0 | 188.2 | 1,251.1 | 1,653.2 | 393.2 | 265.3 | 173.6 | 0.9 | 368.1 | 1,092.3 | 1,216.1 | 994.9 | 979.6 |
| North Carolina | 2,446.9 | 707.7 | 228.6 | 937.2 | 398.6 | 39.9 | 73.9 | 0.4 | 60.6 | 562.7 | 439.5 | 753.7 | 690.9 |
| North Dakota | 365.7 | 411.6 | 58.9 | 122.6 | 0.0 | 28.2 | 2.1 | 0.2 | -255.1 | 54.2 | 42.6 | 186.4 | 82.4 |
| Ohio | 4,323.4 | 1,379.0 | 878.1 | 1,339.8 | 174.5 | 4.4 | 326.6 | 0.9 | 220.3 | 866.7 | 632.1 | 1,855.3 | 969.2 |
| Oklahoma | 1,377.5 | 333.5 | 543.0 | 499.7 | 0.0 | 31.8 | 20.4 | 0.1 | -51.0 | 259.1 | 197.7 | 518.2 | 402.5 |
| Oregon | 1,109.2 | 38.6 | 219.3 | 391.6 | 0.0 | 475.3 | 35.5 | 2.2 | -53.4 | 238.4 | 190.5 | 352.1 | 328.2 |
| Pennsylvania | 3,715.5 | 1,142.7 | 696.2 | 1,385.3 | 755.5 | 15.6 | 94.5 | 1.0 | -375.1 | 858.6 | 582.6 | 1,290.4 | 983.9 |
| Rhode Island | 261.1 | (s) | 86.1 | 98.7 | 0.0 | 10.0 | 4.1 | (s) | 56.4 | 66.0 | 52.2 | 77.0 | 65.9 |
| South Carolina | 1,493.0 | 402.6 | 162.5 | 466.9 | 539.8 | 7.1 | 80.4 | 0.2 | -166.5 | 288.1 | 210.3 | 618.2 | 376.4 |
| South Dakota | 239.0 | 45.9 | 36.0 | 115.0 | 0.0 | 70.9 | 1.8 | 0.4 | -31.6 | 53.3 | 39.2 | 62.2 | 84.3 |
| Tennessee | 2,070.5 | 625.8 | 285.8 | 712.7 | 289.2 | 74.0 | 48.3 | 0.1 | 34.5 | 441.5 | 328.1 | 710.8 | 590.1 |
| Texas | 11,501.0 | 1,534.7 | 3,982.4 | 5,565.3 | 390.5 | 12.9 | 67.8 | 4.5 | -46.1 | 1,323.3 | 1,147.2 | 6,481.5 | 2,549.0 |
| Utah | 693.9 | 382.4 | 168.5 | 262.2 | 0.0 | 13.0 | 5.4 | 3.8 | -141.4 | 127.5 | 120.2 | 235.1 | 211.1 |
| Vermont | 165.0 | 2.0 | 8.1 | 84.5 | 43.1 | 60.8 | 9.2 | 0.2 | -69.6 | 42.6 | 29.4 | 39.9 | 53.2 |
| Virginia | 2,227.3 | 401.6 | 275.2 | 864.3 | 300.6 | -5.6 | 116.4 | 0.5 | 274.2 | 494.4 | 462.8 | 614.4 | 655.7 |
| Washington | 2,240.8 | 96.4 | 277.4 | 878.2 | 64.7 | 988.4 | 86.6 | 0.7 | -185.4 | 435.7 | 332.0 | 855.9 | 617.3 |
| West Virginia | 735.4 | 976.6 | 147.4 | 219.5 | 0.0 | 9.6 | 5.8 | 0.1 | -623.6 | 141.9 | 101.0 | 310.8 | 181.6 |
| Wisconsin | 1,810.5 | 471.6 | 378.5 | 667.5 | 122.1 | 23.2 | 96.8 | 0.4 | 49.0 | 375.8 | 285.4 | 717.4 | 431.8 |
| Wyoming | 421.8 | 494.6 | 101.7 | 155.7 | 0.0 | 12.1 | 1.1 | 0.8 | -344.2 | 35.9 | 42.1 | 224.0 | 119.8 |
| United States | 95,682.4 | 20,498.0 | 22,294.9 | 37,960.1 | 7,735.6 | 3,449.3 | 3,101.2 | 492.9 | 0.0 | 18,382.3 | 15,058.5 | 35,917.1 | 26,324.6 |

[a] End-use sector data include electricity sales and associated electrical system energy losses.
[b] U.S. total energy and U.S. industrial sector include 57.7 trillion Btu of net imports of coal coke that is not allocated to the States. State and U.S. totals include 92.6 trillion Btu of net imports of electricity generated from nonrenewable energy sources not shown in "Sources" columns. See data in appendix Table A8.
[c] All coal except that which is both consumed by nonutility wholesale power producers and cogeneration plants and not reported in the end-use sectors. The U.S. total of the missing quantity is 1,042 trillion Btu.
[d] Includes supplemental gaseous fuels.
[e] Includes net imports of hydroelectricity. A negative number in this column results from pumped storage for which, overall, more electricity is expended than created to provide electricity during peak demand periods.
[f] "Other" is electricity generated from geothermal, wind, photovoltaic, and solar thermal energy. It includes net imports of electricity generated from geothermal energy.
[g] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
(s)=Less than 0.05 trillion Btu.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 2. Energy Consumption Estimates in Physical Units, 1999

| State | Coal | Natural Gas [a] | Petroleum | | | | | | | | | | | | Nuclear Electric Power |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Asphalt and Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other [b] | Total | |
| | Million Short Tons | Billion Cubic Feet | Million Barrels | | | | | | | | | | | | Billion Kilowatthours |
| Alabama | 38.2 | 332.8 | 4.6 | 0.1 | 24.8 | 2.0 | 0.1 | 7.0 | 1.1 | 57.7 | 1.8 | 3.6 | 102.7 | 30.9 |
| Alaska | 0.7 | 420.0 | 0.1 | 0.5 | 8.2 | 23.6 | (s) | 0.3 | 0.1 | 6.4 | 1.1 | 4.2 | 44.7 | 0.0 |
| Arizona | 19.7 | 160.8 | 3.8 | 0.2 | 18.9 | 9.6 | (s) | 1.8 | 0.6 | 54.9 | (s) | 1.8 | 91.7 | 30.4 |
| Arkansas | 15.3 | 260.6 | 1.0 | 0.1 | 18.4 | 4.6 | 0.1 | 6.0 | 0.7 | 33.7 | 0.1 | 7.5 | 72.2 | 12.9 |
| California | 2.8 | 2,145.9 | 20.4 | 0.8 | 74.7 | 98.7 | 0.3 | 12.2 | 5.2 | 337.8 | 28.6 | 39.2 | 617.8 | 33.4 |
| Colorado | 18.2 | 315.9 | 2.1 | 0.2 | 16.3 | 7.8 | (s) | 3.0 | 0.7 | 47.1 | (s) | 1.9 | 79.0 | 0.0 |
| Connecticut | (s) | 131.8 | 0.7 | (s) | 22.5 | 2.5 | 0.4 | 1.7 | 0.5 | 36.3 | 10.6 | 4.4 | 79.5 | 12.7 |
| Delaware | 1.4 | 56.0 | 0.2 | (s) | 3.4 | 0.1 | 0.2 | 1.1 | 0.1 | 9.3 | 5.5 | 5.3 | 25.2 | 0.0 |
| Dist. of Col. | (s) | 32.2 | (s) | (s) | 1.4 | 0.0 | 0.2 | (s) | 0.1 | 4.0 | 0.4 | 0.0 | 6.2 | 0.0 |
| Florida | 27.3 | 519.4 | 3.7 | 0.6 | 47.6 | 29.0 | 0.3 | 7.2 | 1.5 | 173.5 | 66.0 | 15.6 | 345.0 | 31.5 |
| Georgia | 33.5 | 331.6 | 7.4 | 0.1 | 42.3 | 15.3 | 0.3 | 6.9 | 1.3 | 109.9 | 2.6 | 6.9 | 193.2 | 31.5 |
| Hawaii | 0.1 | 2.7 | 0.4 | 0.1 | 4.5 | 9.5 | (s) | 0.4 | 0.1 | 9.0 | 11.1 | 2.1 | 37.0 | 0.0 |
| Idaho | 0.4 | 68.9 | 3.1 | 0.1 | 9.8 | 0.9 | (s) | 1.0 | 0.2 | 15.9 | (s) | (s) | 30.8 | 0.0 |
| Illinois | 42.1 | 1,034.7 | 11.3 | 0.2 | 43.8 | 18.2 | 0.7 | 22.6 | 3.7 | 118.8 | 0.6 | 30.6 | 250.4 | 81.7 |
| Indiana | 66.2 | 567.1 | 7.5 | 0.1 | 39.8 | 11.2 | 1.5 | 6.7 | 1.9 | 72.6 | 0.7 | 22.0 | 164.0 | 0.0 |
| Iowa | 23.4 | 231.3 | 2.9 | 0.1 | 19.5 | 0.9 | 0.1 | 18.7 | 0.8 | 37.0 | 0.1 | 2.6 | 82.7 | 3.6 |
| Kansas | 19.0 | 303.1 | 2.4 | 0.2 | 15.5 | 3.5 | 0.4 | 21.7 | 1.1 | 33.6 | 0.6 | 7.6 | 86.5 | 9.2 |
| Kentucky | 37.9 | 213.3 | 4.2 | (s) | 27.3 | 7.0 | 1.1 | 9.3 | 1.1 | 51.0 | 0.1 | 33.5 | 134.5 | 0.0 |
| Louisiana | 14.0 | 1,495.2 | 1.5 | 0.1 | 36.4 | 34.0 | 0.1 | 75.1 | 2.1 | 49.7 | 26.4 | 55.0 | 280.5 | 13.1 |
| Maine | 0.1 | 6.1 | 0.3 | (s) | 15.1 | 0.9 | 1.7 | 1.1 | 0.2 | 16.2 | 7.8 | 1.2 | 44.6 | 0.0 |
| Maryland | 11.8 | 194.8 | 4.4 | (s) | 22.4 | 3.9 | 0.8 | 2.1 | 0.8 | 56.9 | 8.6 | 6.2 | 106.1 | 13.3 |
| Massachusetts | 0.5 | 339.2 | 1.0 | 0.1 | 33.2 | 8.1 | 0.4 | 2.3 | 0.9 | 63.4 | 2.7 | 5.5 | 117.6 | 4.5 |
| Michigan | 38.2 | 913.8 | 6.7 | 0.3 | 31.8 | 9.1 | 0.7 | 15.3 | 3.5 | 121.0 | 2.6 | 16.3 | 207.2 | 14.6 |
| Minnesota | 18.8 | 339.8 | 7.7 | 0.1 | 23.8 | 12.6 | 0.1 | 8.7 | 1.2 | 59.9 | 0.7 | 7.3 | 122.1 | 13.3 |
| Mississippi | 6.2 | 334.2 | 3.3 | 0.1 | 18.1 | 9.7 | 0.1 | 5.3 | 0.7 | 38.4 | 6.0 | 6.6 | 88.3 | 8.4 |
| Missouri | 37.9 | 266.2 | 5.0 | 0.1 | 35.9 | 12.8 | 0.1 | 12.7 | 1.7 | 71.2 | 0.2 | 6.5 | 146.0 | 8.6 |
| Montana | 10.3 | 62.1 | 2.6 | 0.1 | 8.7 | 0.8 | (s) | 0.5 | 0.3 | 11.8 | (s) | 5.9 | 30.7 | 0.0 |
| Nebraska | 11.5 | 121.4 | 1.9 | 0.1 | 17.4 | 1.6 | (s) | 3.7 | 0.4 | 20.5 | 0.1 | (s) | 45.5 | 10.1 |
| Nevada | 8.0 | 151.5 | 0.8 | 0.1 | 8.3 | 8.4 | (s) | 1.4 | 0.1 | 21.6 | 0.1 | 0.1 | 40.8 | 0.0 |
| New Hampshire | 1.3 | 20.3 | 0.3 | (s) | 9.0 | 0.8 | 0.4 | 2.4 | 0.1 | 15.7 | 3.5 | 2.6 | 34.8 | 8.7 |
| New Jersey | 2.6 | 616.8 | 10.7 | 0.1 | 37.3 | 36.3 | 1.7 | 7.6 | 2.5 | 91.8 | 9.9 | 25.9 | 223.9 | 29.0 |
| New Mexico | 16.3 | 229.5 | 1.9 | 0.1 | 12.0 | 2.7 | (s) | 4.1 | 0.4 | 22.2 | 0.2 | 4.4 | 48.0 | 0.0 |
| New York | 7.2 | 1,218.2 | 6.3 | 0.1 | 73.1 | 9.1 | 3.1 | 7.3 | 2.2 | 133.6 | 36.8 | 26.9 | 298.5 | 37.0 |
| North Carolina | 28.4 | 220.8 | 4.6 | 0.2 | 32.5 | 6.8 | 2.2 | 11.9 | 1.3 | 97.4 | 5.2 | 13.5 | 175.6 | 37.5 |
| North Dakota | 31.3 | 56.4 | 2.1 | (s) | 7.3 | 0.4 | (s) | 2.7 | 0.2 | 8.7 | 0.1 | 1.1 | 22.7 | 0.0 |
| Ohio | 57.6 | 846.7 | 14.1 | 0.2 | 48.8 | 16.5 | 1.5 | 12.9 | 4.0 | 120.9 | 1.4 | 26.1 | 246.5 | 16.4 |
| Oklahoma | 19.1 | 530.8 | 1.7 | 0.1 | 22.2 | 6.6 | (s) | 9.2 | 1.4 | 43.6 | 0.1 | 8.6 | 93.6 | 0.0 |
| Oregon | 2.2 | 208.6 | 3.6 | 0.2 | 14.8 | 6.4 | 0.2 | 1.2 | 0.8 | 36.5 | 3.1 | 4.0 | 70.8 | 0.0 |
| Pennsylvania | 45.3 | 672.0 | 5.0 | 0.2 | 64.2 | 15.9 | 3.1 | 5.7 | 4.3 | 117.4 | 13.4 | 21.7 | 250.9 | 71.1 |
| Rhode Island | (s) | 84.2 | 0.3 | (s) | 5.5 | 1.1 | 0.1 | 0.5 | 0.1 | 9.6 | 0.8 | 0.1 | 18.1 | 0.0 |
| South Carolina | 15.8 | 157.6 | 2.2 | 0.1 | 19.0 | 1.5 | 0.7 | 3.9 | 0.6 | 52.8 | 2.1 | 3.9 | 86.7 | 50.8 |
| South Dakota | 2.6 | 35.8 | 1.9 | 0.1 | 6.0 | 0.8 | (s) | 2.0 | 0.2 | 10.3 | 0.1 | (s) | 21.3 | 0.0 |
| Tennessee | 26.6 | 278.3 | 5.9 | 0.1 | 27.1 | 11.8 | 0.5 | 4.7 | 1.3 | 69.8 | 0.1 | 9.6 | 131.0 | 27.2 |
| Texas | 102.5 | 3,859.0 | 8.4 | 0.8 | 106.3 | 104.9 | 0.2 | 445.2 | 5.7 | 243.0 | 21.7 | 221.5 | 1,157.8 | 36.8 |
| Utah | 16.3 | 159.7 | 2.4 | 0.1 | 10.6 | 7.4 | (s) | 1.0 | 0.3 | 23.1 | 0.1 | 2.6 | 47.6 | 0.0 |
| Vermont | 0.1 | 8.0 | 0.2 | (s) | 5.6 | 0.1 | 0.4 | 1.6 | 0.1 | 7.7 | 0.3 | 0.0 | 15.9 | 4.1 |
| Virginia | 15.8 | 265.1 | 4.8 | 0.1 | 37.1 | 9.3 | 1.9 | 4.6 | 1.0 | 84.8 | 8.1 | 6.7 | 158.4 | 28.3 |
| Washington | 5.8 | 263.7 | 4.1 | 0.3 | 20.3 | 22.2 | 0.1 | 4.5 | 0.7 | 63.2 | 9.6 | 32.4 | 157.4 | 6.1 |
| West Virginia | 39.4 | 139.7 | 0.8 | (s) | 12.2 | 0.2 | 0.6 | 1.1 | 0.7 | 19.5 | 0.1 | 4.8 | 40.0 | 0.0 |
| Wisconsin | 25.3 | 374.0 | 6.2 | 0.1 | 28.3 | 3.4 | 0.1 | 11.0 | 1.1 | 59.0 | 1.2 | 14.8 | 125.2 | 11.5 |
| Wyoming | 27.7 | 96.7 | 1.2 | 0.2 | 14.9 | 0.2 | (s) | 0.5 | 0.2 | 7.9 | (s) | 2.4 | 27.5 | 0.0 |
| United States | 992.6 | 21,694.5 | 199.6 | 7.8 | 1,303.8 | 610.5 | 26.6 | 801.2 | 61.8 | 3,077.2 | 303.0 | 733.1 | 7,124.6 | 728.2 |

[a] Includes supplemental gaseous fuels.
[b] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
(s)=Less than 0.05.
Notes: • Totals may not equal sum of components due to independent rounding. • Total electricity generation by electric utilities from hydroelectric power, wood and waste, and geothermal, wind, photovoltaic, and solar thermal energy in billion kilowatthours are not shown in this table. Wood and waste used by the industrial sector for electricity generation and other purposes are not available in physical units. The Btu equivalents are shown in Table 3.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 3. Energy Consumption Estimates by Source, 1999
(Trillion Btu)

| State | Coal[a] | Natural Gas[b] | Asphalt and Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other[c] | Total | Nuclear Electric Power | Hydro-electric Power[d] | Wood and Waste | Other[e] | Net Inter-state Flow of Electric-ity/Losses[f] | Total[g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 855.4 | 344.5 | 30.5 | 0.5 | 144.7 | 11.1 | 0.5 | 25.4 | 6.4 | 300.5 | 11.0 | 20.3 | 550.9 | 328.2 | 80.3 | 197.8 | 0.2 | -352.4 | 2,004.8 |
| Alaska | 10.9 | 420.0 | 0.9 | 2.7 | 48.0 | 134.1 | 0.1 | 1.0 | 0.7 | 33.5 | 7.0 | 25.5 | 253.4 | 0.0 | 8.5 | 1.9 | 0.1 | 0.0 | 694.7 |
| Arizona | 403.5 | 163.2 | 25.3 | 0.8 | 110.0 | 54.6 | (s) | 6.5 | 3.9 | 285.8 | 0.3 | 9.7 | 497.0 | 323.1 | 104.3 | 12.0 | 4.1 | -287.4 | 1,219.8 |
| Arkansas | 266.9 | 265.5 | 6.8 | 0.6 | 107.0 | 25.9 | 0.3 | 21.6 | 4.5 | 175.6 | 0.7 | 41.1 | 384.1 | 137.2 | 27.9 | 185.8 | 1.2 | -65.0 | 1,203.7 |
| California | 64.0 | 2,182.4 | 135.1 | 4.2 | 434.9 | 559.5 | 1.6 | 44.0 | 31.5 | 1,760.2 | 179.6 | 232.5 | 3,383.2 | 354.5 | 425.0 | 162.3 | 377.6 | 1,420.6 | 8,375.4 |
| Colorado | 355.2 | 318.2 | 14.2 | 1.0 | 94.8 | 44.2 | 0.2 | 10.8 | 4.1 | 245.3 | (s) | 10.9 | 425.5 | 0.0 | 16.6 | 10.3 | 0.8 | 29.0 | 1,155.5 |
| Connecticut | 0.1 | 135.0 | 4.4 | 0.2 | 130.8 | 13.9 | 2.0 | 6.1 | 2.9 | 189.1 | 66.8 | 23.9 | 440.1 | 134.6 | 14.3 | 43.5 | 0.3 | 65.7 | 839.3 |
| Delaware | 35.9 | 58.1 | 1.2 | 0.1 | 19.8 | 0.6 | 1.0 | 4.0 | 0.9 | 48.3 | 34.3 | 30.5 | 140.8 | 0.0 | 0.0 | 2.0 | 0.1 | 42.0 | 278.8 |
| Dist. of Col. | 0.1 | 32.9 | 0.2 | (s) | 8.2 | 0.0 | 1.3 | (s) | 0.4 | 20.7 | 2.8 | 0.0 | 33.6 | 0.0 | 0.0 | 1.3 | (s) | 101.8 | 169.8 |
| Florida | 671.6 | 541.7 | 24.4 | 3.0 | 277.1 | 164.3 | 1.9 | 25.9 | 9.1 | 904.3 | 415.1 | 87.0 | 1,912.0 | 334.9 | 1.5 | 159.0 | 32.7 | 199.4 | 3,852.9 |
| Georgia | 789.6 | 340.6 | 49.3 | 0.8 | 246.5 | 86.8 | 1.8 | 24.9 | 8.0 | 572.8 | 16.1 | 37.3 | 1,044.6 | 334.4 | 28.0 | 254.8 | 0.3 | 6.1 | 2,798.1 |
| Hawaii | 3.1 | 2.9 | 2.3 | 0.3 | 26.3 | 53.7 | (s) | 1.4 | 0.6 | 46.7 | 69.9 | 12.6 | 213.7 | 0.0 | 1.2 | 14.6 | 6.0 | 0.0 | 241.4 |
| Idaho | 7.9 | 71.5 | 20.3 | 0.3 | 56.8 | 4.9 | 0.1 | 3.5 | 1.2 | 82.8 | (s) | 0.1 | 169.9 | 0.0 | 139.6 | 28.1 | 1.3 | 99.9 | 518.3 |
| Illinois | 836.9 | 1,057.5 | 74.9 | 0.9 | 254.9 | 103.4 | 3.7 | 81.7 | 22.3 | 619.1 | 3.7 | 175.5 | 1,340.2 | 868.0 | 1.5 | 38.1 | 0.7 | -260.5 | 3,882.6 |
| Indiana | 1,450.6 | 577.3 | 49.5 | 0.6 | 232.1 | 63.5 | 8.2 | 24.3 | 11.5 | 378.1 | 4.2 | 127.3 | 899.3 | 0.0 | 4.2 | 18.7 | 1.1 | -215.4 | 2,735.8 |
| Iowa | 416.0 | 235.7 | 19.5 | 0.4 | 113.5 | 5.0 | 0.4 | 67.8 | 4.6 | 192.8 | 0.8 | 14.1 | 418.8 | 38.7 | 10.2 | 15.2 | 3.7 | -16.3 | 1,121.7 |
| Kansas | 328.8 | 302.2 | 15.6 | 1.2 | 90.4 | 19.7 | 2.0 | 78.6 | 6.5 | 174.8 | 3.9 | 43.9 | 436.7 | 97.3 | 0.1 | 6.4 | 0.3 | -121.7 | 1,050.0 |
| Kentucky | 885.1 | 220.1 | 27.8 | 0.2 | 159.0 | 39.5 | 6.0 | 33.5 | 6.8 | 265.5 | 0.6 | 187.1 | 726.1 | 0.0 | 26.5 | 10.7 | 0.6 | -38.9 | 1,830.2 |
| Louisiana | 227.8 | 1,558.0 | 10.1 | 0.4 | 211.8 | 192.9 | 0.5 | 271.6 | 12.8 | 259.1 | 166.2 | 326.6 | 1,452.0 | 139.3 | 8.3 | 142.1 | 0.5 | 87.3 | 3,615.4 |
| Maine | 2.9 | 6.2 | 2.1 | 0.2 | 88.2 | 4.9 | 9.6 | 4.1 | 1.3 | 84.2 | 49.2 | 6.6 | 250.4 | 0.0 | 81.4 | 122.0 | 0.1 | 46.7 | 528.6 |
| Maryland | 303.5 | 201.4 | 29.0 | 0.2 | 130.4 | 22.3 | 4.6 | 7.7 | 4.7 | 296.4 | 53.8 | 34.9 | 584.1 | 141.4 | 14.7 | 36.9 | 0.2 | 95.9 | 1,378.2 |
| Massachusetts | 13.0 | 355.5 | 6.4 | 0.5 | 193.2 | 45.8 | 2.4 | 8.3 | 5.4 | 330.6 | 17.2 | 29.3 | 639.1 | 47.5 | 15.0 | 55.3 | 0.4 | 437.5 | 1,569.1 |
| Michigan | 822.6 | 930.2 | 44.3 | 1.4 | 185.0 | 51.7 | 3.9 | 55.5 | 21.0 | 630.7 | 16.1 | 88.3 | 1,097.9 | 155.0 | 11.2 | 89.4 | 1.4 | 139.9 | 3,239.6 |
| Minnesota | 336.0 | 346.3 | 51.4 | 0.7 | 138.4 | 71.4 | 0.7 | 31.5 | 7.2 | 312.1 | 4.2 | 43.4 | 661.0 | 141.5 | 58.5 | 67.3 | 5.6 | 43.4 | 1,675.3 |
| Mississippi | 137.7 | 346.2 | 21.9 | 0.4 | 105.4 | 54.8 | 0.6 | 19.2 | 4.2 | 200.2 | 37.9 | 38.7 | 483.3 | 89.5 | 0.1 | 65.7 | 0.3 | 85.7 | 1,208.5 |
| Missouri | 686.1 | 269.6 | 33.0 | 0.4 | 209.0 | 72.3 | 0.5 | 45.8 | 10.3 | 371.0 | 1.1 | 37.3 | 780.6 | 91.2 | 18.0 | 12.3 | 0.2 | -90.2 | 1,768.0 |
| Montana | 173.9 | 63.6 | 17.4 | 0.6 | 50.4 | 4.7 | (s) | 1.9 | 1.6 | 61.3 | 0.2 | 35.7 | 173.8 | 0.0 | 143.1 | 16.0 | 0.3 | -158.1 | 412.4 |
| Nebraska | 195.9 | 121.3 | 12.4 | 0.4 | 101.1 | 8.9 | 0.1 | 13.3 | 2.5 | 106.8 | 0.6 | 0.1 | 246.0 | 107.2 | 18.0 | 3.7 | 0.3 | -89.9 | 602.0 |
| Nevada | 179.7 | 156.7 | 5.4 | 0.4 | 48.5 | 47.4 | 0.1 | 5.0 | 0.7 | 112.5 | 0.4 | 0.6 | 220.9 | 0.0 | 29.3 | 3.9 | 31.5 | -6.7 | 615.3 |
| New Hampshire | 35.3 | 20.5 | 1.9 | 0.1 | 52.4 | 4.6 | 2.5 | 8.7 | 0.5 | 81.6 | 21.9 | 13.9 | 188.3 | 92.2 | 24.5 | 31.0 | 1.9 | -64.1 | 335.4 |
| New Jersey | 68.2 | 640.9 | 71.3 | 0.5 | 217.4 | 206.1 | 9.8 | 27.4 | 15.2 | 478.3 | 62.5 | 147.1 | 1,235.6 | 307.8 | -1.3 | 38.2 | 0.7 | 298.7 | 2,588.7 |
| New Mexico | 298.0 | 224.7 | 12.6 | 0.4 | 70.2 | 15.4 | 0.3 | 14.9 | 2.1 | 115.6 | 1.1 | 24.8 | 257.4 | 0.0 | 2.5 | 4.4 | 1.2 | -153.1 | 635.0 |
| New York | 188.2 | 1,251.1 | 41.6 | 0.4 | 425.7 | 51.7 | 17.5 | 26.5 | 13.4 | 696.3 | 231.6 | 148.4 | 1,653.1 | 393.2 | 265.3 | 173.6 | 0.9 | 368.1 | 4,283.0 |
| North Carolina | 707.7 | 228.6 | 30.4 | 0.9 | 189.3 | 38.6 | 12.6 | 42.9 | 7.7 | 507.7 | 32.9 | 74.1 | 937.2 | 398.6 | 39.9 | 73.9 | 0.4 | 60.6 | 2,446.9 |
| North Dakota | 411.6 | 58.9 | 13.9 | 0.2 | 42.8 | 2.3 | 0.1 | 9.7 | 1.1 | 45.4 | 0.5 | 6.7 | 122.6 | 0.0 | 28.2 | 2.1 | 0.2 | -255.1 | 365.7 |
| Ohio | 1,379.0 | 878.1 | 93.5 | 1.2 | 284.0 | 93.3 | 8.7 | 46.8 | 24.5 | 630.0 | 9.1 | 148.6 | 1,339.8 | 174.5 | 4.4 | 326.6 | 0.9 | 220.3 | 4,323.4 |
| Oklahoma | 333.5 | 543.0 | 11.4 | 0.5 | 129.3 | 37.3 | 0.3 | 33.3 | 8.7 | 227.0 | 0.8 | 51.1 | 499.7 | 0.0 | 31.8 | 20.4 | 0.1 | -51.0 | 1,377.5 |
| Oregon | 38.6 | 219.3 | 24.2 | 0.8 | 86.2 | 36.5 | 1.0 | 4.3 | 4.8 | 190.3 | 19.5 | 24.1 | 391.6 | 0.0 | 475.3 | 35.5 | 2.2 | -53.4 | 1,109.2 |
| Pennsylvania | 1,142.7 | 696.2 | 33.2 | 1.0 | 374.1 | 90.4 | 17.4 | 20.5 | 26.1 | 611.9 | 84.0 | 126.7 | 1,385.3 | 755.5 | 15.6 | 94.5 | 1.0 | -375.1 | 3,715.5 |
| Rhode Island | (s) | 86.1 | 2.0 | 0.1 | 32.2 | 6.0 | 0.6 | 1.8 | 0.8 | 50.0 | 4.8 | 0.3 | 98.7 | 0.0 | 10.0 | 4.1 | (s) | 56.4 | 261.1 |
| South Carolina | 402.6 | 162.5 | 14.8 | 0.5 | 110.9 | 8.7 | 3.8 | 13.9 | 3.5 | 275.0 | 12.9 | 22.8 | 466.9 | 539.8 | 7.1 | 80.4 | 0.2 | -166.5 | 1,493.0 |
| South Dakota | 45.9 | 36.0 | 12.5 | 0.3 | 35.1 | 4.4 | (s) | 7.2 | 1.0 | 53.9 | 0.7 | 0.1 | 115.0 | 0.0 | 70.9 | 1.8 | 0.4 | -31.6 | 239.0 |
| Tennessee | 625.8 | 285.8 | 39.3 | 0.6 | 158.1 | 67.0 | 3.0 | 17.0 | 8.0 | 363.6 | 0.4 | 55.8 | 712.7 | 289.2 | 74.0 | 48.3 | 0.1 | 34.5 | 2,070.5 |
| Texas | 1,534.7 | 3,982.4 | 56.0 | 4.0 | 619.3 | 594.8 | 1.3 | 1,609.8 | 34.3 | 1,266.2 | 136.7 | 1,242.9 | 5,565.3 | 390.5 | 12.9 | 67.8 | 4.5 | -46.1 | 11,501.0 |
| Utah | 382.4 | 168.5 | 15.8 | 0.4 | 61.6 | 42.2 | 0.1 | 3.7 | 1.9 | 120.6 | 0.5 | 15.5 | 262.2 | 0.0 | 13.0 | 5.4 | 3.8 | -141.4 | 693.9 |
| Vermont | 2.0 | 8.1 | 1.2 | 0.1 | 32.4 | 0.8 | 2.0 | 5.8 | 0.4 | 40.1 | 1.7 | 0.0 | 84.5 | 43.1 | 60.8 | 9.2 | 0.2 | -69.6 | 165.0 |
| Virginia | 401.6 | 275.2 | 31.7 | 0.5 | 216.0 | 52.8 | 10.9 | 16.6 | 6.1 | 442.0 | 51.0 | 36.8 | 864.3 | 300.6 | -5.6 | 116.4 | 0.5 | 274.2 | 2,227.3 |
| Washington | 96.4 | 277.4 | 27.2 | 1.4 | 118.3 | 125.6 | 0.7 | 16.1 | 4.5 | 329.5 | 60.3 | 194.5 | 878.2 | 64.7 | 988.4 | 86.6 | 0.7 | -185.4 | 2,240.8 |
| West Virginia | 976.6 | 147.4 | 5.1 | 0.1 | 71.2 | 1.0 | 3.6 | 3.9 | 4.3 | 101.6 | 0.7 | 28.0 | 219.5 | 0.0 | 9.6 | 5.8 | 0.1 | -623.6 | 735.4 |
| Wisconsin | 471.6 | 378.5 | 41.1 | 0.7 | 164.8 | 19.3 | 0.7 | 39.8 | 6.5 | 307.3 | 7.6 | 79.7 | 667.5 | 122.1 | 23.2 | 96.8 | 0.4 | 49.0 | 1,810.5 |
| Wyoming | 494.6 | 101.7 | 8.1 | 1.2 | 86.8 | 1.0 | (s) | 1.7 | 1.3 | 41.1 | 0.1 | 14.4 | 155.7 | 0.0 | 12.1 | 1.1 | 0.8 | -344.2 | 421.8 |
| United States | 20,498.0 | 22,294.9 | 1,324.4 | 39.2 | 7,594.5 | 3,461.8 | 150.9 | 2,897.1 | 374.9 | 16,035.5 | 1,904.9 | 4,176.9 | 37,960.1 | 7,735.6 | 3,449.3 | 3,101.2 | 492.9 | 0.0 | 95,682.4 |

[a] All coal except that which is both consumed by nonutility wholesale power producers and cogeneration plants and not reported in the end-use sectors. The U.S. total of the missing quantity is 1,042 trillion Btu.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] Includes net imports of hydroelectricity. A negative number in this column results from pumped storage for which, overall, more electricity is expended than created to provide electricity during peak demand periods.
[e] "Other" is electricity generated from geothermal, wind, photovoltaic, and solar thermal energy. It includes net imports of electricity generated from geothermal energy.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] U.S. total includes 57.7 trillion Btu of net imports of coal coke that has not been allocated to the States. State and U.S. totals include 92.6 trillion Btu of net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
(s)=Less than 0.05 trillion Btu.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 4. Residential Energy Consumption Estimates, 1999
(Trillion Btu)

| State | Coal | Natural Gas [a] | Petroleum | | | | Wood | Geothermal | Solar [b] | Electricity | Net Energy | Electrical System Energy Losses [c] | Total [b] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Distillate Fuel | Kerosene | LPG | Total | | | | | | | |
| Alabama ............. | 0.2 | 44.2 | (s) | 0.2 | 16.9 | 17.2 | 6.2 | (s) | 0.1 | 92.3 | 160.2 | 180.8 | 341.0 |
| Alaska ................ | 3.0 | 17.6 | 7.0 | 0.1 | 0.8 | 7.9 | 1.5 | (s) | (s) | 6.4 | 36.4 | 11.3 | 47.7 |
| Arizona .............. | 0.0 | 33.5 | (s) | (s) | 5.1 | 5.2 | 9.2 | (s) | 3.8 | 76.8 | 128.4 | 150.5 | 279.0 |
| Arkansas ............ | 0.0 | 36.9 | (s) | 0.2 | 10.9 | 11.2 | 2.2 | 0.2 | 1.0 | 47.9 | 99.4 | 93.9 | 193.3 |
| California ............ | 0.2 | 578.6 | 0.6 | 1.1 | 20.7 | 22.3 | 35.6 | 0.1 | 19.0 | 256.9 | 912.8 | 503.4 | 1,416.2 |
| Colorado ............ | 0.8 | 112.4 | 0.1 | 0.1 | 7.3 | 7.4 | 7.9 | 0.1 | 0.2 | 44.8 | 173.6 | 87.8 | 261.4 |
| Connecticut ........ | 0.1 | 39.3 | 75.6 | 1.0 | 4.3 | 80.9 | 7.4 | (s) | 0.3 | 39.6 | 167.5 | 77.7 | 245.2 |
| Delaware ........... | (s) | 9.5 | 5.3 | 0.7 | 3.4 | 9.4 | 1.3 | 0.1 | (s) | 12.1 | 32.4 | 23.6 | 56.0 |
| Dist. of Col. ......... | 0.1 | 14.4 | 1.2 | (s) | (s) | 1.3 | 1.1 | 0.0 | (s) | 5.6 | 22.5 | 11.0 | 33.5 |
| Florida ................ | 0.1 | 14.4 | 0.6 | 0.9 | 16.0 | 17.5 | 6.0 | 1.6 | 30.6 | 320.2 | 390.4 | 627.4 | 1,017.8 |
| Georgia .............. | 0.2 | 101.4 | 0.3 | 1.4 | 14.8 | 16.5 | 13.0 | 0.1 | 0.2 | 142.5 | 273.9 | 279.2 | 553.1 |
| Hawaii ................ | 0.0 | 0.6 | (s) | (s) | 1.2 | 1.2 | 0.0 | 0.0 | 1.3 | 9.2 | 12.2 | 10.7 | 23.0 |
| Idaho ................. | 0.4 | 18.6 | 3.1 | (s) | 2.7 | 5.8 | 2.3 | (s) | (s) | 23.2 | 50.4 | 45.5 | 95.9 |
| Illinois ................ | 1.5 | 455.0 | 2.7 | 2.9 | 23.6 | 29.2 | 10.9 | 0.4 | 0.2 | 135.2 | 632.5 | 264.9 | 897.4 |
| Indiana ............... | 2.7 | 154.2 | 5.6 | 7.5 | 16.1 | 29.2 | 5.7 | 0.8 | (s) | 98.3 | 291.0 | 192.6 | 483.6 |
| Iowa ................... | 3.2 | 72.8 | 2.8 | 0.1 | 18.9 | 21.9 | 4.6 | 0.1 | (s) | 40.5 | 143.1 | 79.3 | 222.5 |
| Kansas ............... | 0.1 | 67.8 | 0.1 | 2.0 | 12.1 | 14.1 | 4.3 | (s) | (s) | 38.7 | 125.0 | 75.9 | 200.9 |
| Kentucky ............ | 3.4 | 61.1 | 2.8 | 4.9 | 10.1 | 17.8 | 5.6 | 0.4 | (s) | 76.9 | 165.2 | 150.7 | 315.9 |
| Louisiana ........... | 0.0 | 47.0 | (s) | 0.4 | 6.8 | 7.2 | 3.7 | 0.2 | 0.1 | 90.2 | 148.4 | 176.7 | 325.0 |
| Maine ................. | (s) | 1.0 | 43.6 | 8.7 | 3.4 | 55.7 | 3.3 | (s) | 0.1 | 12.6 | 72.9 | 24.8 | 97.6 |
| Maryland ............ | 0.4 | 77.4 | 27.3 | 3.0 | 6.0 | 36.3 | 8.6 | 0.1 | (s) | 79.6 | 202.5 | 156.0 | 358.6 |
| Massachusetts .... | 0.4 | 110.8 | 104.4 | 1.0 | 5.5 | 110.9 | 13.7 | (s) | 0.2 | 59.3 | 295.4 | 116.3 | 411.7 |
| Michigan ............ | 0.2 | 365.6 | 15.9 | 3.4 | 38.9 | 58.2 | 9.5 | 0.9 | 0.3 | 104.6 | 539.3 | 205.0 | 744.3 |
| Minnesota .......... | 0.1 | 121.2 | 11.1 | 0.2 | 17.5 | 28.9 | 7.6 | 0.2 | 0.3 | 61.4 | 219.8 | 120.3 | 340.2 |
| Mississippi ......... | 0.0 | 25.5 | (s) | 0.1 | 8.4 | 8.5 | 3.7 | (s) | (s) | 55.7 | 93.5 | 109.1 | 202.6 |
| Missouri ............. | 1.8 | 113.6 | 1.6 | 0.3 | 24.8 | 26.7 | 9.0 | 0.1 | 0.1 | 94.7 | 246.1 | 185.6 | 431.7 |
| Montana ............. | (s) | 20.1 | 1.5 | (s) | 1.2 | 2.7 | 1.8 | 0.1 | (s) | 12.5 | 37.3 | 24.5 | 61.8 |
| Nebraska ........... | 0.0 | 40.6 | 0.4 | (s) | 6.2 | 6.6 | 2.7 | 0.1 | (s) | 27.1 | 77.0 | 53.0 | 130.0 |
| Nevada .............. | 0.0 | 29.7 | 0.7 | (s) | 3.2 | 4.0 | 3.4 | 0.2 | 0.4 | 28.6 | 66.3 | 56.1 | 122.4 |
| New Hampshire .. | (s) | 6.7 | 26.5 | 2.1 | 6.8 | 35.5 | 2.9 | (s) | (s) | 12.4 | 57.5 | 24.3 | 81.9 |
| New Jersey ......... | 0.1 | 217.7 | 57.2 | 1.5 | 6.8 | 65.5 | 8.1 | 0.1 | 0.6 | 83.8 | 375.8 | 164.1 | 539.9 |
| New Mexico ........ | (s) | 34.6 | 0.1 | 0.1 | 7.4 | 7.6 | 3.4 | (s) | 0.5 | 15.9 | 62.1 | 31.1 | 93.2 |
| New York ............ | 1.8 | 380.9 | 166.0 | 13.2 | 17.0 | 196.2 | 79.4 | 0.1 | 0.6 | 146.4 | 805.4 | 286.9 | 1,092.3 |
| North Carolina .... | 1.3 | 54.7 | 17.4 | 11.3 | 23.3 | 51.9 | 13.7 | 0.2 | 0.2 | 148.9 | 270.9 | 291.8 | 562.7 |
| North Dakota ...... | 0.7 | 11.0 | 2.6 | 0.1 | 5.2 | 7.9 | 1.1 | 0.1 | (s) | 11.3 | 32.1 | 22.1 | 54.2 |
| Ohio ................... | 1.9 | 330.0 | 18.2 | 7.3 | 27.1 | 52.6 | 10.7 | 0.6 | 0.1 | 159.1 | 555.0 | 311.7 | 866.7 |
| Oklahoma ........... | (s) | 62.9 | (s) | 0.1 | 8.3 | 8.3 | 3.0 | (s) | 0.1 | 62.4 | 136.8 | 122.3 | 259.1 |
| Oregon ............... | 0.0 | 40.7 | 3.8 | 0.5 | 2.0 | 6.2 | 8.3 | 0.2 | 0.7 | 61.6 | 117.7 | 120.7 | 238.4 |
| Pennsylvania ...... | 9.0 | 250.2 | 112.3 | 14.3 | 13.5 | 140.1 | 13.1 | 0.3 | 0.5 | 150.6 | 563.6 | 295.0 | 858.6 |
| Rhode Island ...... | (s) | 17.0 | 18.5 | 0.3 | 0.9 | 19.7 | 2.3 | (s) | (s) | 9.1 | 48.2 | 17.8 | 66.0 |
| South Carolina .... | 2.0 | 26.5 | 2.9 | 3.1 | 7.2 | 13.2 | 6.9 | 0.1 | (s) | 80.9 | 129.6 | 158.4 | 288.1 |
| South Dakota ...... | (s) | 11.8 | 1.8 | (s) | 5.0 | 6.9 | 1.2 | 0.1 | (s) | 11.3 | 31.3 | 22.1 | 53.3 |
| Tennessee .......... | 0.8 | 60.6 | 1.2 | 2.4 | 11.0 | 14.6 | 7.7 | (s) | 0.1 | 120.9 | 204.7 | 236.8 | 441.5 |
| Texas ................. | 0.1 | 182.4 | (s) | 0.2 | 32.9 | 33.1 | 10.3 | 0.3 | 0.6 | 370.5 | 597.3 | 726.0 | 1,323.3 |
| Utah ................... | 0.9 | 58.6 | 0.5 | (s) | 1.1 | 1.7 | 3.3 | (s) | (s) | 21.3 | 85.8 | 41.7 | 127.5 |
| Vermont .............. | (s) | 2.6 | 11.8 | 1.5 | 4.9 | 18.2 | 1.5 | (s) | (s) | 6.8 | 29.2 | 13.4 | 42.6 |
| Virginia .............. | 1.1 | 71.7 | 29.0 | 8.8 | 10.6 | 48.4 | 11.7 | 0.2 | 0.1 | 122.1 | 255.2 | 239.2 | 494.4 |
| Washington ......... | 0.1 | 75.4 | 6.5 | 0.5 | 7.3 | 14.3 | 14.2 | (s) | 0.3 | 112.0 | 216.3 | 219.4 | 435.7 |
| West Virginia ...... | 1.4 | 33.1 | 2.8 | 3.1 | 2.6 | 8.5 | 3.3 | (s) | (s) | 32.3 | 78.7 | 63.2 | 141.9 |
| Wisconsin ........... | 1.4 | 129.1 | 17.2 | 0.3 | 25.3 | 42.8 | 5.2 | 0.1 | 0.2 | 66.5 | 245.4 | 130.4 | 375.8 |
| Wyoming ............ | 0.7 | 12.7 | 0.2 | (s) | 0.9 | 1.1 | 1.0 | (s) | (s) | 6.9 | 22.3 | 13.5 | 35.9 |
| United States ...... | 42.4 | 4,855.8 | 811.2 | 111.2 | 533.7 | 1,456.1 | 404.0 | 8.5 | 63.5 | 3,906.5 | 10,736.7 | 7,645.6 | 18,382.3 |

[a] Includes supplemental gaseous fuels.
[b] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

(s)=Less than 0.05 trillion Btu.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Energy Information Administration**

## Table 5. Commercial Energy Consumption Estimates, 1999
(Trillion Btu)

| State | Coal | Natural Gas [a] | Petroleum | | | | | | Wood | Geothermal | Electricity | Net Energy | Electrical System Energy Losses [b] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Distillate Fuel | Kerosene | LPG | Motor Gasoline | Residual Fuel | Total | | | | | | |
| Alabama ............. | 0.4 | 28.6 | 3.2 | (s) | 3.0 | 0.2 | 0.0 | 6.5 | 0.9 | 0.0 | 64.2 | 100.5 | 125.8 | 226.3 |
| Alaska ................. | 5.6 | 27.7 | 4.5 | (s) | 0.1 | 0.5 | 0.0 | 5.1 | 0.2 | (s) | 8.8 | 47.5 | 15.6 | 63.1 |
| Arizona ............... | 0.0 | 31.9 | 3.3 | (s) | 0.9 | 0.2 | 0.0 | 4.4 | 1.3 | (s) | 77.4 | 115.0 | 151.7 | 266.7 |
| Arkansas ............ | 0.0 | 28.4 | 1.5 | (s) | 1.9 | 0.1 | 0.0 | 3.6 | 0.3 | 0.0 | 30.9 | 63.2 | 60.6 | 123.8 |
| California ............ | 0.4 | 249.1 | 9.5 | 0.2 | 3.6 | 1.2 | 0.0 | 14.5 | 5.0 | 0.5 | 326.8 | 596.3 | 640.2 | 1,236.5 |
| Colorado ............ | 1.5 | 63.9 | 5.4 | 0.1 | 1.3 | 0.9 | (s) | 7.6 | 1.1 | 0.2 | 61.1 | 135.4 | 119.8 | 255.1 |
| Connecticut ........ | (s) | 48.7 | 15.5 | 0.5 | 0.8 | 4.1 | 1.6 | 22.4 | 1.0 | 0.0 | 42.1 | 114.3 | 82.6 | 196.8 |
| Delaware ........... | (s) | 6.5 | 1.9 | 0.3 | 0.6 | 0.1 | 0.8 | 3.6 | 0.2 | 0.0 | 11.6 | 22.0 | 22.8 | 44.8 |
| Dist. of Col. ......... | 0.1 | 18.2 | 2.0 | 1.3 | (s) | 0.1 | (s) | 3.4 | 0.2 | 0.0 | 28.5 | 50.3 | 55.8 | 106.2 |
| Florida ................ | 0.1 | 37.8 | 10.5 | 0.3 | 2.8 | 1.3 | 0.1 | 15.1 | 0.8 | 0.5 | 255.2 | 309.5 | 500.0 | 809.5 |
| Georgia .............. | 0.3 | 44.7 | 7.1 | 0.2 | 2.6 | 0.7 | (s) | 10.7 | 1.8 | (s) | 121.3 | 178.8 | 237.6 | 416.3 |
| Hawaii ................ | 0.0 | 1.8 | 0.9 | (s) | 0.2 | 0.1 | (s) | 1.2 | 0.0 | (s) | 10.0 | 13.1 | 11.8 | 24.8 |
| Idaho .................. | 0.8 | 13.1 | 3.4 | (s) | 0.5 | 0.2 | 0.0 | 4.1 | 0.3 | 0.4 | 23.0 | 41.8 | 45.1 | 86.9 |
| Illinois ................. | 2.7 | 192.7 | 7.8 | 0.5 | 4.2 | 0.8 | 0.6 | 13.8 | 1.5 | 0.0 | 172.8 | 383.5 | 338.6 | 722.0 |
| Indiana ............... | 4.9 | 75.0 | 6.8 | 0.2 | 2.8 | 1.0 | (s) | 10.9 | 0.8 | 0.2 | 70.6 | 162.4 | 138.3 | 300.7 |
| Iowa ................... | 6.0 | 45.8 | 2.6 | (s) | 3.3 | 2.3 | 0.0 | 8.2 | 0.6 | 0.2 | 33.0 | 93.8 | 64.6 | 158.5 |
| Kansas ............... | 0.1 | 39.5 | 2.5 | (s) | 2.1 | 0.3 | 0.0 | 5.0 | 0.6 | 0.2 | 41.8 | 87.2 | 81.9 | 169.2 |
| Kentucky ............. | 6.3 | 37.0 | 5.8 | 0.4 | 1.8 | 0.2 | (s) | 8.2 | 0.8 | 0.2 | 56.3 | 108.7 | 110.3 | 219.0 |
| Louisiana ........... | 0.0 | 25.6 | 3.1 | 0.1 | 1.2 | 0.2 | 0.0 | 4.6 | 0.5 | 0.2 | 69.4 | 100.4 | 136.1 | 236.5 |
| Maine ................. | (s) | 2.6 | 16.4 | 0.8 | 0.6 | 0.1 | 0.8 | 18.6 | 0.5 | 0.0 | 12.1 | 33.8 | 23.7 | 57.6 |
| Maryland ............ | 0.7 | 60.0 | 13.0 | 1.4 | 1.1 | 0.2 | 0.4 | 16.0 | 1.2 | 0.0 | 87.6 | 165.6 | 171.6 | 337.1 |
| Massachusetts .... | 0.5 | 68.3 | 22.4 | 1.3 | 1.0 | 0.3 | 8.9 | 33.9 | 1.9 | 0.2 | 74.4 | 179.4 | 145.8 | 325.2 |
| Michigan ............ | 0.3 | 186.9 | 7.4 | 0.2 | 6.9 | 0.9 | (s) | 15.4 | 1.3 | 0.2 | 123.0 | 327.2 | 240.9 | 568.1 |
| Minnesota .......... | 0.2 | 89.7 | 4.7 | 0.1 | 3.1 | 0.3 | 1.2 | 9.4 | 1.1 | 0.0 | 39.7 | 140.1 | 77.8 | 217.9 |
| Mississippi ......... | 0.0 | 21.1 | 1.5 | 0.2 | 1.5 | 0.2 | 0.0 | 3.4 | 0.5 | 0.2 | 40.7 | 65.9 | 79.7 | 145.6 |
| Missouri ............. | 3.3 | 64.0 | 5.4 | 0.1 | 4.4 | 1.6 | 0.2 | 11.7 | 1.3 | 0.0 | 85.8 | 166.0 | 168.0 | 334.1 |
| Montana ............. | (s) | 12.4 | 0.9 | (s) | 0.2 | 0.1 | (s) | 1.2 | 0.3 | 0.1 | 11.5 | 25.5 | 22.5 | 48.0 |
| Nebraska ........... | 0.0 | 27.6 | 1.2 | (s) | 1.1 | 0.1 | (s) | 2.4 | 0.4 | 0.2 | 27.3 | 57.9 | 53.5 | 111.3 |
| Nevada .............. | 0.0 | 23.4 | 1.3 | (s) | 0.6 | 0.1 | 0.1 | 2.0 | 0.5 | 0.5 | 23.9 | 50.3 | 46.8 | 97.1 |
| New Hampshire .. | (s) | 7.3 | 8.4 | 0.2 | 1.2 | 0.1 | 0.9 | 10.8 | 0.4 | 0.0 | 12.7 | 31.3 | 24.9 | 56.2 |
| New Jersey ......... | (s) | 170.2 | 24.1 | 7.1 | 1.2 | 0.4 | 4.5 | 37.2 | 1.1 | 0.0 | 112.2 | 320.9 | 219.9 | 540.8 |
| New Mexico ........ | 0.1 | 26.6 | 1.8 | (s) | 1.3 | 0.1 | 0.0 | 3.2 | 0.5 | 0.1 | 25.4 | 55.8 | 49.7 | 105.6 |
| New York ............ | 2.6 | 370.1 | 81.7 | 3.9 | 3.0 | 1.0 | 56.2 | 145.7 | 11.1 | 0.2 | 231.9 | 761.8 | 454.4 | 1,216.1 |
| North Carolina .... | 2.4 | 39.4 | 12.7 | 1.0 | 4.1 | 1.6 | 0.8 | 20.2 | 1.9 | 0.0 | 126.9 | 190.8 | 248.7 | 439.5 |
| North Dakota ...... | 1.3 | 10.5 | 1.2 | (s) | 0.9 | 0.1 | 0.1 | 2.4 | 0.2 | 0.1 | 9.5 | 24.0 | 18.7 | 42.6 |
| Ohio ................... | 3.4 | 173.8 | 9.6 | 0.7 | 4.8 | 0.9 | 0.0 | 16.0 | 1.5 | 0.2 | 147.7 | 342.7 | 289.5 | 632.1 |
| Oklahoma ........... | (s) | 40.4 | 1.9 | 0.1 | 1.5 | 0.2 | 0.0 | 3.6 | 0.4 | 0.0 | 51.7 | 96.3 | 101.4 | 197.7 |
| Oregon ............... | 0.0 | 30.1 | 2.9 | 0.2 | 0.3 | 0.2 | 0.4 | 3.9 | 1.2 | 0.3 | 52.4 | 87.9 | 102.6 | 190.5 |
| Pennsylvania ...... | 8.1 | 148.4 | 27.8 | 2.0 | 2.4 | 1.0 | 4.1 | 37.2 | 1.8 | 0.2 | 130.7 | 326.5 | 256.1 | 582.6 |
| Rhode Island ...... | (s) | 12.1 | 3.0 | 0.2 | 0.2 | (s) | 2.8 | 6.2 | 0.3 | 0.0 | 11.3 | 30.0 | 22.2 | 52.2 |
| South Carolina .... | 3.8 | 21.2 | 6.1 | 0.2 | 1.3 | 0.2 | 0.1 | 7.8 | 1.0 | 0.0 | 59.7 | 93.4 | 116.9 | 210.3 |
| South Dakota ...... | (s) | 9.6 | 1.1 | (s) | 0.9 | 0.1 | 0.1 | 2.1 | 0.2 | 0.3 | 9.1 | 21.3 | 17.9 | 39.2 |
| Tennessee .......... | 1.6 | 52.8 | 5.1 | 0.3 | 1.9 | 0.3 | 0.0 | 7.6 | 1.1 | 0.0 | 89.6 | 152.6 | 175.6 | 328.1 |
| Texas ................. | 0.1 | 178.1 | 16.3 | 0.3 | 5.8 | 0.9 | 0.0 | 23.3 | 1.4 | 0.2 | 319.0 | 522.2 | 625.0 | 1,147.2 |
| Utah ................... | 1.7 | 32.0 | 3.9 | (s) | 0.2 | 0.1 | 0.1 | 4.3 | 0.5 | 0.2 | 27.5 | 66.3 | 54.0 | 120.2 |
| Vermont .............. | (s) | 2.3 | 5.5 | 0.2 | 0.9 | (s) | 0.5 | 7.2 | 0.2 | 0.0 | 6.6 | 16.4 | 13.0 | 29.4 |
| Virginia ............... | 2.0 | 63.7 | 16.8 | 1.8 | 1.9 | 0.9 | 1.4 | 22.7 | 1.6 | 0.2 | 125.9 | 216.1 | 246.6 | 462.8 |
| Washington ......... | 0.3 | 53.4 | 3.3 | 0.1 | 1.3 | 1.7 | 0.2 | 6.5 | 2.0 | 0.3 | 91.1 | 153.5 | 178.5 | 332.0 |
| West Virginia ...... | 2.7 | 28.8 | 1.9 | 0.4 | 0.5 | 0.1 | 0.0 | 2.8 | 0.5 | (s) | 22.4 | 57.1 | 43.9 | 101.0 |
| Wisconsin ........... | 2.5 | 82.7 | 7.7 | (s) | 4.5 | 0.4 | 1.3 | 13.9 | 0.7 | 0.0 | 62.7 | 162.6 | 122.9 | 285.4 |
| Wyoming ............ | 1.2 | 10.3 | 2.4 | (s) | 0.2 | (s) | 0.0 | 2.6 | 0.1 | 0.6 | 9.2 | 24.1 | 18.0 | 42.1 |
| United States ...... | 68.6 | 3,135.7 | 416.6 | 26.9 | 94.2 | 28.4 | 88.0 | 654.2 | 56.6 | 7.5 | 3,766.2 | 7,688.9 | 7,369.7 | 15,058.5 |

<sup>a</sup> Includes supplemental gaseous fuels.
<sup>b</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
<sup>c</sup> Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

(s)=Less than 0.05 trillion Btu.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 6. Industrial Energy Consumption Estimates, 1999
(Trillion Btu)

| State | Coal | Natural Gas [a] | Petroleum | | | | | | | | | Hydro-electric power | Wood and Waste | Other [c] | Electricity | Net Energy [d] | Electrical System Energy Losses [e] | Total [d] |
| | | | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other [b] | Total | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 121.9 | 227.6 | 30.5 | 21.2 | 0.2 | 5.5 | 3.3 | 2.3 | 4.5 | 20.3 | 87.8 | 0.0 | 190.7 | (s) | 117.8 | 745.8 | 230.9 | 976.7 |
| Alaska | (s) | 339.7 | 0.9 | 11.4 | (s) | 0.1 | 0.1 | 0.1 | 0.0 | 25.5 | 38.0 | 0.0 | 0.2 | 0.0 | 2.9 | 380.8 | 5.1 | 385.9 |
| Arizona | 13.2 | 27.5 | 25.3 | 14.3 | (s) | 0.4 | 1.7 | 1.7 | 0.2 | 9.7 | 53.4 | 0.0 | 1.5 | 0.2 | 42.5 | 138.4 | 83.3 | 221.6 |
| Arkansas | 7.8 | 150.1 | 6.8 | 20.1 | 0.1 | 7.1 | 1.7 | 2.9 | 0.1 | 41.1 | 79.8 | (s) | 183.3 | (s) | 56.9 | 477.9 | 111.5 | 589.4 |
| California | 63.4 | 1,196.3 | 135.1 | 50.9 | 0.4 | 18.3 | 13.5 | 10.0 | 4.3 | 232.5 | 465.1 | 15.6 | 120.3 | 324.8 | 215.7 | 2,401.1 | 422.6 | 2,823.7 |
| Colorado | 7.8 | 113.7 | 14.2 | 21.1 | (s) | 1.9 | 1.5 | 2.9 | (s) | 10.9 | 52.7 | 1.2 | 1.3 | 0.2 | 32.5 | 209.5 | 63.6 | 273.1 |
| Connecticut | 0.0 | 32.8 | 4.4 | 4.6 | 0.6 | 0.9 | 1.3 | 1.1 | 3.1 | 23.9 | 39.8 | 0.6 | 30.3 | 0.0 | 19.9 | 123.4 | 39.0 | 162.4 |
| Delaware | 3.7 | 22.5 | 1.2 | 2.8 | (s) | 0.1 | 0.5 | 0.4 | 8.8 | 30.5 | 44.3 | 0.0 | 0.4 | 0.0 | 12.3 | 83.3 | 24.2 | 107.4 |
| Dist. of Col. | 0.0 | 0.0 | 0.2 | 0.8 | (s) | (s) | (s) | 0.1 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.9 | 2.0 | 1.7 | 3.7 |
| Florida | 29.8 | 149.1 | 24.4 | 37.3 | 0.6 | 6.6 | 3.9 | 5.6 | 24.0 | 59.2 | 161.4 | 0.0 | 152.0 | 0.0 | 63.4 | 555.6 | 124.2 | 679.8 |
| Georgia | 49.4 | 164.1 | 49.3 | 36.5 | 0.2 | 7.0 | 4.1 | 5.1 | 7.9 | 37.3 | 147.4 | 0.3 | 240.1 | (s) | 120.3 | 721.6 | 235.7 | 957.3 |
| Hawaii | 3.1 | 0.5 | 2.3 | 1.5 | (s) | (s) | 0.1 | 0.8 | 2.5 | 12.6 | 19.9 | 1.0 | 14.6 | 4.6 | 12.8 | 56.4 | 15.0 | 71.3 |
| Idaho | 6.6 | 35.1 | 20.3 | 16.2 | (s) | 0.3 | 0.3 | 1.7 | (s) | 0.1 | 39.0 | 10.2 | 25.4 | 0.8 | 31.3 | 148.5 | 61.3 | 209.8 |
| Illinois | 144.5 | 312.9 | 74.9 | 39.2 | 0.3 | 52.7 | 12.6 | 5.7 | 1.2 | 175.0 | 361.5 | 0.9 | 24.9 | 4.0 | 143.2 | 992.1 | 280.6 | 1,272.6 |
| Indiana | 272.6 | 325.6 | 49.5 | 30.1 | 0.5 | 5.2 | 7.0 | 3.4 | 2.4 | 120.8 | 218.9 | 0.0 | 12.2 | 0.0 | 161.1 | 990.4 | 315.7 | 1,306.2 |
| Iowa | 62.2 | 103.9 | 19.5 | 31.4 | 0.2 | 45.5 | 1.2 | 4.6 | 0.8 | 14.1 | 117.3 | 0.2 | 9.7 | 3.4 | 56.3 | 353.0 | 110.3 | 463.3 |
| Kansas | 2.7 | 127.1 | 15.6 | 25.6 | 0.1 | 64.3 | 2.6 | 3.8 | 1.7 | 43.9 | 157.6 | 0.1 | 1.6 | 0.0 | 34.9 | 323.9 | 68.3 | 392.2 |
| Kentucky | 71.3 | 99.2 | 27.8 | 26.2 | 0.7 | 21.6 | 3.5 | 4.3 | 0.6 | 187.1 | 271.8 | 0.0 | 44.0 | 0.0 | 136.7 | 583.3 | 267.8 | 851.1 |
| Louisiana | 0.9 | 1,102.5 | 10.1 | 61.0 | 0.1 | 263.4 | 8.2 | 3.0 | 9.0 | 326.6 | 681.4 | 8.3 | 137.9 | (s) | 107.4 | 2,038.5 | 210.5 | 2,249.0 |
| Maine | 2.9 | 2.6 | 2.1 | 6.1 | 0.1 | (s) | 0.4 | 0.4 | 39.9 | 6.6 | 55.7 | 33.5 | 118.2 | 0.0 | 16.0 | 228.9 | 31.3 | 260.2 |
| Maryland | 19.4 | 43.6 | 29.0 | 13.9 | 0.2 | 0.6 | 2.7 | 1.2 | 4.5 | 34.9 | 87.0 | (s) | 27.1 | 0.0 | 33.9 | 211.0 | 66.4 | 277.4 |
| Massachusetts | 0.8 | 165.2 | 6.4 | 7.1 | 0.1 | 1.3 | 2.4 | 1.5 | 6.8 | 29.3 | 55.0 | 3.1 | 39.7 | 27.0 | 34.0 | 324.8 | 66.6 | 391.4 |
| Michigan | 117.1 | 323.3 | 44.3 | 26.0 | 0.3 | 8.4 | 11.5 | 5.3 | 2.5 | 87.9 | 186.2 | 0.9 | 78.6 | 0.0 | 127.2 | 833.3 | 249.2 | 1,082.5 |
| Minnesota | 31.6 | 106.2 | 51.4 | 28.1 | 0.4 | 10.8 | 2.1 | 5.3 | 3.0 | 35.8 | 136.9 | 3.3 | 54.3 | 5.0 | 94.7 | 432.1 | 185.6 | 617.7 |
| Mississippi | 4.5 | 129.1 | 21.9 | 22.3 | 0.2 | 8.1 | 2.2 | 3.8 | 0.1 | 38.7 | 97.3 | 0.1 | 61.5 | (s) | 53.7 | 346.2 | 105.2 | 451.4 |
| Missouri | 26.9 | 65.8 | 33.0 | 25.8 | 0.1 | 16.5 | 4.3 | 4.8 | 0.8 | 37.3 | 122.6 | 0.0 | 1.5 | 0.0 | 55.0 | 271.8 | 107.8 | 379.6 |
| Montana | 1.8 | 24.6 | 17.4 | 13.1 | (s) | 0.4 | 0.3 | 2.2 | 0.1 | 35.7 | 69.3 | 23.2 | 13.9 | 0.1 | 21.4 | 154.3 | 41.8 | 196.1 |
| Nebraska | 5.2 | 45.7 | 12.4 | 22.3 | (s) | 5.9 | 0.3 | 3.6 | 0.5 | 0.1 | 45.1 | 0.0 | 0.7 | 0.0 | 23.5 | 120.2 | 46.0 | 166.2 |
| Nevada | 5.0 | 35.2 | 5.4 | 9.4 | 0.1 | 1.2 | 0.2 | 0.7 | 0.1 | 0.6 | 17.6 | 0.2 | 0.0 | 30.4 | 37.1 | 125.4 | 72.6 | 198.0 |
| New Hampshire | 0.0 | 6.0 | 1.9 | 2.7 | 0.1 | 0.7 | 0.1 | 0.8 | 4.5 | 13.9 | 24.8 | 11.1 | 27.8 | 1.8 | 8.6 | 80.0 | 16.8 | 96.9 |
| New Jersey | 0.2 | 215.1 | 71.3 | 12.2 | 1.2 | 19.4 | 10.7 | 1.3 | 4.8 | 147.1 | 267.8 | 0.2 | 29.0 | 0.0 | 44.8 | 557.0 | 87.7 | 644.7 |
| New Mexico | 1.6 | 80.0 | 12.6 | 12.4 | 0.1 | 6.1 | 0.8 | 1.8 | 1.1 | 24.8 | 59.7 | 0.0 | 0.5 | 0.6 | 20.3 | 162.6 | 39.8 | 202.4 |
| New York | 68.7 | 305.2 | 41.6 | 20.2 | 0.4 | 6.4 | 6.6 | 4.7 | 12.3 | 148.4 | 240.6 | 36.4 | 83.1 | 0.0 | 88.2 | 822.2 | 172.7 | 994.9 |
| North Carolina | 43.9 | 112.7 | 30.4 | 23.0 | 0.3 | 15.3 | 3.7 | 3.4 | 31.2 | 74.1 | 181.4 | 12.5 | 58.3 | 0.0 | 116.6 | 525.3 | 228.4 | 753.7 |
| North Dakota | 88.3 | 27.4 | 13.9 | 12.5 | (s) | 3.5 | 0.2 | 2.3 | 0.3 | 6.7 | 39.4 | 0.0 | 0.8 | 0.0 | 10.3 | 166.3 | 20.1 | 186.4 |
| Ohio | 131.3 | 344.3 | 93.5 | 28.0 | 0.6 | 14.2 | 15.4 | 5.9 | 9.0 | 148.6 | 315.2 | 0.0 | 314.4 | 0.0 | 253.5 | 1,358.7 | 496.7 | 1,855.3 |
| Oklahoma | 17.1 | 240.5 | 11.4 | 15.5 | 0.1 | 23.3 | 3.7 | 3.6 | 0.8 | 51.1 | 109.6 | 0.0 | 17.0 | 0.0 | 45.3 | 429.5 | 88.7 | 518.2 |
| Oregon | 0.0 | 114.0 | 24.2 | 9.4 | 0.3 | 1.9 | 1.4 | 2.1 | 1.1 | 24.1 | 64.4 | 4.2 | 26.0 | 1.0 | 48.1 | 257.8 | 94.3 | 352.1 |
| Pennsylvania | 263.7 | 249.6 | 33.2 | 29.5 | 1.1 | 4.3 | 17.7 | 3.9 | 14.4 | 122.3 | 226.3 | 3.5 | 79.6 | 2.5 | 157.2 | 982.5 | 307.9 | 1,290.4 |
| Rhode Island | 0.0 | 56.8 | 2.0 | 1.4 | 0.1 | 0.7 | 0.4 | 0.1 | 2.0 | 0.3 | 7.0 | 0.1 | 1.5 | 0.0 | 4.0 | 69.3 | 7.7 | 77.0 |
| South Carolina | 46.6 | 105.9 | 14.8 | 12.8 | 0.5 | 5.4 | 1.8 | 1.8 | 8.5 | 22.8 | 68.4 | 0.4 | 72.6 | 0.0 | 109.6 | 403.5 | 214.7 | 618.2 |
| South Dakota | 8.6 | 5.9 | 12.5 | 10.8 | (s) | 1.2 | (s) | 2.3 | 0.6 | 0.1 | 27.5 | 0.0 | 0.4 | 0.1 | 6.6 | 49.2 | 13.0 | 62.2 |
| Tennessee | 83.2 | 143.0 | 39.3 | 14.0 | 0.3 | 3.9 | 3.6 | 3.0 | 0.4 | 55.8 | 120.2 | 6.7 | 39.5 | 0.0 | 107.5 | 500.2 | 210.5 | 710.8 |
| Texas | 67.2 | 2,316.3 | 56.0 | 122.1 | 0.8 | 1,569.8 | 22.0 | 13.0 | 4.8 | 1,242.9 | 3,031.5 | (s) | 56.1 | 3.3 | 340.3 | 5,814.7 | 666.8 | 6,481.5 |
| Utah | 40.7 | 68.3 | 15.8 | 11.8 | (s) | 2.2 | 0.7 | 1.2 | 0.4 | 15.5 | 47.6 | 0.1 | 1.6 | 0.3 | 25.8 | 184.5 | 50.6 | 235.1 |
| Vermont | 2.0 | 2.9 | 1.2 | 2.4 | 0.3 | 0.1 | 0.1 | 0.4 | 1.1 | 0.0 | 5.6 | 8.0 | 5.3 | 0.0 | 5.4 | 29.3 | 10.6 | 39.9 |
| Virginia | 82.9 | 106.6 | 31.7 | 25.1 | 0.3 | 4.1 | 2.7 | 3.0 | 12.9 | 36.8 | 116.4 | 0.6 | 103.1 | 0.0 | 69.2 | 478.9 | 135.5 | 614.4 |
| Washington | 2.2 | 133.4 | 27.2 | 12.4 | 0.1 | 7.5 | 1.3 | 2.6 | 2.6 | 194.5 | 248.4 | 5.3 | 67.7 | 0.0 | 134.8 | 591.8 | 264.1 | 855.9 |
| West Virginia | 80.2 | 53.6 | 5.1 | 17.8 | 0.1 | 0.9 | 2.7 | 1.0 | 0.7 | 28.0 | 56.2 | 6.5 | 2.1 | 0.0 | 38.0 | 236.5 | 74.4 | 310.8 |
| Wisconsin | 40.2 | 148.2 | 41.1 | 36.9 | 0.3 | 9.9 | 3.2 | 3.9 | 6.3 | 78.4 | 180.0 | 2.6 | 87.3 | 0.0 | 87.6 | 545.9 | 171.6 | 717.4 |
| Wyoming | 42.3 | 64.0 | 8.1 | 21.3 | (s) | 0.7 | 0.4 | 1.2 | 0.1 | 14.4 | 46.2 | 0.0 | 0.0 | 0.1 | 24.1 | 176.8 | 47.2 | 224.0 |
| United States | 2,186.8 | 10,371.3 | 1,324.4 | 1,080.4 | 12.8 | 2,255.7 | 192.8 | 151.7 | 249.1 | 4,128.5 | 9,395.4 | 201.2 | 2,620.0 | 410.4 | 3,610.6 | 28,853.4 | 7,063.7 | 35,917.1 |

[a] Includes supplemental gaseous fuels.
[b] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[c] "Other" is geothermal, wind, photovoltaic, and solar thermal energy sources. See Appendix A, Section 5, for explanation of estimation methodology.
[d] U.S. total includes 57.7 trillion Btu of net imports of coal coke that has not been allocated to the States.

[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
(s)=Less than 0.05 trillion Btu.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 7. Transportation Energy Consumption Estimates, 1999
(Trillion Btu)

| State | Coal | Natural Gas [a] | Petroleum Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol [b] | Electricity | Net Energy | Electrical System Energy Losses [c] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 0.0 | 22.9 | 0.5 | 118.4 | 11.1 | 0.1 | 3.1 | 298.0 | 6.5 | 437.8 | (s) | 0.0 | 460.7 | 0.0 | 460.7 |
| Alaska | 0.0 | 4.5 | 2.7 | 21.5 | 134.1 | (s) | 0.6 | 32.9 | 1.7 | 193.5 | 0.4 | 0.0 | 198.0 | 0.0 | 198.0 |
| Arizona | 0.0 | 19.0 | 0.8 | 92.0 | 54.6 | 0.1 | 2.2 | 283.9 | 0.0 | 433.5 | 1.3 | 0.0 | 452.5 | 0.0 | 452.5 |
| Arkansas | 0.0 | 9.1 | 0.6 | 84.5 | 25.9 | 1.7 | 2.8 | 172.6 | 0.0 | 288.0 | 0.0 | 0.0 | 297.2 | 0.0 | 297.2 |
| California | 0.0 | 12.9 | 4.2 | 373.3 | 559.5 | 1.4 | 18.0 | 1,749.0 | 175.3 | 2,880.6 | 4.9 | 1.8 | 2,895.3 | 3.6 | 2,898.9 |
| Colorado | 0.0 | 8.4 | 1.0 | 67.8 | 44.2 | 0.3 | 2.6 | 241.5 | 0.0 | 357.4 | 4.5 | (s) | 365.8 | (s) | 365.9 |
| Connecticut | 0.0 | 0.8 | 0.2 | 34.4 | 13.9 | 0.1 | 1.6 | 183.9 | 0.1 | 234.2 | 0.3 | 0.0 | 234.9 | 0.0 | 234.9 |
| Delaware | 0.0 | 0.1 | 0.1 | 8.6 | 0.6 | (s) | 0.4 | 47.7 | 13.2 | 70.6 | 0.0 | 0.0 | 70.6 | 0.0 | 70.6 |
| Dist. of Col. | 0.0 | 0.3 | (s) | 3.6 | 0.0 | (s) | 0.3 | 20.5 | 0.0 | 24.5 | 0.0 | 0.6 | 25.3 | 1.2 | 26.5 |
| Florida | 0.0 | 7.2 | 3.0 | 210.3 | 164.3 | 0.5 | 5.2 | 897.5 | 57.4 | 1,338.1 | 0.1 | 0.2 | 1,345.4 | 0.4 | 1,345.8 |
| Georgia | 0.0 | 9.1 | 0.8 | 196.7 | 86.8 | 0.4 | 4.0 | 566.9 | 5.7 | 861.3 | 0.0 | 0.3 | 870.8 | 0.7 | 871.4 |
| Hawaii | 0.0 | 0.0 | 0.3 | 9.1 | 53.7 | 0.0 | 0.5 | 45.8 | 12.9 | 122.3 | 0.0 | 0.0 | 122.3 | 0.0 | 122.3 |
| Idaho | 0.0 | 4.7 | 0.3 | 34.0 | 4.9 | (s) | 0.9 | 80.8 | 0.0 | 121.0 | 0.0 | 0.0 | 125.7 | 0.0 | 125.7 |
| Illinois | 0.0 | 55.3 | 0.9 | 202.6 | 103.4 | 1.2 | 9.7 | 612.7 | 0.2 | 930.8 | 20.3 | 1.5 | 987.5 | 2.9 | 990.5 |
| Indiana | 0.0 | 14.6 | 0.6 | 186.4 | 63.5 | 0.1 | 4.4 | 373.7 | 1.9 | 630.6 | 9.0 | 0.1 | 645.3 | 0.1 | 645.4 |
| Iowa | 0.0 | 7.9 | 0.4 | 74.9 | 5.0 | (s) | 3.4 | 185.9 | 0.0 | 269.6 | 6.7 | (s) | 277.5 | (s) | 277.5 |
| Kansas | 0.0 | 31.6 | 1.2 | 60.5 | 19.7 | 0.1 | 3.9 | 170.7 | 0.1 | 256.2 | 0.5 | 0.0 | 287.8 | 0.0 | 287.8 |
| Kentucky | 0.0 | 17.2 | 0.2 | 122.9 | 39.5 | 0.1 | 3.3 | 261.0 | 0.0 | 427.0 | 0.3 | 0.0 | 444.2 | 0.0 | 444.2 |
| Louisiana | 0.0 | 50.0 | 0.4 | 147.4 | 192.9 | 0.1 | 4.6 | 255.9 | 153.5 | 754.9 | 0.1 | (s) | 804.9 | (s) | 804.9 |
| Maine | 0.0 | 0.0 | 0.2 | 22.2 | 4.9 | (s) | 0.8 | 83.7 | 1.4 | 113.2 | 0.0 | (s) | 113.2 | (s) | 113.2 |
| Maryland | 0.0 | 3.4 | 0.2 | 73.3 | 22.3 | (s) | 2.0 | 295.0 | 7.4 | 400.3 | 0.2 | 0.5 | 404.1 | 1.0 | 405.1 |
| Massachusetts | 0.0 | 2.8 | 0.5 | 57.0 | 45.8 | 0.6 | 3.0 | 328.7 | 0.2 | 435.7 | 0.0 | 0.8 | 439.2 | 1.6 | 440.8 |
| Michigan | 0.0 | 23.3 | 1.4 | 132.7 | 51.7 | 1.3 | 9.5 | 624.5 | 0.3 | 821.4 | 3.4 | (s) | 844.7 | (s) | 844.8 |
| Minnesota | 0.0 | 22.5 | 0.7 | 93.4 | 71.4 | (s) | 5.1 | 306.5 | (s) | 477.1 | 19.5 | 0.0 | 499.6 | 0.0 | 499.6 |
| Mississippi | 0.0 | 66.1 | 0.4 | 81.2 | 54.8 | 1.2 | 2.0 | 196.2 | 6.9 | 342.7 | 0.0 | 0.0 | 408.9 | 0.0 | 408.9 |
| Missouri | 0.0 | 6.8 | 0.4 | 172.0 | 72.3 | 0.2 | 6.0 | 364.6 | (s) | 615.6 | 1.4 | 0.1 | 622.5 | 0.1 | 622.6 |
| Montana | 0.0 | 6.1 | 0.6 | 34.7 | 4.7 | (s) | 1.3 | 59.1 | 0.0 | 100.4 | (s) | 0.0 | 106.5 | 0.0 | 106.5 |
| Nebraska | 0.0 | 2.9 | 0.4 | 76.9 | 8.9 | 0.1 | 2.2 | 103.1 | 0.0 | 191.5 | 2.1 | 0.0 | 194.4 | 0.0 | 194.4 |
| Nevada | 0.0 | 0.9 | 0.4 | 36.9 | 47.4 | (s) | 0.5 | 111.7 | 0.0 | 196.9 | 2.3 | 0.0 | 197.8 | 0.0 | 197.8 |
| New Hampshire | 0.0 | (s) | 0.1 | 14.5 | 4.6 | (s) | 0.4 | 80.8 | (s) | 100.5 | 0.0 | 0.0 | 100.5 | 0.0 | 100.5 |
| New Jersey | 0.0 | 4.3 | 0.5 | 120.9 | 206.1 | (s) | 4.6 | 476.6 | 48.9 | 857.8 | 0.7 | 0.5 | 862.4 | 0.9 | 863.3 |
| New Mexico | 0.0 | 47.4 | 0.4 | 55.5 | 15.4 | 0.1 | 1.4 | 113.7 | 0.0 | 186.5 | 2.0 | 0.0 | 233.9 | 0.0 | 233.9 |
| New York | 0.0 | 8.6 | 0.4 | 147.5 | 51.7 | 0.1 | 6.8 | 690.6 | 47.1 | 944.2 | 1.2 | 9.1 | 961.9 | 17.7 | 979.6 |
| North Carolina | 0.0 | 10.9 | 0.9 | 132.6 | 38.6 | 0.3 | 4.1 | 502.6 | 1.0 | 680.0 | 3.0 | 0.0 | 690.9 | 0.0 | 690.9 |
| North Dakota | 0.0 | 9.9 | 0.2 | 26.0 | 2.3 | (s) | 1.0 | 43.0 | 0.0 | 72.5 | 0.4 | 0.0 | 82.4 | 0.0 | 82.4 |
| Ohio | 0.0 | 18.5 | 1.2 | 222.5 | 93.3 | 0.7 | 9.2 | 623.2 | 0.1 | 950.2 | 19.6 | 0.2 | 968.9 | 0.3 | 969.2 |
| Oklahoma | 0.0 | 24.5 | 0.5 | 111.7 | 37.3 | 0.2 | 5.0 | 223.3 | 0.0 | 378.0 | 0.0 | 0.0 | 402.5 | 0.0 | 402.5 |
| Oregon | 0.0 | 10.9 | 0.8 | 70.2 | 36.5 | 0.1 | 3.4 | 188.0 | 18.0 | 317.0 | 1.1 | 0.1 | 328.0 | 0.2 | 328.2 |
| Pennsylvania | 0.0 | 37.3 | 1.0 | 197.6 | 90.4 | 0.3 | 8.4 | 607.0 | 37.8 | 942.6 | 1.0 | 1.3 | 981.3 | 2.6 | 983.9 |
| Rhode Island | 0.0 | 0.3 | 0.1 | 9.3 | 6.0 | (s) | 0.4 | 49.8 | (s) | 65.6 | 0.0 | 0.0 | 65.9 | 0.0 | 65.9 |
| South Carolina | 0.0 | 3.7 | 0.5 | 85.8 | 8.7 | 0.1 | 1.7 | 273.0 | 2.8 | 372.7 | 0.0 | 0.0 | 376.4 | 0.0 | 376.4 |
| South Dakota | 0.0 | 6.1 | 0.3 | 21.1 | 4.4 | (s) | 1.0 | 51.5 | 0.0 | 78.2 | 1.8 | 0.0 | 84.3 | 0.0 | 84.3 |
| Tennessee | 0.0 | 25.9 | 0.6 | 131.7 | 67.0 | 0.2 | 4.3 | 360.3 | 0.0 | 564.2 | 0.0 | (s) | 590.1 | (s) | 590.1 |
| Texas | 0.0 | 73.0 | 4.0 | 479.2 | 594.8 | 1.3 | 12.3 | 1,252.3 | 131.9 | 2,475.8 | 4.8 | 0.1 | 2,548.8 | 0.1 | 2,549.0 |
| Utah | 0.0 | 2.8 | 0.4 | 45.1 | 42.2 | 0.1 | 1.2 | 119.2 | 0.0 | 208.2 | 0.9 | (s) | 211.1 | (s) | 211.1 |
| Vermont | 0.0 | (s) | 0.1 | 12.3 | 0.8 | (s) | 0.3 | 39.7 | 0.0 | 53.2 | 0.0 | 0.0 | 53.2 | 0.0 | 53.2 |
| Virginia | 0.0 | 8.3 | 0.5 | 142.3 | 52.8 | (s) | 3.4 | 438.1 | 9.2 | 646.5 | 2.8 | 0.3 | 655.7 | 0.6 | 655.7 |
| Washington | 0.0 | 8.2 | 1.4 | 95.9 | 125.6 | (s) | 3.2 | 325.2 | 57.4 | 608.9 | 2.5 | 0.1 | 617.1 | 0.1 | 617.3 |
| West Virginia | 0.0 | 31.5 | 0.1 | 46.9 | 1.0 | (s) | 1.6 | 100.5 | 0.0 | 150.1 | (s) | 0.0 | 181.6 | 0.0 | 181.6 |
| Wisconsin | 0.0 | 4.2 | 0.7 | 101.0 | 19.3 | 0.2 | 3.4 | 303.0 | (s) | 427.6 | 2.5 | (s) | 431.8 | (s) | 431.8 |
| Wyoming | 0.0 | 14.5 | 1.2 | 62.4 | 1.0 | (s) | 1.0 | 39.8 | 0.0 | 105.3 | 0.0 | 0.0 | 119.8 | 0.0 | 119.8 |
| United States | 0.0 | 761.1 | 39.2 | 5,160.9 | 3,461.8 | 13.5 | 182.1 | 15,855.4 | 798.9 | 25,511.8 | 121.6 | 17.5 | 26,290.3 | 34.3 | 26,324.6 |

a Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and gas consumed as vehicle fuel.
b Ethanol blended into motor gasoline is included in motor gasoline, but is also shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total.
c Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
(s)=Less than 0.05 trillion Btu.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 8. Estimates of Energy Input at Electric Utilities, 1999
(Trillion Btu)

| State | Coal | Natural Gas a | Petroleum Heavy Oil b | Petroleum Light Oil c | Petroleum Coke | Petroleum Total | Nuclear Electric Power | Hydroelectric Power d | Wood and Waste | Geothermal Energy e | Other f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 732.9 | 21.1 | 0.0 | 1.7 | 0.0 | 1.7 | 328.2 | 80.3 | 0.0 | 0.0 | 0.0 | 1,164.2 |
| Alaska | 2.2 | 30.5 | 5.3 | 3.6 | 0.0 | 8.9 | 0.0 | 8.5 | 0.0 | 0.0 | 0.0 | 50.1 |
| Arizona | 390.3 | 51.4 | 0.1 | 0.4 | 0.0 | 0.5 | 323.1 | 104.3 | 0.0 | 0.0 | 0.0 | 869.6 |
| Arkansas | 259.1 | 41.0 | 0.6 | 1.0 | 0.0 | 1.6 | 137.2 | 27.9 | 0.0 | 0.0 | 0.0 | 466.7 |
| California | 0.0 | 145.5 | 0.0 | 0.7 | 0.0 | 0.7 | 354.5 | 409.4 | 1.5 | 33.1 | 0.1 | 950.6 |
| Colorado | 345.2 | 19.8 | (s) | 0.4 | 0.0 | 0.4 | 0.0 | 15.3 | 0.0 | 0.0 | 0.0 | 380.7 |
| Connecticut | 0.0 | 13.4 | 62.1 | 0.8 | 0.0 | 62.9 | 134.6 | 13.7 | 4.8 | 0.0 | 0.0 | 235.3 |
| Delaware | 32.2 | 19.5 | 11.6 | 1.2 | 0.0 | 12.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 64.6 |
| Dist. of Col. | 0.0 | 0.0 | 2.8 | 0.6 | 0.0 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 |
| Florida | 641.7 | 333.3 | 333.6 | 18.4 | 27.9 | 379.9 | 334.9 | 1.5 | 0.2 | 0.0 | 0.0 | 1,691.5 |
| Georgia | 739.7 | 21.2 | 2.5 | 6.0 | 0.0 | 8.4 | 334.4 | 27.7 | 0.0 | 0.0 | 0.0 | 1,131.4 |
| Hawaii | 0.0 | 0.0 | 54.5 | 14.8 | 0.0 | 69.2 | 0.0 | 0.2 | 0.0 | 0.0 | (s) | 69.4 |
| Idaho | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | 129.4 | 0.0 | 0.0 | 0.0 | 129.5 |
| Illinois | 688.3 | 41.6 | 1.7 | 2.6 | 0.6 | 4.9 | 864.2 | 0.5 | 0.7 | 0.0 | 0.0 | 1,600.2 |
| Indiana | 1,170.4 | 7.9 | 0.0 | 3.2 | 6.5 | 9.7 | 0.0 | 4.2 | 0.0 | 0.0 | 0.0 | 1,192.2 |
| Iowa | 344.5 | 5.3 | 0.0 | 1.7 | 0.0 | 1.7 | 38.7 | 10.1 | 0.2 | 0.0 | (s) | 400.3 |
| Kansas | 325.9 | 36.2 | 2.1 | 1.7 | 0.0 | 3.8 | 97.3 | (s) | 0.0 | 0.0 | 0.0 | 463.2 |
| Kentucky | 804.1 | 5.7 | 0.0 | 1.3 | 0.0 | 1.3 | 0.0 | 26.5 | 0.0 | 0.0 | 0.0 | 837.5 |
| Louisiana | 226.8 | 332.8 | 3.7 | 0.3 | 0.0 | 4.0 | 139.3 | 0.0 | 0.0 | 0.0 | 0.0 | 702.9 |
| Maine | 0.0 | 0.0 | 7.1 | 0.1 | 0.0 | 7.1 | 0.0 | 47.9 | 0.0 | 0.0 | 0.0 | 73.9 |
| Maryland | 283.0 | 17.1 | 41.6 | 2.9 | 0.0 | 44.5 | 141.4 | 14.7 | 0.0 | 0.0 | 0.0 | 500.7 |
| Massachusetts | 11.2 | 8.4 | 1.3 | 2.3 | 0.0 | 3.6 | 20.5 | 11.9 | 0.0 | 0.0 | 0.0 | 61.3 |
| Michigan | 705.0 | 31.1 | 13.3 | 2.9 | 0.4 | 16.6 | 155.0 | 10.3 | 0.0 | 0.0 | 0.0 | 910.0 |
| Minnesota | 304.0 | 6.7 | (s) | 1.2 | 7.6 | 8.8 | 141.5 | 55.2 | 4.3 | 0.0 | 0.0 | 536.2 |
| Mississippi | 133.2 | 104.4 | 30.9 | 0.4 | 0.0 | 31.3 | 89.5 | 0.0 | 0.0 | 0.0 | 0.0 | 358.4 |
| Missouri | 654.0 | 19.5 | (s) | 4.1 | 0.0 | 4.1 | 91.2 | 18.0 | 0.5 | 0.0 | 0.0 | 787.4 |
| Montana | 172.0 | 0.3 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 119.9 | 0.0 | 0.0 | 0.0 | 292.2 |
| Nebraska | 190.7 | 4.5 | (s) | 0.4 | 0.0 | 0.4 | 107.2 | 18.0 | 0.0 | 0.0 | 0.0 | 320.2 |
| Nevada | 174.8 | 67.5 | 0.2 | 0.2 | 0.0 | 0.4 | 0.0 | 29.0 | 0.0 | 0.0 | 0.0 | 271.8 |
| New Hampshire | 35.2 | 0.6 | 16.5 | 0.2 | 0.0 | 16.7 | 92.2 | 13.4 | 0.0 | 0.0 | 0.0 | 163.9 |
| New Jersey | 67.9 | 33.7 | 4.3 | 3.0 | 0.0 | 7.3 | 307.8 | -1.5 | 0.0 | 0.0 | 0.0 | 415.2 |
| New Mexico | 296.3 | 36.0 | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | 2.5 | 0.0 | 0.0 | 0.0 | 335.3 |
| New York | 115.0 | 186.2 | 116.1 | 10.3 | 0.0 | 126.4 | 393.2 | 228.9 | (s) | 0.0 | 0.0 | 1,039.2 |
| North Carolina | 660.0 | 10.9 | 0.0 | 3.7 | 0.0 | 3.7 | 398.6 | 27.5 | 0.0 | 0.0 | 0.0 | 1,100.7 |
| North Dakota | 321.3 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 28.2 | 0.0 | 0.0 | 0.0 | 347.1 |
| Ohio | 1,242.4 | 11.4 | 0.0 | 5.7 | 0.0 | 5.7 | 174.5 | 4.4 | 0.0 | 0.0 | 0.0 | 1,438.4 |
| Oklahoma | 316.4 | 174.6 | (s) | 0.1 | 0.0 | 0.1 | 0.0 | 31.8 | 0.0 | 0.0 | 0.0 | 522.9 |
| Oregon | 38.6 | 23.6 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 471.1 | 0.0 | 0.0 | 0.0 | 533.5 |
| Pennsylvania | 862.0 | 10.7 | 27.8 | 6.8 | 4.3 | 39.0 | 753.0 | 12.0 | 0.0 | 0.0 | 0.0 | 1,676.5 |
| Rhode Island | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 9.9 | 0.0 | 0.0 | 0.0 | 15.8 |
| South Carolina | 350.1 | 5.3 | 1.6 | 3.2 | 0.0 | 4.8 | 539.8 | 6.7 | 0.0 | 0.0 | 0.0 | 906.7 |
| South Dakota | 37.3 | 2.5 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 70.9 | 0.0 | 0.0 | 0.0 | 111.6 |
| Tennessee | 540.2 | 3.6 | 0.0 | 6.1 | 0.0 | 6.1 | 289.2 | 67.2 | 0.0 | 0.0 | 0.0 | 906.3 |
| Texas | 1,467.3 | 1,232.6 | 0.1 | 1.6 | 0.0 | 1.7 | 390.5 | 12.9 | 0.0 | 0.0 | (s) | 3,093.9 |
| Utah | 339.1 | 6.8 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 12.9 | 0.0 | 3.3 | 0.0 | 362.3 |
| Vermont | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 | 0.4 | 43.1 | 52.7 | 2.1 | 0.0 | 0.1 | 125.4 |
| Virginia | 315.7 | 24.7 | 27.6 | 2.8 | 0.0 | 30.4 | 300.6 | -6.3 | 0.0 | 0.0 | 0.0 | 665.2 |
| Washington | 93.9 | 7.1 | 0.0 | 0.1 | 0.0 | 0.1 | 64.7 | 983.0 | 2.8 | 0.0 | 0.0 | 1,185.3 |
| West Virginia | 892.3 | 0.4 | 0.0 | 1.9 | 0.0 | 1.9 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 897.7 |
| Wisconsin | 427.5 | 14.2 | 0.0 | 2.0 | 1.2 | 3.2 | 122.1 | 20.6 | 3.5 | 0.0 | 0.0 | 592.6 |
| Wyoming | 450.4 | 0.2 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 12.1 | 0.0 | 0.0 | 0.0 | 463.2 |
| United States | 18,200.3 | 3,171.1 | 768.9 | 125.4 | 48.4 | 942.7 | 7,702.1 | 3,248.1 | 20.6 | 36.3 | 0.3 | 33,414.0 |

a Includes supplemental gaseous fuels.
b Heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
c Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
d Includes net imports of hydroelectricity. A negative number in this column results from pumped storage for which, overall, more electricity is expended than created to provide electricity during peak demand periods.
e Includes net imports of electricity generated from geothermal energy.
f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g Includes 92.6 trillion Btu of net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
(s)=Number less than 0.05.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 9. Energy Consumption by Sector, Ranked by State, 1999

| Rank | Residential Sector State | Trillion Btu | Commercial Sector State | Trillion Btu | Industrial Sector State | Trillion Btu | Transportation Sector State | Trillion Btu | Total Consumption [a] State | Trillion Btu |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | California | 1,416.2 | California | 1,236.5 | Texas | 6,481.5 | California | 2,898.9 | Texas | 11,501.0 |
| 2 | Texas | 1,323.3 | New York | 1,216.1 | California | 2,823.7 | Texas | 2,549.0 | California | 8,375.4 |
| 3 | New York | 1,092.3 | Texas | 1,147.2 | Louisiana | 2,249.0 | Florida | 1,345.8 | Ohio | 4,323.4 |
| 4 | Florida | 1,017.8 | Florida | 809.5 | Ohio | 1,855.3 | Illinois | 990.5 | New York | 4,283.0 |
| 5 | Illinois | 897.4 | Illinois | 722.0 | Indiana | 1,306.2 | Pennsylvania | 983.9 | Illinois | 3,882.6 |
| 6 | Ohio | 866.7 | Ohio | 632.1 | Pennsylvania | 1,290.4 | New York | 979.6 | Florida | 3,852.9 |
| 7 | Pennsylvania | 858.6 | Pennsylvania | 582.6 | Illinois | 1,272.6 | Ohio | 969.2 | Pennsylvania | 3,715.5 |
| 8 | Michigan | 744.3 | Michigan | 568.1 | Michigan | 1,082.5 | Georgia | 871.4 | Louisiana | 3,615.4 |
| 9 | North Carolina | 562.7 | New Jersey | 540.8 | New York | 994.9 | New Jersey | 863.3 | Michigan | 3,239.6 |
| 10 | Georgia | 553.1 | Virginia | 462.8 | Alabama | 976.7 | Michigan | 844.8 | Georgia | 2,798.1 |
| 11 | New Jersey | 539.9 | North Carolina | 439.5 | Georgia | 957.3 | Louisiana | 804.9 | Indiana | 2,735.8 |
| 12 | Virginia | 494.4 | Georgia | 416.3 | Washington | 855.9 | North Carolina | 690.9 | New Jersey | 2,588.7 |
| 13 | Indiana | 483.6 | Maryland | 337.1 | Kentucky | 851.1 | Virginia | 655.7 | North Carolina | 2,446.9 |
| 14 | Tennessee | 441.5 | Missouri | 334.1 | North Carolina | 753.7 | Indiana | 645.4 | Washington | 2,240.8 |
| 15 | Washington | 435.7 | Washington | 332.0 | Wisconsin | 717.4 | Missouri | 622.6 | Virginia | 2,227.3 |
| 16 | Missouri | 431.7 | Tennessee | 328.1 | Tennessee | 710.8 | Washington | 617.3 | Tennessee | 2,070.5 |
| 17 | Massachusetts | 411.7 | Massachusetts | 325.2 | Florida | 679.6 | Tennessee | 590.1 | Alabama | 2,004.8 |
| 18 | Wisconsin | 375.8 | Indiana | 300.7 | New Jersey | 644.7 | Minnesota | 499.6 | Kentucky | 1,830.2 |
| 19 | Maryland | 358.6 | Wisconsin | 285.4 | South Carolina | 618.2 | Alabama | 460.7 | Wisconsin | 1,810.5 |
| 20 | Alabama | 341.0 | Arizona | 266.7 | Minnesota | 617.7 | Arizona | 452.5 | Missouri | 1,768.0 |
| 21 | Minnesota | 340.2 | Colorado | 255.1 | Virginia | 614.4 | Kentucky | 444.2 | Minnesota | 1,675.3 |
| 22 | Louisiana | 325.0 | Louisiana | 236.5 | Arkansas | 589.4 | Massachusetts | 440.8 | Massachusetts | 1,569.1 |
| 23 | Kentucky | 315.9 | Alabama | 226.3 | Oklahoma | 518.2 | Wisconsin | 431.8 | South Carolina | 1,493.0 |
| 24 | South Carolina | 288.1 | Kentucky | 219.0 | Iowa | 463.3 | Mississippi | 408.9 | Maryland | 1,378.2 |
| 25 | Arizona | 279.0 | Minnesota | 217.9 | Mississippi | 451.4 | Maryland | 405.1 | Oklahoma | 1,377.5 |
| 26 | Colorado | 261.4 | South Carolina | 210.3 | Kansas | 392.2 | Oklahoma | 402.5 | Arizona | 1,219.8 |
| 27 | Oklahoma | 259.1 | Oklahoma | 197.7 | Massachusetts | 391.4 | South Carolina | 376.4 | Mississippi | 1,208.5 |
| 28 | Connecticut | 245.2 | Connecticut | 196.8 | Alaska | 385.9 | Colorado | 365.9 | Arkansas | 1,203.7 |
| 29 | Oregon | 238.4 | Oregon | 190.5 | Missouri | 379.6 | Oregon | 328.2 | Colorado | 1,155.5 |
| 30 | Iowa | 222.5 | Kansas | 169.2 | Oregon | 352.1 | Arkansas | 297.2 | Iowa | 1,121.7 |
| 31 | Mississippi | 202.6 | Iowa | 158.5 | West Virginia | 310.8 | Kansas | 287.8 | Oregon | 1,109.2 |
| 32 | Kansas | 200.9 | Mississippi | 145.6 | Maryland | 277.4 | Iowa | 277.5 | Kansas | 1,050.0 |
| 33 | Arkansas | 193.3 | Arkansas | 123.8 | Colorado | 273.1 | Connecticut | 234.5 | Connecticut | 839.3 |
| 34 | West Virginia | 141.9 | Utah | 120.2 | Maine | 260.2 | New Mexico | 233.9 | West Virginia | 735.4 |
| 35 | Nebraska | 130.0 | Nebraska | 111.3 | Utah | 235.1 | Utah | 211.1 | Alaska | 694.7 |
| 36 | Utah | 127.5 | District of Columbia | 106.2 | Wyoming | 224.0 | Alaska | 198.0 | Utah | 693.9 |
| 37 | Nevada | 122.4 | New Mexico | 105.6 | Arizona | 221.6 | Nevada | 197.8 | New Mexico | 635.0 |
| 38 | Maine | 97.6 | West Virginia | 101.0 | Idaho | 209.8 | Nebraska | 194.4 | Nevada | 615.3 |
| 39 | Idaho | 95.9 | Nevada | 97.1 | New Mexico | 202.4 | West Virginia | 181.6 | Nebraska | 602.0 |
| 40 | New Mexico | 93.2 | Idaho | 86.9 | Nevada | 198.0 | Idaho | 125.7 | Maine | 528.6 |
| 41 | New Hampshire | 81.9 | Alaska | 63.1 | Montana | 196.1 | Hawaii | 122.3 | Idaho | 518.3 |
| 42 | Rhode Island | 66.0 | Maine | 57.6 | North Dakota | 186.4 | Wyoming | 119.8 | Wyoming | 421.8 |
| 43 | Montana | 61.8 | New Hampshire | 56.2 | Nebraska | 166.2 | Maine | 113.2 | Montana | 412.4 |
| 44 | Delaware | 56.0 | Rhode Island | 52.2 | Connecticut | 162.4 | Montana | 106.5 | North Dakota | 365.7 |
| 45 | North Dakota | 54.2 | Montana | 48.0 | Delaware | 107.4 | New Hampshire | 100.5 | New Hampshire | 335.4 |
| 46 | South Dakota | 53.3 | Delaware | 44.8 | New Hampshire | 96.9 | South Dakota | 84.3 | Delaware | 278.8 |
| 47 | Alaska | 47.7 | North Dakota | 42.6 | Rhode Island | 77.0 | North Dakota | 82.4 | Rhode Island | 261.1 |
| 48 | Vermont | 42.6 | Wyoming | 42.1 | Hawaii | 71.3 | Delaware | 70.6 | Hawaii | 241.4 |
| 49 | Wyoming | 35.9 | South Dakota | 39.2 | South Dakota | 62.2 | Rhode Island | 65.9 | South Dakota | 239.0 |
| 50 | District of Columbia | 33.5 | Vermont | 29.4 | Vermont | 39.9 | Vermont | 53.2 | District of Columbia | 169.8 |
| 51 | Hawaii | 23.0 | Hawaii | 24.8 | District of Columbia | 3.7 | District of Columbia | 26.5 | Vermont | 165.0 |
|  | United States | 18,382.3 | United States | 15,058.5 | United States | 35,917.1 | United States | 26,324.6 | United States | 95,682.4 |

[a] U.S. total includes 57.7 trillion Btu of net imports of coal coke that has not been allocated to the States.
Source: Combined State Energy Data System 1999.

## Table 10. Energy Consumption by Source and Total Consumption per Capita, Ranked by State, 1999

| Rank | Coal State | Coal Trillion Btu | Natural Gas State | Natural Gas Trillion Btu | Petroleum State | Petroleum Trillion Btu | Electricity [a] State | Electricity [a] Trillion Btu | Total Consumption per Capita State | Total Consumption per Capita Million Btu |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Texas | 1,534.7 | Texas | 3,982.4 | Texas | 5,565.3 | Texas | 1,029.9 | Alaska | 1,121.5 |
| 2 | Indiana | 1,450.6 | California | 2,182.4 | California | 3,383.2 | California | 801.2 | Wyoming | 879.4 |
| 3 | Ohio | 1,379.0 | Louisiana | 1,558.0 | Florida | 1,912.0 | Florida | 639.0 | Louisiana | 826.9 |
| 4 | Pennsylvania | 1,142.7 | New York | 1,251.1 | New York | 1,653.2 | Ohio | 560.5 | North Dakota | 577.1 |
| 5 | West Virginia | 976.6 | Illinois | 1,057.5 | Louisiana | 1,452.0 | New York | 475.6 | Texas | 573.8 |
| 6 | Kentucky | 885.1 | Michigan | 930.2 | Pennsylvania | 1,385.3 | Illinois | 452.7 | Arkansas | 471.8 |
| 7 | Alabama | 855.4 | Ohio | 878.1 | Illinois | 1,340.2 | Pennsylvania | 439.7 | Montana | 467.1 |
| 8 | Illinois | 836.9 | Pennsylvania | 696.2 | Ohio | 1,339.8 | North Carolina | 392.4 | Kentucky | 462.1 |
| 9 | Michigan | 822.6 | New Jersey | 640.9 | New Jersey | 1,235.6 | Georgia | 384.4 | Indiana | 460.3 |
| 10 | Georgia | 789.6 | Indiana | 577.3 | Michigan | 1,097.9 | Michigan | 354.8 | Alabama | 458.8 |
| 11 | North Carolina | 707.7 | Oklahoma | 543.0 | Georgia | 1,044.4 | Washington | 337.9 | Mississippi | 436.5 |
| 12 | Missouri | 686.1 | Florida | 541.7 | North Carolina | 937.2 | Indiana | 330.1 | Maine | 421.9 |
| 13 | Florida | 671.6 | Alaska | 420.0 | Indiana | 899.3 | Tennessee | 317.9 | Idaho | 414.1 |
| 14 | Tennessee | 625.8 | Wisconsin | 378.5 | Washington | 878.2 | Virginia | 317.4 | Oklahoma | 410.2 |
| 15 | Wyoming | 494.6 | Massachusetts | 355.5 | Virginia | 864.3 | Alabama | 274.3 | West Virginia | 407.0 |
| 16 | Wisconsin | 471.6 | Minnesota | 346.3 | Missouri | 780.6 | Kentucky | 269.9 | Kansas | 395.6 |
| 17 | Iowa | 416.0 | Mississippi | 346.2 | Kentucky | 726.1 | Louisiana | 267.0 | Iowa | 390.9 |
| 18 | North Dakota | 411.6 | Alabama | 344.5 | Tennessee | 712.7 | South Carolina | 250.1 | Washington | 389.3 |
| 19 | Arizona | 403.5 | Georgia | 340.6 | Wisconsin | 667.6 | New Jersey | 241.2 | South Carolina | 384.2 |
| 20 | South Carolina | 402.6 | Colorado | 318.2 | Minnesota | 661.0 | Missouri | 235.6 | Ohio | 384.1 |
| 21 | Virginia | 401.6 | Kansas | 302.2 | Massachusetts | 639.1 | Wisconsin | 216.8 | Tennessee | 377.6 |
| 22 | Utah | 382.4 | Tennessee | 285.8 | Maryland | 584.1 | Maryland | 201.6 | Delaware | 370.0 |
| 23 | Colorado | 355.2 | Washington | 277.4 | Alabama | 550.9 | Arizona | 196.7 | New Mexico | 365.0 |
| 24 | Minnesota | 336.0 | Virginia | 275.2 | Oklahoma | 499.7 | Minnesota | 195.8 | Nebraska | 361.3 |
| 25 | Oklahoma | 333.5 | Missouri | 269.6 | Arizona | 497.0 | Massachusetts | 168.6 | Georgia | 359.3 |
| 26 | Kansas | 328.8 | Arkansas | 265.5 | Mississippi | 483.3 | Oregon | 162.2 | Minnesota | 350.8 |
| 27 | Maryland | 303.5 | Iowa | 235.7 | South Carolina | 466.9 | Oklahoma | 159.5 | Wisconsin | 344.8 |
| 28 | New Mexico | 298.0 | North Carolina | 228.6 | Connecticut | 440.1 | Mississippi | 150.1 | Nevada | 340.1 |
| 29 | Arkansas | 266.9 | New Mexico | 224.7 | Kansas | 436.7 | Colorado | 138.4 | Oregon | 334.5 |
| 30 | Louisiana | 227.8 | Kentucky | 220.1 | Colorado | 425.5 | Arkansas | 135.8 | Michigan | 328.4 |
| 31 | Nebraska | 195.9 | Oregon | 219.3 | Iowa | 418.8 | Iowa | 129.8 | District of Columbia | 327.1 |
| 32 | New York | 188.2 | Maryland | 201.4 | Oregon | 391.6 | Kansas | 115.4 | South Dakota | 326.0 |
| 33 | Nevada | 179.7 | Utah | 168.5 | Arkansas | 384.1 | Connecticut | 101.7 | Utah | 325.8 |
| 34 | Montana | 173.9 | Arizona | 163.2 | Utah | 262.2 | West Virginia | 92.6 | Virginia | 324.1 |
| 35 | Mississippi | 137.7 | South Carolina | 162.5 | New Mexico | 257.4 | Nevada | 89.6 | Missouri | 323.3 |
| 36 | Washington | 96.4 | Nevada | 156.7 | Alaska | 253.4 | Nebraska | 77.8 | Illinois | 320.1 |
| 37 | New Jersey | 68.2 | West Virginia | 147.4 | Maine | 250.4 | Idaho | 77.5 | North Carolina | 319.6 |
| 38 | California | 64.0 | Connecticut | 135.0 | Nebraska | 246.0 | Utah | 74.7 | New Jersey | 317.9 |
| 39 | South Dakota | 45.9 | Nebraska | 121.3 | Nevada | 220.9 | New Mexico | 61.6 | Pennsylvania | 309.8 |
| 40 | Oregon | 38.6 | Wyoming | 101.7 | West Virginia | 219.5 | Montana | 45.3 | Colorado | 284.9 |
| 41 | Delaware | 35.9 | Rhode Island | 86.1 | Hawaii | 213.7 | Maine | 40.8 | New Hampshire | 279.2 |
| 42 | New Hampshire | 35.3 | Idaho | 71.5 | New Hampshire | 188.3 | Wyoming | 40.2 | Vermont | 277.9 |
| 43 | Massachusetts | 13.0 | Montana | 63.6 | Montana | 173.8 | Delaware | 36.0 | Maryland | 266.5 |
| 44 | Alaska | 10.9 | North Dakota | 58.9 | Idaho | 169.9 | District of Columbia | 35.5 | Rhode Island | 263.5 |
| 45 | Idaho | 7.9 | Delaware | 58.1 | Wyoming | 155.7 | New Hampshire | 33.7 | Connecticut | 255.7 |
| 46 | Hawaii | 3.1 | South Dakota | 36.0 | Delaware | 140.8 | Hawaii | 32.0 | Arizona | 255.3 |
| 47 | Maine | 2.9 | District of Columbia | 32.9 | North Dakota | 122.6 | North Dakota | 31.1 | Florida | 255.0 |
| 48 | Vermont | 2.0 | New Hampshire | 20.5 | South Dakota | 115.0 | South Dakota | 27.0 | Massachusetts | 254.1 |
| 49 | District of Columbia | 0.1 | Vermont | 8.1 | Rhode Island | 98.7 | Rhode Island | 24.4 | California | 252.7 |
| 50 | Connecticut | 0.1 | Maine | 6.2 | Vermont | 84.5 | Vermont | 18.9 | New York | 235.4 |
| 51 | Rhode Island | 0.0 | Hawaii | 2.9 | District of Columbia | 33.6 | Alaska | 18.1 | Hawaii | 203.7 |
|  | United States | 20,498.0 | United States | 22,294.9 | United States | 37,960.1 | United States | 11,300.8 | United States | 350.9 |

[a] Electricity sold to end users, not including the losses incurred in the generation, transmission, and distribution of the electricity.

Source: Combined State Energy Data System 1999.

# United States Summaries

# Table 11.  Energy Consumption Estimates by Source, Selected Years 1960-1999, United States

| Year | Coal[a] | Net Imports of Coal Coke | Natural Gas[b] | Asphalt and Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other[c] | Total | Nuclear Electric Power | Hydro-electric Power[d,e] | Wood and Waste | Other[d,f] | Total[g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Million Short Tons | | Billion Cubic Feet | Million Barrels | | | | | | | | | | | Billion Kilowatthours | | | | |
| **Million Short Tons / Billion Cubic Feet / Million Barrels / Billion Kilowatthours** | | | | | | | | | | | | | | | | | | | |
| 1960 | 398 | (s) | 11,967 | 111 | 59 | 685 | 136 | 99 | 227 | 43 | 1,453 | 559 | 214 | 3,586 | 1 | 154 | — | — | — |
| 1965 | 472 | -1 | 15,280 | 134 | 44 | 776 | 220 | 98 | 307 | 47 | 1,676 | 587 | 313 | 4,202 | 4 | 197 | — | — | — |
| 1970 | 523 | -2 | 21,139 | 163 | 20 | 927 | 353 | 96 | 447 | 50 | 2,111 | 804 | 393 | 5,364 | 22 | 253 | — | — | — |
| 1975 | 563 | 1 | 19,538 | 153 | 14 | 1,041 | 365 | 58 | 486 | 50 | 2,436 | 899 | 455 | 5,958 | 173 | 309 | — | — | — |
| 1980 | 703 | -1 | 19,877 | 145 | 13 | 1,049 | 391 | 58 | 538 | 58 | 2,408 | 918 | 665 | 6,242 | 251 | 300 | — | — | — |
| 1985 | 818 | -1 | 17,281 | 155 | 10 | 1,047 | 445 | 42 | 584 | 53 | 2,493 | 439 | 473 | 5,740 | 384 | 325 | — | — | — |
| 1990 | 895 | (s) | 18,716 | 176 | 9 | 1,103 | 556 | 16 | 568 | 60 | 2,641 | 449 | 625 | 6,201 | 577 | R h 299 | — | — | — |
| 1991 | 888 | (s) | 19,035 | 162 | 8 | 1,066 | 537 | 17 | 616 | 53 | 2,623 | 423 | 594 | 6,101 | 613 | R 298 | — | — | — |
| 1992 | 892 | 1 | 19,544 | 166 | 8 | 1,090 | 532 | 15 | 642 | 54 | 2,660 | 401 | 665 | 6,234 | 619 | R 268 | — | — | — |
| 1993 | 926 | 1 | 20,279 | 173 | 8 | 1,110 | 536 | 18 | 633 | 55 | 2,729 | 394 | 635 | 6,291 | 610 | R 299 | — | — | — |
| 1994 | 930 | R 2 | 20,708 | 177 | 8 | 1,154 | 557 | 18 | 686 | 58 | 2,774 | 373 | 662 | 6,467 | 640 | R 287 | — | — | — |
| 1995 | 941 | R 2 | 21,581 | 178 | 8 | 1,170 | 553 | 20 | 693 | 57 | 2,843 | 311 | 637 | 6,469 | 673 | R 335 | — | — | — |
| 1996 | 983 | R 1 | R 21,966 | 177 | 7 | 1,232 | 578 | 23 | 736 | 55 | 2,888 | 311 | 695 | 6,701 | 675 | R 373 | — | — | — |
| 1997 | 1,008 | R 2 | R 21,959 | 184 | 8 | 1,254 | 583 | 24 | 744 | 58 | 2,926 | 291 | 724 | 6,796 | 629 | R 378 | — | — | — |
| 1998 | 1,012 | 3 | 21,279 | 190 | 7 | 1,263 | 592 | 28 | 713 | 61 | 3,012 | 324 | 714 | 6,905 | 674 | 341 | — | — | — |
| 1999 | 993 | 2 | 21,694 | 200 | 8 | 1,304 | 611 | 27 | 801 | 62 | 3,077 | 303 | 733 | 7,125 | 728 | 333 | — | — | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 9,830 | -6 | 12,385 | 734 | 298 | 3,992 | 739 | 563 | 912 | 259 | 7,631 | 3,517 | 1,276 | 19,919 | 6 | 1,657 | 1,320 | 1 | 45,113 |
| 1965 | 11,582 | -18 | 15,779 | 890 | 222 | 4,519 | 1,215 | 553 | 1,232 | 286 | 8,806 | 3,691 | 1,833 | 23,246 | 43 | 2,058 | 1,335 | 4 | 54,029 |
| 1970 | 12,269 | -58 | 21,693 | 1,082 | 100 | 5,401 | 1,973 | 544 | 1,689 | 301 | 11,091 | 5,057 | 2,283 | 29,522 | 239 | 2,654 | 1,431 | 11 | 67,761 |
| 1975 | 12,656 | 14 | 19,977 | 1,014 | 71 | 6,061 | 2,047 | 329 | 1,807 | 304 | 12,798 | 5,649 | 2,651 | 32,732 | 1,900 | 3,219 | 1,499 | 70 | 72,066 |
| 1980 | 15,461 | -35 | 20,384 | 962 | 64 | 6,110 | 2,190 | 329 | 1,976 | 354 | 12,648 | 5,772 | 3,799 | 34,204 | 2,739 | 3,118 | R 2,485 | 110 | R 78,466 |
| 1985 | 17,540 | -13 | 17,843 | 1,029 | 50 | 6,098 | 2,497 | 236 | 2,103 | 322 | 13,098 | 2,759 | 2,733 | 30,925 | 4,149 | 3,398 | R 2,813 | 198 | R 76,852 |
| 1990 | 18,997 | 5 | 19,280 | 1,170 | 45 | 6,422 | 3,129 | 88 | 2,059 | 362 | 13,872 | 2,820 | 3,584 | 33,552 | 6,162 | R h 3,110 | R 2,584 | R h 449 | R h 84,058 |
| 1991 | 18,754 | R 10 | 19,605 | 1,077 | 42 | 6,210 | 3,025 | 96 | 2,227 | 324 | 13,781 | 2,657 | 3,407 | 32,846 | 6,580 | R 3,112 | R 2,614 | R 460 | R 84,039 |
| 1992 | 18,846 | R 35 | 20,139 | 1,102 | 41 | 6,351 | 3,001 | 86 | 2,328 | 330 | 13,973 | 2,518 | 3,794 | 33,525 | 6,608 | R 2,775 | R 2,748 | R 471 | R 85,200 |
| 1993 | 19,483 | R 27 | 20,848 | 1,149 | 38 | 6,466 | 3,028 | 103 | 2,282 | 337 | 14,335 | 2,479 | 3,626 | 33,842 | 6,520 | R 3,077 | R 2,694 | R 489 | R 87,031 |
| 1994 | 19,511 | R 58 | 21,313 | 1,173 | 38 | 6,723 | 3,154 | 101 | 2,494 | 352 | R 14,511 | 2,342 | 3,781 | R 34,670 | 6,838 | R 2,958 | R 2,817 | R 496 | R 88,802 |
| 1995 | 19,679 | R 61 | 22,189 | 1,178 | 40 | 6,818 | 3,132 | 112 | 2,512 | 346 | R 14,825 | 1,955 | 3,639 | R 34,556 | 7,177 | R 3,453 | R 2,939 | R 439 | R 90,614 |
| 1996 | 20,520 | R 23 | 22,598 | 1,176 | 37 | 7,175 | 3,274 | 128 | 2,660 | 335 | R 15,064 | 1,952 | 3,958 | R 35,759 | 7,168 | R 3,860 | R 3,030 | R 455 | R 93,522 |
| 1997 | 20,986 | R 46 | R 22,677 | 1,224 | 40 | 7,304 | 3,308 | 136 | 2,690 | 354 | R 15,254 | 1,828 | 4,127 | R 36,266 | 6,678 | R 3,919 | R 2,880 | R 429 | R 93,991 |
| 1998 | 21,014 | 67 | 22,012 | 1,263 | 35 | 7,359 | 3,357 | 162 | 2,575 | 371 | 15,701 | 2,036 | 4,075 | 36,934 | 7,157 | 3,523 | 2,886 | 433 | 94,078 |
| 1999 | 20,498 | 58 | 22,295 | 1,324 | 39 | 7,595 | 3,462 | 151 | 2,897 | 375 | 16,036 | 1,905 | 4,177 | 37,960 | 7,736 | 3,449 | 3,101 | 493 | 95,682 |

[a] All coal except that consumed by nonutility wholesale power producers and cogeneration plants and not reported in the end-use sectors.  The missing quantity ranges from 1 million short tons (17 trillion Btu) in 1989 to 52 million short tons (1,042 trillion Btu) in 1999.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] The continuity of these data series estimates may be affected by the changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[e] Through 1988, includes all net imports of electricity.  From 1989, includes only the portion of net imports of electricity that is derived from hydroelectric power.
[f] "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  From 1989, includes net imports of electricity generated from geothermal energy.
[g] From 1989, "Total" does not equal the sum of the columns.  Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.  — =Not applicable.
(s)=Less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 12. Residential Energy Consumption Estimates, Selected Years 1960-1999, United States

| Year | Coal [a] Million Short Tons | Natural Gas [a] Billion Cubic Feet | Petroleum — Distillate Fuel [b] (Million Barrels) | Petroleum — Kerosene [b] | Petroleum — LPG [b] | Petroleum — Total | Wood Million Cords | Geothermal | Solar [c] | Electricity [b] Billion Kilowatthours | Net Energy | Electrical System Energy Losses [d] Billion Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 17 | 3,103 | 269 | 62 | 85 | 417 | 31 | — | — | 201 | — | 502 | — |
| 1965 | 11 | 3,903 | 294 | 59 | 108 | 461 | 23 | — | — | 291 | — | 695 | — |
| 1970 | 7 | 4,837 | 322 | 53 | 153 | 528 | 20 | — | — | 466 | — | 1,131 | — |
| 1975 | 4 | 4,924 | 310 | 28 | 142 | 481 | 21 | — | — | 588 | — | 1,419 | — |
| 1980 | 3 | 4,752 | 226 | 19 | 88 | 333 | 43 | — | — | 717 | — | 1,746 | — |
| 1985 | 3 | 4,433 | 171 | 28 | 91 | 290 | 45 | — | — | 794 | — | 1,866 | — |
| 1990 | 3 | 4,391 | 144 | 11 | 101 | 256 | 29 | — | — | 924 | — | R 2,022 | — |
| 1991 | 2 | 4,556 | 143 | 13 | 108 | 263 | 31 | — | — | 955 | — | R 2,076 | — |
| 1992 | 2 | 4,690 | 148 | 11 | 106 | 265 | 32 | — | — | 936 | — | R 1,995 | — |
| 1993 | 2 | 4,956 | 157 | 13 | 111 | 281 | 27 | — | — | 995 | — | R 2,099 | — |
| 1994 | 2 | 4,848 | 151 | 11 | 109 | 271 | 27 | — | — | 1,008 | — | R 2,103 | — |
| 1995 | 2 | 4,850 | 152 | 13 | 112 | 276 | 30 | — | — | 1,043 | — | R 2,172 | — |
| 1996 | 2 | 5,241 | 160 | 16 | R 131 | R 306 | 30 | — | — | 1,082 | — | R 2,254 | — |
| 1997 | 3 | 4,984 | 155 | 16 | R 127 | R 298 | R 21 | — | — | 1,076 | — | R 2,236 | — |
| 1998 | 2 | 4,520 | 134 | 19 | 120 | 273 | 19 | — | — | 1,128 | — | 2,327 | — |
| 1999 | 2 | 4,724 | 139 | 20 | 148 | 306 | 20 | — | — | 1,145 | — | 2,241 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 408 | 3,212 | 1,568 | 354 | 343 | 2,265 | 627 | 0 | 0 | 687 | 7,199 | 1,711 | 8,911 |
| 1965 | 254 | 4,019 | 1,713 | 334 | 434 | 2,481 | 468 | 0 | 0 | 993 | 8,215 | 2,372 | 10,587 |
| 1970 | 153 | 4,953 | 1,878 | 298 | 579 | 2,755 | 401 | 0 | 0 | 1,591 | 9,853 | 3,858 | 13,711 |
| 1975 | 85 | 5,024 | 1,807 | 161 | 528 | 2,495 | 425 | 0 | 0 | 2,007 | 10,036 | 4,843 | 14,879 |
| 1980 | 60 | 4,855 | 1,316 | 107 | 325 | 1,748 | R 860 | 0 | 0 | 2,448 | R 9,972 | 5,958 | R 15,929 |
| 1985 | 69 | 4,566 | 998 | 159 | 327 | 1,483 | 900 | 0 | 0 | 2,709 | 9,728 | 6,366 | 16,093 |
| 1990 | 62 | 4,519 | 837 | 64 | 365 | 1,266 | 582 | e 6 | R e 56 | 3,153 | R e 9,643 | R 6,898 | R e 16,541 |
| 1991 | 56 | 4,685 | 832 | 72 | 389 | 1,293 | 613 | 6 | R 58 | 3,260 | R 9,971 | R 7,085 | R 17,056 |
| 1992 | 57 | 4,821 | 865 | 65 | 382 | 1,312 | 645 | 6 | R 60 | 3,193 | R 10,095 | R 6,806 | R 16,901 |
| 1993 | 57 | 5,097 | 913 | 76 | 399 | 1,387 | 548 | 7 | R 62 | 3,394 | R 10,551 | R 7,163 | R 17,714 |
| 1994 | 55 | 4,980 | 880 | 65 | 395 | 1,340 | 537 | 6 | R 64 | 3,441 | R 10,423 | 7,174 | R 17,598 |
| 1995 | 53 | 4,984 | 883 | 74 | 404 | 1,361 | 596 | 7 | R 65 | 3,557 | R 10,623 | R 7,409 | R 18,033 |
| 1996 | 54 | 5,390 | 930 | 89 | R 473 | R 1,492 | 595 | 7 | R 66 | 3,693 | R 11,298 | R 7,690 | R 18,988 |
| 1997 | 58 | 5,125 | 900 | 93 | R 461 | R 1,454 | R 428 | R 7 | R 65 | 3,671 | R 10,807 | R 7,628 | R 18,435 |
| 1998 | 44 | 4,669 | 782 | 108 | 434 | 1,324 | 377 | 8 | 65 | 3,848 | 10,334 | 7,940 | 18,274 |
| 1999 | 42 | 4,856 | 811 | 111 | 534 | 1,456 | 404 | 9 | 63 | 3,906 | 10,737 | 7,646 | 18,382 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 13.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, United States

| Year | Coal[a] Million Short Tons | Natural Gas[a] Billion Cubic Feet | Petroleum Distillate Fuel[b] | Kerosene[b] | LPG[b] | Motor Gasoline | Residual Fuel[b] | Total | Wood Million Cords | Geothermal | Electricity[b] Billion Kilowatthours | Net Energy | Electrical System Energy Losses[c] Billion Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Million Barrels | | | | | | | | |
| 1960 | 24 | 1,020 | 85 | 8 | 15 | 13 | 89 | 210 | 1 | — | 159 | — | 396 | — |
| 1965 | 15 | 1,444 | 92 | 9 | 19 | 15 | 103 | 238 | (s) | — | 231 | — | 552 | — |
| 1970 | 9 | 2,399 | 101 | 11 | 27 | 16 | 114 | 269 | (s) | — | 352 | — | 854 | — |
| 1975 | 6 | 2,508 | 101 | 9 | 25 | 17 | 78 | 230 | (s) | — | 468 | — | 1,130 | — |
| 1980 | 4 | 2,611 | 89 | 7 | 16 | 20 | 90 | 222 | 1 | — | 559 | — | 1,359 | — |
| 1985 | 5 | 2,432 | 107 | 6 | 16 | 18 | 36 | 184 | R1 | — | 689 | — | 1,620 | — |
| 1990 | 4 | 2,623 | 84 | 2 | 18 | 21 | 37 | 162 | R2 | — | 838 | — | 1,834 | — |
| 1991 | 4 | 2,729 | 83 | 2 | 19 | 16 | 34 | 154 | R2 | — | 855 | — | R1,859 | — |
| 1992 | 4 | 2,803 | 80 | 2 | 19 | 15 | 30 | 146 | R2 | — | 850 | — | R1,812 | — |
| 1993 | 4 | 2,862 | 80 | 2 | 20 | 6 | 28 | 135 | 2 | — | 885 | — | R1,867 | — |
| 1994 | 4 | 2,895 | 80 | 3 | 19 | 5 | 28 | 135 | 2 | — | 913 | — | 1,904 | — |
| 1995 | 4 | 3,031 | 79 | 4 | 20 | 3 | 23 | 129 | 2 | — | 953 | — | R1,985 | — |
| 1996 | 4 | 3,158 | 82 | 4 | R23 | 5 | 22 | R136 | 2 | — | 980 | — | R2,040 | — |
| 1997 | 4 | R3,215 | 77 | 4 | R22 | 8 | 18 | R130 | 2 | — | 1,026 | — | R2,133 | — |
| 1998 | 3 | 2,999 | 73 | 5 | 21 | 7 | 14 | 121 | 2 | — | 1,067 | — | 2,201 | — |
| 1999 | 3 | 3,049 | 72 | 5 | 26 | 5 | 14 | 122 | 3 | — | 1,104 | — | 2,160 | — |
| | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 572 | 1,056 | 494 | 48 | 61 | 67 | 559 | 1,228 | 12 | 0 | 543 | 3,410 | 1,352 | 4,762 |
| 1965 | 357 | 1,483 | 534 | 54 | 77 | 77 | 645 | 1,386 | 9 | 0 | 789 | 4,024 | 1,884 | 5,908 |
| 1970 | 217 | 2,455 | 587 | 61 | 102 | 86 | 714 | 1,551 | 8 | 0 | 1,201 | 5,432 | 2,913 | 8,345 |
| 1975 | 123 | 2,556 | 587 | 49 | 93 | 89 | 492 | 1,310 | 8 | 0 | 1,598 | 5,595 | 3,856 | 9,451 |
| 1980 | 87 | 2,666 | 518 | 41 | 57 | 107 | 565 | 1,287 | 21 | 0 | 1,906 | 5,967 | 4,638 | 10,605 |
| 1985 | 107 | 2,503 | 625 | 33 | 58 | 96 | 228 | 1,039 | R24 | 0 | 2,351 | R6,025 | 5,526 | R11,551 |
| 1990 | 93 | 2,698 | 487 | 12 | 64 | 111 | 233 | 907 | R37 | e3 | 2,860 | R e 6,598 | R6,259 | R e 12,857 |
| 1991 | 84 | 2,807 | 482 | 12 | 69 | 85 | 213 | 861 | R39 | 3 | 2,918 | R6,713 | R6,342 | R13,055 |
| 1992 | 86 | 2,883 | 464 | 11 | 67 | 80 | 191 | 813 | R42 | 3 | 2,900 | R6,728 | R6,181 | R12,909 |
| 1993 | 86 | 2,944 | 464 | 14 | 70 | 30 | 175 | 753 | 44 | 3 | 3,019 | 6,848 | R6,371 | R13,219 |
| 1994 | 83 | 2,978 | 464 | 19 | 70 | 25 | 175 | 753 | 45 | 4 | 3,116 | 6,978 | R6,496 | R13,474 |
| 1995 | 80 | 3,117 | 460 | 22 | 71 | 18 | 144 | 715 | 45 | 5 | 3,252 | 7,214 | R6,774 | R13,988 |
| 1996 | 82 | 3,250 | 476 | 21 | R84 | 27 | 140 | R747 | 49 | 5 | 3,344 | R7,477 | R6,962 | R14,439 |
| 1997 | 87 | R3,306 | 446 | 25 | R81 | 43 | 114 | R709 | R47 | 6 | 3,502 | R7,656 | R7,278 | R14,934 |
| 1998 | 66 | 3,097 | 423 | 31 | 77 | 39 | 91 | 660 | 47 | 7 | 3,641 | 7,518 | 7,511 | 15,029 |
| 1999 | 69 | 3,136 | 417 | 27 | 94 | 28 | 88 | 654 | 57 | 7 | 3,766 | 7,689 | 7,370 | 15,059 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 14. Industrial Energy Consumption Estimates, Selected Years 1960-1999, United States

| Year | Coal | Net Imports of Coal Coke | Natural Gas [a] | Petroleum — Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [c] | Total | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Million Short Tons | | Billion Cubic Feet | Million Barrels | | | | | | | | | Billion kWh | | | Billion kWh | | Billion kWh | |
| 1960 | 177 | (s) | 5,771 | 111 | 174 | 28 | 122 | 18 | 73 | 252 | 214 | 991 | 4 | — | — | 324 | — | 807 | — |
| 1965 | 201 | -1 | 7,112 | 134 | 197 | 29 | 172 | 23 | 65 | 252 | 313 | 1,185 | 3 | — | — | 429 | — | 1,024 | — |
| 1970 | 187 | -2 | 9,249 | 163 | 211 | 33 | 255 | 26 | 55 | 258 | 390 | 1,390 | 3 | — | — | 571 | — | 1,383 | — |
| 1975 | 147 | 1 | 8,365 | 153 | 230 | 21 | 308 | 25 | 43 | 240 | 455 | 1,474 | 3 | — | — | 688 | — | 1,659 | — |
| 1980 | 127 | -1 | 8,198 | 145 | 227 | 32 | 429 | 30 | 30 | 215 | 664 | 1,772 | 3 | — | — | 815 | — | 1,983 | — |
| 1985 | 116 | -1 | 6,867 | 155 | 204 | 8 | 469 | 27 | 41 | 119 | 472 | 1,495 | 3 | — | — | 837 | — | 1,965 | — |
| 1990 | 115 | (s) | 8,255 | 176 | 203 | 2 | 444 | 31 | 35 | 66 | 621 | 1,578 | R f 10 | — | — | 946 | — | 2,068 | — |
| 1991 | 109 | (s) | 8,360 | 162 | 196 | 2 | 484 | 27 | 37 | 53 | 591 | 1,552 | R 9 | — | — | 947 | — | R 2,056 | — |
| 1992 | 106 | 1 | 8,698 | 166 | 196 | 2 | 513 | 28 | 37 | 62 | 660 | 1,664 | R 9 | — | — | 973 | — | R 2,072 | — |
| 1993 | 106 | 1 | 9,153 | 173 | 189 | 2 | 498 | 29 | 34 | 72 | 629 | 1,625 | R 11 | — | — | 977 | — | 2,061 | — |
| 1994 | 107 | R 2 | 9,291 | 177 | 190 | 3 | 549 | 30 | 37 | 68 | 658 | 1,711 | R 13 | — | — | 1,008 | — | 2,100 | — |
| 1995 | 106 | R 2 | 9,800 | 178 | 184 | 3 | 557 | 29 | 38 | 54 | 633 | 1,677 | R 15 | — | — | 1,013 | — | R 2,108 | — |
| 1996 | 103 | R 1 | 10,120 | 177 | 193 | 3 | R 578 | 28 | 38 | 54 | 691 | R 1,764 | R 16 | — | — | 1,030 | — | R 2,144 | — |
| 1997 | 101 | R 2 | R 10,036 | 184 | 195 | 3 | R 590 | 30 | 41 | 47 | 717 | R 1,807 | R 18 | — | — | 1,033 | — | R 2,144 | — |
| 1998 | 96 | 3 | 9,861 | 190 | 191 | 4 | 567 | 31 | 38 | 39 | 705 | 1,766 | 14 | — | — | 1,040 | — | 2,145 | — |
| 1999 | 94 | 2 | 10,067 | 200 | 185 | 2 | 624 | 32 | 29 | 40 | 725 | 1,837 | 19 | — | — | 1,058 | — | 2,070 | — |

**Trillion Btu**

| Year | Coal | Net Imports of Coal Coke | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 4,548 | -6 | 5,973 | 734 | 1,016 | 161 | 489 | 107 | 381 | 1,584 | 1,276 | 5,748 | 39 | 680 | 0 | 1,107 | 18,089 | 2,754 | 20,843 |
| 1965 | 5,134 | -18 | 7,350 | 890 | 1,150 | 165 | 688 | 137 | 342 | 1,582 | 1,833 | 6,789 | 33 | 855 | 0 | 1,463 | 21,606 | 3,493 | 25,099 |
| 1970 | 4,664 | -58 | 9,498 | 1,082 | 1,226 | 185 | 964 | 155 | 288 | 1,624 | 2,264 | 7,788 | 34 | 1,019 | 0 | 1,948 | 24,892 | 4,720 | 29,612 |
| 1975 | 3,658 | 14 | 8,571 | 1,014 | 1,339 | 119 | 1,144 | 149 | 223 | 1,509 | 2,649 | 8,148 | 32 | 1,063 | 0 | 2,346 | 23,832 | 5,660 | 29,492 |
| 1980 | 3,155 | -35 | 8,409 | 962 | 1,324 | 181 | 1,577 | 182 | 158 | 1,349 | 3,794 | 9,527 | 33 | 1,600 | 0 | 2,781 | R 25,471 | 6,764 | 32,235 |
| 1985 | 2,777 | -13 | 7,096 | 1,029 | 1,186 | 44 | 1,690 | 166 | 218 | 748 | 2,726 | 7,808 | 33 | R 1,875 | 0 | 2,855 | R 22,430 | 6,706 | R 29,136 |
| 1990 | 2,754 | 5 | 8,520 | 1,170 | 1,181 | 12 | 1,608 | 186 | 185 | 417 | 3,559 | 8,319 | R f 100 | R 1,944 | R f 193 | 3,226 | R f 25,061 | R 7,056 | R f 32,117 |
| 1991 | 2,600 | R 10 | 8,637 | 1,077 | 1,139 | 11 | 1,749 | 167 | 193 | 336 | 3,386 | 8,058 | R 99 | R 1,940 | R 209 | 3,230 | R 24,783 | R 7,016 | R 31,799 |
| 1992 | 2,512 | R 35 | 8,996 | 1,102 | 1,144 | 10 | 1,860 | 170 | 194 | 391 | 3,764 | 8,636 | R 97 | R 2,040 | R 214 | 3,319 | R 25,848 | R 7,071 | R 32,919 |
| 1993 | 2,500 | R 27 | 9,420 | 1,149 | 1,100 | 13 | 1,794 | 173 | 180 | 452 | 3,589 | 8,450 | R 117 | R 2,082 | R 241 | 3,334 | R 26,170 | R 7,031 | R 33,202 |
| 1994 | 2,507 | R 58 | 9,590 | 1,173 | 1,109 | 17 | 1,997 | 181 | R 192 | 425 | 3,755 | 8,849 | R 135 | R 2,214 | R 252 | 3,439 | R 27,045 | 7,165 | R 34,210 |
| 1995 | 2,500 | R 61 | 10,109 | 1,178 | 1,074 | 15 | 2,019 | 178 | R 200 | 342 | 3,616 | R 8,623 | R 151 | R 2,281 | R 245 | 3,455 | R 27,425 | R 7,192 | R 34,617 |
| 1996 | 2,423 | R 23 | 10,446 | 1,176 | 1,127 | 18 | R 2,089 | 173 | R 200 | 341 | 3,937 | R 9,061 | R 169 | R 2,366 | R 254 | 3,516 | R 28,257 | R 7,314 | R 35,571 |
| 1997 | 2,375 | R 46 | R 10,438 | 1,224 | 1,136 | 19 | R 2,134 | 182 | R 212 | 297 | 4,085 | R 9,288 | R 183 | R 2,385 | R 236 | 3,523 | R 28,475 | R 7,317 | R 35,792 |
| 1998 | 2,252 | 67 | 10,256 | 1,263 | 1,115 | 22 | 2,048 | 191 | 199 | 244 | 4,022 | 9,105 | 150 | 2,441 | 243 | 3,549 | 28,064 | 7,318 | 35,382 |
| 1999 | 2,187 | 58 | 10,371 | 1,324 | 1,080 | 13 | 2,256 | 193 | 152 | 249 | 4,128 | 9,395 | 201 | 2,620 | 410 | 3,611 | 28,853 | 7,064 | 35,917 |

[a] Includes supplemental gaseous fuels.

[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours.  — =Not applicable.

(s)=Less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 15. Transportation Energy Consumption Estimates, Selected Years 1960-1999, United States

| | Coal | Natural Gas [a] | Petroleum | | | | | | | | | Ethanol [c] | Electricity [b] | | Electrical System Energy Losses [d] | Total [c] |
| | | | Aviation Gasoline [b] | Distillate Fuel [b] | Jet Fuel [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Total | | | | | | |
| Year | Million Short Tons | Billion Cubic Feet | Million Barrels | | | | | | | | | Million Barrels | Billion Kilowatthours | Net Energy | Billion Kilowatthours | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 3 | 347 | 59 | 153 | 136 | 5 | 25 | 1,367 | 134 | 1,880 | 0 | 3 | — | 8 | — |
| 1965 | 1 | 501 | 44 | 188 | 220 | 8 | 24 | 1,596 | 123 | 2,203 | 0 | 3 | — | 7 | — |
| 1970 | (s) | 722 | 20 | 269 | 353 | 12 | 24 | 2,040 | 121 | 2,839 | 0 | 3 | — | 8 | — |
| 1975 | (s) | 583 | 14 | 364 | 362 | 11 | 26 | 2,377 | 113 | 3,267 | 0 | 3 | — | 7 | — |
| 1980 | 0 | 635 | 13 | 480 | 389 | 5 | 28 | 2,357 | 222 | 3,494 | 0 | 3 | — | 8 | — |
| 1985 | 0 | 504 | 10 | 550 | 445 | 8 | 26 | 2,434 | 125 | 3,597 | R e 15 | 4 | — | 10 | — |
| 1990 | 0 | 660 | 9 | 658 | 556 | 6 | 29 | 2,584 | 164 | 4,005 | R 18 | 5 | — | 10 | — |
| 1991 | 0 | 602 | 8 | 631 | 537 | 6 | 26 | 2,570 | 164 | 3,943 | R 21 | 5 | — | 10 | — |
| 1992 | 0 | 588 | 8 | 654 | 532 | 5 | 26 | 2,608 | 172 | 4,006 | R 23 | 5 | — | 10 | — |
| 1993 | 0 | 625 | 8 | 672 | 536 | 5 | 27 | 2,689 | 145 | 4,082 | R 27 | 5 | — | 10 | — |
| 1994 | 0 | 687 | 8 | 717 | 557 | 9 | 28 | 2,733 | 143 | 4,194 | R 31 | 5 | — | 10 | — |
| 1995 | 0 | 703 | 8 | 740 | 553 | 5 | 28 | 2,801 | 147 | 4,281 | R 33 | 5 | — | 10 | — |
| 1996 | 0 | 714 | 7 | 780 | 578 | 4 | 27 | 2,845 | 138 | 4,378 | R 24 | 5 | — | 10 | — |
| 1997 | 0 | 756 | 8 | 813 | 583 | 4 | 28 | 2,877 | 116 | 4,429 | R 30 | 5 | — | 10 | — |
| 1998 | 0 | 641 | 7 | 843 | 592 | 5 | 30 | 2,967 | 114 | 4,557 | 33 | 5 | — | 10 | — |
| 1999 | 0 | 741 | 8 | 886 | 611 | 4 | 30 | 3,043 | 127 | 4,708 | 34 | 5 | — | 10 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 76 | 359 | 298 | 892 | 739 | 20 | 152 | 7,183 | 844 | 10,126 | 0 | 10 | 10,572 | 26 | 10,598 |
| 1965 | 16 | 518 | 222 | 1,093 | 1,215 | 33 | 149 | 8,386 | 770 | 11,868 | 0 | 10 | 12,412 | 24 | 12,435 |
| 1970 | 7 | 740 | 100 | 1,569 | 1,973 | 44 | 147 | 10,716 | 761 | 15,310 | 0 | 11 | 16,068 | 26 | 16,094 |
| 1975 | 1 | 595 | 71 | 2,121 | 2,029 | 42 | 155 | 12,485 | 711 | 17,614 | 0 | 10 | 18,219 | 24 | 18,244 |
| 1980 | 0 | 650 | 64 | 2,795 | 2,179 | 17 | 172 | 12,383 | 1,398 | 19,009 | 0 | 11 | 19,669 | 27 | 19,696 |
| 1985 | 0 | 521 | 50 | 3,204 | 2,497 | 28 | 156 | 12,784 | 786 | 19,504 | R e 52 | 14 | e 20,039 | 33 | e 20,072 |
| 1990 | 0 | 683 | 45 | 3,831 | 3,129 | 22 | 176 | 13,575 | 1,030 | 21,808 | R 63 | 16 | 22,507 | 35 | 22,543 |
| 1991 | 0 | 622 | 42 | 3,678 | 3,025 | 20 | 157 | 13,503 | 1,032 | 21,456 | R 73 | 16 | 22,094 | 35 | 22,130 |
| 1992 | 0 | 609 | 41 | 3,810 | 3,001 | 18 | 161 | 13,699 | 1,082 | 21,812 | R 83 | 16 | 22,437 | 34 | 22,471 |
| 1993 | 0 | 644 | 38 | 3,913 | 3,028 | 19 | 163 | 14,126 | 913 | 22,201 | R 97 | 16 | 22,861 | 34 | 22,895 |
| 1994 | 0 | 708 | 38 | 4,175 | 3,154 | 32 | 171 | R 14,293 | 896 | R 22,760 | R 109 | 17 | R 23,485 | 36 | R 23,520 |
| 1995 | 0 | 726 | 40 | 4,311 | 3,132 | 17 | 168 | R 14,607 | 925 | R 23,199 | R 117 | 17 | R 23,942 | 35 | R 23,977 |
| 1996 | 0 | 737 | 37 | 4,543 | 3,274 | 15 | 163 | R 14,837 | 866 | R 23,735 | R 84 | 17 | R 24,489 | 35 | R 24,524 |
| 1997 | 0 | R 785 | 40 | 4,734 | 3,308 | 13 | 172 | R 14,999 | 726 | R 23,993 | R 106 | 17 | R 24,795 | 35 | R 24,830 |
| 1998 | 0 | 662 | 35 | 4,911 | 3,357 | 17 | 180 | 15,463 | 716 | 24,679 | 117 | 17 | 25,358 | 35 | 25,393 |
| 1999 | 0 | 761 | 39 | 5,161 | 3,462 | 13 | 182 | 15,855 | 799 | 25,512 | 122 | 17 | 26,290 | 34 | 26,325 |

[a] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 16. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1999, United States

| Year | Coal | Natural Gas a | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy f | Other b,g | Total h |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Million Short Tons | Billion Cubic Feet | Million Barrels | | | | Billion Kilowatthours | | | | | Total h |
| 1960 | 177 | 1,725 | 84 | 4 | 0 | 88 | 1 | 150 | (s) | (s) | 0 | — |
| 1965 | 245 | 2,321 | 110 | 5 | 0 | 115 | 4 | 194 | (s) | (s) | 0 | — |
| 1970 | 320 | 3,932 | 311 | 24 | 3 | 339 | 22 | 250 | (s) | 1 | 0 | — |
| 1975 | 406 | 3,158 | 467 | 39 | (s) | 506 | 173 | 306 | (s) | 3 | 0 | — |
| 1980 | 569 | 3,682 | 391 | 29 | 1 | 421 | 251 | 297 | (s) | 5 | 0 | — |
| 1985 | 694 | 3,044 | 159 | 15 | 1 | 175 | 384 | 322 | 1 | 9 | (s) | — |
| 1990 | 774 | 2,787 | 181 | 15 | 4 | 200 | 577 | R 289 | 2 | 9 | (s) | — |
| 1991 | 772 | 2,789 | 171 | 14 | 4 | 188 | 613 | R 289 | 2 | 9 | (s) | — |
| 1992 | 780 | 2,766 | 136 | 12 | 5 | 152 | 619 | R 259 | 2 | 9 | (s) | — |
| 1993 | 814 | 2,682 | 149 | 13 | 6 | 169 | 610 | R 287 | 2 | 8 | (s) | — |
| 1994 | 817 | 2,987 | 135 | 16 | 4 | 155 | 640 | R 274 | 2 | 8 | (s) | — |
| 1995 | 829 | 3,197 | 87 | 16 | 4 | 106 | 673 | R 320 | 2 | 6 | (s) | — |
| 1996 | 875 | 2,732 | 96 | 17 | 3 | 117 | 675 | R 357 | 2 | 6 | (s) | — |
| 1997 | 900 | 2,968 | 110 | 15 | 7 | 132 | 629 | R 361 | 2 | 5 | (s) | — |
| 1998 | 911 | 3,258 | 157 | 22 | 9 | 187 | 674 | 326 | 2 | 5 | (s) | — |
| 1999 | 894 | 3,113 | 122 | 22 | 8 | 152 | 725 | 314 | 2 | 2 | (s) | — |

### Trillion Btu

| Year | Coal | Natural Gas | Heavy Oil | Light Oil | Petroleum Coke | Total | Nuclear | Hydroelectric | Wood and Waste | Geothermal | Other | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 4,227 | 1,785 | 530 | 22 | 0 | 553 | 6 | 1,618 | 2 | 1 | 0 | 8,191 |
| 1965 | 5,821 | 2,408 | 693 | 29 | 0 | 722 | 43 | 2,025 | 3 | 4 | 0 | 11,027 |
| 1970 | 7,228 | 4,048 | 1,958 | 141 | 19 | 2,117 | 239 | 2,620 | 4 | 11 | 0 | 16,267 |
| 1975 | 8,789 | 3,232 | 2,937 | 226 | 2 | 3,166 | 1,900 | 3,187 | 2 | 70 | 0 | 20,345 |
| 1980 | 12,158 | 3,804 | 2,459 | 169 | 5 | 2,634 | 2,739 | 3,085 | 4 | 110 | 0 | 24,533 |
| 1985 | 14,586 | 3,157 | 998 | 85 | 7 | 1,090 | 4,149 | 3,365 | 14 | 198 | (s) | 26,560 |
| 1990 | 16,088 | 2,861 | 1,139 | 86 | 25 | 1,250 | 6,161 | R 3,010 | 22 | 192 | (s) | R 29,505 |
| 1991 | 16,012 | 2,854 | 1,076 | 80 | 22 | 1,178 | 6,579 | R 3,013 | 21 | 185 | (s) | R 29,902 |
| 1992 | 16,192 | 2,829 | 854 | 67 | 30 | 951 | 6,607 | R 2,678 | 22 | 188 | (s) | R 29,521 |
| 1993 | 16,841 | 2,744 | 939 | 77 | 37 | 1,052 | 6,519 | R 2,960 | 21 | 177 | (s) | R 30,364 |
| 1994 | 16,867 | 3,057 | 847 | 95 | 26 | 968 | 6,837 | R 2,823 | 21 | 170 | (s) | R 30,884 |
| 1995 | 17,045 | 3,253 | 544 | 91 | 23 | 658 | 7,177 | R 3,303 | 17 | 118 | (s) | R 31,692 |
| 1996 | 17,961 | 2,774 | 606 | 98 | 21 | 725 | 7,168 | R 3,691 | 20 | 123 | (s) | R 32,571 |
| 1997 | 18,467 | 3,023 | 692 | 88 | 42 | 822 | 6,678 | R 3,736 | R 21 | 115 | (s) | R 32,971 |
| 1998 | 18,651 | 3,328 | 984 | 128 | 53 | 1,166 | 7,157 | 3,373 | 21 | 110 | (s) | 33,858 |
| 1999 | 18,200 | 3,171 | 769 | 125 | 48 | 943 | 7,702 | 3,248 | 21 | 36 | (s) | 33,414 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e Through 1988, includes all net imports of electricity. From 1989, includes only the portion of net imports of electricity that is derived from hydroelectric power.
f From 1989, includes net imports of electricity generated from geothermal energy.

g "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
h From 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# State Summaries

## Table 17. Energy Consumption Estimates by Source, Selected Years 1960-1999, Alabama

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kero-sene [a] | LPG [a] | Lubri-cants [a] | Motor Gasoline [a] | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydro-electric Power [d] | Wood and Waste | Other [a,e] | Net Inter-state Flow of Electric-ity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
| 1960 | 15,579 | 184 | 2,160 | 280 | 5,393 | 1,126 | 1,046 | 3,211 | 661 | 24,578 | 4,292 | 752 | 43,498 | 0 | 6,239 | — | — | -19,803 | — |
| 1965 | 21,473 | 229 | 2,749 | 446 | 5,251 | 1,156 | 908 | 4,207 | 741 | 28,919 | 2,553 | 2,142 | 49,072 | 0 | 7,103 | — | — | -32,017 | — |
| 1970 | 27,653 | 298 | 3,176 | 349 | 8,512 | 1,799 | 1,310 | 7,583 | 812 | 37,003 | 3,290 | 2,877 | 66,710 | 0 | 7,632 | — | — | -21,654 | — |
| 1975 | 26,609 | 264 | 2,706 | 249 | 14,697 | 1,707 | 673 | 6,540 | 1,049 | 45,174 | 12,953 | 3,910 | 89,656 | 2,722 | 12,213 | — | — | -28,518 | — |
| 1980 | 27,042 | 269 | 3,132 | 248 | 15,190 | 2,048 | 1,253 | 4,949 | 992 | 44,296 | 7,296 | 4,532 | 83,937 | 23,497 | 9,408 | — | — | -68,842 | — |
| 1985 | 27,145 | 219 | 3,757 | 172 | 16,278 | 3,516 | 108 | 3,648 | 903 | 43,476 | 2,249 | 6,215 | 80,323 | 14,313 | 6,886 | — | — | -51,090 | — |
| 1990 | 27,640 | 244 | 4,321 | 116 | 25,436 | 1,899 | 64 | 4,160 | 1,016 | 49,199 | 3,970 | 6,693 | 96,874 | 12,052 | R h 10,367 | — | — | R -35,804 | — |
| 1991 | 29,349 | 254 | 5,286 | 109 | 23,909 | 2,292 | 96 | 3,807 | 909 | 49,527 | 3,554 | 5,895 | 95,385 | 15,875 | R 10,758 | — | — | R -58,232 | — |
| 1992 | 31,510 | 279 | 4,943 | 106 | 24,432 | 2,108 | 83 | 3,968 | 927 | 50,605 | 3,907 | 5,996 | 97,074 | 19,397 | R 10,260 | — | — | R -74,960 | — |
| 1993 | 33,047 | 292 | 4,984 | 103 | 22,990 | 1,973 | 80 | 5,033 | 944 | 51,956 | 4,059 | 6,045 | 98,167 | 17,823 | R 9,034 | — | — | R -77,379 | — |
| 1994 | 31,473 | 289 | 5,059 | 110 | 25,410 | 3,472 | 72 | 5,132 | 986 | 53,226 | 3,432 | 6,313 | 103,212 | 20,480 | R 11,429 | — | — | R -74,453 | — |
| 1995 | 34,309 | 322 | 4,994 | 97 | 23,087 | 3,843 | 121 | 5,115 | 969 | 55,472 | 3,158 | 6,017 | 102,873 | 20,752 | R 9,502 | — | — | R -80,027 | — |
| 1996 | 37,052 | 326 | 5,704 | 93 | 23,107 | 3,508 | 121 | R 4,845 | 941 | 54,999 | 3,207 | R 3,647 | R 100,172 | 29,708 | 11,082 | — | — | R -118,778 | — |
| 1997 | 36,434 | 322 | 5,467 | 103 | 21,383 | 2,183 | 127 | R 4,269 | 994 | 55,694 | 2,595 | R 3,838 | R 96,652 | 29,573 | R 11,521 | — | — | R -110,239 | — |
| 1998 | 36,448 | 328 | 4,455 | 82 | 21,284 | 3,522 | 101 | 3,252 | 1,040 | 57,416 | 1,531 | 3,525 | 96,207 | 28,663 | 10,565 | — | — | -99,670 | — |
| 1999 | 38,173 | 333 | 4,597 | 102 | 24,833 | 1,963 | 83 | 7,025 | 1,051 | 57,669 | 1,754 | 3,599 | 102,676 | 30,892 | 7,760 | — | — | -103,287 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydro-electric Power | Wood and Waste | Other | Net Inter-state Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 395.4 | 190.7 | 14.3 | 1.4 | 31.4 | 6.1 | 5.9 | 12.9 | 4.0 | 129.1 | 27.0 | 4.5 | 236.6 | 0.0 | 67.1 | 45.7 | 0.0 | -67.6 | 868.0 |
| 1965 | 533.1 | 236.9 | 18.2 | 2.3 | 30.6 | 6.2 | 5.2 | 16.9 | 4.5 | 151.9 | 16.0 | 12.7 | 264.4 | 0.0 | 74.2 | 47.6 | 0.0 | -109.2 | 1,047.2 |
| 1970 | 675.6 | 307.8 | 21.1 | 1.8 | 49.6 | 9.9 | 7.4 | 28.7 | 4.9 | 194.4 | 20.7 | 16.9 | 355.3 | 0.0 | 80.1 | 52.4 | 0.0 | -73.9 | 1,397.2 |
| 1975 | 640.1 | 271.7 | 18.0 | 1.3 | 85.6 | 9.4 | 3.8 | 24.3 | 6.4 | 237.3 | 81.4 | 23.1 | 490.6 | 30.0 | 127.1 | 57.6 | 0.0 | -97.3 | 1,519.7 |
| 1980 | 661.0 | 278.4 | 20.8 | 1.3 | 88.5 | 11.3 | 7.1 | 18.2 | 6.0 | 232.7 | 45.9 | 26.2 | 457.9 | 256.3 | 97.7 | R 135.0 | 0.0 | -234.9 | R 1,651.4 |
| 1985 | 662.9 | 227.8 | 24.9 | 0.9 | 94.8 | 19.7 | 0.6 | 13.1 | 5.5 | 228.4 | 14.1 | 35.3 | 437.4 | 154.8 | 71.9 | R 172.4 | 0.0 | -174.3 | R 1,552.8 |
| 1990 | 678.3 | 251.0 | 28.7 | 0.6 | 148.2 | 10.6 | 0.4 | 15.1 | 6.2 | 258.4 | 25.0 | 37.2 | 530.2 | 128.7 | h 107.8 | R 151.7 | R h 0.2 | -122.2 | R h 1,725.8 |
| 1991 | 719.8 | 260.7 | 35.1 | 0.6 | 139.3 | 12.6 | 0.5 | 13.8 | 5.5 | 260.2 | 22.3 | 33.0 | 522.9 | 170.5 | 112.3 | R 154.2 | R 0.2 | R -198.7 | R 1,741.9 |
| 1992 | 770.5 | 286.6 | 32.8 | 0.5 | 142.3 | 11.7 | 0.5 | 14.4 | 5.6 | 265.8 | 24.6 | 33.2 | 531.4 | 207.1 | 106.1 | R 159.4 | R 0.2 | R -255.8 | R 1,805.5 |
| 1993 | 808.4 | 301.1 | 33.1 | 0.5 | 133.9 | 11.0 | 0.5 | 18.1 | 5.7 | 272.9 | 25.5 | 33.6 | 534.8 | 190.4 | 93.1 | R 185.4 | R 0.2 | R -264.0 | R 1,849.4 |
| 1994 | 770.6 | 297.5 | 33.6 | 0.6 | 148.0 | 19.6 | 0.4 | 18.7 | 6.0 | R 278.4 | 21.6 | 35.1 | R 561.8 | 218.6 | 117.9 | R 223.9 | 0.2 | R -254.0 | R 1,936.5 |
| 1995 | 826.5 | 330.9 | 33.1 | 0.5 | 134.5 | 21.8 | 0.7 | 18.5 | 5.9 | R 289.3 | 19.9 | 33.4 | R 557.5 | 221.2 | 98.0 | R 239.6 | 0.2 | R -273.1 | R 2,000.7 |
| 1996 | 887.5 | 336.3 | 37.9 | 0.5 | 134.6 | 19.9 | 0.7 | R 17.5 | 5.7 | R 286.9 | 20.2 | R 20.7 | R 544.5 | 315.6 | R 114.6 | R 198.2 | 0.2 | R -405.3 | R 1,991.5 |
| 1997 | 858.8 | 335.5 | 36.3 | 0.5 | 124.6 | 12.4 | 0.7 | R 15.4 | 6.0 | R 290.3 | 16.3 | R 21.9 | R 524.4 | 314.2 | R 119.3 | R 159.7 | 0.2 | R -376.1 | R 1,935.9 |
| 1998 | 853.4 | 340.9 | 29.6 | 0.4 | 124.0 | 20.0 | 0.6 | 11.8 | 6.3 | 299.3 | 9.6 | 20.0 | 521.4 | 304.5 | 109.3 | 151.0 | 0.2 | -340.1 | 1,940.6 |
| 1999 | 855.4 | 344.5 | 30.5 | 0.5 | 144.7 | 11.1 | 0.5 | 25.4 | 6.4 | 300.5 | 11.0 | 20.3 | 550.9 | 328.2 | 80.3 | 197.8 | 0.2 | -352.4 | 2,004.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 18. Residential Energy Consumption Estimates, Selected Years 1960-1999, Alabama

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 96 | 41 | 36 | 163 | 2,101 | 2,300 | 1,084 | — | — | 4,129 | — | 10,271 | — |
| 1965 | 35 | 48 | 24 | 169 | 2,672 | 2,865 | 765 | — | — | 6,150 | — | 14,684 | — |
| 1970 | 44 | 56 | 36 | 236 | 4,920 | 5,192 | 515 | — | — | 11,527 | — | 27,935 | — |
| 1975 | 7 | 52 | 74 | 134 | 3,916 | 4,124 | 530 | — | — | 13,409 | — | 32,345 | — |
| 1980 | 80 | 52 | 13 | 198 | 2,589 | 2,800 | 521 | — | — | 16,469 | — | 40,047 | — |
| 1985 | 43 | 44 | 34 | 73 | 2,088 | 2,194 | 1,302 | — | — | 17,182 | — | 40,368 | — |
| 1990 | 37 | 45 | 25 | 38 | 2,688 | 2,752 | 757 | — | — | 20,719 | — | R 45,324 | — |
| 1991 | 6 | 46 | 18 | 61 | 2,312 | 2,391 | 797 | — | — | 21,293 | — | R 46,290 | — |
| 1992 | 31 | 50 | 11 | 30 | 2,213 | 2,254 | 839 | — | — | 21,137 | — | R 45,080 | — |
| 1993 | 14 | 51 | 14 | 43 | 2,861 | 2,919 | R 634 | — | — | 22,628 | — | R 47,793 | — |
| 1994 | 4 | 50 | 13 | 29 | 2,798 | 2,840 | R 622 | — | — | 23,159 | — | R 48,330 | — |
| 1995 | 3 | 50 | 9 | 66 | 2,849 | 2,924 | R 690 | — | — | 24,314 | — | R 50,693 | — |
| 1996 | 15 | 57 | 9 | 64 | 2,922 | 2,995 | R 689 | — | — | 25,634 | — | R 53,422 | — |
| 1997 | 25 | 48 | 29 | 57 | R 3,008 | R 3,094 | R 329 | — | — | 24,893 | — | R 51,780 | — |
| 1998 | 3 | 47 | 4 | 40 | 2,591 | 2,636 | 290 | — | — | 27,327 | — | 56,452 | — |
| 1999 | 8 | 43 | 6 | 44 | 4,669 | 4,719 | 310 | — | — | 27,048 | — | 52,995 | — |
| **Trillion Btu** | | | | | | | | | | | | | |
| 1960 | 2.4 | 42.3 | 0.2 | 0.9 | 8.4 | 9.6 | 21.7 | 0.0 | 0.0 | 14.1 | 90.0 | 35.0 | 125.0 |
| 1965 | 0.9 | 49.7 | 0.1 | 1.0 | 10.7 | 11.8 | 15.3 | 0.0 | 0.0 | 21.0 | 98.7 | 50.1 | 148.8 |
| 1970 | 1.1 | 57.5 | 0.2 | 1.3 | 18.6 | 20.1 | 10.3 | 0.0 | 0.0 | 39.3 | 128.3 | 95.3 | 223.7 |
| 1975 | 0.2 | 53.8 | 0.4 | 0.8 | 14.5 | 15.7 | 10.6 | 0.0 | 0.0 | 45.8 | 126.1 | 110.4 | 236.4 |
| 1980 | 1.9 | 54.1 | 0.1 | 1.1 | 9.5 | 10.7 | 10.4 | 0.0 | 0.0 | 56.2 | 133.3 | 136.6 | 270.0 |
| 1985 | 1.1 | 45.4 | 0.2 | 0.4 | 7.5 | 8.1 | 26.0 | 0.0 | 0.0 | 58.6 | 139.2 | 137.7 | 276.9 |
| 1990 | 0.9 | 46.7 | 0.1 | 0.2 | 9.7 | 10.1 | 15.1 | e (s) | e 0.1 | 70.7 | e 143.7 | 154.6 | R e 298.4 |
| 1991 | 0.1 | 47.4 | 0.1 | 0.3 | 8.4 | 8.8 | 15.9 | (s) | R 0.2 | 72.7 | 145.1 | R 157.9 | R 303.0 |
| 1992 | 0.8 | 51.0 | 0.1 | 0.2 | 8.0 | 8.3 | 16.8 | (s) | R 0.2 | 72.1 | 149.1 | R 153.8 | R 302.9 |
| 1993 | 0.3 | 52.9 | 0.1 | 0.2 | 10.3 | 10.6 | 12.7 | (s) | R 0.2 | 77.2 | R 154.0 | 163.1 | 317.0 |
| 1994 | 0.1 | 51.3 | 0.1 | 0.2 | 10.2 | 10.4 | 12.4 | (s) | R 0.2 | 79.0 | R 153.4 | 164.9 | R 318.3 |
| 1995 | 0.1 | 51.0 | 0.1 | 0.4 | 10.3 | 10.7 | 13.8 | (s) | R 0.2 | 83.0 | R 158.8 | R 173.0 | R 331.7 |
| 1996 | 0.4 | 58.4 | 0.1 | 0.4 | 10.6 | 11.0 | 13.8 | (s) | R 0.2 | 87.5 | R 171.2 | R 182.3 | R 353.4 |
| 1997 | 0.6 | 50.5 | 0.2 | 0.3 | R 10.9 | R 11.4 | R 6.6 | (s) | 0.1 | 84.9 | R 154.2 | R 176.7 | R 330.8 |
| 1998 | 0.1 | 48.3 | (s) | 0.2 | 9.4 | 9.6 | 5.8 | (s) | 0.1 | 93.2 | 157.2 | 192.6 | 349.8 |
| 1999 | 0.2 | 44.2 | (s) | 0.2 | 16.9 | 17.2 | 6.2 | (s) | 0.1 | 92.3 | 160.2 | 180.8 | 341.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 19.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Alabama

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel[a] | Petroleum — Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 178 | 17 | 264 | 294 | 371 | 327 | (s) | 1,257 | 21 | — | 2,390 | — | 5,944 | — |
| 1965 | 64 | 32 | 175 | 306 | 472 | 327 | (s) | 1,280 | 14 | — | 3,443 | — | 8,221 | — |
| 1970 | 83 | 36 | 264 | 426 | 868 | 391 | (s) | 1,950 | 10 | — | 5,144 | — | 12,467 | — |
| 1975 | 13 | 33 | 547 | 242 | 691 | 453 | 1 | 1,934 | 10 | — | 6,493 | — | 15,662 | — |
| 1980 | 148 | 29 | 641 | 176 | 457 | 258 | 3 | 1,535 | 13 | — | 7,190 | — | 17,484 | — |
| 1985 | 80 | 26 | 1,290 | 16 | 368 | 251 | 514 | 2,439 | R 35 | — | 8,805 | — | 20,688 | — |
| 1990 | 68 | 24 | 1,088 | 11 | 474 | 258 | 614 | 2,445 | R 48 | — | 11,589 | — | R 25,353 | — |
| 1991 | 11 | 24 | 982 | 15 | 408 | 160 | 244 | 1,809 | R 51 | — | 11,948 | — | R 25,975 | — |
| 1992 | 58 | 25 | 1,030 | 17 | 391 | 138 | 0 | 1,576 | R 55 | — | 11,554 | — | R 24,642 | — |
| 1993 | 26 | 26 | 918 | 13 | 505 | 41 | 0 | 1,477 | 51 | — | 11,906 | — | R 25,148 | — |
| 1994 | 7 | 26 | 1,071 | 11 | 494 | 41 | 1 | 1,617 | 52 | — | 12,503 | — | R 26,093 | — |
| 1995 | 5 | 26 | 532 | 10 | 503 | 42 | 3 | 1,089 | 52 | — | 12,845 | — | R 26,782 | — |
| 1996 | 29 | 29 | 488 | 9 | 516 | 42 | 1 | 1,055 | R 56 | — | 13,948 | — | R 29,067 | — |
| 1997 | 47 | 32 | 383 | 9 | R 531 | 41 | 0 | R 964 | R 36 | — | 17,043 | — | R 35,452 | — |
| 1998 | 6 | 26 | 389 | 21 | 457 | 41 | 0 | 909 | 36 | — | 18,307 | — | 37,818 | — |
| 1999 | 15 | 28 | 557 | 6 | 824 | 41 | 0 | 1,427 | 44 | — | 18,820 | — | 36,875 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 4.4 | 18.1 | 1.5 | 1.7 | 1.5 | 1.7 | (s) | 6.4 | 0.4 | 0.0 | 8.2 | 37.5 | 20.3 | 57.8 |
| 1965 | 1.6 | 33.0 | 1.0 | 1.7 | 1.9 | 1.7 | (s) | 6.4 | 0.3 | 0.0 | 11.7 | 53.0 | 28.0 | 81.1 |
| 1970 | 2.0 | 37.4 | 1.5 | 2.4 | 3.3 | 2.1 | (s) | 9.3 | 0.2 | 0.0 | 17.6 | 66.4 | 42.5 | 108.9 |
| 1975 | 0.3 | 34.4 | 3.2 | 1.4 | 2.6 | 2.4 | (s) | 9.5 | 0.2 | 0.0 | 22.2 | 66.6 | 53.4 | 120.0 |
| 1980 | 3.6 | 29.5 | 3.7 | 1.0 | 1.7 | 1.4 | (s) | 7.8 | 0.3 | 0.0 | 24.5 | 65.6 | 59.7 | 125.3 |
| 1985 | 2.0 | 26.8 | 7.5 | 0.1 | 1.3 | 1.3 | 3.2 | 13.5 | R 0.7 | 0.0 | 30.0 | R 73.0 | 70.6 | R 143.6 |
| 1990 | 1.7 | 25.0 | 6.3 | 0.1 | 1.7 | 1.4 | 3.9 | 13.3 | R 1.0 | e 0.0 | 39.5 | R e 80.5 | 86.5 | R e 167.0 |
| 1991 | 0.3 | 24.4 | 5.7 | 0.1 | 1.5 | 0.8 | 1.5 | 9.7 | R 1.0 | 0.0 | 40.8 | R 76.1 | R 88.6 | R 164.7 |
| 1992 | 1.4 | 25.9 | 6.0 | 0.1 | 1.4 | 0.7 | 0.0 | 8.2 | R 1.1 | 0.0 | 39.4 | R 76.1 | R 84.1 | R 160.2 |
| 1993 | 0.6 | 26.5 | 5.3 | 0.1 | 1.8 | 0.2 | 0.0 | 7.5 | 1.0 | 0.0 | 40.6 | 76.2 | 85.8 | R 162.0 |
| 1994 | 0.2 | 26.3 | 6.2 | 0.1 | 1.8 | 0.2 | (s) | 8.3 | 1.0 | 0.0 | 42.7 | 78.5 | 89.0 | 167.5 |
| 1995 | 0.1 | 27.0 | 3.1 | 0.1 | 1.8 | 0.2 | (s) | 5.2 | 1.0 | 0.0 | 43.8 | 77.2 | R 91.4 | R 168.6 |
| 1996 | 0.7 | 30.0 | 2.8 | 0.1 | 1.9 | 0.2 | (s) | 5.0 | 1.1 | 0.0 | 47.6 | 84.4 | R 99.2 | R 183.5 |
| 1997 | 1.2 | 33.7 | 2.2 | 0.1 | 1.9 | 0.2 | 0.0 | 4.4 | R 0.7 | 0.0 | 58.2 | R 98.2 | R 121.0 | 219.1 |
| 1998 | 0.2 | 26.7 | 2.3 | 0.1 | 1.7 | 0.2 | 0.0 | 4.3 | 0.7 | 0.0 | 62.5 | 94.3 | 129.0 | 223.3 |
| 1999 | 0.4 | 28.6 | 3.2 | (s) | 3.0 | 0.2 | 0.0 | 6.5 | 0.9 | 0.0 | 64.2 | 100.5 | 125.8 | 226.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 20.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Alabama

| | | | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 7,904 | 109 | 2,160 | 2,511 | 589 | 708 | 265 | 382 | 2,014 | 752 | 9,380 | 26 | — | — | 8,966 | — | 22,301 | — |
| 1965 | 8,774 | 132 | 2,749 | 1,962 | 434 | 1,020 | 311 | 372 | 945 | 2,142 | 9,935 | 25 | — | — | 13,636 | — | 32,559 | — |
| 1970 | 11,177 | 171 | 3,176 | 2,833 | 648 | 1,696 | 391 | 204 | 1,611 | 2,428 | 12,987 | 25 | — | — | 18,041 | — | 43,720 | — |
| 1975 | 9,288 | 156 | 2,706 | 4,475 | 297 | 1,846 | 440 | 198 | 5,814 | 3,910 | 19,686 | 25 | — | — | 20,473 | — | 49,384 | — |
| 1980 | 7,221 | 171 | 3,132 | 3,356 | 879 | 1,857 | 506 | 104 | 3,787 | 4,532 | 18,154 | 24 | — | — | 26,708 | — | 64,945 | — |
| 1985 | 5,476 | 138 | 3,757 | 3,671 | 19 | 1,031 | 461 | 507 | 96 | 6,215 | 15,758 | 24 | — | — | 24,179 | — | 56,806 | — |
| 1990 | 5,525 | 156 | 4,321 | 6,740 | 15 | 901 | 519 | 443 | 451 | 6,693 | 20,083 | f 0 | — | — | 27,618 | — | R 60,416 | — |
| 1991 | 5,633 | 163 | 5,286 | 5,423 | 21 | 994 | 464 | 408 | 85 | 5,895 | 18,575 | 0 | — | — | 27,985 | — | R 60,838 | — |
| 1992 | 6,433 | 182 | 4,943 | 5,396 | 35 | 1,279 | 473 | 435 | 371 | 5,996 | 18,928 | 0 | — | — | 29,476 | — | R 62,866 | — |
| 1993 | 5,474 | 195 | 4,984 | 4,587 | 23 | 1,551 | 482 | 583 | 775 | 6,045 | 19,029 | 0 | — | — | 30,524 | — | R 64,470 | — |
| 1994 | 5,646 | 195 | 5,059 | 5,115 | 32 | 1,646 | 503 | 634 | 1,080 | 6,313 | 20,382 | 0 | — | — | 31,919 | — | R 66,612 | — |
| 1995 | 5,543 | 218 | 4,994 | 3,635 | 45 | 1,670 | 495 | 674 | 512 | 6,017 | 18,041 | 0 | — | — | 32,847 | — | R 68,485 | — |
| 1996 | 5,792 | 215 | 5,704 | 4,465 | 48 | R 1,330 | 480 | 678 | 717 | R 3,647 | R 17,068 | 0 | — | — | 33,523 | — | R 69,862 | — |
| 1997 | 5,521 | 211 | 5,467 | 3,145 | 61 | R 661 | 507 | 719 | 612 | R 3,838 | R 15,010 | 0 | — | — | 32,617 | — | R 67,847 | — |
| 1998 | 4,965 | 210 | 4,455 | 2,559 | 40 | 187 | 531 | 519 | 652 | 3,525 | 12,467 | 0 | — | — | 33,539 | — | 69,286 | — |
| 1999 | 4,722 | 220 | 4,597 | 3,647 | 34 | 1,517 | 537 | 443 | 713 | 3,599 | 15,085 | 0 | — | — | 34,533 | — | 67,661 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 209.9 | 112.8 | 14.3 | 14.6 | 3.3 | 2.8 | 1.6 | 2.0 | 12.7 | 4.5 | 55.9 | 0.3 | 23.6 | 0.0 | 30.6 | 433.0 | 76.1 | 509.1 |
| 1965 | 232.0 | 136.0 | 18.2 | 11.4 | 2.5 | 4.1 | 1.9 | 2.0 | 5.9 | 12.7 | 58.7 | 0.3 | 32.1 | 0.0 | 46.5 | 505.5 | 111.1 | 616.6 |
| 1970 | 291.4 | 176.5 | 21.1 | 16.5 | 3.7 | 6.4 | 2.4 | 1.1 | 10.1 | 14.2 | 75.4 | 0.3 | 41.9 | 0.0 | 61.6 | 647.0 | 149.2 | 796.1 |
| 1975 | 238.8 | 160.0 | 18.0 | 26.1 | 1.7 | 6.9 | 2.7 | 1.0 | 36.6 | 23.1 | 115.9 | 0.3 | 46.8 | 0.0 | 69.9 | 631.7 | 168.5 | 800.2 |
| 1980 | 187.0 | 176.3 | 20.8 | 19.6 | 5.0 | 6.8 | 3.1 | 0.5 | 23.8 | 26.2 | 105.8 | 0.2 | R 124.3 | 0.0 | 91.1 | R 684.7 | 221.6 | R 906.3 |
| 1985 | 140.4 | 143.0 | 24.9 | 21.4 | 0.1 | 3.7 | 2.8 | 2.7 | 0.6 | 35.3 | 91.5 | 0.2 | R 145.6 | 0.0 | 82.5 | R 603.2 | 193.8 | R 797.1 |
| 1990 | 143.3 | 160.0 | 28.7 | 39.3 | 0.1 | 3.3 | 3.1 | 2.3 | 2.8 | 37.2 | 116.8 | f 0.0 | R 135.6 | f 0.0 | 94.2 | R f 650.0 | 206.1 | R f 856.2 |
| 1991 | 145.5 | 167.9 | 35.1 | 31.6 | 0.1 | 3.6 | 2.8 | 2.1 | 0.5 | 33.0 | 108.9 | 0.0 | R 137.3 | 0.0 | 95.5 | R 655.0 | R 207.6 | R 862.6 |
| 1992 | 165.6 | 187.0 | 32.8 | 31.4 | 0.2 | 4.6 | 2.9 | 2.3 | 2.3 | 33.2 | 109.8 | 0.0 | R 141.5 | 0.0 | 100.6 | R 704.5 | R 214.5 | R 919.0 |
| 1993 | 141.6 | 201.0 | 33.1 | 26.7 | 0.1 | 5.6 | 2.9 | 3.1 | 4.9 | 33.6 | 110.0 | 0.0 | R 171.7 | 0.0 | 104.1 | R 728.3 | 220.0 | R 948.3 |
| 1994 | 146.2 | 200.7 | 33.6 | 29.8 | 0.2 | 6.0 | 3.1 | 3.3 | 6.8 | 35.1 | R 117.7 | 0.0 | R 210.4 | 0.0 | 108.9 | R 784.0 | 227.3 | R 1,011.3 |
| 1995 | 144.1 | 224.2 | 33.1 | 21.2 | 0.3 | 6.1 | 3.0 | 3.5 | 3.2 | 33.4 | R 103.7 | 0.0 | R 224.7 | 0.0 | 112.1 | R 809.4 | R 233.7 | R 1,043.0 |
| 1996 | 150.1 | 221.9 | 37.9 | 26.0 | 0.3 | R 4.8 | 2.9 | R 3.5 | 4.5 | R 20.7 | R 100.6 | 0.0 | R 183.3 | 0.0 | 114.4 | R 770.2 | R 238.4 | R 1,008.6 |
| 1997 | 142.5 | 219.4 | 36.3 | 18.3 | 0.3 | R 2.4 | 3.1 | R 3.7 | 3.8 | R 21.9 | R 89.9 | R 0.0 | R 152.4 | 0.0 | 111.3 | R 715.5 | R 231.5 | R 947.0 |
| 1998 | 128.1 | 218.5 | 29.6 | 14.9 | 0.2 | 0.7 | 3.2 | 2.7 | 4.1 | 20.0 | 75.4 | 0.0 | 144.5 | 0.0 | 114.4 | 680.9 | 236.4 | 917.3 |
| 1999 | 121.9 | 227.6 | 30.5 | 21.2 | 0.2 | 5.5 | 3.3 | 2.3 | 4.5 | 20.3 | 87.8 | 0.0 | 190.7 | (s) | 117.8 | 745.8 | 230.9 | 976.7 |

# Table 21.   Transportation Energy Consumption Estimates, Selected Years 1960-1999, Alabama

| | Coal [a] | Natural Gas [b] | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | | Electrical System Energy Losses [d] | |
| | | | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 137 | 8 | 280 | 2,582 | 1,126 | 31 | 396 | 23,869 | 2,278 | 30,562 | 0 | 0 | — | 0 | — |
| 1965 | 29 | 12 | 446 | 3,090 | 1,156 | 43 | 430 | 28,220 | 1,608 | 34,993 | 0 | 0 | — | 0 | — |
| 1970 | 18 | 20 | 349 | 5,353 | 1,799 | 98 | 421 | 36,408 | 1,679 | 46,107 | 0 | 0 | — | 0 | — |
| 1975 | 2 | 17 | 249 | 9,087 | 1,707 | 87 | 609 | 44,523 | 7,039 | 63,300 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 16 | 248 | 11,049 | 2,048 | 46 | 486 | 43,934 | 3,506 | 61,318 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 11 | 172 | 11,195 | 3,516 | 161 | 442 | 42,718 | 1,640 | 59,844 | R e 369 | 0 | — | 0 | — |
| 1990 | 0 | 15 | 116 | 17,450 | 1,899 | 96 | 497 | 48,498 | 2,905 | 71,462 | R 467 | 0 | — | 0 | — |
| 1991 | 0 | 16 | 109 | 17,323 | 2,292 | 94 | 445 | 48,959 | 3,225 | 72,448 | R 465 | 0 | — | 0 | — |
| 1992 | 0 | 19 | 106 | 17,854 | 2,108 | 85 | 454 | 50,031 | 3,536 | 74,174 | R 745 | 0 | — | 0 | — |
| 1993 | 0 | 16 | 103 | 17,341 | 1,973 | 117 | 462 | 51,332 | 3,283 | 74,612 | R 394 | 0 | — | 0 | — |
| 1994 | 0 | 15 | 110 | 18,992 | 3,472 | 193 | 483 | 52,551 | 2,352 | 78,152 | R 424 | 0 | — | 0 | — |
| 1995 | 0 | 20 | 97 | 18,730 | 3,843 | 93 | 475 | 54,756 | 2,644 | 80,638 | R 581 | (s) | — | (s) | — |
| 1996 | 0 | 19 | 93 | 17,845 | 3,508 | R 78 | 461 | 54,279 | 2,490 | R 78,754 | R 101 | (s) | — | (s) | — |
| 1997 | 0 | 21 | 103 | 17,597 | 2,183 | R 68 | 487 | 54,934 | 1,982 | R 77,354 | R 99 | 0 | — | 0 | — |
| 1998 | 0 | 20 | 82 | 17,859 | 3,522 | 17 | 509 | 56,856 | 878 | 79,723 | 82 | 0 | — | 0 | — |
| 1999 | 0 | 22 | 102 | 20,328 | 1,963 | 15 | 515 | 57,185 | 1,042 | 81,149 | 11 | 0 | — | 0 | — |

| Year | | | | | | | Trillion Btu | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 3.4 | 7.9 | 1.4 | 15.0 | 6.1 | 0.1 | 2.4 | 125.4 | 14.3 | 164.7 | 0.0 | 0.0 | 176.0 | 0.0 | 176.0 |
| 1965 | 0.7 | 12.4 | 2.3 | 18.0 | 6.2 | 0.2 | 2.6 | 148.2 | 10.1 | 187.6 | 0.0 | 0.0 | 200.7 | 0.0 | 200.7 |
| 1970 | 0.4 | 20.5 | 1.8 | 31.2 | 9.9 | 0.4 | 2.6 | 191.3 | 10.6 | 247.6 | 0.0 | 0.0 | 268.5 | 0.0 | 268.5 |
| 1975 | (s) | 17.3 | 1.3 | 52.9 | 9.4 | 0.3 | 3.7 | 233.9 | 44.3 | 345.8 | 0.0 | 0.0 | 363.1 | 0.0 | 363.1 |
| 1980 | 0.0 | 17.0 | 1.3 | 64.4 | 11.3 | 0.2 | 2.9 | 230.8 | 22.0 | 332.9 | 0.0 | 0.0 | 349.9 | 0.0 | 349.9 |
| 1985 | 0.0 | 11.5 | 0.9 | 65.2 | 19.7 | 0.6 | 2.7 | 224.4 | 10.3 | 323.7 | R e 1.3 | 0.0 | e 335.2 | 0.0 | e 335.2 |
| 1990 | 0.0 | 15.1 | 0.6 | 101.6 | 10.6 | 0.3 | 3.0 | 254.8 | 18.3 | 389.2 | R 1.7 | 0.0 | 404.2 | 0.0 | 404.2 |
| 1991 | 0.0 | 16.9 | 0.6 | 100.9 | 12.6 | 0.3 | 2.7 | 257.2 | 20.3 | 394.6 | R 1.6 | 0.0 | 411.5 | 0.0 | 411.5 |
| 1992 | 0.0 | 19.2 | 0.5 | 104.0 | 11.7 | 0.3 | 2.8 | 262.8 | 22.2 | 404.3 | R 2.6 | 0.0 | 423.5 | 0.0 | 423.5 |
| 1993 | 0.0 | 16.0 | 0.5 | 101.0 | 11.0 | 0.4 | 2.8 | 269.6 | 20.6 | 406.0 | R 1.4 | 0.0 | 422.1 | 0.0 | 422.1 |
| 1994 | 0.0 | 15.4 | 0.6 | 110.6 | 19.6 | 0.7 | 2.9 | R 274.8 | 14.8 | R 424.0 | R 1.5 | 0.0 | R 439.4 | 0.0 | R 439.4 |
| 1995 | 0.0 | 20.7 | 0.5 | 109.1 | 21.8 | 0.3 | 2.9 | R 285.6 | 16.6 | R 436.7 | R 2.1 | (s) | R 457.4 | (s) | R 457.4 |
| 1996 | 0.0 | 19.8 | 0.5 | 103.9 | 19.9 | 0.3 | 2.8 | R 283.1 | 15.7 | R 426.2 | R 0.4 | (s) | R 445.9 | (s) | R 445.9 |
| 1997 | 0.0 | 21.5 | 0.5 | 102.5 | 12.4 | R 0.2 | 3.0 | R 286.4 | 12.5 | R 417.4 | R 0.4 | 0.0 | R 439.0 | 0.0 | R 439.0 |
| 1998 | 0.0 | 20.7 | 0.4 | 104.0 | 20.0 | 0.1 | 3.1 | 296.3 | 5.5 | 429.4 | 0.3 | 0.0 | 450.1 | 0.0 | 450.1 |
| 1999 | 0.0 | 22.9 | 0.5 | 118.4 | 11.1 | 0.1 | 3.1 | 298.0 | 6.5 | 437.8 | (s) | 0.0 | 460.7 | 0.0 | 460.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 22. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Alabama**

| Year | Coal | Natural Gas a | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | | | Thousand Barrels | | | | Million Kilowatthours | | | |
| 1960 | 7,264 | 9 | 0 | (s) | 0 | (s) | 0 | 6,213 | 0 | 0 | 0 | — |
| 1965 | 12,572 | 6 | 0 | 0 | 0 | 0 | 0 | 7,078 | 0 | 0 | 0 | — |
| 1970 | 16,331 | 15 | 0 | 26 | 448 | 474 | 0 | 7,607 | 0 | 0 | 0 | — |
| 1975 | 17,301 | 6 | 99 | 514 | 0 | 613 | 2,722 | 12,188 | 0 | 0 | 0 | — |
| 1980 | 19,593 | 1 | 0 | 131 | 0 | 131 | 23,497 | 9,385 | 0 | 0 | 0 | — |
| 1985 | 21,545 | 1 | 0 | 88 | 0 | 88 | 14,313 | 6,862 | 0 | 0 | 0 | — |
| 1990 | 22,010 | 4 | 0 | 133 | 0 | 133 | 12,052 | 10,367 | 0 | 0 | 0 | — |
| 1991 | 23,700 | 4 | 0 | 163 | 0 | 163 | 15,875 | 10,758 | 0 | 0 | 0 | — |
| 1992 | 24,988 | 3 | 0 | 141 | 0 | 141 | 19,397 | 10,260 | 0 | 0 | 0 | — |
| 1993 | 27,533 | 5 | 0 | 130 | 0 | 130 | 17,823 | 9,034 | 0 | 0 | 0 | — |
| 1994 | 25,817 | 4 | 0 | 220 | 0 | 220 | 20,480 | 11,429 | 0 | 0 | 0 | — |
| 1995 | 28,759 | 7 | 0 | 181 | 0 | 181 | 20,752 | 9,502 | 0 | 0 | 0 | — |
| 1996 | 31,216 | 6 | 0 | 299 | 0 | 299 | 29,708 | 11,082 | 0 | 0 | 0 | — |
| 1997 | 30,841 | 10 | 0 | 230 | 0 | 230 | 29,573 | 11,521 | 0 | 0 | 0 | — |
| 1998 | 31,473 | 26 | 0 | 472 | 0 | 472 | 28,663 | 10,565 | 0 | 0 | 0 | — |
| 1999 | 33,428 | 21 | 0 | 295 | 0 | 295 | 30,892 | 7,760 | 0 | 0 | 0 | — |
| | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 175.3 | 9.7 | 0.0 | (s) | 0.0 | (s) | 0.0 | 66.9 | 0.0 | 0.0 | 0.0 | 251.8 |
| 1965 | 298.0 | 5.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 74.0 | 0.0 | 0.0 | 0.0 | 377.7 |
| 1970 | 380.7 | 15.9 | 0.0 | 0.2 | 2.7 | 2.9 | 0.0 | 79.8 | 0.0 | 0.0 | 0.0 | 479.3 |
| 1975 | 400.7 | 6.2 | 0.6 | 3.0 | 0.0 | 3.6 | 30.0 | 126.8 | 0.0 | 0.0 | 0.0 | 567.4 |
| 1980 | 468.5 | 1.6 | 0.0 | 0.8 | 0.0 | 0.8 | 256.3 | 97.5 | 0.0 | 0.0 | 0.0 | 824.6 |
| 1985 | 519.5 | 1.2 | 0.0 | 0.5 | 0.0 | 0.5 | 154.8 | 71.7 | 0.0 | 0.0 | 0.0 | 747.6 |
| 1990 | 532.4 | 4.2 | 0.0 | 0.8 | 0.0 | 0.8 | 128.7 | 107.8 | 0.0 | 0.0 | 0.0 | 773.9 |
| 1991 | 573.9 | 4.2 | 0.0 | 0.9 | 0.0 | 0.9 | 170.5 | 112.3 | 0.0 | 0.0 | 0.0 | 861.7 |
| 1992 | 602.8 | 3.4 | 0.0 | 0.8 | 0.0 | 0.8 | 207.1 | 106.1 | 0.0 | 0.0 | 0.0 | 920.3 |
| 1993 | 665.9 | 4.7 | 0.0 | 0.8 | 0.0 | 0.8 | 190.4 | 93.1 | 0.0 | 0.0 | 0.0 | 954.8 |
| 1994 | 624.1 | 3.9 | 0.0 | 1.3 | 0.0 | 1.3 | 218.6 | 117.9 | 0.0 | 0.0 | 0.0 | 965.8 |
| 1995 | 682.2 | 7.5 | 0.0 | 1.1 | 0.0 | 1.1 | 221.2 | 98.0 | 0.0 | 0.0 | 0.0 | 1,009.9 |
| 1996 | 736.3 | 6.3 | 0.0 | 1.7 | 0.0 | 1.7 | 315.6 | R 114.6 | 0.0 | 0.0 | 0.0 | 1,174.5 |
| 1997 | 714.5 | 10.3 | 0.0 | 1.3 | 0.0 | 1.3 | 314.2 | R 119.3 | 0.0 | 0.0 | 0.0 | R 1,159.6 |
| 1998 | 725.1 | 26.7 | 0.0 | 2.8 | 0.0 | 2.8 | 304.5 | 109.3 | 0.0 | 0.0 | 0.0 | 1,168.3 |
| 1999 | 732.9 | 21.1 | 0.0 | 1.7 | 0.0 | 1.7 | 328.2 | 80.3 | 0.0 | 0.0 | 0.0 | 1,164.2 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 23. Energy Consumption Estimates by Source, Selected Years 1960-1999, Alaska

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | Million kWh | Million kWh | | | | |

**Thousand Barrels / Million kWh**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear | Hydroelectric | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 376 | 2 | 47 | 1,032 | 2,636 | 1,972 | 90 | 46 | 7 | 1,657 | 711 | 0 | 8,197 | 0 | 290 | — | — | 0 | — |
| 1965 | 525 | 8 | 132 | 293 | 3,788 | 3,005 | 10 | 91 | 41 | 2,450 | 881 | 284 | 10,975 | 0 | 350 | — | — | 0 | — |
| 1970 | 740 | 64 | 274 | 462 | 5,100 | 6,735 | 33 | 151 | 60 | 2,621 | 1,020 | 523 | 16,979 | 0 | 363 | — | — | 0 | — |
| 1975 | 868 | 85 | 319 | 466 | 7,090 | 7,420 | 123 | 211 | 145 | 4,179 | 1,075 | 771 | 21,800 | 0 | 357 | — | — | 0 | — |
| 1980 | 273 | 153 | 309 | 498 | 6,677 | 9,618 | 19 | 191 | 115 | 3,676 | 371 | 1,446 | 22,919 | 0 | 539 | — | — | 0 | — |
| 1985 | 733 | 213 | 485 | 490 | 10,356 | 15,231 | 7 | 331 | 104 | 5,638 | 3,072 | R 5,925 | R 41,639 | 0 | 748 | — | — | 0 | — |
| 1990 | 784 | 343 | 269 | 491 | 11,592 | 17,367 | 3 | 384 | 117 | 5,854 | 429 | 4,582 | 41,088 | 0 | R h 975 | — | — | 0 | — |
| 1991 | 802 | 367 | 259 | 618 | 9,805 | 17,116 | 8 | 402 | 105 | 5,108 | 593 | 2,312 | 36,326 | 0 | R 897 | — | — | 0 | — |
| 1992 | 792 | 383 | 264 | 459 | 10,408 | 14,720 | 1 | 393 | 107 | 5,881 | 765 | 3,377 | 36,376 | 0 | R 918 | — | — | 0 | — |
| 1993 | 863 | 378 | 43 | 410 | 9,354 | 14,693 | 5 | 238 | 109 | 5,976 | 728 | 3,028 | 34,584 | 0 | R 1,304 | — | — | 0 | — |
| 1994 | 796 | 367 | 66 | 171 | 8,027 | 16,080 | 11 | 252 | 114 | 6,542 | 728 | 3,375 | 35,366 | 0 | R 1,346 | — | — | 0 | — |
| 1995 | 815 | 430 | 83 | 389 | 10,378 | 16,921 | 1 | 272 | 112 | 7,148 | 754 | 3,195 | 39,253 | 0 | R 1,373 | — | — | 0 | — |
| 1996 | 706 | 448 | 26 | 142 | 8,552 | 18,652 | 1 | R 241 | 109 | 6,735 | 912 | 4,138 | R 39,508 | 0 | R 1,267 | — | — | 0 | — |
| 1997 | 740 | 425 | 55 | 407 | 9,936 | 21,099 | 1 | R 326 | 115 | 6,312 | 867 | 4,104 | R 43,221 | 0 | R 1,100 | — | — | 0 | — |
| 1998 | 693 | 435 | 65 | 152 | 10,841 | 21,865 | 1 | 320 | 120 | 6,737 | 828 | 4,056 | 44,988 | 0 | 1,114 | — | — | 0 | — |
| 1999 | 694 | 420 | 131 | 529 | 8,237 | 23,612 | 17 | 266 | 122 | 6,426 | 1,114 | 4,217 | 44,671 | 0 | 817 | — | — | 0 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear | Hydroelectric | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 7.2 | 2.0 | 0.3 | 5.2 | 15.4 | 10.6 | 0.5 | 0.2 | (s) | 8.7 | 4.5 | 0.0 | 45.4 | 0.0 | 3.1 | 3.7 | 0.0 | 0.0 | 61.4 |
| 1965 | 9.9 | 7.7 | 0.9 | 1.5 | 22.1 | 16.5 | 0.1 | 0.4 | 0.3 | 12.9 | 5.5 | 1.7 | 61.7 | 0.0 | 3.7 | 4.9 | 0.0 | 0.0 | 87.8 |
| 1970 | 13.2 | 64.0 | 1.8 | 2.3 | 29.7 | 37.7 | 0.2 | 0.6 | 0.4 | 13.8 | 6.4 | 3.1 | 96.0 | 0.0 | 3.8 | 5.0 | 0.0 | 0.0 | 182.0 |
| 1975 | 15.3 | 85.2 | 2.1 | 2.4 | 41.3 | 41.7 | 0.7 | 0.8 | 0.9 | 22.0 | 6.8 | 4.6 | 123.1 | 0.0 | 3.7 | 4.9 | 0.0 | 0.0 | 232.2 |
| 1980 | 4.3 | 153.8 | 2.1 | 2.5 | 38.9 | 54.0 | 0.1 | 0.7 | 0.7 | 19.3 | 2.3 | 8.7 | 129.3 | 0.0 | 5.6 | R 3.1 | 0.0 | 0.0 | 296.1 |
| 1985 | 11.6 | 214.0 | 3.2 | 2.5 | 60.3 | 85.8 | (s) | 1.2 | 0.6 | 29.6 | 19.3 | R 35.3 | R 237.9 | 0.0 | 7.8 | R 3.8 | (s) | 0.0 | R 475.1 |
| 1990 | 12.4 | 326.8 | 1.8 | 2.5 | 67.5 | 97.9 | (s) | 1.4 | 0.7 | 30.8 | 2.7 | 27.2 | 232.5 | 0.0 | h 10.1 | 8.8 | h 0.1 | 0.0 | R h 590.7 |
| 1991 | 12.7 | 368.0 | 1.7 | 3.1 | 57.1 | 96.1 | (s) | 1.5 | 0.6 | 26.8 | 3.7 | 14.1 | 204.9 | 0.0 | R 9.4 | R 4.5 | 0.1 | 0.0 | R 599.5 |
| 1992 | 12.5 | 383.9 | 1.8 | 2.3 | 60.6 | 82.9 | (s) | 1.4 | 0.6 | 30.9 | 4.8 | 20.3 | 205.7 | 0.0 | R 9.5 | R 9.6 | 0.1 | 0.0 | R 621.2 |
| 1993 | 13.6 | 376.0 | 0.3 | 2.1 | 54.5 | 83.2 | (s) | 0.9 | 0.7 | 31.4 | 4.6 | 18.4 | 196.0 | 0.0 | R 13.4 | R 7.1 | 0.1 | 0.0 | R 606.2 |
| 1994 | 12.6 | 367.6 | 0.4 | 0.9 | 46.8 | 91.2 | 0.1 | 0.9 | 0.7 | R 34.2 | 4.6 | 20.4 | R 200.1 | 0.0 | R 13.9 | R 9.7 | 0.1 | 0.0 | R 603.9 |
| 1995 | 12.9 | 432.8 | 0.5 | 2.0 | 60.5 | 95.9 | (s) | 1.0 | 0.7 | R 37.3 | 4.7 | 19.3 | R 221.9 | 0.0 | R 14.2 | R 8.6 | 0.1 | 0.0 | R 690.4 |
| 1996 | 11.2 | 443.6 | 0.2 | 0.7 | 49.8 | 105.8 | (s) | 0.9 | 0.7 | R 35.1 | 5.7 | 24.9 | R 223.7 | 0.0 | R 13.1 | R 8.3 | 0.1 | 0.0 | R 699.9 |
| 1997 | 11.7 | 425.4 | 0.4 | 2.1 | 57.9 | 119.6 | (s) | R 1.2 | 0.7 | R 32.9 | 5.4 | 24.6 | 244.8 | 0.0 | R 11.4 | R 3.8 | 0.1 | 0.0 | R 697.1 |
| 1998 | 10.9 | 434.4 | 0.4 | 0.8 | 63.2 | 124.1 | (s) | 1.2 | 0.7 | 35.1 | 5.2 | 24.5 | 255.2 | 0.0 | 11.5 | 1.8 | 0.1 | 0.0 | 713.8 |
| 1999 | 10.9 | 420.0 | 0.9 | 2.7 | 48.0 | 134.1 | 0.1 | 1.0 | 0.7 | 33.5 | 7.0 | 25.5 | 253.4 | 0.0 | 8.5 | 1.9 | 0.1 | 0.0 | 694.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 24.  Residential Energy Consumption Estimates, Selected Years 1960-1999, Alaska

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 22 | (s) | 866 | 0 | 36 | 902 | 90 | — | — | 151 | — | 539 | — |
| 1965 | 12 | 1 | 1,110 | 10 | 77 | 1,197 | 80 | — | — | 292 | — | 1,139 | — |
| 1970 | 8 | 6 | 1,362 | 19 | 77 | 1,458 | 65 | — | — | 527 | — | 2,073 | — |
| 1975 | 6 | 10 | 1,621 | 91 | 69 | 1,781 | 71 | — | — | 898 | — | 3,227 | — |
| 1980 | 0 | 8 | 1,172 | 0 | 58 | 1,231 | 63 | — | — | 1,092 | — | 4,397 | — |
| 1985 | 153 | 13 | 1,310 | 1 | 192 | 1,503 | 83 | — | — | 1,674 | — | 4,834 | — |
| 1990 | 173 | 14 | 1,745 | 3 | 300 | 2,048 | 109 | — | — | 1,661 | — | R 4,430 | — |
| 1991 | 176 | 14 | 1,597 | 8 | 323 | 1,928 | 114 | — | — | 1,603 | — | R 3,919 | — |
| 1992 | 180 | 14 | 1,606 | 1 | 319 | 1,925 | 120 | — | — | 1,640 | — | R 3,600 | — |
| 1993 | 197 | 14 | 1,277 | 1 | 192 | 1,470 | 97 | — | — | 1,629 | — | R 3,960 | — |
| 1994 | 182 | 15 | 1,254 | 10 | 151 | 1,416 | 95 | — | — | 1,688 | — | R 4,020 | — |
| 1995 | 183 | 15 | 1,494 | (s) | 157 | 1,650 | 106 | — | — | 1,713 | — | R 4,109 | — |
| 1996 | 166 | 16 | 1,312 | (s) | 195 | 1,507 | 106 | — | — | 1,766 | — | R 4,187 | — |
| 1997 | 176 | 15 | 1,453 | (s) | R 123 | R 1,576 | R 78 | — | — | 1,726 | — | R 4,194 | — |
| 1998 | 185 | 16 | 1,542 | 1 | 98 | 1,641 | 69 | — | — | 1,768 | — | 3,432 | — |
| 1999 | 194 | 18 | 1,203 | 17 | 213 | 1,433 | 74 | — | — | 1,866 | — | 3,311 | — |

**Trillion Btu**

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.4 | 0.2 | 5.0 | 0.0 | 0.1 | 5.2 | 1.8 | 0.0 | 0.0 | 0.5 | 8.1 | 1.8 | 10.0 |
| 1965 | 0.2 | 1.5 | 6.5 | 0.1 | 0.3 | 6.8 | 1.6 | 0.0 | 0.0 | 1.0 | 11.1 | 3.9 | 15.0 |
| 1970 | 0.1 | 6.2 | 7.9 | 0.1 | 0.3 | 8.3 | 1.3 | 0.0 | 0.0 | 1.8 | 17.8 | 7.1 | 24.9 |
| 1975 | 0.1 | 10.4 | 9.4 | 0.5 | 0.3 | 10.2 | 1.4 | 0.0 | 0.0 | 3.1 | 25.2 | 11.0 | 36.2 |
| 1980 | 0.0 | 7.9 | 6.8 | 0.0 | 0.2 | 7.0 | 1.3 | 0.0 | 0.0 | 3.7 | 20.0 | 15.0 | 35.0 |
| 1985 | 2.4 | 13.3 | 7.6 | (s) | 0.7 | 8.3 | 1.7 | 0.0 | 0.0 | 5.7 | 31.5 | 16.5 | 48.0 |
| 1990 | 2.7 | 13.4 | 10.2 | (s) | 1.1 | 11.3 | 2.2 | e (s) | e (s) | 5.7 | e 35.3 | 15.1 | e 50.4 |
| 1991 | 2.8 | 13.6 | 9.3 | (s) | 1.2 | 10.5 | 2.3 | (s) | (s) | 5.5 | 34.7 | 13.4 | 48.0 |
| 1992 | 2.8 | 14.4 | 9.4 | (s) | 1.2 | 10.5 | 2.4 | (s) | (s) | 5.6 | 35.8 | 12.3 | 48.0 |
| 1993 | 3.1 | 13.8 | 7.4 | (s) | 0.7 | 8.1 | 1.9 | (s) | (s) | 5.6 | 32.5 | 13.5 | R 46.1 |
| 1994 | 2.9 | 14.9 | 7.3 | 0.1 | 0.5 | 7.9 | 1.9 | (s) | (s) | 5.8 | 33.4 | 13.7 | 47.1 |
| 1995 | 2.9 | 15.3 | 8.7 | (s) | 0.6 | 9.3 | 2.1 | (s) | (s) | 5.8 | 35.5 | 14.0 | 49.5 |
| 1996 | 2.6 | 16.0 | 7.6 | (s) | 0.7 | 8.3 | 2.1 | (s) | (s) | 6.0 | 35.1 | 14.3 | 49.4 |
| 1997 | 2.8 | 15.1 | 8.5 | (s) | R 0.4 | R 8.9 | R 1.6 | (s) | (s) | 5.9 | R 34.3 | 14.3 | R 48.6 |
| 1998 | 2.9 | 15.6 | 9.0 | (s) | 0.4 | 9.3 | 1.4 | (s) | (s) | 6.0 | 35.3 | 11.7 | 47.0 |
| 1999 | 3.0 | 17.6 | 7.0 | 0.1 | 0.8 | 7.9 | 1.5 | (s) | (s) | 6.4 | 36.4 | 11.3 | 47.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 25.   Commercial Energy Consumption Estimates, Selected Years 1960-1999, Alaska

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | |
| **Thousand Barrels** | | | | | | | | | | | | | | |
| 1960 | 42 | 0 | 268 | 0 | 6 | 130 | 464 | 868 | 2 | — | 99 | — | 354 | — |
| 1965 | 22 | 2 | 344 | 0 | 14 | 253 | 751 | 1,361 | 2 | — | 267 | — | 1,043 | — |
| 1970 | 15 | 13 | 422 | 0 | 14 | 246 | 807 | 1,488 | 1 | — | 478 | — | 1,882 | — |
| 1975 | 11 | 14 | 502 | 0 | 12 | 415 | 558 | 1,487 | 1 | — | 657 | — | 2,362 | — |
| 1980 | 0 | 17 | 577 | 0 | 10 | 258 | 4 | 849 | 2 | — | 728 | — | 2,932 | — |
| 1985 | 284 | 20 | 926 | 3 | 34 | 268 | 0 | 1,231 | R 2 | — | 1,898 | — | 5,480 | — |
| 1990 | 321 | 22 | 1,176 | (s) | 53 | 52 | 0 | 1,281 | R 7 | — | 2,133 | — | R 5,688 | — |
| 1991 | 328 | 21 | 974 | (s) | 57 | 88 | 0 | 1,119 | R 7 | — | 2,187 | — | R 5,347 | — |
| 1992 | 334 | 21 | 1,376 | (s) | 56 | 57 | 0 | 1,490 | R 8 | — | 2,195 | — | R 4,817 | — |
| 1993 | 366 | 20 | 1,211 | (s) | 34 | 8 | 0 | 1,253 | 8 | — | 2,245 | — | R 5,456 | — |
| 1994 | 338 | 21 | 1,184 | (s) | 27 | 10 | 0 | 1,221 | 8 | — | 2,334 | — | R 5,558 | — |
| 1995 | 340 | 25 | 763 | (s) | 28 | 21 | 0 | 812 | 8 | — | 2,372 | — | R 5,691 | — |
| 1996 | 309 | 27 | 804 | (s) | 34 | 294 | 0 | 1,132 | 9 | — | 2,429 | — | R 5,758 | — |
| 1997 | 327 | 27 | 744 | (s) | R 22 | 71 | 0 | R 837 | R 9 | — | 2,359 | — | R 5,732 | — |
| 1998 | 344 | 27 | 985 | (s) | 17 | 116 | 0 | 1,118 | 9 | — | 2,508 | — | 4,870 | — |
| 1999 | 359 | 28 | 775 | 1 | 38 | 88 | 0 | 902 | 10 | — | 2,583 | — | 4,584 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 0.8 | 0.0 | 1.6 | 0.0 | (s) | 0.7 | 2.9 | 5.2 | (s) | 0.0 | 0.3 | 6.3 | 1.2 | 7.6 |
| 1965 | 0.4 | 2.3 | 2.0 | 0.0 | 0.1 | 1.3 | 4.7 | 8.1 | (s) | 0.0 | 0.9 | 11.8 | 3.6 | 15.3 |
| 1970 | 0.3 | 12.6 | 2.5 | 0.0 | 0.1 | 1.3 | 5.1 | 8.9 | (s) | 0.0 | 1.6 | 23.4 | 6.4 | 29.8 |
| 1975 | 0.2 | 14.5 | 2.9 | 0.0 | (s) | 2.2 | 3.5 | 8.7 | (s) | 0.0 | 2.2 | 25.6 | 8.1 | 33.7 |
| 1980 | 0.0 | 16.6 | 3.4 | 0.0 | (s) | 1.4 | (s) | 4.8 | (s) | 0.0 | 2.5 | 23.8 | 10.0 | 33.8 |
| 1985 | 4.5 | 20.5 | 5.4 | (s) | 0.1 | 1.4 | 0.0 | 6.9 | (s) | 0.0 | 6.5 | 38.4 | 18.7 | 57.1 |
| 1990 | 5.1 | 20.5 | 6.8 | (s) | 0.2 | 0.3 | 0.0 | 7.3 | R 0.1 | e (s) | 7.3 | R e 40.3 | 19.4 | R e 59.7 |
| 1991 | 5.2 | 20.9 | 5.7 | (s) | 0.2 | 0.5 | 0.0 | 6.3 | R 0.1 | (s) | 7.5 | R 40.1 | 18.2 | R 58.3 |
| 1992 | 5.3 | 21.3 | 8.0 | (s) | 0.2 | 0.3 | 0.0 | 8.5 | R 0.2 | (s) | 7.5 | R 42.8 | 16.4 | R 59.3 |
| 1993 | 5.8 | 19.9 | 7.1 | (s) | 0.1 | (s) | 0.0 | 7.2 | 0.2 | (s) | 7.7 | 40.7 | 18.6 | 59.3 |
| 1994 | 5.3 | 20.7 | 6.9 | (s) | 0.1 | 0.1 | 0.0 | 7.0 | 0.2 | (s) | 8.0 | 41.2 | 19.0 | 60.2 |
| 1995 | 5.4 | 25.1 | 4.4 | (s) | 0.1 | 0.1 | 0.0 | 4.7 | 0.2 | (s) | 8.1 | 43.4 | 19.4 | 62.9 |
| 1996 | 4.9 | 27.0 | 4.7 | (s) | 0.1 | 1.5 | 0.0 | R 6.3 | 0.2 | (s) | 8.3 | 46.7 | 19.6 | 66.4 |
| 1997 | 5.2 | 26.9 | 4.3 | (s) | 0.1 | 0.4 | 0.0 | 4.8 | R 0.2 | (s) | 8.0 | 45.1 | R 19.6 | 64.7 |
| 1998 | 5.4 | 27.1 | 5.7 | (s) | 0.1 | 0.6 | 0.0 | 6.4 | 0.2 | (s) | 8.6 | 47.6 | 16.6 | 64.2 |
| 1999 | 5.6 | 27.7 | 4.5 | (s) | 0.1 | 0.5 | 0.0 | 5.1 | 0.2 | (s) | 8.8 | 47.5 | 15.6 | 63.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 26.   Industrial Energy Consumption Estimates, Selected Years 1960-1999, Alaska

| | Coal | Natural Gas [a] | Petroleum | | | | | | | | | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
| | | | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kero-sene [b] | LPG [b] | Lubri-cants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 256 | 2 | 47 | 878 | 90 | 4 | 4 | 0 | 229 | 0 | 1,252 | 0 | — | — | 45 | — | 162 | — |
| 1965 | 339 | 2 | 132 | 1,238 | 0 | (s) | 1 | 83 | 60 | 284 | 1,798 | 0 | — | — | 59 | — | 229 | — |
| 1970 | 467 | 19 | 274 | 1,923 | 14 | 60 | 1 | 107 | 73 | 523 | 2,975 | 0 | — | — | 101 | — | 398 | — |
| 1975 | 594 | 40 | 319 | 2,117 | 32 | 130 | 24 | 106 | 31 | 771 | 3,530 | 0 | — | — | 485 | — | 1,743 | — |
| 1980 | 0 | 100 | 309 | 1,784 | 19 | 119 | 21 | 111 | 14 | 1,446 | 3,823 | 0 | — | — | 757 | — | 3,048 | — |
| 1985 | 0 | 140 | 485 | 1,762 | 4 | 91 | 19 | 406 | 2,577 | R 5,925 | R 11,269 | 0 | — | — | 417 | — | 1,203 | — |
| 1990 | 0 | 271 | 269 | 1,584 | (s) | 25 | 21 | 55 | 118 | 4,582 | 6,654 | f 0 | — | — | 459 | — | R 1,225 | — |
| 1991 | 0 | 299 | 259 | 1,954 | (s) | 17 | 19 | 57 | 280 | 2,312 | 4,898 | 0 | — | — | 466 | — | 1,139 | — |
| 1992 | 0 | 316 | 264 | 1,973 | (s) | 14 | 19 | 58 | 302 | 3,377 | 6,006 | 0 | — | — | 504 | — | 1,107 | — |
| 1993 | 2 | 313 | 43 | 1,573 | 4 | 10 | 20 | 40 | 303 | 3,028 | 5,021 | 0 | — | — | 501 | — | 1,218 | — |
| 1994 | 5 | 300 | 66 | 1,506 | (s) | 70 | 20 | 57 | 346 | 3,375 | 5,441 | 0 | — | — | 511 | — | R 1,218 | — |
| 1995 | 0 | 358 | 83 | 2,287 | (s) | 85 | 20 | 62 | 381 | 3,195 | 6,113 | 0 | — | — | 546 | — | R 1,311 | — |
| 1996 | 2 | 371 | 26 | 2,541 | (s) | R 9 | 20 | 64 | 394 | 4,138 | R 7,192 | 0 | — | — | 584 | — | 1,385 | — |
| 1997 | 2 | 345 | 55 | 2,816 | (s) | R 180 | 21 | 54 | 141 | 4,104 | R 7,371 | 0 | — | — | 756 | — | R 1,836 | — |
| 1998 | 1 | 358 | 65 | 3,315 | (s) | 204 | 22 | 79 | 0 | 4,056 | 7,741 | 0 | — | — | 818 | — | 1,588 | — |
| 1999 | 1 | 340 | 131 | 1,950 | (s) | 16 | 22 | 25 | 0 | 4,217 | 6,360 | 0 | — | — | 844 | — | 1,497 | — |

Trillion Btu

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5.0 | 1.9 | 0.3 | 5.1 | 0.5 | (s) | (s) | 0.0 | 1.4 | 0.0 | 7.4 | 0.0 | 1.8 | 0.0 | 0.2 | 16.2 | 0.6 | 16.8 |
| 1965 | 6.5 | 1.8 | 0.9 | 7.2 | 0.0 | (s) | (s) | 0.4 | 0.4 | 1.7 | 10.6 | 0.0 | 3.2 | 0.0 | 0.2 | 22.3 | 0.8 | 23.1 |
| 1970 | 8.5 | 19.6 | 1.8 | 11.2 | 0.1 | 0.2 | (s) | 0.6 | 0.5 | 3.1 | 17.5 | 0.0 | 3.7 | 0.0 | 0.3 | 49.6 | 1.4 | 51.0 |
| 1975 | 10.5 | 40.4 | 2.1 | 12.3 | 0.2 | 0.5 | 0.1 | 0.6 | 0.2 | 4.6 | 20.6 | 0.0 | 3.5 | 0.0 | 1.7 | 76.7 | 5.9 | 82.6 |
| 1980 | 0.0 | 100.3 | 2.1 | 10.4 | 0.1 | 0.4 | 0.1 | 0.6 | 0.1 | 8.7 | 22.5 | 0.0 | 1.8 | 0.0 | 2.6 | 127.1 | 10.4 | 137.5 |
| 1985 | 0.0 | 140.7 | 3.2 | 10.3 | (s) | 0.3 | 0.1 | 2.1 | 16.2 | R 35.3 | R 67.6 | 0.0 | 2.1 | 0.0 | 1.4 | R 211.7 | 4.1 | R 215.8 |
| 1990 | 0.0 | 256.7 | 1.8 | 9.2 | (s) | 0.1 | 0.1 | 0.3 | 0.7 | 27.2 | 39.5 | f 0.0 | R 6.4 | f (s) | 1.6 | R f 304.2 | 4.2 | R f 308.4 |
| 1991 | 0.0 | 299.5 | 1.7 | 11.4 | (s) | 0.1 | 0.1 | 0.3 | 1.8 | 14.1 | 29.5 | 0.0 | R 2.1 | (s) | 1.6 | R 332.6 | 3.9 | R 336.5 |
| 1992 | 0.0 | 316.3 | 1.8 | 11.5 | (s) | 0.1 | 0.1 | 0.3 | 1.9 | 20.3 | 35.9 | 0.0 | R 7.0 | (s) | 1.7 | R 361.0 | 3.8 | R 364.7 |
| 1993 | (s) | 311.5 | 0.3 | 9.2 | (s) | (s) | 0.1 | 0.2 | 1.9 | 18.4 | 30.1 | 0.0 | R 5.0 | (s) | 1.7 | R 348.3 | 4.2 | R 352.5 |
| 1994 | 0.1 | 299.9 | 0.4 | 8.8 | (s) | 0.3 | 0.1 | 0.3 | 2.2 | 20.4 | 32.4 | 0.0 | R 7.6 | (s) | 1.7 | R 341.8 | 4.2 | R 346.0 |
| 1995 | 0.0 | 360.0 | 0.5 | 13.3 | (s) | 0.3 | 0.1 | 0.3 | 2.4 | 19.3 | 36.3 | 0.0 | R 6.3 | (s) | 1.9 | R 404.6 | 4.5 | R 409.1 |
| 1996 | (s) | 367.4 | 0.2 | 14.8 | (s) | (s) | 0.1 | 0.3 | 2.5 | 24.9 | 42.8 | 0.0 | R 6.0 | (s) | 2.0 | R 418.3 | 4.7 | R 423.0 |
| 1997 | (s) | 344.9 | 0.4 | 16.4 | (s) | R 0.6 | 0.1 | 0.3 | 0.9 | 24.6 | R 43.4 | 0.0 | R 2.0 | (s) | 2.6 | R 392.9 | 6.3 | R 399.1 |
| 1998 | (s) | 357.4 | 0.4 | 19.3 | (s) | 0.7 | 0.1 | 0.4 | 0.0 | 24.5 | 45.5 | 0.0 | 0.2 | (s) | 2.8 | 406.0 | 5.4 | 411.4 |
| 1999 | (s) | 339.7 | 0.9 | 11.4 | (s) | 0.1 | 0.1 | 0.1 | 0.0 | 25.5 | 38.0 | 0.0 | 0.2 | 0.0 | 2.9 | 380.8 | 5.1 | 385.9 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours.  — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 27. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Alaska

| Year | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 5 | (s) | 1,032 | 528 | 1,972 | 0 | 3 | 1,527 | 15 | 5,077 | 0 | 0 | — | 0 | — |
| 1965 | 1 | 0 | 293 | 789 | 3,005 | (s) | 40 | 2,113 | 66 | 6,307 | 0 | 0 | — | 0 | — |
| 1970 | 1 | 17 | 462 | 1,000 | 6,735 | 1 | 59 | 2,267 | 135 | 10,659 | 0 | 0 | — | 0 | — |
| 1975 | (s) | (s) | 466 | 2,157 | 7,420 | 0 | 121 | 3,658 | 484 | 14,305 | 0 | 0 | — | 0 | — |
| 1980 | 0 | (s) | 498 | 2,605 | 9,618 | 4 | 94 | 3,306 | 0 | 16,125 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 5 | 490 | 5,840 | 15,231 | 14 | 86 | 4,964 | 19 | 26,643 | [e] 0 | 0 | — | 0 | — |
| 1990 | 0 | 2 | 491 | 6,601 | 17,367 | 6 | 96 | 5,747 | 140 | 30,448 | 0 | 0 | — | 0 | — |
| 1991 | 0 | 3 | 618 | 4,750 | 17,116 | 4 | 86 | 4,963 | 73 | 27,611 | 0 | 0 | — | 0 | — |
| 1992 | 0 | 3 | 459 | 4,845 | 14,720 | 4 | 88 | 5,766 | 316 | 26,199 | 0 | 0 | — | 0 | — |
| 1993 | 0 | 3 | 410 | 4,754 | 14,693 | 2 | 90 | 5,928 | 119 | 25,995 | 0 | 0 | — | 0 | — |
| 1994 | 0 | 3 | 171 | 3,510 | 16,080 | 4 | 94 | 6,475 | 102 | 26,435 | R 1 | 0 | — | 0 | — |
| 1995 | 0 | 2 | 389 | 5,243 | 16,921 | 2 | 92 | 7,065 | 116 | 29,828 | R 184 | 0 | — | 0 | — |
| 1996 | 0 | 2 | 142 | 3,239 | 18,652 | 4 | 89 | 6,377 | 4 | 28,507 | R 210 | 0 | — | 0 | — |
| 1997 | 0 | 5 | 407 | 4,325 | 21,099 | R 2 | 94 | 6,187 | 2 | R 32,116 | R 170 | 0 | — | 0 | — |
| 1998 | 0 | 6 | 152 | 4,465 | 21,865 | 1 | 99 | 6,543 | 8 | 33,133 | 100 | 0 | — | 0 | — |
| 1999 | 0 | 4 | 529 | 3,684 | 23,612 | (s) | 100 | 6,312 | 276 | 34,513 | 113 | 0 | — | 0 | — |
| | | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 0.1 | (s) | 5.2 | 3.1 | 10.6 | 0.0 | (s) | 8.0 | 0.1 | 27.1 | 0.0 | 0.0 | 27.1 | 0.0 | 27.1 |
| 1965 | (s) | 0.0 | 1.5 | 4.6 | 16.5 | (s) | 0.2 | 11.1 | 0.4 | 34.4 | 0.0 | 0.0 | 34.4 | 0.0 | 34.4 |
| 1970 | (s) | 17.4 | 2.3 | 5.8 | 37.7 | (s) | 0.4 | 11.9 | 0.9 | 59.0 | 0.0 | 0.0 | 76.4 | 0.0 | 76.4 |
| 1975 | (s) | 0.1 | 2.4 | 12.6 | 41.7 | 0.0 | 0.7 | 19.2 | 3.0 | 79.6 | 0.0 | 0.0 | 79.7 | 0.0 | 79.7 |
| 1980 | 0.0 | 0.1 | 2.5 | 15.2 | 54.0 | (s) | 0.6 | 17.4 | 0.0 | 89.7 | 0.0 | 0.0 | 89.8 | 0.0 | 89.8 |
| 1985 | 0.0 | 5.2 | 2.5 | 34.0 | 85.8 | 0.1 | 0.5 | 26.1 | 0.1 | 149.0 | [e] 0.0 | 0.0 | [e] 154.2 | 0.0 | [e] 154.2 |
| 1990 | 0.0 | 1.6 | 2.5 | 38.4 | 97.9 | (s) | 0.6 | 30.2 | 0.9 | 170.5 | 0.0 | 0.0 | 172.2 | 0.0 | 172.2 |
| 1991 | 0.0 | 2.6 | 3.1 | 27.7 | 96.1 | (s) | 0.5 | 26.1 | 0.5 | 154.0 | 0.0 | 0.0 | 156.6 | 0.0 | 156.6 |
| 1992 | 0.0 | 2.9 | 2.3 | 28.2 | 82.9 | (s) | 0.5 | 30.3 | 2.0 | 146.3 | 0.0 | 0.0 | 149.2 | 0.0 | 149.2 |
| 1993 | 0.0 | 2.8 | 2.1 | 27.7 | 83.2 | (s) | 0.5 | 31.1 | 0.7 | 145.4 | 0.0 | 0.0 | 148.3 | 0.0 | 148.3 |
| 1994 | 0.0 | 3.0 | 0.9 | 20.4 | 91.2 | (s) | 0.6 | R 33.9 | 0.6 | R 147.6 | (s) | 0.0 | R 150.6 | 0.0 | R 150.6 |
| 1995 | 0.0 | 2.4 | 2.0 | 30.5 | 95.9 | (s) | 0.6 | R 36.8 | 0.7 | R 166.6 | 0.6 | 0.0 | R 169.0 | 0.0 | R 169.0 |
| 1996 | 0.0 | 2.0 | 0.7 | 18.9 | 105.8 | (s) | 0.5 | R 33.3 | (s) | R 159.2 | 0.7 | 0.0 | R 161.2 | 0.0 | R 161.2 |
| 1997 | 0.0 | 4.9 | 2.1 | 25.2 | 119.6 | (s) | 0.6 | R 32.3 | (s) | R 179.7 | 0.6 | 0.0 | R 184.7 | 0.0 | R 184.7 |
| 1998 | 0.0 | 5.6 | 0.8 | 26.0 | 124.1 | (s) | 0.6 | 34.1 | (s) | 185.6 | 0.4 | 0.0 | 191.2 | 0.0 | 191.2 |
| 1999 | 0.0 | 4.5 | 2.7 | 21.5 | 134.1 | (s) | 0.6 | 32.9 | 1.7 | 193.5 | 0.4 | 0.0 | 198.0 | 0.0 | 198.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 28. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Alaska

| Year | Coal | Natural Gas a | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 52 | 0 | 3 | 95 | 0 | 99 | 0 | 290 | 0 | 0 | 0 | — |
| 1965 | 151 | 2 | 4 | 308 | 0 | 312 | 0 | 350 | 0 | 0 | 0 | — |
| 1970 | 249 | 8 | 5 | 394 | 0 | 399 | 0 | 363 | 0 | 0 | 0 | — |
| 1975 | 257 | 20 | 1 | 694 | 0 | 696 | 0 | 357 | 0 | 0 | 0 | — |
| 1980 | 273 | 29 | 353 | 538 | 0 | 891 | 0 | 539 | 0 | 0 | 0 | — |
| 1985 | 296 | 34 | 476 | 518 | 0 | 994 | 0 | 748 | 0 | 0 | (s) | — |
| 1990 | 290 | 34 | 171 | 486 | 0 | 658 | 0 | 975 | 0 | 0 | 0 | — |
| 1991 | 298 | 31 | 240 | 530 | 0 | 769 | 0 | R 897 | 0 | 0 | 0 | — |
| 1992 | 277 | 29 | 147 | 608 | 0 | 755 | 0 | 918 | 0 | 0 | 0 | — |
| 1993 | 298 | 28 | 306 | 538 | 0 | 845 | 0 | R 1,304 | 0 | 0 | 0 | — |
| 1994 | 271 | 29 | 281 | 573 | 0 | 854 | 0 | R 1,346 | 0 | 0 | 0 | — |
| 1995 | 293 | 30 | 257 | 592 | 0 | 849 | 0 | R 1,373 | 0 | 0 | 0 | — |
| 1996 | 229 | 31 | 515 | 655 | 0 | 1,171 | 0 | 1,267 | 0 | 0 | 0 | — |
| 1997 | 235 | 34 | 723 | 598 | 0 | 1,321 | 0 | 1,100 | 0 | 0 | 0 | — |
| 1998 | 162 | 29 | 821 | 535 | 0 | 1,355 | 0 | 1,114 | 0 | 0 | 0 | — |
| 1999 | 140 | 31 | 838 | 626 | 0 | 1,464 | 0 | 817 | 0 | 0 | 0 | — |
| | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 0.9 | 0.0 | (s) | 0.6 | 0.0 | 0.6 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 4.6 |
| 1965 | 2.7 | 2.2 | (s) | 1.8 | 0.0 | 1.8 | 0.0 | 3.7 | 0.0 | 0.0 | 0.0 | 10.3 |
| 1970 | 4.3 | 8.2 | (s) | 2.3 | 0.0 | 2.3 | 0.0 | 3.8 | 0.0 | 0.0 | 0.0 | 18.6 |
| 1975 | 4.5 | 19.7 | (s) | 4.0 | 0.0 | 4.1 | 0.0 | 3.7 | 0.0 | 0.0 | 0.0 | 32.0 |
| 1980 | 4.3 | 28.9 | 2.2 | 3.1 | 0.0 | 5.4 | 0.0 | 5.6 | 0.0 | 0.0 | 0.0 | 44.2 |
| 1985 | 4.7 | 34.4 | 3.0 | 3.0 | 0.0 | 6.0 | 0.0 | 7.8 | 0.0 | 0.0 | (s) | 52.9 |
| 1990 | 4.6 | 34.6 | 1.1 | 2.8 | 0.0 | 3.9 | 0.0 | 10.1 | 0.0 | 0.0 | 0.0 | 53.2 |
| 1991 | 4.7 | 31.4 | 1.5 | 3.1 | 0.0 | 4.6 | 0.0 | 9.4 | 0.0 | 0.0 | 0.0 | 50.0 |
| 1992 | 4.4 | 29.0 | 0.9 | 3.5 | 0.0 | 4.5 | 0.0 | 9.5 | 0.0 | 0.0 | 0.0 | 47.3 |
| 1993 | 4.7 | 28.0 | 1.9 | 3.1 | 0.0 | 5.1 | 0.0 | 13.4 | 0.0 | 0.0 | 0.0 | 51.2 |
| 1994 | 4.3 | 29.0 | 1.8 | 3.3 | 0.0 | 5.1 | 0.0 | 13.9 | 0.0 | 0.0 | 0.0 | 52.3 |
| 1995 | 4.6 | 29.9 | 1.6 | 3.4 | 0.0 | 5.1 | 0.0 | R 14.2 | 0.0 | 0.0 | 0.0 | 53.7 |
| 1996 | 3.6 | 31.2 | 3.2 | 3.8 | 0.0 | 7.1 | 0.0 | 13.1 | 0.0 | 0.0 | 0.0 | 55.0 |
| 1997 | 3.7 | 33.5 | 4.5 | 3.5 | 0.0 | 8.0 | 0.0 | R 11.4 | 0.0 | 0.0 | 0.0 | 56.6 |
| 1998 | 2.5 | 28.8 | 5.2 | 3.1 | 0.0 | 8.3 | 0.0 | 11.5 | 0.0 | 0.0 | 0.0 | 51.1 |
| 1999 | 2.2 | 30.5 | 5.3 | 3.6 | 0.0 | 8.9 | 0.0 | 8.5 | 0.0 | 0.0 | 0.0 | 50.1 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 29. Energy Consumption Estimates by Source, Selected Years 1960-1999, Arizona

**A R I Z O N A**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
| **Thousand Barrels** | | | | | | | | | | | | | | | | | | | |
| 1960 | 10 | 136 | 863 | 699 | 2,787 | 4,721 | 64 | 724 | 275 | 12,363 | 125 | 0 | 22,622 | 0 | 2,975 | — | — | -4,266 | — |
| 1965 | 337 | 154 | 1,110 | 478 | 3,528 | 5,545 | 31 | 1,056 | 299 | 14,997 | 82 | 0 | 27,125 | 0 | 4,410 | — | — | 1,933 | — |
| 1970 | 406 | 193 | 3,679 | 427 | 4,899 | 6,644 | 165 | 1,304 | 344 | 21,542 | 105 | 0 | 39,108 | 0 | 6,103 | — | — | 7,594 | — |
| 1975 | 4,392 | 156 | 2,331 | 358 | 10,143 | 7,075 | 213 | 1,119 | 472 | 27,704 | 5,942 | 39 | 55,395 | 0 | 7,240 | — | — | 4,887 | — |
| 1980 | 11,559 | 166 | 2,061 | 281 | 10,769 | 7,967 | 73 | 1,589 | 611 | 30,589 | 1,339 | 71 | 55,350 | 0 | 9,795 | — | — | -24,227 | — |
| 1985 | 16,364 | 131 | 2,563 | 184 | 10,179 | 7,154 | 16 | 1,722 | 556 | 36,148 | 176 | 0 | 58,699 | 1,130 | 13,987 | — | — | -38,272 | — |
| 1990 | 16,419 | 127 | 2,367 | 194 | 12,048 | 8,501 | 20 | 1,508 | 626 | 39,326 | 28 | 129 | 64,746 | 20,598 | R h 7,667 | — | — | R -60,191 | — |
| 1991 | 16,805 | 125 | 2,181 | 188 | 10,370 | 9,642 | 36 | 1,700 | 560 | 40,593 | 201 | 216 | 65,687 | 25,096 | R 7,098 | — | — | R -73,316 | — |
| 1992 | 17,915 | 130 | 2,984 | 158 | 11,301 | 8,310 | 3 | 2,095 | 571 | 41,556 | 106 | 259 | 67,342 | 25,609 | R 6,911 | — | — | R -78,275 | — |
| 1993 | 18,991 | 115 | 2,328 | 128 | 13,549 | 7,892 | 3 | 1,843 | 581 | 43,026 | 192 | 131 | 69,673 | 22,049 | R 7,023 | — | — | R -68,667 | — |
| 1994 | 19,580 | 133 | 2,574 | 142 | 13,135 | 7,401 | 3 | 1,867 | 608 | 45,193 | 201 | 114 | 71,238 | 23,171 | R 7,670 | — | — | R -70,853 | — |
| 1995 | 16,682 | 120 | 3,138 | 139 | 14,607 | 7,588 | 4 | 1,938 | 597 | 47,159 | 82 | 107 | 75,359 | 26,985 | R 8,478 | — | — | R -63,369 | — |
| 1996 | 16,793 | 120 | 2,460 | 155 | 16,292 | 7,922 | 7 | R 1,625 | 580 | 49,417 | 109 | R 1,659 | R 80,223 | 28,840 | R 9,480 | — | — | R -60,493 | — |
| 1997 | 18,206 | 131 | 2,704 | 151 | 17,306 | 7,974 | 8 | R 1,204 | 612 | 48,884 | 15 | R 1,798 | R 80,656 | 29,314 | R 12,504 | — | — | R -72,899 | — |
| 1998 | 19,013 | 155 | 3,972 | 191 | 18,930 | 8,669 | 11 | 1,345 | 641 | 52,661 | 21 | 1,806 | 88,246 | 30,301 | 11,242 | — | — | -78,273 | — |
| 1999 | 19,711 | 161 | 3,814 | 157 | 18,883 | 9,627 | 9 | 1,809 | 648 | 54,854 | 45 | 1,808 | 91,654 | 30,416 | 10,083 | — | — | -84,239 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 0.2 | 140.3 | 5.7 | 3.5 | 16.2 | 25.3 | 0.4 | 2.9 | 1.7 | 64.9 | 0.8 | 0.0 | 121.5 | 0.0 | 32.0 | 4.0 | 0.0 | -14.6 | 283.4 |
| 1965 | 7.0 | 166.1 | 7.4 | 2.4 | 20.6 | 30.1 | 0.2 | 4.2 | 1.8 | 78.8 | 0.5 | 0.0 | 145.9 | 0.0 | 46.1 | 3.7 | 0.0 | 6.6 | 375.4 |
| 1970 | 8.6 | 204.4 | 24.4 | 2.2 | 28.5 | 36.4 | 0.9 | 4.9 | 2.1 | 113.2 | 0.7 | 0.0 | 213.3 | 0.0 | 64.0 | 4.3 | 0.0 | 25.9 | 520.6 |
| 1975 | 92.4 | 164.3 | 15.5 | 1.8 | 59.1 | 39.0 | 1.2 | 4.2 | 2.9 | 145.5 | 37.4 | 0.2 | 306.7 | 0.0 | 75.3 | 5.4 | 0.0 | 16.7 | 661.0 |
| 1980 | 245.0 | 174.0 | 13.7 | 1.4 | 62.7 | 43.9 | 0.4 | 5.8 | 3.7 | 160.7 | 8.4 | 0.4 | 301.2 | 0.0 | 101.8 | R 17.8 | 0.0 | -82.7 | R 757.2 |
| 1985 | 342.0 | 137.3 | 17.0 | 0.9 | 59.3 | 39.4 | 0.1 | 6.2 | 3.4 | 189.9 | 1.1 | 0.0 | 317.3 | 12.2 | 146.1 | 24.0 | 0.0 | -130.6 | 848.4 |
| 1990 | 343.6 | 130.8 | 15.7 | 1.0 | 70.2 | 47.3 | 0.1 | 5.5 | 3.8 | 206.6 | 0.2 | 0.8 | 351.1 | 220.0 | h 79.8 | R 14.7 | R h 3.9 | R -205.4 | R h 938.1 |
| 1991 | 347.5 | 128.2 | 14.5 | 1.0 | 60.4 | 53.7 | 0.2 | 6.1 | 3.4 | 213.2 | 1.3 | 1.2 | 355.0 | 269.5 | 74.1 | R 15.1 | R 4.0 | R -250.2 | R 944.4 |
| 1992 | 369.0 | 133.7 | 19.8 | 0.8 | 65.8 | 46.4 | (s) | 7.6 | 3.5 | 218.3 | 0.7 | 1.5 | 364.4 | 273.4 | 71.5 | R 15.6 | R 4.1 | R -267.1 | R 964.5 |
| 1993 | 389.8 | 118.0 | 15.4 | 0.6 | 78.9 | 44.2 | (s) | 6.6 | 3.5 | 226.0 | 1.2 | 0.7 | 377.4 | 235.5 | 72.4 | R 13.9 | R 4.1 | R -234.3 | R 976.8 |
| 1994 | 402.3 | 137.1 | 17.1 | 0.7 | 76.5 | 41.9 | (s) | 6.8 | 3.7 | R 236.4 | 1.3 | 0.6 | R 385.0 | 247.4 | 79.1 | R 14.0 | R 4.2 | R -241.8 | R 1,027.3 |
| 1995 | 342.4 | 124.3 | 20.8 | 0.7 | 85.1 | 43.0 | (s) | 7.0 | 3.6 | R 245.9 | 0.5 | 0.6 | R 407.3 | 287.6 | 87.4 | R 16.3 | R 4.2 | R -216.2 | R 1,056.8 |
| 1996 | 343.2 | 121.7 | 16.3 | 0.8 | 94.9 | 44.9 | (s) | R 5.9 | 3.5 | R 257.8 | 0.7 | R 8.9 | R 433.7 | 306.4 | 98.0 | R 13.6 | R 4.2 | R -206.4 | R 1,114.3 |
| 1997 | 369.4 | 134.0 | 17.9 | 0.8 | 100.8 | 45.2 | (s) | R 4.4 | 3.7 | R 254.8 | 0.1 | R 9.7 | R 437.5 | 311.4 | R 129.5 | R 14.4 | R 4.2 | R -248.7 | R 1,151.7 |
| 1998 | 386.6 | 157.0 | 26.4 | 1.0 | 110.3 | 49.2 | 0.1 | 4.9 | 3.9 | 274.5 | 0.1 | 9.8 | 479.9 | 321.9 | 116.3 | 9.8 | 4.1 | -267.1 | 1,208.5 |
| 1999 | 403.5 | 163.2 | 25.3 | 0.8 | 110.0 | 54.6 | (s) | 6.5 | 3.9 | 285.8 | 0.3 | 9.7 | 497.0 | 323.1 | 104.3 | 12.0 | 4.1 | -287.4 | 1,219.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 30.  Residential Energy Consumption Estimates, Selected Years 1960-1999, Arizona

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] (Thousand Barrels) | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0 | 27 | 47 | 0 | 397 | 445 | 138 | — | — | 1,355 | — | 3,369 | — |
| 1965 | 0 | 25 | 59 | 9 | 727 | 794 | 129 | — | — | 2,230 | — | 5,326 | — |
| 1970 | 0 | 30 | 98 | 68 | 840 | 1,006 | 151 | — | — | 4,327 | — | 10,486 | — |
| 1975 | 0 | 38 | 216 | 77 | 542 | 836 | 170 | — | — | 7,138 | — | 17,217 | — |
| 1980 | 0 | 30 | 2 | 0 | 657 | 659 | R 439 | — | — | 9,637 | — | 23,434 | — |
| 1985 | (s) | 29 | 12 | 3 | 956 | 971 | 662 | — | — | 12,249 | — | 28,778 | — |
| 1990 | (s) | 30 | 11 | (s) | 772 | 783 | 411 | — | — | 15,378 | — | R 33,640 | — |
| 1991 | (s) | 31 | 5 | 1 | 872 | 878 | 433 | — | — | 15,641 | — | R 34,004 | — |
| 1992 | 1 | 28 | 5 | 2 | 938 | 946 | 456 | — | — | 16,230 | — | R 34,615 | — |
| 1993 | (s) | 28 | 5 | 1 | 827 | 833 | 433 | — | — | 16,705 | — | R 35,284 | — |
| 1994 | (s) | 30 | 4 | 2 | 844 | 849 | 424 | — | — | 18,212 | — | R 38,008 | — |
| 1995 | 2 | 27 | 4 | 2 | 971 | 977 | 471 | — | — | 18,036 | — | R 37,603 | — |
| 1996 | (s) | 28 | 7 | 3 | 784 | 794 | 470 | — | — | 19,746 | — | R 41,152 | — |
| 1997 | (s) | 31 | 6 | 2 | R 720 | R 728 | R 485 | — | — | 20,683 | — | R 43,022 | — |
| 1998 | (s) | 36 | 4 | 3 | 1,028 | 1,035 | 427 | — | — | 21,611 | — | 44,644 | — |
| 1999 | 0 | 33 | 2 | 2 | 1,423 | 1,427 | 458 | — | — | 22,517 | — | 44,119 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Petroleum Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.0 | 28.4 | 0.3 | 0.0 | 1.6 | 1.9 | 2.8 | 0.0 | 0.0 | 4.6 | 37.6 | 11.5 | 49.1 |
| 1965 | 0.0 | 27.1 | 0.3 | (s) | 2.9 | 3.3 | 2.6 | 0.0 | 0.0 | 7.6 | 40.6 | 18.2 | 58.8 |
| 1970 | 0.0 | 31.4 | 0.6 | 0.4 | 3.2 | 4.1 | 3.0 | 0.0 | 0.0 | 14.8 | 53.3 | 35.8 | 89.1 |
| 1975 | 0.0 | 39.8 | 1.3 | 0.4 | 2.0 | 3.7 | 3.4 | 0.0 | 0.0 | 24.4 | 71.3 | 58.7 | 130.0 |
| 1980 | 0.0 | 30.9 | (s) | 0.0 | 2.4 | 2.4 | 8.8 | 0.0 | 0.0 | 32.9 | 74.9 | 80.0 | 154.9 |
| 1985 | (s) | 29.9 | 0.1 | (s) | 3.4 | 3.5 | 13.2 | 0.0 | 0.0 | 41.8 | 88.5 | 98.2 | 186.7 |
| 1990 | (s) | 31.3 | 0.1 | (s) | 2.8 | 2.9 | 8.2 | e (s) | R e 3.7 | 52.5 | R e 98.5 | 114.8 | R e 213.3 |
| 1991 | (s) | 32.1 | (s) | (s) | 3.2 | 3.2 | 8.7 | (s) | R 3.8 | 53.4 | R 101.1 | R 116.0 | R 217.1 |
| 1992 | (s) | 29.3 | (s) | (s) | 3.4 | 3.4 | 9.1 | (s) | R 3.8 | 55.4 | R 101.1 | R 118.1 | R 219.2 |
| 1993 | (s) | 29.0 | (s) | (s) | 3.0 | 3.0 | 8.7 | (s) | R 3.9 | 57.0 | R 101.5 | 120.4 | R 221.9 |
| 1994 | (s) | 30.5 | (s) | (s) | 3.1 | 3.1 | 8.5 | (s) | R 4.0 | 62.1 | R 108.2 | 129.7 | R 237.9 |
| 1995 | (s) | 27.9 | (s) | (s) | 3.5 | 3.6 | 9.4 | (s) | R 4.0 | 61.5 | R 106.4 | R 128.3 | R 234.7 |
| 1996 | (s) | 28.0 | (s) | (s) | 2.8 | 2.9 | 9.4 | (s) | R 4.0 | 67.4 | R 111.7 | R 140.4 | R 252.1 |
| 1997 | (s) | 31.8 | (s) | (s) | R 2.6 | R 2.6 | R 9.7 | (s) | R 4.0 | 70.6 | R 118.6 | R 146.8 | R 265.4 |
| 1998 | (s) | 36.7 | (s) | (s) | 3.7 | 3.8 | 8.5 | (s) | 3.9 | 73.7 | 126.7 | 152.3 | 279.0 |
| 1999 | 0.0 | 33.5 | (s) | (s) | 5.1 | 5.2 | 9.2 | (s) | 3.8 | 76.8 | 128.4 | 150.5 | 279.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 31. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Arizona**

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 0 | 25 | 106 | 0 | 70 | 89 | 39 | 305 | 3 | — | 3,302 | — | 8,214 | — |
| 1965 | 0 | 19 | 131 | 2 | 128 | 137 | 17 | 416 | 2 | — | 3,044 | — | 7,268 | — |
| 1970 | 0 | 23 | 220 | 12 | 148 | 146 | 31 | 557 | 3 | — | 4,690 | — | 11,366 | — |
| 1975 | 0 | 33 | 485 | 14 | 96 | 177 | 83 | 855 | 3 | — | 7,162 | — | 17,277 | — |
| 1980 | 0 | 27 | 280 | 0 | 116 | 179 | 0 | 576 | 11 | — | 9,122 | — | 22,182 | — |
| 1985 | 1 | 25 | 476 | 2 | 169 | 140 | (s) | 787 | R 18 | — | 12,295 | — | 28,885 | — |
| 1990 | (s) | 28 | 511 | 2 | 136 | 257 | 0 | 907 | R 26 | — | 16,058 | — | R 35,129 | — |
| 1991 | (s) | 28 | 303 | 2 | 154 | 372 | 11 | 842 | R 28 | — | 15,802 | — | R 34,352 | — |
| 1992 | 2 | 27 | 226 | 1 | 166 | 308 | 0 | 700 | R 30 | — | 16,366 | — | R 34,904 | — |
| 1993 | 1 | 28 | 167 | 1 | 146 | 191 | 0 | 506 | 35 | — | 16,714 | — | R 35,302 | — |
| 1994 | (s) | 29 | 253 | 1 | 149 | 34 | 0 | 437 | 36 | — | 17,766 | — | R 37,077 | — |
| 1995 | 3 | 28 | 261 | 1 | 171 | 35 | 0 | 469 | 36 | — | 18,562 | — | R 38,700 | — |
| 1996 | (s) | 29 | 403 | 2 | 138 | 35 | 5 | 584 | 39 | — | 19,555 | — | R 40,753 | — |
| 1997 | (s) | 30 | 515 | 4 | R 127 | 35 | 0 | R 681 | R 53 | — | 20,520 | — | R 42,684 | — |
| 1998 | (s) | 32 | 1,034 | 1 | 181 | 36 | 0 | 1,253 | 53 | — | 21,683 | — | 44,794 | — |
| 1999 | 0 | 31 | 559 | 5 | 251 | 36 | 0 | 851 | 64 | — | 22,688 | — | 44,453 | — |
| | | | | | **Trillion Btu** | | | | | | | | | |
| 1960 | 0.0 | 26.2 | 0.6 | 0.0 | 0.3 | 0.5 | 0.2 | 1.6 | 0.1 | 0.0 | 11.3 | 39.1 | 28.0 | 67.1 |
| 1965 | 0.0 | 20.7 | 0.8 | (s) | 0.5 | 0.7 | 0.1 | 2.1 | (s) | 0.0 | 10.4 | 33.2 | 24.8 | 58.0 |
| 1970 | 0.0 | 24.0 | 1.3 | 0.1 | 0.6 | 0.8 | 0.2 | 2.9 | 0.1 | 0.0 | 16.0 | 43.0 | 38.8 | 81.8 |
| 1975 | 0.0 | 34.3 | 2.8 | 0.1 | 0.4 | 0.9 | 0.5 | 4.7 | 0.1 | 0.0 | 24.4 | 63.5 | 58.9 | 122.4 |
| 1980 | 0.0 | 28.7 | 1.6 | 0.0 | 0.4 | 0.9 | 0.0 | 3.0 | 0.2 | 0.0 | 31.1 | 63.1 | 75.7 | 138.8 |
| 1985 | (s) | 26.5 | 2.8 | (s) | 0.6 | 0.7 | (s) | 4.1 | R 0.4 | 0.0 | 41.9 | R 73.0 | 98.6 | R 171.5 |
| 1990 | (s) | 29.3 | 3.0 | (s) | 0.5 | 1.3 | 0.0 | 4.8 | R 0.5 | e (s) | 54.8 | R e 89.4 | R 119.9 | R e 209.3 |
| 1991 | (s) | 28.3 | 1.8 | (s) | 0.6 | 2.0 | 0.1 | 4.4 | R 0.6 | (s) | 53.9 | R 87.1 | R 117.2 | R 204.3 |
| 1992 | 0.1 | 27.9 | 1.3 | (s) | 0.6 | 1.6 | 0.0 | 3.5 | R 0.6 | (s) | 55.8 | R 87.9 | R 119.1 | R 207.0 |
| 1993 | (s) | 28.3 | 1.0 | (s) | 0.5 | 1.0 | 0.0 | 2.5 | 0.7 | (s) | 57.0 | 88.6 | R 120.4 | R 209.0 |
| 1994 | (s) | 30.0 | 1.5 | (s) | 0.5 | 0.2 | 0.0 | 2.2 | 0.7 | (s) | 60.6 | 93.5 | 126.5 | 220.0 |
| 1995 | 0.1 | 29.3 | 1.5 | (s) | 0.6 | 0.2 | 0.0 | 2.3 | 0.7 | (s) | 63.3 | 95.7 | R 132.0 | R 227.8 |
| 1996 | (s) | 29.3 | 2.3 | (s) | 0.5 | 0.2 | (s) | 3.1 | 0.8 | (s) | 66.7 | 99.9 | R 139.0 | R 238.9 |
| 1997 | (s) | 30.8 | 3.0 | (s) | 0.5 | 0.2 | 0.0 | 3.7 | R 1.1 | (s) | 70.0 | R 105.6 | R 145.6 | R 251.2 |
| 1998 | (s) | 32.3 | 6.0 | (s) | 0.7 | 0.2 | 0.0 | 6.9 | 1.1 | (s) | 74.0 | 114.2 | 152.8 | 267.1 |
| 1999 | 0.0 | 31.9 | 3.3 | (s) | 0.9 | 0.2 | 0.0 | 4.4 | 1.3 | (s) | 77.4 | 115.0 | 151.7 | 266.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 32. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Arizona

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 10 | 14 | 863 | 1,227 | 64 | 222 | 81 | 515 | 27 | 0 | 3,000 | 0 | — | — | 1,481 | — | 3,683 | — |
| 1965 | 4 | 55 | 1,110 | 1,545 | 21 | 161 | 93 | 437 | 20 | 0 | 3,387 | 0 | — | — | 3,331 | — | 7,952 | — |
| 1970 | 5 | 58 | 3,679 | 1,387 | 85 | 253 | 115 | 456 | 55 | 0 | 6,031 | 13 | — | — | 4,751 | — | 11,514 | — |
| 1975 | 133 | 51 | 2,331 | 3,113 | 122 | 430 | 205 | 440 | 102 | 39 | 6,781 | 14 | — | — | 6,868 | — | 16,566 | — |
| 1980 | 643 | 38 | 2,061 | 3,570 | 73 | 739 | 264 | 309 | 154 | 71 | 7,241 | 15 | — | — | 8,003 | — | 19,461 | — |
| 1985 | 1,915 | 17 | 2,563 | 1,850 | 11 | 505 | 241 | 404 | 31 | 0 | 5,605 | 15 | — | — | 8,457 | — | 19,869 | — |
| 1990 | 660 | 18 | 2,367 | 3,103 | 17 | 545 | 271 | 503 | 18 | 129 | 6,952 | f 0 | — | — | 10,034 | — | R 21,950 | — |
| 1991 | 689 | 19 | 2,181 | 2,617 | 34 | 617 | 242 | 368 | 176 | 216 | 6,452 | 0 | — | — | 10,405 | — | R 22,620 | — |
| 1992 | 632 | 20 | 2,984 | 2,401 | 1 | 934 | 247 | 346 | 94 | 259 | 7,265 | 0 | — | — | 11,055 | — | R 23,578 | — |
| 1993 | 674 | 21 | 2,328 | 1,707 | 1 | 812 | 251 | 338 | 176 | 131 | 5,745 | 0 | — | — | 10,989 | — | R 23,211 | — |
| 1994 | 727 | 26 | 2,574 | 1,784 | (s) | 789 | 263 | 366 | 45 | 114 | 5,937 | 0 | — | — | 11,303 | — | R 23,589 | — |
| 1995 | 657 | 28 | 3,138 | 2,649 | 1 | 745 | 258 | 410 | 70 | 107 | 7,377 | 0 | — | — | 11,992 | — | R 25,002 | — |
| 1996 | 675 | 27 | 2,460 | 2,768 | 2 | R 667 | 251 | 437 | 81 | R 1,659 | R 8,324 | 0 | — | — | 12,783 | — | R 26,640 | — |
| 1997 | 702 | 28 | 2,704 | 3,324 | 2 | R 331 | 265 | 457 | 14 | R 1,798 | R 8,896 | 0 | — | — | 13,253 | — | R 27,568 | — |
| 1998 | 698 | 28 | 3,972 | 3,338 | 7 | 128 | 277 | 473 | 21 | 1,806 | 10,022 | 0 | — | — | 12,549 | — | 25,924 | — |
| 1999 | 685 | 27 | 3,814 | 2,460 | 2 | 116 | 280 | 334 | 33 | 1,808 | 8,848 | 0 | — | — | 12,456 | — | 24,406 | — |

### Trillion Btu

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.2 | 14.2 | 5.7 | 7.1 | 0.4 | 0.9 | 0.5 | 2.7 | 0.2 | 0.0 | 17.5 | 0.0 | 1.0 | 0.0 | 5.1 | 37.9 | 12.6 | 50.5 |
| 1965 | 0.1 | 59.4 | 7.4 | 9.0 | 0.1 | 0.6 | 0.6 | 2.3 | 0.1 | 0.0 | 20.1 | 0.0 | 1.1 | 0.0 | 11.4 | 92.0 | 27.1 | 119.1 |
| 1970 | 0.1 | 61.2 | 24.4 | 8.1 | 0.5 | 1.0 | 0.7 | 2.4 | 0.3 | 0.0 | 37.4 | 0.1 | 1.3 | 0.0 | 16.2 | 116.3 | 39.3 | 155.6 |
| 1975 | 2.6 | 53.4 | 15.5 | 18.1 | 0.7 | 1.6 | 1.2 | 2.3 | 0.6 | 0.2 | 40.3 | 0.1 | 1.9 | 0.0 | 23.4 | 121.9 | 56.5 | 178.4 |
| 1980 | 13.1 | 39.5 | 13.7 | 20.8 | 0.4 | 2.7 | 1.6 | 1.6 | 1.0 | 0.4 | 42.2 | 0.2 | R 8.9 | 0.0 | 27.3 | R 131.2 | 66.4 | R 197.6 |
| 1985 | 38.8 | 17.3 | 17.0 | 10.8 | 0.1 | 1.8 | 1.5 | 2.1 | 0.2 | 0.0 | 33.4 | 0.2 | R 10.4 | 0.0 | 28.9 | R 128.9 | 67.8 | R 196.7 |
| 1990 | 13.3 | 19.0 | 15.7 | 18.1 | 0.1 | 2.0 | 1.6 | 2.6 | 0.1 | 0.8 | 41.0 | f 0.0 | R 6.0 | f 0.2 | 34.2 | R f 113.7 | 74.9 | R f 188.6 |
| 1991 | 13.7 | 19.7 | 14.5 | 15.2 | 0.2 | 2.2 | 1.5 | 1.9 | 1.1 | 1.2 | 37.9 | 0.0 | R 5.9 | 0.2 | 35.5 | R 113.0 | R 77.2 | R 190.1 |
| 1992 | 12.8 | 20.4 | 19.8 | 14.0 | (s) | 3.4 | 1.5 | 1.8 | 0.6 | 1.5 | 42.6 | 0.0 | R 5.9 | 0.2 | 37.7 | R 119.6 | R 80.4 | R 200.1 |
| 1993 | 13.5 | 21.8 | 15.4 | 9.9 | (s) | 2.9 | 1.5 | 1.8 | 1.1 | 0.7 | 33.4 | 0.0 | R 4.6 | 0.2 | 37.5 | R 111.0 | 79.2 | R 190.2 |
| 1994 | 14.7 | 26.7 | 17.1 | 10.4 | (s) | 2.9 | 1.6 | 1.9 | 0.3 | 0.6 | 34.8 | 0.0 | R 4.8 | 0.2 | 38.6 | R 119.7 | 80.5 | R 200.2 |
| 1995 | 13.1 | 28.8 | 20.8 | 15.4 | (s) | 2.7 | 1.6 | R 2.1 | 0.4 | 0.6 | 43.7 | 0.0 | R 6.1 | 0.2 | 40.9 | R 132.8 | R 85.3 | R 218.1 |
| 1996 | 13.4 | 27.3 | 16.3 | 16.1 | (s) | R 2.4 | 1.5 | 2.3 | 0.5 | R 8.9 | R 48.1 | 0.0 | R 3.4 | 0.2 | 43.6 | R 136.0 | R 90.9 | R 226.9 |
| 1997 | 13.7 | 28.5 | 17.9 | 19.4 | (s) | R 1.2 | 1.6 | 2.4 | 0.1 | R 9.7 | R 52.3 | 0.0 | R 3.6 | 0.2 | 45.2 | R 143.6 | R 94.1 | R 237.7 |
| 1998 | 13.4 | 28.7 | 26.4 | 19.4 | (s) | 0.5 | 1.7 | 2.5 | 0.1 | 9.8 | 60.3 | 0.0 | 0.2 | 0.2 | 42.8 | 145.7 | 88.5 | 234.2 |
| 1999 | 13.2 | 27.5 | 25.3 | 14.3 | (s) | 0.4 | 1.7 | 1.7 | 0.2 | 9.7 | 53.4 | 0.0 | 1.5 | 0.2 | 42.5 | 138.4 | 83.3 | 221.6 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 33. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Arizona

| | | | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | | Electrical System Energy Losses [d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | (s) | 16 | 699 | 1,404 | 4,721 | 34 | 193 | 11,759 | 17 | 18,829 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 18 | 478 | 1,790 | 5,545 | 40 | 206 | 14,423 | 0 | 22,482 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 24 | 427 | 3,192 | 6,644 | 63 | 229 | 20,940 | 0 | 31,494 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 17 | 358 | 4,756 | 6,995 | 51 | 267 | 27,087 | 0 | 39,514 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 21 | 281 | 6,480 | 7,967 | 78 | 347 | 30,100 | 0 | 45,253 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 19 | 184 | 7,630 | 7,154 | 92 | 316 | 35,604 | 0 | 50,979 | e 0 | 0 | — | 0 | — |
| 1990 | 0 | 25 | 194 | 8,223 | 8,501 | 55 | 355 | 38,566 | 0 | 55,895 | R 0 | 0 | — | 0 | — |
| 1991 | 0 | 24 | 188 | 7,300 | 9,642 | 57 | 318 | 39,853 | 0 | 57,357 | R 0 | 0 | — | 0 | — |
| 1992 | 0 | 23 | 158 | 8,546 | 8,310 | 57 | 324 | 40,902 | 0 | 58,297 | R 0 | 0 | — | 0 | — |
| 1993 | 0 | 17 | 128 | 11,575 | 7,892 | 58 | 330 | 42,497 | 0 | 62,479 | R 80 | 0 | — | 0 | — |
| 1994 | 0 | 25 | 142 | 11,026 | 7,401 | 84 | 345 | 44,793 | 0 | 63,791 | R 208 | 0 | — | 0 | — |
| 1995 | 0 | 18 | 139 | 11,586 | 7,588 | 51 | 339 | 46,714 | 0 | 66,417 | R 655 | 0 | — | 0 | — |
| 1996 | 0 | 17 | 155 | 13,013 | 7,922 | R 35 | 329 | 48,944 | 0 | R 70,398 | R 553 | 0 | — | 0 | — |
| 1997 | 0 | 19 | 151 | 13,351 | 7,974 | R 26 | 347 | 48,391 | 0 | R 70,241 | R 549 | 0 | — | 0 | — |
| 1998 | 0 | 20 | 191 | 14,436 | 8,669 | 7 | 364 | 52,152 | 0 | 75,819 | 423 | 0 | — | 0 | — |
| 1999 | 0 | 19 | 157 | 15,786 | 9,627 | 18 | 368 | 54,484 | 0 | 80,441 | 366 | 0 | — | 0 | — |
| | | | | | | Trillion Btu | | | | | | | | | |
| 1960 | (s) | 16.5 | 3.5 | 8.2 | 25.3 | 0.1 | 1.2 | 61.8 | 0.1 | 100.2 | 0.0 | 0.0 | 116.7 | 0.0 | 116.7 |
| 1965 | (s) | 19.4 | 2.4 | 10.4 | 30.1 | 0.2 | 1.2 | 75.8 | 0.0 | 120.1 | 0.0 | 0.0 | 139.4 | 0.0 | 139.4 |
| 1970 | (s) | 25.4 | 2.2 | 18.6 | 36.4 | 0.2 | 1.4 | 110.0 | 0.0 | 168.8 | 0.0 | 0.0 | 194.1 | 0.0 | 194.1 |
| 1975 | (s) | 17.9 | 1.8 | 27.7 | 38.6 | 0.2 | 1.6 | 142.3 | 0.0 | 212.2 | 0.0 | 0.0 | 230.1 | 0.0 | 230.1 |
| 1980 | 0.0 | 22.3 | 1.4 | 37.7 | 43.9 | 0.3 | 2.1 | 158.1 | 0.0 | 243.6 | 0.0 | 0.0 | 265.9 | 0.0 | 265.9 |
| 1985 | 0.0 | 19.4 | 0.9 | 44.4 | 39.4 | 0.3 | 1.9 | 187.0 | 0.0 | 274.1 | e 0.0 | 0.0 | e 293.5 | 0.0 | e 293.5 |
| 1990 | 0.0 | 26.1 | 1.0 | 47.9 | 47.3 | 0.2 | 2.2 | 202.6 | 0.0 | 301.1 | R 0.0 | 0.0 | 327.2 | 0.0 | 327.2 |
| 1991 | 0.0 | 24.1 | 1.0 | 42.5 | 53.7 | 0.2 | 1.9 | 209.3 | 0.0 | 308.7 | R 0.0 | 0.0 | 332.8 | 0.0 | 332.8 |
| 1992 | 0.0 | 24.1 | 0.8 | 49.8 | 46.4 | 0.2 | 2.0 | 214.9 | 0.0 | 314.0 | R 0.0 | 0.0 | 338.2 | 0.0 | 338.2 |
| 1993 | 0.0 | 17.9 | 0.6 | 67.4 | 44.2 | 0.2 | 2.0 | 223.2 | 0.0 | 337.7 | 0.3 | 0.0 | 355.6 | 0.0 | 355.6 |
| 1994 | 0.0 | 25.7 | 0.7 | 64.2 | 41.9 | 0.3 | 2.1 | R 234.3 | 0.0 | R 343.5 | 0.7 | 0.0 | R 369.2 | 0.0 | R 369.2 |
| 1995 | 0.0 | 19.1 | 0.7 | 67.5 | 43.0 | 0.2 | 2.1 | R 243.6 | 0.0 | R 357.1 | R 2.3 | 0.0 | R 376.2 | 0.0 | R 376.2 |
| 1996 | 0.0 | 17.5 | 0.8 | 75.8 | 44.9 | 0.1 | 2.0 | R 255.3 | 0.0 | R 378.9 | R 2.0 | 0.0 | R 396.5 | 0.0 | R 396.5 |
| 1997 | 0.0 | 19.2 | 0.8 | 77.8 | 45.2 | 0.1 | 2.1 | R 252.3 | 0.0 | R 378.2 | R 1.9 | 0.0 | R 397.4 | 0.0 | R 397.4 |
| 1998 | 0.0 | 20.1 | 1.0 | 84.1 | 49.2 | (s) | 2.2 | 271.8 | 0.0 | 408.3 | 1.5 | 0.0 | 428.3 | 0.0 | 428.3 |
| 1999 | 0.0 | 19.0 | 0.8 | 92.0 | 54.6 | 0.1 | 2.2 | 283.9 | 0.0 | 433.5 | 1.3 | 0.0 | 452.5 | 0.0 | 452.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 34.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Arizona**

| Year | Coal Thousand Short Tons | Natural Gas a Billion Cubic Feet | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 0 | 53 | 41 | 3 | 0 | 44 | 0 | 2,975 | 18 | 0 | 0 | — |
| 1965 | 333 | 37 | 44 | 3 | 0 | 47 | 0 | 4,410 | 0 | 0 | 0 | — |
| 1970 | 401 | 59 | 19 | 1 | 0 | 20 | 0 | 6,089 | 0 | 0 | 0 | — |
| 1975 | 4,259 | 18 | 5,756 | 1,653 | 0 | 7,410 | 0 | 7,226 | 0 | 0 | 0 | — |
| 1980 | 10,916 | 50 | 1,185 | 436 | 0 | 1,622 | 0 | 9,780 | 0 | 0 | 0 | — |
| 1985 | 14,448 | 42 | 145 | 211 | 0 | 357 | 1,130 | 13,972 | 0 | 0 | 0 | — |
| 1990 | 15,758 | 24 | 10 | 200 | 0 | 210 | 20,598 | 7,667 | 0 | 0 | 0 | — |
| 1991 | 16,116 | 23 | 14 | 145 | 0 | 159 | 25,096 | 7,098 | 0 | 0 | 0 | — |
| 1992 | 17,280 | 31 | 11 | 123 | 0 | 135 | 25,609 | 6,911 | 0 | 0 | 0 | — |
| 1993 | 18,316 | 20 | 16 | 95 | 0 | 110 | 22,049 | 7,023 | 0 | 0 | 0 | — |
| 1994 | 18,853 | 24 | 155 | 68 | 0 | 224 | 23,171 | 7,670 | 0 | 0 | 0 | — |
| 1995 | 16,021 | 19 | 12 | 107 | 0 | 119 | 26,985 | 8,478 | 0 | 0 | 0 | — |
| 1996 | 16,118 | 19 | 23 | 101 | 0 | 124 | 28,840 | 9,480 | 0 | 0 | 0 | — |
| 1997 | 17,504 | 23 | (s) | 110 | 0 | 110 | 29,314 | R 12,504 | 0 | 0 | 0 | — |
| 1998 | 18,316 | 39 | 0 | 117 | 0 | 117 | 30,301 | 11,242 | 0 | 0 | 0 | — |
| 1999 | 19,025 | 51 | 12 | 75 | 0 | 88 | 30,416 | 10,083 | 0 | 0 | 0 | — |
| | | | | | Trillion Btu | | | | | | | |
| 1960 | 0.0 | 55.1 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 32.0 | 0.2 | 0.0 | 0.0 | 87.6 |
| 1965 | 6.9 | 39.5 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 46.1 | 0.0 | 0.0 | 0.0 | 92.9 |
| 1970 | 8.5 | 62.4 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | 63.9 | 0.0 | 0.0 | 0.0 | 134.9 |
| 1975 | 89.8 | 18.9 | 36.2 | 9.6 | 0.0 | 45.8 | 0.0 | 75.2 | 0.0 | 0.0 | 0.0 | 229.8 |
| 1980 | 231.9 | 52.5 | 7.5 | 2.5 | 0.0 | 10.0 | 0.0 | 101.6 | 0.0 | 0.0 | 0.0 | 396.0 |
| 1985 | 303.2 | 44.2 | 0.9 | 1.2 | 0.0 | 2.1 | 12.2 | 146.0 | 0.0 | 0.0 | 0.0 | 507.7 |
| 1990 | 330.3 | 25.1 | 0.1 | 1.2 | 0.0 | 1.2 | 220.0 | 79.8 | 0.0 | 0.0 | 0.0 | 656.4 |
| 1991 | 333.8 | 23.9 | 0.1 | 0.8 | 0.0 | 0.9 | 269.5 | 74.1 | 0.0 | 0.0 | 0.0 | 703.3 |
| 1992 | 356.1 | 31.9 | 0.1 | 0.7 | 0.0 | 0.8 | 273.4 | 71.5 | 0.0 | 0.0 | 0.0 | 733.7 |
| 1993 | 376.3 | 21.0 | 0.1 | 0.6 | 0.0 | 0.7 | 235.5 | 72.4 | 0.0 | 0.0 | 0.0 | 705.8 |
| 1994 | 387.6 | 24.3 | 1.0 | 0.4 | 0.0 | 1.4 | 247.4 | 79.1 | 0.0 | 0.0 | 0.0 | 739.8 |
| 1995 | 329.2 | 19.3 | 0.1 | 0.6 | 0.0 | 0.7 | 287.6 | 87.4 | 0.0 | 0.0 | 0.0 | 727.7 |
| 1996 | 329.8 | 19.5 | 0.1 | 0.6 | 0.0 | 0.7 | 306.4 | 98.0 | 0.0 | 0.0 | 0.0 | R 754.5 |
| 1997 | 355.6 | 23.7 | (s) | 0.6 | 0.0 | 0.6 | 311.4 | R 129.5 | 0.0 | 0.0 | 0.0 | R 821.0 |
| 1998 | 373.1 | 39.2 | 0.0 | 0.7 | 0.0 | 0.7 | 321.9 | 116.3 | 0.0 | 0.0 | 0.0 | 851.2 |
| 1999 | 390.3 | 51.4 | 0.1 | 0.4 | 0.0 | 0.5 | 323.1 | 104.3 | 0.0 | 0.0 | 0.0 | 869.6 |

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a  Includes supplemental gaseous fuels.

b  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c  Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d  Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f  "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g  If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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**Table 35. Energy Consumption Estimates by Source, Selected Years 1960-1999, Arkansas**

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | Million kWh | | | | |
| 1960 | 14 | 215 | 1,003 | 177 | 2,021 | 2,237 | 565 | 4,823 | 543 | 14,675 | 539 | R 1,892 | R 28,475 | 0 | 992 | — | — | 2,208 | — |
| 1965 | 6 | 277 | 1,295 | 482 | 2,828 | 2,094 | 386 | 5,599 | 468 | 17,922 | 453 | R 2,807 | R 34,332 | 0 | 1,080 | — | — | 7,475 | — |
| 1970 | 0 | 382 | 2,104 | 293 | 5,462 | 2,204 | 821 | 10,198 | 531 | 22,457 | 935 | R 2,830 | R 47,835 | 0 | 2,160 | — | — | 6,464 | — |
| 1975 | 40 | 258 | 2,276 | 254 | 9,566 | 1,995 | 688 | 9,467 | 616 | 27,611 | 9,086 | R 3,017 | R 64,577 | 4,874 | 3,433 | — | — | 18,078 | — |
| 1980 | 2,076 | 274 | 2,770 | 275 | 10,686 | 2,035 | 571 | 4,847 | 700 | 26,490 | 4,981 | R 3,975 | R 57,331 | 7,833 | 1,695 | — | — | 28,164 | — |
| 1985 | 12,682 | 196 | 1,263 | 86 | 14,911 | 2,030 | 156 | 3,673 | 637 | 26,607 | 735 | R 2,433 | R 52,531 | 9,889 | 4,434 | — | — | -30,696 | — |
| 1990 | 12,092 | 232 | 495 | 125 | 14,258 | 1,693 | 38 | 3,463 | 717 | 28,997 | 231 | R 1,843 | R 51,860 | 11,282 | R h 3,698 | — | — | R -29,834 | — |
| 1991 | 12,261 | 209 | 533 | 144 | 13,478 | 1,792 | 36 | 3,309 | 641 | 28,995 | 146 | R 1,608 | R 50,684 | 12,662 | R 3,561 | — | — | R -30,365 | — |
| 1992 | 12,538 | 225 | 1,174 | 152 | 15,340 | 1,134 | 22 | 3,012 | 654 | 29,401 | 31 | R 1,849 | R 52,768 | 11,326 | R 3,382 | — | — | R -27,435 | — |
| 1993 | 11,447 | 231 | 1,453 | 134 | 15,659 | 1,031 | 28 | 3,478 | 666 | 30,472 | 224 | R 1,799 | R 54,945 | 13,522 | R 4,511 | — | — | R -20,483 | — |
| 1994 | 12,596 | 244 | 1,066 | 157 | 17,162 | 1,634 | 28 | 3,378 | 696 | 30,874 | 323 | R 1,882 | R 57,198 | 13,924 | R 3,465 | — | — | R -23,664 | — |
| 1995 | 13,540 | 257 | 1,246 | 143 | 16,551 | 1,179 | 39 | 3,229 | 684 | 32,121 | 223 | R 1,798 | R 57,213 | 11,658 | R 3,218 | — | — | R -16,483 | — |
| 1996 | 14,816 | 271 | 975 | 121 | 16,587 | 1,534 | 26 | R 3,116 | 664 | 32,081 | 199 | R 7,182 | R 62,485 | 13,357 | R 2,800 | — | — | R -22,935 | — |
| 1997 | 14,069 | 263 | 1,012 | 135 | 16,785 | 1,539 | 34 | R 3,068 | 701 | 33,184 | 48 | R 7,679 | R 64,186 | 14,208 | R 3,513 | — | — | R -19,359 | — |
| 1998 | 14,563 | 273 | 859 | 122 | 17,491 | 1,527 | 39 | 2,322 | 734 | 33,261 | 103 | 7,540 | 63,999 | 13,097 | 3,117 | — | — | -14,900 | — |
| 1999 | 15,293 | 261 | 1,023 | 118 | 18,366 | 4,575 | 53 | 5,973 | 742 | 33,698 | 112 | 7,530 | 72,190 | 12,920 | 2,694 | — | — | -19,038 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 0.4 | 222.2 | 6.7 | 0.9 | 11.8 | 12.0 | 3.2 | 19.3 | 3.3 | 77.1 | 3.4 | R 11.3 | R 148.9 | 0.0 | 10.7 | 37.4 | 0.0 | 7.5 | R 427.1 |
| 1965 | 0.2 | 277.7 | 8.6 | 2.4 | 16.5 | 11.2 | 2.2 | 22.5 | 2.8 | 94.1 | 2.8 | R 16.8 | R 180.0 | 0.0 | 11.3 | 35.1 | 0.0 | 25.5 | R 529.8 |
| 1970 | 0.0 | 383.5 | 14.0 | 1.5 | 31.8 | 11.9 | 4.7 | 38.5 | 3.2 | 118.0 | 5.9 | R 16.9 | R 246.3 | 0.0 | 22.7 | 34.3 | 0.0 | 22.1 | 708.8 |
| 1975 | 0.9 | 257.4 | 15.1 | 1.3 | 55.7 | 10.8 | 3.9 | 35.2 | 3.7 | 145.0 | 57.1 | R 17.5 | R 345.4 | 53.7 | 35.7 | 35.9 | 0.0 | 61.7 | R 790.7 |
| 1980 | 36.6 | 274.0 | 18.4 | 1.4 | 62.2 | 11.0 | 3.2 | 17.8 | 4.2 | 139.1 | 31.3 | R 22.5 | R 311.3 | 85.4 | 17.6 | R 56.8 | 0.0 | 96.1 | R 877.9 |
| 1985 | 219.8 | 199.3 | 8.4 | 0.4 | 86.9 | 11.0 | 0.9 | 13.2 | 3.9 | 139.8 | 4.6 | R 13.7 | R 282.8 | 106.9 | 46.3 | R 62.5 | 0.0 | -104.7 | R 813.0 |
| 1990 | 212.7 | 234.5 | 3.3 | 0.6 | 83.1 | 9.2 | 0.2 | 12.6 | 4.3 | 152.3 | 1.5 | R 10.5 | R 277.6 | 120.5 | h 38.5 | R 81.7 | R h 1.4 | R -101.8 | R h 865.2 |
| 1991 | 216.1 | 212.7 | 3.5 | 0.7 | 78.5 | 9.7 | 0.2 | 12.0 | 3.9 | 152.3 | 0.9 | R 9.3 | R 271.1 | 136.0 | 37.2 | R 79.4 | R 1.4 | R -103.6 | R 850.3 |
| 1992 | 220.7 | 226.6 | 7.8 | 0.8 | 89.4 | 6.2 | 0.1 | 10.9 | 4.0 | 154.4 | 0.2 | R 10.6 | R 284.4 | 120.9 | 35.0 | R 84.0 | R 1.4 | R -93.6 | R 879.5 |
| 1993 | 200.4 | 234.4 | 9.6 | 0.7 | 91.2 | 5.7 | 0.2 | 12.5 | 4.0 | 160.1 | 1.4 | 10.4 | 295.8 | 144.4 | 46.5 | R 91.2 | R 1.4 | R -69.9 | R 944.3 |
| 1994 | 221.9 | 249.8 | 7.1 | 0.8 | 100.0 | 9.1 | 0.2 | 12.3 | 4.2 | R 161.5 | 2.0 | 10.9 | R 307.9 | 148.6 | 35.7 | R 82.9 | R 1.4 | R -80.7 | R 967.6 |
| 1995 | 237.4 | 276.6 | 8.3 | 0.7 | 96.4 | 6.7 | 0.2 | 11.7 | 4.1 | R 167.5 | 1.4 | R 10.4 | R 307.4 | 124.2 | 33.2 | R 86.7 | R 1.4 | R -56.2 | R 1,010.8 |
| 1996 | 260.2 | 277.7 | 6.5 | 0.6 | 96.6 | 8.7 | 0.1 | R 11.3 | 4.0 | R 167.3 | 1.3 | R 39.3 | R 335.7 | 141.9 | R 29.0 | R 76.2 | R 1.4 | R -78.3 | R 1,043.7 |
| 1997 | 246.8 | 267.0 | 6.7 | 0.7 | 97.8 | 8.7 | 0.2 | R 11.1 | 4.3 | R 173.0 | 0.3 | R 42.2 | R 344.9 | 150.9 | R 36.4 | 74.1 | 1.3 | R -66.1 | R 1,055.4 |
| 1998 | 254.6 | 279.3 | 5.7 | 0.6 | 101.9 | 8.7 | 0.2 | 8.4 | 4.5 | 173.4 | 0.6 | 41.4 | 345.3 | 139.1 | 32.2 | 58.3 | 1.2 | -50.8 | 1,059.2 |
| 1999 | 266.9 | 265.5 | 6.8 | 0.6 | 107.0 | 25.9 | 0.3 | 21.6 | 4.5 | 175.6 | 0.7 | 41.1 | 384.1 | 137.2 | 27.9 | 185.8 | 1.2 | -65.0 | 1,203.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 36. Residential Energy Consumption Estimates, Selected Years 1960-1999, Arkansas

| Year | Coal a Thousand Short Tons | Natural Gas b Billion Cubic Feet | Petroleum Distillate Fuel a | Petroleum Kerosene a | Petroleum LPG a | Petroleum Total | Wood Thousand Cords | Geothermal | Solar c | Electricity a Million Kilowatthours | Net Energy | Electrical System Energy Losses d Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 0 | 33 | 24 | 62 | 2,831 | 2,918 | 969 | — | — | 1,339 | — | 3,331 | — |
| 1965 | 0 | 37 | 43 | 63 | 3,420 | 3,527 | 667 | — | — | 2,333 | — | 5,571 | — |
| 1970 | 0 | 60 | 70 | 147 | 6,552 | 6,769 | 417 | — | — | 4,321 | — | 10,472 | — |
| 1975 | 0 | 49 | 161 | 128 | 5,162 | 5,451 | 430 | — | — | 7,751 | — | 18,697 | — |
| 1980 | 2 | 47 | 152 | 0 | 2,142 | 2,294 | 318 | — | — | 10,227 | — | 24,869 | — |
| 1985 | (s) | 40 | 1 | 31 | 2,083 | 2,114 | 173 | — | — | 8,936 | — | 20,994 | — |
| 1990 | (s) | 39 | (s) | 20 | 1,851 | 1,871 | 246 | — | — | 10,558 | — | R 23,096 | — |
| 1991 | (s) | 41 | 1 | 14 | 1,674 | 1,688 | 259 | — | — | 11,001 | — | R 23,915 | — |
| 1992 | 1 | 39 | 13 | 7 | 1,498 | 1,518 | 272 | — | — | 10,440 | — | R 22,266 | — |
| 1993 | (s) | 46 | 1 | 10 | 1,708 | 1,718 | 242 | — | — | 11,762 | — | R 24,843 | — |
| 1994 | (s) | 42 | 1 | 6 | 1,669 | 1,676 | 237 | — | — | 11,642 | — | R 24,296 | — |
| 1995 | 0 | 41 | 2 | 14 | 1,497 | 1,513 | 263 | — | — | 12,417 | — | R 25,889 | — |
| 1996 | 0 | 46 | 1 | 12 | 1,490 | 1,503 | R 262 | — | — | 12,934 | — | R 26,955 | — |
| 1997 | (s) | 42 | 1 | 19 | R 1,577 | R 1,596 | R 117 | — | — | 12,990 | — | R 27,020 | — |
| 1998 | (s) | 38 | (s) | 15 | 1,169 | 1,184 | 104 | — | — | 14,339 | — | 29,622 | — |
| 1999 | 0 | 36 | 1 | 36 | 3,027 | 3,064 | 111 | — | — | 14,045 | — | 27,519 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.0 | 34.4 | 0.1 | 0.4 | 11.4 | 11.9 | 19.4 | 0.0 | 0.0 | 4.6 | 70.2 | 11.4 | 81.6 |
| 1965 | 0.0 | 36.5 | 0.3 | 0.4 | 13.7 | 14.3 | 13.3 | 0.0 | 0.0 | 8.0 | 72.2 | 19.0 | 91.2 |
| 1970 | 0.0 | 60.0 | 0.4 | 0.8 | 24.8 | 26.0 | 8.3 | 0.0 | 0.0 | 14.7 | 109.1 | 35.7 | 144.8 |
| 1975 | 0.0 | 48.3 | 0.9 | 0.7 | 19.2 | 20.8 | 8.6 | 0.0 | 0.0 | 26.4 | 104.2 | 63.8 | 168.0 |
| 1980 | 0.1 | 46.6 | 0.9 | 0.0 | 7.9 | 8.8 | 6.4 | 0.0 | 0.0 | 34.9 | 96.6 | 84.9 | 181.5 |
| 1985 | (s) | 40.9 | (s) | 0.2 | 7.5 | 7.7 | 3.5 | 0.0 | 0.0 | 30.5 | 82.5 | 71.6 | 154.1 |
| 1990 | (s) | 39.5 | (s) | 0.1 | 6.7 | 6.8 | 4.9 | e 0.1 | R e 1.3 | 36.0 | R e 88.7 | 78.8 | R e 167.5 |
| 1991 | (s) | 41.3 | (s) | 0.1 | 6.0 | 6.1 | 5.2 | 0.1 | R 1.3 | 37.5 | R 91.6 | R 81.6 | R 173.2 |
| 1992 | (s) | 39.7 | 0.1 | (s) | 5.4 | 5.5 | 5.4 | 0.1 | R 1.3 | 35.6 | R 87.8 | R 76.0 | R 163.8 |
| 1993 | (s) | 46.1 | (s) | 0.1 | 6.2 | 6.2 | 4.8 | 0.1 | R 1.3 | 40.1 | R 98.7 | 84.8 | R 183.5 |
| 1994 | (s) | 42.4 | (s) | (s) | 6.1 | 6.1 | 4.7 | 0.1 | R 1.3 | 39.7 | R 94.4 | 82.9 | R 177.3 |
| 1995 | 0.0 | 44.5 | (s) | 0.1 | 5.4 | 5.5 | 5.3 | 0.1 | R 1.3 | 42.4 | R 99.1 | 88.3 | R 187.4 |
| 1996 | 0.0 | 47.5 | (s) | 0.1 | 5.4 | 5.5 | R 5.2 | 0.1 | R 1.2 | 44.1 | R 103.7 | R 92.0 | R 195.7 |
| 1997 | (s) | 43.0 | (s) | 0.1 | R 5.7 | R 5.8 | R 2.3 | 0.1 | R 1.2 | 44.3 | R 96.8 | R 92.2 | R 189.0 |
| 1998 | (s) | 39.1 | (s) | 0.1 | 4.2 | 4.3 | 2.1 | 0.1 | 1.1 | 48.9 | 95.7 | 101.1 | 196.7 |
| 1999 | 0.0 | 36.9 | (s) | 0.2 | 10.9 | 11.2 | 2.2 | 0.2 | 1.0 | 47.9 | 99.4 | 93.9 | 193.3 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
b Includes supplemental gaseous fuels.
c Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 37. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Arkansas

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Motor Gasoline | Petroleum Residual Fuel[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels → | | | | | | | | | | | |
| 1960 | 0 | 17 | 14 | 38 | 500 | 151 | 103 | 806 | 18 | — | 1,161 | — | 2,888 | — |
| 1965 | 0 | 28 | 24 | 39 | 604 | 127 | 88 | 883 | 13 | — | 1,834 | — | 4,379 | — |
| 1970 | 0 | 39 | 40 | 90 | 1,156 | 181 | 41 | 1,508 | 8 | — | 2,789 | — | 6,760 | — |
| 1975 | 0 | 33 | 92 | 79 | 911 | 143 | 1,077 | 2,302 | 8 | — | 4,382 | — | 10,570 | — |
| 1980 | 4 | 31 | 112 | 132 | 378 | 162 | 437 | 1,221 | 8 | — | 5,326 | — | 12,951 | — |
| 1985 | 1 | 27 | 1,172 | 84 | 368 | 119 | 0 | 1,743 | R 5 | — | 5,848 | — | 13,739 | — |
| 1990 | (s) | 25 | 439 | 1 | 327 | 142 | 0 | 909 | R 16 | — | 6,681 | — | R 14,616 | — |
| 1991 | (s) | 26 | 342 | 2 | 295 | 81 | 0 | 720 | R 16 | — | 6,922 | — | R 15,048 | — |
| 1992 | 1 | 25 | 378 | 5 | 264 | 71 | 4 | 722 | R 18 | — | 6,760 | — | R 14,417 | — |
| 1993 | (s) | 29 | 426 | 5 | 301 | 28 | 1 | 762 | 19 | — | 7,292 | — | R 15,402 | — |
| 1994 | (s) | 27 | 435 | 4 | 294 | 29 | 0 | 763 | 20 | — | 7,451 | — | R 15,550 | — |
| 1995 | 0 | 27 | 249 | 5 | 264 | 29 | 0 | 547 | 20 | — | 7,771 | — | R 16,203 | — |
| 1996 | 0 | 31 | 255 | 5 | 263 | 29 | (s) | 552 | 22 | — | 8,063 | — | R 16,804 | — |
| 1997 | (s) | 29 | 193 | 5 | R 278 | 28 | 0 | R 505 | R 13 | — | 8,236 | — | R 17,131 | — |
| 1998 | (s) | 28 | 246 | 7 | 206 | 29 | 0 | 488 | 13 | — | 8,910 | — | 18,406 | — |
| 1999 | 0 | 28 | 254 | 4 | 534 | 28 | 0 | 821 | 16 | — | 9,064 | — | 17,758 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 0.0 | 17.8 | 0.1 | 0.2 | 2.0 | 0.8 | 0.6 | 3.7 | 0.4 | 0.0 | 4.0 | 25.8 | 9.9 | 35.7 |
| 1965 | 0.0 | 28.0 | 0.1 | 0.2 | 2.4 | 0.7 | 0.6 | 4.0 | 0.3 | 0.0 | 6.3 | 38.5 | 14.9 | 53.4 |
| 1970 | 0.0 | 39.3 | 0.2 | 0.5 | 4.4 | 0.9 | 0.3 | 6.3 | 0.2 | 0.0 | 9.5 | 55.3 | 23.1 | 78.4 |
| 1975 | 0.0 | 33.1 | 0.5 | 0.4 | 3.4 | 0.8 | 6.8 | 11.9 | 0.2 | 0.0 | 15.0 | 60.1 | 36.1 | 96.2 |
| 1980 | 0.1 | 30.5 | 0.6 | 0.7 | 1.4 | 0.9 | 2.7 | 6.4 | 0.2 | 0.0 | 18.2 | 55.3 | 44.2 | 99.5 |
| 1985 | (s) | 27.2 | 6.8 | 0.5 | 1.3 | 0.6 | 0.0 | 9.3 | R 0.1 | 0.0 | 20.0 | R 56.5 | 46.9 | R 103.4 |
| 1990 | (s) | 25.3 | 2.6 | (s) | 1.2 | 0.7 | 0.0 | 4.5 | R 0.3 | e (s) | 22.8 | R e 52.9 | 49.9 | R e 102.8 |
| 1991 | (s) | 26.4 | 2.0 | (s) | 1.1 | 0.4 | 0.0 | 3.5 | R 0.3 | (s) | 23.6 | R 53.9 | R 51.3 | R 105.2 |
| 1992 | (s) | 25.5 | 2.2 | (s) | 1.0 | 0.4 | (s) | 3.6 | R 0.4 | (s) | 23.1 | R 52.5 | R 49.2 | R 101.7 |
| 1993 | (s) | 29.4 | 2.5 | (s) | 1.1 | 0.1 | (s) | 3.8 | 0.4 | (s) | 24.9 | 58.4 | 52.6 | R 110.9 |
| 1994 | (s) | 28.0 | 2.5 | (s) | 1.1 | 0.1 | 0.0 | 3.8 | 0.4 | (s) | 25.4 | 57.6 | 53.1 | 110.7 |
| 1995 | 0.0 | 29.7 | 1.4 | (s) | 1.0 | 0.2 | 0.0 | 2.6 | 0.4 | (s) | 26.5 | 59.2 | R 55.3 | R 114.5 |
| 1996 | 0.0 | 31.8 | 1.5 | (s) | 1.0 | 0.2 | (s) | 2.6 | 0.4 | (s) | 27.5 | 62.4 | 57.3 | R 119.7 |
| 1997 | (s) | 29.8 | 1.1 | (s) | 1.0 | 0.1 | 0.0 | 2.3 | R 0.3 | (s) | 28.1 | R 60.5 | R 58.5 | R 119.0 |
| 1998 | (s) | 28.7 | 1.4 | (s) | 0.7 | 0.1 | 0.0 | 2.4 | 0.3 | (s) | 30.4 | 61.8 | 62.8 | 124.6 |
| 1999 | 0.0 | 28.4 | 1.5 | (s) | 1.9 | 0.1 | 0.0 | 3.6 | 0.3 | 0.0 | 30.9 | 63.2 | 60.6 | 123.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# A R K A N S A S

## Table 38. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Arkansas

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero- sene b | LPG b | Lubri- cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro- electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 14 | 108 | 1,003 | 1,055 | 465 | 1,183 | 269 | 431 | 315 | R 1,892 | R 6,614 | 0 | — | — | 3,161 | — | 7,864 | — |
| 1965 | 6 | 134 | 1,295 | 1,057 | 283 | 1,141 | 163 | 485 | 291 | R 2,807 | R 7,522 | 0 | — | — | 4,883 | — | 11,660 | — |
| 1970 | 0 | 162 | 2,104 | 1,962 | 584 | 1,798 | 231 | 291 | 191 | R 2,830 | R 9,992 | 0 | — | — | 6,333 | — | 15,346 | — |
| 1975 | 40 | 132 | 2,276 | 2,841 | 480 | 2,715 | 308 | 169 | 3,634 | R 3,017 | R 15,440 | 0 | — | — | 5,994 | — | 14,459 | — |
| 1980 | 296 | 126 | 2,770 | 3,544 | 439 | 2,122 | 268 | 51 | 1,438 | R 3,975 | R 14,608 | 0 | — | — | 10,946 | — | 26,617 | — |
| 1985 | 379 | 109 | 1,263 | 6,041 | 41 | 1,076 | 244 | 630 | 726 | R 2,433 | R 12,455 | 0 | — | — | 9,049 | — | 21,260 | — |
| 1990 | 256 | 127 | 495 | 3,567 | 17 | 1,202 | 274 | 416 | 217 | R 1,843 | R 8,033 | f 0 | — | — | 10,126 | — | R 22,152 | — |
| 1991 | 283 | 106 | 533 | 2,675 | 20 | 1,262 | 246 | 453 | 145 | R 1,608 | R 6,943 | 0 | — | — | 10,518 | — | R 22,864 | — |
| 1992 | 295 | 125 | 1,174 | 4,390 | 9 | 1,188 | 250 | 439 | 27 | R 1,849 | R 9,326 | R 2 | — | — | 11,251 | — | R 23,997 | — |
| 1993 | 330 | 126 | 1,453 | 3,800 | 13 | 1,400 | 255 | 393 | 219 | R 1,799 | R 9,332 | R 3 | — | — | 12,609 | — | R 26,632 | — |
| 1994 | 346 | 139 | 1,066 | 3,596 | 17 | 1,290 | 266 | 425 | 269 | R 1,882 | R 8,811 | R 3 | — | — | 13,526 | — | R 28,227 | — |
| 1995 | 325 | 144 | 1,246 | 3,341 | 20 | 1,416 | 262 | 449 | 207 | R 1,798 | R 8,740 | 0 | — | — | 14,483 | — | R 30,196 | — |
| 1996 | 348 | 147 | 975 | 2,979 | 9 | R 1,317 | 254 | 454 | 118 | R 7,182 | R 13,287 | R 3 | — | — | 15,139 | — | R 31,551 | — |
| 1997 | 297 | 155 | 1,012 | 2,852 | 10 | R 1,171 | 268 | 472 | 21 | R 7,679 | R 13,485 | R 2 | — | — | 15,632 | — | R 32,517 | — |
| 1998 | 287 | 156 | 859 | 2,621 | 17 | 915 | 281 | 648 | 4 | 7,540 | 12,884 | 3 | — | — | 16,066 | — | 33,189 | — |
| 1999 | 319 | 147 | 1,023 | 3,445 | 13 | 1,955 | 284 | 549 | 20 | 7,530 | 14,820 | 1 | — | — | 16,680 | — | 32,681 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | |
| 1960 | 0.4 | 112.1 | 6.7 | 6.1 | 2.6 | 4.7 | 1.6 | 2.3 | 2.0 | R 11.3 | R 37.4 | 0.0 | 17.7 | 0.0 | 10.8 | R 178.3 | 26.8 | R 205.2 |
| 1965 | 0.2 | 134.2 | 8.6 | 6.2 | 1.6 | 4.6 | 1.0 | 2.5 | 1.8 | R 16.8 | R 43.1 | 0.0 | 21.6 | 0.0 | 16.7 | R 215.7 | 39.8 | R 255.5 |
| 1970 | 0.0 | 162.8 | 14.0 | 11.4 | 3.3 | 6.8 | 1.4 | 1.5 | 1.2 | R 16.9 | 56.6 | 0.0 | 25.8 | 0.0 | 21.6 | 266.7 | 52.4 | 319.1 |
| 1975 | 0.9 | 131.7 | 15.1 | 16.5 | 2.7 | 10.1 | 1.9 | 0.9 | 22.8 | R 17.5 | R 87.6 | 0.0 | 27.1 | 0.0 | 20.5 | R 267.7 | 49.3 | R 317.1 |
| 1980 | 6.3 | 125.1 | 18.4 | 20.6 | 2.5 | 7.8 | 1.6 | 0.3 | 9.0 | R 22.5 | R 82.8 | 0.0 | R 50.3 | 0.0 | 37.3 | R 301.9 | 90.8 | R 392.7 |
| 1985 | 8.1 | 110.9 | 8.4 | 35.2 | 0.2 | 3.9 | 1.5 | 3.3 | 4.6 | R 13.7 | R 70.8 | 0.0 | R 58.9 | 0.0 | 30.9 | R 279.6 | 72.5 | R 352.1 |
| 1990 | 5.8 | 128.3 | 3.3 | 20.8 | 0.1 | 4.4 | 1.7 | 2.2 | 1.4 | R 10.5 | R 44.3 | f 0.0 | R 76.5 | f 0.0 | 34.6 | R f 289.5 | 75.6 | R f 365.0 |
| 1991 | 6.8 | 108.0 | 3.5 | 15.6 | 0.1 | 4.6 | 1.5 | 2.4 | 0.9 | R 9.3 | R 37.9 | 0.0 | R 73.9 | 0.0 | 35.9 | R 262.5 | R 78.0 | R 340.6 |
| 1992 | 7.1 | 125.5 | 7.8 | 25.6 | 0.1 | 4.3 | 1.5 | 2.3 | 0.2 | R 10.6 | R 52.4 | (s) | R 78.2 | 0.0 | 38.4 | R 301.6 | R 81.9 | R 383.5 |
| 1993 | 7.7 | 127.4 | 9.6 | 22.1 | 0.1 | 5.0 | 1.5 | 2.1 | 1.4 | 10.4 | 52.3 | (s) | R 86.0 | 0.0 | 43.0 | R 316.4 | 90.9 | R 407.3 |
| 1994 | 8.6 | 141.7 | 7.1 | 20.9 | 0.1 | 4.7 | 1.6 | 2.2 | 1.7 | 10.9 | R 49.2 | (s) | R 77.8 | 0.0 | 46.2 | R 323.5 | 96.3 | R 419.8 |
| 1995 | 7.8 | 156.4 | 8.3 | 19.5 | 0.1 | 5.1 | 1.6 | R 2.3 | 1.3 | 10.4 | R 48.6 | 0.0 | R 81.1 | 0.0 | 49.4 | R 343.3 | R 103.0 | R 446.4 |
| 1996 | 8.4 | 150.7 | 6.5 | 17.3 | 0.1 | R 4.8 | 1.5 | 2.4 | 0.7 | R 39.3 | R 72.5 | (s) | R 70.5 | 0.0 | 51.7 | R 353.8 | R 107.7 | R 461.5 |
| 1997 | 7.0 | 156.9 | 6.7 | 16.6 | 0.1 | R 4.2 | 1.6 | 2.5 | 0.1 | R 42.2 | R 74.0 | (s) | R 71.5 | 0.0 | 53.3 | R 362.8 | R 110.9 | R 473.7 |
| 1998 | 7.0 | 159.5 | 5.7 | 15.3 | 0.1 | 3.3 | 1.7 | 3.4 | (s) | 41.4 | 70.8 | (s) | 55.9 | 0.0 | 54.8 | 348.1 | 113.2 | 461.3 |
| 1999 | 7.8 | 150.1 | 6.8 | 20.1 | 0.1 | 7.1 | 1.7 | 2.9 | 0.1 | 41.1 | 79.8 | (s) | 183.3 | (s) | 56.9 | 477.9 | 111.5 | 589.4 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 39. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Arkansas

| | Coal [a] | Natural Gas [b] | Petroleum: Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | (s) | 9 | 177 | 926 | 2,237 | 309 | 274 | 14,093 | 3 | 18,019 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 11 | 482 | 1,703 | 2,094 | 434 | 305 | 17,310 | 36 | 22,364 | 0 | 0 | — | 0 | — |
| 1970 | 0 | 13 | 293 | 3,383 | 2,204 | 692 | 300 | 21,985 | 5 | 28,862 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 12 | 254 | 6,410 | 1,995 | 679 | 308 | 27,299 | 11 | 36,957 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 11 | 275 | 6,699 | 2,035 | 205 | 432 | 26,276 | 0 | 35,922 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 8 | 86 | 7,685 | 2,030 | 147 | 393 | 25,857 | 0 | 36,199 | R e 19 | 0 | — | 0 | — |
| 1990 | 0 | 9 | 125 | 10,111 | 1,693 | 83 | 442 | 28,438 | 0 | 40,892 | R 146 | 0 | — | 0 | — |
| 1991 | 0 | 8 | 144 | 10,333 | 1,792 | 78 | 396 | 28,461 | 0 | 41,204 | R 92 | 0 | — | 0 | — |
| 1992 | 0 | 8 | 152 | 10,464 | 1,134 | 62 | 404 | 28,891 | 0 | 41,106 | R 65 | 0 | — | 0 | — |
| 1993 | 0 | 10 | 134 | 11,307 | 1,031 | 68 | 411 | 30,051 | 0 | 43,003 | R 45 | 0 | — | 0 | — |
| 1994 | 0 | 12 | 157 | 13,007 | 1,634 | 125 | 429 | 30,421 | 0 | 45,772 | R 8 | 0 | — | 0 | — |
| 1995 | 0 | 11 | 143 | 12,865 | 1,179 | 51 | 422 | 31,644 | 0 | 46,304 | R 9 | 0 | — | 0 | — |
| 1996 | 0 | 13 | 121 | 13,255 | 1,534 | R 45 | 410 | 31,599 | 0 | R 46,963 | R 1 | 0 | — | 0 | — |
| 1997 | 0 | 12 | 135 | 13,639 | 1,539 | R 42 | 433 | 32,684 | 0 | R 48,472 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 10 | 122 | 14,445 | 1,527 | 33 | 453 | 32,585 | 0 | 49,164 | 0 | 0 | — | 0 | — |
| 1999 | 0 | 9 | 118 | 14,498 | 4,575 | 457 | 458 | 33,120 | 0 | 53,226 | 0 | 0 | — | 0 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Elec. System Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | (s) | 9.5 | 0.9 | 5.4 | 12.0 | 1.2 | 1.7 | 74.0 | (s) | 95.2 | 0.0 | 0.0 | 104.7 | 0.0 | 104.7 |
| 1965 | (s) | 11.4 | 2.4 | 9.9 | 11.2 | 1.7 | 1.8 | 90.9 | 0.2 | 118.3 | 0.0 | 0.0 | 129.7 | 0.0 | 129.7 |
| 1970 | 0.0 | 13.5 | 1.5 | 19.7 | 11.9 | 2.6 | 1.8 | 115.5 | (s) | 153.0 | 0.0 | 0.0 | 166.5 | 0.0 | 166.5 |
| 1975 | (s) | 12.2 | 1.3 | 37.3 | 10.8 | 2.5 | 1.9 | 143.4 | 0.1 | 197.3 | 0.0 | 0.0 | 209.4 | 0.0 | 209.4 |
| 1980 | 0.0 | 11.4 | 1.4 | 39.0 | 11.0 | 0.8 | 2.6 | 138.0 | 0.0 | 192.9 | 0.0 | 0.0 | 204.2 | 0.0 | 204.2 |
| 1985 | 0.0 | 8.3 | 0.4 | 44.8 | 11.0 | 0.5 | 2.4 | 135.8 | 0.0 | 195.0 | R e 0.1 | 0.0 | e 203.3 | 0.0 | e 203.3 |
| 1990 | 0.0 | 8.7 | 0.6 | 58.9 | 9.2 | 0.3 | 2.7 | 149.4 | 0.0 | 221.1 | R 0.5 | 0.0 | 229.9 | 0.0 | 229.9 |
| 1991 | 0.0 | 8.5 | 0.7 | 60.2 | 9.7 | 0.3 | 2.4 | 149.5 | 0.0 | 222.8 | R 0.3 | 0.0 | 231.3 | 0.0 | 231.3 |
| 1992 | 0.0 | 8.1 | 0.8 | 61.0 | 6.2 | 0.2 | 2.4 | 151.8 | 0.0 | 222.4 | R 0.2 | 0.0 | 230.5 | 0.0 | 230.5 |
| 1993 | 0.0 | 9.8 | 0.7 | 65.9 | 5.7 | 0.2 | 2.5 | 157.9 | 0.0 | 232.8 | R 0.2 | 0.0 | 242.6 | 0.0 | 242.6 |
| 1994 | 0.0 | 12.1 | 0.8 | 75.8 | 9.1 | 0.5 | 2.6 | R 159.1 | 0.0 | R 247.8 | (s) | 0.0 | R 259.9 | 0.0 | R 259.9 |
| 1995 | 0.0 | 12.4 | 0.7 | 74.9 | 6.7 | 0.2 | 2.6 | R 165.0 | 0.0 | R 250.1 | (s) | 0.0 | R 262.5 | 0.0 | R 262.5 |
| 1996 | 0.0 | 12.8 | 0.6 | 77.2 | 8.7 | 0.2 | 2.5 | R 164.8 | 0.0 | R 254.0 | (s) | 0.0 | R 266.8 | 0.0 | R 266.8 |
| 1997 | 0.0 | 11.7 | 0.7 | 79.4 | 8.7 | 0.2 | 2.6 | R 170.4 | 0.0 | R 262.0 | 0.0 | 0.0 | R 273.8 | 0.0 | R 273.8 |
| 1998 | 0.0 | 10.4 | 0.6 | 84.1 | 8.7 | 0.1 | 2.7 | 169.8 | 0.0 | 266.1 | 0.0 | 0.0 | 276.6 | 0.0 | 276.6 |
| 1999 | 0.0 | 9.1 | 0.6 | 84.5 | 25.9 | 1.7 | 2.8 | 172.6 | 0.0 | 288.0 | 0.0 | 0.0 | 297.2 | 0.0 | 297.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 40.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Arkansas**

| Year | Coal | Natural Gas a | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 0 | 47 | 118 | 1 | 0 | 119 | 0 | 992 | 0 | 0 | 0 | — |
| 1965 | 0 | 68 | 38 | (s) | 0 | 38 | 0 | 1,080 | 0 | 0 | 0 | — |
| 1970 | 0 | 107 | 698 | 8 | 0 | 705 | 0 | 2,160 | 0 | 0 | 0 | — |
| 1975 | 0 | 32 | 4,365 | 62 | 0 | 4,427 | 4,874 | 3,433 | 0 | 0 | 0 | — |
| 1980 | 1,774 | 59 | 3,106 | 180 | 0 | 3,285 | 7,833 | 1,695 | 0 | 0 | 0 | — |
| 1985 | 12,302 | 11 | 8 | 12 | 0 | 21 | 9,889 | 4,434 | 0 | 0 | 0 | — |
| 1990 | 11,836 | 32 | 15 | 140 | 0 | 155 | 11,282 | 3,698 | 0 | 0 | 0 | — |
| 1991 | 11,978 | 28 | 1 | 127 | 0 | 129 | 12,662 | 3,561 | 0 | 0 | 0 | — |
| 1992 | 12,241 | 27 | (s) | 95 | 0 | 95 | 11,326 | 3,380 | 0 | 0 | 0 | — |
| 1993 | 11,116 | 21 | 5 | 126 | 0 | 131 | 13,522 | 4,508 | 0 | 0 | 0 | — |
| 1994 | 12,250 | 25 | 54 | 122 | 0 | 176 | 13,924 | 3,462 | 0 | 0 | 0 | — |
| 1995 | 13,216 | 33 | 15 | 94 | 0 | 109 | 11,658 | 3,218 | 0 | 0 | 0 | — |
| 1996 | 14,467 | 34 | 81 | 97 | 0 | 179 | 13,357 | 2,797 | 0 | 0 | 0 | — |
| 1997 | 13,772 | 25 | 27 | 100 | 0 | 127 | 14,208 | 3,511 | 0 | 0 | 0 | — |
| 1998 | 14,276 | 41 | 100 | 179 | 0 | 279 | 13,097 | 3,114 | 0 | 0 | 0 | — |
| 1999 | 14,974 | 40 | 92 | 167 | 0 | 260 | 12,920 | 2,693 | 0 | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 0.0 | 48.4 | 0.7 | (s) | 0.0 | 0.7 | 0.0 | 10.7 | 0.0 | 0.0 | 0.0 | 59.8 |
| 1965 | 0.0 | 67.6 | 0.2 | (s) | 0.0 | 0.2 | 0.0 | 11.3 | 0.0 | 0.0 | 0.0 | 79.1 |
| 1970 | 0.0 | 107.9 | 4.4 | (s) | 0.0 | 4.4 | 0.0 | 22.7 | 0.0 | 0.0 | 0.0 | 135.0 |
| 1975 | 0.0 | 32.2 | 27.4 | 0.4 | 0.0 | 27.8 | 53.7 | 35.7 | 0.0 | 0.0 | 0.0 | 149.4 |
| 1980 | 30.2 | 60.4 | 19.5 | 1.0 | 0.0 | 20.6 | 85.4 | 17.6 | 0.0 | 0.0 | 0.0 | 214.2 |
| 1985 | 211.7 | 12.0 | 0.1 | 0.1 | 0.0 | 0.1 | 106.9 | 46.3 | 0.0 | 0.0 | 0.0 | 377.1 |
| 1990 | 206.9 | 32.7 | 0.1 | 0.8 | 0.0 | 0.9 | 120.5 | 38.5 | 0.0 | 0.0 | 0.0 | 399.4 |
| 1991 | 209.2 | 28.5 | (s) | 0.7 | 0.0 | 0.7 | 136.0 | 37.2 | 0.0 | 0.0 | 0.0 | 411.6 |
| 1992 | 213.6 | 27.7 | (s) | 0.6 | 0.0 | 0.6 | 120.9 | 35.0 | 0.0 | 0.0 | 0.0 | 397.7 |
| 1993 | 192.6 | 21.8 | (s) | 0.7 | 0.0 | 0.8 | 144.4 | 46.5 | 0.0 | 0.0 | 0.0 | 406.1 |
| 1994 | 213.3 | 25.6 | 0.3 | 0.7 | 0.0 | 1.0 | 148.6 | 35.7 | 0.0 | 0.0 | 0.0 | 424.3 |
| 1995 | 229.6 | 33.5 | 0.1 | 0.5 | 0.0 | 0.6 | 124.2 | 33.2 | 0.0 | 0.0 | 0.0 | 421.2 |
| 1996 | 251.8 | 34.8 | 0.5 | 0.6 | 0.0 | 1.1 | 141.9 | 28.9 | 0.0 | 0.0 | 0.0 | 458.5 |
| 1997 | 239.8 | 25.5 | 0.2 | 0.6 | 0.0 | 0.8 | 150.9 | R 36.4 | 0.0 | 0.0 | 0.0 | R 453.4 |
| 1998 | 247.6 | 41.5 | 0.6 | 1.0 | 0.0 | 1.7 | 139.1 | 32.2 | 0.0 | 0.0 | 0.0 | 462.1 |
| 1999 | 259.1 | 41.0 | 0.6 | 1.0 | 0.0 | 1.6 | 137.2 | 27.9 | 0.0 | 0.0 | 0.0 | 466.7 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 41. Energy Consumption Estimates by Source, Selected Years 1960-1999, California

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline [a] | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power Million kWh | Hydroelectric Power [d] Million kWh | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 1,343 | 1,258 | 10,665 | 5,383 | 26,683 | 25,818 | 1,017 | 8,888 | 3,781 | 137,025 | 80,575 | R 25,691 | R 325,526 | (s) | 17,045 | — | — | 3,463 | — |
| 1965 | 2,380 | 1,690 | 11,892 | 3,342 | 35,105 | 40,150 | 817 | 11,029 | 4,482 | 169,900 | 69,745 | R 28,664 | R 375,126 | 270 | 30,520 | — | — | -1,406 | — |
| 1970 | 2,327 | 2,126 | 12,084 | 2,184 | 39,221 | 59,614 | 1,004 | 15,532 | 3,967 | 214,064 | 70,324 | R 35,824 | R 453,818 | 3,132 | 38,071 | — | — | 39,011 | — |
| 1975 | 2,151 | 1,833 | 13,146 | 1,640 | 42,335 | 62,607 | 2,027 | 19,264 | 3,632 | 241,508 | 111,086 | R 39,478 | R 536,724 | 6,071 | 40,103 | — | — | 113,596 | — |
| 1980 | 2,669 | 1,808 | 18,431 | 285 | 62,277 | 63,201 | 2,117 | 19,197 | 4,907 | 253,593 | 148,701 | R 49,455 | R 622,165 | 4,920 | 40,868 | — | — | 122,895 | — |
| 1985 | 1,942 | 1,846 | 13,848 | 1,354 | 72,431 | 67,028 | 916 | 20,497 | 4,465 | 267,368 | 66,724 | R 55,165 | R 569,796 | 19,729 | 35,772 | — | — | 173,717 | — |
| 1990 | 2,899 | 1,864 | 14,862 | 1,106 | 82,559 | 94,907 | 145 | 19,992 | 5,024 | 305,983 | 64,890 | R 54,940 | R 644,408 | 32,693 | R h 26,620 | — | — | R 278,397 | — |
| 1991 | 2,816 | 1,971 | 14,251 | 1,091 | 75,409 | 90,064 | 139 | 18,596 | 4,495 | 298,698 | 45,571 | R 45,165 | R 593,479 | 31,542 | R 23,111 | — | — | R 301,541 | — |
| 1992 | 2,821 | 2,031 | 13,558 | 1,059 | 67,259 | 86,688 | 75 | 21,088 | 4,583 | 315,643 | 34,696 | R 48,344 | R 592,992 | 35,244 | R 20,735 | — | — | R 270,592 | — |
| 1993 | 2,453 | 1,976 | 12,433 | 819 | 59,089 | 89,244 | 131 | 16,655 | 4,666 | 308,726 | 37,615 | R 43,672 | R 573,050 | 31,581 | R 40,791 | — | — | R 239,611 | — |
| 1994 | 2,498 | 2,123 | 12,237 | 793 | 64,921 | 98,793 | 120 | 18,099 | 4,877 | 307,653 | 42,525 | R 45,397 | R 595,417 | 33,752 | R 24,047 | — | — | R 246,926 | — |
| 1995 | 2,618 | 1,925 | 12,212 | 807 | 68,710 | 95,305 | 164 | 14,798 | 4,793 | 313,464 | 46,957 | R 42,389 | R 599,599 | 30,246 | R 50,516 | — | — | R 261,421 | — |
| 1996 | 2,317 | 1,807 | 12,399 | 769 | 67,412 | 103,773 | 294 | R 10,914 | 4,652 | 318,257 | 40,949 | R 46,392 | R 605,810 | 34,097 | R 47,154 | — | — | R 298,389 | — |
| 1997 | 2,134 | 1,947 | 11,512 | R 836 | 75,787 | 103,144 | 358 | R 8,854 | 4,914 | 322,871 | 21,864 | R 44,442 | R 594,582 | 30,512 | R 42,060 | — | — | R 335,645 | — |
| 1998 | 2,803 | 2,015 | 15,572 | 574 | 79,028 | 105,385 | 474 | 10,936 | 5,145 | 329,943 | 18,281 | 38,703 | 604,043 | 34,594 | 51,641 | — | — | 321,909 | — |
| 1999 | 2,783 | 2,146 | 20,366 | 825 | 74,662 | 98,673 | 288 | 12,171 | 5,198 | 337,791 | 28,565 | 39,220 | 617,760 | 33,372 | 41,075 | — | — | 416,346 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 35.9 | 1,301.8 | 70.8 | 27.2 | 155.4 | 140.7 | 5.8 | 35.7 | 22.9 | 719.8 | 506.6 | R 153.9 | R 1,838.7 | (s) | 183.4 | 82.1 | 0.8 | 11.8 | R 3,454.5 |
| 1965 | 63.7 | 1,813.2 | 78.9 | 16.9 | 204.5 | 222.2 | 4.6 | 44.2 | 27.2 | 892.5 | 438.5 | R 168.7 | R 2,098.2 | 3.2 | 319.0 | 97.5 | 4.2 | -4.8 | R 4,394.2 |
| 1970 | 61.8 | 2,241.3 | 80.2 | 11.0 | 228.5 | 332.9 | 5.7 | 58.7 | 24.1 | 1,124.5 | 442.1 | R 210.6 | R 2,518.2 | 34.4 | 399.5 | 116.8 | 11.3 | 133.1 | R 5,516.5 |
| 1975 | 56.4 | 1,937.3 | 87.2 | 8.3 | 246.6 | 350.7 | 11.5 | 71.6 | 22.0 | 1,268.6 | 698.4 | R 232.3 | R 2,997.3 | 66.9 | 417.3 | 127.5 | 70.2 | 387.6 | R 6,060.4 |
| 1980 | 66.2 | 1,890.9 | 122.3 | 1.4 | 362.8 | 354.2 | 12.0 | 70.5 | 29.8 | 1,332.1 | 934.9 | R 289.5 | R 3,509.6 | 53.7 | 424.5 | R 134.0 | 109.8 | 419.3 | R 6,607.9 |
| 1985 | 45.3 | 1,925.5 | 91.9 | 6.8 | 421.9 | 375.8 | 5.2 | 73.8 | 27.1 | 1,404.5 | 419.5 | R 327.2 | R 3,153.7 | 213.3 | 373.7 | R 155.5 | 195.7 | 592.7 | R 6,655.4 |
| 1990 | 65.3 | 1,923.7 | 98.6 | 5.6 | 480.9 | 534.7 | 0.8 | 72.5 | 30.5 | 1,607.3 | 408.0 | R 323.2 | R 3,562.0 | 349.2 | R h 276.9 | R 196.1 | R h 380.6 | R 949.9 | R h 7,727.1 |
| 1991 | 64.0 | 2,023.9 | 94.6 | 5.5 | 439.3 | 508.1 | 0.8 | 67.2 | 27.3 | 1,569.1 | 286.5 | R 267.9 | R 3,266.2 | 338.8 | R 241.2 | R 185.9 | R 385.9 | R 1,028.9 | R 7,550.2 |
| 1992 | 64.8 | 2,089.6 | 90.0 | 5.3 | 391.8 | 489.5 | 0.4 | 76.4 | 27.8 | 1,658.1 | 218.1 | R 284.6 | R 3,242.1 | 376.3 | R 214.4 | R 197.8 | R 391.8 | R 923.3 | R 7,511.7 |
| 1993 | 56.9 | 2,047.5 | 82.5 | 4.1 | 344.2 | 504.7 | 0.7 | 60.1 | 28.3 | 1,621.7 | 236.5 | R 258.3 | R 3,141.2 | 337.3 | R 420.5 | R 180.9 | R 397.6 | R 817.6 | R 7,410.6 |
| 1994 | 58.0 | 2,172.1 | 81.2 | 4.0 | 378.2 | 560.1 | 0.7 | 65.8 | 29.6 | R 1,609.0 | 267.4 | R 268.4 | R 3,264.3 | 360.3 | R 248.1 | R 186.1 | R 399.2 | R 842.5 | R 7,538.7 |
| 1995 | 61.0 | 1,955.9 | 81.0 | 4.1 | 400.2 | 540.4 | 0.9 | 53.6 | 29.1 | R 1,634.7 | 295.2 | R 250.9 | R 3,290.1 | 322.4 | R 520.9 | R 176.2 | R 341.5 | R 892.0 | R 7,568.4 |
| 1996 | 53.9 | 1,865.1 | 82.3 | 3.9 | 392.7 | 588.4 | 1.7 | R 39.4 | 28.2 | R 1,660.0 | 257.4 | R 275.4 | R 3,329.4 | 362.2 | 487.6 | R 175.1 | R 352.5 | R 1,018.1 | R 7,648.2 |
| 1997 | 49.2 | 1,982.0 | 76.4 | 4.2 | 441.5 | 584.8 | 2.0 | R 32.0 | 29.8 | R 1,683.1 | 137.5 | R 263.9 | R 3,255.3 | 324.1 | R 435.6 | R 152.8 | R 327.5 | R 1,145.2 | R 7,674.3 |
| 1998 | 64.5 | 2,109.5 | 103.3 | 2.9 | 460.3 | 597.5 | 2.7 | 39.5 | 31.2 | 1,719.7 | 114.9 | 230.1 | 3,302.2 | 367.5 | 534.3 | 132.4 | 329.4 | 1,098.4 | 7,942.4 |
| 1999 | 64.0 | 2,182.4 | 135.1 | 4.2 | 434.9 | 559.5 | 1.6 | 44.0 | 31.5 | 1,760.2 | 179.6 | 232.5 | 3,383.2 | 354.5 | 425.0 | 162.3 | 377.6 | 1,420.6 | 8,375.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. From 1989, includes net imports of electricity generated from geothermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 42. Residential Energy Consumption Estimates, Selected Years 1960-1999, California

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 2 | 365 | 485 | 15 | 3,778 | 4,277 | 1,263 | — | — | 14,975 | — | 37,248 | — |
| 1965 | 4 | 489 | 427 | 31 | 5,095 | 5,553 | 1,083 | — | — | 23,800 | — | 56,824 | — |
| 1970 | 38 | 553 | 500 | 166 | 5,167 | 5,833 | 1,209 | — | — | 35,777 | — | 86,700 | — |
| 1975 | 0 | 631 | 493 | 211 | 2,708 | 3,412 | 1,374 | — | — | 44,257 | — | 106,754 | — |
| 1980 | 1 | 529 | 94 | 18 | 4,919 | 5,032 | R 3,550 | — | — | 52,011 | — | 126,473 | — |
| 1985 | 19 | 527 | 148 | 73 | 5,350 | 5,571 | 4,083 | — | — | 57,501 | — | 135,093 | — |
| 1990 | 9 | 515 | 226 | 88 | 5,750 | 6,064 | 3,174 | — | — | 66,575 | — | R 145,639 | — |
| 1991 | 16 | 509 | 199 | 80 | 6,952 | 7,231 | 3,344 | — | — | 66,017 | — | R 143,516 | — |
| 1992 | (s) | 480 | 201 | 33 | 4,802 | 5,036 | 3,519 | — | — | 68,121 | — | R 145,287 | — |
| 1993 | 50 | 501 | 155 | 67 | 5,035 | 5,257 | 2,983 | — | — | 67,359 | — | R 142,272 | — |
| 1994 | 58 | 521 | 148 | 67 | 4,953 | 5,168 | 2,924 | — | — | 68,866 | — | R 143,719 | — |
| 1995 | 46 | 477 | 129 | 81 | 4,884 | 5,094 | 3,246 | — | — | 68,783 | — | R 143,408 | — |
| 1996 | 62 | 473 | 101 | 103 | 4,079 | 4,283 | 3,240 | — | — | 71,396 | — | R 148,790 | — |
| 1997 | 38 | 479 | 125 | 135 | R 3,686 | R 3,945 | R 1,883 | — | — | 73,086 | — | R 152,027 | — |
| 1998 | 40 | 550 | 156 | 237 | 6,092 | 6,485 | 1,660 | — | — | 74,792 | — | 154,505 | — |
| 1999 | 10 | 568 | 101 | 187 | 5,711 | 6,000 | 1,779 | — | — | 75,303 | — | 147,542 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.1 | 377.6 | 2.8 | 0.1 | 15.2 | 18.1 | 25.3 | 0.0 | 0.0 | 51.1 | 472.0 | 127.1 | 599.1 |
| 1965 | 0.1 | 524.9 | 2.5 | 0.2 | 20.4 | 23.1 | 21.7 | 0.0 | 0.0 | 81.2 | 650.9 | 193.9 | 844.8 |
| 1970 | 0.8 | 582.4 | 2.9 | 0.9 | 19.5 | 23.4 | 24.2 | 0.0 | 0.0 | 122.1 | 752.9 | 295.8 | 1,048.7 |
| 1975 | 0.0 | 666.7 | 2.9 | 1.2 | 10.1 | 14.1 | 27.5 | 0.0 | 0.0 | 151.0 | 859.3 | 364.2 | 1,223.6 |
| 1980 | (s) | 552.4 | 0.6 | 0.1 | 18.1 | 18.7 | R 71.0 | 0.0 | 0.0 | 177.5 | R 819.6 | 431.5 | R 1,251.2 |
| 1985 | 0.4 | 547.8 | 0.9 | 0.4 | 19.3 | 20.6 | 81.7 | 0.0 | 0.0 | 196.2 | 846.6 | 460.9 | 1,307.6 |
| 1990 | 0.2 | 530.8 | 1.3 | 0.5 | 20.8 | 22.7 | 63.5 | e 0.2 | R e 18.4 | 227.2 | R e 862.9 | R 496.9 | R e 1,359.8 |
| 1991 | 0.4 | 522.3 | 1.2 | 0.5 | 25.1 | 26.7 | 66.9 | 0.2 | R 19.1 | 225.2 | R 860.8 | R 489.7 | R 1,350.4 |
| 1992 | (s) | 492.7 | 1.2 | 0.2 | 17.4 | 18.8 | 70.4 | 0.2 | R 19.6 | 232.4 | R 834.1 | R 495.7 | R 1,329.8 |
| 1993 | 1.2 | 519.9 | 0.9 | 0.4 | 18.2 | 19.4 | 59.7 | 0.2 | R 20.1 | 229.8 | R 850.3 | R 485.4 | R 1,335.7 |
| 1994 | 1.4 | 531.7 | 0.9 | 0.4 | 18.0 | 19.2 | 58.5 | 0.2 | R 20.4 | 235.0 | R 866.3 | R 490.4 | R 1,356.7 |
| 1995 | 1.1 | 483.8 | 0.8 | 0.5 | 17.7 | 18.9 | 64.9 | 0.2 | R 20.5 | 234.7 | R 824.0 | R 489.3 | R 1,313.4 |
| 1996 | 1.4 | 489.1 | 0.6 | 0.6 | 14.7 | 15.9 | 64.8 | 0.2 | R 20.5 | 243.6 | R 835.5 | R 507.7 | R 1,343.2 |
| 1997 | 0.9 | 487.4 | 0.7 | 0.8 | R 13.3 | R 14.8 | R 37.7 | 0.2 | R 20.1 | 249.4 | R 810.4 | R 518.7 | R 1,329.2 |
| 1998 | 0.9 | 578.3 | 0.9 | 1.3 | 22.0 | 24.3 | 33.2 | 0.2 | 19.7 | 255.2 | 911.8 | 527.2 | 1,439.0 |
| 1999 | 0.2 | 578.6 | 0.6 | 1.1 | 20.7 | 22.3 | 35.6 | 0.1 | 19.0 | 256.9 | 912.8 | 503.4 | 1,416.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 43. Commercial Energy Consumption Estimates, Selected Years 1960-1999, California

CALIFORNIA

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 4 | 109 | 637 | 46 | 667 | 1,406 | 7,284 | 10,040 | 24 | — | 22,039 | — | 54,819 | — |
| 1965 | 7 | 164 | 560 | 95 | 899 | 1,309 | 6,200 | 9,064 | 20 | — | 29,917 | — | 71,430 | — |
| 1970 | 71 | 210 | 657 | 510 | 912 | 1,482 | 8,631 | 12,192 | 23 | — | 40,634 | — | 98,471 | — |
| 1975 | 0 | 240 | 647 | 650 | 478 | 1,622 | 4,377 | 7,774 | 26 | — | 57,846 | — | 139,532 | — |
| 1980 | 3 | 258 | 3,225 | 222 | 868 | 1,795 | 6,811 | 12,921 | 85 | — | 63,465 | — | 154,326 | — |
| 1985 | 34 | 205 | 3,513 | 353 | 944 | 1,759 | 35 | 6,604 | R 109 | — | 73,592 | — | 172,897 | — |
| 1990 | 16 | 285 | 4,588 | 19 | 1,015 | 1,928 | 895 | 8,444 | R 202 | — | 88,311 | — | R 193,190 | — |
| 1991 | 29 | 288 | 4,449 | 23 | 1,227 | 1,647 | 764 | 8,110 | R 213 | — | 86,098 | — | R 187,170 | — |
| 1992 | (s) | 285 | 1,994 | 20 | 847 | 1,485 | 43 | 4,390 | R 229 | — | 87,849 | — | R 187,363 | — |
| 1993 | 92 | 250 | 1,591 | 19 | 889 | 262 | 18 | 2,779 | 240 | — | 86,544 | — | R 182,795 | — |
| 1994 | 108 | 262 | 1,505 | 12 | 874 | 226 | 8 | 2,625 | 245 | — | 84,529 | — | R 176,405 | — |
| 1995 | 86 | 279 | 2,334 | 27 | 862 | 236 | 4 | 3,463 | 245 | — | 86,032 | — | R 179,371 | — |
| 1996 | 115 | 235 | 1,743 | 69 | 720 | 231 | 12 | 2,775 | R 266 | — | 88,605 | — | R 184,653 | — |
| 1997 | 71 | 254 | 1,955 | 41 | R 650 | 233 | 2 | R 2,881 | R 207 | — | 92,295 | — | R 191,984 | — |
| 1998 | 75 | 282 | 2,451 | 63 | 1,075 | 250 | 63 | 3,901 | 207 | — | 92,228 | — | 190,524 | — |
| 1999 | 18 | 245 | 1,624 | 29 | 1,008 | 236 | 0 | 2,897 | 249 | — | 95,771 | — | 187,645 | — |
| | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 0.1 | 112.7 | 3.7 | 0.3 | 2.7 | 7.4 | 45.8 | 59.8 | 0.5 | 0.0 | 75.2 | 248.3 | 187.0 | 435.3 |
| 1965 | 0.2 | 175.5 | 3.3 | 0.5 | 3.6 | 6.9 | 39.0 | 53.3 | 0.4 | 0.0 | 102.1 | 331.4 | 243.7 | 575.1 |
| 1970 | 1.6 | 221.3 | 3.8 | 2.9 | 3.4 | 7.8 | 54.3 | 72.2 | 0.5 | 0.0 | 138.6 | 434.2 | 336.0 | 770.1 |
| 1975 | 0.0 | 253.7 | 3.8 | 3.7 | 1.8 | 8.5 | 27.5 | 45.3 | 0.5 | 0.0 | 197.4 | 496.8 | 476.1 | 972.9 |
| 1980 | 0.1 | 269.4 | 18.8 | 1.3 | 3.2 | 9.4 | 42.8 | 75.5 | 1.7 | 0.0 | 216.5 | 563.2 | 526.6 | 1,089.8 |
| 1985 | 0.8 | 212.9 | 20.5 | 2.0 | 3.4 | 9.2 | 0.2 | 35.3 | R 2.2 | 0.0 | 251.1 | R 502.3 | 589.9 | R 1,092.3 |
| 1990 | 0.4 | 294.1 | 26.7 | 0.1 | 3.7 | 10.1 | 5.6 | 46.3 | R 4.0 | e 0.3 | 301.3 | R e 646.4 | R 659.2 | R e 1,305.6 |
| 1991 | 0.7 | 295.3 | 25.9 | 0.1 | 4.4 | 8.7 | 4.8 | 43.9 | R 4.3 | 0.3 | 293.8 | R 638.2 | R 638.6 | R 1,276.9 |
| 1992 | (s) | 292.8 | 11.6 | 0.1 | 3.1 | 7.8 | 0.3 | 22.9 | R 4.6 | 0.3 | 299.7 | R 620.4 | R 639.3 | R 1,259.7 |
| 1993 | 2.1 | 259.8 | 9.3 | 0.1 | 3.2 | 1.4 | 0.1 | 14.1 | 4.8 | 0.3 | 295.3 | 576.4 | R 623.7 | R 1,200.1 |
| 1994 | 2.5 | 267.4 | 8.8 | 0.1 | 3.2 | 1.2 | (s) | 13.2 | 4.9 | 0.3 | 288.4 | 576.8 | R 601.9 | 1,178.7 |
| 1995 | 2.0 | 282.4 | 13.6 | 0.2 | 3.1 | 1.2 | (s) | 18.1 | 4.9 | 0.4 | 293.5 | 601.4 | R 612.0 | R 1,213.4 |
| 1996 | 2.7 | 242.9 | 10.2 | 0.4 | 2.6 | 1.2 | 0.1 | 14.4 | 5.3 | 0.5 | 302.3 | 568.1 | R 630.0 | R 1,198.1 |
| 1997 | 1.6 | 258.4 | 11.4 | 0.2 | R 2.4 | 1.2 | (s) | R 15.2 | R 4.1 | 0.5 | 314.9 | R 594.8 | R 655.0 | R 1,249.9 |
| 1998 | 1.7 | 296.7 | 14.3 | 0.4 | 3.9 | 1.3 | 0.4 | 20.2 | 4.1 | 0.7 | 314.7 | 638.1 | 650.1 | 1,288.2 |
| 1999 | 0.4 | 249.1 | 9.5 | 0.2 | 3.6 | 1.2 | 0.0 | 14.5 | 5.0 | 0.5 | 326.8 | 596.3 | 640.2 | 1,236.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 44.   Industrial Energy Consumption Estimates, Selected Years 1960-1999, California

| Year | Coal Thousand Short Tons | Natural Gas [a] Billion Cubic Feet | Petroleum — Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | Hydro-electric Power [b] Million kWh | Wood and Waste | Other [b,d] | Electricity [b] Million kWh | Net Energy | Electrical System Energy Losses [e] Million kWh | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1,313 | 451 | 10,665 | 10,127 | 956 | 4,231 | 1,454 | 2,851 | 10,750 | R 25,691 | R 66,725 | (s) | — | — | 20,190 | — | 50,221 | — |
| 1965 | 2,361 | 529 | 11,892 | 13,002 | 692 | 4,826 | 1,709 | 2,245 | 11,846 | R 28,664 | R 74,876 | (s) | — | — | 28,904 | — | 69,012 | — |
| 1970 | 2,215 | 711 | 12,084 | 8,510 | 328 | 9,147 | 1,510 | 1,942 | 12,121 | R 35,824 | R 81,466 | (s) | — | — | 42,169 | — | 102,190 | — |
| 1975 | 2,151 | 666 | 13,146 | 10,519 | 1,166 | 15,688 | 1,246 | 1,338 | 8,308 | R 39,478 | R 90,890 | 0 | — | — | 46,053 | — | 111,086 | — |
| 1980 | 2,665 | 486 | 18,431 | 15,576 | 1,877 | 12,887 | 2,103 | 1,698 | 12,554 | R 49,455 | R 114,581 | 0 | — | — | 51,888 | — | 126,174 | — |
| 1985 | 1,889 | 433 | 13,848 | 18,285 | 491 | 12,977 | 1,914 | 3,065 | 18,732 | R 55,165 | R 124,477 | 0 | — | — | 52,972 | — | 124,454 | — |
| 1990 | 2,874 | 588 | 14,862 | 19,138 | 38 | 12,304 | 2,153 | 3,163 | 1,864 | R 54,940 | R 108,462 | R f 990 | — | — | 55,892 | — | R 122,268 | — |
| 1991 | 2,771 | 707 | 14,251 | 14,329 | 36 | 9,658 | 1,926 | 3,271 | 1,762 | R 45,165 | R 90,398 | R 1,368 | — | — | 56,191 | — | R 122,155 | — |
| 1992 | 2,821 | 687 | 13,558 | 11,101 | 23 | 14,788 | 1,964 | 3,297 | 1,889 | R 48,344 | R 94,964 | R 1,476 | — | — | 57,090 | — | R 121,759 | — |
| 1993 | 2,311 | 747 | 12,433 | 8,779 | 44 | 10,073 | 2,000 | 2,664 | 1,539 | R 43,672 | R 81,205 | R 2,511 | — | — | 56,189 | — | R 118,680 | — |
| 1994 | 2,332 | 726 | 12,237 | 9,028 | 40 | 11,266 | 2,090 | 2,758 | 1,353 | R 45,397 | R 84,169 | R 1,091 | — | — | 59,864 | — | R 124,931 | — |
| 1995 | 2,485 | 754 | 12,212 | 8,607 | 56 | 8,489 | 2,054 | 2,849 | 1,489 | R 42,389 | R 78,145 | R 3,049 | — | — | 57,367 | — | R 119,607 | — |
| 1996 | 2,140 | 761 | 12,399 | 8,078 | 122 | R 5,634 | 1,994 | 2,741 | 309 | R 46,392 | R 77,670 | R 2,919 | — | — | 57,683 | — | R 120,211 | — |
| 1997 | 2,026 | 812 | 11,512 | 11,031 | 182 | R 4,169 | 2,106 | 2,910 | 104 | R 44,442 | R 76,456 | R 1,220 | — | — | 62,017 | — | R 129,001 | — |
| 1998 | 2,688 | 900 | 15,572 | 11,849 | 174 | 3,100 | 2,205 | 3,263 | 33 | 38,703 | 74,899 | 2,073 | — | — | 58,856 | — | 121,584 | — |
| 1999 | 2,755 | 1,175 | 20,366 | 8,737 | 73 | 5,068 | 2,228 | 1,922 | 684 | 39,220 | 78,298 | 1,508 | — | — | 63,217 | — | 123,861 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 35.2 | 466.3 | 70.8 | 59.0 | 5.4 | 17.0 | 8.8 | 15.0 | 67.6 | R 153.9 | R 397.5 | (s) | 56.3 | 0.0 | 68.9 | R 1,024.2 | 171.4 | R 1,195.5 |
| 1965 | 63.2 | 567.4 | 78.9 | 75.7 | 3.9 | 19.4 | 10.4 | 11.8 | 74.5 | R 168.7 | R 443.3 | (s) | 74.8 | 0.0 | 98.6 | R 1,247.3 | 235.5 | R 1,482.8 |
| 1970 | 59.3 | 749.1 | 80.2 | 49.6 | 1.9 | 34.6 | 9.2 | 10.2 | 76.2 | R 210.6 | R 472.3 | (s) | 91.7 | 0.0 | 143.9 | R 1,516.4 | 348.7 | R 1,865.0 |
| 1975 | 56.4 | 703.6 | 87.2 | 61.3 | 6.6 | 58.3 | 7.6 | 7.0 | 52.2 | R 232.3 | R 512.5 | 0.0 | 99.3 | 0.0 | 157.1 | R 1,529.0 | 379.0 | R 1,908.0 |
| 1980 | 66.1 | 507.4 | 122.3 | 90.7 | 10.6 | 47.3 | 12.8 | 8.9 | 78.9 | R 289.5 | R 661.2 | 0.0 | R 61.1 | 0.0 | 177.0 | R 1,472.7 | 430.5 | R 1,903.3 |
| 1985 | 44.0 | 449.5 | 91.9 | 106.5 | 2.8 | 46.8 | 11.6 | 16.1 | 117.8 | R 327.2 | R 720.6 | 0.0 | 71.6 | 0.0 | 180.7 | R 1,466.5 | 424.6 | R 1,891.1 |
| 1990 | 64.7 | 606.5 | 98.6 | 111.5 | 0.2 | 44.6 | 13.1 | 16.6 | 11.7 | R 323.2 | R 619.5 | R f 10.3 | R 128.6 | R f 172.5 | 190.7 | R f 1,792.9 | R 417.2 | R f 2,210.1 |
| 1991 | 63.0 | 725.7 | 94.6 | 83.5 | 0.2 | 34.9 | 11.7 | 17.2 | 11.1 | R 267.9 | R 521.0 | R 14.3 | R 114.6 | R 185.0 | 191.7 | R 1,815.3 | R 416.8 | R 2,232.1 |
| 1992 | 64.8 | 705.7 | 90.0 | 64.7 | 0.1 | 53.6 | 11.9 | 17.3 | 11.9 | R 284.6 | R 534.1 | R 15.3 | R 122.8 | R 187.4 | 194.8 | R 1,824.7 | R 415.4 | R 2,240.2 |
| 1993 | 53.6 | 775.3 | 82.5 | 51.1 | 0.3 | 36.3 | 12.1 | 14.0 | 9.7 | R 258.3 | R 464.3 | R 25.9 | R 116.4 | R 203.3 | 191.7 | R 1,830.6 | R 404.9 | R 2,235.5 |
| 1994 | 54.2 | 741.4 | 81.2 | 52.6 | 0.2 | 41.0 | 12.7 | R 14.4 | 8.5 | R 268.4 | R 478.9 | R 11.3 | R 122.7 | R 212.7 | 204.3 | R 1,825.3 | R 426.3 | 2,251.6 |
| 1995 | 57.9 | 764.3 | 81.0 | 50.1 | 0.3 | 30.8 | 12.5 | R 14.9 | 9.4 | R 250.9 | R 449.8 | R 31.4 | R 106.4 | R 205.4 | 195.7 | R 1,811.0 | R 408.1 | R 2,219.1 |
| 1996 | 49.8 | 786.7 | 82.3 | 47.1 | 0.7 | R 20.4 | 12.1 | R 14.3 | 1.9 | R 275.4 | R 454.1 | R 30.2 | R 104.5 | R 211.9 | 196.8 | R 1,834.0 | R 410.2 | R 2,244.1 |
| 1997 | 46.7 | 825.9 | 76.4 | 64.3 | 1.0 | R 15.1 | 12.8 | R 15.2 | 0.7 | R 263.9 | R 449.3 | R 12.6 | R 109.7 | R 195.1 | 211.6 | R 1,851.0 | R 440.2 | R 2,291.1 |
| 1998 | 61.8 | 946.7 | 103.3 | 69.0 | 1.0 | 11.2 | 13.4 | 17.0 | 0.2 | 230.1 | 445.2 | 21.4 | 93.8 | 202.3 | 200.8 | 1,972.1 | 414.8 | 2,387.0 |
| 1999 | 63.4 | 1,196.3 | 135.1 | 50.9 | 0.4 | 18.3 | 13.5 | 10.0 | 4.3 | 232.5 | 465.1 | 15.6 | 120.3 | 324.8 | 215.7 | 2,401.1 | 422.6 | 2,823.7 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 45.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, California

| Year | Coal [a] | Natural Gas [b] | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 23 | 11 | 5,383 | 15,313 | 25,818 | 214 | 2,327 | 132,768 | 38,610 | 220,432 | 0 | 66 | — | 164 | — |
| 1965 | 8 | 16 | 3,342 | 21,032 | 40,150 | 208 | 2,772 | 166,346 | 35,109 | 268,960 | 0 | 66 | — | 158 | — |
| 1970 | 4 | 17 | 2,184 | 29,448 | 59,614 | 305 | 2,457 | 210,641 | 27,982 | 332,632 | 0 | 65 | — | 158 | — |
| 1975 | (s) | 20 | 1,640 | 30,528 | 62,509 | 390 | 2,386 | 238,548 | 20,056 | 356,057 | 0 | 265 | — | 639 | — |
| 1980 | 0 | 15 | 285 | 41,801 | 62,224 | 522 | 2,804 | 250,100 | 66,673 | 424,409 | 0 | 203 | — | 493 | — |
| 1985 | 0 | 14 | 1,354 | 50,177 | 67,028 | 1,225 | 2,552 | 262,544 | 43,340 | 428,219 | R e 429 | 266 | — | 625 | — |
| 1990 | 0 | 20 | 1,106 | 58,418 | 94,907 | 923 | 2,871 | 300,893 | 54,963 | 514,080 | R 1,133 | 315 | — | 690 | — |
| 1991 | 0 | 19 | 1,091 | 56,328 | 90,064 | 760 | 2,568 | 293,780 | 42,113 | 486,703 | R 1,424 | 345 | — | R 750 | — |
| 1992 | 0 | 15 | 1,059 | 53,839 | 86,688 | 650 | 2,619 | 310,861 | 32,282 | 487,997 | R 158 | 387 | — | R 826 | — |
| 1993 | 0 | 12 | 819 | 48,455 | 89,244 | 658 | 2,666 | 305,800 | 32,831 | 480,474 | R 575 | 408 | — | 861 | — |
| 1994 | 0 | 13 | 793 | 54,137 | 98,793 | 1,006 | 2,787 | 304,669 | 38,310 | 500,495 | R 810 | 425 | — | 887 | — |
| 1995 | 0 | 20 | 807 | 57,540 | 95,305 | 564 | 2,739 | 310,379 | 44,729 | 512,062 | R 2,523 | 423 | — | 882 | — |
| 1996 | 0 | 20 | 769 | 57,352 | 103,773 | R 481 | 2,658 | 315,285 | 39,644 | R 519,961 | R 2,128 | 429 | — | R 894 | — |
| 1997 | 0 | 25 | R 836 | 62,403 | 103,144 | R 349 | 2,808 | 319,727 | 21,714 | R 510,982 | R 2,134 | 478 | — | R 994 | — |
| 1998 | 0 | 11 | 574 | 64,305 | 105,385 | 670 | 2,940 | 326,430 | 18,176 | 518,480 | 1,610 | 521 | — | 1,076 | — |
| 1999 | 0 | 13 | 825 | 64,078 | 98,673 | 384 | 2,971 | 335,633 | 27,881 | 530,446 | 1,395 | 540 | — | 1,058 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.6 | 11.0 | 27.2 | 89.2 | 140.7 | 0.9 | 14.1 | 697.4 | 242.7 | 1,212.2 | 0.0 | 0.2 | 1,223.9 | 0.6 | 1,224.5 |
| 1965 | 0.2 | 16.8 | 16.9 | 122.5 | 222.2 | 0.8 | 16.8 | 873.8 | 220.7 | 1,473.8 | 0.0 | 0.2 | 1,491.0 | 0.5 | 1,491.5 |
| 1970 | 0.1 | 17.9 | 11.0 | 171.5 | 332.9 | 1.2 | 14.9 | 1,106.5 | 175.9 | 1,814.0 | 0.0 | 0.2 | 1,832.2 | 0.5 | 1,832.7 |
| 1975 | (s) | 21.4 | 8.3 | 177.8 | 350.2 | 1.5 | 14.5 | 1,253.1 | 126.1 | 1,931.4 | 0.0 | 0.9 | 1,953.7 | 2.2 | 1,955.9 |
| 1980 | 0.0 | 15.9 | 1.4 | 243.5 | 348.7 | 1.9 | 17.0 | 1,313.8 | 419.2 | 2,345.5 | 0.0 | 0.7 | 2,362.1 | 1.7 | 2,363.8 |
| 1985 | 0.0 | 15.0 | 6.8 | 292.3 | 375.8 | 4.4 | 15.5 | 1,379.1 | 272.5 | 2,346.5 | R e 1.5 | 0.9 | e 2,362.3 | 2.1 | e 2,364.5 |
| 1990 | 0.0 | 20.8 | 5.6 | 340.3 | 534.7 | 3.3 | 17.4 | 1,580.6 | 345.6 | 2,827.4 | R 4.0 | 1.1 | 2,849.3 | 2.4 | 2,851.6 |
| 1991 | 0.0 | 19.0 | 5.5 | 328.1 | 508.1 | 2.7 | 15.6 | 1,543.2 | 264.8 | 2,668.0 | R 5.0 | 1.2 | 2,688.2 | 2.6 | 2,690.8 |
| 1992 | 0.0 | 15.2 | 5.3 | 313.6 | 489.5 | 2.4 | 15.9 | 1,633.0 | 203.0 | 2,662.7 | R 0.6 | 1.3 | 2,679.2 | 2.8 | 2,682.0 |
| 1993 | 0.0 | 12.5 | 4.1 | 282.3 | 504.7 | 2.4 | 16.2 | 1,606.4 | 206.4 | 2,622.4 | R 2.0 | 1.4 | 2,636.3 | 2.9 | 2,639.3 |
| 1994 | 0.0 | 12.9 | 4.0 | 315.3 | 560.1 | 3.7 | 16.9 | R 1,593.4 | 240.9 | R 2,734.3 | R 2.9 | 1.5 | R 2,748.7 | 3.0 | R 2,751.7 |
| 1995 | 0.0 | 20.0 | 4.1 | 335.2 | 540.4 | 2.0 | 16.6 | R 1,618.6 | 281.2 | R 2,798.1 | R 8.9 | 1.4 | R 2,819.6 | 3.0 | R 2,822.6 |
| 1996 | 0.0 | 20.2 | 3.9 | 334.1 | 588.4 | R 1.7 | 16.1 | R 1,644.5 | 249.2 | R 2,838.0 | R 7.5 | 1.5 | R 2,859.6 | 3.0 | R 2,862.7 |
| 1997 | 0.0 | 25.1 | 4.2 | 363.5 | 584.8 | R 1.3 | 17.0 | R 1,666.7 | 136.5 | R 2,774.1 | R 7.6 | 1.6 | R 2,800.8 | 3.4 | R 2,804.2 |
| 1998 | 0.0 | 11.9 | 2.9 | 374.6 | 597.5 | 2.4 | 17.8 | 1,701.4 | 114.3 | 2,810.9 | 5.7 | 1.8 | 2,824.6 | 3.7 | 2,828.2 |
| 1999 | 0.0 | 12.9 | 4.2 | 373.3 | 559.5 | 1.4 | 18.0 | 1,749.0 | 175.3 | 2,880.6 | 4.9 | 1.8 | 2,895.3 | 3.6 | 2,898.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 46. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, California

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy f | Other b,g | Total h |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |

**Thousand Barrels / Million Kilowatthours**

| Year | Coal | Natural Gas | Heavy Oil | Light Oil | Petroleum Coke | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Geothermal Energy | Other | Total h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0 | 323 | 23,931 | 120 | 0 | 24,051 | (s) | 17,045 | (s) | 33 | 0 | — |
| 1965 | 0 | 493 | 16,590 | 83 | 0 | 16,673 | 270 | 30,520 | 64 | 189 | 0 | — |
| 1970 | 0 | 636 | 21,589 | 107 | 0 | 21,696 | 3,132 | 38,071 | 48 | 525 | 0 | — |
| 1975 | 0 | 275 | 78,345 | 247 | 0 | 78,592 | 6,071 | 40,103 | 20 | 3,246 | 0 | — |
| 1980 | 0 | 519 | 62,663 | 2,559 | 0 | 65,222 | 4,920 | 40,868 | 20 | 5,073 | 0 | — |
| 1985 | 0 | 666 | 4,617 | 308 | 0 | 4,925 | 19,729 | 35,772 | 4 | 9,197 | 13 | — |
| 1990 | 0 | 456 | 7,169 | 189 | 0 | 7,358 | 32,693 | R 25,630 | 2 | 8,968 | 2 | — |
| 1991 | 0 | 449 | 933 | 104 | 0 | 1,037 | 31,542 | R 21,743 | 8 | 8,638 | 3 | — |
| 1992 | 0 | 564 | 482 | 124 | 0 | 605 | 35,244 | R 19,260 | 5 | 8,807 | 3 | — |
| 1993 | 0 | 466 | 3,227 | 109 | 0 | 3,336 | 31,581 | R 38,280 | 4 | 8,300 | 3 | — |
| 1994 | 0 | 601 | 2,854 | 104 | 0 | 2,959 | 33,752 | R 22,956 | 3 | 7,918 | 3 | — |
| 1995 | 0 | 395 | 734 | 101 | 0 | 835 | 30,246 | R 47,468 | 2 | 5,490 | 15 | — |
| 1996 | 0 | 318 | 983 | 138 | 0 | 1,122 | 34,097 | R 44,235 | 55 | 5,692 | 13 | — |
| 1997 | 0 | 378 | 44 | 273 | 0 | 317 | 30,512 | R 40,840 | 122 | 5,317 | 9 | — |
| 1998 | 0 | 271 | 10 | 268 | 0 | 278 | 34,594 | 49,568 | 120 | 5,061 | 5 | — |
| 1999 | 0 | 145 | 0 | 120 | 0 | 120 | 33,372 | 39,567 | 141 | 1,573 | 7 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Heavy Oil | Light Oil | Petroleum Coke | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Geothermal Energy | Other | Total h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.0 | 334.3 | 150.5 | 0.7 | 0.0 | 151.2 | (s) | 183.4 | (s) | 0.8 | 0.0 | 669.6 |
| 1965 | 0.0 | 528.7 | 104.3 | 0.5 | 0.0 | 104.8 | 3.2 | 319.0 | 0.7 | 4.2 | 0.0 | 960.5 |
| 1970 | 0.0 | 670.6 | 135.7 | 0.6 | 0.0 | 136.4 | 34.4 | 399.5 | 0.5 | 11.3 | 0.0 | 1,252.7 |
| 1975 | 0.0 | 291.9 | 492.6 | 1.4 | 0.0 | 494.0 | 66.9 | 417.3 | 0.2 | 70.2 | 0.0 | 1,340.4 |
| 1980 | 0.0 | 545.8 | 394.0 | 14.8 | 0.0 | 408.7 | 53.7 | 424.5 | 0.2 | 109.8 | 0.0 | 1,542.7 |
| 1985 | 0.0 | 700.3 | 29.0 | 1.8 | 0.0 | 30.8 | 213.3 | 373.7 | (s) | 195.6 | 0.1 | 1,513.8 |
| 1990 | 0.0 | 471.5 | 45.1 | 1.1 | 0.0 | 46.2 | 349.2 | R 266.6 | (s) | 189.2 | (s) | R 1,346.0 |
| 1991 | 0.0 | 461.6 | 5.9 | 0.6 | 0.0 | 6.5 | 338.8 | R 226.9 | 0.1 | 181.4 | (s) | R 1,230.7 |
| 1992 | 0.0 | 583.1 | 3.0 | 0.7 | 0.0 | 3.7 | 376.3 | R 199.2 | 0.1 | 184.2 | (s) | R 1,358.3 |
| 1993 | 0.0 | 480.0 | 20.3 | 0.6 | 0.0 | 20.9 | 337.3 | R 394.6 | (s) | 173.6 | (s) | R 1,417.7 |
| 1994 | 0.0 | 618.7 | 17.9 | 0.6 | 0.0 | 18.6 | 360.3 | R 236.8 | (s) | 165.6 | (s) | R 1,408.1 |
| 1995 | 0.0 | 405.4 | 4.6 | 0.6 | 0.0 | 5.2 | 322.4 | R 489.5 | (s) | 114.8 | 0.2 | R 1,345.9 |
| 1996 | 0.0 | 326.3 | 6.2 | 0.8 | 0.0 | 7.0 | 362.2 | R 457.4 | 0.6 | 119.3 | 0.1 | R 1,277.0 |
| 1997 | 0.0 | 385.1 | 0.3 | 1.6 | 0.0 | 1.9 | 324.1 | R 423.0 | 1.3 | 111.4 | 0.1 | R 1,249.6 |
| 1998 | 0.0 | 276.0 | 0.1 | 1.6 | 0.0 | 1.6 | 367.5 | 512.8 | 1.2 | 106.4 | 0.1 | 1,269.9 |
| 1999 | 0.0 | 145.5 | 0.0 | 0.7 | 0.0 | 0.7 | 354.5 | 409.4 | 1.5 | 33.1 | 0.1 | 950.6 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
f Includes net imports of electricity generated from geothermal energy.

g "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
h From 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 47. Energy Consumption Estimates by Source, Selected Years 1960-1999, Colorado

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | Million kWh | Million kWh | | | | |

**Thousand Barrels / physical units**

| Year | Coal | Nat Gas | Asphalt | Aviation Gas | Distillate | Jet | Kerosene | LPG | Lubricants | Motor Gas | Residual | Other | Total | Nuclear | Hydro | Wood/Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2,941 | 188 | 1,617 | 1,125 | 4,194 | 480 | 277 | 3,153 | 378 | 16,461 | 1,883 | R 675 | R 30,242 | 0 | 970 | — | — | -4,980 | — |
| 1965 | 4,204 | 224 | 1,423 | 1,111 | 3,925 | 3,426 | 1,108 | 3,339 | 416 | 19,321 | 2,056 | R 937 | R 37,061 | 0 | 938 | — | — | -2,572 | — |
| 1970 | 5,101 | 282 | 3,220 | 337 | 5,212 | 7,476 | 822 | 4,710 | 423 | 26,103 | 1,507 | R 1,182 | R 50,991 | 0 | 1,236 | — | — | -2,230 | — |
| 1975 | 7,603 | 308 | 2,231 | 267 | 8,846 | 7,151 | 278 | 5,053 | 458 | 31,916 | 3,388 | R 1,121 | R 60,709 | 0 | 1,507 | — | — | -1,877 | — |
| 1980 | 11,981 | 256 | 2,284 | 265 | 11,228 | 4,725 | 413 | 3,870 | 641 | 34,282 | 1,814 | R 1,826 | R 61,348 | 667 | 1,717 | — | — | -5,019 | — |
| 1985 | 15,241 | 219 | 3,103 | 142 | 9,552 | 7,861 | 92 | 2,324 | 583 | 35,742 | 194 | R 1,214 | R 60,807 | -32 | 2,357 | — | — | -1,099 | — |
| 1990 | 16,710 | 239 | 3,257 | 167 | 10,373 | 6,109 | 50 | 3,045 | 656 | 35,562 | 13 | R 1,351 | R 60,583 | 0 | R h 1,371 | — | — | R 1,052 | — |
| 1991 | 16,218 | 261 | 3,107 | 155 | 11,805 | 6,503 | 51 | 3,520 | 587 | 35,676 | 80 | R 1,232 | R 62,717 | 0 | R 1,787 | — | — | R 3,597 | — |
| 1992 | 16,696 | 253 | 3,190 | 136 | 12,425 | 7,363 | 51 | 3,184 | 599 | 35,790 | 41 | R 1,559 | R 64,339 | 0 | R 1,587 | — | — | R 1,046 | — |
| 1993 | 17,070 | 284 | 3,413 | 124 | 12,922 | 8,959 | 53 | 3,448 | 610 | 37,913 | 11 | R 1,441 | R 68,895 | 0 | R 1,968 | — | — | R 1,272 | — |
| 1994 | 17,475 | 276 | 4,188 | 128 | 13,261 | 7,930 | 48 | 3,390 | 637 | 39,385 | 3 | R 1,558 | R 70,528 | 0 | R 1,658 | — | — | R 3,562 | — |
| 1995 | 16,971 | 284 | 3,720 | 124 | 13,426 | 7,428 | 29 | 3,936 | 626 | 41,357 | 8 | R 1,482 | R 72,136 | 0 | R 2,212 | — | — | R 7,334 | — |
| 1996 | 17,222 | 307 | 3,904 | 124 | 14,839 | 7,765 | 33 | R 3,897 | 608 | 43,028 | 20 | R 1,958 | R 76,174 | 0 | R 1,704 | — | — | R 10,518 | — |
| 1997 | 17,961 | 306 | 2,574 | 143 | 13,796 | 7,174 | 29 | R 1,954 | 642 | 43,744 | 3 | R 1,955 | R 72,013 | 0 | R 2,031 | — | — | R 10,532 | — |
| 1998 | 18,033 | 312 | 4,749 | 144 | 15,719 | 6,792 | 44 | 1,413 | 672 | 44,841 | 3 | 1,799 | 76,177 | 0 | 1,508 | — | — | 12,055 | — |
| 1999 | 18,171 | 316 | 2,137 | 195 | 16,275 | 7,800 | 32 | 2,973 | 679 | 47,069 | 4 | 1,865 | 79,029 | 0 | 1,600 | — | — | 8,485 | — |

**Trillion Btu**

| Year | Coal | Nat Gas | Asphalt | Aviation Gas | Distillate | Jet | Kerosene | LPG | Lubricants | Motor Gas | Residual | Other | Total | Nuclear | Hydro | Wood/Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 68.2 | 195.0 | 10.7 | 5.7 | 24.4 | 2.6 | 1.6 | 12.6 | 2.3 | 86.5 | 11.8 | R 4.0 | R 162.3 | 0.0 | 10.4 | 6.5 | 0.0 | -17.0 | R 425.4 |
| 1965 | 98.1 | 204.5 | 9.4 | 5.6 | 22.9 | 19.3 | 6.3 | 13.4 | 2.5 | 101.5 | 12.9 | R 5.5 | R 199.3 | 0.0 | 9.8 | 6.6 | 0.0 | -8.8 | R 509.5 |
| 1970 | 115.7 | 275.0 | 21.4 | 1.7 | 30.4 | 42.3 | 4.7 | 17.8 | 2.6 | 137.1 | 9.5 | R 6.9 | R 274.2 | 0.0 | 13.0 | 8.4 | 0.0 | -7.6 | R 678.6 |
| 1975 | 159.3 | 281.0 | 14.8 | 1.3 | 51.5 | 40.4 | 1.6 | 18.8 | 2.8 | 167.7 | 21.3 | R 6.6 | R 326.8 | 0.0 | 15.7 | 9.0 | 0.0 | -6.4 | R 785.4 |
| 1980 | 247.6 | 254.6 | 15.2 | 1.3 | 65.4 | 26.7 | 2.3 | 14.2 | 3.9 | 180.1 | 11.4 | R 10.5 | R 331.0 | 7.3 | 17.8 | R 10.8 | 0.0 | -17.1 | R 852.0 |
| 1985 | 299.1 | 218.7 | 20.6 | 0.7 | 55.6 | 44.5 | 0.5 | 8.4 | 3.5 | 187.8 | 1.2 | R 7.2 | R 330.0 | -0.3 | 24.6 | R 15.3 | 0.0 | -3.7 | 883.7 |
| 1990 | 329.0 | 240.3 | 21.6 | 0.8 | 60.4 | 34.6 | 0.3 | 11.0 | 4.0 | 186.8 | 0.1 | R 8.1 | R 327.7 | 0.0 | R h 14.3 | R 8.8 | R h 0.6 | 3.6 | R h 924.2 |
| 1991 | 321.8 | 268.1 | 20.6 | 0.8 | 68.8 | 36.8 | 0.3 | 12.7 | 3.6 | 187.4 | 0.5 | R 7.4 | R 338.9 | 0.0 | R 18.6 | R 9.3 | R 0.6 | R 12.3 | R 969.6 |
| 1992 | 331.5 | 258.9 | 21.2 | 0.7 | 72.4 | 41.6 | 0.3 | 11.5 | 3.6 | 188.0 | 0.3 | R 9.3 | R 348.9 | 0.0 | R 16.4 | R 9.7 | R 0.6 | R 3.6 | R 969.6 |
| 1993 | 338.5 | 287.3 | 22.6 | 0.6 | 75.3 | 50.7 | 0.3 | 12.4 | 3.7 | 199.2 | 0.1 | R 8.6 | R 373.5 | 0.0 | R 20.3 | R 9.3 | R 0.6 | R 4.3 | R 1,033.9 |
| 1994 | 349.1 | 277.1 | 27.8 | 0.6 | 77.2 | 44.9 | 0.3 | 12.3 | 3.9 | R 206.0 | (s) | R 9.3 | R 382.3 | 0.0 | 17.1 | R 9.4 | R 0.6 | R 12.2 | R 1,047.8 |
| 1995 | 337.3 | 288.7 | 24.7 | 0.6 | 78.2 | 42.0 | 0.2 | 14.3 | 3.8 | R 215.7 | 0.1 | R 8.9 | R 388.4 | 0.0 | R 22.8 | R 10.5 | R 0.6 | R 25.0 | R 1,073.3 |
| 1996 | 340.3 | 314.7 | 25.9 | 0.6 | 86.4 | 44.0 | 0.2 | R 14.1 | 3.7 | R 224.4 | 0.1 | R 11.5 | R 411.0 | 0.0 | 17.6 | R 10.3 | 0.6 | R 35.9 | R 1,130.4 |
| 1997 | 356.0 | 309.6 | 17.1 | 0.7 | 80.4 | 40.7 | 0.2 | R 7.1 | 3.9 | R 228.0 | (s) | R 11.5 | R 389.5 | 0.0 | R 21.0 | R 10.6 | 0.6 | R 35.9 | R 1,123.5 |
| 1998 | 355.3 | 315.9 | 31.5 | 0.7 | 91.6 | 38.5 | 0.2 | 5.1 | 4.1 | 233.7 | (s) | 10.6 | 416.1 | 0.0 | 15.6 | 8.8 | 0.7 | 41.1 | 1,153.5 |
| 1999 | 355.2 | 318.2 | 14.2 | 1.0 | 94.8 | 44.2 | 0.2 | 10.8 | 4.1 | 245.3 | (s) | 10.9 | 425.5 | 0.0 | 16.6 | 10.3 | 0.8 | 29.0 | 1,155.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**C O L O R A D O**

## Table 48.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Colorado

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 90 | 52 | 148 | 50 | 2,097 | 2,294 | 212 | — | — | 1,776 | — | 4,418 | — |
| 1965 | 112 | 65 | 90 | 285 | 2,224 | 2,599 | 179 | — | — | 2,521 | — | 6,018 | — |
| 1970 | 80 | 83 | 168 | 112 | 3,080 | 3,361 | 195 | — | — | 3,859 | — | 9,351 | — |
| 1975 | 7 | 100 | 283 | 36 | 2,862 | 3,181 | 233 | — | — | 5,142 | — | 12,403 | — |
| 1980 | 35 | 90 | 78 | 23 | 1,670 | 1,772 | 463 | — | — | 6,693 | — | 16,275 | — |
| 1985 | 55 | 90 | 106 | 49 | 1,390 | 1,545 | 673 | — | — | 8,861 | — | 20,819 | — |
| 1990 | 20 | 92 | 27 | 22 | 1,697 | 1,746 | 366 | — | — | 9,787 | — | R 21,411 | — |
| 1991 | 23 | 97 | 27 | 24 | 1,899 | 1,950 | 385 | — | — | 10,099 | — | R 21,955 | — |
| 1992 | 21 | 95 | 22 | 37 | 1,692 | 1,751 | 406 | — | — | 10,216 | — | R 21,788 | — |
| 1993 | 13 | 106 | 33 | 35 | 1,768 | 1,836 | 379 | — | — | 10,656 | — | R 22,507 | — |
| 1994 | 8 | 100 | 26 | 40 | 1,757 | 1,822 | R 371 | — | — | 10,939 | — | R 22,828 | — |
| 1995 | 7 | 104 | 40 | 20 | 2,188 | 2,248 | R 412 | — | — | 11,307 | — | R 23,574 | — |
| 1996 | 5 | 111 | 60 | 21 | 2,100 | 2,180 | R 411 | — | — | 11,871 | — | R 24,738 | — |
| 1997 | 23 | 116 | 69 | 19 | R 330 | R 417 | R 418 | — | — | 12,261 | — | R 25,504 | — |
| 1998 | 6 | 111 | 21 | 24 | 171 | 216 | 369 | — | — | 12,652 | — | 26,136 | — |
| 1999 | 36 | 112 | 11 | 16 | 2,011 | 2,039 | 395 | — | — | 13,131 | — | 25,727 | — |
| | | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 2.1 | 54.1 | 0.9 | 0.3 | 8.4 | 9.6 | 4.2 | 0.0 | 0.0 | 6.1 | 76.0 | 15.1 | 91.1 |
| 1965 | 2.6 | 59.6 | 0.5 | 1.6 | 8.9 | 11.1 | 3.6 | 0.0 | 0.0 | 8.6 | 85.4 | 20.5 | 105.9 |
| 1970 | 1.8 | 80.4 | 1.0 | 0.6 | 11.6 | 13.3 | 3.9 | 0.0 | 0.0 | 13.2 | 112.5 | 31.9 | 144.5 |
| 1975 | 0.2 | 89.5 | 1.6 | 0.2 | 10.6 | 12.5 | 4.7 | 0.0 | 0.0 | 17.5 | 124.4 | 42.3 | 166.7 |
| 1980 | 0.8 | 89.2 | 0.5 | 0.1 | 6.1 | 6.7 | 9.3 | 0.0 | 0.0 | 22.8 | 128.8 | 55.5 | 184.3 |
| 1985 | 1.2 | 90.1 | 0.6 | 0.3 | 5.0 | 5.9 | 13.5 | 0.0 | 0.0 | 30.2 | 140.8 | 71.0 | 211.9 |
| 1990 | 0.4 | 92.4 | 0.2 | 0.1 | 6.2 | 6.4 | 7.3 | e 0.1 | R e 0.2 | 33.4 | e 140.2 | R 73.1 | R e 213.3 |
| 1991 | 0.5 | 100.3 | 0.2 | 0.1 | 6.9 | 7.2 | 7.7 | 0.1 | R 0.2 | 34.5 | 150.4 | R 74.9 | R 225.3 |
| 1992 | 0.4 | 96.8 | 0.1 | 0.2 | 6.1 | 6.5 | 8.1 | 0.1 | 0.2 | 34.9 | R 147.0 | R 74.3 | R 221.3 |
| 1993 | 0.3 | 107.4 | 0.2 | 0.2 | 6.4 | 6.8 | 7.6 | 0.1 | 0.2 | 36.4 | 158.6 | 76.8 | 235.4 |
| 1994 | 0.2 | 99.9 | 0.1 | 0.2 | 6.4 | 6.8 | 7.4 | 0.1 | 0.2 | 37.3 | 151.9 | 77.9 | 229.8 |
| 1995 | 0.2 | 106.2 | 0.2 | 0.1 | 7.9 | 8.3 | R 8.2 | 0.1 | 0.2 | 38.6 | 161.7 | 80.4 | R 242.2 |
| 1996 | 0.1 | 113.6 | 0.4 | 0.1 | 7.6 | 8.1 | 8.2 | 0.1 | 0.2 | 40.5 | 170.8 | R 84.4 | R 255.2 |
| 1997 | 0.4 | 117.0 | 0.4 | 0.1 | R 1.2 | R 1.7 | R 8.4 | 0.1 | 0.2 | 41.8 | R 169.6 | R 87.0 | R 256.7 |
| 1998 | 0.1 | 112.2 | 0.1 | 0.1 | 0.6 | 0.9 | 7.4 | 0.1 | 0.2 | 43.2 | 164.1 | 89.2 | 253.3 |
| 1999 | 0.8 | 112.4 | 0.1 | 0.1 | 7.3 | 7.4 | 7.9 | 0.1 | 0.2 | 44.8 | 173.6 | 87.8 | 261.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 49. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Colorado

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 167 | 28 | 123 | 66 | 370 | 135 | 56 | 750 | 4 | — | 1,772 | — | 4,408 | — |
| 1965 | 207 | 39 | 75 | 376 | 393 | 186 | 49 | 1,078 | 3 | — | 2,842 | — | 6,785 | — |
| 1970 | 149 | 59 | 140 | 148 | 544 | 124 | 38 | 993 | 4 | — | 4,594 | — | 11,134 | — |
| 1975 | 14 | 76 | 235 | 48 | 505 | 109 | 75 | 972 | 4 | — | 6,276 | — | 15,139 | — |
| 1980 | 65 | 67 | 339 | 6 | 295 | 312 | 3 | 955 | 11 | — | 7,277 | — | 17,695 | — |
| 1985 | 101 | 69 | 681 | 15 | 245 | 176 | 1 | 1,118 | R 18 | — | 12,344 | — | 29,001 | — |
| 1990 | 38 | 66 | 437 | 10 | 299 | 265 | 0 | 1,011 | R 23 | — | 14,420 | — | R 31,546 | — |
| 1991 | 42 | 69 | 591 | 11 | 335 | 336 | 0 | 1,272 | R 25 | — | 14,609 | — | R 31,759 | — |
| 1992 | 38 | 66 | 834 | 7 | 299 | 161 | (s) | 1,301 | R 26 | — | 14,757 | — | R 31,474 | — |
| 1993 | 24 | 72 | 759 | 7 | 312 | 35 | (s) | 1,113 | 30 | — | 15,278 | — | R 32,270 | — |
| 1994 | 15 | 66 | 1,219 | 5 | 310 | 51 | 0 | 1,585 | 31 | — | 13,943 | — | R 29,097 | — |
| 1995 | 13 | 67 | 814 | 5 | 386 | 58 | 0 | 1,263 | 31 | — | 14,300 | — | R 29,814 | — |
| 1996 | 9 | 69 | 987 | 6 | 371 | 265 | 0 | 1,628 | 34 | — | 15,251 | — | R 31,784 | — |
| 1997 | 42 | 69 | 1,186 | 5 | R 58 | 37 | 0 | R 1,286 | R 46 | — | 15,506 | — | R 32,254 | — |
| 1998 | 11 | 63 | 989 | 9 | 30 | 38 | 3 | 1,070 | 46 | — | 16,920 | — | 34,953 | — |
| 1999 | 66 | 64 | 923 | 9 | 355 | 166 | 1 | 1,455 | 55 | — | 17,915 | — | 35,100 | — |
| | | | | | | **Trillion Btu** | | | | | | | | |
| 1960 | 3.8 | 29.5 | 0.7 | 0.4 | 1.5 | 0.7 | 0.4 | 3.6 | 0.1 | 0.0 | 6.0 | 43.1 | 15.0 | 58.1 |
| 1965 | 4.7 | 35.8 | 0.4 | 2.1 | 1.6 | 1.0 | 0.3 | 5.4 | 0.1 | 0.0 | 9.7 | 55.7 | 23.1 | 78.9 |
| 1970 | 3.3 | 57.5 | 0.8 | 0.8 | 2.1 | 0.7 | 0.2 | 4.6 | 0.1 | 0.0 | 15.7 | 81.2 | 38.0 | 119.2 |
| 1975 | 0.3 | 68.3 | 1.4 | 0.3 | 1.9 | 0.6 | 0.5 | 4.6 | 0.1 | 0.0 | 21.4 | 94.7 | 51.7 | 146.3 |
| 1980 | 1.4 | 66.6 | 2.0 | (s) | 1.1 | 1.6 | (s) | 4.7 | 0.2 | 0.0 | 24.8 | 97.8 | 60.4 | 158.2 |
| 1985 | 2.2 | 68.9 | 4.0 | 0.1 | 0.9 | 0.9 | (s) | 5.9 | R 0.4 | 0.0 | 42.1 | R 119.4 | 98.9 | R 218.4 |
| 1990 | 0.8 | 66.6 | 2.5 | 0.1 | 1.1 | 1.4 | 0.0 | 5.1 | R 0.5 | e 0.2 | 49.2 | R e 122.4 | 107.6 | R e 230.0 |
| 1991 | 0.9 | 71.0 | 3.4 | 0.1 | 1.2 | 1.8 | 0.0 | 6.5 | R 0.5 | 0.2 | 49.8 | R 128.9 | R 108.4 | R 237.2 |
| 1992 | 0.8 | 68.0 | 4.9 | (s) | 1.1 | 0.8 | (s) | 6.8 | R 0.5 | 0.2 | 50.4 | R 126.7 | R 107.4 | R 234.0 |
| 1993 | 0.5 | 72.4 | 4.4 | (s) | 1.1 | 0.2 | (s) | 5.8 | 0.6 | 0.2 | 52.1 | 131.7 | 110.1 | 241.8 |
| 1994 | 0.3 | 66.2 | 7.1 | (s) | 1.1 | 0.3 | 0.0 | 8.5 | 0.6 | 0.2 | 47.6 | 123.4 | 99.3 | 222.7 |
| 1995 | 0.3 | 67.8 | 4.7 | (s) | 1.4 | 0.3 | 0.0 | 6.5 | 0.6 | 0.2 | 48.8 | 124.2 | R 101.7 | R 225.9 |
| 1996 | 0.2 | 70.6 | 5.7 | (s) | 1.3 | 1.4 | 0.0 | 8.5 | 0.7 | 0.2 | 52.0 | 132.2 | R 108.4 | R 240.6 |
| 1997 | 0.8 | 69.9 | 6.9 | (s) | R 0.2 | 0.2 | 0.0 | R 7.3 | R 0.9 | 0.2 | 52.9 | R 132.0 | R 110.1 | R 242.1 |
| 1998 | 0.3 | 63.9 | 5.8 | (s) | 0.1 | 0.2 | (s) | 6.1 | 0.9 | 0.2 | 57.7 | 129.2 | 119.3 | 248.4 |
| 1999 | 1.5 | 63.9 | 5.4 | 0.1 | 1.3 | 0.9 | (s) | 7.6 | 1.1 | 0.2 | 61.1 | 135.4 | 119.8 | 255.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# COLORADO

**Table 50. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Colorado**

| Year | Coal | Natural Gas a | Petroleum — Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | | | | Thousand Barrels | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 1,438 | 69 | 1,617 | 1,768 | 161 | 593 | 98 | 1,303 | 1,583 | R 675 | R 7,798 | 1 | — | — | 1,289 | — | 3,206 | — |
| 1965 | 1,698 | 82 | 1,423 | 1,994 | 447 | 641 | 130 | 1,039 | 1,254 | R 937 | R 7,865 | 1 | — | — | 1,576 | — | 3,763 | — |
| 1970 | 1,657 | 88 | 3,220 | 2,228 | 561 | 953 | 137 | 1,036 | 1,128 | R 1,182 | R 10,444 | 1 | — | — | 2,334 | — | 5,656 | — |
| 1975 | 1,871 | 73 | 2,231 | 3,419 | 193 | 1,498 | 156 | 860 | 2,327 | R 1,121 | R 11,805 | 1 | — | — | 4,407 | — | 10,630 | — |
| 1980 | 1,757 | 60 | 2,284 | 3,983 | 384 | 1,860 | 238 | 695 | 1,640 | R 1,826 | R 12,910 | 1 | — | — | 6,900 | — | 16,778 | — |
| 1985 | 791 | 48 | 3,103 | 2,293 | 28 | 621 | 217 | 580 | 40 | R 1,214 | R 8,096 | 1 | — | — | 5,468 | — | 12,848 | — |
| 1990 | 729 | 66 | 3,257 | 2,683 | 18 | 975 | 244 | 408 | 13 | R 1,351 | R 8,949 | R f 95 | — | — | 6,587 | — | R 14,409 | — |
| 1991 | 738 | 80 | 3,107 | 3,531 | 17 | 1,203 | 218 | 503 | 34 | R 1,232 | R 9,844 | R 124 | — | — | 6,748 | — | R 14,670 | — |
| 1992 | 735 | 79 | 3,190 | 4,350 | 7 | 1,125 | 223 | 494 | 4 | R 1,559 | R 10,952 | R 82 | — | — | 6,849 | — | R 14,607 | — |
| 1993 | 780 | 94 | 3,413 | 3,626 | 12 | 1,284 | 227 | 504 | 11 | R 1,441 | R 10,518 | R 110 | — | — | 7,024 | — | R 14,836 | — |
| 1994 | 857 | 95 | 4,188 | 3,126 | 4 | 1,184 | 237 | 583 | 1 | R 1,558 | R 10,882 | R 117 | — | — | 9,620 | — | R 20,076 | — |
| 1995 | 729 | 98 | 3,720 | 3,184 | 5 | 1,294 | 233 | 541 | (s) | R 1,482 | R 10,458 | R 111 | — | — | 9,706 | — | R 20,237 | — |
| 1996 | 367 | 111 | 3,904 | 4,119 | 6 | R 1,357 | 226 | 631 | 4 | R 1,958 | R 12,206 | R 119 | — | — | 9,947 | — | R 20,730 | — |
| 1997 | 780 | 103 | 2,574 | 4,066 | 5 | R 1,536 | 239 | 681 | 3 | R 1,955 | R 11,059 | R 68 | — | — | 10,297 | — | R 21,420 | — |
| 1998 | 353 | 118 | 4,749 | 3,839 | 11 | 1,186 | 250 | 625 | (s) | 1,799 | 12,460 | 116 | — | — | 9,998 | — | 20,655 | — |
| 1999 | 365 | 113 | 2,137 | 3,622 | 6 | 538 | 253 | 564 | 1 | 1,865 | 8,985 | 119 | — | — | 9,521 | — | 18,654 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | |
| 1960 | 36.6 | 71.8 | 10.7 | 10.3 | 0.9 | 2.4 | 0.6 | 6.8 | 10.0 | R 4.0 | R 45.8 | (s) | 2.2 | 0.0 | 4.4 | R 160.7 | 10.9 | R 171.7 |
| 1965 | 44.2 | 74.9 | 9.4 | 11.6 | 2.5 | 2.6 | 0.8 | 5.5 | 7.9 | R 5.5 | 45.8 | (s) | 2.9 | 0.0 | 5.4 | R 173.2 | 12.8 | 186.1 |
| 1970 | 41.4 | 85.3 | 21.4 | 13.0 | 3.2 | 3.6 | 0.8 | 5.4 | 7.1 | R 6.9 | R 61.4 | (s) | 4.4 | 0.0 | 8.0 | R 200.5 | 19.3 | R 219.8 |
| 1975 | 45.8 | 65.6 | 14.8 | 19.9 | 1.1 | 5.6 | 0.9 | 4.5 | 14.6 | R 6.6 | R 68.1 | (s) | 4.3 | 0.0 | 15.0 | R 198.8 | 36.3 | R 235.1 |
| 1980 | 43.1 | 59.9 | 15.2 | 23.2 | 2.2 | 6.8 | 1.4 | 3.6 | 10.3 | R 10.5 | R 73.3 | (s) | R 1.3 | 0.0 | 23.5 | R 201.1 | 57.2 | R 258.3 |
| 1985 | 17.1 | 47.7 | 20.6 | 13.4 | 0.2 | 2.2 | 1.3 | 3.0 | 0.2 | R 7.2 | R 48.2 | (s) | R 1.5 | 0.0 | 18.7 | R 133.1 | 43.8 | R 177.0 |
| 1990 | 15.4 | 66.7 | 21.6 | 15.6 | 0.1 | 3.5 | 1.5 | 2.1 | 0.1 | R 8.1 | R 52.7 | R f 1.0 | R 1.0 | f 0.2 | 22.5 | R f 159.4 | 49.2 | R 208.5 |
| 1991 | 15.6 | 82.4 | 20.6 | 20.6 | 0.1 | 4.3 | 1.3 | 2.6 | 0.2 | R 7.4 | R 57.2 | R 1.3 | R 1.1 | 0.2 | 23.0 | R 180.8 | 50.1 | R 230.9 |
| 1992 | 14.8 | 80.6 | 21.2 | 25.3 | (s) | 4.1 | 1.4 | 2.6 | (s) | R 9.3 | R 63.9 | R 0.9 | R 1.1 | 0.2 | 23.4 | R 184.7 | R 49.8 | R 234.6 |
| 1993 | 16.3 | 94.9 | 22.6 | 21.1 | 0.1 | 4.6 | 1.4 | 2.6 | 0.1 | R 8.6 | R 61.2 | R 1.1 | R 1.1 | 0.2 | 24.0 | R 198.8 | 50.6 | R 249.4 |
| 1994 | 18.5 | 95.9 | 27.8 | 18.2 | (s) | 4.3 | 1.4 | R 3.0 | (s) | R 9.3 | R 64.2 | 1.2 | R 1.3 | 0.2 | 32.8 | R 214.0 | 68.5 | R 282.5 |
| 1995 | 15.8 | 99.3 | 24.7 | 18.5 | (s) | 4.7 | 1.4 | 2.8 | (s) | R 8.9 | R 61.1 | R 1.7 | R 1.7 | 0.2 | 33.1 | R 212.3 | 69.0 | R 281.3 |
| 1996 | 7.9 | 113.9 | 25.9 | 24.0 | (s) | R 4.9 | 1.4 | 3.3 | (s) | R 11.5 | R 71.1 | 1.2 | R 1.4 | 0.2 | 33.9 | R 229.5 | R 70.7 | R 300.3 |
| 1997 | 16.8 | 104.6 | 17.1 | 23.7 | (s) | R 5.6 | 1.4 | R 3.5 | (s) | R 11.5 | R 62.9 | R 0.7 | R 1.3 | 0.2 | 35.1 | R 221.7 | R 73.1 | R 294.8 |
| 1998 | 7.5 | 119.8 | 31.5 | 22.4 | 0.1 | 4.3 | 1.5 | 3.3 | (s) | 10.6 | 73.6 | 1.2 | 0.5 | 0.2 | 34.1 | 236.9 | 70.5 | 307.4 |
| 1999 | 7.8 | 113.7 | 14.2 | 21.1 | (s) | 1.9 | 1.5 | 2.9 | (s) | 10.9 | 52.7 | 1.2 | 1.3 | 0.2 | 32.5 | 209.5 | 63.6 | 273.1 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 51. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Colorado

| Year | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | 25 | 1 | 1,125 | 2,146 | 480 | 93 | 280 | 15,023 | 137 | 19,284 | 0 | 0 | — | 0 | — |
| 1965 | 6 | 2 | 1,111 | 1,763 | 3,426 | 81 | 286 | 18,097 | 713 | 25,476 | 0 | 0 | — | 0 | — |
| 1970 | 3 | 2 | 337 | 2,655 | 7,476 | 133 | 286 | 24,943 | 99 | 35,929 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 5 | 267 | 4,290 | 7,151 | 188 | 302 | 30,948 | 104 | 43,250 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 8 | 265 | 6,554 | 4,725 | 45 | 402 | 33,275 | 0 | 45,267 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 7 | 142 | 6,358 | 7,861 | 68 | 366 | 34,986 | 146 | 49,927 | R e 446 | 0 | — | 0 | — |
| 1990 | 0 | 9 | 167 | 7,175 | 6,109 | 75 | 412 | 34,889 | 0 | 48,826 | R 230 | 0 | — | 0 | — |
| 1991 | 0 | 8 | 155 | 7,622 | 6,503 | 83 | 369 | 34,837 | 0 | 49,568 | R 241 | 0 | — | 0 | — |
| 1992 | 0 | 8 | 136 | 7,173 | 7,363 | 68 | 376 | 35,135 | 0 | 50,251 | R 377 | 0 | — | 0 | — |
| 1993 | 0 | 8 | 124 | 8,476 | 8,959 | 84 | 383 | 37,374 | 0 | 55,400 | R 613 | 0 | — | 0 | — |
| 1994 | 0 | 10 | 128 | 8,864 | 7,930 | 138 | 400 | 38,751 | 1 | 56,212 | R 589 | 1 | — | 2 | — |
| 1995 | 0 | 11 | 124 | 9,366 | 7,428 | 69 | 393 | 40,757 | 0 | 58,136 | R 897 | 4 | — | 8 | — |
| 1996 | 0 | 11 | 124 | 9,638 | 7,765 | R 70 | 382 | 42,132 | (s) | R 60,109 | R 1,547 | 4 | — | 9 | — |
| 1997 | 0 | 12 | 143 | 8,437 | 7,174 | R 31 | 403 | 43,026 | 0 | R 59,214 | R 1,521 | 5 | — | 10 | — |
| 1998 | 0 | 9 | 144 | 10,787 | 6,792 | 25 | 422 | 44,178 | 0 | 62,348 | 1,504 | 5 | — | 10 | — |
| 1999 | 0 | 8 | 195 | 11,648 | 7,800 | 70 | 426 | 46,339 | 0 | 66,478 | 1,276 | 5 | — | 9 | — |

### Trillion Btu

| Year | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 0.6 | 1.3 | 5.7 | 12.5 | 2.6 | 0.4 | 1.7 | 78.9 | 0.9 | 102.6 | 0.0 | 0.0 | 104.5 | 0.0 | 104.5 |
| 1965 | 0.1 | 1.7 | 5.6 | 10.3 | 19.3 | 0.3 | 1.7 | 95.1 | 4.5 | 136.8 | 0.0 | 0.0 | 138.6 | 0.0 | 138.6 |
| 1970 | 0.1 | 1.8 | 1.7 | 15.5 | 42.3 | 0.5 | 1.7 | 131.0 | 0.6 | 193.3 | 0.0 | 0.0 | 195.2 | 0.0 | 195.2 |
| 1975 | (s) | 4.8 | 1.3 | 25.0 | 40.4 | 0.7 | 1.8 | 162.6 | 0.7 | 232.5 | 0.0 | 0.0 | 237.3 | 0.0 | 237.3 |
| 1980 | 0.0 | 7.5 | 1.3 | 38.2 | 26.7 | 0.2 | 2.4 | 174.8 | 0.0 | 243.6 | 0.0 | 0.0 | 251.1 | 0.0 | 251.1 |
| 1985 | 0.0 | 7.1 | 0.7 | 37.0 | 44.5 | 0.2 | 2.2 | 183.8 | 0.9 | 269.4 | R e 1.6 | 0.0 | e 276.5 | 0.0 | e 276.5 |
| 1990 | 0.0 | 9.2 | 0.8 | 41.8 | 34.6 | 0.3 | 2.5 | 183.3 | 0.0 | 263.2 | R 0.8 | 0.0 | 272.4 | 0.0 | 272.4 |
| 1991 | 0.0 | 8.6 | 0.8 | 44.4 | 36.8 | 0.3 | 2.2 | 183.0 | 0.0 | 267.5 | R 0.9 | 0.0 | 276.2 | 0.0 | 276.2 |
| 1992 | 0.0 | 8.5 | 0.7 | 41.8 | 41.6 | 0.2 | 2.3 | 184.6 | 0.0 | 271.2 | R 1.3 | 0.0 | 279.7 | 0.0 | 279.7 |
| 1993 | 0.0 | 7.7 | 0.6 | 49.4 | 50.7 | 0.3 | 2.3 | 196.3 | 0.0 | 299.6 | R 2.2 | 0.0 | 307.4 | 0.0 | 307.4 |
| 1994 | 0.0 | 10.1 | 0.6 | 51.6 | 44.9 | 0.5 | 2.4 | R 202.7 | (s) | R 302.8 | R 2.1 | (s) | R 312.9 | (s) | R 312.9 |
| 1995 | 0.0 | 11.5 | 0.6 | 54.6 | 42.0 | 0.2 | 2.4 | R 212.6 | 0.0 | R 312.4 | R 3.2 | (s) | R 323.9 | (s) | R 323.9 |
| 1996 | 0.0 | 11.2 | 0.6 | 56.1 | 44.0 | 0.3 | 2.3 | R 219.8 | (s) | R 323.1 | R 5.5 | (s) | R 334.3 | (s) | R 334.3 |
| 1997 | 0.0 | 12.5 | 0.7 | 49.1 | 40.7 | R 0.1 | 2.4 | R 224.3 | 0.0 | R 317.4 | R 5.4 | (s) | R 329.9 | (s) | R 330.0 |
| 1998 | 0.0 | 9.4 | 0.7 | 62.8 | 38.5 | 0.1 | 2.6 | 230.3 | 0.0 | 335.0 | 5.3 | (s) | 344.4 | (s) | 344.4 |
| 1999 | 0.0 | 8.4 | 1.0 | 67.8 | 44.2 | 0.3 | 2.6 | 241.5 | 0.0 | 357.4 | 4.5 | (s) | 365.8 | (s) | 365.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 52. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Colorado

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 1,221 | 37 | 106 | 10 | 0 | 116 | 0 | 969 | 0 | 0 | 0 | — |
| 1965 | 2,181 | 36 | 40 | 4 | 0 | 43 | 0 | 937 | 0 | 0 | 0 | — |
| 1970 | 3,212 | 51 | 242 | 22 | 0 | 264 | 0 | 1,234 | 0 | 0 | 0 | — |
| 1975 | 5,710 | 53 | 882 | 619 | 0 | 1,501 | 0 | 1,506 | 0 | 0 | 0 | — |
| 1980 | 10,124 | 32 | 171 | 273 | 0 | 444 | 667 | 1,716 | 0 | 0 | 0 | — |
| 1985 | 14,295 | 5 | 8 | 113 | 0 | 121 | -32 | 2,357 | 3 | 0 | 0 | — |
| 1990 | 15,924 | 5 | (s) | 50 | 0 | 50 | 0 | 1,276 | (s) | 0 | 0 | — |
| 1991 | 15,416 | 6 | 46 | 35 | 0 | 82 | 0 | 1,663 | (s) | 0 | 0 | — |
| 1992 | 15,902 | 5 | 37 | 47 | 0 | 84 | 0 | 1,505 | 0 | 0 | 0 | — |
| 1993 | 16,252 | 5 | 0 | 28 | 0 | 28 | 0 | 1,858 | 0 | 0 | 0 | — |
| 1994 | 16,596 | 5 | (s) | 26 | 0 | 26 | 0 | 1,540 | 0 | 0 | 0 | — |
| 1995 | 16,222 | 4 | 8 | 22 | 0 | 30 | 0 | 2,101 | 0 | 0 | 0 | — |
| 1996 | 16,841 | 5 | 16 | 35 | 0 | 51 | 0 | 1,585 | 0 | 0 | 0 | — |
| 1997 | 17,116 | 6 | (s) | 38 | 0 | 38 | 0 | R 1,962 | 0 | 0 | 0 | — |
| 1998 | 17,663 | 11 | (s) | 83 | 0 | 83 | 0 | 1,392 | 0 | 0 | 0 | — |
| 1999 | 17,704 | 19 | 1 | 71 | 0 | 72 | 0 | 1,481 | 0 | 0 | 0 | — |
| | Trillion Btu | | | | | | | | | | | |
| 1960 | 25.1 | 38.3 | 0.7 | 0.1 | 0.0 | 0.7 | 0.0 | 10.4 | 0.0 | 0.0 | 0.0 | 74.6 |
| 1965 | 46.5 | 32.4 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 9.8 | 0.0 | 0.0 | 0.0 | 89.0 |
| 1970 | 69.1 | 49.9 | 1.5 | 0.1 | 0.0 | 1.6 | 0.0 | 13.0 | 0.0 | 0.0 | 0.0 | 133.6 |
| 1975 | 113.1 | 52.7 | 5.5 | 3.6 | 0.0 | 9.2 | 0.0 | 15.7 | 0.0 | 0.0 | 0.0 | 190.6 |
| 1980 | 202.4 | 31.3 | 1.1 | 1.6 | 0.0 | 2.7 | 7.3 | 17.8 | 0.0 | 0.0 | 0.0 | 261.5 |
| 1985 | 278.7 | 4.9 | (s) | 0.7 | 0.0 | 0.7 | -0.3 | 24.6 | (s) | 0.0 | 0.0 | 308.6 |
| 1990 | 312.4 | 5.4 | (s) | 0.3 | 0.0 | 0.3 | 0.0 | 13.3 | (s) | 0.0 | 0.0 | 331.3 |
| 1991 | 304.8 | 5.7 | 0.3 | 0.2 | 0.0 | 0.5 | 0.0 | 17.4 | (s) | 0.0 | 0.0 | 328.4 |
| 1992 | 315.5 | 5.0 | 0.2 | 0.3 | 0.0 | 0.5 | 0.0 | 15.6 | 0.0 | 0.0 | 0.0 | 336.6 |
| 1993 | 321.4 | 4.9 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 19.2 | 0.0 | 0.0 | 0.0 | 345.6 |
| 1994 | 330.1 | 5.1 | (s) | 0.1 | 0.0 | 0.2 | 0.0 | 15.9 | 0.0 | 0.0 | 0.0 | 351.2 |
| 1995 | 321.0 | 3.8 | (s) | 0.1 | 0.0 | 0.2 | 0.0 | 21.7 | 0.0 | 0.0 | 0.0 | 346.7 |
| 1996 | 332.1 | 5.5 | 0.1 | 0.2 | 0.0 | 0.3 | 0.0 | 16.4 | 0.0 | 0.0 | 0.0 | 354.2 |
| 1997 | 337.9 | 5.5 | (s) | 0.2 | 0.0 | 0.2 | 0.0 | R 20.3 | 0.0 | 0.0 | 0.0 | 364.1 |
| 1998 | 347.4 | 10.6 | (s) | 0.5 | 0.0 | 0.5 | 0.0 | 14.4 | 0.0 | 0.0 | 0.0 | 372.8 |
| 1999 | 345.2 | 19.8 | (s) | 0.4 | 0.0 | 0.4 | 0.0 | 15.3 | 0.0 | 0.0 | 0.0 | 380.7 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 53. Energy Consumption Estimates by Source, Selected Years 1960-1999, Connecticut**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | Wood and Waste | | Million kWh | |
| 1960 | 3,851 | 28 | 1,088 | 104 | 23,369 | 1,129 | 1,914 | 1,092 | 350 | 19,349 | 14,622 | 222 | 63,238 | 0 | 424 | — | — | -708 | — |
| 1965 | 4,957 | 41 | 1,326 | 172 | 21,186 | 1,411 | 1,308 | 1,383 | 563 | 22,933 | 17,159 | 660 | 68,100 | 0 | 187 | — | — | -946 | — |
| 1970 | 2,060 | 61 | 1,019 | 124 | 24,117 | 2,897 | 778 | 1,854 | 569 | 28,638 | 35,595 | 6,190 | 101,782 | 3,604 | 329 | — | — | -9,907 | — |
| 1975 | 55 | 64 | 1,262 | 90 | 21,613 | 2,124 | 588 | 2,209 | 396 | 31,822 | 32,512 | 617 | 93,233 | 8,135 | 493 | — | — | -5,957 | — |
| 1980 | 16 | 73 | 630 | 89 | 22,304 | 1,973 | 491 | 1,501 | 455 | 30,205 | 29,334 | 2,012 | 88,994 | 11,835 | 256 | — | — | -5,609 | — |
| 1985 | 815 | 78 | 2,095 | 71 | 18,909 | 1,085 | 712 | 1,283 | 414 | 30,999 | 21,040 | 1,857 | 78,464 | 12,721 | 307 | — | — | -501 | — |
| 1990 | 971 | 98 | 1,585 | 94 | 20,398 | 2,344 | 315 | 1,592 | 466 | 31,140 | 16,590 | 1,305 | 75,829 | 19,776 | R h 576 | — | — | R -13,016 | — |
| 1991 | 856 | 102 | 1,976 | 28 | 19,837 | 2,246 | 379 | 1,485 | 417 | 31,870 | 14,536 | 1,515 | 74,289 | 12,243 | R 820 | — | — | R 11,581 | — |
| 1992 | 849 | 111 | 1,678 | 28 | 22,236 | 2,293 | 249 | 1,885 | 425 | 32,596 | 10,889 | 1,583 | 73,862 | 16,771 | R 1,071 | — | — | R 4,411 | — |
| 1993 | 788 | 112 | 1,577 | 30 | 22,099 | 2,312 | 279 | 1,684 | 433 | 33,103 | 8,845 | 1,595 | 71,957 | 21,802 | R 1,258 | — | — | R -7,859 | — |
| 1994 | 862 | 120 | 1,676 | 28 | 20,347 | 2,452 | 260 | 1,487 | 453 | 32,668 | 7,597 | 1,624 | 68,592 | 20,160 | R 1,326 | — | — | R -1,866 | — |
| 1995 | 906 | 132 | 1,911 | 41 | 20,982 | 2,489 | 244 | 1,410 | 445 | 30,591 | 6,822 | 1,553 | 66,486 | 18,749 | R 1,240 | — | — | R -1,292 | — |
| 1996 | 931 | 128 | 1,572 | 37 | 22,545 | 2,718 | 221 | R 1,517 | 432 | 32,663 | 10,432 | R 4,064 | R 76,201 | 6,225 | R 1,556 | — | — | R 34,457 | — |
| 1997 | 1,065 | 137 | 1,217 | 23 | 22,877 | 2,371 | 286 | R 1,732 | 456 | 32,934 | 14,688 | R 4,411 | R 80,996 | -125 | R 1,503 | — | — | R 41,312 | — |
| 1998 | 596 | 122 | 552 | 52 | 20,401 | 2,212 | 355 | 2,243 | 477 | 33,589 | 15,012 | 4,434 | 79,328 | 3,243 | 1,371 | — | — | 37,294 | — |
| 1999 | 5 | 132 | 666 | 32 | 22,457 | 2,456 | 355 | 1,673 | 482 | 36,283 | 10,628 | 4,444 | 79,478 | 12,675 | 1,381 | — | — | 19,243 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 101.7 | 29.4 | 7.2 | 0.5 | 136.1 | 6.4 | 10.9 | 4.4 | 2.1 | 101.6 | 91.9 | 1.3 | 362.4 | 0.0 | 4.6 | 12.8 | 0.0 | -2.4 | 508.6 |
| 1965 | 128.6 | 41.7 | 8.8 | 0.9 | 123.4 | 8.0 | 7.4 | 5.5 | 3.4 | 120.5 | 107.9 | 3.7 | 389.4 | 0.0 | 2.0 | 13.5 | 0.0 | -3.2 | 572.0 |
| 1970 | 48.6 | 61.5 | 6.8 | 0.6 | 140.5 | 16.4 | 4.4 | 7.0 | 3.5 | 150.4 | 223.8 | 34.0 | 587.4 | 39.6 | 3.5 | 15.8 | 0.0 | -33.8 | 722.6 |
| 1975 | 1.3 | 64.3 | 8.4 | 0.5 | 125.9 | 12.0 | 3.3 | 8.2 | 2.4 | 167.2 | 204.4 | 3.4 | 535.7 | 89.6 | 5.1 | 17.1 | 0.0 | -20.3 | 692.8 |
| 1980 | 0.4 | 74.2 | 4.2 | 0.4 | 129.9 | 11.2 | 2.8 | 5.5 | 2.8 | 158.7 | 184.4 | 11.0 | 510.9 | 129.1 | 2.7 | R 35.3 | 0.0 | -19.1 | R 733.3 |
| 1985 | 21.3 | 80.6 | 13.9 | 0.4 | 110.1 | 6.1 | 4.0 | 4.6 | 2.5 | 162.8 | 132.3 | 10.0 | 446.9 | 137.6 | 3.2 | R 36.0 | 0.0 | -1.7 | R 723.7 |
| 1990 | 25.7 | 100.9 | 10.5 | 0.5 | 118.8 | 13.3 | 1.8 | 5.8 | 2.8 | 163.6 | 104.3 | 7.1 | 428.4 | 211.2 | R h 6.0 | R 29.7 | h 0.1 | R -44.4 | R h 757.7 |
| 1991 | 22.6 | 105.1 | 13.1 | 0.1 | 115.5 | 12.7 | 2.1 | 5.4 | 2.5 | 167.4 | 91.4 | 8.2 | 418.6 | 131.5 | R 8.6 | R 30.8 | 0.1 | R 39.5 | R 758.6 |
| 1992 | 22.3 | 114.4 | 11.1 | 0.1 | 129.5 | 13.0 | 1.4 | 6.8 | 2.6 | 171.2 | 68.5 | 8.5 | 412.8 | 179.1 | R 11.1 | R 35.2 | 0.1 | R 15.1 | R 792.7 |
| 1993 | 20.6 | 114.5 | 10.5 | 0.2 | 128.7 | 13.1 | 1.6 | 6.1 | 2.6 | 173.9 | 55.6 | 8.6 | 400.8 | 232.9 | R 13.0 | R 35.3 | 0.1 | -26.8 | R 792.7 |
| 1994 | 22.5 | 123.6 | 11.1 | 0.1 | 118.5 | 13.9 | 1.5 | 5.4 | 2.7 | R 170.9 | 47.8 | 8.8 | R 380.7 | 215.2 | R 13.7 | R 36.1 | 0.2 | R -6.4 | R 789.1 |
| 1995 | 23.7 | 136.0 | 12.7 | 0.2 | 122.2 | 14.1 | 1.4 | 5.1 | 2.7 | R 159.5 | 42.9 | 8.4 | R 369.2 | 199.8 | R 12.8 | R 44.7 | R 0.2 | R -4.4 | R 785.9 |
| 1996 | 24.4 | 131.5 | 10.4 | 0.2 | 131.3 | 15.4 | 1.3 | R 5.5 | 2.6 | R 170.4 | 65.6 | R 21.8 | R 424.4 | 66.1 | R 16.1 | R 50.0 | 0.2 | R 117.6 | R 834.4 |
| 1997 | 28.0 | 140.7 | 8.1 | 0.1 | 133.3 | 13.4 | 1.6 | R 6.3 | 2.8 | R 171.7 | 92.3 | R 23.8 | R 453.4 | -1.3 | R 15.6 | R 45.0 | 0.2 | R 141.0 | R 829.0 |
| 1998 | 15.7 | 125.0 | 3.7 | 0.3 | 118.8 | 12.5 | 2.0 | 8.1 | 2.9 | 175.1 | 94.4 | 23.9 | 441.7 | 34.5 | 14.2 | 40.2 | 0.2 | 127.2 | 803.6 |
| 1999 | 0.1 | 135.0 | 4.4 | 0.2 | 130.8 | 13.9 | 2.0 | 6.1 | 2.9 | 189.1 | 66.8 | 23.9 | 440.1 | 134.6 | 14.3 | 43.5 | 0.3 | 65.7 | 839.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 54.  Residential Energy Consumption Estimates, Selected Years 1960-1999, Connecticut

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 95 | 16 | 15,480 | 1,507 | 624 | 17,611 | 255 | — | — | 2,724 | — | 6,776 | — |
| 1965 | 46 | 22 | 13,649 | 1,101 | 692 | 15,442 | 239 | — | — | 3,812 | — | 9,101 | — |
| 1970 | 25 | 31 | 14,239 | 526 | 802 | 15,568 | 308 | — | — | 6,396 | — | 15,501 | — |
| 1975 | 13 | 32 | 12,950 | 291 | 768 | 14,009 | 332 | — | — | 7,449 | — | 17,969 | — |
| 1980 | 10 | 32 | 13,468 | 233 | 595 | 14,296 | R 821 | — | — | 8,218 | — | 19,983 | — |
| 1985 | 22 | 33 | 9,758 | 605 | 639 | 11,001 | 698 | — | — | 8,638 | — | 20,295 | — |
| 1990 | 7 | 37 | 11,426 | 196 | 857 | 12,479 | 483 | — | — | 10,376 | — | R 22,698 | — |
| 1991 | 8 | 37 | 11,236 | 175 | 950 | 12,360 | 509 | — | — | 10,441 | — | R 22,697 | — |
| 1992 | 10 | 42 | 13,434 | 196 | 1,220 | 14,850 | 535 | — | — | 10,496 | — | R 22,386 | — |
| 1993 | 8 | 42 | 13,812 | 211 | 1,051 | 15,073 | R 551 | — | — | 10,597 | — | R 22,382 | — |
| 1994 | 7 | 42 | 12,564 | 162 | 941 | 13,667 | R 540 | — | — | 10,898 | — | R 22,744 | — |
| 1995 | 11 | 41 | 12,129 | 122 | 875 | 13,126 | R 599 | — | — | 10,760 | — | R 22,434 | — |
| 1996 | 3 | 44 | 13,392 | 124 | R 1,061 | R 14,577 | R 598 | — | — | 10,943 | — | R 22,805 | — |
| 1997 | 4 | 41 | 13,362 | 143 | R 1,208 | R 14,713 | R 390 | — | — | 10,859 | — | R 22,588 | — |
| 1998 | 4 | 35 | 11,276 | 126 | 1,530 | 12,933 | 344 | — | — | 10,935 | — | 22,589 | — |
| 1999 | 3 | 38 | 12,976 | 177 | 1,182 | 14,335 | 368 | — | — | 11,619 | — | 22,765 | — |

| | | | | | | Trillion Btu | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2.4 | 16.6 | 90.2 | 8.5 | 2.5 | 101.2 | 5.1 | 0.0 | 0.0 | 9.3 | 134.5 | 23.1 | 157.7 |
| 1965 | 1.1 | 22.7 | 79.5 | 6.2 | 2.8 | 88.5 | 4.8 | 0.0 | 0.0 | 13.0 | 130.1 | 31.1 | 161.2 |
| 1970 | 0.6 | 31.7 | 82.9 | 3.0 | 3.0 | 89.0 | 6.2 | 0.0 | 0.0 | 21.8 | 149.2 | 52.9 | 202.1 |
| 1975 | 0.3 | 32.3 | 75.4 | 1.7 | 2.9 | 79.9 | 6.6 | 0.0 | 0.0 | 25.4 | 144.6 | 61.3 | 205.9 |
| 1980 | 0.2 | 32.7 | 78.5 | 1.3 | 2.2 | 82.0 | 16.4 | 0.0 | 0.0 | 28.0 | 159.4 | 68.2 | R 227.6 |
| 1985 | 0.5 | 33.8 | 56.8 | 3.4 | 2.3 | 62.6 | 14.0 | 0.0 | 0.0 | 29.5 | 140.3 | 69.2 | 209.5 |
| 1990 | 0.2 | 38.7 | 66.6 | 1.1 | 3.1 | 70.8 | 9.7 | e 0.0 | e 0.1 | 35.4 | e 154.8 | 77.4 | e 232.2 |
| 1991 | 0.2 | 38.3 | 65.4 | 1.0 | 3.4 | 69.9 | 10.2 | 0.0 | 0.1 | 35.6 | 154.3 | R 77.4 | R 231.7 |
| 1992 | 0.2 | 43.6 | 78.3 | 1.1 | 4.4 | 83.8 | 10.7 | 0.0 | 0.1 | 35.8 | 174.2 | R 76.4 | R 250.6 |
| 1993 | 0.2 | 43.4 | 80.5 | 1.2 | 3.8 | 85.4 | 11.0 | 0.0 | 0.1 | 36.2 | 176.2 | 76.4 | 252.6 |
| 1994 | 0.2 | 42.9 | 73.2 | 0.9 | 3.4 | 77.5 | 10.8 | 0.0 | 0.1 | 37.2 | 168.7 | 77.6 | 246.3 |
| 1995 | 0.3 | 42.0 | 70.7 | 0.7 | 3.2 | 74.5 | 12.0 | 0.0 | R 0.2 | 36.7 | R 165.7 | 76.5 | R 242.2 |
| 1996 | 0.1 | 45.0 | 78.0 | 0.7 | R 3.8 | R 82.5 | R 12.0 | 0.0 | 0.2 | 37.3 | R 177.2 | R 77.8 | R 255.0 |
| 1997 | 0.1 | 41.7 | 77.8 | 0.8 | R 4.4 | R 83.0 | R 7.8 | 0.0 | 0.2 | 37.1 | R 169.9 | R 77.1 | R 246.9 |
| 1998 | 0.1 | 36.2 | 65.7 | 0.7 | 5.5 | 71.9 | 6.9 | 0.0 | 0.2 | 37.3 | 152.7 | 77.1 | 229.8 |
| 1999 | 0.1 | 39.3 | 75.6 | 1.0 | 4.3 | 80.9 | 7.4 | (s) | 0.3 | 39.6 | 167.5 | 77.7 | 245.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 55. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Connecticut

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 98 | 3 | 5,029 | 52 | 110 | 63 | 871 | 6,125 | 5 | — | 1,825 | — | 4,539 | — |
| 1965 | 35 | 6 | 4,434 | 38 | 122 | 76 | 958 | 5,629 | 5 | — | 2,873 | — | 6,861 | — |
| 1970 | 17 | 15 | 4,626 | 18 | 142 | 97 | 995 | 5,877 | 6 | — | 4,649 | — | 11,265 | — |
| 1975 | 9 | 16 | 4,207 | 10 | 136 | 239 | 656 | 5,248 | 6 | — | 6,000 | — | 14,472 | — |
| 1980 | 6 | 20 | 2,905 | 7 | 105 | 275 | 1,171 | 4,463 | 20 | — | 7,039 | — | 17,116 | — |
| 1985 | 15 | 25 | 3,547 | 64 | 113 | 142 | 1,679 | 5,546 | R 19 | — | 8,731 | — | 20,514 | — |
| 1990 | 5 | 29 | 2,929 | 51 | 151 | 204 | 1,049 | 4,385 | R 31 | — | 10,711 | — | R 23,432 | — |
| 1991 | 5 | 27 | 2,984 | 167 | 168 | 656 | 529 | 4,504 | R 32 | — | 10,908 | — | R 23,714 | — |
| 1992 | 10 | 30 | 2,944 | 45 | 215 | 1,576 | 893 | 5,673 | R 35 | — | 10,851 | — | R 23,144 | — |
| 1993 | 5 | 31 | 2,564 | 44 | 185 | 1,588 | 413 | 4,795 | 44 | — | 11,044 | — | R 23,328 | — |
| 1994 | 5 | 39 | 2,469 | 51 | 166 | 1,041 | 656 | 4,382 | 45 | — | 11,210 | — | R 23,395 | — |
| 1995 | 14 | 38 | 2,921 | 27 | 154 | 250 | 454 | 3,807 | 45 | — | 11,297 | — | R 23,553 | — |
| 1996 | 2 | 40 | 3,001 | 72 | R 187 | 823 | 462 | R 4,545 | 49 | — | 11,546 | — | R 24,062 | — |
| 1997 | 3 | 43 | 3,029 | 104 | R 213 | 983 | 328 | R 4,656 | R 43 | — | 11,654 | — | R 24,242 | — |
| 1998 | 3 | 42 | 2,682 | 176 | 270 | 725 | 170 | 4,023 | 43 | — | 12,184 | — | 25,169 | — |
| 1999 | 2 | 48 | 2,664 | 82 | 209 | 778 | 252 | 3,984 | 52 | — | 12,349 | — | 24,195 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Motor Gasoline | Residual Fuel | Total | Wood | Geothermal | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2.4 | 3.3 | 29.3 | 0.3 | 0.4 | 0.3 | 5.5 | 35.8 | 0.1 | 0.0 | 6.2 | 47.9 | 15.5 | 63.4 |
| 1965 | 0.9 | 5.9 | 25.8 | 0.2 | 0.5 | 0.4 | 6.0 | 33.0 | 0.1 | 0.0 | 9.8 | 49.6 | 23.4 | 73.0 |
| 1970 | 0.4 | 14.7 | 26.9 | 0.1 | 0.5 | 0.5 | 6.3 | 34.3 | 0.1 | 0.0 | 15.9 | 65.5 | 38.4 | 103.9 |
| 1975 | 0.2 | 16.0 | 24.5 | 0.1 | 0.5 | 1.3 | 4.1 | 30.4 | 0.1 | 0.0 | 20.5 | 67.3 | 49.4 | 116.6 |
| 1980 | 0.1 | 20.6 | 16.9 | (s) | 0.4 | 1.4 | 7.4 | 26.2 | 0.4 | 0.0 | 24.0 | 71.3 | 58.4 | 129.7 |
| 1985 | 0.3 | 25.3 | 20.7 | 0.4 | 0.4 | 0.7 | 10.6 | 32.7 | R 0.4 | 0.0 | 29.8 | R 88.6 | 70.0 | R 158.6 |
| 1990 | 0.1 | 30.4 | 17.1 | 0.3 | 0.5 | 1.1 | 6.6 | 25.6 | R 0.6 | e 0.0 | 36.5 | R e 93.2 | R 80.0 | R e 173.2 |
| 1991 | 0.1 | 27.7 | 17.4 | 0.9 | 0.6 | 3.4 | 3.3 | 25.7 | R 0.6 | 0.0 | 37.2 | R 91.4 | R 80.9 | R 172.3 |
| 1992 | 0.3 | 30.7 | 17.1 | 0.3 | 0.8 | 8.3 | 5.6 | 32.1 | R 0.7 | 0.0 | 37.0 | R 100.7 | R 79.0 | R 179.7 |
| 1993 | 0.1 | 32.3 | 14.9 | 0.3 | 0.7 | 8.3 | 2.6 | 26.8 | 0.9 | 0.0 | 37.7 | 97.8 | 79.6 | 177.4 |
| 1994 | 0.1 | 40.3 | 14.4 | 0.3 | 0.6 | R 5.4 | 4.1 | R 24.8 | 0.9 | 0.0 | 38.2 | 104.4 | 79.8 | R 184.2 |
| 1995 | 0.3 | 39.0 | 17.0 | 0.2 | 0.6 | 1.3 | 2.9 | 21.9 | 0.9 | 0.0 | 38.5 | 100.7 | R 80.4 | 181.0 |
| 1996 | 0.1 | 40.9 | 17.5 | 0.4 | R 0.7 | 4.3 | 2.9 | 25.8 | 1.0 | 0.0 | 39.4 | 107.1 | R 82.1 | R 189.2 |
| 1997 | 0.1 | 43.8 | 17.6 | 0.6 | R 0.8 | R 5.1 | 2.1 | R 26.2 | R 0.9 | 0.0 | 39.8 | R 110.7 | R 82.7 | R 193.4 |
| 1998 | 0.1 | 43.4 | 15.6 | 1.0 | 1.0 | 3.8 | 1.1 | 22.4 | 0.9 | 0.0 | 41.6 | 108.3 | 85.9 | 194.2 |
| 1999 | (s) | 48.7 | 15.5 | 0.5 | 0.8 | 4.1 | 1.6 | 22.4 | 1.0 | 0.0 | 42.1 | 114.3 | 82.6 | 196.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# C O N N E C T I C U T

## Table 56. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Connecticut

| Year | Coal Thousand Short Tons | Natural Gas a Billion Cubic Feet | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b Million kWh | Wood and Waste | Other b,d | Electricity b Million kWh | Net Energy | Electrical System Energy Losses e Million kWh | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum — Thousand Barrels | | | | | | | | | | | | | | | |
| 1960 | 866 | 7 | 1,088 | 1,665 | 354 | 355 | 93 | 243 | 11,950 | 222 | 15,968 | 26 | — | — | 2,837 | — | 7,056 | — |
| 1965 | 776 | 12 | 1,326 | 1,561 | 169 | 564 | 308 | 248 | 13,180 | 660 | 18,016 | 9 | — | — | 3,862 | — | 9,220 | — |
| 1970 | 142 | 15 | 1,019 | 1,968 | 234 | 890 | 331 | 269 | 13,710 | 6,190 | 24,611 | 3 | — | — | 5,094 | — | 12,344 | — |
| 1975 | 29 | 16 | 1,262 | 1,944 | 287 | 1,280 | 200 | 36 | 9,124 | 617 | 14,750 | 7 | — | — | 5,050 | — | 12,181 | — |
| 1980 | 0 | 20 | 630 | 3,235 | 251 | 785 | 208 | 66 | 6,683 | 2,012 | 13,870 | 6 | — | — | 5,944 | — | 14,454 | — |
| 1985 | 4 | 19 | 2,095 | 1,072 | 44 | 499 | 189 | 225 | 2,202 | 1,857 | 8,183 | 6 | — | — | 6,113 | — | 14,362 | — |
| 1990 | 1 | 25 | 1,585 | 1,018 | 68 | 548 | 213 | 263 | 1,434 | 1,305 | 6,434 | R f 52 | — | — | 6,100 | — | R 13,344 | — |
| 1991 | 3 | 33 | 1,976 | 1,080 | 37 | 327 | 191 | 239 | 996 | 1,515 | 6,360 | R 68 | — | — | 5,822 | — | R 12,658 | — |
| 1992 | 12 | 36 | 1,678 | 932 | 8 | 417 | 194 | 240 | 1,229 | 1,583 | 6,282 | R 67 | — | — | 5,780 | — | R 12,326 | — |
| 1993 | 30 | 37 | 1,577 | 822 | 24 | 415 | 198 | 196 | 1,442 | 1,595 | 6,269 | R 65 | — | — | 5,597 | — | R 11,822 | — |
| 1994 | 29 | 31 | 1,676 | 761 | 46 | 330 | 207 | 195 | 1,313 | 1,624 | 6,153 | R 72 | — | — | 5,917 | — | R 12,348 | — |
| 1995 | 0 | 33 | 1,911 | 825 | 95 | 355 | 203 | 195 | 767 | 1,553 | 5,903 | R 58 | — | — | 5,913 | — | R 12,329 | — |
| 1996 | 0 | 32 | 1,572 | 822 | 25 | R 247 | 197 | 223 | 980 | R 4,064 | R 8,130 | R 96 | — | — | 5,928 | — | R 12,355 | — |
| 1997 | 0 | 35 | 1,217 | 874 | 39 | R 295 | 208 | 232 | 395 | R 4,411 | R 7,671 | R 66 | — | — | 5,919 | — | R 12,312 | — |
| 1998 | 0 | 32 | 552 | 795 | 53 | 391 | 218 | 138 | 327 | 4,434 | 6,908 | 64 | — | — | 5,838 | — | 12,059 | — |
| 1999 | 0 | 32 | 666 | 787 | 97 | 249 | 220 | 210 | 486 | 4,444 | 7,160 | 57 | — | — | 5,836 | — | 11,434 | — |
| | | | Trillion Btu | | | | | | | | | | | | | | | |
| 1960 | 22.8 | 7.5 | 7.2 | 9.7 | 2.0 | 1.4 | 0.6 | 1.3 | 75.1 | 1.3 | 98.6 | 0.3 | 7.6 | 0.0 | 9.7 | 146.5 | 24.1 | 170.6 |
| 1965 | 20.4 | 12.7 | 8.8 | 9.1 | 1.0 | 2.3 | 1.9 | 1.3 | 82.9 | 3.7 | 110.8 | 0.1 | 8.7 | 0.0 | 13.2 | 165.9 | 31.5 | 197.3 |
| 1970 | 3.4 | 14.9 | 6.8 | 11.5 | 1.3 | 3.4 | 2.0 | 1.4 | 86.2 | 34.0 | 146.6 | (s) | 9.6 | 0.0 | 17.4 | 191.9 | 42.1 | 234.0 |
| 1975 | 0.7 | 15.6 | 8.4 | 11.3 | 1.6 | 4.8 | 1.2 | 0.2 | 57.4 | 3.4 | 88.3 | 0.1 | 10.3 | 0.0 | 17.2 | 132.2 | 41.6 | 173.8 |
| 1980 | 0.0 | 20.8 | 4.2 | 18.8 | 1.4 | 2.9 | 1.3 | 0.3 | 42.0 | 11.0 | 82.0 | 0.1 | R 18.5 | 0.0 | 20.3 | R 141.5 | 49.3 | R 190.8 |
| 1985 | 0.1 | 19.5 | 13.9 | 6.2 | 0.2 | 1.8 | 1.1 | 1.2 | 13.8 | 10.0 | 48.4 | 0.1 | R 21.6 | 0.0 | 20.9 | R 110.6 | 49.0 | R 159.6 |
| 1990 | (s) | 26.3 | 10.5 | 5.9 | 0.4 | 2.0 | 1.3 | 1.4 | 9.0 | 7.1 | 37.6 | R f 0.5 | R 15.1 | f 0.0 | 20.8 | R f 100.3 | 45.5 | f 145.8 |
| 1991 | 0.1 | 33.7 | 13.1 | 6.3 | 0.2 | 1.2 | 1.2 | 1.3 | 6.3 | 8.2 | 37.7 | R 0.7 | R 15.4 | 0.0 | 19.9 | R 107.4 | 43.2 | R 150.6 |
| 1992 | 0.3 | 37.4 | 11.1 | 5.4 | (s) | 1.5 | 1.2 | 1.3 | 7.7 | 8.5 | 36.8 | 0.7 | R 19.9 | 0.0 | 19.7 | R 114.9 | 42.1 | R 156.9 |
| 1993 | 0.7 | 37.8 | 10.5 | 4.8 | 0.1 | 1.5 | 1.2 | 1.0 | 9.1 | 8.6 | 36.8 | 0.7 | R 19.2 | 0.0 | 19.1 | R 114.3 | R 40.3 | R 154.6 |
| 1994 | 0.7 | 31.6 | 11.1 | 4.4 | 0.3 | 1.2 | 1.3 | 1.0 | 8.3 | 8.8 | 36.3 | 0.7 | R 19.8 | 0.0 | 20.2 | R 109.4 | 42.1 | R 151.6 |
| 1995 | 0.0 | 34.1 | 12.7 | 4.8 | 0.5 | 1.3 | 1.2 | 1.0 | 4.8 | 14.3 | 34.8 | 0.6 | R 27.6 | 0.0 | 20.2 | R 117.3 | R 42.1 | R 159.3 |
| 1996 | 0.0 | 33.4 | 10.4 | 4.8 | 0.1 | R 0.9 | 1.2 | 1.2 | 6.2 | R 21.8 | R 46.5 | 1.0 | R 32.6 | 0.0 | 20.2 | R 133.7 | R 42.2 | R 175.9 |
| 1997 | 0.0 | 35.5 | 8.1 | 5.1 | 0.2 | R 1.1 | 1.3 | 1.2 | 2.5 | R 23.8 | R 43.2 | 0.7 | R 31.7 | 0.0 | 20.2 | R 131.3 | R 42.0 | R 173.3 |
| 1998 | 0.0 | 33.3 | 3.7 | 4.6 | 0.3 | 1.4 | 1.3 | 0.7 | 2.1 | 23.9 | 38.1 | 0.7 | 28.0 | 0.0 | 19.9 | 120.0 | 41.1 | 161.1 |
| 1999 | 0.0 | 32.8 | 4.4 | 4.6 | 0.6 | 0.9 | 1.3 | 1.1 | 3.1 | 23.9 | 39.8 | 0.6 | 30.3 | 0.0 | 19.9 | 123.4 | 39.0 | 162.4 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 57. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Connecticut

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 15 | (s) | 104 | 1,117 | 1,129 | 2 | 258 | 19,044 | 204 | 21,857 | 0 | 0 | — | 0 | — |
| 1965 | 3 | (s) | 172 | 1,415 | 1,411 | 5 | 255 | 22,609 | 471 | 26,338 | 0 | 0 | — | 0 | — |
| 1970 | (s) | (s) | 124 | 2,266 | 2,897 | 21 | 238 | 28,273 | 359 | 34,177 | 0 | 0 | — | 0 | — |
| 1975 | (s) | (s) | 90 | 2,391 | 2,013 | 26 | 196 | 31,547 | 581 | 36,844 | 0 | 0 | — | 0 | — |
| 1980 | 0 | (s) | 89 | 2,580 | 1,921 | 15 | 247 | 29,864 | 53 | 34,768 | 0 | 0 | — | 0 | — |
| 1985 | 0 | (s) | 71 | 4,448 | 1,085 | 32 | 225 | 30,631 | 152 | 36,645 | R e 31 | 0 | — | 0 | — |
| 1990 | 0 | (s) | 94 | 4,955 | 2,344 | 36 | 253 | 30,673 | 86 | 38,441 | R 0 | 0 | — | 0 | — |
| 1991 | 0 | 1 | 28 | 4,428 | 2,246 | 40 | 227 | 30,976 | 92 | 38,036 | R 32 | 0 | — | 0 | — |
| 1992 | 0 | 1 | 28 | 4,861 | 2,293 | 32 | 231 | 30,780 | 44 | 38,269 | R 134 | 0 | — | 0 | — |
| 1993 | 0 | (s) | 30 | 4,828 | 2,312 | 33 | 235 | 31,319 | 31 | 38,788 | R 163 | 0 | — | 0 | — |
| 1994 | 0 | 1 | 28 | 4,470 | 2,452 | 50 | 246 | 31,433 | 23 | 38,701 | R 110 | 0 | — | 0 | — |
| 1995 | 0 | 1 | 41 | 4,976 | 2,489 | 26 | 242 | 30,146 | 12 | 37,930 | R 24 | 0 | — | 0 | — |
| 1996 | 0 | 1 | 37 | 5,255 | 2,718 | R 21 | 235 | 31,617 | 36 | 39,920 | R 80 | 0 | — | 0 | — |
| 1997 | 0 | 3 | 23 | 5,510 | 2,371 | R 16 | 248 | 31,719 | 25 | R 39,912 | R 85 | 0 | — | 0 | — |
| 1998 | 0 | 1 | 52 | 5,542 | 2,212 | 52 | 259 | 32,726 | 15 | 40,859 | 82 | 0 | — | 0 | — |
| 1999 | 0 | 1 | 32 | 5,898 | 2,456 | 34 | 262 | 35,294 | 15 | 43,991 | 87 | 0 | — | 0 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 0.4 | 0.2 | 0.5 | 6.5 | 6.4 | (s) | 1.6 | 100.0 | 1.3 | 116.3 | 0.0 | 0.0 | 116.9 | 0.0 | 116.9 |
| 1965 | 0.1 | 0.1 | 0.9 | 8.2 | 8.0 | (s) | 1.5 | 118.8 | 3.0 | 140.4 | 0.0 | 0.0 | 140.5 | 0.0 | 140.5 |
| 1970 | (s) | 0.1 | 0.6 | 13.2 | 16.4 | 0.1 | 1.4 | 148.5 | 2.3 | 182.5 | 0.0 | 0.0 | 182.6 | 0.0 | 182.6 |
| 1975 | (s) | (s) | 0.5 | 13.9 | 11.4 | 0.1 | 1.2 | 165.7 | 3.7 | 196.4 | 0.0 | 0.0 | 196.5 | 0.0 | 196.5 |
| 1980 | 0.0 | 0.1 | 0.4 | 15.0 | 10.9 | 0.1 | 1.5 | 156.9 | 0.3 | 185.1 | 0.0 | 0.0 | 185.2 | 0.0 | 185.2 |
| 1985 | 0.0 | 0.4 | 0.4 | 25.9 | 6.1 | 0.1 | 1.4 | 160.9 | 1.0 | 195.7 | R e 0.1 | 0.0 | e 196.1 | 0.0 | e 196.1 |
| 1990 | 0.0 | 0.5 | 0.5 | 28.9 | 13.3 | 0.1 | 1.5 | 161.1 | 0.5 | 205.9 | R 0.0 | 0.0 | 206.4 | 0.0 | 206.4 |
| 1991 | 0.0 | 0.5 | 0.1 | 25.8 | 12.7 | 0.1 | 1.4 | 162.7 | 0.6 | 203.4 | R 0.1 | 0.0 | 204.0 | 0.0 | 204.0 |
| 1992 | 0.0 | 0.6 | 0.1 | 28.3 | 13.0 | 0.1 | 1.4 | 161.7 | 0.3 | 204.9 | 0.5 | 0.0 | 205.5 | 0.0 | 205.5 |
| 1993 | 0.0 | 0.5 | 0.2 | 28.1 | 13.1 | 0.1 | 1.4 | 164.5 | 0.1 | 207.6 | R 0.6 | 0.0 | 208.1 | 0.0 | 208.1 |
| 1994 | 0.0 | 0.7 | 0.1 | 26.0 | 13.9 | 0.2 | 1.5 | R 164.4 | 0.1 | R 206.3 | 0.4 | 0.0 | R 207.0 | 0.0 | R 207.0 |
| 1995 | 0.0 | 1.2 | 0.2 | 29.0 | 14.1 | 0.1 | 1.5 | R 157.2 | 0.1 | R 202.1 | 0.1 | 0.0 | R 203.3 | 0.0 | R 203.3 |
| 1996 | 0.0 | 1.5 | 0.2 | 30.6 | 15.4 | 0.1 | 1.4 | R 164.9 | 0.2 | R 212.9 | 0.3 | 0.0 | R 214.3 | 0.0 | R 214.3 |
| 1997 | 0.0 | 2.6 | 0.1 | 32.1 | 13.4 | 0.1 | 1.5 | R 165.4 | 0.2 | R 212.7 | 0.3 | 0.0 | R 215.3 | 0.0 | R 215.3 |
| 1998 | 0.0 | 0.9 | 0.3 | 32.3 | 12.5 | 0.2 | 1.6 | 170.6 | 0.1 | 217.5 | 0.3 | 0.0 | 218.4 | 0.0 | 218.4 |
| 1999 | 0.0 | 0.8 | 0.2 | 34.4 | 13.9 | 0.1 | 1.6 | 183.9 | 0.1 | 234.2 | 0.3 | 0.0 | 234.9 | 0.0 | 234.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 58.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Connecticut

| Year | Coal Thousand Short Tons | Natural Gas a Billion Cubic Feet | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 2,776 | 2 | 1,597 | 79 | 0 | 1,676 | 0 | 398 | 0 | 0 | 0 | — |
| 1965 | 4,097 | (s) | 2,550 | 126 | 0 | 2,676 | 0 | 179 | 0 | 0 | 0 | — |
| 1970 | 1,875 | (s) | 20,531 | 1,018 | 0 | 21,550 | 3,604 | 327 | 0 | 0 | 0 | — |
| 1975 | 4 | (s) | 22,150 | 232 | 0 | 22,382 | 8,135 | 487 | 0 | 0 | 0 | — |
| 1980 | 0 | 0 | 21,428 | 168 | 0 | 21,596 | 11,835 | 250 | 0 | 0 | 0 | — |
| 1985 | 774 | 2 | 17,006 | 83 | 0 | 17,089 | 12,721 | 300 | 0 | 0 | 0 | — |
| 1990 | 958 | 5 | 14,021 | 69 | 0 | 14,090 | 19,776 | R 523 | 422 | 0 | 0 | — |
| 1991 | 840 | 5 | 12,919 | 109 | 0 | 13,028 | 12,243 | R 752 | 439 | 0 | 0 | — |
| 1992 | 817 | 2 | 8,723 | 65 | 0 | 8,788 | 16,771 | R 1,004 | 374 | 0 | 0 | — |
| 1993 | 745 | 1 | 6,958 | 73 | 0 | 7,032 | 21,802 | R 1,193 | 406 | 0 | 0 | — |
| 1994 | 821 | 8 | 5,605 | 83 | 0 | 5,689 | 20,160 | R 1,254 | 439 | 0 | 0 | — |
| 1995 | 881 | 19 | 5,589 | 131 | 0 | 5,720 | 18,749 | R 1,181 | 404 | 0 | 0 | — |
| 1996 | 925 | 10 | 8,953 | 75 | 0 | 9,028 | 6,225 | R 1,460 | 437 | 0 | 0 | — |
| 1997 | 1,058 | 17 | 13,941 | 102 | 0 | 14,043 | -125 | R 1,437 | 451 | 0 | 0 | — |
| 1998 | 590 | 11 | 14,500 | 105 | 0 | 14,605 | 3,243 | 1,307 | 427 | 0 | 0 | — |
| 1999 | 0 | 13 | 9,876 | 132 | 0 | 10,008 | 12,675 | 1,325 | 467 | 0 | 0 | — |
| | | | | | Trillion Btu | | | | | | | |
| 1960 | 73.7 | 1.8 | 10.0 | 0.5 | 0.0 | 10.5 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 | 90.3 |
| 1965 | 106.2 | 0.3 | 16.0 | 0.7 | 0.0 | 16.8 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 | 125.1 |
| 1970 | 44.2 | 0.1 | 129.1 | 5.9 | 0.0 | 135.0 | 39.6 | 3.4 | 0.0 | 0.0 | 0.0 | 222.3 |
| 1975 | 0.1 | 0.3 | 139.3 | 1.3 | 0.0 | 140.6 | 89.6 | 5.1 | 0.0 | 0.0 | 0.0 | 235.7 |
| 1980 | 0.0 | 0.0 | 134.7 | 1.0 | 0.0 | 135.7 | 129.1 | 2.6 | 0.0 | 0.0 | 0.0 | 267.4 |
| 1985 | 20.4 | 1.6 | 106.9 | 0.5 | 0.0 | 107.4 | 137.6 | 3.1 | 0.0 | 0.0 | 0.0 | 270.1 |
| 1990 | 25.3 | 5.0 | 88.1 | 0.4 | 0.0 | 88.6 | 211.2 | R 5.4 | 4.4 | 0.0 | 0.0 | R 340.1 |
| 1991 | 22.2 | 4.9 | 81.2 | 0.6 | 0.0 | 81.9 | 131.5 | R 7.8 | 4.6 | 0.0 | 0.0 | R 254.7 |
| 1992 | 21.5 | 2.2 | 54.8 | 0.4 | 0.0 | 55.2 | 179.1 | R 10.4 | 3.9 | 0.0 | 0.0 | R 274.9 |
| 1993 | 19.6 | 0.6 | 43.7 | 0.4 | 0.0 | 44.2 | 232.9 | R 12.3 | 4.2 | 0.0 | 0.0 | 316.1 |
| 1994 | 21.5 | 8.1 | 35.2 | 0.5 | 0.0 | 35.7 | 215.2 | R 12.9 | 4.5 | 0.0 | 0.0 | R 301.6 |
| 1995 | 23.1 | 19.6 | 35.1 | 0.8 | 0.0 | 35.9 | 199.8 | R 12.2 | 4.2 | 0.0 | 0.0 | R 298.8 |
| 1996 | 24.2 | 10.7 | 56.3 | 0.4 | 0.0 | 56.7 | 66.1 | R 15.1 | 4.5 | 0.0 | 0.0 | R 181.5 |
| 1997 | 27.8 | 17.1 | 87.6 | 0.6 | 0.0 | 88.2 | -1.3 | R 14.9 | R 4.7 | 0.0 | 0.0 | R 157.8 |
| 1998 | 15.5 | 11.0 | 91.2 | 0.6 | 0.0 | 91.8 | 34.5 | 13.5 | 4.4 | 0.0 | 0.0 | 175.6 |
| 1999 | 0.0 | 13.4 | 62.1 | 0.8 | 0.0 | 62.9 | 134.6 | 13.7 | 4.8 | 0.0 | 0.0 | 235.3 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 59.  Energy Consumption Estimates by Source, Selected Years 1960-1999, Delaware

**DELAWARE**

| Year | Coal a | Natural Gas b | Petroleum — Asphalt & Road Oil a | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | Kerosene a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Other a,c | Total | Nuclear Electric Power | Hydroelectric Power d | Wood and Waste | Other a,e | Net Interstate Flow of Electricity/Losses f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | Wood and Waste | | Million kWh | Total g |
| **Thousand Barrels** | | | | | | | | | | | | | | | | | | | |
| 1960 | 791 | 9 | 239 | 19 | 2,712 | 2,144 | 966 | 1,007 | 111 | 4,314 | 6,246 | R 3,841 | R 21,599 | 0 | 0 | — | — | -668 | — |
| 1965 | 1,103 | 18 | 571 | 150 | 3,275 | 2,086 | 825 | 1,507 | 112 | 5,076 | 5,538 | R 4,382 | R 23,522 | 0 | 0 | — | — | -817 | — |
| 1970 | 1,541 | 26 | 518 | 20 | 4,308 | 2,062 | 437 | 2,255 | 108 | 6,247 | 6,588 | R 4,748 | R 27,293 | 0 | 0 | — | — | -1,583 | — |
| 1975 | 937 | 19 | 653 | 15 | 4,309 | 1,654 | 277 | 2,654 | 82 | 7,069 | 10,218 | R 4,087 | R 31,018 | 0 | 0 | — | — | -1,500 | — |
| 1980 | 1,130 | 30 | 350 | 10 | 3,716 | 1,573 | 301 | 3,199 | 139 | 6,614 | 12,717 | R 5,453 | R 34,072 | 0 | 0 | — | — | -941 | — |
| 1985 | 2,766 | 38 | 827 | 16 | 3,425 | 1,569 | 705 | 994 | 126 | 7,556 | 3,602 | R 3,440 | R 22,260 | 0 | 0 | — | — | -6,056 | — |
| 1990 | 2,293 | 39 | 537 | 78 | 3,220 | 1,306 | 159 | 1,043 | 142 | 8,012 | 3,830 | R 5,270 | R 23,595 | 0 | h 0 | — | — | R 1,021 | — |
| 1991 | 2,186 | 42 | 142 | 17 | 3,427 | 2,397 | 187 | 1,098 | 127 | 7,797 | 5,005 | R 5,346 | R 25,543 | 0 | 0 | — | — | R 204 | — |
| 1992 | 1,770 | 40 | 78 | 18 | 3,242 | 1,451 | 148 | 925 | 130 | 8,153 | 4,947 | R 6,389 | R 25,481 | 0 | 0 | — | — | R 3,758 | — |
| 1993 | 2,446 | 42 | 112 | 51 | 3,562 | 1,440 | 143 | 1,015 | 132 | 8,312 | 6,414 | R 4,427 | R 25,608 | 0 | 0 | — | — | R 2,545 | — |
| 1994 | 2,226 | 49 | 163 | 57 | 3,566 | 566 | 253 | 1,264 | 138 | 8,304 | 5,720 | R 4,572 | R 24,603 | 0 | 0 | — | — | R 3,191 | — |
| 1995 | 2,011 | 61 | 176 | 53 | 3,401 | 73 | 127 | 1,361 | 136 | 8,471 | 4,109 | R 4,515 | R 22,420 | 0 | 0 | — | — | R 4,719 | — |
| 1996 | 1,956 | 54 | 298 | 52 | 3,833 | 62 | 235 | R 1,707 | 132 | 8,453 | 5,487 | R 5,192 | R 25,451 | 0 | 0 | — | — | R 5,412 | — |
| 1997 | 1,865 | 46 | 143 | 64 | 3,448 | 70 | 143 | R 1,217 | 139 | 8,587 | 4,453 | R 5,401 | R 23,666 | 0 | 0 | — | — | R 10,764 | — |
| 1998 | 1,773 | 41 | 168 | 55 | 3,262 | 70 | 178 | 1,427 | 146 | 9,079 | 4,621 | 5,166 | 24,171 | 0 | 0 | — | — | 12,738 | — |
| 1999 | 1,393 | 56 | 179 | 15 | 3,404 | 105 | 179 | 1,118 | 147 | 9,259 | 5,462 | 5,290 | 25,160 | 0 | 0 | — | — | 12,302 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 20.5 | 9.4 | 1.6 | 0.1 | 15.8 | 11.5 | 5.5 | 4.0 | 0.7 | 22.7 | 39.3 | R 23.1 | R 124.2 | 0.0 | 0.0 | 5.0 | 0.0 | -2.3 | R 156.7 |
| 1965 | 29.0 | 18.7 | 3.8 | 0.8 | 19.1 | 11.2 | 4.7 | 6.0 | 0.7 | 26.7 | 34.8 | R 26.3 | R 134.0 | 0.0 | 0.0 | 5.6 | 0.0 | -2.8 | R 184.6 |
| 1970 | 37.2 | 26.9 | 3.4 | 0.1 | 25.1 | 11.1 | 2.5 | 8.5 | 0.7 | 32.8 | 41.4 | R 28.6 | R 154.2 | 0.0 | 0.0 | 7.0 | 0.0 | -5.4 | R 220.0 |
| 1975 | 22.9 | 19.0 | 4.3 | 0.1 | 25.1 | 8.9 | 1.6 | 9.9 | 0.5 | 37.1 | 64.2 | R 24.4 | R 176.1 | 0.0 | 0.0 | 7.9 | 0.0 | -5.1 | R 220.8 |
| 1980 | 28.1 | 30.8 | 2.3 | 0.1 | 21.6 | 8.4 | 1.7 | 11.8 | 0.8 | 34.7 | 80.0 | R 31.7 | R 193.2 | 0.0 | 0.0 | 1.7 | 0.0 | -3.2 | R 250.6 |
| 1985 | 71.4 | 39.5 | 5.5 | 0.1 | 19.9 | 8.4 | 4.0 | 3.6 | 0.8 | 39.7 | 22.6 | R 20.6 | R 125.2 | 0.0 | 0.0 | 2.7 | 0.0 | -20.7 | R 218.1 |
| 1990 | 59.5 | 40.1 | 3.6 | 0.4 | 18.8 | 7.0 | 0.9 | 3.8 | 0.9 | 42.1 | 24.1 | R 31.2 | R 132.7 | 0.0 | h 0.0 | R 2.1 | h 0.1 | 3.5 | R h 238.0 |
| 1991 | 56.8 | 43.4 | 0.9 | 0.1 | 20.0 | 12.9 | 1.1 | 4.0 | 0.8 | 41.0 | 31.5 | R 31.5 | R 143.6 | 0.0 | 0.0 | R 2.2 | 0.1 | R 0.7 | R 246.8 |
| 1992 | 46.1 | 41.0 | 0.5 | 0.1 | 18.9 | 7.8 | 0.8 | 3.4 | 0.8 | 42.8 | 31.1 | R 37.5 | R 143.7 | 0.0 | 0.0 | R 2.2 | 0.1 | R 12.8 | R 246.0 |
| 1993 | 63.5 | 43.1 | 0.7 | 0.3 | 20.7 | 7.7 | 0.8 | 3.7 | 0.8 | 43.7 | 40.3 | R 25.8 | R 144.6 | 0.0 | 0.0 | R 2.4 | 0.1 | 8.7 | R 262.3 |
| 1994 | 57.5 | 50.4 | 1.1 | 0.3 | 20.8 | 3.0 | 1.4 | 4.6 | 0.8 | R 43.4 | 36.0 | R 26.6 | R 138.1 | 0.0 | 0.0 | R 2.4 | 0.1 | 10.9 | R 259.3 |
| 1995 | 52.4 | 62.7 | 1.2 | 0.3 | 19.8 | 0.4 | 0.7 | 4.9 | 0.8 | R 44.2 | 25.8 | R 26.3 | R 124.5 | 0.0 | 0.0 | R 2.7 | 0.1 | R 16.1 | R 258.6 |
| 1996 | 50.8 | 55.9 | 2.0 | 0.3 | 22.3 | 0.4 | 1.3 | R 6.2 | 0.8 | R 44.1 | 34.5 | R 30.1 | R 141.9 | 0.0 | 0.0 | R 2.8 | 0.1 | R 18.5 | R 269.9 |
| 1997 | 48.6 | 48.1 | 0.9 | 0.3 | 20.1 | 0.4 | 0.8 | R 4.4 | 0.8 | R 44.8 | 28.0 | R 31.3 | R 131.9 | 0.0 | 0.0 | R 2.2 | 0.1 | R 36.7 | R 267.5 |
| 1998 | 45.8 | 42.3 | 1.1 | 0.3 | 19.0 | 0.4 | 1.0 | 5.2 | 0.9 | 47.3 | 29.1 | 29.9 | 134.1 | 0.0 | 0.0 | 1.5 | 0.1 | 43.5 | 267.3 |
| 1999 | 35.9 | 58.1 | 1.2 | 0.1 | 19.8 | 0.6 | 1.0 | 4.0 | 0.9 | 48.3 | 34.3 | 30.5 | 140.8 | 0.0 | 0.0 | 2.0 | 0.1 | 42.0 | 278.8 |

a  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in  Appendix A.
b  Includes supplemental gaseous fuels.
c  "Other" is the subtotal of 16 petroleum products consumed in the industrial sector.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
d  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
e  "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
f  Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.  A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
g  From 1989, "Total" does not equal the sum of the columns.  Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
h  There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours.  R=Revised data.  — =Not applicable.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 60. Residential Energy Consumption Estimates, Selected Years 1960-1999, Delaware**

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 12 | 4 | 1,485 | 807 | 176 | 2,468 | 76 | — | — | 496 | — | 1,234 | — |
| 1965 | 8 | 6 | 1,651 | 604 | 288 | 2,543 | 58 | — | — | 729 | — | 1,741 | — |
| 1970 | 5 | 8 | 2,037 | 365 | 416 | 2,818 | 54 | — | — | 1,169 | — | 2,832 | — |
| 1975 | 3 | 7 | 1,866 | 215 | 394 | 2,474 | 63 | — | — | 1,640 | — | 3,956 | — |
| 1980 | 2 | 7 | 1,316 | 275 | 375 | 1,966 | 85 | — | — | 1,866 | — | 4,537 | — |
| 1985 | 3 | 6 | 1,331 | 649 | 593 | 2,572 | 131 | — | — | 1,924 | — | 4,521 | — |
| 1990 | 8 | 7 | 967 | 144 | 573 | 1,684 | 79 | — | — | 2,651 | — | R 5,800 | — |
| 1991 | 7 | 7 | 1,017 | 165 | 631 | 1,813 | 84 | — | — | 2,824 | — | R 6,140 | — |
| 1992 | (s) | 8 | 1,041 | 144 | 618 | 1,803 | 88 | — | — | 2,786 | — | R 5,942 | — |
| 1993 | 17 | 8 | 1,135 | 106 | 672 | 1,913 | 95 | — | — | 3,044 | — | R 6,429 | — |
| 1994 | 11 | 9 | 1,180 | 96 | 700 | 1,976 | 93 | — | — | 3,107 | — | 6,484 | — |
| 1995 | 1 | 9 | 1,078 | 120 | 859 | 2,056 | 104 | — | — | 3,168 | — | R 6,606 | — |
| 1996 | 2 | 10 | 1,107 | 180 | R 913 | R 2,200 | R 104 | — | — | 3,271 | — | R 6,817 | — |
| 1997 | 2 | 9 | 934 | 121 | R 982 | R 2,037 | R 71 | — | — | 3,257 | — | R 6,775 | — |
| 1998 | 2 | 8 | 820 | 164 | 1,041 | 2,025 | 63 | — | — | 3,339 | — | 6,898 | — |
| 1999 | 1 | 9 | 917 | 125 | 931 | 1,973 | 67 | — | — | 3,532 | — | 6,920 | — |
| | | | | | Trillion Btu | | | | | | | | |
| 1960 | 0.3 | 3.9 | 8.6 | 4.6 | 0.7 | 13.9 | 1.5 | 0.0 | 0.0 | 1.7 | 21.4 | 4.2 | 25.6 |
| 1965 | 0.2 | 5.9 | 9.6 | 3.4 | 1.2 | 14.2 | 1.2 | 0.0 | 0.0 | 2.5 | 24.0 | 5.9 | 29.9 |
| 1970 | 0.1 | 8.0 | 11.9 | 2.1 | 1.6 | 15.5 | 1.1 | 0.0 | 0.0 | 4.0 | 28.7 | 9.7 | 38.4 |
| 1975 | 0.1 | 7.1 | 10.9 | 1.2 | 1.5 | 13.5 | 1.3 | 0.0 | 0.0 | 5.6 | 27.5 | 13.5 | 41.0 |
| 1980 | (s) | 7.1 | 7.7 | 1.6 | 1.4 | 10.6 | 1.7 | 0.0 | 0.0 | 6.4 | R 25.9 | 15.5 | 41.3 |
| 1985 | 0.1 | 6.3 | 7.8 | 3.7 | 2.1 | 13.6 | 2.6 | 0.0 | 0.0 | 6.6 | 29.2 | 15.4 | 44.6 |
| 1990 | 0.2 | 7.4 | 5.6 | 0.8 | 2.1 | 8.5 | 1.6 | e 0.1 | e (s) | 9.0 | e 26.8 | 19.8 | e 46.6 |
| 1991 | 0.2 | 7.4 | 5.9 | 0.9 | 2.3 | 9.1 | 1.7 | 0.1 | (s) | 9.6 | 28.1 | R 20.9 | R 49.0 |
| 1992 | (s) | 8.5 | 6.1 | 0.8 | 2.2 | 9.1 | 1.8 | 0.1 | (s) | 9.5 | 29.0 | 20.3 | R 49.2 |
| 1993 | 0.4 | 8.6 | 6.6 | 0.6 | 2.4 | 9.6 | 1.9 | 0.1 | (s) | 10.4 | 31.0 | 21.9 | 53.0 |
| 1994 | 0.3 | 8.9 | 6.9 | 0.5 | 2.5 | 10.0 | 1.9 | 0.1 | (s) | 10.6 | 31.6 | 22.1 | 53.8 |
| 1995 | (s) | 8.8 | 6.3 | 0.7 | 3.1 | 10.1 | 2.1 | 0.1 | (s) | 10.8 | 31.9 | 22.5 | 54.4 |
| 1996 | 0.1 | 10.1 | 6.4 | 1.0 | R 3.3 | R 10.8 | 2.1 | 0.1 | (s) | 11.2 | R 34.3 | R 23.3 | R 57.6 |
| 1997 | 0.1 | 9.3 | 5.4 | 0.7 | R 3.6 | R 9.7 | R 1.4 | 0.1 | (s) | 11.1 | R 31.7 | 23.1 | R 54.8 |
| 1998 | 0.1 | 8.2 | 4.8 | 0.9 | 3.8 | 9.5 | 1.3 | 0.1 | (s) | 11.4 | 30.5 | 23.5 | 54.1 |
| 1999 | (s) | 9.5 | 5.3 | 0.7 | 3.4 | 9.4 | 1.3 | 0.1 | (s) | 12.1 | 32.4 | 23.6 | 56.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 61.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Delaware

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel[a] | Petroleum — Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 8 | 1 | 572 | 114 | 31 | 13 | 1,812 | 2,542 | 1 | — | 361 | — | 897 | — |
| 1965 | 5 | 1 | 636 | 85 | 51 | 11 | 2,081 | 2,864 | 1 | — | 536 | — | 1,279 | — |
| 1970 | 3 | 3 | 785 | 51 | 73 | 24 | 1,736 | 2,670 | 1 | — | 889 | — | 2,154 | — |
| 1975 | 2 | 3 | 719 | 30 | 70 | 32 | 1,204 | 2,054 | 1 | — | 1,333 | — | 3,214 | — |
| 1980 | 2 | 3 | 634 | 9 | 66 | 45 | 4,265 | 5,020 | 2 | — | 1,514 | — | 3,682 | — |
| 1985 | 3 | 3 | 334 | 51 | 105 | 38 | 70 | 599 | R 3 | — | 1,698 | — | 3,988 | — |
| 1990 | 14 | 4 | 338 | 10 | 101 | 35 | 180 | 664 | R 5 | — | 2,361 | — | R 5,165 | — |
| 1991 | 13 | 4 | 440 | 13 | 111 | 34 | 51 | 649 | R 5 | — | 2,471 | — | R 5,371 | — |
| 1992 | (s) | 5 | 349 | 1 | 109 | 35 | 89 | 584 | R 6 | — | 2,498 | — | R 5,328 | — |
| 1993 | 32 | 5 | 332 | 7 | 119 | 9 | 220 | 688 | 8 | — | 2,660 | — | R 5,619 | — |
| 1994 | 19 | 5 | 259 | 8 | 124 | 8 | 161 | 559 | 8 | — | 2,745 | — | R 5,729 | — |
| 1995 | (s) | 6 | 273 | 2 | 152 | 8 | 133 | 568 | 8 | — | 2,900 | — | R 6,047 | — |
| 1996 | 3 | 7 | 388 | 6 | R 161 | 8 | 225 | R 789 | R 8 | — | 2,970 | — | R 6,190 | — |
| 1997 | 4 | 7 | 349 | 16 | R 173 | 8 | 198 | R 744 | R 8 | — | 3,124 | — | R 6,498 | — |
| 1998 | 5 | 6 | 295 | 12 | 184 | 11 | 132 | 634 | 8 | — | 3,280 | — | 6,775 | — |
| 1999 | (s) | 6 | 325 | 52 | 164 | 20 | 119 | 681 | 9 | — | 3,407 | — | 6,675 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 0.2 | 0.6 | 3.3 | 0.6 | 0.1 | 0.1 | 11.4 | 15.6 | (s) | 0.0 | 1.2 | 17.6 | 3.1 | 20.7 |
| 1965 | 0.1 | 1.4 | 3.7 | 0.5 | 0.2 | 0.1 | 13.1 | 17.5 | (s) | 0.0 | 1.8 | 20.9 | 4.4 | 25.2 |
| 1970 | 0.1 | 2.9 | 4.6 | 0.3 | 0.3 | 0.1 | 10.9 | 16.2 | (s) | 0.0 | 3.0 | 22.2 | 7.3 | 29.5 |
| 1975 | (s) | 3.0 | 4.2 | 0.2 | 0.3 | 0.2 | 7.6 | 12.4 | (s) | 0.0 | 4.5 | 20.0 | 11.0 | 30.9 |
| 1980 | (s) | 3.4 | 3.7 | 0.1 | 0.2 | 0.2 | 26.8 | 31.0 | (s) | 0.0 | 5.2 | 39.6 | 12.6 | 52.2 |
| 1985 | 0.1 | 3.5 | 1.9 | 0.3 | 0.4 | 0.2 | 0.4 | 3.3 | R 0.1 | 0.0 | 5.8 | R e 12.7 | 13.6 | R 26.3 |
| 1990 | 0.4 | 4.1 | 2.0 | 0.1 | 0.4 | 0.2 | 1.1 | 3.7 | R 0.1 | e 0.0 | 8.1 | R e 16.3 | 17.6 | R e 33.9 |
| 1991 | 0.3 | 4.4 | 2.6 | 0.1 | 0.4 | 0.2 | 0.3 | 3.5 | R 0.1 | 0.0 | 8.4 | R 16.8 | R 18.3 | R 35.1 |
| 1992 | (s) | 5.1 | 2.0 | (s) | 0.4 | 0.2 | 0.6 | 3.2 | R 0.1 | 0.0 | 8.5 | R 17.0 | 18.2 | R 35.1 |
| 1993 | 0.8 | 5.4 | 1.9 | (s) | 0.4 | (s) | 1.4 | 3.8 | 0.2 | 0.0 | 9.1 | 19.2 | 19.2 | 38.4 |
| 1994 | 0.5 | 5.7 | 1.5 | (s) | 0.4 | (s) | 1.0 | 3.1 | 0.2 | 0.0 | 9.4 | 18.7 | 19.5 | 38.2 |
| 1995 | (s) | 5.9 | 1.6 | (s) | 0.5 | (s) | 0.8 | 3.0 | 0.2 | 0.0 | 9.9 | 19.0 | 20.6 | 39.7 |
| 1996 | 0.1 | 6.9 | 2.3 | (s) | 0.6 | (s) | 1.4 | 4.3 | 0.2 | 0.0 | 10.1 | 21.6 | 21.1 | R 42.8 |
| 1997 | 0.1 | 6.8 | 2.0 | 0.1 | 0.6 | (s) | 1.2 | 4.0 | R 0.2 | 0.0 | 10.7 | R 21.8 | R 22.2 | R 44.0 |
| 1998 | 0.1 | 5.9 | 1.7 | 0.1 | 0.7 | 0.1 | 0.8 | 3.3 | 0.2 | 0.0 | 11.2 | 20.7 | 23.1 | 43.9 |
| 1999 | (s) | 6.5 | 1.9 | 0.3 | 0.6 | 0.1 | 0.8 | 3.6 | 0.2 | 0.0 | 11.6 | 22.0 | 22.8 | 44.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**D E L A W A R E**

### Table 62.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Delaware

| | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Thousand Short Tons | Billion Cubic Feet | | | | Thousand Barrels | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 32 | 1 | 239 | 482 | 45 | 798 | 37 | 205 | 2,931 | R 3,841 | R 8,577 | 0 | — | — | 863 | — | 2,146 | — |
| 1965 | 35 | 6 | 571 | 715 | 136 | 1,165 | 40 | 144 | 2,785 | R 4,382 | R 9,939 | 0 | — | — | 1,373 | — | 3,277 | — |
| 1970 | 35 | 12 | 518 | 794 | 20 | 1,753 | 41 | 92 | 2,643 | R 3,508 | R 9,370 | 0 | — | — | 2,527 | — | 6,124 | — |
| 1975 | 27 | 7 | 653 | 1,079 | 32 | 2,154 | 31 | 63 | 1,878 | R 3,851 | R 9,741 | 0 | — | — | 2,176 | — | 5,249 | — |
| 1980 | 184 | 13 | 350 | 616 | 17 | 2,744 | 75 | 35 | 1,808 | R 4,982 | R 10,628 | 0 | — | — | 2,439 | — | 5,931 | — |
| 1985 | 217 | 22 | 827 | 423 | 4 | 293 | 69 | 54 | 649 | R 3,089 | R 5,408 | 0 | — | — | 2,693 | — | 6,327 | — |
| 1990 | 215 | 17 | 537 | 434 | 4 | 363 | 77 | 48 | 746 | R 3,860 | R 6,070 | f 0 | — | — | 3,272 | — | R 7,157 | — |
| 1991 | 208 | 16 | 142 | 445 | 8 | 350 | 69 | 51 | 950 | R 4,032 | R 6,046 | 0 | — | — | 3,241 | — | R 7,046 | — |
| 1992 | 142 | 18 | 78 | 345 | 3 | 192 | 70 | 51 | 1,238 | R 4,698 | R 6,676 | 0 | — | — | 3,248 | — | R 6,928 | — |
| 1993 | 174 | 19 | 112 | 365 | 30 | 219 | 72 | 64 | 1,756 | R 4,427 | R 7,043 | 0 | — | — | 3,417 | — | R 7,217 | — |
| 1994 | 189 | 17 | 163 | 341 | 149 | 434 | 75 | 64 | 1,813 | R 4,572 | R 7,611 | 0 | — | — | 3,447 | — | 7,193 | — |
| 1995 | 194 | 19 | 176 | 328 | 5 | 346 | 74 | 64 | 1,594 | R 4,515 | R 7,102 | 0 | — | — | 3,511 | — | R 7,320 | — |
| 1996 | 164 | 14 | 298 | 511 | 49 | R 628 | 71 | 70 | 1,485 | R 5,192 | R 8,304 | 0 | — | — | 3,399 | — | R 7,084 | — |
| 1997 | 174 | 15 | 143 | 466 | 6 | R 55 | 75 | 70 | 1,241 | R 5,401 | R 7,458 | 0 | — | — | 3,741 | — | R 7,782 | — |
| 1998 | 174 | 16 | 168 | 439 | 2 | 199 | 79 | 86 | 1,039 | 5,166 | 7,178 | 0 | — | — | 3,779 | — | 7,807 | — |
| 1999 | 148 | 21 | 179 | 478 | 3 | 20 | 80 | 77 | 1,404 | 5,290 | 7,531 | 0 | — | — | 3,613 | — | 7,080 | — |

**Trillion Btu**

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.8 | 1.5 | 1.6 | 2.8 | 0.3 | 3.2 | 0.2 | 1.1 | 18.4 | R 23.1 | R 50.7 | 0.0 | 3.4 | 0.0 | 2.9 | R 59.4 | 7.3 | R 66.7 |
| 1965 | 0.9 | 6.6 | 3.8 | 4.2 | 0.8 | 4.7 | 0.2 | 0.8 | 17.5 | R 26.3 | R 58.2 | 0.0 | 4.4 | 0.0 | 4.7 | R 74.8 | 11.2 | R 86.0 |
| 1970 | 0.8 | 12.3 | 3.4 | 4.6 | 0.1 | 6.6 | 0.3 | 0.5 | 16.6 | R 21.1 | R 53.2 | 0.0 | 5.9 | 0.0 | 8.6 | R 80.9 | 20.9 | R 101.8 |
| 1975 | 0.6 | 7.1 | 4.3 | 6.3 | 0.2 | 8.0 | 0.2 | 0.3 | 11.8 | R 22.9 | R 54.1 | 0.0 | 6.6 | 0.0 | 7.4 | R 75.8 | 17.9 | R 93.7 |
| 1980 | 4.5 | 13.1 | 2.3 | 3.6 | 0.1 | 10.1 | 0.5 | 0.2 | 11.4 | R 28.9 | R 57.0 | 0.0 | 0.0 | 0.0 | 8.3 | R 82.9 | 20.2 | R 103.1 |
| 1985 | 5.4 | 22.1 | 5.5 | 2.5 | (s) | 1.1 | 0.4 | 0.3 | 4.1 | R 18.4 | R 32.3 | 0.0 | 0.0 | 0.0 | 9.2 | R 68.9 | 21.6 | R 90.5 |
| 1990 | 5.3 | 17.3 | 3.6 | 2.5 | (s) | 1.3 | 0.5 | 0.3 | 4.7 | R 22.7 | R 35.6 | f 0.0 | R 0.4 | f 0.0 | 11.2 | f 69.8 | 24.4 | f 94.2 |
| 1991 | 5.2 | 16.5 | 0.9 | 2.6 | (s) | 1.3 | 0.4 | 0.3 | 6.0 | R 23.6 | R 35.1 | 0.0 | R 0.4 | 0.0 | 11.1 | 68.3 | R 24.0 | R 92.3 |
| 1992 | 3.6 | 18.7 | 0.5 | 2.0 | (s) | 0.7 | 0.4 | 0.3 | 7.8 | R 27.4 | R 39.1 | 0.0 | R 0.3 | 0.0 | 11.1 | R 72.8 | R 23.6 | R 96.4 |
| 1993 | 4.4 | 20.1 | 0.7 | 2.1 | 0.2 | 0.8 | 0.4 | 0.3 | 11.0 | R 25.8 | R 41.5 | 0.0 | R 0.4 | 0.0 | 11.7 | R 78.0 | 24.6 | R 102.6 |
| 1994 | 4.8 | 17.8 | 1.1 | 2.0 | 0.8 | 1.6 | 0.5 | 0.3 | 11.4 | R 26.6 | R 44.3 | 0.0 | R 0.4 | 0.0 | 11.8 | 79.1 | 24.5 | 103.6 |
| 1995 | 4.9 | 20.1 | 1.2 | 1.9 | (s) | 1.3 | 0.4 | 0.3 | 10.0 | R 26.3 | R 41.5 | 0.0 | R 0.5 | 0.1 | 12.0 | R 79.0 | 25.0 | R 103.9 |
| 1996 | 4.1 | 14.7 | 2.0 | 3.0 | 0.3 | R 2.3 | 0.4 | 0.4 | 9.3 | R 30.1 | R 47.7 | 0.0 | R 0.6 | 0.0 | 11.6 | R 78.6 | R 24.2 | R 102.8 |
| 1997 | 4.4 | 15.3 | 0.9 | 2.7 | (s) | R 0.2 | 0.5 | 0.4 | 7.8 | R 31.3 | R 43.8 | 0.0 | R 0.6 | 0.0 | 12.8 | R 76.9 | R 26.6 | R 103.4 |
| 1998 | 4.4 | 17.3 | 1.1 | 2.6 | (s) | 0.7 | 0.5 | 0.4 | 6.5 | 29.9 | 41.8 | 0.0 | 0.1 | 0.0 | 12.9 | 76.5 | 26.6 | 103.1 |
| 1999 | 3.7 | 22.5 | 1.2 | 2.8 | (s) | 0.1 | 0.5 | 0.4 | 8.8 | 30.5 | 44.3 | 0.0 | 0.4 | 0.0 | 12.3 | 83.3 | 24.2 | 107.4 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 63. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Delaware**

| | | | Petroleum | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Coal** [a] | **Natural Gas** [b] | **Aviation Gasoline** [a] | **Distillate Fuel** [a] | **Jet Fuel** [a] | **LPG** [a] | **Lubricants** [a] | **Motor Gasoline** | **Residual Fuel** [a] | **Total** | **Ethanol** [c] | **Electricity** [a] | | **Electrical System Energy Losses** [d] | |
| Year | **Thousand Short Tons** | **Billion Cubic Feet** | **Thousand Barrels** | | | | | | | | **Thousand Barrels** | **Million Kilowatthours** | **Net Energy** | **Million Kilowatthours** | **Total** [c] |
| 1960 | 1 | 0 | 19 | 166 | 2,144 | 2 | 74 | 4,096 | 1,464 | 7,965 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 0 | 150 | 256 | 2,086 | 3 | 71 | 4,921 | 589 | 8,076 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 0 | 20 | 385 | 2,062 | 13 | 67 | 6,131 | 671 | 9,350 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 0 | 15 | 510 | 1,654 | 36 | 52 | 6,973 | 961 | 10,201 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 0 | 10 | 963 | 1,573 | 14 | 64 | 6,533 | 812 | 9,970 | 0 | 0 | — | 0 | — |
| 1985 | 0 | (s) | 16 | 1,236 | 1,569 | 5 | 58 | 7,464 | 232 | 10,580 | [e] 0 | 0 | — | 0 | — |
| 1990 | 0 | (s) | 78 | 1,371 | 1,306 | 6 | 65 | 7,929 | 912 | 11,667 | 0 | 0 | — | 0 | — |
| 1991 | 0 | (s) | 17 | 1,406 | 2,397 | 6 | 58 | 7,712 | 1,316 | 12,913 | 0 | 0 | — | 0 | — |
| 1992 | 0 | (s) | 18 | 1,381 | 1,451 | 6 | 59 | 8,067 | 1,037 | 12,020 | 0 | 0 | — | 0 | — |
| 1993 | 0 | (s) | 51 | 1,627 | 1,440 | 5 | 61 | 8,238 | 1,144 | 12,566 | 0 | 0 | — | 0 | — |
| 1994 | 0 | (s) | 57 | 1,539 | 566 | 7 | 63 | 8,232 | 1,267 | 11,731 | 0 | 0 | — | 0 | — |
| 1995 | 0 | (s) | 53 | 1,562 | 73 | 5 | 62 | 8,398 | 1,046 | 11,200 | 0 | 0 | — | 0 | — |
| 1996 | 0 | (s) | 52 | 1,604 | 62 | 4 | 60 | 8,375 | 2,031 | 12,189 | 0 | 0 | — | 0 | — |
| 1997 | 0 | (s) | 64 | 1,577 | 70 | R 7 | 64 | 8,510 | 1,701 | R 11,992 | 0 | 0 | — | 0 | — |
| 1998 | 0 | (s) | 55 | 1,587 | 70 | 3 | 67 | 8,982 | 1,459 | 12,222 | 0 | 0 | — | 0 | — |
| 1999 | 0 | (s) | 15 | 1,471 | 105 | 2 | 67 | 9,163 | 2,093 | 12,916 | 0 | 0 | — | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | | | | |
| 1960 | (s) | 0.0 | 0.1 | 1.0 | 11.5 | (s) | 0.5 | 21.5 | 9.2 | 43.7 | 0.0 | 0.0 | 43.7 | 0.0 | 43.7 |
| 1965 | (s) | 0.0 | 0.8 | 1.5 | 11.2 | (s) | 0.4 | 25.8 | 3.7 | 43.4 | 0.0 | 0.0 | 43.4 | 0.0 | 43.4 |
| 1970 | (s) | 0.0 | 0.1 | 2.2 | 11.1 | 0.1 | 0.4 | 32.2 | 4.2 | 50.3 | 0.0 | 0.0 | 50.3 | 0.0 | 50.3 |
| 1975 | (s) | 0.0 | 0.1 | 3.0 | 8.9 | 0.1 | 0.3 | 36.6 | 6.0 | 55.0 | 0.0 | 0.0 | 55.0 | 0.0 | 55.0 |
| 1980 | 0.0 | 0.0 | 0.1 | 5.6 | 8.4 | 0.1 | 0.4 | 34.3 | 5.1 | 54.0 | 0.0 | 0.0 | 54.0 | 0.0 | 54.0 |
| 1985 | 0.0 | (s) | 0.1 | 7.2 | 8.4 | (s) | 0.4 | 39.2 | 1.5 | 56.8 | [e] 0.0 | 0.0 | [e] 56.8 | 0.0 | [e] 56.8 |
| 1990 | 0.0 | (s) | 0.4 | 8.0 | 7.0 | (s) | 0.4 | 41.6 | 5.7 | 63.2 | 0.0 | 0.0 | 63.2 | 0.0 | 63.2 |
| 1991 | 0.0 | (s) | 0.1 | 8.2 | 12.9 | (s) | 0.4 | 40.5 | 8.3 | 70.3 | 0.0 | 0.0 | 70.3 | 0.0 | 70.3 |
| 1992 | 0.0 | (s) | 0.1 | 8.0 | 7.8 | (s) | 0.4 | 42.4 | 6.5 | 65.2 | 0.0 | 0.0 | 65.2 | 0.0 | 65.2 |
| 1993 | 0.0 | (s) | 0.3 | 9.5 | 7.7 | (s) | 0.4 | 43.3 | 7.2 | 68.3 | 0.0 | 0.0 | 68.3 | 0.0 | 68.3 |
| 1994 | 0.0 | (s) | 0.3 | 9.0 | 3.0 | (s) | 0.4 | R 43.1 | 8.0 | R 63.7 | 0.0 | 0.0 | R 63.7 | 0.0 | R 63.7 |
| 1995 | 0.0 | (s) | 0.3 | 9.1 | 0.4 | (s) | 0.4 | R 43.8 | 6.6 | R 60.6 | 0.0 | 0.0 | R 60.6 | 0.0 | R 60.6 |
| 1996 | 0.0 | (s) | 0.3 | 9.3 | 0.4 | (s) | 0.4 | R 43.7 | 12.8 | R 66.8 | 0.0 | 0.0 | R 66.8 | 0.0 | R 66.8 |
| 1997 | 0.0 | (s) | 0.3 | 9.2 | 0.4 | (s) | 0.4 | R 44.4 | 10.7 | R 65.4 | 0.0 | 0.0 | R 65.4 | 0.0 | R 65.4 |
| 1998 | 0.0 | (s) | 0.3 | 9.2 | 0.4 | (s) | 0.4 | 46.8 | 9.2 | 66.3 | 0.0 | 0.0 | 66.3 | 0.0 | 66.3 |
| 1999 | 0.0 | 0.1 | 0.1 | 8.6 | 0.6 | (s) | 0.4 | 47.7 | 13.2 | 70.6 | 0.0 | 0.0 | 70.6 | 0.0 | 70.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 64. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Delaware

| | | | Petroleum | | | | | | Wood | | | |
| | Coal | Natural Gas [a] | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | Nuclear Electric Power | Hydroelectric Power [e] | and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 737 | 3 | 40 | 8 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | — |
| 1965 | 1,055 | 5 | 84 | 17 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | — |
| 1970 | 1,497 | 4 | 1,537 | 307 | 1,240 | 3,084 | 0 | 0 | 0 | 0 | 0 | — |
| 1975 | 905 | 2 | 6,176 | 135 | 237 | 6,547 | 0 | 0 | 0 | 0 | 0 | — |
| 1980 | 942 | 7 | 5,831 | 187 | 470 | 6,488 | 0 | 0 | 0 | 0 | 0 | — |
| 1985 | 2,543 | 7 | 2,650 | 101 | 351 | 3,102 | 0 | 0 | 0 | 0 | 0 | — |
| 1990 | 2,056 | 11 | 1,991 | 110 | 1,410 | 3,510 | 0 | 0 | 0 | 0 | 0 | — |
| 1991 | 1,958 | 14 | 2,689 | 119 | 1,314 | 4,122 | 0 | 0 | 0 | 0 | 0 | — |
| 1992 | 1,628 | 8 | 2,582 | 126 | 1,691 | 4,399 | 0 | 0 | 0 | 0 | 0 | — |
| 1993 | 2,223 | 9 | 3,294 | 103 | 0 | 3,397 | 0 | 0 | 0 | 0 | 0 | — |
| 1994 | 2,007 | 17 | 2,479 | 247 | 0 | 2,727 | 0 | 0 | 0 | 0 | 0 | — |
| 1995 | 1,816 | 27 | 1,335 | 160 | 0 | 1,495 | 0 | 0 | 0 | 0 | 0 | — |
| 1996 | 1,787 | 23 | 1,747 | 222 | 0 | 1,969 | 0 | 0 | 0 | 0 | 0 | — |
| 1997 | 1,685 | 16 | 1,313 | 122 | 0 | 1,435 | 0 | 0 | 0 | 0 | 0 | — |
| 1998 | 1,592 | 11 | 1,991 | 120 | 0 | 2,111 | 0 | 0 | 0 | 0 | 0 | — |
| 1999 | 1,244 | 20 | 1,846 | 213 | 0 | 2,059 | 0 | 0 | 0 | 0 | 0 | — |
| | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 19.1 | 3.3 | 0.2 | (s) | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.7 |
| 1965 | 27.8 | 4.8 | 0.5 | 0.1 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.3 |
| 1970 | 36.2 | 3.8 | 9.7 | 1.8 | 7.5 | 18.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 59.0 |
| 1975 | 22.2 | 1.8 | 38.8 | 0.8 | 1.4 | 41.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65.1 |
| 1980 | 23.5 | 7.3 | 36.7 | 1.1 | 2.8 | 40.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 71.3 |
| 1985 | 65.9 | 7.5 | 16.7 | 0.6 | 2.1 | 19.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 92.8 |
| 1990 | 53.6 | 11.4 | 12.5 | 0.6 | 8.5 | 21.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 86.6 |
| 1991 | 51.1 | 15.1 | 16.9 | 0.7 | 7.9 | 25.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 91.7 |
| 1992 | 42.5 | 8.7 | 16.2 | 0.7 | 10.2 | 27.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 78.4 |
| 1993 | 57.9 | 9.0 | 20.7 | 0.6 | 0.0 | 21.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 88.2 |
| 1994 | 52.0 | 18.0 | 15.6 | 1.4 | 0.0 | 17.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 87.1 |
| 1995 | 47.5 | 27.9 | 8.4 | 0.9 | 0.0 | 9.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 84.7 |
| 1996 | 46.5 | 24.2 | 11.0 | 1.3 | 0.0 | 12.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 83.0 |
| 1997 | 44.0 | 16.7 | 8.3 | 0.7 | 0.0 | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 69.7 |
| 1998 | 41.3 | 10.8 | 12.5 | 0.7 | 0.0 | 13.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65.3 |
| 1999 | 32.2 | 19.5 | 11.6 | 1.2 | 0.0 | 12.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 64.6 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 65. Energy Consumption Estimates by Source, Selected Years 1960-1999, District of Columbia**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
| **Thousand Barrels** | | | | | | | | | | | | | | | | | | | |
| 1960 | 1,051 | 13 | 11 | 0 | 2,894 | 0 | 161 | 2 | 120 | 4,957 | 2,428 | 0 | 10,573 | 0 | 3 | — | — | 5,633 | — |
| 1965 | 526 | 17 | 20 | 0 | 3,435 | (s) | 104 | 2 | 71 | 5,469 | 6,749 | 0 | 15,850 | 0 | 3 | — | — | 10,436 | — |
| 1970 | 1,128 | 26 | 17 | 0 | 4,934 | (s) | 46 | 4 | 56 | 5,688 | 11,144 | 0 | 21,889 | 0 | 1 | — | — | 6,335 | — |
| 1975 | 418 | 26 | 20 | 0 | 3,157 | 0 | 110 | 4 | 60 | 5,748 | 4,174 | 0 | 13,273 | 0 | 1 | — | — | 14,942 | — |
| 1980 | 134 | 28 | 16 | 0 | 2,284 | 329 | 268 | 4 | 61 | 3,881 | 1,612 | 0 | 8,455 | 0 | 0 | — | — | 21,154 | — |
| 1985 | 140 | 29 | 27 | 0 | 2,229 | 7 | 68 | 4 | 55 | 3,802 | 740 | 0 | 6,932 | 0 | 0 | — | — | 26,938 | — |
| 1990 | 69 | 29 | 30 | 0 | 1,537 | 5 | 11 | 4 | 62 | 4,043 | 1,024 | 0 | 6,717 | 0 | [h]0 | — | — | R 29,798 | — |
| 1991 | 66 | 31 | 22 | 0 | 1,548 | 0 | 8 | 4 | 56 | 4,023 | 666 | 0 | 6,328 | 0 | 0 | — | — | R 31,451 | — |
| 1992 | 50 | 33 | 21 | 0 | 1,553 | 0 | 8 | 7 | 57 | 4,024 | 472 | 0 | 6,142 | 0 | 0 | — | — | R 31,009 | — |
| 1993 | 51 | 33 | 28 | 2 | 1,631 | 101 | 9 | 6 | 58 | 4,185 | 650 | 0 | 6,671 | 0 | 0 | — | — | R 31,413 | — |
| 1994 | 47 | 31 | 26 | 2 | 1,863 | 0 | 10 | 6 | 61 | 4,099 | 737 | 0 | 6,804 | 0 | 0 | — | — | R 30,568 | — |
| 1995 | 6 | 33 | 26 | 4 | 1,822 | 2 | 135 | 5 | 60 | 4,142 | 534 | 0 | 6,730 | 0 | 0 | — | — | R 30,955 | — |
| 1996 | 23 | 34 | 22 | (s) | 2,041 | 0 | 107 | 6 | 58 | 3,862 | 339 | 0 | 6,435 | 0 | 0 | — | — | R 30,733 | — |
| 1997 | 40 | 34 | 34 | 3 | 1,521 | 252 | 209 | R 7 | 61 | 4,066 | 161 | 0 | R 6,314 | 0 | 0 | — | — | R 30,777 | — |
| 1998 | 6 | 30 | 28 | 3 | 1,320 | 559 | 299 | 3 | 64 | 4,031 | 454 | 0 | 6,761 | 0 | 0 | — | — | 30,493 | — |
| 1999 | 6 | 32 | 26 | 3 | 1,412 | 0 | 232 | 3 | 65 | 3,979 | 442 | 0 | 6,162 | 0 | 0 | — | — | 29,835 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 27.8 | 13.0 | 0.1 | 0.0 | 16.9 | 0.0 | 0.9 | (s) | 0.7 | 26.0 | 15.3 | 0.0 | 59.9 | 0.0 | (s) | 0.1 | 0.0 | 19.2 | 120.0 |
| 1965 | 13.8 | 17.3 | 0.1 | 0.0 | 20.0 | (s) | 0.6 | (s) | 0.4 | 28.7 | 42.4 | 0.0 | 92.3 | 0.0 | (s) | 0.1 | 0.0 | 35.6 | 159.2 |
| 1970 | 28.4 | 26.4 | 0.1 | 0.0 | 28.7 | (s) | 0.3 | (s) | 0.3 | 29.9 | 70.1 | 0.0 | 129.4 | 0.0 | (s) | 0.1 | 0.0 | 21.6 | 206.0 |
| 1975 | 10.1 | 26.2 | 0.1 | 0.0 | 18.4 | 0.0 | 0.6 | (s) | 0.4 | 30.2 | 26.2 | 0.0 | 76.0 | 0.0 | (s) | 0.1 | 0.0 | 51.0 | 163.4 |
| 1980 | 3.3 | 28.0 | 0.1 | 0.0 | 13.3 | 1.9 | 1.5 | (s) | 0.4 | 20.4 | 10.1 | 0.0 | 47.7 | 0.0 | 0.0 | 2.0 | 0.0 | 72.2 | 153.1 |
| 1985 | 3.5 | 29.3 | 0.2 | 0.0 | 13.0 | (s) | 0.4 | (s) | 0.3 | 20.0 | 4.7 | 0.0 | 38.6 | 0.0 | 0.0 | R 3.0 | 0.0 | 91.9 | R 166.3 |
| 1990 | 1.7 | 29.1 | 0.2 | 0.0 | 9.0 | (s) | 0.1 | (s) | 0.4 | 21.2 | 6.4 | 0.0 | 37.3 | 0.0 | [h]0.0 | R 1.6 | [h](s) | R 101.7 | R h 171.4 |
| 1991 | 1.7 | 31.3 | 0.1 | 0.0 | 9.0 | 0.0 | (s) | (s) | 0.3 | 21.1 | 4.2 | 0.0 | 34.9 | 0.0 | 0.0 | R 1.7 | (s) | R 107.3 | 176.8 |
| 1992 | 1.3 | 33.2 | 0.1 | 0.0 | 9.0 | 0.0 | (s) | (s) | 0.3 | 21.1 | 3.0 | 0.0 | 33.7 | 0.0 | 0.0 | R 1.8 | (s) | R 105.8 | 175.8 |
| 1993 | 1.3 | 33.3 | 0.2 | (s) | 9.5 | 0.6 | 0.1 | (s) | 0.4 | 22.0 | 4.1 | 0.0 | 36.8 | 0.0 | 0.0 | 1.9 | (s) | 107.2 | 180.4 |
| 1994 | 1.2 | 31.2 | 0.2 | (s) | 10.9 | 0.0 | 0.1 | (s) | 0.4 | R 21.4 | 4.6 | 0.0 | R 37.6 | 0.0 | 0.0 | 1.8 | (s) | 104.3 | R 176.0 |
| 1995 | 0.1 | 33.2 | 0.2 | (s) | 10.6 | (s) | 0.8 | (s) | 0.4 | R 21.6 | 3.4 | 0.0 | R 36.9 | 0.0 | 0.0 | 2.0 | (s) | 105.6 | R 177.9 |
| 1996 | 0.6 | 34.2 | 0.1 | (s) | 11.9 | 0.0 | 0.6 | (s) | 0.4 | R 20.1 | 2.1 | 0.0 | R 35.3 | 0.0 | 0.0 | 2.0 | (s) | R 104.9 | R 176.9 |
| 1997 | 1.0 | 34.8 | 0.2 | (s) | 8.9 | 1.4 | 1.2 | (s) | 0.4 | R 21.2 | 1.0 | 0.0 | R 34.3 | 0.0 | 0.0 | R 1.3 | (s) | R 105.0 | R 176.4 |
| 1998 | 0.1 | 31.2 | 0.2 | (s) | 7.7 | 3.2 | 1.7 | (s) | 0.4 | 21.0 | 2.9 | 0.0 | 37.0 | 0.0 | 0.0 | 1.2 | (s) | 104.0 | 173.6 |
| 1999 | 0.1 | 32.9 | 0.2 | (s) | 8.2 | 0.0 | 1.3 | (s) | 0.4 | 20.7 | 2.8 | 0.0 | 33.6 | 0.0 | 0.0 | 1.3 | (s) | 101.8 | 169.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number

indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 66.  Residential Energy Consumption Estimates, Selected Years 1960-1999, District of Columbia

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] Thousand Barrels | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 47 | 9 | 1,314 | 67 | 1 | 1,382 | 6 | — | — | 429 | — | 1,068 | — |
| 1965 | 36 | 11 | 1,241 | 43 | 1 | 1,285 | 4 | — | — | 578 | — | 1,381 | — |
| 1970 | 14 | 14 | 1,622 | 21 | 1 | 1,644 | 5 | — | — | 830 | — | 2,012 | — |
| 1975 | 5 | 13 | 1,161 | 7 | 1 | 1,169 | 6 | — | — | 909 | — | 2,193 | — |
| 1980 | 38 | 14 | 749 | 5 | 1 | 755 | 98 | — | — | 1,085 | — | 2,638 | — |
| 1985 | 49 | 17 | 495 | 10 | 1 | 507 | 144 | — | — | 1,233 | — | 2,897 | — |
| 1990 | 24 | 15 | 149 | 3 | 1 | 154 | 76 | — | — | 1,480 | — | 3,238 | — |
| 1991 | 23 | 15 | 165 | 4 | 1 | 170 | 80 | — | — | 1,580 | — | R 3,435 | — |
| 1992 | 18 | 17 | 170 | 4 | 1 | 175 | 85 | — | — | 1,488 | — | R 3,174 | — |
| 1993 | 18 | 17 | 164 | 5 | 1 | 171 | 86 | — | — | 1,635 | — | R 3,453 | — |
| 1994 | 16 | 16 | 133 | 4 | 1 | 139 | 84 | — | — | 1,572 | — | R 3,280 | — |
| 1995 | 2 | 16 | 275 | 6 | 2 | 283 | 93 | — | — | 1,608 | — | R 3,354 | — |
| 1996 | 8 | 17 | 307 | 6 | 2 | R 315 | 93 | — | — | 1,614 | — | R 3,364 | — |
| 1997 | 14 | 16 | 266 | 6 | 2 | 274 | R 59 | — | — | 1,554 | — | R 3,232 | — |
| 1998 | 2 | 13 | 240 | 6 | 2 | 247 | 52 | — | — | 1,596 | — | 3,296 | — |
| 1999 | 2 | 14 | 210 | 5 | 2 | 217 | 56 | — | — | 1,643 | — | 3,219 | — |

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.2 | 9.0 | 7.7 | 0.4 | (s) | 8.0 | 0.1 | 0.0 | 0.0 | 1.5 | 19.8 | 3.6 | 23.5 |
| 1965 | 0.9 | 11.1 | 7.2 | 0.2 | (s) | 7.5 | 0.1 | 0.0 | 0.0 | 2.0 | 21.5 | 4.7 | 26.2 |
| 1970 | 0.3 | 14.1 | 9.4 | 0.1 | (s) | 9.6 | 0.1 | 0.0 | 0.0 | 2.8 | 27.0 | 6.9 | 33.8 |
| 1975 | 0.1 | 13.3 | 6.8 | (s) | (s) | 6.8 | 0.1 | 0.0 | 0.0 | 3.1 | 23.5 | 7.5 | 31.0 |
| 1980 | 0.9 | 13.8 | 4.4 | (s) | (s) | 4.4 | 2.0 | 0.0 | 0.0 | 3.7 | 24.8 | 9.0 | 33.8 |
| 1985 | 1.2 | 16.9 | 2.9 | 0.1 | (s) | 2.9 | 2.9 | 0.0 | 0.0 | 4.2 | 28.1 | 9.9 | 38.0 |
| 1990 | 0.6 | 15.3 | 0.9 | (s) | (s) | 0.9 | 1.5 | e 0.0 | e (s) | 5.1 | e 23.3 | 11.0 | e 34.4 |
| 1991 | 0.6 | 15.4 | 1.0 | (s) | (s) | 1.0 | 1.6 | 0.0 | (s) | 5.4 | 23.9 | 11.7 | 35.7 |
| 1992 | 0.4 | 16.7 | 1.0 | (s) | (s) | 1.0 | 1.7 | 0.0 | (s) | 5.1 | 24.9 | 10.8 | 35.8 |
| 1993 | 0.4 | 16.7 | 1.0 | (s) | (s) | 1.0 | 1.7 | 0.0 | (s) | 5.6 | 25.4 | 11.8 | 37.2 |
| 1994 | 0.4 | 16.0 | 0.8 | (s) | (s) | 0.8 | 1.7 | 0.0 | (s) | 5.4 | 24.3 | 11.2 | 35.5 |
| 1995 | 0.1 | 15.8 | 1.6 | (s) | (s) | 1.6 | 1.9 | 0.0 | (s) | 5.5 | 24.8 | 11.4 | 36.3 |
| 1996 | 0.2 | 17.4 | 1.8 | (s) | (s) | 1.8 | 1.9 | 0.0 | (s) | 5.5 | 26.8 | 11.5 | 38.3 |
| 1997 | 0.3 | 16.1 | 1.6 | (s) | (s) | 1.6 | R 1.2 | 0.0 | (s) | 5.3 | R 24.6 | 11.0 | R 35.6 |
| 1998 | 0.1 | 13.6 | 1.4 | (s) | (s) | 1.4 | 1.0 | 0.0 | (s) | 5.4 | 21.6 | 11.2 | 32.8 |
| 1999 | 0.1 | 14.4 | 1.2 | (s) | (s) | 1.3 | 1.1 | 0.0 | (s) | 5.6 | 22.5 | 11.0 | 33.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 67.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, District of Columbia

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 87 | 4 | 1,060 | 34 | (s) | 85 | 1,443 | 2,621 | (s) | — | 955 | — | 2,375 | — |
| 1965 | 67 | 6 | 1,001 | 22 | (s) | 78 | 4,044 | 5,144 | (s) | — | 1,359 | — | 3,245 | — |
| 1970 | 26 | 12 | 1,308 | 10 | (s) | 65 | 5,081 | 6,464 | (s) | — | 1,935 | — | 4,689 | — |
| 1975 | 10 | 12 | 936 | 4 | (s) | 78 | 1,051 | 2,068 | (s) | — | 2,355 | — | 5,680 | — |
| 1980 | 71 | 14 | 647 | 1 | (s) | 40 | 37 | 725 | 2 | — | 2,457 | — | 5,974 | — |
| 1985 | 91 | 12 | 749 | 55 | (s) | 27 | 286 | 1,117 | R 4 | — | 4,317 | — | 10,142 | — |
| 1990 | 45 | 13 | 501 | 8 | (s) | 71 | 221 | 802 | R 5 | — | 5,250 | — | R 11,485 | — |
| 1991 | 43 | 16 | 587 | 4 | (s) | 35 | 222 | 848 | R 5 | — | 5,418 | — | R 11,778 | — |
| 1992 | 33 | 16 | 551 | 4 | (s) | 29 | 269 | 854 | R 6 | — | 5,416 | — | R 11,550 | — |
| 1993 | 33 | 16 | 800 | 4 | (s) | 32 | 208 | 1,045 | 7 | — | 5,605 | — | R 11,838 | — |
| 1994 | 30 | 15 | 908 | 6 | (s) | 66 | 170 | 1,150 | 7 | — | 8,291 | — | R 17,302 | — |
| 1995 | 4 | 17 | 803 | 129 | (s) | 101 | 132 | 1,166 | 7 | — | 8,275 | — | R 17,252 | — |
| 1996 | 15 | 16 | 975 | 101 | (s) | 20 | 97 | 1,194 | 8 | — | 8,108 | — | R 16,897 | — |
| 1997 | 26 | 18 | 522 | 202 | (s) | 49 | 35 | 809 | R 6 | — | 8,132 | — | R 16,916 | — |
| 1998 | 4 | 17 | 324 | 293 | (s) | 170 | 4 | 793 | 6 | — | 8,261 | — | 17,066 | — |
| 1999 | 4 | 18 | 337 | 227 | (s) | 22 | 2 | 589 | 8 | — | 8,354 | — | 16,367 | — |
| | | | | | | **Trillion Btu** | | | | | | | | | |
| 1960 | 2.2 | 3.7 | 6.2 | 0.2 | (s) | 0.4 | 9.1 | 15.9 | (s) | 0.0 | 3.3 | 25.1 | 8.1 | 33.2 |
| 1965 | 1.7 | 6.0 | 5.8 | 0.1 | (s) | 0.4 | 25.4 | 31.8 | (s) | 0.0 | 4.6 | 44.1 | 11.1 | 55.2 |
| 1970 | 0.6 | 11.8 | 7.6 | 0.1 | (s) | 0.3 | 31.9 | 40.0 | (s) | 0.0 | 6.6 | 59.0 | 16.0 | 75.0 |
| 1975 | 0.2 | 12.4 | 5.5 | (s) | (s) | 0.4 | 6.6 | 12.5 | (s) | 0.0 | 8.0 | 33.2 | 19.4 | 52.5 |
| 1980 | 1.7 | 13.8 | 3.8 | (s) | (s) | 0.2 | 0.2 | 4.2 | (s) | 0.0 | 8.4 | 28.2 | 20.4 | 48.6 |
| 1985 | 2.3 | 12.1 | 4.4 | 0.3 | (s) | 0.1 | 1.8 | 6.6 | R 0.1 | 0.0 | 14.7 | R 35.8 | 34.6 | R 70.4 |
| 1990 | 1.1 | 13.6 | 2.9 | (s) | (s) | 0.4 | 1.4 | 4.7 | R 0.1 | e 0.0 | 17.9 | e 37.4 | 39.2 | R e 76.6 |
| 1991 | 1.1 | 15.6 | 3.4 | (s) | (s) | 0.2 | 1.4 | 5.0 | R 0.1 | 0.0 | 18.5 | R 40.3 | 40.2 | 80.5 |
| 1992 | 0.8 | 16.2 | 3.2 | (s) | (s) | 0.2 | 1.7 | 5.1 | R 0.1 | 0.0 | 18.5 | R 40.7 | R 39.4 | 80.1 |
| 1993 | 0.8 | 16.3 | 4.7 | (s) | (s) | 0.2 | 1.3 | 6.2 | 0.1 | 0.0 | 19.1 | 42.6 | 40.4 | 83.0 |
| 1994 | 0.8 | 14.9 | 5.3 | (s) | (s) | 0.3 | 1.1 | 6.7 | 0.1 | 0.0 | 28.3 | 50.8 | 59.0 | 109.9 |
| 1995 | 0.1 | 17.1 | 4.7 | 0.7 | (s) | 0.5 | 0.8 | 6.8 | 0.1 | 0.0 | 28.2 | 52.4 | R 58.9 | 111.2 |
| 1996 | 0.4 | 16.5 | 5.7 | 0.6 | (s) | 0.1 | 0.6 | 7.0 | 0.2 | 0.0 | 27.7 | 51.7 | R 57.7 | R 109.3 |
| 1997 | 0.6 | 18.4 | 3.0 | 1.1 | (s) | 0.3 | 0.2 | 4.7 | 0.1 | 0.0 | 27.7 | 51.6 | R 57.7 | R 109.3 |
| 1998 | 0.1 | 17.3 | 1.9 | 1.7 | (s) | 0.9 | (s) | 4.5 | 0.1 | 0.0 | 28.2 | 50.2 | 58.2 | 108.4 |
| 1999 | 0.1 | 18.2 | 2.0 | 1.3 | (s) | 0.1 | (s) | 3.4 | 0.2 | 0.0 | 28.5 | 50.3 | 55.8 | 106.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**D I S T R I C T   O F   C O L U M B I A**

## Table 68.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, District of Columbia

| Year | Coal | Natural Gas a | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
| | | | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 463 | (s) | 11 | 211 | 61 | 1 | 8 | 0 | 949 | 0 | 1,241 | 0 | — | — | 1,237 | — | 3,076 | — |
| 1965 | 129 | (s) | 20 | 316 | 39 | 1 | 11 | 0 | 2,689 | 0 | 3,076 | 0 | — | — | 1,836 | — | 4,383 | — |
| 1970 | 414 | (s) | 17 | 377 | 15 | 2 | 3 | 0 | 3,296 | 0 | 3,710 | 0 | — | — | 2,627 | — | 6,367 | — |
| 1975 | 292 | (s) | 20 | 150 | 99 | 2 | 14 | 0 | 686 | 0 | 970 | 0 | — | — | 2,532 | — | 6,108 | — |
| 1980 | 25 | (s) | 16 | 192 | 262 | 3 | 7 | 0 | 54 | 0 | 534 | 0 | — | — | 3,356 | — | 8,161 | — |
| 1985 | 0 | 0 | 27 | 36 | 3 | 2 | 7 | 59 | 1 | 0 | 135 | 0 | — | — | 2,534 | — | 5,954 | — |
| 1990 | 0 | 0 | 30 | 2 | 0 | 2 | 7 | 90 | 1 | 0 | 133 | f 0 | — | — | 2,976 | — | R 6,511 | — |
| 1991 | 0 | 0 | 22 | 2 | (s) | 2 | 7 | 58 | 1 | 0 | 93 | 0 | — | — | 3,053 | — | R 6,637 | — |
| 1992 | 0 | 0 | 21 | 13 | 0 | 5 | 7 | 59 | 2 | 0 | 106 | 0 | — | — | 2,987 | — | R 6,371 | — |
| 1993 | 0 | 0 | 28 | 15 | 0 | 3 | 7 | 36 | 0 | 0 | 90 | 0 | — | — | 2,976 | — | R 6,287 | — |
| 1994 | 0 | 0 | 26 | 13 | 0 | 3 | 7 | 69 | 1 | 0 | 119 | 0 | — | — | 267 | — | 558 | — |
| 1995 | 0 | 0 | 26 | 15 | 0 | 3 | 7 | 44 | (s) | 0 | 95 | 0 | — | — | 262 | — | R 547 | — |
| 1996 | 0 | 0 | 22 | 18 | (s) | 3 | 7 | 39 | (s) | 0 | 89 | 0 | — | — | 252 | — | 524 | — |
| 1997 | 0 | 0 | 34 | 21 | (s) | R 4 | 7 | 56 | 0 | 0 | R 122 | 0 | — | — | 262 | — | R 546 | — |
| 1998 | 0 | 0 | 28 | 18 | 0 | 1 | 8 | 27 | 0 | 0 | 81 | 0 | — | — | 262 | — | 541 | — |
| 1999 | 0 | 0 | 26 | 141 | (s) | 1 | 8 | 18 | 0 | 0 | 194 | 0 | — | — | 249 | — | 488 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 12.0 | 0.2 | 0.1 | 1.2 | 0.3 | (s) | (s) | 0.0 | 6.0 | 0.0 | 7.7 | 0.0 | 0.0 | 0.0 | 4.2 | 24.0 | 10.5 | 34.5 |
| 1965 | 3.3 | 0.3 | 0.1 | 1.8 | 0.2 | (s) | 0.1 | 0.0 | 16.9 | 0.0 | 19.2 | 0.0 | 0.0 | 0.0 | 6.3 | 29.0 | 15.0 | 44.0 |
| 1970 | 10.0 | 0.4 | 0.1 | 2.2 | 0.1 | (s) | (s) | 0.0 | 20.7 | 0.0 | 23.1 | 0.0 | 0.0 | 0.0 | 9.0 | 42.6 | 21.7 | 64.3 |
| 1975 | 7.0 | 0.4 | 0.1 | 0.9 | 0.6 | (s) | 0.1 | 0.0 | 4.3 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 8.6 | 22.0 | 20.8 | 42.8 |
| 1980 | 0.6 | 0.4 | 0.1 | 1.1 | 1.5 | (s) | (s) | 0.0 | 0.3 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 11.5 | 15.5 | 27.8 | 43.4 |
| 1985 | 0.0 | 0.0 | 0.2 | 0.2 | (s) | (s) | (s) | 0.3 | (s) | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 8.6 | 9.4 | 20.3 | 29.7 |
| 1990 | 0.0 | 0.0 | 0.2 | (s) | 0.0 | (s) | (s) | 0.5 | (s) | 0.0 | 0.7 | f 0.0 | 0.0 | f 0.0 | 10.2 | f 10.9 | f 22.2 | f 33.1 |
| 1991 | 0.0 | 0.0 | 0.1 | (s) | (s) | (s) | (s) | 0.3 | (s) | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 10.4 | 10.9 | R 22.6 | 33.6 |
| 1992 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | (s) | (s) | 0.3 | (s) | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 10.2 | 10.8 | R 21.7 | R 32.5 |
| 1993 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | (s) | (s) | 0.2 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 10.2 | 10.7 | R 21.4 | 32.1 |
| 1994 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | (s) | (s) | 0.4 | (s) | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.9 | 1.6 | 1.9 | 3.5 |
| 1995 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | (s) | (s) | 0.2 | (s) | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.9 | 1.4 | 1.9 | 3.3 |
| 1996 | 0.0 | 0.0 | 0.1 | 0.1 | (s) | (s) | (s) | 0.2 | (s) | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.9 | 1.4 | 1.8 | 3.2 |
| 1997 | 0.0 | 0.0 | 0.2 | 0.1 | (s) | (s) | (s) | 0.3 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.9 | 1.6 | 1.9 | 3.5 |
| 1998 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | (s) | (s) | 0.1 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.9 | 1.4 | 1.8 | 3.2 |
| 1999 | 0.0 | 0.0 | 0.2 | 0.8 | (s) | (s) | (s) | 0.1 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.9 | 2.0 | 1.7 | 3.7 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 69. Transportation Energy Consumption Estimates, Selected Years 1960-1999, District of Columbia**

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 8 | (s) | 0 | 305 | 0 | (s) | 112 | 4,872 | 28 | 5,317 | 0 | 32 | — | 80 | — |
| 1965 | (s) | 0 | 0 | 874 | (s) | (s) | 59 | 5,391 | 6 | 6,331 | 0 | 0 | — | 0 | — |
| 1970 | 1 | (s) | 0 | 492 | (s) | (s) | 53 | 5,623 | 13 | 6,182 | 0 | 0 | — | 0 | — |
| 1975 | (s) | (s) | 0 | 820 | 0 | 1 | 46 | 5,670 | 350 | 6,887 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 0 | 0 | 587 | 329 | (s) | 54 | 3,841 | 59 | 4,870 | 0 | 106 | — | 258 | — |
| 1985 | 0 | (s) | 0 | 882 | 7 | 1 | 49 | 3,716 | 202 | 4,857 | R e (s) | 130 | — | 305 | — |
| 1990 | 0 | (s) | 0 | 812 | 5 | 1 | 55 | 3,882 | 3 | 4,759 | 0 | 142 | — | 310 | — |
| 1991 | 0 | (s) | 0 | 740 | 0 | (s) | 49 | 3,930 | 0 | 4,720 | R 1 | 144 | — | R 313 | — |
| 1992 | 0 | (s) | 0 | 763 | 0 | 1 | 50 | 3,936 | 7 | 4,758 | 0 | 152 | — | 325 | — |
| 1993 | 0 | (s) | 2 | 617 | 101 | 1 | 51 | 4,117 | 0 | 4,889 | 0 | 159 | — | 336 | — |
| 1994 | 0 | (s) | 2 | 712 | 0 | 1 | 53 | 3,963 | 0 | 4,731 | 0 | 165 | — | 345 | — |
| 1995 | 0 | (s) | 4 | 654 | 2 | 1 | 53 | 3,997 | 0 | 4,709 | 0 | 170 | — | 355 | — |
| 1996 | 0 | (s) | (s) | 693 | 0 | 1 | 51 | 3,803 | 0 | 4,548 | 0 | 163 | — | 339 | — |
| 1997 | 0 | (s) | 3 | 641 | 252 | R 1 | 54 | 3,962 | 0 | R 4,913 | 0 | 158 | — | R 330 | — |
| 1998 | 0 | (s) | 3 | 622 | 559 | (s) | 56 | 3,833 | 0 | 5,074 | 0 | 162 | — | 335 | — |
| 1999 | 0 | (s) | 3 | 617 | 0 | (s) | 57 | 3,938 | 0 | 4,615 | 0 | 172 | — | 338 | — |
| | | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 0.2 | (s) | 0.0 | 1.8 | 0.0 | (s) | 0.7 | 25.6 | 0.2 | 28.2 | 0.0 | 0.1 | 28.6 | 0.3 | 28.8 |
| 1965 | (s) | 0.0 | 0.0 | 5.1 | (s) | (s) | 0.4 | 28.3 | (s) | 33.8 | 0.0 | 0.0 | 33.8 | 0.0 | 33.8 |
| 1970 | (s) | (s) | 0.0 | 2.9 | (s) | (s) | 0.3 | 29.5 | 0.1 | 32.8 | 0.0 | 0.0 | 32.8 | 0.0 | 32.8 |
| 1975 | (s) | (s) | 0.0 | 4.8 | 0.0 | (s) | 0.3 | 29.8 | 2.2 | 37.0 | 0.0 | 0.0 | 37.1 | 0.0 | 37.1 |
| 1980 | 0.0 | 0.0 | 0.0 | 3.4 | 1.9 | (s) | 0.3 | 20.2 | 0.4 | 26.2 | 0.0 | 0.4 | 26.5 | 0.9 | 27.4 |
| 1985 | 0.0 | 0.4 | 0.0 | 5.1 | (s) | (s) | 0.3 | 19.5 | 1.3 | 26.3 | R e (s) | 0.4 | e 27.1 | 1.0 | e 28.1 |
| 1990 | 0.0 | 0.3 | 0.0 | 4.7 | (s) | (s) | 0.3 | 20.4 | (s) | 25.5 | 0.0 | 0.5 | 26.2 | 1.1 | 27.3 |
| 1991 | 0.0 | 0.3 | 0.0 | 4.3 | 0.0 | (s) | 0.3 | 20.6 | 0.0 | 25.3 | R (s) | 0.5 | 26.0 | 1.1 | 27.1 |
| 1992 | 0.0 | 0.3 | 0.0 | 4.4 | 0.0 | (s) | 0.3 | 20.7 | (s) | 25.5 | 0.0 | 0.5 | 26.3 | 1.1 | 27.4 |
| 1993 | 0.0 | 0.3 | (s) | 3.6 | 0.6 | (s) | 0.3 | 21.6 | 0.0 | 26.1 | 0.0 | 0.5 | 26.9 | 1.1 | 28.1 |
| 1994 | 0.0 | 0.2 | (s) | 4.1 | 0.0 | (s) | 0.3 | R 20.7 | 0.0 | R 25.2 | 0.0 | 0.6 | R 26.0 | 1.2 | R 27.2 |
| 1995 | 0.0 | 0.3 | (s) | 3.8 | (s) | (s) | 0.3 | R 20.8 | 0.0 | R 25.0 | 0.0 | 0.6 | R 25.8 | 1.2 | R 27.1 |
| 1996 | 0.0 | 0.2 | (s) | 4.0 | 0.0 | (s) | 0.3 | R 19.8 | 0.0 | R 24.2 | 0.0 | 0.6 | R 25.0 | 1.2 | R 26.1 |
| 1997 | 0.0 | 0.3 | (s) | 3.7 | 1.4 | (s) | 0.3 | R 20.7 | 0.0 | R 26.2 | 0.0 | 0.5 | R 27.0 | 1.1 | R 28.1 |
| 1998 | 0.0 | 0.3 | (s) | 3.6 | 3.2 | (s) | 0.3 | 20.0 | 0.0 | 27.1 | 0.0 | 0.6 | 27.9 | 1.1 | 29.1 |
| 1999 | 0.0 | 0.3 | (s) | 3.6 | 0.0 | (s) | 0.3 | 20.5 | 0.0 | 24.5 | 0.0 | 0.6 | 25.3 | 1.2 | 26.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

DISTRICT OF COLUMBIA

## Table 70.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, District of Columbia

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 446 | 0 | 9 | 4 | 0 | 12 | 0 | 3 | 0 | 0 | 0 | — |
| 1965 | 293 | 0 | 10 | 4 | 0 | 14 | 0 | 3 | 0 | 0 | 0 | — |
| 1970 | 673 | 0 | 2,755 | 1,135 | 0 | 3,889 | 0 | 1 | 0 | 0 | 0 | — |
| 1975 | 111 | 0 | 2,088 | 90 | 0 | 2,178 | 0 | 1 | 0 | 0 | 0 | — |
| 1980 | 0 | 0 | 1,462 | 109 | 0 | 1,572 | 0 | 0 | 0 | 0 | 0 | — |
| 1985 | 0 | 0 | 250 | 66 | 0 | 316 | 0 | 0 | 0 | 0 | 0 | — |
| 1990 | 0 | 0 | 798 | 72 | 0 | 871 | 0 | 0 | 0 | 0 | 0 | — |
| 1991 | 0 | 0 | 442 | 54 | 0 | 497 | 0 | 0 | 0 | 0 | 0 | — |
| 1992 | 0 | 0 | 194 | 56 | 0 | 250 | 0 | 0 | 0 | 0 | 0 | — |
| 1993 | 0 | 0 | 442 | 35 | 0 | 477 | 0 | 0 | 0 | 0 | 0 | — |
| 1994 | 0 | 0 | 566 | 98 | 0 | 664 | 0 | 0 | 0 | 0 | 0 | — |
| 1995 | 0 | 0 | 402 | 75 | 0 | 477 | 0 | 0 | 0 | 0 | 0 | — |
| 1996 | 0 | 0 | 241 | 49 | 0 | 290 | 0 | 0 | 0 | 0 | 0 | — |
| 1997 | 0 | 0 | 126 | 71 | 0 | 197 | 0 | 0 | 0 | 0 | 0 | — |
| 1998 | 0 | 0 | 450 | 116 | 0 | 566 | 0 | 0 | 0 | 0 | 0 | — |
| 1999 | 0 | 0 | 440 | 107 | 0 | 547 | 0 | 0 | 0 | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 12.2 | 0.0 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 12.4 |
| 1965 | 7.9 | 0.0 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 8.0 |
| 1970 | 17.4 | 0.0 | 17.3 | 6.6 | 0.0 | 23.9 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 41.4 |
| 1975 | 2.8 | 0.0 | 13.1 | 0.5 | 0.0 | 13.6 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 16.5 |
| 1980 | 0.0 | 0.0 | 9.2 | 0.6 | 0.0 | 9.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.8 |
| 1985 | 0.0 | 0.0 | 1.6 | 0.4 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 1990 | 0.0 | 0.0 | 5.0 | 0.4 | 0.0 | 5.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.4 |
| 1991 | 0.0 | 0.0 | 2.8 | 0.3 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1 |
| 1992 | 0.0 | 0.0 | 1.2 | 0.3 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| 1993 | 0.0 | 0.0 | 2.8 | 0.2 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| 1994 | 0.0 | 0.0 | 3.6 | 0.6 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 |
| 1995 | 0.0 | 0.0 | 2.5 | 0.4 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| 1996 | 0.0 | 0.0 | 1.5 | 0.3 | 0.0 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 |
| 1997 | 0.0 | 0.0 | 0.8 | 0.4 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 |
| 1998 | 0.0 | 0.0 | 2.8 | 0.7 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 |
| 1999 | 0.0 | 0.0 | 2.8 | 0.6 | 0.0 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 71.  Energy Consumption Estimates by Source, Selected Years 1960-1999, Florida

| | | | Petroleum | | | | | | | | | | | | Nuclear Electric Power | Hydro-electric Power [d] | Wood and Waste | Other [a,e] | Net Inter-state Flow of Electric-ity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kero-sene [a] | LPG [a] | Lubri-cants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | | Million kWh | | | | Million kWh | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| 1960 | 1,104 | 138 | 3,304 | 4,517 | 8,621 | 9,482 | 3,962 | 4,936 | 911 | 43,148 | 30,199 | 356 | 109,435 | 0 | 278 | — | — | -2,134 | — |
| 1965 | 2,323 | 185 | 3,506 | 4,273 | 12,279 | 17,525 | 4,449 | 5,663 | 1,014 | 53,136 | 43,344 | 1,349 | 146,537 | 0 | 298 | — | — | 606 | — |
| 1970 | 5,131 | 337 | 4,076 | 3,138 | 15,639 | 23,840 | 3,657 | 7,828 | 1,089 | 76,254 | 53,642 | 1,380 | 190,543 | 0 | 292 | — | — | -1,715 | — |
| 1975 | 5,779 | 280 | 3,659 | 1,921 | 23,387 | 24,224 | 879 | 7,478 | 1,189 | 100,592 | 79,315 | 1,651 | 244,296 | 8,370 | 234 | — | — | -850 | — |
| 1980 | 9,543 | 317 | 4,487 | 1,339 | 29,431 | 35,911 | 952 | 10,718 | 1,409 | 109,279 | 96,756 | 3,036 | 293,318 | 16,737 | 215 | — | — | 12,500 | — |
| 1985 | 19,305 | 290 | 6,666 | 841 | 30,444 | 23,101 | 2,530 | 9,932 | 1,282 | 125,346 | 37,777 | 3,100 | 241,020 | 23,461 | 244 | — | — | 73,679 | — |
| 1990 | 25,233 | 328 | 6,804 | 808 | 34,388 | 31,958 | 329 | 7,744 | 1,443 | 142,351 | 54,500 | 3,677 | 284,002 | 21,780 | R h 175 | — | — | R 84,085 | — |
| 1991 | 26,004 | 344 | 7,310 | 712 | 31,382 | 25,048 | 237 | 7,959 | 1,291 | 141,440 | 59,727 | 3,068 | 278,174 | 20,508 | R 263 | — | — | R 70,233 | — |
| 1992 | 26,368 | 353 | 6,933 | 593 | 34,689 | 24,436 | 313 | 7,992 | 1,316 | 143,176 | 59,829 | 3,230 | 282,506 | 25,116 | R 236 | — | — | R 57,205 | — |
| 1993 | 26,430 | 336 | 8,342 | 527 | 23,595 | 26,644 | 284 | 8,070 | 1,340 | 150,283 | 70,106 | 3,254 | 292,446 | 25,887 | R 211 | — | — | R 60,680 | — |
| 1994 | 26,082 | 368 | 7,304 | 526 | 33,724 | 28,640 | 209 | 7,430 | 1,401 | 152,338 | 67,062 | 3,265 | 301,899 | 26,682 | R 274 | — | — | R 78,138 | — |
| 1995 | 26,526 | 516 | 6,630 | 599 | 39,920 | 28,045 | 313 | 7,796 | 1,377 | 157,657 | 47,456 | 3,110 | 292,904 | 28,741 | R 231 | — | — | R 85,769 | — |
| 1996 | 28,443 | 486 | 5,920 | 519 | 39,187 | 29,345 | 402 | R 8,081 | 1,336 | 159,028 | 47,619 | R 10,308 | R 301,746 | 25,470 | R 216 | — | — | R 103,733 | — |
| 1997 | 28,719 | 486 | 3,517 | 567 | 42,889 | 30,507 | 308 | R 5,839 | 1,411 | 161,878 | 49,948 | R 14,200 | R 311,064 | 22,968 | R 241 | — | — | R 103,736 | — |
| 1998 | 28,827 | 466 | 3,826 | 431 | 44,938 | 28,482 | 396 | 6,269 | 1,477 | 169,201 | 71,338 | 15,575 | 341,932 | 31,115 | 199 | — | — | 71,982 | — |
| 1999 | 27,286 | 519 | 3,672 | 591 | 47,566 | 28,977 | 332 | 7,170 | 1,493 | 173,543 | 66,022 | 15,647 | 345,014 | 31,526 | 140 | — | — | 58,452 | — |
| | | | | | | | | | Trillion Btu | | | | | | | | | | |
| 1960 | 27.2 | 142.9 | 21.9 | 22.8 | 50.2 | 51.5 | 22.5 | 19.8 | 5.5 | 226.7 | 189.9 | 2.1 | 612.8 | 0.0 | 3.0 | 32.7 | 0.0 | -7.3 | 811.3 |
| 1965 | 55.2 | 191.7 | 23.3 | 21.6 | 71.5 | 97.2 | 25.2 | 22.7 | 6.2 | 279.1 | 272.5 | 7.4 | 826.6 | 0.0 | 3.1 | 36.8 | 0.0 | 2.1 | 1,115.5 |
| 1970 | 116.7 | 350.6 | 27.0 | 15.8 | 91.1 | 133.2 | 20.7 | 29.6 | 6.6 | 400.6 | 337.2 | 7.5 | 1,069.4 | 0.0 | 3.1 | 48.0 | 0.0 | -5.9 | 1,581.9 |
| 1975 | 133.5 | 292.1 | 24.3 | 9.7 | 136.2 | 135.7 | 5.0 | 27.8 | 7.2 | 528.4 | 498.7 | 9.1 | 1,382.0 | 92.2 | 2.4 | 47.6 | 0.0 | -2.9 | 1,946.9 |
| 1980 | 225.5 | 329.6 | 29.8 | 6.8 | 171.4 | 201.6 | 5.4 | 39.4 | 8.5 | 574.0 | 608.3 | 16.7 | 1,661.9 | 182.6 | 2.2 | R 73.8 | 0.0 | 42.6 | R 2,518.2 |
| 1985 | 472.4 | 305.1 | 44.2 | 4.2 | 177.3 | 129.2 | 14.3 | 35.8 | 7.8 | 658.4 | 237.5 | 16.8 | 1,325.6 | 253.7 | 2.5 | R 101.5 | 0.0 | 251.4 | R 2,712.1 |
| 1990 | 624.3 | 342.0 | 45.1 | 4.1 | 200.3 | 179.6 | 1.9 | 28.1 | 8.8 | 747.8 | 342.6 | 19.9 | 1,578.1 | 232.6 | h 1.8 | R 139.5 | R h 27.5 | R 286.9 | R h 3,232.7 |
| 1991 | 642.8 | 361.0 | 48.5 | 3.6 | 182.8 | 140.8 | 1.3 | 28.8 | 7.8 | 743.0 | 375.5 | 16.6 | 1,548.8 | 220.3 | 2.7 | R 147.5 | R 28.4 | R 239.6 | R 3,191.2 |
| 1992 | 652.7 | 370.3 | 46.0 | 3.0 | 202.1 | 137.5 | 1.8 | 29.0 | 8.0 | 752.1 | 376.1 | 17.4 | 1,573.0 | 268.2 | 2.4 | R 150.7 | R 29.8 | R 195.2 | R 3,242.2 |
| 1993 | 652.2 | 353.4 | 55.4 | 2.7 | 137.4 | 150.3 | 1.6 | 29.1 | 8.1 | 789.4 | 440.8 | 17.5 | 1,632.4 | 276.5 | 2.2 | R 159.8 | R 31.0 | R 207.0 | R 3,314.3 |
| 1994 | 641.7 | 392.5 | 48.5 | 2.7 | 196.4 | 162.1 | 1.2 | 27.0 | 8.5 | R 796.7 | 421.6 | 17.6 | R 1,682.4 | 284.9 | 2.8 | R 162.8 | R 31.8 | R 266.6 | R 3,465.6 |
| 1995 | 653.0 | 532.6 | 44.0 | 3.0 | 232.5 | 159.0 | 1.8 | 28.2 | 8.3 | R 822.2 | 298.4 | 16.8 | R 1,614.2 | 306.3 | 2.4 | R 176.7 | R 32.6 | R 292.6 | R 3,610.6 |
| 1996 | 694.5 | 510.7 | 39.3 | 2.6 | 228.3 | 166.4 | 2.3 | R 29.2 | 8.1 | R 829.5 | 299.4 | R 55.4 | R 1,660.4 | 270.6 | 2.2 | R 190.7 | R 33.3 | R 353.9 | R 3,716.3 |
| 1997 | 697.3 | 509.0 | 23.3 | 2.9 | 249.8 | 173.0 | 1.7 | R 21.1 | 8.6 | R 843.9 | 314.0 | R 78.7 | R 1,717.0 | 244.0 | R 2.5 | R 154.4 | R 33.3 | R 353.9 | R 3,711.5 |
| 1998 | 701.0 | 490.0 | 25.4 | 2.2 | 261.8 | 161.5 | 2.2 | 22.7 | 9.0 | 881.9 | 448.5 | 87.0 | 1,902.0 | 330.5 | 2.1 | 133.1 | 33.3 | 245.6 | 3,837.8 |
| 1999 | 671.6 | 541.7 | 24.4 | 3.0 | 277.1 | 164.3 | 1.9 | 25.9 | 9.1 | 904.3 | 415.1 | 87.0 | 1,912.0 | 334.9 | 1.5 | 159.0 | 32.7 | 199.4 | 3,852.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 72. Residential Energy Consumption Estimates, Selected Years 1960-1999, Florida

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 0 | 6 | 541 | 3,150 | 3,458 | 7,149 | 436 | — | — | 7,258 | — | 18,052 | — |
| 1965 | 0 | 8 | 976 | 3,001 | 4,095 | 8,073 | 292 | — | — | 12,283 | — | 29,327 | — |
| 1970 | 0 | 15 | 1,010 | 2,414 | 5,698 | 9,121 | 373 | — | — | 24,610 | — | 59,638 | — |
| 1975 | 0 | 15 | 1,097 | 724 | 5,157 | 6,977 | 481 | — | — | 34,756 | — | 83,836 | — |
| 1980 | 4 | 15 | 1,215 | 774 | 4,434 | 6,422 | R 1,609 | — | — | 44,746 | — | 108,807 | — |
| 1985 | 38 | 14 | 568 | 864 | 5,994 | 7,426 | 2,610 | — | — | 54,118 | — | 127,146 | — |
| 1990 | 2 | 13 | 234 | 154 | 4,989 | 5,377 | 428 | — | — | 71,115 | — | R 155,570 | — |
| 1991 | (s) | 13 | 237 | 195 | 5,162 | 5,594 | 451 | — | — | 72,814 | — | R 158,293 | — |
| 1992 | 6 | 14 | 309 | 274 | 5,189 | 5,772 | 474 | — | — | 73,189 | — | R 156,095 | — |
| 1993 | 6 | 14 | 319 | 218 | 5,053 | 5,591 | 513 | — | — | 76,827 | — | R 162,271 | — |
| 1994 | 7 | 14 | 249 | 125 | 4,635 | 5,008 | 503 | — | — | 80,595 | — | R 168,196 | — |
| 1995 | (s) | 15 | 221 | 211 | 3,944 | 4,375 | 558 | — | — | 85,770 | — | R 178,825 | — |
| 1996 | (s) | 16 | 216 | 264 | R 4,030 | R 4,510 | 557 | — | — | 88,315 | — | R 184,049 | — |
| 1997 | 0 | 13 | 150 | 202 | R 3,992 | R 4,344 | R 319 | — | — | 87,845 | — | R 182,727 | — |
| 1998 | 2 | 14 | 111 | 167 | 4,455 | 4,733 | 281 | — | — | 95,768 | — | 197,838 | — |
| 1999 | 2 | 14 | 101 | 161 | 4,433 | 4,696 | 301 | — | — | 93,846 | — | 183,874 | — |
| | | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 0.0 | 6.6 | 3.2 | 17.9 | 13.9 | 34.9 | 8.7 | 0.0 | 0.0 | 24.8 | 75.0 | 61.6 | 136.6 |
| 1965 | 0.0 | 8.4 | 5.7 | 17.0 | 16.4 | 39.1 | 5.8 | 0.0 | 0.0 | 41.9 | 95.3 | 100.1 | 195.4 |
| 1970 | 0.0 | 15.3 | 5.9 | 13.7 | 21.5 | 41.1 | 7.5 | 0.0 | 0.0 | 84.0 | 147.8 | 203.5 | 351.3 |
| 1975 | 0.0 | 16.4 | 6.4 | 4.1 | 19.2 | 29.6 | 9.6 | 0.0 | 0.0 | 118.6 | 174.2 | 286.0 | 460.3 |
| 1980 | 0.1 | 16.2 | 7.1 | 4.4 | 16.3 | 27.8 | R 32.2 | 0.0 | 0.0 | 152.7 | R 228.9 | 371.2 | 600.1 |
| 1985 | 1.0 | 15.0 | 3.3 | 4.9 | 21.6 | 29.8 | 52.2 | 0.0 | 0.0 | 184.7 | 282.6 | 433.8 | 716.4 |
| 1990 | (s) | 14.1 | 1.4 | 0.9 | 18.1 | 20.3 | 8.6 | e 1.1 | R e 26.2 | 242.6 | R e 313.0 | R 530.8 | R e 843.8 |
| 1991 | (s) | 14.2 | 1.4 | 1.1 | 18.7 | 21.1 | 9.0 | 1.2 | R 27.0 | 248.4 | R 321.1 | R 540.1 | R 861.1 |
| 1992 | 0.1 | 15.8 | 1.8 | 1.6 | 18.8 | 22.2 | 9.5 | 1.3 | R 28.3 | 249.7 | R 326.9 | R 532.6 | R 859.5 |
| 1993 | 0.1 | 15.3 | 1.9 | 1.2 | 18.2 | 21.3 | 10.3 | 1.4 | R 29.4 | 262.1 | R 339.9 | R 553.7 | R 893.6 |
| 1994 | 0.2 | 15.6 | 1.5 | 0.7 | 16.8 | 19.0 | 10.1 | 1.3 | R 30.3 | 275.0 | R 351.4 | R 573.9 | R 925.3 |
| 1995 | (s) | 15.6 | 1.3 | 1.2 | 14.3 | 16.8 | 11.2 | 1.4 | R 31.0 | 292.6 | R 368.5 | R 610.2 | R 978.7 |
| 1996 | (s) | 18.1 | 1.3 | 1.5 | R 14.6 | R 17.3 | 11.1 | 1.5 | R 31.5 | 301.3 | R 380.8 | R 628.0 | R 1,008.8 |
| 1997 | 0.0 | 13.8 | 0.9 | 1.1 | R 14.4 | R 16.5 | R 6.4 | 1.6 | R 31.4 | 299.7 | R 369.3 | R 623.5 | R 992.8 |
| 1998 | (s) | 14.8 | 0.6 | 0.9 | 16.1 | 17.7 | 5.6 | 1.6 | 31.2 | 326.8 | 397.7 | 675.0 | 1,072.7 |
| 1999 | 0.1 | 14.4 | 0.6 | 0.9 | 16.0 | 17.5 | 6.0 | 1.6 | 30.6 | 320.2 | 390.4 | 627.4 | 1,017.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 73.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Florida

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum — Thousand Barrels | | | | | | | | | | | |
| 1960 | 0 | 7 | 1,097 | 175 | 610 | 685 | 2,126 | 4,693 | 8 | — | 5,586 | — | 13,894 | — |
| 1965 | 0 | 13 | 1,981 | 166 | 723 | 712 | 1,608 | 5,190 | 6 | — | 9,369 | — | 22,369 | — |
| 1970 | 0 | 27 | 2,049 | 134 | 1,005 | 1,382 | 1,467 | 6,038 | 7 | — | 16,244 | — | 39,364 | — |
| 1975 | 0 | 32 | 2,226 | 40 | 910 | 1,038 | 1,555 | 5,769 | 9 | — | 22,904 | — | 55,248 | — |
| 1980 | 7 | 30 | 1,926 | 28 | 782 | 1,340 | 1,476 | 5,552 | 39 | — | 27,422 | — | 66,681 | — |
| 1985 | 71 | 31 | 3,657 | 1,047 | 1,058 | 1,368 | 2,170 | 9,300 | R 70 | — | 41,290 | — | 97,008 | — |
| 1990 | 3 | 36 | 3,243 | 125 | 880 | 1,412 | 2,398 | 8,059 | R 27 | — | 55,769 | — | R 122,001 | — |
| 1991 | (s) | 39 | 3,000 | 29 | 911 | 927 | 2,146 | 7,014 | R 29 | — | 56,993 | — | R 123,898 | — |
| 1992 | 10 | 42 | 3,002 | 30 | 916 | 818 | 1,804 | 6,569 | R 31 | — | 57,278 | — | R 122,161 | — |
| 1993 | 10 | 41 | 3,077 | 54 | 892 | 96 | 143 | 4,262 | 41 | — | 59,576 | — | R 125,834 | — |
| 1994 | 13 | 40 | 2,190 | 76 | 818 | 97 | 136 | 3,318 | 42 | — | 62,388 | — | R 130,198 | — |
| 1995 | 1 | 40 | 2,850 | 95 | 696 | 100 | 140 | 3,881 | 42 | — | 65,201 | — | R 135,940 | — |
| 1996 | 1 | 42 | 2,151 | 106 | R 711 | 100 | 100 | R 3,168 | 46 | — | 66,255 | — | R 138,076 | — |
| 1997 | 0 | 37 | 1,842 | 54 | R 705 | 241 | 127 | R 2,969 | R 35 | — | 68,879 | — | R 143,276 | — |
| 1998 | 4 | 38 | 1,420 | 65 | 786 | 247 | 11 | 2,529 | 35 | — | 73,087 | — | 150,984 | — |
| 1999 | 4 | 36 | 1,810 | 61 | 782 | 251 | 16 | 2,921 | 42 | — | 74,790 | — | 146,537 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 0.0 | 7.2 | 6.4 | 1.0 | 2.4 | 3.6 | 13.4 | 26.8 | 0.2 | 0.0 | 19.1 | 53.2 | 47.4 | 100.6 |
| 1965 | 0.0 | 13.2 | 11.5 | 0.9 | 2.9 | 3.7 | 10.1 | 29.2 | 0.1 | 0.0 | 32.0 | 74.5 | 76.3 | 150.8 |
| 1970 | 0.0 | 28.0 | 11.9 | 0.8 | 3.8 | 7.3 | 9.2 | 33.0 | 0.1 | 0.0 | 55.4 | 116.6 | 134.3 | 250.9 |
| 1975 | 0.0 | 34.2 | 13.0 | 0.2 | 3.4 | 5.5 | 9.8 | 31.8 | 0.2 | 0.0 | 78.1 | 144.3 | 188.5 | 332.8 |
| 1980 | 0.2 | 32.3 | 11.2 | 0.2 | 2.9 | 7.0 | 9.3 | 30.6 | 0.8 | 0.0 | 93.6 | R 157.4 | 227.5 | 384.9 |
| 1985 | 1.8 | 34.0 | 21.3 | 5.9 | 3.8 | 7.2 | 13.6 | 51.9 | R 1.4 | 0.0 | 140.9 | R 230.0 | 331.0 | R 560.9 |
| 1990 | 0.1 | 39.5 | 18.9 | 0.7 | 3.2 | 7.4 | 15.1 | 45.3 | R 0.5 | e 0.2 | 190.3 | R e 275.8 | R 416.3 | R e 692.1 |
| 1991 | (s) | 43.1 | 17.5 | 0.2 | 3.3 | 4.9 | 13.5 | 39.3 | R 0.6 | 0.2 | 194.5 | R 277.6 | R 422.7 | 700.4 |
| 1992 | 0.2 | 45.9 | 17.5 | 0.2 | 3.3 | 4.3 | 11.3 | 36.6 | R 0.6 | 0.2 | 195.4 | R 279.0 | R 416.8 | 695.8 |
| 1993 | 0.3 | 45.2 | 17.9 | 0.3 | 3.2 | 0.5 | 0.9 | 22.8 | 0.8 | 0.2 | 203.3 | 272.6 | R 429.3 | R 702.0 |
| 1994 | 0.3 | 44.9 | 12.8 | 0.4 | 3.0 | 0.5 | 0.9 | 17.5 | 0.8 | 0.2 | 212.9 | 276.7 | 444.2 | 720.9 |
| 1995 | (s) | 43.2 | 16.6 | 0.5 | 2.5 | 0.5 | 0.9 | 21.1 | 0.8 | 0.3 | 222.5 | 287.9 | R 463.8 | R 751.7 |
| 1996 | (s) | 46.4 | 12.5 | 0.6 | R 2.6 | 0.5 | 0.6 | R 16.9 | 0.9 | 0.3 | 226.1 | R 290.5 | R 471.1 | R 761.7 |
| 1997 | 0.0 | 38.7 | 10.7 | 0.3 | 2.5 | 1.3 | 0.8 | 15.6 | R 0.7 | 0.4 | 235.0 | 290.4 | R 488.9 | R 779.3 |
| 1998 | 0.1 | 39.5 | 8.3 | 0.4 | 2.8 | 1.3 | 0.1 | 12.8 | 0.7 | 0.5 | 249.4 | 303.0 | 515.2 | 818.1 |
| 1999 | 0.1 | 37.8 | 10.5 | 0.3 | 2.8 | 1.3 | 0.1 | 15.1 | 0.8 | 0.5 | 255.2 | 309.5 | 500.0 | 809.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 74. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Florida

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | | | | Thousand Barrels | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| **Thousand Barrels / physical units** | | | | | | | | | | | | | | | | | | |
| 1960 | 0 | 35 | 3,304 | 2,934 | 638 | 785 | 237 | 182 | 10,883 | 356 | 19,320 | 0 | — | — | 3,963 | — | 9,858 | — |
| 1965 | 0 | 74 | 3,506 | 4,451 | 1,281 | 711 | 291 | 180 | 9,636 | 1,349 | 21,404 | 0 | — | — | 6,449 | — | 15,397 | — |
| 1970 | 0 | 92 | 4,076 | 4,494 | 1,109 | 928 | 420 | 202 | 8,148 | 1,380 | 20,757 | 0 | — | — | 9,365 | — | 22,695 | — |
| 1975 | 21 | 90 | 3,659 | 4,724 | 115 | 1,242 | 567 | 92 | 7,369 | 1,651 | 19,421 | 0 | — | — | 13,294 | — | 32,067 | — |
| 1980 | 748 | 102 | 4,487 | 7,077 | 150 | 5,341 | 604 | 86 | 13,673 | 3,036 | 34,453 | 0 | — | — | 18,598 | — | 45,224 | — |
| 1985 | 911 | 76 | 6,666 | 4,639 | 620 | 2,489 | 550 | 1,022 | 6,283 | 3,100 | 25,369 | 0 | — | — | 15,742 | — | 36,983 | — |
| 1990 | 1,207 | 87 | 6,804 | 3,491 | 50 | 1,662 | 619 | 1,069 | 3,265 | 3,677 | 20,636 | f 0 | — | — | 16,605 | — | R 36,324 | — |
| 1991 | 1,133 | 87 | 7,310 | 3,083 | 13 | 1,707 | 553 | 965 | 2,613 | 3,068 | 19,313 | 0 | — | — | 16,482 | — | R 35,831 | — |
| 1992 | 1,335 | 90 | 6,933 | 3,619 | 9 | 1,721 | 564 | 979 | 4,127 | 3,230 | 21,181 | 0 | — | — | 16,497 | — | R 35,184 | — |
| 1993 | 1,307 | 102 | 8,342 | 4,162 | 13 | 1,961 | 575 | 969 | 5,257 | 3,254 | 24,533 | 0 | — | — | 16,298 | — | R 34,423 | — |
| 1994 | 1,303 | 128 | 7,304 | 3,776 | 8 | 1,698 | 601 | 1,031 | 4,647 | 3,265 | 22,328 | 0 | — | — | 16,513 | — | R 34,461 | — |
| 1995 | 1,325 | 134 | 6,630 | 5,608 | 7 | 3,008 | 590 | 1,148 | 5,058 | 3,110 | 25,158 | 0 | — | — | 16,473 | — | R 34,345 | — |
| 1996 | 1,270 | 139 | 5,920 | 5,730 | 33 | R 3,221 | 573 | 1,139 | 3,969 | R 9,994 | R 30,579 | 0 | — | — | 17,212 | — | R 35,870 | — |
| 1997 | 1,347 | 133 | 3,517 | 5,923 | 52 | R 1,039 | 605 | 1,144 | 3,511 | R 10,864 | R 26,656 | 0 | — | — | 18,266 | — | R 37,995 | — |
| 1998 | 1,279 | 129 | 3,826 | 5,623 | 163 | 936 | 633 | 1,900 | 4,398 | 10,953 | 28,433 | 0 | — | — | 18,448 | — | 38,110 | — |
| 1999 | 1,190 | 143 | 3,672 | 6,396 | 109 | 1,822 | 640 | 1,069 | 3,811 | 11,024 | 28,543 | 0 | — | — | 18,579 | — | 36,402 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | |
| 1960 | 0.0 | 36.4 | 21.9 | 17.1 | 3.6 | 3.2 | 1.4 | 1.0 | 68.4 | 2.1 | 118.7 | 0.0 | 23.8 | 0.0 | 13.5 | 192.4 | 33.6 | 226.0 |
| 1965 | 0.0 | 77.2 | 23.3 | 25.9 | 7.3 | 2.9 | 1.8 | 0.9 | 60.6 | 7.4 | 130.0 | 0.0 | 30.8 | 0.0 | 22.0 | 260.0 | 52.5 | 312.5 |
| 1970 | 0.0 | 96.3 | 27.0 | 26.2 | 6.3 | 3.5 | 2.5 | 1.1 | 51.2 | 7.5 | 125.4 | 0.0 | 40.4 | 0.0 | 32.0 | 294.0 | 77.4 | 371.4 |
| 1975 | 0.5 | 96.6 | 24.3 | 27.5 | 0.7 | 4.6 | 3.4 | 0.5 | 46.3 | 9.1 | 116.4 | 0.0 | 37.8 | 0.0 | 45.4 | 296.7 | 109.4 | 406.1 |
| 1980 | 17.1 | 108.6 | 29.8 | 41.2 | 0.9 | 19.6 | 3.7 | 0.5 | 86.0 | 16.7 | 198.2 | 0.0 | R 40.9 | 0.0 | 63.5 | R 428.3 | 154.3 | R 582.6 |
| 1985 | 22.6 | 84.2 | 44.2 | 27.0 | 3.5 | 9.0 | 3.3 | 5.4 | 39.5 | 16.8 | 148.7 | 0.0 | R 47.9 | 0.0 | 53.7 | R 357.2 | 126.2 | R 483.3 |
| 1990 | 30.2 | 94.2 | 45.1 | 20.3 | 0.3 | 6.0 | 3.8 | 5.6 | 20.5 | 19.9 | 121.6 | f 0.0 | R 130.4 | f 0.0 | 56.7 | R f 433.0 | 123.9 | R f 556.9 |
| 1991 | 28.5 | 95.7 | 48.5 | 18.0 | 0.1 | 6.2 | 3.4 | 5.1 | 16.4 | 16.6 | 114.2 | 0.0 | R 137.9 | 0.0 | 56.2 | R 432.6 | 122.3 | R 554.8 |
| 1992 | 33.4 | 99.0 | 46.0 | 21.1 | 0.1 | 6.2 | 3.4 | 5.1 | 25.9 | 17.4 | 125.3 | 0.0 | R 140.6 | 0.0 | 56.3 | R 454.5 | 120.0 | R 574.6 |
| 1993 | 32.5 | 112.1 | 55.4 | 24.2 | 0.1 | 7.1 | 3.5 | 5.1 | 33.1 | 17.5 | 145.9 | 0.0 | R 148.7 | 0.0 | 55.6 | R 494.8 | 117.5 | R 612.3 |
| 1994 | 32.5 | 143.5 | 48.5 | 22.0 | (s) | 6.2 | 3.6 | 5.4 | 29.2 | 17.6 | 132.5 | 0.0 | R 151.9 | 0.0 | 56.3 | R 516.8 | 117.6 | R 634.3 |
| 1995 | 33.3 | 143.7 | 44.0 | 32.7 | (s) | 10.9 | 3.6 | 6.0 | 31.8 | 16.8 | 145.7 | 0.0 | R 164.7 | 0.0 | 56.2 | R 543.6 | 117.2 | R 660.8 |
| 1996 | 31.9 | 154.0 | 39.3 | 33.4 | 0.2 | R 11.6 | 3.5 | R 5.9 | 25.0 | R 53.5 | R 172.4 | 0.0 | R 178.6 | 0.0 | 58.7 | R 595.6 | 122.4 | R 718.0 |
| 1997 | 33.7 | 140.5 | 23.3 | 34.5 | 0.3 | R 3.8 | 3.7 | 6.0 | 22.1 | R 58.6 | R 152.2 | R 0.0 | R 147.3 | 0.0 | 62.3 | R 536.1 | 129.6 | R 665.7 |
| 1998 | 32.0 | 135.4 | 25.4 | 32.8 | 0.9 | 3.4 | 3.8 | 9.9 | 27.7 | 59.1 | 163.0 | 0.0 | 126.8 | 0.0 | 62.9 | 520.1 | 130.0 | 650.2 |
| 1999 | 29.8 | 149.1 | 24.4 | 37.3 | 0.6 | 6.6 | 3.9 | 5.6 | 24.0 | 59.2 | 161.4 | 0.0 | 152.0 | 0.0 | 63.4 | 555.6 | 124.2 | 679.8 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 75.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, Florida

| | | | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | | Electrical System Energy Losses [d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | 0 | 1 | 4,517 | 3,858 | 9,482 | 82 | 674 | 42,281 | 3,770 | 64,663 | 0 | 0 | — | 0 | — |
| 1965 | 0 | 3 | 4,273 | 4,482 | 17,525 | 134 | 723 | 52,244 | 4,751 | 84,132 | 0 | 0 | — | 0 | — |
| 1970 | 0 | 4 | 3,138 | 7,493 | 23,840 | 197 | 669 | 74,670 | 2,244 | 112,252 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 2 | 1,921 | 10,160 | 24,199 | 169 | 622 | 99,462 | 2,211 | 138,744 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 4 | 1,339 | 16,014 | 35,911 | 161 | 805 | 107,853 | 11,613 | 173,695 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 4 | 841 | 20,335 | 23,101 | 390 | 733 | 122,956 | 6,892 | 175,247 | R e 1,093 | 18 | — | 43 | — |
| 1990 | 0 | 3 | 808 | 25,551 | 31,958 | 213 | 824 | 139,870 | 10,085 | 209,311 | R 183 | 46 | — | 101 | — |
| 1991 | 0 | 3 | 712 | 23,253 | 25,048 | 179 | 737 | 139,547 | 8,347 | 197,823 | R 228 | 47 | — | 103 | — |
| 1992 | 0 | 4 | 593 | 26,334 | 24,436 | 167 | 752 | 141,380 | 10,382 | 204,043 | R 229 | 46 | — | 98 | — |
| 1993 | 0 | 4 | 527 | 14,616 | 26,644 | 164 | 766 | 149,218 | 11,774 | 203,709 | R 131 | 46 | — | 98 | — |
| 1994 | 0 | 5 | 526 | 26,196 | 28,640 | 279 | 800 | 151,211 | 10,224 | 217,876 | R 106 | 49 | — | 102 | — |
| 1995 | 0 | 8 | 599 | 29,863 | 28,045 | 148 | 786 | 156,410 | 8,567 | 224,418 | R 57 | 49 | — | 102 | — |
| 1996 | 0 | 6 | 519 | 29,504 | 29,345 | R 120 | 763 | 157,789 | 8,264 | R 226,304 | R 20 | 51 | — | 105 | — |
| 1997 | 0 | 6 | 567 | 33,466 | 30,507 | R 103 | 806 | 160,492 | 8,661 | R 234,603 | R 34 | 51 | — | 105 | — |
| 1998 | 0 | 4 | 431 | 34,515 | 28,482 | 92 | 844 | 167,054 | 8,149 | 239,567 | 35 | 51 | — | 106 | — |
| 1999 | 0 | 7 | 591 | 36,095 | 28,977 | 132 | 853 | 172,223 | 9,135 | 248,006 | 24 | 55 | — | 107 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.0 | 1.0 | 22.8 | 22.5 | 51.5 | 0.3 | 4.1 | 222.1 | 23.7 | 347.0 | 0.0 | 0.0 | 348.0 | 0.0 | 348.0 |
| 1965 | 0.0 | 2.6 | 21.6 | 26.1 | 97.2 | 0.5 | 4.4 | 274.4 | 29.9 | 454.1 | 0.0 | 0.0 | 456.7 | 0.0 | 456.7 |
| 1970 | 0.0 | 4.5 | 15.8 | 43.6 | 133.2 | 0.7 | 4.1 | 392.2 | 14.1 | 603.8 | 0.0 | 0.0 | 608.3 | 0.0 | 608.3 |
| 1975 | (s) | 2.5 | 9.7 | 59.2 | 135.5 | 0.6 | 3.8 | 522.5 | 13.9 | 745.2 | 0.0 | 0.0 | 747.7 | 0.0 | 747.7 |
| 1980 | 0.0 | 3.9 | 6.8 | 93.3 | 201.6 | 0.6 | 4.9 | 566.6 | 73.0 | 946.6 | 0.0 | 0.0 | 950.6 | 0.0 | 950.6 |
| 1985 | 0.0 | 4.3 | 4.2 | 118.4 | 129.2 | 1.4 | 4.4 | 645.9 | 43.3 | 946.9 | R e 3.9 | 0.1 | e 951.3 | 0.1 | e 951.4 |
| 1990 | 0.0 | 3.0 | 4.1 | 148.8 | 179.6 | 0.8 | 5.0 | 734.7 | 63.4 | 1,136.4 | R 0.6 | 0.2 | 1,139.6 | 0.3 | 1,139.9 |
| 1991 | 0.0 | 3.8 | 3.6 | 135.4 | 140.8 | 0.6 | 4.5 | 733.0 | 52.5 | 1,070.5 | R 0.8 | 0.2 | 1,074.4 | 0.4 | 1,074.8 |
| 1992 | 0.0 | 4.8 | 3.0 | 153.4 | 137.5 | 0.6 | 4.6 | 742.7 | 65.3 | 1,107.0 | R 0.8 | 0.2 | 1,111.9 | 0.3 | 1,112.3 |
| 1993 | 0.0 | 4.8 | 2.7 | 85.1 | 150.3 | 0.6 | 4.6 | 783.8 | 74.0 | 1,101.2 | R 0.5 | 0.2 | 1,106.2 | 0.3 | 1,106.5 |
| 1994 | 0.0 | 6.0 | 2.7 | 152.6 | 162.1 | 1.0 | 4.9 | R 790.8 | 64.3 | R 1,178.4 | R 0.4 | 0.2 | R 1,184.6 | 0.3 | R 1,184.9 |
| 1995 | 0.0 | 8.1 | 3.0 | 174.0 | 159.0 | 0.5 | 4.8 | R 815.7 | 53.9 | R 1,210.8 | 0.2 | 0.2 | R 1,219.1 | 0.3 | R 1,219.4 |
| 1996 | 0.0 | 6.4 | 2.6 | 171.9 | 166.4 | 0.4 | 4.6 | R 823.0 | 52.0 | R 1,220.9 | 0.1 | 0.2 | R 1,227.5 | 0.4 | R 1,227.9 |
| 1997 | 0.0 | 6.0 | 2.9 | 194.9 | 173.0 | 0.4 | 4.9 | R 836.6 | 54.5 | R 1,267.1 | 0.1 | 0.2 | R 1,273.3 | 0.4 | R 1,273.7 |
| 1998 | 0.0 | 4.1 | 2.2 | 201.1 | 161.5 | 0.3 | 5.1 | 870.7 | 51.2 | 1,292.1 | 0.1 | 0.2 | 1,296.4 | 0.4 | 1,296.7 |
| 1999 | 0.0 | 7.2 | 3.0 | 210.3 | 164.3 | 0.5 | 5.2 | 897.5 | 57.4 | 1,338.1 | 0.1 | 0.2 | 1,345.4 | 0.4 | 1,345.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 76. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Florida

| | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total [g] |
| 1960 | 1,104 | 89 | 13,419 | 191 | 0 | 13,610 | 0 | 278 | 0 | 0 | 0 | — |
| 1965 | 2,323 | 87 | 27,349 | 388 | 0 | 27,737 | 0 | 298 | 0 | 0 | 0 | — |
| 1970 | 5,131 | 198 | 41,783 | 593 | 0 | 42,376 | 0 | 292 | 0 | 0 | 0 | — |
| 1975 | 5,758 | 141 | 68,180 | 5,205 | 0 | 73,385 | 8,370 | 234 | 0 | 0 | 0 | — |
| 1980 | 8,785 | 166 | 69,994 | 3,200 | 0 | 73,194 | 16,737 | 215 | 0 | 0 | 0 | — |
| 1985 | 18,283 | 166 | 22,432 | 1,246 | 0 | 23,678 | 23,461 | 244 | 0 | 0 | 0 | — |
| 1990 | 24,022 | 189 | 38,752 | 1,869 | 0 | 40,620 | 21,780 | 175 | 0 | 0 | 0 | — |
| 1991 | 24,870 | 201 | 46,621 | 1,809 | 0 | 48,430 | 20,508 | 263 | 0 | 0 | 0 | — |
| 1992 | 25,016 | 203 | 43,516 | 1,424 | 0 | 44,940 | 25,116 | 236 | 0 | 0 | 0 | — |
| 1993 | 25,108 | 174 | 52,931 | 1,420 | 0 | 54,351 | 25,887 | 211 | 0 | 0 | 0 | — |
| 1994 | 24,758 | 181 | 52,055 | 1,313 | 0 | 53,369 | 26,682 | 274 | 0 | 0 | 0 | — |
| 1995 | 25,200 | 319 | 33,692 | 1,379 | 0 | 35,071 | 28,741 | 231 | 0 | 0 | 0 | — |
| 1996 | 27,172 | 284 | 35,286 | 1,586 | 313 | 37,185 | 25,470 | 216 | 0 | 0 | 0 | — |
| 1997 | 27,372 | 297 | 37,648 | 1,508 | 3,336 | 42,493 | 22,968 | 241 | 0 | 0 | 0 | — |
| 1998 | 27,542 | 281 | 58,780 | 3,268 | 4,622 | 66,670 | 31,115 | 199 | 0 | 0 | 0 | — |
| 1999 | 26,090 | 319 | 53,061 | 3,164 | 4,624 | 60,848 | 31,526 | 140 | 16 | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 27.2 | 91.6 | 84.4 | 1.1 | 0.0 | 85.5 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 207.3 |
| 1965 | 55.2 | 90.2 | 171.9 | 2.3 | 0.0 | 174.2 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 322.7 |
| 1970 | 116.7 | 206.5 | 262.7 | 3.5 | 0.0 | 266.1 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 592.4 |
| 1975 | 133.0 | 142.4 | 428.6 | 30.3 | 0.0 | 459.0 | 92.2 | 2.4 | 0.0 | 0.0 | 0.0 | 829.0 |
| 1980 | 208.1 | 168.5 | 440.1 | 18.6 | 0.0 | 458.7 | 182.6 | 2.2 | 0.0 | 0.0 | 0.0 | 1,020.1 |
| 1985 | 447.0 | 167.5 | 141.0 | 7.3 | 0.0 | 148.3 | 253.7 | 2.5 | 0.0 | 0.0 | 0.0 | 1,019.1 |
| 1990 | 594.0 | 191.2 | 243.6 | 10.9 | 0.0 | 254.5 | 232.6 | 1.8 | 0.0 | 0.0 | 0.0 | 1,274.2 |
| 1991 | 614.3 | 204.1 | 293.1 | 10.5 | 0.0 | 303.6 | 220.3 | 2.7 | 0.0 | 0.0 | 0.0 | 1,345.1 |
| 1992 | 618.9 | 204.8 | 273.6 | 8.3 | 0.0 | 281.9 | 268.2 | 2.4 | 0.0 | 0.0 | 0.0 | 1,376.2 |
| 1993 | 619.3 | 175.9 | 332.8 | 8.3 | 0.0 | 341.1 | 276.5 | 2.2 | 0.0 | 0.0 | 0.0 | 1,414.9 |
| 1994 | 608.7 | 182.5 | 327.3 | 7.7 | 0.0 | 334.9 | 284.9 | 2.8 | 0.0 | 0.0 | 0.0 | 1,413.8 |
| 1995 | 619.8 | 322.0 | 211.8 | 8.0 | 0.0 | 219.9 | 306.3 | 2.4 | 0.0 | 0.0 | 0.0 | 1,470.3 |
| 1996 | 662.6 | 285.8 | 221.8 | 9.2 | 1.9 | 233.0 | 270.6 | 2.2 | 0.0 | 0.0 | 0.0 | 1,454.2 |
| 1997 | 663.6 | 310.0 | 236.7 | 8.8 | 20.1 | 265.6 | 244.0 | 2.5 | 0.0 | 0.0 | 0.0 | 1,485.6 |
| 1998 | 668.9 | 296.3 | 369.5 | 19.0 | 27.8 | 416.4 | 330.5 | 2.1 | 0.0 | 0.0 | 0.0 | 1,714.2 |
| 1999 | 641.7 | 333.3 | 333.6 | 18.4 | 27.9 | 379.9 | 334.9 | 1.5 | 0.2 | 0.0 | 0.0 | 1,691.5 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
— =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 77. Energy Consumption Estimates by Source, Selected Years 1960-1999, Georgia

**GEORGIA**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | Million kWh | | | Million kWh | |

**Thousand Barrels / Million kWh**

| Year | Coal | Nat Gas | Asphalt | Av Gas | Distillate | Jet | Kero | LPG | Lubri | Motor Gas | Residual | Other | Total | Nuclear | Hydro | Wood&Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 3,548 | 182 | 2,482 | 262 | 5,140 | 2,306 | 1,554 | 4,253 | 819 | 32,079 | 6,551 | 273 | 55,720 | 0 | 2,306 | — | — | 7,839 | — |
| 1965 | 6,116 | 211 | 4,007 | 928 | 8,531 | 2,158 | 1,297 | 5,424 | 967 | 39,136 | 8,413 | 1,005 | 71,867 | 0 | 3,234 | — | — | 13,600 | — |
| 1970 | 8,131 | 333 | 3,916 | 600 | 12,781 | 10,506 | 457 | 7,430 | 1,023 | 54,081 | 10,279 | 1,031 | 102,104 | 0 | 2,519 | — | — | 27,394 | — |
| 1975 | 13,141 | 327 | 4,198 | 399 | 16,115 | 12,887 | 246 | 8,168 | 1,126 | 65,541 | 10,809 | 2,038 | 121,527 | 3,093 | 4,334 | — | — | 9,175 | — |
| 1980 | 21,892 | 315 | 4,795 | 386 | 19,437 | 16,421 | 552 | 7,444 | 1,250 | 65,506 | 9,036 | 5,272 | 130,097 | 8,436 | 4,423 | — | — | -15,441 | — |
| 1985 | 29,898 | 282 | 4,580 | 212 | 23,818 | 16,236 | 367 | 6,825 | 1,137 | 72,993 | 11,931 | 4,372 | 142,471 | 10,130 | 2,826 | — | — | -28,970 | — |
| 1990 | 30,067 | 311 | 6,398 | 196 | 28,537 | 18,439 | 198 | 6,021 | 1,279 | 83,148 | 3,539 | 4,880 | 152,635 | 24,797 | R h 4,916 | — | — | R -31,157 | — |
| 1991 | 26,957 | 323 | 5,192 | 182 | 26,960 | 14,441 | 194 | 6,747 | 1,145 | 83,715 | 2,954 | 7,626 | 149,155 | 26,016 | R 4,663 | — | — | R -11,752 | — |
| 1992 | 25,481 | 343 | 4,897 | 166 | 27,207 | 12,422 | 155 | 7,185 | 1,167 | 83,906 | 6,875 | 8,003 | 151,983 | 27,996 | R 5,367 | — | — | R -10,314 | — |
| 1993 | 27,081 | 351 | 5,324 | 167 | 31,273 | 15,204 | 223 | 7,614 | 1,188 | 93,036 | 5,548 | 8,043 | 167,620 | 27,233 | R 4,801 | — | — | R -4,270 | — |
| 1994 | 29,254 | 341 | 5,251 | 160 | 31,485 | 16,936 | 243 | 7,548 | 1,242 | 93,493 | 4,798 | 8,151 | 169,308 | 28,927 | R 4,911 | — | — | R -16,940 | — |
| 1995 | 31,288 | 370 | 5,526 | 156 | 35,275 | 18,451 | 195 | 7,288 | 1,221 | 97,672 | 4,165 | 7,774 | 177,723 | 30,661 | R 4,734 | — | — | R -15,070 | — |
| 1996 | 31,158 | 383 | 5,428 | 168 | 41,616 | 17,293 | 212 | R 7,490 | 1,185 | 101,063 | 4,857 | R 5,971 | R 185,282 | 29,925 | R 4,989 | — | — | R 3,763 | — |
| 1997 | 32,693 | 362 | 4,890 | 157 | 37,344 | 15,233 | 187 | R 7,800 | 1,251 | 101,576 | 4,338 | R 6,390 | R 179,166 | 30,414 | R 4,453 | — | — | R -7,215 | — |
| 1998 | 32,701 | 357 | 5,497 | 138 | 38,916 | 15,134 | 245 | 6,188 | 1,310 | 106,860 | 2,501 | 6,578 | 183,366 | 31,380 | 5,061 | — | — | 5,354 | — |
| 1999 | 33,494 | 332 | 7,428 | 149 | 42,325 | 15,316 | 314 | 6,899 | 1,324 | 109,920 | 2,562 | 6,932 | 193,170 | 31,478 | 2,703 | — | — | 1,783 | — |

**Trillion Btu**

| Year | Coal | Nat Gas | Asphalt | Av Gas | Distillate | Jet | Kero | LPG | Lubri | Motor Gas | Residual | Other | Total | Nuclear | Hydro | Wood&Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 89.0 | 188.5 | 16.5 | 1.3 | 29.9 | 12.4 | 8.8 | 17.1 | 5.0 | 168.5 | 41.2 | 1.6 | 302.2 | 0.0 | 24.8 | 71.2 | 0.0 | 26.7 | 702.4 |
| 1965 | 152.6 | 219.8 | 26.6 | 4.7 | 49.7 | 11.6 | 7.4 | 21.8 | 5.9 | 205.6 | 52.9 | 5.4 | 391.4 | 0.0 | 33.8 | 74.2 | 0.0 | 46.4 | 918.2 |
| 1970 | 193.2 | 342.8 | 26.0 | 3.0 | 74.5 | 59.0 | 2.6 | 28.1 | 6.2 | 284.1 | 64.6 | 5.6 | 553.6 | 0.0 | 26.4 | 71.8 | 0.0 | 93.5 | 1,281.3 |
| 1975 | 312.0 | 335.4 | 27.9 | 2.0 | 93.9 | 72.6 | 1.4 | 30.3 | 6.8 | 344.3 | 68.0 | 11.2 | 658.3 | 34.1 | 45.1 | 78.3 | 0.0 | 31.3 | 1,494.4 |
| 1980 | 521.5 | 325.3 | 31.8 | 1.9 | 113.2 | 92.6 | 3.1 | 27.3 | 7.6 | 344.1 | 56.8 | 28.8 | 707.3 | 92.0 | 45.9 | R 91.8 | 0.0 | -52.7 | R 1,731.2 |
| 1985 | 725.7 | 289.7 | 30.4 | 1.1 | 138.7 | 91.5 | 2.1 | 24.6 | 6.9 | 383.4 | 75.0 | 23.8 | 777.5 | 109.5 | 29.5 | 113.8 | 0.0 | -98.8 | R 1,946.9 |
| 1990 | 718.2 | 319.4 | 42.5 | 1.0 | 166.2 | 104.2 | 1.1 | 21.8 | 7.8 | 436.8 | 22.2 | 26.5 | 830.1 | 264.8 | h 51.1 | R 175.9 | h 0.1 | R -106.3 | R h 2,253.5 |
| 1991 | 646.2 | 331.8 | 34.5 | 0.9 | 157.0 | 81.5 | 1.1 | 24.4 | 6.9 | 439.8 | 18.6 | 41.5 | 806.1 | 279.4 | 48.7 | R 195.2 | R 0.2 | R -40.1 | R 2,267.4 |
| 1992 | 615.5 | 351.5 | 32.5 | 0.8 | 158.5 | 70.0 | 0.9 | 26.0 | 7.1 | 440.8 | 43.2 | 43.2 | 823.0 | 298.9 | R 55.5 | R 194.2 | 0.2 | R -35.2 | R 2,303.6 |
| 1993 | 659.4 | 360.1 | 35.3 | 0.8 | 182.2 | 85.8 | 1.3 | 27.5 | 7.2 | 488.7 | 34.9 | 43.4 | 907.1 | 290.9 | 49.5 | R 199.1 | 0.2 | R -14.6 | R 2,451.7 |
| 1994 | 691.9 | 351.6 | 34.8 | 0.8 | 183.4 | 95.9 | 1.4 | 27.4 | 7.5 | R 489.0 | 30.2 | 44.0 | R 914.4 | 308.8 | 50.7 | R 195.3 | 0.2 | R -57.8 | R 2,455.6 |
| 1995 | 728.5 | 380.0 | 36.7 | 0.8 | 205.5 | 104.6 | 1.1 | 26.4 | 7.4 | R 509.4 | 26.2 | 41.9 | R 959.9 | 326.8 | 48.8 | R 207.4 | 0.2 | R -51.4 | R 2,600.2 |
| 1996 | 725.6 | 392.2 | 36.0 | 0.8 | 242.4 | 98.0 | 1.2 | R 27.1 | 7.2 | R 527.1 | 30.5 | R 32.0 | R 1,002.5 | 317.9 | 51.6 | R 209.9 | 0.2 | R 12.8 | R 2,712.7 |
| 1997 | 771.9 | 371.4 | 32.4 | 0.8 | 217.5 | 86.4 | 1.1 | R 28.2 | 7.6 | R 529.5 | 27.3 | R 34.5 | R 965.3 | 323.1 | R 46.1 | R 232.5 | 0.2 | R -24.6 | R 2,686.0 |
| 1998 | 771.6 | 367.0 | 36.5 | 0.7 | 226.7 | 85.8 | 1.4 | 22.4 | 7.9 | 557.0 | 15.7 | 35.5 | 989.6 | 333.4 | 52.4 | 180.8 | 0.3 | 18.3 | 2,713.2 |
| 1999 | 789.6 | 340.6 | 49.3 | 0.8 | 246.5 | 86.8 | 1.8 | 24.9 | 8.0 | 572.8 | 16.1 | 37.3 | 1,044.4 | 334.4 | 28.0 | 254.8 | 0.3 | 6.1 | 2,798.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 78.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Georgia

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 134 | 56 | 131 | 633 | 2,279 | 3,042 | 1,719 | — | — | 4,469 | — | 11,116 | — |
| 1965 | 68 | 67 | 211 | 460 | 3,092 | 3,764 | 1,173 | — | — | 6,936 | — | 16,560 | — |
| 1970 | 44 | 87 | 250 | 121 | 4,164 | 4,536 | 729 | — | — | 12,474 | — | 30,229 | — |
| 1975 | 18 | 87 | 298 | 34 | 3,896 | 4,229 | 758 | — | — | 16,457 | — | 39,696 | — |
| 1980 | 8 | 90 | 578 | 91 | 3,553 | 4,222 | R 726 | — | — | 20,033 | — | 48,713 | — |
| 1985 | 14 | 84 | 353 | 257 | 3,952 | 4,562 | 1,150 | — | — | 23,505 | — | 55,222 | — |
| 1990 | 8 | 90 | 250 | 111 | 3,400 | 3,761 | 723 | — | — | 29,933 | — | R 65,481 | — |
| 1991 | 3 | 97 | 178 | 113 | 3,651 | 3,943 | 761 | — | — | 30,187 | — | R 65,624 | — |
| 1992 | 13 | 108 | 178 | 109 | 4,020 | 4,306 | 801 | — | — | 30,528 | — | R 65,108 | — |
| 1993 | 8 | 116 | 236 | 136 | 4,196 | 4,568 | R 874 | — | — | 33,867 | — | R 71,532 | — |
| 1994 | 10 | 105 | 113 | 80 | 4,216 | 4,408 | R 856 | — | — | 32,735 | — | R 68,314 | — |
| 1995 | 21 | 115 | 159 | 126 | 4,001 | 4,285 | R 950 | — | — | 35,812 | — | R 74,667 | — |
| 1996 | 1 | 127 | 153 | 144 | R 4,072 | R 4,369 | R 949 | — | — | 37,763 | — | R 78,698 | — |
| 1997 | 6 | 114 | 82 | 135 | R 4,387 | R 4,604 | R 686 | — | — | 36,831 | — | R 76,612 | — |
| 1998 | 4 | 107 | 95 | 171 | 3,770 | 4,037 | 605 | — | — | 41,519 | — | 85,770 | — |
| 1999 | 6 | 99 | 55 | 241 | 4,106 | 4,401 | 648 | — | — | 41,767 | — | 81,834 | — |

| Year | Trillion Btu | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 3.3 | 57.8 | 0.8 | 3.6 | 9.1 | 13.5 | 34.4 | 0.0 | 0.0 | 15.2 | 124.2 | 37.9 | 162.2 |
| 1965 | 1.7 | 69.9 | 1.2 | 2.6 | 12.4 | 16.2 | 23.5 | 0.0 | 0.0 | 23.7 | 134.9 | 56.5 | 191.4 |
| 1970 | 1.1 | 90.1 | 1.5 | 0.7 | 15.7 | 17.9 | 14.6 | 0.0 | 0.0 | 42.6 | 166.1 | 103.1 | 269.3 |
| 1975 | 0.4 | 89.5 | 1.7 | 0.2 | 14.5 | 16.4 | 15.2 | 0.0 | 0.0 | 56.2 | 177.6 | 135.4 | 313.1 |
| 1980 | 0.2 | 93.1 | 3.4 | 0.5 | 13.1 | 16.9 | 14.5 | 0.0 | 0.0 | 68.4 | 193.1 | 166.2 | 359.3 |
| 1985 | 0.3 | 86.4 | 2.1 | 1.5 | 14.2 | 17.8 | 23.0 | 0.0 | 0.0 | 80.2 | 207.7 | 188.4 | 396.1 |
| 1990 | 0.2 | 92.7 | 1.5 | 0.6 | 12.3 | 14.4 | 14.5 | e (s) | e 0.1 | 102.1 | e 224.0 | 223.4 | R e 447.5 |
| 1991 | 0.1 | 99.3 | 1.0 | 0.6 | 13.2 | 14.9 | 15.2 | (s) | 0.1 | 103.0 | 232.6 | R 223.9 | R 456.5 |
| 1992 | 0.3 | 110.9 | 1.0 | 0.6 | 14.6 | 16.2 | 16.0 | (s) | 0.1 | 104.2 | 247.8 | R 222.1 | R 470.0 |
| 1993 | 0.2 | 118.8 | 1.4 | 0.8 | 15.1 | 17.3 | 17.5 | (s) | 0.1 | 115.6 | 269.5 | 244.1 | R 513.5 |
| 1994 | 0.3 | 108.6 | 0.7 | 0.5 | 15.3 | 16.4 | R 17.1 | (s) | 0.1 | 111.7 | 254.3 | 233.1 | 487.4 |
| 1995 | 0.5 | 117.7 | 0.9 | 0.7 | 14.5 | 16.1 | 19.0 | (s) | R 0.2 | 122.2 | 275.7 | R 254.8 | R 530.5 |
| 1996 | (s) | 130.0 | 0.9 | 0.8 | R 14.7 | R 16.4 | 19.0 | (s) | 0.2 | 128.8 | R 294.5 | R 268.5 | R 563.0 |
| 1997 | 0.1 | 117.5 | 0.5 | 0.8 | R 15.9 | R 17.1 | R 13.7 | 0.1 | 0.2 | 125.7 | R 274.4 | R 261.4 | R 535.8 |
| 1998 | 0.1 | 110.3 | 0.6 | 1.0 | 13.6 | 15.2 | 12.1 | 0.1 | 0.2 | 141.7 | 279.6 | 292.6 | 572.2 |
| 1999 | 0.2 | 101.4 | 0.3 | 1.4 | 14.8 | 16.5 | 13.0 | 0.1 | 0.2 | 142.5 | 273.9 | 279.2 | 553.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 79. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Georgia

| | | | Petroleum | | | | | | | | | | Electrical System Energy Losses [c] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal [a] | Natural Gas [b] | Distillate Fuel [a] | Kerosene [a] | LPG [a] | Motor Gasoline | Residual Fuel [a] | Total | Wood | Geothermal | Electricity [a] | Net Energy | | Total [d] |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 249 | 21 | 373 | 206 | 402 | 269 | 59 | 1,308 | 33 | — | 2,765 | — | 6,878 | — |
| 1965 | 125 | 26 | 603 | 149 | 546 | 306 | 83 | 1,687 | 22 | — | 4,560 | — | 10,887 | — |
| 1970 | 82 | 39 | 713 | 39 | 735 | 349 | 108 | 1,945 | 14 | — | 8,174 | — | 19,807 | — |
| 1975 | 33 | 49 | 851 | 11 | 688 | 372 | 80 | 2,002 | 14 | — | 11,226 | — | 27,079 | — |
| 1980 | 14 | 59 | 315 | 12 | 627 | 363 | 10 | 1,327 | 17 | — | 11,965 | — | 29,094 | — |
| 1985 | 25 | 52 | 1,546 | 46 | 697 | 310 | 468 | 3,066 | R 31 | — | 17,009 | — | 39,962 | — |
| 1990 | 14 | 49 | 1,271 | 64 | 600 | 519 | 69 | 2,523 | R 46 | — | 23,715 | — | R 51,878 | — |
| 1991 | 5 | 51 | 862 | 53 | 644 | 330 | 22 | 1,912 | R 48 | — | 24,086 | — | R 52,360 | — |
| 1992 | 25 | 54 | 1,038 | 37 | 709 | 415 | 6 | 2,205 | R 52 | — | 24,594 | — | R 52,454 | — |
| 1993 | 14 | 58 | 1,134 | 65 | 740 | 64 | 6 | 2,010 | 70 | — | 26,166 | — | R 55,267 | — |
| 1994 | 18 | 54 | 1,035 | 149 | 744 | 171 | 7 | 2,106 | 72 | — | 27,149 | — | R 56,659 | — |
| 1995 | 39 | 57 | 1,407 | 35 | 706 | 62 | 12 | 2,221 | 72 | — | 28,793 | — | R 60,031 | — |
| 1996 | 2 | 61 | 1,172 | 31 | R 719 | 62 | 11 | R 1,995 | 78 | — | 30,273 | — | R 63,089 | — |
| 1997 | 11 | 57 | 896 | 28 | R 774 | 632 | 6 | R 2,337 | R 75 | — | 31,352 | — | R 65,216 | — |
| 1998 | 7 | 55 | 730 | 27 | 665 | 155 | 1 | 1,579 | 75 | — | 34,026 | — | 70,292 | — |
| 1999 | 11 | 44 | 1,218 | 37 | 725 | 142 | (s) | 2,122 | 91 | — | 35,536 | — | 69,627 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 6.2 | 22.1 | 2.2 | 1.2 | 1.6 | 1.4 | 0.4 | 6.7 | 0.7 | 0.0 | 9.4 | 45.1 | 23.5 | 68.6 |
| 1965 | 3.1 | 27.1 | 3.5 | 0.8 | 2.2 | 1.6 | 0.5 | 8.7 | 0.4 | 0.0 | 15.6 | 54.9 | 37.1 | 92.0 |
| 1970 | 2.0 | 39.9 | 4.2 | 0.2 | 2.8 | 1.8 | 0.7 | 9.7 | 0.3 | 0.0 | 27.9 | 79.7 | 67.6 | 147.3 |
| 1975 | 0.8 | 50.8 | 5.0 | 0.1 | 2.6 | 2.0 | 0.5 | 10.0 | 0.3 | 0.0 | 38.3 | 100.2 | 92.4 | 192.6 |
| 1980 | 0.3 | 60.6 | 1.8 | 0.1 | 2.3 | 1.9 | 0.1 | 6.2 | 0.3 | 0.0 | 40.8 | 108.3 | 99.3 | 207.6 |
| 1985 | 0.6 | 53.0 | 9.0 | 0.3 | 2.5 | 1.6 | 2.9 | 16.3 | R 0.6 | 0.0 | 58.0 | R 128.6 | 136.3 | R 264.9 |
| 1990 | 0.4 | 50.8 | 7.4 | 0.4 | 2.2 | 2.7 | 0.4 | 13.1 | R 0.9 | e (s) | 80.9 | R e 146.1 | 177.0 | R e 323.1 |
| 1991 | 0.1 | 52.4 | 5.0 | 0.3 | 2.3 | 1.7 | 0.1 | 9.5 | R 1.0 | (s) | 82.2 | R 145.2 | R 178.7 | R 323.9 |
| 1992 | 0.6 | 55.2 | 6.0 | 0.2 | 2.6 | 2.2 | (s) | 11.0 | R 1.0 | (s) | 83.9 | R 151.8 | R 179.0 | R 330.8 |
| 1993 | 0.4 | 59.1 | 6.6 | 0.4 | 2.7 | 0.3 | (s) | 10.0 | 1.4 | (s) | 89.3 | 160.1 | 188.6 | R 348.7 |
| 1994 | 0.5 | 55.7 | 6.0 | 0.8 | 2.7 | 0.9 | (s) | 10.5 | 1.4 | (s) | 92.6 | 160.7 | 193.3 | 354.0 |
| 1995 | 1.0 | 58.0 | 8.2 | 0.2 | 2.6 | 0.3 | 0.1 | 11.3 | 1.4 | (s) | 98.2 | 170.0 | R 204.8 | R 374.8 |
| 1996 | (s) | 62.8 | 6.8 | 0.2 | R 2.6 | 0.3 | 0.1 | R 10.0 | 1.6 | (s) | 103.3 | R 177.7 | R 215.3 | R 392.9 |
| 1997 | 0.3 | 58.8 | 5.2 | 0.2 | R 2.8 | 3.3 | (s) | R 11.5 | R 1.5 | (s) | 107.0 | R 179.0 | R 222.5 | R 401.6 |
| 1998 | 0.2 | 56.9 | 4.3 | 0.2 | 2.4 | 0.8 | (s) | 7.6 | 1.5 | (s) | 116.1 | 182.3 | 239.8 | 422.2 |
| 1999 | 0.3 | 44.7 | 7.1 | 0.2 | 2.6 | 0.7 | (s) | 10.7 | 1.8 | (s) | 121.3 | 178.8 | 237.6 | 416.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 80.   Industrial Energy Consumption Estimates, Selected Years 1960-1999, Georgia

| Year | Coal | Natural Gas [a] | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kero-sene [b] | LPG [b] | Lubri-cants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | | | | Thousand Barrels | | | | | | Million kWh | | | Million kWh | | Million kWh | |

### Thousand Barrels

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydroelectric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 548 | 76 | 2,482 | 2,043 | 715 | 1,507 | 289 | 936 | 4,909 | 273 | 13,153 | 63 | — | — | 4,713 | — | 11,723 | — |
| 1965 | 630 | 113 | 4,007 | 3,538 | 687 | 1,716 | 384 | 616 | 7,117 | 1,005 | 19,070 | 64 | — | — | 6,903 | — | 16,481 | — |
| 1970 | 506 | 141 | 3,916 | 4,014 | 296 | 2,430 | 474 | 124 | 8,457 | 1,031 | 20,741 | 58 | — | — | 10,853 | — | 26,300 | — |
| 1975 | 434 | 145 | 4,198 | 3,557 | 200 | 3,478 | 610 | 60 | 6,243 | 2,038 | 20,384 | 56 | — | — | 13,866 | — | 33,446 | — |
| 1980 | 679 | 155 | 4,795 | 3,993 | 449 | 3,188 | 632 | 26 | 5,361 | 5,272 | 23,717 | 54 | — | — | 19,195 | — | 46,676 | — |
| 1985 | 1,575 | 140 | 4,580 | 3,653 | 65 | 1,964 | 575 | 1,251 | 10,397 | 4,372 | 26,855 | 54 | — | — | 23,122 | — | 54,324 | — |
| 1990 | 2,232 | 162 | 6,398 | 4,068 | 23 | 1,916 | 647 | 1,288 | 2,030 | 4,880 | 21,250 | R f 29 | — | — | 26,717 | — | R 58,447 | — |
| 1991 | 2,101 | 167 | 5,192 | 3,433 | 28 | 2,340 | 579 | 1,173 | 1,747 | 7,626 | 22,118 | R 23 | — | — | 27,193 | — | R 59,116 | — |
| 1992 | 1,787 | 172 | 4,897 | 2,797 | 10 | 2,346 | 590 | 1,223 | 3,425 | 8,003 | 23,290 | R 25 | — | — | 28,197 | — | R 60,138 | — |
| 1993 | 1,720 | 167 | 5,324 | 3,838 | 22 | 2,560 | 601 | 712 | 2,804 | 8,043 | 23,904 | R 48 | — | — | 29,084 | — | R 61,430 | — |
| 1994 | 1,933 | 174 | 5,251 | 3,472 | 14 | 2,339 | 628 | 777 | 2,857 | 8,151 | 23,490 | R 54 | — | — | 29,942 | — | R 62,487 | — |
| 1995 | 1,949 | 184 | 5,526 | 4,831 | 35 | 2,441 | 617 | 829 | 2,639 | 7,774 | 24,692 | R 51 | — | — | 31,493 | — | R 65,662 | — |
| 1996 | 1,985 | 182 | 5,428 | 5,562 | 37 | R 2,579 | 599 | 907 | 3,503 | R 5,971 | R 24,586 | R 53 | — | — | 33,175 | — | R 69,138 | — |
| 1997 | 2,046 | 175 | 4,890 | 5,028 | 24 | R 2,503 | 633 | 890 | 3,122 | R 6,390 | R 23,479 | R 35 | — | — | 33,957 | — | R 70,635 | — |
| 1998 | 1,959 | 165 | 5,497 | 5,349 | 46 | 1,711 | 663 | 954 | 1,286 | 6,578 | 22,082 | 35 | — | — | 35,077 | — | 72,461 | — |
| 1999 | 1,971 | 160 | 7,428 | 6,258 | 37 | 1,949 | 670 | 982 | 1,264 | 6,932 | 25,520 | 29 | — | — | 35,255 | — | 69,076 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydroelectric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 13.9 | 78.6 | 16.5 | 11.9 | 4.1 | 6.0 | 1.8 | 4.9 | 30.9 | 1.6 | 77.6 | 0.7 | 36.2 | 0.0 | 16.1 | 223.0 | 40.0 | 263.0 |
| 1965 | 15.9 | 117.0 | 26.6 | 20.6 | 3.9 | 6.9 | 2.3 | 3.2 | 44.7 | 5.4 | 113.7 | 0.7 | 50.3 | 0.0 | 23.6 | 321.1 | 56.2 | 377.4 |
| 1970 | 12.0 | 145.3 | 26.0 | 23.4 | 1.7 | 9.2 | 2.9 | 0.7 | 53.2 | 5.6 | 122.5 | 0.6 | 56.9 | 0.0 | 37.0 | 374.3 | 89.7 | 464.1 |
| 1975 | 10.2 | 149.4 | 27.9 | 20.7 | 1.1 | 12.9 | 3.7 | 0.3 | 39.2 | 11.2 | 117.1 | 0.6 | 62.9 | 0.0 | 47.3 | 387.4 | 114.1 | 501.5 |
| 1980 | 16.5 | 160.1 | 31.8 | 23.3 | 2.5 | 11.7 | 3.8 | 0.1 | 33.7 | 28.8 | 135.8 | 0.6 | R 76.9 | 0.0 | 65.5 | R 455.4 | 159.3 | R 614.7 |
| 1985 | 39.1 | 143.9 | 30.4 | 21.3 | 0.4 | 7.1 | 3.5 | 6.6 | 65.4 | 23.8 | 158.3 | 0.6 | R 90.1 | 0.0 | 78.9 | R 510.9 | 185.4 | R 696.3 |
| 1990 | 56.1 | 166.4 | 42.5 | 23.7 | 0.1 | 6.9 | 3.9 | 6.8 | 12.8 | 26.5 | 123.2 | f 0.3 | R 160.5 | f 0.0 | 91.2 | R f 597.7 | 199.4 | R f 797.1 |
| 1991 | 52.8 | 171.6 | 34.5 | 20.0 | 0.2 | 8.5 | 3.5 | 6.2 | 11.0 | 41.5 | 125.2 | R 0.2 | R 179.0 | 0.0 | 92.8 | R 621.6 | R 201.7 | R 823.3 |
| 1992 | 44.9 | 176.5 | 32.5 | 16.3 | 0.1 | 8.5 | 3.6 | 6.4 | 21.5 | 43.2 | 132.1 | R 0.3 | R 177.1 | 0.0 | 96.2 | R 627.1 | R 205.2 | R 832.3 |
| 1993 | 43.2 | 171.9 | 35.3 | 22.4 | 0.1 | 9.2 | 3.6 | 3.7 | 17.6 | 43.4 | 135.5 | 0.5 | R 180.2 | 0.0 | 99.2 | R 630.5 | R 209.6 | R 840.1 |
| 1994 | 48.5 | 179.1 | 34.8 | 20.2 | 0.1 | 8.5 | 3.8 | 4.1 | 18.0 | 44.0 | 133.5 | 0.6 | R 177.2 | 0.0 | 102.2 | R 641.0 | 213.2 | R 854.2 |
| 1995 | 49.1 | 188.5 | 36.7 | 28.1 | 0.2 | 8.8 | 3.7 | R 4.3 | 16.6 | 41.9 | 140.4 | R 0.5 | R 187.0 | 0.0 | 107.5 | R 673.0 | R 224.0 | R 897.0 |
| 1996 | 49.9 | 185.9 | 36.0 | 32.4 | 0.2 | R 9.3 | 3.6 | R 4.7 | 22.0 | R 32.0 | R 140.4 | R 0.5 | R 189.3 | 0.0 | 113.2 | R 679.3 | R 235.9 | R 915.2 |
| 1997 | 51.3 | 179.5 | 32.4 | 29.3 | 0.1 | R 9.0 | 3.8 | R 4.6 | 19.6 | R 34.5 | R 133.5 | 0.4 | R 217.3 | 0.0 | 115.9 | R 697.9 | R 241.0 | R 938.9 |
| 1998 | 49.1 | 168.9 | 36.5 | 31.2 | 0.3 | 6.2 | 4.0 | 5.0 | 8.1 | 35.5 | 126.7 | 0.4 | 167.2 | 0.0 | 119.7 | 632.0 | 247.2 | 879.2 |
| 1999 | 49.4 | 164.1 | 49.3 | 36.5 | 0.2 | 7.0 | 4.1 | 5.1 | 7.9 | 37.3 | 147.4 | 0.3 | 240.1 | (s) | 120.3 | 721.6 | 235.7 | 957.3 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 81. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Georgia**

| | | | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | | Electrical System Energy Losses [d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | Net Energy | | Total [c] |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 10 | 4 | 262 | 2,592 | 2,306 | 66 | 530 | 30,875 | 1,544 | 38,175 | 0 | 43 | — | 107 | — |
| 1965 | 2 | 5 | 928 | 4,177 | 2,158 | 69 | 583 | 38,215 | 1,162 | 47,292 | 0 | 0 | — | 0 | — |
| 1970 | 1 | 7 | 600 | 7,747 | 10,506 | 100 | 549 | 53,608 | 172 | 73,283 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 4 | 399 | 10,331 | 12,887 | 106 | 516 | 65,110 | 427 | 89,776 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 7 | 386 | 14,135 | 16,421 | 76 | 618 | 65,116 | 2,995 | 99,747 | 0 | 16 | — | 40 | — |
| 1985 | 0 | 5 | 212 | 18,031 | 16,236 | 212 | 562 | 71,432 | 1,009 | 107,695 | e 0 | 61 | — | 142 | — |
| 1990 | 0 | 7 | 196 | 22,731 | 18,439 | 105 | 632 | 81,341 | 1,325 | 124,769 | R 209 | 75 | — | 165 | — |
| 1991 | 0 | 7 | 182 | 22,292 | 14,441 | 112 | 566 | 82,211 | 1,165 | 120,969 | R 227 | 74 | — | 161 | — |
| 1992 | 0 | 8 | 166 | 22,995 | 12,422 | 110 | 577 | 82,268 | 3,376 | 121,914 | R 61 | 73 | — | 155 | — |
| 1993 | 0 | 7 | 167 | 25,729 | 15,204 | 118 | 587 | 92,260 | 2,568 | 136,633 | R 113 | 73 | — | 155 | — |
| 1994 | 0 | 7 | 160 | 26,568 | 16,936 | 249 | 614 | 92,545 | 1,873 | 138,945 | R 32 | 87 | — | 181 | — |
| 1995 | 0 | 8 | 156 | 28,494 | 18,451 | 140 | 603 | 96,781 | 1,405 | 146,030 | R 3 | 94 | — | R 196 | — |
| 1996 | 0 | 8 | 168 | 34,173 | 17,293 | R 120 | 586 | 100,094 | 1,258 | R 153,691 | 0 | 96 | — | 200 | — |
| 1997 | 0 | 8 | 157 | 30,967 | 15,233 | R 136 | 619 | 100,054 | 1,129 | R 148,295 | 0 | 109 | — | R 228 | — |
| 1998 | 0 | 8 | 138 | 31,396 | 15,134 | 41 | 648 | 105,751 | 970 | 154,077 | 0 | 98 | — | 203 | — |
| 1999 | 0 | 9 | 149 | 33,769 | 15,316 | 120 | 654 | 108,795 | 907 | 159,711 | 0 | 98 | — | 191 | — |
| | | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 0.2 | 3.7 | 1.3 | 15.1 | 12.4 | 0.3 | 3.2 | 162.2 | 9.7 | 204.2 | 0.0 | 0.1 | 208.3 | 0.4 | 208.6 |
| 1965 | 0.1 | 5.0 | 4.7 | 24.3 | 11.6 | 0.3 | 3.5 | 200.7 | 7.3 | 252.5 | 0.0 | 0.0 | 257.5 | 0.0 | 257.5 |
| 1970 | (s) | 7.1 | 3.0 | 45.1 | 59.0 | 0.4 | 3.3 | 281.6 | 1.1 | 393.5 | 0.0 | 0.0 | 400.6 | 0.0 | 400.6 |
| 1975 | (s) | 4.3 | 2.0 | 60.2 | 72.6 | 0.4 | 3.1 | 342.0 | 2.7 | 483.0 | 0.0 | 0.0 | 487.3 | 0.0 | 487.3 |
| 1980 | 0.0 | 7.6 | 1.9 | 82.3 | 92.6 | 0.3 | 3.7 | 342.1 | 18.8 | 541.8 | 0.0 | 0.1 | 549.4 | 0.1 | 549.6 |
| 1985 | 0.0 | 5.5 | 1.1 | 105.0 | 91.5 | 0.8 | 3.4 | 375.2 | 6.3 | 583.4 | e 0.0 | 0.2 | e 589.1 | 0.5 | e 589.6 |
| 1990 | 0.0 | 7.5 | 1.0 | 132.4 | 104.2 | 0.4 | 3.8 | 427.3 | 8.3 | 677.4 | R 0.7 | 0.3 | 685.2 | 0.6 | 685.8 |
| 1991 | 0.0 | 7.6 | 0.9 | 129.9 | 81.5 | 0.4 | 3.4 | 431.9 | 7.3 | 655.3 | R 0.8 | 0.3 | 663.2 | 0.5 | 663.7 |
| 1992 | 0.0 | 7.7 | 0.8 | 133.9 | 70.0 | 0.4 | 3.5 | 432.2 | 21.2 | 662.0 | R 0.2 | 0.2 | 670.0 | 0.5 | 670.5 |
| 1993 | 0.0 | 7.2 | 0.8 | 149.9 | 85.8 | 0.4 | 3.6 | 484.6 | 16.1 | 741.3 | 0.4 | 0.3 | 748.8 | 0.5 | 749.3 |
| 1994 | 0.0 | 7.2 | 0.8 | 154.8 | 95.9 | 0.9 | 3.7 | R 484.0 | 11.8 | R 751.9 | 0.1 | 0.3 | R 759.4 | 0.6 | R 760.0 |
| 1995 | 0.0 | 7.9 | 0.8 | 166.0 | 104.6 | 0.5 | 3.7 | R 504.7 | 8.8 | R 789.1 | (s) | 0.3 | R 797.3 | 0.7 | R 797.9 |
| 1996 | 0.0 | 8.7 | 0.8 | 199.1 | 98.0 | 0.4 | 3.6 | R 522.1 | 7.9 | R 831.9 | 0.0 | 0.3 | R 840.9 | 0.7 | R 841.6 |
| 1997 | 0.0 | 8.2 | 0.8 | 180.4 | 86.4 | R 0.5 | 3.8 | R 521.6 | 7.1 | R 800.5 | 0.0 | 0.4 | R 809.0 | 0.8 | R 809.8 |
| 1998 | 0.0 | 7.8 | 0.7 | 182.9 | 85.8 | 0.1 | 3.9 | 551.2 | 6.1 | 830.7 | 0.0 | 0.3 | 838.9 | 0.7 | 839.6 |
| 1999 | 0.0 | 9.1 | 0.8 | 196.7 | 86.8 | 0.4 | 4.0 | 566.9 | 5.7 | 861.3 | 0.0 | 0.3 | 870.8 | 0.7 | 871.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 82.   Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Georgia

| Year | Coal | Natural Gas a | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 2,608 | 25 | 39 | 1 | 0 | 40 | 0 | 2,243 | 0 | 0 | 0 | — |
| 1965 | 5,291 | 1 | 52 | 2 | 0 | 54 | 0 | 3,170 | 0 | 0 | 0 | — |
| 1970 | 7,498 | 59 | 1,542 | 58 | 0 | 1,600 | 0 | 2,461 | 0 | 0 | 0 | — |
| 1975 | 12,656 | 40 | 4,059 | 1,077 | 0 | 5,136 | 3,093 | 4,278 | 0 | 0 | 0 | — |
| 1980 | 21,191 | 4 | 670 | 415 | 0 | 1,085 | 8,436 | 4,369 | 0 | 0 | 0 | — |
| 1985 | 28,285 | 1 | 57 | 235 | 0 | 292 | 10,130 | 2,772 | 0 | 0 | 0 | — |
| 1990 | 27,812 | 2 | 115 | 218 | 0 | 333 | 24,797 | 4,887 | 0 | 0 | 0 | — |
| 1991 | 24,848 | 1 | 20 | 194 | 0 | 213 | 26,016 | 4,639 | 0 | 0 | 0 | — |
| 1992 | 23,656 | 1 | 69 | 199 | 0 | 268 | 27,996 | 5,342 | 0 | 0 | 0 | — |
| 1993 | 25,339 | 3 | 170 | 336 | 0 | 506 | 27,233 | 4,753 | 0 | 0 | 0 | — |
| 1994 | 27,293 | 1 | 61 | 297 | 0 | 358 | 28,927 | 4,857 | 0 | 0 | 0 | — |
| 1995 | 29,280 | 8 | 109 | 385 | 0 | 494 | 30,661 | 4,684 | 0 | 0 | 0 | — |
| 1996 | 29,170 | 5 | 84 | 555 | 0 | 640 | 29,925 | 4,936 | 0 | 0 | 0 | — |
| 1997 | 30,631 | 7 | 81 | 370 | 0 | 451 | 30,414 | 4,418 | 0 | 0 | 0 | — |
| 1998 | 30,731 | 22 | 245 | 1,346 | 0 | 1,591 | 31,380 | 5,026 | 0 | 0 | 0 | — |
| 1999 | 31,506 | 21 | 391 | 1,025 | 0 | 1,416 | 31,478 | 2,674 | 0 | 0 | 0 | — |
| | | | | Trillion Btu | | | | | | | | |
| 1960 | 65.3 | 26.2 | 0.2 | (s) | 0.0 | 0.3 | 0.0 | 24.1 | 0.0 | 0.0 | 0.0 | 115.9 |
| 1965 | 131.9 | 0.9 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 33.1 | 0.0 | 0.0 | 0.0 | 166.3 |
| 1970 | 178.1 | 60.5 | 9.7 | 0.3 | 0.0 | 10.0 | 0.0 | 25.8 | 0.0 | 0.0 | 0.0 | 274.5 |
| 1975 | 300.6 | 41.5 | 25.5 | 6.3 | 0.0 | 31.8 | 34.1 | 44.5 | 0.0 | 0.0 | 0.0 | 452.4 |
| 1980 | 504.5 | 3.8 | 4.2 | 2.4 | 0.0 | 6.6 | 92.0 | 45.4 | 0.0 | 0.0 | 0.0 | 652.3 |
| 1985 | 685.7 | 0.9 | 0.4 | 1.4 | 0.0 | 1.7 | 109.5 | 29.0 | 0.0 | 0.0 | 0.0 | 826.8 |
| 1990 | 661.5 | 2.0 | 0.7 | 1.3 | 0.0 | 2.0 | 264.8 | 50.8 | 0.0 | 0.0 | 0.0 | 981.2 |
| 1991 | 593.2 | 0.9 | 0.1 | 1.1 | 0.0 | 1.3 | 279.4 | 48.4 | 0.0 | 0.0 | 0.0 | 923.1 |
| 1992 | 569.6 | 1.2 | 0.4 | 1.2 | 0.0 | 1.6 | 298.9 | 55.2 | 0.0 | 0.0 | 0.0 | 926.6 |
| 1993 | 615.6 | 3.1 | 1.1 | 2.0 | 0.0 | 3.0 | 290.9 | 49.0 | 0.0 | 0.0 | 0.0 | 961.7 |
| 1994 | 642.7 | 1.1 | 0.4 | 1.7 | 0.0 | 2.1 | 308.8 | 50.1 | 0.0 | 0.0 | 0.0 | 1,004.8 |
| 1995 | 677.9 | 8.0 | 0.7 | 2.2 | 0.0 | 2.9 | 326.8 | 48.3 | 0.0 | 0.0 | 0.0 | 1,063.9 |
| 1996 | 675.6 | 4.8 | 0.5 | 3.2 | 0.0 | 3.8 | 317.9 | 51.0 | 0.0 | 0.0 | 0.0 | 1,053.2 |
| 1997 | 720.2 | 7.5 | 0.5 | 2.2 | 0.0 | 2.7 | 323.1 | R 45.8 | 0.0 | 0.0 | 0.0 | R 1,099.2 |
| 1998 | 722.2 | 23.0 | 1.5 | 7.8 | 0.0 | 9.4 | 333.4 | 52.0 | 0.0 | 0.0 | 0.0 | 1,139.9 |
| 1999 | 739.7 | 21.2 | 2.5 | 6.0 | 0.0 | 8.4 | 334.4 | 27.7 | 0.0 | 0.0 | 0.0 | 1,131.4 |

a  Includes supplemental gaseous fuels.
b  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c  Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d  Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f  "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g  If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
  Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 83. Energy Consumption Estimates by Source, Selected Years 1960-1999, Hawaii**

| | | | Petroleum | | | | | | | | | | | Nuclear Electric Power | Hydro-electric Power [d] | Wood and Waste | Other [a,e] | Net Inter-state Flow of Electric-ity/Losses [f] | Total [g] |
| | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kero-sene [a] | LPG [a] | Lubri-cants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0 | 0 | 29 | 2,640 | 886 | 4,321 | 91 | 112 | 38 | 3,429 | 4,766 | R 533 | R 16,844 | 0 | 27 | — | — | 0 | — |
| 1965 | 0 | 0 | 306 | 613 | 1,612 | 7,618 | 49 | 219 | 94 | 4,082 | 7,230 | R 655 | R 22,478 | 0 | 105 | — | — | 0 | — |
| 1970 | 0 | 0 | 377 | 133 | 1,695 | 14,273 | 153 | 938 | 71 | 5,691 | 10,154 | R 619 | R 34,105 | 0 | 108 | — | — | 0 | — |
| 1975 | 0 | 0 | 379 | 116 | 1,948 | 14,849 | 76 | 872 | 104 | 6,766 | 11,255 | R 734 | R 37,097 | 0 | 89 | — | — | 0 | — |
| 1980 | 0 | 3 | 285 | 199 | 5,987 | 14,116 | 9 | 1,573 | 94 | 7,231 | 13,196 | R 872 | R 43,562 | 0 | 86 | — | — | 0 | — |
| 1985 | 46 | 2 | 308 | 155 | 4,611 | 13,260 | 2 | 133 | 86 | 7,594 | 13,185 | R 757 | R 40,091 | 0 | 86 | — | — | 0 | — |
| 1990 | 28 | 3 | 381 | 272 | 6,822 | 12,646 | (s) | 178 | 96 | 8,670 | 17,433 | R 2,215 | R 48,714 | 0 | R h 79 | — | — | 0 | — |
| 1991 | 37 | 3 | 383 | 261 | 7,239 | 11,123 | (s) | 214 | 86 | 8,970 | 15,418 | R 1,910 | R 45,606 | 0 | R 71 | — | — | 0 | — |
| 1992 | 47 | 3 | 431 | 243 | 5,588 | 9,993 | (s) | 651 | 88 | 8,870 | 16,271 | R 2,304 | R 44,439 | 0 | R 61 | — | — | 0 | — |
| 1993 | 73 | 3 | 444 | 198 | 4,837 | 8,891 | 1 | 884 | 90 | 9,060 | 12,361 | R 2,050 | R 38,814 | 0 | R 56 | — | — | 0 | — |
| 1994 | 86 | 3 | 407 | 210 | 5,063 | 9,472 | 1 | 1,619 | 94 | 9,343 | 12,931 | R 2,256 | R 41,396 | 0 | R 141 | — | — | 0 | — |
| 1995 | 192 | 3 | 438 | 218 | 5,017 | 9,940 | 1 | R 1,316 | 92 | 9,416 | 12,348 | R 2,161 | R 40,947 | 0 | R 98 | — | — | 0 | — |
| 1996 | 169 | 3 | 401 | 165 | 4,418 | 10,087 | 1 | R 1,319 | 89 | 9,374 | 10,379 | R 2,577 | R 38,811 | 0 | R 105 | — | — | 0 | — |
| 1997 | 145 | 3 | 396 | 121 | 4,287 | 10,217 | 1 | R 241 | 94 | 9,358 | 9,879 | R 2,540 | R 37,134 | 0 | R 115 | — | — | 0 | — |
| 1998 | 167 | 3 | 322 | 107 | 4,343 | 9,990 | (s) | 844 | 99 | 9,342 | 11,026 | 2,085 | 38,159 | 0 | 121 | — | — | 0 | — |
| 1999 | 133 | 3 | 353 | 58 | 4,507 | 9,474 | (s) | 376 | 100 | 8,953 | 11,120 | 2,091 | 37,031 | 0 | 118 | — | — | 0 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear | Hydro | Wood and Waste | Other | Net | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.0 | 0.0 | 0.2 | 13.3 | 5.2 | 23.5 | 0.5 | 0.4 | 0.2 | 18.0 | 30.0 | R 3.2 | R 94.6 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | R 94.9 |
| 1965 | 0.0 | 0.0 | 2.0 | 3.1 | 9.4 | 42.3 | 0.3 | 0.9 | 0.6 | 21.4 | 45.5 | R 3.9 | R 129.3 | 0.0 | 1.1 | 0.2 | 0.0 | 0.0 | R 130.6 |
| 1970 | 0.0 | 0.0 | 2.5 | 0.7 | 9.9 | 80.1 | 0.9 | 3.5 | 0.4 | 29.9 | 63.8 | R 3.7 | R 195.4 | 0.0 | 1.1 | 0.4 | 0.0 | 0.0 | R 197.0 |
| 1975 | 0.0 | 0.0 | 2.5 | 0.6 | 11.3 | 83.5 | 0.4 | 3.2 | 0.6 | 35.5 | 70.8 | R 4.4 | R 212.9 | 0.0 | 0.9 | 0.6 | 0.0 | 0.0 | R 214.4 |
| 1980 | 0.0 | 3.0 | 1.9 | 1.0 | 34.9 | 79.2 | 0.1 | 5.8 | 0.6 | 38.0 | 83.0 | R 5.2 | R 249.6 | 0.0 | 0.9 | 11.9 | 0.0 | 0.0 | R 265.4 |
| 1985 | 1.1 | 2.7 | 2.0 | 0.8 | 26.9 | 74.4 | (s) | 0.5 | 0.5 | 39.9 | 82.9 | R 4.7 | R 232.6 | 0.0 | 0.9 | 14.2 | 0.4 | 0.0 | R 251.9 |
| 1990 | 0.7 | 3.0 | 2.5 | 1.4 | 39.7 | 71.1 | (s) | 0.6 | 0.6 | 45.5 | 109.6 | R 13.3 | R 284.4 | 0.0 | R h 0.8 | R 6.6 | R h 1.3 | 0.0 | R h 296.8 |
| 1991 | 0.9 | 2.9 | 2.5 | 1.3 | 42.2 | 62.6 | (s) | 0.8 | 0.5 | 47.1 | 96.9 | R 11.6 | R 265.6 | 0.0 | R 0.7 | R 6.7 | R 1.4 | 0.0 | R 278.3 |
| 1992 | 1.2 | 2.9 | 2.9 | 1.2 | 32.6 | 56.5 | (s) | 2.4 | 0.5 | 46.6 | 102.3 | R 13.8 | R 258.8 | 0.0 | 0.6 | R 7.0 | R 1.3 | 0.0 | R 271.7 |
| 1993 | 1.8 | 2.8 | 2.9 | 1.0 | 28.2 | 50.4 | (s) | 3.2 | 0.5 | 47.6 | 77.7 | R 12.4 | R 224.0 | 0.0 | 0.6 | R 6.8 | R 4.4 | 0.0 | R 240.4 |
| 1994 | 1.8 | 2.9 | 2.7 | 1.1 | 29.5 | 53.7 | (s) | 5.9 | 0.6 | R 48.9 | 81.3 | R 13.6 | 237.2 | 0.0 | 1.5 | R 6.9 | R 5.4 | 0.0 | R 255.7 |
| 1995 | 4.1 | 2.9 | 2.9 | 1.1 | 29.2 | 56.4 | (s) | 4.8 | 0.6 | R 49.1 | 77.6 | R 13.1 | R 234.7 | 0.0 | 1.0 | R 8.0 | 6.3 | 0.0 | R 257.0 |
| 1996 | 3.6 | 2.8 | 2.7 | 0.8 | 25.7 | 57.2 | (s) | R 4.8 | 0.5 | R 48.9 | 65.3 | R 15.5 | 221.4 | 0.0 | 1.1 | R 16.0 | R 6.5 | 0.0 | R 251.4 |
| 1997 | 3.3 | 2.7 | 2.6 | 0.6 | 25.0 | 57.9 | (s) | R 0.9 | 0.6 | R 48.8 | 62.1 | R 15.3 | R 213.7 | 0.0 | 1.2 | R 14.8 | R 6.2 | 0.0 | R 241.8 |
| 1998 | 3.8 | 2.8 | 2.1 | 0.5 | 25.3 | 56.6 | (s) | 3.1 | 0.6 | 48.7 | 69.3 | 12.6 | 218.9 | 0.0 | 1.3 | 13.3 | 6.5 | 0.0 | 246.6 |
| 1999 | 3.1 | 2.9 | 2.3 | 0.3 | 26.3 | 53.7 | (s) | 1.4 | 0.6 | 46.7 | 69.9 | 12.6 | 213.7 | 0.0 | 1.2 | 14.6 | 6.0 | 0.0 | 241.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 84.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Hawaii

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 0 | 0 | (s) | 0 | 57 | 58 | 0 | — | — | 514 | — | 1,550 | — |
| 1965 | 0 | 0 | 1 | 0 | 113 | 114 | 0 | — | — | 861 | — | 1,976 | — |
| 1970 | 0 | 0 | 1 | 0 | 447 | 449 | 0 | — | — | 1,285 | — | 3,021 | — |
| 1975 | 0 | 0 | 1 | 0 | 320 | 321 | 0 | — | — | 1,663 | — | 3,732 | — |
| 1980 | 0 | 1 | 1 | 0 | 430 | 431 | 0 | — | — | 1,841 | — | 4,103 | — |
| 1985 | 0 | 1 | (s) | 0 | 101 | 101 | 0 | — | — | 1,879 | — | 3,928 | — |
| 1990 | 0 | 1 | (s) | 0 | 127 | 128 | 0 | — | — | 2,324 | — | 4,734 | — |
| 1991 | 0 | 1 | (s) | (s) | 131 | 131 | 0 | — | — | 2,396 | — | 4,132 | — |
| 1992 | 0 | 1 | (s) | (s) | 413 | 413 | 0 | — | — | 2,438 | — | 3,711 | — |
| 1993 | 0 | 1 | 1 | (s) | 88 | 89 | 0 | — | — | 2,469 | — | 3,061 | — |
| 1994 | 0 | 1 | 1 | (s) | 90 | 91 | 0 | — | — | 2,557 | — | 2,859 | — |
| 1995 | 0 | 1 | 1 | (s) | 86 | 88 | 0 | — | — | 2,606 | — | 2,923 | — |
| 1996 | 0 | 1 | (s) | (s) | 107 | 107 | 0 | — | — | 2,676 | — | 3,023 | — |
| 1997 | 0 | 1 | (s) | (s) | R 198 | R 198 | 0 | — | — | 2,668 | — | 2,927 | — |
| 1998 | 0 | 1 | (s) | (s) | 563 | 563 | 0 | — | — | 2,641 | — | 2,988 | — |
| 1999 | 0 | 1 | (s) | (s) | 319 | 319 | 0 | — | — | 2,689 | — | 3,145 | — |

| Year | | | | | | Trillion Btu | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.0 | 0.0 | (s) | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 1.8 | 2.0 | 5.3 | 7.3 |
| 1965 | 0.0 | 0.0 | (s) | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 2.9 | 3.4 | 6.7 | 10.1 |
| 1970 | 0.0 | 0.0 | (s) | 0.0 | 1.7 | 1.7 | 0.0 | 0.0 | 0.0 | 4.4 | 6.1 | 10.3 | 16.4 |
| 1975 | 0.0 | 0.0 | (s) | 0.0 | 1.2 | 1.2 | 0.0 | 0.0 | 0.0 | 5.7 | 6.9 | 12.7 | 19.6 |
| 1980 | 0.0 | 1.4 | (s) | 0.0 | 1.6 | 1.6 | 0.0 | 0.0 | 0.0 | 6.3 | 9.2 | 14.0 | 23.2 |
| 1985 | 0.0 | 0.7 | (s) | 0.0 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 6.4 | 7.5 | 13.4 | 20.9 |
| 1990 | 0.0 | 0.6 | (s) | 0.0 | 0.5 | 0.5 | 0.0 | e 0.0 | R e 0.9 | 7.9 | R e 9.9 | 16.2 | R e 26.1 |
| 1991 | 0.0 | 0.6 | (s) | (s) | 0.5 | 0.5 | 0.0 | 0.0 | R 1.0 | 8.2 | R 10.2 | 14.1 | R 24.3 |
| 1992 | 0.0 | 0.6 | (s) | (s) | 1.5 | 1.5 | 0.0 | 0.0 | R 1.0 | 8.3 | R 11.4 | 12.7 | R 24.1 |
| 1993 | 0.0 | 0.6 | (s) | (s) | 0.3 | 0.3 | 0.0 | 0.0 | R 1.1 | 8.4 | R 10.4 | 10.4 | R 20.9 |
| 1994 | 0.0 | 0.6 | (s) | (s) | 0.3 | 0.3 | 0.0 | 0.0 | R 1.2 | 8.7 | R 10.8 | 9.8 | R 20.6 |
| 1995 | 0.0 | 0.6 | (s) | (s) | 0.3 | 0.3 | 0.0 | 0.0 | R 1.2 | 8.9 | R 11.0 | 10.0 | R 21.0 |
| 1996 | 0.0 | 0.6 | (s) | (s) | 0.4 | 0.4 | 0.0 | 0.0 | R 1.3 | 9.1 | R 11.3 | 10.3 | R 21.7 |
| 1997 | 0.0 | 0.5 | (s) | (s) | R 0.7 | R 0.7 | 0.0 | 0.0 | R 1.3 | 9.1 | R 11.6 | 10.0 | R 21.6 |
| 1998 | 0.0 | 0.6 | (s) | (s) | 2.0 | 2.0 | 0.0 | 0.0 | 1.3 | 9.0 | 12.9 | 10.2 | 23.1 |
| 1999 | 0.0 | 0.6 | (s) | (s) | 1.2 | 1.2 | 0.0 | 0.0 | 1.3 | 9.2 | 12.2 | 10.7 | 23.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 85.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Hawaii

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 0 | 0 | 48 | 23 | 10 | 55 | 41 | 177 | 0 | — | 306 | — | 921 | — |
| 1965 | 0 | 0 | 71 | 39 | 20 | 59 | 31 | 220 | 0 | — | 495 | — | 1,136 | — |
| 1970 | 0 | 0 | 174 | 87 | 79 | 133 | 38 | 511 | 0 | — | 771 | — | 1,813 | — |
| 1975 | 0 | 0 | 84 | 45 | 57 | 98 | 15 | 299 | 0 | — | 1,109 | — | 2,489 | — |
| 1980 | 0 | 2 | 398 | 0 | 76 | 54 | 25 | 552 | 0 | — | 1,462 | — | 3,259 | — |
| 1985 | 0 | 2 | 136 | 1 | 18 | 47 | 21 | 223 | 0 | — | 1,612 | — | 3,371 | — |
| 1990 | 0 | 2 | 507 | (s) | 22 | 59 | 837 | 1,426 | 0 | — | 2,253 | — | 4,589 | — |
| 1991 | 0 | 2 | 613 | (s) | 23 | 49 | 19 | 703 | 0 | — | 2,355 | — | 4,062 | — |
| 1992 | 0 | 2 | 437 | (s) | 73 | 45 | 1,063 | 1,618 | 0 | — | 2,417 | — | 3,678 | — |
| 1993 | 0 | 2 | 279 | 1 | 15 | 11 | 35 | 341 | 0 | — | 2,419 | — | 3,000 | — |
| 1994 | 0 | 2 | 252 | (s) | 16 | 11 | 439 | 718 | 0 | — | 2,601 | — | 2,908 | — |
| 1995 | 0 | 2 | 253 | (s) | 15 | 11 | 63 | 343 | 0 | — | 2,779 | — | 3,116 | — |
| 1996 | 0 | 2 | 152 | (s) | 19 | 11 | 13 | 195 | 0 | — | 2,819 | — | 3,185 | — |
| 1997 | 0 | 2 | 308 | (s) | R 35 | 11 | 11 | R 366 | 0 | — | 2,839 | — | 3,114 | — |
| 1998 | 0 | 2 | 194 | (s) | 99 | 11 | 1,812 | 2,116 | 0 | — | 2,833 | — | 3,205 | — |
| 1999 | 0 | 2 | 154 | (s) | 56 | 11 | 7 | 228 | 0 | — | 2,944 | — | 3,444 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 0.0 | 0.0 | 0.3 | 0.1 | (s) | 0.3 | 0.3 | 1.0 | 0.0 | 0.0 | 1.0 | 2.0 | 3.1 | 5.2 |
| 1965 | 0.0 | 0.0 | 0.4 | 0.2 | 0.1 | 0.3 | 0.2 | 1.2 | 0.0 | 0.0 | 1.7 | 2.9 | 3.9 | 6.8 |
| 1970 | 0.0 | 0.0 | 1.0 | 0.5 | 0.3 | 0.7 | 0.2 | 2.7 | 0.0 | 0.0 | 2.6 | 5.4 | 6.2 | 11.6 |
| 1975 | 0.0 | 0.0 | 0.5 | 0.3 | 0.2 | 0.5 | 0.1 | 1.6 | 0.0 | 0.0 | 3.8 | 5.4 | 5.4 | 13.8 |
| 1980 | 0.0 | 1.7 | 2.3 | 0.0 | 0.3 | 0.3 | 0.2 | 3.0 | 0.0 | 0.0 | 5.0 | 9.7 | 11.1 | 20.8 |
| 1985 | 0.0 | 2.0 | 0.8 | (s) | 0.1 | 0.2 | 0.1 | 1.2 | 0.0 | 0.0 | 5.5 | 8.8 | 11.5 | 20.3 |
| 1990 | 0.0 | 2.4 | 3.0 | (s) | 0.1 | 0.3 | 5.3 | 8.6 | 0.0 | e 0.0 | 7.7 | e 18.7 | 15.7 | e 34.3 |
| 1991 | 0.0 | 2.3 | 3.6 | (s) | 0.1 | 0.3 | 0.1 | 4.0 | 0.0 | 0.0 | 8.0 | 14.4 | 13.9 | 28.2 |
| 1992 | 0.0 | 2.3 | 2.5 | (s) | 0.3 | 0.2 | 6.7 | 9.7 | 0.0 | 0.0 | 8.2 | 20.3 | 12.6 | 32.8 |
| 1993 | 0.0 | 2.3 | 1.6 | (s) | 0.1 | 0.1 | 0.2 | 2.0 | 0.0 | 0.0 | 8.3 | 12.5 | 10.2 | 22.7 |
| 1994 | 0.0 | 2.3 | 1.5 | (s) | 0.1 | 0.1 | 2.8 | 4.3 | 0.0 | 0.0 | 8.9 | 15.5 | 9.9 | 25.4 |
| 1995 | 0.0 | 2.3 | 1.5 | (s) | 0.1 | 0.1 | 0.4 | 2.0 | 0.0 | 0.0 | 9.5 | 13.8 | 10.6 | 24.4 |
| 1996 | 0.0 | 2.3 | 0.9 | (s) | 0.1 | 0.1 | 0.1 | 1.1 | 0.0 | 0.0 | 9.6 | 13.0 | 10.9 | 23.8 |
| 1997 | 0.0 | 1.8 | 1.8 | (s) | 0.1 | 0.1 | 0.1 | R 2.1 | 0.0 | 0.0 | 9.7 | 13.5 | 10.6 | R 24.2 |
| 1998 | 0.0 | 1.8 | 1.1 | (s) | 0.4 | 0.1 | 11.4 | 12.9 | 0.0 | 0.0 | 9.7 | 24.4 | 10.9 | 35.4 |
| 1999 | 0.0 | 1.8 | 0.9 | (s) | 0.2 | 0.1 | (s) | 1.2 | 0.0 | (s) | 10.0 | 13.1 | 11.8 | 24.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 86. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Hawaii

**Thousand Barrels section (Coal: Thousand Short Tons; Natural Gas: Billion Cubic Feet; Petroleum: Thousand Barrels; Hydroelectric Power: Million kWh; Electricity: Million kWh; Electrical System Energy Losses: Million kWh)**

| Year | Coal | Natural Gas [a] | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | Hydroelectric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0 | 0 | 29 | 554 | 68 | 43 | 18 | 83 | 1,038 | R 533 | R 2,367 | 0 | — | — | 465 | — | 1,403 | — |
| 1965 | 0 | 0 | 306 | 635 | 10 | 82 | 21 | 76 | 1,712 | R 655 | R 3,497 | 83 | — | — | 1,096 | — | 2,516 | — |
| 1970 | 0 | 0 | 377 | 701 | 66 | 386 | 4 | 49 | 1,671 | R 619 | R 3,874 | 86 | — | — | 1,720 | — | 4,044 | — |
| 1975 | 0 | 0 | 379 | 603 | 31 | 472 | 30 | 53 | 1,346 | R 734 | R 3,648 | 71 | — | — | 2,538 | — | 5,696 | — |
| 1980 | 0 | 0 | 285 | 1,369 | 9 | 1,041 | 20 | 49 | 1,491 | R 872 | R 5,135 | 67 | — | — | 3,028 | — | 6,749 | — |
| 1985 | 46 | 0 | 308 | 471 | (s) | 9 | 18 | 104 | 1,344 | R 757 | R 3,010 | 67 | — | — | 3,143 | — | 6,571 | — |
| 1990 | 28 | 0 | 381 | 812 | (s) | 15 | 20 | 133 | 1,765 | R 2,215 | R 5,342 | R f 57 | — | — | 3,734 | — | 7,605 | — |
| 1991 | 37 | 0 | 383 | 692 | (s) | 46 | 18 | 150 | 1,804 | R 1,910 | R 5,003 | R 51 | — | — | 3,773 | — | 6,507 | — |
| 1992 | 47 | 0 | 431 | 602 | (s) | 130 | 18 | 152 | 1,372 | R 2,304 | R 5,009 | R 51 | — | — | 3,811 | — | 5,800 | — |
| 1993 | 73 | 0 | 444 | 451 | (s) | 772 | 19 | 241 | 1,070 | R 2,050 | R 5,046 | R 42 | — | — | 3,770 | — | 4,675 | — |
| 1994 | 86 | 0 | 407 | 349 | (s) | 1,499 | 20 | 245 | 1,202 | R 2,256 | R 5,978 | R 122 | — | — | 3,791 | — | 4,238 | — |
| 1995 | 192 | 0 | 438 | 405 | (s) | 1,207 | 19 | 245 | 1,040 | R 2,161 | R 5,515 | R 82 | — | — | 3,803 | — | 4,265 | — |
| 1996 | 169 | 0 | 401 | 324 | (s) | R 1,191 | 19 | 259 | 973 | R 2,577 | R 5,745 | R 87 | — | — | 3,884 | — | 4,388 | — |
| 1997 | 145 | (s) | 396 | 489 | (s) | R 6 | 20 | 242 | 862 | R 2,540 | R 4,556 | R 97 | — | — | 3,856 | — | 4,231 | — |
| 1998 | 167 | (s) | 322 | 539 | (s) | 181 | 21 | 266 | 324 | 2,085 | 3,738 | 108 | — | — | 3,787 | — | 4,285 | — |
| 1999 | 133 | (s) | 353 | 253 | (s) | (s) | 21 | 155 | 399 | 2,091 | 3,272 | 99 | — | — | 3,748 | — | 4,384 | — |

**Trillion Btu**

| Year | Coal | Natural Gas [a] | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | Hydroelectric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.0 | 0.0 | 0.2 | 3.2 | 0.4 | 0.2 | 0.1 | 0.4 | 6.5 | R 3.2 | R 14.3 | 0.0 | 0.0 | 0.0 | 1.6 | R 15.8 | 4.8 | R 20.6 |
| 1965 | 0.0 | 0.0 | 2.0 | 3.7 | 0.1 | 0.3 | 0.1 | 0.4 | 10.8 | R 3.9 | R 21.3 | 0.9 | 0.2 | 0.0 | 3.7 | R 26.1 | 8.6 | R 34.7 |
| 1970 | 0.0 | 0.0 | 2.5 | 4.1 | 0.4 | 1.5 | (s) | 0.3 | 10.5 | R 3.7 | R 22.9 | 0.9 | 0.2 | 0.0 | 5.9 | R 29.9 | 13.8 | R 43.7 |
| 1975 | 0.0 | 0.0 | 2.5 | 3.5 | 0.2 | 1.8 | 0.2 | 0.3 | 8.5 | R 4.4 | R 21.3 | 0.7 | 0.3 | 0.0 | 8.7 | R 31.0 | 19.4 | R 50.4 |
| 1980 | 0.0 | 0.0 | 1.9 | 8.0 | 0.1 | 3.8 | 0.1 | 0.3 | 9.4 | R 5.2 | R 28.7 | 0.7 | 11.9 | 0.0 | 10.3 | R 51.7 | 23.0 | R 74.7 |
| 1985 | 1.1 | 0.0 | 2.0 | 2.7 | (s) | (s) | 0.1 | 0.5 | 8.4 | R 4.7 | R 18.6 | 0.7 | R 14.0 | 0.0 | 10.7 | R 45.1 | 22.4 | R 67.5 |
| 1990 | 0.7 | 0.0 | 2.5 | 4.7 | (s) | 0.1 | 0.1 | 0.7 | 11.1 | R 13.3 | R 32.6 | R f 0.6 | R 6.5 | R f 0.4 | 12.7 | R f 53.5 | 25.9 | R f 79.4 |
| 1991 | 0.9 | 0.0 | 2.5 | 4.0 | (s) | 0.2 | 0.1 | 0.8 | 11.3 | R 11.6 | R 30.6 | R 0.5 | R 6.7 | R 0.4 | 12.9 | R 52.1 | 22.2 | R 74.3 |
| 1992 | 1.2 | 0.0 | 2.9 | 3.5 | (s) | 0.5 | 0.1 | 0.8 | 8.6 | R 13.8 | R 30.2 | 0.5 | R 7.0 | 0.3 | 13.0 | R 52.2 | 19.8 | R 71.9 |
| 1993 | 1.8 | 0.0 | 2.9 | 2.6 | (s) | 2.8 | 0.1 | 1.3 | 6.7 | R 12.4 | R 28.9 | 0.4 | R 6.8 | R 3.3 | 12.9 | R 54.1 | 16.0 | R 70.0 |
| 1994 | 1.8 | 0.0 | 2.7 | 2.0 | (s) | 5.5 | 0.1 | 1.3 | 7.6 | R 13.6 | R 32.8 | 1.3 | R 6.9 | 4.2 | 12.9 | R 59.9 | 14.5 | R 74.3 |
| 1995 | 4.1 | 0.0 | 2.9 | 2.4 | (s) | 4.4 | 0.1 | 1.3 | 6.5 | R 13.1 | R 30.6 | R 0.8 | R 8.0 | R 5.1 | 13.0 | R 61.7 | 14.6 | R 76.2 |
| 1996 | 3.6 | 0.0 | 2.7 | 1.9 | (s) | R 4.3 | 0.1 | R 1.3 | 6.1 | R 15.5 | R 31.9 | 0.9 | R 16.0 | R 5.2 | 13.3 | R 71.0 | 15.0 | R 85.9 |
| 1997 | 3.3 | 0.4 | 2.6 | 2.9 | (s) | (s) | 0.1 | 1.3 | 5.4 | R 15.3 | R 27.6 | 1.0 | R 14.8 | R 4.9 | 13.2 | R 65.0 | 14.4 | R 79.4 |
| 1998 | 3.8 | 0.4 | 2.1 | 3.1 | (s) | 0.7 | 0.1 | 1.4 | 2.0 | 12.6 | 22.1 | 1.1 | 13.3 | 5.2 | 12.9 | 58.8 | 14.6 | 73.5 |
| 1999 | 3.1 | 0.5 | 2.3 | 1.5 | (s) | (s) | 0.1 | 0.8 | 2.5 | 12.6 | 19.9 | 1.0 | 14.6 | 4.6 | 12.8 | 56.4 | 15.0 | 71.3 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 87.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, Hawaii

| Year | Coal [a] | Natural Gas [b] | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | 0 | 0 | 2,640 | 247 | 4,321 | 2 | 19 | 3,290 | 968 | 11,487 | 0 | 0 | — | 0 | — |
| 1965 | 0 | 0 | 613 | 844 | 7,618 | 4 | 73 | 3,947 | 1,195 | 14,294 | 0 | 0 | — | 0 | — |
| 1970 | 0 | 0 | 133 | 722 | 14,273 | 26 | 68 | 5,508 | 1,744 | 22,473 | 0 | 0 | — | 0 | — |
| 1975 | 0 | 0 | 116 | 831 | 14,849 | 22 | 74 | 6,615 | 1,013 | 23,520 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 0 | 199 | 3,331 | 14,116 | 26 | 74 | 7,129 | 1,441 | 26,317 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 0 | 155 | 3,253 | 13,260 | 6 | 68 | 7,443 | 1,526 | 25,710 | [e] 0 | 0 | — | 0 | — |
| 1990 | 0 | 0 | 272 | 3,870 | 12,646 | 13 | 76 | 8,477 | 2,694 | 28,049 | 0 | 0 | — | 0 | — |
| 1991 | 0 | 0 | 261 | 4,224 | 11,123 | 14 | 68 | 8,771 | 2,609 | 27,072 | 0 | 0 | — | 0 | — |
| 1992 | 0 | 0 | 243 | 2,597 | 9,993 | 35 | 69 | 8,674 | 3,799 | 25,410 | 0 | 0 | — | 0 | — |
| 1993 | 0 | 0 | 198 | 2,017 | 8,891 | 9 | 71 | 8,808 | 2,689 | 22,682 | 0 | 0 | — | 0 | — |
| 1994 | 0 | 0 | 210 | 2,362 | 9,472 | 14 | 74 | 9,088 | 2,980 | 24,201 | 0 | 0 | — | 0 | — |
| 1995 | 0 | 0 | 218 | 2,171 | 9,940 | 8 | 73 | 9,160 | 2,719 | 24,289 | 0 | 0 | — | 0 | — |
| 1996 | 0 | 0 | 165 | 1,641 | 10,087 | 2 | 71 | 9,104 | 714 | 21,784 | 0 | 0 | — | 0 | — |
| 1997 | 0 | 0 | 121 | 1,203 | 10,217 | 2 | 75 | 9,104 | 500 | 21,221 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 0 | 107 | 1,228 | 9,990 | 1 | 78 | 9,065 | 408 | 20,876 | 0 | 0 | — | 0 | — |
| 1999 | 0 | 0 | 58 | 1,568 | 9,474 | 0 | 79 | 8,786 | 2,051 | 22,016 | 0 | 0 | — | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | |
| 1960 | 0.0 | 0.0 | 13.3 | 1.4 | 23.5 | (s) | 0.1 | 17.3 | 6.1 | 61.8 | 0.0 | 0.0 | 61.8 | 0.0 | 61.8 |
| 1965 | 0.0 | 0.0 | 3.1 | 4.9 | 42.3 | (s) | 0.4 | 20.7 | 7.5 | 79.0 | 0.0 | 0.0 | 79.0 | 0.0 | 79.0 |
| 1970 | 0.0 | 0.0 | 0.7 | 4.2 | 80.1 | 0.1 | 0.4 | 28.9 | 11.0 | 125.3 | 0.0 | 0.0 | 125.3 | 0.0 | 125.3 |
| 1975 | 0.0 | 0.0 | 0.6 | 4.8 | 83.5 | 0.1 | 0.5 | 34.7 | 6.4 | 130.5 | 0.0 | 0.0 | 130.5 | 0.0 | 130.5 |
| 1980 | 0.0 | 0.0 | 1.0 | 19.4 | 79.2 | 0.1 | 0.5 | 37.4 | 9.1 | 146.7 | 0.0 | 0.0 | 146.7 | 0.0 | 146.7 |
| 1985 | 0.0 | 0.0 | 0.8 | 18.9 | 74.4 | (s) | 0.4 | 39.1 | 9.6 | 143.3 | [e] 0.0 | 0.0 | [e] 143.3 | 0.0 | [e] 143.3 |
| 1990 | 0.0 | 0.0 | 1.4 | 22.5 | 71.1 | (s) | 0.5 | 44.5 | 16.9 | 156.9 | 0.0 | 0.0 | 156.9 | 0.0 | 156.9 |
| 1991 | 0.0 | 0.0 | 1.3 | 24.6 | 62.6 | (s) | 0.4 | 46.1 | 16.4 | 151.4 | 0.0 | 0.0 | 151.4 | 0.0 | 151.4 |
| 1992 | 0.0 | 0.0 | 1.2 | 15.1 | 56.5 | 0.1 | 0.4 | 45.6 | 23.9 | 142.9 | 0.0 | 0.0 | 142.9 | 0.0 | 142.9 |
| 1993 | 0.0 | 0.0 | 1.0 | 11.7 | 50.4 | (s) | 0.4 | 46.3 | 16.9 | 126.8 | 0.0 | 0.0 | 126.8 | 0.0 | 126.8 |
| 1994 | 0.0 | 0.0 | 1.1 | 13.8 | 53.7 | 0.1 | 0.4 | [R] 47.5 | 18.7 | [R] 135.3 | 0.0 | 0.0 | [R] 135.3 | 0.0 | [R] 135.3 |
| 1995 | 0.0 | 0.0 | 1.1 | 12.6 | 56.4 | (s) | 0.4 | [R] 47.8 | 17.1 | [R] 135.4 | 0.0 | 0.0 | [R] 135.4 | 0.0 | [R] 135.4 |
| 1996 | 0.0 | 0.0 | 0.8 | 9.6 | 57.2 | (s) | 0.4 | [R] 47.5 | 4.5 | [R] 120.0 | 0.0 | 0.0 | [R] 120.0 | 0.0 | [R] 120.0 |
| 1997 | 0.0 | 0.0 | 0.6 | 7.0 | 57.9 | (s) | 0.5 | [R] 47.5 | 3.1 | [R] 116.6 | 0.0 | 0.0 | [R] 116.6 | 0.0 | [R] 116.6 |
| 1998 | 0.0 | 0.0 | 0.5 | 7.2 | 56.6 | (s) | 0.5 | 47.2 | 2.6 | 114.6 | 0.0 | 0.0 | 114.6 | 0.0 | 114.6 |
| 1999 | 0.0 | 0.0 | 0.3 | 9.1 | 53.7 | 0.0 | 0.5 | 45.8 | 12.9 | 122.3 | 0.0 | 0.0 | 122.3 | 0.0 | 122.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 88.   Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Hawaii

| Year | Coal Thousand Short Tons | Natural Gas a Billion Cubic Feet | Petroleum Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 0 | 0 | 2,719 | 37 | 0 | 2,756 | 0 | 27 | 0 | 0 | 0 | — |
| 1965 | 0 | 0 | 4,292 | 61 | 0 | 4,353 | 0 | 22 | 0 | 0 | 0 | — |
| 1970 | 0 | 0 | 6,702 | 96 | 0 | 6,798 | 0 | 22 | 24 | 0 | 0 | — |
| 1975 | 0 | 0 | 8,880 | 429 | 0 | 9,309 | 0 | 18 | 25 | 0 | 0 | — |
| 1980 | 0 | 0 | 10,239 | 888 | 0 | 11,127 | 0 | 20 | 0 | 0 | 0 | — |
| 1985 | 0 | 0 | 10,295 | 752 | 0 | 11,047 | 0 | 19 | 25 | 19 | 0 | — |
| 1990 | 0 | 0 | 12,138 | 1,632 | 0 | 13,769 | 0 | 23 | 6 | 0 | 0 | — |
| 1991 | 0 | 0 | 10,986 | 1,710 | 0 | 12,696 | 0 | 20 | 0 | 0 | 0 | — |
| 1992 | 0 | 0 | 10,037 | 1,952 | 0 | 11,989 | 0 | 10 | 0 | 0 | 0 | — |
| 1993 | 0 | 0 | 8,568 | 2,088 | 0 | 10,656 | 0 | 14 | 0 | 0 | 0 | — |
| 1994 | 0 | 0 | 8,310 | 2,100 | 0 | 10,409 | 0 | 19 | 0 | 0 | 0 | — |
| 1995 | 0 | 0 | 8,525 | 2,187 | 0 | 10,713 | 0 | 16 | 0 | 0 | 0 | — |
| 1996 | 0 | 0 | 8,679 | 2,301 | 0 | 10,980 | 0 | 18 | 0 | 0 | 0 | — |
| 1997 | 0 | 0 | 8,507 | 2,286 | 0 | 10,793 | 0 | 19 | 0 | 0 | 0 | — |
| 1998 | 0 | 0 | 8,482 | 2,382 | 0 | 10,864 | 0 | 14 | 0 | 0 | (s) | — |
| 1999 | 0 | 0 | 8,663 | 2,532 | 0 | 11,195 | 0 | 19 | 0 | 0 | 4 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 0.0 | 0.0 | 17.1 | 0.2 | 0.0 | 17.3 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 17.6 |
| 1965 | 0.0 | 0.0 | 27.0 | 0.4 | 0.0 | 27.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 27.6 |
| 1970 | 0.0 | 0.0 | 42.1 | 0.6 | 0.0 | 42.7 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 43.2 |
| 1975 | 0.0 | 0.0 | 55.8 | 2.5 | 0.0 | 58.3 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 58.8 |
| 1980 | 0.0 | 0.0 | 64.4 | 5.2 | 0.0 | 69.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 69.7 |
| 1985 | 0.0 | 0.0 | 64.7 | 4.4 | 0.0 | 69.1 | 0.0 | 0.2 | 0.3 | 0.4 | 0.0 | 70.0 |
| 1990 | 0.0 | 0.0 | 76.3 | 9.5 | 0.0 | 85.8 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 86.1 |
| 1991 | 0.0 | 0.0 | 69.1 | 10.0 | 0.0 | 79.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 79.2 |
| 1992 | 0.0 | 0.0 | 63.1 | 11.4 | 0.0 | 74.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 74.6 |
| 1993 | 0.0 | 0.0 | 53.9 | 12.2 | 0.0 | 66.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 66.2 |
| 1994 | 0.0 | 0.0 | 52.2 | 12.2 | 0.0 | 64.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 64.7 |
| 1995 | 0.0 | 0.0 | 53.6 | 12.7 | 0.0 | 66.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 66.5 |
| 1996 | 0.0 | 0.0 | 54.6 | 13.4 | 0.0 | 68.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 68.2 |
| 1997 | 0.0 | 0.0 | 53.5 | 13.3 | 0.0 | 66.8 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 67.0 |
| 1998 | 0.0 | 0.0 | 53.3 | 13.9 | 0.0 | 67.2 | 0.0 | 0.1 | 0.0 | 0.0 | (s) | 67.3 |
| 1999 | 0.0 | 0.0 | 54.5 | 14.8 | 0.0 | 69.2 | 0.0 | 0.2 | 0.0 | 0.0 | (s) | 69.4 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 89. Energy Consumption Estimates by Source, Selected Years 1960-1999, Idaho

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power Million kWh | Hydroelectric Power [d] Million kWh | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 699 | 22 | 491 | 133 | 4,072 | 899 | 107 | 455 | 147 | 6,965 | 205 | 9 | 13,484 | 0 | 6,165 | — | — | -5 | — |
| 1965 | 673 | 34 | 710 | 177 | 4,803 | 870 | 521 | 560 | 160 | 7,654 | 356 | 8 | 15,819 | 0 | 6,640 | — | — | 4,753 | — |
| 1970 | 353 | 47 | 1,147 | 154 | 5,600 | 960 | 230 | 1,057 | 151 | 9,684 | 277 | 17 | 19,278 | 0 | 7,075 | — | — | 14,161 | — |
| 1975 | 647 | 60 | 880 | 120 | 7,560 | 950 | 145 | 1,184 | 163 | 11,288 | 684 | 0 | 22,973 | 0 | 10,274 | — | — | 11,347 | — |
| 1980 | 514 | 49 | 797 | 162 | 5,662 | 1,243 | 0 | 993 | 182 | 11,078 | 613 | 0 | 20,731 | 0 | 9,507 | — | — | 18,078 | — |
| 1985 | 486 | 39 | 632 | 80 | 5,584 | 1,122 | 7 | 778 | 166 | 10,672 | 86 | 0 | 19,126 | 0 | 10,919 | — | — | 21,495 | — |
| 1990 | 549 | 46 | 1,281 | 39 | 7,173 | 1,143 | 9 | 610 | 186 | 11,453 | 47 | 0 | 21,942 | 113 | R h 9,182 | — | — | R 30,789 | — |
| 1991 | 673 | 51 | 988 | 39 | 8,508 | 957 | 4 | 814 | 167 | 11,610 | 44 | 18 | 23,149 | 77 | R 8,912 | — | — | R 31,504 | — |
| 1992 | 535 | 49 | 1,465 | 1 | 7,187 | 973 | 2 | 669 | 170 | 11,947 | 22 | 19 | 22,456 | 65 | R 6,842 | — | — | R 39,776 | — |
| 1993 | 528 | 56 | 1,533 | 63 | 7,749 | 1,076 | 2 | 682 | 173 | 12,770 | 38 | 21 | 24,108 | 76 | R 9,715 | — | — | R 30,998 | — |
| 1994 | 534 | 57 | 1,798 | 54 | 8,086 | 1,201 | 6 | 645 | 181 | 12,927 | 21 | 21 | 24,940 | 52 | R 7,967 | — | — | R 39,079 | — |
| 1995 | 465 | 64 | 2,014 | 48 | 8,355 | 1,568 | 20 | 758 | 178 | 13,521 | 7 | 21 | 26,490 | 0 | R 10,927 | — | — | R 30,105 | — |
| 1996 | 397 | 67 | 2,034 | 55 | 9,457 | 874 | 17 | R 2,656 | 173 | 14,174 | 7 | R 26 | R 29,473 | 0 | R 13,275 | — | — | R 27,550 | — |
| 1997 | 361 | 67 | 2,080 | 72 | 9,904 | 760 | 18 | R 550 | 182 | 14,462 | 2 | R 24 | R 28,053 | 0 | R 14,150 | — | — | R 23,877 | — |
| 1998 | 479 | 68 | 3,049 | 61 | 8,514 | 718 | 21 | 419 | 191 | 15,284 | 5 | 23 | 28,286 | 0 | 12,977 | — | — | 28,459 | — |
| 1999 | 419 | 69 | 3,052 | 67 | 9,756 | 856 | 13 | 954 | 193 | 15,886 | 7 | 20 | 30,804 | 0 | 13,497 | — | — | 29,280 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 16.8 | 22.8 | 3.3 | 0.7 | 23.7 | 4.8 | 0.6 | 1.8 | 0.9 | 36.6 | 1.3 | 0.1 | 73.7 | 0.0 | 66.3 | 11.4 | 0.0 | (s) | 191.0 |
| 1965 | 15.9 | 36.1 | 4.7 | 0.9 | 28.0 | 4.7 | 3.0 | 2.2 | 1.0 | 40.2 | 2.2 | (s) | 86.9 | 0.0 | 69.4 | 10.4 | 0.0 | 16.2 | 234.9 |
| 1970 | 7.9 | 49.4 | 7.6 | 0.8 | 32.6 | 5.2 | 1.3 | 4.0 | 0.9 | 50.9 | 1.7 | 0.1 | 105.1 | 0.0 | 74.2 | 11.5 | 0.0 | 48.3 | 296.5 |
| 1975 | 13.4 | 63.8 | 5.8 | 0.6 | 44.0 | 5.2 | 0.8 | 4.4 | 1.0 | 59.3 | 4.3 | 0.0 | 125.5 | 0.0 | 106.9 | 11.1 | 0.0 | 38.7 | 359.4 |
| 1980 | 9.6 | 51.6 | 5.3 | 0.8 | 33.0 | 6.8 | 0.0 | 3.7 | 1.1 | 58.2 | 3.9 | 0.0 | 112.7 | 0.0 | 98.8 | R 14.6 | 0.0 | 61.7 | R 349.1 |
| 1985 | 8.9 | 41.1 | 4.2 | 0.4 | 32.5 | 6.1 | (s) | 2.8 | 1.0 | 56.1 | 0.5 | 0.0 | 103.7 | 0.0 | 114.1 | R 17.8 | 0.0 | 73.3 | R 358.9 |
| 1990 | 10.1 | 46.8 | 8.5 | 0.2 | 41.8 | 6.3 | 0.1 | 2.2 | 1.1 | 60.2 | 0.3 | 0.0 | 120.6 | 1.2 | R h 95.5 | R 26.2 | h 0.5 | R 105.1 | R h 406.5 |
| 1991 | 12.3 | 52.7 | 6.6 | 0.2 | 49.6 | 5.3 | (s) | 2.9 | 1.0 | 61.0 | 0.3 | 0.1 | 126.9 | 0.8 | R 93.0 | R 25.1 | 0.5 | R 107.5 | R 419.4 |
| 1992 | 9.6 | 50.4 | 9.7 | (s) | 41.9 | 5.3 | (s) | 2.4 | 1.0 | 62.8 | 0.1 | 0.1 | 123.4 | 0.7 | R 70.8 | R 26.7 | 0.5 | R 135.7 | R 418.6 |
| 1993 | 9.8 | 58.3 | 10.2 | 0.3 | 45.1 | 5.9 | (s) | 2.5 | 1.0 | 67.1 | 0.2 | 0.1 | 132.5 | 0.8 | R 100.2 | R 26.4 | 0.5 | R 105.8 | R 434.3 |
| 1994 | 9.7 | 59.1 | 11.9 | 0.3 | 47.1 | 6.6 | (s) | 2.3 | 1.1 | R 67.6 | 0.1 | 0.1 | R 137.3 | 0.6 | R 82.2 | R 24.9 | 0.5 | R 133.3 | R 447.7 |
| 1995 | 8.9 | 65.7 | 13.4 | 0.2 | 48.7 | 8.6 | 0.1 | 2.7 | 1.1 | R 70.5 | (s) | 0.1 | R 145.5 | 0.0 | R 112.7 | R 27.6 | 0.5 | R 102.7 | 463.6 |
| 1996 | 7.3 | 69.0 | 13.5 | 0.3 | 55.1 | 4.9 | 0.1 | R 9.6 | 1.0 | R 73.9 | (s) | 0.1 | R 158.6 | 0.0 | R 137.3 | R 27.3 | 0.5 | R 94.0 | 494.6 |
| 1997 | 6.4 | 69.0 | 13.8 | 0.4 | 57.7 | 4.3 | 0.1 | R 2.0 | 1.1 | R 75.4 | (s) | 0.1 | R 154.9 | 0.0 | R 146.5 | R 29.8 | 0.5 | R 81.5 | R 489.3 |
| 1998 | 9.0 | 70.1 | 20.2 | 0.3 | 49.6 | 4.1 | 0.1 | 1.5 | 1.2 | 79.7 | (s) | 0.1 | 156.8 | 0.0 | 134.3 | 23.7 | 0.6 | 97.1 | 492.0 |
| 1999 | 7.9 | 71.5 | 20.3 | 0.3 | 56.8 | 4.9 | 0.1 | 3.5 | 1.2 | 82.8 | (s) | 0.1 | 169.9 | 0.0 | 139.6 | 28.1 | 1.3 | 99.9 | 518.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 90.  Residential Energy Consumption Estimates, Selected Years 1960-1999, Idaho

| Year | Coal [a] | Natural Gas [b] | Petroleum Distillate Fuel [a] | Kerosene [a] | LPG [a] | Total | Wood | Geothermal | Solar [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 166 | 2 | 663 | 0 | 314 | 977 | 278 | — | — | 1,463 | — | 3,639 | — |
| 1965 | 123 | 5 | 708 | 0 | 348 | 1,056 | 200 | — | — | 1,779 | — | 4,247 | — |
| 1970 | 63 | 8 | 837 | 0 | 711 | 1,548 | 146 | — | — | 2,354 | — | 5,706 | — |
| 1975 | 66 | 14 | 972 | 0 | 712 | 1,684 | 160 | — | — | 3,870 | — | 9,336 | — |
| 1980 | 40 | 7 | 485 | 0 | 316 | 801 | 144 | — | — | 4,936 | — | 12,003 | — |
| 1985 | 16 | 8 | 635 | 2 | 328 | 964 | 199 | — | — | 5,780 | — | 13,580 | — |
| 1990 | 21 | 9 | 530 | 5 | 318 | 853 | 102 | — | — | 5,626 | — | R 12,308 | — |
| 1991 | 24 | 10 | 704 | 2 | 373 | 1,078 | 108 | — | — | 5,971 | — | R 12,981 | — |
| 1992 | 18 | 10 | 570 | 2 | 297 | 869 | 113 | — | — | 5,739 | — | R 12,239 | — |
| 1993 | 15 | 13 | 619 | 2 | 328 | 948 | 109 | — | — | 6,245 | — | R 13,191 | — |
| 1994 | 14 | 12 | 524 | 2 | 307 | 833 | 107 | — | — | 6,222 | — | R 12,985 | — |
| 1995 | 14 | 13 | 510 | 15 | 374 | 899 | 119 | — | — | 6,193 | — | R 12,912 | — |
| 1996 | 10 | 15 | 526 | 13 | 449 | 988 | R 118 | — | — | 6,508 | — | R 13,563 | — |
| 1997 | 11 | 15 | 578 | 4 | R 432 | R 1,014 | R 123 | — | — | 6,628 | — | R 13,787 | — |
| 1998 | 20 | 16 | 425 | 14 | 177 | 616 | 108 | — | — | 6,610 | — | 13,655 | — |
| 1999 | 19 | 18 | 541 | 6 | 733 | 1,280 | 116 | — | — | 6,806 | — | 13,336 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 4.1 | 2.3 | 3.9 | 0.0 | 1.3 | 5.1 | 5.6 | 0.0 | 0.0 | 5.0 | 22.0 | 12.4 | 34.5 |
| 1965 | 3.0 | 5.2 | 4.1 | 0.0 | 1.4 | 5.5 | 4.0 | 0.0 | 0.0 | 6.1 | 23.8 | 14.5 | 38.3 |
| 1970 | 1.5 | 8.2 | 4.9 | 0.0 | 2.7 | 7.6 | 2.9 | 0.0 | 0.0 | 8.0 | 28.2 | 19.5 | 47.7 |
| 1975 | 1.5 | 14.9 | 5.7 | 0.0 | 2.6 | 8.3 | 3.2 | 0.0 | 0.0 | 13.2 | 41.1 | 31.9 | 72.9 |
| 1980 | 0.9 | 7.8 | 2.8 | 0.0 | 1.2 | 4.0 | 2.9 | 0.0 | 0.0 | 16.8 | 32.4 | 41.0 | 73.3 |
| 1985 | 0.4 | 8.1 | 3.7 | (s) | 1.2 | 4.9 | 4.0 | 0.0 | 0.0 | 19.7 | 37.1 | 46.3 | 83.4 |
| 1990 | 0.5 | 8.8 | 3.1 | (s) | 1.2 | 4.3 | 2.0 | e 0.1 | e (s) | 19.2 | e 34.9 | 42.0 | e 76.9 |
| 1991 | 0.5 | 10.6 | 4.1 | (s) | 1.3 | 5.5 | 2.2 | 0.1 | (s) | 20.4 | 39.2 | 44.3 | 83.5 |
| 1992 | 0.4 | 9.9 | 3.3 | (s) | 1.1 | 4.4 | 2.3 | 0.1 | (s) | 19.6 | 36.7 | 41.8 | 78.5 |
| 1993 | 0.3 | 13.0 | 3.6 | (s) | 1.2 | 4.8 | 2.2 | 0.1 | (s) | 21.3 | 41.8 | 45.0 | 86.8 |
| 1994 | 0.3 | 12.8 | 3.1 | (s) | 1.1 | 4.2 | 2.1 | 0.1 | (s) | 21.2 | 40.7 | 44.3 | 85.0 |
| 1995 | 0.3 | 13.4 | 3.0 | 0.1 | 1.4 | 4.4 | 2.4 | 0.1 | (s) | 21.1 | 41.7 | R 44.1 | R 85.8 |
| 1996 | 0.2 | 15.4 | 3.1 | 0.1 | 1.6 | 4.8 | 2.4 | 0.1 | (s) | 22.2 | 45.0 | R 46.3 | 91.3 |
| 1997 | 0.2 | 15.7 | 3.4 | (s) | 1.6 | R 4.9 | R 2.5 | 0.1 | (s) | 22.6 | R 46.1 | 47.0 | R 93.1 |
| 1998 | 0.5 | 16.6 | 2.5 | 0.1 | 0.6 | 3.2 | 2.2 | 0.1 | (s) | 22.6 | 45.1 | 46.6 | 91.7 |
| 1999 | 0.4 | 18.6 | 3.1 | (s) | 2.7 | 5.8 | 2.3 | (s) | (s) | 23.2 | 50.4 | 45.5 | 95.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 91. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Idaho**

| Year | Coal[a] | Natural Gas[b] | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 307 | 3 | 232 | 102 | 55 | 45 | 0 | 435 | 5 | — | 1,261 | — | 3,136 | — |
| 1965 | 228 | 5 | 248 | 500 | 61 | 52 | 0 | 862 | 4 | — | 1,290 | — | 3,079 | — |
| 1970 | 118 | 6 | 294 | 116 | 125 | 65 | 0 | 600 | 3 | — | 2,088 | — | 5,059 | — |
| 1975 | 123 | 12 | 341 | 81 | 126 | 90 | 0 | 637 | 3 | — | 3,530 | — | 8,515 | — |
| 1980 | 73 | 6 | 218 | 0 | 56 | 100 | 487 | 860 | 3 | — | 3,973 | — | 9,661 | — |
| 1985 | 30 | 9 | 366 | 3 | 58 | 134 | 25 | 586 | R 5 | — | 4,592 | — | 10,789 | — |
| 1990 | 39 | 9 | 340 | 1 | 56 | 148 | 19 | 565 | R 7 | — | 5,212 | — | R 11,401 | — |
| 1991 | 44 | 10 | 434 | (s) | 66 | 345 | 1 | 846 | R 7 | — | 5,166 | — | R 11,230 | — |
| 1992 | 33 | 9 | 414 | (s) | 52 | 312 | 14 | 793 | R 7 | — | 5,718 | — | R 12,196 | — |
| 1993 | 28 | 11 | 339 | (s) | 58 | 38 | 30 | 464 | 9 | — | 5,253 | — | R 11,094 | — |
| 1994 | 26 | 10 | 441 | 2 | 54 | 38 | 7 | 542 | 9 | — | 6,010 | — | R 12,543 | — |
| 1995 | 25 | 10 | 454 | 3 | 66 | 38 | 4 | 566 | 9 | — | 5,584 | — | R 11,641 | — |
| 1996 | 18 | 12 | 612 | 4 | 79 | 167 | 4 | 867 | 10 | — | 6,231 | — | R 12,986 | — |
| 1997 | 20 | 11 | 467 | 1 | R 76 | 39 | 1 | R 584 | R 13 | — | 6,285 | — | R 13,073 | — |
| 1998 | 37 | 12 | 470 | 3 | 31 | 33 | 4 | 541 | 13 | — | 6,273 | — | 12,960 | — |
| 1999 | 36 | 13 | 585 | 1 | 129 | 40 | 0 | 756 | 16 | — | 6,745 | — | 13,216 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 7.6 | 2.9 | 1.4 | 0.6 | 0.2 | 0.2 | 0.0 | 2.4 | 0.1 | 0.0 | 4.3 | 17.3 | 10.7 | 28.0 |
| 1965 | 5.6 | 5.4 | 1.4 | 2.8 | 0.2 | 0.3 | 0.0 | 4.8 | 0.1 | 0.0 | 4.4 | 20.3 | 10.5 | 30.8 |
| 1970 | 2.8 | 6.2 | 1.7 | 0.7 | 0.5 | 0.3 | 0.0 | 3.2 | 0.1 | 0.0 | 7.1 | 19.4 | 17.3 | 36.6 |
| 1975 | 2.8 | 12.8 | 2.0 | 0.5 | 0.5 | 0.5 | 0.0 | 3.4 | 0.1 | 0.0 | 12.0 | 31.1 | 29.1 | 60.2 |
| 1980 | 1.6 | 6.1 | 1.3 | 0.0 | 0.2 | 0.5 | 3.1 | 5.1 | 0.1 | 0.0 | 13.6 | 26.4 | 33.0 | 59.3 |
| 1985 | 0.7 | 9.4 | 2.1 | (s) | 0.2 | 0.7 | 0.2 | 3.2 | R 0.1 | 0.0 | 15.7 | R 29.1 | 36.8 | R 65.9 |
| 1990 | 0.9 | 8.8 | 2.0 | (s) | 0.2 | 0.8 | 0.1 | 3.1 | R 0.1 | e 0.2 | 17.8 | R e 30.8 | 38.9 | R e 69.7 |
| 1991 | 1.0 | 9.9 | 2.5 | (s) | 0.2 | 1.8 | (s) | 4.6 | R 0.1 | 0.2 | 17.6 | R 33.4 | R 38.3 | 71.7 |
| 1992 | 0.7 | 9.2 | 2.4 | (s) | 0.2 | 1.6 | 0.1 | 4.3 | R 0.1 | 0.2 | 19.5 | R 34.1 | R 41.6 | R 75.7 |
| 1993 | 0.6 | 11.1 | 2.0 | (s) | 0.2 | 0.2 | 0.2 | 2.6 | 0.2 | 0.2 | 17.9 | 32.5 | 37.9 | 70.4 |
| 1994 | 0.6 | 10.5 | 2.6 | (s) | 0.2 | 0.2 | (s) | 3.0 | 0.2 | 0.2 | 20.5 | 34.9 | 42.8 | 77.7 |
| 1995 | 0.5 | 10.7 | 2.6 | (s) | 0.2 | 0.2 | (s) | 3.1 | 0.2 | 0.2 | 19.1 | 33.7 | 39.7 | R 73.5 |
| 1996 | 0.4 | 11.9 | 3.6 | (s) | 0.3 | 0.9 | (s) | 4.8 | 0.2 | 0.2 | 21.3 | 38.6 | R 44.3 | 82.9 |
| 1997 | 0.4 | 11.8 | 2.7 | (s) | 0.3 | 0.2 | (s) | 3.2 | R 0.3 | 0.2 | 21.4 | R 37.3 | R 44.6 | R 81.9 |
| 1998 | 0.9 | 12.1 | 2.7 | (s) | 0.1 | 0.2 | (s) | 3.1 | 0.3 | 0.2 | 21.4 | 37.9 | 44.2 | 82.1 |
| 1999 | 0.8 | 13.1 | 3.4 | (s) | 0.5 | 0.2 | 0.0 | 4.1 | 0.3 | 0.4 | 23.0 | 41.8 | 45.1 | 86.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 92.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Idaho**

| Year | Coal Thousand Short Tons | Natural Gas [a] Billion Cubic Feet | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | Hydroelectric Power [b] Million kWh | Wood and Waste | Other [b,d] | Electricity [b] Million kWh | Net Energy | Electrical System Energy Losses [e] Million kWh | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 222 | 17 | 491 | 2,529 | 5 | 79 | 19 | 930 | 153 | 9 | 4,217 | (s) | — | — | 2,849 | — | 7,087 | — |
| 1965 | 321 | 23 | 710 | 2,768 | 21 | 146 | 32 | 859 | 301 | 8 | 4,846 | (s) | — | — | 4,340 | — | 10,361 | — |
| 1970 | 171 | 29 | 1,147 | 3,206 | 114 | 212 | 32 | 626 | 275 | 17 | 5,630 | 0 | — | — | 6,052 | — | 14,665 | — |
| 1975 | 459 | 30 | 880 | 3,935 | 64 | 325 | 44 | 801 | 684 | 0 | 6,734 | 0 | — | — | 5,112 | — | 12,331 | — |
| 1980 | 401 | 32 | 797 | 2,209 | 0 | 598 | 44 | 639 | 126 | 0 | 4,413 | 0 | — | — | 4,798 | — | 11,667 | — |
| 1985 | 439 | 19 | 632 | 1,751 | 2 | 333 | 40 | 511 | 61 | 0 | 3,330 | 0 | — | — | 6,029 | — | 14,165 | — |
| 1990 | 489 | 23 | 1,281 | 2,726 | 3 | 187 | 45 | 352 | 28 | 0 | 4,623 | R f 504 | — | — | 7,165 | — | R 15,675 | — |
| 1991 | 604 | 27 | 988 | 3,744 | 2 | 336 | 40 | 439 | 43 | 18 | 5,611 | R 534 | — | — | 6,909 | — | R 15,019 | — |
| 1992 | 484 | 27 | 1,465 | 2,458 | 1 | 284 | 41 | 388 | 8 | 19 | 4,664 | R 394 | — | — | 7,551 | — | R 16,105 | — |
| 1993 | 486 | 29 | 1,533 | 2,289 | 1 | 262 | 42 | 339 | 8 | 21 | 4,494 | R 693 | — | — | 7,222 | — | R 15,254 | — |
| 1994 | 494 | 30 | 1,798 | 2,522 | 1 | 234 | 44 | 378 | 14 | 21 | 5,012 | R 616 | — | — | 7,647 | — | R 15,958 | — |
| 1995 | 426 | 34 | 2,014 | 2,623 | 2 | 291 | 43 | 400 | 3 | 21 | 5,396 | R 863 | — | — | 7,843 | — | R 16,352 | — |
| 1996 | 369 | 35 | 2,034 | 2,922 | 1 | R 2,106 | 42 | 412 | 2 | R 26 | R 7,546 | R 925 | — | — | 8,380 | — | R 17,464 | — |
| 1997 | 331 | 35 | 2,080 | 3,126 | 13 | R 31 | 44 | 425 | 1 | R 24 | R 5,744 | R 531 | — | — | 8,322 | — | R 17,311 | — |
| 1998 | 421 | 34 | 3,049 | 2,325 | 4 | 209 | 46 | 425 | 1 | 23 | 6,082 | 902 | — | — | 8,393 | — | 17,338 | — |
| 1999 | 364 | 34 | 3,052 | 2,786 | 6 | 82 | 47 | 335 | 7 | 20 | 6,334 | 987 | — | — | 9,171 | — | 17,968 | — |
| | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 5.0 | 17.1 | 3.3 | 14.7 | (s) | 0.3 | 0.1 | 4.9 | 1.0 | 0.1 | 24.4 | (s) | 5.7 | 0.0 | 9.7 | 61.9 | 24.2 | 86.1 |
| 1965 | 7.2 | 24.4 | 4.7 | 16.1 | 0.1 | 0.6 | 0.2 | 4.5 | 1.9 | (s) | 28.2 | (s) | 6.3 | 0.0 | 14.8 | 80.8 | 35.4 | 116.2 |
| 1970 | 3.6 | 30.6 | 7.6 | 18.7 | 0.6 | 0.8 | 0.2 | 3.3 | 1.7 | 0.1 | 33.0 | 0.0 | 8.5 | 0.0 | 20.6 | 96.4 | 50.0 | 146.4 |
| 1975 | 9.1 | 31.6 | 5.8 | 22.9 | 0.4 | 1.2 | 0.3 | 4.2 | 4.3 | 0.0 | 39.1 | 0.0 | 7.8 | 0.0 | 17.4 | 105.1 | 42.1 | 147.2 |
| 1980 | 7.1 | 33.3 | 5.3 | 12.9 | 0.0 | 2.2 | 0.3 | 3.4 | 0.8 | 0.0 | 24.8 | 0.0 | R 11.7 | 0.0 | 16.4 | R 93.3 | 39.8 | R 133.1 |
| 1985 | 7.8 | 20.4 | 4.2 | 10.2 | (s) | 1.2 | 0.2 | 2.7 | 0.4 | 0.0 | 18.9 | 0.0 | R 13.7 | 0.0 | 20.6 | R 81.4 | 48.3 | R 129.8 |
| 1990 | 8.7 | 24.0 | 8.5 | 15.9 | (s) | 0.7 | 0.3 | 1.9 | 0.2 | 0.0 | 27.4 | R f 5.2 | R 24.1 | R f 1.5 | 24.4 | R f 115.3 | R 53.5 | R f 168.8 |
| 1991 | 10.7 | 27.5 | 6.6 | 21.8 | (s) | 1.2 | 0.2 | 2.3 | 0.3 | 0.1 | 32.5 | R 5.6 | R 22.8 | R 1.1 | 23.6 | R 123.8 | R 51.2 | R 175.1 |
| 1992 | 8.5 | 27.9 | 9.7 | 14.3 | (s) | 1.0 | 0.2 | 2.0 | (s) | 0.1 | 27.5 | 4.1 | R 24.3 | R 1.0 | 25.8 | R 119.0 | R 54.9 | R 173.9 |
| 1993 | 8.8 | 30.3 | 10.2 | 13.3 | (s) | 0.9 | 0.3 | 1.8 | 0.1 | 0.1 | 26.7 | R 7.1 | R 24.0 | R 1.1 | 24.6 | R 122.6 | R 52.0 | R 174.7 |
| 1994 | 8.8 | 30.9 | 11.9 | 14.7 | (s) | 0.9 | 0.3 | 2.0 | 0.1 | 0.1 | 29.9 | 6.4 | R 22.6 | R 0.8 | 26.1 | R 125.4 | 54.4 | R 179.9 |
| 1995 | 8.1 | 35.0 | 13.4 | 15.3 | (s) | 1.1 | 0.3 | 2.1 | (s) | 0.1 | 32.2 | R 8.9 | R 25.0 | 0.3 | 26.8 | R 136.3 | 55.8 | R 192.1 |
| 1996 | 6.7 | 35.6 | 13.5 | 17.0 | (s) | R 7.6 | 0.3 | R 2.1 | (s) | 0.1 | R 40.7 | R 9.6 | R 24.7 | 0.3 | 28.6 | R 146.1 | R 59.6 | R 205.7 |
| 1997 | 5.7 | 36.1 | 13.8 | 18.2 | 0.1 | R 0.1 | 0.3 | 2.2 | (s) | 0.1 | R 34.8 | R 5.5 | R 27.1 | 0.3 | 28.4 | R 137.9 | R 59.1 | R 196.9 |
| 1998 | 7.6 | 35.6 | 20.2 | 13.5 | (s) | 0.8 | 0.3 | 2.2 | (s) | 0.1 | 37.2 | 9.3 | 21.3 | 0.3 | 28.6 | 139.9 | 59.2 | 199.1 |
| 1999 | 6.6 | 35.1 | 20.3 | 16.2 | (s) | 0.3 | 0.3 | 1.7 | (s) | 0.1 | 39.0 | 10.2 | 25.4 | 0.8 | 31.3 | 148.5 | 61.3 | 209.8 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 93. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Idaho**

| | Coal [a] | Natural Gas [b] | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | 4 | (s) | 133 | 648 | 899 | 7 | 127 | 5,990 | 52 | 7,856 | 0 | 0 | — | 0 | — |
| 1965 | 1 | 1 | 177 | 1,079 | 870 | 4 | 128 | 6,743 | 55 | 9,055 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 4 | 154 | 1,263 | 960 | 9 | 119 | 8,993 | 2 | 11,500 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 4 | 120 | 2,306 | 950 | 21 | 119 | 10,396 | 0 | 13,912 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 4 | 162 | 2,750 | 1,243 | 23 | 138 | 10,339 | 0 | 14,655 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 3 | 80 | 2,830 | 1,122 | 59 | 126 | 10,026 | 0 | 14,244 | R e 40 | 0 | — | 0 | — |
| 1990 | 0 | 5 | 39 | 3,575 | 1,143 | 48 | 141 | 10,952 | 0 | 15,899 | R 166 | 0 | — | 0 | — |
| 1991 | 0 | 5 | 39 | 3,626 | 957 | 40 | 126 | 10,826 | 0 | 15,614 | R 187 | 0 | — | 0 | — |
| 1992 | 0 | 3 | 1 | 3,743 | 973 | 36 | 129 | 11,246 | 0 | 16,128 | R 117 | 0 | — | 0 | — |
| 1993 | 0 | 4 | 63 | 4,503 | 1,076 | 34 | 131 | 12,394 | 0 | 18,201 | R 18 | 0 | — | 0 | — |
| 1994 | 0 | 5 | 54 | 4,598 | 1,201 | 50 | 137 | 12,511 | 0 | 18,552 | R 16 | 0 | — | 0 | — |
| 1995 | 0 | 6 | 48 | 4,768 | 1,568 | 27 | 135 | 13,083 | 0 | 19,629 | R 11 | 0 | — | 0 | — |
| 1996 | 0 | 6 | 55 | 5,395 | 874 | R 21 | 131 | 13,595 | 0 | R 20,071 | 0 | 0 | — | 0 | — |
| 1997 | 0 | 5 | 72 | 5,733 | 760 | R 10 | 138 | 13,998 | 0 | R 20,710 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 6 | 61 | 5,294 | 718 | 2 | 145 | 14,827 | 0 | 21,046 | 0 | 0 | — | 0 | — |
| 1999 | 0 | 5 | 67 | 5,844 | 856 | 10 | 146 | 15,511 | 0 | 22,435 | 0 | 0 | — | 0 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.1 | 0.5 | 0.7 | 3.8 | 4.8 | (s) | 0.8 | 31.5 | 0.3 | 41.9 | 0.0 | 0.0 | 42.5 | 0.0 | 42.5 |
| 1965 | (s) | 1.1 | 0.9 | 6.3 | 4.7 | (s) | 0.8 | 35.4 | 0.3 | 48.4 | 0.0 | 0.0 | 49.6 | 0.0 | 49.6 |
| 1970 | (s) | 4.5 | 0.8 | 7.4 | 5.2 | (s) | 0.7 | 47.2 | (s) | 61.3 | 0.0 | 0.0 | 65.8 | 0.0 | 65.8 |
| 1975 | (s) | 4.5 | 0.6 | 13.4 | 5.2 | 0.1 | 0.7 | 54.6 | 0.0 | 74.6 | 0.0 | 0.0 | 79.1 | 0.0 | 79.1 |
| 1980 | 0.0 | 4.4 | 0.8 | 16.0 | 6.8 | 0.1 | 0.8 | 54.3 | 0.0 | 78.9 | 0.0 | 0.0 | 83.3 | 0.0 | 83.3 |
| 1985 | 0.0 | 3.1 | 0.4 | 16.5 | 6.1 | 0.2 | 0.8 | 52.7 | 0.0 | 76.6 | R e 0.1 | 0.0 | e 79.7 | 0.0 | e 79.7 |
| 1990 | 0.0 | 5.2 | 0.2 | 20.8 | 6.3 | 0.2 | 0.9 | 57.5 | 0.0 | 85.9 | R 0.6 | 0.0 | 91.1 | 0.0 | 91.1 |
| 1991 | 0.0 | 4.7 | 0.2 | 21.1 | 5.3 | 0.1 | 0.8 | 56.9 | 0.0 | 84.4 | R 0.7 | 0.0 | 89.1 | 0.0 | 89.1 |
| 1992 | 0.0 | 3.4 | (s) | 21.8 | 5.3 | 0.1 | 0.8 | 59.1 | 0.0 | 87.1 | R 0.4 | 0.0 | 90.5 | 0.0 | 90.5 |
| 1993 | 0.0 | 3.9 | 0.3 | 26.2 | 5.9 | 0.1 | 0.8 | 65.1 | 0.0 | 98.5 | 0.1 | 0.0 | 102.4 | 0.0 | 102.4 |
| 1994 | 0.0 | 4.9 | 0.3 | 26.8 | 6.6 | 0.2 | 0.8 | R 65.4 | 0.0 | R 100.1 | 0.1 | 0.0 | R 105.1 | 0.0 | R 105.1 |
| 1995 | 0.0 | 6.6 | 0.2 | 27.8 | 8.6 | 0.1 | 0.8 | R 68.2 | 0.0 | R 105.8 | (s) | 0.0 | R 112.3 | 0.0 | R 112.3 |
| 1996 | 0.0 | 6.2 | 0.3 | 31.4 | 4.9 | 0.1 | 0.8 | R 70.9 | 0.0 | R 108.4 | 0.0 | 0.0 | R 114.6 | 0.0 | R 114.6 |
| 1997 | 0.0 | 5.4 | 0.4 | 33.4 | 4.3 | R (s) | 0.8 | R 73.0 | 0.0 | R 111.9 | 0.0 | 0.0 | R 117.3 | 0.0 | R 117.3 |
| 1998 | 0.0 | 5.7 | 0.3 | 30.8 | 4.1 | (s) | 0.9 | 77.3 | 0.0 | 113.4 | 0.0 | 0.0 | 119.1 | 0.0 | 119.1 |
| 1999 | 0.0 | 4.7 | 0.3 | 34.0 | 4.9 | (s) | 0.9 | 80.8 | 0.0 | 121.0 | 0.0 | 0.0 | 125.7 | 0.0 | 125.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 94. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Idaho**

| Year | Coal | Natural Gas [a] | Petroleum — Heavy Oil [b,c] | Petroleum — Light Oil [b,d] | Petroleum — Petroleum Coke [b] | Petroleum — Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 0 | 0 | 0 | (s) | 0 | (s) | 0 | 6,165 | 0 | 0 | 0 | — |
| 1965 | 0 | 0 | 0 | (s) | 0 | (s) | 0 | 6,640 | 0 | 0 | 0 | — |
| 1970 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 7,075 | 0 | 0 | 0 | — |
| 1975 | 0 | (s) | 0 | 5 | 0 | 5 | 0 | 10,274 | 0 | 0 | 0 | — |
| 1980 | 0 | (s) | 0 | (s) | 0 | (s) | 0 | 9,507 | 0 | 0 | 0 | — |
| 1985 | 0 | (s) | 0 | 1 | 0 | 1 | 0 | 10,919 | 0 | 0 | 0 | — |
| 1990 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | R 8,679 | 0 | 0 | 0 | — |
| 1991 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | R 8,378 | 0 | 0 | 0 | — |
| 1992 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | R 6,447 | 0 | 0 | 0 | — |
| 1993 | 0 | 0 | 0 | (s) | 0 | (s) | 0 | R 9,023 | 0 | 0 | 0 | — |
| 1994 | 0 | 0 | 0 | (s) | 0 | (s) | 0 | R 7,351 | 0 | 0 | 0 | — |
| 1995 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | R 10,064 | 0 | 0 | 0 | — |
| 1996 | 0 | 0 | 0 | (s) | 0 | (s) | 0 | R 12,350 | 0 | 0 | 0 | — |
| 1997 | 0 | 0 | 0 | (s) | 0 | (s) | 0 | R 13,619 | 0 | 0 | 0 | — |
| 1998 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 12,076 | 0 | 0 | 0 | — |
| 1999 | 0 | 0 | 0 | (s) | 0 | (s) | 0 | 12,510 | 0 | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | 66.3 | 0.0 | 0.0 | 0.0 | 66.3 |
| 1965 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | 69.4 | 0.0 | 0.0 | 0.0 | 69.4 |
| 1970 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | 74.2 | 0.0 | 0.0 | 0.0 | 74.3 |
| 1975 | 0.0 | (s) | 0.0 | (s) | 0.0 | (s) | 0.0 | 106.9 | 0.0 | 0.0 | 0.0 | 107.0 |
| 1980 | 0.0 | (s) | 0.0 | (s) | 0.0 | (s) | 0.0 | 98.8 | 0.0 | 0.0 | 0.0 | 98.8 |
| 1985 | 0.0 | (s) | 0.0 | (s) | 0.0 | (s) | 0.0 | 114.1 | 0.0 | 0.0 | 0.0 | 114.1 |
| 1990 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | R 90.3 | 0.0 | 0.0 | 0.0 | R 90.8 |
| 1991 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | R 87.4 | 0.0 | 0.0 | 0.0 | R 87.9 |
| 1992 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | R 66.7 | 0.0 | 0.0 | 0.0 | R 67.5 |
| 1993 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | R 93.0 | 0.0 | 0.0 | 0.0 | R 93.0 |
| 1994 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | R 75.8 | 0.0 | 0.0 | 0.0 | R 76.0 |
| 1995 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | R 103.8 | 0.0 | 0.0 | 0.0 | R 103.8 |
| 1996 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | R 127.7 | 0.0 | 0.0 | 0.0 | R 128.2 |
| 1997 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | R 141.0 | 0.0 | 0.0 | 0.0 | R 141.7 |
| 1998 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | 124.9 | 0.0 | 0.0 | 0.0 | 125.5 |
| 1999 | 0.0 | 0.0 | 0.0 | (s) | 0.0 | (s) | 0.0 | 129.4 | 0.0 | 0.0 | 0.0 | 129.5 |

[a] Includes supplemental gaseous fuels.

[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 95. Energy Consumption Estimates by Source, Selected Years 1960-1999, Illinois

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | Wood and Waste | Other [a,e] | Million kWh | Total [g] |

**Thousand Barrels**

| Year | Coal | Natural Gas | Asphalt | Aviation | Distillate | Jet | Kerosene | LPG | Lubricants | Motor Gas | Residual | Other | Total | Nuclear | Hydro | Wood | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 39,674 | 518 | 7,244 | 3,733 | 42,592 | 4,356 | 5,369 | 14,958 | 2,672 | 78,026 | 26,533 | R 13,726 | R 199,209 | 254 | 185 | — | — | -18,487 | — |
| 1965 | 44,715 | 757 | 9,751 | 383 | 41,011 | 12,176 | 5,337 | 18,763 | 2,616 | 88,769 | 23,091 | R 20,417 | R 222,314 | 965 | 175 | — | — | -8,786 | — |
| 1970 | 42,136 | 1,174 | 12,651 | 264 | 44,495 | 22,644 | 3,583 | 28,481 | 3,255 | 107,084 | 27,949 | R 24,151 | R 274,558 | 2,514 | 166 | — | — | 5,391 | — |
| 1975 | 40,374 | 1,095 | 10,213 | 82 | 51,249 | 24,769 | 2,622 | 35,135 | 3,120 | 118,637 | 28,142 | R 28,264 | R 302,231 | 22,315 | 122 | — | — | -4,391 | — |
| 1980 | 40,147 | 1,090 | 8,094 | 132 | 36,704 | 19,664 | 606 | 38,811 | 3,473 | 109,062 | 28,271 | R 31,213 | R 276,030 | 27,742 | 138 | — | — | 4,045 | — |
| 1985 | 37,706 | 962 | 7,502 | 212 | 32,189 | 2,748 | 755 | 27,168 | 3,160 | 111,114 | 6,508 | R 19,530 | R 210,886 | 39,106 | 136 | — | — | 6,167 | — |
| 1990 | 33,904 | 939 | 8,339 | 164 | 42,529 | 3,952 | 174 | 12,471 | 3,556 | 105,948 | 3,622 | R 30,737 | R 211,490 | 71,887 | R h 134 | — | — | R -49,340 | — |
| 1991 | 34,677 | 988 | 7,917 | 176 | 36,149 | 6,437 | 203 | 14,539 | 3,181 | 104,380 | 3,454 | R 32,027 | R 208,464 | 71,866 | R 112 | — | — | R -39,238 | — |
| 1992 | 31,599 | 993 | 9,293 | 176 | 36,377 | 7,399 | 142 | 12,482 | 3,243 | 106,297 | 2,354 | R 36,023 | R 213,786 | 73,742 | R 115 | — | — | R -43,323 | — |
| 1993 | 38,135 | 1,031 | 6,310 | 231 | 38,385 | 9,170 | 176 | 21,649 | 3,302 | 109,587 | 2,282 | R 34,717 | R 225,810 | 78,373 | R 125 | — | — | R -80,335 | — |
| 1994 | 39,077 | 1,025 | 7,798 | 204 | 33,949 | 9,619 | 201 | 24,708 | 3,452 | 111,255 | 2,712 | R 36,392 | R 230,288 | 72,654 | R 121 | — | — | R -62,038 | — |
| 1995 | 39,623 | 1,079 | 7,457 | 215 | 37,535 | 10,360 | 293 | 25,822 | 3,392 | 111,207 | 1,463 | R 34,524 | R 232,270 | 78,481 | R 124 | — | — | R -66,777 | — |
| 1996 | 44,431 | 1,119 | 9,127 | 202 | 37,926 | 12,076 | 398 | R 25,109 | 3,292 | 111,554 | 2,010 | R 30,175 | R 231,870 | 69,774 | R 107 | — | — | R -62,165 | — |
| 1997 | 47,621 | 1,077 | 8,350 | 197 | 39,186 | 12,497 | 367 | R 24,777 | 3,478 | 113,343 | 1,448 | R 30,879 | R 234,519 | 51,069 | R 69 | — | — | R -20,141 | — |
| 1998 | 44,629 | 958 | 9,859 | 168 | 41,426 | 13,152 | 349 | 15,783 | 3,641 | 113,707 | 1,065 | 29,660 | 228,809 | 55,596 | 140 | — | — | -8,303 | — |
| 1999 | 42,061 | 1,035 | 11,282 | 172 | 43,761 | 18,245 | 661 | 22,588 | 3,679 | 118,810 | 588 | 30,583 | 250,369 | 81,737 | 142 | — | — | -76,358 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt | Aviation | Distillate | Jet | Kerosene | LPG | Lubricants | Motor Gas | Residual | Other | Total | Nuclear | Hydro | Wood | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 914.7 | 536.1 | 48.1 | 18.8 | 248.1 | 24.4 | 30.4 | 60.0 | 16.2 | 409.9 | 166.8 | R 82.2 | R 1,105.0 | 3.0 | 2.0 | 31.0 | 0.0 | -63.1 | R 2,528.7 |
| 1965 | 1,014.5 | 778.7 | 64.7 | 1.9 | 238.9 | 68.8 | 30.3 | 75.3 | 15.9 | 466.3 | 145.2 | R 118.8 | R 1,226.0 | 11.4 | 1.8 | 33.2 | 0.0 | -30.0 | R 3,035.6 |
| 1970 | 920.3 | 1,203.2 | 84.0 | 1.3 | 259.2 | 128.2 | 20.3 | 107.6 | 19.7 | 562.5 | 175.7 | R 140.4 | R 1,498.9 | 27.6 | 1.7 | 39.3 | 0.0 | 18.4 | R 3,709.5 |
| 1975 | 845.6 | 1,123.6 | 67.8 | 0.4 | 298.5 | 140.2 | 14.9 | 130.5 | 18.9 | 623.2 | 176.9 | R 165.6 | R 1,637.0 | 245.8 | 1.3 | 41.6 | 0.0 | -15.0 | R 3,879.8 |
| 1980 | 844.5 | 1,113.7 | 53.7 | 0.7 | 213.8 | 111.3 | 3.4 | 142.6 | 21.1 | 572.9 | 177.7 | R 180.9 | R 1,478.1 | 302.6 | 1.4 | R 87.4 | 0.0 | 13.8 | R 3,841.5 |
| 1985 | 811.1 | 1,000.5 | 49.8 | 1.1 | 187.5 | 15.4 | 4.3 | 97.9 | 19.2 | 583.7 | 40.9 | R 113.8 | R 1,113.5 | 422.9 | 1.4 | R 93.5 | 0.0 | 21.0 | R 3,463.9 |
| 1990 | 747.9 | 960.1 | 55.3 | 0.8 | 247.7 | 22.3 | 1.0 | 45.2 | 21.6 | 556.5 | 22.8 | R 176.9 | R 1,150.1 | 767.8 | R h 1.4 | R 44.9 | h 0.3 | R -168.3 | R h 3,504.1 |
| 1991 | 757.7 | 1,006.4 | 52.5 | 0.9 | 210.6 | 36.3 | 1.2 | 52.5 | 19.3 | 548.3 | 21.7 | R 183.5 | R 1,126.9 | 771.8 | R 1.2 | R 45.8 | R 1.3 | R -133.9 | R 3,577.1 |
| 1992 | 692.5 | 1,011.3 | 61.7 | 0.9 | 211.9 | 41.8 | 0.8 | 45.2 | 19.7 | 558.4 | 14.8 | R 205.2 | R 1,160.4 | 787.4 | R 1.2 | R 48.5 | 0.4 | R -147.8 | R 3,553.9 |
| 1993 | 812.4 | 1,052.9 | 41.9 | 1.2 | 223.6 | 51.9 | 1.0 | 78.1 | 20.0 | 575.7 | 14.3 | R 198.2 | R 1,205.8 | 837.2 | R 1.3 | R 31.0 | 0.4 | R -274.1 | R 3,666.8 |
| 1994 | 818.9 | 1,046.4 | 51.7 | 1.0 | 197.8 | 54.4 | 1.1 | 89.8 | 20.9 | R 581.9 | 17.1 | R 207.9 | R 1,223.6 | 775.7 | R 1.2 | R 34.0 | 0.4 | R -211.7 | R 3,688.6 |
| 1995 | 816.9 | 1,100.1 | 49.5 | 1.1 | 218.6 | 58.7 | 1.7 | 93.6 | 20.6 | R 579.9 | 9.2 | R 197.2 | R 1,230.0 | 836.4 | R 1.3 | R 39.7 | 0.4 | R -227.8 | R 3,797.1 |
| 1996 | 906.9 | 1,140.6 | 60.6 | 1.0 | 220.9 | 68.5 | 2.3 | R 90.7 | 20.0 | R 581.9 | 12.6 | R 174.1 | R 1,232.5 | 741.2 | R 1.1 | R 37.1 | 0.5 | R -212.1 | R 3,847.8 |
| 1997 | 964.2 | 1,099.7 | 55.4 | 1.0 | 228.3 | 70.9 | 2.1 | R 89.6 | 21.1 | R 590.9 | 9.1 | R 178.2 | R 1,246.5 | 542.5 | R 0.7 | R 30.6 | 0.5 | R -68.7 | R 3,816.0 |
| 1998 | 897.8 | 978.7 | 65.4 | 0.8 | 241.3 | 74.6 | 2.0 | 57.0 | 22.1 | 592.6 | 6.7 | 170.9 | 1,233.5 | 590.6 | 1.5 | 23.9 | 0.6 | -28.3 | 3,698.2 |
| 1999 | 836.9 | 1,057.5 | 74.9 | 0.9 | 254.9 | 103.4 | 3.7 | 81.7 | 22.3 | 619.1 | 3.7 | 175.5 | 1,340.2 | 868.3 | 1.5 | 38.1 | 0.7 | -260.5 | 3,882.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 96.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Illinois

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 2,233 | 232 | 15,330 | 2,052 | 5,192 | 22,574 | 739 | — | — | 9,969 | — | 24,797 | — |
| 1965 | 1,383 | 342 | 13,154 | 2,518 | 5,989 | 21,661 | 550 | — | — | 14,173 | — | 33,839 | — |
| 1970 | 770 | 439 | 11,980 | 1,336 | 8,616 | 21,932 | 634 | — | — | 22,533 | — | 54,604 | — |
| 1975 | 268 | 479 | 12,384 | 1,225 | 9,145 | 22,754 | 681 | — | — | 26,366 | — | 63,599 | — |
| 1980 | 65 | 478 | 3,512 | 161 | 4,051 | 7,724 | R 2,363 | — | — | 29,930 | — | 72,780 | — |
| 1985 | 94 | 447 | 2,258 | 568 | 3,518 | 6,343 | 2,327 | — | — | 29,976 | — | 70,425 | — |
| 1990 | 93 | 442 | 1,200 | 101 | 3,209 | 4,510 | 1,608 | — | — | 32,871 | — | R 71,910 | — |
| 1991 | 91 | 467 | 1,228 | 117 | 3,797 | 5,141 | 1,694 | — | — | 35,964 | — | R 78,183 | — |
| 1992 | 99 | 475 | 999 | 61 | 3,661 | 4,720 | 1,783 | — | — | 32,367 | — | R 69,031 | — |
| 1993 | 91 | 495 | 741 | 81 | 3,883 | 4,705 | R 907 | — | — | 35,226 | — | R 74,402 | — |
| 1994 | 90 | 474 | 807 | 72 | 3,771 | 4,650 | R 889 | — | — | 35,706 | — | R 74,515 | — |
| 1995 | 78 | 501 | 822 | 84 | 3,871 | 4,777 | R 987 | — | — | 38,386 | — | R 80,033 | — |
| 1996 | 66 | 539 | 756 | 96 | R 5,216 | R 6,068 | R 985 | — | — | 37,535 | — | R 78,223 | — |
| 1997 | 103 | 497 | 750 | 109 | R 5,295 | R 6,154 | R 579 | — | — | 37,246 | — | R 77,475 | — |
| 1998 | 83 | 410 | 411 | 120 | 4,498 | 5,030 | 510 | — | — | 39,685 | — | 81,981 | — |
| 1999 | 63 | 445 | 462 | 520 | 6,514 | 7,497 | 547 | — | — | 39,631 | — | 77,649 | — |
| | | | | | | Trillion Btu | | | | | | | |
| 1960 | 53.7 | 240.2 | 89.3 | 11.6 | 20.8 | 121.8 | 14.8 | 0.0 | 0.0 | 34.0 | 464.5 | 84.6 | 549.1 |
| 1965 | 33.1 | 351.9 | 76.6 | 14.3 | 24.0 | 114.9 | 11.0 | 0.0 | 0.0 | 48.4 | 559.3 | 115.5 | 674.7 |
| 1970 | 17.8 | 450.1 | 69.8 | 7.6 | 32.6 | 109.9 | 12.7 | 0.0 | 0.0 | 76.9 | 667.4 | 186.3 | 853.7 |
| 1975 | 6.0 | 491.0 | 72.1 | 6.9 | 34.0 | 113.1 | 13.6 | 0.0 | 0.0 | 90.0 | 713.7 | 217.0 | 930.7 |
| 1980 | 1.4 | 489.0 | 20.5 | 0.9 | 14.9 | 36.3 | R 47.3 | 0.0 | 0.0 | 102.1 | R 676.1 | 248.3 | R 924.4 |
| 1985 | 2.1 | 464.5 | 13.2 | 3.2 | 12.7 | 29.0 | 46.5 | 0.0 | 0.0 | 102.3 | 644.4 | 240.3 | 884.7 |
| 1990 | 2.1 | 451.9 | 7.0 | 0.6 | 11.6 | 19.2 | 32.2 | e 0.3 | R e 0.1 | 112.2 | e 617.8 | R 245.4 | R e 863.2 |
| 1991 | 2.1 | 475.8 | 7.2 | 0.7 | 13.7 | 21.5 | 33.9 | 0.3 | R 0.1 | 122.7 | 656.4 | R 266.8 | R 923.1 |
| 1992 | 2.3 | 483.9 | 5.8 | 0.3 | 13.3 | 19.4 | 35.7 | 0.3 | 0.1 | 110.4 | 652.1 | R 235.5 | R 887.6 |
| 1993 | 2.1 | 505.8 | 4.3 | 0.5 | 14.0 | 18.8 | R 18.1 | 0.3 | 0.1 | 120.2 | 665.3 | 253.9 | R 919.2 |
| 1994 | 2.0 | 483.7 | 4.7 | 0.4 | 13.7 | 18.8 | 17.8 | 0.3 | 0.1 | 121.8 | 644.6 | 254.2 | 898.8 |
| 1995 | 1.8 | 510.9 | 4.8 | 0.5 | 14.0 | 19.3 | R 19.7 | 0.3 | 0.1 | 131.0 | 683.1 | R 273.1 | R 956.2 |
| 1996 | 1.5 | 549.0 | 4.4 | 0.5 | R 18.8 | R 23.8 | 19.7 | 0.4 | 0.1 | 128.1 | R 722.5 | R 266.9 | R 989.4 |
| 1997 | 2.4 | 507.8 | 4.4 | 0.6 | R 19.1 | R 24.1 | R 11.6 | 0.4 | 0.1 | 127.1 | R 673.4 | R 264.3 | R 937.8 |
| 1998 | 1.9 | 418.9 | 2.4 | 0.7 | 16.3 | 19.3 | 10.2 | 0.4 | 0.2 | 135.4 | 586.3 | 279.7 | 866.0 |
| 1999 | 1.5 | 455.0 | 2.7 | 2.9 | 23.6 | 29.2 | 10.9 | 0.4 | 0.2 | 135.2 | 632.5 | 264.9 | 897.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 97.   Commercial Energy Consumption Estimates, Selected Years 1960-1999, Illinois

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 4,142 | 47 | 4,834 | 78 | 916 | 358 | 8,336 | 14,523 | 14 | — | 10,002 | — | 24,878 | — |
| 1965 | 2,565 | 129 | 4,148 | 96 | 1,057 | 469 | 7,453 | 13,223 | 10 | — | 15,059 | — | 35,956 | — |
| 1970 | 1,428 | 193 | 3,778 | 51 | 1,520 | 533 | 7,627 | 13,509 | 12 | — | 22,406 | — | 54,296 | — |
| 1975 | 498 | 216 | 3,905 | 47 | 1,614 | 678 | 4,960 | 11,203 | 13 | — | 28,097 | — | 67,774 | — |
| 1980 | 121 | 228 | 2,100 | 16 | 715 | 1,008 | 2,633 | 6,471 | 57 | — | 31,579 | — | 76,791 | — |
| 1985 | 175 | 214 | 3,975 | 96 | 621 | 549 | 343 | 5,583 | R 62 | — | 32,578 | — | 76,539 | — |
| 1990 | 172 | 200 | 1,548 | 26 | 566 | 560 | 207 | 2,908 | R 102 | — | 38,999 | — | R 85,314 | — |
| 1991 | 166 | 194 | 1,689 | 40 | 670 | 399 | 39 | 2,838 | R 108 | — | 40,771 | — | R 88,633 | — |
| 1992 | 184 | 197 | 1,801 | 34 | 646 | 374 | 43 | 2,900 | R 116 | — | 38,844 | — | R 82,845 | — |
| 1993 | 170 | 203 | 1,994 | 32 | 685 | 132 | 56 | 2,898 | 73 | — | 41,901 | — | R 88,502 | — |
| 1994 | 167 | 198 | 2,214 | 50 | 665 | 161 | 67 | 3,158 | R 74 | — | 43,615 | — | R 91,021 | — |
| 1995 | 145 | 204 | 2,021 | 80 | 683 | 138 | 46 | 2,968 | R 74 | — | 45,201 | — | R 94,242 | — |
| 1996 | 121 | 218 | 1,843 | 67 | R 921 | 184 | 193 | R 3,208 | 81 | — | 45,577 | — | R 94,984 | — |
| 1997 | 192 | 203 | 2,336 | 108 | R 934 | 224 | 132 | R 3,734 | R 64 | — | 46,402 | — | R 96,520 | — |
| 1998 | 154 | 175 | 1,834 | 39 | 794 | 228 | 123 | 3,017 | 64 | — | 48,079 | — | 99,322 | — |
| 1999 | 118 | 189 | 1,335 | 84 | 1,150 | 152 | 94 | 2,814 | 77 | — | 50,642 | — | 99,224 | — |
| | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 99.6 | 48.9 | 28.2 | 0.4 | 3.7 | 1.9 | 52.4 | 86.6 | 0.3 | 0.0 | 34.1 | 269.5 | 84.9 | 354.3 |
| 1965 | 61.3 | 132.7 | 24.2 | 0.5 | 4.2 | 2.5 | 46.9 | 78.3 | 0.2 | 0.0 | 51.4 | 323.9 | 122.7 | 446.6 |
| 1970 | 33.0 | 198.3 | 22.0 | 0.3 | 5.7 | 2.8 | 47.9 | 78.8 | 0.2 | 0.0 | 76.4 | 386.7 | 185.3 | 572.0 |
| 1975 | 11.2 | 221.3 | 22.7 | 0.3 | 6.0 | 3.6 | 31.2 | 63.8 | 0.3 | 0.0 | 95.9 | 392.4 | 231.2 | 623.6 |
| 1980 | 2.7 | 233.2 | 12.2 | 0.1 | 2.6 | 5.3 | 16.6 | 36.8 | 1.1 | 0.0 | 107.7 | 381.5 | 262.0 | 643.5 |
| 1985 | 3.9 | 222.1 | 23.2 | 0.5 | 2.2 | 2.9 | 2.2 | 31.0 | R 1.2 | 0.0 | 111.2 | R 369.3 | 261.2 | R 630.5 |
| 1990 | 3.9 | 204.7 | 9.0 | 0.1 | 2.1 | 2.9 | 1.3 | 15.5 | R 2.0 | e 0.0 | 133.1 | R e 359.1 | R 291.1 | R e 650.2 |
| 1991 | 3.8 | 197.5 | 9.8 | 0.2 | 2.4 | 2.1 | 0.2 | 14.8 | R 2.2 | 0.0 | 139.1 | R 357.4 | R 302.4 | R 659.8 |
| 1992 | 4.2 | 200.5 | 10.5 | 0.2 | 2.3 | 2.0 | 0.3 | 15.3 | R 2.3 | 0.0 | 132.5 | R 354.8 | R 282.7 | R 637.5 |
| 1993 | 3.8 | 207.4 | 11.6 | 0.2 | 2.5 | 0.7 | 0.4 | 15.3 | 1.5 | 0.0 | 143.0 | 371.0 | R 302.0 | R 673.0 |
| 1994 | 3.7 | 201.7 | 12.9 | 0.3 | 2.4 | 0.8 | 0.4 | 16.9 | 1.5 | 0.0 | 148.8 | 372.6 | R 310.6 | R 683.2 |
| 1995 | 3.3 | 207.9 | 11.8 | 0.5 | 2.5 | 0.7 | 0.3 | 15.7 | 1.5 | 0.0 | 154.2 | 382.6 | R 321.6 | R 704.1 |
| 1996 | 2.7 | 222.2 | 10.7 | 0.4 | R 3.3 | 1.0 | 1.2 | R 16.6 | 1.6 | 0.0 | 155.5 | R 398.7 | R 324.1 | R 722.8 |
| 1997 | 4.4 | 207.2 | 13.6 | 0.6 | R 3.4 | 1.2 | 0.8 | R 19.6 | R 1.3 | 0.0 | 158.3 | R 390.7 | R 329.3 | R 720.0 |
| 1998 | 3.5 | 178.6 | 10.7 | 0.2 | 2.9 | 1.2 | 0.8 | 15.7 | 1.3 | 0.0 | 164.0 | 363.1 | 338.9 | 702.0 |
| 1999 | 2.7 | 192.7 | 7.8 | 0.5 | 4.2 | 0.8 | 0.6 | 13.8 | 1.5 | 0.0 | 172.8 | 383.5 | 338.6 | 722.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

ILLINOIS

## Table 98.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Illinois

| Year | Coal (Thousand Short Tons) | Natural Gas a (Billion Cubic Feet) | Petroleum — Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b (Million kWh) | Wood and Waste | Other b,d | Electricity b (Million kWh) | Net Energy | Electrical System Energy Losses e (Million kWh) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 13,842 | 186 | 7,244 | 13,545 | 3,239 | 8,534 | 1,340 | 6,476 | 16,835 | R 13,726 | R 70,939 | 19 | — | — | 13,722 | — | 34,131 | — |
| 1965 | 15,669 | 238 | 9,751 | 12,074 | 2,723 | 11,399 | 1,321 | 6,512 | 15,064 | R 20,417 | R 79,260 | 17 | — | — | 18,708 | — | 44,668 | — |
| 1970 | 10,928 | 381 | 12,651 | 10,836 | 2,196 | 17,818 | 2,015 | 6,017 | 16,694 | R 24,151 | R 92,380 | 20 | — | — | 25,647 | — | 62,151 | — |
| 1975 | 7,257 | 352 | 10,213 | 11,138 | 1,351 | 23,889 | 1,668 | 4,290 | 15,728 | R 28,264 | R 96,540 | 19 | — | — | 30,330 | — | 73,160 | — |
| 1980 | 5,350 | 349 | 8,094 | 7,842 | 429 | 33,867 | 1,959 | 3,505 | 12,598 | R 31,213 | R 99,506 | 17 | — | — | 35,158 | — | 85,492 | — |
| 1985 | 5,829 | 285 | 7,502 | 6,373 | 91 | 22,607 | 1,782 | 1,738 | 3,410 | R 19,530 | R 63,033 | 17 | — | — | 36,178 | — | 84,997 | — |
| 1990 | 6,243 | 276 | 8,339 | 7,616 | 47 | 8,368 | 2,006 | 1,264 | 1,741 | R 30,737 | R 60,117 | R f 73 | — | — | 39,299 | — | R 85,969 | — |
| 1991 | 6,666 | 303 | 7,917 | 7,678 | 47 | 9,761 | 1,794 | 1,342 | 851 | R 32,027 | R 61,418 | R 59 | — | — | 39,712 | — | R 86,331 | — |
| 1992 | 6,052 | 300 | 9,293 | 8,493 | 47 | 7,857 | 1,829 | 1,212 | 373 | R 36,023 | R 65,127 | R 64 | — | — | 40,898 | — | R 87,227 | — |
| 1993 | 6,130 | 305 | 6,310 | 7,089 | 64 | 16,800 | 1,863 | 1,590 | 536 | R 34,717 | R 68,969 | R 85 | — | — | 40,249 | — | R 85,013 | — |
| 1994 | 6,222 | 305 | 7,798 | 7,663 | 78 | 19,741 | 1,947 | 1,515 | 608 | R 36,392 | R 75,741 | R 76 | — | — | 41,765 | — | R 87,161 | — |
| 1995 | 5,937 | 322 | 7,457 | 8,479 | 129 | 20,981 | 1,913 | 1,500 | 369 | R 34,139 | R 74,967 | R 77 | — | — | 42,251 | — | R 88,090 | — |
| 1996 | 6,154 | 322 | 9,127 | 7,797 | 235 | R 18725 | 1,857 | 1,464 | 602 | R 29,934 | R 69,741 | R 85 | — | — | 42,050 | — | R 87,633 | — |
| 1997 | 6,309 | 318 | 8,350 | 8,593 | 150 | R 18373 | 1,962 | 1,489 | 691 | R 30,859 | R 70,466 | R 53 | — | — | 42,375 | — | R 88,145 | — |
| 1998 | 6,137 | 304 | 9,859 | 9,391 | 190 | 10,222 | 2,054 | 1,347 | 159 | 29,314 | 62,535 | 90 | — | — | 43,031 | — | 88,894 | — |
| 1999 | 5,885 | 306 | 11,282 | 6,725 | 57 | 14,587 | 2,075 | 1,087 | 189 | 30,489 | 66,491 | 90 | — | — | 41,972 | — | 82,236 | — |
| | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 338.8 | 192.7 | 48.1 | 78.9 | 18.4 | 34.2 | 8.1 | 34.0 | 105.8 | R 82.2 | R 409.8 | 0.2 | 16.0 | 0.0 | 46.8 | R 1,004.3 | 116.5 | R 1,120.8 |
| 1965 | 381.7 | 244.6 | 64.7 | 70.3 | 15.4 | 45.7 | 8.0 | 34.2 | 94.7 | R 118.8 | R 451.9 | 0.2 | 22.0 | 0.0 | 63.8 | R 1,164.2 | 152.4 | R 1,316.6 |
| 1970 | 260.2 | 390.5 | 84.0 | 63.1 | 12.5 | 67.3 | 12.2 | 31.6 | 105.0 | R 140.4 | R 516.0 | 0.2 | 26.4 | 0.0 | 87.5 | R 1,280.8 | 212.1 | R 1,492.9 |
| 1975 | 172.9 | 361.4 | 67.8 | 64.9 | 7.7 | 88.7 | 10.1 | 22.5 | 98.9 | R 165.6 | R 526.2 | 0.2 | 27.7 | 0.0 | 103.5 | R 1,192.0 | 249.6 | R 1,441.6 |
| 1980 | 127.7 | 357.0 | 53.7 | 45.7 | 2.4 | 124.4 | 11.9 | 18.4 | 79.2 | R 180.9 | R 516.6 | 0.2 | R 39.0 | 0.0 | 120.0 | R 1,160.4 | 291.7 | R 1,452.1 |
| 1985 | 142.3 | 296.3 | 49.8 | 37.1 | 0.5 | 81.5 | 10.8 | 9.1 | 21.4 | R 113.8 | R 324.1 | 0.2 | R 45.7 | 0.0 | 123.4 | R 932.0 | 290.0 | R 1,222.0 |
| 1990 | 150.8 | 281.8 | 55.3 | 44.4 | 0.3 | 30.3 | 12.2 | 6.6 | 10.9 | R 176.9 | R 337.0 | R f 0.8 | R 10.7 | f 0.0 | 134.1 | R f 915.2 | 293.3 | R f 1,208.5 |
| 1991 | 156.8 | 308.6 | 52.5 | 44.7 | 0.3 | 35.3 | 10.9 | 7.1 | 5.4 | R 183.5 | R 339.6 | R 0.6 | R 9.7 | R 0.9 | 135.5 | R 951.8 | 294.6 | R 1,246.4 |
| 1992 | 147.1 | 305.9 | 61.7 | 49.5 | 0.3 | 28.5 | 11.1 | 6.4 | 2.3 | R 205.2 | R 364.9 | R 0.7 | R 10.4 | 0.0 | 139.5 | R 968.5 | 297.6 | R 1,266.1 |
| 1993 | 148.6 | 311.6 | 41.9 | 41.3 | 0.4 | 60.6 | 11.3 | 8.4 | 3.4 | R 198.2 | R 365.3 | 0.9 | R 11.4 | 0.0 | 137.3 | R 975.1 | 290.1 | R 1,265.2 |
| 1994 | 149.4 | 311.6 | 51.7 | 44.6 | 0.4 | 71.8 | 11.8 | R 7.9 | 3.8 | R 207.9 | R 400.0 | 0.8 | R 14.7 | 0.0 | 142.5 | R 1,019.0 | 297.4 | R 1,316.4 |
| 1995 | 144.6 | 328.0 | 49.5 | 49.4 | 0.7 | 76.0 | 11.6 | R 7.8 | 2.3 | R 194.8 | R 392.2 | 0.8 | R 17.8 | 0.0 | 144.2 | R 1,027.6 | 300.6 | R 1,328.2 |
| 1996 | 150.1 | 328.5 | 60.6 | 45.4 | 1.3 | R 67.7 | 11.3 | R 7.6 | 3.8 | R 172.7 | R 370.3 | 0.9 | R 14.4 | 0.0 | 143.5 | R 1,007.7 | 299.0 | R 1,306.7 |
| 1997 | 155.1 | 324.6 | 55.4 | 50.1 | 0.8 | R 66.4 | 11.9 | 7.8 | 4.3 | R 178.1 | R 374.9 | R 0.5 | R 17.5 | 0.0 | 144.6 | R 1,017.1 | 300.7 | R 1,317.9 |
| 1998 | 150.2 | 310.5 | 65.4 | 54.7 | 1.1 | 36.9 | 12.5 | 7.0 | 1.0 | 168.8 | 347.5 | 0.9 | 12.4 | 0.0 | 146.8 | 968.3 | 303.3 | 1,271.6 |
| 1999 | 144.5 | 312.9 | 74.9 | 39.2 | 0.3 | 52.7 | 12.6 | 5.7 | 1.2 | 175.0 | 361.5 | 0.9 | 24.9 | 4.0 | 143.2 | 992.1 | 280.6 | 1,272.6 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."

d "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.

e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours.  — =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 99. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Illinois

| | | | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | | Electrical System Energy Losses [d] | |
| | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 239 | 10 | 3,733 | 8,721 | 4,356 | 316 | 1,333 | 71,193 | 1,168 | 90,819 | 0 | 308 | — | 767 | — |
| 1965 | 51 | 13 | 383 | 11,509 | 12,176 | 318 | 1,295 | 81,788 | 423 | 107,891 | 0 | 302 | — | 722 | — |
| 1970 | 17 | 28 | 264 | 15,234 | 22,644 | 526 | 1,239 | 100,534 | 408 | 140,850 | 0 | 296 | — | 717 | — |
| 1975 | 1 | 14 | 82 | 20,488 | 24,271 | 486 | 1,452 | 113,669 | 215 | 160,662 | 0 | 262 | — | 632 | — |
| 1980 | 0 | 15 | 132 | 22,560 | 19,508 | 178 | 1,514 | 104,550 | 279 | 148,721 | 0 | 282 | — | 685 | — |
| 1985 | 0 | 11 | 212 | 19,147 | 2,748 | 423 | 1,378 | 108,826 | 187 | 132,921 | R e 2,040 | 379 | — | 891 | — |
| 1990 | 0 | 12 | 164 | 31,675 | 3,952 | 328 | 1,550 | 104,123 | 52 | 141,843 | R 3,278 | 408 | — | 892 | — |
| 1991 | 0 | 11 | 176 | 25,059 | 6,437 | 312 | 1,387 | 102,638 | 13 | 136,023 | R 3,620 | 422 | — | R 917 | — |
| 1992 | 0 | 11 | 176 | 24,718 | 7,399 | 319 | 1,414 | 104,710 | 32 | 138,768 | R 4,162 | 411 | — | R 877 | — |
| 1993 | 0 | 12 | 231 | 28,093 | 9,170 | 281 | 1,440 | 107,865 | 37 | 147,117 | R 4,123 | 410 | — | 866 | — |
| 1994 | 0 | 14 | 204 | 22,640 | 9,619 | 531 | 1,505 | 109,579 | 51 | 144,128 | R 5,147 | 404 | — | 843 | — |
| 1995 | 0 | 13 | 215 | 25,674 | 10,360 | 287 | 1,479 | 109,570 | 36 | 147,621 | R 4,321 | 393 | — | R 819 | — |
| 1996 | 0 | 14 | 202 | 26,982 | 12,076 | R 247 | 1,435 | 109,906 | 31 | R 150,879 | R 3,136 | 427 | — | R 889 | — |
| 1997 | 0 | 15 | 197 | 26,955 | 12,497 | R 175 | 1,516 | 111,630 | 48 | R 153,018 | R 4,562 | 426 | — | R 886 | — |
| 1998 | 0 | 13 | 168 | 29,195 | 13,152 | 269 | 1,587 | 112,132 | 39 | 156,543 | 5,405 | 422 | — | 872 | — |
| 1999 | 0 | 54 | 172 | 34,786 | 18,245 | 337 | 1,604 | 117,570 | 36 | 172,751 | 5,740 | 437 | — | 856 | — |

Trillion Btu

| Year | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5.7 | 10.4 | 18.8 | 50.8 | 24.4 | 1.3 | 8.1 | 374.0 | 7.3 | 484.7 | 0.0 | 1.1 | 501.9 | 2.6 | 504.5 |
| 1965 | 1.2 | 13.8 | 1.9 | 67.0 | 68.8 | 1.3 | 7.9 | 429.6 | 2.7 | 579.2 | 0.0 | 1.0 | 595.2 | 2.5 | 597.6 |
| 1970 | 0.4 | 28.7 | 1.3 | 88.7 | 128.2 | 2.0 | 7.5 | 528.1 | 2.6 | 758.4 | 0.0 | 1.0 | 788.5 | 2.4 | 790.9 |
| 1975 | (s) | 14.6 | 0.4 | 119.3 | 137.4 | 1.8 | 8.8 | 597.1 | 1.4 | 866.2 | 0.0 | 0.9 | 881.8 | 2.2 | 883.9 |
| 1980 | 0.0 | 14.9 | 0.7 | 131.4 | 110.4 | 0.7 | 9.2 | 549.2 | 1.8 | 803.3 | 0.0 | 1.0 | 819.1 | 2.3 | 821.5 |
| 1985 | 0.0 | 11.6 | 1.1 | 111.5 | 15.4 | 1.5 | 8.4 | 571.7 | 1.2 | 710.7 | R e 7.2 | 1.3 | e 723.6 | 3.0 | e 726.7 |
| 1990 | 0.0 | 12.4 | 0.8 | 184.5 | 22.3 | 1.2 | 9.4 | 547.0 | 0.3 | 765.5 | R 11.6 | 1.4 | 779.2 | 3.0 | 782.3 |
| 1991 | 0.0 | 11.3 | 0.9 | 146.0 | 36.3 | 1.1 | 8.4 | 539.2 | 0.1 | 732.0 | R 12.8 | 1.4 | 744.7 | 3.1 | 747.8 |
| 1992 | 0.0 | 11.5 | 0.9 | 144.0 | 41.8 | 1.2 | 8.6 | 550.0 | 0.2 | 746.7 | R 14.7 | 1.4 | 759.6 | 3.0 | 762.6 |
| 1993 | 0.0 | 11.9 | 1.2 | 163.6 | 51.9 | 1.0 | 8.7 | 566.6 | 0.2 | 793.3 | R 14.6 | 1.4 | 806.5 | 3.0 | 809.5 |
| 1994 | 0.0 | 14.1 | 1.0 | 131.9 | 54.4 | 1.9 | 9.1 | R 573.1 | 0.3 | R 771.8 | R 18.2 | 1.4 | R 787.3 | 2.9 | R 790.2 |
| 1995 | 0.0 | 13.5 | 1.1 | 149.5 | 58.7 | 1.0 | 9.0 | R 571.4 | 0.2 | R 791.0 | R 15.3 | 1.3 | R 805.9 | 2.8 | R 808.7 |
| 1996 | 0.0 | 14.7 | 1.0 | 157.2 | 68.5 | R 0.9 | 8.7 | R 573.3 | 0.2 | R 809.7 | R 11.1 | 1.5 | R 825.9 | 3.0 | R 828.9 |
| 1997 | 0.0 | 14.8 | 1.0 | 157.0 | 70.9 | R 0.6 | 9.2 | R 581.9 | 0.3 | R 820.9 | R 16.1 | 1.5 | R 837.2 | 3.0 | R 840.2 |
| 1998 | 0.0 | 13.3 | 0.8 | 170.1 | 74.6 | 1.0 | 9.6 | 584.4 | 0.2 | 840.8 | 19.1 | 1.4 | 855.5 | 3.0 | 858.5 |
| 1999 | 0.0 | 55.3 | 0.9 | 202.6 | 103.4 | 1.2 | 9.7 | 612.7 | 0.2 | 930.8 | 20.3 | 1.5 | 987.5 | 2.9 | 990.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 100.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Illinois

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| **Physical Units** | | | | | | | | | | | | |
| 1960 | 19,218 | 42 | 194 | 161 | 0 | 355 | 254 | 166 | 0 | 0 | 0 | — |
| 1965 | 25,047 | 35 | 152 | 126 | 0 | 278 | 965 | 158 | 3 | 0 | 0 | — |
| 1970 | 28,993 | 132 | 3,221 | 2,667 | 0 | 5,888 | 2,514 | 146 | (s) | 0 | 0 | — |
| 1975 | 32,350 | 34 | 7,239 | 3,833 | 0 | 11,072 | 22,315 | 104 | 0 | 0 | 0 | — |
| 1980 | 34,611 | 19 | 12,762 | 847 | 0 | 13,608 | 27,742 | 121 | 0 | 0 | 0 | — |
| 1985 | 31,608 | 6 | 2,569 | 436 | 0 | 3,005 | 39,106 | 119 | 0 | 0 | 0 | — |
| 1990 | 27,396 | 9 | 1,622 | 491 | 0 | 2,113 | 71,887 | 61 | 0 | 0 | 0 | — |
| 1991 | 27,754 | 13 | 2,550 | 495 | 0 | 3,044 | 71,866 | 53 | 0 | 0 | 0 | — |
| 1992 | 25,264 | 9 | 1,906 | 365 | 0 | 2,271 | 73,742 | 52 | 8 | 0 | 0 | — |
| 1993 | 31,744 | 16 | 1,653 | 469 | 0 | 2,122 | 78,373 | 40 | 0 | 0 | 0 | — |
| 1994 | 32,599 | 35 | 1,986 | 624 | 0 | 2,611 | 72,654 | 45 | 0 | 0 | 0 | — |
| 1995 | 33,463 | 39 | 1,013 | 539 | 385 | 1,938 | 78,481 | 48 | 68 | 0 | 0 | — |
| 1996 | 38,091 | 26 | 1,184 | 548 | 241 | 1,973 | 69,774 | 22 | 134 | 0 | 0 | — |
| 1997 | 41,017 | 45 | 577 | 551 | 19 | 1,147 | 51,069 | 17 | 24 | 0 | 0 | — |
| 1998 | 38,255 | 56 | 744 | 595 | 346 | 1,684 | 55,596 | 51 | 0 | 0 | 0 | — |
| 1999 | 35,995 | 41 | 269 | 453 | 93 | 815 | 81,356 | 52 | 67 | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 416.9 | 43.8 | 1.2 | 0.9 | 0.0 | 2.2 | 3.0 | 1.8 | 0.0 | 0.0 | 0.0 | 467.6 |
| 1965 | 537.2 | 35.6 | 1.0 | 0.7 | 0.0 | 1.7 | 11.4 | 1.7 | (s) | 0.0 | 0.0 | 587.6 |
| 1970 | 608.9 | 135.7 | 20.3 | 15.5 | 0.0 | 35.8 | 27.6 | 1.5 | (s) | 0.0 | 0.0 | 809.5 |
| 1975 | 655.4 | 35.2 | 45.5 | 22.2 | 0.0 | 67.8 | 245.8 | 1.1 | 0.0 | 0.0 | 0.0 | 1,005.2 |
| 1980 | 712.7 | 19.6 | 80.2 | 4.9 | 0.0 | 85.1 | 302.6 | 1.3 | 0.0 | 0.0 | 0.0 | 1,121.4 |
| 1985 | 662.8 | 6.0 | 16.2 | 2.5 | 0.0 | 18.7 | 422.9 | 1.2 | 0.0 | 0.0 | 0.0 | 1,111.6 |
| 1990 | 591.1 | 9.3 | 10.2 | 2.9 | 0.0 | 13.1 | 767.8 | 0.6 | 0.0 | 0.0 | 0.0 | 1,381.9 |
| 1991 | 595.1 | 13.1 | 16.0 | 2.9 | 0.0 | 18.9 | 771.8 | 0.6 | 0.0 | 0.0 | 0.0 | 1,399.5 |
| 1992 | 539.0 | 9.4 | 12.0 | 2.1 | 0.0 | 14.1 | 787.4 | 0.5 | 0.1 | 0.0 | 0.0 | 1,350.6 |
| 1993 | 657.8 | 16.3 | 10.4 | 2.7 | 0.0 | 13.1 | 837.2 | 0.4 | 0.0 | 0.0 | 0.0 | 1,524.8 |
| 1994 | 663.8 | 35.3 | 12.5 | 3.6 | 0.0 | 16.1 | 775.7 | 0.5 | 0.0 | 0.0 | 0.0 | 1,491.3 |
| 1995 | 667.3 | 39.8 | 6.4 | 3.1 | 2.3 | 11.8 | 836.4 | 0.5 | 0.7 | 0.0 | 0.0 | 1,556.5 |
| 1996 | 752.5 | 26.2 | 7.4 | 3.2 | 1.5 | 12.1 | 741.2 | 0.2 | 1.4 | 0.0 | 0.0 | 1,533.6 |
| 1997 | 802.4 | 45.3 | 3.6 | 3.2 | 0.1 | 7.0 | 542.5 | 0.2 | 0.2 | 0.0 | 0.0 | 1,397.6 |
| 1998 | 742.2 | 57.4 | 4.7 | 3.5 | 2.1 | 10.2 | 590.6 | 0.5 | 0.0 | 0.0 | 0.0 | 1,400.9 |
| 1999 | 688.3 | 41.6 | 1.7 | 2.6 | 0.6 | 4.9 | 864.2 | 0.5 | 0.7 | 0.0 | 0.0 | 1,600.2 |

[a] Includes supplemental gaseous fuels.

[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 101. Energy Consumption Estimates by Source, Selected Years 1960-1999, Indiana

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kero-sene [a] | LPG [a] | Lubri-cants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power Million kWh | Hydro-electric Power [d] Million kWh | Wood and Waste | Other [a,e] | Net Inter-state Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 32,599 | 212 | 3,277 | 453 | 25,707 | 1,316 | 3,899 | 5,751 | 1,181 | 43,595 | 13,076 | R 9,555 | R 107,809 | 0 | 100 | — | — | -31,833 | — |
| 1965 | 37,350 | 358 | 4,283 | 1,110 | 25,948 | 1,848 | 3,444 | 6,654 | 1,458 | 48,051 | 13,033 | R 11,559 | R 117,388 | 0 | 94 | — | — | -38,137 | — |
| 1970 | 42,776 | 545 | 6,101 | 367 | 29,379 | 2,558 | 2,130 | 8,978 | 1,583 | 58,905 | 9,769 | R 14,130 | R 133,900 | 0 | 495 | — | — | -27,768 | — |
| 1975 | 46,210 | 477 | 6,067 | 217 | 32,655 | 2,619 | 841 | 12,335 | 1,604 | 64,639 | 15,007 | R 13,954 | R 149,938 | 0 | 444 | — | — | 114 | — |
| 1980 | 50,485 | 489 | 5,165 | 260 | 30,795 | 2,151 | 659 | 7,961 | 1,788 | 60,192 | 14,615 | R 12,296 | R 135,881 | 0 | 474 | — | — | -9,357 | — |
| 1985 | 53,291 | 433 | 5,336 | 393 | 30,776 | 15,445 | 731 | 4,947 | 1,627 | 57,936 | 3,768 | R 10,792 | R 131,752 | 0 | 426 | — | — | -27,809 | — |
| 1990 | 61,701 | 451 | 8,552 | 302 | 32,718 | 17,889 | 368 | 9,563 | 1,831 | 61,930 | 3,881 | R 14,706 | R 151,739 | 0 | R h 441 | — | — | R -64,905 | — |
| 1991 | 60,790 | 457 | 7,058 | 302 | 32,418 | 17,228 | 406 | 9,508 | 1,638 | 61,302 | 3,239 | R 15,432 | R 148,531 | 0 | R 399 | — | — | R -56,528 | — |
| 1992 | 58,765 | 483 | 6,210 | 252 | 31,959 | 16,001 | 298 | 7,045 | 1,670 | 61,975 | 4,112 | R 18,388 | R 147,909 | 0 | R 562 | — | — | R -56,235 | — |
| 1993 | 60,353 | 518 | 9,501 | 201 | 33,109 | 16,366 | 347 | 7,778 | 1,701 | 65,531 | 2,925 | R 15,974 | R 153,432 | 0 | R 448 | — | — | R -50,420 | — |
| 1994 | 59,996 | 519 | 10,219 | 149 | 35,828 | 17,299 | 429 | 7,134 | 1,778 | 66,838 | 3,045 | R 16,910 | R 159,628 | 0 | R 407 | — | — | R -58,098 | — |
| 1995 | 62,631 | 535 | 7,085 | 144 | 35,339 | 17,344 | 330 | 6,788 | 1,747 | 70,100 | 1,862 | R 16,263 | R 157,002 | 0 | R 467 | — | — | R -51,881 | — |
| 1996 | 64,021 | 574 | 8,528 | 171 | 35,679 | 12,576 | 441 | R 8,555 | 1,695 | 69,578 | 1,350 | R 19,774 | R 158,348 | 0 | R 448 | — | — | R -50,494 | — |
| 1997 | 66,042 | 557 | 9,233 | 136 | 38,407 | 10,991 | 459 | R 7,379 | 1,791 | 69,828 | 1,509 | R 20,638 | R 160,372 | 0 | R 562 | — | — | R -66,980 | — |
| 1998 | 66,296 | 521 | 7,187 | 113 | 37,761 | 9,647 | 433 | 5,346 | 1,875 | 74,133 | 1,235 | 21,215 | 158,945 | 0 | 479 | — | — | -64,478 | — |
| 1999 | 66,167 | 567 | 7,460 | 119 | 39,845 | 11,198 | 1,450 | 6,730 | 1,895 | 72,552 | 674 | 22,028 | 163,950 | 0 | 407 | — | — | -63,143 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 795.1 | 219.8 | 21.7 | 2.3 | 149.7 | 7.1 | 22.1 | 23.1 | 7.2 | 229.0 | 82.2 | R 57.3 | R 601.7 | 0.0 | 1.1 | 23.5 | 0.0 | -108.6 | R 1,532.5 |
| 1965 | 900.6 | 357.5 | 28.4 | 5.6 | 151.1 | 10.2 | 19.5 | 26.7 | 8.8 | 252.4 | 81.9 | R 68.5 | R 653.3 | 0.0 | 1.0 | 22.1 | 0.0 | -130.1 | R 1,804.3 |
| 1970 | 1,006.8 | 548.6 | 40.5 | 1.9 | 171.1 | 14.2 | 12.1 | 33.9 | 9.6 | 309.4 | 61.4 | R 83.6 | R 737.7 | 0.0 | 5.2 | 23.3 | 0.0 | -94.7 | R 2,227.0 |
| 1975 | 1,061.2 | 472.6 | 40.3 | 1.1 | 190.2 | 14.6 | 4.8 | 45.8 | 9.7 | 339.6 | 94.3 | R 82.6 | R 823.0 | 0.0 | 4.6 | 26.7 | 0.0 | 0.4 | R 2,388.5 |
| 1980 | 1,157.0 | 483.9 | 34.3 | 1.3 | 179.4 | 12.0 | 3.7 | 29.2 | 10.8 | 316.2 | 91.9 | R 72.4 | R 751.3 | 0.0 | 4.9 | R 49.5 | 0.0 | -31.9 | R 2,414.6 |
| 1985 | 1,193.4 | 436.4 | 35.4 | 2.0 | 179.3 | 87.4 | 4.1 | 17.8 | 9.9 | 304.3 | 23.7 | R 63.5 | R 727.4 | 0.0 | 4.5 | R 53.8 | 0.0 | -94.9 | R 2,320.5 |
| 1990 | 1,361.8 | 459.1 | 56.7 | 1.5 | 190.6 | 101.3 | 2.1 | 34.7 | 11.1 | 325.3 | 24.4 | R 86.5 | R 834.1 | 0.0 | h 4.6 | R 34.0 | h 0.5 | R -221.5 | R h 2,472.6 |
| 1991 | 1,340.1 | 463.7 | 46.8 | 1.5 | 188.8 | 97.5 | 2.3 | 34.4 | 9.9 | 322.0 | 20.4 | R 89.9 | R 813.6 | 0.0 | 4.2 | R 33.0 | 0.6 | R -192.9 | R 2,462.2 |
| 1992 | 1,296.5 | 488.8 | 41.2 | 1.3 | 186.2 | 90.5 | 1.7 | 25.5 | 10.1 | 325.6 | 25.9 | R 106.8 | R 814.7 | 0.0 | 5.8 | R 33.8 | 0.6 | R -191.9 | R 2,448.3 |
| 1993 | 1,318.5 | 524.5 | 63.1 | 1.0 | 192.9 | 92.7 | 2.0 | 28.0 | 10.3 | 344.2 | 18.4 | R 92.6 | R 845.1 | 0.0 | 4.6 | R 25.5 | 0.6 | R -172.0 | R 2,546.9 |
| 1994 | 1,299.0 | 526.1 | 67.8 | 0.8 | 208.7 | 98.0 | 2.4 | 25.9 | 10.8 | R 349.6 | 19.1 | R 98.0 | R 881.1 | 0.0 | 4.2 | R 26.8 | 0.7 | R -198.2 | R 2,603.5 |
| 1995 | 1,341.9 | 541.7 | 47.0 | 0.7 | 205.8 | 98.3 | 1.9 | 24.6 | 10.6 | R 365.6 | 11.7 | R 94.3 | R 860.6 | 0.0 | 4.8 | R 30.8 | R 0.8 | R -177.0 | R 2,683.4 |
| 1996 | 1,372.1 | 579.8 | 56.6 | 0.9 | 207.8 | 71.3 | 2.5 | R 30.9 | 10.3 | R 362.9 | 8.5 | R 113.9 | R 865.6 | 0.0 | 4.6 | R 32.7 | 0.9 | R -172.3 | R 2,683.4 |
| 1997 | 1,427.3 | 563.3 | 61.3 | 0.7 | 223.7 | 62.3 | 2.6 | R 26.7 | 10.9 | R 364.0 | 9.5 | R 119.0 | R 880.7 | 0.0 | 5.8 | R 29.7 | 0.9 | R -228.5 | R 2,679.1 |
| 1998 | 1,441.9 | 529.6 | 47.7 | 0.6 | 220.0 | 54.7 | 2.5 | 19.3 | 11.4 | 386.4 | 7.8 | 122.7 | 872.9 | 0.0 | 5.0 | 17.0 | 1.0 | -220.0 | 2,647.4 |
| 1999 | 1,450.6 | 577.3 | 49.5 | 0.6 | 232.1 | 63.5 | 8.2 | 24.3 | 11.5 | 378.1 | 4.2 | 127.3 | 899.3 | 0.0 | 4.2 | 18.7 | 1.1 | -215.4 | 2,735.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 102. Residential Energy Consumption Estimates, Selected Years 1960-1999, Indiana

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 744 | 76 | 8,536 | 3,370 | 3,389 | 15,296 | 770 | — | — | 6,371 | — | 15,847 | — |
| 1965 | 380 | 114 | 8,146 | 2,498 | 3,993 | 14,637 | 580 | — | — | 8,651 | — | 20,656 | — |
| 1970 | 247 | 159 | 8,027 | 1,837 | 6,312 | 16,175 | 567 | — | — | 13,488 | — | 32,686 | — |
| 1975 | 315 | 163 | 8,647 | 717 | 6,665 | 16,029 | 562 | — | — | 16,375 | — | 39,499 | — |
| 1980 | 78 | 164 | 5,398 | 492 | 3,351 | 9,241 | R 1,150 | — | — | 19,262 | — | 46,839 | — |
| 1985 | 184 | 146 | 2,558 | 466 | 2,340 | 5,364 | 1,142 | — | — | 19,803 | — | 46,526 | — |
| 1990 | 193 | 140 | 1,719 | 278 | 3,494 | 5,492 | 802 | — | — | 22,111 | — | R 48,370 | — |
| 1991 | 152 | 146 | 1,937 | 316 | 3,490 | 5,743 | 844 | — | — | 24,220 | — | R 52,653 | — |
| 1992 | 145 | 153 | 1,897 | 186 | 3,422 | 5,505 | 888 | — | — | 22,837 | — | R 48,706 | — |
| 1993 | 120 | 164 | 2,110 | 253 | 3,769 | 6,132 | R 459 | — | — | 24,978 | — | R 52,758 | — |
| 1994 | 125 | 157 | 1,827 | 275 | 3,698 | 5,801 | R 450 | — | — | 25,048 | — | R 52,273 | — |
| 1995 | 102 | 161 | 1,595 | 215 | 3,768 | 5,578 | R 499 | — | — | 26,560 | — | R 55,376 | — |
| 1996 | 127 | 180 | 1,467 | 288 | R 5,058 | R 6,813 | R 498 | — | — | 26,860 | — | R 55,978 | — |
| 1997 | 140 | 169 | 1,339 | 303 | R 5,003 | R 6,644 | R 301 | — | — | 26,550 | — | R 55,228 | — |
| 1998 | 132 | 140 | 1,038 | 300 | 3,684 | 5,023 | 266 | — | — | 27,334 | — | 56,467 | — |
| 1999 | 121 | 152 | 954 | 1,328 | 4,466 | 6,747 | 285 | — | — | 28,806 | — | 56,439 | — |
| **Trillion Btu** | | | | | | | | | | | | | |
| 1960 | 17.9 | 78.7 | 49.7 | 19.1 | 13.6 | 82.4 | 15.4 | 0.0 | 0.0 | 21.7 | 216.1 | 54.1 | 270.2 |
| 1965 | 9.1 | 114.2 | 47.5 | 14.2 | 16.0 | 77.6 | 11.6 | 0.0 | 0.0 | 29.5 | 242.1 | 70.5 | 312.6 |
| 1970 | 5.7 | 159.7 | 46.8 | 10.4 | 23.9 | 81.0 | 11.3 | 0.0 | 0.0 | 46.0 | 303.7 | 111.5 | 415.3 |
| 1975 | 7.0 | 161.2 | 50.4 | 4.1 | 24.8 | 79.2 | 11.2 | 0.0 | 0.0 | 55.9 | 314.5 | 134.8 | 449.3 |
| 1980 | 1.7 | 161.9 | 31.4 | 2.8 | 12.3 | 46.5 | 23.0 | 0.0 | 0.0 | 65.7 | 298.8 | 159.8 | 458.6 |
| 1985 | 4.1 | 147.4 | 14.9 | 2.6 | 8.4 | 26.0 | 22.8 | 0.0 | 0.0 | 67.6 | 267.9 | 158.7 | 426.6 |
| 1990 | 4.3 | 143.1 | 10.0 | 1.6 | 12.7 | 24.3 | 16.0 | e 0.5 | e (s) | 75.4 | e 263.6 | 165.0 | e 428.7 |
| 1991 | 3.4 | 148.5 | 11.3 | 1.8 | 12.6 | 25.7 | 16.9 | 0.5 | (s) | 82.6 | 277.7 | R 179.7 | R 457.4 |
| 1992 | 3.3 | 154.4 | 11.1 | 1.1 | 12.4 | 24.5 | 17.8 | 0.6 | (s) | 77.9 | 278.4 | R 166.2 | R 444.6 |
| 1993 | 2.7 | 166.1 | 12.3 | 1.4 | 13.6 | 27.3 | 9.2 | 0.6 | (s) | 85.2 | R 291.1 | R 180.0 | 471.2 |
| 1994 | 2.8 | 159.5 | 10.6 | 1.6 | 13.4 | 25.6 | 9.0 | 0.6 | (s) | 85.5 | R 283.0 | R 178.4 | 461.4 |
| 1995 | 2.3 | 163.0 | 9.3 | 1.2 | 13.7 | 24.2 | 10.0 | 0.6 | (s) | 90.6 | R 290.6 | R 188.9 | R 479.6 |
| 1996 | 2.8 | 181.9 | 8.5 | 1.6 | R 18.3 | R 28.5 | 10.0 | 0.7 | (s) | 91.6 | R 315.5 | R 191.0 | R 506.5 |
| 1997 | 3.1 | 171.0 | 7.8 | 1.7 | R 18.1 | R 27.6 | R 6.0 | 0.7 | (s) | 90.6 | R 299.1 | R 188.4 | R 487.5 |
| 1998 | 3.0 | 142.5 | 6.0 | 1.7 | 13.3 | 21.1 | 5.3 | 0.7 | (s) | 93.3 | 265.8 | 192.7 | 458.5 |
| 1999 | 2.7 | 154.2 | 5.6 | 7.5 | 16.1 | 29.2 | 5.7 | 0.8 | (s) | 98.3 | 291.0 | 192.6 | 483.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 103.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Indiana

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 1,376 | 20 | 2,968 | 328 | 598 | 168 | 1,394 | 5,456 | 15 | — | 2,900 | — | 7,213 | — |
| 1965 | 703 | 42 | 2,832 | 243 | 705 | 171 | 1,520 | 5,472 | 11 | — | 4,243 | — | 10,132 | — |
| 1970 | 456 | 78 | 2,791 | 179 | 1,114 | 251 | 844 | 5,178 | 11 | — | 6,520 | — | 15,800 | — |
| 1975 | 585 | 71 | 3,007 | 70 | 1,176 | 120 | 1,645 | 6,017 | 11 | — | 9,071 | — | 21,881 | — |
| 1980 | 144 | 70 | 1,985 | 31 | 591 | 223 | 2,431 | 5,262 | 28 | — | 10,423 | — | 25,345 | — |
| 1985 | 340 | 70 | 2,637 | 133 | 413 | 352 | 388 | 3,923 | R 30 | — | 12,257 | — | 28,797 | — |
| 1990 | 357 | 67 | 1,071 | 35 | 617 | 561 | 63 | 2,346 | R 51 | — | 16,116 | — | R 35,255 | — |
| 1991 | 280 | 68 | 1,176 | 43 | 616 | 353 | 205 | 2,393 | R 54 | — | 17,014 | — | R 36,988 | — |
| 1992 | 266 | 73 | 1,415 | 59 | 604 | 333 | 18 | 2,429 | R 58 | — | 16,688 | — | R 35,593 | — |
| 1993 | 219 | 78 | 1,619 | 48 | 665 | 289 | 38 | 2,660 | 37 | — | 17,524 | — | R 37,012 | — |
| 1994 | 231 | 76 | 1,536 | 67 | 653 | 260 | 41 | 2,556 | 38 | — | 17,982 | — | R 37,528 | — |
| 1995 | 185 | 83 | 1,193 | 70 | 665 | 175 | 32 | 2,135 | 38 | — | 18,654 | — | R 38,893 | — |
| 1996 | 230 | 87 | 978 | 69 | R 893 | 159 | 14 | R 2,112 | 41 | — | 18,822 | — | R 39,226 | — |
| 1997 | 255 | 82 | 1,159 | 87 | R 883 | 171 | 9 | R 2,309 | R 33 | — | 19,030 | — | R 39,585 | — |
| 1998 | 239 | 73 | 1,401 | 51 | 650 | 167 | 128 | 2,398 | 33 | — | 19,861 | — | 41,029 | — |
| 1999 | 222 | 74 | 1,174 | 41 | 788 | 183 | 3 | 2,188 | 40 | — | 20,685 | — | 40,527 | — |
| | | | | | | | Trillion Btu | | | | | | | |
| 1960 | 33.1 | 20.7 | 17.3 | 1.9 | 2.4 | 0.9 | 8.8 | 31.2 | 0.3 | 0.0 | 9.9 | 95.2 | 24.6 | 119.8 |
| 1965 | 16.8 | 42.2 | 16.5 | 1.4 | 2.8 | 0.9 | 9.6 | 31.2 | 0.2 | 0.0 | 14.5 | 104.9 | 34.6 | 139.5 |
| 1970 | 10.5 | 78.0 | 16.3 | 1.0 | 4.2 | 1.3 | 5.3 | 28.1 | 0.2 | 0.0 | 22.2 | 139.1 | 53.9 | 193.0 |
| 1975 | 12.9 | 69.8 | 17.5 | 0.4 | 4.4 | 0.6 | 10.3 | 33.3 | 0.2 | 0.0 | 31.0 | 147.1 | 74.7 | 221.8 |
| 1980 | 3.2 | 69.3 | 11.6 | 0.2 | 2.2 | 1.2 | 15.3 | 30.4 | 0.6 | 0.0 | 35.6 | 138.9 | 86.5 | 225.4 |
| 1985 | 7.6 | 70.2 | 15.4 | 0.8 | 1.5 | 1.8 | 2.4 | 21.9 | R 0.6 | 0.0 | 41.8 | R 142.1 | 98.3 | R 240.3 |
| 1990 | 8.0 | 68.4 | 6.2 | 0.2 | 2.2 | 2.9 | 0.4 | 12.0 | R 1.0 | e 0.0 | 55.0 | R e 144.5 | 120.3 | R e 264.8 |
| 1991 | 6.3 | 69.4 | 6.9 | 0.2 | 2.2 | 1.9 | 1.3 | 12.5 | R 1.1 | 0.0 | 58.1 | R 147.2 | R 126.2 | R 273.4 |
| 1992 | 6.0 | 73.5 | 8.2 | 0.3 | 2.2 | 1.8 | 0.1 | 12.6 | R 1.2 | 0.0 | 56.9 | R 150.2 | R 121.4 | R 271.7 |
| 1993 | 5.0 | 79.1 | 9.4 | 0.3 | 2.4 | 1.5 | 0.2 | 13.9 | 0.7 | 0.0 | 59.8 | 158.4 | 126.3 | 284.7 |
| 1994 | 5.2 | 76.8 | 8.9 | 0.4 | 2.4 | 1.4 | 0.3 | 13.3 | 0.8 | 0.1 | 61.4 | 157.5 | 128.0 | 285.6 |
| 1995 | 4.1 | 83.7 | 6.9 | 0.4 | 2.4 | 0.9 | 0.2 | 10.9 | 0.8 | 0.1 | 63.6 | 163.2 | R 132.7 | R 295.9 |
| 1996 | 5.1 | 88.4 | 5.7 | 0.4 | R 3.2 | 0.8 | 0.1 | R 10.2 | 0.8 | 0.1 | 64.2 | R 168.9 | R 133.8 | R 302.8 |
| 1997 | 5.7 | 82.6 | 6.8 | 0.5 | R 3.2 | 0.9 | 0.1 | R 11.4 | 0.7 | 0.2 | 64.9 | R 165.4 | R 135.1 | R 300.5 |
| 1998 | 5.3 | 74.3 | 8.2 | 0.3 | 2.3 | 0.9 | 0.8 | 12.5 | 0.7 | 0.2 | 67.8 | 160.8 | 140.0 | 300.8 |
| 1999 | 4.9 | 75.0 | 6.8 | 0.2 | 2.8 | 1.0 | (s) | 10.9 | 0.8 | 0.2 | 70.6 | 162.4 | 138.3 | 300.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 104. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Indiana

| Year | Coal (Thousand Short Tons) | Natural Gas a (Billion Cubic Feet) | Petroleum — Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b (Million kWh) | Wood and Waste | Other b,d | Electricity b (Million kWh) | Net Energy | Electrical System Energy Losses e (Million kWh) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 16,702 | 102 | 3,277 | 9,976 | 202 | 1,716 | 489 | 2,813 | 11,229 | R 9,555 | R 39,256 | (s) | — | — | 8,226 | — | 20,461 | — |
| 1965 | 18,093 | 180 | 4,283 | 9,766 | 703 | 1,904 | 843 | 2,686 | 10,866 | R 11,559 | R 42,611 | 0 | — | — | 12,360 | — | 29,510 | — |
| 1970 | 19,394 | 268 | 6,101 | 10,180 | 115 | 1,455 | 974 | 2,238 | 8,391 | R 13,876 | R 43,329 | 0 | — | — | 17,952 | — | 43,504 | — |
| 1975 | 18,006 | 223 | 6,067 | 9,324 | 55 | 4,369 | 842 | 1,263 | 11,688 | R 13,954 | R 47,560 | 0 | — | — | 26,675 | — | 64,343 | — |
| 1980 | 16,599 | 245 | 5,165 | 5,053 | 136 | 3,930 | 1,096 | 752 | 11,984 | R 12,296 | R 40,412 | 0 | — | — | 30,730 | — | 74,725 | — |
| 1985 | 14,457 | 211 | 5,336 | 4,502 | 131 | 2,046 | 998 | 901 | 3,348 | R 10,792 | R 28,055 | 0 | — | — | 31,784 | — | 74,674 | — |
| 1990 | 13,496 | 228 | 8,552 | 4,555 | 54 | 5,300 | 1,123 | 625 | 3,620 | R 13,749 | R 37,579 | f 0 | — | — | 35,743 | — | R 78,192 | — |
| 1991 | 12,638 | 228 | 7,058 | 5,332 | 47 | 5,243 | 1,004 | 709 | 2,944 | R 15,085 | R 37,422 | 0 | — | — | 35,787 | — | R 77,798 | — |
| 1992 | 11,416 | 246 | 6,210 | 5,489 | 54 | 2,857 | 1,024 | 639 | 3,886 | R 18,087 | R 38,245 | 0 | — | — | 37,439 | — | R 79,848 | — |
| 1993 | 11,178 | 263 | 9,501 | 4,758 | 45 | 3,216 | 1,043 | 739 | 2,547 | R 15,974 | R 37,823 | 0 | — | — | 39,415 | — | R 83,251 | — |
| 1994 | 9,085 | 270 | 10,219 | 5,158 | 87 | 2,549 | 1,090 | 836 | 2,778 | R 16,910 | R 39,626 | 0 | — | — | 40,763 | — | R 85,069 | — |
| 1995 | 10,255 | 275 | 7,085 | 5,150 | 45 | 2,250 | 1,071 | 849 | 1,591 | R 16,180 | R 34,223 | 0 | — | — | 41,777 | — | R 87,102 | — |
| 1996 | 10,810 | 289 | 8,528 | 4,736 | 84 | R 2,485 | 1,039 | 808 | 1,039 | R 19,475 | R 38,194 | 0 | — | — | 43,203 | — | R 90,036 | — |
| 1997 | 10,801 | 291 | 9,233 | 5,326 | 70 | R 1,427 | 1,098 | 847 | 1,097 | R 19,730 | R 38,829 | 0 | — | — | 43,550 | — | R 90,588 | — |
| 1998 | 10,839 | 291 | 7,187 | 5,791 | 81 | 962 | 1,149 | 650 | 785 | 19,988 | 36,595 | 0 | — | — | 44,848 | — | 92,648 | — |
| 1999 | 10,718 | 320 | 7,460 | 5,162 | 81 | 1,442 | 1,161 | 655 | 377 | 20,953 | 37,290 | 0 | — | — | 47,230 | — | 92,539 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 431.8 | 106.1 | 21.7 | 58.1 | 1.1 | 6.9 | 3.0 | 14.8 | 70.6 | R 57.3 | R 233.5 | (s) | 7.8 | 0.0 | 28.1 | R 807.2 | 69.8 | R 877.0 |
| 1965 | 466.3 | 179.8 | 28.4 | 56.9 | 4.0 | 7.6 | 5.1 | 14.1 | 68.3 | R 68.5 | R 253.0 | 0.0 | 10.3 | 0.0 | 42.2 | R 951.5 | 100.7 | R 1,052.2 |
| 1970 | 490.9 | 270.1 | 40.5 | 59.3 | 0.6 | 5.5 | 5.9 | 11.8 | 52.8 | R 82.1 | R 258.4 | 0.0 | 11.7 | 0.0 | 61.3 | R 1,092.4 | 148.4 | R 1,240.9 |
| 1975 | 461.6 | 221.1 | 40.3 | 54.3 | 0.3 | 16.2 | 5.1 | 6.6 | 73.5 | R 82.6 | R 278.9 | 0.0 | 15.3 | 0.0 | 91.0 | R 1,067.9 | 219.5 | R 1,287.4 |
| 1980 | 423.9 | 242.0 | 34.3 | 29.4 | 0.8 | 14.4 | 6.6 | 3.9 | 75.3 | R 72.4 | R 237.3 | 0.0 | R 25.9 | 0.0 | 104.9 | R 1,034.0 | 255.0 | R 1,288.9 |
| 1985 | 365.1 | 212.8 | 35.4 | 26.2 | 0.7 | 7.4 | 6.1 | 4.7 | 21.1 | R 63.5 | R 165.1 | 0.0 | R 30.4 | 0.0 | 108.4 | R 881.8 | 254.8 | R 1,136.6 |
| 1990 | 342.8 | 232.3 | 56.7 | 26.5 | 0.3 | 19.2 | 6.8 | 3.3 | 22.8 | R 80.7 | R 216.3 | f 0.0 | R 17.0 | f 0.0 | 122.0 | R f 930.3 | R 266.8 | R f 1,197.1 |
| 1991 | 321.6 | 231.0 | 46.8 | 31.1 | 0.3 | 18.9 | 6.1 | 3.7 | 18.5 | R 87.8 | R 213.2 | 0.0 | R 15.0 | 0.0 | 122.1 | R 903.0 | R 265.4 | R 1,168.5 |
| 1992 | 289.5 | 248.3 | 41.2 | 32.0 | 0.3 | 10.4 | 6.2 | 3.4 | 24.4 | R 104.9 | R 222.8 | 0.0 | R 14.9 | 0.0 | 127.7 | R 903.2 | R 272.4 | R 1,175.6 |
| 1993 | 281.5 | 266.7 | 63.1 | 27.7 | 0.3 | 11.6 | 6.3 | 3.9 | 16.0 | R 92.6 | R 221.4 | 0.0 | R 15.6 | 0.0 | 134.5 | R 919.7 | 284.1 | R 1,203.8 |
| 1994 | 225.8 | 273.6 | 67.8 | 30.0 | 0.5 | 9.3 | 6.6 | 4.4 | 17.5 | R 98.0 | R 234.1 | 0.0 | R 17.1 | 0.0 | 139.1 | R 889.7 | R 290.3 | R 1,179.9 |
| 1995 | 258.5 | 278.8 | 47.0 | 30.0 | 0.3 | 8.2 | 6.5 | R 4.4 | 10.0 | R 93.8 | R 200.2 | 0.0 | R 20.1 | 0.0 | 142.5 | R 900.0 | R 297.2 | R 1,197.2 |
| 1996 | 269.3 | 292.4 | 56.6 | 27.6 | 0.5 | R 9.0 | 6.3 | 4.2 | 6.5 | R 112.1 | R 222.8 | 0.0 | R 21.9 | 0.0 | 147.4 | R 953.9 | R 307.2 | R 1,261.1 |
| 1997 | 271.1 | 293.9 | 61.3 | 31.0 | 0.4 | R 5.2 | 6.7 | R 4.4 | 6.9 | R 113.5 | R 229.4 | 0.0 | R 23.0 | 0.0 | 148.6 | R 965.9 | R 309.1 | R 1,275.0 |
| 1998 | 274.9 | 295.9 | 47.7 | 33.7 | 0.5 | 3.5 | 7.0 | 3.4 | 4.9 | 115.3 | 216.0 | 0.0 | 11.1 | 0.0 | 153.0 | 950.9 | 316.1 | 1,267.0 |
| 1999 | 272.6 | 325.6 | 49.5 | 30.1 | 0.5 | 5.2 | 7.0 | 3.4 | 2.4 | 120.8 | 218.9 | 0.0 | 12.2 | 0.0 | 161.1 | 990.4 | 315.7 | 1,306.2 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 105.  Transformation Energy Consumption Estimates, Selected Years 1960-1999, Indiana**

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum Aviation Gasoline [a] | Petroleum Distillate Fuel [a] | Petroleum Jet Fuel [a] | Petroleum LPG [a] | Petroleum Lubricants [a] | Petroleum Motor Gasoline | Petroleum Residual Fuel [a] | Petroleum Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 294 | 5 | 453 | 4,097 | 1,316 | 47 | 692 | 40,615 | 350 | 47,570 | 0 | 1 | — | 2 | — |
| 1965 | 60 | 8 | 1,110 | 5,124 | 1,848 | 52 | 615 | 45,194 | 583 | 54,526 | 0 | 0 | — | 0 | — |
| 1970 | 31 | 11 | 367 | 8,123 | 2,558 | 97 | 610 | 56,417 | 330 | 68,501 | 0 | 0 | — | 0 | — |
| 1975 | 3 | 10 | 217 | 11,200 | 2,619 | 125 | 763 | 63,256 | 331 | 78,510 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 9 | 260 | 17,629 | 2,151 | 88 | 692 | 59,217 | 200 | 80,236 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 5 | 393 | 20,665 | 15,445 | 148 | 630 | 56,684 | 31 | 93,996 | R e 1,308 | 0 | — | 0 | — |
| 1990 | 0 | 8 | 302 | 24,950 | 17,889 | 153 | 709 | 60,744 | 197 | 104,944 | R 1,507 | 12 | — | 27 | — |
| 1991 | 0 | 5 | 302 | 23,622 | 17,228 | 159 | 634 | 60,240 | 90 | 102,275 | R 1,790 | 12 | — | 27 | — |
| 1992 | 0 | 5 | 252 | 22,893 | 16,001 | 162 | 646 | 61,003 | 208 | 101,165 | R 1,706 | 13 | — | 27 | — |
| 1993 | 0 | 7 | 201 | 24,229 | 16,366 | 128 | 658 | 64,502 | 340 | 106,423 | R 1,788 | 14 | — | 30 | — |
| 1994 | 0 | 7 | 149 | 26,895 | 17,299 | 234 | 688 | 65,742 | 226 | 111,233 | R 1,760 | 14 | — | 30 | — |
| 1995 | 0 | 8 | 144 | 27,059 | 17,344 | 104 | 676 | 69,076 | 238 | 114,642 | R 2,222 | 15 | — | 31 | — |
| 1996 | 0 | 13 | 171 | 28,145 | 12,576 | R 120 | 656 | 68,611 | 298 | R 110,576 | R 1,132 | 15 | — | 32 | — |
| 1997 | 0 | 11 | 136 | 30,260 | 10,991 | R 66 | 693 | 68,809 | 403 | R 111,358 | R 1,519 | 16 | — | 33 | — |
| 1998 | 0 | 7 | 113 | 29,084 | 9,647 | 50 | 726 | 73,315 | 322 | 113,256 | 1,447 | 15 | — | 31 | — |
| 1999 | 0 | 14 | 119 | 32,002 | 11,198 | 35 | 733 | 71,714 | 295 | 116,095 | 2,537 | 15 | — | 30 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 7.1 | 5.2 | 2.3 | 23.9 | 7.1 | 0.2 | 4.2 | 213.3 | 2.2 | 253.2 | 0.0 | (s) | 265.5 | (s) | 265.5 |
| 1965 | 1.4 | 8.0 | 5.6 | 29.8 | 10.2 | 0.2 | 3.7 | 237.4 | 3.7 | 290.6 | 0.0 | 0.0 | 300.1 | 0.0 | 300.1 |
| 1970 | 0.7 | 11.2 | 1.9 | 47.3 | 14.2 | 0.4 | 3.7 | 296.4 | 2.1 | 365.9 | 0.0 | 0.0 | 377.8 | 0.0 | 377.8 |
| 1975 | 0.1 | 9.5 | 1.1 | 65.2 | 14.6 | 0.5 | 4.6 | 332.3 | 2.1 | 420.4 | 0.0 | 0.0 | 430.0 | 0.0 | 430.0 |
| 1980 | 0.0 | 8.8 | 1.3 | 102.7 | 12.0 | 0.3 | 4.2 | 311.1 | 1.3 | 432.8 | 0.0 | 0.0 | 441.6 | 0.0 | 441.6 |
| 1985 | 0.0 | 4.9 | 2.0 | 120.4 | 87.4 | 0.5 | 3.8 | 297.8 | 0.2 | 512.0 | R e 4.6 | 0.0 | e 516.9 | 0.0 | e 516.9 |
| 1990 | 0.0 | 8.6 | 1.5 | 145.3 | 101.3 | 0.6 | 4.3 | 319.1 | 1.2 | 573.3 | R 5.3 | (s) | 582.0 | 0.1 | 582.1 |
| 1991 | 0.0 | 4.7 | 1.5 | 137.6 | 97.5 | 0.6 | 3.8 | 316.4 | 0.6 | 558.0 | R 6.3 | (s) | 562.8 | 0.1 | 562.9 |
| 1992 | 0.0 | 4.8 | 1.3 | 133.4 | 90.5 | 0.6 | 3.9 | 320.4 | 1.3 | 551.4 | R 6.0 | (s) | 556.3 | 0.1 | 556.4 |
| 1993 | 0.0 | 6.9 | 1.0 | 141.1 | 92.7 | 0.5 | 4.0 | 338.8 | 2.1 | 580.2 | R 6.3 | (s) | 587.2 | 0.1 | 587.3 |
| 1994 | 0.0 | 7.0 | 0.8 | 156.7 | 98.0 | 0.9 | 4.2 | R 343.8 | 1.4 | R 605.7 | R 6.2 | (s) | R 612.7 | 0.1 | R 612.9 |
| 1995 | 0.0 | 7.8 | 0.7 | 157.6 | 98.3 | 0.4 | 4.1 | R 360.2 | 1.5 | R 622.9 | R 7.9 | 0.1 | R 630.7 | 0.1 | R 630.8 |
| 1996 | 0.0 | 12.7 | 0.9 | 163.9 | 71.3 | 0.4 | 4.0 | R 357.9 | 1.9 | R 600.3 | R 4.0 | 0.1 | R 613.0 | 0.1 | R 613.1 |
| 1997 | 0.0 | 11.0 | 0.7 | 176.3 | 62.3 | R 0.2 | 4.2 | R 358.7 | 2.5 | R 604.9 | R 5.4 | 0.1 | R 616.0 | 0.1 | R 616.1 |
| 1998 | 0.0 | 7.5 | 0.6 | 169.4 | 54.7 | 0.2 | 4.4 | 382.1 | 2.0 | 613.4 | 5.1 | 0.1 | 621.0 | 0.1 | 621.1 |
| 1999 | 0.0 | 14.6 | 0.6 | 186.4 | 63.5 | 0.1 | 4.4 | 373.7 | 1.9 | 630.6 | 9.0 | 0.1 | 645.3 | 0.1 | 645.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 106.   Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Indiana

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 13,483 | 9 | 103 | 130 | 0 | 232 | 0 | 100 | 0 | 0 | 0 | — |
| 1965 | 18,113 | 13 | 63 | 80 | 0 | 142 | 0 | 94 | 0 | 0 | 0 | — |
| 1970 | 22,648 | 30 | 204 | 257 | 255 | 716 | 0 | 495 | 0 | 0 | 0 | — |
| 1975 | 27,301 | 11 | 1,344 | 477 | 0 | 1,821 | 0 | 444 | 0 | 0 | 0 | — |
| 1980 | 33,664 | 2 | 0 | 730 | 0 | 730 | 0 | 474 | 0 | 0 | 0 | — |
| 1985 | 38,310 | 1 | 0 | 414 | 0 | 414 | 0 | 426 | 0 | 0 | 0 | — |
| 1990 | 47,654 | 7 | 0 | 423 | 956 | 1,379 | 0 | 441 | 0 | 0 | 0 | — |
| 1991 | 47,720 | 10 | 0 | 351 | 346 | 698 | 0 | 399 | 0 | 0 | 0 | — |
| 1992 | 46,937 | 8 | 0 | 264 | 301 | 565 | 0 | 562 | 0 | 0 | 0 | — |
| 1993 | 48,836 | 6 | 0 | 393 | 0 | 393 | 0 | 448 | 0 | 0 | 0 | — |
| 1994 | 50,554 | 9 | 0 | 412 | 0 | 412 | 0 | 407 | 0 | 0 | 0 | — |
| 1995 | 52,089 | 8 | 0 | 342 | 82 | 424 | 0 | 467 | 0 | 0 | 0 | — |
| 1996 | 52,855 | 4 | 0 | 353 | 298 | 652 | 0 | 448 | 0 | 0 | 0 | — |
| 1997 | 54,845 | 5 | 0 | 322 | 908 | 1,230 | 0 | 562 | 0 | 0 | 0 | — |
| 1998 | 55,086 | 9 | 0 | 447 | 1,227 | 1,674 | 0 | 479 | 0 | 0 | 0 | — |
| 1999 | 55,105 | 8 | 0 | 554 | 1,075 | 1,630 | 0 | 407 | 0 | 0 | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | |
| 1960 | 305.2 | 9.1 | 0.6 | 0.8 | 0.0 | 1.4 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 316.8 |
| 1965 | 406.9 | 13.3 | 0.4 | 0.5 | 0.0 | 0.9 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 422.0 |
| 1970 | 498.9 | 29.7 | 1.3 | 1.5 | 1.5 | 4.3 | 0.0 | 5.2 | 0.0 | 0.0 | 0.0 | 538.1 |
| 1975 | 579.6 | 11.0 | 8.5 | 2.8 | 0.0 | 11.2 | 0.0 | 4.6 | 0.0 | 0.0 | 0.0 | 606.4 |
| 1980 | 728.2 | 1.9 | 0.0 | 4.3 | 0.0 | 4.3 | 0.0 | 4.9 | 0.0 | 0.0 | 0.0 | 739.3 |
| 1985 | 816.5 | 1.1 | 0.0 | 2.4 | 0.0 | 2.4 | 0.0 | 4.5 | 0.0 | 0.0 | 0.0 | 824.5 |
| 1990 | 1,006.6 | 6.6 | 0.0 | 2.5 | 5.8 | 8.2 | 0.0 | 4.6 | 0.0 | 0.0 | 0.0 | 1,026.1 |
| 1991 | 1,008.8 | 10.1 | 0.0 | 2.0 | 2.1 | 4.1 | 0.0 | 4.2 | 0.0 | 0.0 | 0.0 | 1,027.1 |
| 1992 | 997.7 | 7.8 | 0.0 | 1.5 | 1.8 | 3.4 | 0.0 | 5.8 | 0.0 | 0.0 | 0.0 | 1,014.7 |
| 1993 | 1,029.4 | 5.7 | 0.0 | 2.3 | 0.0 | 2.3 | 0.0 | 4.6 | 0.0 | 0.0 | 0.0 | 1,042.0 |
| 1994 | 1,065.1 | 9.2 | 0.0 | 2.4 | 0.0 | 2.4 | 0.0 | 4.2 | 0.0 | 0.0 | 0.0 | 1,080.9 |
| 1995 | 1,077.0 | 8.5 | 0.0 | 2.0 | 0.5 | 2.5 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 1,092.8 |
| 1996 | 1,094.8 | 4.4 | 0.0 | 2.1 | 1.8 | 3.9 | 0.0 | 4.6 | 0.0 | 0.0 | 0.0 | 1,107.8 |
| 1997 | 1,147.5 | 4.8 | 0.0 | 1.9 | 5.5 | 7.3 | 0.0 | 5.8 | 0.0 | 0.0 | 0.0 | 1,165.4 |
| 1998 | 1,158.7 | 9.3 | 0.0 | 2.6 | 7.4 | 10.0 | 0.0 | 5.0 | 0.0 | 0.0 | 0.0 | 1,183.0 |
| 1999 | 1,170.4 | 7.9 | 0.0 | 3.2 | 6.5 | 9.7 | 0.0 | 4.2 | 0.0 | 0.0 | 0.0 | 1,192.2 |

[a] Includes supplemental gaseous fuels.

[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

— =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 107. Energy Consumption Estimates by Source, Selected Years 1960-1999, Iowa

**IOWA**

### Thousand Barrels / Million kWh

| Year | Coal [a] (Thousand Short Tons) | Natural Gas [b] (Billion Cubic Feet) | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power (Million kWh) | Hydroelectric Power [d] (Million kWh) | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] (Million kWh) | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5,257 | 187 | 2,579 | 366 | 11,163 | 195 | 2,587 | 5,017 | 713 | 29,463 | 1,071 | 44 | 53,197 | 0 | 881 | — | — | -2,370 | — |
| 1965 | 5,722 | 248 | 2,569 | 358 | 11,068 | 232 | 1,523 | 7,448 | 698 | 30,792 | 531 | 542 | 55,760 | 0 | 928 | — | — | 3,241 | — |
| 1970 | 6,166 | 349 | 2,914 | 256 | 13,677 | 725 | 490 | 11,038 | 700 | 35,701 | 401 | 627 | 66,528 | 0 | 935 | — | — | 1,618 | — |
| 1975 | 6,407 | 346 | 2,294 | 191 | 14,553 | 835 | 214 | 13,645 | 655 | 39,042 | 608 | 986 | 73,024 | 2,291 | 879 | — | — | 13,729 | — |
| 1980 | 12,340 | 270 | 1,699 | 184 | 15,930 | 813 | 171 | 11,167 | 714 | 35,394 | 415 | 5,236 | 71,721 | 2,563 | 946 | — | — | 13,041 | — |
| 1985 | 14,342 | 226 | 2,023 | 83 | 15,490 | 592 | 155 | 8,507 | 649 | 31,465 | 182 | 1,778 | 60,925 | 1,927 | 2,048 | — | — | 6,022 | — |
| 1990 | 17,929 | 218 | 1,537 | 99 | 15,223 | 891 | 81 | 6,355 | 731 | 31,684 | 126 | 937 | 57,663 | 3,012 | R h 873 | — | — | R 604 | — |
| 1991 | 18,741 | 233 | 1,563 | 82 | 14,605 | 892 | 51 | 7,255 | 654 | 32,471 | 96 | 676 | 58,346 | 4,147 | R 896 | — | — | R -1,958 | — |
| 1992 | 17,992 | 231 | 1,406 | 75 | 16,370 | 803 | 42 | 8,978 | 666 | 31,713 | 107 | 748 | 60,908 | 3,405 | R 995 | — | — | R 324 | — |
| 1993 | 19,188 | 248 | 1,354 | 70 | 16,970 | 720 | 71 | 15,651 | 679 | 32,703 | 164 | 756 | 69,139 | 3,235 | R 756 | — | — | R 1,638 | — |
| 1994 | 19,341 | 248 | 1,964 | 69 | 18,531 | 897 | 60 | 15,663 | 709 | 33,887 | 182 | 688 | 72,650 | 4,107 | R 1,073 | — | — | R -518 | — |
| 1995 | 20,636 | 262 | 1,636 | 72 | 18,879 | 1,046 | 69 | 16,989 | 697 | 34,418 | 94 | 640 | 74,540 | 3,730 | R 1,010 | — | — | R -681 | — |
| 1996 | 21,171 | 273 | 2,052 | 71 | 20,276 | 819 | 54 | R 11,344 | 676 | 35,909 | 96 | R 2,261 | R 73,558 | 3,924 | R 938 | — | — | R 995 | — |
| 1997 | 21,719 | 255 | 2,623 | 78 | 20,553 | 793 | 63 | R 10,296 | 715 | 35,577 | 73 | R 2,425 | R 73,197 | 4,149 | R 910 | — | — | R 1,482 | — |
| 1998 | 23,351 | 233 | 2,157 | 72 | 20,425 | 1,184 | 62 | 14,882 | 748 | 36,973 | 94 | 2,525 | 79,122 | 3,768 | 984 | — | — | -3,896 | — |
| 1999 | 23,399 | 231 | 2,942 | 81 | 19,479 | 885 | 72 | 18,746 | 756 | 36,993 | 120 | 2,624 | 82,698 | 3,640 | 988 | — | — | -4,767 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 115.9 | 193.7 | 17.1 | 1.8 | 65.0 | 1.0 | 14.7 | 20.1 | 4.3 | 154.8 | 6.7 | 0.2 | 285.9 | 0.0 | 9.5 | 6.4 | 0.0 | -8.1 | 603.3 |
| 1965 | 126.6 | 250.0 | 17.0 | 1.8 | 64.5 | 1.3 | 8.6 | 29.9 | 4.2 | 161.7 | 3.3 | 2.9 | 295.3 | 0.0 | 9.7 | 5.5 | 0.0 | 11.1 | 698.1 |
| 1970 | 130.9 | 351.8 | 19.3 | 1.3 | 79.7 | 4.1 | 2.8 | 41.7 | 4.2 | 187.5 | 2.5 | 3.3 | 346.4 | 0.0 | 9.8 | 6.3 | 0.0 | 5.5 | 850.7 |
| 1975 | 131.6 | 348.6 | 15.2 | 1.0 | 84.8 | 4.7 | 1.2 | 50.7 | 4.0 | 205.1 | 3.8 | 5.4 | 375.8 | 25.2 | 9.1 | 7.9 | 0.0 | 46.8 | 945.0 |
| 1980 | 234.4 | 270.4 | 11.3 | 0.9 | 92.8 | 4.6 | 1.0 | 41.0 | 4.3 | 185.9 | 2.6 | 28.7 | 373.1 | 28.0 | 9.8 | R 50.8 | 0.0 | 44.5 | R 1,011.0 |
| 1985 | 268.8 | 228.4 | 13.4 | 0.4 | 90.2 | 3.3 | 0.9 | 30.7 | 3.9 | 165.3 | 1.1 | 9.6 | 318.9 | 20.8 | 21.4 | 56.8 | 0.0 | 20.5 | R 935.6 |
| 1990 | 331.7 | 219.7 | 10.2 | 0.5 | 88.7 | 5.0 | 0.5 | 23.0 | 4.4 | 166.4 | 0.8 | 5.1 | 304.6 | 32.2 | h 9.1 | R 15.7 | h 0.1 | R 2.1 | R h 915.1 |
| 1991 | 346.4 | 235.0 | 10.4 | 0.4 | 85.1 | 5.0 | 0.3 | 26.2 | 4.0 | 170.6 | 0.6 | 3.6 | 306.2 | 44.5 | R 9.3 | R 15.1 | 0.1 | R -6.7 | R 950.0 |
| 1992 | 326.7 | 231.9 | 9.3 | 0.4 | 95.4 | 4.5 | 0.2 | 32.5 | 4.0 | 166.6 | 0.7 | 4.0 | 317.7 | 36.4 | 10.3 | R 14.9 | 0.1 | R 1.1 | R 939.0 |
| 1993 | 339.9 | 248.8 | 9.0 | 0.4 | 98.9 | 4.1 | 0.4 | 56.4 | 4.1 | 171.8 | 1.0 | 4.0 | 350.1 | 34.6 | R 7.8 | R 13.8 | 0.1 | R 5.6 | R 1,000.5 |
| 1994 | 346.9 | 250.3 | 13.0 | 0.3 | 107.9 | 5.1 | 0.3 | R 56.9 | 4.3 | R 177.2 | 1.1 | 3.7 | R 370.0 | 43.9 | 11.1 | R 21.3 | 0.2 | -1.8 | R 1,053.3 |
| 1995 | 368.8 | 263.6 | 10.9 | 0.4 | 110.0 | 5.9 | 0.4 | 61.5 | 4.2 | R 179.5 | 0.6 | 3.4 | R 376.8 | 39.8 | R 10.4 | R 21.3 | 0.2 | R -2.3 | R 1,078.6 |
| 1996 | 380.5 | 274.3 | 13.6 | 0.4 | 118.1 | 4.6 | 0.3 | R 41.0 | 4.1 | R 187.3 | 0.6 | R 12.1 | R 382.1 | 41.7 | 9.7 | R 19.7 | 0.2 | R 3.4 | R 1,111.7 |
| 1997 | 390.0 | 257.1 | 17.4 | 0.4 | 119.7 | 4.5 | 0.4 | R 37.2 | 4.3 | R 185.5 | 0.5 | R 13.1 | R 382.9 | 44.1 | R 9.4 | R 20.5 | 0.3 | R 5.1 | R 1,109.9 |
| 1998 | 417.0 | 235.2 | 14.3 | 0.4 | 119.0 | 6.7 | 0.4 | 53.8 | 4.5 | 192.7 | 0.6 | 13.6 | 405.9 | 40.0 | 10.2 | 8.7 | 0.3 | -13.3 | 1,103.9 |
| 1999 | 416.0 | 235.7 | 19.5 | 0.4 | 113.5 | 5.0 | 0.4 | 67.8 | 4.6 | 192.8 | 0.8 | 14.1 | 418.8 | 38.7 | 10.2 | 15.2 | 3.7 | -16.3 | 1,121.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 108. Residential Energy Consumption Estimates, Selected Years 1960-1999, Iowa

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 319 | 58 | 2,610 | 2,301 | 3,312 | 8,223 | 163 | — | — | 3,720 | — | 9,253 | — |
| 1965 | 171 | 77 | 2,347 | 1,327 | 4,741 | 8,416 | 108 | — | — | 5,044 | — | 12,042 | — |
| 1970 | 62 | 96 | 2,232 | 325 | 6,826 | 9,383 | 99 | — | — | 6,480 | — | 15,703 | — |
| 1975 | 49 | 94 | 1,802 | 138 | 6,799 | 8,740 | 115 | — | — | 8,338 | — | 20,112 | — |
| 1980 | 32 | 85 | 2,388 | 47 | 3,890 | 6,325 | R 620 | — | — | 10,038 | — | 24,409 | — |
| 1985 | 98 | 79 | 1,435 | 115 | 2,996 | 4,546 | 575 | — | — | 9,851 | — | 23,144 | — |
| 1990 | 86 | 71 | 797 | 24 | 2,742 | 3,563 | 348 | — | — | 10,513 | — | R 22,998 | — |
| 1991 | 78 | 79 | 887 | 34 | 3,359 | 4,279 | 366 | — | — | 11,159 | — | R 24,259 | — |
| 1992 | 23 | 75 | 779 | 20 | 3,401 | 4,199 | 385 | — | — | 10,290 | — | R 21,947 | — |
| 1993 | 26 | 83 | 821 | 33 | 3,955 | 4,809 | R 319 | — | — | 11,103 | — | R 23,451 | — |
| 1994 | 15 | 78 | 973 | 19 | 3,925 | 4,917 | R 313 | — | — | 11,062 | — | R 23,085 | — |
| 1995 | 31 | 82 | 844 | 25 | 3,964 | 4,832 | R 347 | — | — | 11,640 | — | R 24,268 | — |
| 1996 | 78 | 88 | 785 | 30 | R 5,321 | R 6,135 | R 347 | — | — | 11,537 | — | R 24,044 | — |
| 1997 | 131 | 82 | 768 | 28 | R 4,935 | R 5,730 | R 242 | — | — | 11,673 | — | R 24,282 | — |
| 1998 | 98 | 69 | 542 | 25 | 4,178 | 4,745 | 214 | — | — | 11,855 | — | 24,491 | — |
| 1999 | 136 | 71 | 489 | 24 | 5,230 | 5,743 | 229 | — | — | 11,867 | — | 23,251 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 6.8 | 60.5 | 15.2 | 13.0 | 13.3 | 41.5 | 3.3 | 0.0 | 0.0 | 12.7 | 124.7 | 31.6 | 156.3 |
| 1965 | 3.6 | 78.0 | 13.7 | 7.5 | 19.0 | 40.2 | 2.2 | 0.0 | 0.0 | 17.2 | 141.3 | 41.1 | 182.3 |
| 1970 | 1.3 | 97.1 | 13.0 | 1.8 | 25.8 | 40.6 | 2.0 | 0.0 | 0.0 | 22.1 | 163.1 | 53.6 | 216.7 |
| 1975 | 0.9 | 95.1 | 10.5 | 0.8 | 25.3 | 36.5 | 2.3 | 0.0 | 0.0 | 28.4 | 163.3 | 68.6 | 231.9 |
| 1980 | 0.6 | 85.2 | 13.9 | 0.3 | 14.3 | 28.5 | 12.4 | 0.0 | 0.0 | 34.2 | 160.9 | 83.3 | 244.2 |
| 1985 | 2.1 | 79.6 | 8.4 | 0.7 | 10.8 | 19.8 | 11.5 | 0.0 | 0.0 | 33.6 | 146.6 | 79.0 | 225.6 |
| 1990 | 2.1 | 71.9 | 4.6 | 0.1 | 9.9 | 14.7 | 7.0 | e 0.1 | e (s) | 35.9 | e 131.6 | 78.5 | e 210.0 |
| 1991 | 1.9 | 79.4 | 5.2 | 0.2 | 12.1 | 17.5 | 7.3 | 0.1 | (s) | 38.1 | 144.3 | R 82.8 | R 227.1 |
| 1992 | 0.5 | 75.2 | 4.5 | 0.1 | 12.3 | 17.0 | 7.7 | 0.1 | (s) | 35.1 | 135.6 | R 74.9 | R 210.5 |
| 1993 | 0.6 | 83.7 | 4.8 | 0.2 | 14.3 | 19.2 | 6.4 | 0.1 | (s) | 37.9 | R 147.9 | 80.0 | 227.9 |
| 1994 | 0.4 | 78.9 | 5.7 | 0.1 | 14.3 | 20.0 | R 6.3 | 0.1 | (s) | 37.7 | 143.4 | 78.8 | 222.1 |
| 1995 | 0.8 | 82.6 | 4.9 | 0.1 | 14.4 | 19.4 | 6.9 | 0.1 | (s) | 39.7 | 149.6 | R 82.8 | R 232.4 |
| 1996 | 1.9 | 88.6 | 4.6 | 0.2 | R 19.2 | R 24.0 | 6.9 | 0.1 | (s) | 39.4 | R 160.9 | R 82.0 | R 242.9 |
| 1997 | 3.1 | 82.4 | 4.5 | 0.2 | R 17.8 | R 22.5 | R 4.8 | 0.1 | (s) | 39.8 | R 152.8 | R 82.9 | R 235.6 |
| 1998 | 2.3 | 69.7 | 3.2 | 0.1 | 15.1 | 18.4 | 4.3 | 0.1 | (s) | 40.5 | 135.2 | 83.6 | 218.8 |
| 1999 | 3.2 | 72.8 | 2.8 | 0.1 | 18.9 | 21.9 | 4.6 | 0.1 | (s) | 40.5 | 143.1 | 79.3 | 222.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 109. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Iowa

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 592 | 28 | 1,046 | 94 | 584 | 178 | 232 | 2,135 | 3 | — | 1,812 | — | 4,506 | — |
| 1965 | 318 | 39 | 941 | 54 | 837 | 194 | 135 | 2,161 | 2 | — | 2,797 | — | 6,679 | — |
| 1970 | 116 | 57 | 895 | 13 | 1,205 | 271 | 65 | 2,449 | 2 | — | 3,655 | — | 8,857 | — |
| 1975 | 90 | 67 | 722 | 6 | 1,200 | 323 | 115 | 2,366 | 2 | — | 5,121 | — | 12,353 | — |
| 1980 | 59 | 51 | 751 | 5 | 686 | 350 | 79 | 1,871 | 15 | — | 5,502 | — | 13,379 | — |
| 1985 | 180 | 48 | 1,124 | 7 | 529 | 237 | 1 | 1,898 | R 15 | — | 6,306 | — | 14,816 | — |
| 1990 | 159 | 44 | 495 | 38 | 484 | 142 | 31 | 1,190 | R 22 | — | 7,532 | — | R 16,477 | — |
| 1991 | 145 | 47 | 563 | 3 | 593 | 727 | 9 | 1,895 | R 23 | — | 7,938 | — | R 17,257 | — |
| 1992 | 41 | 46 | 488 | 4 | 600 | 645 | 37 | 1,775 | R 25 | — | 7,783 | — | R 16,600 | — |
| 1993 | 44 | 50 | 356 | 7 | 698 | 637 | 5 | 1,703 | 26 | — | 8,536 | — | R 18,029 | — |
| 1994 | 25 | 48 | 391 | 13 | 693 | 35 | 1 | 1,132 | 26 | — | 8,753 | — | R 18,268 | — |
| 1995 | 58 | 50 | 449 | 3 | 700 | 35 | 0 | 1,186 | 26 | — | 8,890 | — | R 18,536 | — |
| 1996 | 144 | 55 | 361 | 4 | R 939 | 244 | 1 | R 1,549 | 28 | — | 8,673 | — | R 18,075 | — |
| 1997 | 243 | 50 | 339 | 8 | R 871 | 445 | 0 | R 1,663 | R 27 | — | 8,944 | — | R 18,604 | — |
| 1998 | 181 | 43 | 456 | 3 | 737 | 470 | 1 | 1,667 | 27 | — | 9,384 | — | 19,386 | — |
| 1999 | 253 | 45 | 443 | 4 | 923 | 433 | 0 | 1,803 | 32 | — | 9,668 | — | 18,942 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 12.6 | 28.8 | 6.1 | 0.5 | 2.3 | 0.9 | 1.5 | 11.4 | 0.1 | 0.0 | 6.2 | 59.1 | 15.4 | 74.4 |
| 1965 | 6.7 | 39.1 | 5.5 | 0.3 | 3.4 | 1.0 | 0.9 | 11.0 | (s) | 0.0 | 9.5 | 66.4 | 22.8 | 89.2 |
| 1970 | 2.4 | 57.8 | 5.2 | 0.1 | 4.6 | 1.4 | 0.4 | 11.7 | (s) | 0.0 | 12.5 | 84.3 | 30.2 | 114.5 |
| 1975 | 1.6 | 67.5 | 4.2 | (s) | 4.5 | 1.7 | 0.7 | 11.1 | (s) | 0.0 | 17.5 | 97.7 | 42.1 | 139.9 |
| 1980 | 1.2 | 50.7 | 4.4 | (s) | 2.5 | 1.8 | 0.5 | 9.3 | 0.3 | 0.0 | 18.8 | 80.2 | 45.6 | 125.9 |
| 1985 | 3.9 | 48.2 | 6.5 | (s) | 1.9 | 1.2 | (s) | 9.7 | R 0.3 | 0.0 | 21.5 | R 83.6 | 50.6 | R 134.1 |
| 1990 | 3.8 | 44.3 | 2.9 | 0.2 | 1.8 | 0.7 | 0.2 | 5.8 | R 0.4 | e 0.0 | 25.7 | R e 80.0 | 56.2 | R e 136.2 |
| 1991 | 3.5 | 47.0 | 3.3 | (s) | 2.1 | 3.8 | 0.1 | 9.3 | R 0.5 | 0.0 | 27.1 | R 87.3 | R 58.9 | R 146.2 |
| 1992 | 1.0 | 46.3 | 2.8 | (s) | 2.2 | 3.4 | 0.2 | 8.7 | R 0.5 | 0.0 | 26.6 | R 83.0 | R 56.6 | R 139.6 |
| 1993 | 1.0 | 50.5 | 2.1 | (s) | 2.5 | 3.3 | (s) | 8.0 | 0.5 | 0.0 | 29.1 | 89.2 | 61.5 | 150.7 |
| 1994 | 0.6 | 48.3 | 2.3 | 0.1 | 2.5 | 0.2 | (s) | 5.1 | 0.5 | 0.1 | 29.9 | 84.4 | 62.3 | 146.8 |
| 1995 | 1.4 | 50.6 | 2.6 | (s) | 2.5 | 0.2 | 0.0 | 5.3 | 0.5 | 0.1 | 30.3 | 88.3 | 63.2 | R 151.6 |
| 1996 | 3.5 | 54.9 | 2.1 | (s) | R 3.4 | 1.3 | (s) | R 6.8 | 0.6 | 0.1 | 29.6 | R 95.5 | R 61.7 | R 157.2 |
| 1997 | 5.7 | 50.6 | 2.0 | (s) | R 3.1 | 2.3 | 0.0 | R 7.5 | 0.5 | 0.2 | 30.5 | R 95.1 | R 63.5 | R 158.5 |
| 1998 | 4.3 | 43.5 | 2.7 | (s) | 2.7 | 2.4 | (s) | 7.8 | 0.5 | 0.2 | 32.0 | 88.4 | 66.1 | 154.5 |
| 1999 | 6.0 | 45.8 | 2.6 | (s) | 3.3 | 2.3 | 0.0 | 8.2 | 0.6 | 0.2 | 33.0 | 93.8 | 64.6 | 158.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 110. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Iowa

| | | | Petroleum | | | | | | | | | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal | Natural Gas [a] | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 2,193 | 43 | 2,579 | 5,536 | 192 | 1,098 | 196 | 5,797 | 573 | 44 | 16,016 | 2 | — | — | 2,676 | — | 6,657 | — |
| 1965 | 2,464 | 68 | 2,569 | 5,607 | 142 | 1,815 | 218 | 5,373 | 354 | 542 | 16,620 | 2 | — | — | 3,719 | — | 8,879 | — |
| 1970 | 1,955 | 99 | 2,914 | 5,884 | 152 | 2,949 | 220 | 5,391 | 261 | 627 | 18,398 | 1 | — | — | 5,338 | — | 12,936 | — |
| 1975 | 1,333 | 121 | 2,294 | 4,670 | 70 | 5,593 | 155 | 3,791 | 279 | 986 | 17,838 | 1 | — | — | 6,626 | — | 15,984 | — |
| 1980 | 1,505 | 115 | 1,699 | 4,698 | 119 | 6,557 | 192 | 2,612 | 273 | 5,236 | 21,385 | 1 | — | — | 9,318 | — | 22,658 | — |
| 1985 | 1,572 | 87 | 2,023 | 4,788 | 33 | 4,893 | 175 | 1,703 | 179 | 1,778 | 15,571 | 1 | — | — | 9,520 | — | 22,367 | — |
| 1990 | 2,353 | 90 | 1,537 | 4,137 | 19 | 3,087 | 196 | 1,072 | 95 | 937 | 11,080 | R f 16 | — | — | 11,392 | — | R 24,922 | — |
| 1991 | 2,672 | 97 | 1,563 | 4,604 | 15 | 3,255 | 176 | 1,160 | 87 | 676 | 11,536 | R 13 | — | — | 11,684 | — | R 25,401 | — |
| 1992 | 2,571 | 101 | 1,406 | 6,221 | 18 | 4,932 | 179 | 1,052 | 70 | 748 | 14,625 | R 14 | — | — | 12,134 | — | R 25,880 | — |
| 1993 | 2,494 | 103 | 1,354 | 6,150 | 31 | 10,944 | 182 | 799 | 160 | 756 | 20,378 | R 19 | — | — | 12,465 | — | R 26,328 | — |
| 1994 | 2,735 | 109 | 1,964 | 6,680 | 28 | 10,894 | 191 | 1,108 | 181 | 688 | 21,734 | R 20 | — | — | 13,224 | — | R 27,598 | — |
| 1995 | 2,761 | 115 | 1,636 | 6,091 | 41 | 12,267 | 187 | 1,038 | 94 | 640 | 21,994 | R 19 | — | — | 13,771 | — | R 28,712 | — |
| 1996 | 3,085 | 114 | 2,052 | 6,334 | 20 | R 4,986 | 182 | 1,105 | 95 | R 2,261 | R 17,035 | R 20 | — | — | 14,789 | — | R 30,820 | — |
| 1997 | 3,151 | 107 | 2,623 | 6,859 | 27 | R 4,399 | 192 | 1,092 | 73 | R 2,425 | R 17,690 | R 12 | — | — | 15,531 | — | R 32,306 | — |
| 1998 | 3,040 | 106 | 2,157 | 6,472 | 34 | 9,946 | 201 | 900 | 93 | 2,525 | 22,329 | 20 | — | — | 16,079 | — | 33,215 | — |
| 1999 | 2,939 | 102 | 2,942 | 5,386 | 44 | 12,589 | 203 | 879 | 120 | 2,624 | 24,788 | 15 | — | — | 16,499 | — | 32,327 | — |

### Trillion Btu

| 1960 | 51.7 | 44.9 | 17.1 | 32.2 | 1.1 | 4.4 | 1.2 | 30.5 | 3.6 | 0.2 | 90.3 | (s) | 2.8 | 0.0 | 9.1 | 198.8 | 22.7 | 221.6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1965 | 57.5 | 68.9 | 17.0 | 32.7 | 0.8 | 7.3 | 1.3 | 28.2 | 2.2 | 2.9 | 92.4 | (s) | 2.9 | 0.0 | 12.7 | 234.5 | 30.3 | 264.8 |
| 1970 | 43.0 | 99.9 | 19.3 | 34.3 | 0.9 | 11.1 | 1.3 | 28.3 | 1.6 | 3.3 | 100.2 | (s) | 3.9 | 0.0 | 18.2 | 265.1 | 44.1 | 309.3 |
| 1975 | 28.4 | 122.5 | 15.2 | 27.2 | 0.4 | 20.8 | 0.9 | 19.9 | 1.8 | 5.4 | 91.6 | (s) | 5.1 | 0.0 | 22.6 | 270.2 | 54.5 | 324.7 |
| 1980 | 32.4 | 114.9 | 11.3 | 27.4 | 0.7 | 24.1 | 1.2 | 13.7 | 1.7 | 28.7 | 108.7 | (s) | R 37.8 | 0.0 | 31.8 | R 325.6 | 77.3 | R 402.9 |
| 1985 | 35.6 | 88.0 | 13.4 | 27.9 | 0.2 | 17.6 | 1.1 | 8.9 | 1.1 | 9.6 | 79.9 | (s) | R 44.3 | 0.0 | 32.5 | R 280.2 | 76.3 | R 356.6 |
| 1990 | 53.1 | 90.9 | 10.2 | 24.1 | 0.1 | 11.2 | 1.2 | 5.6 | 0.6 | 5.1 | 58.1 | f 0.2 | R 8.1 | f 0.0 | 38.9 | R f 249.3 | 85.0 | R f 334.3 |
| 1991 | 59.3 | 98.2 | 10.4 | 26.8 | 0.1 | 11.8 | 1.1 | 6.1 | 0.5 | 3.6 | 60.4 | R 0.1 | R 7.1 | 0.0 | 39.9 | R 265.0 | R 86.7 | R 351.6 |
| 1992 | 52.9 | 101.2 | 9.3 | 36.2 | 0.1 | 17.9 | 1.1 | 5.5 | 0.4 | 4.0 | 74.6 | R 0.1 | R 6.5 | 0.0 | 41.4 | R 276.7 | R 88.3 | R 365.0 |
| 1993 | 50.3 | 102.9 | 9.0 | 35.8 | 0.2 | 39.5 | 1.1 | 4.2 | 1.0 | 4.0 | 94.8 | R 0.2 | R 6.7 | 0.0 | 42.5 | R 297.5 | R 89.8 | R 387.3 |
| 1994 | 55.0 | 109.6 | 13.0 | 38.9 | 0.2 | 39.6 | 1.2 | 5.8 | 1.1 | 3.7 | 103.5 | 0.2 | R 25.6 | 0.0 | 45.1 | R 339.0 | 94.2 | R 433.2 |
| 1995 | 57.9 | 115.7 | 10.9 | 35.5 | 0.2 | 44.4 | 1.1 | R 5.4 | 0.6 | 3.4 | 101.6 | R 0.2 | R 13.6 | 0.0 | 47.0 | R 336.0 | R 98.0 | R 434.0 |
| 1996 | 65.7 | 114.7 | 13.6 | 36.9 | 0.1 | R 18.0 | 1.1 | 5.8 | 0.6 | R 12.1 | R 88.2 | 0.2 | R 12.0 | 0.0 | 50.5 | R 331.3 | R 105.2 | R 436.4 |
| 1997 | 66.0 | 108.4 | 17.4 | 40.0 | 0.2 | R 15.9 | 1.2 | 5.7 | 0.5 | R 13.1 | R 93.8 | 0.1 | R 14.9 | 0.0 | 53.0 | R 336.2 | R 110.2 | R 446.4 |
| 1998 | 64.4 | 107.1 | 14.3 | 37.7 | 0.2 | 35.9 | 1.2 | 4.7 | 0.6 | 13.6 | 108.3 | 0.2 | 3.7 | 0.0 | 54.9 | 338.5 | 113.3 | 451.8 |
| 1999 | 62.2 | 103.9 | 19.5 | 31.4 | 0.2 | 45.5 | 1.2 | 4.6 | 0.8 | 14.1 | 117.3 | 0.2 | 9.7 | 3.4 | 56.3 | 353.0 | 110.3 | 463.3 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 111. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Iowa

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Petroleum — Thousand Barrels | | | | | | | | | |
| 1960 | 36 | 9 | 366 | 1,711 | 195 | 23 | 516 | 23,488 | 227 | 26,526 | 0 | 0 | — | 0 | — |
| 1965 | 8 | 11 | 358 | 1,991 | 232 | 55 | 480 | 25,224 | 15 | 28,354 | 0 | 0 | — | 0 | — |
| 1970 | 3 | 18 | 256 | 4,339 | 725 | 58 | 480 | 30,039 | 26 | 35,923 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 16 | 191 | 6,851 | 835 | 53 | 501 | 34,929 | 0 | 43,359 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 13 | 184 | 7,924 | 813 | 34 | 522 | 32,432 | 0 | 41,909 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 10 | 83 | 8,042 | 592 | 90 | 475 | 29,525 | 0 | 38,807 | R e 820 | 0 | — | 0 | — |
| 1990 | 0 | 9 | 99 | 9,671 | 891 | 42 | 534 | 30,470 | (s) | 41,708 | R 885 | 0 | — | 0 | — |
| 1991 | 0 | 7 | 82 | 8,442 | 892 | 49 | 478 | 30,584 | 0 | 40,528 | R 1,102 | 0 | — | 0 | — |
| 1992 | 0 | 7 | 75 | 8,792 | 803 | 46 | 487 | 30,016 | 0 | 40,219 | R 1,366 | 0 | — | 0 | — |
| 1993 | 0 | 7 | 70 | 9,521 | 720 | 54 | 496 | 31,266 | 0 | 42,128 | R 1,611 | 0 | — | 0 | — |
| 1994 | 0 | 11 | 69 | 10,305 | 897 | 151 | 519 | 32,744 | 0 | 44,684 | R 1,849 | 0 | — | 0 | — |
| 1995 | 0 | 11 | 72 | 11,349 | 1,046 | 58 | 510 | 33,345 | 0 | 46,380 | R 1,811 | 0 | — | 0 | — |
| 1996 | 0 | 13 | 71 | 12,662 | 819 | R 98 | 495 | 34,561 | 0 | R 48,705 | R 1,158 | 0 | — | 0 | — |
| 1997 | 0 | 11 | 78 | 12,377 | 793 | R 91 | 522 | 34,040 | 0 | R 47,901 | R 1,410 | 0 | — | 0 | — |
| 1998 | 0 | 9 | 72 | 12,686 | 1,184 | 21 | 547 | 35,603 | 0 | 50,113 | 1,744 | (s) | — | (s) | — |
| 1999 | 0 | 8 | 81 | 12,862 | 885 | 4 | 553 | 35,681 | 0 | 50,065 | 1,888 | (s) | — | (s) | — |
| | | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 0.9 | 9.2 | 1.8 | 10.0 | 1.0 | 0.1 | 3.1 | 123.4 | 1.4 | 140.9 | 0.0 | 0.0 | 151.0 | 0.0 | 151.0 |
| 1965 | 0.2 | 11.2 | 1.8 | 11.6 | 1.3 | 0.2 | 2.9 | 132.5 | 0.1 | 150.4 | 0.0 | 0.0 | 161.7 | 0.0 | 161.7 |
| 1970 | 0.1 | 18.5 | 1.3 | 25.3 | 4.1 | 0.2 | 2.9 | 157.8 | 0.2 | 191.7 | 0.0 | 0.0 | 210.2 | 0.0 | 210.2 |
| 1975 | (s) | 16.2 | 1.0 | 39.9 | 4.7 | 0.2 | 3.0 | 183.5 | 0.0 | 232.3 | 0.0 | 0.0 | 248.5 | 0.0 | 248.5 |
| 1980 | 0.0 | 12.7 | 0.9 | 46.2 | 4.6 | 0.1 | 3.2 | 170.4 | 0.0 | 225.3 | 0.0 | 0.0 | 238.0 | 0.0 | 238.0 |
| 1985 | 0.0 | 10.5 | 0.4 | 46.8 | 3.3 | 0.3 | 2.9 | 155.1 | 0.0 | 208.9 | R e 2.9 | 0.0 | e 219.3 | 0.0 | e 219.3 |
| 1990 | 0.0 | 9.2 | 0.5 | 56.3 | 5.0 | 0.2 | 3.2 | 160.1 | (s) | 225.3 | R 3.1 | 0.0 | 234.5 | 0.0 | 234.5 |
| 1991 | 0.0 | 6.7 | 0.4 | 49.2 | 5.0 | 0.2 | 2.9 | 160.7 | 0.0 | 218.3 | R 3.9 | 0.0 | 225.0 | 0.0 | 225.0 |
| 1992 | 0.0 | 7.0 | 0.4 | 51.2 | 4.5 | 0.2 | 3.0 | 157.7 | 0.0 | 216.9 | R 4.8 | 0.0 | 223.9 | 0.0 | 223.9 |
| 1993 | 0.0 | 7.4 | 0.4 | 55.5 | 4.1 | 0.2 | 3.0 | 164.2 | 0.0 | 227.3 | R 5.7 | 0.0 | 234.7 | 0.0 | 234.7 |
| 1994 | 0.0 | 10.8 | 0.3 | 60.0 | 5.1 | 0.5 | 3.1 | R 171.2 | 0.0 | R 240.4 | R 6.5 | 0.0 | R 251.2 | 0.0 | R 251.2 |
| 1995 | 0.0 | 11.1 | 0.4 | 66.1 | 5.9 | 0.2 | 3.1 | R 173.9 | 0.0 | R 249.6 | R 6.4 | 0.0 | R 260.7 | 0.0 | R 260.7 |
| 1996 | 0.0 | 12.7 | 0.4 | 73.8 | 4.6 | R 0.4 | 3.0 | R 180.3 | 0.0 | R 262.4 | R 4.1 | 0.0 | R 275.1 | 0.0 | R 275.1 |
| 1997 | 0.0 | 11.4 | 0.4 | 72.1 | 4.5 | 0.3 | 3.2 | R 177.4 | 0.0 | R 257.9 | R 5.0 | 0.0 | R 269.3 | 0.0 | R 269.3 |
| 1998 | 0.0 | 8.9 | 0.4 | 73.9 | 6.7 | 0.1 | 3.3 | 185.6 | 0.0 | 269.9 | 6.2 | (s) | 278.8 | (s) | 278.8 |
| 1999 | 0.0 | 7.9 | 0.4 | 74.9 | 5.0 | (s) | 3.4 | 185.9 | 0.0 | 269.6 | 6.7 | (s) | 277.5 | (s) | 277.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 112.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Iowa

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total [g] |
| 1960 | 2,118 | 49 | 39 | 259 | 0 | 298 | 0 | 879 | 25 | 0 | 0 | — |
| 1965 | 2,760 | 52 | 27 | 183 | 0 | 210 | 0 | 926 | 30 | 0 | 0 | — |
| 1970 | 4,030 | 78 | 49 | 327 | 0 | 375 | 0 | 934 | 38 | 0 | 0 | — |
| 1975 | 4,936 | 47 | 214 | 507 | 0 | 722 | 2,291 | 877 | 40 | 0 | 0 | — |
| 1980 | 10,745 | 7 | 63 | 168 | 0 | 231 | 2,563 | 945 | 29 | 0 | 0 | — |
| 1985 | 12,491 | 2 | 2 | 101 | 0 | 103 | 1,927 | 2,047 | 60 | 0 | 0 | — |
| 1990 | 15,331 | 3 | 0 | 123 | 0 | 123 | 3,012 | 857 | 17 | 0 | 0 | — |
| 1991 | 15,846 | 4 | 0 | 109 | 0 | 109 | 4,147 | 883 | 20 | 0 | 0 | — |
| 1992 | 15,357 | 2 | 0 | 90 | 0 | 90 | 3,405 | 981 | 14 | 0 | 0 | — |
| 1993 | 16,623 | 4 | 0 | 122 | 0 | 122 | 3,235 | 737 | 20 | 0 | 0 | — |
| 1994 | 16,565 | 3 | 0 | 183 | 0 | 183 | 4,107 | 1,053 | 28 | 0 | (s) | — |
| 1995 | 17,785 | 4 | 0 | 148 | 0 | 148 | 3,730 | 991 | 20 | 0 | (s) | — |
| 1996 | 17,864 | 3 | 0 | 134 | 0 | 134 | 3,924 | 918 | 23 | 0 | (s) | — |
| 1997 | 18,194 | 4 | 0 | 211 | 0 | 211 | 4,149 | R 899 | 22 | 0 | (s) | — |
| 1998 | 20,031 | 6 | 0 | 269 | 0 | 269 | 3,768 | 964 | 19 | 0 | (s) | — |
| 1999 | 20,071 | 5 | 0 | 299 | 0 | 299 | 3,640 | 974 | 20 | 0 | 2 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 44.0 | 50.3 | 0.2 | 1.5 | 0.0 | 1.8 | 0.0 | 9.5 | 0.3 | 0.0 | 0.0 | 105.8 |
| 1965 | 58.6 | 52.8 | 0.2 | 1.1 | 0.0 | 1.2 | 0.0 | 9.7 | 0.3 | 0.0 | 0.0 | 122.6 |
| 1970 | 84.2 | 78.6 | 0.3 | 1.9 | 0.0 | 2.2 | 0.0 | 9.8 | 0.4 | 0.0 | 0.0 | 175.2 |
| 1975 | 100.6 | 47.3 | 1.3 | 3.0 | 0.0 | 4.3 | 25.2 | 9.1 | 0.4 | 0.0 | 0.0 | 187.0 |
| 1980 | 200.2 | 6.9 | 0.4 | 1.0 | 0.0 | 1.4 | 28.0 | 9.8 | 0.3 | 0.0 | 0.0 | 246.6 |
| 1985 | 227.3 | 2.1 | (s) | 0.6 | 0.0 | 0.6 | 20.8 | 21.4 | 0.6 | 0.0 | 0.0 | 272.9 |
| 1990 | 272.6 | 3.5 | 0.0 | 0.7 | 0.0 | 0.7 | 32.2 | 8.9 | 0.2 | 0.0 | 0.0 | 318.1 |
| 1991 | 281.8 | 3.7 | 0.0 | 0.6 | 0.0 | 0.6 | 44.5 | 9.2 | 0.2 | 0.0 | 0.0 | 340.0 |
| 1992 | 272.3 | 2.3 | 0.0 | 0.5 | 0.0 | 0.5 | 36.4 | 10.1 | 0.1 | 0.0 | 0.0 | 321.8 |
| 1993 | 287.9 | 4.3 | 0.0 | 0.7 | 0.0 | 0.7 | 34.6 | 7.6 | 0.2 | 0.0 | 0.0 | 335.3 |
| 1994 | 291.0 | 2.7 | 0.0 | 1.1 | 0.0 | 1.1 | 43.9 | 10.9 | 0.3 | 0.0 | (s) | 349.8 |
| 1995 | 308.7 | 3.6 | 0.0 | 0.9 | 0.0 | 0.9 | 39.8 | 10.2 | 0.2 | 0.0 | (s) | 363.4 |
| 1996 | 309.3 | 3.4 | 0.0 | 0.8 | 0.0 | 0.8 | 41.7 | 9.5 | 0.2 | 0.0 | (s) | 364.9 |
| 1997 | 315.2 | 4.1 | 0.0 | 1.2 | 0.0 | 1.2 | 44.1 | R 9.3 | 0.2 | 0.0 | (s) | R 374.8 |
| 1998 | 346.0 | 6.0 | 0.0 | 1.6 | 0.0 | 1.6 | 40.0 | 10.0 | 0.2 | 0.0 | (s) | 403.7 |
| 1999 | 344.5 | 5.3 | 0.0 | 1.7 | 0.0 | 1.7 | 38.7 | 10.1 | 0.2 | 0.0 | (s) | 400.3 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 113. Energy Consumption Estimates by Source, Selected Years 1960-1999, Kansas

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
| **Thousand Barrels** | | | | | | | | | | | | | | | | | | | |
| 1960 | 675 | 361 | 2,198 | 170 | 4,739 | 952 | 696 | 5,590 | 737 | 23,712 | 2,403 | R 5,801 | R 46,998 | 0 | 20 | — | — | -4,181 | — |
| 1965 | 644 | 443 | 3,061 | 493 | 5,257 | 1,053 | 1,813 | 6,521 | 770 | 25,525 | 1,066 | R 6,186 | R 51,744 | 0 | 13 | — | — | -3,746 | — |
| 1970 | 458 | 576 | 2,188 | 326 | 7,550 | 1,561 | 306 | 8,009 | 655 | 28,849 | 1,127 | R 6,618 | R 57,189 | 0 | 7 | — | — | -5,106 | — |
| 1975 | 3,117 | 499 | 2,162 | 177 | 11,273 | 1,310 | 100 | 8,857 | 773 | 32,004 | 6,365 | R 8,568 | R 71,589 | 0 | 5 | — | — | -5,045 | — |
| 1980 | 10,370 | 488 | 3,019 | 221 | 14,764 | 2,466 | 492 | 8,404 | 1,011 | 29,584 | 1,498 | R 8,430 | R 69,890 | 0 | 8 | — | — | -9,085 | — |
| 1985 | 14,715 | 355 | 1,700 | 137 | 15,040 | 4,424 | 57 | 24,510 | 920 | 28,209 | 86 | R 5,705 | R 80,789 | 3,856 | 9 | — | — | -13,553 | — |
| 1990 | 15,175 | 353 | 3,875 | 136 | 16,561 | 3,701 | 27 | 15,565 | 1,035 | 28,626 | 232 | R 7,809 | R 77,569 | 7,874 | R h 24 | — | — | R -25,070 | — |
| 1991 | 14,881 | 371 | 3,721 | 124 | 15,714 | 3,296 | 24 | 13,293 | 926 | 28,041 | 128 | R 5,973 | R 71,240 | 5,859 | R 21 | — | — | R -17,331 | — |
| 1992 | 14,227 | 343 | 3,715 | 142 | 15,154 | 4,164 | 33 | 16,816 | 944 | 27,821 | 180 | R 6,595 | R 75,565 | 8,491 | R 13 | — | — | R -19,314 | — |
| 1993 | 17,386 | 392 | 3,635 | 151 | 16,268 | 3,617 | 36 | 8,269 | 962 | 28,480 | 373 | R 5,563 | R 67,354 | 7,900 | R 12 | — | — | R -28,923 | — |
| 1994 | 17,158 | 418 | 4,741 | 142 | 15,770 | 1,981 | 17 | 7,754 | 1,005 | 29,073 | 190 | R 6,137 | R 66,810 | 8,529 | R 12 | — | — | R -30,096 | — |
| 1995 | 16,521 | 368 | 3,911 | 146 | 19,446 | 2,414 | 28 | 4,924 | 988 | 29,402 | 31 | R 5,872 | R 67,162 | 10,062 | R 14 | — | — | R -29,710 | — |
| 1996 | 19,084 | 363 | 3,581 | 177 | 16,964 | 2,009 | 37 | R 10,442 | 959 | 30,927 | 292 | R 7,941 | R 73,329 | 8,205 | R 14 | — | — | R -33,767 | — |
| 1997 | 17,673 | R 339 | 2,115 | 247 | 17,142 | 2,130 | 58 | R 14,557 | 1,013 | 30,695 | 260 | R 8,119 | R 76,336 | 8,430 | R 15 | — | — | R -24,792 | — |
| 1998 | 17,736 | 327 | 2,699 | 199 | 16,215 | 2,157 | 50 | 14,121 | 1,060 | 32,001 | 286 | 7,344 | 76,133 | 10,411 | 14 | — | — | -28,940 | — |
| 1999 | 19,004 | 303 | 2,358 | 240 | 15,514 | 3,476 | 360 | 21,741 | 1,071 | 33,550 | 616 | 7,585 | 86,511 | 9,157 | 13 | — | — | -35,681 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 15.7 | 373.7 | 14.6 | 0.9 | 27.6 | 5.1 | 3.9 | 22.4 | 4.5 | 124.6 | 15.1 | R 34.8 | R 253.4 | 0.0 | 0.2 | 3.9 | 0.0 | -14.3 | R 632.7 |
| 1965 | 15.3 | 440.8 | 20.3 | 2.5 | 30.6 | 5.7 | 10.3 | 26.2 | 4.7 | 134.1 | 6.7 | R 37.0 | R 278.0 | 0.0 | 0.1 | 3.4 | 0.0 | -12.8 | R 724.8 |
| 1970 | 10.7 | 574.5 | 14.5 | 1.6 | 44.0 | 8.6 | 1.7 | 30.3 | 4.0 | 151.5 | 7.1 | R 39.5 | R 302.8 | 0.0 | 0.1 | 3.7 | 0.0 | -17.4 | R 874.4 |
| 1975 | 62.3 | 490.7 | 14.3 | 0.9 | 65.7 | 7.2 | 0.6 | 32.9 | 4.7 | 168.1 | 40.0 | R 51.2 | R 385.6 | 0.0 | (s) | 5.8 | 0.0 | -17.2 | R 927.2 |
| 1980 | 191.6 | 482.0 | 20.0 | 1.1 | 86.0 | 13.8 | 2.8 | 30.9 | 6.1 | 155.4 | 9.4 | R 50.1 | R 375.7 | 0.0 | 0.1 | R 10.8 | 0.0 | -31.0 | R 1,029.1 |
| 1985 | 259.5 | 354.8 | 11.3 | 0.7 | 87.6 | 24.8 | 0.3 | 88.3 | 5.6 | 148.2 | 0.5 | R 34.1 | R 401.5 | 41.7 | 0.1 | R 10.3 | (s) | -46.2 | R 1,021.0 |
| 1990 | 272.6 | 352.6 | 25.7 | 0.7 | 96.5 | 20.7 | 0.2 | 56.4 | 6.3 | 150.4 | 1.5 | R 46.1 | R 404.3 | 84.1 | R h 0.3 | R 8.1 | h 0.1 | R -85.5 | R h 1,036.6 |
| 1991 | 268.7 | 373.2 | 24.7 | 0.6 | 91.5 | 18.3 | 0.1 | 48.0 | 5.6 | 147.3 | 0.8 | R 35.8 | R 372.8 | 62.9 | 0.2 | R 8.3 | 0.1 | R -59.1 | R 1,027.1 |
| 1992 | 254.3 | 338.8 | 24.7 | 0.7 | 88.3 | 23.2 | 0.2 | 60.9 | 5.7 | 146.1 | 1.1 | R 39.1 | R 390.0 | 90.7 | 0.1 | R 8.6 | 0.1 | R -65.9 | R 1,016.7 |
| 1993 | 301.9 | 386.5 | 24.1 | 0.8 | 94.8 | 20.2 | 0.2 | 29.8 | 5.8 | 149.6 | 2.3 | R 33.1 | R 360.8 | 84.4 | 0.1 | R 7.5 | 0.1 | R -98.7 | R 1,042.6 |
| 1994 | 300.0 | 417.2 | 31.5 | 0.7 | 91.9 | 11.0 | 0.1 | 28.2 | 6.1 | R 152.1 | 1.2 | R 36.4 | R 359.1 | 91.1 | 0.1 | R 7.7 | 0.2 | -102.7 | R 1,072.7 |
| 1995 | 289.6 | 369.1 | 26.0 | 0.7 | 113.3 | 13.7 | 0.2 | 17.8 | 6.0 | R 153.3 | 0.2 | R 34.9 | R 366.0 | 107.2 | 0.1 | R 8.8 | 0.2 | R -101.4 | R 1,039.6 |
| 1996 | 338.6 | 362.0 | 23.8 | 0.9 | 98.8 | 11.4 | 0.2 | R 37.7 | 5.8 | R 161.3 | 1.8 | R 46.0 | R 387.8 | 87.2 | 0.1 | R 8.9 | 0.2 | R -115.2 | R 1,069.7 |
| 1997 | 310.8 | R 339.5 | 14.0 | 1.2 | 99.9 | 12.1 | 0.3 | R 52.6 | 6.1 | R 160.0 | 1.6 | R 47.1 | R 395.0 | 89.6 | R 0.2 | R 7.1 | 0.2 | R -84.6 | R 1,057.9 |
| 1998 | 309.3 | 325.3 | 17.9 | 1.0 | 94.5 | 12.2 | 0.3 | 51.0 | 6.4 | 166.8 | 1.8 | 42.6 | 394.5 | 110.6 | 0.1 | 4.9 | 0.3 | -98.7 | 1,046.2 |
| 1999 | 328.8 | 302.2 | 15.6 | 1.2 | 90.4 | 19.7 | 2.0 | 78.6 | 6.5 | 174.8 | 3.9 | 43.9 | 436.7 | 97.3 | 0.1 | 6.4 | 0.3 | -121.7 | 1,050.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 114.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Kansas

| Year | Coal[a]<br>Thousand<br>Short Tons | Natural<br>Gas[b]<br>Billion<br>Cubic Feet | Petroleum — Distillate<br>Fuel[a]<br>Thousand Barrels | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Total | Wood<br>Thousand<br>Cords | Geothermal | Solar[c] | Electricity[a]<br>Million<br>Kilowatthours | Net<br>Energy | Electrical System<br>Energy Losses[d]<br>Million<br>Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 22 | 73 | 53 | 303 | 3,447 | 3,804 | 157 | — | — | 2,360 | — | 5,869 | — |
| 1965 | 6 | 87 | 50 | 1,285 | 3,991 | 5,327 | 102 | — | — | 3,251 | — | 7,762 | — |
| 1970 | 4 | 97 | 53 | 116 | 4,825 | 4,994 | 80 | — | — | 5,348 | — | 12,960 | — |
| 1975 | 0 | 98 | 96 | 60 | 4,563 | 4,719 | 93 | — | — | 5,695 | — | 13,736 | — |
| 1980 | 2 | 85 | 150 | 5 | 2,083 | 2,237 | R 527 | — | — | 7,189 | — | 17,481 | — |
| 1985 | (s) | 78 | 65 | 27 | 1,469 | 1,561 | 501 | — | — | 8,195 | — | 19,252 | — |
| 1990 | (s) | 71 | 24 | 11 | 1,182 | 1,218 | 317 | — | — | 9,515 | — | R 20,814 | — |
| 1991 | (s) | 75 | 23 | 10 | 1,305 | 1,338 | 334 | — | — | 9,933 | — | R 21,594 | — |
| 1992 | (s) | 72 | 29 | 13 | 1,079 | 1,121 | 352 | — | — | 8,873 | — | R 18,924 | — |
| 1993 | 8 | 85 | 27 | 20 | 1,092 | 1,139 | 293 | — | — | 9,986 | — | R 21,093 | — |
| 1994 | 11 | 74 | 27 | 8 | 1,054 | 1,089 | 287 | — | — | 10,131 | — | R 21,142 | — |
| 1995 | 13 | 76 | 15 | 13 | 1,469 | 1,497 | R 319 | — | — | 10,356 | — | R 21,591 | — |
| 1996 | 27 | 85 | 18 | 19 | R 1,971 | R 2,008 | 318 | — | — | 10,672 | — | R 22,241 | — |
| 1997 | 1 | 69 | 37 | 12 | R 2,382 | R 2,431 | R 225 | — | — | 10,862 | — | R 22,594 | — |
| 1998 | (s) | 70 | 11 | 18 | 2,538 | 2,567 | 199 | — | — | 11,832 | — | 24,442 | — |
| 1999 | 2 | 68 | 13 | 346 | 3,342 | 3,700 | 213 | — | — | 11,347 | — | 22,233 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.5 | 76.1 | 0.3 | 1.7 | 13.8 | 15.9 | 3.1 | 0.0 | 0.0 | 8.1 | 103.6 | 20.0 | 123.6 |
| 1965 | 0.1 | 86.4 | 0.3 | 7.3 | 16.0 | 23.6 | 2.0 | 0.0 | 0.0 | 11.1 | 123.2 | 26.5 | 149.7 |
| 1970 | 0.1 | 97.1 | 0.3 | 0.7 | 18.2 | 19.2 | 1.6 | 0.0 | 0.0 | 18.2 | 136.2 | 44.2 | 180.5 |
| 1975 | 0.0 | 96.6 | 0.6 | 0.3 | 17.0 | 17.9 | 1.9 | 0.0 | 0.0 | 19.4 | 135.7 | 46.9 | 182.6 |
| 1980 | (s) | 84.8 | 0.9 | (s) | 7.7 | 8.6 | 10.5 | 0.0 | 0.0 | 24.5 | 128.4 | 59.6 | 188.1 |
| 1985 | (s) | 78.3 | 0.4 | 0.2 | 5.3 | 5.8 | 10.0 | 0.0 | 0.0 | 28.0 | 122.2 | 65.7 | 187.8 |
| 1990 | (s) | 71.3 | 0.1 | 0.1 | 4.3 | 4.5 | 6.3 | e (s) | e (s) | 32.5 | e 114.7 | 71.0 | e 185.7 |
| 1991 | (s) | 75.7 | 0.1 | 0.1 | 4.7 | 4.9 | 6.7 | (s) | (s) | 33.9 | 121.2 | R 73.7 | R 194.9 |
| 1992 | (s) | 70.6 | 0.2 | 0.1 | 3.9 | 4.2 | 7.0 | (s) | (s) | 30.3 | 112.2 | R 64.6 | R 176.7 |
| 1993 | 0.2 | 83.9 | 0.2 | 0.1 | 3.9 | 4.2 | 5.9 | (s) | (s) | 34.1 | 128.2 | 72.0 | 200.2 |
| 1994 | 0.3 | 74.1 | 0.2 | (s) | 3.8 | 4.0 | 5.7 | (s) | (s) | 34.6 | 118.8 | 72.1 | 190.9 |
| 1995 | 0.3 | 76.1 | 0.1 | 0.1 | 5.3 | 5.5 | 6.4 | (s) | (s) | 35.3 | 123.7 | R 73.7 | R 197.4 |
| 1996 | 0.7 | 85.2 | 0.1 | 0.1 | R 7.1 | R 7.3 | 6.4 | (s) | (s) | 36.4 | R 136.0 | R 75.9 | R 211.9 |
| 1997 | (s) | R 69.6 | 0.2 | 0.1 | R 8.6 | R 8.9 | R 4.5 | (s) | (s) | 37.1 | R 120.2 | R 77.1 | R 197.3 |
| 1998 | (s) | 69.8 | 0.1 | 0.1 | 9.2 | 9.3 | 4.0 | (s) | (s) | 40.4 | 123.6 | 83.4 | 207.0 |
| 1999 | 0.1 | 67.8 | 0.1 | 2.0 | 12.1 | 14.1 | 4.3 | (s) | (s) | 38.7 | 125.0 | 75.9 | 200.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 115. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Kansas

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 40 | 41 | 115 | 87 | 608 | 179 | 47 | 1,036 | 3 | — | 1,727 | — | 4,296 | — |
| 1965 | 11 | 38 | 109 | 367 | 704 | 204 | 19 | 1,403 | 2 | — | 2,597 | — | 6,200 | — |
| 1970 | 7 | 53 | 115 | 33 | 851 | 215 | 34 | 1,249 | 2 | — | 3,967 | — | 9,614 | — |
| 1975 | 0 | 52 | 209 | 17 | 805 | 268 | 36 | 1,335 | 2 | — | 5,614 | — | 13,542 | — |
| 1980 | 3 | 59 | 360 | 10 | 368 | 279 | 0 | 1,016 | 13 | — | 6,806 | — | 16,550 | — |
| 1985 | 1 | 57 | 698 | 10 | 259 | 177 | 0 | 1,145 | R 13 | — | 8,174 | — | 19,205 | — |
| 1990 | (s) | 56 | 283 | 6 | 209 | 162 | 27 | 687 | R 20 | — | 9,547 | — | R 20,885 | — |
| 1991 | (s) | 59 | 363 | 4 | 230 | 124 | 7 | 728 | R 21 | — | 9,935 | — | R 21,598 | — |
| 1992 | (s) | 54 | 502 | 4 | 190 | 109 | 22 | 827 | R 23 | — | 9,746 | — | R 20,785 | — |
| 1993 | 15 | 56 | 645 | 7 | 193 | 55 | 30 | 929 | 24 | — | 10,120 | — | R 21,374 | — |
| 1994 | 21 | 52 | 499 | 4 | 186 | 76 | 2 | 766 | 24 | — | 10,482 | — | R 21,875 | — |
| 1995 | 25 | 53 | 608 | 6 | 259 | 74 | 12 | 959 | 24 | — | 10,645 | — | R 22,194 | — |
| 1996 | 51 | 57 | 562 | 5 | R 348 | 99 | 2 | R 1,015 | 26 | — | 11,388 | — | R 23,732 | — |
| 1997 | 2 | 41 | 501 | 28 | R 420 | 90 | 0 | R 1,039 | R 25 | — | 12,043 | — | R 25,051 | — |
| 1998 | (s) | 42 | 434 | 9 | 448 | 94 | 84 | 1,069 | 25 | — | 12,546 | — | 25,918 | — |
| 1999 | 5 | 40 | 432 | 4 | 590 | 61 | 0 | 1,086 | 30 | — | 12,258 | — | 24,018 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Motor Gasoline | Residual Fuel | Total | Wood | Geothermal | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.9 | 42.6 | 0.7 | 0.5 | 2.4 | 0.9 | 0.3 | 4.8 | 0.1 | 0.0 | 5.9 | 54.3 | 14.7 | 68.9 |
| 1965 | 0.2 | 38.3 | 0.6 | 2.1 | 2.8 | 1.1 | 0.1 | 6.7 | (s) | 0.0 | 8.9 | 54.2 | 21.2 | 75.3 |
| 1970 | 0.1 | 52.5 | 0.7 | 0.2 | 3.2 | 1.1 | 0.2 | 5.4 | (s) | 0.0 | 13.5 | 71.7 | 32.8 | 104.5 |
| 1975 | 0.0 | 50.8 | 1.2 | 0.1 | 3.0 | 1.4 | 0.2 | 5.9 | (s) | 0.0 | 19.2 | 75.9 | 46.2 | 122.1 |
| 1980 | 0.1 | 58.5 | 2.1 | 0.1 | 1.4 | 1.5 | 0.0 | 5.0 | 0.3 | 0.0 | 23.2 | 87.0 | 56.5 | 143.5 |
| 1985 | (s) | 56.5 | 4.1 | 0.1 | 0.9 | 0.9 | 0.0 | 6.0 | R 0.3 | 0.0 | 27.9 | R 90.7 | 65.5 | R 156.2 |
| 1990 | (s) | 56.0 | 1.6 | (s) | 0.8 | 0.9 | 0.2 | 3.5 | R 0.4 | e (s) | 32.6 | R e 92.5 | R 71.3 | R e 163.8 |
| 1991 | (s) | 59.2 | 2.1 | (s) | 0.8 | 0.7 | (s) | 3.7 | R 0.4 | (s) | 33.9 | R 97.3 | R 73.7 | R 171.0 |
| 1992 | (s) | 53.3 | 2.9 | (s) | 0.7 | 0.6 | 0.1 | 4.3 | R 0.5 | 0.1 | 33.3 | R 91.4 | R 70.9 | R 162.3 |
| 1993 | 0.3 | 55.3 | 3.8 | (s) | 0.7 | 0.3 | 0.2 | 5.0 | 0.5 | 0.1 | 34.5 | 95.7 | R 72.9 | R 168.6 |
| 1994 | 0.5 | 52.2 | 2.9 | (s) | 0.7 | 0.4 | (s) | 4.0 | 0.5 | 0.1 | 35.8 | 93.1 | 74.6 | 167.7 |
| 1995 | 0.6 | 53.3 | 3.5 | (s) | 0.9 | 0.4 | 0.1 | 5.0 | 0.5 | 0.1 | 36.3 | 95.8 | 75.7 | 171.5 |
| 1996 | 1.2 | 57.1 | 3.3 | (s) | R 1.3 | 0.5 | (s) | R 5.1 | 0.5 | 0.1 | 38.9 | R 102.9 | R 81.0 | R 183.9 |
| 1997 | (s) | R 41.6 | 2.9 | 0.2 | R 1.5 | 0.5 | 0.0 | R 5.1 | R 0.5 | 0.2 | 41.1 | R 88.5 | R 85.5 | R 173.9 |
| 1998 | (s) | 41.5 | 2.5 | (s) | 1.6 | 0.5 | 0.5 | 5.2 | 0.5 | 0.2 | 42.8 | 90.3 | 88.4 | 178.7 |
| 1999 | 0.1 | 39.5 | 2.5 | (s) | 2.1 | 0.3 | 0.0 | 5.0 | 0.6 | 0.2 | 41.8 | 87.2 | 81.9 | 169.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# K A N S A S

## Table 116. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Kansas

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| | | | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |

**Thousand Barrels / Million kWh**

| Year | Coal | Natural Gas | Asphalt | Distillate | Kerosene | LPG | Lubricants | Motor Gasoline | Residual | Other | Total | Hydro | Wood | Other | Electricity | Net | Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 175 | 121 | 2,198 | 1,405 | 306 | 1,321 | 230 | 4,557 | 1,924 | R 5,801 | R 17,742 | 0 | — | — | 2,932 | — | 7,293 | — |
| 1965 | 148 | 155 | 3,061 | 1,553 | 160 | 1,530 | 303 | 3,535 | 755 | R 6,186 | R 17,084 | 0 | — | — | 3,902 | — | 9,318 | — |
| 1970 | 103 | 184 | 2,188 | 2,515 | 157 | 1,985 | 207 | 2,777 | 701 | R 6,618 | R 17,149 | 0 | — | — | 4,548 | — | 11,022 | — |
| 1975 | 134 | 152 | 2,162 | 3,532 | 23 | 3,125 | 253 | 2,406 | 2,178 | R 8,564 | R 22,244 | 0 | — | — | 6,214 | — | 14,990 | — |
| 1980 | 331 | 191 | 3,019 | 3,476 | 477 | 5,844 | 408 | 1,198 | 1,004 | R 8,430 | R 23,856 | 0 | — | — | 7,845 | — | 19,076 | — |
| 1985 | 363 | 161 | 1,700 | 3,908 | 20 | 22,687 | 371 | 1,064 | 66 | R 5,705 | R 35,521 | 0 | — | — | 7,167 | — | 16,839 | — |
| 1990 | 157 | 158 | 3,875 | 3,912 | 10 | 14,032 | 418 | 765 | 184 | R 7,809 | R 31,003 | R f 12 | — | — | 8,087 | — | R 17,691 | — |
| 1991 | 148 | 168 | 3,721 | 4,580 | 11 | 11,649 | 374 | 755 | 118 | R 5,973 | R 27,180 | R 11 | — | — | 8,284 | — | R 18,008 | — |
| 1992 | 158 | 175 | 3,715 | 4,546 | 15 | 15,448 | 381 | 675 | 157 | R 6,595 | R 31,532 | R 13 | — | — | 8,451 | — | R 18,023 | — |
| 1993 | 137 | 196 | 3,635 | 5,103 | 10 | 6,885 | 388 | 892 | 303 | R 5,563 | R 22,779 | R 12 | — | — | 8,702 | — | R 18,381 | — |
| 1994 | 137 | 233 | 4,741 | 5,387 | 6 | 6,364 | 405 | 943 | 175 | R 6,137 | R 24,159 | R 12 | — | — | 9,001 | — | R 18,785 | — |
| 1995 | 138 | 177 | 3,911 | 5,207 | 10 | 3,140 | 398 | 995 | 19 | R 5,872 | R 19,551 | R 14 | — | — | 9,356 | — | R 19,507 | — |
| 1996 | 154 | R 159 | 3,581 | 4,892 | 13 | R 8,100 | 387 | 1,021 | 135 | R 7,941 | R 26,069 | R 14 | — | — | 9,231 | — | R 19,237 | — |
| 1997 | 137 | R 163 | 2,115 | 5,580 | 19 | R 11657 | 408 | 1,055 | 171 | R 8,119 | R 29,123 | R 15 | — | — | 9,365 | — | R 19,480 | — |
| 1998 | 109 | 145 | 2,699 | 4,776 | 23 | 11,109 | 428 | 1,156 | 195 | 7,344 | 27,731 | 11 | — | — | 9,762 | — | 20,166 | — |
| 1999 | 108 | 128 | 2,358 | 4,393 | 10 | 17,786 | 432 | 725 | 268 | 7,585 | 33,558 | 12 | — | — | 10,215 | — | 20,013 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt | Distillate | Kerosene | LPG | Lubricants | Motor Gasoline | Residual | Other | Total | Hydro | Wood | Other | Electricity | Net | Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 4.0 | 125.7 | 14.6 | 8.2 | 1.7 | 5.3 | 1.4 | 23.9 | 12.1 | R 34.8 | R 102.0 | 0.0 | 0.7 | 0.0 | 10.0 | R 242.3 | 24.9 | R 267.2 |
| 1965 | 3.3 | 154.3 | 20.3 | 9.0 | 0.9 | 6.1 | 1.8 | 18.6 | 4.7 | R 37.0 | R 98.6 | 0.0 | 1.3 | 0.0 | 13.3 | R 270.8 | 31.8 | R 302.6 |
| 1970 | 2.2 | 184.1 | 14.5 | 14.7 | 0.9 | 7.5 | 1.3 | 14.6 | 4.4 | R 39.5 | R 97.3 | 0.0 | 2.0 | 0.0 | 15.5 | R 301.1 | 37.6 | R 338.7 |
| 1975 | 2.7 | 148.8 | 14.3 | 20.6 | 0.1 | 11.6 | 1.5 | 12.6 | 13.7 | R 51.2 | R 125.7 | 0.0 | 3.9 | 0.0 | 21.2 | R 302.3 | 51.1 | R 353.5 |
| 1980 | 7.1 | 189.7 | 20.0 | 20.2 | 2.7 | 21.5 | 2.5 | 6.3 | 6.3 | R 50.1 | R 129.7 | 0.0 | R 0.0 | 0.0 | 26.8 | R 353.3 | 65.1 | R 418.3 |
| 1985 | 7.8 | 161.3 | 11.3 | 22.8 | 0.1 | 81.7 | 2.3 | 5.6 | 0.4 | R 34.1 | R 158.3 | 0.0 | R 0.0 | 0.0 | 24.5 | R 351.8 | 57.5 | R 409.3 |
| 1990 | 3.8 | 157.8 | 25.7 | 22.8 | 0.1 | 50.9 | 2.5 | 4.0 | 1.2 | R 46.1 | R 153.2 | f 0.1 | R 1.4 | f 0.0 | 27.6 | R f 343.9 | 60.4 | R f 404.2 |
| 1991 | 3.6 | 170.0 | 24.7 | 26.7 | 0.1 | 42.1 | 2.3 | 4.0 | 0.7 | R 35.8 | R 136.3 | 0.1 | R 1.2 | 0.0 | 28.3 | R 339.5 | R 61.4 | R 400.9 |
| 1992 | 3.9 | 172.4 | 24.7 | 26.5 | 0.1 | 56.0 | 2.3 | 3.5 | 1.0 | R 39.1 | R 153.1 | 0.1 | R 1.1 | 0.0 | 28.8 | R 359.4 | R 61.5 | R 420.9 |
| 1993 | 3.2 | 193.3 | 24.1 | 29.7 | 0.1 | 24.8 | 2.4 | 4.7 | 1.9 | R 33.1 | R 120.8 | 0.1 | R 1.1 | 0.0 | 29.7 | R 348.2 | 62.7 | R 410.9 |
| 1994 | 3.3 | 232.4 | 31.5 | 31.4 | (s) | 23.1 | 2.5 | R 4.9 | 1.1 | R 36.4 | R 130.9 | 0.1 | R 1.5 | 0.0 | 30.7 | R 398.9 | 64.1 | R 463.0 |
| 1995 | 3.3 | 177.5 | 26.0 | 30.3 | 0.1 | 11.4 | 2.4 | 5.2 | 0.1 | R 34.9 | R 110.3 | 0.1 | R 2.0 | 0.0 | 31.9 | R 325.1 | R 66.6 | R 391.7 |
| 1996 | 3.9 | 159.1 | 23.8 | 28.5 | 0.1 | R 29.3 | 2.3 | R 5.3 | 0.8 | R 46.0 | R 136.1 | 0.1 | R 2.0 | 0.0 | 31.5 | R 332.8 | R 65.6 | R 398.5 |
| 1997 | 3.4 | R 163.8 | 14.0 | 32.5 | 0.1 | R 42.2 | 2.5 | 5.5 | 1.1 | R 47.1 | R 144.9 | R 0.2 | R 2.1 | 0.0 | 32.0 | R 346.4 | R 66.5 | R 412.8 |
| 1998 | 2.7 | 144.3 | 17.9 | 27.8 | 0.1 | 40.1 | 2.6 | 6.0 | 1.2 | 42.6 | 138.4 | 0.1 | 0.4 | 0.0 | 33.3 | 319.3 | 68.8 | 388.1 |
| 1999 | 2.7 | 127.1 | 15.6 | 25.6 | 0.1 | 64.3 | 2.6 | 3.8 | 1.7 | 43.9 | 157.6 | 0.1 | 1.6 | 0.0 | 34.9 | 323.9 | 68.3 | 392.2 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 117. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Kansas

| Year | Coal [a] | Natural Gas [b] | Petroleum Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 3 | 43 | 170 | 3,056 | 952 | 215 | 507 | 18,976 | 190 | 24,065 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 50 | 493 | 3,473 | 1,053 | 295 | 467 | 21,786 | 137 | 27,704 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 73 | 326 | 4,691 | 1,561 | 348 | 448 | 25,857 | 8 | 33,238 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 69 | 177 | 5,898 | 1,310 | 364 | 520 | 29,331 | 17 | 37,615 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 52 | 221 | 10,397 | 2,466 | 110 | 603 | 28,107 | 2 | 41,906 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 38 | 137 | 10,173 | 4,424 | 95 | 549 | 26,968 | 0 | 42,347 | R e 529 | 0 | — | 0 | — |
| 1990 | 0 | 41 | 136 | 12,213 | 3,701 | 142 | 618 | 27,700 | 0 | 44,509 | R 175 | 0 | — | 0 | — |
| 1991 | 0 | 33 | 124 | 10,595 | 3,296 | 108 | 553 | 27,162 | 0 | 41,838 | R 170 | 0 | — | 0 | — |
| 1992 | 0 | 29 | 142 | 9,975 | 4,164 | 99 | 563 | 27,037 | 0 | 41,981 | R 167 | 0 | — | 0 | — |
| 1993 | 0 | 33 | 151 | 10,367 | 3,617 | 100 | 574 | 27,533 | 0 | 42,341 | R 145 | 0 | — | 0 | — |
| 1994 | 0 | 32 | 142 | 9,727 | 1,981 | 151 | 600 | 28,054 | 0 | 40,655 | R 137 | 0 | — | 0 | — |
| 1995 | 0 | 35 | 146 | 13,466 | 2,414 | 56 | 589 | 28,333 | 0 | 45,004 | R 110 | 0 | — | 0 | — |
| 1996 | 0 | 38 | 177 | 11,317 | 2,009 | R 23 | 572 | 29,807 | 0 | R 43,906 | R 68 | 0 | — | 0 | — |
| 1997 | 0 | 39 | 247 | 10,860 | 2,130 | R 97 | 604 | 29,551 | 0 | R 43,490 | R 68 | 0 | — | 0 | — |
| 1998 | 0 | 33 | 199 | 10,699 | 2,157 | 26 | 633 | 30,751 | 3 | 44,468 | 84 | 0 | — | 0 | — |
| 1999 | 0 | 32 | 240 | 10,384 | 3,476 | 23 | 639 | 32,764 | 9 | 47,534 | 140 | 0 | — | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | | | | |
| 1960 | 0.1 | 44.3 | 0.9 | 17.8 | 5.1 | 0.9 | 3.1 | 99.7 | 1.2 | 128.6 | 0.0 | 0.0 | 172.9 | 0.0 | 172.9 |
| 1965 | (s) | 49.5 | 2.5 | 20.2 | 5.7 | 1.2 | 2.8 | 114.4 | 0.9 | 147.7 | 0.0 | 0.0 | 197.2 | 0.0 | 197.2 |
| 1970 | (s) | 73.2 | 1.6 | 27.3 | 8.6 | 1.3 | 2.7 | 135.8 | 0.1 | 177.5 | 0.0 | 0.0 | 250.7 | 0.0 | 250.7 |
| 1975 | (s) | 68.0 | 0.9 | 34.4 | 7.2 | 1.4 | 3.2 | 154.1 | 0.1 | 201.1 | 0.0 | 0.0 | 269.1 | 0.0 | 269.1 |
| 1980 | 0.0 | 52.0 | 1.1 | 60.6 | 13.8 | 0.4 | 3.7 | 147.6 | (s) | 227.2 | 0.0 | 0.0 | 279.2 | 0.0 | 279.2 |
| 1985 | 0.0 | 38.1 | 0.7 | 59.3 | 24.8 | 0.3 | 3.3 | 141.7 | 0.0 | 230.1 | R e 1.9 | 0.0 | e 268.2 | 0.0 | e 268.2 |
| 1990 | 0.0 | 40.6 | 0.7 | 71.1 | 20.7 | 0.5 | 3.7 | 145.5 | 0.0 | 242.3 | R 0.6 | 0.0 | 282.9 | 0.0 | 282.9 |
| 1991 | 0.0 | 33.3 | 0.6 | 61.7 | 18.3 | 0.4 | 3.4 | 142.7 | 0.0 | 227.1 | R 0.6 | 0.0 | 260.4 | 0.0 | 260.4 |
| 1992 | 0.0 | 28.8 | 0.7 | 58.1 | 23.2 | 0.4 | 3.4 | 142.0 | 0.0 | 227.8 | R 0.6 | 0.0 | 256.7 | 0.0 | 256.7 |
| 1993 | 0.0 | 33.0 | 0.8 | 60.4 | 20.2 | 0.4 | 3.5 | 144.6 | 0.0 | 229.8 | 0.5 | 0.0 | 262.8 | 0.0 | 262.8 |
| 1994 | 0.0 | 31.7 | 0.7 | 56.7 | 11.0 | 0.5 | 3.6 | R 146.7 | 0.0 | R 219.3 | R 0.5 | 0.0 | R 251.0 | 0.0 | R 251.0 |
| 1995 | 0.0 | 34.8 | 0.7 | 78.4 | 13.7 | 0.2 | 3.6 | R 147.8 | 0.0 | R 244.4 | R 0.4 | 0.0 | R 279.2 | 0.0 | R 279.2 |
| 1996 | 0.0 | 38.2 | 0.9 | 65.9 | 11.4 | 0.1 | 3.5 | R 155.5 | 0.0 | R 237.2 | 0.2 | 0.0 | R 275.4 | 0.0 | R 275.4 |
| 1997 | 0.0 | 39.2 | 1.2 | 63.3 | 12.1 | R 0.4 | 3.7 | R 154.0 | 0.0 | R 234.6 | 0.2 | 0.0 | R 273.9 | 0.0 | R 273.9 |
| 1998 | 0.0 | 32.7 | 1.0 | 62.3 | 12.2 | 0.1 | 3.8 | 160.3 | (s) | 239.8 | 0.3 | 0.0 | 272.5 | 0.0 | 272.5 |
| 1999 | 0.0 | 31.6 | 1.2 | 60.5 | 19.7 | 0.1 | 3.9 | 170.7 | 0.1 | 256.2 | 0.5 | 0.0 | 287.8 | 0.0 | 287.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 118.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Kansas

| Year | Coal Thousand Short Tons | Natural Gas a Billion Cubic Feet | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 435 | 82 | 241 | 110 | 0 | 351 | 0 | 20 | 0 | 0 | 0 | — |
| 1965 | 478 | 113 | 156 | 71 | 0 | 226 | 0 | 13 | 0 | 0 | 0 | — |
| 1970 | 344 | 168 | 385 | 175 | 0 | 560 | 0 | 7 | 0 | 0 | 0 | — |
| 1975 | 2,983 | 128 | 4,134 | 1,539 | 4 | 5,676 | 0 | 5 | 0 | 0 | 0 | — |
| 1980 | 10,034 | 101 | 492 | 382 | 0 | 875 | 0 | 8 | 0 | 0 | 0 | — |
| 1985 | 14,351 | 21 | 20 | 195 | 0 | 215 | 3,856 | 9 | 0 | 0 | (s) | — |
| 1990 | 15,018 | 27 | 22 | 130 | 0 | 152 | 7,874 | 12 | 0 | 0 | (s) | — |
| 1991 | 14,732 | 36 | 4 | 153 | 0 | 156 | 5,859 | 9 | 0 | 0 | (s) | — |
| 1992 | 14,068 | 14 | 2 | 103 | 0 | 104 | 8,491 | 0 | 0 | 0 | (s) | — |
| 1993 | 17,226 | 22 | 40 | 126 | 0 | 166 | 7,900 | 0 | 0 | 0 | (s) | — |
| 1994 | 16,989 | 27 | 12 | 129 | 0 | 142 | 8,529 | 0 | 0 | 0 | (s) | — |
| 1995 | 16,345 | 28 | 1 | 150 | 0 | 151 | 10,062 | 0 | 0 | 0 | (s) | — |
| 1996 | 18,852 | 23 | 155 | 176 | 0 | 331 | 8,205 | 0 | 0 | 0 | 0 | — |
| 1997 | 17,534 | 26 | 89 | 163 | 0 | 252 | 8,430 | R (s) | 0 | 0 | 0 | — |
| 1998 | 17,627 | 37 | 4 | 294 | 0 | 298 | 10,411 | 2 | 0 | 0 | 0 | — |
| 1999 | 18,888 | 36 | 339 | 293 | 0 | 632 | 9,157 | 1 | 0 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 10.3 | 85.1 | 1.5 | 0.6 | 0.0 | 2.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 97.8 |
| 1965 | 11.6 | 112.4 | 1.0 | 0.4 | 0.0 | 1.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 125.5 |
| 1970 | 8.3 | 167.5 | 2.4 | 1.0 | 0.0 | 3.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 179.4 |
| 1975 | 59.5 | 126.7 | 26.0 | 9.0 | (s) | 35.0 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 221.2 |
| 1980 | 184.3 | 97.0 | 3.1 | 2.2 | 0.0 | 5.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 286.7 |
| 1985 | 251.7 | 20.5 | 0.1 | 1.1 | 0.0 | 1.3 | 41.7 | 0.1 | 0.0 | 0.0 | (s) | 315.2 |
| 1990 | 268.8 | 26.9 | 0.1 | 0.8 | 0.0 | 0.9 | 84.1 | 0.1 | 0.0 | 0.0 | (s) | 380.8 |
| 1991 | 265.1 | 35.0 | (s) | 0.9 | 0.0 | 0.9 | 62.9 | 0.1 | 0.0 | 0.0 | (s) | 364.0 |
| 1992 | 250.4 | 13.6 | (s) | 0.6 | 0.0 | 0.6 | 90.7 | 0.0 | 0.0 | 0.0 | (s) | 355.2 |
| 1993 | 298.1 | 21.1 | 0.3 | 0.7 | 0.0 | 1.0 | 84.4 | 0.0 | 0.0 | 0.0 | (s) | 404.6 |
| 1994 | 295.9 | 26.8 | 0.1 | 0.8 | 0.0 | 0.8 | 91.1 | 0.0 | 0.0 | 0.0 | (s) | 414.6 |
| 1995 | 285.4 | 27.4 | (s) | 0.9 | 0.0 | 0.9 | 107.2 | 0.0 | 0.0 | 0.0 | (s) | 420.9 |
| 1996 | 332.8 | 22.5 | 1.0 | 1.0 | 0.0 | 2.0 | 87.2 | 0.0 | 0.0 | 0.0 | 0.0 | 444.5 |
| 1997 | 307.4 | 25.3 | 0.6 | 1.0 | 0.0 | 1.5 | 89.6 | R (s) | 0.0 | 0.0 | 0.0 | 423.7 |
| 1998 | 306.6 | 36.9 | (s) | 1.7 | 0.0 | 1.7 | 110.6 | (s) | 0.0 | 0.0 | 0.0 | 455.9 |
| 1999 | 325.9 | 36.2 | 2.1 | 1.7 | 0.0 | 3.8 | 97.3 | (s) | 0.0 | 0.0 | 0.0 | 463.2 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 119. Energy Consumption Estimates by Source, Selected Years 1960-1999, Kentucky

| Year | Coal [a] | Natural Gas [b] | Petroleum Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | Million kWh | | | Million kWh | |
| 1960 | 12,006 | 149 | 1,482 | 652 | 4,850 | 497 | 1,585 | 4,152 | 544 | 21,535 | 337 | R 2,195 | R 37,827 | 0 | 2,633 | — | — | 38,952 | — |
| 1965 | 17,584 | 172 | 2,112 | 1,052 | 5,567 | 1,284 | 2,375 | 5,869 | 755 | 25,780 | 600 | R 3,933 | R 49,327 | 0 | 2,464 | — | — | 1,224 | — |
| 1970 | 23,558 | 248 | 3,090 | 330 | 8,211 | 3,089 | 3,094 | 9,564 | 842 | 33,581 | 1,063 | R 7,036 | R 69,900 | 0 | 3,174 | — | — | -26,029 | — |
| 1975 | 25,556 | 208 | 2,622 | 129 | 10,924 | 2,150 | 1,577 | 10,977 | 1,048 | 40,816 | 2,169 | R 9,060 | R 81,471 | 0 | 3,463 | — | — | 8,996 | — |
| 1980 | 27,728 | 202 | 2,021 | 112 | 22,906 | 2,897 | 2,912 | 10,223 | 1,057 | 39,829 | 1,012 | R 13,564 | R 96,533 | 0 | 2,940 | — | — | -2,827 | — |
| 1985 | 31,066 | 173 | 1,872 | 66 | 21,768 | 3,434 | 1,507 | 5,539 | 962 | 39,924 | 622 | R 7,360 | R 83,053 | 0 | 2,941 | — | — | -21,176 | — |
| 1990 | 34,449 | 184 | 3,032 | 51 | 23,408 | 5,713 | 567 | 6,154 | 1,082 | 43,040 | 545 | R 9,703 | R 93,295 | 0 | R h 3,160 | — | — | R -24,456 | — |
| 1991 | 34,517 | 187 | 2,801 | 51 | 22,666 | 6,368 | 551 | 6,709 | 968 | 43,766 | 458 | R 18,160 | R 102,499 | 0 | R 3,658 | — | — | R -20,727 | — |
| 1992 | 34,704 | 190 | 2,537 | 55 | 25,603 | 6,882 | 505 | 6,427 | 987 | 44,786 | 422 | R 20,831 | R 109,035 | 0 | R 3,767 | — | — | R -17,743 | — |
| 1993 | 39,095 | 203 | 2,550 | 40 | 27,952 | 5,705 | 612 | 5,815 | 1,005 | 45,756 | 336 | R 19,609 | R 109,381 | 0 | R 3,155 | — | — | R -39,668 | — |
| 1994 | 38,090 | 208 | 2,843 | 46 | 28,041 | 6,343 | 562 | 5,673 | 1,050 | 46,180 | 329 | R 20,378 | R 111,446 | 0 | R 4,014 | — | — | R -25,719 | — |
| 1995 | 39,516 | 224 | 2,778 | 44 | 29,108 | 6,305 | 647 | 5,607 | 1,032 | 48,104 | 204 | R 19,770 | R 113,600 | 0 | R 3,423 | — | — | R -24,423 | — |
| 1996 | 40,862 | 236 | 2,714 | 47 | 28,350 | 5,590 | 670 | R 7,207 | 1,002 | 43,543 | 247 | R 29,447 | R 118,817 | 0 | R 3,497 | — | — | R -24,822 | — |
| 1997 | 42,228 | 228 | 3,417 | 28 | 29,335 | 4,556 | 735 | R 8,757 | 1,058 | 50,174 | 169 | R 30,846 | R 129,077 | 0 | R 3,380 | — | — | R -34,343 | — |
| 1998 | 39,235 | 205 | 3,199 | 62 | 28,623 | 5,347 | 851 | 7,517 | 1,108 | 50,222 | 59 | 32,321 | 129,309 | 0 | 3,116 | — | — | -22,347 | — |
| 1999 | 37,890 | 213 | 4,191 | 33 | 27,299 | 6,962 | 1,062 | 9,278 | 1,120 | 50,950 | 93 | 33,527 | 134,515 | 0 | 2,557 | — | — | -11,389 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 286.6 | 153.8 | 9.8 | 3.3 | 28.2 | 2.7 | 9.0 | 16.7 | 3.3 | 113.1 | 2.1 | R 13.0 | R 201.3 | 0.0 | 28.3 | 22.4 | 0.0 | 132.9 | R 825.4 |
| 1965 | 415.5 | 176.7 | 14.0 | 5.3 | 32.4 | 7.2 | 13.5 | 23.5 | 4.6 | 135.4 | 3.8 | R 22.4 | R 262.1 | 0.0 | 25.8 | 21.7 | 0.0 | 4.2 | R 905.9 |
| 1970 | 527.0 | 252.3 | 20.5 | 1.7 | 47.8 | 17.4 | 17.5 | 36.1 | 5.1 | 176.4 | 6.7 | R 40.0 | R 369.3 | 0.0 | 33.3 | 23.7 | 0.0 | -88.8 | R 1,116.8 |
| 1975 | 558.3 | 209.2 | 17.4 | 0.6 | 63.6 | 12.1 | 8.9 | 40.8 | 6.4 | 214.4 | 13.6 | R 52.0 | R 429.9 | 0.0 | 36.0 | 30.8 | 0.0 | 30.7 | R 1,295.0 |
| 1980 | 641.7 | 204.1 | 13.4 | 0.6 | 133.4 | 16.3 | 16.5 | 37.6 | 6.4 | 209.2 | 6.4 | R 76.5 | R 516.3 | 0.0 | 30.5 | R 19.6 | 0.0 | -9.6 | R 1,402.6 |
| 1985 | 716.9 | 177.7 | 12.4 | 0.3 | 126.8 | 19.3 | 8.5 | 20.0 | 5.8 | 209.7 | 3.9 | R 42.9 | R 449.8 | 0.0 | 30.7 | R 36.0 | 0.0 | -72.3 | R 1,338.9 |
| 1990 | 804.3 | 191.7 | 20.1 | 0.3 | 136.4 | 32.3 | 3.2 | 22.3 | 6.6 | 226.1 | 3.4 | R 57.0 | R 507.7 | 0.0 | h 32.9 | R 18.6 | h 0.2 | R -83.4 | R h 1,471.9 |
| 1991 | 804.6 | 196.3 | 18.6 | 0.3 | 132.0 | 36.0 | 3.1 | 24.2 | 5.9 | 229.9 | 2.9 | R 102.7 | R 555.7 | 0.0 | 38.2 | R 18.8 | 0.3 | R -70.7 | R 1,543.0 |
| 1992 | 813.6 | 200.9 | 16.8 | 0.3 | 149.1 | 38.9 | 2.9 | 23.3 | 6.0 | 235.3 | 2.7 | R 117.8 | R 593.0 | 0.0 | 39.0 | R 19.3 | 0.3 | R -60.5 | R 1,605.5 |
| 1993 | 922.4 | 213.1 | 16.9 | 0.2 | 162.8 | 32.3 | 3.5 | 21.0 | 6.1 | 240.4 | 2.1 | R 110.6 | R 595.8 | 0.0 | 32.5 | R 15.6 | 0.3 | R -135.3 | R 1,644.4 |
| 1994 | 897.5 | 221.3 | 18.9 | 0.2 | 163.3 | 35.9 | 3.2 | 20.6 | 6.4 | R 241.5 | 2.1 | R 115.0 | R 607.1 | 0.0 | 41.4 | R 15.5 | 0.4 | R -87.8 | R 1,695.4 |
| 1995 | 927.6 | 245.6 | 18.4 | 0.2 | 169.6 | 35.7 | 3.7 | 20.3 | 6.3 | R 250.9 | 1.3 | R 111.6 | R 618.0 | 0.0 | 35.3 | R 18.0 | 0.4 | R -83.3 | R 1,761.5 |
| 1996 | 951.8 | 248.0 | 18.0 | 0.2 | 165.1 | 31.7 | 3.8 | R 26.0 | 6.1 | R 227.1 | 1.6 | R 163.5 | R 643.2 | 0.0 | R 36.2 | R 19.1 | 0.5 | R -84.7 | R 1,814.1 |
| 1997 | 985.2 | 239.3 | 22.7 | 0.1 | 170.9 | 25.8 | 4.2 | R 31.7 | 6.4 | R 261.6 | 1.1 | R 171.6 | R 696.0 | 0.0 | R 35.0 | R 12.4 | 0.5 | R -117.2 | R 1,851.2 |
| 1998 | 916.5 | 212.0 | 21.2 | 0.3 | 166.7 | 30.3 | 4.8 | 27.2 | 6.7 | 261.8 | 0.4 | 180.7 | 700.1 | 0.0 | 32.2 | 7.2 | 0.6 | -76.2 | 1,792.5 |
| 1999 | 885.1 | 220.1 | 27.8 | 0.2 | 159.0 | 39.5 | 6.0 | 33.5 | 6.8 | 265.5 | 0.6 | 187.1 | 726.1 | 0.0 | 26.5 | 10.7 | 0.6 | -38.9 | 1,830.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 120.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Kentucky

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 266 | 63 | 242 | 897 | 1,396 | 2,534 | 744 | — | — | 2,760 | — | 6,866 | — |
| 1965 | 176 | 64 | 278 | 1,653 | 1,594 | 3,526 | 562 | — | — | 3,763 | — | 8,984 | — |
| 1970 | 190 | 86 | 403 | 2,077 | 3,356 | 5,836 | 505 | — | — | 6,987 | — | 16,932 | — |
| 1975 | 105 | 79 | 442 | 1,073 | 3,740 | 5,255 | 542 | — | — | 9,586 | — | 23,122 | — |
| 1980 | 102 | 74 | 820 | 1,751 | 2,063 | 4,633 | R 484 | — | — | 13,075 | — | 31,794 | — |
| 1985 | 87 | 60 | 824 | 833 | 1,586 | 3,244 | 1,197 | — | — | 14,539 | — | 34,159 | — |
| 1990 | 53 | 56 | 644 | 321 | 1,825 | 2,791 | 683 | — | — | 16,814 | — | R 36,781 | — |
| 1991 | 65 | 59 | 703 | 378 | 2,152 | 3,233 | 719 | — | — | 18,644 | — | R 40,532 | — |
| 1992 | 74 | 62 | 769 | 365 | 2,027 | 3,160 | 757 | — | — | 17,787 | — | R 37,935 | — |
| 1993 | 94 | 67 | 779 | 396 | 2,347 | 3,522 | R 571 | — | — | 19,223 | — | R 40,602 | — |
| 1994 | 100 | 63 | 816 | 390 | 2,270 | 3,477 | R 560 | — | — | 19,481 | — | R 40,655 | — |
| 1995 | 46 | 66 | 781 | 415 | 2,260 | 3,455 | R 622 | — | — | 20,537 | — | R 42,819 | — |
| 1996 | 41 | 70 | 672 | 438 | R 3,033 | R 4,143 | R 621 | — | — | 21,353 | — | R 44,500 | — |
| 1997 | 124 | 66 | 697 | 486 | R 3,018 | R 4,201 | R 294 | — | — | 20,998 | — | R 43,678 | — |
| 1998 | 81 | 56 | 576 | 611 | 2,289 | 3,476 | 259 | — | — | 21,669 | — | 44,765 | — |
| 1999 | 140 | 59 | 476 | 864 | 2,797 | 4,137 | 278 | — | — | 22,548 | — | 44,178 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 6.5 | 65.2 | 1.4 | 5.1 | 5.6 | 12.1 | 14.9 | 0.0 | 0.0 | 9.4 | 108.1 | 23.4 | 131.5 |
| 1965 | 4.3 | 65.9 | 1.6 | 9.4 | 6.4 | 17.4 | 11.2 | 0.0 | 0.0 | 12.8 | 111.6 | 30.7 | 142.3 |
| 1970 | 4.4 | 87.9 | 2.3 | 11.8 | 12.7 | 26.8 | 10.1 | 0.0 | 0.0 | 23.8 | 153.1 | 57.8 | 210.9 |
| 1975 | 2.4 | 79.8 | 2.6 | 6.1 | 13.9 | 22.6 | 10.8 | 0.0 | 0.0 | 32.7 | 148.3 | 78.9 | 227.2 |
| 1980 | 2.4 | 74.9 | 4.8 | 9.9 | 7.6 | 22.3 | 9.7 | 0.0 | 0.0 | 44.6 | 153.9 | 108.5 | 262.4 |
| 1985 | 2.1 | 61.9 | 4.8 | 4.7 | 5.7 | 15.2 | 23.9 | 0.0 | 0.0 | 49.6 | 152.8 | 116.6 | 269.4 |
| 1990 | 1.3 | 58.3 | 3.8 | 1.8 | 6.6 | 12.2 | 13.7 | e 0.2 | e (s) | 57.4 | e 143.1 | 125.5 | e 268.5 |
| 1991 | 1.6 | 62.3 | 4.1 | 2.1 | 7.8 | 14.0 | 14.4 | 0.3 | (s) | 63.6 | R 156.2 | R 138.3 | R 294.4 |
| 1992 | 1.8 | 65.5 | 4.5 | 2.1 | 7.3 | 13.9 | 15.1 | 0.3 | (s) | 60.7 | 157.3 | R 129.4 | R 286.8 |
| 1993 | 2.3 | 70.1 | 4.5 | 2.2 | 8.5 | 15.2 | R 11.4 | 0.3 | (s) | 65.6 | R 165.0 | R 138.5 | 303.6 |
| 1994 | 2.5 | 66.4 | 4.8 | 2.2 | 8.3 | 15.2 | 11.2 | 0.3 | (s) | 66.5 | 162.1 | 138.7 | 300.8 |
| 1995 | 1.1 | 72.5 | 4.5 | 2.4 | 8.2 | 15.1 | R 12.4 | 0.3 | (s) | 70.1 | R 171.5 | R 146.1 | 317.6 |
| 1996 | 1.0 | 73.7 | 3.9 | 2.5 | R 11.0 | R 17.4 | 12.4 | 0.3 | (s) | 72.9 | R 177.6 | R 151.8 | R 329.5 |
| 1997 | 2.9 | 69.4 | 4.1 | 2.8 | R 10.9 | R 17.7 | R 5.9 | 0.3 | (s) | 71.6 | R 167.8 | R 149.0 | R 316.8 |
| 1998 | 2.0 | 57.4 | 3.4 | 3.5 | 8.3 | 15.1 | 5.2 | 0.3 | (s) | 73.9 | 154.0 | 152.7 | 306.7 |
| 1999 | 3.4 | 61.1 | 2.8 | 4.9 | 10.1 | 17.8 | 5.6 | 0.4 | (s) | 76.9 | 165.2 | 150.7 | 315.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 121. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Kentucky

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | *Thousand Barrels* | | | | | | | | | | | |
| 1960 | 460 | 18 | 501 | 176 | 246 | 336 | 4 | 1,263 | 14 | — | 1,590 | — | 3,955 | — |
| 1965 | 305 | 21 | 576 | 325 | 281 | 268 | 8 | 1,459 | 11 | — | 2,166 | — | 5,171 | — |
| 1970 | 339 | 42 | 835 | 408 | 592 | 263 | 11 | 2,110 | 9 | — | 3,465 | — | 8,396 | — |
| 1975 | 187 | 38 | 915 | 211 | 660 | 275 | 7 | 2,069 | 10 | — | 6,489 | — | 15,652 | — |
| 1980 | 185 | 39 | 2,632 | 622 | 364 | 250 | 19 | 3,887 | 12 | — | 8,432 | — | 20,504 | — |
| 1985 | 162 | 34 | 1,521 | 92 | 280 | 377 | 1 | 2,271 | R 32 | — | 9,465 | — | 22,237 | — |
| 1990 | 98 | 32 | 656 | 94 | 322 | 445 | (s) | 1,517 | R 43 | — | 11,740 | — | R 25,683 | — |
| 1991 | 122 | 34 | 716 | 102 | 380 | 319 | 0 | 1,516 | R 46 | — | 12,610 | — | R 27,414 | — |
| 1992 | 138 | 35 | 878 | 58 | 358 | 277 | 0 | 1,570 | R 49 | — | 12,198 | — | R 26,015 | — |
| 1993 | 172 | 38 | 662 | 78 | 414 | 40 | 2 | 1,197 | 46 | — | 12,606 | — | R 26,626 | — |
| 1994 | 185 | 37 | 988 | 73 | 401 | 40 | 2 | 1,503 | 47 | — | 12,956 | — | R 27,037 | — |
| 1995 | 85 | 39 | 1,203 | 117 | 399 | 42 | 0 | 1,762 | 47 | — | 13,521 | — | R 28,190 | — |
| 1996 | 76 | 41 | 1,209 | 111 | R 535 | 40 | (s) | R 1,896 | 51 | — | 13,736 | — | R 28,626 | — |
| 1997 | 230 | 39 | 989 | 113 | R 533 | 40 | 0 | R 1,675 | R 32 | — | 15,238 | — | R 31,696 | — |
| 1998 | 151 | 32 | 1,043 | 130 | 404 | 80 | 0 | 1,657 | 32 | — | 15,921 | — | 32,890 | — |
| 1999 | 261 | 36 | 999 | 67 | 494 | 39 | 1 | 1,599 | 39 | — | 16,496 | — | 32,321 | — |
| | | | *Trillion Btu* | | | | | | | | | | | |
| 1960 | 11.2 | 18.9 | 2.9 | 1.0 | 1.0 | 1.8 | (s) | 6.7 | 0.3 | 0.0 | 5.4 | 42.5 | 13.5 | 56.0 |
| 1965 | 7.4 | 21.9 | 3.4 | 1.8 | 1.1 | 1.4 | (s) | 7.8 | 0.2 | 0.0 | 7.4 | 44.7 | 17.6 | 62.4 |
| 1970 | 8.0 | 43.2 | 4.9 | 2.3 | 2.2 | 1.4 | 0.1 | 10.9 | 0.2 | 0.0 | 11.8 | 74.0 | 28.6 | 102.7 |
| 1975 | 4.3 | 38.8 | 5.3 | 1.2 | 2.5 | 1.4 | (s) | 10.5 | 0.2 | 0.0 | 22.1 | 76.0 | 53.4 | 129.4 |
| 1980 | 4.4 | 39.7 | 15.3 | 3.5 | 1.3 | 1.3 | 0.1 | 21.6 | 0.2 | 0.0 | 28.8 | 94.7 | 70.0 | 164.7 |
| 1985 | 3.9 | 34.8 | 8.9 | 0.5 | 1.0 | 2.0 | (s) | 12.4 | R 0.6 | 0.0 | 32.3 | R 84.0 | 75.9 | R 159.9 |
| 1990 | 2.4 | 33.1 | 3.8 | 0.5 | 1.2 | 2.3 | (s) | 7.9 | R 0.9 | e 0.0 | 40.1 | R e 84.3 | 87.6 | R e 171.9 |
| 1991 | 3.0 | 35.3 | 4.2 | 0.6 | 1.4 | 1.7 | 0.0 | 7.8 | R 0.9 | 0.0 | 43.0 | R 90.0 | R 93.5 | R 183.6 |
| 1992 | 3.4 | 37.5 | 5.1 | 0.3 | 1.3 | 1.5 | 0.0 | 8.2 | R 1.0 | 0.0 | 41.6 | R 91.7 | R 88.8 | R 180.4 |
| 1993 | 4.3 | 39.6 | 3.9 | 0.4 | 1.5 | 0.2 | (s) | 6.0 | 0.9 | 0.0 | 43.0 | 93.9 | R 90.8 | 184.7 |
| 1994 | 4.6 | 39.0 | 5.8 | 0.4 | 1.5 | 0.2 | (s) | 7.8 | 0.9 | 0.1 | 44.2 | 96.7 | R 92.3 | 189.0 |
| 1995 | 2.1 | 42.3 | 7.0 | 0.7 | 1.4 | 0.2 | 0.0 | 9.3 | 0.9 | 0.1 | 46.1 | 101.0 | R 96.2 | 197.1 |
| 1996 | 1.9 | 43.0 | 7.0 | 0.6 | R 1.9 | 0.2 | (s) | R 9.8 | 1.0 | 0.1 | 46.9 | R 102.7 | R 97.7 | R 200.4 |
| 1997 | 5.4 | 40.6 | 5.8 | 0.6 | R 1.9 | 0.2 | 0.0 | R 8.5 | R 0.6 | 0.2 | 52.0 | 107.3 | R 108.1 | R 215.4 |
| 1998 | 3.7 | 33.6 | 6.1 | 0.7 | 1.5 | 0.4 | 0.0 | 8.7 | 0.6 | 0.2 | 54.3 | 101.1 | 112.2 | 213.3 |
| 1999 | 6.3 | 37.0 | 5.8 | 0.4 | 1.8 | 0.2 | (s) | 8.2 | 0.8 | 0.2 | 56.3 | 108.7 | 110.3 | 219.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 122.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Kentucky

| Year | Coal Thousand Short Tons | Natural Gas [a] Billion Cubic Feet | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | Hydroelectric Power [b] Million kWh | Wood and Waste | Other [b,d] | Electricity [b] Million kWh | Net Energy | Electrical System Energy Losses [e] Million kWh | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | Thousand Barrels | | | | | Million kWh | | | Million kWh | Net Energy | Million kWh | Total |
| 1960 | 3,754 | 46 | 1,482 | 1,558 | 512 | 2,476 | 138 | 485 | 289 | R 2,195 | R 9,134 | 0 | — | — | 23,818 | — | 59,243 | — |
| 1965 | 4,879 | 58 | 2,112 | 1,987 | 397 | 3,957 | 346 | 430 | 536 | R 3,933 | R 13,698 | 0 | — | — | 20,893 | — | 49,884 | — |
| 1970 | 4,325 | 75 | 3,090 | 2,078 | 608 | 5,562 | 474 | 209 | 786 | R 7,036 | R 19,843 | 0 | — | — | 20,586 | — | 49,887 | — |
| 1975 | 2,898 | 66 | 2,622 | 3,346 | 293 | 6,511 | 518 | 195 | 2,059 | R 9,060 | R 24,603 | 0 | — | — | 31,006 | — | 74,790 | — |
| 1980 | 3,058 | 66 | 2,021 | 6,433 | 539 | 7,784 | 539 | 89 | 857 | R 13,564 | R 31,825 | 0 | — | — | 28,280 | — | 68,767 | — |
| 1985 | 3,732 | 63 | 1,872 | 5,622 | 582 | 3,574 | 490 | 843 | 621 | R 7,360 | R 20,964 | 0 | — | — | 26,564 | — | 62,409 | — |
| 1990 | 3,431 | 72 | 3,032 | 5,211 | 152 | 3,941 | 552 | 848 | 544 | R 9,703 | R 23,983 | f 0 | — | — | 32,543 | — | R 71,192 | — |
| 1991 | 2,898 | 74 | 2,801 | 5,226 | 72 | 4,125 | 493 | 865 | 458 | R 18,160 | R 32,200 | 0 | — | — | 32,939 | — | R 71,607 | — |
| 1992 | 2,777 | 76 | 2,537 | 5,792 | 82 | 3,986 | 503 | 861 | 422 | R 20,831 | R 35,014 | 0 | — | — | 37,084 | — | R 79,091 | — |
| 1993 | 3,565 | 79 | 2,550 | 5,257 | 138 | 2,997 | 512 | 1,043 | 334 | R 19,609 | R 32,440 | 0 | — | — | 36,320 | — | R 76,713 | — |
| 1994 | 3,241 | 86 | 2,843 | 6,400 | 99 | 2,909 | 535 | 1,114 | 328 | R 20,378 | R 34,606 | 0 | — | — | 40,049 | — | R 83,579 | — |
| 1995 | 3,679 | 93 | 2,778 | 6,614 | 115 | 2,902 | 526 | 1,168 | 204 | R 19,770 | R 34,077 | 0 | — | — | 40,490 | — | R 84,420 | — |
| 1996 | 3,674 | 97 | 2,714 | 6,181 | 121 | R 3,589 | 511 | 1,199 | 247 | R 29,447 | R 44,010 | 0 | — | — | 41,930 | — | R 87,382 | — |
| 1997 | 3,593 | 98 | 3,417 | 6,019 | 136 | R 5,148 | 540 | 1,230 | 169 | R 30,846 | R 47,506 | 0 | — | — | 40,600 | — | R 84,451 | — |
| 1998 | 3,161 | 96 | 3,199 | 5,800 | 110 | 4,805 | 565 | 821 | 59 | 32,321 | 47,679 | 0 | — | — | 38,260 | — | 79,037 | — |
| 1999 | 2,778 | 96 | 4,191 | 4,504 | 131 | 5,962 | 571 | 820 | 92 | 33,527 | 49,798 | 0 | — | — | 40,054 | — | 78,479 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydroelectric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 95.9 | 47.7 | 9.8 | 9.1 | 2.9 | 9.9 | 0.8 | 2.5 | 1.8 | R 13.0 | R 50.0 | 0.0 | 7.3 | 0.0 | 81.3 | R 282.1 | 202.1 | R 484.3 |
| 1965 | 123.9 | 60.0 | 14.0 | 11.6 | 2.3 | 15.9 | 2.1 | 2.3 | 3.4 | R 22.4 | R 73.8 | 0.0 | 10.2 | 0.0 | 71.3 | R 339.3 | 170.2 | R 509.5 |
| 1970 | 105.9 | 76.1 | 20.5 | 12.1 | 3.4 | 21.0 | 2.9 | 1.1 | 4.9 | R 40.0 | R 106.0 | 0.0 | 13.4 | 0.0 | 70.2 | R 371.7 | 170.2 | R 541.9 |
| 1975 | 71.1 | 66.6 | 17.4 | 19.5 | 1.7 | 24.2 | 3.1 | 1.0 | 12.9 | R 52.0 | R 131.9 | 0.0 | 19.8 | 0.0 | 105.8 | R 395.2 | 255.2 | R 650.4 |
| 1980 | 76.1 | 66.4 | 13.4 | 37.5 | 3.1 | 28.6 | 3.3 | 0.5 | 5.4 | R 76.5 | R 168.2 | 0.0 | R 9.7 | 0.0 | 96.5 | R 416.9 | 234.6 | R 651.5 |
| 1985 | 94.2 | 65.1 | 12.4 | 32.8 | 3.3 | 12.9 | 3.0 | 4.4 | 3.9 | R 42.9 | R 115.6 | 0.0 | R 11.4 | 0.0 | 90.6 | R 376.9 | 212.9 | R 589.9 |
| 1990 | 87.1 | 74.4 | 20.1 | 30.4 | 0.9 | 14.3 | 3.3 | 4.5 | 3.4 | R 57.0 | R 133.8 | f 0.0 | R 4.0 | f 0.0 | 111.0 | R f 410.4 | 242.9 | R f 653.3 |
| 1991 | 73.8 | 77.6 | 18.6 | 30.4 | 0.4 | 14.9 | 3.0 | 4.5 | 2.9 | R 102.7 | R 177.5 | 0.0 | R 3.5 | 0.0 | 112.4 | R 444.7 | R 244.3 | R 689.0 |
| 1992 | 71.3 | 80.9 | 16.8 | 33.7 | 0.5 | 14.4 | 3.1 | 4.5 | 2.7 | R 117.8 | R 193.5 | 0.0 | R 3.2 | 0.0 | 126.5 | R 475.4 | R 269.9 | R 745.2 |
| 1993 | 90.9 | 83.1 | 16.9 | 30.6 | 0.8 | 10.8 | 3.1 | 5.5 | 2.1 | R 110.6 | R 180.4 | 0.0 | R 3.3 | 0.0 | 123.9 | R 481.5 | R 261.7 | R 743.3 |
| 1994 | 82.8 | 91.2 | 18.9 | 37.3 | 0.6 | 10.6 | 3.2 | 5.8 | 2.1 | R 115.0 | R 193.4 | 0.0 | R 3.4 | 0.0 | 136.6 | R 507.4 | R 285.2 | R 792.6 |
| 1995 | 94.2 | 102.4 | 18.4 | 38.5 | 0.7 | 10.5 | 3.2 | 6.1 | 1.3 | R 111.6 | R 190.3 | 0.0 | R 4.6 | 0.0 | 138.2 | R 529.7 | R 288.0 | R 817.7 |
| 1996 | 93.7 | 101.7 | 18.0 | 36.0 | 0.7 | R 13.0 | 3.1 | 6.3 | 1.6 | R 163.5 | R 242.1 | 0.0 | R 5.7 | 0.0 | 143.1 | R 586.2 | R 298.1 | R 884.4 |
| 1997 | 91.1 | 103.1 | 22.7 | 35.1 | 0.8 | R 18.6 | 3.3 | R 6.4 | 1.1 | R 171.6 | R 259.5 | 0.0 | R 5.9 | 0.0 | 138.5 | R 598.1 | R 288.1 | R 886.3 |
| 1998 | 80.9 | 98.8 | 21.2 | 33.8 | 0.6 | 17.4 | 3.4 | 4.3 | 0.4 | 180.7 | 261.8 | 0.0 | 1.4 | 0.0 | 130.5 | 573.4 | 269.7 | 843.1 |
| 1999 | 71.3 | 99.2 | 27.8 | 26.2 | 0.7 | 21.6 | 3.5 | 4.3 | 0.6 | 187.1 | 271.8 | 0.0 | 4.4 | 0.0 | 136.7 | 583.3 | 267.8 | 851.1 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours.  — =Not applicable.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 123. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Kentucky

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 60 | 19 | 652 | 2,549 | 497 | 34 | 405 | 20,715 | 35 | 24,886 | 0 | 0 | — | 0 | — |
| 1965 | 15 | 28 | 1,052 | 2,725 | 1,284 | 36 | 409 | 25,082 | 42 | 30,630 | 0 | 0 | — | 0 | — |
| 1970 | 7 | 36 | 330 | 4,891 | 3,089 | 54 | 368 | 33,109 | 145 | 41,986 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 24 | 129 | 6,215 | 2,150 | 66 | 530 | 40,346 | 2 | 49,437 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 21 | 112 | 12,795 | 2,897 | 13 | 518 | 39,490 | 136 | 55,961 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 14 | 66 | 13,530 | 3,434 | 98 | 471 | 38,704 | 0 | 56,304 | R e 1,046 | 0 | — | 0 | — |
| 1990 | 0 | 25 | 51 | 16,685 | 5,713 | 65 | 531 | 41,748 | 0 | 64,792 | R 841 | 0 | — | 0 | — |
| 1991 | 0 | 20 | 51 | 15,793 | 6,368 | 52 | 475 | 42,583 | 0 | 65,322 | R 826 | 0 | — | 0 | — |
| 1992 | 0 | 16 | 55 | 17,969 | 6,882 | 57 | 484 | 43,648 | 0 | 69,095 | R 969 | 0 | — | 0 | — |
| 1993 | 0 | 19 | 40 | 21,040 | 5,705 | 56 | 493 | 44,674 | 0 | 72,008 | R 611 | 0 | — | 0 | — |
| 1994 | 0 | 23 | 46 | 19,519 | 6,343 | 93 | 515 | 45,027 | 0 | 71,542 | R 258 | 0 | — | 0 | — |
| 1995 | 0 | 25 | 44 | 20,228 | 6,305 | 47 | 506 | 46,894 | 0 | 74,024 | R 130 | 0 | — | 0 | — |
| 1996 | 0 | 26 | 47 | 19,980 | 5,590 | R 50 | 491 | 42,303 | 0 | R 68,461 | R 134 | 0 | — | 0 | — |
| 1997 | 0 | 23 | 28 | 21,364 | 4,556 | R 58 | 519 | 48,904 | 0 | R 75,430 | R 159 | 0 | — | 0 | — |
| 1998 | 0 | 16 | 62 | 20,939 | 5,347 | 19 | 543 | 49,322 | 0 | 76,232 | 94 | 0 | — | 0 | — |
| 1999 | 0 | 17 | 33 | 21,100 | 6,962 | 26 | 549 | 50,091 | 0 | 78,761 | 88 | 0 | — | 0 | — |
| | | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 1.5 | 19.6 | 3.3 | 14.8 | 2.7 | 0.1 | 2.5 | 108.8 | 0.2 | 132.5 | 0.0 | 0.0 | 153.5 | 0.0 | 153.5 |
| 1965 | 0.4 | 28.4 | 5.3 | 15.9 | 7.2 | 0.1 | 2.5 | 131.8 | 0.3 | 163.0 | 0.0 | 0.0 | 191.8 | 0.0 | 191.8 |
| 1970 | 0.2 | 36.3 | 1.7 | 28.5 | 17.4 | 0.2 | 2.2 | 173.9 | 0.9 | 224.8 | 0.0 | 0.0 | 261.3 | 0.0 | 261.3 |
| 1975 | (s) | 23.7 | 0.6 | 36.2 | 12.1 | 0.2 | 3.2 | 211.9 | (s) | 264.4 | 0.0 | 0.0 | 288.1 | 0.0 | 288.1 |
| 1980 | 0.0 | 21.1 | 0.6 | 74.5 | 16.3 | (s) | 3.1 | 207.4 | 0.9 | 302.9 | 0.0 | 0.0 | 324.0 | 0.0 | 324.0 |
| 1985 | 0.0 | 14.7 | 0.3 | 78.8 | 19.3 | 0.4 | 2.9 | 203.3 | 0.0 | 305.0 | R e 3.7 | 0.0 | e 319.8 | 0.0 | e 319.8 |
| 1990 | 0.0 | 25.6 | 0.3 | 97.2 | 32.3 | 0.2 | 3.2 | 219.3 | 0.0 | 352.5 | R 3.0 | 0.0 | 378.1 | 0.0 | 378.1 |
| 1991 | 0.0 | 20.9 | 0.3 | 92.0 | 36.0 | 0.2 | 2.9 | 223.7 | 0.0 | 355.1 | R 2.9 | 0.0 | 376.0 | 0.0 | 376.0 |
| 1992 | 0.0 | 16.8 | 0.3 | 104.7 | 38.9 | 0.2 | 2.9 | 229.3 | 0.0 | 376.3 | R 3.4 | 0.0 | 393.1 | 0.0 | 393.1 |
| 1993 | 0.0 | 19.9 | 0.2 | 122.6 | 32.3 | 0.2 | 3.0 | 234.7 | 0.0 | 392.9 | R 2.2 | 0.0 | 412.8 | 0.0 | 412.8 |
| 1994 | 0.0 | 24.3 | 0.2 | 113.7 | 35.9 | 0.3 | 3.1 | R 235.5 | 0.0 | R 388.8 | R 0.9 | 0.0 | R 413.1 | 0.0 | R 413.1 |
| 1995 | 0.0 | 27.4 | 0.2 | 117.8 | 35.7 | 0.2 | 3.1 | R 244.6 | 0.0 | R 401.6 | R 0.5 | 0.0 | R 429.0 | 0.0 | R 429.0 |
| 1996 | 0.0 | 27.8 | 0.2 | 116.4 | 31.7 | 0.2 | 3.0 | R 220.7 | 0.0 | R 372.1 | R 0.5 | 0.0 | R 399.9 | 0.0 | R 399.9 |
| 1997 | 0.0 | 24.0 | 0.1 | 124.4 | 25.8 | 0.2 | 3.1 | R 254.9 | 0.0 | R 408.7 | R 0.6 | 0.0 | R 432.7 | 0.0 | R 432.7 |
| 1998 | 0.0 | 16.3 | 0.3 | 122.0 | 30.3 | 0.1 | 3.3 | 257.1 | 0.0 | 413.0 | 0.3 | 0.0 | 429.3 | 0.0 | 429.3 |
| 1999 | 0.0 | 17.2 | 0.2 | 122.9 | 39.5 | 0.1 | 3.3 | 261.0 | 0.0 | 427.0 | 0.3 | 0.0 | 444.2 | 0.0 | 444.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 124.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Kentucky**

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total [g] |
| 1960 | 7,466 | 2 | 9 | (s) | 0 | 10 | 0 | 2,633 | 0 | 0 | 0 | — |
| 1965 | 12,210 | (s) | 14 | (s) | 0 | 14 | 0 | 2,464 | 0 | 0 | 0 | — |
| 1970 | 18,698 | 9 | 121 | 4 | 0 | 124 | 0 | 3,174 | 0 | 0 | 0 | — |
| 1975 | 22,366 | (s) | 100 | 7 | 0 | 108 | 0 | 3,463 | 0 | 0 | 0 | — |
| 1980 | 24,383 | 2 | 0 | 227 | 0 | 227 | 0 | 2,940 | 0 | 0 | 0 | — |
| 1985 | 27,085 | 1 | 0 | 270 | 0 | 270 | 0 | 2,941 | 0 | 0 | 0 | — |
| 1990 | 30,867 | (s) | 0 | 212 | 0 | 212 | 0 | 3,160 | 0 | 0 | 0 | — |
| 1991 | 31,432 | (s) | 0 | 228 | 0 | 228 | 0 | 3,658 | 0 | 0 | 0 | — |
| 1992 | 31,715 | (s) | 0 | 195 | 0 | 195 | 0 | 3,767 | 0 | 0 | 0 | — |
| 1993 | 35,264 | (s) | 0 | 214 | 0 | 214 | 0 | 3,155 | 0 | 0 | 0 | — |
| 1994 | 34,564 | (s) | 0 | 317 | 0 | 317 | 0 | 4,014 | 0 | 0 | 0 | — |
| 1995 | 35,707 | 1 | 0 | 282 | 0 | 282 | 0 | 3,423 | 0 | 0 | 0 | — |
| 1996 | 37,071 | 2 | 0 | 308 | 0 | 308 | 0 | 3,497 | 0 | 0 | 0 | — |
| 1997 | 38,281 | 2 | 0 | 266 | 0 | 266 | 0 | 3,380 | 0 | 0 | 0 | — |
| 1998 | 35,842 | 6 | 0 | 265 | 0 | 265 | 0 | 3,116 | 0 | 0 | 0 | — |
| 1999 | 34,710 | 6 | 0 | 220 | 0 | 220 | 0 | 2,557 | 0 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 171.5 | 2.4 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | 28.3 | 0.0 | 0.0 | 0.0 | 202.3 |
| 1965 | 279.5 | 0.5 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | 25.8 | 0.0 | 0.0 | 0.0 | 305.8 |
| 1970 | 408.6 | 8.7 | 0.8 | (s) | 0.0 | 0.8 | 0.0 | 33.3 | 0.0 | 0.0 | 0.0 | 451.3 |
| 1975 | 480.4 | 0.3 | 0.6 | (s) | 0.0 | 0.7 | 0.0 | 36.0 | 0.0 | 0.0 | 0.0 | 517.4 |
| 1980 | 558.8 | 1.9 | 0.0 | 1.3 | 0.0 | 1.3 | 0.0 | 30.5 | 0.0 | 0.0 | 0.0 | 592.6 |
| 1985 | 616.7 | 1.1 | 0.0 | 1.6 | 0.0 | 1.6 | 0.0 | 30.7 | 0.0 | 0.0 | 0.0 | 650.2 |
| 1990 | 713.5 | 0.3 | 0.0 | 1.2 | 0.0 | 1.2 | 0.0 | 32.9 | 0.0 | 0.0 | 0.0 | 747.9 |
| 1991 | 726.2 | 0.2 | 0.0 | 1.3 | 0.0 | 1.3 | 0.0 | 38.2 | 0.0 | 0.0 | 0.0 | 765.9 |
| 1992 | 737.1 | 0.3 | 0.0 | 1.1 | 0.0 | 1.1 | 0.0 | 39.0 | 0.0 | 0.0 | 0.0 | 777.4 |
| 1993 | 825.0 | 0.3 | 0.0 | 1.2 | 0.0 | 1.2 | 0.0 | 32.5 | 0.0 | 0.0 | 0.0 | 859.0 |
| 1994 | 807.6 | 0.4 | 0.0 | 1.8 | 0.0 | 1.8 | 0.0 | 41.4 | 0.0 | 0.0 | 0.0 | 851.2 |
| 1995 | 830.2 | 0.9 | 0.0 | 1.6 | 0.0 | 1.6 | 0.0 | 35.3 | 0.0 | 0.0 | 0.0 | 868.0 |
| 1996 | 855.3 | 1.9 | 0.0 | 1.8 | 0.0 | 1.8 | 0.0 | R 36.2 | 0.0 | 0.0 | 0.0 | 895.1 |
| 1997 | 885.9 | 2.2 | 0.0 | 1.5 | 0.0 | 1.5 | 0.0 | R 35.0 | 0.0 | 0.0 | 0.0 | R 924.7 |
| 1998 | 830.0 | 5.9 | 0.0 | 1.5 | 0.0 | 1.5 | 0.0 | 32.2 | 0.0 | 0.0 | 0.0 | 869.7 |
| 1999 | 804.1 | 5.7 | 0.0 | 1.3 | 0.0 | 1.3 | 0.0 | 26.5 | 0.0 | 0.0 | 0.0 | 837.5 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 125. Energy Consumption Estimates by Source, Selected Years 1960-1999, Louisiana

| Year | Coal [a] | Natural Gas [b] | Petroleum — Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kero-sene [a] | LPG [a] | Lubri-cants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydro-electric Power [d] | Wood and Waste | Other [a,e] | Net Inter-state Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
| **Thousand Barrels / physical units** | | | | | | | | | | | | | | | | | | | |
| 1960 | 0 | 970 | 2,201 | 847 | 10,710 | 3,207 | 927 | 21,646 | 1,259 | 22,550 | 8,769 | R 16,663 | R 88,779 | 0 | 0 | — | — | -2,067 | — |
| 1965 | (s) | 1,110 | 2,539 | 1,055 | 8,357 | 6,097 | 803 | 31,150 | 1,483 | 27,404 | 7,889 | R 22,380 | R 109,158 | 0 | 0 | — | — | 362 | — |
| 1970 | 0 | 1,841 | 2,210 | 447 | 11,799 | 5,879 | 2,509 | 47,555 | 1,590 | 34,850 | 11,118 | R 32,499 | R 150,456 | 0 | 0 | — | — | 321 | — |
| 1975 | 0 | 1,789 | 2,812 | 295 | 21,502 | 6,082 | 2,418 | 52,953 | 1,826 | 43,192 | 28,410 | R 50,685 | R 210,174 | 0 | 0 | — | — | 2,064 | — |
| 1980 | 111 | 1,794 | 1,946 | 255 | 22,579 | 8,644 | 5,711 | 52,872 | 1,999 | 47,157 | 64,084 | R 88,497 | R 293,743 | 0 | 0 | — | — | 36,712 | — |
| 1985 | 9,217 | 1,386 | 1,835 | 171 | 33,602 | 12,803 | 187 | 70,430 | 1,819 | 49,302 | 24,717 | R 52,809 | R 247,676 | 2,457 | 0 | — | — | 64,216 | — |
| 1990 | 12,547 | 1,571 | 1,672 | 108 | 39,230 | 25,879 | 81 | 47,504 | 2,047 | 43,967 | 23,302 | R 85,104 | R 268,893 | 14,197 | R h 747 | — | — | R 19,869 | — |
| 1991 | 12,965 | 1,508 | 1,498 | 93 | 34,796 | 32,179 | 87 | 51,957 | 1,831 | 43,005 | 26,096 | R 71,894 | R 263,436 | 13,956 | R 701 | — | — | R 23,841 | — |
| 1992 | 13,674 | 1,546 | 1,689 | 87 | 31,546 | 26,950 | 46 | 54,256 | 1,867 | 45,117 | 30,253 | R 82,039 | R 273,850 | 10,356 | R 736 | — | — | R 29,644 | — |
| 1993 | 13,676 | 1,578 | 1,860 | 219 | 35,151 | 25,124 | 62 | 55,642 | 1,901 | 46,073 | 27,878 | R 81,658 | R 275,569 | 14,398 | R 1,010 | — | — | R 22,979 | — |
| 1994 | 14,100 | 1,624 | 1,682 | 132 | 38,762 | 32,225 | 49 | 67,586 | 1,987 | 45,627 | 24,555 | R 83,498 | R 296,101 | 12,779 | R 1,064 | — | — | R 24,874 | — |
| 1995 | 13,357 | 1,718 | 1,652 | 87 | 32,699 | 28,853 | 37 | 66,974 | 1,953 | 47,247 | 23,418 | R 79,504 | R 282,424 | 15,686 | R 1,017 | — | — | R 15,333 | — |
| 1996 | 12,534 | 1,664 | 1,720 | 81 | 39,288 | 29,030 | 54 | R 66,649 | 1,895 | 50,871 | 26,988 | R 56,834 | R 273,409 | 15,765 | R 1,090 | — | — | R 45,436 | — |
| 1997 | 13,874 | 1,659 | 5,289 | 98 | 35,276 | 30,459 | 122 | R 47,298 | 2,002 | 46,918 | 21,961 | R 57,368 | R 246,790 | 13,511 | R 626 | — | — | R 39,826 | — |
| 1998 | 13,891 | 1,569 | 1,697 | 78 | 32,495 | 28,643 | 130 | 46,693 | 2,096 | 50,105 | 23,284 | 52,618 | 237,839 | 16,428 | 1,063 | — | — | 22,129 | — |
| 1999 | 13,954 | 1,495 | 1,520 | 87 | 36,368 | 34,016 | 87 | 75,103 | 2,118 | 49,717 | 26,442 | 55,049 | 280,507 | 13,112 | 802 | — | — | 25,594 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 0.0 | 1,003.8 | 14.6 | 4.3 | 62.4 | 17.4 | 5.3 | 86.8 | 7.6 | 118.5 | 55.1 | R 99.8 | R 471.8 | 0.0 | 0.0 | 39.0 | 0.0 | -7.1 | R 1,507.5 |
| 1965 | (s) | 1,156.4 | 16.8 | 5.3 | 48.7 | 33.8 | 4.6 | 124.9 | 9.0 | 144.0 | 49.6 | R 133.1 | R 569.8 | 0.0 | 0.0 | 38.3 | 0.0 | 1.2 | R 1,765.8 |
| 1970 | 0.0 | 1,894.2 | 14.7 | 2.3 | 68.7 | 32.6 | 14.2 | 179.7 | 9.6 | 183.1 | 69.9 | R 191.7 | R 766.5 | 0.0 | 0.0 | 41.6 | 0.0 | 1.1 | R 2,703.4 |
| 1975 | 0.0 | 1,854.8 | 18.7 | 1.5 | 125.2 | 33.9 | 13.7 | 196.7 | 11.1 | 226.9 | 178.6 | R 294.9 | R 1,101.1 | 0.0 | 0.0 | 42.4 | 0.0 | 7.0 | R 3,005.3 |
| 1980 | 2.5 | 1,862.2 | 12.9 | 1.3 | 131.5 | 48.4 | 32.4 | 194.3 | 12.1 | 247.7 | 402.9 | R 505.5 | R 1,589.0 | 0.0 | 0.0 | R 72.4 | 0.0 | 125.3 | R 3,651.3 |
| 1985 | 159.1 | 1,441.8 | 12.2 | 0.9 | 195.7 | 72.0 | 1.1 | 253.8 | 11.0 | 259.0 | 155.4 | R 309.0 | R 1,270.0 | 26.6 | 0.0 | 77.9 | 0.0 | 219.1 | R 3,194.4 |
| 1990 | 208.5 | 1,636.9 | 11.1 | 0.5 | 228.5 | 146.1 | 0.5 | 172.2 | 12.4 | 231.0 | 146.5 | R 486.9 | R 1,435.6 | 151.6 | R h 7.8 | R 125.1 | h 0.2 | R 67.8 | R h 3,633.5 |
| 1991 | 214.3 | 1,579.0 | 9.9 | 0.5 | 202.7 | 181.9 | 0.5 | 187.8 | 11.1 | 225.9 | 164.1 | R 413.8 | R 1,398.1 | 149.9 | R 7.3 | R 135.3 | 0.2 | R 81.3 | R 3,565.4 |
| 1992 | 223.5 | 1,613.8 | 11.2 | 0.4 | 183.8 | 152.3 | 0.3 | 196.6 | 11.3 | 237.0 | 190.2 | R 469.8 | R 1,452.8 | 110.6 | R 7.6 | R 132.1 | 0.2 | R 101.1 | R 3,641.9 |
| 1993 | 222.7 | 1,636.8 | 12.3 | 1.1 | 204.8 | 142.0 | 0.4 | 200.6 | 11.5 | 242.0 | 175.3 | R 469.5 | R 1,459.5 | 153.8 | R 10.4 | R 128.7 | 0.2 | R 78.4 | R 3,690.6 |
| 1994 | 230.8 | 1,688.7 | 11.2 | 0.7 | 225.8 | 182.6 | 0.3 | R 238.6 | 12.1 | 245.7 | 154.4 | R 478.6 | R 1,549.8 | 136.4 | R 11.0 | R 141.1 | 0.3 | R 84.9 | R 3,843.0 |
| 1995 | 217.5 | 1,778.0 | 11.0 | 0.4 | 190.5 | 163.6 | 0.2 | 242.6 | 11.8 | R 246.4 | 147.2 | R 455.5 | R 1,469.3 | 167.2 | R 10.5 | R 124.9 | 0.3 | R 52.3 | R 3,820.0 |
| 1996 | 205.6 | 1,737.7 | 11.4 | 0.4 | 228.9 | 164.6 | 0.3 | R 240.8 | 11.5 | R 265.3 | 169.7 | R 336.6 | R 1,429.5 | 167.5 | R 11.3 | R 148.3 | 0.4 | R 155.0 | R 3,855.2 |
| 1997 | 225.4 | 1,855.0 | 35.1 | 0.5 | 205.5 | 172.7 | 0.7 | R 171.0 | 12.1 | R 244.6 | 138.1 | R 339.6 | R 1,319.9 | 143.5 | R 6.5 | R 136.4 | 0.4 | R 135.9 | R 3,823.0 |
| 1998 | 225.3 | 1,679.1 | 11.3 | 0.4 | 189.3 | 162.4 | 0.7 | 168.7 | 12.7 | 261.1 | 146.4 | 312.4 | 1,265.5 | 174.5 | 11.0 | 108.8 | 0.5 | 75.5 | 3,540.1 |
| 1999 | 227.8 | 1,558.0 | 10.1 | 0.4 | 211.8 | 192.9 | 0.5 | 271.6 | 12.8 | 259.1 | 166.2 | 326.6 | 1,452.0 | 139.3 | 8.3 | 142.1 | 0.5 | 87.3 | 3,615.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 126. Residential Energy Consumption Estimates, Selected Years 1960-1999, Louisiana

| Year | Coal[a] | Natural Gas[b] | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 0 | 56 | 11 | 7 | 1,567 | 1,585 | 453 | — | — | 3,014 | — | 7,498 | — |
| 1965 | 0 | 61 | 6 | 14 | 2,159 | 2,178 | 304 | — | — | 5,161 | — | 12,323 | — |
| 1970 | 0 | 86 | 6 | 20 | 2,709 | 2,735 | 219 | — | — | 9,334 | — | 22,620 | — |
| 1975 | 0 | 96 | 10 | 21 | 2,086 | 2,117 | 257 | — | — | 11,923 | — | 28,761 | — |
| 1980 | 1 | 73 | 5 | 0 | 1,147 | 1,152 | R 553 | — | — | 16,832 | — | 40,930 | — |
| 1985 | 0 | 61 | 8 | 18 | 989 | 1,014 | 308 | — | — | 20,168 | — | 47,383 | — |
| 1990 | 0 | 53 | 9 | 13 | 774 | 797 | 421 | — | — | 21,434 | — | R 46,888 | — |
| 1991 | (s) | 55 | 2 | 14 | 825 | 840 | 444 | — | — | 21,577 | — | R 46,906 | — |
| 1992 | 0 | 55 | (s) | 9 | 1,058 | 1,067 | 467 | — | — | 21,188 | — | R 45,188 | — |
| 1993 | 1 | 57 | (s) | 7 | 712 | 719 | R 409 | — | — | 22,430 | — | R 47,376 | — |
| 1994 | 0 | 53 | 13 | 5 | 683 | 701 | R 401 | — | — | 22,629 | — | R 47,224 | — |
| 1995 | 2 | 53 | 1 | 9 | 626 | 636 | R 445 | — | — | 24,116 | — | R 50,281 | — |
| 1996 | 0 | 57 | 1 | 17 | 791 | 809 | R 444 | — | — | 24,311 | — | R 50,664 | — |
| 1997 | (s) | 53 | (s) | 92 | R 871 | R 963 | R 195 | — | — | 24,502 | — | R 50,966 | — |
| 1998 | 0 | 48 | 1 | 69 | 1,270 | 1,340 | 172 | — | — | 26,709 | — | 55,175 | — |
| 1999 | 0 | 45 | 3 | 62 | 1,889 | 1,955 | 184 | — | — | 26,426 | — | 51,776 | — |
| **Trillion Btu** | | | | | | | | | | | | | |
| 1960 | 0.0 | 57.8 | 0.1 | (s) | 6.3 | 6.4 | 9.1 | 0.0 | 0.0 | 10.3 | 83.5 | 25.6 | 109.1 |
| 1965 | 0.0 | 63.6 | (s) | 0.1 | 8.7 | 8.8 | 6.1 | 0.0 | 0.0 | 17.6 | 96.1 | 42.0 | 138.1 |
| 1970 | 0.0 | 88.6 | (s) | 0.1 | 10.2 | 10.4 | 4.4 | 0.0 | 0.0 | 31.8 | 135.3 | 77.2 | 212.4 |
| 1975 | 0.0 | 99.3 | 0.1 | 0.1 | 7.7 | 7.9 | 5.1 | 0.0 | 0.0 | 40.7 | 153.0 | 98.1 | 251.1 |
| 1980 | (s) | 75.8 | (s) | 0.0 | 4.2 | 4.2 | R 11.1 | 0.0 | 0.0 | 57.4 | 148.6 | 139.7 | 288.2 |
| 1985 | 0.0 | 63.0 | (s) | 0.1 | 3.6 | 3.7 | 6.2 | 0.0 | 0.0 | 68.8 | 141.7 | 161.7 | 303.3 |
| 1990 | 0.0 | 55.6 | 0.1 | 0.1 | 2.8 | 2.9 | 8.4 | e 0.1 | e 0.1 | 73.1 | e 140.3 | 160.0 | R e 300.3 |
| 1991 | (s) | 57.2 | (s) | 0.1 | 3.0 | 3.1 | 8.9 | 0.1 | 0.1 | 73.6 | 143.0 | R 160.0 | R 303.0 |
| 1992 | 0.0 | 57.7 | (s) | 0.1 | 3.8 | 3.9 | 9.3 | 0.1 | 0.1 | 72.3 | 143.4 | R 154.2 | R 297.6 |
| 1993 | (s) | 58.6 | (s) | (s) | 2.6 | 2.6 | 8.2 | 0.2 | 0.1 | 76.5 | 146.2 | R 161.6 | R 307.8 |
| 1994 | 0.0 | 55.0 | 0.1 | (s) | 2.5 | 2.6 | 8.0 | 0.1 | 0.1 | 77.2 | R 143.1 | 161.1 | R 304.2 |
| 1995 | (s) | 54.3 | (s) | 0.1 | 2.3 | 2.3 | 8.9 | 0.1 | 0.1 | 82.3 | 148.1 | R 171.6 | R 319.7 |
| 1996 | 0.0 | 59.1 | (s) | 0.1 | 2.9 | 3.0 | 8.9 | 0.2 | 0.1 | 82.9 | 154.1 | R 172.9 | R 327.0 |
| 1997 | (s) | 59.8 | (s) | 0.5 | R 3.1 | R 3.7 | R 3.9 | 0.2 | 0.1 | 83.6 | R 151.2 | R 173.9 | R 325.1 |
| 1998 | 0.0 | 51.2 | (s) | 0.4 | 4.6 | 5.0 | 3.4 | 0.2 | 0.1 | 91.1 | 151.0 | 188.3 | 339.3 |
| 1999 | 0.0 | 47.0 | (s) | 0.4 | 6.8 | 7.2 | 3.7 | 0.2 | 0.1 | 90.2 | 148.4 | 176.7 | 325.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 127. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Louisiana

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum — Thousand Barrels | | | | | | | | | | | |
| 1960 | 0 | 23 | 1,604 | 156 | 276 | 259 | 304 | 2,599 | 9 | — | 2,493 | — | 6,202 | — |
| 1965 | 0 | 23 | 815 | 305 | 381 | 299 | 206 | 2,006 | 6 | — | 4,890 | — | 11,675 | — |
| 1970 | 0 | 70 | 838 | 445 | 478 | 381 | 502 | 2,645 | 4 | — | 8,427 | — | 20,421 | — |
| 1975 | 0 | 51 | 1,458 | 467 | 368 | 465 | 1,830 | 4,588 | 5 | — | 9,225 | — | 22,253 | — |
| 1980 | 3 | 40 | 399 | 549 | 202 | 168 | 13,466 | 14,784 | 13 | — | 12,809 | — | 31,147 | — |
| 1985 | 0 | 30 | 3,743 | 65 | 174 | 235 | 575 | 4,793 | R 8 | — | 16,548 | — | 38,877 | — |
| 1990 | 0 | 25 | 1,091 | 21 | 137 | 318 | 40 | 1,606 | R 27 | — | 16,528 | — | R 36,156 | — |
| 1991 | (s) | 25 | 899 | 22 | 146 | 258 | 121 | 1,445 | R 28 | — | 16,541 | — | R 35,958 | — |
| 1992 | 0 | 28 | 606 | 10 | 187 | 245 | 6 | 1,054 | R 30 | — | 16,441 | — | R 35,065 | — |
| 1993 | (s) | 25 | 865 | 26 | 126 | 41 | (s) | 1,057 | 33 | — | 16,884 | — | R 35,661 | — |
| 1994 | 0 | 24 | 865 | 13 | 121 | 41 | 0 | 1,039 | R 34 | — | 17,630 | — | R 36,793 | — |
| 1995 | 3 | 24 | 213 | 6 | 110 | 41 | 0 | 370 | R 34 | — | 18,016 | — | R 37,562 | — |
| 1996 | 0 | 26 | 118 | 7 | 140 | 41 | 1 | 307 | 36 | — | 18,411 | — | R 38,368 | — |
| 1997 | (s) | 26 | 222 | 3 | R 154 | 41 | 0 | R 419 | R 21 | — | 18,888 | — | R 39,290 | — |
| 1998 | 0 | 24 | 208 | 5 | 224 | 41 | 0 | 478 | 21 | — | 20,005 | — | 41,327 | — |
| 1999 | 0 | 25 | 537 | 9 | 333 | 41 | 0 | 920 | 26 | — | 20,354 | — | 39,880 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 0.0 | 24.3 | 9.3 | 0.9 | 1.1 | 1.4 | 1.9 | 14.6 | 0.2 | 0.0 | 8.5 | 47.6 | 21.2 | 68.8 |
| 1965 | 0.0 | 23.5 | 4.7 | 1.7 | 1.5 | 1.6 | 1.3 | 10.9 | 0.1 | 0.0 | 16.7 | 51.2 | 39.8 | 91.0 |
| 1970 | 0.0 | 72.4 | 4.9 | 2.5 | 1.8 | 2.0 | 3.2 | 14.4 | 0.1 | 0.0 | 28.8 | 115.6 | 69.7 | 185.2 |
| 1975 | 0.0 | 52.3 | 8.5 | 2.6 | 1.4 | 2.4 | 11.5 | 26.5 | 0.1 | 0.0 | 31.5 | 110.3 | 75.9 | 186.2 |
| 1980 | 0.1 | 41.5 | 2.3 | 3.1 | 0.7 | 0.9 | 84.7 | 91.7 | 0.3 | 0.0 | 43.7 | 177.2 | 106.3 | 283.5 |
| 1985 | 0.0 | 31.4 | 21.8 | 0.4 | 0.6 | 1.2 | 3.6 | 27.7 | R 0.2 | 0.0 | 56.5 | R 115.7 | 132.6 | R 248.3 |
| 1990 | 0.0 | 26.0 | 6.4 | 0.1 | 0.5 | 1.7 | 0.3 | 8.9 | R 0.5 | e 0.0 | 56.4 | R e 91.8 | R 123.4 | R e 215.1 |
| 1991 | (s) | 26.7 | 5.2 | 0.1 | 0.5 | 1.4 | 0.8 | 8.0 | R 0.6 | 0.0 | 56.4 | R 91.7 | R 122.7 | R 214.4 |
| 1992 | 0.0 | 29.7 | 3.5 | 0.1 | 0.7 | 1.3 | (s) | 5.6 | R 0.6 | 0.0 | 56.1 | R 92.0 | R 119.6 | R 211.6 |
| 1993 | (s) | 26.1 | 5.0 | 0.1 | 0.5 | 0.2 | (s) | 5.9 | 0.7 | 0.0 | 57.6 | 90.2 | 121.7 | 211.9 |
| 1994 | 0.0 | 25.1 | 5.0 | 0.1 | 0.4 | 0.2 | 0.0 | 5.8 | 0.7 | 0.1 | 60.2 | 91.8 | 125.5 | 217.3 |
| 1995 | 0.1 | 24.6 | 1.2 | (s) | 0.4 | 0.2 | 0.0 | 1.9 | 0.7 | 0.1 | 61.5 | 88.8 | R 128.2 | R 217.0 |
| 1996 | 0.0 | 26.9 | 0.7 | (s) | 0.5 | 0.2 | (s) | 1.5 | 0.7 | 0.1 | 62.8 | 92.0 | R 130.9 | R 222.9 |
| 1997 | (s) | 29.1 | 1.3 | (s) | R 0.6 | 0.2 | 0.0 | R 2.1 | R 0.4 | 0.2 | 64.4 | R 96.2 | R 134.1 | 230.2 |
| 1998 | 0.0 | 25.9 | 1.2 | (s) | 0.8 | 0.2 | 0.0 | 2.3 | 0.4 | 0.2 | 68.3 | 97.1 | 141.0 | 238.1 |
| 1999 | 0.0 | 25.6 | 3.1 | 0.1 | 1.2 | 0.2 | 0.0 | 4.6 | 0.5 | 0.2 | 69.4 | 100.4 | 136.1 | 236.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 128.   Industrial Energy Consumption Estimates, Selected Years 1960-1999, Louisiana

| Year | Coal | Natural Gas a | Petroleum | | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
| | | | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0 | 739 | 2,201 | 3,383 | 764 | 19,606 | 559 | 562 | 485 | R 16,663 | R 44,222 | 0 | — | — | 4,326 | — | 10,761 | — |
| 1965 | 0 | 797 | 2,539 | 3,129 | 484 | 28,451 | 821 | 548 | 353 | R 22,380 | R 58,706 | 0 | — | — | 5,905 | — | 14,100 | — |
| 1970 | 0 | 1,281 | 2,210 | 4,241 | 2,044 | 44,017 | 1,052 | 302 | 819 | R 32,499 | R 87,183 | 0 | — | — | 11,637 | — | 28,201 | — |
| 1975 | 0 | 1,224 | 2,812 | 6,391 | 1,931 | 50,191 | 1,299 | 173 | 4,046 | R 50,685 | R 117,528 | 0 | — | — | 14,969 | — | 36,108 | — |
| 1980 | 107 | 1,182 | 1,946 | 8,543 | 5,162 | 51,364 | 1,278 | 62 | 12,363 | R 88,497 | R 169,215 | 0 | — | — | 23,233 | — | 56,495 | — |
| 1985 | 457 | 968 | 1,835 | 9,540 | 104 | 69,158 | 1,163 | 486 | 6,806 | R 52,809 | R 141,901 | 0 | — | — | 23,952 | — | 56,274 | — |
| 1990 | 799 | 1,168 | 1,672 | 13,455 | 47 | 46,519 | 1,309 | 337 | 1,146 | R 85,104 | R 149,589 | R f 747 | — | — | 25,862 | — | R 56,576 | — |
| 1991 | 559 | 1,120 | 1,498 | 12,826 | 52 | 50,912 | 1,171 | 356 | 1,125 | R 71,894 | R 139,834 | R 701 | — | — | 26,584 | — | R 57,792 | — |
| 1992 | 597 | 1,153 | 1,689 | 11,390 | 27 | 52,948 | 1,194 | 345 | 1,003 | R 81,166 | R 149,761 | R 736 | — | — | 27,466 | — | R 58,580 | — |
| 1993 | 586 | 1,196 | 1,860 | 12,251 | 29 | 54,735 | 1,216 | 656 | 311 | R 78,909 | R 149,967 | R 1,010 | — | — | 28,439 | — | R 60,068 | — |
| 1994 | 621 | 1,206 | 1,682 | 13,525 | 31 | 66,667 | 1,271 | 796 | 232 | R 82,587 | R 166,790 | R 1,064 | — | — | 29,870 | — | R 62,336 | — |
| 1995 | 422 | 1,254 | 1,652 | 9,383 | 22 | 66,176 | 1,249 | 771 | 388 | R 79,504 | R 159,145 | R 1,017 | — | — | 30,692 | — | R 63,991 | — |
| 1996 | 84 | 1,262 | 1,720 | 10,995 | 30 | R 65673 | 1,212 | 773 | 757 | R 56,834 | R 137,993 | R 1,090 | — | — | 32,544 | — | R 67,823 | — |
| 1997 | 67 | 1,232 | 5,289 | 8,965 | 27 | R 46228 | 1,280 | 825 | 1,034 | R 57,368 | R 121,016 | R 626 | — | — | 32,493 | — | R 67,588 | — |
| 1998 | 41 | 1,119 | 1,697 | 8,420 | 56 | 45,178 | 1,340 | 655 | 779 | 52,618 | 110,743 | 1,063 | — | — | 30,999 | — | 64,038 | — |
| 1999 | 37 | 1,057 | 1,520 | 10,468 | 15 | 72,855 | 1,354 | 570 | 1,434 | 55,049 | 143,265 | 802 | — | — | 31,484 | — | 61,687 | — |

## Trillion Btu

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.0 | 764.9 | 14.6 | 19.7 | 4.3 | 78.6 | 3.4 | 3.0 | 3.0 | R 99.8 | R 226.5 | 0.0 | 29.8 | 0.0 | 14.8 | R 1,035.9 | 36.7 | R 1,072.7 |
| 1965 | 0.0 | 830.0 | 16.8 | 18.2 | 2.7 | 114.1 | 5.0 | 2.9 | 2.2 | R 133.1 | R 295.1 | 0.0 | 32.1 | 0.0 | 20.1 | R 1,177.4 | 48.1 | R 1,225.5 |
| 1970 | 0.0 | 1,318.4 | 14.7 | 24.7 | 11.6 | 166.3 | 6.4 | 1.6 | 5.1 | R 191.7 | R 422.1 | 0.0 | 37.2 | 0.0 | 39.7 | R 1,817.4 | 96.2 | R 1,913.6 |
| 1975 | 0.0 | 1,263.1 | 18.7 | 37.2 | 10.9 | 186.5 | 7.9 | 0.9 | 25.4 | R 294.9 | R 582.4 | 0.0 | 37.1 | 0.0 | 51.1 | R 1,933.7 | 123.2 | R 2,056.9 |
| 1980 | 2.4 | 1,225.4 | 12.9 | 49.8 | 29.3 | 188.7 | 7.8 | 0.3 | 77.7 | R 505.5 | R 872.0 | 0.0 | R 61.1 | 0.0 | 79.3 | R 2,240.1 | 192.8 | R 2,432.9 |
| 1985 | 11.0 | 1,005.1 | 12.2 | 55.6 | 0.6 | 249.2 | 7.1 | 2.6 | 42.8 | R 309.0 | R 678.9 | 0.0 | R 71.5 | 0.0 | 81.7 | R 1,848.2 | 192.0 | R 2,040.2 |
| 1990 | 16.0 | 1,216.4 | 11.1 | 78.4 | 0.3 | 168.6 | 7.9 | 1.8 | 7.2 | R 486.9 | R 762.1 | R f 7.8 | R 116.1 | f 0.0 | 88.2 | R f 2,206.7 | 193.0 | R f 2,399.7 |
| 1991 | 10.3 | 1,174.0 | 9.9 | 74.7 | 0.3 | 184.0 | 7.1 | 1.9 | 7.1 | R 413.8 | R 698.8 | R 7.3 | R 125.9 | 0.0 | 90.7 | R 2,106.9 | R 197.2 | R 2,304.0 |
| 1992 | 11.1 | 1,204.1 | 11.2 | 66.3 | 0.2 | 191.9 | 7.2 | 1.8 | 6.3 | R 464.5 | R 749.5 | R 7.6 | R 122.2 | 0.0 | 93.7 | R 2,188.2 | R 199.9 | R 2,388.1 |
| 1993 | 10.8 | 1,239.4 | 12.3 | 71.4 | 0.2 | 197.4 | 7.4 | 3.4 | 2.0 | R 452.9 | R 747.0 | R 10.4 | R 119.9 | 0.0 | 97.0 | R 2,224.5 | 205.0 | R 2,429.5 |
| 1994 | 11.4 | 1,253.0 | 11.2 | 78.8 | 0.2 | 242.3 | 7.7 | 4.2 | 1.5 | R 473.1 | R 818.9 | R 11.0 | R 132.5 | 0.0 | 101.9 | R 2,328.6 | 212.7 | R 2,541.3 |
| 1995 | 7.7 | 1,295.4 | 11.0 | 54.7 | 0.1 | 239.8 | 7.6 | R 4.0 | 2.4 | R 455.5 | R 775.0 | R 10.5 | R 115.3 | 0.0 | 104.7 | R 2,308.6 | R 218.3 | R 2,527.0 |
| 1996 | 2.1 | 1,317.9 | 11.4 | 64.0 | 0.2 | R 237.3 | 7.4 | R 4.0 | 4.8 | R 336.6 | R 665.7 | R 11.3 | R 138.7 | 0.0 | 111.0 | R 2,246.7 | R 231.4 | R 2,478.2 |
| 1997 | 1.7 | 1,397.6 | 35.1 | 52.2 | 0.2 | R 167.2 | 7.8 | 4.3 | 6.5 | R 339.6 | R 612.8 | R 6.5 | R 132.0 | 0.0 | 110.9 | R 2,261.4 | R 230.6 | R 2,492.1 |
| 1998 | 1.0 | 1,204.8 | 11.3 | 49.0 | 0.3 | 163.3 | 8.1 | 3.4 | 4.9 | 312.4 | 552.7 | 11.0 | 104.9 | 0.0 | 105.8 | 1,980.2 | 218.5 | 2,198.7 |
| 1999 | 0.9 | 1,102.5 | 10.1 | 61.0 | 0.1 | 263.4 | 8.2 | 3.0 | 9.0 | 326.6 | 681.4 | 8.3 | 137.9 | (s) | 107.4 | 2,038.5 | 210.5 | 2,249.0 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."

d "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.

e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours.  — =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 129.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, Louisiana

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 0 | 32 | 847 | 5,690 | 3,207 | 197 | 700 | 21,729 | 7,944 | 40,314 | 0 | 25 | — | 63 | — |
| 1965 | 0 | 54 | 1,055 | 4,387 | 6,097 | 159 | 661 | 26,557 | 7,297 | 46,213 | 0 | 7 | — | 17 | — |
| 1970 | 0 | 71 | 447 | 6,655 | 5,879 | 350 | 539 | 34,167 | 9,699 | 57,736 | 0 | 4 | — | 8 | — |
| 1975 | 0 | 61 | 295 | 13,554 | 6,082 | 307 | 527 | 42,554 | 16,835 | 80,154 | 0 | 3 | — | 6 | — |
| 1980 | 0 | 74 | 255 | 12,457 | 8,644 | 159 | 721 | 46,927 | 31,159 | 100,321 | 0 | 3 | — | 8 | — |
| 1985 | 0 | 42 | 171 | 20,179 | 12,803 | 109 | 656 | 48,581 | 17,277 | 99,777 | R e 232 | 3 | — | 7 | — |
| 1990 | 0 | 56 | 108 | 24,516 | 25,879 | 73 | 738 | 43,312 | 22,041 | 116,667 | R 92 | 3 | — | 6 | — |
| 1991 | 0 | 54 | 93 | 20,997 | 32,179 | 74 | 660 | 42,391 | 24,835 | 121,229 | R 171 | 3 | — | 6 | — |
| 1992 | 0 | 54 | 87 | 19,475 | 26,950 | 64 | 673 | 44,527 | 29,226 | 121,001 | R 222 | 3 | — | 6 | — |
| 1993 | 0 | 56 | 219 | 21,966 | 25,124 | 69 | 685 | 45,377 | 26,933 | 120,373 | R 220 | 3 | — | 6 | — |
| 1994 | 0 | 63 | 132 | 24,261 | 32,225 | 115 | 716 | 44,791 | 23,987 | 126,226 | R 311 | 3 | — | 7 | — |
| 1995 | 0 | 65 | 87 | 23,024 | 28,853 | 61 | 704 | 46,434 | 23,016 | 122,181 | R 186 | 3 | — | 7 | — |
| 1996 | 0 | 68 | 81 | 27,976 | 29,030 | R 45 | 683 | 50,057 | 25,922 | R 133,794 | R 45 | 3 | — | 7 | — |
| 1997 | 0 | 72 | 98 | 26,003 | 30,459 | R 45 | 722 | 46,053 | 19,902 | R 123,282 | R 19 | 3 | — | 6 | — |
| 1998 | 0 | 60 | 78 | 23,785 | 28,643 | 21 | 756 | 49,410 | 21,537 | 124,229 | 16 | 3 | — | 6 | — |
| 1999 | 0 | 48 | 87 | 25,309 | 34,016 | 26 | 764 | 49,106 | 24,416 | 133,724 | 39 | 3 | — | 6 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 0.0 | 32.8 | 4.3 | 33.1 | 17.4 | 0.8 | 4.2 | 114.1 | 49.9 | 223.9 | 0.0 | 0.1 | 256.8 | 0.2 | 257.0 |
| 1965 | 0.0 | 56.4 | 5.3 | 25.6 | 33.8 | 0.6 | 4.0 | 139.5 | 45.9 | 254.7 | 0.0 | (s) | 311.1 | 0.1 | 311.1 |
| 1970 | 0.0 | 73.4 | 2.3 | 38.8 | 32.6 | 1.3 | 3.3 | 179.5 | 61.0 | 318.7 | 0.0 | (s) | 392.1 | (s) | 392.1 |
| 1975 | 0.0 | 63.0 | 1.5 | 79.0 | 33.9 | 1.1 | 3.2 | 223.5 | 105.8 | 448.0 | 0.0 | (s) | 511.0 | (s) | 511.1 |
| 1980 | 0.0 | 77.0 | 1.3 | 72.6 | 48.4 | 0.6 | 4.4 | 246.5 | 195.9 | 569.6 | 0.0 | (s) | 646.6 | (s) | 646.7 |
| 1985 | 0.0 | 43.9 | 0.9 | 117.5 | 72.0 | 0.4 | 4.0 | 255.2 | 108.6 | 558.6 | R e 0.8 | (s) | e 602.5 | (s) | e 602.5 |
| 1990 | 0.0 | 58.1 | 0.5 | 142.8 | 146.1 | 0.3 | 4.5 | 227.5 | 138.6 | 660.3 | R 0.3 | (s) | 718.4 | (s) | 718.4 |
| 1991 | 0.0 | 56.2 | 0.5 | 122.3 | 181.9 | 0.3 | 4.0 | 222.7 | 156.1 | 687.7 | R 0.6 | (s) | 743.9 | (s) | 744.0 |
| 1992 | 0.0 | 56.4 | 0.4 | 113.4 | 152.3 | 0.2 | 4.1 | 233.9 | 183.7 | 688.1 | R 0.8 | (s) | 744.5 | (s) | 744.6 |
| 1993 | 0.0 | 58.2 | 1.1 | 128.0 | 142.0 | 0.2 | 4.2 | 238.4 | 169.3 | 683.2 | R 0.8 | (s) | 741.4 | (s) | 741.4 |
| 1994 | 0.0 | 65.7 | 0.7 | 141.3 | 182.6 | 0.4 | 4.3 | R 234.3 | 150.8 | R 714.4 | R 1.1 | (s) | R 780.1 | (s) | R 780.1 |
| 1995 | 0.0 | 66.9 | 0.4 | 134.1 | 163.6 | 0.2 | 4.3 | R 242.2 | 144.7 | R 689.5 | R 0.7 | (s) | R 756.4 | (s) | R 756.4 |
| 1996 | 0.0 | 70.8 | 0.4 | 163.0 | 164.6 | 0.2 | 4.1 | R 261.1 | 163.0 | R 756.3 | R 0.2 | (s) | R 827.1 | (s) | R 827.1 |
| 1997 | 0.0 | 81.2 | 0.5 | 151.5 | 172.7 | 0.2 | 4.4 | R 240.1 | 125.1 | R 694.4 | 0.1 | (s) | R 775.6 | (s) | R 775.6 |
| 1998 | 0.0 | 65.1 | 0.4 | 138.5 | 162.4 | 0.1 | 4.6 | 257.5 | 135.4 | 698.9 | 0.1 | (s) | 764.0 | (s) | 764.0 |
| 1999 | 0.0 | 50.0 | 0.4 | 147.4 | 192.9 | 0.1 | 4.6 | 255.9 | 153.5 | 754.9 | 0.1 | (s) | 804.9 | (s) | 804.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 130.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Louisiana

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total [g] |
| 1960 | 0 | 120 | 36 | 22 | 0 | 58 | 0 | 0 | 0 | 0 | 0 | — |
| 1965 | (s) | 176 | 34 | 20 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | — |
| 1970 | 0 | 332 | 98 | 58 | 0 | 156 | 0 | 0 | 0 | 0 | 0 | — |
| 1975 | 0 | 356 | 5,699 | 88 | 0 | 5,787 | 0 | 0 | 0 | 0 | 0 | — |
| 1980 | 0 | 425 | 7,096 | 1,174 | 0 | 8,270 | 0 | 0 | 0 | 0 | 0 | — |
| 1985 | 8,760 | 285 | 59 | 132 | 0 | 191 | 2,457 | 0 | 0 | 0 | 0 | — |
| 1990 | 11,748 | 269 | 75 | 159 | 0 | 234 | 14,197 | 0 | 0 | 0 | 0 | — |
| 1991 | 12,406 | 254 | 16 | 73 | 0 | 89 | 13,956 | 0 | 0 | 0 | 0 | — |
| 1992 | 13,077 | 255 | 18 | 75 | 873 | 966 | 10,356 | 0 | 0 | 0 | 0 | — |
| 1993 | 13,089 | 244 | 634 | 69 | 2,749 | 3,452 | 14,398 | 0 | 0 | 0 | 0 | — |
| 1994 | 13,479 | 277 | 336 | 98 | 911 | 1,345 | 12,779 | 0 | 0 | 0 | 0 | — |
| 1995 | 12,930 | 323 | 13 | 78 | 0 | 91 | 15,686 | 0 | 0 | 0 | 0 | — |
| 1996 | 12,450 | 252 | 308 | 198 | 0 | 507 | 15,765 | 0 | 0 | 0 | 0 | — |
| 1997 | 13,807 | 277 | 1,024 | 86 | 0 | 1,111 | 13,511 | 0 | 0 | 0 | 0 | — |
| 1998 | 13,850 | 318 | 968 | 82 | 0 | 1,050 | 16,428 | 0 | 0 | 0 | 0 | — |
| 1999 | 13,916 | 320 | 592 | 51 | 0 | 644 | 13,112 | 0 | 0 | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 0.0 | 124.0 | 0.2 | 0.1 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 124.4 |
| 1965 | (s) | 182.9 | 0.2 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 183.3 |
| 1970 | 0.0 | 341.4 | 0.6 | 0.3 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 342.3 |
| 1975 | 0.0 | 377.1 | 35.8 | 0.5 | 0.0 | 36.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 413.5 |
| 1980 | 0.0 | 442.4 | 44.6 | 6.8 | 0.0 | 51.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 493.9 |
| 1985 | 148.1 | 298.4 | 0.4 | 0.8 | 0.0 | 1.1 | 26.6 | 0.0 | 0.0 | 0.0 | 0.0 | 474.3 |
| 1990 | 192.5 | 280.8 | 0.5 | 0.9 | 0.0 | 1.4 | 151.6 | 0.0 | 0.0 | 0.0 | 0.0 | 626.4 |
| 1991 | 204.0 | 264.9 | 0.1 | 0.4 | 0.0 | 0.5 | 149.9 | 0.0 | 0.0 | 0.0 | 0.0 | 619.4 |
| 1992 | 212.4 | 265.9 | 0.1 | 0.4 | 5.3 | 5.8 | 110.6 | 0.0 | 0.0 | 0.0 | 0.0 | 594.7 |
| 1993 | 211.8 | 254.5 | 4.0 | 0.4 | 16.6 | 20.9 | 153.8 | 0.0 | 0.0 | 0.0 | 0.0 | 641.1 |
| 1994 | 219.3 | 289.9 | 2.1 | 0.6 | 5.5 | 8.2 | 136.4 | 0.0 | 0.0 | 0.0 | 0.0 | 653.8 |
| 1995 | 209.7 | 336.8 | 0.1 | 0.5 | 0.0 | 0.5 | 167.2 | 0.0 | 0.0 | 0.0 | 0.0 | 714.2 |
| 1996 | 203.5 | 263.0 | 1.9 | 1.2 | 0.0 | 3.1 | 167.5 | 0.0 | 0.0 | 0.0 | 0.0 | 637.0 |
| 1997 | 223.7 | 287.4 | 6.4 | 0.5 | 0.0 | 6.9 | 143.5 | 0.0 | 0.0 | 0.0 | 0.0 | 661.6 |
| 1998 | 224.3 | 332.1 | 6.1 | 0.5 | 0.0 | 6.6 | 174.5 | 0.0 | 0.0 | 0.0 | 0.0 | 737.4 |
| 1999 | 226.8 | 332.8 | 3.7 | 0.3 | 0.0 | 4.0 | 139.3 | 0.0 | 0.0 | 0.0 | 0.0 | 702.9 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
 Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 131. Energy Consumption Estimates by Source, Selected Years 1960-1999, Maine

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum — Thousand Barrels | | | | | | | | | | | Million kWh | | | | | |

**Thousand Barrels**

| Year | Coal | NG | Asphalt | AvGas | Distillate | Jet | Kero | LPG | Lubr | Motor | Residual | Other | Total | Nuclear | Hydro | Wood | Other | Net Inter | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 794 | 0 | 729 | 57 | 7,415 | 1,904 | 2,294 | 442 | 175 | 8,378 | 5,408 | 10 | 26,811 | 0 | 2,993 | — | — | -489 | — |
| 1965 | 316 | 0 | 745 | 89 | 9,220 | 1,812 | 2,052 | 550 | 169 | 9,131 | 6,340 | 25 | 30,132 | 0 | 2,290 | — | — | -360 | — |
| 1970 | 91 | 1 | 701 | 93 | 11,822 | 2,300 | 1,783 | 635 | 169 | 11,025 | 11,605 | 72 | 40,206 | 0 | 3,369 | — | — | 928 | — |
| 1975 | 56 | 2 | 696 | 71 | 11,505 | 1,988 | 1,036 | 963 | 167 | 12,645 | 9,929 | 0 | 39,001 | 4,502 | 4,100 | — | — | -7,464 | — |
| 1980 | 124 | 2 | 435 | 82 | 10,628 | 1,875 | 504 | 874 | 196 | 11,768 | 8,557 | 0 | 34,919 | 4,404 | 6,176 | — | — | -8,605 | — |
| 1985 | 206 | 3 | 2,185 | 41 | 9,581 | 1,639 | 1,042 | 674 | 179 | 12,548 | 7,900 | 0 | 35,789 | 5,354 | 3,379 | — | — | 2,200 | — |
| 1990 | 265 | 4 | 645 | 62 | 11,993 | 2,528 | 657 | 1,391 | 201 | 14,126 | 10,709 | 0 | 42,312 | 4,861 | R h 5,490 | — | — | R 1,773 | — |
| 1991 | 374 | 5 | 988 | 42 | 10,366 | 2,374 | 743 | 1,475 | 180 | 14,125 | 10,196 | 145 | 40,634 | 6,264 | R 5,163 | — | — | R 1,078 | — |
| 1992 | 856 | 5 | 1,064 | 41 | 10,899 | 1,904 | 553 | 1,234 | 183 | 14,123 | 9,647 | 151 | 39,800 | 5,358 | R 4,852 | — | — | R 5,167 | — |
| 1993 | 449 | 5 | 1,083 | 37 | 12,767 | 1,488 | 967 | 1,368 | 187 | 14,391 | 9,353 | 153 | 41,794 | 5,740 | R 4,893 | — | — | R 6,023 | — |
| 1994 | 464 | 5 | 480 | 35 | 13,581 | 992 | 982 | 1,383 | 195 | 14,512 | 11,486 | 158 | 43,805 | 6,632 | R 5,789 | — | — | R -1,869 | — |
| 1995 | 282 | 5 | 482 | 35 | 14,513 | 841 | 1,281 | 1,545 | 192 | 14,368 | 9,537 | 153 | 42,946 | 198 | R 6,585 | — | — | R 13,404 | — |
| 1996 | 234 | 6 | 379 | 28 | 15,221 | 891 | 1,536 | R 1,832 | 186 | 14,959 | 9,717 | R 1,144 | R 45,894 | 5,062 | R 7,304 | — | — | R -1,154 | — |
| 1997 | 194 | 6 | 557 | 36 | 15,139 | 954 | 1,506 | R 1,242 | 197 | 15,987 | 10,033 | R 1,248 | R 46,897 | 0 | R 5,835 | — | — | R 16,375 | — |
| 1998 | 141 | 6 | 297 | 25 | 15,621 | 929 | 2,183 | 1,403 | 206 | 15,319 | 9,322 | 1,239 | 46,544 | 0 | 7,526 | — | — | 7,113 | — |
| 1999 | 120 | 6 | 324 | 34 | 15,146 | 864 | 1,698 | 1,131 | 208 | 16,158 | 7,819 | 1,226 | 44,610 | 0 | 7,868 | — | — | 13,687 | — |

**Trillion Btu**

| Year | Coal | NG | Asphalt | AvGas | Distillate | Jet | Kero | LPG | Lubr | Motor | Residual | Other | Total | Nuclear | Hydro | Wood | Other | Net Inter | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 20.4 | 0.0 | 4.8 | 0.3 | 43.2 | 10.2 | 13.0 | 1.8 | 1.1 | 44.0 | 34.0 | 0.1 | 152.4 | 0.0 | 32.2 | 29.2 | 0.0 | -1.7 | 232.5 |
| 1965 | 8.0 | 0.0 | 4.9 | 0.4 | 53.7 | 9.7 | 11.6 | 2.2 | 1.0 | 48.0 | 39.9 | 0.1 | 171.6 | 0.0 | 23.9 | 30.0 | 0.0 | -1.2 | 232.4 |
| 1970 | 2.2 | 1.3 | 4.7 | 0.5 | 68.9 | 12.5 | 10.1 | 2.4 | 1.0 | 57.9 | 73.0 | 0.4 | 231.3 | 0.0 | 35.4 | 29.5 | 0.0 | 3.2 | 302.8 |
| 1975 | 1.3 | 2.0 | 4.6 | 0.4 | 67.0 | 10.8 | 5.9 | 3.6 | 1.0 | 66.4 | 62.4 | 0.0 | 222.1 | 49.6 | 42.7 | 32.7 | 0.0 | -25.5 | 324.9 |
| 1980 | 3.0 | 2.3 | 2.9 | 0.4 | 61.9 | 10.2 | 2.9 | 3.2 | 1.2 | 61.8 | 53.8 | 0.0 | 198.3 | 48.0 | 64.2 | R 93.5 | 0.0 | -29.4 | R 380.0 |
| 1985 | 5.1 | 2.6 | 14.5 | 0.2 | 55.8 | 8.9 | 5.9 | 2.4 | 1.1 | 65.9 | 49.7 | 0.0 | 204.5 | 57.9 | 35.3 | R 107.2 | 0.0 | 7.5 | R 420.1 |
| 1990 | 6.6 | 4.4 | 4.3 | 0.3 | 69.9 | 14.0 | 3.7 | 5.0 | 1.2 | 74.2 | 67.3 | 0.0 | 240.0 | 51.9 | R h 57.1 | R 112.3 | h 0.1 | R 6.0 | R h 487.6 |
| 1991 | 9.4 | 4.8 | 6.6 | 0.2 | 60.4 | 13.2 | 4.2 | 5.3 | 1.1 | 74.2 | 64.1 | 0.8 | 230.0 | 67.3 | R 53.9 | R 122.3 | 0.1 | R 3.7 | R 495.5 |
| 1992 | 21.5 | 5.2 | 7.1 | 0.2 | 63.5 | 10.5 | 3.1 | 4.5 | 1.1 | 74.2 | 60.7 | 0.8 | 225.7 | 57.2 | R 50.2 | R 128.3 | 0.1 | R 17.6 | R 508.0 |
| 1993 | 11.2 | 5.0 | 7.2 | 0.2 | 74.4 | 8.3 | 5.5 | 4.9 | 1.1 | 75.6 | 58.8 | 0.8 | 236.8 | 61.3 | R 50.4 | R 130.0 | 0.1 | R 20.6 | R 518.5 |
| 1994 | 11.6 | 5.1 | 3.2 | 0.2 | 79.1 | 5.6 | 5.6 | 5.0 | 1.2 | R 75.9 | 72.2 | 0.9 | R 248.8 | 70.8 | R 59.7 | R 125.9 | 0.1 | R -6.4 | R 524.6 |
| 1995 | 7.1 | 5.5 | 3.2 | 0.2 | 84.5 | 4.8 | 7.3 | 5.6 | 1.2 | R 74.9 | 60.0 | 0.8 | R 242.4 | 2.1 | R 67.9 | R 127.4 | 0.1 | R 45.7 | R 512.5 |
| 1996 | 5.9 | 5.8 | 2.5 | 0.1 | 88.7 | 5.1 | 8.7 | R 6.6 | 1.1 | R 78.0 | 61.1 | R 6.1 | R 258.1 | 53.8 | R 75.5 | R 146.0 | 0.1 | R -3.9 | R 554.3 |
| 1997 | 4.8 | 6.3 | 3.7 | 0.2 | 88.2 | 5.4 | 8.5 | R 4.5 | 1.2 | R 83.3 | 63.1 | R 6.7 | R 264.8 | 0.0 | R 60.4 | R 131.2 | 0.1 | R 55.9 | R 536.7 |
| 1998 | 3.5 | 5.8 | 2.0 | 0.1 | 91.0 | 5.3 | 12.4 | 5.1 | 1.2 | 79.8 | 58.6 | 6.7 | 262.2 | 0.0 | 77.9 | 96.2 | 0.1 | 24.3 | 490.0 |
| 1999 | 2.9 | 6.2 | 2.1 | 0.2 | 88.2 | 4.9 | 9.6 | 4.1 | 1.3 | 84.2 | 49.2 | 6.6 | 250.4 | 0.0 | 81.4 | 122.0 | 0.1 | 46.7 | 528.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**M A I N E**

## Table 132.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Maine

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 95 | 0 | 4,727 | 2,091 | 342 | 7,160 | 426 | — | — | 993 | — | 2,471 | — |
| 1965 | 58 | 0 | 6,139 | 1,691 | 381 | 8,210 | 322 | — | — | 1,224 | — | 2,922 | — |
| 1970 | 24 | 1 | 7,877 | 1,649 | 383 | 9,909 | 222 | — | — | 1,723 | — | 4,175 | — |
| 1975 | 13 | 1 | 7,646 | 932 | 604 | 9,182 | 292 | — | — | 2,487 | — | 5,999 | — |
| 1980 | 12 | 1 | 6,372 | 405 | 395 | 7,173 | R 356 | — | — | 2,998 | — | 7,290 | — |
| 1985 | 21 | 1 | 4,881 | 910 | 348 | 6,139 | 304 | — | — | 3,419 | — | 8,033 | — |
| 1990 | 18 | 1 | 5,039 | 563 | 863 | 6,464 | 215 | — | — | 3,932 | — | R 8,602 | — |
| 1991 | 7 | 1 | 5,157 | 593 | 939 | 6,689 | 226 | — | — | 3,817 | — | R 8,298 | — |
| 1992 | 15 | 1 | 5,282 | 473 | 767 | 6,522 | 238 | — | — | 3,830 | — | R 8,168 | — |
| 1993 | 11 | 1 | 5,722 | 741 | 952 | 7,414 | R 247 | — | — | 3,872 | — | R 8,179 | — |
| 1994 | 4 | 1 | 5,642 | 758 | 985 | 7,385 | R 242 | — | — | 3,692 | — | R 7,705 | — |
| 1995 | 2 | 1 | 7,384 | 1,089 | 1,120 | 9,593 | R 269 | — | — | 3,629 | — | R 7,566 | — |
| 1996 | 2 | 1 | 7,657 | 1,370 | R 1,315 | R 10,342 | R 269 | — | — | 3,679 | — | R 7,667 | — |
| 1997 | 2 | 1 | 7,644 | 1,310 | R 971 | R 9,924 | R 177 | — | — | 3,659 | — | R 7,611 | — |
| 1998 | 2 | 1 | 7,701 | 1,880 | 1,074 | 10,655 | 156 | — | — | 3,589 | — | 7,414 | — |
| 1999 | 2 | 1 | 7,484 | 1,539 | 948 | 9,971 | 167 | — | — | 3,704 | — | 7,258 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2.4 | 0.0 | 27.5 | 11.9 | 1.4 | 40.8 | 8.5 | 0.0 | 0.0 | 3.4 | 55.0 | 8.4 | 63.5 |
| 1965 | 1.4 | 0.0 | 35.8 | 9.6 | 1.5 | 46.9 | 6.4 | 0.0 | 0.0 | 4.2 | 58.9 | 10.0 | 68.9 |
| 1970 | 0.6 | 0.5 | 45.9 | 9.4 | 1.4 | 56.7 | 4.4 | 0.0 | 0.0 | 5.9 | 68.1 | 14.2 | 82.3 |
| 1975 | 0.3 | 0.7 | 44.5 | 5.3 | 2.2 | 52.1 | 5.8 | 0.0 | 0.0 | 8.5 | 67.4 | 20.5 | 87.9 |
| 1980 | 0.3 | 0.6 | 37.1 | 2.3 | 1.5 | 40.9 | 7.1 | 0.0 | 0.0 | 10.2 | R 59.1 | 24.9 | 83.9 |
| 1985 | 0.5 | 0.5 | 28.4 | 5.2 | 1.3 | 34.8 | 6.1 | 0.0 | 0.0 | 11.7 | 53.6 | 27.4 | 81.0 |
| 1990 | 0.5 | 0.7 | 29.3 | 3.2 | 3.1 | 35.7 | 4.3 | e 0.0 | e 0.1 | 13.4 | e 54.6 | R 29.4 | e 83.9 |
| 1991 | 0.2 | 0.7 | 30.0 | 3.4 | 3.4 | 36.8 | 4.5 | 0.0 | 0.1 | 13.0 | 55.3 | R 28.3 | 83.7 |
| 1992 | 0.4 | 0.9 | 30.8 | 2.7 | 2.8 | 36.2 | 4.8 | 0.0 | 0.1 | 13.1 | 55.4 | 27.9 | 83.3 |
| 1993 | 0.3 | 0.9 | 33.3 | 4.2 | 3.4 | 41.0 | R 4.9 | 0.0 | 0.1 | 13.2 | 60.4 | 27.9 | R 88.3 |
| 1994 | 0.1 | 0.9 | 32.9 | 4.3 | 3.6 | 40.7 | R 4.8 | 0.0 | 0.1 | 12.6 | 59.3 | 26.3 | 85.6 |
| 1995 | (s) | 0.9 | 43.0 | 6.2 | 4.1 | 53.2 | 5.4 | 0.0 | 0.1 | 12.4 | 72.1 | 25.8 | 97.9 |
| 1996 | 0.1 | 1.0 | 44.6 | 7.8 | R 4.8 | R 57.1 | 5.4 | 0.0 | 0.1 | 12.6 | R 76.2 | R 26.2 | R 102.4 |
| 1997 | 0.1 | 1.0 | 44.5 | 7.4 | R 3.5 | R 55.5 | R 3.5 | 0.0 | 0.1 | 12.5 | R 72.7 | R 26.0 | R 98.7 |
| 1998 | (s) | 0.9 | 44.9 | 10.7 | 3.9 | 59.4 | 3.1 | 0.0 | 0.1 | 12.2 | 75.9 | 25.3 | 101.2 |
| 1999 | (s) | 1.0 | 43.6 | 8.7 | 3.4 | 55.7 | 3.3 | (s) | 0.1 | 12.6 | 72.9 | 24.8 | 97.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 133. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Maine

**MAINE**

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 111 | 0 | 996 | 100 | 60 | 29 | 145 | 1,331 | 8 | — | 542 | — | 1,349 | — |
| 1965 | 67 | 0 | 1,294 | 81 | 67 | 34 | 72 | 1,549 | 6 | — | 819 | — | 1,956 | — |
| 1970 | 19 | (s) | 1,660 | 79 | 68 | 40 | 292 | 2,139 | 4 | — | 975 | — | 2,364 | — |
| 1975 | 11 | 1 | 1,611 | 45 | 107 | 40 | 334 | 2,136 | 6 | — | 1,568 | — | 3,781 | — |
| 1980 | 13 | 1 | 1,840 | 70 | 70 | 48 | 682 | 2,710 | 9 | — | 1,717 | — | 4,175 | — |
| 1985 | 28 | 1 | 969 | 99 | 61 | 104 | 1,040 | 2,273 | R 8 | — | 2,338 | — | 5,493 | — |
| 1990 | 25 | 2 | 1,688 | 68 | 152 | 101 | 2,166 | 4,176 | R 14 | — | 2,847 | — | R 6,227 | — |
| 1991 | 6 | 2 | 1,444 | 125 | 166 | 54 | 2,464 | 4,252 | R 14 | — | 2,857 | — | R 6,210 | — |
| 1992 | 21 | 2 | 1,715 | 66 | 135 | 50 | 1,257 | 3,223 | R 15 | — | 2,900 | — | R 6,186 | — |
| 1993 | 15 | 2 | 2,262 | 174 | 168 | 12 | 740 | 3,355 | 20 | — | 3,040 | — | R 6,422 | — |
| 1994 | 2 | 2 | 2,292 | 152 | 174 | 12 | 772 | 3,401 | R 20 | — | 2,962 | — | R 6,182 | — |
| 1995 | 1 | 2 | 2,212 | 161 | 198 | 12 | 375 | 2,958 | R 20 | — | 2,973 | — | R 6,199 | — |
| 1996 | 2 | 3 | 2,458 | 148 | R 232 | 12 | 516 | R 3,367 | 22 | — | 3,276 | — | R 6,826 | — |
| 1997 | 2 | 3 | 2,426 | 157 | R 171 | 12 | 599 | R 3,365 | 19 | — | 3,343 | — | R 6,954 | — |
| 1998 | 1 | 2 | 2,802 | 242 | 190 | 12 | 299 | 3,544 | 19 | — | 3,388 | — | 6,998 | — |
| 1999 | 1 | 3 | 2,807 | 135 | 167 | 12 | 130 | 3,251 | 23 | — | 3,553 | — | 6,961 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 2.8 | 0.0 | 5.8 | 0.6 | 0.2 | 0.2 | 0.9 | 7.7 | 0.2 | 0.0 | 1.9 | 12.5 | 4.6 | 17.1 |
| 1965 | 1.7 | 0.0 | 7.5 | 0.5 | 0.3 | 0.2 | 0.5 | 8.9 | 0.1 | 0.0 | 2.8 | 13.5 | 6.7 | 20.2 |
| 1970 | 0.5 | 0.4 | 9.7 | 0.4 | 0.3 | 0.2 | 1.8 | 12.4 | 0.1 | 0.0 | 3.3 | 16.7 | 8.1 | 24.8 |
| 1975 | 0.3 | 0.5 | 9.4 | 0.3 | 0.4 | 0.2 | 2.1 | 12.3 | 0.1 | 0.0 | 5.3 | 18.6 | 12.9 | 31.5 |
| 1980 | 0.3 | 0.9 | 10.7 | 0.4 | 0.3 | 0.3 | 4.3 | 15.9 | 0.2 | 0.0 | 5.9 | 23.1 | 14.2 | 37.4 |
| 1985 | 0.7 | 1.2 | 5.6 | 0.6 | 0.2 | 0.5 | 6.5 | 13.5 | R 0.2 | 0.0 | 8.0 | R 23.5 | 18.7 | R 42.2 |
| 1990 | 0.6 | 1.7 | 9.8 | 0.4 | 0.6 | 0.5 | 13.6 | 24.9 | R 0.3 | e 0.0 | 9.7 | R e 37.2 | 21.2 | R e 58.5 |
| 1991 | 0.1 | 1.9 | 8.4 | 0.7 | 0.6 | 0.3 | 15.5 | 25.5 | R 0.3 | 0.0 | 9.7 | R 37.5 | 21.2 | R 58.7 |
| 1992 | 0.5 | 2.2 | 10.0 | 0.4 | 0.5 | 0.3 | 7.9 | 19.0 | R 0.3 | 0.0 | 9.9 | R 32.0 | 21.1 | R 53.1 |
| 1993 | 0.4 | 2.3 | 13.2 | 1.0 | 0.6 | 0.1 | 4.6 | 19.5 | 0.4 | 0.0 | 10.4 | 33.0 | 21.9 | 54.9 |
| 1994 | 0.1 | 2.4 | 13.4 | 0.9 | 0.6 | 0.1 | 4.9 | 19.8 | 0.4 | 0.0 | 10.1 | R 32.7 | 21.1 | 53.8 |
| 1995 | (s) | 2.5 | 12.9 | 0.9 | 0.7 | 0.1 | 2.4 | 16.9 | 0.4 | 0.0 | 10.1 | 30.0 | 21.1 | 51.1 |
| 1996 | (s) | 2.6 | 14.3 | 0.8 | 0.8 | 0.1 | 3.2 | 19.3 | 0.4 | 0.0 | 11.2 | R 33.6 | 23.3 | R 56.9 |
| 1997 | (s) | 2.8 | 14.1 | 0.9 | R 0.6 | 0.1 | 3.8 | R 19.5 | 0.4 | 0.0 | 11.4 | R 34.1 | 23.7 | R 57.8 |
| 1998 | (s) | 2.5 | 16.3 | 1.4 | 0.7 | 0.1 | 1.9 | 20.3 | 0.4 | 0.0 | 11.6 | 34.8 | 23.9 | 58.7 |
| 1999 | (s) | 2.6 | 16.4 | 0.8 | 0.6 | 0.1 | 0.8 | 18.6 | 0.5 | 0.0 | 12.1 | 33.8 | 23.7 | 57.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# MAINE

## Table 134. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Maine

| | | | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 562 | 0 | 729 | 402 | 103 | 38 | 42 | 166 | 2,639 | 10 | 4,130 | 906 | — | — | 1,246 | — | 3,100 | — |
| 1965 | 191 | 0 | 745 | 500 | 280 | 100 | 54 | 145 | 1,270 | 25 | 3,117 | 697 | — | — | 1,715 | — | 4,094 | — |
| 1970 | 48 | (s) | 701 | 805 | 54 | 182 | 55 | 137 | 5,128 | 72 | 7,134 | 940 | — | — | 2,370 | — | 5,743 | — |
| 1975 | 32 | 1 | 696 | 682 | 59 | 250 | 59 | 79 | 5,848 | 0 | 7,674 | 832 | — | — | 2,477 | — | 5,976 | — |
| 1980 | 99 | 1 | 435 | 762 | 29 | 400 | 65 | 76 | 4,047 | 0 | 5,812 | 974 | — | — | 3,470 | — | 8,438 | — |
| 1985 | 157 | 1 | 2,185 | 456 | 34 | 249 | 59 | 124 | 3,407 | 0 | 6,514 | 974 | — | — | 4,067 | — | 9,555 | — |
| 1990 | 222 | 2 | 645 | 708 | 27 | 358 | 66 | 94 | 4,856 | 0 | 6,754 | R f 2,036 | — | — | 4,750 | — | R 10,391 | — |
| 1991 | 361 | 2 | 988 | 778 | 26 | 353 | 59 | 100 | 5,330 | 145 | 7,780 | R 1,923 | — | — | 4,709 | — | R 10,237 | — |
| 1992 | 820 | 2 | 1,064 | 752 | 14 | 316 | 60 | 102 | 6,021 | 151 | 8,480 | R 1,798 | — | — | 4,753 | — | R 10,137 | — |
| 1993 | 423 | 2 | 1,083 | 1,258 | 52 | 235 | 61 | 146 | 6,952 | 153 | 9,942 | R 1,670 | — | — | 5,040 | — | R 10,644 | — |
| 1994 | 458 | 2 | 480 | 1,415 | 72 | 202 | 64 | 163 | 9,202 | 158 | 11,758 | R 1,837 | — | — | 4,952 | — | R 10,334 | — |
| 1995 | 279 | 2 | 482 | 1,163 | 31 | 216 | 63 | 169 | 7,493 | 153 | 9,770 | R 1,709 | — | — | 4,959 | — | R 10,340 | — |
| 1996 | 230 | 2 | 379 | 1,355 | 17 | R 278 | 61 | 176 | 7,853 | R 1,144 | R 11,265 | R 2,151 | — | — | 4,772 | — | R 9,944 | — |
| 1997 | 190 | 3 | 557 | 1,293 | 39 | R 87 | 65 | 179 | 6,821 | R 1,248 | R 10,288 | R 1,887 | — | — | 4,957 | — | R 10,311 | — |
| 1998 | 138 | 2 | 297 | 1,379 | 61 | 133 | 68 | 117 | 5,766 | 1,239 | 9,060 | 1,896 | — | — | 4,622 | — | 9,548 | — |
| 1999 | 117 | 3 | 324 | 1,039 | 25 | 11 | 68 | 86 | 6,341 | 1,226 | 9,119 | 3,242 | — | — | 4,687 | — | 9,182 | — |
| | | | | | | | | Trillion Btu | | | | | | | | | | |
| 1960 | 14.5 | 0.0 | 4.8 | 2.3 | 0.6 | 0.2 | 0.3 | 0.9 | 16.6 | 0.1 | 25.7 | 9.7 | 20.5 | 0.0 | 4.3 | 74.7 | 10.6 | 85.3 |
| 1965 | 4.9 | 0.0 | 4.9 | 2.9 | 1.6 | 0.4 | 0.3 | 0.8 | 8.0 | 0.1 | 19.0 | 7.3 | 23.5 | 0.0 | 5.9 | 60.6 | 14.0 | 74.5 |
| 1970 | 1.2 | 0.4 | 4.7 | 4.7 | 0.3 | 0.7 | 0.3 | 0.7 | 32.2 | 0.4 | 44.0 | 9.9 | 25.0 | 0.0 | 8.1 | 88.4 | 19.6 | 108.0 |
| 1975 | 0.8 | 0.7 | 4.6 | 4.0 | 0.3 | 0.9 | 0.4 | 0.4 | 36.8 | 0.0 | 47.4 | 8.7 | 26.8 | 0.0 | 8.5 | 92.7 | 20.4 | 113.1 |
| 1980 | 2.4 | 0.8 | 2.9 | 4.4 | 0.2 | 1.5 | 0.4 | 0.4 | 25.4 | 0.0 | 35.2 | 10.1 | R 86.2 | 0.0 | 11.8 | R 146.5 | 28.8 | R 175.3 |
| 1985 | 3.9 | 0.9 | 14.5 | 2.7 | 0.2 | 0.9 | 0.4 | 0.7 | 21.4 | 0.0 | 40.7 | 10.2 | R 101.0 | 0.0 | 13.9 | R 170.5 | 32.6 | R 203.1 |
| 1990 | 5.5 | 2.0 | 4.3 | 4.1 | 0.2 | 1.3 | 0.4 | 0.5 | 30.5 | 0.0 | 41.3 | R f 21.2 | R 107.8 | f 0.0 | 16.2 | R f 194.0 | R 35.5 | R f 229.4 |
| 1991 | 9.0 | 2.2 | 6.6 | 4.5 | 0.1 | 1.3 | 0.4 | 0.5 | 33.5 | 0.8 | 47.7 | R 20.1 | R 117.5 | 0.0 | 16.1 | R 212.6 | R 34.9 | R 247.5 |
| 1992 | 20.6 | 2.1 | 7.1 | 4.4 | 0.1 | 1.1 | 0.4 | 0.5 | 37.9 | 0.8 | 52.2 | R 18.6 | R 123.2 | 0.0 | 16.2 | R 232.9 | 34.6 | R 267.5 |
| 1993 | 10.6 | 1.8 | 7.2 | 7.3 | 0.3 | 0.8 | 0.4 | 0.8 | 43.7 | 0.8 | 61.3 | R 17.2 | R 124.7 | 0.0 | 17.2 | R 232.8 | 36.3 | R 269.1 |
| 1994 | 11.4 | 1.8 | 3.2 | 8.2 | 0.4 | 0.7 | 0.4 | 0.9 | 57.9 | 0.9 | 72.5 | R 18.9 | R 120.6 | 0.0 | 16.9 | R 242.2 | 35.3 | R 277.5 |
| 1995 | 7.0 | 2.0 | 3.2 | 6.8 | 0.2 | 0.8 | 0.4 | 0.9 | 47.1 | 0.8 | 60.1 | R 17.6 | R 121.6 | 0.0 | 16.9 | R 225.3 | 35.3 | R 260.6 |
| 1996 | 5.8 | 2.2 | 2.5 | 7.9 | 0.1 | R 1.0 | 0.4 | 0.9 | 49.4 | R 6.1 | R 68.3 | R 22.2 | R 140.2 | 0.0 | 16.3 | R 255.0 | 33.9 | R 288.9 |
| 1997 | 4.7 | 2.6 | 3.7 | 7.5 | 0.2 | R 0.3 | 0.4 | 0.9 | 42.9 | R 6.7 | R 62.7 | R 19.5 | R 127.3 | 0.0 | 16.9 | R 233.7 | R 35.2 | R 268.9 |
| 1998 | 3.4 | 2.3 | 2.0 | 8.0 | 0.3 | 0.5 | 0.4 | 0.6 | 36.2 | 6.7 | 54.8 | 19.6 | 92.7 | 0.0 | 15.8 | 188.6 | 32.6 | 221.1 |
| 1999 | 2.9 | 2.6 | 2.1 | 6.1 | 0.1 | (s) | 0.4 | 0.4 | 39.9 | 6.6 | 55.7 | 33.5 | 118.2 | 0.0 | 16.0 | 228.9 | 31.3 | 260.2 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 135.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, Maine**

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Petroleum — Distillate Fuel [a] | Petroleum — Jet Fuel [a] | Petroleum — LPG [a] | Petroleum — Lubricants [a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel [a] | Petroleum — Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 10 | 0 | 57 | 1,251 | 1,904 | 1 | 133 | 8,183 | 776 | 12,305 | 0 | 0 | — | 0 | — |
| 1965 | 1 | 0 | 89 | 1,199 | 1,812 | 2 | 116 | 8,952 | 625 | 12,794 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 0 | 93 | 1,385 | 2,300 | 3 | 114 | 10,848 | 1,415 | 16,158 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 0 | 71 | 1,524 | 1,988 | 3 | 108 | 12,526 | 934 | 17,155 | 0 | 0 | — | 0 | — |
| 1980 | 0 | (s) | 82 | 1,593 | 1,875 | 9 | 132 | 11,644 | 209 | 15,544 | 0 | 0 | — | 0 | — |
| 1985 | 0 | (s) | 41 | 3,247 | 1,639 | 15 | 120 | 12,320 | 21 | 17,403 | [e] 0 | 0 | — | 0 | — |
| 1990 | 0 | (s) | 62 | 4,539 | 2,528 | 17 | 135 | 13,931 | 149 | 21,362 | 0 | 0 | — | 0 | — |
| 1991 | 0 | (s) | 42 | 2,965 | 2,374 | 17 | 121 | 13,971 | 116 | 19,606 | 0 | 0 | — | 0 | — |
| 1992 | 0 | (s) | 41 | 3,126 | 1,904 | 15 | 123 | 13,971 | 156 | 19,337 | 0 | 0 | — | 0 | — |
| 1993 | 0 | (s) | 37 | 3,510 | 1,488 | 13 | 125 | 14,233 | 285 | 19,691 | 0 | 0 | — | 0 | — |
| 1994 | 0 | (s) | 35 | 4,213 | 992 | 22 | 131 | 14,337 | 236 | 19,967 | 0 | 0 | — | 0 | — |
| 1995 | 0 | (s) | 35 | 3,725 | 841 | 11 | 129 | 14,187 | 207 | 19,135 | 0 | 0 | — | 0 | — |
| 1996 | 0 | 0 | 28 | 3,738 | 891 | 7 | 125 | 14,771 | 205 | 19,766 | 0 | (s) | — | (s) | — |
| 1997 | 0 | 0 | 36 | 3,763 | 954 | R 13 | 132 | 15,796 | 110 | R 20,804 | 0 | (s) | — | (s) | — |
| 1998 | 0 | 0 | 25 | 3,724 | 929 | 6 | 138 | 15,190 | 299 | 20,311 | 0 | (s) | — | (s) | — |
| 1999 | 0 | 0 | 34 | 3,807 | 864 | 5 | 140 | 16,061 | 224 | 21,135 | 0 | (s) | — | (s) | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 0.3 | 0.0 | 0.3 | 7.3 | 10.2 | (s) | 0.8 | 43.0 | 4.9 | 66.4 | 0.0 | 0.0 | 66.7 | 0.0 | 66.7 |
| 1965 | (s) | 0.0 | 0.4 | 7.0 | 9.7 | (s) | 0.7 | 47.0 | 3.9 | 68.8 | 0.0 | 0.0 | 68.8 | 0.0 | 68.8 |
| 1970 | (s) | 0.0 | 0.5 | 8.1 | 12.5 | (s) | 0.7 | 57.0 | 8.9 | 87.6 | 0.0 | 0.0 | 87.6 | 0.0 | 87.6 |
| 1975 | (s) | 0.0 | 0.4 | 8.9 | 10.8 | (s) | 0.7 | 65.8 | 5.9 | 92.4 | 0.0 | 0.0 | 92.4 | 0.0 | 92.4 |
| 1980 | 0.0 | 0.1 | 0.4 | 9.3 | 10.2 | (s) | 0.8 | 61.2 | 1.3 | 83.2 | 0.0 | 0.0 | 83.3 | 0.0 | 83.3 |
| 1985 | 0.0 | (s) | 0.2 | 18.9 | 8.9 | 0.1 | 0.7 | 64.7 | 0.1 | 93.7 | [e] 0.0 | 0.0 | [e] 93.7 | 0.0 | [e] 93.7 |
| 1990 | 0.0 | (s) | 0.3 | 26.4 | 14.0 | 0.1 | 0.8 | 73.2 | 0.9 | 115.8 | 0.0 | 0.0 | 115.8 | 0.0 | 115.8 |
| 1991 | 0.0 | (s) | 0.2 | 17.3 | 13.2 | 0.1 | 0.7 | 73.4 | 0.7 | 105.6 | 0.0 | 0.0 | 105.6 | 0.0 | 105.6 |
| 1992 | 0.0 | (s) | 0.2 | 18.2 | 10.5 | 0.1 | 0.7 | 73.4 | 1.0 | 104.1 | 0.0 | 0.0 | 104.1 | 0.0 | 104.1 |
| 1993 | 0.0 | (s) | 0.2 | 20.4 | 8.3 | (s) | 0.8 | 74.8 | 1.8 | 106.3 | 0.0 | 0.0 | 106.3 | 0.0 | 106.3 |
| 1994 | 0.0 | (s) | 0.2 | 24.5 | 5.6 | 0.1 | 0.8 | R 75.0 | 1.5 | R 107.7 | 0.0 | 0.0 | R 107.7 | 0.0 | R 107.7 |
| 1995 | 0.0 | 0.1 | 0.2 | 21.7 | 4.8 | (s) | 0.8 | R 74.0 | 1.3 | R 102.7 | 0.0 | 0.0 | R 102.8 | 0.0 | R 102.8 |
| 1996 | 0.0 | 0.0 | 0.1 | 21.8 | 5.1 | (s) | 0.8 | R 77.0 | 1.3 | R 106.1 | 0.0 | (s) | R 106.1 | (s) | R 106.1 |
| 1997 | 0.0 | 0.0 | 0.2 | 21.9 | 5.4 | (s) | 0.8 | R 82.3 | 0.7 | R 111.4 | 0.0 | (s) | R 111.4 | (s) | R 111.4 |
| 1998 | 0.0 | 0.0 | 0.1 | 21.7 | 5.3 | (s) | 0.8 | 79.2 | 1.9 | 109.0 | 0.0 | (s) | 109.0 | (s) | 109.0 |
| 1999 | 0.0 | 0.0 | 0.2 | 22.2 | 4.9 | (s) | 0.8 | 83.7 | 1.4 | 113.2 | 0.0 | (s) | 113.2 | (s) | 113.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 136.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Maine**

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 17 | 0 | 1,847 | 38 | 0 | 1,885 | 0 | 2,087 | 0 | 0 | 0 | — |
| 1965 | 0 | 0 | 4,373 | 89 | 0 | 4,462 | 0 | 1,593 | 0 | 0 | 0 | — |
| 1970 | 0 | 0 | 4,770 | 95 | 0 | 4,865 | 0 | 2,429 | 0 | 0 | 0 | — |
| 1975 | 0 | 0 | 2,812 | 42 | 0 | 2,854 | 4,502 | 3,268 | 0 | 0 | 0 | — |
| 1980 | 0 | 0 | 3,620 | 61 | 0 | 3,680 | 4,404 | 5,203 | 0 | 0 | 0 | — |
| 1985 | 0 | 0 | 3,432 | 28 | 0 | 3,461 | 5,354 | 2,405 | 0 | 0 | 0 | — |
| 1990 | 0 | 0 | 3,537 | 19 | 0 | 3,557 | 4,861 | R 3,454 | 0 | 0 | 0 | — |
| 1991 | 0 | 0 | 2,286 | 22 | 0 | 2,307 | 6,264 | R 3,241 | 0 | 0 | 0 | — |
| 1992 | 0 | 0 | 2,213 | 24 | 0 | 2,237 | 5,358 | R 3,055 | 0 | 0 | 0 | — |
| 1993 | 0 | 0 | 1,377 | 16 | 0 | 1,392 | 5,740 | R 3,223 | 0 | 0 | 0 | — |
| 1994 | 0 | 0 | 1,275 | 18 | 0 | 1,294 | 6,632 | R 3,952 | 0 | 0 | 0 | — |
| 1995 | 0 | 0 | 1,462 | 29 | 0 | 1,490 | 198 | R 4,876 | (s) | 0 | 0 | — |
| 1996 | 0 | 0 | 1,142 | 12 | 0 | 1,154 | 5,062 | R 5,152 | 1 | 0 | 0 | — |
| 1997 | 0 | 0 | 2,503 | 13 | 0 | 2,517 | 0 | R 3,948 | 0 | 0 | 0 | — |
| 1998 | 0 | 0 | 2,958 | 15 | 0 | 2,973 | 0 | 5,631 | 0 | 0 | 0 | — |
| 1999 | 0 | 0 | 1,124 | 9 | 0 | 1,133 | 0 | 4,626 | 0 | 0 | 0 | — |
| | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 0.5 | 0.0 | 11.6 | 0.2 | 0.0 | 11.8 | 0.0 | 22.5 | 0.0 | 0.0 | 0.0 | 34.8 |
| 1965 | 0.0 | 0.0 | 27.5 | 0.5 | 0.0 | 28.0 | 0.0 | 16.7 | 0.0 | 0.0 | 0.0 | 44.7 |
| 1970 | 0.0 | 0.0 | 30.0 | 0.6 | 0.0 | 30.5 | 0.0 | 25.5 | 0.0 | 0.0 | 0.0 | 56.0 |
| 1975 | 0.0 | 0.0 | 17.7 | 0.2 | 0.0 | 17.9 | 49.6 | 34.0 | 0.0 | 0.0 | 0.0 | 101.5 |
| 1980 | 0.0 | 0.0 | 22.8 | 0.4 | 0.0 | 23.1 | 48.0 | 54.0 | 0.0 | 0.0 | 0.0 | 125.2 |
| 1985 | 0.0 | 0.0 | 21.6 | 0.2 | 0.0 | 21.7 | 57.9 | 25.1 | 0.0 | 0.0 | 0.0 | 104.8 |
| 1990 | 0.0 | 0.0 | 22.2 | 0.1 | 0.0 | 22.4 | 51.9 | R 35.9 | 0.0 | 0.0 | 0.0 | R 119.3 |
| 1991 | 0.0 | 0.0 | 14.4 | 0.1 | 0.0 | 14.5 | 67.3 | R 33.8 | 0.0 | 0.0 | 0.0 | R 119.6 |
| 1992 | 0.0 | 0.0 | 13.9 | 0.1 | 0.0 | 14.1 | 57.2 | R 31.6 | 0.0 | 0.0 | 0.0 | R 105.1 |
| 1993 | 0.0 | 0.0 | 8.7 | 0.1 | 0.0 | 8.7 | 61.3 | R 33.2 | 0.0 | 0.0 | 0.0 | R 106.4 |
| 1994 | 0.0 | 0.0 | 8.0 | 0.1 | 0.0 | 8.1 | 70.8 | R 40.8 | 0.0 | 0.0 | 0.0 | R 128.6 |
| 1995 | 0.0 | 0.0 | 9.2 | 0.2 | 0.0 | 9.4 | 2.1 | R 50.3 | (s) | 0.0 | 0.0 | R 76.0 |
| 1996 | 0.0 | 0.0 | 7.2 | 0.1 | 0.0 | 7.3 | 53.8 | R 53.3 | (s) | 0.0 | 0.0 | R 127.3 |
| 1997 | 0.0 | 0.0 | 15.7 | 0.1 | 0.0 | 15.8 | 0.0 | R 40.9 | 0.0 | 0.0 | 0.0 | R 69.8 |
| 1998 | 0.0 | 0.0 | 18.6 | 0.1 | 0.0 | 18.7 | 0.0 | 58.3 | 0.0 | 0.0 | 0.0 | 97.1 |
| 1999 | 0.0 | 0.0 | 7.1 | 0.1 | 0.0 | 7.1 | 0.0 | 47.9 | 0.0 | 0.0 | 0.0 | 73.9 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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**Table 137.   Energy Consumption Estimates by Source, Selected Years 1960-1999, Maryland**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydro-electric Power [d] | Wood and Waste | Other [a,e] | Net Inter-state Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |

| Year | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 8,530 | 71 | 1,813 | 279 | 12,870 | 2,457 | 2,445 | 1,051 | 565 | 22,552 | 16,835 | 978 | 61,844 | 0 | 1,358 | — | — | 1,813 | — |
| 1965 | 12,372 | 99 | 3,289 | 474 | 16,967 | 2,856 | 2,371 | 1,473 | 627 | 27,510 | 15,510 | 1,697 | 72,774 | 0 | 1,141 | — | — | -5,190 | — |
| 1970 | 12,216 | 156 | 2,798 | 309 | 19,817 | 4,477 | 2,331 | 1,841 | 624 | 37,159 | 22,046 | 2,895 | 94,297 | 0 | 1,907 | — | — | 4,900 | — |
| 1975 | 7,761 | 140 | 3,246 | 205 | 21,034 | 3,049 | 1,193 | 2,395 | 763 | 43,688 | 26,941 | 2,166 | 104,680 | 4,386 | 2,311 | — | — | 9,915 | — |
| 1980 | 9,312 | 160 | 2,638 | 173 | 21,908 | 3,522 | 1,168 | 2,060 | 724 | 44,003 | 16,480 | 2,504 | 95,181 | 10,947 | 1,270 | — | — | 18,497 | — |
| 1985 | 10,012 | 151 | 4,520 | 76 | 17,717 | 3,901 | 1,247 | 1,805 | 659 | 45,632 | 7,916 | 2,640 | 86,112 | 9,926 | 1,524 | — | — | 31,970 | — |
| 1990 | 11,193 | 172 | 5,008 | 74 | 17,003 | 3,637 | 466 | 1,965 | 742 | 47,415 | 9,881 | 4,027 | 90,218 | 1,251 | R h 2,299 | — | — | R 62,337 | — |
| 1991 | 10,709 | 173 | 3,703 | 75 | 17,313 | 3,293 | 476 | 2,018 | 663 | 48,448 | 9,368 | 3,814 | 89,173 | 9,036 | R 1,407 | — | — | R 45,800 | — |
| 1992 | 9,713 | 181 | 3,509 | 96 | 18,355 | 3,061 | 378 | 2,635 | 676 | 49,044 | 7,836 | 4,559 | 90,150 | 10,664 | R 1,825 | — | — | R 40,705 | — |
| 1993 | 10,268 | 181 | 4,684 | 102 | 19,724 | 3,000 | 621 | 2,479 | 689 | 49,602 | 9,703 | 4,025 | 94,629 | 12,301 | R 1,658 | — | — | R 36,415 | — |
| 1994 | 10,491 | 184 | 4,363 | 71 | 19,463 | 3,229 | 672 | 2,835 | 720 | 50,699 | 9,039 | 4,133 | 95,222 | 11,235 | R 2,010 | — | — | R 36,951 | — |
| 1995 | 11,198 | 194 | 4,236 | 48 | 19,189 | 3,430 | 801 | 2,687 | 708 | 51,475 | 3,921 | 4,057 | 90,553 | 12,938 | R 1,442 | — | — | R 40,619 | — |
| 1996 | 11,366 | 193 | 3,610 | 35 | 22,124 | 3,897 | 802 | R 2,995 | 687 | 51,800 | 4,383 | R 4,436 | R 94,769 | 12,093 | R 2,457 | — | — | R 43,294 | — |
| 1997 | 11,261 | 207 | 5,619 | 43 | 20,214 | 4,096 | 865 | R 2,856 | 725 | 53,594 | 4,026 | R 4,428 | R 96,466 | 13,213 | R 1,588 | — | — | R 39,663 | — |
| 1998 | 11,789 | 179 | 4,679 | 56 | 21,299 | 3,920 | 1,146 | 2,410 | 759 | 54,585 | 7,409 | 5,500 | 101,763 | 13,331 | 1,740 | — | — | 32,469 | — |
| 1999 | 11,752 | 195 | 4,375 | 39 | 22,383 | 3,938 | 814 | 2,143 | 767 | 56,886 | 8,559 | 6,164 | 106,067 | 13,312 | 1,424 | — | — | 28,121 | — |

**Trillion Btu**

| Year | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 226.6 | 73.3 | 12.0 | 1.4 | 75.0 | 13.5 | 13.9 | 4.2 | 3.4 | 118.5 | 105.8 | 5.7 | 353.4 | 0.0 | 14.6 | 23.8 | 0.0 | 6.2 | 697.9 |
| 1965 | 327.4 | 101.0 | 21.8 | 2.4 | 98.8 | 15.7 | 13.4 | 5.9 | 3.8 | 144.5 | 97.5 | 9.4 | 413.4 | 0.0 | 11.9 | 27.1 | 0.0 | -17.7 | 863.1 |
| 1970 | 311.3 | 159.6 | 18.6 | 1.6 | 115.4 | 25.0 | 13.2 | 7.0 | 3.8 | 195.2 | 138.6 | 16.2 | 534.4 | 0.0 | 20.0 | 31.8 | 0.0 | 16.7 | 1,073.8 |
| 1975 | 197.2 | 141.9 | 21.5 | 1.0 | 122.5 | 16.9 | 6.8 | 8.9 | 4.6 | 229.5 | 169.4 | 12.4 | 593.6 | 48.3 | 24.0 | 31.8 | 0.0 | 33.8 | 1,070.6 |
| 1980 | 235.7 | 163.4 | 17.5 | 0.9 | 127.6 | 19.5 | 6.6 | 7.6 | 4.4 | 231.1 | 103.6 | 14.1 | 533.0 | 119.4 | 13.2 | R 27.8 | 0.0 | 63.1 | R 1,155.6 |
| 1985 | 256.2 | 156.0 | 30.0 | 0.4 | 103.2 | 21.7 | 7.1 | 6.5 | 4.0 | 239.7 | 49.8 | 14.9 | 477.2 | 107.3 | 15.9 | R 37.0 | 0.0 | 109.1 | R 1,158.7 |
| 1990 | 286.4 | 177.1 | 33.2 | 0.4 | 99.0 | 20.3 | 2.6 | 7.1 | 4.5 | 249.1 | 62.1 | 22.8 | 501.2 | 13.4 | h 23.9 | R 30.5 | h 0.1 | R 212.7 | R h 1,245.3 |
| 1991 | 274.8 | 177.8 | 24.6 | 0.4 | 100.9 | 18.4 | 2.7 | 7.3 | 4.0 | 254.5 | 58.9 | 21.5 | 493.1 | 97.0 | 14.7 | R 30.6 | 0.1 | R 156.3 | R 1,244.4 |
| 1992 | 247.5 | 186.4 | 23.3 | 0.5 | 106.9 | 17.1 | 2.1 | 9.6 | 4.1 | 257.6 | 49.3 | 25.8 | 496.3 | 113.9 | 18.9 | R 32.0 | 0.1 | R 138.9 | R 1,233.9 |
| 1993 | 261.7 | 185.7 | 31.1 | 0.5 | 114.9 | 16.8 | 3.5 | 8.9 | 4.2 | 260.6 | 61.0 | 22.6 | 524.1 | 131.4 | 17.1 | R 32.8 | 0.1 | R 124.2 | R 1,277.2 |
| 1994 | 268.9 | 189.4 | 28.9 | 0.4 | 113.4 | 18.2 | 3.8 | 10.3 | 4.4 | R 265.2 | 56.8 | 23.3 | R 524.7 | 119.9 | 20.7 | R 33.4 | 0.1 | R 126.1 | R 1,283.5 |
| 1995 | 289.6 | 199.1 | 28.1 | 0.2 | 111.8 | 19.4 | 4.5 | 9.7 | 4.3 | R 268.4 | 24.7 | 22.9 | R 494.2 | 137.9 | 14.9 | R 40.2 | 0.1 | R 138.6 | R 1,314.6 |
| 1996 | 292.2 | 198.1 | 24.0 | 0.2 | 128.9 | 22.1 | 4.5 | R 10.8 | 4.2 | R 270.2 | 27.6 | R 25.0 | R 517.3 | 128.5 | 25.4 | R 43.3 | 0.1 | R 147.7 | R 1,352.7 |
| 1997 | 290.2 | 214.5 | 37.3 | 0.2 | 117.7 | 23.2 | 4.9 | R 10.3 | 4.4 | R 279.4 | 25.3 | R 24.9 | R 527.7 | 140.4 | R 16.5 | R 38.3 | 0.2 | R 135.3 | R 1,363.0 |
| 1998 | 303.8 | 185.9 | 31.1 | 0.3 | 124.1 | 22.2 | 6.5 | 8.7 | 4.6 | 284.5 | 46.6 | 31.2 | 559.7 | 141.6 | 18.0 | 31.0 | 0.2 | 110.8 | 1,351.0 |
| 1999 | 303.5 | 201.4 | 29.0 | 0.2 | 130.4 | 22.3 | 4.6 | 7.7 | 4.7 | 296.4 | 53.8 | 34.9 | 584.1 | 141.4 | 14.7 | 36.9 | 0.2 | 95.9 | 1,378.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in  Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.  A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns.  Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours.  R=Revised data.  — =Not applicable.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**MARYLAND**

## Table 138.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Maryland

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum Distillate Fuel [a] | Petroleum Kerosene [a] | Petroleum LPG [a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar [c] | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 116 | 46 | 6,053 | 2,234 | 617 | 8,903 | 406 | — | — | 2,772 | — | 6,895 | — |
| 1965 | 91 | 57 | 7,191 | 2,177 | 893 | 10,261 | 328 | — | — | 4,384 | — | 10,466 | — |
| 1970 | 35 | 73 | 8,234 | 2,166 | 1,007 | 11,407 | 377 | — | — | 7,690 | — | 18,635 | — |
| 1975 | 15 | 69 | 8,453 | 1,014 | 1,242 | 10,708 | 452 | — | — | 9,660 | — | 23,300 | — |
| 1980 | 15 | 68 | 8,797 | 830 | 740 | 10,367 | 558 | — | — | 12,119 | — | 29,469 | — |
| 1985 | 44 | 68 | 5,023 | 1,113 | 987 | 7,123 | 862 | — | — | 14,319 | — | 33,642 | — |
| 1990 | 18 | 66 | 4,284 | 385 | 1,088 | 5,757 | 518 | — | — | 19,102 | — | R 41,787 | — |
| 1991 | 16 | 69 | 4,181 | 396 | 1,215 | 5,792 | 546 | — | — | 20,295 | — | R 44,121 | — |
| 1992 | 5 | 75 | 4,458 | 316 | 1,365 | 6,139 | 575 | — | — | 19,762 | — | R 42,148 | — |
| 1993 | 6 | 77 | 5,230 | 509 | 1,404 | 7,143 | 619 | — | — | 21,546 | — | R 45,509 | — |
| 1994 | 14 | 77 | 4,985 | 393 | 1,431 | 6,809 | 607 | — | — | 21,666 | — | R 45,215 | — |
| 1995 | 107 | 77 | 4,766 | 535 | 1,647 | 6,948 | R 674 | — | — | 22,234 | — | R 46,356 | — |
| 1996 | 15 | 86 | 5,895 | 593 | R 1,853 | R 8,341 | R 673 | — | — | 22,986 | — | R 47,903 | — |
| 1997 | 20 | 78 | 5,176 | 597 | R 1,989 | R 7,762 | R 458 | — | — | 21,937 | — | R 45,630 | — |
| 1998 | 19 | 68 | 4,398 | 720 | 1,814 | 6,932 | 403 | — | — | 22,407 | — | 46,288 | — |
| 1999 | 17 | 75 | 4,694 | 523 | 1,661 | 6,878 | 432 | — | — | 23,342 | — | 45,735 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Petroleum Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2.9 | 47.5 | 35.3 | 12.7 | 2.5 | 50.4 | 8.1 | 0.0 | 0.0 | 9.5 | 118.4 | 23.5 | 141.9 |
| 1965 | 2.3 | 58.1 | 41.9 | 12.3 | 3.6 | 57.8 | 6.6 | 0.0 | 0.0 | 15.0 | 139.7 | 35.7 | 175.4 |
| 1970 | 0.8 | 74.5 | 48.0 | 12.3 | 3.8 | 64.0 | 7.5 | 0.0 | 0.0 | 26.2 | 173.2 | 63.6 | 236.8 |
| 1975 | 0.3 | 70.1 | 49.2 | 5.7 | 4.6 | 59.6 | 9.0 | 0.0 | 0.0 | 33.0 | 172.0 | 79.5 | 251.5 |
| 1980 | 0.4 | 69.4 | 51.2 | 4.7 | 2.7 | 58.7 | 11.2 | 0.0 | 0.0 | 41.4 | 181.0 | 100.5 | 281.5 |
| 1985 | 1.1 | 70.7 | 29.3 | 6.3 | 3.6 | 39.1 | 17.2 | 0.0 | 0.0 | 48.9 | 177.1 | 114.8 | 291.8 |
| 1990 | 0.4 | 68.2 | 25.0 | 2.2 | 3.9 | 31.1 | 10.4 | e 0.1 | e (s) | 65.2 | e 175.4 | 142.6 | e 317.9 |
| 1991 | 0.4 | 71.0 | 24.4 | 2.2 | 4.4 | 31.0 | 10.9 | 0.1 | (s) | 69.2 | 182.6 | R 150.5 | R 333.2 |
| 1992 | 0.1 | 77.1 | 26.0 | 1.8 | 4.9 | 32.7 | 11.5 | 0.1 | (s) | 67.4 | 189.0 | R 143.8 | R 332.8 |
| 1993 | 0.2 | 79.0 | 30.5 | 2.9 | 5.1 | 38.4 | 12.4 | 0.1 | R 0.1 | 73.5 | 203.6 | 155.3 | 358.9 |
| 1994 | 0.3 | 79.0 | 29.0 | 2.2 | 5.2 | 36.5 | 12.1 | 0.1 | R 0.1 | 73.9 | 202.0 | 154.3 | 356.3 |
| 1995 | 2.7 | 78.4 | 27.8 | 3.0 | 6.0 | 36.8 | 13.5 | 0.1 | R 0.1 | 75.9 | 207.3 | R 158.2 | R 365.5 |
| 1996 | 0.4 | 88.0 | 34.3 | 3.4 | R 6.7 | R 44.4 | R 13.5 | 0.1 | R 0.1 | 78.4 | R 224.8 | R 163.4 | R 388.2 |
| 1997 | 0.5 | 80.1 | 30.1 | 3.4 | R 7.2 | R 40.7 | R 9.2 | 0.1 | R 0.1 | 74.8 | R 205.5 | R 155.7 | R 361.2 |
| 1998 | 0.5 | 70.5 | 25.6 | 4.1 | 6.6 | 36.3 | 8.1 | 0.1 | 0.1 | 76.5 | 191.9 | 157.9 | 349.9 |
| 1999 | 0.4 | 77.4 | 27.3 | 3.0 | 6.0 | 36.3 | 8.6 | 0.1 | (s) | 79.6 | 202.5 | 156.0 | 358.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 139.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Maryland

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 170 | 8 | 2,357 | 72 | 109 | 72 | 2,442 | 5,052 | 8 | — | 2,696 | — | 6,706 | — |
| 1965 | 142 | 13 | 2,800 | 70 | 158 | 90 | 1,920 | 5,039 | 6 | — | 3,937 | — | 9,401 | — |
| 1970 | 48 | 26 | 3,206 | 70 | 178 | 103 | 1,498 | 5,054 | 7 | — | 6,347 | — | 15,380 | — |
| 1975 | 19 | 25 | 3,291 | 33 | 219 | 120 | 1,169 | 4,833 | 9 | — | 8,573 | — | 20,680 | — |
| 1980 | 22 | 29 | 2,865 | 20 | 131 | 121 | 1,159 | 4,296 | 13 | — | 9,387 | — | 22,827 | — |
| 1985 | 77 | 24 | 1,942 | 89 | 174 | 170 | 252 | 2,628 | R 23 | — | 9,621 | — | 22,603 | — |
| 1990 | 30 | 24 | 2,095 | 48 | 192 | 231 | 556 | 3,122 | R 33 | — | 11,021 | — | R 24,111 | — |
| 1991 | 26 | 38 | 2,297 | 52 | 214 | 118 | 133 | 2,816 | R 35 | — | 11,259 | — | R 24,476 | — |
| 1992 | 8 | 42 | 2,575 | 42 | 241 | 103 | 478 | 3,439 | R 37 | — | 11,355 | — | R 24,217 | — |
| 1993 | 9 | 44 | 2,689 | 85 | 248 | 31 | 193 | 3,246 | 50 | — | 12,006 | — | R 25,357 | — |
| 1994 | 22 | 44 | 3,063 | 213 | 253 | 31 | 217 | 3,776 | 51 | — | 13,914 | — | R 29,036 | — |
| 1995 | 190 | 47 | 2,999 | 210 | 291 | 32 | 121 | 3,652 | 51 | — | 23,730 | — | R 49,476 | — |
| 1996 | 27 | 46 | 3,317 | 151 | R 327 | 32 | 109 | R 3,935 | 55 | — | 23,780 | — | R 49,558 | — |
| 1997 | 35 | 50 | 2,560 | 227 | R 351 | 31 | 51 | R 3,220 | R 50 | — | 24,070 | — | R 50,067 | — |
| 1998 | 34 | 57 | 2,605 | 313 | 320 | 31 | 45 | 3,315 | 50 | — | 24,950 | — | 51,541 | — |
| 1999 | 29 | 58 | 2,224 | 254 | 293 | 31 | 63 | 2,866 | 61 | — | 25,662 | — | 50,279 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 4.3 | 8.3 | 13.7 | 0.4 | 0.4 | 0.4 | 15.4 | 30.3 | 0.2 | 0.0 | 9.2 | 52.2 | 22.9 | 75.1 |
| 1965 | 3.5 | 13.3 | 16.3 | 0.4 | 0.6 | 0.5 | 12.1 | 29.9 | 0.1 | 0.0 | 13.4 | 60.3 | 32.1 | 92.4 |
| 1970 | 1.1 | 26.5 | 18.7 | 0.4 | 0.7 | 0.5 | 9.4 | 29.7 | 0.1 | 0.0 | 21.7 | 79.1 | 52.5 | 131.6 |
| 1975 | 0.4 | 25.5 | 19.2 | 0.2 | 0.8 | 0.6 | 7.4 | 28.2 | 0.2 | 0.0 | 29.3 | 83.5 | 70.6 | 154.1 |
| 1980 | 0.5 | 29.1 | 16.7 | 0.1 | 0.5 | 0.6 | 7.3 | 25.2 | 0.3 | 0.0 | 32.0 | 87.2 | 77.9 | 165.1 |
| 1985 | 1.9 | 25.0 | 11.3 | 0.5 | 0.6 | 0.9 | 1.6 | 14.9 | R 0.5 | 0.0 | 32.8 | R 75.1 | 77.1 | R 152.2 |
| 1990 | 0.8 | 24.7 | 12.2 | 0.3 | 0.7 | 1.2 | 3.5 | 17.9 | R 0.7 | e 0.0 | 37.6 | R e 81.6 | 82.3 | R e 163.9 |
| 1991 | 0.7 | 39.1 | 13.4 | 0.3 | 0.8 | 0.6 | 0.8 | 15.9 | R 0.7 | 0.0 | 38.4 | R 94.8 | R 83.5 | R 178.3 |
| 1992 | 0.2 | 43.6 | 15.0 | 0.2 | 0.9 | 0.5 | 3.0 | 19.7 | R 0.7 | 0.0 | 38.7 | R 103.0 | R 82.6 | R 185.6 |
| 1993 | 0.2 | 44.8 | 15.7 | 0.5 | 0.9 | 0.2 | 1.2 | 18.4 | 1.0 | 0.0 | 41.0 | 105.4 | 86.5 | R 191.9 |
| 1994 | 0.6 | 45.5 | 17.8 | 1.2 | 0.9 | 0.2 | 1.4 | 21.5 | 1.0 | 0.0 | 47.5 | 116.0 | 99.1 | 215.1 |
| 1995 | 4.7 | 48.0 | 17.5 | 1.2 | 1.1 | 0.2 | 0.8 | 20.6 | 1.0 | 0.0 | 81.0 | 155.4 | R 168.8 | R 324.2 |
| 1996 | 0.7 | 47.1 | 19.3 | 0.9 | R 1.2 | 0.2 | 0.7 | 22.2 | 1.1 | 0.0 | 81.1 | R 152.3 | R 169.1 | R 321.4 |
| 1997 | 0.9 | 51.5 | 14.9 | 1.3 | R 1.3 | 0.2 | 0.3 | R 18.0 | R 1.0 | 0.0 | 82.1 | R 153.4 | R 170.8 | R 324.3 |
| 1998 | 0.8 | 59.5 | 15.2 | 1.8 | 1.2 | 0.2 | 0.3 | 18.6 | 1.0 | 0.0 | 85.1 | 165.0 | 175.9 | 340.8 |
| 1999 | 0.7 | 60.0 | 13.0 | 1.4 | 1.1 | 0.2 | 0.4 | 16.0 | 1.2 | 0.0 | 87.6 | 165.6 | 171.6 | 337.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 140. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Maryland

| | | | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | Total |
| 1960 | 5,067 | 16 | 1,813 | 2,093 | 138 | 317 | 247 | 670 | 10,333 | 978 | 16,589 | 1 | — | — | 3,269 | — | 8,131 | — |
| 1965 | 6,101 | 28 | 3,289 | 3,177 | 124 | 412 | 316 | 439 | 8,296 | 1,697 | 17,750 | 1 | — | — | 5,073 | — | 12,113 | — |
| 1970 | 6,174 | 44 | 2,798 | 3,248 | 95 | 624 | 325 | 261 | 6,672 | 2,895 | 16,918 | (s) | — | — | 8,469 | — | 20,524 | — |
| 1975 | 3,854 | 43 | 3,246 | 3,434 | 146 | 888 | 456 | 293 | 4,983 | 2,166 | 15,614 | 0 | — | — | 9,069 | — | 21,875 | — |
| 1980 | 3,367 | 54 | 2,638 | 3,297 | 318 | 1,163 | 414 | 145 | 2,669 | 2,504 | 13,148 | 0 | — | — | 13,057 | — | 31,750 | — |
| 1985 | 2,846 | 55 | 4,520 | 2,547 | 44 | 584 | 377 | 299 | 1,022 | 2,640 | 12,032 | 0 | — | — | 15,312 | — | 35,974 | — |
| 1990 | 2,200 | 62 | 5,008 | 1,733 | 33 | 633 | 424 | 297 | 1,241 | 4,027 | 13,396 | f 0 | — | — | 19,308 | — | R 42,239 | — |
| 1991 | 2,034 | 47 | 3,703 | 1,556 | 28 | 547 | 379 | 285 | 777 | 3,814 | 11,089 | 0 | — | — | 19,448 | — | R 42,279 | — |
| 1992 | 706 | 50 | 3,509 | 1,408 | 19 | 928 | 387 | 275 | 1,073 | 4,559 | 12,159 | 0 | — | — | 19,768 | — | R 42,161 | — |
| 1993 | 732 | 49 | 4,684 | 1,787 | 27 | 713 | 394 | 290 | 1,244 | 4,025 | 13,163 | 0 | — | — | 20,201 | — | R 42,667 | — |
| 1994 | 738 | 48 | 4,363 | 1,697 | 66 | 1,055 | 412 | 294 | 1,252 | 4,133 | 13,271 | 0 | — | — | 19,037 | — | R 39,730 | — |
| 1995 | 760 | 49 | 4,236 | 1,682 | 57 | 701 | 405 | 328 | 740 | 4,057 | 12,207 | 0 | — | — | 10,057 | — | R 20,969 | — |
| 1996 | 785 | 50 | 3,610 | 2,087 | 58 | R 767 | 393 | 343 | 1,384 | R 4,436 | R 13,077 | 0 | — | — | 10,098 | — | R 21,045 | — |
| 1997 | 790 | 66 | 5,619 | 1,765 | 41 | R 414 | 415 | 363 | 856 | R 4,428 | R 13,900 | 0 | — | — | 10,128 | — | R 21,067 | — |
| 1998 | 768 | 39 | 4,679 | 2,776 | 113 | 263 | 434 | 294 | 676 | 5,500 | 14,736 | 0 | — | — | 10,344 | — | 21,368 | — |
| 1999 | 775 | 42 | 4,375 | 2,379 | 36 | 176 | 439 | 238 | 711 | 6,164 | 14,517 | 2 | — | — | 9,936 | — | 19,468 | — |

#### Trillion Btu

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydroelectric | Wood and Waste | Other | Electricity | Net Energy | Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 135.0 | 16.6 | 12.0 | 12.2 | 0.8 | 1.3 | 1.5 | 3.5 | 65.0 | 5.7 | 102.0 | (s) | 15.6 | 0.0 | 11.2 | 280.2 | 27.7 | 308.0 |
| 1965 | 162.4 | 28.3 | 21.8 | 18.5 | 0.7 | 1.7 | 1.9 | 2.3 | 52.2 | 9.4 | 108.5 | (s) | 20.4 | 0.0 | 17.3 | 336.9 | 41.3 | 378.2 |
| 1970 | 162.7 | 44.9 | 18.6 | 18.9 | 0.5 | 2.4 | 2.0 | 1.4 | 41.9 | 16.2 | 101.8 | (s) | 24.1 | 0.0 | 28.9 | 362.3 | 70.0 | 432.4 |
| 1975 | 102.2 | 43.6 | 21.5 | 20.0 | 0.8 | 3.3 | 2.8 | 1.5 | 31.3 | 12.4 | 93.7 | 0.0 | 22.6 | 0.0 | 30.9 | 293.0 | 74.6 | 367.7 |
| 1980 | 88.6 | 55.5 | 17.5 | 19.2 | 1.8 | 4.3 | 2.5 | 0.8 | 16.8 | 14.1 | 76.9 | 0.0 | R 16.4 | 0.0 | 44.6 | R 281.9 | 108.3 | R 390.2 |
| 1985 | 74.8 | 56.5 | 30.0 | 14.8 | 0.2 | 2.1 | 2.3 | 1.6 | 6.4 | 14.9 | 72.4 | 0.0 | R 19.2 | 0.0 | 52.2 | R 275.1 | 122.7 | R 397.8 |
| 1990 | 57.4 | 63.5 | 33.2 | 10.1 | 0.2 | 2.3 | 2.6 | 1.6 | 7.8 | 22.8 | 80.6 | f 0.0 | R 19.5 | f 0.0 | 65.9 | R f 286.8 | 144.1 | R f 430.9 |
| 1991 | 52.8 | 48.3 | 24.6 | 9.1 | 0.2 | 2.0 | 2.3 | 1.5 | 4.9 | 21.5 | 66.0 | 0.0 | R 19.0 | 0.0 | 66.4 | R 252.5 | R 144.3 | R 396.8 |
| 1992 | 17.8 | 51.1 | 23.3 | 8.2 | 0.1 | 3.4 | 2.3 | 1.4 | 6.7 | 25.8 | 71.3 | 0.0 | R 19.7 | 0.0 | 67.4 | R 227.4 | R 143.9 | R 371.2 |
| 1993 | 18.5 | 50.2 | 31.1 | 10.4 | 0.2 | 2.6 | 2.4 | 1.5 | 7.8 | 22.6 | 78.6 | 0.0 | R 19.5 | 0.0 | 68.9 | R 235.6 | 145.6 | R 381.2 |
| 1994 | 18.8 | 49.1 | 28.9 | 9.9 | 0.4 | 3.8 | 2.5 | 1.5 | 7.9 | 23.3 | 78.3 | 0.0 | R 20.2 | 0.0 | 65.0 | R 231.3 | R 135.6 | R 366.9 |
| 1995 | 19.2 | 50.2 | 28.1 | 9.8 | 0.3 | 2.5 | 2.5 | 1.7 | 4.7 | 22.9 | 72.5 | 0.0 | R 25.7 | 0.0 | 34.3 | R 201.9 | 71.5 | R 273.5 |
| 1996 | 19.7 | 51.4 | 24.0 | 12.2 | 0.3 | R 2.8 | 2.4 | 1.8 | 8.7 | R 25.0 | R 77.0 | 0.0 | R 28.7 | 0.0 | 34.5 | R 211.4 | R 71.8 | R 283.2 |
| 1997 | 19.8 | 68.2 | 37.3 | 10.3 | 0.2 | R 1.5 | 2.5 | 1.9 | 5.4 | R 24.9 | R 84.0 | 0.0 | R 28.1 | 0.0 | 34.6 | R 234.6 | R 71.9 | R 306.5 |
| 1998 | 19.2 | 39.9 | 31.1 | 16.2 | 0.6 | 1.0 | 2.6 | 1.5 | 4.3 | 31.2 | 88.4 | 0.0 | 21.9 | 0.0 | 35.3 | 204.8 | 72.9 | 277.7 |
| 1999 | 19.4 | 43.6 | 29.0 | 13.9 | 0.2 | 0.6 | 2.7 | 1.2 | 4.5 | 34.9 | 87.0 | (s) | 27.1 | 0.0 | 33.9 | 211.0 | 66.4 | 277.4 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 141.   Transportation Energy Consumption Estimates, Selected Years 1960-1999, Maryland**

| Year | Coal [a] | Natural Gas [b] | Petroleum Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | 89 | 1 | 279 | 2,352 | 2,457 | 9 | 318 | 21,810 | 3,893 | 31,117 | 0 | 19 | — | 48 | — |
| 1965 | 20 | 1 | 474 | 3,774 | 2,856 | 10 | 310 | 26,981 | 5,024 | 39,429 | 0 | 0 | — | 0 | — |
| 1970 | 10 | 2 | 309 | 4,184 | 4,477 | 32 | 299 | 36,795 | 3,931 | 50,027 | 0 | 0 | — | 0 | — |
| 1975 | 1 | 2 | 205 | 5,244 | 2,973 | 46 | 307 | 43,275 | 2,807 | 54,856 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 4 | 173 | 5,848 | 3,512 | 26 | 310 | 43,737 | 4,514 | 58,121 | 0 | 23 | — | 55 | — |
| 1985 | 0 | 2 | 76 | 7,375 | 3,901 | 60 | 282 | 45,163 | 1,511 | 58,368 | R e 1 | 75 | — | 176 | — |
| 1990 | 0 | 2 | 74 | 8,293 | 3,637 | 52 | 318 | 46,887 | 1,850 | 61,111 | 0 | 102 | — | 224 | — |
| 1991 | 0 | 3 | 75 | 8,727 | 3,293 | 42 | 284 | 48,045 | 1,373 | 61,840 | 0 | 106 | — | R 229 | — |
| 1992 | 0 | 2 | 96 | 9,457 | 3,061 | 101 | 290 | 48,665 | 1,631 | 63,301 | 0 | 104 | — | R 221 | — |
| 1993 | 0 | 2 | 102 | 9,425 | 3,000 | 115 | 295 | 49,281 | 1,291 | 63,509 | 0 | 120 | — | 254 | — |
| 1994 | 0 | 3 | 71 | 8,678 | 3,229 | 97 | 308 | 50,374 | 988 | 63,745 | 0 | 135 | — | 281 | — |
| 1995 | 0 | 3 | 48 | 9,068 | 3,430 | 48 | 303 | 51,115 | 946 | 64,958 | R 76 | 137 | — | 285 | — |
| 1996 | 0 | 3 | 35 | 10,044 | 3,897 | 49 | 294 | 51,425 | 768 | R 66,512 | R 64 | 133 | — | 277 | — |
| 1997 | 0 | 3 | 43 | 10,075 | 4,096 | R 102 | 311 | 53,200 | 739 | R 68,566 | R 73 | 130 | — | R 271 | — |
| 1998 | 0 | 3 | 56 | 10,835 | 3,920 | 13 | 325 | 54,260 | 1,213 | 70,622 | 61 | 134 | — | 276 | — |
| 1999 | 0 | 3 | 39 | 12,581 | 3,938 | 12 | 329 | 56,617 | 1,173 | 74,689 | 62 | 146 | — | 286 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | |
| 1960 | 2.3 | 0.9 | 1.4 | 13.7 | 13.5 | (s) | 1.9 | 114.6 | 24.5 | 169.6 | 0.0 | 0.1 | 172.8 | 0.2 | 173.0 |
| 1965 | 0.5 | 1.2 | 2.4 | 22.0 | 15.7 | (s) | 1.9 | 141.7 | 31.6 | 215.4 | 0.0 | 0.0 | 217.1 | 0.0 | 217.1 |
| 1970 | 0.2 | 2.1 | 1.6 | 24.4 | 25.0 | 0.1 | 1.8 | 193.3 | 24.7 | 270.8 | 0.0 | 0.0 | 273.1 | 0.0 | 273.1 |
| 1975 | (s) | 2.2 | 1.0 | 30.5 | 16.5 | 0.2 | 1.9 | 227.3 | 17.6 | 295.1 | 0.0 | 0.0 | 297.3 | 0.0 | 297.3 |
| 1980 | 0.0 | 4.0 | 0.9 | 34.1 | 19.5 | 0.1 | 1.9 | 229.8 | 28.4 | 314.5 | 0.0 | 0.1 | 318.6 | 0.2 | 318.8 |
| 1985 | 0.0 | 2.3 | 0.4 | 43.0 | 21.7 | 0.2 | 1.7 | 237.2 | 9.5 | 313.7 | R e (s) | 0.3 | e 316.3 | 0.6 | e 316.9 |
| 1990 | 0.0 | 2.5 | 0.4 | 48.3 | 20.3 | 0.2 | 1.9 | 246.3 | 11.6 | 329.0 | 0.0 | 0.3 | 331.8 | 0.8 | 332.6 |
| 1991 | 0.0 | 2.6 | 0.4 | 50.8 | 18.4 | 0.2 | 1.7 | 252.4 | 8.6 | 332.5 | 0.0 | 0.4 | 335.4 | 0.8 | 336.2 |
| 1992 | 0.0 | 2.5 | 0.5 | 55.1 | 17.1 | 0.4 | 1.8 | 255.6 | 10.3 | 340.7 | 0.0 | 0.4 | 343.5 | 0.8 | 344.3 |
| 1993 | 0.0 | 2.5 | 0.5 | 54.9 | 16.8 | 0.4 | 1.8 | 258.9 | 8.1 | 341.4 | 0.0 | 0.4 | 344.3 | 0.9 | 345.2 |
| 1994 | 0.0 | 2.6 | 0.4 | 50.6 | 18.2 | 0.4 | 1.9 | R 263.5 | 6.2 | R 341.0 | 0.0 | 0.5 | R 344.1 | 1.0 | R 345.0 |
| 1995 | 0.0 | 2.9 | 0.2 | 52.8 | 19.4 | 0.2 | 1.8 | R 266.6 | 5.9 | R 347.0 | R 0.3 | 0.5 | R 350.4 | 1.0 | R 351.4 |
| 1996 | 0.0 | 2.7 | 0.2 | 58.5 | 22.1 | 0.2 | 1.8 | R 268.2 | 4.8 | R 355.8 | 0.2 | 0.5 | R 359.0 | 0.9 | R 359.9 |
| 1997 | 0.0 | 3.3 | 0.2 | 58.7 | 23.2 | R 0.4 | 1.9 | R 277.3 | 4.6 | R 366.4 | R 0.3 | 0.4 | R 370.1 | 0.9 | R 371.0 |
| 1998 | 0.0 | 3.1 | 0.3 | 63.1 | 22.2 | (s) | 2.0 | 282.8 | 7.6 | 378.1 | 0.2 | 0.5 | 381.7 | 0.9 | 382.6 |
| 1999 | 0.0 | 3.4 | 0.2 | 73.3 | 22.3 | (s) | 2.0 | 295.0 | 7.4 | 400.3 | 0.2 | 0.5 | 404.1 | 1.0 | 405.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 142.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Maryland**

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 3,088 | (s) | 166 | 16 | 0 | 182 | 0 | 1,356 | 0 | 0 | 0 | — |
| 1965 | 6,018 | (s) | 269 | 26 | 0 | 295 | 0 | 1,140 | 0 | 0 | 0 | — |
| 1970 | 5,950 | 11 | 9,946 | 945 | 0 | 10,891 | 0 | 1,906 | 0 | 0 | 0 | — |
| 1975 | 3,873 | (s) | 17,982 | 688 | 0 | 18,669 | 4,386 | 2,311 | 0 | 0 | 0 | — |
| 1980 | 5,908 | 5 | 8,139 | 1,111 | 0 | 9,250 | 10,947 | 1,270 | 0 | 0 | 0 | — |
| 1985 | 7,046 | 1 | 5,131 | 830 | 0 | 5,961 | 9,926 | 1,524 | 16 | 0 | 0 | — |
| 1990 | 8,945 | 18 | 6,234 | 598 | 0 | 6,832 | 1,251 | 2,299 | 0 | 0 | 0 | — |
| 1991 | 8,632 | 16 | 7,084 | 552 | 0 | 7,637 | 9,036 | 1,407 | 0 | 0 | 0 | — |
| 1992 | 8,993 | 12 | 4,654 | 458 | 0 | 5,111 | 10,664 | 1,825 | 0 | 0 | 0 | — |
| 1993 | 9,521 | 9 | 6,975 | 592 | 0 | 7,567 | 12,301 | 1,658 | 0 | 0 | 0 | — |
| 1994 | 9,717 | 13 | 6,581 | 1,040 | 0 | 7,621 | 11,235 | 2,010 | 0 | 0 | 0 | — |
| 1995 | 10,141 | 19 | 2,115 | 674 | 0 | 2,789 | 12,938 | 1,442 | 0 | 0 | 0 | — |
| 1996 | 10,540 | 8 | 2,121 | 782 | 0 | 2,903 | 12,093 | 2,457 | 0 | 0 | 0 | — |
| 1997 | 10,417 | 11 | 2,380 | 638 | 0 | 3,018 | 13,213 | 1,588 | 0 | 0 | 0 | — |
| 1998 | 10,968 | 12 | 5,475 | 684 | 0 | 6,159 | 13,331 | 1,740 | 0 | 0 | 0 | — |
| 1999 | 10,931 | 16 | 6,612 | 505 | 0 | 7,117 | 13,312 | 1,422 | 0 | 0 | 0 | — |
| | Trillion Btu | | | | | | | | | | | |
| 1960 | 82.2 | 0.1 | 1.0 | 0.1 | 0.0 | 1.1 | 0.0 | 14.6 | 0.0 | 0.0 | 0.0 | 98.0 |
| 1965 | 158.7 | 0.1 | 1.7 | 0.1 | 0.0 | 1.8 | 0.0 | 11.9 | 0.0 | 0.0 | 0.0 | 172.5 |
| 1970 | 146.4 | 11.7 | 62.5 | 5.5 | 0.0 | 68.0 | 0.0 | 20.0 | 0.0 | 0.0 | 0.0 | 246.2 |
| 1975 | 94.2 | 0.4 | 113.0 | 4.0 | 0.0 | 117.0 | 48.3 | 24.0 | 0.0 | 0.0 | 0.0 | 284.0 |
| 1980 | 146.3 | 5.4 | 51.2 | 6.5 | 0.0 | 57.6 | 119.4 | 13.2 | 0.0 | 0.0 | 0.0 | 341.8 |
| 1985 | 178.4 | 1.4 | 32.3 | 4.8 | 0.0 | 37.1 | 107.3 | 15.9 | 0.2 | 0.0 | 0.0 | 340.4 |
| 1990 | 227.8 | 18.3 | 39.2 | 3.5 | 0.0 | 42.7 | 13.4 | 23.9 | 0.0 | 0.0 | 0.0 | 326.0 |
| 1991 | 220.9 | 16.8 | 44.5 | 3.2 | 0.0 | 47.8 | 97.0 | 14.7 | 0.0 | 0.0 | 0.0 | 397.2 |
| 1992 | 229.4 | 12.1 | 29.3 | 2.7 | 0.0 | 31.9 | 113.9 | 18.9 | 0.0 | 0.0 | 0.0 | 406.1 |
| 1993 | 242.8 | 9.2 | 43.9 | 3.5 | 0.0 | 47.3 | 131.4 | 17.1 | 0.0 | 0.0 | 0.0 | 447.8 |
| 1994 | 249.2 | 13.3 | 41.4 | 6.1 | 0.0 | 47.4 | 119.9 | 20.7 | 0.0 | 0.0 | 0.0 | 450.6 |
| 1995 | 263.0 | 19.6 | 13.3 | 3.9 | 0.0 | 17.2 | 137.9 | 14.9 | 0.0 | 0.0 | 0.0 | 452.5 |
| 1996 | 271.5 | 8.8 | 13.3 | 4.6 | 0.0 | 17.9 | 128.5 | 25.4 | 0.0 | 0.0 | 0.0 | 452.0 |
| 1997 | 269.0 | 11.5 | 15.0 | 3.7 | 0.0 | 18.7 | 140.4 | R 16.5 | 0.0 | 0.0 | 0.0 | R 456.0 |
| 1998 | 283.3 | 12.9 | 34.4 | 4.0 | 0.0 | 38.4 | 141.6 | 18.0 | 0.0 | 0.0 | 0.0 | 494.2 |
| 1999 | 283.0 | 17.1 | 41.6 | 2.9 | 0.0 | 44.5 | 141.4 | 14.7 | 0.0 | 0.0 | 0.0 | 500.7 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 143. Energy Consumption Estimates by Source, Selected Years 1960-1999, Massachusetts

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power Million kWh | Hydroelectric Power [d] Million kWh | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | | | | | |
| 1960 | 4,559 | 78 | 2,270 | 968 | 51,240 | 1,209 | 5,718 | 1,148 | 799 | 34,993 | 39,108 | R 1,269 | R 138,722 | 34 | 982 | — | — | -711 | — |
| 1965 | 4,932 | 114 | 2,867 | 1,702 | 55,825 | 3,166 | 3,496 | 1,511 | 915 | 39,752 | 54,207 | 1,120 | 164,561 | 966 | 664 | — | — | -6,364 | — |
| 1970 | 910 | 147 | 2,843 | 276 | 59,239 | 7,864 | 2,103 | 1,820 | 947 | 49,527 | 86,130 | 1,121 | 211,870 | 1,209 | 753 | — | — | -7,191 | — |
| 1975 | 1,016 | 154 | 1,832 | 228 | 58,665 | 8,009 | 867 | 2,315 | 786 | 54,630 | 65,975 | 1,127 | 194,432 | 3,781 | 417 | — | — | 6,757 | — |
| 1980 | 874 | 183 | 1,231 | 274 | 37,613 | 8,573 | 698 | 2,125 | 841 | 51,443 | 54,143 | 2,312 | 159,253 | 3,232 | 158 | — | — | 11,452 | — |
| 1985 | 4,176 | 219 | 1,051 | 134 | 33,072 | 6,984 | 737 | 1,719 | 765 | 54,847 | 36,075 | 2,268 | 137,652 | 6,133 | 4,574 | — | — | 5,631 | — |
| 1990 | 4,337 | 258 | 1,339 | 97 | 33,697 | 9,806 | 308 | 2,631 | 861 | 56,125 | 32,066 | 2,337 | 139,265 | 5,070 | R h 1,684 | — | — | R 28,874 | — |
| 1991 | 4,451 | 252 | 1,976 | 45 | 33,188 | 9,398 | 369 | 1,919 | 770 | 54,488 | 30,533 | 2,277 | 134,964 | 4,417 | R 2,018 | — | — | R 29,974 | — |
| 1992 | 4,257 | 295 | 1,567 | 45 | 35,150 | 7,880 | 424 | 1,869 | 785 | 55,436 | 27,386 | 2,426 | 132,967 | 4,742 | R 1,543 | — | — | R 38,695 | — |
| 1993 | 3,811 | 312 | 1,454 | 85 | 36,629 | 7,728 | 378 | 2,102 | 800 | 56,065 | 24,361 | 2,444 | 132,046 | 4,339 | R 1,757 | — | — | R 51,720 | — |
| 1994 | 3,932 | 337 | 886 | 73 | 35,313 | 7,433 | 336 | 2,056 | 836 | 56,871 | 21,079 | 2,397 | 127,278 | 3,859 | R 1,504 | — | — | R 56,154 | — |
| 1995 | 4,113 | 362 | 1,249 | 84 | 36,635 | 6,636 | 275 | 2,143 | 821 | 58,775 | 13,942 | 2,270 | 122,831 | 4,486 | R 1,418 | — | — | R 57,103 | — |
| 1996 | 4,477 | 358 | 1,270 | 90 | 34,929 | 6,873 | 209 | R 2,563 | 797 | 59,794 | 15,500 | R 4,911 | R 126,936 | 5,324 | R 1,731 | — | — | R 59,463 | — |
| 1997 | 4,891 | 380 | 916 | 87 | 35,596 | 7,298 | 257 | R 2,109 | 842 | 60,912 | 22,497 | R 5,307 | R 135,822 | 4,310 | R 1,676 | — | — | R 43,585 | — |
| 1998 | 3,189 | 338 | 838 | 87 | 33,587 | 7,728 | 290 | 1,969 | 882 | 62,284 | 18,895 | 5,387 | 131,946 | 5,698 | 1,597 | — | — | 68,054 | — |
| 1999 | 497 | 339 | 967 | 96 | 33,175 | 8,081 | 426 | 2,295 | 891 | 63,433 | 2,733 | 5,453 | 117,551 | 4,473 | 1,446 | — | — | 128,236 | — |
| | | | Trillion Btu | | | | | | | | | | | | | | | | |
| 1960 | 118.8 | 80.6 | 15.1 | 4.9 | 298.5 | 6.7 | 32.4 | 4.6 | 4.8 | 183.8 | 245.9 | R 7.6 | R 804.3 | 0.4 | 10.6 | 42.8 | 0.0 | -2.4 | R 1,055.0 |
| 1965 | 127.9 | 115.7 | 19.0 | 8.6 | 325.2 | 17.8 | 19.8 | 6.1 | 5.6 | 208.8 | 340.8 | 6.0 | 957.7 | 11.4 | 6.9 | 48.7 | 0.0 | -21.7 | 1,246.6 |
| 1970 | 21.4 | 149.1 | 18.9 | 1.4 | 345.1 | 44.5 | 11.9 | 6.9 | 5.7 | 260.2 | 541.5 | 6.0 | 1,242.0 | 13.3 | 7.9 | 57.1 | 0.0 | -24.5 | 1,466.3 |
| 1975 | 24.5 | 154.6 | 12.2 | 1.2 | 341.7 | 45.3 | 4.9 | 8.6 | 4.8 | 287.0 | 414.8 | 6.1 | 1,126.5 | 41.6 | 4.3 | 49.0 | 0.0 | 23.1 | 1,423.6 |
| 1980 | 22.8 | 185.5 | 8.2 | 1.4 | 219.1 | 48.5 | 4.0 | 7.8 | 5.1 | 270.2 | 340.4 | 12.6 | 917.2 | 35.3 | 1.6 | R 59.8 | 0.0 | 39.1 | R 1,261.3 |
| 1985 | 110.2 | 224.8 | 7.0 | 0.7 | 192.6 | 39.5 | 4.2 | 6.2 | 4.6 | 288.1 | 226.8 | 12.2 | 781.9 | 66.3 | 47.8 | 59.8 | 0.0 | 19.2 | R 1,310.0 |
| 1990 | 113.1 | 268.0 | 8.9 | 0.5 | 196.3 | 55.5 | 1.7 | 9.5 | 5.2 | 294.8 | 201.6 | 12.7 | 786.7 | 54.1 | R h 17.5 | R 53.7 | h 0.2 | R 98.5 | R h 1,400.5 |
| 1991 | 116.8 | 261.3 | 13.1 | 0.2 | 193.3 | 52.8 | 2.1 | 6.9 | 4.7 | 286.2 | 192.0 | 12.3 | 763.7 | 47.4 | R 21.1 | R 57.1 | 0.2 | R 102.3 | R 1,377.9 |
| 1992 | 111.0 | 305.9 | 10.4 | 0.2 | 204.7 | 44.5 | 2.4 | 6.8 | 4.8 | 291.2 | 172.2 | 13.0 | 750.3 | 50.6 | R 16.0 | R 61.0 | R 0.3 | 132.0 | R 1,431.9 |
| 1993 | 98.5 | 324.2 | 9.6 | 0.4 | 213.4 | 43.7 | 2.1 | 7.6 | 4.8 | 294.5 | 153.2 | 13.2 | 742.5 | 46.3 | R 18.1 | R 62.1 | 0.3 | R 176.5 | R 1,472.6 |
| 1994 | 100.7 | 346.1 | 5.9 | 0.4 | 205.7 | 42.1 | 1.9 | 7.5 | 5.1 | R 297.4 | 132.5 | 12.9 | R 711.4 | 41.2 | R 15.5 | R 65.4 | 0.3 | R 191.6 | R 1,476.7 |
| 1995 | 104.4 | 371.7 | 8.3 | 0.4 | 213.4 | 37.6 | 1.6 | 7.8 | 5.0 | R 306.5 | 87.7 | 12.2 | R 680.4 | 47.8 | R 14.6 | R 68.8 | 0.3 | R 194.8 | R 1,488.6 |
| 1996 | 113.1 | 367.5 | 8.4 | 0.5 | 203.5 | 39.0 | 1.2 | R 9.3 | 4.8 | R 311.9 | 97.4 | R 26.3 | R 702.2 | 56.6 | R 17.9 | R 69.1 | R 0.4 | R 202.9 | R 1,534.5 |
| 1997 | 122.9 | 388.6 | 6.1 | 0.4 | 207.3 | 41.4 | 1.5 | R 7.6 | 5.1 | R 317.5 | 141.4 | R 28.6 | R 757.0 | 45.8 | R 17.4 | R 62.8 | 0.4 | R 148.7 | R 1,550.8 |
| 1998 | 80.4 | 345.5 | 5.6 | 0.4 | 195.6 | 43.8 | 1.6 | 7.1 | 5.3 | 324.6 | 118.8 | 29.1 | 732.1 | 60.5 | 16.5 | 50.2 | 0.4 | 232.2 | 1,522.9 |
| 1999 | 13.0 | 355.5 | 6.4 | 0.5 | 193.2 | 45.8 | 2.4 | 8.3 | 5.4 | 330.6 | 17.2 | 29.3 | 639.1 | 47.5 | 15.0 | 55.3 | 0.4 | 437.5 | 1,569.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

MASSACHUSETTS

## Table 144. Residential Energy Consumption Estimates, Selected Years 1960-1999, Massachusetts

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 394 | 45 | 34,305 | 4,858 | 752 | 39,915 | 427 | — | — | 4,190 | — | 10,423 | — |
| 1965 | 195 | 65 | 37,082 | 2,682 | 926 | 40,689 | 378 | — | — | 5,766 | — | 13,767 | — |
| 1970 | 105 | 83 | 38,530 | 1,434 | 933 | 40,897 | 459 | — | — | 9,335 | — | 22,621 | — |
| 1975 | 57 | 90 | 37,860 | 591 | 1,006 | 39,456 | 491 | — | — | 10,648 | — | 25,684 | — |
| 1980 | 50 | 94 | 22,712 | 323 | 675 | 23,710 | R 1,560 | — | — | 11,571 | — | 28,137 | — |
| 1985 | 70 | 98 | 17,968 | 577 | 1,021 | 19,566 | 1,322 | — | — | 12,907 | — | 30,324 | — |
| 1990 | 29 | 107 | 17,287 | 163 | 1,358 | 18,808 | 904 | — | — | 15,581 | — | R 34,085 | — |
| 1991 | 15 | 103 | 16,640 | 151 | 1,229 | 18,020 | 952 | — | — | 15,379 | — | R 33,434 | — |
| 1992 | 25 | 120 | 18,812 | 259 | 1,219 | 20,291 | 1,002 | — | — | 15,560 | — | R 33,186 | — |
| 1993 | 22 | 121 | 20,527 | 250 | 1,344 | 22,120 | R 1,029 | — | — | 15,785 | — | R 33,341 | — |
| 1994 | 13 | 120 | 19,764 | 218 | 1,389 | 21,372 | R 1,008 | — | — | 16,049 | — | R 33,493 | — |
| 1995 | 14 | 106 | 19,425 | 130 | 1,451 | 21,006 | R 1,119 | — | — | 15,993 | — | R 33,344 | — |
| 1996 | 16 | 114 | 18,625 | 148 | R 1,720 | R 20,493 | R 1,117 | — | — | 16,256 | — | R 33,877 | — |
| 1997 | 14 | 112 | 18,916 | 190 | R 1,614 | R 20,720 | R 726 | — | — | 16,274 | — | R 33,853 | — |
| 1998 | 12 | 102 | 17,312 | 197 | 1,478 | 18,987 | 640 | — | — | 16,388 | — | 33,854 | — |
| 1999 | 15 | 106 | 17,923 | 179 | 1,522 | 19,624 | 686 | — | — | 17,392 | — | 34,077 | — |

### Trillion Btu

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 9.8 | 46.6 | 199.8 | 27.5 | 3.0 | 230.4 | 8.5 | 0.0 | 0.0 | 14.3 | 309.6 | 35.6 | 345.2 |
| 1965 | 4.8 | 65.7 | 216.0 | 15.2 | 3.7 | 234.9 | 7.6 | 0.0 | 0.0 | 19.7 | 332.6 | 47.0 | 379.6 |
| 1970 | 2.5 | 83.6 | 224.4 | 8.1 | 3.5 | 236.1 | 9.2 | 0.0 | 0.0 | 31.8 | 363.2 | 77.2 | 440.4 |
| 1975 | 1.3 | 90.6 | 220.5 | 3.3 | 3.7 | 227.6 | 9.8 | 0.0 | 0.0 | 36.3 | 365.6 | 87.6 | 453.2 |
| 1980 | 1.2 | 96.0 | 132.3 | 1.8 | 2.5 | 136.6 | 31.2 | 0.0 | 0.0 | 39.5 | 304.4 | 96.0 | 400.4 |
| 1985 | 1.6 | 100.1 | 104.7 | 3.3 | 3.7 | 111.6 | 26.4 | 0.0 | 0.0 | 44.0 | 283.9 | 103.5 | 387.3 |
| 1990 | 0.7 | 110.5 | 100.7 | 0.9 | 4.9 | 106.5 | 18.1 | e 0.0 | e 0.2 | 53.2 | e 289.2 | 116.3 | R e 405.5 |
| 1991 | 0.4 | 106.9 | 96.9 | 0.9 | 4.4 | 102.2 | 19.0 | 0.0 | 0.2 | 52.5 | 281.2 | R 114.1 | R 395.3 |
| 1992 | 0.6 | 124.2 | 109.6 | 1.5 | 4.4 | 115.5 | 20.0 | 0.0 | 0.2 | 53.1 | 313.6 | R 113.2 | R 426.8 |
| 1993 | 0.5 | 125.9 | 119.6 | 1.4 | 4.8 | 125.8 | R 20.6 | 0.0 | 0.2 | 53.9 | R 326.9 | 113.8 | 440.6 |
| 1994 | 0.3 | 122.6 | 115.1 | 1.2 | 5.0 | 121.4 | R 20.2 | 0.0 | 0.2 | 54.8 | R 319.5 | 114.3 | 433.7 |
| 1995 | 0.3 | 108.5 | 113.2 | 0.7 | 5.3 | 119.1 | R 22.4 | 0.0 | 0.2 | 54.6 | R 305.2 | R 113.8 | R 419.0 |
| 1996 | 0.4 | 117.3 | 108.5 | 0.8 | R 6.2 | R 115.5 | 22.3 | 0.0 | 0.2 | 55.5 | R 311.3 | R 115.6 | R 426.9 |
| 1997 | 0.3 | 114.6 | 110.2 | 1.1 | R 5.8 | R 117.1 | R 14.5 | 0.0 | 0.2 | 55.5 | R 302.3 | R 115.5 | R 417.8 |
| 1998 | 0.3 | 104.4 | 100.8 | 1.1 | 5.3 | 107.3 | 12.8 | 0.0 | 0.2 | 55.9 | 280.9 | 115.5 | 396.4 |
| 1999 | 0.4 | 110.8 | 104.4 | 1.0 | 5.5 | 110.9 | 13.7 | (s) | 0.2 | 59.3 | 295.4 | 116.3 | 411.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 145. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Massachusetts

| | | | Petroleum | | | | | | | | | | Electrical System Energy Losses [c] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal[a] | Natural Gas [b] | Distillate Fuel [a] | Kerosene [a] | LPG [a] | Motor Gasoline | Residual Fuel [a] | Total | Wood | Geothermal | Electricity [a] | Net Energy | | Total [d] |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 431 | 10 | 11,965 | 404 | 133 | 135 | 10,036 | 22,672 | 8 | — | 3,011 | — | 7,488 | — |
| 1965 | 174 | 16 | 12,933 | 223 | 163 | 92 | 14,503 | 27,914 | 7 | — | 4,302 | — | 10,272 | — |
| 1970 | 81 | 35 | 13,438 | 119 | 165 | 102 | 14,872 | 28,696 | 9 | — | 7,782 | — | 18,858 | — |
| 1975 | 45 | 38 | 13,204 | 49 | 178 | 109 | 9,122 | 22,662 | 9 | — | 11,397 | — | 27,490 | — |
| 1980 | 50 | 53 | 7,510 | 30 | 119 | 191 | 4,854 | 12,704 | 37 | — | 13,047 | — | 31,726 | — |
| 1985 | 67 | 41 | 5,703 | 108 | 180 | 188 | 3,157 | 9,336 | R 35 | — | 15,566 | — | 36,571 | — |
| 1990 | 34 | 51 | 6,236 | 127 | 240 | 69 | 4,535 | 11,207 | R 57 | — | 19,520 | — | R 42,702 | — |
| 1991 | 12 | 53 | 7,610 | 200 | 217 | 182 | 4,562 | 12,772 | R 61 | — | 19,421 | — | R 42,219 | — |
| 1992 | 33 | 64 | 6,685 | 73 | 215 | 164 | 3,711 | 10,847 | R 65 | — | 19,563 | — | R 41,724 | — |
| 1993 | 22 | 65 | 6,334 | 113 | 237 | 53 | 2,592 | 9,330 | R 83 | — | 19,670 | — | R 41,545 | — |
| 1994 | 9 | 85 | 5,548 | 100 | 245 | 57 | 2,998 | 8,948 | 84 | — | 20,105 | — | R 41,958 | — |
| 1995 | 13 | 82 | 6,272 | 110 | 256 | 65 | 3,117 | 9,820 | 84 | — | 20,255 | — | R 42,231 | — |
| 1996 | 17 | 96 | 5,718 | 47 | R 303 | 65 | 2,472 | R 8,605 | 92 | — | 20,711 | — | R 43,163 | — |
| 1997 | 15 | 106 | 5,859 | 47 | R 285 | 48 | 2,286 | R 8,524 | R 80 | — | 21,203 | — | R 44,104 | — |
| 1998 | 14 | 90 | 5,510 | 70 | 261 | 66 | 1,506 | 7,413 | 80 | — | 21,773 | — | 44,979 | — |
| 1999 | 22 | 65 | 3,851 | 225 | 269 | 63 | 1,422 | 5,830 | 96 | — | 21,815 | — | 42,743 | — |

Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Motor Gasoline | Residual Fuel | Total | Wood | Geothermal | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 10.7 | 10.6 | 69.7 | 2.3 | 0.5 | 0.7 | 63.1 | 136.3 | 0.2 | 0.0 | 10.3 | 168.1 | 25.6 | 193.7 |
| 1965 | 4.3 | 16.5 | 75.3 | 1.3 | 0.7 | 0.5 | 91.2 | 168.9 | 0.1 | 0.0 | 14.7 | 204.5 | 35.0 | 239.6 |
| 1970 | 1.9 | 35.8 | 78.3 | 0.7 | 0.6 | 0.5 | 93.5 | 173.6 | 0.2 | 0.0 | 26.6 | 238.0 | 64.3 | 302.4 |
| 1975 | 1.0 | 38.0 | 76.9 | 0.3 | 0.7 | 0.6 | 57.4 | 135.8 | 0.2 | 0.0 | 38.9 | 213.8 | 93.8 | 307.6 |
| 1980 | 1.2 | 54.3 | 43.7 | 0.2 | 0.4 | 1.0 | 30.5 | 75.9 | 0.7 | 0.0 | 44.5 | 176.7 | 108.2 | 284.9 |
| 1985 | 1.6 | 42.4 | 33.2 | 0.6 | 0.6 | 1.0 | 19.8 | 55.3 | R 0.7 | 0.0 | 53.1 | R 153.1 | 124.8 | R 277.9 |
| 1990 | 0.8 | 52.3 | 36.3 | 0.7 | 0.9 | 0.4 | 28.5 | 66.8 | R 1.1 | e (s) | 66.6 | R e 187.7 | 145.7 | R e 333.5 |
| 1991 | 0.3 | 55.2 | 44.3 | 1.1 | 0.8 | 1.0 | 28.7 | 75.9 | R 1.2 | (s) | 66.3 | R 198.9 | R 144.1 | R 343.0 |
| 1992 | 0.8 | 66.8 | 38.9 | 0.4 | 0.8 | 0.9 | 23.3 | 64.3 | R 1.3 | 0.1 | 66.8 | R 200.0 | R 142.4 | R 342.4 |
| 1993 | 0.5 | 67.9 | 36.9 | 0.6 | 0.9 | 0.3 | 16.3 | 55.0 | R 1.7 | 0.1 | 67.1 | 192.3 | 141.8 | R 334.0 |
| 1994 | 0.2 | 86.6 | 32.3 | 0.6 | 0.9 | 0.3 | 18.9 | 52.9 | 1.7 | 0.1 | 68.6 | R 210.2 | R 143.2 | 353.3 |
| 1995 | 0.3 | 84.4 | 36.5 | 0.6 | 0.9 | 0.3 | 19.6 | 58.0 | 1.7 | 0.1 | 69.1 | 213.7 | R 144.1 | R 357.8 |
| 1996 | 0.4 | 98.6 | 33.3 | 0.3 | R 1.1 | 0.3 | 15.5 | 50.5 | 1.8 | 0.1 | 70.7 | R 222.3 | R 147.3 | R 369.5 |
| 1997 | 0.4 | 108.0 | 34.1 | 0.3 | 1.0 | 0.3 | 14.4 | R 50.0 | 1.6 | 0.2 | 72.3 | 232.5 | R 150.5 | R 383.0 |
| 1998 | 0.3 | 92.1 | 32.1 | 0.4 | 0.9 | 0.3 | 9.5 | 43.3 | 1.6 | 0.2 | 74.3 | 211.8 | 153.5 | 365.3 |
| 1999 | 0.5 | 68.3 | 22.4 | 1.3 | 1.0 | 0.3 | 8.9 | 33.9 | 1.9 | 0.2 | 74.4 | 179.4 | 145.8 | 325.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 146. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Massachusetts

**Thousand Barrels (Petroleum), Million kWh, etc.**

| Year | Coal (Thousand Short Tons) | Natural Gas [a] (Billion Cubic Feet) | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kero-sene [b] | LPG [b] | Lubri-cants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | Hydro-electric Power [b] (Million kWh) | Wood and Waste | Other [b,d] | Electricity [b] (Million kWh) | Net Energy | Electrical System Energy Losses [e] (Million kWh) | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 1,266 | 12 | 2,270 | 2,322 | 456 | 260 | 356 | 133 | 17,875 | R 1,269 | R 24,942 | 117 | — | — | 5,075 | — | 12,625 | — |
| 1965 | 496 | 20 | 2,867 | 2,841 | 590 | 401 | 507 | 206 | 25,076 | 1,120 | 33,607 | 100 | — | — | 6,546 | — | 15,630 | — |
| 1970 | 149 | 23 | 2,843 | 2,897 | 549 | 693 | 506 | 111 | 25,742 | 1,121 | 34,463 | 72 | — | — | 7,418 | — | 17,975 | — |
| 1975 | 110 | 24 | 1,832 | 2,654 | 227 | 1,099 | 353 | 81 | 15,891 | 1,127 | 23,264 | 67 | — | — | 7,330 | — | 17,680 | — |
| 1980 | 98 | 29 | 1,231 | 1,886 | 345 | 1,305 | 377 | 91 | 2,663 | 2,312 | 10,209 | 63 | — | — | 8,486 | — | 20,635 | — |
| 1985 | 176 | 33 | 1,051 | 1,044 | 52 | 448 | 343 | 367 | 8,399 | 2,268 | 13,973 | 63 | — | — | 9,454 | — | 22,210 | — |
| 1990 | 73 | 44 | 1,339 | 2,176 | 18 | 973 | 386 | 414 | 2,640 | 2,337 | 10,284 | R f 280 | — | — | 10,157 | — | R 22,219 | — |
| 1991 | 85 | 55 | 1,976 | 1,195 | 18 | 404 | 346 | 332 | 1,406 | 2,277 | 7,955 | R 263 | — | — | 9,794 | — | R 21,290 | — |
| 1992 | 155 | 71 | 1,567 | 1,855 | 92 | 372 | 352 | 334 | 2,180 | 2,426 | 9,178 | R 244 | — | — | 9,663 | — | R 20,609 | — |
| 1993 | 115 | 95 | 1,454 | 1,402 | 15 | 460 | 359 | 175 | 3,537 | 2,444 | 9,846 | R 309 | — | — | 9,605 | — | R 20,286 | — |
| 1994 | 65 | 93 | 886 | 1,121 | 17 | 333 | 375 | 347 | 2,731 | 2,397 | 8,209 | R 309 | — | — | 9,710 | — | R 20,264 | — |
| 1995 | 42 | 108 | 1,249 | 1,237 | 35 | 387 | 369 | 373 | 1,481 | 2,270 | 7,400 | R 328 | — | — | 10,026 | — | R 20,904 | — |
| 1996 | 38 | 100 | 1,270 | 1,237 | 14 | R 495 | 358 | 372 | 1,719 | R 4,911 | R 10,375 | R 352 | — | — | 10,085 | — | R 21,018 | — |
| 1997 | 36 | 108 | 916 | 1,166 | 21 | R 163 | 378 | 392 | 1,759 | R 5,307 | R 10,101 | R 202 | — | — | 9,930 | — | R 20,654 | — |
| 1998 | 35 | 125 | 838 | 1,031 | 23 | 185 | 396 | 316 | 1,892 | 5,387 | 10,068 | 343 | — | — | 10,212 | — | 21,096 | — |
| 1999 | 33 | 158 | 967 | 1,224 | 22 | 348 | 400 | 297 | 1,081 | 5,453 | 9,792 | 300 | — | — | 9,966 | — | 19,526 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 33.2 | 12.0 | 15.1 | 13.5 | 2.6 | 1.0 | 2.2 | 0.7 | 112.4 | R 7.6 | R 155.0 | 1.3 | 34.1 | 0.0 | 17.3 | R 252.8 | 43.1 | R 295.9 |
| 1965 | 12.8 | 20.0 | 19.0 | 16.5 | 3.3 | 1.6 | 3.1 | 1.1 | 157.6 | 6.0 | 208.3 | 1.0 | 41.0 | 0.0 | 22.3 | 305.6 | 53.3 | 358.9 |
| 1970 | 3.6 | 22.8 | 18.9 | 16.9 | 3.1 | 2.6 | 3.1 | 0.6 | 161.8 | 6.0 | 213.0 | 0.8 | 47.8 | 0.0 | 25.3 | 313.3 | 61.3 | 374.6 |
| 1975 | 2.6 | 24.1 | 12.2 | 15.5 | 1.3 | 4.1 | 2.1 | 0.4 | 99.0 | 6.1 | 141.6 | 0.7 | 39.0 | 0.0 | 25.0 | 233.0 | 60.3 | 293.3 |
| 1980 | 2.4 | 29.4 | 8.2 | 11.0 | 2.0 | 4.8 | 2.3 | 0.5 | 16.7 | 12.6 | 58.0 | 0.7 | R 27.8 | 0.0 | 29.0 | R 147.2 | 70.4 | R 217.6 |
| 1985 | 4.4 | 33.9 | 7.0 | 6.1 | 0.3 | 1.6 | 2.1 | 1.9 | 52.8 | 12.2 | 84.0 | 0.7 | R 32.6 | 0.0 | 32.3 | R 187.8 | 75.8 | R 263.6 |
| 1990 | 1.8 | 45.8 | 8.9 | 12.7 | 0.1 | 3.5 | 2.3 | 2.2 | 16.6 | 12.7 | 59.0 | R f 2.9 | R 34.5 | f 0.0 | 34.7 | R f 178.7 | 75.8 | R f 254.5 |
| 1991 | 2.1 | 56.9 | 13.1 | 7.0 | 0.1 | 1.5 | 2.1 | 1.7 | 8.8 | 12.3 | 46.6 | R 2.7 | R 36.8 | 0.0 | 33.4 | R 178.6 | R 72.6 | R 251.2 |
| 1992 | 3.9 | 73.5 | 10.4 | 10.8 | 0.5 | 1.3 | 2.1 | 1.8 | 13.7 | 13.0 | 53.7 | R 2.5 | R 39.6 | 0.0 | 33.0 | R 206.2 | R 70.3 | R 276.5 |
| 1993 | 2.9 | 98.3 | 9.6 | 8.2 | 0.1 | 1.7 | 2.2 | 0.9 | 22.2 | 13.2 | 58.0 | R 3.2 | R 39.8 | 0.0 | 32.8 | R 235.0 | 69.2 | R 304.2 |
| 1994 | 1.6 | 95.1 | 5.9 | 6.5 | 0.1 | 1.2 | 2.3 | 1.8 | 17.2 | 12.9 | 47.9 | R 3.2 | R 43.5 | 0.0 | 33.1 | R 224.4 | 69.1 | R 293.6 |
| 1995 | 1.1 | 110.5 | 8.3 | 7.2 | 0.2 | 1.4 | 2.2 | R 1.9 | 9.3 | 12.2 | 42.8 | R 3.4 | R 44.7 | 0.0 | 34.2 | R 236.7 | 71.3 | R 308.0 |
| 1996 | 0.9 | 102.6 | 8.4 | 7.2 | 0.1 | R 1.8 | 2.2 | R 1.9 | 10.8 | R 26.3 | R 58.7 | R 3.6 | R 44.9 | 0.0 | 34.4 | R 245.2 | R 71.7 | R 316.9 |
| 1997 | 0.9 | 110.5 | 6.1 | 6.8 | 0.1 | R 0.6 | 2.3 | R 2.0 | 11.1 | R 28.6 | R 57.6 | R 2.1 | R 46.7 | 0.0 | 33.9 | R 251.6 | R 70.5 | R 322.1 |
| 1998 | 0.9 | 128.1 | 5.6 | 6.0 | 0.1 | 0.7 | 2.4 | 1.6 | 11.9 | 29.1 | 57.4 | 3.5 | 35.8 | 0.0 | 34.8 | 260.5 | 72.0 | 332.5 |
| 1999 | 0.8 | 165.2 | 6.4 | 7.1 | 0.1 | 1.3 | 2.4 | 1.5 | 6.8 | 29.3 | 55.0 | 3.1 | 39.7 | 27.0 | 34.0 | 324.8 | 66.6 | 391.4 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 147. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Massachusetts

| Year | Coal a Thousand Short Tons | Natural Gas b Billion Cubic Feet | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | Ethanol c Thousand Barrels | Electricity a Million Kilowatthours | Net Energy | Electrical System Energy Losses d Million Kilowatthours | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum — Thousand Barrels | | | | | | | | | | | | |
| 1960 | 22 | (s) | 968 | 2,371 | 1,209 | 4 | 443 | 34,725 | 1,207 | 40,927 | 0 | 105 | — | 261 | — |
| 1965 | 2 | (s) | 1,702 | 2,632 | 3,166 | 22 | 408 | 39,454 | 2,472 | 49,856 | 0 | 105 | — | 251 | — |
| 1970 | (s) | 1 | 276 | 3,198 | 7,864 | 29 | 441 | 49,314 | 3,215 | 64,336 | 0 | 105 | — | 254 | — |
| 1975 | (s) | 1 | 228 | 4,485 | 7,967 | 33 | 433 | 54,440 | 1,049 | 68,634 | 0 | 105 | — | 253 | — |
| 1980 | 0 | 1 | 274 | 4,900 | 8,563 | 26 | 463 | 51,161 | 900 | 66,287 | 0 | 167 | — | 406 | — |
| 1985 | 0 | 1 | 134 | 7,536 | 6,984 | 70 | 422 | 54,292 | 874 | 70,311 | e 0 | 193 | — | 453 | — |
| 1990 | 0 | 1 | 97 | 7,510 | 9,806 | 59 | 475 | 55,642 | 1,385 | 74,973 | R 0 | 183 | — | 401 | — |
| 1991 | 0 | 2 | 45 | 7,270 | 9,398 | 69 | 425 | 53,974 | 443 | 71,623 | R 0 | 203 | — | 442 | — |
| 1992 | 0 | 2 | 45 | 7,404 | 7,880 | 63 | 433 | 54,938 | 434 | 71,197 | R 0 | 212 | — | 452 | — |
| 1993 | 0 | 2 | 85 | 7,980 | 7,728 | 62 | 441 | 55,837 | 349 | 72,482 | R (s) | 221 | — | 468 | — |
| 1994 | 0 | 2 | 73 | 8,346 | 7,433 | 88 | 461 | 56,466 | 369 | 73,236 | 0 | 227 | — | 474 | — |
| 1995 | 0 | 2 | 84 | 9,088 | 6,636 | 50 | 453 | 58,337 | 202 | 74,850 | 0 | 236 | — | 493 | — |
| 1996 | 0 | 2 | 90 | 8,896 | 6,873 | R 45 | 439 | 59,356 | 2,036 | R 77,736 | 0 | 241 | — | R 503 | — |
| 1997 | 0 | 2 | 87 | 9,263 | 7,298 | R 47 | 464 | 60,472 | 1,409 | R 79,041 | 0 | 252 | — | R 525 | — |
| 1998 | 0 | 2 | 87 | 9,276 | 7,728 | 45 | 486 | 61,902 | 32 | 79,556 | 0 | 234 | — | 483 | — |
| 1999 | 0 | 3 | 96 | 9,782 | 8,081 | 156 | 491 | 63,073 | 26 | 81,706 | 0 | 234 | — | 458 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 0.6 | 0.3 | 4.9 | 13.8 | 6.7 | (s) | 2.7 | 182.4 | 7.6 | 218.1 | 0.0 | 0.4 | 219.3 | 0.9 | 220.2 |
| 1965 | (s) | 0.2 | 8.6 | 15.3 | 17.8 | 0.1 | 2.5 | 207.3 | 15.5 | 267.1 | 0.0 | 0.4 | 267.7 | 0.9 | 268.6 |
| 1970 | (s) | 1.1 | 1.4 | 18.6 | 44.5 | 0.1 | 2.7 | 259.0 | 20.2 | 346.5 | 0.0 | 0.4 | 348.0 | 0.9 | 348.9 |
| 1975 | (s) | 0.5 | 1.2 | 26.1 | 45.1 | 0.1 | 2.6 | 286.0 | 6.6 | 367.7 | 0.0 | 0.4 | 368.5 | 0.9 | 369.4 |
| 1980 | 0.0 | 0.7 | 1.4 | 28.5 | 48.4 | 0.1 | 2.8 | 268.7 | 5.7 | 355.7 | 0.0 | 0.6 | 356.9 | 1.4 | 358.3 |
| 1985 | 0.0 | 1.4 | 0.7 | 43.9 | 39.5 | 0.3 | 2.6 | 285.2 | 5.5 | 377.6 | e 0.0 | 0.7 | e 379.6 | 1.5 | e 381.2 |
| 1990 | 0.0 | 1.3 | 0.5 | 43.7 | 55.5 | 0.2 | 2.9 | 292.3 | 8.7 | 403.8 | R 0.0 | 0.6 | 405.7 | 1.4 | 407.1 |
| 1991 | 0.0 | 1.6 | 0.2 | 42.3 | 52.8 | 0.2 | 2.6 | 283.5 | 2.8 | 384.6 | R 0.0 | 0.7 | 386.8 | 1.5 | 388.3 |
| 1992 | 0.0 | 1.8 | 0.2 | 43.1 | 44.5 | 0.2 | 2.6 | 288.6 | 2.7 | 382.1 | R 0.0 | 0.7 | 384.6 | 1.5 | 386.1 |
| 1993 | 0.0 | 2.3 | 0.4 | 46.5 | 43.7 | 0.2 | 2.7 | 293.3 | 2.2 | 389.0 | (s) | 0.8 | 392.1 | 1.6 | 393.7 |
| 1994 | 0.0 | 1.9 | 0.4 | 48.6 | 42.1 | 0.3 | 2.8 | R 295.3 | 2.3 | R 391.8 | 0.0 | 0.8 | R 394.5 | 1.6 | R 396.1 |
| 1995 | 0.0 | 1.9 | 0.4 | 52.9 | 37.6 | 0.2 | 2.7 | R 304.2 | 1.3 | R 399.4 | 0.0 | 0.8 | R 402.2 | 1.7 | R 403.8 |
| 1996 | 0.0 | 2.2 | 0.5 | 51.8 | 39.0 | 0.2 | 2.7 | R 309.6 | 12.8 | R 416.5 | 0.0 | 0.8 | R 419.5 | 1.7 | R 421.2 |
| 1997 | 0.0 | 2.4 | 0.4 | 54.0 | 41.4 | R 0.2 | 2.8 | R 315.2 | 8.9 | R 422.9 | 0.0 | 0.9 | R 426.1 | 1.8 | R 427.9 |
| 1998 | 0.0 | 2.0 | 0.4 | 54.0 | 43.8 | 0.2 | 2.9 | 322.6 | 0.2 | 424.2 | 0.0 | 0.8 | 427.0 | 1.6 | 428.6 |
| 1999 | 0.0 | 2.8 | 0.5 | 57.0 | 45.8 | 0.6 | 3.0 | 328.7 | 0.2 | 435.7 | 0.0 | 0.8 | 439.2 | 1.6 | 440.8 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 148.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Massachusetts**

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 2,446 | 11 | 9,990 | 277 | 0 | 10,267 | 34 | 865 | 0 | 0 | 0 | — |
| 1965 | 4,066 | 13 | 12,157 | 337 | 0 | 12,494 | 966 | 564 | 0 | 0 | 0 | — |
| 1970 | 575 | 6 | 42,301 | 1,176 | 0 | 43,477 | 1,209 | 682 | 0 | 0 | 0 | — |
| 1975 | 804 | 1 | 39,912 | 503 | 0 | 40,415 | 3,781 | 350 | 0 | 0 | 0 | — |
| 1980 | 676 | 5 | 45,726 | 616 | 0 | 46,342 | 3,232 | 96 | 0 | 0 | 0 | — |
| 1985 | 3,863 | 45 | 23,645 | 822 | 0 | 24,467 | 6,133 | 4,511 | 0 | 0 | 0 | — |
| 1990 | 4,201 | 55 | 23,505 | 488 | 0 | 23,993 | 5,070 | R 1,404 | 0 | 0 | 0 | — |
| 1991 | 4,339 | 39 | 24,121 | 473 | 0 | 24,594 | 4,417 | R 1,755 | 0 | 0 | 0 | — |
| 1992 | 4,044 | 38 | 21,061 | 394 | 0 | 21,455 | 4,742 | R 1,299 | 0 | 0 | 0 | — |
| 1993 | 3,652 | 29 | 17,883 | 386 | 0 | 18,269 | 4,339 | R 1,448 | 0 | 0 | 0 | — |
| 1994 | 3,845 | 39 | 14,981 | 533 | 0 | 15,514 | 3,859 | R 1,195 | 0 | 0 | 0 | — |
| 1995 | 4,044 | 65 | 9,143 | 612 | 0 | 9,755 | 4,486 | R 1,090 | 0 | 0 | 0 | — |
| 1996 | 4,406 | 45 | 9,273 | 453 | 0 | 9,727 | 5,324 | R 1,380 | 0 | 0 | 0 | — |
| 1997 | 4,826 | 51 | 17,043 | 392 | 0 | 17,436 | 4,310 | R 1,474 | 0 | 0 | 0 | — |
| 1998 | 3,129 | 18 | 15,465 | 458 | 0 | 15,923 | 5,698 | 1,254 | 0 | 0 | 0 | — |
| 1999 | 427 | 8 | 205 | 394 | 0 | 600 | 1,931 | 1,146 | 0 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 64.5 | 11.2 | 62.8 | 1.6 | 0.0 | 64.4 | 0.4 | 9.3 | 0.0 | 0.0 | 0.0 | 149.8 |
| 1965 | 106.0 | 13.3 | 76.4 | 2.0 | 0.0 | 78.4 | 11.4 | 5.9 | 0.0 | 0.0 | 0.0 | 215.0 |
| 1970 | 13.4 | 5.7 | 265.9 | 6.8 | 0.0 | 272.8 | 13.3 | 7.2 | 0.0 | 0.0 | 0.0 | 312.3 |
| 1975 | 19.6 | 1.4 | 250.9 | 2.9 | 0.0 | 253.8 | 41.6 | 3.6 | 0.0 | 0.0 | 0.0 | 320.1 |
| 1980 | 18.1 | 5.1 | 287.5 | 3.6 | 0.0 | 291.1 | 35.3 | 1.0 | 0.0 | 0.0 | 0.0 | 350.5 |
| 1985 | 102.6 | 46.9 | 148.7 | 4.8 | 0.0 | 153.4 | 66.3 | 47.1 | 0.0 | 0.0 | 0.0 | 416.4 |
| 1990 | 109.7 | 58.1 | 147.8 | 2.8 | 0.0 | 150.6 | 54.1 | R 14.6 | 0.0 | 0.0 | 0.0 | R 395.7 |
| 1991 | 114.0 | 40.7 | 151.7 | 2.8 | 0.0 | 154.4 | 47.4 | R 18.3 | 0.0 | 0.0 | 0.0 | R 382.9 |
| 1992 | 105.7 | 39.6 | 132.4 | 2.3 | 0.0 | 134.7 | 50.6 | R 13.4 | 0.0 | 0.0 | 0.0 | R 349.0 |
| 1993 | 94.6 | 29.8 | 112.4 | 2.2 | 0.0 | 114.7 | 46.3 | R 14.9 | 0.0 | 0.0 | 0.0 | 304.4 |
| 1994 | 98.5 | 40.0 | 94.2 | 3.1 | 0.0 | 97.3 | 41.2 | R 12.3 | 0.0 | 0.0 | 0.0 | R 293.9 |
| 1995 | 102.7 | 66.3 | 57.5 | 3.6 | 0.0 | 61.0 | 47.8 | R 11.2 | 0.0 | 0.0 | 0.0 | R 294.7 |
| 1996 | 111.3 | 46.8 | 58.3 | 2.6 | 0.0 | 60.9 | 56.6 | R 14.3 | 0.0 | 0.0 | 0.0 | R 294.8 |
| 1997 | 121.3 | 53.2 | 107.2 | 2.3 | 0.0 | 109.4 | 45.8 | R 15.3 | 0.0 | 0.0 | 0.0 | R 352.2 |
| 1998 | 78.9 | 19.0 | 97.2 | 2.7 | 0.0 | 99.9 | 60.5 | 13.0 | 0.0 | 0.0 | 0.0 | 276.3 |
| 1999 | 11.2 | 8.4 | 1.3 | 2.3 | 0.0 | 3.6 | 20.5 | 11.9 | 0.0 | 0.0 | 0.0 | 61.3 |

a  Includes supplemental gaseous fuels.
b  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c  Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d  Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f  "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g  If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 149. Energy Consumption Estimates by Source, Selected Years 1960-1999, Michigan

MICHIGAN (vertical side text)

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |

**Thousand Barrels / Million kWh**

| Year | Coal | Nat Gas | Asphalt | Aviation Gas | Distillate | Jet | Kerosene | LPG | Lubricants | Motor Gas | Residual | Other | Total | Nuclear | Hydro | Wood/Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 25,934 | 370 | 2,936 | 1,312 | 30,235 | 3,369 | 4,072 | 2,827 | 2,497 | 65,782 | 11,840 | R 4,051 | R 128,920 | 0 | 3,280 | — | — | 9,080 | — |
| 1965 | 33,132 | 556 | 2,264 | 2,619 | 30,287 | 4,377 | 5,880 | 3,716 | 3,025 | 78,044 | 8,594 | R 8,077 | R 146,882 | 181 | 1,400 | — | — | 11,513 | — |
| 1970 | 34,066 | 809 | 3,881 | 718 | 38,141 | 7,365 | 3,124 | 6,202 | 3,157 | 96,831 | 10,056 | R 9,775 | R 179,250 | 375 | 1,303 | — | — | 12,620 | — |
| 1975 | 31,198 | 884 | 3,886 | 347 | 42,170 | 5,776 | 1,349 | 7,475 | 2,751 | 108,255 | 18,291 | R 10,245 | R 200,545 | 7,176 | 1,430 | — | — | 4,840 | — |
| 1980 | 31,110 | 865 | 3,507 | 488 | 27,643 | 6,646 | 1,233 | 6,736 | 3,274 | 97,025 | 13,289 | R 17,512 | R 177,353 | 15,891 | 6,885 | — | — | -13,005 | — |
| 1985 | 32,793 | 709 | 2,779 | 201 | 25,411 | 6,570 | 507 | 14,225 | 2,979 | 93,447 | 3,109 | R 8,260 | R 157,487 | 13,452 | 1,388 | — | — | 21,789 | — |
| 1990 | 34,713 | 817 | 3,950 | 215 | 23,312 | 10,057 | 270 | 14,901 | 3,352 | 99,913 | 2,750 | R 10,434 | R 169,153 | 21,611 | R h 971 | — | — | R 27,601 | — |
| 1991 | 33,879 | 828 | 3,464 | 206 | 24,978 | 10,234 | 360 | 16,017 | 2,999 | 101,375 | 1,750 | R 12,699 | R 174,082 | 27,021 | R 1,078 | — | — | R -16,657 | — |
| 1992 | 31,554 | 891 | 3,546 | 182 | 25,311 | 10,125 | 251 | 16,666 | 3,057 | 101,370 | 1,706 | R 13,552 | R 175,766 | 18,849 | R 1,086 | — | — | R 14,656 | — |
| 1993 | 32,217 | 913 | 4,453 | 198 | 28,719 | 10,305 | 452 | 13,077 | 3,113 | 105,003 | 2,094 | R 13,452 | R 180,867 | 28,525 | R 2,911 | — | — | R -14,058 | — |
| 1994 | 35,674 | 926 | 3,596 | 237 | 29,347 | 10,281 | 415 | 14,287 | 3,254 | 105,744 | 2,188 | R 13,717 | R 183,067 | 14,144 | R 5,802 | — | — | R 10,107 | — |
| 1995 | 35,802 | 971 | 4,955 | 231 | 29,118 | 8,818 | 366 | 14,497 | 3,198 | 110,546 | 1,610 | R 13,153 | R 186,493 | 24,448 | R 4,921 | — | — | R -5,505 | — |
| 1996 | 36,694 | 1,015 | 3,703 | 215 | 29,502 | 9,045 | 421 | R 18,306 | 3,104 | 110,520 | 1,787 | R 15,697 | R 192,297 | 26,829 | R 2,474 | — | — | R 1,681 | — |
| 1997 | 35,888 | 980 | 7,777 | 197 | 30,999 | 9,483 | 354 | R 14,524 | 3,279 | 112,389 | 1,564 | R 16,752 | R 197,319 | 21,914 | R 2,930 | — | — | R 22,355 | — |
| 1998 | 38,084 | 843 | 6,488 | 167 | 30,651 | 9,025 | 387 | 13,108 | 3,432 | 114,913 | 2,144 | 16,886 | 197,201 | 12,494 | 1,818 | — | — | 50,522 | — |
| 1999 | 38,220 | 914 | 6,669 | 286 | 31,760 | 9,116 | 694 | 15,339 | 3,468 | 121,027 | 2,565 | 16,290 | 207,214 | 14,591 | 1,086 | — | — | 41,014 | — |

**Trillion Btu**

| Year | Coal | Nat Gas | Asphalt | Aviation Gas | Distillate | Jet | Kerosene | LPG | Lubricants | Motor Gas | Residual | Other | Total | Nuclear | Hydro | Wood/Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 653.2 | 383.0 | 19.5 | 6.6 | 176.1 | 18.2 | 23.1 | 11.3 | 15.1 | 345.6 | 74.4 | R 23.9 | R 713.9 | 0.0 | 35.3 | 37.3 | 0.0 | 31.0 | R 1,853.6 |
| 1965 | 830.2 | 563.6 | 15.0 | 13.2 | 176.4 | 24.0 | 33.3 | 14.9 | 18.3 | 410.0 | 54.0 | R 45.4 | R 804.7 | 2.1 | 14.6 | 36.9 | 0.0 | 39.3 | R 2,291.4 |
| 1970 | 828.9 | 821.3 | 25.8 | 3.6 | 222.2 | 41.0 | 17.7 | 23.4 | 19.1 | 508.7 | 63.2 | R 54.4 | R 979.1 | 4.1 | 13.7 | 36.4 | 0.0 | 43.1 | R 2,726.5 |
| 1975 | 751.0 | 894.8 | 25.8 | 1.7 | 245.6 | 32.1 | 7.6 | 27.8 | 16.7 | 568.7 | 115.0 | R 57.8 | R 1,098.9 | 79.0 | 14.9 | 35.9 | 0.0 | 16.5 | R 2,891.0 |
| 1980 | 759.0 | 874.7 | 23.3 | 2.5 | 161.0 | 37.1 | 7.0 | 24.7 | 19.9 | 509.7 | 83.6 | R 96.6 | R 965.4 | 173.3 | 71.5 | R 87.6 | 0.0 | -44.4 | R 2,887.1 |
| 1985 | 781.9 | 719.9 | 18.4 | 1.0 | 148.0 | 36.7 | 2.9 | 51.3 | 18.1 | 490.9 | 19.5 | R 45.6 | R 832.4 | 145.5 | 14.5 | 74.3 | 0.0 | 74.3 | R 2,663.9 |
| 1990 | 786.3 | 835.4 | 26.2 | 1.1 | 135.8 | 56.6 | 1.5 | 54.0 | 20.3 | 524.8 | 17.3 | R 57.8 | R 895.4 | 230.8 | R h 10.1 | R 91.6 | h 0.8 | R 94.2 | R h 2,830.9 |
| 1991 | 759.8 | 844.2 | 23.0 | 1.0 | 145.5 | 57.5 | 2.0 | 57.9 | 18.2 | 532.5 | 11.0 | R 70.2 | R 918.8 | 290.2 | R 11.3 | R 91.6 | R 0.9 | R -56.8 | R 2,854.6 |
| 1992 | 702.0 | 909.0 | 23.5 | 0.9 | 147.4 | 57.0 | 1.4 | 60.4 | 18.5 | 532.5 | 10.7 | R 74.4 | R 926.9 | 201.3 | R 11.2 | R 95.0 | 0.9 | R 50.0 | R 2,893.3 |
| 1993 | 708.1 | 932.2 | 29.6 | 1.0 | 167.3 | 58.1 | 2.6 | 47.2 | 18.9 | 551.6 | 13.2 | R 73.9 | R 963.2 | 304.7 | R 30.0 | R 87.3 | R 1.0 | R -48.0 | R 2,983.5 |
| 1994 | 794.0 | 945.5 | 23.9 | 1.2 | 170.9 | 58.2 | 2.4 | 51.9 | 19.7 | R 553.0 | 13.8 | R 75.3 | R 970.3 | 151.0 | R 59.9 | R 98.9 | 1.0 | R 34.5 | R 3,066.9 |
| 1995 | 780.9 | 987.4 | 32.9 | 1.2 | 169.6 | 50.0 | 2.1 | 52.5 | 19.4 | R 576.5 | 10.1 | R 72.2 | R 986.5 | 260.6 | R 50.7 | R 98.9 | 1.1 | R -18.8 | R 3,165.0 |
| 1996 | 789.3 | 1,026.7 | 24.6 | 1.1 | 171.8 | 51.3 | 2.4 | R 66.1 | 18.8 | R 576.5 | 11.2 | R 85.6 | R 1,009.5 | 285.0 | R 25.6 | R 106.9 | R 1.2 | R 5.7 | R 3,254.2 |
| 1997 | 774.6 | 995.4 | 51.6 | 1.0 | 180.6 | 53.8 | 2.0 | R 52.5 | 19.9 | R 585.9 | 9.8 | R 91.8 | R 1,048.9 | 232.8 | R 30.3 | R 93.1 | 1.2 | R 76.3 | R 3,244.7 |
| 1998 | 820.7 | 860.3 | 43.1 | 0.8 | 178.5 | 51.2 | 2.2 | 47.4 | 20.8 | 598.9 | 13.5 | 92.5 | 1,048.9 | 132.7 | 18.8 | 68.7 | 1.3 | 172.4 | 3,094.2 |
| 1999 | 822.6 | 930.2 | 44.3 | 1.4 | 185.0 | 51.7 | 3.9 | 55.5 | 21.0 | 630.7 | 16.1 | 88.3 | 1,097.9 | 155.0 | 11.2 | 89.4 | 1.4 | 139.9 | 3,239.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 150. Residential Energy Consumption Estimates, Selected Years 1960-1999, Michigan

| Year | Coal[a] | Natural Gas[b] | Petroleum — Distillate Fuel[a] | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | Thousand Barrels | Thousand Barrels | Thousand Barrels | Thousand Cords | | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 842 | 202 | 17,380 | 765 | 1,940 | 20,084 | 1,103 | — | — | 8,728 | — | 21,709 | — |
| 1965 | 620 | 271 | 16,334 | 1,279 | 2,346 | 19,959 | 890 | — | — | 11,309 | — | 27,002 | — |
| 1970 | 302 | 340 | 18,839 | 545 | 4,493 | 23,877 | 829 | — | — | 17,103 | — | 41,446 | — |
| 1975 | 140 | 335 | 19,420 | 302 | 5,219 | 24,942 | 796 | — | — | 20,886 | — | 50,380 | — |
| 1980 | 108 | 387 | 9,195 | 83 | 3,375 | 12,653 | R 1,972 | — | — | 22,260 | — | 54,129 | — |
| 1985 | 89 | 341 | 5,964 | 425 | 4,427 | 10,817 | 1,950 | — | — | 22,302 | — | 52,396 | — |
| 1990 | 94 | 327 | 4,167 | 217 | 6,538 | 10,922 | 1,373 | — | — | 25,319 | — | R 55,388 | — |
| 1991 | 93 | 337 | 4,558 | 279 | 7,248 | 12,085 | 1,447 | — | — | 26,760 | — | R 58,173 | — |
| 1992 | 66 | 358 | 4,232 | 205 | 7,331 | 11,767 | 1,522 | — | — | 25,671 | — | R 54,750 | — |
| 1993 | 83 | 370 | 4,149 | 355 | 7,976 | 12,480 | 779 | — | — | 26,770 | — | R 56,543 | — |
| 1994 | 102 | 365 | 4,032 | 322 | 7,896 | 12,250 | R 764 | — | — | 27,174 | — | R 56,710 | — |
| 1995 | 89 | 380 | 4,123 | 233 | 8,015 | 12,370 | 847 | — | — | 28,623 | — | R 59,677 | — |
| 1996 | 95 | 400 | 3,912 | 230 | R 10,758 | R 14,900 | 846 | — | — | 28,901 | — | R 60,231 | — |
| 1997 | 66 | 380 | 3,879 | 254 | R 10,166 | R 14,299 | R 503 | — | — | 28,726 | — | R 59,754 | — |
| 1998 | 51 | 320 | 2,613 | 272 | 9,500 | 12,385 | 443 | — | — | 29,808 | — | 61,577 | — |
| 1999 | 7 | 351 | 2,727 | 606 | 10,763 | 14,096 | 475 | — | — | 30,661 | — | 60,075 | — |
| | | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 20.8 | 209.0 | 101.2 | 4.3 | 7.8 | 113.4 | 22.1 | 0.0 | 0.0 | 29.8 | 395.1 | 74.1 | 469.2 |
| 1965 | 15.3 | 274.8 | 95.1 | 7.3 | 9.4 | 111.8 | 17.8 | 0.0 | 0.0 | 38.6 | 458.3 | 92.1 | 550.4 |
| 1970 | 7.2 | 345.1 | 109.7 | 3.1 | 17.0 | 129.8 | 16.6 | 0.0 | 0.0 | 58.4 | 557.1 | 141.4 | 698.5 |
| 1975 | 3.3 | 343.0 | 113.1 | 1.7 | 19.4 | 134.2 | 15.9 | 0.0 | 0.0 | 71.3 | 567.7 | 171.9 | 739.6 |
| 1980 | 2.6 | 394.9 | 53.6 | 0.5 | 12.4 | 66.4 | 39.4 | 0.0 | 0.0 | 76.0 | 579.3 | 184.7 | 764.0 |
| 1985 | 2.2 | 348.9 | 34.7 | 2.4 | 16.0 | 53.1 | 39.0 | 0.0 | 0.0 | 76.1 | 519.3 | 178.8 | 698.0 |
| 1990 | 2.3 | 342.2 | 24.3 | 1.2 | 23.7 | 49.2 | 27.5 | e 0.6 | e 0.2 | 86.4 | R e 508.4 | 189.0 | e 697.3 |
| 1991 | 2.3 | 350.2 | 26.5 | 1.6 | 26.2 | 54.3 | 28.9 | 0.6 | 0.2 | 91.3 | R 528.0 | R 198.5 | R 726.4 |
| 1992 | 1.7 | 371.5 | 24.7 | 1.2 | 26.6 | 52.4 | 30.4 | 0.7 | 0.2 | 87.6 | R 544.5 | R 186.8 | R 731.3 |
| 1993 | 2.1 | 382.6 | 24.2 | 2.0 | 28.8 | 54.9 | 15.6 | 0.7 | 0.2 | 91.3 | 547.4 | R 192.9 | 740.4 |
| 1994 | 2.5 | 376.8 | 23.5 | 1.8 | 28.7 | 54.0 | 15.3 | 0.7 | R 0.3 | 92.7 | 542.2 | 193.5 | R 735.7 |
| 1995 | 2.2 | 396.0 | 24.0 | 1.3 | 29.0 | 54.4 | 16.9 | 0.7 | R 0.3 | 97.7 | 568.1 | R 203.6 | R 771.8 |
| 1996 | 2.4 | 414.0 | 22.8 | 1.3 | R 38.9 | R 63.0 | 16.9 | 0.8 | R 0.3 | 98.6 | R 595.8 | R 205.5 | R 801.4 |
| 1997 | 1.6 | 395.3 | 22.6 | 1.4 | R 36.8 | R 60.8 | R 10.1 | 0.8 | 0.3 | 98.0 | 566.9 | R 203.9 | R 770.8 |
| 1998 | 1.3 | 335.4 | 15.2 | 1.5 | 34.3 | 51.1 | 8.9 | 0.8 | 0.3 | 101.7 | 499.4 | 210.1 | 709.5 |
| 1999 | 0.2 | 365.6 | 15.9 | 3.4 | 38.9 | 58.2 | 9.5 | 0.9 | 0.3 | 104.6 | 539.3 | 205.0 | 744.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 151.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Michigan

| Year | Coal[a] | Natural Gas[b] | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| **Thousand Barrels / Physical Units** | | | | | | | | | | | | | | |
| 1960 | 1,554 | 43 | 3,212 | 566 | 342 | 324 | 1,175 | 5,619 | 21 | — | 6,381 | — | 15,872 | — |
| 1965 | 1,146 | 85 | 3,019 | 946 | 414 | 536 | 839 | 5,754 | 17 | — | 9,124 | — | 21,785 | — |
| 1970 | 557 | 133 | 3,482 | 403 | 793 | 804 | 558 | 6,040 | 16 | — | 13,021 | — | 31,553 | — |
| 1975 | 258 | 182 | 3,589 | 224 | 921 | 954 | 390 | 6,078 | 15 | — | 14,596 | — | 35,207 | — |
| 1980 | 200 | 190 | 3,123 | 15 | 596 | 823 | 225 | 4,781 | 47 | — | 16,765 | — | 40,767 | — |
| 1985 | 164 | 158 | 2,359 | 11 | 781 | 699 | 274 | 4,126 | R 52 | — | 18,421 | — | 43,279 | — |
| 1990 | 174 | 159 | 1,730 | 18 | 1,154 | 770 | 72 | 3,744 | R 87 | — | 21,986 | — | R 48,097 | — |
| 1991 | 171 | 166 | 1,938 | 17 | 1,279 | 586 | 5 | 3,825 | R 92 | — | 22,748 | — | R 49,452 | — |
| 1992 | 123 | 174 | 1,767 | 5 | 1,294 | 553 | 12 | 3,631 | R 99 | — | 22,508 | — | R 48,005 | — |
| 1993 | 154 | 180 | 1,472 | 25 | 1,407 | 77 | 8 | 2,990 | 63 | — | 30,242 | — | R 63,875 | — |
| 1994 | 188 | 183 | 1,437 | 33 | 1,393 | 363 | 3 | 3,229 | 64 | — | 31,264 | — | R 65,246 | — |
| 1995 | 165 | 194 | 1,770 | 102 | 1,414 | 77 | 5 | 3,369 | 64 | — | 32,153 | — | R 67,038 | — |
| 1996 | 175 | 201 | 1,790 | 149 | R 1,899 | 77 | 5 | R 3,920 | R 69 | — | 32,896 | — | R 68,555 | — |
| 1997 | 122 | 192 | 2,030 | 56 | R 1,794 | 76 | 57 | R 4,012 | R 55 | — | 33,231 | — | R 69,123 | — |
| 1998 | 94 | 163 | 1,483 | 66 | 1,676 | 208 | 2 | 3,435 | 55 | — | 34,710 | — | 71,704 | — |
| 1999 | 13 | 179 | 1,276 | 37 | 1,899 | 171 | 3 | 3,387 | 67 | — | 36,040 | — | 70,614 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 38.5 | 44.5 | 18.7 | 3.2 | 1.4 | 1.7 | 7.4 | 32.4 | 0.4 | 0.0 | 21.8 | 137.6 | 54.2 | 191.7 |
| 1965 | 28.2 | 86.0 | 17.6 | 5.4 | 1.7 | 2.8 | 5.3 | 32.7 | 0.3 | 0.0 | 31.1 | 178.4 | 74.3 | 252.7 |
| 1970 | 13.3 | 134.7 | 20.3 | 2.3 | 3.0 | 4.2 | 3.5 | 33.3 | 0.3 | 0.0 | 44.4 | 226.0 | 107.7 | 333.7 |
| 1975 | 6.1 | 186.4 | 20.9 | 1.3 | 3.4 | 5.0 | 2.4 | 33.1 | 0.3 | 0.0 | 49.8 | 275.6 | 120.1 | 395.7 |
| 1980 | 4.9 | 194.0 | 18.2 | 0.1 | 2.2 | 4.3 | 1.4 | 26.2 | 0.9 | 0.0 | 57.2 | 283.2 | 139.1 | 422.3 |
| 1985 | 4.0 | 161.4 | 13.7 | 0.1 | 2.8 | 3.7 | 1.7 | 22.0 | R 1.0 | 0.0 | 62.9 | R 251.3 | 147.7 | R 399.0 |
| 1990 | 4.3 | 166.6 | 10.1 | 0.1 | 4.2 | 4.0 | 0.5 | 18.9 | R 1.7 | e 0.0 | 75.0 | R e 266.6 | 164.1 | R e 430.7 |
| 1991 | 4.3 | 172.0 | 11.3 | 0.1 | 4.6 | 3.1 | (s) | 19.1 | R 1.8 | 0.0 | 77.6 | R 274.8 | R 168.7 | R 443.5 |
| 1992 | 3.1 | 180.3 | 10.3 | (s) | 4.7 | 2.9 | 0.1 | 18.0 | R 2.0 | 0.0 | 76.8 | R 280.1 | R 163.8 | R 443.9 |
| 1993 | 3.8 | 186.5 | 8.6 | 0.1 | 5.1 | 0.4 | 0.1 | 14.2 | 1.3 | 0.0 | 103.2 | 308.9 | R 217.9 | 526.9 |
| 1994 | 4.6 | 189.2 | 8.4 | 0.2 | 5.1 | 1.9 | (s) | 15.5 | 1.3 | 0.1 | 106.7 | 317.4 | 222.6 | 540.0 |
| 1995 | 4.1 | 202.2 | 10.3 | 0.6 | 5.1 | 0.4 | (s) | R 16.4 | 1.3 | 0.1 | 109.7 | 333.8 | R 228.7 | R 562.6 |
| 1996 | 4.4 | 208.7 | 10.4 | 0.8 | R 6.9 | 0.4 | (s) | R 18.6 | 1.4 | 0.1 | 112.2 | R 345.4 | R 233.9 | R 579.3 |
| 1997 | 3.0 | 200.1 | 11.8 | 0.3 | R 6.5 | 0.4 | 0.4 | R 19.4 | R 1.1 | 0.2 | 113.4 | R 337.1 | R 235.8 | R 573.0 |
| 1998 | 2.3 | 171.4 | 8.6 | 0.4 | 6.1 | 1.1 | (s) | 16.2 | 1.1 | 0.2 | 118.4 | 309.6 | 244.7 | 554.3 |
| 1999 | 0.3 | 186.9 | 7.4 | 0.2 | 6.9 | 0.9 | (s) | 15.4 | 1.3 | 0.2 | 123.0 | 327.2 | 240.9 | 568.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 152. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Michigan

| | | | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | Total |
| **Thousand Barrels / physical units** | | | | | | | | | | | | | | | | | | |
| 1960 | 13,011 | 117 | 2,936 | 7,091 | 2,741 | 524 | 1,221 | 3,151 | 9,574 | R 4,051 | R 31,288 | 212 | — | — | 12,482 | — | 31,046 | — |
| 1965 | 15,193 | 192 | 2,264 | 7,518 | 3,655 | 923 | 1,898 | 2,694 | 6,660 | R 8,077 | R 33,689 | 146 | — | — | 19,350 | — | 46,201 | — |
| 1970 | 13,061 | 262 | 3,881 | 8,502 | 2,175 | 854 | 1,834 | 2,758 | 4,557 | R 9,775 | R 34,336 | 123 | — | — | 25,169 | — | 60,992 | — |
| 1975 | 9,885 | 300 | 3,886 | 8,749 | 823 | 1,239 | 1,430 | 1,889 | 3,343 | R 10,245 | R 31,603 | 121 | — | — | 28,866 | — | 69,627 | — |
| 1980 | 8,652 | 249 | 3,507 | 4,804 | 1,135 | 2,637 | 1,796 | 967 | 3,213 | R 17,512 | R 35,572 | 117 | — | — | 30,656 | — | 74,545 | — |
| 1985 | 6,645 | 190 | 2,779 | 4,246 | 70 | 8,725 | 1,635 | 1,192 | 2,213 | R 8,260 | R 29,121 | 117 | — | — | 33,704 | — | 79,184 | — |
| 1990 | 4,719 | 290 | 3,950 | 3,406 | 34 | 6,926 | 1,839 | 976 | 1,435 | R 10,434 | R 29,001 | R f 150 | — | — | 35,062 | — | R 76,702 | — |
| 1991 | 3,718 | 282 | 3,464 | 4,576 | 64 | 7,228 | 1,646 | 1,111 | 751 | R 12,699 | R 31,538 | R 150 | — | — | 35,007 | — | R 76,102 | — |
| 1992 | 3,127 | 313 | 3,546 | 4,628 | 41 | 7,791 | 1,678 | 950 | 763 | R 13,552 | R 32,948 | R 150 | — | — | 35,657 | — | R 76,048 | — |
| 1993 | 3,231 | 320 | 4,453 | 4,487 | 72 | 3,420 | 1,708 | 1,034 | 965 | R 13,452 | R 29,591 | R 138 | — | — | 30,572 | — | R 64,572 | — |
| 1994 | 4,278 | 338 | 3,596 | 4,729 | 60 | 4,528 | 1,786 | 1,166 | 972 | R 13,717 | R 30,554 | R 142 | — | — | 32,717 | — | R 68,277 | — |
| 1995 | 4,383 | 336 | 4,955 | 3,736 | 32 | 4,826 | 1,755 | 1,310 | 408 | R 13,153 | R 30,175 | R 129 | — | — | 33,921 | — | R 70,722 | — |
| 1996 | 4,248 | 356 | 3,703 | 3,943 | 42 | R 5,425 | 1,703 | 1,418 | 422 | R 15,694 | R 32,349 | R 143 | — | — | 34,499 | — | R 71,897 | — |
| 1997 | 3,772 | 351 | 7,777 | 4,223 | 44 | R 2,361 | 1,799 | 1,271 | 423 | R 16,752 | R 34,651 | R 139 | — | — | 35,430 | — | R 73,697 | — |
| 1998 | 3,918 | 291 | 6,488 | 4,060 | 50 | 1,127 | 1,883 | 1,097 | 425 | 16,783 | 31,913 | 130 | — | — | 35,983 | — | 74,335 | — |
| 1999 | 4,584 | 310 | 6,669 | 4,470 | 51 | 2,323 | 1,903 | 1,017 | 399 | 16,225 | 33,058 | 91 | — | — | 37,276 | — | 73,035 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | |
| 1960 | 332.0 | 121.3 | 19.5 | 41.3 | 15.5 | 2.1 | 7.4 | 16.5 | 60.2 | R 23.9 | R 186.5 | 2.3 | 14.8 | 0.0 | 42.6 | R 699.4 | 105.9 | R 805.3 |
| 1965 | 385.6 | 195.1 | 15.0 | 43.8 | 20.7 | 3.7 | 11.5 | 14.2 | 41.9 | R 45.4 | R 196.2 | 1.5 | 18.8 | 0.0 | 66.0 | R 863.2 | 157.6 | R 1,020.8 |
| 1970 | 320.9 | 265.7 | 25.8 | 49.5 | 12.3 | 3.2 | 11.1 | 14.5 | 28.7 | R 54.4 | R 199.5 | 1.3 | 19.5 | 0.0 | 85.9 | R 892.8 | 208.1 | R 1,100.9 |
| 1975 | 246.7 | 307.7 | 25.8 | 51.0 | 4.7 | 4.6 | 8.7 | 9.9 | 21.0 | R 57.8 | R 183.5 | 1.3 | 19.7 | 0.0 | 98.5 | R 857.4 | 237.6 | R 1,094.9 |
| 1980 | 219.4 | 253.7 | 23.3 | 28.0 | 6.4 | 9.7 | 10.9 | 5.1 | 20.2 | R 96.6 | R 200.2 | 1.2 | R 47.2 | 0.0 | 104.6 | R 826.3 | 254.3 | R 1,080.7 |
| 1985 | 169.9 | 194.2 | 18.4 | 24.7 | 0.4 | 31.4 | 9.9 | 6.3 | 13.9 | R 45.6 | R 150.7 | 1.2 | R 55.3 | 0.0 | 115.0 | R 686.3 | 270.2 | R 956.5 |
| 1990 | 117.9 | 302.8 | 26.2 | 19.8 | 0.2 | 25.1 | 11.2 | 5.1 | 9.0 | R 57.8 | R 154.4 | R f 1.6 | R 62.4 | f 0.0 | 119.6 | R f 758.7 | 261.7 | R f 1,020.4 |
| 1991 | 92.5 | 292.5 | 23.0 | 26.7 | 0.4 | 26.1 | 10.0 | 5.8 | 4.7 | R 70.2 | R 166.8 | R 1.6 | R 60.9 | 0.0 | 119.4 | R 733.6 | 259.7 | R 993.3 |
| 1992 | 76.3 | 324.4 | 23.5 | 27.0 | 0.2 | 28.2 | 10.2 | 5.0 | 4.8 | R 74.4 | R 173.3 | 1.6 | R 62.6 | 0.0 | 121.7 | R 759.8 | 259.5 | R 1,019.3 |
| 1993 | 78.2 | 331.3 | 29.6 | 26.1 | 0.4 | 12.3 | 10.4 | 5.4 | 6.1 | R 73.9 | R 164.2 | 1.4 | R 70.5 | 0.0 | 104.3 | R 749.9 | 220.3 | R 970.2 |
| 1994 | 107.2 | 348.9 | 23.9 | 27.5 | 0.3 | 16.5 | 10.8 | 6.1 | 6.1 | R 75.3 | R 166.6 | 1.5 | R 73.8 | 0.0 | 111.6 | R 809.6 | 233.0 | R 1,042.5 |
| 1995 | 109.2 | 350.2 | 32.9 | 21.8 | 0.2 | 17.5 | 10.6 | R 6.8 | 2.6 | R 72.2 | R 164.6 | 1.3 | R 80.6 | 0.0 | 115.7 | R 821.6 | 241.3 | R 1,062.9 |
| 1996 | 106.7 | 368.4 | 24.6 | 23.0 | 0.2 | R 19.6 | 10.3 | 7.4 | 2.7 | R 85.6 | R 173.3 | 1.5 | R 88.6 | 0.0 | 117.7 | R 856.2 | 245.3 | R 1,101.5 |
| 1997 | 95.2 | 364.8 | 51.6 | 24.6 | 0.3 | R 8.5 | 10.9 | R 6.6 | 2.7 | R 91.8 | R 197.0 | 1.4 | R 81.9 | 0.0 | 120.9 | R 861.2 | 251.5 | R 1,112.7 |
| 1998 | 98.3 | 305.6 | 43.1 | 23.6 | 0.3 | 4.1 | 11.4 | 5.7 | 2.7 | 91.9 | 182.8 | 1.3 | 58.8 | 0.0 | 122.8 | 769.5 | 253.6 | 1,023.2 |
| 1999 | 117.1 | 323.3 | 44.3 | 26.0 | 0.3 | 8.4 | 11.5 | 5.3 | 2.5 | 87.9 | 186.2 | 0.9 | 78.6 | 0.0 | 127.2 | 833.3 | 249.2 | 1,082.5 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours.  — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 153. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Michigan

| | | | Petroleum | | | | | | | | Ethanol c | Electricity a | | Electrical System Energy Losses d | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal a | Natural Gas b | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total c |
| 1960 | 227 | 3 | 1,312 | 2,475 | 3,369 | 21 | 1,277 | 62,307 | 728 | 71,489 | 0 | 9 | — | 23 | — |
| 1965 | 50 | 5 | 2,619 | 3,348 | 4,377 | 34 | 1,126 | 74,814 | 779 | 87,097 | 0 | 0 | — | 0 | — |
| 1970 | 21 | 10 | 718 | 6,353 | 7,365 | 62 | 1,324 | 93,269 | 427 | 109,518 | 0 | 0 | — | 0 | — |
| 1975 | 2 | 10 | 347 | 8,949 | 5,700 | 95 | 1,321 | 105,412 | 423 | 122,248 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 12 | 488 | 9,741 | 6,646 | 128 | 1,477 | 95,235 | 232 | 113,946 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 11 | 201 | 12,196 | 6,570 | 291 | 1,344 | 91,556 | 99 | 112,256 | R e 1,032 | 0 | — | 0 | — |
| 1990 | 0 | 18 | 215 | 13,670 | 10,057 | 283 | 1,513 | 98,167 | 93 | 123,997 | R 1,205 | 0 | — | 0 | — |
| 1991 | 0 | 20 | 206 | 13,620 | 10,234 | 262 | 1,353 | 99,679 | 50 | 125,403 | R 1,582 | 5 | — | 10 | — |
| 1992 | 0 | 22 | 182 | 14,391 | 10,125 | 251 | 1,380 | 99,868 | 98 | 126,294 | R 1,367 | 4 | — | 9 | — |
| 1993 | 0 | 24 | 198 | 18,269 | 10,305 | 275 | 1,405 | 103,892 | 74 | 134,418 | R 1,609 | 5 | — | 11 | — |
| 1994 | 0 | 23 | 237 | 18,831 | 10,281 | 470 | 1,468 | 104,215 | 98 | 135,601 | R 1,859 | 5 | — | 10 | — |
| 1995 | 0 | 25 | 231 | 19,082 | 8,818 | 241 | 1,443 | 109,159 | 95 | 139,070 | R 1,219 | 4 | — | 9 | — |
| 1996 | 0 | 26 | 215 | 19,567 | 9,045 | R 224 | 1,401 | 109,025 | 125 | R 139,600 | R 514 | 5 | — | 11 | — |
| 1997 | 0 | 24 | 197 | 20,560 | 9,483 | R 204 | 1,480 | 111,042 | 53 | R 143,018 | R 654 | 4 | — | 9 | — |
| 1998 | 0 | 21 | 167 | 22,038 | 9,025 | 804 | 1,549 | 113,608 | 87 | 147,277 | 845 | 5 | — | 10 | — |
| 1999 | 0 | 22 | 286 | 22,788 | 9,116 | 352 | 1,565 | 119,839 | 43 | 153,989 | 956 | 4 | — | 7 | — |
| | | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 5.6 | 2.7 | 6.6 | 14.4 | 18.2 | 0.1 | 7.7 | 327.3 | 4.6 | 378.9 | 0.0 | (s) | 387.3 | 0.1 | 387.4 |
| 1965 | 1.2 | 4.6 | 13.2 | 19.5 | 24.0 | 0.1 | 6.8 | 393.0 | 4.9 | 461.5 | 0.0 | 0.0 | 467.4 | 0.0 | 467.4 |
| 1970 | 0.5 | 10.5 | 3.6 | 37.0 | 41.0 | 0.2 | 8.0 | 489.9 | 2.7 | 582.5 | 0.0 | 0.0 | 593.5 | 0.0 | 593.5 |
| 1975 | (s) | 10.5 | 1.7 | 52.1 | 31.6 | 0.4 | 8.0 | 553.7 | 2.7 | 650.3 | 0.0 | 0.0 | 660.8 | 0.0 | 660.8 |
| 1980 | 0.0 | 12.6 | 2.5 | 56.7 | 37.1 | 0.5 | 9.0 | 500.3 | 1.5 | 607.5 | 0.0 | 0.0 | 620.1 | 0.0 | 620.1 |
| 1985 | 0.0 | 10.8 | 1.0 | 71.0 | 36.7 | 1.0 | 8.2 | 480.9 | 0.6 | 599.5 | R e 3.7 | 0.0 | e 610.3 | 0.0 | e 610.3 |
| 1990 | 0.0 | 18.7 | 1.1 | 79.6 | 56.6 | 1.0 | 9.2 | 515.7 | 0.6 | 663.7 | R 4.3 | 0.0 | 682.5 | 0.0 | 682.5 |
| 1991 | 0.0 | 20.3 | 1.0 | 79.3 | 57.5 | 0.9 | 8.2 | 523.6 | 0.3 | 670.9 | R 5.6 | (s) | 691.3 | (s) | 691.3 |
| 1992 | 0.0 | 22.5 | 0.9 | 83.8 | 57.0 | 0.9 | 8.4 | 524.6 | 0.6 | 676.2 | R 4.8 | (s) | 698.8 | (s) | 698.8 |
| 1993 | 0.0 | 24.7 | 1.0 | 106.4 | 58.1 | 1.0 | 8.5 | 545.7 | 0.5 | 721.3 | R 5.7 | (s) | 746.0 | (s) | 746.1 |
| 1994 | 0.0 | 23.3 | 1.2 | 109.7 | 58.2 | 1.7 | 8.9 | R 545.0 | 0.6 | R 725.3 | R 6.6 | (s) | R 748.6 | (s) | R 748.7 |
| 1995 | 0.0 | 25.9 | 1.2 | 111.2 | 50.0 | 0.9 | 8.8 | R 569.3 | 0.6 | R 741.8 | R 4.3 | (s) | R 767.7 | (s) | R 767.8 |
| 1996 | 0.0 | 26.9 | 1.1 | 114.0 | 51.3 | 0.8 | 8.5 | R 568.7 | 0.8 | R 745.1 | R 1.8 | (s) | R 772.0 | (s) | R 772.0 |
| 1997 | 0.0 | 24.8 | 1.0 | 119.8 | 53.8 | 0.7 | 9.0 | R 578.9 | 0.3 | R 763.4 | R 2.3 | (s) | R 788.2 | (s) | R 788.3 |
| 1998 | 0.0 | 21.8 | 0.8 | 128.4 | 51.2 | 2.9 | 9.4 | 592.1 | 0.5 | 785.4 | 3.0 | (s) | 807.2 | (s) | 807.2 |
| 1999 | 0.0 | 23.3 | 1.4 | 132.7 | 51.7 | 1.3 | 9.5 | 624.5 | 0.3 | 821.4 | 3.4 | (s) | 844.7 | (s) | 844.8 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 154. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Michigan

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 10,300 | 5 | 362 | 77 | 0 | 440 | 0 | 3,067 | 0 | 0 | 0 | — |
| 1965 | 16,123 | 3 | 316 | 68 | 0 | 384 | 181 | 1,254 | 0 | 0 | 0 | — |
| 1970 | 20,124 | 64 | 4,514 | 965 | 0 | 5,479 | 375 | 1,181 | 0 | 0 | 0 | — |
| 1975 | 20,914 | 57 | 14,136 | 1,538 | 0 | 15,674 | 7,176 | 1,309 | 0 | 0 | 0 | — |
| 1980 | 22,150 | 26 | 9,621 | 780 | 0 | 10,400 | 15,891 | 6,768 | 0 | 0 | 0 | — |
| 1985 | 25,896 | 10 | 522 | 646 | 0 | 1,168 | 13,452 | 1,272 | 0 | 0 | 0 | — |
| 1990 | 29,726 | 23 | 1,149 | 339 | 0 | 1,488 | 21,611 | R 821 | 0 | 0 | 0 | — |
| 1991 | 29,896 | 24 | 944 | 286 | 0 | 1,230 | 27,021 | R 928 | 0 | 0 | 0 | — |
| 1992 | 28,238 | 25 | 833 | 292 | 0 | 1,125 | 18,849 | R 936 | 0 | 0 | 0 | — |
| 1993 | 28,749 | 19 | 1,047 | 341 | 0 | 1,388 | 28,525 | R 2,772 | 0 | 0 | 0 | — |
| 1994 | 31,106 | 18 | 1,114 | 319 | 0 | 1,433 | 14,144 | R 5,660 | 0 | 0 | 0 | — |
| 1995 | 31,165 | 36 | 1,101 | 408 | 0 | 1,509 | 24,448 | R 4,792 | 0 | 0 | 0 | — |
| 1996 | 32,175 | 32 | 1,235 | 289 | 3 | 1,527 | 26,829 | R 2,332 | 0 | 0 | 0 | — |
| 1997 | 31,928 | 33 | 1,031 | 308 | 0 | 1,339 | 21,914 | R 2,790 | 0 | 0 | 0 | — |
| 1998 | 34,021 | 48 | 1,630 | 457 | 103 | 2,190 | 12,494 | 1,688 | 0 | 0 | 0 | — |
| 1999 | 33,615 | 51 | 2,120 | 499 | 65 | 2,684 | 14,591 | 995 | 0 | 0 | 0 | — |
| | | | | | Trillion Btu | | | | | | | |
| 1960 | 256.3 | 5.4 | 2.3 | 0.5 | 0.0 | 2.7 | 0.0 | 33.0 | 0.0 | 0.0 | 0.0 | 297.4 |
| 1965 | 399.9 | 3.0 | 2.0 | 0.4 | 0.0 | 2.4 | 2.1 | 13.1 | 0.0 | 0.0 | 0.0 | 420.6 |
| 1970 | 487.0 | 65.2 | 28.4 | 5.6 | 0.0 | 34.0 | 4.1 | 12.4 | 0.0 | 0.0 | 0.0 | 602.8 |
| 1975 | 494.9 | 47.3 | 88.9 | 8.9 | 0.0 | 97.8 | 79.0 | 13.6 | 0.0 | 0.0 | 0.0 | 732.6 |
| 1980 | 532.2 | 19.4 | 60.5 | 4.5 | 0.0 | 65.0 | 173.3 | 70.3 | 0.0 | 0.0 | 0.0 | 860.3 |
| 1985 | 605.8 | 4.7 | 3.3 | 3.8 | 0.0 | 7.0 | 145.5 | 13.3 | 0.0 | 0.0 | 0.0 | 776.2 |
| 1990 | 661.8 | 5.2 | 7.2 | 2.0 | 0.0 | 9.2 | 230.8 | R 8.5 | 0.0 | 0.0 | 0.0 | R 801.7 |
| 1991 | 660.8 | 9.2 | 5.9 | 1.7 | 0.0 | 7.6 | 290.2 | R 9.7 | 0.0 | 0.0 | 0.0 | R 972.1 |
| 1992 | 621.0 | 10.3 | 5.2 | 1.7 | 0.0 | 6.9 | 201.3 | R 9.7 | 0.0 | 0.0 | 0.0 | R 846.2 |
| 1993 | 624.0 | 7.2 | 6.6 | 2.0 | 0.0 | 8.6 | 304.7 | R 28.6 | 0.0 | 0.0 | 0.0 | R 978.0 |
| 1994 | 679.7 | 7.3 | 7.0 | 1.9 | 0.0 | 8.9 | 151.0 | R 58.4 | 0.0 | 0.0 | 0.0 | R 925.7 |
| 1995 | 665.5 | 13.1 | 6.9 | 2.4 | 0.0 | 9.3 | 260.6 | R 49.4 | 0.0 | 0.0 | 0.0 | 1,015.6 |
| 1996 | 675.9 | 8.8 | 7.8 | 1.7 | (s) | 9.5 | 285.0 | R 24.1 | 0.0 | 0.0 | 0.0 | R 1,007.6 |
| 1997 | 674.7 | 10.3 | 6.5 | 1.8 | 0.0 | 8.3 | 232.8 | R 28.9 | 0.0 | 0.0 | 0.0 | 947.2 |
| 1998 | 718.7 | 26.2 | 10.2 | 2.7 | 0.6 | 13.5 | 132.7 | 17.5 | 0.0 | 0.0 | 0.0 | 879.0 |
| 1999 | 705.0 | 31.1 | 13.3 | 2.9 | 0.4 | 16.6 | 155.0 | 10.3 | 0.0 | 0.0 | 0.0 | 910.0 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 155.   Energy Consumption Estimates by Source, Selected Years 1960-1999, Minnesota**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
| 1960 | 5,977 | 180 | 3,004 | 1,199 | 16,151 | 472 | 2,570 | 4,525 | 960 | 32,583 | 6,658 | R 1,314 | R 69,435 | 0 | R 977 | — | — | -3,263 | — |
| 1965 | 7,260 | 249 | 3,791 | 803 | 18,960 | 2,624 | 2,313 | 5,781 | 759 | 35,278 | 4,980 | R 2,219 | R 77,507 | 143 | 1,204 | — | — | -1,370 | — |
| 1970 | 8,787 | 342 | 4,413 | 277 | 22,356 | 3,491 | 1,685 | 8,887 | 924 | 44,122 | 5,159 | R 3,122 | R 94,435 | 0 | 1,020 | — | — | 11,382 | — |
| 1975 | 10,120 | 331 | 4,628 | 215 | 24,369 | 5,629 | 856 | 9,187 | 1,003 | 48,253 | 4,326 | R 4,185 | R 102,651 | 9,750 | 1,101 | — | — | 6,217 | — |
| 1980 | 13,810 | 286 | 3,565 | 193 | 21,382 | 5,142 | 212 | 7,697 | 1,120 | 46,211 | 3,183 | R 3,540 | R 92,244 | 10,027 | 1,739 | — | — | 8,135 | — |
| 1985 | 12,744 | 257 | 4,989 | 154 | 19,399 | 7,781 | 184 | 5,353 | 1,019 | 45,285 | 859 | R 2,899 | R 87,922 | 11,572 | 3,642 | — | — | 22,856 | — |
| 1990 | 18,377 | 291 | 6,039 | 214 | 18,481 | 5,099 | 42 | 5,966 | 1,146 | 47,760 | 974 | R 5,471 | R 91,192 | 12,139 | R h 1,871 | — | — | R 16,796 | — |
| 1991 | 16,993 | 314 | 5,040 | 188 | 21,227 | 4,978 | 54 | 6,595 | 1,026 | 48,578 | 1,053 | R 5,936 | R 94,674 | 12,059 | R 3,031 | — | — | R 17,718 | — |
| 1992 | 16,924 | 309 | 5,343 | 134 | 21,630 | 6,621 | 53 | 8,008 | 1,046 | 49,693 | 1,189 | R 6,913 | R 100,630 | 11,166 | R 4,848 | — | — | R 8,114 | — |
| 1993 | 18,321 | 328 | 4,793 | 132 | 21,073 | 9,438 | 60 | 8,926 | 1,065 | 51,348 | 1,251 | R 6,795 | R 104,881 | 11,986 | R 6,366 | — | — | R 2,502 | — |
| 1994 | 18,729 | 324 | 4,745 | 125 | 23,698 | 9,780 | 134 | 9,445 | 1,113 | 52,540 | 1,102 | R 7,305 | R 109,988 | 12,224 | R 6,749 | — | — | R 702 | — |
| 1995 | 18,947 | 353 | 6,403 | 129 | 24,574 | 9,969 | 104 | 9,758 | 1,094 | 54,303 | 657 | R 6,811 | R 113,802 | 13,243 | R 7,067 | — | — | R 2,336 | — |
| 1996 | 19,264 | 368 | 6,674 | 124 | 24,575 | 10,625 | 123 | R 12,018 | 1,061 | 54,866 | 796 | R 7,712 | R 118,574 | 12,095 | R 7,526 | — | — | R 6,306 | — |
| 1997 | 19,086 | 354 | 6,671 | 137 | 24,810 | 10,887 | 102 | R 10,269 | 1,121 | 55,755 | 710 | R 7,831 | R 118,293 | 10,819 | R 7,240 | — | — | R 8,864 | — |
| 1998 | 19,586 | 325 | 6,884 | 92 | 24,994 | 10,699 | 130 | 7,410 | 1,174 | 58,106 | 547 | 6,894 | 116,931 | 11,644 | 6,852 | — | — | 12,532 | — |
| 1999 | 18,827 | 340 | 7,746 | 141 | 23,768 | 12,591 | 125 | 8,705 | 1,186 | 59,894 | 663 | 7,256 | 122,077 | 13,316 | 5,654 | — | — | 12,719 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 131.3 | 186.1 | 19.9 | 6.1 | 94.1 | 2.6 | 14.6 | 18.1 | 5.8 | 171.2 | 41.9 | R 7.9 | R 382.1 | 0.0 | 10.5 | 25.4 | 0.0 | -11.1 | R 724.3 |
| 1965 | 160.0 | 248.2 | 25.2 | 4.1 | 110.4 | 14.8 | 13.1 | 23.2 | 4.6 | 185.3 | 31.3 | R 13.2 | R 425.1 | 1.7 | 12.6 | 23.4 | 0.0 | -4.7 | R 866.3 |
| 1970 | 179.7 | 343.0 | 29.3 | 1.4 | 130.2 | 19.7 | 9.6 | 33.6 | 5.6 | 231.8 | 32.4 | R 18.6 | R 512.2 | 0.0 | 10.7 | 23.4 | 0.0 | 38.8 | R 1,107.9 |
| 1975 | 191.5 | 331.5 | 30.7 | 1.1 | 141.9 | 31.9 | 4.9 | 34.1 | 6.1 | 253.5 | 27.2 | R 24.9 | R 556.2 | 107.4 | 11.5 | 27.4 | 0.0 | 21.2 | R 1,246.7 |
| 1980 | 242.4 | 285.0 | 23.7 | 1.0 | 124.5 | 29.1 | 1.2 | 28.3 | 6.8 | 242.7 | 20.0 | R 21.1 | R 498.4 | 109.4 | 18.1 | R 49.7 | 0.0 | 27.8 | R 1,230.6 |
| 1985 | 226.1 | 258.5 | 33.1 | 0.8 | 113.0 | 44.1 | 1.0 | 19.3 | 6.2 | 237.9 | 5.4 | R 17.8 | R 478.6 | 125.1 | 54.3 | 38.0 | 0.0 | 78.0 | R 1,258.6 |
| 1990 | 324.3 | 291.7 | 40.1 | 1.1 | 107.7 | 28.9 | 0.2 | 21.6 | 7.0 | 250.9 | 6.1 | R 32.8 | R 496.3 | 129.6 | R h 19.5 | R 50.5 | R h 0.5 | R 57.3 | R h 1,366.9 |
| 1991 | 300.6 | 318.3 | 33.4 | 0.9 | 123.6 | 28.2 | 0.3 | 23.8 | 6.2 | 255.2 | 6.6 | R 35.4 | R 513.8 | 129.5 | R 31.6 | R 49.6 | 0.5 | R 60.5 | R 1,412.3 |
| 1992 | 300.1 | 312.2 | 35.5 | 0.7 | 126.0 | 37.5 | 0.3 | 29.0 | 6.3 | 261.0 | 7.5 | R 40.9 | R 544.7 | 119.2 | R 50.1 | R 55.0 | 0.5 | R 27.7 | R 1,425.3 |
| 1993 | 324.7 | 331.5 | 31.8 | 0.7 | 122.7 | 53.5 | 0.3 | 32.2 | 6.5 | 269.7 | 7.9 | R 40.4 | R 565.7 | 128.0 | R 65.6 | R 54.1 | 0.5 | R 8.5 | R 1,488.6 |
| 1994 | 332.1 | 327.4 | 31.5 | 0.6 | 138.0 | 55.4 | 0.8 | 34.3 | 6.7 | R 274.8 | 6.9 | R 43.4 | R 592.5 | 130.5 | R 69.6 | R 55.9 | R 1.1 | R 2.4 | R 1,533.5 |
| 1995 | 337.2 | 357.7 | 42.5 | 0.7 | 143.1 | 56.5 | 0.6 | 35.4 | 6.6 | R 283.2 | 4.1 | R 40.4 | R 613.1 | 141.1 | R 72.9 | R 75.2 | R 1.3 | R 8.0 | R 1,631.6 |
| 1996 | 345.5 | 375.1 | 44.3 | 0.6 | 143.1 | 60.2 | 0.7 | R 43.4 | 6.4 | R 286.2 | 5.0 | R 46.1 | R 636.1 | 128.5 | R 77.8 | R 64.6 | R 1.5 | R 21.5 | R 1,676.0 |
| 1997 | 341.2 | 360.5 | 44.3 | 0.7 | 144.5 | 61.7 | 0.6 | R 37.1 | 6.8 | R 290.6 | 4.5 | R 46.8 | R 637.6 | 114.9 | R 75.0 | R 76.6 | R 2.2 | R 30.2 | R 1,675.3 |
| 1998 | 349.6 | 331.8 | 45.7 | 0.5 | 145.6 | 60.7 | 0.7 | 26.8 | 7.1 | 302.8 | 3.4 | 41.3 | 634.6 | 123.7 | 70.9 | 730.4 | 2.1 | 42.8 | 2,306.9 |
| 1999 | 336.0 | 346.3 | 51.4 | 0.7 | 138.4 | 71.4 | 0.7 | 31.5 | 7.2 | 312.1 | 4.2 | 43.4 | 661.0 | 141.5 | 58.5 | 67.3 | 5.6 | 43.4 | 1,675.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours.  R=Revised data.  — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 156. Residential Energy Consumption Estimates, Selected Years 1960-1999, Minnesota

| | | | Petroleum | | | | | | | | | Electrical System Energy Losses [d] | |
| | Coal[a] | Natural Gas [b] | Distillate Fuel [a] | Kerosene [a] | LPG [a] | Total | Wood | | | Electricity [a] | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | Geothermal | Solar [c] | Million Kilowatthours | Net Energy | Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 330 | 61 | 5,414 | 1,748 | 3,108 | 10,270 | 878 | — | — | 4,186 | — | 10,411 | — |
| 1965 | 216 | 86 | 6,309 | 1,556 | 4,043 | 11,908 | 682 | — | — | 6,063 | — | 14,476 | — |
| 1970 | 200 | 102 | 7,197 | 1,195 | 6,390 | 14,782 | 560 | — | — | 9,031 | — | 21,886 | — |
| 1975 | 81 | 114 | 7,242 | 558 | 6,040 | 13,840 | 563 | — | — | 10,189 | — | 24,578 | — |
| 1980 | 50 | 103 | 5,946 | 114 | 2,929 | 8,989 | R 893 | — | — | 11,749 | — | 28,570 | — |
| 1985 | 77 | 107 | 3,826 | 137 | 2,400 | 6,363 | 855 | — | — | 13,261 | — | 31,156 | — |
| 1990 | 63 | 107 | 3,222 | 30 | 2,933 | 6,185 | 562 | — | — | 14,858 | — | R 32,502 | — |
| 1991 | 33 | 117 | 4,098 | 41 | 3,186 | 7,324 | 592 | — | — | 15,655 | — | R 34,033 | — |
| 1992 | 9 | 114 | 3,426 | 38 | 3,560 | 7,024 | 623 | — | — | 14,848 | — | R 31,667 | — |
| 1993 | 38 | 123 | 3,210 | 36 | 4,379 | 7,624 | R 525 | — | — | 15,597 | — | R 32,943 | — |
| 1994 | 80 | 122 | 3,384 | 45 | 4,305 | 7,735 | R 514 | — | — | 16,007 | — | R 33,404 | — |
| 1995 | 92 | 129 | 3,334 | 50 | 4,447 | 7,831 | R 571 | — | — | 16,974 | — | R 35,391 | — |
| 1996 | 55 | 142 | 3,499 | 61 | R 5,969 | R 9,529 | R 570 | — | — | 17,157 | — | R 35,756 | — |
| 1997 | 37 | 129 | 3,106 | 52 | R 5,650 | R 8,808 | R 404 | — | — | 17,073 | — | R 35,515 | — |
| 1998 | 15 | 110 | 2,503 | 73 | 3,927 | 6,503 | 356 | — | — | 17,378 | — | 35,900 | — |
| 1999 | 5 | 119 | 1,914 | 32 | 4,853 | 6,799 | 381 | — | — | 17,998 | — | 35,263 | — |

**Trillion Btu**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 7.3 | 63.6 | 31.5 | 9.9 | 12.5 | 53.9 | 17.6 | 0.0 | 0.0 | 14.3 | 156.6 | 35.5 | 192.1 |
| 1965 | 4.7 | 86.3 | 36.7 | 8.8 | 16.2 | 61.8 | 13.6 | 0.0 | 0.0 | 20.7 | 187.1 | 49.4 | 236.5 |
| 1970 | 4.2 | 102.0 | 41.9 | 6.8 | 24.1 | 72.8 | 11.2 | 0.0 | 0.0 | 30.8 | 221.1 | 74.7 | 295.7 |
| 1975 | 1.6 | 114.7 | 42.2 | 3.2 | 22.4 | 67.8 | 11.3 | 0.0 | 0.0 | 34.8 | 230.1 | 83.9 | 313.9 |
| 1980 | 1.0 | 103.1 | 34.6 | 0.6 | 10.8 | 46.0 | R 17.9 | 0.0 | 0.0 | 40.1 | 208.1 | 97.5 | 305.6 |
| 1985 | 1.5 | 107.1 | 22.3 | 0.8 | 8.6 | 31.7 | 17.1 | 0.0 | 0.0 | 45.2 | 202.6 | 106.3 | 308.9 |
| 1990 | 1.1 | 107.4 | 18.8 | 0.2 | 10.6 | 29.6 | 11.2 | e 0.1 | e 0.3 | 50.7 | e 200.5 | 110.9 | R e 311.4 |
| 1991 | 0.6 | 118.6 | 23.9 | 0.2 | 11.5 | 35.6 | 11.8 | 0.2 | 0.3 | 53.4 | 220.5 | R 116.1 | R 336.6 |
| 1992 | 0.2 | 114.8 | 20.0 | 0.2 | 12.9 | 33.1 | 12.5 | 0.2 | R 0.4 | 50.7 | R 211.7 | R 108.0 | R 319.7 |
| 1993 | 0.7 | 124.8 | 18.7 | 0.2 | 15.8 | 34.7 | R 10.5 | 0.2 | R 0.4 | 53.2 | R 224.4 | 112.4 | R 336.8 |
| 1994 | 1.6 | 123.6 | 19.7 | 0.3 | 15.6 | 35.6 | R 10.3 | 0.2 | R 0.4 | 54.6 | R 226.2 | 114.0 | R 340.2 |
| 1995 | 1.9 | 130.4 | 19.4 | 0.3 | 16.1 | 35.8 | 11.4 | 0.2 | R 0.4 | 57.9 | R 238.0 | R 120.8 | R 358.8 |
| 1996 | 1.0 | 144.9 | 20.4 | 0.3 | R 21.6 | R 42.3 | R 11.4 | 0.2 | R 0.4 | 58.5 | R 258.7 | R 122.0 | R 380.7 |
| 1997 | 0.7 | 131.2 | 18.1 | 0.3 | R 20.4 | R 38.8 | R 8.1 | 0.2 | 0.4 | 58.3 | R 237.6 | R 121.2 | R 358.8 |
| 1998 | 0.3 | 112.7 | 14.6 | 0.4 | 14.2 | 29.2 | 7.1 | 0.2 | 0.4 | 59.3 | 209.2 | 122.5 | 331.7 |
| 1999 | 0.1 | 121.2 | 11.1 | 0.2 | 17.5 | 28.9 | 7.6 | 0.2 | 0.3 | 61.4 | 219.8 | 120.3 | 340.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 157. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Minnesota

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 614 | 20 | 1,323 | 378 | 548 | 142 | 634 | 3,026 | 17 | — | 1,540 | — | 3,831 | — |
| 1965 | 401 | 27 | 1,542 | 337 | 713 | 158 | 414 | 3,164 | 13 | — | 2,026 | — | 4,838 | — |
| 1970 | 372 | 77 | 1,759 | 259 | 1,128 | 235 | 393 | 3,774 | 11 | — | 3,178 | — | 7,701 | — |
| 1975 | 151 | 90 | 1,770 | 121 | 1,066 | 355 | 223 | 3,536 | 11 | — | 4,845 | — | 11,686 | — |
| 1980 | 93 | 64 | 1,443 | 0 | 517 | 340 | 32 | 2,331 | 21 | — | 5,724 | — | 13,919 | — |
| 1985 | 143 | 77 | 2,740 | 24 | 424 | 335 | 223 | 3,746 | R 23 | — | 7,469 | — | 17,548 | — |
| 1990 | 116 | 78 | 939 | 5 | 518 | 1,568 | 263 | 3,293 | R 36 | — | 8,813 | — | R 19,278 | — |
| 1991 | 61 | 86 | 910 | 3 | 562 | 198 | 295 | 1,969 | R 38 | — | 9,162 | — | R 19,917 | — |
| 1992 | 16 | 82 | 760 | 7 | 628 | 117 | 197 | 1,709 | R 41 | — | 9,007 | — | R 19,211 | — |
| 1993 | 70 | 87 | 653 | 9 | 773 | 49 | 134 | 1,618 | 42 | — | 9,229 | — | R 19,494 | — |
| 1994 | 149 | 84 | 903 | 14 | 760 | 49 | 161 | 1,887 | 43 | — | 9,698 | — | R 20,238 | — |
| 1995 | 171 | 91 | 931 | 23 | 785 | 50 | 113 | 1,903 | 43 | — | 10,407 | — | R 21,699 | — |
| 1996 | 101 | 99 | 1,028 | 27 | R 1,053 | 50 | 141 | R 2,298 | 47 | — | 10,850 | — | R 22,612 | — |
| 1997 | 68 | 92 | 925 | 26 | R 997 | 1,010 | 163 | R 3,121 | R 44 | — | 10,888 | — | R 22,648 | — |
| 1998 | 27 | 82 | 830 | 31 | 693 | 988 | 171 | 2,714 | 44 | — | 11,152 | — | 23,038 | — |
| 1999 | 10 | 88 | 809 | 20 | 856 | 50 | 186 | 1,921 | 53 | — | 11,637 | — | 22,801 | — |
| | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 13.5 | 21.0 | 7.7 | 2.1 | 2.2 | 0.7 | 4.0 | 16.8 | 0.3 | 0.0 | 5.3 | 56.9 | 13.1 | 70.0 |
| 1965 | 8.8 | 26.8 | 9.0 | 1.9 | 2.9 | 0.8 | 2.6 | 17.2 | 0.3 | 0.0 | 6.9 | 59.9 | 16.5 | 76.5 |
| 1970 | 7.8 | 76.7 | 10.2 | 1.5 | 4.3 | 1.2 | 2.5 | 19.7 | 0.2 | 0.0 | 10.8 | 115.3 | 26.3 | 141.6 |
| 1975 | 2.9 | 89.9 | 10.3 | 0.7 | 4.0 | 1.9 | 1.4 | 18.2 | 0.2 | 0.0 | 16.5 | 127.7 | 39.9 | 167.6 |
| 1980 | 1.9 | 63.6 | 8.4 | 0.0 | 1.9 | 1.8 | 0.2 | 12.3 | 0.4 | 0.0 | 19.5 | 97.8 | 47.5 | 145.3 |
| 1985 | 2.7 | 77.3 | 16.0 | 0.1 | 1.5 | 1.8 | 1.4 | 20.8 | R 0.5 | 0.0 | 25.5 | R 126.8 | 59.9 | R 186.7 |
| 1990 | 2.1 | 78.3 | 5.5 | (s) | 1.9 | 8.2 | 1.7 | 17.3 | R 0.7 | e 0.0 | 30.1 | R e 128.5 | 65.8 | R e 194.2 |
| 1991 | 1.1 | 86.9 | 5.3 | (s) | 2.0 | 1.0 | 1.9 | 10.2 | R 0.8 | 0.0 | 31.3 | R 130.3 | 68.0 | R 198.2 |
| 1992 | 0.3 | 83.3 | 4.4 | (s) | 2.3 | 0.6 | 1.2 | 8.6 | R 0.8 | 0.0 | 30.7 | R 123.7 | R 65.5 | R 189.3 |
| 1993 | 1.3 | 87.6 | 3.8 | (s) | 2.8 | 0.3 | 0.8 | 7.7 | 0.8 | 0.0 | 31.5 | 128.9 | 66.5 | 195.5 |
| 1994 | 2.9 | 84.9 | 5.3 | 0.1 | 2.8 | 0.3 | 1.0 | 9.4 | 0.9 | 0.0 | 33.1 | 131.1 | R 69.1 | R 200.2 |
| 1995 | 3.5 | 91.9 | 5.4 | 0.1 | 2.8 | 0.3 | 0.7 | 9.4 | 0.9 | 0.0 | 35.5 | 141.1 | 74.0 | R 215.1 |
| 1996 | 1.8 | 100.3 | 6.0 | 0.2 | R 3.8 | 0.3 | 0.9 | R 11.1 | 0.9 | 0.0 | 37.0 | R 151.2 | R 77.2 | R 228.3 |
| 1997 | 1.3 | 93.9 | 5.4 | 0.1 | R 3.6 | 5.3 | 1.0 | R 15.4 | R 0.9 | 0.0 | 37.1 | R 148.6 | R 77.3 | R 225.9 |
| 1998 | 0.6 | 84.0 | 4.8 | 0.2 | 2.5 | 5.2 | 1.1 | 13.7 | 0.9 | 0.0 | 38.1 | 137.3 | 78.6 | 215.9 |
| 1999 | 0.2 | 89.7 | 4.7 | 0.1 | 3.1 | 0.3 | 1.2 | 9.4 | 1.1 | 0.0 | 39.7 | 140.1 | 77.8 | 217.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 158.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Minnesota

### Thousand Barrels (physical units)

| Year | Coal (Thousand Short Tons) | Natural Gas a (Billion Cubic Feet) | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b (Million kWh) | Wood and Waste | Other b,d | Electricity b (Million kWh) | Net Energy | Electrical System Energy Losses e (Million kWh) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2,555 | 49 | 3,004 | 6,062 | 444 | 841 | 263 | 4,266 | 5,690 | R 1,314 | R 21,884 | 156 | — | — | 3,095 | — | 7,699 | — |
| 1965 | 2,776 | 83 | 3,791 | 7,651 | 420 | 988 | 163 | 3,947 | 4,213 | R 2,219 | R 23,392 | 178 | — | — | 4,677 | — | 11,166 | — |
| 1970 | 2,020 | 98 | 4,413 | 7,784 | 231 | 1,275 | 296 | 3,608 | 3,894 | R 2,979 | R 24,480 | 168 | — | — | 8,506 | — | 20,613 | — |
| 1975 | 2,292 | 101 | 4,628 | 7,991 | 177 | 1,985 | 252 | 3,132 | 2,675 | R 4,126 | R 24,965 | 189 | — | — | 11,280 | — | 27,208 | — |
| 1980 | 1,057 | 101 | 3,565 | 5,708 | 98 | 4,183 | 324 | 1,336 | 1,818 | R 3,540 | R 20,573 | 145 | — | — | 15,525 | — | 37,752 | — |
| 1985 | 1,027 | 66 | 4,989 | 4,802 | 23 | 2,406 | 294 | 1,718 | 481 | R 2,899 | R 17,612 | 145 | — | — | 17,934 | — | 42,133 | — |
| 1990 | 1,283 | 88 | 6,039 | 4,719 | 7 | 2,459 | 331 | 1,117 | 710 | R 4,744 | R 20,126 | R f 212 | — | — | 23,497 | — | R 51,402 | — |
| 1991 | 785 | 92 | 5,040 | 5,612 | 10 | 2,795 | 296 | 1,442 | 753 | R 4,974 | R 20,923 | R 170 | — | — | 23,938 | — | R 52,039 | — |
| 1992 | 1,059 | 93 | 5,343 | 6,193 | 8 | 3,765 | 302 | 1,417 | 989 | R 5,849 | R 23,865 | R 184 | — | — | 23,557 | — | R 50,241 | — |
| 1993 | 1,370 | 98 | 4,793 | 5,765 | 16 | 3,674 | 308 | 1,222 | 1,115 | R 5,718 | R 22,611 | R 245 | — | — | 24,384 | — | R 51,503 | — |
| 1994 | 1,455 | 94 | 4,745 | 6,414 | 75 | 4,254 | 322 | 1,254 | 938 | R 6,312 | R 24,314 | R 308 | — | — | 25,451 | — | R 53,114 | — |
| 1995 | 1,401 | 106 | 6,403 | 6,518 | 31 | 4,392 | 316 | 1,192 | 544 | R 6,041 | R 25,437 | R 266 | — | — | 26,577 | — | R 55,412 | — |
| 1996 | 1,649 | 102 | 6,674 | 6,600 | 35 | R 4,855 | 307 | 670 | 654 | R 6,657 | R 26,453 | R 307 | — | — | 26,934 | — | R 56,132 | — |
| 1997 | 1,490 | 107 | 6,671 | 6,784 | 25 | R 3,485 | 324 | 1,846 | 530 | R 6,590 | R 26,254 | R 237 | — | — | 27,713 | — | R 57,646 | — |
| 1998 | 1,642 | 105 | 6,884 | 6,202 | 26 | 2,777 | 339 | 1,240 | 375 | 5,853 | 23,696 | 258 | — | — | 28,214 | — | 58,283 | — |
| 1999 | 1,698 | 104 | 7,746 | 4,818 | 74 | 2,989 | 343 | 1,026 | 473 | 5,995 | 23,464 | 322 | — | — | 27,764 | — | 54,399 | — |

### Trillion Btu

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 55.2 | 51.0 | 19.9 | 35.3 | 2.5 | 3.4 | 1.6 | 22.4 | 35.8 | R 7.9 | R 128.8 | 1.7 | 7.4 | 0.0 | 10.6 | R 254.6 | 26.3 | R 280.8 |
| 1965 | 60.8 | 82.6 | 25.2 | 44.6 | 2.4 | 4.0 | 1.0 | 20.7 | 26.5 | R 13.2 | R 137.4 | 1.9 | 9.3 | 0.0 | 16.0 | R 308.0 | 38.1 | R 346.1 |
| 1970 | 42.1 | 97.8 | 29.3 | 45.3 | 1.3 | 4.8 | 1.8 | 19.0 | 24.5 | R 17.7 | R 143.7 | 1.8 | 11.8 | 0.0 | 29.0 | R 326.1 | 70.3 | R 396.5 |
| 1975 | 50.8 | 100.8 | 30.7 | 46.5 | 1.0 | 7.4 | 1.5 | 16.5 | 16.8 | R 24.5 | R 145.0 | 2.0 | 15.9 | 0.0 | 38.5 | R 352.8 | 92.8 | R 445.7 |
| 1980 | 18.1 | 101.2 | 23.7 | 33.3 | 0.6 | 15.4 | 2.0 | 7.0 | 11.4 | R 21.1 | R 114.3 | 1.5 | R 31.3 | 0.0 | 53.0 | R 319.4 | 128.8 | R 448.2 |
| 1985 | 21.3 | 66.6 | 33.1 | 28.0 | 0.1 | 8.7 | 1.8 | 9.0 | 3.0 | R 17.8 | R 101.5 | 1.5 | R 36.7 | 0.0 | 61.2 | R 288.8 | 143.8 | R 432.5 |
| 1990 | 23.8 | 88.7 | 40.1 | 27.5 | (s) | 8.9 | 2.0 | 5.9 | 4.5 | R 28.4 | R 117.3 | R f 2.2 | R 34.4 | f 0.0 | 80.2 | R f 346.6 | 175.4 | R f 522.0 |
| 1991 | 15.2 | 93.4 | 33.4 | 32.7 | 0.1 | 10.1 | 1.8 | 7.6 | 4.7 | R 29.6 | R 120.0 | R 1.8 | R 32.8 | 0.0 | 81.7 | R 344.9 | 177.6 | R 522.4 |
| 1992 | 19.6 | 94.1 | 35.5 | 36.1 | (s) | 13.6 | 1.8 | 7.4 | 6.2 | R 34.5 | R 135.2 | R 1.9 | R 37.5 | 0.0 | 80.4 | R 368.7 | 171.4 | R 540.1 |
| 1993 | 24.9 | 98.9 | 31.8 | 33.6 | 0.1 | 13.2 | 1.9 | 6.4 | 7.0 | R 33.9 | R 127.9 | R 2.5 | R 38.5 | 0.0 | 83.2 | R 375.9 | 175.7 | R 551.6 |
| 1994 | 26.9 | 95.5 | 31.5 | 37.4 | 0.4 | 15.5 | 2.0 | 6.6 | 5.9 | R 37.4 | R 136.5 | 3.2 | R 40.5 | R 0.5 | 86.8 | R 390.0 | 181.2 | R 571.3 |
| 1995 | 26.7 | 107.6 | 42.5 | 38.0 | 0.2 | 15.9 | 1.9 | R 6.2 | 3.4 | R 35.8 | R 143.9 | 2.7 | R 58.5 | R 0.7 | 90.7 | R 430.9 | 189.1 | R 619.9 |
| 1996 | 31.6 | 104.3 | 44.3 | 38.4 | 0.2 | R 17.5 | 1.9 | 3.5 | 4.1 | R 39.7 | R 149.7 | 3.2 | R 47.9 | R 1.0 | 91.9 | R 429.5 | 191.5 | R 621.0 |
| 1997 | 28.1 | 109.3 | 44.3 | 39.5 | 0.1 | R 12.6 | 2.0 | R 9.6 | 3.3 | R 39.3 | R 150.8 | 2.5 | R 63.2 | R 1.6 | 94.6 | R 450.0 | 196.7 | R 646.7 |
| 1998 | 30.6 | 106.7 | 45.7 | 36.1 | 0.1 | 10.0 | 2.1 | 6.5 | 2.4 | 35.0 | 137.9 | 2.7 | 717.7 | 1.5 | 96.3 | 1,093.4 | 198.9 | 1,292.2 |
| 1999 | 31.6 | 106.2 | 51.4 | 28.1 | 0.4 | 10.8 | 2.1 | 5.3 | 3.0 | 35.8 | 136.9 | 3.3 | 54.3 | 5.0 | 94.7 | 432.1 | 185.6 | 617.7 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 159. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Minnesota**

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | *Thousand Barrels* | | | | | | | | | | | | |
| 1960 | 45 | (s) | 1,199 | 3,194 | 472 | 27 | 697 | 28,176 | 95 | 33,860 | 0 | 0 | — | 0 | — |
| 1965 | 9 | 1 | 803 | 3,276 | 2,624 | 37 | 596 | 31,173 | 75 | 38,584 | 0 | 0 | — | 0 | — |
| 1970 | 3 | 7 | 277 | 5,064 | 3,491 | 95 | 628 | 40,279 | 29 | 49,863 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 4 | 215 | 6,691 | 5,629 | 97 | 752 | 44,766 | 577 | 58,726 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 9 | 193 | 8,117 | 5,142 | 68 | 796 | 44,535 | 971 | 59,822 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 6 | 154 | 7,982 | 7,781 | 123 | 724 | 43,232 | 155 | 60,152 | R e 658 | 0 | — | 0 | — |
| 1990 | 0 | 12 | 214 | 9,509 | 5,099 | 57 | 815 | 45,075 | 0 | 60,768 | R 577 | 0 | — | 0 | — |
| 1991 | 0 | 13 | 188 | 10,518 | 4,978 | 52 | 729 | 46,937 | 3 | 63,404 | R 1,102 | 0 | — | 0 | — |
| 1992 | 0 | 15 | 134 | 11,190 | 6,621 | 54 | 743 | 48,159 | 3 | 66,904 | R 1,729 | 0 | — | 0 | — |
| 1993 | 0 | 16 | 132 | 11,355 | 9,438 | 100 | 757 | 50,077 | (s) | 71,859 | R 3,224 | 0 | — | 0 | — |
| 1994 | 0 | 17 | 125 | 12,889 | 9,780 | 126 | 791 | 51,237 | 2 | 74,951 | R 3,690 | 0 | — | 0 | — |
| 1995 | 0 | 19 | 129 | 13,657 | 9,969 | 134 | 778 | 53,061 | 0 | 77,728 | R 3,968 | 0 | — | 0 | — |
| 1996 | 0 | 20 | 124 | 13,308 | 10,625 | R 140 | 755 | 54,146 | 0 | R 79,099 | R 3,023 | 0 | — | 0 | — |
| 1997 | 0 | 20 | 137 | 13,816 | 10,887 | R 137 | 797 | 52,898 | 10 | R 78,682 | R 4,523 | 0 | — | 0 | — |
| 1998 | 0 | 20 | 92 | 15,283 | 10,699 | 13 | 835 | 55,878 | 0 | 82,800 | 5,063 | 0 | — | 0 | — |
| 1999 | 0 | 22 | 141 | 16,027 | 12,591 | 7 | 843 | 58,819 | 2 | 88,430 | 5,500 | 0 | — | 0 | — |
| | | | *Trillion Btu* | | | | | | | | | | | | |
| 1960 | 0.9 | 0.3 | 6.1 | 18.6 | 2.6 | 0.1 | 4.2 | 148.0 | 0.6 | 180.2 | 0.0 | 0.0 | 181.4 | 0.0 | 181.4 |
| 1965 | 0.2 | 1.2 | 4.1 | 19.1 | 14.8 | 0.1 | 3.6 | 163.8 | 0.5 | 205.9 | 0.0 | 0.0 | 207.3 | 0.0 | 207.3 |
| 1970 | 0.1 | 7.5 | 1.4 | 29.5 | 19.7 | 0.4 | 3.8 | 211.6 | 0.2 | 266.6 | 0.0 | 0.0 | 274.1 | 0.0 | 274.1 |
| 1975 | (s) | 3.9 | 1.1 | 39.0 | 31.9 | 0.4 | 4.6 | 235.2 | 3.6 | 315.6 | 0.0 | 0.0 | 319.5 | 0.0 | 319.5 |
| 1980 | 0.0 | 9.1 | 1.0 | 47.3 | 29.1 | 0.2 | 4.8 | 233.9 | 6.1 | 322.5 | 0.0 | 0.0 | 331.6 | 0.0 | 331.6 |
| 1985 | 0.0 | 6.3 | 0.8 | 46.5 | 44.1 | 0.4 | 4.4 | 227.1 | 1.0 | 324.2 | R e 2.3 | 0.0 | e 330.5 | 0.0 | e 330.5 |
| 1990 | 0.0 | 12.1 | 1.1 | 55.4 | 28.9 | 0.2 | 4.9 | 236.8 | 0.0 | 327.3 | R 2.0 | 0.0 | 339.3 | 0.0 | 339.3 |
| 1991 | 0.0 | 13.5 | 0.9 | 61.3 | 28.2 | 0.2 | 4.4 | 246.6 | (s) | 341.6 | R 3.9 | 0.0 | 355.1 | 0.0 | 355.1 |
| 1992 | 0.0 | 15.1 | 0.7 | 65.2 | 37.5 | 0.2 | 4.5 | 253.0 | (s) | 361.0 | R 6.1 | 0.0 | 376.2 | 0.0 | 376.2 |
| 1993 | 0.0 | 16.4 | 0.7 | 66.1 | 53.5 | 0.4 | 4.6 | 263.1 | (s) | 388.3 | R 11.4 | 0.0 | 404.7 | 0.0 | 404.7 |
| 1994 | 0.0 | 17.5 | 0.6 | 75.1 | 55.4 | 0.5 | 4.8 | R 268.0 | (s) | R 404.4 | R 13.1 | 0.0 | R 421.9 | 0.0 | R 421.9 |
| 1995 | 0.0 | 19.5 | 0.7 | 79.6 | 56.5 | 0.5 | 4.7 | R 276.7 | 0.0 | R 418.6 | R 14.0 | 0.0 | R 438.1 | 0.0 | R 438.1 |
| 1996 | 0.0 | 20.2 | 0.6 | 77.5 | 60.2 | 0.5 | 4.6 | R 282.4 | 0.0 | R 425.9 | R 10.7 | 0.0 | R 446.1 | 0.0 | R 446.1 |
| 1997 | 0.0 | 19.9 | 0.7 | 80.5 | 61.7 | R 0.5 | 4.8 | R 275.8 | 0.1 | R 424.0 | R 16.0 | 0.0 | R 443.9 | 0.0 | R 443.9 |
| 1998 | 0.0 | 20.5 | 0.5 | 89.0 | 60.7 | (s) | 5.1 | 291.2 | 0.0 | 446.5 | 17.9 | 0.0 | 467.0 | 0.0 | 467.0 |
| 1999 | 0.0 | 22.5 | 0.7 | 93.4 | 71.4 | (s) | 5.1 | 306.5 | (s) | 477.1 | 19.5 | 0.0 | 499.6 | 0.0 | 499.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 160.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Minnesota

| | | | Petroleum | | | | | | Wood | | | |
| Year | Coal | Natural Gas a | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | Nuclear Electric Power | Hydroelectric Power e | and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 2,433 | 49 | 239 | 156 | 0 | 395 | 0 | 822 | 15 | 0 | 0 | — |
| 1965 | 3,857 | 51 | 278 | 182 | 0 | 460 | 143 | 1,026 | 14 | 0 | 0 | — |
| 1970 | 6,192 | 59 | 842 | 551 | 143 | 1,537 | 0 | 853 | 19 | 0 | 0 | — |
| 1975 | 7,595 | 23 | 851 | 674 | 59 | 1,584 | 9,750 | 913 | 4 | 0 | 0 | — |
| 1980 | 12,610 | 8 | 361 | 167 | 0 | 529 | 10,027 | 1,594 | 2 | 0 | 0 | — |
| 1985 | 11,498 | 1 | (s) | 49 | 0 | 49 | 11,572 | 3,497 | (s) | 0 | 0 | — |
| 1990 | 16,916 | 5 | 1 | 91 | 727 | 820 | 12,139 | R 1,659 | 398 | 0 | (s) | — |
| 1991 | 16,114 | 6 | 2 | 90 | 962 | 1,054 | 12,059 | R 2,861 | 402 | 0 | (s) | — |
| 1992 | 15,841 | 5 | (s) | 62 | 1,064 | 1,127 | 11,166 | R 4,665 | 407 | 0 | (s) | — |
| 1993 | 16,844 | 4 | 1 | 90 | 1,077 | 1,168 | 11,986 | R 6,120 | 414 | 0 | (s) | — |
| 1994 | 17,046 | 6 | 0 | 108 | 993 | 1,101 | 12,224 | R 6,441 | 414 | 0 | (s) | — |
| 1995 | 17,282 | 8 | 0 | 133 | 770 | 903 | 13,243 | R 6,801 | 429 | 0 | (s) | — |
| 1996 | 17,459 | 5 | 2 | 140 | 1,055 | 1,196 | 12,095 | R 7,219 | 422 | 0 | (s) | — |
| 1997 | 17,490 | 6 | 7 | 179 | 1,241 | 1,427 | 10,819 | R 7,003 | 429 | 0 | 0 | — |
| 1998 | 17,902 | 8 | 1 | 177 | 1,041 | 1,218 | 11,644 | 6,594 | 451 | 0 | 0 | — |
| 1999 | 17,114 | 7 | 2 | 200 | 1,261 | 1,462 | 13,316 | 5,332 | 417 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 54.5 | 50.2 | 1.5 | 0.9 | 0.0 | 2.4 | 0.0 | 8.8 | 0.2 | 0.0 | 0.0 | 116.1 |
| 1965 | 85.5 | 51.3 | 1.7 | 1.1 | 0.0 | 2.8 | 1.7 | 10.7 | 0.1 | 0.0 | 0.0 | 152.2 |
| 1970 | 125.5 | 59.1 | 5.3 | 3.2 | 0.9 | 9.4 | 0.0 | 8.9 | 0.2 | 0.0 | 0.0 | 203.1 |
| 1975 | 136.3 | 22.3 | 5.4 | 3.9 | 0.4 | 9.6 | 107.4 | 9.5 | (s) | 0.0 | 0.0 | 285.1 |
| 1980 | 221.4 | 8.0 | 2.3 | 1.0 | 0.0 | 3.2 | 109.4 | 16.6 | (s) | 0.0 | 0.0 | 358.6 |
| 1985 | 200.6 | 1.3 | (s) | 0.3 | 0.0 | 0.3 | 125.1 | 36.5 | (s) | 0.0 | 0.0 | 363.9 |
| 1990 | 297.3 | 5.2 | (s) | 0.5 | 4.4 | 4.9 | 129.6 | R 17.3 | 4.1 | 0.0 | (s) | R 455.7 |
| 1991 | 283.7 | 5.9 | (s) | 0.5 | 5.8 | 6.3 | 129.5 | R 29.9 | 4.2 | 0.0 | (s) | R 467.5 |
| 1992 | 280.0 | 4.9 | (s) | 0.4 | 6.4 | 6.8 | 119.2 | R 48.2 | 4.2 | 0.0 | (s) | R 479.1 |
| 1993 | 297.9 | 3.9 | (s) | 0.5 | 6.5 | 7.0 | 128.0 | R 63.1 | 4.3 | 0.0 | (s) | R 514.0 |
| 1994 | 300.7 | 5.9 | 0.0 | 0.6 | 6.0 | 6.6 | 130.5 | R 66.4 | 4.3 | 0.0 | (s) | R 536.4 |
| 1995 | 305.1 | 8.3 | 0.0 | 0.8 | 4.6 | 5.4 | 141.1 | R 70.1 | 4.4 | 0.0 | (s) | R 560.0 |
| 1996 | 311.2 | 5.3 | (s) | 0.8 | 6.4 | 7.2 | 128.5 | R 74.6 | 4.4 | 0.0 | (s) | R 556.6 |
| 1997 | 311.1 | 6.1 | (s) | 1.0 | 7.5 | 8.6 | 114.9 | R 72.5 | 4.4 | 0.0 | 0.0 | R 554.9 |
| 1998 | 318.0 | 7.8 | (s) | 1.0 | 6.3 | 7.3 | 123.7 | 68.2 | 4.7 | 0.0 | 0.0 | 550.8 |
| 1999 | 304.0 | 6.7 | (s) | 1.2 | 7.6 | 8.8 | 141.5 | 55.2 | 4.3 | 0.0 | 0.0 | 536.2 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 161. Energy Consumption Estimates by Source, Selected Years 1960-1999, Mississippi

| Year | Coal [a] | Natural Gas [b] | Petroleum — Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | Million kWh | | | Million kWh | |
| **Thousand Barrels** | | | | | | | | | | | | | | | | | | | |
| 1960 | 30 | 182 | 762 | 170 | 2,375 | 1,465 | 398 | 4,220 | 391 | 16,096 | 311 | R 1,229 | R 27,417 | 0 | 0 | — | — | 8,132 | — |
| 1965 | 40 | 244 | 1,144 | 463 | 2,796 | 1,460 | 346 | 4,720 | 469 | 18,539 | 489 | R 2,810 | R 33,237 | 0 | 0 | — | — | 14,061 | — |
| 1970 | 549 | 360 | 1,748 | 318 | 5,991 | 1,614 | 2,646 | 8,645 | 525 | 24,316 | 703 | R 5,446 | R 51,951 | 0 | 0 | — | — | 17,089 | — |
| 1975 | 1,440 | 230 | 2,589 | 203 | 9,852 | 1,475 | 1,434 | 8,180 | 681 | 27,811 | 12,063 | R 4,906 | R 69,194 | 0 | 0 | — | — | 27,909 | — |
| 1980 | 3,127 | 264 | 2,036 | 206 | 9,648 | 1,530 | 242 | 5,694 | 655 | 26,781 | 16,010 | R 5,991 | R 68,793 | 0 | 0 | — | — | 20,395 | — |
| 1985 | 4,519 | 227 | 2,054 | 108 | 15,914 | 4,111 | 86 | 4,672 | 596 | 27,586 | 1,319 | R 4,096 | R 60,541 | 4,332 | 0 | — | — | 25,490 | — |
| 1990 | 4,159 | 254 | 2,509 | 132 | 16,133 | 6,922 | 53 | 7,093 | 671 | 29,080 | 3,692 | R 6,247 | R 72,532 | 7,422 | h 0 | — | — | R 28,549 | — |
| 1991 | 3,812 | 250 | 2,531 | 110 | 15,450 | 8,080 | 61 | 6,103 | 600 | 29,794 | 4,778 | R 6,104 | R 73,612 | 9,133 | 0 | — | — | R 29,790 | — |
| 1992 | 3,485 | 239 | 2,171 | 94 | 15,313 | 11,006 | 38 | 6,203 | 612 | 30,535 | 3,433 | R 7,317 | R 76,723 | 8,174 | 0 | — | — | R 37,287 | — |
| 1993 | 4,030 | 230 | 1,945 | 85 | 14,691 | 8,328 | 66 | 6,214 | 623 | 31,907 | 8,999 | R 6,921 | R 79,779 | 7,904 | 0 | — | — | R 34,006 | — |
| 1994 | 4,285 | 258 | 2,110 | 72 | 15,486 | 6,750 | 51 | 6,505 | 651 | 32,868 | 5,444 | R 6,522 | R 76,460 | 9,615 | 0 | — | — | R 28,115 | — |
| 1995 | 4,606 | 288 | 2,430 | 100 | 13,530 | 7,573 | 47 | 6,810 | 640 | 34,017 | 2,648 | R 6,207 | R 74,000 | 8,013 | 0 | — | — | R 29,430 | — |
| 1996 | 5,791 | 269 | 2,608 | 61 | 14,489 | 7,157 | 49 | R 8,945 | 621 | 34,178 | 3,521 | R 7,342 | R 78,970 | 9,225 | 0 | — | — | R 28,947 | — |
| 1997 | 6,273 | 255 | 3,041 | 66 | 15,095 | 7,912 | 65 | R 3,091 | 656 | 35,393 | 5,343 | R 7,400 | R 78,062 | 10,813 | 0 | — | — | R 23,008 | — |
| 1998 | 5,897 | 241 | 3,223 | 99 | 15,703 | 7,683 | 83 | 2,787 | 687 | 36,708 | 9,582 | 6,495 | 83,050 | 9,191 | 0 | — | — | 27,824 | — |
| 1999 | 6,207 | 334 | 3,308 | 80 | 18,098 | 9,658 | 104 | 5,312 | 694 | 38,422 | 6,029 | 6,600 | 88,304 | 8,428 | 6 | — | — | 25,107 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 0.8 | 187.9 | 5.1 | 0.9 | 13.8 | 7.8 | 2.3 | 16.9 | 2.4 | 84.6 | 2.0 | R 7.4 | R 143.0 | 0.0 | 0.0 | 46.6 | 0.0 | 27.7 | R 406.0 |
| 1965 | 1.0 | 250.6 | 7.6 | 2.3 | 16.3 | 7.8 | 2.0 | 18.9 | 2.8 | 97.4 | 3.1 | R 16.9 | R 175.1 | 0.0 | 0.0 | 37.8 | 0.0 | 48.0 | R 512.5 |
| 1970 | 13.2 | 369.4 | 11.6 | 1.6 | 34.9 | 8.7 | 15.0 | 32.7 | 3.2 | 127.7 | 4.4 | R 32.7 | R 272.6 | 0.0 | 0.0 | 33.5 | 0.0 | 58.3 | R 747.0 |
| 1975 | 33.4 | 235.3 | 17.2 | 1.0 | 57.4 | 8.0 | 8.1 | 30.4 | 4.1 | 146.1 | 75.8 | R 29.4 | R 377.6 | 0.0 | 0.0 | 31.2 | 0.0 | 95.2 | R 772.7 |
| 1980 | 75.0 | 270.9 | 13.5 | 1.0 | 56.2 | 8.3 | 1.4 | 20.9 | 4.0 | 140.7 | 100.7 | R 35.9 | R 382.6 | 0.0 | 0.0 | R 34.3 | 0.0 | 69.6 | R 832.4 |
| 1985 | 109.4 | 233.0 | 13.6 | 0.5 | 92.7 | 22.9 | 0.5 | 16.8 | 3.6 | 144.9 | 8.3 | R 25.4 | R 329.4 | 46.8 | 0.0 | R 49.0 | 0.0 | 87.0 | R 854.6 |
| 1990 | 103.8 | 261.9 | 16.7 | 0.7 | 94.0 | 39.0 | 0.3 | 25.7 | 4.1 | 152.8 | 23.2 | R 37.3 | R 393.6 | 79.3 | h 0.0 | R 91.1 | h (s) | 97.4 | R h 1,027.2 |
| 1991 | 95.3 | 257.0 | 16.8 | 0.6 | 90.0 | 45.5 | 0.3 | 22.1 | 3.6 | 156.5 | 30.0 | R 36.4 | R 401.8 | 98.1 | 0.0 | R 93.4 | (s) | R 101.6 | R 1,047.3 |
| 1992 | 86.8 | 250.7 | 14.4 | 0.5 | 89.2 | 62.2 | 0.2 | 22.5 | 3.7 | 160.4 | 21.6 | R 43.2 | R 417.9 | 87.3 | 0.0 | R 94.7 | (s) | R 127.2 | R 1,064.5 |
| 1993 | 99.3 | 235.2 | 12.9 | 0.4 | 85.6 | 47.0 | 0.4 | 22.4 | 3.8 | 167.6 | 56.6 | R 41.1 | R 437.8 | 84.4 | 0.0 | R 96.1 | 0.1 | R 116.0 | R 1,068.9 |
| 1994 | 97.3 | 266.1 | 14.0 | 0.4 | 90.2 | 38.2 | 0.3 | 23.6 | 4.0 | R 171.9 | 34.2 | R 38.6 | R 415.3 | 102.6 | 0.0 | R 98.0 | 0.1 | 95.9 | R 1,075.5 |
| 1995 | 103.8 | 295.6 | 16.1 | 0.5 | 78.8 | 42.9 | 0.3 | 24.7 | 3.9 | R 177.4 | 16.6 | R 36.7 | R 397.9 | 85.4 | 0.0 | R 82.9 | 0.1 | R 100.4 | R 1,066.2 |
| 1996 | 128.1 | 277.4 | 17.3 | 0.3 | 84.4 | 40.6 | 0.3 | R 32.3 | 3.8 | R 178.3 | 22.1 | R 43.2 | R 422.5 | 98.0 | 0.0 | R 77.5 | 0.2 | R 98.8 | R 1,102.4 |
| 1997 | 132.2 | 264.1 | 20.2 | 0.3 | 87.9 | 44.9 | 0.4 | R 11.2 | 4.0 | R 184.5 | 33.6 | R 43.5 | R 430.4 | 114.9 | 0.0 | R 73.4 | 0.2 | R 78.5 | R 1,093.6 |
| 1998 | 125.3 | 252.3 | 21.4 | 0.5 | 91.5 | 43.6 | 0.5 | 10.1 | 4.2 | 191.3 | 60.2 | 38.2 | 461.4 | 97.6 | 0.0 | 59.8 | 0.2 | 94.9 | 1,091.6 |
| 1999 | 137.7 | 346.2 | 21.9 | 0.4 | 105.4 | 54.8 | 0.6 | 19.2 | 4.2 | 200.2 | 37.9 | 38.7 | 483.3 | 89.5 | 0.1 | 65.7 | 0.3 | 85.7 | 1,208.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 162. Residential Energy Consumption Estimates, Selected Years 1960-1999, Mississippi**

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] Thousand Barrels | Petroleum — Kerosene[a] Thousand Barrels | Petroleum — LPG[a] Thousand Barrels | Petroleum — Total Thousand Barrels | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 0 | 24 | 23 | 13 | 2,450 | 2,486 | 1,375 | — | — | 2,089 | — | 5,196 | — |
| 1965 | 0 | 24 | 32 | 27 | 2,865 | 2,923 | 923 | — | — | 3,705 | — | 8,847 | — |
| 1970 | 0 | 37 | 89 | 75 | 5,129 | 5,293 | 515 | — | — | 6,880 | — | 16,673 | — |
| 1975 | 0 | 30 | 196 | 127 | 4,231 | 4,554 | 507 | — | — | 8,091 | — | 19,517 | — |
| 1980 | 1 | 29 | 7 | 44 | 2,201 | 2,252 | 323 | — | — | 9,964 | — | 24,229 | — |
| 1985 | (s) | 26 | 2 | 27 | 1,915 | 1,943 | 805 | — | — | 10,447 | — | 24,545 | — |
| 1990 | (s) | 25 | 1 | 12 | 2,158 | 2,171 | 458 | — | — | 12,266 | — | R 26,832 | — |
| 1991 | (s) | 26 | 2 | 23 | 1,862 | 1,887 | 482 | — | — | 12,518 | — | R 27,212 | — |
| 1992 | (s) | 26 | 1 | 14 | 1,744 | 1,759 | 507 | — | — | 12,422 | — | R 26,494 | — |
| 1993 | (s) | 28 | 3 | 25 | 2,200 | 2,227 | 380 | — | — | 13,200 | — | R 27,880 | — |
| 1994 | 0 | 27 | 1 | 20 | 2,159 | 2,181 | 372 | — | — | 13,642 | — | R 28,469 | — |
| 1995 | 0 | 27 | (s) | 20 | 1,946 | 1,966 | 413 | — | — | 14,181 | — | R 29,567 | — |
| 1996 | 0 | 30 | 1 | 22 | 2,397 | 2,420 | R 412 | — | — | 14,965 | — | R 31,186 | — |
| 1997 | (s) | 28 | (s) | 21 | R 2,240 | R 2,261 | R 195 | — | — | 14,817 | — | R 30,822 | — |
| 1998 | 0 | 25 | 1 | 24 | 2,124 | 2,149 | 172 | — | — | 16,392 | — | 33,863 | — |
| 1999 | 0 | 25 | 2 | 21 | 2,328 | 2,351 | 185 | — | — | 16,321 | — | 31,979 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 0.0 | 24.9 | 0.1 | 0.1 | 9.8 | 10.0 | 27.5 | 0.0 | 0.0 | 7.1 | 69.5 | 17.7 | 87.3 |
| 1965 | 0.0 | 24.8 | 0.2 | 0.2 | 11.5 | 11.8 | 18.5 | 0.0 | 0.0 | 12.6 | 67.7 | 30.2 | 97.9 |
| 1970 | 0.0 | 37.6 | 0.5 | 0.4 | 19.4 | 20.3 | 10.3 | 0.0 | 0.0 | 23.5 | 91.7 | 56.9 | 148.6 |
| 1975 | 0.0 | 30.2 | 1.1 | 0.7 | 15.7 | 17.6 | 10.1 | 0.0 | 0.0 | 27.6 | 85.5 | 66.6 | 152.1 |
| 1980 | (s) | 30.5 | (s) | 0.2 | 8.1 | 8.4 | 6.5 | 0.0 | 0.0 | 34.0 | 79.3 | 82.7 | 162.0 |
| 1985 | (s) | 26.3 | (s) | 0.2 | 6.9 | 7.1 | 16.1 | 0.0 | 0.0 | 35.6 | 85.2 | 83.7 | 168.9 |
| 1990 | (s) | 25.8 | (s) | 0.1 | 7.8 | 7.9 | 9.2 | e (s) | e (s) | 41.9 | e 84.8 | R 91.6 | e 176.3 |
| 1991 | (s) | 26.5 | (s) | 0.1 | 6.7 | 6.9 | 9.6 | (s) | (s) | 42.7 | 85.8 | R 92.8 | R 178.6 |
| 1992 | (s) | 27.9 | (s) | 0.1 | 6.3 | 6.4 | 10.1 | (s) | (s) | 42.4 | 86.8 | R 90.4 | R 177.2 |
| 1993 | (s) | 29.0 | (s) | 0.1 | 7.9 | 8.1 | 7.6 | (s) | (s) | 45.0 | 89.7 | R 95.1 | 184.9 |
| 1994 | 0.0 | 27.9 | (s) | 0.1 | 7.8 | 8.0 | 7.4 | (s) | (s) | 46.5 | 89.8 | 97.1 | 187.0 |
| 1995 | 0.0 | 27.4 | (s) | 0.1 | 7.0 | 7.2 | 8.3 | (s) | (s) | 48.4 | 91.3 | R 100.9 | R 192.2 |
| 1996 | 0.0 | 31.0 | (s) | 0.1 | 8.7 | 8.8 | R 8.2 | (s) | (s) | 51.1 | 99.1 | R 106.4 | R 205.5 |
| 1997 | (s) | 28.5 | (s) | 0.1 | R 8.1 | R 8.2 | R 3.9 | (s) | (s) | 50.6 | R 91.2 | R 105.2 | R 196.4 |
| 1998 | 0.0 | 26.1 | (s) | 0.1 | 7.7 | 7.8 | 3.4 | (s) | (s) | 55.9 | 93.3 | 115.5 | 208.8 |
| 1999 | 0.0 | 25.5 | (s) | 0.1 | 8.4 | 8.5 | 3.7 | (s) | (s) | 55.7 | 93.5 | 109.1 | 202.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 163.   Commercial Energy Consumption Estimates, Selected Years 1960-1999, Mississippi**

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Motor Gasoline | Petroleum Residual Fuel[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 0 | 15 | 28 | 0 | 432 | 79 | 18 | 557 | 26 | — | 1,278 | — | 3,179 | — |
| 1965 | 0 | 12 | 39 | 0 | 506 | 88 | 33 | 665 | 17 | — | 1,968 | — | 4,700 | — |
| 1970 | 0 | 24 | 108 | 0 | 905 | 91 | 45 | 1,149 | 10 | — | 3,019 | — | 7,317 | — |
| 1975 | 0 | 24 | 239 | 0 | 747 | 105 | 898 | 1,988 | 10 | — | 3,982 | — | 9,604 | — |
| 1980 | 1 | 21 | 24 | 0 | 388 | 122 | 3,405 | 3,940 | 8 | — | 5,110 | — | 12,426 | — |
| 1985 | 1 | 17 | 1,067 | 39 | 338 | 134 | 11 | 1,589 | R 21 | — | 6,131 | — | 14,405 | — |
| 1990 | (s) | 18 | 589 | 6 | 381 | 165 | 0 | 1,141 | R 29 | — | 7,407 | — | R 16,204 | — |
| 1991 | (s) | 18 | 607 | 6 | 329 | 81 | 1 | 1,024 | R 31 | — | 7,478 | — | R 16,256 | — |
| 1992 | (s) | 18 | 511 | 9 | 308 | 172 | (s) | 1,000 | R 33 | — | 7,328 | — | R 15,629 | — |
| 1993 | (s) | 19 | 329 | 6 | 388 | 49 | 0 | 773 | R 30 | — | 7,320 | — | R 15,461 | — |
| 1994 | 0 | 19 | 432 | 3 | 381 | 149 | 0 | 965 | 31 | — | 7,729 | — | R 16,130 | — |
| 1995 | 0 | 20 | 263 | 7 | 343 | 49 | 0 | 662 | 31 | — | 8,210 | — | R 17,118 | — |
| 1996 | 0 | 22 | 349 | 6 | 423 | 57 | 0 | 835 | 34 | — | 8,615 | — | R 17,954 | — |
| 1997 | (s) | 22 | 235 | 13 | R 395 | 47 | 0 | R 690 | R 21 | — | 10,649 | — | R 22,152 | — |
| 1998 | 0 | 21 | 251 | 7 | 375 | 49 | 0 | 681 | 21 | — | 11,519 | — | 23,797 | — |
| 1999 | 0 | 20 | 254 | 44 | 411 | 44 | 0 | 752 | 26 | — | 11,923 | — | 23,361 | — |
| | | | | | | **Trillion Btu** | | | | | | | | |
| 1960 | 0.0 | 15.7 | 0.2 | 0.0 | 1.7 | 0.4 | 0.1 | 2.4 | 0.5 | 0.0 | 4.4 | 23.0 | 10.8 | 33.9 |
| 1965 | 0.0 | 12.8 | 0.2 | 0.0 | 2.0 | 0.5 | 0.2 | 2.9 | 0.3 | 0.0 | 6.7 | 22.8 | 16.0 | 38.8 |
| 1970 | 0.0 | 24.4 | 0.6 | 0.0 | 3.4 | 0.5 | 0.3 | 4.8 | 0.2 | 0.0 | 10.3 | 39.7 | 25.0 | 64.7 |
| 1975 | 0.0 | 24.4 | 1.4 | 0.0 | 2.8 | 0.6 | 5.6 | 10.4 | 0.2 | 0.0 | 13.6 | 48.6 | 32.8 | 81.4 |
| 1980 | (s) | 21.6 | 0.1 | 0.0 | 1.4 | 0.6 | 21.4 | 23.6 | 0.2 | 0.0 | 17.4 | 62.8 | 42.4 | 105.2 |
| 1985 | (s) | 17.0 | 6.2 | 0.2 | 1.2 | 0.7 | 0.1 | 8.4 | R 0.4 | 0.0 | 20.9 | R e 46.8 | 49.1 | R 95.9 |
| 1990 | (s) | 18.1 | 3.4 | (s) | 1.4 | 0.9 | 0.0 | 5.7 | R 0.6 | e (s) | 25.3 | R e 49.7 | 55.3 | R e 105.0 |
| 1991 | (s) | 18.3 | 3.5 | (s) | 1.2 | 0.4 | (s) | 5.2 | R 0.6 | (s) | 25.5 | R 49.6 | 55.5 | R 105.1 |
| 1992 | (s) | 18.9 | 3.0 | (s) | 1.1 | 0.9 | (s) | 5.0 | R 0.7 | (s) | 25.0 | R 49.6 | R 53.3 | R 103.0 |
| 1993 | (s) | 19.6 | 1.9 | (s) | 1.4 | 0.3 | 0.0 | 3.6 | 0.6 | (s) | 25.0 | 48.9 | 52.8 | R 101.6 |
| 1994 | 0.0 | 19.8 | 2.5 | (s) | 1.4 | 0.8 | 0.0 | 4.7 | 0.6 | 0.1 | 26.4 | 51.6 | 55.0 | 106.6 |
| 1995 | 0.0 | 20.3 | 1.5 | (s) | 1.2 | 0.3 | 0.0 | 3.1 | 0.6 | 0.1 | 28.0 | 52.1 | 58.4 | R 110.5 |
| 1996 | 0.0 | 22.8 | 2.0 | (s) | 1.5 | 0.3 | 0.0 | 3.9 | 0.7 | 0.1 | 29.4 | 56.9 | R 61.3 | R 118.2 |
| 1997 | (s) | 22.8 | 1.4 | 0.1 | R 1.4 | 0.2 | 0.0 | R 3.1 | R 0.4 | 0.2 | 36.3 | R 62.8 | R 75.6 | R 138.4 |
| 1998 | 0.0 | 22.4 | 1.5 | (s) | 1.4 | 0.3 | 0.0 | 3.1 | 0.4 | 0.2 | 39.3 | 65.5 | 81.2 | 146.7 |
| 1999 | 0.0 | 21.1 | 1.5 | 0.2 | 1.5 | 0.2 | 0.0 | 3.4 | 0.5 | 0.2 | 40.7 | 65.9 | 79.7 | 145.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 164. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Mississippi

| | Coal | Natural Gas [a] | Petroleum | | | | | | | | | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
| | | | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | Net Energy | Million kWh | Total |
| 1960 | 21 | 77 | 762 | 1,441 | 385 | 1,118 | 99 | 738 | 218 | R 1,229 | R 5,990 | 0 | — | — | 2,004 | — | 4,985 | — |
| 1965 | 31 | 105 | 1,144 | 1,590 | 319 | 1,117 | 157 | 610 | 149 | R 2,810 | R 7,896 | 0 | — | — | 3,517 | — | 8,398 | — |
| 1970 | 48 | 141 | 1,748 | 3,100 | 2,571 | 2,139 | 242 | 311 | 240 | R 5,446 | R 15,795 | 0 | — | — | 5,101 | — | 12,361 | — |
| 1975 | 24 | 107 | 2,589 | 4,455 | 1,307 | 2,739 | 374 | 218 | 778 | R 4,906 | R 17,366 | 0 | — | — | 6,814 | — | 16,437 | — |
| 1980 | 53 | 79 | 2,036 | 3,527 | 198 | 2,952 | 341 | 73 | 2,172 | R 5,991 | R 17,290 | 0 | — | — | 8,184 | — | 19,901 | — |
| 1985 | 251 | 105 | 2,054 | 5,392 | 20 | 2,187 | 310 | 751 | 89 | R 4,096 | R 14,899 | 0 | — | — | 9,147 | — | 21,490 | — |
| 1990 | 271 | 108 | 2,509 | 5,667 | 35 | 4,423 | 349 | 578 | 960 | R 6,247 | R 20,767 | f 0 | — | — | 12,454 | — | R 27,245 | — |
| 1991 | 242 | 109 | 2,531 | 4,830 | 33 | 3,803 | 312 | 669 | 238 | R 6,104 | R 18,520 | 0 | — | — | 13,024 | — | R 28,314 | — |
| 1992 | 247 | 108 | 2,171 | 4,344 | 15 | 4,060 | 318 | 638 | 192 | R 7,317 | R 19,055 | 0 | — | — | 13,491 | — | R 28,772 | — |
| 1993 | 263 | 105 | 1,945 | 3,756 | 35 | 3,520 | 324 | 383 | 258 | R 6,921 | R 17,143 | 0 | — | — | 14,229 | — | R 30,054 | — |
| 1994 | 296 | 90 | 2,110 | 4,128 | 29 | 3,807 | 339 | 418 | 173 | R 6,522 | R 17,526 | 0 | — | — | 15,256 | — | R 31,838 | — |
| 1995 | 287 | 88 | 2,430 | 3,209 | 19 | 4,448 | 333 | 427 | 82 | R 6,207 | R 17,155 | 0 | — | — | 15,477 | — | R 32,269 | — |
| 1996 | 233 | 84 | 2,608 | 3,387 | 21 | R 6,061 | 323 | 430 | 114 | R 7,342 | R 20,286 | 0 | — | — | 16,043 | — | R 33,433 | — |
| 1997 | 238 | 88 | 3,041 | 3,313 | 31 | R 397 | 341 | 488 | 31 | R 7,400 | R 15,041 | 0 | — | — | 14,622 | — | R 30,415 | — |
| 1998 | 213 | 82 | 3,223 | 2,782 | 52 | 280 | 357 | 370 | 162 | 6,495 | 13,722 | 0 | — | — | 14,599 | — | 30,158 | — |
| 1999 | 185 | 124 | 3,308 | 3,834 | 40 | 2,232 | 361 | 733 | 14 | 6,600 | 17,121 | 6 | — | — | 15,735 | — | 30,830 | — |

### Trillion Btu

| 1960 | 0.5 | 79.3 | 5.1 | 8.4 | 2.2 | 4.5 | 0.6 | 3.9 | 1.4 | R 7.4 | R 33.4 | 0.0 | 18.5 | 0.0 | 6.8 | R 138.5 | 17.0 | R 155.5 |
| 1965 | 0.8 | 108.5 | 7.6 | 9.3 | 1.8 | 4.5 | 1.0 | 3.2 | 0.9 | R 16.9 | R 45.1 | 0.0 | 19.0 | 0.0 | 12.0 | R 185.3 | 28.7 | R 214.0 |
| 1970 | 1.2 | 144.4 | 11.6 | 18.1 | 14.6 | 8.1 | 1.5 | 1.6 | 1.5 | R 32.7 | R 89.6 | 0.0 | 23.0 | 0.0 | 17.4 | R 275.6 | 42.2 | R 317.8 |
| 1975 | 0.6 | 109.1 | 17.2 | 26.0 | 7.4 | 10.2 | 2.3 | 1.1 | 4.9 | R 29.4 | R 98.4 | 0.0 | 20.8 | 0.0 | 23.3 | R 252.1 | 56.1 | R 308.2 |
| 1980 | 1.2 | 81.5 | 13.5 | 20.5 | 1.1 | 10.8 | 2.1 | 0.4 | 13.7 | R 35.9 | R 98.0 | 0.0 | R 27.7 | 0.0 | 27.9 | R 236.4 | 67.9 | R 304.3 |
| 1985 | 5.9 | 108.1 | 13.6 | 31.4 | 0.1 | 7.9 | 1.9 | 3.9 | 0.6 | R 25.4 | R 84.8 | 0.0 | R 32.5 | 0.0 | 31.2 | R 262.4 | 73.3 | R 335.8 |
| 1990 | 6.3 | 111.5 | 16.7 | 33.0 | 0.2 | 16.0 | 2.1 | 3.0 | 6.0 | R 37.3 | R 114.4 | f 0.0 | R 81.4 | f 0.0 | 42.5 | R f 356.1 | R 93.0 | R f 449.0 |
| 1991 | 5.6 | 112.5 | 16.8 | 28.1 | 0.2 | 13.7 | 1.9 | 3.5 | 1.5 | R 36.4 | R 102.2 | 0.0 | R 83.2 | 0.0 | 44.4 | R 347.9 | R 96.6 | R 444.5 |
| 1992 | 5.8 | 113.2 | 14.4 | 25.3 | 0.1 | 14.7 | 1.9 | 3.3 | 1.2 | R 43.2 | R 104.2 | 0.0 | R 83.9 | 0.0 | 46.0 | R 353.0 | R 98.2 | R 451.2 |
| 1993 | 6.3 | 107.4 | 12.9 | 21.9 | 0.2 | 12.7 | 2.0 | 2.0 | 1.6 | R 41.1 | R 94.4 | 0.0 | R 87.9 | 0.0 | 48.6 | R 344.6 | R 102.5 | R 447.2 |
| 1994 | 7.1 | 92.2 | 14.0 | 24.0 | 0.2 | 13.8 | 2.1 | 2.2 | 1.1 | R 38.6 | R 95.9 | 0.0 | R 89.9 | 0.0 | 52.1 | R 337.1 | 108.6 | R 445.8 |
| 1995 | 6.9 | 89.6 | 16.1 | 18.7 | 0.1 | 16.1 | 2.0 | 2.2 | 0.5 | R 36.7 | R 92.5 | 0.0 | R 74.0 | 0.0 | 52.8 | R 315.8 | R 110.1 | R 425.9 |
| 1996 | 5.6 | 86.7 | 17.3 | 19.7 | 0.1 | R 21.9 | 2.0 | R 2.2 | 0.7 | R 43.2 | R 107.1 | 0.0 | R 68.5 | 0.0 | 54.7 | R 322.7 | R 114.1 | R 436.8 |
| 1997 | 5.6 | 90.5 | 20.2 | 19.3 | 0.2 | R 1.4 | 2.1 | R 2.5 | 0.2 | R 43.5 | R 89.4 | 0.0 | R 69.0 | 0.0 | 49.9 | R 304.5 | R 103.8 | R 408.3 |
| 1998 | 5.1 | 86.4 | 21.4 | 16.2 | 0.3 | 1.0 | 2.2 | 1.9 | 1.0 | 38.2 | 82.2 | 0.0 | 55.9 | 0.0 | 49.8 | 279.4 | 102.9 | 382.3 |
| 1999 | 4.5 | 129.1 | 21.9 | 22.3 | 0.2 | 8.1 | 2.2 | 3.8 | 0.1 | 38.7 | 97.3 | 0.1 | 61.5 | (s) | 53.7 | 346.2 | 105.2 | 451.4 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 165. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Mississippi**

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Petroleum — Distillate Fuel [a] | Petroleum — Jet Fuel [a] | Petroleum — LPG [a] | Petroleum — Lubricants [a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel [a] | Petroleum — Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | (s) | 31 | 170 | 882 | 1,465 | 220 | 292 | 15,279 | 11 | 18,320 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 45 | 463 | 1,136 | 1,460 | 233 | 312 | 17,842 | 301 | 21,747 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 59 | 318 | 2,690 | 1,614 | 472 | 283 | 23,914 | 3 | 29,293 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 38 | 203 | 4,696 | 1,475 | 464 | 307 | 27,489 | 1,184 | 35,817 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 39 | 206 | 6,020 | 1,530 | 152 | 315 | 26,585 | 5,355 | 40,163 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 25 | 108 | 9,392 | 4,111 | 232 | 286 | 26,701 | 1,110 | 41,941 | e 0 | 0 | — | 0 | — |
| 1990 | 0 | 38 | 132 | 9,826 | 6,922 | 131 | 322 | 28,337 | 1,554 | 47,224 | R 0 | 0 | — | 0 | — |
| 1991 | 0 | 35 | 110 | 9,932 | 8,080 | 109 | 288 | 29,043 | 3,938 | 51,500 | R 0 | 0 | — | 0 | — |
| 1992 | 0 | 33 | 94 | 10,429 | 11,006 | 92 | 294 | 29,725 | 2,618 | 54,258 | R 0 | 0 | — | 0 | — |
| 1993 | 0 | 38 | 85 | 10,568 | 8,328 | 106 | 299 | 31,475 | 3,238 | 54,099 | R 139 | 0 | — | 0 | — |
| 1994 | 0 | 39 | 72 | 10,875 | 6,750 | 158 | 313 | 32,301 | 3,588 | 54,056 | R 98 | 0 | — | 0 | — |
| 1995 | 0 | 42 | 100 | 10,018 | 7,573 | 72 | 307 | 33,540 | 2,558 | 54,169 | R 55 | 0 | — | 0 | — |
| 1996 | 0 | 49 | 61 | 10,664 | 7,157 | R 64 | 298 | 33,690 | 1,703 | R 53,637 | R 6 | 0 | — | 0 | — |
| 1997 | 0 | 45 | 66 | 11,496 | 7,912 | R 58 | 315 | 34,858 | 1,277 | R 55,983 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 36 | 99 | 12,608 | 7,683 | 7 | 330 | 36,290 | 1,106 | 58,122 | 0 | 0 | — | 0 | — |
| 1999 | 0 | 64 | 80 | 13,946 | 9,658 | 341 | 333 | 37,644 | 1,099 | 63,102 | 0 | 0 | — | 0 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | (s) | 32.5 | 0.9 | 5.1 | 7.8 | 0.9 | 1.8 | 80.3 | 0.1 | 96.8 | 0.0 | 0.0 | 129.3 | 0.0 | 129.3 |
| 1965 | (s) | 46.6 | 2.3 | 6.6 | 7.8 | 0.9 | 1.9 | 93.7 | 1.9 | 115.2 | 0.0 | 0.0 | 161.8 | 0.0 | 161.8 |
| 1970 | (s) | 60.8 | 1.6 | 15.7 | 8.7 | 1.8 | 1.7 | 125.6 | (s) | 155.2 | 0.0 | 0.0 | 216.0 | 0.0 | 216.0 |
| 1975 | (s) | 39.2 | 1.0 | 27.4 | 8.0 | 1.7 | 1.9 | 144.4 | 7.4 | 191.8 | 0.0 | 0.0 | 231.0 | 0.0 | 231.0 |
| 1980 | 0.0 | 40.6 | 1.0 | 35.1 | 8.3 | 0.6 | 1.9 | 139.7 | 33.7 | 220.2 | 0.0 | 0.0 | 260.8 | 0.0 | 260.8 |
| 1985 | 0.0 | 25.9 | 0.5 | 54.7 | 22.9 | 0.8 | 1.7 | 140.3 | 7.0 | 228.0 | e 0.0 | 0.0 | e 253.9 | 0.0 | e 253.9 |
| 1990 | 0.0 | 38.9 | 0.7 | 57.2 | 39.0 | 0.5 | 2.0 | 148.9 | 9.8 | 257.9 | R 0.0 | 0.0 | 296.9 | 0.0 | 296.9 |
| 1991 | 0.0 | 35.7 | 0.6 | 57.9 | 45.5 | 0.4 | 1.7 | 152.6 | 24.8 | 283.4 | R 0.0 | 0.0 | 319.1 | 0.0 | 319.1 |
| 1992 | 0.0 | 35.0 | 0.5 | 60.8 | 62.2 | 0.3 | 1.8 | 156.1 | 16.5 | 298.1 | R 0.0 | 0.0 | 333.1 | 0.0 | 333.1 |
| 1993 | 0.0 | 38.4 | 0.4 | 61.6 | 47.0 | 0.4 | 1.8 | 165.3 | 20.4 | 296.9 | R 0.5 | 0.0 | 335.3 | 0.0 | 335.3 |
| 1994 | 0.0 | 40.3 | 0.4 | 63.3 | 38.2 | 0.6 | 1.9 | R 168.9 | 22.6 | R 295.9 | 0.3 | 0.0 | R 336.1 | 0.0 | R 336.1 |
| 1995 | 0.0 | 42.7 | 0.5 | 58.4 | 42.9 | 0.3 | 1.9 | R 174.9 | 16.1 | R 294.9 | 0.2 | 0.0 | R 337.6 | 0.0 | R 337.6 |
| 1996 | 0.0 | 50.5 | 0.3 | 62.1 | 40.6 | 0.2 | 1.8 | R 175.7 | 10.7 | R 291.5 | (s) | 0.0 | R 342.0 | 0.0 | R 342.0 |
| 1997 | 0.0 | 46.5 | 0.3 | 67.0 | 44.9 | 0.2 | 1.9 | R 181.7 | 8.0 | R 304.0 | 0.0 | 0.0 | R 350.5 | 0.0 | R 350.5 |
| 1998 | 0.0 | 38.1 | 0.5 | 73.4 | 43.6 | (s) | 2.0 | 189.1 | 7.0 | 315.6 | 0.0 | 0.0 | 353.7 | 0.0 | 353.7 |
| 1999 | 0.0 | 66.1 | 0.4 | 81.2 | 54.8 | 1.2 | 2.0 | 196.2 | 6.9 | 342.7 | 0.0 | 0.0 | 408.9 | 0.0 | 408.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 166.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Mississippi**

| | | | Petroleum | | | | | | Wood | | | |
| | Coal | Natural Gas [a] | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | Nuclear Electric Power | Hydroelectric Power [e] | and Waste | Geothermal Energy | Other [b,f] | |
| Year | Thousand Short Tons | Billion Cubic Feet | | | Thousand Barrels | | | | Million Kilowatthours | | | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 8 | 34 | 64 | 1 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | — |
| 1965 | 9 | 56 | 6 | (s) | 0 | 7 | 0 | 0 | 0 | 0 | 0 | — |
| 1970 | 500 | 100 | 415 | 5 | 0 | 420 | 0 | 0 | 0 | 0 | 0 | — |
| 1975 | 1,416 | 32 | 9,203 | 266 | 0 | 9,469 | 0 | 0 | 0 | 0 | 0 | — |
| 1980 | 3,072 | 95 | 5,078 | 70 | 0 | 5,149 | 0 | 0 | 0 | 0 | 0 | — |
| 1985 | 4,267 | 54 | 108 | 61 | 0 | 169 | 4,332 | 0 | 0 | 0 | 0 | — |
| 1990 | 3,888 | 65 | 1,179 | 50 | 0 | 1,228 | 7,422 | 0 | 0 | 0 | 0 | — |
| 1991 | 3,570 | 62 | 602 | 79 | 0 | 681 | 9,133 | 0 | 0 | 0 | 0 | — |
| 1992 | 3,237 | 54 | 623 | 28 | 0 | 651 | 8,174 | 0 | 0 | 0 | 0 | — |
| 1993 | 3,767 | 40 | 5,503 | 35 | 0 | 5,538 | 7,904 | 0 | 0 | 0 | 0 | — |
| 1994 | 3,989 | 83 | 1,683 | 50 | 0 | 1,733 | 9,615 | 0 | 0 | 0 | 0 | — |
| 1995 | 4,319 | 111 | 7 | 41 | 0 | 48 | 8,013 | 0 | 0 | 0 | 0 | — |
| 1996 | 5,558 | 83 | 1,703 | 89 | 0 | 1,792 | 9,225 | 0 | 0 | 0 | 0 | — |
| 1997 | 6,035 | 73 | 4,035 | 51 | 0 | 4,086 | 10,813 | 0 | 0 | 0 | 0 | — |
| 1998 | 5,684 | 76 | 8,314 | 61 | 0 | 8,376 | 9,191 | 0 | 0 | 0 | 0 | — |
| 1999 | 6,022 | 102 | 4,916 | 62 | 0 | 4,978 | 8,428 | 0 | 0 | 0 | 0 | — |
| | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 0.2 | 35.6 | 0.4 | (s) | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.2 |
| 1965 | 0.2 | 58.0 | (s) | (s) | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 58.3 |
| 1970 | 12.1 | 102.2 | 2.6 | (s) | 0.0 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 116.9 |
| 1975 | 32.8 | 32.5 | 57.9 | 1.5 | 0.0 | 59.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 124.7 |
| 1980 | 73.7 | 96.7 | 31.9 | 0.4 | 0.0 | 32.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 202.7 |
| 1985 | 103.5 | 55.7 | 0.7 | 0.4 | 0.0 | 1.0 | 46.8 | 0.0 | 0.0 | 0.0 | 0.0 | 207.0 |
| 1990 | 97.5 | 67.5 | 7.4 | 0.3 | 0.0 | 7.7 | 79.3 | 0.0 | 0.0 | 0.0 | 0.0 | 252.0 |
| 1991 | 89.6 | 64.0 | 3.8 | 0.5 | 0.0 | 4.2 | 98.1 | 0.0 | 0.0 | 0.0 | 0.0 | 255.9 |
| 1992 | 81.0 | 55.8 | 3.9 | 0.2 | 0.0 | 4.1 | 87.3 | 0.0 | 0.0 | 0.0 | 0.0 | 228.1 |
| 1993 | 93.0 | 40.8 | 34.6 | 0.2 | 0.0 | 34.8 | 84.4 | 0.0 | 0.0 | 0.0 | 0.0 | 253.0 |
| 1994 | 90.2 | 86.1 | 10.6 | 0.3 | 0.0 | 10.9 | 102.6 | 0.0 | 0.0 | 0.0 | 0.0 | 289.8 |
| 1995 | 96.9 | 115.6 | (s) | 0.2 | 0.0 | 0.3 | 85.4 | 0.0 | 0.0 | 0.0 | 0.0 | 298.2 |
| 1996 | 122.5 | 86.4 | 10.7 | 0.5 | 0.0 | 11.2 | 98.0 | 0.0 | 0.0 | 0.0 | 0.0 | 318.2 |
| 1997 | 126.6 | 75.7 | 25.4 | 0.3 | 0.0 | 25.7 | 114.9 | 0.0 | 0.0 | 0.0 | 0.0 | 342.8 |
| 1998 | 120.1 | 79.3 | 52.3 | 0.4 | 0.0 | 52.6 | 97.6 | 0.0 | 0.0 | 0.0 | 0.0 | 349.7 |
| 1999 | 133.2 | 104.4 | 30.9 | 0.4 | 0.0 | 31.3 | 89.5 | 0.0 | 0.0 | 0.0 | 0.0 | 358.4 |

[a]  Includes supplemental gaseous fuels.
[b]  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c]  Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d]  Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e]  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f]  "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g]  If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 167. Energy Consumption Estimates by Source, Selected Years 1960-1999, Missouri**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |

*Thousand Barrels section:*

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 7,510 | 261 | 3,725 | 1,844 | 12,817 | 1,249 | 2,087 | 5,994 | 953 | 40,807 | 3,179 | R 2,207 | R 74,860 | 0 | 726 | — | — | 4,227 | — |
| 1965 | 8,534 | 341 | 4,401 | 2,323 | 13,803 | 3,625 | 1,162 | 7,692 | 1,029 | 45,015 | 3,449 | R 4,395 | R 86,894 | 0 | 802 | — | — | 2,382 | — |
| 1970 | 12,863 | 430 | 5,657 | 179 | 16,235 | 8,074 | 643 | 11,771 | 1,150 | 56,041 | 3,570 | R 5,467 | R 108,789 | 0 | 927 | — | — | -2,103 | — |
| 1975 | 19,955 | 370 | 5,401 | 184 | 17,819 | 8,311 | 282 | 12,995 | 1,284 | 62,342 | 2,521 | R 4,801 | R 115,940 | 0 | 1,280 | — | — | -12,225 | — |
| 1980 | 24,845 | 318 | 4,002 | 162 | 18,390 | 6,268 | 315 | 9,121 | 1,603 | 58,966 | 1,427 | R 11,384 | R 111,638 | 0 | 558 | — | — | -5,550 | — |
| 1985 | 24,733 | 260 | 4,295 | 135 | 19,593 | 5,889 | 149 | 5,583 | 1,459 | 60,036 | 732 | 7,660 | 105,531 | 8,030 | 2,993 | — | — | -22,418 | — |
| 1990 | 25,836 | 239 | 4,468 | 126 | 20,743 | 6,647 | 45 | 6,874 | 1,641 | 63,994 | 629 | 9,864 | 115,031 | 7,998 | R h 2,156 | — | — | R -8,848 | — |
| 1991 | 25,773 | 256 | 4,062 | 117 | 20,310 | 7,506 | 65 | 8,633 | 1,468 | 63,908 | 548 | 4,639 | 111,256 | 9,979 | R 1,072 | — | — | R -6,189 | — |
| 1992 | 25,180 | 241 | 3,832 | 115 | 22,458 | 7,522 | 43 | 8,470 | 1,497 | 65,260 | 666 | 5,644 | 115,507 | 8,084 | R 1,450 | — | — | R -4,364 | — |
| 1993 | 23,381 | 280 | 4,055 | 93 | 22,784 | 9,034 | 56 | 9,586 | 1,524 | 66,109 | 1,079 | 6,000 | 120,350 | 8,381 | R 3,110 | — | — | R 16,244 | — |
| 1994 | 27,663 | 268 | 5,703 | 113 | 24,545 | 10,623 | 48 | 9,407 | 1,593 | 67,526 | 534 | 6,527 | 126,619 | 10,006 | R 1,844 | — | — | R -6,774 | — |
| 1995 | 31,753 | 279 | 5,296 | 109 | 25,540 | 11,425 | 53 | 11,085 | 1,566 | 68,930 | 359 | 6,369 | 130,732 | 8,242 | R 1,854 | — | — | R -10,057 | — |
| 1996 | 34,382 | 294 | 5,385 | 108 | 27,873 | 12,133 | 116 | R 12,965 | 1,520 | 69,947 | 365 | R 4,462 | R 134,876 | 8,890 | R 1,239 | — | — | R -9,155 | — |
| 1997 | 36,665 | 284 | 4,141 | 160 | 30,015 | 12,320 | 77 | R 11,200 | 1,605 | 70,581 | 257 | R 4,320 | R 134,678 | 8,955 | R 1,479 | — | — | R -18,477 | — |
| 1998 | 38,589 | 259 | 3,906 | 136 | 36,943 | 12,747 | 83 | 8,134 | 1,680 | 71,675 | 247 | 5,676 | 141,228 | 8,517 | 2,269 | — | — | -22,830 | — |
| 1999 | 37,948 | 266 | 4,977 | 75 | 35,879 | 12,760 | 84 | 12,671 | 1,698 | 71,189 | 169 | 6,465 | 145,967 | 8,587 | 1,743 | — | — | -26,448 | — |

*Trillion Btu section:*

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 170.9 | 270.1 | 24.7 | 9.3 | 74.7 | 7.0 | 11.8 | 24.0 | 5.8 | 214.4 | 20.0 | R 13.0 | R 404.6 | 0.0 | 7.8 | 33.6 | 0.0 | 14.4 | R 901.5 |
| 1965 | 189.6 | 348.0 | 29.2 | 11.7 | 80.4 | 20.4 | 6.6 | 30.9 | 6.2 | 236.5 | 21.7 | R 24.8 | R 468.4 | 0.0 | 8.4 | 27.0 | 0.0 | 8.1 | R 1,049.5 |
| 1970 | 279.2 | 432.5 | 37.5 | 0.9 | 94.6 | 45.7 | 3.6 | 44.5 | 7.0 | 294.4 | 22.4 | R 30.7 | R 581.3 | 0.0 | 9.7 | 23.6 | 0.0 | -7.2 | R 1,319.3 |
| 1975 | 430.2 | 371.8 | 35.8 | 0.9 | 103.8 | 47.0 | 1.6 | 48.3 | 7.8 | 327.5 | 15.9 | R 27.4 | R 616.0 | 0.0 | 13.3 | 27.1 | 0.0 | -41.7 | R 1,416.8 |
| 1980 | 531.4 | 322.9 | 26.6 | 0.8 | 107.1 | 35.5 | 1.8 | 33.5 | 9.7 | 309.8 | 9.0 | R 63.3 | R 597.0 | 0.0 | 5.8 | R 28.8 | 0.0 | -18.9 | R 1,467.0 |
| 1985 | 529.7 | 264.3 | 28.5 | 0.7 | 114.1 | 33.3 | 0.8 | 20.1 | 8.8 | 315.4 | 4.6 | 41.9 | 568.3 | 86.8 | 31.3 | R 28.7 | 0.0 | -76.5 | R 1,432.6 |
| 1990 | 540.6 | 241.3 | 29.6 | 0.6 | 120.8 | 37.6 | 0.3 | 24.9 | 10.0 | 336.2 | 4.0 | 54.8 | 618.8 | 85.4 | h 22.4 | R 16.1 | h 0.2 | R -30.2 | R h 1,494.7 |
| 1991 | 534.5 | 258.6 | 27.0 | 0.6 | 118.3 | 42.5 | 0.4 | 31.2 | 8.9 | 335.7 | 3.4 | 26.2 | 594.2 | 107.2 | 11.2 | R 16.6 | 0.2 | R -21.1 | R 1,501.4 |
| 1992 | 523.2 | 241.2 | 25.4 | 0.6 | 130.8 | 42.6 | 0.2 | 30.7 | 9.1 | 342.8 | 4.2 | 32.1 | 618.5 | 86.3 | 15.0 | R 17.3 | 0.2 | R -14.9 | R 1,486.9 |
| 1993 | 466.3 | 280.7 | 26.9 | 0.5 | 132.7 | 51.2 | 0.3 | 34.6 | 9.2 | 347.3 | 6.8 | 34.4 | 643.8 | 89.5 | 32.1 | R 14.9 | 0.2 | R 55.4 | R 1,583.0 |
| 1994 | 542.3 | 269.2 | 37.8 | 0.6 | 143.0 | 60.2 | 0.3 | 34.2 | 9.7 | R 353.2 | 3.4 | 37.4 | R 679.6 | 106.8 | 19.0 | R 16.7 | 0.2 | R -23.1 | R 1,608.8 |
| 1995 | 591.4 | 281.0 | 35.1 | 0.5 | 148.8 | 64.8 | 0.3 | 40.2 | 9.5 | R 359.5 | 2.3 | 36.5 | R 697.4 | 87.8 | 19.1 | R 16.7 | 0.2 | R -34.3 | R 1,659.4 |
| 1996 | 629.7 | 297.5 | 35.7 | 0.5 | 162.4 | 68.8 | 0.7 | R 46.8 | 9.2 | R 364.8 | 2.3 | R 25.6 | R 716.9 | 94.4 | 12.8 | R 16.4 | 0.2 | R -31.2 | R 1,736.7 |
| 1997 | 666.7 | 286.4 | 27.5 | 0.8 | 174.8 | 69.9 | 0.4 | R 40.5 | 9.7 | R 367.9 | 1.6 | R 24.7 | R 717.9 | 95.1 | R 15.3 | R 13.0 | 0.2 | R -63.0 | R 1,731.6 |
| 1998 | 697.0 | 262.0 | 25.9 | 0.7 | 215.2 | 72.3 | 0.5 | 29.4 | 10.2 | 373.6 | 1.6 | 32.7 | 762.0 | 90.5 | 23.5 | 11.0 | 0.2 | -77.9 | 1,768.2 |
| 1999 | 686.1 | 269.6 | 33.0 | 0.4 | 209.0 | 72.3 | 0.5 | 45.8 | 10.3 | 371.0 | 1.1 | 37.3 | 780.6 | 91.2 | 18.0 | 12.3 | 0.2 | -90.2 | 1,768.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number

indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 168.  Residential Energy Consumption Estimates, Selected Years 1960-1999, Missouri

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 415 | 111 | 1,330 | 240 | 4,687 | 6,257 | 1,293 | — | — | 4,223 | — | 10,505 | — |
| 1965 | 105 | 130 | 1,056 | 138 | 6,139 | 7,332 | 898 | — | — | 5,977 | — | 14,271 | — |
| 1970 | 32 | 157 | 1,312 | 69 | 8,934 | 10,315 | 674 | — | — | 9,672 | — | 23,438 | — |
| 1975 | 54 | 155 | 1,435 | 28 | 9,528 | 10,992 | 704 | — | — | 13,654 | — | 32,935 | — |
| 1980 | 29 | 143 | 1,246 | 57 | 4,991 | 6,294 | R 1,093 | — | — | 18,648 | — | 45,346 | — |
| 1985 | 55 | 128 | 815 | 95 | 3,496 | 4,406 | 1,033 | — | — | 18,483 | — | 43,425 | — |
| 1990 | 99 | 116 | 355 | 29 | 4,193 | 4,577 | 669 | — | — | 21,652 | — | R 47,367 | — |
| 1991 | 88 | 121 | 430 | 37 | 5,489 | 5,956 | 704 | — | — | 23,386 | — | R 50,840 | — |
| 1992 | 79 | 117 | 358 | 21 | 5,545 | 5,923 | 741 | — | — | 21,294 | — | R 45,414 | — |
| 1993 | 91 | 134 | 414 | 37 | 5,863 | 6,314 | R 617 | — | — | 24,182 | — | R 51,076 | — |
| 1994 | 77 | 123 | 353 | 24 | 5,771 | 6,148 | R 605 | — | — | 24,057 | — | R 50,205 | — |
| 1995 | 74 | 125 | 472 | 32 | 5,841 | 6,344 | R 672 | — | — | 25,409 | — | R 52,976 | — |
| 1996 | 72 | 137 | 335 | 56 | R 7,840 | R 8,231 | R 671 | — | — | 26,448 | — | R 55,117 | — |
| 1997 | 93 | 128 | 329 | 45 | R 7,148 | R 7,522 | R 478 | — | — | 26,595 | — | R 55,321 | — |
| 1998 | 58 | 111 | 289 | 49 | 5,105 | 5,444 | 421 | — | — | 28,265 | — | 58,389 | — |
| 1999 | 80 | 112 | 279 | 55 | 6,848 | 7,182 | 451 | — | — | 27,766 | — | 54,402 | — |
| | | | | | Trillion Btu | | | | | | | | |
| 1960 | 9.5 | 115.0 | 7.7 | 1.4 | 18.8 | 27.9 | 25.9 | 0.0 | 0.0 | 14.4 | 192.7 | 35.8 | 228.5 |
| 1965 | 2.4 | 132.1 | 6.1 | 0.8 | 24.6 | 31.6 | 18.0 | 0.0 | 0.0 | 20.4 | 204.4 | 48.7 | 253.1 |
| 1970 | 0.7 | 157.7 | 7.6 | 0.4 | 33.8 | 41.8 | 13.5 | 0.0 | 0.0 | 33.0 | 246.7 | 80.0 | 326.6 |
| 1975 | 1.2 | 156.5 | 8.4 | 0.2 | 35.4 | 43.9 | 14.1 | 0.0 | 0.0 | 46.6 | 262.2 | 112.4 | 374.6 |
| 1980 | 0.6 | 145.7 | 7.3 | 0.3 | 18.3 | 25.9 | R 21.9 | 0.0 | 0.0 | 63.6 | 257.7 | 154.7 | 412.4 |
| 1985 | 1.2 | 130.3 | 4.8 | 0.5 | 12.6 | 17.9 | 20.7 | 0.0 | 0.0 | 63.1 | 233.2 | 148.2 | 381.3 |
| 1990 | 2.2 | 117.2 | 2.1 | 0.2 | 15.2 | 17.4 | 13.4 | e (s) | R e 0.2 | 73.9 | e 224.3 | 161.6 | R e 385.9 |
| 1991 | 1.9 | 121.7 | 2.5 | 0.2 | 19.8 | 22.6 | 14.1 | (s) | R 0.2 | 79.8 | 240.3 | R 173.5 | R 413.8 |
| 1992 | 1.7 | 116.9 | 2.1 | 0.1 | 20.1 | 22.3 | 14.8 | 0.1 | R 0.2 | 72.7 | 228.6 | R 155.0 | R 383.6 |
| 1993 | 2.0 | 134.7 | 2.4 | 0.2 | 21.1 | 23.8 | R 12.3 | 0.1 | R 0.2 | 82.5 | 255.6 | 174.3 | R 429.9 |
| 1994 | 1.8 | 123.3 | 2.1 | 0.1 | 21.0 | 23.2 | R 12.1 | 0.1 | R 0.2 | 82.1 | R 242.6 | 171.3 | R 413.9 |
| 1995 | 1.7 | 126.0 | 2.7 | 0.2 | 21.2 | 24.1 | R 13.4 | 0.1 | R 0.2 | 86.7 | R 252.1 | R 180.8 | R 432.9 |
| 1996 | 1.6 | 138.7 | 2.0 | 0.3 | R 28.3 | R 30.6 | R 13.4 | 0.1 | R 0.2 | 90.2 | R 274.8 | R 188.1 | R 462.9 |
| 1997 | 2.1 | 128.9 | 1.9 | 0.3 | R 25.8 | R 28.0 | R 9.6 | 0.1 | R 0.2 | 90.7 | R 259.6 | R 188.8 | R 448.3 |
| 1998 | 1.3 | 112.0 | 1.7 | 0.3 | 18.5 | 20.4 | 8.4 | 0.1 | 0.1 | 96.4 | 238.8 | 199.2 | 438.0 |
| 1999 | 1.8 | 113.6 | 1.6 | 0.3 | 24.8 | 26.7 | 9.0 | 0.1 | 0.1 | 94.7 | 246.1 | 185.6 | 431.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 169.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Missouri

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum (Thousand Barrels) Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 770 | 33 | 1,101 | 1,507 | 827 | 113 | 1,366 | 4,914 | 24 | — | 3,314 | — | 8,243 | — |
| 1965 | 196 | 41 | 873 | 865 | 1,083 | 133 | 1,508 | 4,463 | 17 | — | 4,473 | — | 10,681 | — |
| 1970 | 60 | 88 | 1,085 | 433 | 1,577 | 153 | 1,654 | 4,901 | 13 | — | 6,168 | — | 14,948 | — |
| 1975 | 101 | 91 | 1,187 | 179 | 1,681 | 159 | 764 | 3,971 | 13 | — | 7,639 | — | 18,425 | — |
| 1980 | 53 | 76 | 1,001 | 171 | 881 | 223 | 554 | 2,830 | 26 | — | 12,986 | — | 31,578 | — |
| 1985 | 101 | 60 | 1,465 | 33 | 617 | 262 | 121 | 2,498 | R 28 | — | 15,205 | — | 35,724 | — |
| 1990 | 185 | 59 | 883 | 8 | 740 | 239 | 60 | 1,931 | R 43 | — | 19,335 | — | R 42,297 | — |
| 1991 | 164 | 63 | 1,111 | 4 | 969 | 128 | 30 | 2,241 | R 45 | — | 20,014 | — | R 43,509 | — |
| 1992 | 148 | 61 | 1,174 | 16 | 978 | 121 | 3 | 2,293 | R 48 | — | 19,677 | — | R 41,967 | — |
| 1993 | 168 | 70 | 1,148 | 13 | 1,035 | 112 | 8 | 2,315 | 50 | — | 20,822 | — | R 43,979 | — |
| 1994 | 142 | 66 | 1,194 | 14 | 1,018 | 102 | 20 | 2,348 | 51 | — | 21,518 | — | R 44,906 | — |
| 1995 | 137 | 65 | 1,286 | 10 | 1,031 | 99 | 1 | 2,427 | 51 | — | 22,514 | — | R 46,940 | — |
| 1996 | 133 | 73 | 1,327 | 27 | R 1,383 | 116 | 6 | R 2,859 | R 55 | — | 23,462 | — | R 48,895 | — |
| 1997 | 173 | 70 | 1,238 | 21 | R 1,261 | 145 | 34 | R 2,699 | R 52 | — | 23,792 | — | R 49,491 | — |
| 1998 | 108 | 62 | 1,142 | 18 | 901 | 122 | 36 | 2,220 | 52 | — | 24,901 | — | 51,440 | — |
| 1999 | 146 | 63 | 931 | 17 | 1,209 | 305 | 32 | 2,494 | 63 | — | 25,138 | — | 49,253 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 17.7 | 33.8 | 6.4 | 8.5 | 3.3 | 0.6 | 8.6 | 27.5 | 0.5 | 0.0 | 11.3 | 90.8 | 28.1 | 118.9 |
| 1965 | 4.5 | 41.8 | 5.1 | 4.9 | 4.3 | 0.7 | 9.5 | 24.5 | 0.3 | 0.0 | 15.3 | 86.4 | 36.4 | 122.8 |
| 1970 | 1.3 | 88.3 | 6.3 | 2.5 | 6.0 | 0.8 | 10.4 | 25.9 | 0.3 | 0.0 | 21.0 | 136.8 | 51.0 | 187.8 |
| 1975 | 2.2 | 91.5 | 6.9 | 1.0 | 6.2 | 0.8 | 4.8 | 19.8 | 0.3 | 0.0 | 26.1 | 139.8 | 62.9 | 202.6 |
| 1980 | 1.2 | 77.3 | 5.8 | 1.0 | 3.2 | 1.2 | 3.5 | 14.7 | 0.5 | 0.0 | 44.3 | 137.9 | 107.7 | 245.7 |
| 1985 | 2.3 | 61.4 | 8.5 | 0.2 | 2.2 | 1.4 | 0.8 | 13.1 | R 0.6 | 0.0 | 51.9 | R 129.2 | 121.9 | R 251.1 |
| 1990 | 4.0 | 60.0 | 5.1 | (s) | 2.7 | 1.3 | 0.4 | 9.5 | R 0.9 | e 0.0 | 66.0 | R e 140.4 | 144.3 | R e 284.7 |
| 1991 | 3.6 | 63.7 | 6.5 | (s) | 3.5 | 0.7 | 0.2 | 10.9 | R 0.9 | 0.0 | 68.3 | R 147.4 | R 148.5 | R 295.8 |
| 1992 | 3.2 | 61.1 | 6.8 | 0.1 | 3.5 | 0.6 | (s) | 11.1 | R 1.0 | 0.0 | 67.1 | R 143.6 | R 143.2 | R 286.8 |
| 1993 | 3.8 | 69.9 | 6.7 | 0.1 | 3.7 | 0.6 | (s) | 11.1 | 1.0 | 0.0 | 71.0 | 156.9 | 150.1 | 306.9 |
| 1994 | 3.2 | 66.6 | 7.0 | 0.1 | 3.7 | 0.5 | 0.1 | 11.4 | 1.0 | 0.0 | 73.4 | 155.7 | 153.2 | 308.9 |
| 1995 | 3.1 | 65.5 | 7.5 | 0.1 | 3.7 | 0.5 | (s) | 11.8 | 1.0 | 0.0 | 76.8 | 158.3 | R 160.2 | R 318.4 |
| 1996 | 3.0 | 73.6 | 7.7 | 0.2 | R 5.0 | 0.6 | (s) | R 13.5 | 1.1 | 0.0 | 80.1 | R 171.3 | R 166.8 | R 338.1 |
| 1997 | 3.9 | 70.5 | 7.2 | 0.1 | R 4.6 | 0.8 | 0.2 | R 12.9 | 1.0 | 0.0 | 81.2 | R 169.6 | R 168.9 | R 338.4 |
| 1998 | 2.5 | 62.7 | 6.7 | 0.1 | 3.3 | 0.6 | 0.2 | 10.9 | 1.0 | 0.0 | 85.0 | 162.0 | 175.5 | 337.5 |
| 1999 | 3.3 | 64.0 | 5.4 | 0.1 | 4.4 | 1.6 | 0.2 | 11.7 | 1.3 | 0.0 | 85.8 | 166.0 | 168.0 | 334.1 |

[a]  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b]  Includes supplemental gaseous fuels.
[c]  Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d]  Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e]  There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 170.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Missouri

| Year | Coal | Natural Gas a | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
| | | | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | Total |

| Year | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2,605 | 79 | 3,725 | 5,722 | 340 | 437 | 284 | 3,074 | 1,630 | R 2,207 | R 17,419 | 0 | — | — | 3,890 | — | 9,675 | — |
| 1965 | 2,534 | 114 | 4,401 | 5,097 | 160 | 423 | 328 | 3,224 | 1,710 | R 4,395 | R 19,739 | 0 | — | — | 5,872 | — | 14,020 | — |
| 1970 | 1,921 | 110 | 5,657 | 5,689 | 141 | 1,175 | 415 | 2,767 | 1,620 | R 5,467 | R 22,932 | 0 | — | — | 9,939 | — | 24,084 | — |
| 1975 | 2,065 | 90 | 5,401 | 5,765 | 75 | 1,712 | 491 | 2,707 | 1,242 | R 4,786 | R 22,178 | 0 | — | — | 11,782 | — | 28,421 | — |
| 1980 | 1,595 | 78 | 4,002 | 4,782 | 87 | 3,182 | 671 | 1,866 | 703 | R 11,283 | R 26,575 | 0 | — | — | 11,018 | — | 26,792 | — |
| 1985 | 1,798 | 66 | 4,295 | 3,993 | 22 | 1,333 | 610 | 1,076 | 557 | 7,660 | 19,546 | 0 | — | — | 12,625 | — | 29,661 | — |
| 1990 | 1,321 | 55 | 4,468 | 3,007 | 8 | 1,823 | 687 | 663 | 526 | 9,864 | 21,046 | f 0 | — | — | 12,937 | — | R 28,302 | — |
| 1991 | 1,235 | 57 | 4,062 | 2,947 | 23 | 2,046 | 614 | 758 | 476 | 4,639 | 15,565 | 0 | — | — | 13,114 | — | R 28,509 | — |
| 1992 | 1,137 | 58 | 3,832 | 3,258 | 6 | 1,859 | 626 | 669 | 621 | 5,644 | 16,515 | 0 | — | — | 13,440 | — | R 28,665 | — |
| 1993 | 1,177 | 61 | 4,055 | 2,803 | 5 | 2,597 | 638 | 1,469 | 1,015 | 5,115 | 17,696 | 0 | — | — | 13,618 | — | R 28,763 | — |
| 1994 | 1,070 | 72 | 5,703 | 3,482 | 10 | 2,416 | 666 | 1,623 | 465 | 5,323 | 19,688 | 0 | — | — | 14,106 | — | R 29,438 | — |
| 1995 | 1,102 | 69 | 5,296 | 3,261 | 11 | 4,102 | 655 | 1,676 | 324 | 5,254 | 20,580 | 0 | — | — | 14,321 | — | R 29,858 | — |
| 1996 | 1,118 | 72 | 5,385 | 3,225 | 33 | R 3,644 | 636 | 1,677 | 314 | R 4,462 | R 19,376 | 0 | — | — | 14,915 | — | R 31,083 | — |
| 1997 | 1,206 | 71 | 4,141 | 3,761 | 12 | R 2,733 | 672 | 1,688 | 183 | R 4,320 | R 17,510 | 0 | — | — | 15,267 | — | R 31,757 | — |
| 1998 | 1,258 | 65 | 3,906 | 3,727 | 15 | 2,108 | 703 | 1,033 | 194 | 5,676 | 17,362 | 0 | — | — | 15,801 | — | 32,641 | — |
| 1999 | 1,175 | 65 | 4,977 | 4,434 | 12 | 4,555 | 710 | 915 | 131 | 6,465 | 22,199 | 0 | — | — | 16,122 | — | 31,588 | — |

**Trillion Btu**

| Year | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 62.2 | 81.7 | 24.7 | 33.3 | 1.9 | 1.8 | 1.7 | 16.1 | 10.2 | R 13.0 | R 102.8 | 0.0 | 7.3 | 0.0 | 13.3 | R 267.2 | 33.0 | R 300.3 |
| 1965 | 59.9 | 116.4 | 29.2 | 29.7 | 0.9 | 1.7 | 2.0 | 16.9 | 10.8 | R 24.8 | R 116.0 | 0.0 | 8.7 | 0.0 | 20.0 | R 321.1 | 47.8 | R 368.9 |
| 1970 | 43.8 | 110.4 | 37.5 | 33.1 | 0.8 | 4.4 | 2.5 | 14.5 | 10.2 | R 30.7 | R 133.8 | 0.0 | 9.9 | 0.0 | 33.9 | R 331.8 | 82.2 | R 413.9 |
| 1975 | 45.7 | 90.7 | 35.8 | 33.6 | 0.4 | 6.4 | 3.0 | 14.2 | 7.8 | R 27.3 | R 128.5 | 0.0 | 12.7 | 0.0 | 40.2 | R 317.9 | 97.0 | R 414.8 |
| 1980 | 36.0 | 79.3 | 26.6 | 27.9 | 0.5 | 11.7 | 4.1 | 9.8 | 4.4 | R 62.7 | R 147.6 | 0.0 | 6.4 | 0.0 | 37.6 | R 306.9 | 91.4 | R 398.3 |
| 1985 | 41.2 | 66.8 | 28.5 | 23.3 | 0.1 | 4.8 | 3.7 | 5.7 | 3.5 | 41.9 | 111.4 | 0.0 | 7.5 | 0.0 | 43.1 | R 270.0 | 101.2 | R 371.2 |
| 1990 | 30.4 | 55.1 | 29.6 | 17.5 | (s) | 6.6 | 4.2 | 3.5 | 3.3 | 54.8 | 119.6 | f 0.0 | R 1.9 | f 0.0 | 44.1 | R f 251.1 | R 96.6 | R f 347.7 |
| 1991 | 28.7 | 57.7 | 27.0 | 17.2 | 0.1 | 7.4 | 3.7 | 4.0 | 3.0 | 26.2 | 88.6 | 0.0 | R 1.7 | 0.0 | 44.7 | R 221.4 | R 97.3 | R 318.7 |
| 1992 | 26.6 | 58.6 | 25.4 | 19.0 | (s) | 6.7 | 3.8 | 3.5 | 3.9 | 32.1 | 94.5 | 0.0 | R 1.5 | 0.0 | 45.9 | R 227.1 | R 97.8 | R 324.9 |
| 1993 | 27.8 | 61.2 | 26.9 | 16.3 | (s) | 9.4 | 3.9 | 7.7 | 6.4 | 28.9 | 99.5 | 0.0 | R 1.5 | 0.0 | 46.5 | R 236.4 | R 98.1 | R 334.6 |
| 1994 | 24.6 | 72.0 | 37.8 | 20.3 | 0.1 | 8.8 | 4.0 | 8.5 | 2.9 | 30.1 | 112.5 | 0.0 | R 1.5 | 0.0 | 48.1 | R 258.9 | 100.4 | R 359.3 |
| 1995 | 25.5 | 69.4 | 35.1 | 19.0 | 0.1 | 14.9 | 4.0 | R 8.7 | 2.0 | 29.8 | 113.6 | 0.0 | R 2.0 | 0.0 | 48.9 | R 259.4 | R 101.9 | R 361.3 |
| 1996 | 25.9 | 72.3 | 35.7 | 18.8 | 0.2 | R 13.2 | 3.9 | R 8.7 | 2.0 | R 25.6 | R 108.0 | 0.0 | R 1.6 | 0.0 | 50.9 | R 258.7 | R 106.1 | R 364.8 |
| 1997 | 27.5 | 71.9 | 27.5 | 21.9 | 0.1 | R 9.9 | 4.1 | R 8.8 | 1.2 | R 24.7 | R 98.1 | 0.0 | R 1.9 | 0.0 | 52.1 | R 251.5 | R 108.4 | R 359.9 |
| 1998 | 28.8 | 65.6 | 25.9 | 21.7 | 0.1 | 7.6 | 4.3 | 5.4 | 1.2 | 32.7 | 98.9 | 0.0 | 0.7 | 0.0 | 53.9 | 247.9 | 111.4 | 359.3 |
| 1999 | 26.9 | 65.8 | 33.0 | 25.8 | 0.1 | 16.5 | 4.3 | 4.8 | 0.8 | 37.3 | 122.6 | 0.0 | 1.5 | 0.0 | 55.0 | 271.8 | 107.8 | 379.6 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours.  — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 171.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, Missouri

| | | | Petroleum | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal a | Natural Gas b | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | Ethanol c | Electricity a | | Electrical System Energy Losses d | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total c |
| 1960 | 46 | 8 | 1,844 | 4,485 | 1,249 | 43 | 669 | 37,620 | 34 | 45,943 | 0 | 2 | — | 5 | — |
| 1965 | 8 | 9 | 2,323 | 6,685 | 3,625 | 47 | 701 | 41,658 | 154 | 55,191 | 0 | 0 | — | 0 | — |
| 1970 | 3 | 13 | 179 | 7,990 | 8,074 | 85 | 735 | 53,122 | 163 | 70,349 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 7 | 184 | 8,721 | 8,311 | 74 | 793 | 59,476 | 141 | 77,698 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 6 | 162 | 10,824 | 6,268 | 68 | 932 | 56,877 | 142 | 75,272 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 4 | 135 | 13,116 | 5,889 | 138 | 848 | 58,698 | 38 | 78,863 | R e 35 | 0 | — | 0 | — |
| 1990 | 0 | 5 | 126 | 16,291 | 6,647 | 117 | 955 | 63,092 | 34 | 87,263 | R 631 | 0 | — | 0 | — |
| 1991 | 0 | 3 | 117 | 15,577 | 7,506 | 130 | 854 | 63,022 | 0 | 87,206 | R 570 | 0 | — | 0 | — |
| 1992 | 0 | 2 | 115 | 17,483 | 7,522 | 88 | 871 | 64,471 | 17 | 90,567 | R 672 | 0 | — | 0 | — |
| 1993 | 0 | 10 | 93 | 18,052 | 9,034 | 91 | 887 | 64,527 | 34 | 92,719 | R 768 | 0 | — | 0 | — |
| 1994 | 0 | 3 | 113 | 19,260 | 10,623 | 202 | 927 | 65,801 | 22 | 96,949 | R 861 | 12 | — | 25 | — |
| 1995 | 0 | 7 | 109 | 20,237 | 11,425 | 112 | 911 | 67,155 | 21 | 99,971 | R 576 | 16 | — | 33 | — |
| 1996 | 0 | 7 | 108 | 22,759 | 12,133 | R 98 | 884 | 68,154 | 18 | R 104,153 | R 303 | 19 | — | 39 | — |
| 1997 | 0 | 7 | 160 | 24,412 | 12,320 | R 57 | 934 | 68,748 | 15 | R 106,646 | R 167 | 18 | — | 37 | — |
| 1998 | 0 | 6 | 136 | 31,083 | 12,747 | 20 | 977 | 70,520 | 4 | 115,487 | 189 | 19 | — | 40 | — |
| 1999 | 0 | 7 | 75 | 29,532 | 12,760 | 59 | 988 | 69,969 | 6 | 113,388 | 406 | 20 | — | 38 | — |

## Trillion Btu

| Year | Coal a | Natural Gas b | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | Ethanol c | Electricity a | Net Energy | Electrical System Energy Losses d | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.1 | 8.2 | 9.3 | 26.1 | 7.0 | 0.2 | 4.1 | 197.6 | 0.2 | 244.5 | 0.0 | (s) | 253.8 | (s) | 253.8 |
| 1965 | 0.2 | 9.1 | 11.7 | 38.9 | 20.4 | 0.2 | 4.3 | 218.8 | 1.0 | 295.3 | 0.0 | 0.0 | 304.6 | 0.0 | 304.6 |
| 1970 | 0.1 | 12.8 | 0.9 | 46.5 | 45.7 | 0.3 | 4.5 | 279.0 | 1.0 | 378.0 | 0.0 | 0.0 | 390.9 | 0.0 | 390.9 |
| 1975 | (s) | 7.6 | 0.9 | 50.8 | 47.0 | 0.3 | 4.8 | 312.4 | 0.9 | 417.2 | 0.0 | 0.0 | 424.7 | 0.0 | 424.7 |
| 1980 | 0.0 | 5.7 | 0.8 | 63.0 | 35.5 | 0.2 | 5.7 | 298.8 | 0.9 | 404.9 | 0.0 | 0.0 | 410.6 | 0.0 | 410.6 |
| 1985 | 0.0 | 4.3 | 0.7 | 76.4 | 33.3 | 0.5 | 5.1 | 308.3 | 0.2 | 424.6 | R e 0.1 | 0.0 | e 429.0 | 0.0 | e 429.0 |
| 1990 | 0.0 | 5.4 | 0.6 | 94.9 | 37.6 | 0.4 | 5.8 | 331.4 | 0.2 | 471.0 | R 2.2 | 0.0 | 476.4 | 0.0 | 476.4 |
| 1991 | 0.0 | 2.6 | 0.6 | 90.7 | 42.5 | 0.5 | 5.2 | 331.1 | 0.0 | 470.5 | R 2.0 | 0.0 | 473.1 | 0.0 | 473.1 |
| 1992 | 0.0 | 2.3 | 0.6 | 101.8 | 42.6 | 0.3 | 5.3 | 338.7 | 0.1 | 489.4 | R 2.4 | 0.0 | 491.7 | 0.0 | 491.7 |
| 1993 | 0.0 | 9.9 | 0.5 | 105.2 | 51.2 | 0.3 | 5.4 | 339.0 | 0.2 | 501.7 | R 2.7 | 0.0 | 511.6 | 0.0 | 511.6 |
| 1994 | 0.0 | 2.9 | 0.6 | 112.2 | 60.2 | 0.7 | 5.6 | R 344.1 | 0.1 | R 523.6 | R 3.0 | (s) | R 526.5 | 0.1 | R 526.6 |
| 1995 | 0.0 | 7.2 | 0.5 | 117.9 | 64.8 | 0.4 | 5.5 | R 350.2 | 0.1 | R 539.5 | R 2.0 | 0.1 | R 546.7 | 0.1 | R 546.8 |
| 1996 | 0.0 | 7.6 | 0.5 | 132.6 | 68.8 | R 0.4 | 5.4 | R 355.5 | 0.1 | R 563.2 | R 1.1 | 0.1 | R 570.9 | 0.1 | R 571.0 |
| 1997 | 0.0 | 7.6 | 0.8 | 142.2 | 69.9 | R 0.2 | 5.7 | R 358.4 | 0.1 | R 577.2 | R 0.6 | 0.1 | R 584.8 | 0.1 | R 585.0 |
| 1998 | 0.0 | 5.6 | 0.7 | 181.1 | 72.3 | 0.1 | 5.9 | 367.6 | (s) | 627.6 | 0.7 | 0.1 | 633.2 | 0.1 | 633.4 |
| 1999 | 0.0 | 6.8 | 0.4 | 172.0 | 72.3 | 0.2 | 6.0 | 364.6 | (s) | 615.6 | 1.4 | 0.1 | 622.5 | 0.1 | 622.6 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# MISSOURI

## Table 172.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Missouri

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 3,674 | 30 | 150 | 178 | 0 | 328 | 0 | 726 | 0 | 0 | 0 | — |
| 1965 | 5,690 | 48 | 77 | 92 | 0 | 168 | 0 | 802 | 0 | 0 | 0 | — |
| 1970 | 10,846 | 63 | 133 | 159 | 0 | 291 | 0 | 927 | 0 | 0 | 0 | — |
| 1975 | 17,734 | 26 | 375 | 710 | 15 | 1,100 | 0 | 1,280 | 0 | 0 | 0 | — |
| 1980 | 23,168 | 15 | 29 | 538 | 101 | 668 | 0 | 558 | 0 | 0 | 0 | — |
| 1985 | 22,779 | 1 | 16 | 202 | 1 | 219 | 8,030 | 2,993 | 0 | 0 | 0 | — |
| 1990 | 24,231 | 4 | 8 | 207 | 0 | 215 | 7,998 | 2,156 | 0 | 0 | 0 | — |
| 1991 | 24,286 | 13 | 42 | 245 | 0 | 287 | 9,979 | 1,072 | 0 | 0 | 0 | — |
| 1992 | 23,815 | 2 | 24 | 185 | 0 | 209 | 8,084 | 1,450 | 0 | 0 | 0 | — |
| 1993 | 21,945 | 5 | 22 | 367 | 915 | 1,305 | 8,381 | 3,110 | 1 | 0 | 0 | — |
| 1994 | 26,375 | 4 | 27 | 255 | 1,204 | 1,486 | 10,006 | 1,844 | 7 | 0 | 0 | — |
| 1995 | 30,440 | 13 | 13 | 283 | 1,114 | 1,410 | 8,242 | 1,854 | 25 | 0 | 0 | — |
| 1996 | 33,059 | 5 | 28 | 228 | 0 | 256 | 8,890 | 1,239 | 31 | 0 | 0 | — |
| 1997 | 35,193 | 7 | 25 | 275 | 0 | 300 | 8,955 | R 1,479 | 42 | 0 | 0 | — |
| 1998 | 37,165 | 16 | 13 | 701 | 0 | 714 | 8,517 | 2,269 | 78 | 0 | 0 | — |
| 1999 | 36,546 | 19 | (s) | 703 | 0 | 703 | 8,587 | 1,743 | 50 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 80.5 | 31.3 | 0.9 | 1.0 | 0.0 | 2.0 | 0.0 | 7.8 | 0.0 | 0.0 | 0.0 | 121.6 |
| 1965 | 122.6 | 48.5 | 0.5 | 0.5 | 0.0 | 1.0 | 0.0 | 8.4 | 0.0 | 0.0 | 0.0 | 180.5 |
| 1970 | 233.4 | 63.4 | 0.8 | 0.9 | 0.0 | 1.8 | 0.0 | 9.7 | 0.0 | 0.0 | 0.0 | 308.3 |
| 1975 | 381.2 | 25.7 | 2.4 | 4.1 | 0.1 | 6.6 | 0.0 | 13.3 | 0.0 | 0.0 | 0.0 | 426.8 |
| 1980 | 493.6 | 15.0 | 0.2 | 3.1 | 0.6 | 3.9 | 0.0 | 5.8 | 0.0 | 0.0 | 0.0 | 518.3 |
| 1985 | 484.9 | 1.5 | 0.1 | 1.2 | (s) | 1.3 | 86.8 | 31.3 | 0.0 | 0.0 | 0.0 | 605.8 |
| 1990 | 504.0 | 3.6 | (s) | 1.2 | 0.0 | 1.3 | 85.4 | 22.4 | 0.0 | 0.0 | 0.0 | 616.7 |
| 1991 | 500.2 | 12.9 | 0.3 | 1.4 | 0.0 | 1.7 | 107.2 | 11.2 | 0.0 | 0.0 | 0.0 | 633.1 |
| 1992 | 491.6 | 2.4 | 0.2 | 1.1 | 0.0 | 1.2 | 86.3 | 15.0 | 0.0 | 0.0 | 0.0 | 596.5 |
| 1993 | 432.7 | 4.9 | 0.1 | 2.1 | 5.5 | 7.8 | 89.5 | 32.1 | (s) | 0.0 | 0.0 | 567.1 |
| 1994 | 512.6 | 4.4 | 0.2 | 1.5 | 7.3 | 8.9 | 106.8 | 19.0 | 0.1 | 0.0 | 0.0 | 651.8 |
| 1995 | 561.1 | 12.9 | 0.1 | 1.7 | 6.7 | 8.4 | 87.8 | 19.1 | 0.3 | 0.0 | 0.0 | 689.6 |
| 1996 | 599.2 | 5.3 | 0.2 | 1.3 | 0.0 | 1.5 | 94.4 | 12.8 | 0.3 | 0.0 | 0.0 | 713.6 |
| 1997 | 633.1 | 7.5 | 0.2 | 1.6 | 0.0 | 1.8 | 95.1 | R 15.3 | 0.4 | 0.0 | 0.0 | R 753.2 |
| 1998 | 664.4 | 16.2 | 0.1 | 4.1 | 0.0 | 4.2 | 90.5 | 23.5 | 0.8 | 0.0 | 0.0 | 799.5 |
| 1999 | 654.0 | 19.5 | (s) | 4.1 | 0.0 | 4.1 | 91.2 | 18.0 | 0.5 | 0.0 | 0.0 | 787.4 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 173. Energy Consumption Estimates by Source, Selected Years 1960-1999, Montana

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power Million kWh | Hydroelectric Power [d] Million kWh | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | *(Thousand Barrels)* | | | | | | | | | | | | |
| 1960 | 254 | 56 | 865 | 1,006 | 4,898 | 265 | 477 | 737 | 161 | 6,922 | 2,063 | R 1,725 | R 19,118 | 0 | 5,800 | — | — | -3,181 | — |
| 1965 | 370 | 71 | 1,003 | 312 | 4,962 | 384 | 248 | 926 | 189 | 7,709 | 1,241 | R 2,835 | R 19,809 | 0 | 8,388 | — | — | -6,938 | — |
| 1970 | 763 | 88 | 1,347 | 43 | 4,827 | 649 | 376 | 1,326 | 200 | 9,262 | 1,268 | R 3,372 | R 22,670 | 0 | 8,744 | — | — | -1,251 | — |
| 1975 | 1,149 | 80 | 924 | 79 | 7,586 | 818 | 122 | 1,370 | 208 | 10,630 | 2,178 | R 3,772 | R 27,687 | 0 | 10,164 | — | — | -6,056 | — |
| 1980 | 3,520 | 61 | 1,020 | 159 | 7,509 | 920 | 0 | 1,806 | 247 | 10,416 | 4,025 | R 3,159 | R 29,262 | 0 | 9,963 | — | — | -11,328 | — |
| 1985 | 5,713 | 47 | 1,463 | 91 | 11,317 | 678 | 10 | 1,576 | 225 | 10,188 | 133 | R 2,512 | R 28,193 | 0 | 10,244 | — | — | -13,692 | — |
| 1990 | 9,676 | 43 | 1,487 | 111 | 7,422 | 708 | 8 | 1,740 | 253 | 10,328 | 221 | R 4,054 | R 26,332 | 0 | R h 10,752 | — | — | -38,514 | — |
| 1991 | 10,549 | 45 | 1,350 | 108 | 8,321 | 615 | 3 | 1,053 | 227 | 10,360 | 146 | R 3,568 | R 25,750 | 0 | R 11,980 | — | — | R -45,407 | — |
| 1992 | 11,040 | 46 | 1,309 | 75 | 7,716 | 864 | 1 | 1,018 | 231 | 10,727 | 89 | R 4,473 | R 26,503 | 0 | R 8,281 | — | — | R -38,451 | — |
| 1993 | 9,247 | 53 | 1,707 | 64 | 8,004 | 901 | 8 | 2,200 | 235 | 10,999 | 689 | R 3,906 | R 28,712 | 0 | R 9,613 | — | — | R -33,200 | — |
| 1994 | 11,089 | 52 | 1,964 | 75 | 8,254 | 855 | 7 | 1,055 | 246 | 11,097 | 374 | R 4,327 | R 28,255 | 0 | R 8,162 | — | — | R -36,557 | — |
| 1995 | 10,005 | 58 | 1,293 | 78 | 8,924 | 1,052 | 1 | 918 | 242 | 11,328 | 240 | R 4,269 | R 28,344 | 0 | R 10,760 | — | — | R -37,963 | — |
| 1996 | 8,032 | 61 | 1,702 | 99 | 9,818 | 999 | 1 | R 1,618 | 235 | 11,753 | 184 | R 4,876 | R 31,284 | 0 | R 13,833 | — | — | R -38,417 | — |
| 1997 | 9,517 | 60 | 1,448 | 71 | 10,782 | 792 | 2 | R 277 | 248 | 11,480 | 165 | R 4,704 | R 29,969 | 0 | R 13,395 | — | — | R -49,906 | — |
| 1998 | 10,724 | 60 | 1,594 | 102 | 8,586 | 797 | 3 | 271 | 259 | 11,596 | 113 | 5,281 | 28,603 | 0 | 11,136 | — | — | -44,109 | — |
| 1999 | 10,302 | 62 | 2,625 | 121 | 8,653 | 836 | 2 | 527 | 262 | 11,768 | 24 | 5,915 | 30,735 | 0 | 13,834 | — | — | -46,327 | — |
| | | | | | | | *(Trillion Btu)* | | | | | | | | | | | | |
| 1960 | 4.0 | 57.6 | 5.7 | 5.1 | 28.5 | 1.4 | 2.7 | 3.0 | 1.0 | 36.4 | 13.0 | R 10.4 | R 107.1 | 0.0 | 62.4 | 7.5 | 0.0 | -10.9 | R 227.8 |
| 1965 | 5.5 | 70.8 | 6.7 | 1.6 | 28.9 | 2.1 | 1.4 | 3.7 | 1.1 | 40.5 | 7.8 | R 17.0 | R 110.8 | 0.0 | 87.7 | 7.8 | 0.0 | -23.7 | R 259.0 |
| 1970 | 12.0 | 90.6 | 8.9 | 0.2 | 28.1 | 3.6 | 2.1 | 5.0 | 1.2 | 48.7 | 8.0 | R 20.3 | R 126.1 | 0.0 | 91.8 | 6.6 | 0.0 | -4.3 | R 322.9 |
| 1975 | 18.6 | 81.2 | 6.1 | 0.4 | 44.2 | 4.6 | 0.7 | 5.1 | 1.3 | 55.8 | 13.7 | R 22.7 | R 154.6 | 0.0 | 105.8 | 6.2 | 0.0 | -20.7 | R 345.7 |
| 1980 | 60.2 | 61.5 | 6.8 | 0.8 | 43.7 | 5.2 | 0.0 | 6.6 | 1.5 | 54.7 | 25.3 | R 19.0 | R 163.6 | 0.0 | 103.5 | R 11.1 | 0.0 | -38.6 | R 361.2 |
| 1985 | 99.1 | 47.3 | 9.7 | 0.5 | 65.9 | 3.8 | 0.1 | 5.7 | 1.4 | 53.5 | 0.8 | R 15.5 | R 156.8 | 0.0 | 107.0 | 14.0 | (s) | -46.7 | R 377.4 |
| 1990 | 166.1 | 44.4 | 9.9 | 0.6 | 43.2 | 4.0 | (s) | 6.3 | 1.5 | 54.3 | 1.4 | R 24.4 | R 145.6 | 0.0 | R h 111.8 | R 19.9 | h 0.1 | -131.4 | R h 356.7 |
| 1991 | 180.2 | 46.7 | 9.0 | 0.5 | 48.5 | 3.5 | (s) | 3.8 | 1.4 | 54.4 | 0.9 | R 21.6 | R 143.6 | 0.0 | R 125.0 | R 18.2 | 0.1 | R -154.9 | R 359.1 |
| 1992 | 189.8 | 46.6 | 8.7 | 0.4 | 44.9 | 4.8 | (s) | 3.7 | 1.4 | 56.3 | 0.6 | R 26.9 | R 147.7 | 0.0 | R 85.6 | R 6.7 | 0.1 | R -131.2 | R 345.4 |
| 1993 | 157.7 | 54.3 | 11.3 | 0.3 | 46.6 | 5.0 | (s) | 7.9 | 1.4 | 57.8 | 4.3 | R 23.6 | R 158.4 | 0.0 | R 99.1 | R 6.6 | 0.1 | R -113.3 | R 362.9 |
| 1994 | 189.3 | 53.3 | 13.0 | 0.4 | 48.1 | 4.8 | (s) | 3.8 | 1.5 | R 58.0 | 2.4 | R 26.1 | R 158.1 | 0.0 | R 84.2 | R 5.9 | 0.1 | R -124.7 | R 366.2 |
| 1995 | 171.2 | 59.6 | 8.6 | 0.4 | 52.0 | 5.9 | (s) | 3.3 | 1.5 | R 59.1 | 1.5 | R 25.8 | R 158.0 | 0.0 | R 111.0 | R 18.0 | 0.1 | R -129.5 | R 388.3 |
| 1996 | 135.7 | 63.2 | 11.3 | 0.5 | 57.2 | 5.7 | (s) | R 5.8 | 1.4 | R 61.3 | 1.2 | R 29.3 | R 173.7 | 0.0 | R 143.0 | R 17.2 | 0.1 | R -131.1 | R 402.1 |
| 1997 | 160.7 | 61.7 | 9.6 | 0.4 | 62.8 | 4.5 | (s) | R 1.0 | 1.5 | R 59.8 | 1.0 | R 28.3 | R 169.0 | 0.0 | R 138.7 | R 17.6 | 0.1 | R -170.3 | 377.5 |
| 1998 | 181.0 | 61.4 | 10.6 | 0.5 | 50.0 | 4.5 | (s) | 1.0 | 1.6 | 60.4 | 0.7 | 31.9 | 161.2 | 0.0 | 115.2 | 12.5 | 0.1 | -150.5 | 381.0 |
| 1999 | 173.9 | 63.6 | 17.4 | 0.6 | 50.4 | 4.7 | (s) | 1.9 | 1.6 | 61.3 | 0.2 | 35.7 | 173.8 | 0.0 | 143.1 | 16.0 | 0.3 | -158.1 | 412.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 174.  Residential Energy Consumption Estimates, Selected Years 1960-1999, Montana

| Year | Coal[a] | Natural Gas[b] | Petroleum | | | | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
| | | | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | | | Million Kilowatthours | | Million Kilowatthours | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 11 | 17 | 262 | 0 | 506 | 768 | 237 | — | — | 935 | — | 2,327 | — |
| 1965 | 8 | 20 | 277 | 0 | 636 | 914 | 182 | — | — | 1,216 | — | 2,904 | — |
| 1970 | 4 | 25 | 249 | 0 | 887 | 1,137 | 139 | — | — | 1,534 | — | 3,717 | — |
| 1975 | 4 | 24 | 589 | 0 | 973 | 1,562 | 153 | — | — | 2,143 | — | 5,169 | — |
| 1980 | 5 | 19 | 421 | 0 | 829 | 1,250 | 125 | — | — | 2,916 | — | 7,091 | — |
| 1985 | 3 | 19 | 345 | 9 | 604 | 959 | 174 | — | — | 3,614 | — | 8,491 | — |
| 1990 | 20 | 17 | 288 | 1 | 813 | 1,102 | 89 | — | — | 3,358 | — | R 7,347 | — |
| 1991 | 16 | 18 | 356 | 1 | 703 | 1,060 | 94 | — | — | 3,459 | — | R 7,519 | — |
| 1992 | 7 | 17 | 218 | (s) | 598 | 816 | 99 | — | — | 3,286 | — | R 7,009 | — |
| 1993 | 4 | 20 | 267 | 7 | 548 | 822 | 91 | — | — | 3,598 | — | R 7,599 | — |
| 1994 | 1 | 19 | 189 | 6 | 541 | 736 | 89 | — | — | 3,567 | — | R 7,444 | — |
| 1995 | 4 | 20 | 252 | 1 | 473 | 726 | 99 | — | — | 3,640 | — | R 7,589 | — |
| 1996 | 1 | 22 | 438 | 1 | 519 | 958 | 99 | — | — | 3,911 | — | R 8,150 | — |
| 1997 | 29 | 21 | 910 | 2 | R 152 | R 1,064 | R 95 | — | — | 3,804 | — | R 7,913 | — |
| 1998 | 1 | 19 | 461 | 3 | 86 | 549 | 84 | — | — | 3,722 | — | 7,690 | — |
| 1999 | 1 | 20 | 256 | 1 | 342 | 600 | 89 | — | — | 3,664 | — | 7,180 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.2 | 17.5 | 1.5 | 0.0 | 2.0 | 3.6 | 4.7 | 0.0 | 0.0 | 3.2 | 29.2 | 7.9 | 37.2 |
| 1965 | 0.2 | 19.9 | 1.6 | 0.0 | 2.6 | 4.2 | 3.6 | 0.0 | 0.0 | 4.1 | 32.1 | 9.9 | 42.0 |
| 1970 | 0.1 | 25.6 | 1.5 | 0.0 | 3.4 | 4.8 | 2.8 | 0.0 | 0.0 | 5.2 | 38.5 | 12.7 | 51.2 |
| 1975 | 0.1 | 24.6 | 3.4 | 0.0 | 3.6 | 7.0 | 3.1 | 0.0 | 0.0 | 7.3 | 42.1 | 17.6 | 59.7 |
| 1980 | 0.1 | 19.5 | 2.5 | 0.0 | 3.0 | 5.5 | 2.5 | 0.0 | 0.0 | 9.9 | 37.5 | 24.2 | 61.7 |
| 1985 | (s) | 19.4 | 2.0 | 0.1 | 2.2 | 4.2 | 3.5 | 0.0 | 0.0 | 12.3 | 39.4 | 29.0 | 68.4 |
| 1990 | 0.4 | 17.3 | 1.7 | (s) | 2.9 | 4.6 | 1.8 | e (s) | e (s) | 11.5 | e 35.6 | 25.1 | R e 60.7 |
| 1991 | 0.3 | 18.9 | 2.1 | (s) | 2.5 | 4.6 | 1.9 | (s) | (s) | 11.8 | 37.6 | 25.7 | 63.2 |
| 1992 | 0.1 | 17.0 | 1.3 | (s) | 2.2 | 3.4 | 2.0 | (s) | (s) | 11.2 | 33.8 | R 23.9 | 57.8 |
| 1993 | 0.1 | 20.7 | 1.6 | (s) | 2.0 | 3.6 | 1.8 | (s) | (s) | 12.3 | 38.5 | 25.9 | 64.4 |
| 1994 | (s) | 19.2 | 1.1 | (s) | 2.0 | 3.1 | 1.8 | (s) | (s) | 12.2 | 36.3 | 25.4 | 61.7 |
| 1995 | 0.1 | 20.2 | 1.5 | (s) | 1.7 | 3.2 | 2.0 | (s) | (s) | 12.4 | 37.9 | 25.9 | 63.8 |
| 1996 | (s) | 22.8 | 2.6 | (s) | 1.9 | 4.4 | 2.0 | (s) | (s) | 13.3 | 42.6 | 27.8 | R 70.5 |
| 1997 | 0.5 | 21.6 | 5.3 | (s) | R 0.5 | R 5.9 | R 1.9 | (s) | (s) | 13.0 | R 42.9 | 27.0 | R 69.9 |
| 1998 | (s) | 19.7 | 2.7 | (s) | 0.3 | 3.0 | 1.7 | (s) | (s) | 12.7 | 37.1 | 26.2 | 63.3 |
| 1999 | (s) | 20.1 | 1.5 | (s) | 1.2 | 2.7 | 1.8 | 0.1 | (s) | 12.5 | 37.3 | 24.5 | 61.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 175. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Montana**

| Year | Coal[a] | Natural Gas[b] | Petroleum | | | | | | | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
| | | | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 20 | 12 | 297 | 466 | 89 | 135 | 2 | 989 | 4 | — | 688 | — | 1,711 | — |
| 1965 | 15 | 14 | 315 | 227 | 112 | 144 | 1 | 800 | 3 | — | 925 | — | 2,208 | — |
| 1970 | 8 | 19 | 283 | 94 | 157 | 220 | 1 | 755 | 3 | — | 1,187 | — | 2,877 | — |
| 1975 | 7 | 19 | 668 | 54 | 172 | 174 | 2 | 1,071 | 3 | — | 1,645 | — | 3,968 | — |
| 1980 | 9 | 14 | 346 | 0 | 146 | 92 | 7 | 591 | 3 | — | 2,094 | — | 5,092 | — |
| 1985 | 5 | 15 | 863 | (s) | 107 | 72 | 126 | 1,167 | R 5 | — | 4,245 | — | 9,973 | — |
| 1990 | 37 | 12 | 153 | (s) | 143 | 84 | 11 | 391 | R 6 | — | 3,237 | — | R 7,081 | — |
| 1991 | 29 | 13 | 204 | (s) | 124 | 63 | 3 | 394 | R 6 | — | 3,326 | — | R 7,230 | — |
| 1992 | 14 | 12 | 169 | (s) | 106 | 55 | 4 | 334 | R 6 | — | 3,396 | — | R 7,242 | — |
| 1993 | 7 | 14 | 194 | 1 | 97 | 12 | 5 | 308 | 7 | — | 3,495 | — | R 7,381 | — |
| 1994 | 3 | 13 | 189 | 1 | 95 | 15 | 3 | 304 | 7 | — | 3,657 | — | R 7,631 | — |
| 1995 | 7 | 13 | 118 | (s) | 83 | 13 | 3 | 218 | 7 | — | 3,411 | — | R 7,112 | — |
| 1996 | 3 | 15 | 308 | (s) | 92 | 19 | 3 | 422 | 8 | — | 3,603 | — | R 7,509 | — |
| 1997 | 54 | 14 | 215 | (s) | R 27 | 12 | 1 | R 255 | R 10 | — | 3,577 | — | R 7,440 | — |
| 1998 | 3 | 13 | 130 | (s) | 15 | 14 | 1 | 160 | 10 | — | 3,649 | — | 7,537 | — |
| 1999 | 2 | 12 | 161 | (s) | 60 | 14 | 3 | 238 | 13 | — | 3,359 | — | 6,582 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate | Kerosene | LPG | Motor Gasoline | Residual | Total | Wood | Geothermal | Electricity | Net Energy | Elec Losses | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 0.4 | 12.3 | 1.7 | 2.6 | 0.4 | 0.7 | (s) | 5.5 | 0.1 | 0.0 | 2.3 | 20.6 | 5.8 | 26.4 |
| 1965 | 0.3 | 14.1 | 1.8 | 1.3 | 0.5 | 0.8 | (s) | 4.3 | 0.1 | 0.0 | 3.2 | 22.0 | 7.5 | 29.5 |
| 1970 | 0.2 | 19.2 | 1.6 | 0.5 | 0.6 | 1.2 | (s) | 3.9 | 0.1 | 0.0 | 4.1 | 27.4 | 9.8 | 37.2 |
| 1975 | 0.1 | 19.0 | 3.9 | 0.3 | 0.6 | 0.9 | (s) | 5.8 | 0.1 | 0.0 | 5.6 | 30.6 | 13.5 | 44.1 |
| 1980 | 0.2 | 14.4 | 2.0 | 0.0 | 0.5 | 0.5 | (s) | 3.1 | 0.1 | 0.0 | 7.1 | 24.9 | 17.4 | 42.3 |
| 1985 | 0.1 | 14.8 | 5.0 | (s) | 0.4 | 0.4 | 0.8 | 6.6 | R 0.1 | 0.0 | 14.5 | R 36.1 | 34.0 | R 70.1 |
| 1990 | 0.7 | 12.5 | 0.9 | (s) | 0.5 | 0.4 | 0.1 | 1.9 | R 0.1 | e 0.1 | 11.0 | R e 26.3 | 24.2 | R e 50.5 |
| 1991 | 0.5 | 13.2 | 1.2 | (s) | 0.4 | 0.3 | (s) | 2.0 | R 0.1 | 0.1 | 11.3 | R 27.2 | 24.7 | R 51.9 |
| 1992 | 0.2 | 11.8 | 1.0 | (s) | 0.4 | 0.3 | (s) | 1.7 | R 0.1 | 0.1 | 11.6 | R 25.5 | 24.7 | R 50.2 |
| 1993 | 0.1 | 14.1 | 1.1 | (s) | 0.3 | 0.1 | (s) | 1.6 | 0.1 | 0.1 | 11.9 | 28.0 | 25.2 | 53.1 |
| 1994 | (s) | 13.3 | 1.1 | (s) | 0.3 | 0.1 | (s) | 1.6 | 0.1 | 0.1 | 12.5 | 27.6 | 26.0 | 53.6 |
| 1995 | 0.1 | 13.9 | 0.7 | (s) | 0.3 | 0.1 | (s) | 1.1 | 0.1 | 0.1 | 11.6 | 26.9 | R 24.3 | 51.2 |
| 1996 | (s) | 15.3 | 1.8 | (s) | 0.3 | 0.1 | (s) | 2.2 | 0.2 | 0.1 | 12.3 | 30.1 | 25.6 | 55.7 |
| 1997 | 1.0 | 14.3 | 1.3 | (s) | R 0.1 | 0.1 | (s) | R 1.4 | R 0.2 | 0.1 | 12.2 | R 29.2 | R 25.4 | R 54.6 |
| 1998 | (s) | 13.3 | 0.8 | (s) | 0.1 | 0.1 | (s) | 0.9 | 0.2 | 0.1 | 12.4 | 26.9 | 25.7 | 52.6 |
| 1999 | (s) | 12.4 | 0.9 | (s) | 0.2 | 0.1 | (s) | 1.2 | 0.3 | 0.1 | 11.5 | 25.5 | 22.5 | 48.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 176. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Montana

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | \<td colspan> Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | Net Energy | Million kWh | Total |

**Thousand Barrels**

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 36 | 26 | 865 | 1,500 | 11 | 112 | 23 | 816 | 1,684 | R 1,725 | R 6,737 | 0 | — | — | 2,951 | — | 7,341 | — |
| 1965 | 52 | 34 | 1,003 | 1,693 | 21 | 164 | 41 | 887 | 914 | R 2,835 | R 7,559 | 0 | — | — | 3,939 | — | 9,406 | — |
| 1970 | 28 | 41 | 1,347 | 1,274 | 282 | 246 | 46 | 635 | 1,123 | R 3,372 | R 8,324 | 0 | — | — | 6,029 | — | 14,610 | — |
| 1975 | 50 | 34 | 924 | 2,494 | 68 | 174 | 46 | 774 | 1,963 | R 3,772 | R 10,215 | 0 | — | — | 5,160 | — | 12,447 | — |
| 1980 | 154 | 20 | 1,020 | 1,925 | 0 | 786 | 51 | 619 | 4,018 | R 3,159 | R 11,577 | 0 | — | — | 5,815 | — | 14,140 | — |
| 1985 | 225 | 10 | 1,463 | 5,798 | (s) | 814 | 46 | 677 | 7 | R 2,512 | R 11,318 | 0 | — | — | 5,841 | — | 13,722 | — |
| 1990 | 220 | 12 | 1,487 | 2,749 | 7 | 717 | 52 | 615 | 209 | R 4,054 | R 9,890 | R f 53 | — | — | 6,529 | — | R 14,284 | — |
| 1991 | 281 | 12 | 1,350 | 3,559 | 2 | 178 | 47 | 611 | 143 | R 3,568 | R 9,457 | R 42 | — | — | 6,622 | — | R 14,396 | — |
| 1992 | 251 | 14 | 1,309 | 2,589 | (s) | 279 | 48 | 572 | 86 | R 4,473 | R 9,356 | R 46 | — | — | 6,414 | — | R 13,680 | — |
| 1993 | 367 | 15 | 1,707 | 2,737 | (s) | 1,513 | 49 | 567 | 684 | R 3,906 | R 11,162 | R 61 | — | — | 5,837 | — | R 12,328 | — |
| 1994 | 572 | 16 | 1,964 | 2,275 | (s) | 360 | 51 | 603 | 371 | R 4,327 | R 9,952 | R 65 | — | — | 5,961 | — | R 12,439 | — |
| 1995 | 622 | 20 | 1,293 | 2,645 | (s) | 333 | 50 | 646 | 237 | R 4,269 | R 9,473 | R 62 | — | — | 6,368 | — | R 13,276 | — |
| 1996 | 131 | 21 | 1,702 | 3,461 | (s) | R 991 | 48 | 663 | 181 | R 4,876 | R 11,923 | R 66 | — | — | 6,306 | — | R 13,141 | — |
| 1997 | 148 | 21 | 1,448 | 3,220 | (s) | R 90 | 51 | 686 | 164 | R 4,704 | R 10,364 | R 38 | — | — | 4,537 | — | R 9,437 | — |
| 1998 | 93 | 23 | 1,594 | 2,229 | (s) | 108 | 54 | 437 | 112 | 5,281 | 9,815 | 64 | — | — | 6,403 | — | 13,226 | — |
| 1999 | 101 | 24 | 2,625 | 2,253 | (s) | 112 | 54 | 420 | 22 | 5,915 | 11,403 | 2,241 | — | — | 6,258 | — | 12,261 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.8 | 27.0 | 5.7 | 8.7 | 0.1 | 0.5 | 0.1 | 4.3 | 10.6 | R 10.4 | R 40.4 | 0.0 | 2.7 | 0.0 | 10.1 | R 80.9 | 25.0 | R 106.0 |
| 1965 | 1.2 | 34.3 | 6.7 | 9.9 | 0.1 | 0.7 | 0.3 | 4.7 | 5.7 | R 17.0 | R 45.0 | 0.0 | 3.7 | 0.0 | 13.4 | R 97.6 | 32.1 | R 129.7 |
| 1970 | 0.6 | 42.5 | 8.9 | 7.4 | 1.6 | 0.9 | 0.3 | 3.3 | 7.1 | R 20.3 | R 49.8 | 0.0 | 3.0 | 0.0 | 20.6 | R 116.5 | 49.8 | R 166.4 |
| 1975 | 1.0 | 34.6 | 6.1 | 14.5 | 0.4 | 0.6 | 0.3 | 4.1 | 12.3 | R 22.7 | R 61.1 | 0.0 | 3.0 | 0.0 | 17.6 | R 117.3 | 42.5 | R 159.7 |
| 1980 | 2.9 | 20.3 | 6.8 | 11.2 | 0.0 | 2.9 | 0.3 | 3.3 | 25.3 | R 19.0 | R 68.7 | 0.0 | R 8.3 | 0.0 | 19.8 | R 120.1 | 48.2 | R 168.4 |
| 1985 | 4.1 | 10.3 | 9.7 | 33.8 | (s) | 2.9 | 0.3 | 3.6 | (s) | R 15.5 | R 65.7 | 0.0 | R 9.8 | 0.0 | 19.9 | R 109.9 | 46.8 | R 156.7 |
| 1990 | 4.0 | 12.0 | 9.9 | 16.0 | (s) | 2.6 | 0.3 | 3.2 | 1.3 | R 24.4 | R 57.8 | f 0.5 | R 17.2 | f (s) | 22.3 | R f 113.9 | 48.7 | R f 162.6 |
| 1991 | 5.2 | 11.9 | 9.0 | 20.7 | (s) | 0.6 | 0.3 | 3.2 | 0.9 | R 21.6 | R 56.4 | R 0.4 | R 15.6 | (s) | 22.6 | R 112.1 | R 49.1 | R 161.2 |
| 1992 | 4.7 | 14.4 | 8.7 | 15.1 | (s) | 1.0 | 0.3 | 3.0 | 0.5 | R 26.9 | R 55.5 | 0.5 | R 3.8 | (s) | 21.9 | R 100.8 | 46.7 | R 147.5 |
| 1993 | 6.8 | 15.3 | 11.3 | 15.9 | (s) | 5.5 | 0.3 | 3.0 | 4.3 | R 23.6 | R 63.9 | R 0.6 | R 3.8 | (s) | 19.9 | R 110.4 | 42.1 | R 152.5 |
| 1994 | 10.5 | 16.6 | 13.0 | 13.3 | (s) | 1.3 | 0.3 | 3.2 | 2.3 | R 26.1 | R 59.5 | R 0.7 | R 3.5 | (s) | 20.3 | R 111.1 | 42.4 | R 153.6 |
| 1995 | 11.2 | 21.0 | 8.6 | 15.4 | (s) | 1.2 | 0.3 | 3.4 | 1.5 | R 25.8 | R 56.1 | R 0.6 | R 15.9 | (s) | 21.7 | R 126.6 | 45.3 | R 171.9 |
| 1996 | 2.4 | 21.1 | 11.3 | 20.2 | (s) | R 3.6 | 0.3 | 3.5 | 1.1 | R 29.3 | R 69.3 | R 0.7 | R 15.1 | (s) | 21.5 | R 130.1 | 44.8 | R 174.9 |
| 1997 | 2.7 | 21.7 | 9.6 | 18.8 | (s) | R 0.3 | 0.3 | 3.6 | 1.0 | R 28.3 | R 61.9 | R 0.4 | R 15.5 | (s) | 15.5 | R 117.7 | R 32.2 | R 149.9 |
| 1998 | 1.7 | 24.0 | 10.6 | 13.0 | (s) | 0.4 | 0.3 | 2.3 | 0.7 | 31.9 | 59.1 | 0.7 | 10.6 | (s) | 21.8 | 118.0 | 45.1 | 163.1 |
| 1999 | 1.8 | 24.6 | 17.4 | 13.1 | (s) | 0.4 | 0.3 | 2.2 | 0.1 | 35.7 | 69.3 | 23.2 | 13.9 | 0.1 | 21.4 | 154.3 | 41.8 | 196.1 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 177.   Transportation Energy Consumption Estimates, Selected Years 1960-1999, Montana

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 1 | (s) | 1,006 | 2,839 | 265 | 29 | 137 | 5,972 | 377 | 10,624 | 0 | 0 | — | 0 | — |
| 1965 | (s) | (s) | 312 | 2,676 | 384 | 13 | 148 | 6,678 | 325 | 10,536 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 1 | 43 | 3,020 | 649 | 36 | 154 | 8,407 | 119 | 12,428 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 2 | 79 | 3,835 | 818 | 50 | 162 | 9,682 | 160 | 14,786 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 3 | 159 | 4,759 | 920 | 45 | 196 | 9,705 | 0 | 15,786 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 2 | 91 | 4,273 | 678 | 51 | 179 | 9,439 | (s) | 14,711 | R e 15 | 0 | — | 0 | — |
| 1990 | 0 | 2 | 111 | 4,169 | 708 | 67 | 201 | 9,630 | 0 | 14,885 | R 3 | 0 | — | 0 | — |
| 1991 | 0 | 2 | 108 | 4,161 | 615 | 48 | 180 | 9,687 | 0 | 14,798 | R 13 | 0 | — | 0 | — |
| 1992 | 0 | 3 | 75 | 4,705 | 864 | 35 | 183 | 10,100 | 0 | 15,963 | R 13 | 0 | — | 0 | — |
| 1993 | 0 | 4 | 64 | 4,758 | 901 | 43 | 187 | 10,421 | 0 | 16,373 | R 15 | 0 | — | 0 | — |
| 1994 | 0 | 4 | 75 | 5,559 | 855 | 58 | 195 | 10,479 | 0 | 17,221 | 0 | 0 | — | 0 | — |
| 1995 | 0 | 4 | 78 | 5,856 | 1,052 | 28 | 192 | 10,669 | 0 | 17,875 | R 17 | 0 | — | 0 | — |
| 1996 | 0 | 3 | 99 | 5,570 | 999 | 16 | 186 | 11,070 | 0 | R 17,940 | 0 | 0 | — | 0 | — |
| 1997 | 0 | 3 | 71 | 6,397 | 792 | R 8 | 197 | 10,782 | 0 | R 18,248 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 4 | 102 | 5,734 | 797 | 62 | 206 | 11,145 | 0 | 18,047 | 10 | 0 | — | 0 | — |
| 1999 | 0 | 6 | 121 | 5,952 | 836 | 12 | 208 | 11,334 | 0 | 18,464 | 11 | 0 | — | 0 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | (s) | 0.5 | 5.1 | 16.5 | 1.4 | 0.1 | 0.8 | 31.4 | 2.4 | 57.7 | 0.0 | 0.0 | 58.2 | 0.0 | 58.2 |
| 1965 | (s) | 0.4 | 1.6 | 15.6 | 2.1 | 0.1 | 0.9 | 35.1 | 2.0 | 57.3 | 0.0 | 0.0 | 57.8 | 0.0 | 57.8 |
| 1970 | (s) | 0.7 | 0.2 | 17.6 | 3.6 | 0.1 | 0.9 | 44.2 | 0.7 | 67.4 | 0.0 | 0.0 | 68.1 | 0.0 | 68.1 |
| 1975 | (s) | 1.8 | 0.4 | 22.3 | 4.6 | 0.2 | 1.0 | 50.9 | 1.0 | 80.4 | 0.0 | 0.0 | 82.1 | 0.0 | 82.1 |
| 1980 | 0.0 | 2.9 | 0.8 | 27.7 | 5.2 | 0.2 | 1.2 | 51.0 | 0.0 | 86.0 | 0.0 | 0.0 | 88.9 | 0.0 | 88.9 |
| 1985 | 0.0 | 2.2 | 0.5 | 24.9 | 3.8 | 0.2 | 1.1 | 49.6 | (s) | 80.0 | R e 0.1 | 0.0 | e 82.2 | 0.0 | e 82.2 |
| 1990 | 0.0 | 2.1 | 0.6 | 24.3 | 4.0 | 0.2 | 1.2 | 50.6 | 0.0 | 80.9 | (s) | 0.0 | 83.0 | 0.0 | 83.0 |
| 1991 | 0.0 | 2.4 | 0.5 | 24.2 | 3.5 | 0.2 | 1.1 | 50.9 | 0.0 | 80.4 | (s) | 0.0 | 82.8 | 0.0 | 82.8 |
| 1992 | 0.0 | 3.1 | 0.4 | 27.4 | 4.8 | 0.1 | 1.1 | 53.1 | 0.0 | 86.9 | (s) | 0.0 | 90.0 | 0.0 | 90.0 |
| 1993 | 0.0 | 3.8 | 0.3 | 27.7 | 5.0 | 0.2 | 1.1 | 54.7 | 0.0 | 89.1 | R 0.1 | 0.0 | 92.9 | 0.0 | 92.9 |
| 1994 | 0.0 | 3.6 | 0.4 | 32.4 | 4.8 | 0.2 | 1.2 | R 54.8 | 0.0 | R 93.7 | 0.0 | 0.0 | R 97.4 | 0.0 | R 97.4 |
| 1995 | 0.0 | 4.1 | 0.4 | 34.1 | 5.9 | 0.1 | 1.2 | R 55.6 | 0.0 | R 97.3 | 0.1 | 0.0 | R 101.3 | 0.0 | R 101.3 |
| 1996 | 0.0 | 3.5 | 0.5 | 32.4 | 5.7 | 0.1 | 1.1 | R 57.7 | 0.0 | R 97.5 | 0.0 | 0.0 | R 101.1 | 0.0 | R 101.1 |
| 1997 | 0.0 | 3.6 | 0.4 | 37.3 | 4.5 | R (s) | 1.2 | R 56.2 | 0.0 | R 99.5 | 0.0 | 0.0 | R 103.1 | 0.0 | R 103.1 |
| 1998 | 0.0 | 3.9 | 0.5 | 33.4 | 4.5 | 0.2 | 1.2 | 58.1 | 0.0 | 98.0 | (s) | 0.0 | 101.8 | 0.0 | 101.8 |
| 1999 | 0.0 | 6.1 | 0.6 | 34.7 | 4.7 | (s) | 1.3 | 59.1 | 0.0 | 100.4 | (s) | 0.0 | 106.5 | 0.0 | 106.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 178.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Montana

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total [g] |
| 1960 | 187 | (s) | (s) | (s) | 0 | (s) | 0 | 5,800 | 0 | 0 | 0 | — |
| 1965 | 296 | 2 | 1 | (s) | 0 | 1 | 0 | 8,388 | 37 | 0 | 0 | — |
| 1970 | 723 | 3 | 26 | (s) | 0 | 26 | 0 | 8,744 | 73 | 0 | 0 | — |
| 1975 | 1,089 | 1 | 53 | 1 | 0 | 54 | 0 | 10,164 | 14 | 0 | 0 | — |
| 1980 | 3,352 | 4 | 0 | 59 | 0 | 59 | 0 | 9,963 | 17 | 0 | 0 | — |
| 1985 | 5,480 | (s) | 0 | 38 | 0 | 38 | 0 | 10,244 | 59 | 0 | (s) | — |
| 1990 | 9,399 | (s) | 0 | 63 | 0 | 63 | 0 | R 10,699 | 75 | 0 | 0 | — |
| 1991 | 10,223 | (s) | 0 | 41 | 0 | 41 | 0 | R 11,938 | 62 | 0 | 0 | — |
| 1992 | 10,768 | (s) | 0 | 35 | 0 | 35 | 0 | R 8,236 | 79 | 0 | (s) | — |
| 1993 | 8,869 | (s) | 0 | 48 | 0 | 48 | 0 | R 9,552 | 78 | 0 | 0 | — |
| 1994 | 10,513 | 1 | 0 | 42 | 0 | 42 | 0 | R 8,096 | 42 | 0 | 0 | — |
| 1995 | 9,373 | (s) | 0 | 53 | 0 | 53 | 0 | R 10,698 | 0 | 0 | 0 | — |
| 1996 | 7,897 | (s) | 0 | 41 | 0 | 41 | 0 | R 13,767 | 0 | 0 | 0 | — |
| 1997 | 9,286 | (s) | 0 | 39 | 0 | 39 | 0 | 13,357 | 0 | 0 | 0 | — |
| 1998 | 10,627 | 1 | 0 | 33 | 0 | 33 | 0 | 11,071 | 0 | 0 | 0 | — |
| 1999 | 10,198 | (s) | 0 | 30 | 0 | 30 | 0 | 11,593 | 0 | 0 | 0 | — |
| | | | | | Trillion Btu | | | | | | | |
| 1960 | 2.5 | 0.4 | (s) | (s) | 0.0 | (s) | 0.0 | 62.4 | 0.0 | 0.0 | 0.0 | 65.3 |
| 1965 | 3.9 | 2.0 | (s) | (s) | 0.0 | (s) | 0.0 | 87.7 | 0.4 | 0.0 | 0.0 | 94.0 |
| 1970 | 11.2 | 2.6 | 0.2 | (s) | 0.0 | 0.2 | 0.0 | 91.8 | 0.8 | 0.0 | 0.0 | 106.5 |
| 1975 | 17.4 | 1.2 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 105.8 | 0.1 | 0.0 | 0.0 | 124.8 |
| 1980 | 57.0 | 4.4 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 103.5 | 0.2 | 0.0 | 0.0 | 165.4 |
| 1985 | 94.8 | 0.6 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 107.0 | 0.6 | 0.0 | (s) | 203.3 |
| 1990 | 161.0 | 0.5 | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | R 111.3 | 0.8 | 0.0 | 0.0 | R 274.2 |
| 1991 | 174.2 | 0.3 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 124.6 | 0.7 | 0.0 | 0.0 | 300.1 |
| 1992 | 184.7 | 0.3 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | R 85.2 | 0.8 | 0.0 | (s) | R 271.2 |
| 1993 | 150.7 | 0.3 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | R 98.5 | 0.8 | 0.0 | 0.0 | R 250.6 |
| 1994 | 178.7 | 0.7 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | R 83.5 | 0.4 | 0.0 | 0.0 | R 263.6 |
| 1995 | 159.7 | 0.4 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | R 110.3 | 0.0 | 0.0 | 0.0 | R 270.8 |
| 1996 | 133.3 | 0.5 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 142.4 | 0.0 | 0.0 | 0.0 | 276.5 |
| 1997 | 156.5 | 0.4 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | R 138.3 | 0.0 | 0.0 | 0.0 | R 295.5 |
| 1998 | 179.2 | 0.6 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 114.5 | 0.0 | 0.0 | 0.0 | 294.6 |
| 1999 | 172.0 | 0.3 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 119.9 | 0.0 | 0.0 | 0.0 | 292.2 |

[a] Includes supplemental gaseous fuels.

[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 179. Energy Consumption Estimates by Source, Selected Years 1960-1999, Nebraska

| | | | Petroleum | | | | | | | | | | | | Nuclear Electric Power | Hydro-electric Power [d] | Wood and Waste | Other [a,e] | Net Inter-state Flow of Electric-ity/Losses [f] | Total [g] |
| | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kero-sene [a] | LPG [a] | Lubri-cants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 889 | 136 | 780 | 371 | 4,151 | 1,202 | 677 | 2,650 | 424 | 14,998 | 415 | R 62 | R 25,731 | 0 | R 959 | — | — | -536 | — |
| 1965 | 896 | 166 | 655 | 410 | 3,689 | 1,371 | 790 | 3,407 | 425 | 15,745 | 332 | 50 | 26,875 | -5 | 1,116 | — | — | 2,652 | — |
| 1970 | 1,283 | 222 | 1,137 | 199 | 7,449 | 1,783 | 582 | 5,616 | 479 | 18,525 | 793 | R 102 | R 36,665 | 0 | 1,371 | — | — | 7,502 | — |
| 1975 | 1,595 | 219 | 754 | 141 | 8,507 | 1,679 | 554 | 5,740 | 492 | 20,636 | 1,092 | R 150 | R 39,745 | 5,916 | 1,213 | — | — | -3,822 | — |
| 1980 | 4,990 | 163 | 719 | 213 | 9,149 | 1,588 | 62 | 4,499 | 389 | 19,100 | 228 | R 130 | R 36,076 | 5,783 | 1,336 | — | — | -5,079 | — |
| 1985 | 6,653 | 126 | 473 | 96 | 12,384 | 1,357 | 74 | 2,590 | 354 | 17,737 | 62 | 75 | 35,203 | 4,134 | 1,441 | — | — | 2,271 | — |
| 1990 | 8,266 | 111 | 1,388 | 83 | 12,455 | 1,501 | 41 | 2,912 | 398 | 18,451 | 260 | 316 | 37,806 | 7,511 | R h 1,140 | — | — | R -11,408 | — |
| 1991 | 8,859 | 116 | 1,418 | 84 | 13,022 | 1,192 | 17 | 3,167 | 356 | 17,801 | 200 | 26 | 37,285 | 8,048 | R 1,045 | — | — | R -13,224 | — |
| 1992 | 8,212 | 107 | 898 | 81 | 14,091 | 1,198 | 20 | 3,225 | 363 | 17,951 | 187 | 28 | 38,042 | 8,748 | R 1,075 | — | — | R -15,028 | — |
| 1993 | 9,666 | 126 | 797 | 72 | 14,049 | 1,157 | 24 | 2,984 | 370 | 18,029 | 278 | 30 | 37,791 | 6,805 | R 1,002 | — | — | R -13,264 | — |
| 1994 | 9,300 | 127 | 1,031 | 76 | 15,692 | 1,259 | 21 | 3,080 | 387 | 18,043 | 215 | 31 | 39,834 | 6,345 | R 1,312 | — | — | R -8,071 | — |
| 1995 | 10,396 | 136 | 929 | 77 | 15,558 | 1,001 | 17 | 3,020 | 380 | 19,302 | 123 | 31 | 40,435 | 7,485 | R 1,426 | — | — | R -14,905 | — |
| 1996 | 10,379 | 133 | 1,771 | 75 | 17,033 | 1,007 | 19 | R 3,831 | 369 | 19,474 | 170 | R 28 | R 43,778 | 9,457 | R 1,602 | — | — | R -19,657 | — |
| 1997 | 11,210 | 132 | 1,450 | 90 | 17,674 | 1,075 | 23 | R 3,130 | 390 | 19,825 | 112 | R 25 | R 43,794 | 9,269 | R 1,673 | — | — | R -19,671 | — |
| 1998 | 11,792 | 131 | 1,400 | 63 | 18,870 | 1,080 | 23 | 3,300 | 408 | 20,305 | 122 | 24 | 45,596 | 8,259 | 1,702 | — | — | -19,227 | — |
| 1999 | 11,494 | 121 | 1,867 | 71 | 17,352 | 1,564 | 11 | 3,665 | 412 | 20,487 | 91 | 22 | 45,542 | 10,091 | 1,736 | — | — | -26,337 | — |

| | | | | | | | | Trillion Btu | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 20.0 | 140.4 | 5.2 | 1.9 | 24.2 | 6.4 | 3.8 | 10.6 | 2.6 | 78.8 | 2.6 | 0.4 | 136.5 | 0.0 | 10.3 | 3.1 | 0.0 | -1.8 | 308.5 |
| 1965 | 20.8 | 164.7 | 4.3 | 2.1 | 21.5 | 7.4 | 4.5 | 13.7 | 2.6 | 82.7 | 2.1 | 0.3 | 141.1 | -0.1 | 11.7 | 1.9 | 0.0 | 9.0 | 349.2 |
| 1970 | 29.7 | 224.1 | 7.5 | 1.0 | 43.4 | 9.8 | 3.3 | 21.2 | 2.9 | 97.3 | 5.0 | 0.6 | R 192.1 | 0.0 | 14.4 | 1.6 | 0.0 | 25.6 | 487.4 |
| 1975 | 32.9 | 217.5 | 5.0 | 0.7 | 49.6 | 9.2 | 3.1 | 21.3 | 3.0 | 108.4 | 6.9 | 0.9 | 208.1 | 65.2 | 12.6 | 2.8 | 0.0 | -13.0 | 526.0 |
| 1980 | 93.9 | 159.5 | 4.8 | 1.1 | 53.3 | 8.7 | 0.4 | 16.5 | 2.4 | 100.3 | 1.4 | R 0.8 | R 189.6 | 63.1 | 13.9 | 7.1 | 0.0 | -17.3 | R 509.7 |
| 1985 | 115.5 | 123.9 | 3.1 | 0.5 | 72.1 | 7.4 | 0.4 | 9.3 | 2.1 | 93.2 | 0.4 | 0.4 | 189.1 | 44.7 | 15.1 | R 6.7 | 0.0 | 7.8 | R 502.6 |
| 1990 | 142.0 | 109.2 | 9.2 | 0.4 | 72.6 | 8.3 | 0.2 | 10.6 | 2.4 | 96.9 | 1.6 | 1.7 | 204.0 | 80.2 | h 11.9 | R 4.3 | h 0.1 | -38.9 | h 512.7 |
| 1991 | 152.0 | 114.0 | 9.4 | 0.4 | 75.9 | 6.6 | 0.1 | 11.4 | 2.2 | 93.5 | 1.3 | 0.1 | 200.9 | 86.4 | 10.9 | R 4.5 | 0.1 | R -45.1 | R 523.7 |
| 1992 | 140.9 | 104.6 | 6.0 | 0.4 | 82.1 | 6.6 | 0.1 | 11.7 | 2.2 | 94.3 | 1.2 | 0.2 | 204.7 | 93.4 | 11.1 | R 4.8 | 0.1 | R -51.3 | R 508.4 |
| 1993 | 166.1 | 123.3 | 5.3 | 0.4 | 81.8 | 6.4 | 0.1 | 10.8 | 2.2 | 94.7 | 1.7 | 0.2 | 203.7 | 72.7 | 10.3 | R 4.1 | 0.2 | R -45.3 | R 534.7 |
| 1994 | 160.3 | 124.8 | 6.8 | 0.4 | 91.4 | 7.0 | 0.1 | 11.2 | 2.3 | R 94.4 | 1.4 | 0.2 | R 215.2 | 67.7 | 13.5 | R 4.0 | 0.2 | R -27.5 | R 558.3 |
| 1995 | 179.4 | 133.7 | 6.2 | 0.4 | 90.6 | 5.7 | 0.1 | 10.9 | 2.3 | R 100.7 | 0.8 | 0.2 | R 217.8 | 79.8 | 14.7 | R 4.5 | 0.2 | R -50.9 | R 579.2 |
| 1996 | 179.0 | 133.8 | 11.8 | 0.4 | 99.2 | 5.7 | 0.1 | R 13.8 | 2.2 | R 101.6 | 1.1 | 0.2 | R 236.1 | 100.5 | 16.6 | R 5.2 | 0.2 | R -67.1 | R 604.2 |
| 1997 | 193.3 | 131.9 | 9.6 | 0.5 | 103.0 | 6.1 | 0.1 | R 11.3 | 2.4 | R 103.3 | 0.7 | R 0.1 | R 237.1 | 98.5 | R 17.3 | R 3.9 | 0.3 | R -67.1 | R 615.2 |
| 1998 | 203.0 | 131.1 | 9.3 | 0.3 | 109.9 | 6.1 | 0.1 | 11.9 | 2.5 | 105.8 | 0.8 | 0.1 | 246.9 | 87.7 | 17.6 | 3.1 | 0.3 | -65.6 | 623.4 |
| 1999 | 195.9 | 121.3 | 12.4 | 0.4 | 101.1 | 8.9 | 0.1 | 13.3 | 2.5 | 106.8 | 0.6 | 0.1 | 246.0 | 107.2 | 18.0 | 3.7 | 0.3 | -89.9 | 602.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 180.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Nebraska

| | | | Petroleum | | | | | | | | | Electrical System | |
| | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | | | Electricity[a] | | Energy Losses[d] | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | Geothermal | Solar[c] | Million Kilowatthours | Net Energy | Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 76 | 39 | 140 | 337 | 1,790 | 2,267 | 108 | — | — | 1,907 | — | 4,744 | — |
| 1965 | 21 | 48 | 111 | 453 | 2,545 | 3,110 | 69 | — | — | 2,816 | — | 6,723 | — |
| 1970 | 13 | 58 | 196 | 379 | 3,889 | 4,464 | 52 | — | — | 4,107 | — | 9,953 | — |
| 1975 | 3 | 54 | 173 | 372 | 3,143 | 3,688 | 60 | — | — | 4,693 | — | 11,321 | — |
| 1980 | 7 | 49 | 360 | 10 | 1,406 | 1,775 | 344 | — | — | 5,521 | — | 13,425 | — |
| 1985 | 4 | 47 | 340 | 40 | 998 | 1,379 | 323 | — | — | 6,195 | — | 14,554 | — |
| 1990 | 1 | 41 | 169 | 4 | 978 | 1,151 | 201 | — | — | 6,800 | — | R 14,875 | — |
| 1991 | 5 | 45 | 197 | 5 | 1,227 | 1,430 | 212 | — | — | 7,138 | — | R 15,518 | — |
| 1992 | 3 | 41 | 145 | 10 | 1,245 | 1,401 | 223 | — | — | 6,561 | — | R 13,994 | — |
| 1993 | 2 | 48 | 168 | 11 | 1,171 | 1,349 | 185 | — | — | 7,226 | — | R 15,262 | — |
| 1994 | 2 | 44 | 161 | 5 | 1,090 | 1,256 | 182 | — | — | 7,379 | — | R 15,400 | — |
| 1995 | 3 | 45 | 95 | 4 | 1,173 | 1,272 | 202 | — | — | 7,597 | — | R 15,839 | — |
| 1996 | 1 | 49 | 115 | 4 | R 1,575 | R 1,693 | 201 | — | — | 7,741 | — | R 16,132 | — |
| 1997 | 41 | 47 | 95 | 7 | R 1,265 | R 1,367 | R 142 | — | — | 7,989 | — | R 16,617 | — |
| 1998 | (s) | 41 | 64 | 10 | 1,674 | 1,747 | 125 | — | — | 8,160 | — | 16,857 | — |
| 1999 | 0 | 41 | 70 | 6 | 1,713 | 1,789 | 134 | — | — | 7,929 | — | 15,536 | — |

**Trillion Btu**

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.6 | 40.9 | 0.8 | 1.9 | 7.2 | 9.9 | 2.2 | 0.0 | 0.0 | 6.5 | 61.0 | 16.2 | 77.2 |
| 1965 | 0.4 | 47.2 | 0.6 | 2.6 | 10.2 | 13.4 | 1.4 | 0.0 | 0.0 | 9.6 | 72.1 | 22.9 | 95.0 |
| 1970 | 0.3 | 58.8 | 1.1 | 2.1 | 14.7 | 18.0 | 1.0 | 0.0 | 0.0 | 14.0 | 92.1 | 34.0 | 126.0 |
| 1975 | 0.1 | 53.6 | 1.0 | 2.1 | 11.7 | 14.8 | 1.2 | 0.0 | 0.0 | 16.0 | 85.7 | 38.6 | 124.3 |
| 1980 | 0.1 | 47.9 | 2.1 | 0.1 | 5.2 | 7.3 | 6.9 | 0.0 | 0.0 | 18.8 | 81.1 | 45.8 | 126.9 |
| 1985 | 0.1 | 45.8 | 2.0 | 0.2 | 3.6 | 5.8 | 6.5 | 0.0 | 0.0 | 21.1 | 79.3 | 49.7 | 129.0 |
| 1990 | (s) | 40.8 | 1.0 | (s) | 3.5 | 4.6 | 4.0 | e (s) | e (s) | 23.2 | e 72.7 | R 50.8 | R e 123.5 |
| 1991 | 0.1 | 44.0 | 1.1 | (s) | 4.4 | 5.6 | 4.2 | (s) | (s) | 24.4 | 78.4 | R 52.9 | R 131.3 |
| 1992 | 0.1 | 40.6 | 0.8 | 0.1 | 4.5 | 5.4 | 4.5 | 0.1 | (s) | 22.4 | 72.9 | R 47.7 | R 120.7 |
| 1993 | (s) | 47.0 | 1.0 | 0.1 | 4.2 | 5.3 | 3.7 | 0.1 | (s) | 24.7 | 80.8 | 52.1 | 132.9 |
| 1994 | 0.1 | 43.7 | 0.9 | (s) | 4.0 | 4.9 | 3.6 | 0.1 | (s) | 25.2 | 77.6 | 52.5 | 130.1 |
| 1995 | 0.1 | 44.1 | 0.6 | (s) | 4.2 | 4.8 | 4.0 | 0.1 | (s) | 25.9 | R 79.1 | 54.0 | R 133.1 |
| 1996 | (s) | 49.3 | 0.7 | (s) | R 5.7 | R 6.4 | 4.0 | 0.1 | (s) | 26.4 | R 86.2 | 55.0 | R 141.3 |
| 1997 | 0.7 | 47.0 | 0.6 | (s) | R 4.6 | R 5.2 | R 2.8 | 0.1 | (s) | 27.3 | R 83.1 | R 56.7 | R 139.8 |
| 1998 | (s) | 40.9 | 0.4 | 0.1 | 6.1 | 6.5 | 2.5 | 0.1 | (s) | 27.8 | 77.8 | 57.5 | 135.3 |
| 1999 | 0.0 | 40.6 | 0.4 | (s) | 6.2 | 6.6 | 2.7 | 0.1 | (s) | 27.1 | 77.0 | 53.0 | 130.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 181. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Nebraska

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 142 | 22 | 140 | 65 | 316 | 84 | 43 | 649 | 2 | — | 1,269 | — | 3,157 | — |
| 1965 | 39 | 26 | 112 | 87 | 449 | 95 | 84 | 827 | 1 | — | 2,025 | — | 4,835 | — |
| 1970 | 24 | 47 | 197 | 73 | 686 | 110 | 241 | 1,307 | 1 | — | 3,505 | — | 8,493 | — |
| 1975 | 6 | 43 | 174 | 71 | 555 | 120 | 159 | 1,079 | 1 | — | 3,660 | — | 8,829 | — |
| 1980 | 12 | 43 | 181 | 21 | 248 | 149 | 23 | 622 | 8 | — | 4,068 | — | 9,892 | — |
| 1985 | 8 | 39 | 800 | 12 | 176 | 158 | 0 | 1,146 | R 9 | — | 5,714 | — | 13,425 | — |
| 1990 | 3 | 36 | 247 | 23 | 173 | 155 | 20 | 618 | R 13 | — | 6,451 | — | R 14,111 | — |
| 1991 | 6 | 40 | 183 | 3 | 217 | 100 | 27 | 529 | R 13 | — | 6,777 | — | R 14,733 | — |
| 1992 | 3 | 34 | 270 | 1 | 220 | 92 | 41 | 624 | R 14 | — | 6,470 | — | R 13,800 | — |
| 1993 | 3 | 35 | 306 | 4 | 207 | 21 | 19 | 557 | 15 | — | 6,560 | — | R 13,857 | — |
| 1994 | 5 | 39 | 362 | 5 | 192 | 21 | 19 | 600 | 15 | — | 7,149 | — | R 14,919 | — |
| 1995 | 6 | 40 | 175 | 4 | 207 | 21 | 1 | 408 | 15 | — | 7,494 | — | R 15,625 | — |
| 1996 | (s) | 41 | 234 | 4 | R 278 | 21 | 0 | R 537 | 17 | — | 7,563 | — | R 15,762 | — |
| 1997 | 77 | 34 | 175 | 3 | R 223 | 21 | 10 | R 431 | R 16 | — | 8,014 | — | 16,670 | — |
| 1998 | (s) | 29 | 218 | 3 | 295 | 21 | 8 | 545 | 16 | — | 8,069 | — | 16,669 | — |
| 1999 | 0 | 28 | 199 | 1 | 302 | 21 | 4 | 527 | 19 | — | 7,997 | — | 15,669 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Motor Gasoline | Residual Fuel | Total | Wood | Geothermal | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 3.0 | 22.7 | 0.8 | 0.4 | 1.3 | 0.4 | 0.3 | 3.2 | (s) | 0.0 | 4.3 | 33.2 | 10.8 | 44.0 |
| 1965 | 0.8 | 25.3 | 0.7 | 0.5 | 1.8 | 0.5 | 0.5 | 4.0 | (s) | 0.0 | 6.9 | 37.0 | 16.5 | 53.5 |
| 1970 | 0.5 | 47.2 | 1.1 | 0.4 | 2.6 | 0.6 | 1.5 | 6.2 | (s) | 0.0 | 12.0 | 65.9 | 29.0 | 94.9 |
| 1975 | 0.1 | 43.0 | 1.0 | 0.4 | 2.1 | 0.6 | 1.0 | 5.1 | (s) | 0.0 | 12.5 | 60.7 | 30.1 | 90.8 |
| 1980 | 0.2 | 42.5 | 1.1 | 0.1 | 0.9 | 0.8 | 0.1 | 3.0 | 0.2 | 0.0 | 13.9 | 59.8 | 33.8 | 93.5 |
| 1985 | 0.2 | 38.7 | 4.7 | 0.1 | 0.6 | 0.8 | 0.0 | 6.2 | R 0.2 | 0.0 | 19.5 | R 64.7 | 45.8 | R 110.5 |
| 1990 | 0.1 | 35.9 | 1.4 | 0.1 | 0.6 | 0.8 | 0.1 | 3.1 | R 0.3 | e (s) | 22.0 | R e 61.4 | 48.1 | R e 109.6 |
| 1991 | 0.1 | 39.7 | 1.1 | (s) | 0.8 | 0.5 | 0.2 | 2.6 | R 0.3 | 0.1 | 23.1 | R 65.8 | 50.3 | R 116.1 |
| 1992 | 0.1 | 33.8 | 1.6 | (s) | 0.8 | 0.5 | 0.3 | 3.1 | R 0.3 | 0.1 | 22.1 | R 59.4 | R 47.1 | R 106.5 |
| 1993 | 0.1 | 33.9 | 1.8 | (s) | 0.7 | 0.1 | 0.1 | 2.8 | 0.3 | 0.1 | 22.4 | 59.5 | 47.3 | 106.8 |
| 1994 | 0.1 | 38.4 | 2.1 | (s) | 0.7 | 0.1 | 0.1 | 3.1 | 0.3 | 0.1 | 24.4 | 66.3 | 50.9 | 117.2 |
| 1995 | 0.1 | 39.2 | 1.0 | (s) | 0.7 | 0.1 | (s) | 1.9 | 0.3 | 0.1 | 25.6 | 67.3 | 53.3 | R 120.6 |
| 1996 | (s) | 41.1 | 1.4 | (s) | R 1.0 | 0.1 | 0.0 | R 2.5 | 0.3 | 0.2 | 25.8 | R 69.9 | R 53.8 | R 123.7 |
| 1997 | 1.3 | 33.8 | 1.0 | (s) | R 0.8 | 0.1 | 0.1 | R 2.0 | 0.3 | 0.2 | 27.3 | 65.0 | R 56.9 | 121.8 |
| 1998 | (s) | 29.0 | 1.3 | (s) | 1.1 | 0.1 | (s) | 2.5 | 0.3 | 0.2 | 27.5 | 59.6 | 56.9 | 116.5 |
| 1999 | 0.0 | 27.6 | 1.2 | (s) | 1.1 | 0.1 | (s) | 2.4 | 0.4 | 0.2 | 27.3 | 57.9 | 53.5 | 111.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 182. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Nebraska

| Year | Coal | Natural Gas [a] | Petroleum Asphalt and Road Oil [b] | Distillate Fuel [b] | Kero-sene [b] | LPG [b] | Lubri-cants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 408 | 37 | 780 | 2,405 | 275 | 441 | 97 | 2,146 | 18 | R 62 | R 6,224 | (s) | — | — | 889 | — | 2,210 | — |
| 1965 | 349 | 48 | 655 | 1,956 | 250 | 314 | 130 | 1,790 | 32 | 50 | 5,177 | (s) | — | — | 1,182 | — | 2,821 | — |
| 1970 | 240 | 56 | 1,137 | 3,271 | 130 | 823 | 160 | 1,319 | 139 | R 102 | R 7,082 | (s) | — | — | 2,145 | — | 5,198 | — |
| 1975 | 308 | 74 | 754 | 3,234 | 111 | 1,811 | 193 | 1,644 | 137 | R 150 | R 8,035 | 0 | — | — | 3,200 | — | 7,718 | — |
| 1980 | 269 | 52 | 719 | 3,411 | 31 | 2,675 | 41 | 1,471 | 29 | R 130 | R 8,506 | 0 | — | — | 4,155 | — | 10,104 | — |
| 1985 | 261 | 33 | 473 | 4,292 | 22 | 1,359 | 38 | 1,392 | 62 | 75 | 7,713 | 0 | — | — | 3,794 | — | 8,913 | — |
| 1990 | 235 | 26 | 1,388 | 4,140 | 14 | 1,700 | 42 | 950 | 239 | 316 | 8,790 | f 0 | — | — | 4,618 | — | R 10,103 | — |
| 1991 | 324 | 25 | 1,418 | 4,654 | 9 | 1,659 | 38 | 940 | 170 | 26 | 8,915 | 0 | — | — | 4,690 | — | R 10,195 | — |
| 1992 | 325 | 26 | 898 | 4,915 | 8 | 1,713 | 39 | 825 | 146 | 28 | 8,571 | 0 | — | — | 4,752 | — | R 10,136 | — |
| 1993 | 364 | 39 | 797 | 4,922 | 9 | 1,559 | 39 | 696 | 259 | 30 | 8,312 | 0 | — | — | 4,963 | — | R 10,482 | — |
| 1994 | 414 | 37 | 1,031 | 5,884 | 10 | 1,726 | 41 | 734 | 196 | 31 | 9,652 | 0 | — | — | 5,345 | — | R 11,154 | — |
| 1995 | 339 | 45 | 929 | 5,131 | 9 | 1,617 | 40 | 759 | 122 | 31 | 8,638 | 0 | — | — | 5,802 | — | R 12,096 | — |
| 1996 | 287 | 36 | 1,771 | 4,668 | 12 | R 1,957 | 39 | 773 | 170 | R 28 | R 9,418 | 0 | — | — | 6,193 | — | R 12,907 | — |
| 1997 | 296 | 44 | 1,450 | 4,975 | 14 | R 1,571 | 41 | 810 | 103 | R 25 | R 8,989 | 0 | — | — | 6,580 | — | R 13,686 | — |
| 1998 | 287 | 53 | 1,400 | 4,949 | 11 | 1,308 | 43 | 1,047 | 104 | 24 | 8,886 | 0 | — | — | 6,916 | — | 14,286 | — |
| 1999 | 275 | 46 | 1,867 | 3,822 | 4 | 1,636 | 44 | 686 | 83 | 22 | 8,163 | 0 | — | — | 6,883 | — | 13,487 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 9.0 | 38.3 | 5.2 | 14.0 | 1.6 | 1.8 | 0.6 | 11.3 | 0.1 | 0.4 | R 34.9 | (s) | 0.4 | 0.0 | 3.0 | 85.5 | 7.5 | R 93.1 |
| 1965 | 7.6 | 47.7 | 4.3 | 11.4 | 1.4 | 1.3 | 0.8 | 9.4 | 0.2 | 0.3 | 29.1 | (s) | 0.5 | 0.0 | 4.0 | 88.9 | 9.6 | 98.6 |
| 1970 | 4.9 | 56.9 | 7.5 | 19.1 | 0.7 | 3.1 | 1.0 | 6.9 | 0.9 | 0.6 | 39.8 | (s) | 0.5 | 0.0 | 7.3 | R 109.5 | 17.7 | 127.2 |
| 1975 | 5.9 | 73.5 | 5.0 | 18.8 | 0.6 | 6.7 | 1.2 | 8.6 | 0.9 | 0.9 | R 42.8 | 0.0 | 1.5 | 0.0 | 10.9 | R 134.7 | 26.3 | 161.0 |
| 1980 | 5.2 | 50.9 | 4.8 | 19.9 | 0.2 | 9.8 | 0.3 | 7.7 | 0.2 | R 0.8 | R 43.6 | 0.0 | R (s) | 0.0 | 14.2 | R 113.8 | 34.5 | R 148.3 |
| 1985 | 4.9 | 32.6 | 3.1 | 25.0 | 0.1 | 4.9 | 0.2 | 7.3 | 0.4 | 0.4 | 41.5 | 0.0 | R (s) | 0.0 | 12.9 | R 92.0 | 30.4 | R 122.4 |
| 1990 | 4.5 | 25.4 | 9.2 | 24.1 | 0.1 | 6.2 | 0.3 | 5.0 | 1.5 | 1.7 | 48.0 | f 0.0 | R 0.0 | f 0.0 | 15.8 | R f 93.7 | 34.5 | R f 128.1 |
| 1991 | 6.1 | 24.4 | 9.4 | 27.1 | 0.1 | 6.0 | 0.2 | 4.9 | 1.1 | 0.1 | 49.0 | 0.0 | R 0.0 | 0.0 | 16.0 | R 95.5 | 34.8 | R 130.3 |
| 1992 | 6.0 | 25.9 | 6.0 | 28.6 | (s) | 6.2 | 0.2 | 4.3 | 0.9 | 0.2 | 46.5 | 0.0 | R 0.0 | 0.0 | 16.2 | R 94.6 | 34.6 | R 129.2 |
| 1993 | 6.8 | 37.7 | 5.3 | 28.7 | 0.1 | 5.6 | 0.2 | 3.7 | 1.6 | 0.2 | 45.3 | 0.0 | R 0.0 | 0.0 | 16.9 | R 106.8 | 35.8 | R 142.6 |
| 1994 | 7.9 | 36.5 | 6.8 | 34.3 | 0.1 | 6.3 | 0.2 | R 3.8 | 1.2 | 0.2 | R 52.9 | 0.0 | R 0.0 | 0.0 | 18.2 | R 115.6 | 38.1 | R 153.6 |
| 1995 | 6.6 | 43.9 | 6.2 | 29.9 | 0.1 | 5.9 | 0.2 | 4.0 | 0.8 | 0.2 | 47.1 | 0.0 | R 0.0 | 0.0 | 19.8 | R 117.4 | R 41.3 | R 158.6 |
| 1996 | 5.4 | 36.4 | 11.8 | 27.2 | 0.1 | R 7.1 | 0.2 | R 4.0 | 1.1 | 0.2 | R 51.6 | 0.0 | R 0.7 | 0.0 | 21.1 | R 115.2 | 44.0 | R 159.3 |
| 1997 | 5.7 | 44.4 | 9.6 | 29.0 | 0.1 | R 5.7 | 0.3 | R 4.2 | 0.6 | R 0.1 | R 49.6 | 0.0 | R 0.8 | 0.0 | 22.4 | R 122.9 | R 46.7 | R 169.6 |
| 1998 | 5.5 | 53.3 | 9.3 | 28.8 | 0.1 | 4.7 | 0.3 | 5.5 | 0.7 | 0.1 | 49.4 | 0.0 | 0.3 | 0.0 | 23.6 | 132.0 | 48.7 | 180.8 |
| 1999 | 5.2 | 45.7 | 12.4 | 22.3 | (s) | 5.9 | 0.3 | 3.6 | 0.5 | 0.1 | 45.1 | 0.0 | 0.7 | 0.0 | 23.5 | 120.2 | 46.0 | 166.2 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 183. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Nebraska

NEBRASKA

| | | | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | | Electrical System Energy Losses [d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | Net Energy | | Total [c] |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 7 | 6 | 371 | 1,402 | 1,202 | 103 | 328 | 12,768 | 258 | 16,432 | 0 | 0 | — | 0 | — |
| 1965 | 1 | 9 | 410 | 1,439 | 1,371 | 99 | 295 | 13,861 | 109 | 17,583 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 13 | 199 | 3,658 | 1,783 | 217 | 319 | 17,096 | 225 | 23,497 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 10 | 141 | 4,618 | 1,679 | 231 | 299 | 18,871 | 138 | 25,976 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 7 | 213 | 5,112 | 1,588 | 171 | 348 | 17,480 | 0 | 24,911 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 6 | 96 | 6,890 | 1,357 | 57 | 317 | 16,187 | 0 | 24,903 | R e 456 | 0 | — | 0 | — |
| 1990 | 0 | 4 | 83 | 7,869 | 1,501 | 61 | 356 | 17,346 | 0 | 27,216 | R 710 | 0 | — | 0 | — |
| 1991 | 0 | 2 | 84 | 7,961 | 1,192 | 64 | 319 | 16,760 | 0 | 26,380 | R 837 | 0 | — | 0 | — |
| 1992 | 0 | 3 | 81 | 8,737 | 1,198 | 47 | 325 | 17,034 | 0 | 27,422 | R 987 | 0 | — | 0 | — |
| 1993 | 0 | 3 | 72 | 8,611 | 1,157 | 48 | 331 | 17,312 | 0 | 27,531 | R 807 | 0 | — | 0 | — |
| 1994 | 0 | 3 | 76 | 9,240 | 1,259 | 72 | 346 | 17,288 | 0 | 28,281 | R 545 | 0 | — | 0 | — |
| 1995 | 0 | 3 | 77 | 10,096 | 1,001 | 23 | 340 | 18,521 | 0 | 30,056 | R 647 | 0 | — | 0 | — |
| 1996 | 0 | 5 | 75 | 11,970 | 1,007 | R 21 | 330 | 18,679 | 0 | R 32,083 | R 419 | 0 | — | 0 | — |
| 1997 | 0 | 4 | 90 | 12,358 | 1,075 | R 71 | 348 | 18,994 | 0 | R 32,936 | R 478 | 0 | — | 0 | — |
| 1998 | 0 | 3 | 63 | 13,557 | 1,080 | 23 | 365 | 19,237 | 0 | 34,325 | 504 | 0 | — | 0 | — |
| 1999 | 0 | 3 | 71 | 13,195 | 1,564 | 14 | 368 | 19,781 | 0 | 34,993 | 589 | 0 | — | 0 | — |

Trillion Btu

| Year | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.2 | 6.5 | 1.9 | 8.2 | 6.4 | 0.4 | 2.0 | 67.1 | 1.6 | 87.6 | 0.0 | 0.0 | 94.2 | 0.0 | 94.2 |
| 1965 | (s) | 8.6 | 2.1 | 8.4 | 7.4 | 0.4 | 1.8 | 72.8 | 0.7 | 93.5 | 0.0 | 0.0 | 102.2 | 0.0 | 102.2 |
| 1970 | (s) | 13.2 | 1.0 | 21.3 | 9.8 | 0.8 | 1.9 | 89.8 | 1.4 | 126.1 | 0.0 | 0.0 | 139.3 | 0.0 | 139.3 |
| 1975 | (s) | 10.4 | 0.7 | 26.9 | 9.2 | 0.9 | 1.8 | 99.1 | 0.9 | 139.5 | 0.0 | 0.0 | 149.9 | 0.0 | 149.9 |
| 1980 | 0.0 | 6.9 | 1.1 | 29.8 | 8.7 | 0.6 | 2.1 | 91.8 | 0.0 | 134.1 | 0.0 | 0.0 | 141.0 | 0.0 | 141.0 |
| 1985 | 0.0 | 5.5 | 0.5 | 40.1 | 7.4 | 0.2 | 1.9 | 85.0 | 0.0 | 135.2 | R e 1.6 | 0.0 | e 140.7 | 0.0 | e 140.7 |
| 1990 | 0.0 | 3.5 | 0.4 | 45.8 | 8.3 | 0.2 | 2.2 | 91.1 | 0.0 | 148.0 | R 2.5 | 0.0 | 151.5 | 0.0 | 151.5 |
| 1991 | 0.0 | 2.3 | 0.4 | 46.4 | 6.6 | 0.2 | 1.9 | 88.0 | 0.0 | 143.6 | R 3.0 | 0.0 | 145.9 | 0.0 | 145.9 |
| 1992 | 0.0 | 2.5 | 0.4 | 50.9 | 6.6 | 0.2 | 2.0 | 89.5 | 0.0 | 149.5 | R 3.5 | 0.0 | 152.0 | 0.0 | 152.0 |
| 1993 | 0.0 | 2.5 | 0.4 | 50.2 | 6.4 | 0.2 | 2.0 | 90.9 | 0.0 | 150.1 | R 2.9 | 0.0 | 152.5 | 0.0 | 152.5 |
| 1994 | 0.0 | 3.2 | 0.4 | 53.8 | 7.0 | 0.3 | 2.1 | R 90.4 | 0.0 | R 154.0 | R 1.9 | 0.0 | R 157.3 | 0.0 | R 157.3 |
| 1995 | 0.0 | 3.3 | 0.4 | 58.8 | 5.7 | 0.1 | 2.1 | R 96.6 | 0.0 | R 163.6 | R 2.3 | 0.0 | R 166.9 | 0.0 | R 166.9 |
| 1996 | 0.0 | 4.6 | 0.4 | 69.7 | 5.7 | 0.1 | 2.0 | R 97.4 | 0.0 | R 175.3 | R 1.5 | 0.0 | R 179.9 | 0.0 | R 179.9 |
| 1997 | 0.0 | 4.1 | 0.5 | 72.0 | 6.1 | R 0.3 | 2.1 | R 99.0 | 0.0 | R 179.9 | R 1.7 | 0.0 | R 184.0 | 0.0 | R 184.0 |
| 1998 | 0.0 | 2.9 | 0.3 | 79.0 | 6.1 | 0.1 | 2.2 | 100.3 | 0.0 | 188.0 | 1.8 | 0.0 | 190.8 | 0.0 | 190.8 |
| 1999 | 0.0 | 2.9 | 0.4 | 76.9 | 8.9 | 0.1 | 2.2 | 103.1 | 0.0 | 191.5 | 2.1 | 0.0 | 194.4 | 0.0 | 194.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 184.   Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Nebraska

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 256 | 31 | 96 | 64 | 0 | 160 | 0 | 959 | 48 | 0 | 0 | — |
| 1965 | 486 | 36 | 107 | 71 | 0 | 178 | -5 | 1,115 | 0 | 0 | 0 | — |
| 1970 | 1,006 | 48 | 188 | 126 | 0 | 314 | 0 | 1,370 | 0 | 0 | 0 | — |
| 1975 | 1,278 | 38 | 658 | 308 | 0 | 967 | 5,916 | 1,213 | 0 | 0 | 0 | — |
| 1980 | 4,702 | 12 | 176 | 86 | 0 | 262 | 5,783 | 1,336 | 0 | 0 | 0 | — |
| 1985 | 6,380 | 1 | 0 | 62 | 0 | 62 | 4,134 | 1,441 | 0 | 0 | 0 | — |
| 1990 | 8,027 | 4 | 1 | 31 | 0 | 31 | 7,511 | 1,140 | 0 | 0 | 0 | — |
| 1991 | 8,524 | 4 | 3 | 27 | 0 | 30 | 8,048 | 1,045 | 0 | 0 | 0 | — |
| 1992 | 7,881 | 2 | 0 | 25 | 0 | 25 | 8,748 | 1,075 | 6 | 0 | 0 | — |
| 1993 | 9,297 | 2 | 0 | 42 | 0 | 42 | 6,805 | 1,002 | 6 | 0 | 0 | — |
| 1994 | 8,879 | 3 | 1 | 45 | 0 | 45 | 6,345 | 1,312 | 9 | 0 | 0 | — |
| 1995 | 10,048 | 3 | 0 | 61 | 0 | 61 | 7,485 | 1,426 | 16 | 0 | 0 | — |
| 1996 | 10,091 | 2 | 0 | 47 | 0 | 47 | 9,457 | 1,602 | 12 | 0 | 0 | — |
| 1997 | 10,796 | 3 | (s) | 71 | 0 | 72 | 9,269 | R 1,673 | 1 | 0 | 0 | — |
| 1998 | 11,505 | 5 | 11 | 83 | 0 | 93 | 8,259 | 1,702 | 1 | 0 | 0 | — |
| 1999 | 11,219 | 5 | 4 | 65 | 0 | 70 | 10,091 | 1,736 | 0 | 0 | 0 | — |
| | **Trillion Btu** | | | | | | | | | | | |
| 1960 | 6.3 | 32.1 | 0.6 | 0.4 | 0.0 | 1.0 | 0.0 | 10.3 | 0.5 | 0.0 | 0.0 | 50.2 |
| 1965 | 11.9 | 35.9 | 0.7 | 0.4 | 0.0 | 1.1 | -0.1 | 11.7 | 0.0 | 0.0 | 0.0 | 60.6 |
| 1970 | 24.1 | 48.0 | 1.2 | 0.7 | 0.0 | 1.9 | 0.0 | 14.4 | 0.0 | 0.0 | 0.0 | 88.4 |
| 1975 | 26.8 | 37.0 | 4.1 | 1.8 | 0.0 | 5.9 | 65.2 | 12.6 | 0.0 | 0.0 | 0.0 | 147.5 |
| 1980 | 88.4 | 11.3 | 1.1 | 0.5 | 0.0 | 1.6 | 63.1 | 13.9 | 0.0 | 0.0 | 0.0 | 178.3 |
| 1985 | 110.4 | 1.2 | 0.0 | 0.4 | 0.0 | 0.4 | 44.7 | 15.1 | 0.0 | 0.0 | 0.0 | 171.7 |
| 1990 | 137.4 | 3.6 | (s) | 0.2 | 0.0 | 0.2 | 80.2 | 11.9 | 0.0 | 0.0 | 0.0 | 233.3 |
| 1991 | 145.6 | 3.5 | (s) | 0.2 | 0.0 | 0.2 | 86.4 | 10.9 | 0.0 | 0.0 | 0.0 | 246.6 |
| 1992 | 134.8 | 1.8 | 0.0 | 0.1 | 0.0 | 0.1 | 93.4 | 11.1 | 0.1 | 0.0 | 0.0 | 241.4 |
| 1993 | 159.2 | 1.8 | 0.0 | 0.2 | 0.0 | 0.2 | 72.7 | 10.3 | 0.1 | 0.0 | 0.0 | 244.3 |
| 1994 | 152.2 | 3.0 | (s) | 0.3 | 0.0 | 0.3 | 67.7 | 13.5 | 0.1 | 0.0 | 0.0 | 236.9 |
| 1995 | 172.7 | 3.1 | 0.0 | 0.4 | 0.0 | 0.4 | 79.8 | 14.7 | 0.2 | 0.0 | 0.0 | 270.8 |
| 1996 | 173.5 | 2.3 | 0.0 | 0.3 | 0.0 | 0.3 | 100.5 | 16.6 | 0.1 | 0.0 | 0.0 | 293.3 |
| 1997 | 185.6 | 2.7 | (s) | 0.4 | 0.0 | 0.4 | 98.5 | R 17.3 | (s) | 0.0 | 0.0 | 304.4 |
| 1998 | 197.5 | 5.0 | 0.1 | 0.5 | 0.0 | 0.5 | 87.7 | 17.6 | (s) | 0.0 | 0.0 | 307.7 |
| 1999 | 190.7 | 4.5 | (s) | 0.4 | 0.0 | 0.4 | 107.2 | 18.0 | 0.0 | 0.0 | 0.0 | 320.2 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 185. Energy Consumption Estimates by Source, Selected Years 1960-1999, Nevada

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | Thousand Barrels | | | | | | | | Million kWh | | | | |
| 1960 | 151 | 12 | 247 | 281 | 2,409 | 2,462 | 3 | 773 | 92 | 3,621 | 246 | 0 | 10,134 | 0 | 1,967 | — | — | -655 | — |
| 1965 | 309 | 28 | 367 | 335 | 2,775 | 2,999 | 5 | 720 | 121 | 5,504 | 137 | 0 | 12,963 | 0 | 1,595 | — | — | 1,603 | — |
| 1970 | 680 | 53 | 609 | 186 | 2,834 | 4,584 | 16 | 839 | 105 | 7,374 | 143 | 11 | 16,700 | 0 | 1,646 | — | — | 2,134 | — |
| 1975 | 4,521 | 61 | 837 | 197 | 2,565 | 5,859 | 29 | 493 | 120 | 9,633 | 1,339 | 0 | 21,070 | 0 | 1,690 | — | — | -18,450 | — |
| 1980 | 4,215 | 58 | 614 | 206 | 3,966 | 7,223 | 0 | 880 | 108 | 11,224 | 2,439 | 53 | 26,715 | 0 | 2,372 | — | — | -10,964 | — |
| 1985 | 5,539 | 39 | 844 | 105 | 5,410 | 5,715 | 53 | 1,043 | 99 | 11,627 | 165 | 36 | 25,097 | 0 | 4,374 | — | — | -14,328 | — |
| 1990 | 7,442 | 65 | 1,083 | 111 | 7,355 | 6,114 | 19 | 1,430 | 111 | 14,942 | 454 | 0 | 31,619 | 0 | R h 1,745 | — | — | -8,888 | — |
| 1991 | 8,091 | 65 | 1,072 | 111 | 7,102 | 6,556 | 23 | 1,157 | 99 | 15,353 | 464 | 73 | 32,008 | 0 | R 2,377 | — | — | R -13,267 | — |
| 1992 | 8,088 | 68 | 841 | 105 | 7,356 | 6,162 | 23 | 1,009 | 101 | 16,040 | 598 | 92 | 32,329 | 0 | R 1,995 | — | — | R -10,228 | — |
| 1993 | 7,806 | 85 | 1,147 | 113 | 7,629 | 6,510 | 14 | 910 | 103 | 16,233 | 497 | 81 | 33,237 | 0 | R 1,975 | — | — | R -4,687 | — |
| 1994 | 7,968 | 102 | 1,258 | 108 | 7,576 | 6,813 | 8 | 1,446 | 108 | 17,231 | 382 | 90 | 35,019 | 0 | R 1,899 | — | — | R -5,535 | — |
| 1995 | 7,340 | 111 | 1,486 | 63 | 7,700 | 7,374 | 9 | 815 | 106 | 18,017 | 1,125 | 85 | 36,780 | 0 | R 2,020 | — | — | R -267 | — |
| 1996 | 7,604 | 123 | 1,432 | 93 | 9,506 | 7,843 | 9 | R 970 | 103 | 18,962 | 279 | R 122 | R 39,319 | 0 | R 2,159 | — | — | R 221 | — |
| 1997 | 7,440 | 129 | 445 | 76 | 9,134 | 7,556 | 8 | R 852 | 109 | 19,952 | 234 | R 121 | R 38,487 | 0 | R 2,582 | — | — | R 3,532 | — |
| 1998 | 8,170 | 144 | 1,388 | 65 | 9,138 | 6,715 | 13 | 911 | 114 | 22,070 | 151 | 110 | 40,675 | 0 | 3,166 | — | — | -3,704 | — |
| 1999 | 7,977 | 152 | 808 | 78 | 8,331 | 8,354 | 26 | 1,378 | 115 | 21,583 | 69 | 98 | 40,840 | 0 | 2,828 | — | — | -1,960 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 4.0 | 12.9 | 1.6 | 1.4 | 14.0 | 13.2 | (s) | 3.1 | 0.6 | 19.0 | 1.5 | 0.0 | 54.5 | 0.0 | 21.2 | 0.9 | 0.0 | -2.2 | 91.3 |
| 1965 | 7.9 | 29.4 | 2.4 | 1.7 | 16.2 | 16.3 | (s) | 2.9 | 0.7 | 28.9 | 0.9 | 0.0 | 70.0 | 0.0 | 16.7 | 0.9 | 0.0 | 5.5 | 130.3 |
| 1970 | 17.3 | 56.9 | 4.0 | 0.9 | 16.5 | 25.3 | 0.1 | 3.2 | 0.6 | 38.7 | 0.9 | 0.1 | 90.4 | 0.0 | 17.3 | 1.1 | 0.0 | 7.3 | 190.2 |
| 1975 | 101.3 | 65.4 | 5.6 | 1.0 | 14.9 | 32.7 | 0.2 | 1.8 | 0.7 | 50.6 | 8.4 | 0.0 | 115.9 | 0.0 | 17.6 | 1.2 | 0.0 | -63.0 | 238.4 |
| 1980 | 93.2 | 62.0 | 4.1 | 1.0 | 23.1 | 40.4 | 0.0 | 3.2 | 0.7 | 59.0 | 15.3 | 0.3 | 147.1 | 0.0 | 24.6 | 2.8 | 0.0 | -37.4 | 292.3 |
| 1985 | 126.2 | 41.6 | 5.6 | 0.5 | 31.5 | 31.7 | 0.3 | 3.8 | 0.6 | 61.1 | 1.0 | 0.2 | 136.3 | 0.0 | 45.7 | R 4.1 | 0.0 | -48.9 | R 305.1 |
| 1990 | 165.7 | 66.9 | 7.2 | 0.6 | 42.8 | 34.0 | 0.1 | 5.2 | 0.7 | 78.5 | 2.9 | 0.0 | 171.9 | 0.0 | R h 18.2 | R 2.7 | R h 18.8 | -30.3 | R h 413.9 |
| 1991 | 180.1 | 66.9 | 7.1 | 0.6 | 41.4 | 36.5 | 0.1 | 4.2 | 0.6 | 80.6 | 2.9 | 0.4 | 174.5 | 0.0 | R 24.8 | R 2.9 | 21.7 | R -45.3 | 425.7 |
| 1992 | 178.9 | 70.5 | 5.6 | 0.5 | 42.9 | 34.4 | 0.1 | 3.7 | 0.6 | 84.3 | 3.8 | 0.6 | 176.3 | 0.0 | R 20.6 | R 3.0 | R 25.5 | R -34.9 | R 440.0 |
| 1993 | 172.2 | 87.8 | 7.6 | 0.6 | 44.4 | 36.5 | 0.1 | 3.3 | 0.6 | 85.3 | 3.1 | 0.5 | 182.0 | 0.0 | R 20.4 | R 3.2 | R 33.2 | R -16.0 | R 482.8 |
| 1994 | 180.1 | 105.4 | 8.3 | 0.5 | 44.1 | 38.6 | (s) | 5.3 | 0.7 | R 90.1 | 2.4 | 0.5 | R 190.7 | 0.0 | R 19.6 | R 3.2 | R 33.9 | -18.9 | R 513.9 |
| 1995 | 162.7 | 114.7 | 9.9 | 0.3 | 44.9 | 41.8 | (s) | 3.0 | 0.6 | R 94.0 | 7.1 | 0.5 | R 202.0 | 0.0 | R 20.8 | R 3.5 | R 33.1 | R -0.9 | R 535.9 |
| 1996 | 169.5 | 127.6 | 9.5 | 0.5 | 55.4 | 44.5 | 0.1 | R 3.5 | 0.6 | R 98.9 | 1.8 | R 0.7 | R 215.4 | 0.0 | R 22.3 | R 3.5 | R 35.0 | R 0.8 | R 574.0 |
| 1997 | 166.3 | 132.1 | 3.0 | 0.4 | 53.2 | 42.8 | (s) | R 3.1 | 0.7 | R 104.0 | 1.5 | R 0.7 | R 209.4 | 0.0 | 26.7 | R 4.0 | R 33.2 | 12.0 | R 583.8 |
| 1998 | 183.2 | 149.7 | 9.2 | 0.3 | 53.2 | 38.1 | 0.1 | 3.3 | 0.7 | 115.0 | 0.9 | 0.6 | 221.5 | 0.0 | 32.8 | 3.6 | 33.1 | -12.6 | 611.2 |
| 1999 | 179.7 | 156.7 | 5.4 | 0.4 | 48.5 | 47.4 | 0.1 | 5.0 | 0.7 | 112.5 | 0.4 | 0.6 | 220.9 | 0.0 | 29.3 | 3.9 | 31.5 | -6.7 | 615.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 186. Residential Energy Consumption Estimates, Selected Years 1960-1999, Nevada

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 12 | 2 | 219 | 0 | 275 | 493 | 46 | — | — | 719 | — | 1,788 | — |
| 1965 | 25 | 4 | 286 | 0 | 519 | 805 | 43 | — | — | 1,268 | — | 3,029 | — |
| 1970 | 24 | 7 | 328 | 0 | 621 | 949 | 52 | — | — | 1,990 | — | 4,821 | — |
| 1975 | 3 | 11 | 265 | 0 | 316 | 581 | 61 | — | — | 2,803 | — | 6,762 | — |
| 1980 | 2 | 13 | 187 | 0 | 427 | 614 | 135 | — | — | 3,697 | — | 8,990 | — |
| 1985 | 1 | 13 | 284 | 47 | 650 | 982 | 201 | — | — | 4,126 | — | 9,693 | — |
| 1990 | 1 | 17 | 239 | 8 | 817 | 1,064 | 128 | — | — | 5,540 | — | R 12,118 | — |
| 1991 | 1 | 19 | 221 | 10 | 733 | 965 | 135 | — | — | 5,782 | — | R 12,569 | — |
| 1992 | (s) | 18 | 217 | 10 | 632 | 859 | 142 | — | — | 6,064 | — | R 12,934 | — |
| 1993 | 1 | 21 | 179 | 11 | 623 | 813 | 148 | — | — | 6,281 | — | R 13,266 | — |
| 1994 | (s) | 21 | 151 | 4 | 642 | 797 | R 146 | — | — | 6,845 | — | R 14,284 | — |
| 1995 | (s) | 21 | 130 | 6 | 509 | 644 | 161 | — | — | 6,655 | — | R 13,876 | — |
| 1996 | (s) | 23 | 135 | 6 | 549 | 691 | 161 | — | — | 7,526 | — | R 15,685 | — |
| 1997 | (s) | 25 | 204 | 5 | R 584 | R 793 | R 182 | — | — | 7,801 | — | R 16,228 | — |
| 1998 | (s) | 30 | 251 | 10 | 615 | 876 | 160 | — | — | 7,975 | — | 16,474 | — |
| 1999 | 0 | 29 | 123 | 8 | 894 | 1,025 | 172 | — | — | 8,386 | — | 16,430 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.3 | 2.0 | 1.3 | 0.0 | 1.1 | 2.4 | 0.9 | 0.0 | 0.0 | 2.5 | 8.1 | 6.1 | 14.2 |
| 1965 | 0.6 | 4.4 | 1.7 | 0.0 | 2.1 | 3.7 | 0.9 | 0.0 | 0.0 | 4.3 | 14.0 | 10.3 | 24.3 |
| 1970 | 0.6 | 7.9 | 1.9 | 0.0 | 2.3 | 4.3 | 1.0 | 0.0 | 0.0 | 6.8 | 20.5 | 16.5 | 37.0 |
| 1975 | 0.1 | 11.8 | 1.5 | 0.0 | 1.2 | 2.7 | 1.2 | 0.0 | 0.0 | 9.6 | 25.4 | 23.1 | 48.5 |
| 1980 | (s) | 13.9 | 1.1 | 0.0 | 1.6 | 2.7 | 2.7 | 0.0 | 0.0 | 12.6 | 31.9 | 30.7 | 62.5 |
| 1985 | (s) | 13.4 | 1.7 | 0.3 | 2.3 | 4.3 | 4.0 | 0.0 | 0.0 | 14.1 | 35.7 | 33.1 | 68.8 |
| 1990 | (s) | 17.7 | 1.4 | (s) | 3.0 | 4.4 | 2.6 | e 0.1 | e 0.1 | 18.9 | e 43.8 | 41.3 | e 85.1 |
| 1991 | (s) | 19.8 | 1.3 | 0.1 | 2.7 | 4.0 | 2.7 | 0.1 | 0.1 | 19.7 | 46.5 | 42.9 | 89.4 |
| 1992 | (s) | 18.8 | 1.3 | 0.1 | 2.3 | 3.6 | 2.8 | 0.2 | 0.1 | 20.7 | 46.2 | R 44.1 | R 90.3 |
| 1993 | (s) | 21.4 | 1.0 | 0.1 | 2.2 | 3.3 | 3.0 | 0.2 | 0.1 | 21.4 | 49.4 | 45.3 | 94.7 |
| 1994 | (s) | 22.0 | 0.9 | (s) | 2.3 | 3.2 | 2.9 | 0.1 | 0.1 | 23.4 | 51.8 | 48.7 | 100.5 |
| 1995 | (s) | 21.4 | 0.8 | (s) | 1.8 | 2.6 | 3.2 | 0.1 | 0.2 | 22.7 | 50.3 | 47.3 | R 97.7 |
| 1996 | (s) | 23.5 | 0.8 | (s) | 2.0 | 2.8 | 3.2 | 0.1 | 0.2 | 25.7 | 55.6 | R 53.5 | R 109.1 |
| 1997 | (s) | 25.9 | 1.2 | (s) | R 2.1 | R 3.3 | R 3.6 | R 0.1 | R 0.3 | 26.6 | R 59.9 | R 55.4 | R 115.3 |
| 1998 | (s) | 31.4 | 1.5 | 0.1 | 2.2 | 3.7 | 3.2 | 0.1 | 0.3 | 27.2 | 66.1 | 56.2 | 122.3 |
| 1999 | 0.0 | 29.7 | 0.7 | (s) | 3.2 | 4.0 | 3.4 | 0.2 | 0.4 | 28.6 | 66.3 | 56.1 | 122.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 187.   Commercial Energy Consumption Estimates, Selected Years 1960-1999, Nevada

| Year | Coal[a] | Natural Gas[b] | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 18 | 1 | 107 | 0 | 48 | 29 | 86 | 271 | 1 | — | 655 | — | 1,629 | — |
| 1965 | 43 | 2 | 140 | 1 | 92 | 44 | 38 | 316 | 1 | — | 1,235 | — | 2,950 | — |
| 1970 | 42 | 10 | 161 | 10 | 110 | 49 | 29 | 358 | 1 | — | 2,069 | — | 5,013 | — |
| 1975 | 5 | 15 | 130 | 12 | 56 | 69 | 34 | 301 | 1 | — | 2,876 | — | 6,938 | — |
| 1980 | 2 | 10 | 353 | 0 | 75 | 61 | 7 | 496 | 3 | — | 1,775 | — | 4,316 | — |
| 1985 | 1 | 12 | 324 | 5 | 115 | 82 | 25 | 551 | R 5 | — | 3,408 | — | 8,006 | — |
| 1990 | 2 | 15 | 349 | 4 | 144 | 84 | 2 | 583 | R 8 | — | 4,550 | — | R 9,953 | — |
| 1991 | 1 | 17 | 294 | 3 | 129 | 78 | 2 | 507 | R 9 | — | 4,671 | — | R 10,155 | — |
| 1992 | 1 | 16 | 297 | 4 | 112 | 69 | (s) | 483 | R 9 | — | 4,909 | — | R 10,469 | — |
| 1993 | 1 | 18 | 608 | 3 | 110 | 12 | 0 | 734 | 12 | — | 5,037 | — | R 10,639 | — |
| 1994 | 1 | 19 | 528 | 2 | 113 | 12 | 0 | 656 | 12 | — | 5,417 | — | R 11,304 | — |
| 1995 | 1 | 19 | 614 | 1 | 90 | 13 | 0 | 717 | 12 | — | 5,509 | — | R 11,485 | — |
| 1996 | 1 | 20 | 672 | 2 | R 97 | 13 | 0 | 783 | 13 | — | 5,973 | — | R 12,448 | — |
| 1997 | 1 | 22 | 221 | 1 | R 103 | 13 | 1 | R 339 | R 20 | — | 6,383 | — | R 13,278 | — |
| 1998 | 1 | 23 | 285 | 2 | 108 | 13 | 4 | 412 | 20 | — | 6,544 | — | 13,518 | — |
| 1999 | 0 | 23 | 216 | 3 | 158 | 13 | 8 | 397 | 24 | — | 7,007 | — | 13,729 | — |
| | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 0.4 | 0.9 | 0.6 | 0.0 | 0.2 | 0.2 | 0.5 | 1.5 | (s) | 0.0 | 2.2 | 5.1 | 5.6 | 10.7 |
| 1965 | 1.1 | 2.5 | 0.8 | (s) | 0.4 | 0.2 | 0.2 | 1.7 | (s) | 0.0 | 4.2 | 9.5 | 10.1 | 19.6 |
| 1970 | 1.0 | 10.4 | 0.9 | 0.1 | 0.4 | 0.3 | 0.2 | 1.8 | (s) | 0.0 | 7.1 | 20.4 | 17.1 | 37.5 |
| 1975 | 0.1 | 16.0 | 0.8 | 0.1 | 0.2 | 0.4 | 0.2 | 1.6 | (s) | 0.0 | 9.8 | 27.5 | 23.7 | 51.2 |
| 1980 | 0.1 | 10.7 | 2.1 | 0.0 | 0.3 | 0.3 | (s) | 2.7 | 0.1 | 0.0 | 6.1 | 19.6 | 14.7 | 34.3 |
| 1985 | (s) | 13.0 | 1.9 | (s) | 0.4 | 0.4 | 0.2 | 2.9 | R 0.1 | 0.0 | 11.6 | R 27.7 | 27.3 | R 55.0 |
| 1990 | (s) | 15.5 | 2.0 | (s) | 0.5 | 0.4 | (s) | 3.0 | R 0.2 | e 0.4 | 15.5 | R e 34.7 | 34.0 | R e 68.7 |
| 1991 | (s) | 17.6 | 1.7 | (s) | 0.5 | 0.4 | (s) | 2.6 | R 0.2 | 0.4 | 15.9 | R 36.7 | R 34.6 | R 71.4 |
| 1992 | (s) | 16.7 | 1.7 | (s) | 0.4 | 0.4 | (s) | 2.5 | R 0.2 | 0.4 | 16.7 | R 36.6 | R 35.7 | R 72.3 |
| 1993 | (s) | 18.2 | 3.5 | (s) | 0.4 | 0.1 | 0.0 | 4.0 | 0.2 | 0.4 | 17.2 | 40.1 | 36.3 | 76.4 |
| 1994 | (s) | 19.4 | 3.1 | (s) | 0.4 | 0.1 | 0.0 | 3.6 | 0.2 | 0.4 | 18.5 | 42.1 | 38.6 | 80.7 |
| 1995 | (s) | 19.4 | 3.6 | (s) | 0.3 | 0.1 | 0.0 | 4.0 | 0.2 | 0.4 | 18.8 | 42.8 | 39.2 | R 82.0 |
| 1996 | (s) | 21.2 | 3.9 | (s) | 0.4 | 0.1 | 0.0 | 4.3 | 0.3 | 0.4 | 20.4 | 46.7 | R 42.5 | 89.1 |
| 1997 | (s) | 22.5 | 1.3 | (s) | 0.4 | 0.1 | (s) | 1.7 | R 0.4 | 0.4 | 21.8 | R 46.9 | R 45.3 | R 92.2 |
| 1998 | (s) | 24.4 | 1.7 | (s) | 0.4 | 0.1 | (s) | 2.2 | 0.4 | 0.5 | 22.3 | 49.8 | 46.1 | 95.9 |
| 1999 | 0.0 | 23.4 | 1.3 | (s) | 0.6 | 0.1 | 0.1 | 2.0 | 0.5 | 0.5 | 23.9 | 50.3 | 46.8 | 97.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# NEVADA

## Table 188. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Nevada

| | Coal | Natural Gas a | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
| | | | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 119 | 3 | 247 | 575 | 3 | 445 | 18 | 120 | 118 | 0 | 1,527 | (s) | — | — | 793 | — | 1,974 | — |
| 1965 | 61 | 8 | 367 | 740 | 4 | 101 | 36 | 131 | 40 | 0 | 1,419 | (s) | — | — | 1,059 | — | 2,529 | — |
| 1970 | 70 | 10 | 609 | 840 | 6 | 99 | 23 | 166 | 34 | 11 | 1,788 | (s) | — | — | 1,635 | — | 3,963 | — |
| 1975 | 77 | 10 | 837 | 705 | 17 | 107 | 26 | 115 | 44 | 0 | 1,852 | 0 | — | — | 1,964 | — | 4,737 | — |
| 1980 | 147 | 7 | 614 | 651 | 0 | 374 | 25 | 111 | 1 | 53 | 1,830 | 0 | — | — | 4,936 | — | 12,003 | — |
| 1985 | 110 | 6 | 844 | 1,540 | 1 | 247 | 23 | 131 | 88 | 36 | 2,910 | 0 | — | — | 3,808 | — | 8,946 | — |
| 1990 | 169 | 8 | 1,083 | 3,257 | 7 | 446 | 26 | 170 | 8 | 0 | 4,997 | R f 12 | — | — | 6,263 | — | R 13,701 | — |
| 1991 | 197 | 7 | 1,072 | 2,984 | 9 | 273 | 23 | 179 | 82 | 73 | 4,694 | R 10 | — | — | 6,173 | — | R 13,419 | — |
| 1992 | 173 | 9 | 841 | 3,000 | 10 | 241 | 23 | 172 | 80 | 92 | 4,459 | R 11 | — | — | 6,723 | — | R 14,339 | — |
| 1993 | 196 | 25 | 1,147 | 2,596 | 1 | 151 | 24 | 140 | 101 | 81 | 4,241 | R 14 | — | — | 7,181 | — | R 15,167 | — |
| 1994 | 195 | 29 | 1,258 | 2,531 | 1 | 647 | 25 | 191 | 141 | 90 | 4,884 | R 28 | — | — | 7,775 | — | R 16,226 | — |
| 1995 | 255 | 31 | 1,486 | 2,547 | 2 | 197 | 25 | 201 | 1,099 | 85 | 5,641 | R 98 | — | — | 8,496 | — | R 17,713 | — |
| 1996 | 179 | 33 | 1,432 | 2,695 | 2 | R 302 | 24 | 206 | 131 | R 122 | R 4,915 | R 15 | — | — | 9,075 | — | R 18,912 | — |
| 1997 | 178 | 29 | 445 | 3,190 | 2 | R 147 | 25 | 299 | 210 | R 121 | R 4,439 | R 15 | — | — | 10,034 | — | R 20,872 | — |
| 1998 | 208 | 29 | 1,388 | 2,982 | 1 | 180 | 26 | 434 | 82 | 110 | 5,205 | 15 | — | — | 10,518 | — | 21,729 | — |
| 1999 | 214 | 34 | 808 | 1,621 | 15 | 326 | 27 | 134 | 23 | 98 | 3,051 | 21 | — | — | 10,861 | — | 21,280 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 3.2 | 3.4 | 1.6 | 3.3 | (s) | 1.8 | 0.1 | 0.6 | 0.7 | 0.0 | 8.3 | (s) | 0.0 | 0.0 | 2.7 | 17.6 | 6.7 | 24.3 |
| 1965 | 1.6 | 8.4 | 2.4 | 4.3 | (s) | 0.4 | 0.2 | 0.7 | 0.3 | 0.0 | 8.3 | (s) | 0.0 | 0.0 | 3.6 | 21.9 | 8.6 | 30.5 |
| 1970 | 1.7 | 11.2 | 4.0 | 4.9 | (s) | 0.4 | 0.1 | 0.9 | 0.2 | 0.1 | 10.6 | (s) | 0.0 | 0.0 | 5.6 | 29.1 | 13.5 | 42.7 |
| 1975 | 1.8 | 10.7 | 5.6 | 4.1 | 0.1 | 0.4 | 0.2 | 0.6 | 0.3 | 0.0 | 11.2 | 0.0 | 0.0 | 0.0 | 6.7 | 30.4 | 16.2 | 46.6 |
| 1980 | 3.4 | 7.7 | 4.1 | 3.8 | 0.0 | 1.4 | 0.2 | 0.6 | (s) | 0.3 | 10.3 | 0.0 | 0.0 | 0.0 | 16.8 | 38.3 | 41.0 | 79.2 |
| 1985 | 2.6 | 6.6 | 5.6 | 9.0 | (s) | 0.9 | 0.1 | 0.7 | 0.6 | 0.2 | 17.1 | 0.0 | 0.0 | 0.0 | 13.0 | 39.2 | 30.5 | 69.7 |
| 1990 | 3.9 | 7.7 | 7.2 | 19.0 | (s) | 1.6 | 0.2 | 0.9 | (s) | 0.0 | 28.9 | R f 0.1 | R 0.0 | R f 18.2 | 21.4 | R f 80.3 | R f 46.7 | R f 127.1 |
| 1991 | 4.6 | 6.9 | 7.1 | 17.4 | 0.1 | 1.0 | 0.1 | 0.9 | 0.5 | 0.4 | 27.6 | R 0.1 | R 0.0 | R 21.0 | 21.1 | R 81.2 | 45.8 | R 127.0 |
| 1992 | 4.0 | 9.6 | 5.6 | 17.5 | 0.1 | 0.9 | 0.1 | 0.9 | 0.5 | 0.6 | 26.1 | R 0.1 | R 0.0 | R 24.8 | 22.9 | R 87.5 | R 48.9 | R 136.4 |
| 1993 | 4.5 | 25.6 | 7.6 | 15.1 | (s) | 0.5 | 0.1 | 0.7 | 0.6 | 0.5 | 25.3 | 0.1 | R 0.0 | R 32.5 | 24.5 | R 112.6 | 51.8 | R 164.4 |
| 1994 | 4.5 | 29.9 | 8.3 | 14.7 | (s) | 2.4 | 0.2 | 1.0 | 0.9 | 0.5 | 28.0 | R 0.3 | R 0.0 | R 33.2 | 26.5 | R 122.5 | 55.4 | R 177.9 |
| 1995 | 5.8 | 31.7 | 9.9 | 14.8 | (s) | 0.7 | 0.1 | 1.1 | 6.9 | 0.5 | 34.0 | R 1.0 | R 0.0 | R 32.4 | 29.0 | R 133.9 | 60.4 | R 194.3 |
| 1996 | 4.0 | 33.9 | 9.5 | 15.7 | (s) | R 1.1 | 0.1 | 1.1 | 0.8 | R 0.7 | 29.1 | 0.2 | R 0.0 | R 34.2 | 31.0 | R 132.4 | R 64.5 | R 196.9 |
| 1997 | 4.1 | 29.7 | 3.0 | 18.6 | (s) | R 0.5 | 0.2 | 1.6 | 1.3 | R 0.7 | R 25.8 | 0.2 | R 0.0 | R 32.4 | 34.2 | R 126.4 | R 71.2 | R 197.6 |
| 1998 | 4.8 | 30.0 | 9.2 | 17.4 | (s) | 0.7 | 0.2 | 2.3 | 0.5 | 0.6 | 30.8 | 0.2 | 0.0 | 32.1 | 35.9 | 133.8 | 74.1 | 208.0 |
| 1999 | 5.0 | 35.2 | 5.4 | 9.4 | 0.1 | 1.2 | 0.2 | 0.7 | 0.1 | 0.6 | 17.6 | 0.2 | 0.0 | 30.4 | 37.1 | 125.4 | 72.6 | 198.0 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 189. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Nevada**

| Year | Coal a (Thousand Short Tons) | Natural Gas b (Billion Cubic Feet) | Petroleum — Aviation Gasoline a (Thousand Barrels) | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | Ethanol c (Thousand Barrels) | Electricity a (Million Kilowatthours) | Net Energy | Electrical System Energy Losses d (Million Kilowatthours) | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2 | 0 | 281 | 1,501 | 2,462 | 5 | 73 | 3,472 | 0 | 7,795 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 0 | 335 | 1,599 | 2,999 | 9 | 86 | 5,329 | 7 | 10,364 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 0 | 186 | 1,492 | 4,584 | 9 | 83 | 7,158 | 1 | 13,512 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 0 | 197 | 1,407 | 5,859 | 13 | 94 | 9,449 | 5 | 17,023 | 0 | 0 | — | 0 | — |
| 1980 | 0 | (s) | 206 | 2,754 | 7,223 | 3 | 83 | 11,052 | 0 | 21,322 | 0 | 0 | — | 0 | — |
| 1985 | 0 | (s) | 105 | 3,209 | 5,715 | 31 | 76 | 11,414 | 0 | 20,549 | R e 2 | 0 | — | 0 | — |
| 1990 | 0 | 1 | 111 | 3,420 | 6,114 | 22 | 85 | 14,688 | 0 | 24,440 | R 116 | 0 | — | 0 | — |
| 1991 | 0 | (s) | 111 | 3,536 | 6,556 | 21 | 76 | 15,096 | 0 | 25,395 | R 158 | 0 | — | 0 | — |
| 1992 | 0 | (s) | 105 | 3,776 | 6,162 | 24 | 78 | 15,799 | 0 | 25,944 | R 190 | 0 | — | 0 | — |
| 1993 | 0 | 1 | 113 | 4,206 | 6,510 | 26 | 79 | 16,080 | 0 | 27,015 | R 228 | 0 | — | 0 | — |
| 1994 | 0 | 1 | 108 | 4,320 | 6,813 | 43 | 83 | 17,028 | 0 | 28,395 | 0 | 0 | — | 0 | — |
| 1995 | 0 | 1 | 63 | 4,383 | 7,374 | 19 | 81 | 17,803 | 0 | 29,724 | R 304 | 0 | — | 0 | — |
| 1996 | 0 | 1 | 93 | 5,974 | 7,843 | R 22 | 79 | 18,743 | 0 | R 32,754 | 0 | 0 | — | 0 | — |
| 1997 | 0 | 1 | 76 | 5,473 | 7,556 | R 19 | 83 | 19,640 | 0 | R 32,848 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 1 | 65 | 5,585 | 6,715 | 7 | 87 | 21,623 | 0 | 34,083 | 352 | 0 | — | 0 | — |
| 1999 | 0 | 1 | 78 | 6,337 | 8,354 | (s) | 88 | 21,437 | 0 | 36,294 | 636 | 0 | — | 0 | — |

**Trillion Btu**

| Year | Coal a | Natural Gas b | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | Ethanol c | Electricity a | Net Energy | Electrical System Energy Losses d | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.1 | 0.0 | 1.4 | 8.7 | 13.2 | (s) | 0.4 | 18.2 | 0.0 | 42.1 | 0.0 | 0.0 | 42.1 | 0.0 | 42.1 |
| 1965 | (s) | 0.0 | 1.7 | 9.3 | 16.3 | (s) | 0.5 | 28.0 | (s) | 55.9 | 0.0 | 0.0 | 55.9 | 0.0 | 55.9 |
| 1970 | (s) | 0.0 | 0.9 | 8.7 | 25.3 | (s) | 0.5 | 37.6 | (s) | 73.1 | 0.0 | 0.0 | 73.1 | 0.0 | 73.1 |
| 1975 | (s) | 0.0 | 1.0 | 8.2 | 32.7 | (s) | 0.6 | 49.6 | (s) | 92.1 | 0.0 | 0.0 | 92.1 | 0.0 | 92.1 |
| 1980 | 0.0 | 0.2 | 1.0 | 16.0 | 40.4 | (s) | 0.5 | 58.1 | 0.0 | 116.0 | 0.0 | 0.0 | 116.2 | 0.0 | 116.2 |
| 1985 | 0.0 | 0.1 | 0.5 | 18.7 | 31.7 | 0.1 | 0.5 | 60.0 | 0.0 | 111.4 | R e (s) | 0.0 | e 111.5 | 0.0 | e 111.5 |
| 1990 | 0.0 | 0.8 | 0.6 | 19.9 | 34.0 | 0.1 | 0.5 | 77.2 | 0.0 | 132.3 | R 0.4 | 0.0 | 133.1 | 0.0 | 133.1 |
| 1991 | 0.0 | 0.4 | 0.6 | 20.6 | 36.5 | 0.1 | 0.5 | 79.3 | 0.0 | 137.5 | R 0.6 | 0.0 | 137.9 | 0.0 | 137.9 |
| 1992 | 0.0 | 0.5 | 0.5 | 22.0 | 34.4 | 0.1 | 0.5 | 83.0 | 0.0 | 140.5 | 0.7 | 0.0 | 141.0 | 0.0 | 141.0 |
| 1993 | 0.0 | 0.7 | 0.6 | 24.5 | 36.5 | 0.1 | 0.5 | 84.5 | 0.0 | 146.6 | R 0.8 | 0.0 | 147.3 | 0.0 | 147.3 |
| 1994 | 0.0 | 0.7 | 0.5 | 25.2 | 38.6 | 0.2 | 0.5 | R 89.1 | 0.0 | R 154.0 | 0.0 | 0.0 | R 154.8 | 0.0 | R 154.8 |
| 1995 | 0.0 | 0.9 | 0.3 | 25.5 | 41.8 | 0.1 | 0.5 | R 92.8 | 0.0 | R 161.1 | R 1.1 | 0.0 | R 161.9 | 0.0 | R 161.9 |
| 1996 | 0.0 | 0.8 | 0.5 | 34.8 | 44.5 | 0.1 | 0.5 | R 97.8 | 0.0 | R 178.1 | 0.0 | 0.0 | R 178.9 | 0.0 | R 178.9 |
| 1997 | 0.0 | 0.7 | 0.4 | 31.9 | 42.8 | 0.1 | 0.5 | R 102.4 | 0.0 | R 178.1 | 0.0 | 0.0 | R 178.8 | 0.0 | R 178.8 |
| 1998 | 0.0 | 0.9 | 0.3 | 32.5 | 38.1 | (s) | 0.5 | 112.7 | 0.0 | 184.2 | 1.2 | 0.0 | 185.0 | 0.0 | 185.0 |
| 1999 | 0.0 | 0.9 | 0.4 | 36.9 | 47.4 | (s) | 0.5 | 111.7 | 0.0 | 196.9 | 2.3 | 0.0 | 197.8 | 0.0 | 197.8 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 190. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Nevada**

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total [g] |
| 1960 | 0 | 6 | 41 | 7 | 0 | 48 | 0 | 1,967 | 0 | 0 | 0 | — |
| 1965 | 180 | 13 | 51 | 8 | 0 | 60 | 0 | 1,594 | 0 | 0 | 0 | — |
| 1970 | 544 | 25 | 80 | 13 | 0 | 93 | 0 | 1,645 | 0 | 0 | 0 | — |
| 1975 | 4,435 | 25 | 1,256 | 58 | 0 | 1,314 | 0 | 1,690 | 0 | 0 | 0 | — |
| 1980 | 4,064 | 28 | 2,431 | 22 | 0 | 2,453 | 0 | 2,372 | 0 | 0 | 0 | — |
| 1985 | 5,427 | 8 | 51 | 54 | 0 | 104 | 0 | 4,374 | 0 | 0 | 0 | — |
| 1990 | 7,270 | 24 | 444 | 91 | 0 | 535 | 0 | R 1,733 | 0 | 0 | 0 | — |
| 1991 | 7,892 | 22 | 380 | 67 | 0 | 447 | 0 | R 2,367 | 0 | 0 | 0 | — |
| 1992 | 7,914 | 24 | 518 | 67 | 0 | 584 | 0 | R 1,984 | 0 | 0 | 0 | — |
| 1993 | 7,608 | 21 | 396 | 40 | 0 | 436 | 0 | R 1,961 | 0 | 0 | 0 | — |
| 1994 | 7,772 | 32 | 241 | 46 | 0 | 287 | 0 | R 1,871 | 0 | 0 | 0 | — |
| 1995 | 7,084 | 40 | 26 | 27 | 0 | 54 | 0 | R 1,922 | 0 | 0 | 0 | — |
| 1996 | 7,424 | 47 | 147 | 30 | 0 | 177 | 0 | 2,143 | 0 | 0 | 0 | — |
| 1997 | 7,261 | 52 | 23 | 45 | 0 | 69 | 0 | 2,567 | 0 | 0 | 0 | — |
| 1998 | 7,961 | 61 | 64 | 35 | 0 | 99 | 0 | 3,151 | 0 | 0 | 0 | — |
| 1999 | 7,763 | 65 | 38 | 35 | 0 | 73 | 0 | 2,807 | 0 | 0 | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | |
| 1960 | 0.0 | 6.6 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 21.2 | 0.0 | 0.0 | 0.0 | 28.0 |
| 1965 | 4.6 | 14.1 | 0.3 | (s) | 0.0 | 0.4 | 0.0 | 16.7 | 0.0 | 0.0 | 0.0 | 35.7 |
| 1970 | 14.0 | 27.4 | 0.5 | 0.1 | 0.0 | 0.6 | 0.0 | 17.3 | 0.0 | 0.0 | 0.0 | 59.2 |
| 1975 | 99.3 | 26.8 | 7.9 | 0.3 | 0.0 | 8.2 | 0.0 | 17.6 | 0.0 | 0.0 | 0.0 | 151.9 |
| 1980 | 89.7 | 29.5 | 15.3 | 0.1 | 0.0 | 15.4 | 0.0 | 24.6 | 0.0 | 0.0 | 0.0 | 159.3 |
| 1985 | 123.6 | 8.6 | 0.3 | 0.3 | 0.0 | 0.6 | 0.0 | 45.7 | 0.0 | 0.0 | 0.0 | 178.5 |
| 1990 | 161.7 | 25.1 | 2.8 | 0.5 | 0.0 | 3.3 | 0.0 | 18.0 | 0.0 | 0.0 | 0.0 | 208.2 |
| 1991 | 175.5 | 22.3 | 2.4 | 0.4 | 0.0 | 2.8 | 0.0 | 24.7 | 0.0 | 0.0 | 0.0 | 225.3 |
| 1992 | 174.9 | 25.0 | 3.3 | 0.4 | 0.0 | 3.6 | 0.0 | R 20.5 | 0.0 | 0.0 | 0.0 | R 224.1 |
| 1993 | 167.6 | 21.9 | 2.5 | 0.2 | 0.0 | 2.7 | 0.0 | R 20.2 | 0.0 | 0.0 | 0.0 | R 212.4 |
| 1994 | 175.5 | 33.3 | 1.5 | 0.3 | 0.0 | 1.8 | 0.0 | 19.3 | 0.0 | 0.0 | 0.0 | R 229.9 |
| 1995 | 156.9 | 41.3 | 0.2 | 0.2 | 0.0 | 0.3 | 0.0 | R 19.8 | 0.0 | 0.0 | 0.0 | R 218.4 |
| 1996 | 165.4 | 48.1 | 0.9 | 0.2 | 0.0 | 1.1 | 0.0 | 22.2 | 0.0 | 0.0 | 0.0 | 236.8 |
| 1997 | 162.2 | 53.3 | 0.1 | 0.3 | 0.0 | 0.4 | 0.0 | R 26.6 | 0.0 | 0.0 | 0.0 | R 242.5 |
| 1998 | 178.3 | 63.0 | 0.4 | 0.2 | 0.0 | 0.6 | 0.0 | 32.6 | 0.0 | 0.0 | 0.0 | 274.5 |
| 1999 | 174.8 | 67.5 | 0.2 | 0.2 | 0.0 | 0.4 | 0.0 | 29.0 | 0.0 | 0.0 | 0.0 | 271.8 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 191. Energy Consumption Estimates by Source, Selected Years 1960-1999, New Hampshire

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydro-electric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | | Million kWh | | | | |
| 1960 | 216 | 3 | 470 | 18 | 4,590 | 1,151 | 843 | 532 | 97 | 4,940 | 2,195 | 22 | 14,856 | 0 | 1,373 | — | — | -1,500 | — |
| 1965 | 407 | 4 | 424 | 46 | 5,912 | 1,097 | 758 | 657 | 84 | 5,773 | 2,416 | 29 | 17,195 | 0 | 1,053 | — | — | -692 | — |
| 1970 | 992 | 7 | 541 | 38 | 7,681 | 1,053 | 777 | 829 | 72 | 8,122 | 5,520 | 170 | 24,802 | 0 | 1,239 | — | — | -3,659 | — |
| 1975 | 982 | 8 | 431 | 33 | 7,194 | 916 | 463 | 1,436 | 70 | 9,373 | 4,611 | 181 | 24,707 | 0 | 1,251 | — | — | 1,442 | — |
| 1980 | 1,093 | 9 | 253 | 40 | 5,820 | 777 | 340 | 1,280 | 83 | 9,382 | 5,692 | 434 | 24,103 | 0 | 1,027 | — | — | 1,383 | — |
| 1985 | 1,481 | 11 | 854 | 24 | 5,243 | 521 | 902 | 1,586 | 76 | 10,340 | 3,442 | 153 | 23,141 | 0 | 2,023 | — | — | 3,441 | — |
| 1990 | 1,186 | 14 | 1,198 | 21 | 6,325 | 647 | 266 | 2,122 | 85 | 11,778 | 5,252 | 145 | 27,839 | 4,081 | R h 2,009 | — | — | R -5,106 | — |
| 1991 | 1,315 | 14 | 659 | 26 | 6,353 | 468 | 322 | 1,652 | 76 | 12,135 | 4,006 | 122 | 25,819 | 6,788 | R 1,957 | — | — | R -13,455 | — |
| 1992 | 1,311 | 17 | 791 | 19 | 6,612 | 378 | 293 | 1,761 | 78 | 12,111 | 3,763 | 126 | 25,931 | 7,869 | R 2,038 | — | — | R -16,404 | — |
| 1993 | 1,428 | 17 | 320 | 43 | 6,721 | 388 | 395 | 2,163 | 79 | 12,494 | 4,105 | 127 | 26,836 | 9,047 | R 2,258 | — | — | R -22,018 | — |
| 1994 | 1,287 | 20 | 381 | 33 | 6,848 | 342 | 337 | 2,221 | 83 | 12,811 | 4,199 | 132 | 27,386 | 6,204 | R 2,304 | — | — | R -13,103 | — |
| 1995 | 1,355 | 20 | 365 | 22 | 7,410 | 333 | 394 | 2,285 | 81 | 13,495 | 3,319 | 127 | 27,832 | 8,379 | R 2,274 | — | — | R -19,574 | — |
| 1996 | 1,377 | 19 | 627 | 20 | 7,947 | 360 | 451 | R 2,466 | 79 | 13,939 | 2,915 | R 2,404 | R 31,207 | 9,845 | R 2,854 | — | — | R -24,163 | — |
| 1997 | 1,705 | 21 | 412 | 23 | 8,054 | 408 | 560 | R 2,183 | 83 | 14,666 | 3,142 | R 2,630 | R 32,160 | 7,979 | R 2,705 | — | — | R -22,129 | — |
| 1998 | 1,469 | 19 | 269 | 20 | 8,561 | 609 | 697 | 2,447 | 87 | 15,086 | 3,402 | 2,613 | 33,792 | 8,387 | 2,519 | — | — | -20,635 | — |
| 1999 | 1,344 | 20 | 288 | 28 | 9,000 | 820 | 437 | 2,407 | 88 | 15,659 | 3,491 | 2,591 | 34,807 | 8,676 | 2,368 | — | — | -18,778 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydro-electric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5.4 | 3.0 | 3.1 | 0.1 | 26.7 | 6.2 | 4.8 | 2.1 | 0.6 | 25.9 | 13.8 | 0.1 | 83.5 | 0.0 | 14.8 | 10.9 | 0.0 | -5.1 | 112.3 |
| 1965 | 11.2 | 4.1 | 2.8 | 0.2 | 34.4 | 5.9 | 4.3 | 2.6 | 0.5 | 30.3 | 15.2 | 0.2 | 96.5 | 0.0 | 11.0 | 11.0 | 0.0 | -2.4 | 131.4 |
| 1970 | 27.1 | 6.8 | 3.6 | 0.2 | 44.7 | 5.7 | 4.4 | 3.1 | 0.4 | 42.7 | 34.7 | 0.9 | 140.5 | 0.0 | 13.0 | 12.3 | 0.0 | -12.5 | 187.2 |
| 1975 | 26.2 | 7.7 | 2.9 | 0.2 | 41.9 | 4.9 | 2.6 | 5.3 | 0.4 | 49.2 | 29.0 | 1.1 | 137.5 | 0.0 | 13.0 | 12.8 | 0.0 | 4.9 | 202.2 |
| 1980 | 29.3 | 9.7 | 1.7 | 0.2 | 33.9 | 4.2 | 1.9 | 4.7 | 0.5 | 49.3 | 35.8 | 2.5 | 134.6 | 0.0 | 10.7 | R 19.8 | 0.0 | 4.7 | R 208.7 |
| 1985 | 39.7 | 10.9 | 5.7 | 0.1 | 30.5 | 2.8 | 5.1 | 5.7 | 0.5 | 54.3 | 21.6 | 0.8 | 127.2 | 0.0 | 21.1 | 21.5 | 0.0 | 11.7 | R 232.2 |
| 1990 | 31.5 | 14.5 | 8.0 | 0.1 | 36.8 | 3.6 | 1.5 | 7.7 | 0.5 | 61.9 | 33.0 | 0.8 | 153.9 | 43.6 | R h 20.9 | R 23.7 | h (s) | R -17.4 | R h 270.8 |
| 1991 | 34.8 | 14.2 | 4.4 | 0.1 | 37.0 | 2.6 | 1.8 | 6.0 | 0.5 | 63.7 | 25.2 | 0.7 | 142.0 | 72.9 | R 20.4 | R 23.4 | (s) | R -45.9 | R 263.6 |
| 1992 | 34.7 | 17.0 | 5.2 | 0.1 | 38.5 | 2.1 | 1.7 | 6.4 | 0.5 | 63.6 | 23.7 | 0.7 | 142.4 | 84.0 | R 21.1 | R 34.6 | (s) | R -56.0 | R 280.6 |
| 1993 | 37.5 | 17.1 | 2.1 | 0.2 | 39.1 | 2.2 | 2.2 | 7.8 | 0.5 | 65.6 | 25.8 | 0.7 | 146.3 | 96.6 | R 23.3 | R 33.0 | (s) | -75.1 | R 281.1 |
| 1994 | 33.5 | 20.0 | 2.5 | 0.2 | 39.9 | 1.9 | 1.9 | 8.1 | 0.5 | R 67.0 | 26.4 | 0.7 | R 149.1 | 66.2 | R 23.8 | R 30.9 | (s) | R -44.7 | R 282.3 |
| 1995 | 35.5 | 20.1 | 2.4 | 0.1 | 43.2 | 1.9 | 2.2 | 8.3 | 0.5 | R 70.4 | 20.9 | 0.7 | R 150.5 | 89.3 | R 23.4 | R 31.7 | (s) | R -66.8 | R 287.9 |
| 1996 | 36.2 | 19.4 | 4.2 | 0.1 | 46.3 | 2.0 | 2.6 | R 8.9 | 0.5 | R 72.7 | 18.3 | R 12.9 | R 168.4 | 104.6 | R 29.5 | R 35.8 | (s) | R -82.4 | R 315.7 |
| 1997 | 44.5 | 21.1 | 2.7 | 0.1 | 46.9 | 2.3 | 3.2 | R 7.9 | 0.5 | R 76.5 | 19.8 | R 14.2 | R 174.0 | 84.8 | R 28.0 | R 33.9 | (s) | R -75.5 | R 317.4 |
| 1998 | 38.6 | 19.3 | 1.8 | 0.1 | 49.9 | 3.5 | 4.0 | 8.8 | 0.5 | 78.6 | 21.4 | 14.1 | 182.7 | 89.1 | 26.1 | 28.4 | (s) | -70.4 | 318.8 |
| 1999 | 35.3 | 20.5 | 1.9 | 0.1 | 52.4 | 4.6 | 2.5 | 8.7 | 0.5 | 81.6 | 21.9 | 13.9 | 188.3 | 92.2 | 24.5 | 31.0 | 1.9 | -64.1 | 335.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 192.  Residential Energy Consumption Estimates, Selected Years 1960-1999, New Hampshire

| Year | Coal a | Natural Gas b | Petroleum Distillate Fuel a | Petroleum Kerosene a | Petroleum LPG a | Petroleum Total | Wood | Geothermal | Solar c | Electricity a | Net Energy | Electrical System Energy Losses d | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | Geothermal | Solar c | Million Kilowatthours | Net Energy | Million Kilowatthours | Total |
| 1960 | 12 | 2 | 3,622 | 803 | 412 | 4,837 | 186 | — | — | 619 | — | 1,540 | — |
| 1965 | 8 | 3 | 4,724 | 710 | 460 | 5,894 | 156 | — | — | 868 | — | 2,072 | — |
| 1970 | 5 | 4 | 6,039 | 705 | 474 | 7,218 | 136 | — | — | 1,476 | — | 3,577 | — |
| 1975 | 3 | 4 | 5,709 | 406 | 692 | 6,807 | 159 | — | — | 2,148 | — | 5,181 | — |
| 1980 | 2 | 4 | 3,519 | 322 | 588 | 4,430 | R 277 | — | — | 2,478 | — | 6,026 | — |
| 1985 | 5 | 5 | 3,241 | 855 | 856 | 4,951 | 241 | — | — | 2,851 | — | 6,697 | — |
| 1990 | 7 | 6 | 3,395 | 233 | 1,449 | 5,078 | 184 | — | — | 3,444 | — | R 7,535 | — |
| 1991 | 13 | 6 | 3,566 | 269 | 1,229 | 5,064 | 194 | — | — | 3,357 | — | R 7,297 | — |
| 1992 | 9 | 6 | 3,683 | 250 | 1,285 | 5,218 | 204 | — | — | 3,428 | — | R 7,312 | — |
| 1993 | 6 | 6 | 3,815 | 351 | 1,480 | 5,646 | 212 | — | — | 3,420 | — | R 7,224 | — |
| 1994 | 5 | 7 | 3,814 | 282 | 1,533 | 5,629 | 208 | — | — | 3,431 | — | 7,159 | — |
| 1995 | 4 | 7 | 4,307 | 331 | 1,662 | 6,300 | 231 | — | — | 3,364 | — | R 7,015 | — |
| 1996 | 4 | 7 | 4,709 | 393 | R 1,834 | R 6,936 | 230 | — | — | 3,427 | — | R 7,143 | — |
| 1997 | 3 | 7 | 4,783 | 476 | R 1,607 | R 6,866 | R 152 | — | — | 3,368 | — | R 7,005 | — |
| 1998 | 2 | 6 | 4,404 | 620 | 1,803 | 6,827 | 134 | — | — | 3,384 | — | 6,990 | — |
| 1999 | 2 | 7 | 4,555 | 377 | 1,880 | 6,813 | 143 | — | — | 3,640 | — | 7,132 | — |

**Trillion Btu**

| Year | Coal a | Natural Gas b | Petroleum Distillate Fuel a | Petroleum Kerosene a | Petroleum LPG a | Petroleum Total | Wood | Geothermal | Solar c | Electricity a | Net Energy | Electrical System Energy Losses d | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.3 | 1.8 | 21.1 | 4.6 | 1.7 | 27.3 | 3.7 | 0.0 | 0.0 | 2.1 | 35.2 | 5.3 | 40.4 |
| 1965 | 0.2 | 2.7 | 27.5 | 4.0 | 1.8 | 33.4 | 3.1 | 0.0 | 0.0 | 3.0 | 42.3 | 7.1 | 49.4 |
| 1970 | 0.1 | 3.7 | 35.2 | 4.0 | 1.8 | 41.0 | 2.7 | 0.0 | 0.0 | 5.0 | 52.5 | 12.2 | 64.7 |
| 1975 | 0.1 | 3.8 | 33.3 | 2.3 | 2.6 | 38.1 | 3.2 | 0.0 | 0.0 | 7.3 | 52.5 | 17.7 | 70.1 |
| 1980 | (s) | 4.4 | 20.5 | 1.8 | 2.2 | 24.5 | 5.5 | 0.0 | 0.0 | 8.5 | 42.9 | 20.6 | 63.5 |
| 1985 | 0.1 | 4.8 | 18.9 | 4.8 | 3.1 | 26.8 | 4.8 | 0.0 | 0.0 | 9.7 | 46.3 | 22.9 | 69.1 |
| 1990 | 0.2 | 6.0 | 19.8 | 1.3 | 5.3 | 26.4 | 3.7 | e 0.0 | e (s) | 11.8 | e 48.0 | 25.7 | e 73.7 |
| 1991 | 0.3 | 5.6 | 20.8 | 1.5 | 4.4 | 26.7 | 3.9 | 0.0 | (s) | 11.5 | 48.1 | 24.9 | 73.0 |
| 1992 | 0.2 | 6.5 | 21.5 | 1.4 | 4.7 | 27.5 | 4.1 | 0.0 | (s) | 11.7 | R 50.1 | R 24.9 | 75.0 |
| 1993 | 0.1 | 6.6 | 22.2 | 2.0 | 5.3 | 29.5 | 4.2 | 0.0 | (s) | 11.7 | 52.2 | R 24.6 | 76.8 |
| 1994 | 0.1 | 6.7 | 22.2 | 1.6 | 5.6 | 29.4 | 4.2 | 0.0 | (s) | 11.7 | 52.1 | 24.4 | 76.5 |
| 1995 | 0.1 | 6.6 | 25.1 | 1.9 | 6.0 | 33.0 | 4.6 | 0.0 | (s) | 11.5 | 55.8 | 23.9 | 79.7 |
| 1996 | 0.1 | 7.1 | 27.4 | 2.2 | R 6.6 | R 36.3 | 4.6 | 0.0 | (s) | 11.7 | R 59.9 | R 24.4 | R 84.2 |
| 1997 | 0.1 | 7.0 | 27.9 | 2.7 | R 5.8 | R 36.4 | R 3.0 | 0.0 | (s) | 11.5 | R 58.0 | 23.9 | R 81.9 |
| 1998 | 0.1 | 6.3 | 25.7 | 3.5 | 6.5 | 35.7 | 2.7 | 0.0 | (s) | 11.5 | 56.3 | 23.9 | 80.2 |
| 1999 | (s) | 6.7 | 26.5 | 2.1 | 6.8 | 35.5 | 2.9 | (s) | (s) | 12.4 | 57.5 | 24.3 | 81.9 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
b Includes supplemental gaseous fuels.
c Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 193. Commercial Energy Consumption Estimates, Selected Years 1960-1999, New Hampshire

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Distillate Fuel [a] | Kerosene [a] | LPG [a] | Motor Gasoline | Residual Fuel [a] | Total | Wood Thousand Cords | Geothermal | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [c] Million Kilowatthours | Total [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 8 | 1 | 376 | 30 | 73 | 37 | 18 | 534 | 4 | — | 371 | — | 922 | — |
| 1965 | 5 | 1 | 491 | 26 | 81 | 43 | 26 | 667 | 3 | — | 468 | — | 1,117 | — |
| 1970 | 3 | 2 | 628 | 26 | 84 | 46 | 71 | 854 | 3 | — | 699 | — | 1,694 | — |
| 1975 | 2 | 3 | 593 | 15 | 122 | 52 | 56 | 839 | 3 | — | 883 | — | 2,131 | — |
| 1980 | 1 | 4 | 1,044 | 9 | 104 | 116 | 372 | 1,645 | 7 | — | 1,110 | — | 2,699 | — |
| 1985 | 3 | 5 | 550 | 41 | 151 | 126 | 87 | 956 | R 6 | — | 1,582 | — | 3,718 | — |
| 1990 | 5 | 5 | 1,191 | 25 | 256 | 74 | 657 | 2,202 | R 12 | — | 2,117 | — | R 4,631 | — |
| 1991 | 9 | 5 | 1,140 | 21 | 217 | 55 | 675 | 2,109 | R 12 | — | 2,140 | — | R 4,652 | — |
| 1992 | 7 | 6 | 1,129 | 22 | 227 | 48 | 326 | 1,752 | R 13 | — | 2,193 | — | R 4,678 | — |
| 1993 | 4 | 6 | 1,123 | 35 | 261 | 11 | 380 | 1,809 | 17 | — | 2,241 | — | R 4,733 | — |
| 1994 | 3 | 6 | 1,279 | 41 | 271 | 11 | 453 | 2,053 | 17 | — | 3,343 | — | 6,977 | — |
| 1995 | 4 | 7 | 1,093 | 44 | 293 | 11 | 443 | 1,883 | 17 | — | 3,357 | — | R 6,998 | — |
| 1996 | 4 | 7 | 1,339 | 42 | R 324 | 11 | 455 | R 2,170 | 19 | — | 3,366 | — | R 7,015 | — |
| 1997 | 2 | 7 | 1,367 | 58 | R 284 | 11 | 484 | R 2,204 | R 17 | — | 3,375 | — | R 7,021 | — |
| 1998 | 2 | 7 | 1,259 | 57 | 318 | 11 | 294 | 1,940 | 17 | — | 3,455 | — | 7,138 | — |
| 1999 | 1 | 7 | 1,442 | 42 | 332 | 11 | 151 | 1,978 | 20 | — | 3,732 | — | 7,311 | — |
| | | | | | **Trillion Btu** | | | | | | | | | |
| 1960 | 0.2 | 0.5 | 2.2 | 0.2 | 0.3 | 0.2 | 0.1 | 3.0 | 0.1 | 0.0 | 1.3 | 5.0 | 3.1 | 8.2 |
| 1965 | 0.1 | 0.8 | 2.9 | 0.1 | 0.3 | 0.2 | 0.2 | 3.7 | 0.1 | 0.0 | 1.6 | 6.3 | 3.8 | 10.1 |
| 1970 | 0.1 | 2.3 | 3.7 | 0.1 | 0.3 | 0.2 | 0.4 | 4.8 | 0.1 | 0.0 | 2.4 | 9.6 | 5.8 | 15.4 |
| 1975 | (s) | 2.6 | 3.5 | 0.1 | 0.5 | 0.3 | 0.4 | 4.6 | 0.1 | 0.0 | 3.0 | 10.4 | 7.3 | 17.7 |
| 1980 | (s) | 4.2 | 6.1 | 0.1 | 0.4 | 0.6 | 2.3 | 9.5 | 0.1 | 0.0 | 3.8 | 17.6 | 9.2 | 26.8 |
| 1985 | 0.1 | 5.1 | 3.2 | 0.2 | 0.5 | 0.7 | 0.5 | 5.2 | R 0.1 | 0.0 | 5.4 | R 15.9 | 12.7 | R 28.6 |
| 1990 | 0.1 | 5.1 | 6.9 | 0.1 | 0.9 | 0.4 | 4.1 | 12.5 | R 0.2 | e 0.0 | 7.2 | R e 25.2 | 15.8 | R e 41.1 |
| 1991 | 0.2 | 5.1 | 6.6 | 0.1 | 0.8 | 0.3 | 4.2 | 12.1 | R 0.2 | 0.0 | 7.3 | R 24.9 | 15.9 | R 40.8 |
| 1992 | 0.2 | 5.9 | 6.6 | 0.1 | 0.8 | 0.3 | 2.0 | 9.8 | R 0.3 | 0.0 | 7.5 | R 23.7 | 16.0 | R 39.6 |
| 1993 | 0.1 | 6.2 | 6.5 | 0.2 | 0.9 | 0.1 | 2.4 | 10.1 | 0.3 | 0.0 | 7.6 | 24.4 | 16.2 | 40.6 |
| 1994 | 0.1 | 6.5 | 7.5 | 0.2 | 1.0 | 0.1 | 2.8 | 11.6 | 0.3 | 0.0 | 11.4 | 29.9 | 23.8 | 53.7 |
| 1995 | 0.1 | 6.6 | 6.4 | 0.2 | 1.1 | 0.1 | 2.8 | 10.5 | 0.3 | 0.0 | 11.5 | 29.0 | 23.9 | 52.9 |
| 1996 | 0.1 | 7.2 | 7.8 | 0.2 | R 1.2 | 0.1 | 2.9 | 12.1 | 0.4 | 0.0 | 11.5 | 31.3 | 23.9 | 55.2 |
| 1997 | 0.1 | 7.6 | 8.0 | 0.3 | R 1.0 | 0.1 | 3.0 | R 12.4 | 0.3 | 0.0 | 11.5 | R 31.9 | R 24.0 | 55.9 |
| 1998 | (s) | 6.9 | 7.3 | 0.3 | 1.2 | 0.1 | 1.8 | 10.7 | 0.3 | 0.0 | 11.8 | 29.8 | 24.4 | 54.1 |
| 1999 | (s) | 7.3 | 8.4 | 0.2 | 1.2 | 0.1 | 0.9 | 10.8 | 0.4 | 0.0 | 12.7 | 31.3 | 24.9 | 56.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 194.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, New Hampshire

| | | | Petroleum | | | | | | | | | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal | Natural Gas [a] | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kero-sene [b] | LPG [b] | Lubri-cants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 100 | 1 | 470 | 280 | 10 | 47 | 22 | 66 | 727 | 22 | 1,644 | 239 | — | — | 596 | — | 1,483 | — |
| 1965 | 36 | 1 | 424 | 421 | 22 | 114 | 24 | 53 | 1,046 | 29 | 2,132 | 170 | — | — | 902 | — | 2,152 | — |
| 1970 | 9 | 1 | 541 | 511 | 46 | 267 | 17 | 38 | 2,842 | 170 | 4,432 | 184 | — | — | 1,452 | — | 3,519 | — |
| 1975 | 6 | 1 | 431 | 460 | 42 | 617 | 22 | 31 | 2,266 | 181 | 4,048 | 178 | — | — | 1,839 | — | 4,436 | — |
| 1980 | 10 | 1 | 253 | 558 | 9 | 514 | 23 | 27 | 923 | 434 | 2,741 | 155 | — | — | 2,406 | — | 5,851 | — |
| 1985 | 40 | 1 | 854 | 384 | 6 | 556 | 21 | 61 | 1,024 | 153 | 3,059 | 155 | — | — | 2,974 | — | 6,987 | — |
| 1990 | 28 | 3 | 1,198 | 435 | 8 | 402 | 24 | 55 | 529 | 145 | 2,797 | R f 510 | — | — | 3,418 | — | R 7,478 | — |
| 1991 | 51 | 3 | 659 | 446 | 31 | 198 | 21 | 50 | 461 | 122 | 1,988 | R 410 | — | — | 3,265 | — | R 7,098 | — |
| 1992 | 44 | 4 | 791 | 500 | 20 | 239 | 22 | 51 | 1,031 | 126 | 2,781 | R 429 | — | — | 3,333 | — | R 7,108 | — |
| 1993 | 79 | 4 | 320 | 423 | 9 | 405 | 22 | 91 | 1,432 | 127 | 2,830 | R 409 | — | — | 3,100 | — | R 6,547 | — |
| 1994 | 0 | 4 | 381 | 365 | 14 | 393 | 23 | 99 | 1,323 | 132 | 2,730 | R 426 | — | — | 2,182 | — | 4,554 | — |
| 1995 | 1 | 5 | 365 | 419 | 19 | 312 | 23 | 109 | 1,109 | 127 | 2,482 | R 402 | — | — | 2,286 | — | R 4,767 | — |
| 1996 | 0 | 5 | 627 | 399 | 17 | R 294 | 22 | 108 | 973 | R 2,404 | R 4,843 | R 498 | — | — | 2,334 | — | R 4,864 | — |
| 1997 | 0 | 6 | 412 | 321 | 26 | R 282 | 23 | 116 | 846 | R 2,630 | R 4,656 | R 469 | — | — | 2,339 | — | R 4,864 | — |
| 1998 | 0 | 6 | 269 | 381 | 20 | 323 | 24 | 74 | 761 | 2,613 | 4,466 | 622 | — | — | 2,415 | — | 4,988 | — |
| 1999 | 0 | 6 | 288 | 472 | 19 | 194 | 25 | 151 | 711 | 2,591 | 4,450 | 1,072 | — | — | 2,516 | — | 4,930 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 2.5 | 0.7 | 3.1 | 1.6 | 0.1 | 0.2 | 0.1 | 0.3 | 4.6 | 0.1 | 10.2 | 2.6 | 7.1 | 0.0 | 2.0 | 25.0 | 5.1 | 30.0 |
| 1965 | 0.9 | 0.7 | 2.8 | 2.5 | 0.1 | 0.5 | 0.1 | 0.3 | 6.6 | 0.2 | 13.0 | 1.8 | 7.8 | 0.0 | 3.1 | 27.2 | 7.3 | 34.6 |
| 1970 | 0.2 | 0.8 | 3.6 | 3.0 | 0.3 | 1.0 | 0.1 | 0.2 | 17.9 | 0.9 | 26.9 | 1.9 | 9.5 | 0.0 | 5.0 | 44.4 | 12.0 | 56.4 |
| 1975 | 0.1 | 1.1 | 2.9 | 2.7 | 0.2 | 2.3 | 0.1 | 0.2 | 14.2 | 1.1 | 23.7 | 1.9 | 9.6 | 0.0 | 6.3 | 42.6 | 15.1 | 57.8 |
| 1980 | 0.2 | 1.0 | 1.7 | 3.2 | 0.1 | 1.9 | 0.1 | 0.1 | 5.8 | 2.5 | 15.4 | 1.6 | R 14.1 | 0.0 | 8.2 | R 40.6 | 20.0 | R 60.6 |
| 1985 | 1.0 | 0.9 | 5.7 | 2.2 | (s) | 2.0 | 0.1 | 0.3 | 6.4 | 0.8 | 17.7 | 1.6 | R 16.5 | 0.0 | 10.1 | R 47.8 | 23.8 | R 71.7 |
| 1990 | 0.7 | 3.3 | 8.0 | 2.5 | (s) | 1.5 | 0.1 | 0.3 | 3.3 | 0.8 | 16.5 | R f 5.3 | R 19.8 | f 0.0 | 11.7 | R f 57.3 | 25.5 | R f 82.8 |
| 1991 | 1.3 | 3.5 | 4.4 | 2.6 | 0.2 | 0.7 | 0.1 | 0.3 | 2.9 | 0.7 | 11.8 | R 4.3 | R 19.2 | 0.0 | 11.1 | R 51.2 | R 24.2 | R 75.5 |
| 1992 | 1.1 | 3.9 | 5.2 | 2.9 | 0.1 | 0.9 | 0.1 | 0.3 | 6.5 | 0.7 | 16.7 | R 4.4 | R 30.3 | 0.0 | 11.4 | R 67.8 | 24.3 | R 92.0 |
| 1993 | 2.0 | 3.8 | 2.1 | 2.5 | 0.1 | 1.5 | 0.1 | 0.5 | 9.0 | 0.7 | 16.4 | R 4.2 | R 28.4 | 0.0 | 10.6 | R 65.4 | 22.3 | R 87.8 |
| 1994 | 0.0 | 4.5 | 2.5 | 2.1 | 0.1 | 1.4 | 0.1 | 0.5 | 8.3 | 0.7 | 15.9 | 4.4 | R 26.4 | 0.0 | 7.4 | R 58.6 | 15.5 | R 74.2 |
| 1995 | (s) | 4.7 | 2.4 | 2.4 | 0.1 | 1.1 | 0.1 | 0.6 | 7.0 | 0.7 | 14.5 | R 4.1 | R 26.8 | 0.0 | 7.8 | R 57.8 | 16.3 | R 74.1 |
| 1996 | 0.0 | 5.0 | 4.2 | 2.3 | 0.1 | R 1.1 | 0.1 | 0.6 | 6.1 | R 12.9 | R 27.3 | 5.2 | R 30.9 | 0.0 | 8.0 | R 76.3 | 16.6 | R 92.9 |
| 1997 | 0.0 | 5.9 | 2.7 | 1.9 | 0.1 | R 1.0 | 0.1 | 0.6 | 5.3 | R 14.2 | R 26.0 | R 4.9 | R 30.6 | 0.0 | 8.0 | R 75.3 | 16.6 | R 91.9 |
| 1998 | 0.0 | 5.9 | 1.8 | 2.2 | 0.1 | 1.2 | 0.1 | 0.4 | 4.8 | 14.1 | 24.7 | 6.4 | 25.4 | 0.0 | 8.2 | 70.8 | 17.0 | 87.8 |
| 1999 | 0.0 | 6.0 | 1.9 | 2.7 | 0.1 | 0.7 | 0.1 | 0.8 | 4.5 | 13.9 | 24.8 | 11.1 | 27.8 | 1.8 | 8.6 | 80.0 | 16.8 | 96.9 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 195. Transportation Energy Consumption Estimates, Selected Years 1960-1999, New Hampshire

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 2 | 0 | 18 | 209 | 1,151 | (s) | 74 | 4,837 | 49 | 6,338 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 0 | 46 | 178 | 1,097 | 1 | 60 | 5,677 | 1 | 7,061 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 0 | 38 | 319 | 1,053 | 5 | 55 | 8,038 | 69 | 9,577 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 0 | 33 | 418 | 903 | 5 | 48 | 9,290 | 9 | 10,706 | 0 | 0 | — | 0 | — |
| 1980 | 0 | (s) | 40 | 687 | 771 | 74 | 60 | 9,240 | 49 | 10,921 | 0 | 0 | — | 0 | — |
| 1985 | 0 | (s) | 24 | 1,038 | 521 | 24 | 55 | 10,152 | 0 | 11,813 | [e] 0 | 0 | — | 0 | — |
| 1990 | 0 | (s) | 21 | 1,267 | 647 | 15 | 61 | 11,649 | 83 | 13,743 | 0 | 0 | — | 0 | — |
| 1991 | 0 | (s) | 26 | 1,166 | 468 | 9 | 55 | 12,030 | 200 | 13,954 | 0 | 0 | — | 0 | — |
| 1992 | 0 | (s) | 19 | 1,268 | 378 | 10 | 56 | 12,012 | 122 | 13,865 | 0 | 0 | — | 0 | — |
| 1993 | 0 | (s) | 43 | 1,314 | 388 | 17 | 57 | 12,393 | 1 | 14,213 | 0 | 0 | — | 0 | — |
| 1994 | 0 | 1 | 33 | 1,362 | 342 | 24 | 60 | 12,702 | 10 | 14,531 | 0 | 0 | — | 0 | — |
| 1995 | 0 | (s) | 22 | 1,543 | 333 | 18 | 59 | 13,376 | 0 | 15,351 | 0 | 0 | — | 0 | — |
| 1996 | 0 | (s) | 20 | 1,473 | 360 | 15 | 57 | 13,820 | 5 | 15,749 | 0 | 0 | — | 0 | — |
| 1997 | 0 | (s) | 23 | 1,548 | 408 | R 10 | 60 | 14,540 | 3 | R 16,591 | 0 | 0 | — | 0 | — |
| 1998 | 0 | (s) | 20 | 2,485 | 609 | 2 | 63 | 15,001 | 6 | 18,187 | 0 | 0 | — | 0 | — |
| 1999 | 0 | (s) | 28 | 2,496 | 820 | (s) | 64 | 15,496 | 1 | 18,904 | 0 | 0 | — | 0 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | (s) | 0.0 | 0.1 | 1.2 | 6.2 | (s) | 0.5 | 25.4 | 0.3 | 33.6 | 0.0 | 0.0 | 33.7 | 0.0 | 33.7 |
| 1965 | (s) | 0.0 | 0.2 | 1.0 | 5.9 | (s) | 0.4 | 29.8 | (s) | 37.3 | 0.0 | 0.0 | 37.3 | 0.0 | 37.3 |
| 1970 | (s) | 0.0 | 0.2 | 1.9 | 5.7 | (s) | 0.3 | 42.2 | 0.4 | 50.7 | 0.0 | 0.0 | 50.7 | 0.0 | 50.7 |
| 1975 | (s) | 0.0 | 0.2 | 2.4 | 4.8 | (s) | 0.3 | 48.8 | 0.1 | 56.6 | 0.0 | 0.0 | 56.6 | 0.0 | 56.6 |
| 1980 | 0.0 | (s) | 0.2 | 4.0 | 4.1 | 0.3 | 0.4 | 48.5 | 0.3 | 57.8 | 0.0 | 0.0 | 57.9 | 0.0 | 57.9 |
| 1985 | 0.0 | 0.1 | 0.1 | 6.0 | 2.8 | 0.1 | 0.3 | 53.3 | 0.0 | 62.7 | [e] 0.0 | 0.0 | [e] 62.8 | 0.0 | [e] 62.8 |
| 1990 | 0.0 | (s) | 0.1 | 7.4 | 3.6 | 0.1 | 0.4 | 61.2 | 0.5 | 73.2 | 0.0 | 0.0 | 73.2 | 0.0 | 73.2 |
| 1991 | 0.0 | (s) | 0.1 | 6.8 | 2.6 | (s) | 0.3 | 63.2 | 1.3 | 74.3 | 0.0 | 0.0 | 74.4 | 0.0 | 74.4 |
| 1992 | 0.0 | 0.1 | 0.1 | 7.4 | 2.1 | (s) | 0.3 | 63.1 | 0.8 | 73.8 | 0.0 | 0.0 | 73.9 | 0.0 | 73.9 |
| 1993 | 0.0 | 0.3 | 0.2 | 7.7 | 2.2 | 0.1 | 0.3 | 65.1 | (s) | 75.5 | 0.0 | 0.0 | 75.9 | 0.0 | 75.9 |
| 1994 | 0.0 | 1.0 | 0.2 | 7.9 | 1.9 | 0.1 | 0.4 | R 66.4 | 0.1 | R 77.0 | 0.0 | 0.0 | R 77.9 | 0.0 | R 77.9 |
| 1995 | 0.0 | (s) | 0.1 | 9.0 | 1.9 | 0.1 | 0.4 | R 69.8 | 0.0 | R 81.2 | 0.0 | 0.0 | R 81.2 | 0.0 | R 81.2 |
| 1996 | 0.0 | (s) | 0.1 | 8.6 | 2.0 | 0.1 | 0.3 | R 72.1 | (s) | R 83.2 | 0.0 | 0.0 | R 83.3 | 0.0 | R 83.3 |
| 1997 | 0.0 | (s) | 0.1 | 9.0 | 2.3 | (s) | 0.4 | R 75.8 | (s) | R 87.7 | 0.0 | 0.0 | R 87.7 | 0.0 | R 87.7 |
| 1998 | 0.0 | (s) | 0.1 | 14.5 | 3.5 | (s) | 0.4 | 78.2 | (s) | 96.6 | 0.0 | 0.0 | 96.7 | 0.0 | 96.7 |
| 1999 | 0.0 | (s) | 0.1 | 14.5 | 4.6 | (s) | 0.4 | 80.8 | (s) | 100.5 | 0.0 | 0.0 | 100.5 | 0.0 | 100.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 196.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, New Hampshire**

| Year | Coal | Natural Gas a | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 94 | 0 | 1,401 | 102 | 0 | 1,504 | 0 | 1,134 | 0 | 0 | 0 | — |
| 1965 | 358 | 0 | 1,343 | 98 | 0 | 1,441 | 0 | 882 | 0 | 0 | 0 | — |
| 1970 | 975 | 0 | 2,537 | 184 | 0 | 2,721 | 0 | 1,056 | 0 | 0 | 0 | — |
| 1975 | 972 | (s) | 2,279 | 27 | 0 | 2,306 | 0 | 1,073 | 0 | 0 | 0 | — |
| 1980 | 1,080 | 0 | 4,348 | 18 | 0 | 4,366 | 0 | 872 | 0 | 0 | 0 | — |
| 1985 | 1,433 | 0 | 2,332 | 31 | 0 | 2,363 | 0 | 1,868 | 0 | 0 | 0 | — |
| 1990 | 1,146 | 0 | 3,983 | 37 | 0 | 4,020 | 4,081 | R 1,498 | 0 | 0 | 0 | — |
| 1991 | 1,242 | 0 | 2,669 | 35 | 0 | 2,704 | 6,788 | R 1,546 | 0 | 0 | 0 | — |
| 1992 | 1,251 | 1 | 2,283 | 32 | 0 | 2,315 | 7,869 | R 1,609 | 0 | 0 | 0 | — |
| 1993 | 1,339 | (s) | 2,291 | 46 | 0 | 2,338 | 9,047 | R 1,849 | 0 | 0 | 0 | — |
| 1994 | 1,279 | 1 | 2,414 | 28 | 0 | 2,442 | 6,204 | R 1,878 | 0 | 0 | 0 | — |
| 1995 | 1,346 | 2 | 1,768 | 48 | 0 | 1,816 | 8,379 | R 1,872 | 0 | 0 | 0 | — |
| 1996 | 1,369 | (s) | 1,482 | 26 | 0 | 1,508 | 9,845 | R 2,356 | 0 | 0 | 0 | — |
| 1997 | 1,699 | 1 | 1,809 | 35 | 0 | 1,843 | 7,979 | R 2,236 | 0 | 0 | 0 | — |
| 1998 | 1,465 | (s) | 2,341 | 32 | 0 | 2,372 | 8,387 | 1,898 | 0 | 0 | 0 | — |
| 1999 | 1,341 | 1 | 2,628 | 35 | 0 | 2,663 | 8,676 | 1,295 | 0 | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 2.4 | 0.0 | 8.8 | 0.6 | 0.0 | 9.4 | 0.0 | 12.2 | 0.0 | 0.0 | 0.0 | 24.0 |
| 1965 | 10.0 | 0.0 | 8.4 | 0.6 | 0.0 | 9.0 | 0.0 | 9.2 | 0.0 | 0.0 | 0.0 | 28.2 |
| 1970 | 26.7 | 0.0 | 16.0 | 1.1 | 0.0 | 17.0 | 0.0 | 11.1 | 0.0 | 0.0 | 0.0 | 54.9 |
| 1975 | 26.0 | 0.2 | 14.3 | 0.2 | 0.0 | 14.5 | 0.0 | 11.2 | 0.0 | 0.0 | 0.0 | 51.8 |
| 1980 | 29.0 | 0.0 | 27.3 | 0.1 | 0.0 | 27.4 | 0.0 | 9.1 | 0.0 | 0.0 | 0.0 | 65.5 |
| 1985 | 38.6 | 0.0 | 14.7 | 0.2 | 0.0 | 14.8 | 0.0 | 19.5 | 0.0 | 0.0 | 0.0 | 72.9 |
| 1990 | 30.5 | 0.0 | 25.0 | 0.2 | 0.0 | 25.3 | 43.6 | R 15.6 | 0.0 | 0.0 | 0.0 | R 115.1 |
| 1991 | 32.9 | 0.0 | 16.8 | 0.2 | 0.0 | 17.0 | 72.9 | R 16.1 | 0.0 | 0.0 | 0.0 | R 140.8 |
| 1992 | 33.2 | 0.6 | 14.4 | 0.2 | 0.0 | 14.5 | 84.0 | R 16.6 | 0.0 | 0.0 | 0.0 | R 151.7 |
| 1993 | 35.3 | 0.1 | 14.4 | 0.3 | 0.0 | 14.7 | 96.6 | R 19.1 | 0.0 | 0.0 | 0.0 | 168.2 |
| 1994 | 33.3 | 1.3 | 15.2 | 0.2 | 0.0 | 15.3 | 66.2 | R 19.4 | 0.0 | 0.0 | 0.0 | R 139.0 |
| 1995 | 35.3 | 2.3 | 11.1 | 0.3 | 0.0 | 11.4 | 89.3 | R 19.3 | 0.0 | 0.0 | 0.0 | R 161.6 |
| 1996 | 36.0 | (s) | 9.3 | 0.2 | 0.0 | 9.5 | 104.6 | R 24.4 | 0.0 | 0.0 | 0.0 | R 178.5 |
| 1997 | 44.4 | 0.6 | 11.4 | 0.2 | 0.0 | 11.6 | 84.8 | R 23.2 | 0.0 | 0.0 | 0.0 | R 170.9 |
| 1998 | 38.5 | 0.2 | 14.7 | 0.2 | 0.0 | 14.9 | 89.1 | 19.6 | 0.0 | 0.0 | 0.0 | 167.2 |
| 1999 | 35.2 | 0.6 | 16.5 | 0.2 | 0.0 | 16.7 | 92.2 | 13.4 | 0.0 | 0.0 | 0.0 | 163.9 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 197. Energy Consumption Estimates by Source, Selected Years 1960-1999, New Jersey

| Year | Coal (Thousand Short Tons) | Natural Gas (Billion Cubic Feet) | Petroleum — Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power (Million kWh) | Hydroelectric Power (Million kWh) | Wood and Waste | Other | Net Interstate Flow of Electricity/Losses (Million kWh) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | Million kWh | | | Million kWh | |
| 1960 | 6,424 | 139 | 4,657 | 1,147 | 46,051 | 2,125 | 2,468 | 3,213 | 1,879 | 48,706 | 42,854 | R 12,834 | R 165,934 | 0 | 45 | — | — | 4,034 | — |
| 1965 | 9,034 | 210 | 5,340 | 1,153 | 53,611 | 5,280 | 2,096 | 4,268 | 2,052 | 55,149 | 42,900 | R 20,232 | R 192,082 | 0 | -31 | — | — | 5,282 | — |
| 1970 | 4,946 | 323 | 5,828 | 160 | 63,391 | 6,705 | 1,829 | 6,748 | 1,952 | 66,231 | 80,770 | R 24,746 | R 258,360 | 3,454 | -403 | — | — | 5,934 | — |
| 1975 | 2,397 | 244 | 5,012 | 92 | 59,630 | 6,267 | 1,211 | 7,328 | 1,741 | 77,617 | 49,463 | R 25,281 | R 233,642 | 3,146 | -272 | — | — | 70,001 | — |
| 1980 | 2,634 | 340 | 4,369 | 83 | 52,854 | 8,781 | 1,694 | 7,383 | 2,371 | 72,740 | 53,617 | R 29,901 | R 233,792 | 7,627 | -282 | — | — | 74,427 | — |
| 1985 | 3,943 | 379 | 4,733 | 184 | 40,389 | 43,910 | 1,404 | 7,184 | 2,158 | 75,405 | 23,986 | R 22,893 | R 222,246 | 17,770 | -244 | — | — | 68,612 | — |
| 1990 | 3,029 | 428 | 3,586 | 119 | 34,884 | 46,377 | 729 | 4,295 | 2,428 | 78,343 | 15,364 | R 31,916 | R 218,041 | 23,770 | R h -133 | — | — | R 84,169 | — |
| 1991 | 2,326 | 463 | 3,137 | 100 | 33,247 | 43,733 | 615 | 6,066 | 2,172 | 79,704 | 17,673 | R 29,816 | R 216,264 | 24,807 | R -142 | — | — | R 86,635 | — |
| 1992 | 2,348 | 546 | 3,378 | 122 | 33,601 | 46,133 | 820 | 6,594 | 2,214 | 76,633 | 15,949 | R 31,712 | R 217,158 | 21,595 | R -124 | — | — | R 98,308 | — |
| 1993 | 2,353 | 552 | 8,291 | 121 | 34,087 | 48,161 | 519 | 3,722 | 2,255 | 70,463 | 12,813 | R 31,658 | R 212,090 | 24,932 | R -104 | — | — | R 95,259 | — |
| 1994 | 1,969 | 585 | 5,220 | 158 | 37,272 | 48,376 | 1,504 | 3,827 | 2,357 | 81,556 | 13,603 | R 33,215 | R 227,086 | 22,129 | R -146 | — | — | R 102,244 | — |
| 1995 | 2,074 | 591 | 6,151 | 145 | 33,032 | 50,059 | 1,216 | 4,062 | 2,316 | 82,325 | 12,700 | R 32,076 | R 224,082 | 16,806 | R -75 | — | — | R 120,770 | — |
| 1996 | 2,402 | 603 | 5,373 | 114 | 35,912 | 43,002 | 841 | R 3,813 | 2,248 | 86,044 | 9,861 | R 26,011 | R 213,219 | 11,028 | R -93 | — | — | R 144,278 | — |
| 1997 | 2,867 | 621 | 8,214 | 133 | 36,317 | 38,738 | 1,701 | R 4,268 | 2,375 | 88,850 | 9,348 | R 27,284 | R 217,228 | 13,908 | R -117 | — | — | R 128,027 | — |
| 1998 | 2,372 | 582 | 7,620 | 132 | 35,189 | 37,069 | 1,839 | 3,717 | 2,486 | 91,734 | 9,176 | 25,018 | 213,981 | 27,132 | -126 | — | — | 95,384 | — |
| 1999 | 2,596 | 617 | 10,741 | 106 | 37,324 | 36,343 | 1,725 | 7,569 | 2,512 | 91,783 | 9,938 | 25,874 | 223,915 | 28,971 | -128 | — | — | 87,547 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 168.8 | 144.1 | 30.9 | 5.8 | 268.2 | 11.5 | 14.0 | 12.9 | 11.4 | 255.9 | 269.4 | R 76.3 | R 956.3 | 0.0 | 0.5 | 20.0 | 0.0 | 13.8 | R 1,303.5 |
| 1965 | 236.6 | 219.2 | 35.4 | 5.8 | 312.3 | 29.4 | 11.9 | 17.1 | 12.4 | 289.7 | 269.7 | R 115.9 | R 1,099.7 | 0.0 | -0.3 | 24.0 | 0.0 | 18.0 | R 1,597.2 |
| 1970 | 123.3 | 331.2 | 38.7 | 0.8 | 369.3 | 37.5 | 10.4 | 25.5 | 11.8 | 347.9 | 507.8 | R 140.1 | R 1,489.8 | 37.9 | -4.2 | 30.1 | 0.0 | 20.2 | R 2,028.4 |
| 1975 | 60.5 | 251.7 | 33.3 | 0.5 | 347.3 | 35.1 | 6.9 | 27.2 | 10.6 | 407.7 | 311.0 | R 144.1 | R 1,323.6 | 34.6 | -2.8 | 33.8 | 0.0 | 238.8 | R 1,940.2 |
| 1980 | 68.7 | 351.0 | 29.0 | 0.4 | 307.9 | 49.3 | 9.6 | 27.1 | 14.4 | 382.1 | 337.1 | R 168.6 | R 1,325.5 | 83.2 | -2.9 | R 58.4 | 0.0 | 253.9 | R 2,137.9 |
| 1985 | 103.3 | 389.1 | 31.4 | 0.9 | 235.3 | 248.6 | 8.0 | 25.9 | 13.1 | 396.1 | 150.8 | R 128.5 | R 1,238.5 | 192.1 | -2.6 | R 48.8 | 0.0 | 234.1 | R 2,203.4 |
| 1990 | 80.9 | 439.0 | 23.8 | 0.6 | 203.2 | 262.6 | 4.1 | 15.6 | 14.7 | 411.5 | 96.6 | R 178.8 | R 1,211.6 | 253.9 | R h -1.4 | R 23.1 | h 0.4 | R 287.2 | R h 2,294.6 |
| 1991 | 62.0 | 475.5 | 20.8 | 0.5 | 193.7 | 247.0 | 3.5 | 21.9 | 13.2 | 418.7 | 111.1 | R 168.2 | R 1,198.5 | 266.4 | R -1.5 | R 32.0 | R 0.5 | R 295.6 | R 2,329.0 |
| 1992 | 62.8 | 560.5 | 22.4 | 0.6 | 195.7 | 261.2 | 4.7 | 23.9 | 13.4 | 402.6 | 100.3 | R 177.7 | R 1,202.5 | 230.6 | R -1.3 | R 35.0 | R 0.5 | R 335.4 | R 2,426.0 |
| 1993 | 62.7 | 571.8 | 55.0 | 0.6 | 198.6 | 272.8 | 2.9 | 13.4 | 13.7 | 370.1 | 80.6 | R 177.8 | R 1,185.5 | 266.3 | -1.1 | R 37.0 | R 0.5 | R 325.0 | R 2,447.7 |
| 1994 | 52.4 | 607.7 | 34.6 | 0.8 | 217.1 | 274.2 | 8.5 | 13.9 | 14.3 | R 426.5 | 85.5 | R 186.6 | R 1,262.1 | 236.3 | R -1.5 | R 41.6 | R 0.6 | R 348.9 | R 2,548.0 |
| 1995 | 55.0 | 610.9 | 40.8 | 0.7 | 192.4 | 283.8 | 6.9 | 14.7 | 14.0 | R 429.3 | 79.8 | R 180.3 | R 1,242.9 | 179.1 | R -0.8 | R 51.7 | R 0.6 | R 412.1 | R 2,551.5 |
| 1996 | 62.4 | 624.6 | 35.7 | 0.6 | 209.2 | 243.8 | 4.8 | R 13.8 | 13.6 | R 448.8 | 62.0 | R 148.6 | R 1,180.8 | 117.1 | -1.0 | R 46.2 | 0.6 | R 492.3 | R 2,523.1 |
| 1997 | 75.0 | 642.8 | 54.5 | 0.7 | 211.5 | 219.6 | 9.6 | R 15.4 | 14.4 | R 463.2 | 58.8 | R 156.1 | R 1,203.9 | 147.7 | R -1.2 | R 38.3 | 0.6 | R 436.8 | R 2,544.0 |
| 1998 | 62.2 | 603.9 | 50.6 | 0.7 | 205.0 | 210.2 | 10.4 | 13.4 | 15.1 | 478.1 | 57.7 | 142.6 | 1,183.7 | 288.2 | -1.3 | 33.4 | 0.7 | 325.5 | 2,496.2 |
| 1999 | 68.2 | 640.9 | 71.3 | 0.5 | 217.4 | 206.1 | 9.8 | 27.4 | 15.2 | 478.3 | 62.5 | 147.1 | 1,235.6 | 307.8 | -1.3 | 38.2 | 0.7 | 298.7 | 2,588.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours.  R=Revised data.  — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 198. Residential Energy Consumption Estimates, Selected Years 1960-1999, New Jersey

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 255 | 75 | 25,587 | 1,200 | 737 | 27,524 | 353 | — | — | 5,080 | — | 12,635 | — |
| 1965 | 158 | 114 | 29,038 | 969 | 672 | 30,679 | 338 | — | — | 7,410 | — | 17,692 | — |
| 1970 | 90 | 140 | 32,933 | 769 | 834 | 34,536 | 503 | — | — | 12,131 | — | 29,398 | — |
| 1975 | 47 | 129 | 30,655 | 431 | 964 | 32,050 | 550 | — | — | 14,495 | — | 34,964 | — |
| 1980 | 34 | 136 | 23,976 | 262 | 777 | 25,015 | R 1,958 | — | — | 16,329 | — | 39,707 | — |
| 1985 | 62 | 151 | 18,071 | 907 | 918 | 19,896 | 1,331 | — | — | 17,177 | — | 40,356 | — |
| 1990 | 8 | 172 | 11,498 | 295 | 899 | 12,692 | 647 | — | — | 20,498 | — | R 44,841 | — |
| 1991 | 7 | 177 | 11,069 | 329 | 1,108 | 12,505 | 682 | — | — | 21,539 | — | R 46,825 | — |
| 1992 | 8 | 198 | 11,201 | 273 | 1,317 | 12,790 | 717 | — | — | 20,547 | — | R 43,822 | — |
| 1993 | 5 | 196 | 11,535 | 223 | 1,391 | 13,149 | R 765 | — | — | 22,042 | — | R 46,556 | — |
| 1994 | 6 | 217 | 12,340 | 291 | 1,304 | 13,935 | R 750 | — | — | 22,154 | — | R 46,233 | — |
| 1995 | 4 | 194 | 11,647 | 236 | 1,548 | 13,431 | R 833 | — | — | 22,470 | — | R 46,848 | — |
| 1996 | 5 | 223 | 12,344 | 284 | R 1,685 | R 14,312 | R 831 | — | — | 22,632 | — | R 47,166 | — |
| 1997 | 4 | 217 | 11,723 | 292 | R 1,394 | R 13,409 | R 427 | — | — | 22,286 | — | R 46,358 | — |
| 1998 | 3 | 197 | 9,306 | 308 | 1,755 | 11,369 | 377 | — | — | 23,191 | — | 47,907 | — |
| 1999 | 3 | 209 | 9,824 | 270 | 1,876 | 11,970 | 404 | — | — | 24,551 | — | 48,103 | — |

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Trillion Btu | | |
| 1960 | 6.3 | 77.7 | 149.0 | 6.8 | 3.0 | 158.8 | 7.1 | 0.0 | 0.0 | 17.3 | 267.2 | 43.1 | 310.4 |
| 1965 | 3.8 | 119.6 | 169.1 | 5.5 | 2.7 | 177.3 | 6.8 | 0.0 | 0.0 | 25.3 | 332.8 | 60.4 | 393.1 |
| 1970 | 2.1 | 143.9 | 191.8 | 4.4 | 3.2 | 199.3 | 10.1 | 0.0 | 0.0 | 41.4 | 396.8 | 100.3 | 497.1 |
| 1975 | 1.1 | 133.4 | 178.6 | 2.4 | 3.6 | 184.6 | 11.0 | 0.0 | 0.0 | 49.5 | 379.5 | 119.3 | 498.8 |
| 1980 | 0.8 | 140.9 | 139.7 | 1.5 | 2.9 | 144.0 | R 39.2 | 0.0 | 0.0 | 55.7 | R 380.6 | 135.5 | R 516.1 |
| 1985 | 1.4 | 154.3 | 105.3 | 5.1 | 3.3 | 113.7 | 26.6 | 0.0 | 0.0 | 58.6 | 354.6 | 137.7 | 492.3 |
| 1990 | 0.2 | 176.0 | 67.0 | 1.7 | 3.3 | 71.9 | 12.9 | e 0.1 | R e 0.4 | 69.9 | e 331.4 | 153.0 | R e 484.4 |
| 1991 | 0.2 | 181.1 | 64.5 | 1.9 | 4.0 | 70.3 | 13.6 | 0.1 | R 0.4 | 73.5 | R 339.2 | R 159.8 | R 498.9 |
| 1992 | 0.2 | 203.5 | 65.2 | 1.5 | 4.8 | 71.6 | 14.3 | 0.1 | 0.4 | 70.1 | R 360.2 | R 149.5 | R 509.7 |
| 1993 | 0.1 | 202.6 | 67.2 | 1.3 | 5.0 | 73.5 | 15.3 | 0.1 | 0.4 | 75.2 | 367.2 | R 158.8 | 526.1 |
| 1994 | 0.2 | 225.4 | 71.9 | 1.7 | 4.7 | 78.3 | 15.0 | 0.1 | R 0.5 | 75.6 | R 395.0 | 157.7 | R 552.7 |
| 1995 | 0.1 | 201.1 | 67.8 | 1.3 | 5.6 | 74.8 | R 16.7 | 0.1 | R 0.5 | 76.7 | R 369.9 | R 159.8 | R 529.7 |
| 1996 | 0.1 | 230.8 | 71.9 | 1.6 | R 6.1 | R 79.6 | 16.6 | 0.1 | 0.5 | 77.2 | R 405.0 | R 160.9 | R 565.9 |
| 1997 | 0.1 | 224.5 | 68.3 | 1.7 | R 5.0 | R 75.0 | 8.5 | 0.1 | 0.5 | 76.0 | R 384.8 | 158.2 | R 542.9 |
| 1998 | 0.1 | 204.1 | 54.2 | 1.7 | 6.3 | 62.3 | 7.5 | 0.1 | 0.6 | 79.1 | 353.7 | 163.5 | 517.2 |
| 1999 | 0.1 | 217.7 | 57.2 | 1.5 | 6.8 | 65.5 | 8.1 | 0.1 | 0.6 | 83.8 | 375.8 | 164.1 | 539.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 199. Commercial Energy Consumption Estimates, Selected Years 1960-1999, New Jersey

| Year | Coal[a] | Natural Gas[b] | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 197 | 10 | 8,640 | 466 | 130 | 308 | 7,117 | 16,661 | 7 | — | 4,391 | — | 10,922 | — |
| 1965 | 120 | 20 | 9,805 | 377 | 119 | 420 | 7,473 | 18,194 | 6 | — | 6,945 | — | 16,582 | — |
| 1970 | 61 | 56 | 11,121 | 299 | 147 | 613 | 11,415 | 23,595 | 9 | — | 10,799 | — | 26,170 | — |
| 1975 | 32 | 53 | 10,351 | 168 | 170 | 634 | 6,484 | 17,807 | 10 | — | 13,849 | — | 33,405 | — |
| 1980 | 22 | 60 | 9,167 | 39 | 137 | 297 | 10,950 | 20,590 | 47 | — | 16,878 | — | 41,041 | — |
| 1985 | 46 | 83 | 5,638 | 77 | 162 | 660 | 3,128 | 9,665 | R 36 | — | 20,903 | — | 49,109 | — |
| 1990 | 5 | 116 | 6,916 | 178 | 159 | 754 | 1,480 | 9,487 | R 41 | — | 27,201 | — | R 59,504 | — |
| 1991 | 4 | 121 | 6,559 | 192 | 195 | 692 | 1,607 | 9,244 | R 43 | — | 27,992 | — | R 60,853 | — |
| 1992 | 7 | 131 | 6,364 | 389 | 232 | 613 | 1,371 | 8,970 | R 47 | — | 27,764 | — | R 59,215 | — |
| 1993 | 3 | 129 | 5,605 | 160 | 245 | 77 | 1,997 | 8,084 | 61 | — | 28,862 | — | R 60,960 | — |
| 1994 | 4 | 132 | 4,983 | 615 | 230 | 84 | 2,109 | 8,022 | 63 | — | 29,727 | — | R 62,038 | — |
| 1995 | 3 | 139 | 3,357 | 566 | 273 | 78 | 1,257 | 5,531 | 63 | — | 30,170 | — | R 62,903 | — |
| 1996 | 3 | 150 | 5,015 | 243 | R 297 | 77 | 1,303 | R 6,936 | 68 | — | 30,520 | — | R 63,603 | — |
| 1997 | 2 | 169 | 3,515 | 750 | R 246 | 79 | 810 | R 5,399 | R 47 | — | 30,127 | — | R 62,668 | — |
| 1998 | 2 | 147 | 3,121 | 1,084 | 310 | 76 | 520 | 5,112 | 47 | — | 31,489 | — | 65,050 | — |
| 1999 | 2 | 164 | 4,144 | 1,244 | 331 | 75 | 709 | 6,503 | 57 | — | 32,897 | — | 64,455 | — |

### Trillion Btu

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 4.9 | 10.7 | 50.3 | 2.6 | 0.5 | 1.6 | 44.7 | 99.9 | 0.1 | 0.0 | 15.0 | 130.5 | 37.3 | 167.8 |
| 1965 | 2.9 | 21.1 | 57.1 | 2.1 | 0.5 | 2.2 | 47.0 | 108.9 | 0.1 | 0.0 | 23.7 | 156.8 | 56.6 | 213.4 |
| 1970 | 1.4 | 57.4 | 64.8 | 1.7 | 0.6 | 3.2 | 71.8 | 142.0 | 0.2 | 0.0 | 36.8 | 237.9 | 89.3 | 327.2 |
| 1975 | 0.7 | 55.0 | 60.3 | 1.0 | 0.6 | 3.3 | 40.8 | 106.0 | 0.2 | 0.0 | 47.3 | 209.2 | 114.0 | 323.1 |
| 1980 | 0.5 | 62.5 | 53.4 | 0.2 | 0.5 | 1.6 | 68.8 | 124.5 | 0.9 | 0.0 | 57.6 | 246.0 | 140.0 | 386.1 |
| 1985 | 1.1 | 85.3 | 32.8 | 0.4 | 0.6 | 3.5 | 19.7 | 57.0 | R 0.7 | 0.0 | 71.3 | R 215.4 | 167.6 | R 383.0 |
| 1990 | 0.1 | 118.5 | 40.3 | 1.0 | 0.6 | 4.0 | 9.3 | 55.1 | R 0.8 | e 0.0 | 92.8 | R e 267.4 | 203.0 | R e 470.4 |
| 1991 | 0.1 | 124.3 | 38.2 | 1.1 | 0.7 | 3.6 | 10.1 | 53.7 | R 0.9 | 0.0 | 95.5 | R 274.5 | R 207.6 | R 482.1 |
| 1992 | 0.2 | 134.2 | 37.1 | 2.2 | 0.8 | 3.2 | 8.6 | 52.0 | R 0.9 | 0.0 | 94.7 | R 282.0 | R 202.0 | R 484.0 |
| 1993 | 0.1 | 133.6 | 32.6 | 0.9 | 0.9 | 0.4 | 12.6 | 47.4 | 1.2 | 0.0 | 98.5 | 280.8 | R 208.0 | 488.8 |
| 1994 | 0.1 | 137.2 | 29.0 | 3.5 | 0.8 | 0.4 | 13.3 | 47.1 | 1.3 | 0.0 | 101.4 | 287.0 | 211.7 | 498.7 |
| 1995 | 0.1 | 143.7 | 19.6 | 3.2 | 1.0 | 0.4 | 7.9 | 32.1 | 1.3 | 0.0 | 102.9 | 280.1 | R 214.6 | R 494.7 |
| 1996 | 0.1 | 156.0 | 29.2 | 1.4 | R 1.1 | 0.4 | 8.2 | R 40.3 | 1.4 | 0.0 | 104.1 | R 301.8 | R 217.0 | R 518.8 |
| 1997 | 0.1 | 174.6 | 20.5 | 4.3 | R 0.9 | 0.4 | 5.1 | R 31.1 | R 0.9 | 0.0 | 102.8 | R 309.6 | R 213.8 | 523.4 |
| 1998 | (s) | 152.2 | 18.2 | 6.1 | 1.1 | 0.4 | 3.3 | 29.1 | 0.9 | 0.0 | 107.4 | 289.7 | 221.9 | 511.7 |
| 1999 | (s) | 170.2 | 24.1 | 7.1 | 1.2 | 0.4 | 4.5 | 37.2 | 1.1 | 0.0 | 112.2 | 320.9 | 219.9 | 540.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 200.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, New Jersey**

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | | | | Thousand Barrels | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 2,368 | 28 | 4,657 | 6,719 | 802 | 2,340 | 1,194 | 612 | 18,822 | R 12,834 | R 47,980 | 10 | — | — | 8,021 | — | 19,952 | — |
| 1965 | 1,921 | 52 | 5,340 | 8,423 | 750 | 3,438 | 1,433 | 532 | 17,049 | R 20,232 | R 57,196 | 4 | — | — | 11,519 | — | 27,503 | — |
| 1970 | 740 | 80 | 5,828 | 9,560 | 761 | 5,665 | 1,379 | 401 | 22,609 | R 24,746 | R 70,948 | 4 | — | — | 15,215 | — | 36,872 | — |
| 1975 | 67 | 52 | 5,012 | 7,963 | 612 | 6,096 | 1,136 | 233 | 14,809 | R 25,281 | R 61,142 | 4 | — | — | 14,562 | — | 35,126 | — |
| 1980 | 33 | 63 | 4,369 | 7,339 | 1,393 | 6,429 | 1,658 | 147 | 17,694 | R 29,901 | R 68,931 | 3 | — | — | 16,345 | — | 39,745 | — |
| 1985 | 359 | 81 | 4,733 | 2,539 | 420 | 5,994 | 1,509 | 462 | 4,851 | R 22,893 | R 43,401 | 3 | — | — | 15,657 | — | 36,784 | — |
| 1990 | 276 | 90 | 3,586 | 2,907 | 256 | 3,163 | 1,698 | 460 | 3,673 | R 31,916 | R 47,658 | R f 17 | — | — | 15,041 | — | R 32,903 | — |
| 1991 | 234 | 101 | 3,137 | 2,529 | 95 | 4,693 | 1,519 | 420 | 3,146 | R 29,816 | R 45,356 | R 14 | — | — | 15,031 | — | R 32,677 | — |
| 1992 | 215 | 175 | 3,378 | 2,001 | 158 | 4,969 | 1,549 | 423 | 3,114 | R 31,712 | R 47,305 | R 15 | — | — | 14,687 | — | R 31,325 | — |
| 1993 | 222 | 189 | 8,291 | 2,074 | 136 | 2,005 | 1,577 | 542 | 2,615 | R 31,658 | R 48,900 | R 20 | — | — | 14,596 | — | R 30,829 | — |
| 1994 | 72 | 191 | 5,220 | 2,228 | 597 | 2,157 | 1,648 | 556 | 2,527 | R 33,215 | R 48,149 | R 21 | — | — | 14,251 | — | R 29,741 | — |
| 1995 | 13 | 209 | 6,151 | 1,931 | 414 | 2,172 | 1,620 | 602 | 1,930 | R 32,076 | R 46,897 | R 20 | — | — | 13,989 | — | R 29,166 | — |
| 1996 | 7 | 201 | 5,373 | 1,954 | 314 | R 1,773 | 1,572 | 597 | 1,689 | R 26,011 | R 39,284 | R 21 | — | — | 13,603 | — | R 28,348 | — |
| 1997 | 10 | 202 | 8,214 | 1,846 | 658 | R 2,523 | 1,661 | 628 | 1,384 | R 27,284 | R 44,198 | R 12 | — | — | 13,369 | — | R 27,809 | — |
| 1998 | 10 | 205 | 7,620 | 2,041 | 447 | 1,599 | 1,739 | 509 | 909 | 25,018 | 39,882 | 21 | — | — | 13,339 | — | 27,556 | — |
| 1999 | 8 | 207 | 10,741 | 2,088 | 211 | 5,352 | 1,757 | 242 | 760 | 25,874 | 47,026 | 17 | — | — | 13,121 | — | 25,709 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 61.2 | 28.7 | 30.9 | 39.1 | 4.5 | 9.4 | 7.2 | 3.2 | 118.3 | R 76.3 | R 289.1 | 0.1 | 12.8 | 0.0 | 27.4 | R 419.3 | 68.1 | R 487.4 |
| 1965 | 49.0 | 54.6 | 35.4 | 49.1 | 4.3 | 13.8 | 8.7 | 2.8 | 107.2 | R 115.9 | R 337.1 | (s) | 17.1 | 0.0 | 39.3 | R 497.2 | 93.8 | R 591.1 |
| 1970 | 18.6 | 81.9 | 38.7 | 55.7 | 4.3 | 21.4 | 8.4 | 2.1 | 142.1 | R 140.1 | R 412.8 | (s) | 19.9 | 0.0 | 51.9 | R 585.2 | 125.8 | R 711.0 |
| 1975 | 1.6 | 54.0 | 33.3 | 46.4 | 3.5 | 22.6 | 6.9 | 1.2 | 93.1 | R 144.1 | R 351.1 | (s) | 22.6 | 0.0 | 49.7 | R 478.9 | 119.9 | R 598.7 |
| 1980 | 0.8 | 64.9 | 29.0 | 42.7 | 7.9 | 23.6 | 10.1 | 0.8 | 111.2 | R 168.6 | R 394.0 | (s) | R 18.3 | 0.0 | 55.8 | R 533.8 | 135.6 | R 669.4 |
| 1985 | 8.8 | 83.0 | 31.4 | 14.8 | 2.4 | 21.6 | 9.2 | 2.4 | 30.5 | R 128.5 | R 240.8 | (s) | R 21.5 | 0.0 | 53.4 | R 407.5 | 125.5 | R 533.0 |
| 1990 | 7.0 | 92.7 | 23.8 | 16.9 | 1.5 | 11.5 | 10.3 | 2.4 | 23.1 | R 178.8 | R 268.2 | R f 0.2 | R 9.3 | f 0.0 | 51.3 | R f 428.7 | R 112.3 | R f 541.0 |
| 1991 | 5.9 | 103.3 | 20.8 | 14.7 | 0.5 | 17.0 | 9.2 | 2.2 | 19.8 | R 168.2 | R 252.4 | R 0.1 | R 17.5 | 0.0 | 51.3 | R 430.6 | R 111.5 | R 542.1 |
| 1992 | 5.4 | 179.0 | 22.4 | 11.7 | 0.9 | 18.0 | 9.4 | 2.2 | 19.6 | R 177.7 | R 261.9 | 0.2 | R 19.7 | 0.0 | 50.1 | R 516.3 | R 106.9 | R 623.2 |
| 1993 | 5.6 | 195.7 | 55.0 | 12.1 | 0.8 | 7.2 | 9.6 | 2.8 | 16.4 | R 177.8 | R 281.7 | 0.2 | R 20.4 | 0.0 | 49.8 | R 553.5 | 105.2 | R 658.7 |
| 1994 | 1.8 | 198.3 | 34.6 | 13.0 | 3.4 | 7.8 | 10.0 | 2.9 | 15.9 | R 186.6 | R 274.2 | 0.2 | R 25.3 | 0.0 | 48.6 | R 548.6 | 101.5 | R 650.0 |
| 1995 | 0.3 | 216.2 | 40.8 | 11.2 | 2.3 | 7.9 | 9.8 | R 3.1 | 12.1 | R 180.3 | R 227.6 | R 0.2 | R 33.8 | 0.0 | 47.7 | R 565.5 | R 99.5 | R 665.3 |
| 1996 | 0.2 | 208.3 | 35.7 | 11.4 | 1.8 | 6.4 | 9.5 | 3.1 | 10.6 | R 148.6 | R 227.1 | 0.2 | R 28.2 | 0.0 | 46.4 | R 510.4 | R 96.7 | R 607.1 |
| 1997 | 0.3 | 209.5 | 54.5 | 10.8 | 3.7 | R 9.1 | 10.1 | 3.3 | 8.7 | R 156.1 | R 256.2 | R 0.1 | R 28.9 | 0.0 | 45.6 | R 540.6 | R 94.9 | R 635.5 |
| 1998 | 0.2 | 212.5 | 50.6 | 11.9 | 2.5 | 5.8 | 10.5 | 2.7 | 5.7 | 142.6 | 232.3 | 0.2 | 24.9 | 0.0 | 45.5 | 515.6 | 94.0 | 609.7 |
| 1999 | 0.2 | 215.1 | 71.3 | 12.2 | 1.2 | 19.4 | 10.7 | 1.3 | 4.8 | 147.1 | 267.8 | 0.2 | 29.0 | 0.0 | 44.8 | 557.0 | 87.7 | 644.7 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."

d "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.

e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours.  — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 201.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, New Jersey

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 40 | 1 | 1,147 | 4,748 | 2,125 | 6 | 685 | 47,786 | 5,754 | 62,252 | 0 | 4 | — | 9 | — |
| 1965 | 6 | (s) | 1,153 | 5,964 | 5,280 | 40 | 619 | 54,198 | 6,431 | 73,684 | 0 | 4 | — | 10 | — |
| 1970 | 1 | 1 | 160 | 8,558 | 6,705 | 102 | 574 | 65,217 | 9,081 | 90,396 | 0 | 39 | — | 95 | — |
| 1975 | (s) | (s) | 92 | 8,907 | 5,777 | 98 | 605 | 76,750 | 4,246 | 96,475 | 0 | 43 | — | 105 | — |
| 1980 | 0 | (s) | 83 | 10,243 | 8,088 | 40 | 713 | 72,296 | 12,053 | 103,516 | 0 | 33 | — | 80 | — |
| 1985 | 0 | 2 | 184 | 13,470 | 43,910 | 111 | 649 | 74,283 | 11,010 | 143,615 | e 0 | 95 | — | 224 | — |
| 1990 | 0 | 3 | 119 | 12,950 | 46,377 | 75 | 730 | 77,129 | 7,374 | 144,754 | R 0 | 117 | — | 256 | — |
| 1991 | 0 | 3 | 100 | 12,515 | 43,733 | 69 | 653 | 78,592 | 10,203 | 145,866 | R 0 | 120 | — | 261 | — |
| 1992 | 0 | 4 | 122 | 13,718 | 46,133 | 76 | 666 | 75,597 | 9,688 | 146,000 | R 0 | 124 | — | 264 | — |
| 1993 | 0 | 3 | 121 | 14,486 | 48,161 | 80 | 678 | 69,845 | 6,492 | 139,863 | R 27 | 121 | — | 256 | — |
| 1994 | 0 | 3 | 158 | 17,082 | 48,376 | 135 | 708 | 80,915 | 6,376 | 153,751 | R 95 | 126 | — | 262 | — |
| 1995 | 0 | 2 | 145 | 15,732 | 50,059 | 69 | 696 | 81,644 | 8,174 | 156,519 | R 292 | 125 | — | R 261 | — |
| 1996 | 0 | 3 | 114 | 16,176 | 43,002 | R 58 | 676 | 85,370 | 6,111 | R 151,506 | R 246 | 135 | — | 281 | — |
| 1997 | 0 | 3 | 133 | 18,882 | 38,738 | R 106 | 714 | 88,143 | 6,802 | R 153,517 | R 279 | 132 | — | 274 | — |
| 1998 | 0 | 3 | 132 | 20,302 | 37,069 | 53 | 747 | 91,149 | 7,080 | 156,532 | 219 | 143 | — | 295 | — |
| 1999 | 0 | 4 | 106 | 20,755 | 36,343 | 10 | 755 | 91,466 | 7,778 | 157,212 | 187 | 134 | — | 263 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 1.0 | 0.6 | 5.8 | 27.7 | 11.5 | (s) | 4.2 | 251.0 | 36.2 | 336.3 | 0.0 | (s) | 337.9 | (s) | 338.0 |
| 1965 | 0.2 | 0.5 | 5.8 | 34.7 | 29.4 | 0.2 | 3.8 | 284.7 | 40.4 | 399.0 | 0.0 | (s) | 399.6 | (s) | 399.7 |
| 1970 | (s) | 1.0 | 0.8 | 49.8 | 37.5 | 0.4 | 3.5 | 342.6 | 57.1 | 491.7 | 0.0 | 0.1 | 492.8 | 0.3 | 493.1 |
| 1975 | (s) | 0.4 | 0.5 | 51.9 | 32.3 | 0.4 | 3.7 | 403.2 | 26.7 | 518.6 | 0.0 | 0.1 | 519.1 | 0.4 | 519.5 |
| 1980 | 0.0 | 0.5 | 0.4 | 59.7 | 45.4 | 0.1 | 4.3 | 379.8 | 75.8 | 565.5 | 0.0 | 0.1 | 566.1 | 0.3 | 566.3 |
| 1985 | 0.0 | 2.3 | 0.9 | 78.5 | 248.6 | 0.4 | 3.9 | 390.2 | 69.2 | 791.7 | e 0.0 | 0.3 | e 794.3 | 0.8 | e 795.1 |
| 1990 | 0.0 | 2.7 | 0.6 | 75.4 | 262.6 | 0.3 | 4.4 | 405.2 | 46.4 | 794.9 | R 0.0 | 0.4 | 797.9 | 0.9 | 798.8 |
| 1991 | 0.0 | 3.0 | 0.5 | 72.9 | 247.0 | 0.3 | 4.0 | 412.8 | 64.1 | 801.6 | R 0.0 | 0.4 | 805.0 | 0.9 | 805.9 |
| 1992 | 0.0 | 3.7 | 0.6 | 79.9 | 261.2 | 0.3 | 4.0 | 397.1 | 60.9 | 804.0 | R 0.0 | 0.4 | 808.1 | 0.9 | 809.0 |
| 1993 | 0.0 | 3.0 | 0.6 | 84.4 | 272.8 | 0.3 | 4.1 | 366.9 | 40.8 | 769.9 | 0.1 | 0.4 | 773.3 | 0.9 | 774.2 |
| 1994 | 0.0 | 2.6 | 0.8 | 99.5 | 274.2 | 0.5 | 4.3 | R 423.2 | 40.1 | R 842.6 | 0.3 | 0.4 | R 845.6 | 0.9 | R 846.5 |
| 1995 | 0.0 | 2.6 | 0.7 | 91.6 | 283.8 | 0.2 | 4.2 | R 425.8 | 51.4 | R 857.8 | R 1.0 | 0.4 | R 860.8 | 0.9 | R 861.7 |
| 1996 | 0.0 | 3.2 | 0.6 | 94.2 | 243.8 | 0.2 | 4.1 | R 445.3 | 38.4 | R 826.6 | R 0.9 | 0.5 | R 830.3 | 1.0 | R 831.3 |
| 1997 | 0.0 | 3.5 | 0.7 | 110.0 | 219.6 | R 0.4 | 4.3 | R 459.5 | 42.8 | R 837.3 | R 1.0 | 0.5 | R 841.2 | 0.9 | R 842.2 |
| 1998 | 0.0 | 2.8 | 0.7 | 118.3 | 210.2 | 0.2 | 4.5 | 475.1 | 44.5 | 853.4 | 0.8 | 0.5 | 856.7 | 1.0 | 857.7 |
| 1999 | 0.0 | 4.3 | 0.5 | 120.9 | 206.1 | (s) | 4.6 | 476.6 | 48.9 | 857.6 | 0.7 | 0.5 | 862.4 | 0.9 | 863.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 202.   Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, New Jersey

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 3,565 | 25 | 11,160 | 357 | 0 | 11,518 | 0 | 35 | 0 | 0 | 0 | — |
| 1965 | 6,829 | 22 | 11,947 | 382 | 0 | 12,329 | 0 | -35 | 0 | 0 | 0 | — |
| 1970 | 4,054 | 46 | 37,665 | 1,220 | 0 | 38,885 | 3,454 | -407 | 0 | 0 | 0 | — |
| 1975 | 2,250 | 9 | 23,924 | 2,244 | 0 | 26,168 | 3,146 | -276 | 0 | 0 | 0 | — |
| 1980 | 2,545 | 80 | 12,919 | 2,821 | 0 | 15,740 | 7,627 | -286 | 0 | 0 | 0 | — |
| 1985 | 3,476 | 61 | 4,997 | 671 | 0 | 5,668 | 17,770 | -247 | 0 | 0 | 0 | — |
| 1990 | 2,740 | 48 | 2,836 | 613 | 0 | 3,450 | 23,770 | -150 | 0 | 0 | 0 | — |
| 1991 | 2,081 | 62 | 2,717 | 576 | 0 | 3,293 | 24,807 | -155 | 0 | 0 | 0 | — |
| 1992 | 2,118 | 39 | 1,775 | 317 | 0 | 2,092 | 21,595 | -138 | 0 | 0 | 0 | — |
| 1993 | 2,123 | 36 | 1,708 | 387 | 0 | 2,095 | 24,932 | -123 | 0 | 0 | 0 | — |
| 1994 | 1,887 | 43 | 2,590 | 639 | 0 | 3,229 | 22,129 | -167 | 0 | 0 | 0 | — |
| 1995 | 2,054 | 46 | 1,339 | 366 | 0 | 1,704 | 16,806 | -95 | 0 | 0 | 0 | — |
| 1996 | 2,387 | 26 | 759 | 423 | 0 | 1,182 | 11,028 | -114 | 0 | 0 | 0 | — |
| 1997 | 2,851 | 30 | 352 | 352 | 0 | 705 | 13,908 | -130 | 0 | 0 | 0 | — |
| 1998 | 2,357 | 31 | 668 | 418 | 0 | 1,085 | 27,132 | -146 | 0 | 0 | 0 | — |
| 1999 | 2,583 | 33 | 691 | 513 | 0 | 1,205 | 28,971 | -145 | 0 | 0 | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | |
| 1960 | 95.4 | 26.4 | 70.2 | 2.1 | 0.0 | 72.2 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 194.4 |
| 1965 | 180.7 | 23.4 | 75.1 | 2.2 | 0.0 | 77.3 | 0.0 | -0.4 | 0.0 | 0.0 | 0.0 | 281.1 |
| 1970 | 101.1 | 47.1 | 236.8 | 7.1 | 0.0 | 243.9 | 37.9 | -4.3 | 0.0 | 0.0 | 0.0 | 425.8 |
| 1975 | 57.2 | 8.8 | 150.4 | 13.0 | 0.0 | 163.4 | 34.6 | -2.9 | 0.0 | 0.0 | 0.0 | 261.2 |
| 1980 | 66.6 | 82.2 | 81.2 | 16.3 | 0.0 | 97.5 | 83.2 | -3.0 | 0.0 | 0.0 | 0.0 | 326.6 |
| 1985 | 92.0 | 64.2 | 31.4 | 3.9 | 0.0 | 35.3 | 192.1 | -2.6 | 0.0 | 0.0 | 0.0 | 381.1 |
| 1990 | 73.6 | 49.1 | 17.8 | 3.6 | 0.0 | 21.4 | 253.9 | -1.6 | 0.0 | 0.0 | 0.0 | 396.4 |
| 1991 | 55.8 | 63.9 | 17.1 | 3.4 | 0.0 | 20.4 | 266.4 | -1.6 | 0.0 | 0.0 | 0.0 | 404.9 |
| 1992 | 57.0 | 40.1 | 11.2 | 1.8 | 0.0 | 13.0 | 230.6 | -1.4 | 0.0 | 0.0 | 0.0 | 339.3 |
| 1993 | 56.9 | 36.8 | 10.7 | 2.3 | 0.0 | 13.0 | 266.3 | -1.3 | 0.0 | 0.0 | 0.0 | 371.8 |
| 1994 | 50.4 | 44.1 | 16.3 | 3.7 | 0.0 | 20.0 | 236.3 | -1.7 | 0.0 | 0.0 | 0.0 | 349.0 |
| 1995 | 54.6 | 47.3 | 8.4 | 2.1 | 0.0 | 10.5 | 179.1 | -1.0 | 0.0 | 0.0 | 0.0 | 290.6 |
| 1996 | 62.0 | 26.3 | 4.8 | 2.5 | 0.0 | 7.2 | 117.1 | -1.2 | 0.0 | 0.0 | 0.0 | 211.6 |
| 1997 | 74.6 | 30.6 | 2.2 | 2.1 | 0.0 | 4.3 | 147.7 | -1.3 | 0.0 | 0.0 | 0.0 | 255.9 |
| 1998 | 61.8 | 32.4 | 4.2 | 2.4 | 0.0 | 6.6 | 288.2 | -1.5 | 0.0 | 0.0 | 0.0 | 387.6 |
| 1999 | 67.9 | 33.7 | 4.3 | 3.0 | 0.0 | 7.3 | 307.8 | -1.5 | 0.0 | 0.0 | 0.0 | 415.2 |

a  Includes supplemental gaseous fuels.

b  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c  Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d  Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f  "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g  If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

— =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 203. Energy Consumption Estimates by Source, Selected Years 1960-1999, New Mexico

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power Million kWh | Hydroelectric Power [d] Million kWh | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 174 | 200 | 964 | 201 | 3,067 | 2,186 | 485 | 3,014 | 226 | 9,555 | 191 | R 437 | R 20,325 | 0 | 69 | — | — | 951 | — |
| 1965 | 2,450 | 202 | 1,388 | 239 | 3,895 | 2,530 | 376 | 3,334 | 237 | 10,806 | 699 | R 624 | R 24,127 | 0 | 43 | — | — | -14,477 | — |
| 1970 | 5,529 | 270 | 1,208 | 111 | 5,410 | 3,110 | 994 | 4,413 | 270 | 13,146 | 220 | R 717 | R 29,601 | 0 | 66 | — | — | -27,673 | — |
| 1975 | 7,425 | 240 | 1,632 | 81 | 6,717 | 2,667 | 654 | 3,865 | 317 | 16,493 | 3,046 | R 1,482 | R 36,955 | 0 | 63 | — | — | -39,258 | — |
| 1980 | 11,458 | 222 | 1,138 | 167 | 7,967 | 2,673 | 1,339 | 4,710 | 332 | 16,913 | 1,033 | R 1,664 | R 37,937 | 0 | 94 | — | — | -46,980 | — |
| 1985 | 14,589 | 151 | 1,501 | 95 | 8,517 | 2,873 | 191 | 3,002 | 302 | 17,905 | 825 | R 987 | R 36,196 | 0 | 128 | — | — | -47,212 | — |
| 1990 | 15,111 | 239 | 1,451 | 86 | 9,127 | 2,912 | 56 | 7,943 | 340 | 18,647 | 149 | R 1,574 | R 42,284 | 0 | R h 205 | — | — | R -44,906 | — |
| 1991 | 12,858 | 219 | 1,525 | 94 | 9,435 | 2,441 | 65 | 11,735 | 304 | 19,148 | 129 | R 1,796 | R 46,670 | 0 | R 237 | — | — | R -32,774 | — |
| 1992 | 14,832 | 203 | 1,874 | 94 | 9,980 | 2,834 | 23 | 10,457 | 310 | 19,432 | 130 | R 2,091 | R 47,223 | 0 | R 255 | — | — | R -40,446 | — |
| 1993 | 15,012 | 216 | 2,438 | 71 | 8,234 | 3,303 | 17 | 9,616 | 315 | 20,394 | 184 | R 2,008 | R 46,580 | 0 | R 294 | — | — | R -41,562 | — |
| 1994 | 15,374 | 221 | 2,114 | 62 | 7,278 | 2,576 | 11 | 8,767 | 330 | 20,806 | 179 | R 2,097 | R 44,220 | 0 | R 213 | — | — | R -42,500 | — |
| 1995 | 15,221 | 215 | 1,859 | 53 | 4,739 | 2,222 | 16 | 8,191 | 324 | 21,014 | 182 | R 2,003 | R 40,603 | 0 | R 264 | — | — | R -39,893 | — |
| 1996 | 15,297 | 222 | 1,648 | R 101 | 9,960 | 1,615 | 17 | R 2,015 | 314 | 20,247 | 198 | R 4,490 | R 40,605 | 0 | R 211 | — | — | R -37,944 | — |
| 1997 | 15,887 | R 250 | 1,233 | R 102 | 10,247 | 1,751 | 14 | R 2,667 | 332 | 21,505 | 162 | R 4,723 | R 42,736 | 0 | R 259 | — | — | R -40,819 | — |
| 1998 | 15,963 | 239 | 2,048 | 61 | 11,047 | 2,196 | 17 | 2,801 | 348 | 21,918 | 144 | 4,420 | 45,001 | 0 | 236 | — | — | -41,188 | — |
| 1999 | 16,303 | 229 | 1,902 | 70 | 12,050 | 2,723 | 47 | 4,115 | 351 | 22,189 | 169 | 4,418 | 48,035 | 0 | 243 | — | — | -44,880 | — |
| | | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 4.1 | 207.3 | 6.4 | 1.0 | 17.9 | 11.7 | 2.7 | 12.1 | 1.4 | 50.2 | 1.2 | R 2.6 | R 107.2 | 0.0 | 0.7 | 6.6 | 0.0 | 3.2 | R 329.2 |
| 1965 | 44.3 | 224.3 | 9.2 | 1.2 | 22.7 | 13.7 | 2.1 | 13.4 | 1.4 | 56.8 | 4.4 | R 3.7 | R 128.6 | 0.0 | 0.4 | 5.6 | 0.0 | -49.4 | R 353.8 |
| 1970 | 99.4 | 292.5 | 8.0 | 0.6 | 31.5 | 17.0 | 5.6 | 16.7 | 1.6 | 69.1 | 1.4 | R 4.3 | R 155.8 | 0.0 | 0.7 | 4.9 | 0.0 | -94.4 | R 458.8 |
| 1975 | 132.5 | 255.6 | 10.8 | 0.4 | 39.1 | 14.6 | 3.7 | 14.4 | 1.9 | 86.6 | 19.1 | R 8.9 | R 199.7 | 0.0 | 0.7 | 5.3 | 0.0 | -133.9 | R 459.9 |
| 1980 | 202.9 | 231.3 | 7.6 | 0.8 | 46.4 | 14.6 | 7.6 | 17.3 | 2.0 | 88.8 | 6.5 | R 10.0 | R 201.6 | 0.0 | 1.0 | 5.2 | 0.0 | -160.3 | R 481.7 |
| 1985 | 268.4 | 162.3 | 10.0 | 0.5 | 49.6 | 15.7 | 1.1 | 10.8 | 1.8 | 94.1 | 5.2 | R 6.1 | R 194.8 | 0.0 | 1.3 | R 7.2 | 0.0 | -161.1 | 473.0 |
| 1990 | 275.7 | 251.4 | 9.6 | 0.4 | 53.2 | 16.0 | 0.3 | 28.8 | 2.1 | 98.0 | 0.9 | R 9.4 | R 218.7 | 0.0 | h 2.1 | R 3.8 | R h 0.7 | -153.2 | R h 599.2 |
| 1991 | 234.0 | 227.3 | 10.1 | 0.5 | 55.0 | 13.5 | 0.4 | 42.4 | 1.8 | 100.6 | 0.8 | R 10.7 | R 235.8 | 0.0 | 2.5 | 3.9 | R 0.7 | R -111.8 | R 592.3 |
| 1992 | 267.5 | 211.0 | 12.4 | 0.5 | 58.1 | 15.6 | 0.1 | 37.9 | 1.9 | 102.1 | 0.8 | R 12.4 | R 241.8 | 0.0 | 2.6 | R 4.2 | R 0.7 | R -138.0 | R 589.8 |
| 1993 | 270.2 | 224.9 | 16.2 | 0.4 | 48.0 | 18.3 | 0.1 | 34.7 | 1.9 | 107.1 | 1.2 | R 11.9 | R 239.7 | 0.0 | 3.0 | R 4.0 | R 0.7 | -141.8 | R 600.8 |
| 1994 | 278.3 | 221.4 | 14.0 | 0.3 | 42.4 | 14.6 | 0.1 | 31.9 | 2.0 | R 108.8 | 1.1 | R 12.4 | R 227.6 | 0.0 | 2.2 | R 4.0 | R 0.8 | -145.0 | R 589.3 |
| 1995 | 275.3 | 219.4 | 12.3 | 0.3 | 27.6 | 12.6 | 0.1 | 29.7 | 2.0 | R 109.6 | 1.1 | R 11.9 | R 207.1 | 0.0 | 2.7 | R 4.4 | R 0.8 | R -136.1 | R 573.6 |
| 1996 | 279.2 | 228.2 | 10.9 | 0.5 | 58.0 | 9.2 | 0.1 | R 7.3 | 1.9 | R 105.6 | 1.2 | R 25.3 | R 220.1 | 0.0 | 2.2 | R 4.4 | R 0.8 | R -129.5 | R 605.3 |
| 1997 | 288.4 | R 254.4 | 8.2 | 0.5 | 59.7 | 9.9 | 0.1 | R 9.6 | 2.0 | R 112.1 | 1.0 | R 26.7 | R 229.8 | 0.0 | 2.7 | R 4.6 | 0.7 | -139.3 | R 641.4 |
| 1998 | 290.2 | 235.1 | 13.6 | 0.3 | 64.3 | 12.5 | 0.1 | 10.1 | 2.1 | 114.2 | 0.9 | 24.9 | 243.1 | 0.0 | 2.4 | 3.8 | 0.7 | -140.5 | 634.9 |
| 1999 | 298.0 | 224.7 | 12.6 | 0.4 | 70.2 | 15.4 | 0.3 | 14.9 | 2.1 | 115.6 | 1.1 | 24.8 | 257.4 | 0.0 | 2.5 | 4.4 | 1.2 | -153.1 | 635.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 204.  Residential Energy Consumption Estimates, Selected Years 1960-1999, New Mexico

| Year | Coal a Thousand Short Tons | Natural Gas b Billion Cubic Feet | Petroleum Distillate Fuel a | Kerosene a | LPG a | Total | Wood Thousand Cords | Geothermal | Solar c | Electricity a Million Kilowatthours | Net Energy | Electrical System Energy Losses d Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 15 | 20 | 3 | 17 | 1,441 | 1,461 | 287 | — | — | 872 | — | 2,169 | — |
| 1965 | 4 | 24 | 2 | 14 | 1,518 | 1,534 | 234 | — | — | 988 | — | 2,360 | — |
| 1970 | (s) | 31 | 3 | 29 | 2,004 | 2,036 | 202 | — | — | 1,475 | — | 3,574 | — |
| 1975 | 0 | 28 | 5 | 27 | 1,270 | 1,301 | 210 | — | — | 1,957 | — | 4,720 | — |
| 1980 | 15 | 29 | 11 | 132 | 1,209 | 1,352 | 196 | — | — | 2,453 | — | 5,965 | — |
| 1985 | 3 | 22 | 21 | 41 | 2,091 | 2,153 | 281 | — | — | 3,098 | — | 7,279 | — |
| 1990 | 2 | 28 | 12 | 4 | 1,705 | 1,721 | 157 | — | — | 3,566 | — | R 7,800 | — |
| 1991 | 3 | 30 | 9 | 6 | 1,349 | 1,364 | 165 | — | — | 3,665 | — | R 7,968 | — |
| 1992 | 3 | 31 | 14 | 5 | 1,096 | 1,115 | 174 | — | — | 3,791 | — | R 8,086 | — |
| 1993 | 4 | 32 | 6 | 4 | 808 | 818 | 163 | — | — | 3,884 | — | R 8,204 | — |
| 1994 | 3 | 31 | 8 | 3 | 772 | 784 | 160 | — | — | 4,080 | — | R 8,514 | — |
| 1995 | 3 | 29 | 2 | 6 | 860 | 868 | 178 | — | — | 4,124 | — | R 8,598 | — |
| 1996 | 3 | 34 | 2 | 7 | 853 | 862 | R 177 | — | — | 4,328 | — | R 9,021 | — |
| 1997 | 3 | 37 | 2 | 5 | R 1,085 | R 1,093 | R 182 | — | — | 4,502 | — | R 9,365 | — |
| 1998 | 3 | 36 | 1 | 6 | 1,593 | 1,600 | 160 | — | — | 4,642 | — | 9,589 | — |
| 1999 | 2 | 36 | 20 | 23 | 2,045 | 2,088 | 172 | — | — | 4,649 | — | 9,109 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.3 | 21.1 | (s) | 0.1 | 5.8 | 5.9 | 5.7 | 0.0 | 0.0 | 3.0 | 36.0 | 7.4 | 43.4 |
| 1965 | 0.1 | 26.9 | (s) | 0.1 | 6.1 | 6.2 | 4.7 | 0.0 | 0.0 | 3.4 | 41.2 | 8.1 | 49.2 |
| 1970 | (s) | 33.3 | (s) | 0.2 | 7.6 | 7.8 | 4.0 | 0.0 | 0.0 | 5.0 | 50.2 | 12.2 | 62.4 |
| 1975 | 0.0 | 29.9 | (s) | 0.2 | 4.7 | 4.9 | 4.2 | 0.0 | 0.0 | 6.7 | 45.7 | 16.1 | 61.8 |
| 1980 | 0.3 | 29.9 | 0.1 | 0.7 | 4.4 | 5.3 | 3.9 | 0.0 | 0.0 | 8.4 | 47.8 | 20.4 | 68.1 |
| 1985 | 0.1 | 23.9 | 0.1 | 0.2 | 7.5 | 7.9 | 5.6 | 0.0 | 0.0 | 10.6 | 48.0 | 24.8 | 72.9 |
| 1990 | (s) | 29.7 | 0.1 | (s) | 6.2 | 6.3 | 3.1 | e (s) | R e 0.6 | 12.2 | R e 51.9 | 26.6 | e 78.5 |
| 1991 | 0.1 | 31.0 | (s) | (s) | 4.9 | 5.0 | 3.3 | (s) | R 0.6 | 12.5 | 52.4 | 27.2 | 79.6 |
| 1992 | 0.1 | 32.8 | 0.1 | (s) | 4.0 | 4.1 | 3.5 | (s) | R 0.6 | 12.9 | 53.9 | 27.6 | 81.5 |
| 1993 | 0.1 | 33.2 | (s) | (s) | 2.9 | 3.0 | 3.3 | (s) | R 0.6 | 13.3 | R 53.4 | 28.0 | R 81.4 |
| 1994 | 0.1 | 30.9 | (s) | (s) | 2.8 | 2.9 | 3.2 | (s) | R 0.6 | 13.9 | 51.5 | 29.0 | R 80.6 |
| 1995 | 0.1 | 29.4 | (s) | (s) | 3.1 | 3.2 | 3.6 | (s) | R 0.6 | 14.1 | R 50.8 | 29.3 | R 80.2 |
| 1996 | 0.1 | 34.8 | (s) | (s) | 3.1 | 3.1 | R 3.5 | (s) | R 0.6 | 14.8 | R 56.9 | R 30.8 | R 87.6 |
| 1997 | 0.1 | R 37.3 | (s) | (s) | R 3.9 | R 4.0 | R 3.6 | (s) | R 0.6 | 15.4 | R 60.9 | R 32.0 | R 92.9 |
| 1998 | 0.1 | 35.0 | (s) | (s) | 5.8 | 5.8 | 3.2 | (s) | 0.5 | 15.8 | 60.5 | 32.7 | 93.2 |
| 1999 | (s) | 34.6 | 0.1 | 0.1 | 7.4 | 7.6 | 3.4 | (s) | 0.5 | 15.9 | 62.1 | 31.1 | 93.2 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
b Includes supplemental gaseous fuels.
c Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 205.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, New Mexico

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 27 | 9 | 107 | 4 | 254 | 46 | 0 | 412 | 5 | — | 963 | — | 2,395 | — |
| 1965 | 7 | 13 | 65 | 4 | 268 | 54 | 0 | 391 | 4 | — | 1,485 | — | 3,547 | — |
| 1970 | 1 | 33 | 114 | 8 | 354 | 70 | 0 | 545 | 4 | — | 2,216 | — | 5,371 | — |
| 1975 | 0 | 23 | 179 | 7 | 224 | 91 | 0 | 501 | 4 | — | 2,743 | — | 6,618 | — |
| 1980 | 29 | 25 | 133 | 659 | 213 | 108 | 0 | 1,113 | 5 | — | 3,380 | — | 8,219 | — |
| 1985 | 5 | 17 | 452 | 61 | 369 | 113 | 4 | 999 | R 7 | — | 4,664 | — | 10,958 | — |
| 1990 | 3 | 24 | 627 | 15 | 301 | 127 | 0 | 1,069 | R 10 | — | 5,842 | — | R 12,781 | — |
| 1991 | 5 | 25 | 462 | 20 | 238 | 113 | 0 | 833 | R 10 | — | 5,872 | — | R 12,766 | — |
| 1992 | 6 | 28 | 241 | 9 | 193 | 100 | 0 | 543 | R 11 | — | 6,031 | — | R 12,864 | — |
| 1993 | 6 | 28 | 339 | 6 | 143 | 18 | 0 | 506 | 13 | — | 6,226 | — | R 13,151 | — |
| 1994 | 6 | 25 | 212 | 3 | 136 | 18 | 0 | 369 | 13 | — | 6,595 | — | R 13,763 | — |
| 1995 | 5 | 24 | 200 | 4 | 152 | 18 | 0 | 374 | 13 | — | 6,641 | — | R 13,846 | — |
| 1996 | 5 | 26 | 154 | 1 | 150 | 18 | (s) | 324 | 15 | — | 6,924 | — | R 14,430 | — |
| 1997 | 5 | R 27 | 120 | 3 | R 192 | 18 | 0 | R 333 | R 20 | — | 6,839 | — | R 14,226 | — |
| 1998 | 6 | 27 | 95 | 3 | 281 | 18 | 0 | 397 | 20 | — | 7,346 | — | 15,175 | — |
| 1999 | 4 | 27 | 308 | 6 | 361 | 18 | 0 | 694 | 24 | — | 7,435 | — | 14,567 | — |

Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Motor Gasoline | Residual Fuel | Total | Wood | Geothermal | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.6 | 9.3 | 0.6 | (s) | 1.0 | 0.2 | 0.0 | 1.9 | 0.1 | 0.0 | 3.3 | 15.3 | 8.2 | 23.4 |
| 1965 | 0.2 | 13.9 | 0.4 | (s) | 1.1 | 0.3 | 0.0 | 1.8 | 0.1 | 0.0 | 5.1 | 21.0 | 12.1 | 33.1 |
| 1970 | (s) | 35.8 | 0.7 | (s) | 1.3 | 0.4 | 0.0 | 2.4 | 0.1 | 0.0 | 7.6 | 45.8 | 18.3 | 64.2 |
| 1975 | 0.0 | 24.5 | 1.0 | (s) | 0.8 | 0.5 | 0.0 | 2.4 | 0.1 | 0.0 | 9.4 | 36.4 | 22.6 | 58.9 |
| 1980 | 0.6 | 25.7 | 0.8 | 3.7 | 0.8 | 0.6 | 0.0 | 5.9 | 0.1 | 0.0 | 11.5 | 43.7 | 28.0 | 71.8 |
| 1985 | 0.1 | 18.2 | 2.6 | 0.3 | 1.3 | 0.6 | (s) | 4.9 | R 0.1 | 0.0 | 15.9 | R 39.3 | 37.4 | R 76.7 |
| 1990 | 0.1 | 25.0 | 3.7 | 0.1 | 1.1 | 0.7 | 0.0 | 5.5 | R 0.2 | e (s) | 19.9 | R e 50.8 | 43.6 | R e 94.4 |
| 1991 | 0.1 | 26.1 | 2.7 | 0.1 | 0.9 | 0.6 | 0.0 | 4.3 | R 0.2 | (s) | 20.0 | R 50.7 | 43.6 | R 94.3 |
| 1992 | 0.1 | 29.1 | 1.4 | (s) | 0.7 | 0.5 | 0.0 | 2.7 | R 0.2 | (s) | 20.6 | R 52.7 | R 43.9 | R 96.6 |
| 1993 | 0.1 | 29.1 | 2.0 | (s) | 0.5 | 0.1 | 0.0 | 2.6 | 0.3 | (s) | 21.2 | 53.4 | 44.9 | R 98.2 |
| 1994 | 0.1 | 25.0 | 1.2 | (s) | 0.5 | 0.1 | 0.0 | 1.8 | 0.3 | (s) | 22.5 | 49.7 | 47.0 | 96.7 |
| 1995 | 0.1 | 24.4 | 1.2 | (s) | 0.6 | 0.1 | 0.0 | 1.8 | 0.3 | (s) | 22.7 | 49.3 | 47.2 | R 96.6 |
| 1996 | 0.1 | 27.3 | 0.9 | (s) | 0.5 | 0.1 | (s) | 1.5 | 0.3 | (s) | 23.6 | 52.9 | 49.2 | 102.1 |
| 1997 | 0.1 | R 27.9 | 0.7 | (s) | R 0.7 | 0.1 | 0.0 | R 1.5 | R 0.4 | (s) | 23.3 | R 53.3 | 48.5 | R 101.8 |
| 1998 | 0.1 | 26.6 | 0.6 | (s) | 1.0 | 0.1 | 0.0 | 1.7 | 0.4 | (s) | 25.1 | 53.9 | 51.8 | 105.6 |
| 1999 | 0.1 | 26.6 | 1.8 | (s) | 1.3 | 0.1 | 0.0 | 3.2 | 0.5 | 0.1 | 25.4 | 55.8 | 49.7 | 105.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 206.   Industrial Energy Consumption Estimates, Selected Years 1960-1999, New Mexico

| Year | Coal | Natural Gas [a] | Petroleum | | | | | | | | | | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
| | | | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kero-sene [b] | LPG [b] | Lubri-cants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 105 | 120 | 964 | 1,028 | 463 | 1,194 | 67 | 295 | 59 | R 437 | R 4,508 | 0 | — | — | 1,548 | — | 3,851 | — |
| 1965 | 22 | 97 | 1,388 | 1,206 | 358 | 1,345 | 72 | 241 | 621 | R 624 | R 5,855 | 0 | — | — | 1,299 | — | 3,103 | — |
| 1970 | 11 | 121 | 1,208 | 2,127 | 957 | 1,813 | 104 | 192 | 123 | R 717 | R 7,242 | 0 | — | — | 1,911 | — | 4,632 | — |
| 1975 | 0 | 95 | 1,632 | 2,299 | 620 | 2,160 | 120 | 145 | 1,342 | R 1,482 | R 9,800 | 0 | — | — | 1,960 | — | 4,728 | — |
| 1980 | 8 | 74 | 1,138 | 2,196 | 548 | 3,260 | 118 | 84 | 858 | R 1,664 | R 9,866 | 0 | — | — | 2,945 | — | 7,161 | — |
| 1985 | 83 | 58 | 1,501 | 3,669 | 89 | 447 | 108 | 361 | 781 | R 987 | R 7,942 | 0 | — | — | 4,111 | — | 9,658 | — |
| 1990 | 41 | 85 | 1,451 | 2,187 | 37 | 5,819 | 121 | 330 | 117 | R 1,574 | R 11,637 | f 0 | — | — | 4,413 | — | R 9,654 | — |
| 1991 | 41 | 64 | 1,525 | 2,366 | 39 | 10,067 | 108 | 361 | 119 | R 1,796 | R 16,379 | 0 | — | — | 4,546 | — | R 9,884 | — |
| 1992 | 48 | 71 | 1,874 | 1,911 | 10 | 9,068 | 111 | 328 | 128 | R 2,091 | R 15,519 | 0 | — | — | 4,609 | — | R 9,830 | — |
| 1993 | 60 | 67 | 2,438 | 1,515 | 7 | 8,568 | 113 | 561 | 182 | R 2,008 | R 15,393 | 0 | — | — | 4,816 | — | R 10,172 | — |
| 1994 | 68 | 74 | 2,114 | 1,235 | 5 | 7,715 | 118 | 600 | 179 | R 2,097 | R 14,063 | 0 | — | — | 5,184 | — | R 10,819 | — |
| 1995 | 76 | 74 | 1,859 | 1,577 | 7 | 7,085 | 116 | 653 | 181 | R 2,003 | R 13,481 | 0 | — | — | 5,651 | — | R 11,781 | — |
| 1996 | 74 | 105 | 1,648 | 1,776 | 10 | R 926 | 112 | 658 | 198 | R 4,490 | R 9,819 | 0 | — | — | 5,921 | — | R 12,339 | — |
| 1997 | 77 | R 90 | 1,233 | 1,484 | 6 | R 1,316 | 119 | 693 | 161 | R 4,723 | R 9,734 | 0 | — | — | 6,187 | — | R 12,869 | — |
| 1998 | 71 | 85 | 2,048 | 1,302 | 9 | 927 | 124 | 497 | 144 | 4,420 | 9,471 | 0 | — | — | 6,186 | — | 12,778 | — |
| 1999 | 73 | 82 | 1,902 | 2,123 | 18 | 1,692 | 125 | 342 | 169 | 4,418 | 10,791 | 0 | — | — | 5,957 | — | 11,672 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric | Wood and Waste | Other | Electricity | Net Energy | Electrical Losses | Total |
| 1960 | 2.4 | 124.5 | 6.4 | 6.0 | 2.6 | 4.8 | 0.4 | 1.6 | 0.4 | R 2.6 | R 24.8 | 0.0 | 0.8 | 0.0 | 5.3 | R 157.7 | 13.1 | R 170.8 |
| 1965 | 0.5 | 107.1 | 9.2 | 7.0 | 2.0 | 5.4 | 0.4 | 1.3 | 3.9 | R 3.7 | R 33.0 | 0.0 | 0.9 | 0.0 | 4.4 | R 145.9 | 10.6 | R 156.5 |
| 1970 | 0.2 | 131.2 | 8.0 | 12.4 | 5.4 | 6.8 | 0.6 | 1.0 | 0.8 | R 4.3 | R 39.4 | 0.0 | 0.7 | 0.0 | 6.5 | R 178.1 | 15.8 | R 193.9 |
| 1975 | 0.0 | 102.6 | 10.8 | 13.4 | 3.5 | 8.0 | 0.7 | 0.8 | 8.4 | R 8.9 | R 54.6 | 0.0 | 1.1 | 0.0 | 6.7 | R 164.9 | 16.1 | R 181.1 |
| 1980 | 0.2 | 77.6 | 7.6 | 12.8 | 3.1 | 12.0 | 0.7 | 0.4 | 5.4 | R 10.0 | R 52.0 | 0.0 | 1.2 | 0.0 | 10.0 | R 141.0 | 24.4 | R 165.5 |
| 1985 | 1.8 | 63.5 | 10.0 | 21.4 | 0.5 | 1.6 | 0.7 | 1.9 | 4.9 | R 6.1 | R 47.0 | 0.0 | 1.4 | 0.0 | 14.0 | R 127.8 | 33.0 | R 160.7 |
| 1990 | 0.9 | 90.0 | 9.6 | 12.7 | 0.2 | 21.1 | 0.7 | 1.7 | 0.7 | R 9.4 | R 56.3 | f 0.0 | R 0.5 | f 0.1 | 15.1 | R f 162.7 | 32.9 | R f 195.7 |
| 1991 | 0.9 | 66.8 | 10.1 | 13.8 | 0.2 | 36.4 | 0.7 | 1.9 | 0.7 | R 10.7 | R 74.5 | 0.0 | R 0.4 | 0.1 | 15.5 | R 158.2 | R 33.7 | R 191.9 |
| 1992 | 1.0 | 73.8 | 12.4 | 11.1 | 0.1 | 32.9 | 0.7 | 1.7 | 0.8 | R 12.4 | R 72.0 | 0.0 | R 0.5 | 0.1 | 15.7 | R 163.1 | R 33.5 | R 196.7 |
| 1993 | 1.3 | 69.5 | 16.2 | 8.8 | (s) | 30.9 | 0.7 | 2.9 | 1.1 | R 11.9 | 72.7 | 0.0 | R 0.5 | 0.1 | 16.4 | R 160.5 | 34.7 | R 195.2 |
| 1994 | 1.5 | 73.5 | 14.0 | 7.2 | (s) | 28.0 | 0.7 | R 3.1 | 1.1 | R 12.4 | R 66.7 | 0.0 | R 0.5 | 0.1 | 17.7 | R 160.0 | 36.9 | R 196.9 |
| 1995 | 1.7 | 75.2 | 12.3 | 9.2 | (s) | 25.7 | 0.7 | 3.4 | 1.1 | R 11.9 | R 64.4 | 0.0 | R 0.6 | 0.1 | 19.3 | R 161.2 | 40.2 | R 201.4 |
| 1996 | 1.6 | 107.9 | 10.9 | 10.3 | 0.1 | R 3.3 | 0.7 | R 3.4 | 1.2 | R 25.3 | R 55.4 | 0.0 | R 0.6 | 0.1 | 20.2 | R 185.8 | R 42.1 | R 227.9 |
| 1997 | 1.7 | R 92.1 | 8.2 | 8.6 | (s) | R 4.8 | 0.7 | 3.6 | 1.0 | R 26.7 | R 53.6 | 0.0 | R 0.6 | 0.1 | 21.1 | R 169.2 | R 43.9 | R 213.1 |
| 1998 | 1.6 | 82.7 | 13.6 | 7.6 | 0.1 | 3.3 | 0.8 | 2.6 | 0.9 | 24.9 | 53.8 | 0.0 | 0.2 | 0.1 | 21.1 | 159.5 | 43.6 | 203.1 |
| 1999 | 1.6 | 80.0 | 12.6 | 12.4 | 0.1 | 6.1 | 0.8 | 1.8 | 1.1 | 24.8 | 59.7 | 0.0 | 0.5 | 0.6 | 20.3 | 162.6 | 39.8 | 202.4 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 207.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, New Mexico**

| | Coal [a] | Natural Gas [b] | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | 2 | 17 | 201 | 1,919 | 2,186 | 124 | 159 | 9,213 | 25 | 13,826 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 25 | 239 | 2,618 | 2,530 | 203 | 165 | 10,511 | 36 | 16,301 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 30 | 111 | 3,158 | 3,110 | 243 | 166 | 12,884 | 11 | 19,684 | 0 | 0 | — | 0 | — |
| 1975 | 0 | 29 | 81 | 4,200 | 2,667 | 211 | 197 | 16,257 | 0 | 23,615 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 38 | 167 | 5,411 | 2,673 | 29 | 213 | 16,721 | 0 | 25,214 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 26 | 95 | 4,330 | 2,873 | 95 | 194 | 17,431 | 0 | 25,018 | R e 142 | 0 | — | 0 | — |
| 1990 | 0 | 76 | 86 | 6,264 | 2,912 | 118 | 218 | 18,190 | 0 | 27,788 | R 371 | 0 | — | 0 | — |
| 1991 | 0 | 72 | 94 | 6,542 | 2,441 | 80 | 195 | 18,674 | 0 | 28,026 | R 365 | 0 | — | 0 | — |
| 1992 | 0 | 50 | 94 | 7,743 | 2,834 | 100 | 199 | 19,004 | 0 | 29,973 | R 288 | 0 | — | 0 | — |
| 1993 | 0 | 62 | 71 | 6,303 | 3,303 | 97 | 203 | 19,815 | 0 | 29,792 | R 59 | 0 | — | 0 | — |
| 1994 | 0 | 59 | 62 | 5,777 | 2,576 | 143 | 212 | 20,187 | 0 | 28,958 | R 153 | 0 | — | 0 | — |
| 1995 | 0 | 57 | 53 | 2,916 | 2,222 | 94 | 208 | 20,342 | 0 | 25,835 | R 472 | 0 | — | 0 | — |
| 1996 | 0 | 27 | R 101 | 7,984 | 1,615 | R 85 | 202 | 19,570 | 0 | R 29,557 | R 398 | 0 | — | 0 | — |
| 1997 | 0 | 62 | R 102 | 8,599 | 1,751 | R 75 | 214 | 20,794 | 0 | R 31,534 | R 399 | 0 | — | 0 | — |
| 1998 | 0 | 53 | 61 | 9,603 | 2,196 | 1 | 224 | 21,403 | 0 | 33,488 | 671 | 0 | — | 0 | — |
| 1999 | 0 | 49 | 70 | 9,526 | 2,723 | 17 | 226 | 21,828 | 0 | 34,391 | 560 | 0 | — | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | |
| 1960 | (s) | 17.6 | 1.0 | 11.2 | 11.7 | 0.5 | 1.0 | 48.4 | 0.2 | 73.9 | 0.0 | 0.0 | 91.5 | 0.0 | 91.5 |
| 1965 | (s) | 27.6 | 1.2 | 15.3 | 13.7 | 0.8 | 1.0 | 55.2 | 0.2 | 87.4 | 0.0 | 0.0 | 115.0 | 0.0 | 115.0 |
| 1970 | (s) | 32.8 | 0.6 | 18.4 | 17.0 | 0.9 | 1.0 | 67.7 | 0.1 | 105.7 | 0.0 | 0.0 | 138.5 | 0.0 | 138.5 |
| 1975 | 0.0 | 31.2 | 0.4 | 24.5 | 14.6 | 0.8 | 1.2 | 85.4 | 0.0 | 126.9 | 0.0 | 0.0 | 158.1 | 0.0 | 158.1 |
| 1980 | 0.0 | 40.2 | 0.8 | 31.5 | 14.6 | 0.1 | 1.3 | 87.8 | 0.0 | 136.2 | 0.0 | 0.0 | 176.3 | 0.0 | 176.3 |
| 1985 | 0.0 | 28.2 | 0.5 | 25.2 | 15.7 | 0.3 | 1.2 | 91.6 | 0.0 | 134.5 | R e 0.5 | 0.0 | e 162.7 | 0.0 | e 162.7 |
| 1990 | 0.0 | 80.4 | 0.4 | 36.5 | 16.0 | 0.4 | 1.3 | 95.6 | 0.0 | 150.2 | R 1.3 | 0.0 | 230.6 | 0.0 | 230.6 |
| 1991 | 0.0 | 74.8 | 0.5 | 38.1 | 13.5 | 0.3 | 1.2 | 98.1 | 0.0 | 151.6 | R 1.3 | 0.0 | 226.5 | 0.0 | 226.5 |
| 1992 | 0.0 | 52.5 | 0.5 | 45.1 | 15.6 | 0.4 | 1.2 | 99.8 | 0.0 | 162.6 | R 1.0 | 0.0 | 215.0 | 0.0 | 215.0 |
| 1993 | 0.0 | 64.9 | 0.4 | 36.7 | 18.3 | 0.4 | 1.2 | 104.1 | 0.0 | 161.1 | 0.2 | 0.0 | 226.0 | 0.0 | 226.0 |
| 1994 | 0.0 | 59.2 | 0.3 | 33.7 | 14.6 | 0.5 | 1.3 | R 105.8 | 0.0 | R 156.0 | R 0.5 | 0.0 | R 215.1 | 0.0 | R 215.1 |
| 1995 | 0.0 | 58.0 | 0.3 | 17.0 | 12.6 | 0.3 | 1.3 | R 106.1 | 0.0 | R 137.5 | R 1.7 | 0.0 | R 195.5 | 0.0 | R 195.5 |
| 1996 | 0.0 | 27.9 | 0.5 | 46.5 | 9.2 | 0.3 | 1.2 | R 102.1 | 0.0 | R 159.8 | R 1.4 | 0.0 | R 187.6 | 0.0 | R 187.6 |
| 1997 | 0.0 | R 63.1 | 0.5 | 50.1 | 9.9 | 0.3 | 1.3 | R 108.4 | 0.0 | R 170.5 | R 1.4 | 0.0 | R 233.6 | 0.0 | R 233.6 |
| 1998 | 0.0 | 51.4 | 0.3 | 55.9 | 12.5 | (s) | 1.4 | 111.6 | 0.0 | 181.6 | 2.4 | 0.0 | 233.0 | 0.0 | 233.0 |
| 1999 | 0.0 | 47.4 | 0.4 | 55.5 | 15.4 | 0.1 | 1.4 | 113.7 | 0.0 | 186.5 | 2.0 | 0.0 | 233.9 | 0.0 | 233.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 208.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, New Mexico**

| | | | Petroleum | | | | | | Wood | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Coal | Natural Gas [a] | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | Nuclear Electric Power | Hydroelectric Power [e] | and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |

| Year | Coal | Natural Gas | Heavy Oil | Light Oil | Petroleum Coke | Total | Nuclear | Hydro | Wood/Waste | Geothermal | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 26 | 34 | 107 | 10 | 0 | 117 | 0 | 69 | 0 | 0 | 0 | — |
| 1965 | 2,418 | 44 | 42 | 4 | 0 | 46 | 0 | 43 | 0 | 0 | 0 | — |
| 1970 | 5,518 | 55 | 86 | 8 | 0 | 94 | 0 | 66 | 0 | 0 | 0 | — |
| 1975 | 7,425 | 65 | 1,704 | 34 | 0 | 1,738 | 0 | 63 | 0 | 0 | 0 | — |
| 1980 | 11,406 | 56 | 175 | 216 | 0 | 391 | 0 | 94 | 0 | 0 | 0 | — |
| 1985 | 14,498 | 28 | 41 | 45 | 0 | 86 | 0 | 128 | 0 | 0 | 0 | — |
| 1990 | 15,065 | 25 | 32 | 37 | 0 | 69 | 0 | 205 | 0 | 0 | 0 | — |
| 1991 | 12,809 | 28 | 10 | 57 | 0 | 67 | 0 | 237 | 0 | 0 | 0 | — |
| 1992 | 14,775 | 22 | 2 | 71 | 0 | 73 | 0 | 255 | 0 | 0 | 0 | — |
| 1993 | 14,942 | 28 | 1 | 70 | 0 | 72 | 0 | 294 | 0 | 0 | 0 | — |
| 1994 | 15,297 | 32 | (s) | 46 | 0 | 47 | 0 | 213 | 0 | 0 | 0 | — |
| 1995 | 15,137 | 32 | 1 | 44 | 0 | 44 | 0 | 264 | 0 | 0 | 0 | — |
| 1996 | 15,215 | 30 | (s) | 43 | 0 | 43 | 0 | 211 | 0 | 0 | 0 | — |
| 1997 | 15,802 | 33 | (s) | 41 | 0 | 42 | 0 | 259 | 0 | 0 | 0 | — |
| 1998 | 15,883 | 39 | 0 | 45 | 0 | 45 | 0 | 236 | 0 | 0 | 0 | — |
| 1999 | 16,224 | 36 | 0 | 72 | 0 | 72 | 0 | 243 | 0 | 0 | 0 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Heavy Oil | Light Oil | Petroleum Coke | Total | Nuclear | Hydro | Wood/Waste | Geothermal | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.6 | 34.9 | 0.7 | 0.1 | 0.0 | 0.7 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 37.0 |
| 1965 | 43.5 | 48.7 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 93.0 |
| 1970 | 99.1 | 59.5 | 0.5 | (s) | 0.0 | 0.6 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 159.9 |
| 1975 | 132.5 | 67.4 | 10.7 | 0.2 | 0.0 | 10.9 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 211.5 |
| 1980 | 201.8 | 57.9 | 1.1 | 1.3 | 0.0 | 2.4 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 263.1 |
| 1985 | 266.4 | 28.5 | 0.3 | 0.3 | 0.0 | 0.5 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 296.8 |
| 1990 | 274.7 | 26.3 | 0.2 | 0.2 | 0.0 | 0.4 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 | 303.5 |
| 1991 | 232.9 | 28.6 | 0.1 | 0.3 | 0.0 | 0.4 | 0.0 | 2.5 | 0.0 | 0.0 | 0.0 | 264.3 |
| 1992 | 266.3 | 22.9 | (s) | 0.4 | 0.0 | 0.4 | 0.0 | 2.6 | 0.0 | 0.0 | 0.0 | 292.3 |
| 1993 | 268.7 | 28.2 | (s) | 0.4 | 0.0 | 0.4 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 300.3 |
| 1994 | 276.7 | 32.9 | (s) | 0.3 | 0.0 | 0.3 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 312.0 |
| 1995 | 273.5 | 32.5 | (s) | 0.3 | 0.0 | 0.3 | 0.0 | 2.7 | 0.0 | 0.0 | 0.0 | 308.9 |
| 1996 | 277.4 | 30.3 | (s) | 0.3 | 0.0 | 0.3 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 310.2 |
| 1997 | 286.6 | 33.9 | (s) | 0.2 | 0.0 | 0.2 | 0.0 | 2.7 | 0.0 | 0.0 | 0.0 | 323.5 |
| 1998 | 288.5 | 39.4 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 2.4 | 0.0 | 0.0 | 0.0 | 330.6 |
| 1999 | 296.3 | 36.0 | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | 2.5 | 0.0 | 0.0 | 0.0 | 335.3 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 209. Energy Consumption Estimates by Source, Selected Years 1960-1999, New York

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline [a] | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power Million kWh | Hydroelectric Power [d] Million kWh | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 26,413 | 419 | 5,424 | 13,729 | 82,380 | 9,411 | 5,302 | 2,849 | 2,312 | 95,706 | 77,563 | R 2,861 | R 297,538 | 0 | 15,709 | — | — | -18,429 | — |
| 1965 | 28,735 | 545 | 6,234 | 2,427 | 104,033 | 23,620 | 5,623 | 3,174 | 2,221 | 109,226 | 104,296 | R 6,523 | R 367,377 | 727 | 20,072 | — | — | -10,286 | — |
| 1970 | 23,935 | 711 | 5,612 | 249 | 111,107 | 38,338 | 6,994 | 4,506 | 2,199 | 130,737 | 152,252 | R 8,360 | R 460,354 | 4,273 | 25,995 | — | — | -14,477 | — |
| 1975 | 12,678 | 577 | 5,733 | 274 | 105,118 | 38,634 | 5,206 | 5,188 | 1,948 | 133,461 | 144,721 | R 9,326 | R 449,609 | 13,111 | 29,955 | — | — | -17,753 | — |
| 1980 | 12,503 | 737 | 4,983 | 320 | 72,559 | 35,936 | 2,309 | 5,631 | 2,091 | 127,422 | 115,488 | R 11,826 | R 378,566 | 19,276 | 33,641 | — | — | -5,317 | — |
| 1985 | 11,944 | 763 | 7,208 | 221 | 62,013 | 3,856 | 5,319 | 4,923 | 1,903 | 136,330 | 66,334 | 6,862 | 294,971 | 24,092 | 44,477 | — | — | -25,342 | — |
| 1990 | 13,465 | 863 | 5,524 | 78 | 66,310 | 5,447 | 2,283 | 5,606 | 2,141 | 139,180 | 77,570 | 10,619 | 314,757 | 23,623 | R h 29,351 | — | — | R 13,921 | — |
| 1991 | 13,338 | 875 | 6,375 | 65 | 61,552 | 5,300 | 2,646 | 7,206 | 1,916 | 133,311 | 67,888 | 9,680 | 295,939 | 28,448 | R 28,422 | — | — | R 13,541 | — |
| 1992 | 12,996 | 959 | 6,904 | 74 | 65,721 | 5,357 | 1,862 | 7,076 | 1,953 | 129,064 | 51,559 | 11,110 | 280,679 | 24,155 | R 29,546 | — | — | R 47,484 | — |
| 1993 | 11,878 | 944 | 8,068 | 60 | 70,070 | 5,131 | 2,421 | 6,139 | 1,989 | 131,710 | 48,130 | 10,320 | 284,037 | 26,889 | R 32,852 | — | — | R 60,687 | — |
| 1994 | 11,474 | 1,012 | 7,439 | 99 | 67,740 | 5,729 | 2,289 | 6,351 | 2,079 | 128,228 | 40,402 | 10,812 | 271,166 | 29,231 | R 35,912 | — | — | R 45,414 | — |
| 1995 | 11,062 | 1,140 | 7,073 | 76 | 69,385 | 7,697 | 2,364 | 6,332 | 2,043 | 132,627 | 30,392 | 10,616 | 268,605 | 26,336 | R 31,097 | — | — | R 61,738 | — |
| 1996 | 11,337 | 1,131 | 6,184 | 66 | 73,165 | 11,532 | 2,884 | R 7,073 | 1,983 | 130,979 | 36,975 | R 23,045 | R 293,887 | 35,226 | R 33,085 | — | — | R 60,450 | — |
| 1997 | 11,719 | 1,228 | 6,327 | 68 | 72,805 | 12,133 | 2,906 | R 6,686 | 2,094 | 130,923 | 30,340 | R 24,435 | R 288,719 | 29,570 | R 31,456 | — | — | R 67,042 | — |
| 1998 | 12,379 | 1,143 | 6,624 | 238 | 66,205 | 14,787 | 3,359 | 7,306 | 2,193 | 131,469 | 36,526 | 26,124 | 294,830 | 31,314 | 29,798 | — | — | 41,983 | — |
| 1999 | 7,250 | 1,218 | 6,274 | 84 | 73,075 | 9,122 | 3,086 | 7,316 | 2,216 | 133,621 | 36,837 | 26,892 | 298,522 | 37,019 | 25,640 | — | — | 107,885 | — |
| | | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 691.6 | 434.1 | 36.0 | 69.3 | 479.9 | 52.6 | 30.1 | 11.4 | 14.0 | 502.7 | 487.6 | R 16.9 | R 1,700.6 | 0.0 | 169.0 | 59.3 | 0.0 | -62.9 | R 2,991.7 |
| 1965 | 755.2 | 558.7 | 41.4 | 12.3 | 606.0 | 133.2 | 31.9 | 12.7 | 13.5 | 573.8 | 655.7 | R 37.1 | R 2,117.5 | 8.6 | 209.8 | 58.1 | 0.0 | -35.1 | R 3,672.8 |
| 1970 | 598.9 | 725.8 | 37.2 | 1.3 | 647.2 | 216.7 | 39.7 | 17.0 | 13.3 | 686.8 | 957.2 | R 47.0 | R 2,663.4 | 46.9 | 272.8 | 62.6 | 0.0 | -49.4 | R 4,321.1 |
| 1975 | 312.5 | 585.5 | 38.0 | 1.4 | 612.3 | 218.5 | 29.5 | 19.3 | 11.8 | 701.1 | 909.9 | R 52.8 | R 2,594.6 | 144.4 | 311.7 | 60.2 | 0.0 | -60.6 | R 3,948.4 |
| 1980 | 313.7 | 755.9 | 33.1 | 1.6 | 422.7 | 203.3 | 13.1 | 20.7 | 12.7 | 669.3 | 726.1 | R 66.1 | R 2,168.7 | 210.3 | 349.5 | R 147.2 | 0.0 | -18.1 | R 3,927.0 |
| 1985 | 301.4 | 784.7 | 47.8 | 1.1 | 361.2 | 21.4 | 30.2 | 17.7 | 11.5 | 716.1 | 417.0 | 38.0 | 1,662.1 | 260.5 | 464.6 | R 123.2 | 0.0 | -86.5 | R 3,510.1 |
| 1990 | 346.1 | 889.0 | 36.7 | 0.4 | 386.3 | 30.4 | 12.9 | 20.3 | 13.0 | 731.1 | 487.7 | 59.8 | 1,778.6 | 252.3 | R h 305.3 | R 104.2 | h 0.3 | R 47.5 | R h 3,707.9 |
| 1991 | 344.4 | 899.7 | 42.3 | 0.3 | 358.5 | 29.6 | 15.0 | 26.0 | 11.6 | 700.3 | 426.8 | 54.3 | 1,664.8 | 305.5 | R 296.6 | R 105.1 | R 0.4 | R 46.2 | R 3,671.9 |
| 1992 | 336.7 | 986.8 | 45.8 | 0.4 | 382.8 | 29.9 | 10.6 | 25.6 | 11.8 | 678.0 | 324.2 | 62.5 | 1,571.5 | 257.9 | R 305.6 | R 117.7 | 0.4 | R 162.0 | R 3,744.2 |
| 1993 | 306.5 | 971.2 | 53.5 | 0.3 | 408.2 | 28.7 | 13.7 | 22.1 | 12.1 | 691.9 | 302.6 | 57.7 | 1,590.8 | 287.2 | R 338.7 | R 118.9 | R 0.5 | R 207.1 | R 3,831.2 |
| 1994 | 297.3 | 1,040.8 | 49.4 | 0.5 | 394.6 | 32.3 | 13.0 | 23.1 | 12.6 | R 670.6 | 254.0 | 60.5 | R 1,510.6 | 312.1 | R 370.5 | R 125.1 | 0.5 | R 155.0 | R 3,848.2 |
| 1995 | 288.1 | 1,172.4 | 46.9 | 0.4 | 404.2 | 43.6 | 13.4 | 22.9 | 12.4 | R 691.7 | 191.1 | 59.5 | R 1,486.1 | 280.7 | R 320.7 | R 133.0 | 0.6 | R 210.6 | R 3,919.3 |
| 1996 | 294.3 | 1,159.9 | 41.0 | 0.3 | 426.2 | 65.4 | 16.4 | R 25.6 | 12.0 | R 683.2 | 232.5 | R 126.0 | R 1,628.5 | 374.2 | R 342.1 | R 148.1 | 0.7 | R 206.3 | R 4,172.5 |
| 1997 | 306.1 | 1,260.3 | 42.0 | 0.3 | 424.1 | 68.8 | 16.5 | R 24.2 | 12.7 | R 682.5 | 190.7 | R 134.0 | R 1,595.9 | 314.1 | R 325.8 | R 178.9 | R 0.8 | R 228.7 | R 4,206.8 |
| 1998 | 322.2 | 1,175.2 | 44.0 | 1.2 | 385.6 | 83.8 | 19.0 | 26.4 | 13.3 | 685.2 | 229.6 | 144.4 | 1,632.7 | 332.6 | 308.3 | 140.6 | 0.8 | 143.2 | 4,047.3 |
| 1999 | 188.2 | 1,251.1 | 41.6 | 0.4 | 425.7 | 51.7 | 17.5 | 26.5 | 13.4 | 696.3 | 231.6 | 148.4 | 1,653.2 | 393.2 | 265.3 | 173.6 | 0.9 | 368.1 | 4,283.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 210.  Residential Energy Consumption Estimates, Selected Years 1960-1999, New York

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 1,074 | 225 | 44,927 | 4,174 | 2,130 | 51,232 | 1,295 | — | — | 12,496 | — | 31,082 | — |
| 1965 | 694 | 288 | 57,623 | 4,161 | 2,254 | 64,037 | 1,070 | — | — | 17,027 | — | 40,655 | — |
| 1970 | 381 | 347 | 60,128 | 5,581 | 2,782 | 68,491 | 1,096 | — | — | 25,492 | — | 61,777 | — |
| 1975 | 228 | 327 | 55,966 | 3,746 | 3,078 | 62,790 | 1,103 | — | — | 28,710 | — | 69,253 | — |
| 1980 | 181 | 334 | 37,690 | 1,723 | 2,511 | 41,923 | R 4,818 | — | — | 30,583 | — | 74,367 | — |
| 1985 | 208 | 320 | 30,992 | 3,219 | 3,227 | 37,438 | 3,240 | — | — | 32,757 | — | 76,961 | — |
| 1990 | 129 | 338 | 26,529 | 1,765 | 4,079 | 32,373 | 2,325 | — | — | 38,574 | — | R 84,385 | — |
| 1991 | 130 | 339 | 25,021 | 2,098 | 5,051 | 32,170 | 2,450 | — | — | 39,177 | — | R 85,169 | — |
| 1992 | 128 | 379 | 27,997 | 1,252 | 4,965 | 34,214 | 2,577 | — | — | 38,720 | — | R 82,580 | — |
| 1993 | 120 | 384 | 28,707 | 1,565 | 4,293 | 34,565 | 2,758 | — | — | 39,897 | — | R 84,269 | — |
| 1994 | 88 | 385 | 26,760 | 1,396 | 4,350 | 32,505 | 2,704 | — | — | 40,105 | — | R 83,696 | — |
| 1995 | 105 | 375 | 27,713 | 1,240 | 4,516 | 33,469 | 3,001 | — | — | 39,887 | — | R 83,163 | — |
| 1996 | 135 | 403 | 30,674 | 1,450 | R 4,937 | R 37,061 | 2,996 | — | — | 40,285 | — | R 83,953 | — |
| 1997 | 114 | 376 | 30,303 | 1,744 | R 4,379 | R 36,426 | R 4,202 | — | — | 40,059 | — | R 83,326 | — |
| 1998 | 66 | 340 | 27,159 | 1,866 | 4,323 | 33,349 | 3,705 | — | — | 40,240 | — | 83,127 | — |
| 1999 | 74 | 371 | 28,502 | 2,327 | 4,691 | 35,520 | 3,970 | — | — | 42,919 | — | 84,092 | — |

Trillion Btu

| Year | Coal[a] | Natural Gas[b] | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 26.5 | 232.5 | 261.7 | 23.7 | 8.5 | 293.9 | 25.9 | 0.0 | 0.0 | 42.6 | 621.4 | 106.1 | 727.5 |
| 1965 | 16.9 | 295.0 | 335.7 | 23.6 | 9.0 | 368.3 | 21.4 | 0.0 | 0.0 | 58.1 | 759.7 | 138.7 | 898.4 |
| 1970 | 9.0 | 353.8 | 350.2 | 31.6 | 10.5 | 392.4 | 21.9 | 0.0 | 0.0 | 87.0 | 864.1 | 210.8 | 1,074.8 |
| 1975 | 5.1 | 332.2 | 326.0 | 21.2 | 11.4 | 358.7 | 22.1 | 0.0 | 0.0 | 98.0 | 816.0 | 236.3 | 1,052.3 |
| 1980 | 4.2 | 341.5 | 219.5 | 9.8 | 9.2 | 238.5 | R 96.4 | 0.0 | 0.0 | 104.3 | R 784.9 | 253.7 | R 1,038.7 |
| 1985 | 4.9 | 328.8 | 180.5 | 18.3 | 11.6 | 210.4 | 64.8 | 0.0 | 0.0 | 111.8 | 720.7 | 262.6 | 983.3 |
| 1990 | 3.2 | 347.8 | 154.5 | 10.0 | 14.8 | 179.3 | 46.5 | e (s) | R e 0.3 | 131.6 | e 708.7 | 287.9 | R e 996.7 |
| 1991 | 3.3 | 348.1 | 145.7 | 11.9 | 18.3 | 175.9 | 49.0 | (s) | R 0.3 | 133.7 | 710.2 | R 290.6 | R 1,000.8 |
| 1992 | 3.2 | 389.6 | 163.1 | 7.1 | 18.0 | 188.2 | 51.5 | (s) | 0.3 | 132.1 | 764.9 | R 281.8 | R 1,046.7 |
| 1993 | 2.9 | 395.2 | 167.2 | 8.9 | 15.5 | 191.6 | 55.2 | 0.1 | 0.3 | 136.1 | R 781.4 | R 287.5 | 1,068.9 |
| 1994 | 2.2 | 395.9 | 155.9 | 7.9 | 15.8 | 179.6 | 54.1 | (s) | R 0.4 | 136.8 | R 769.1 | R 285.6 | R 1,054.7 |
| 1995 | 2.6 | 385.7 | 161.4 | 7.0 | 16.4 | 184.8 | 60.0 | 0.1 | 0.4 | 136.1 | R 769.8 | R 283.8 | R 1,053.5 |
| 1996 | 3.4 | 413.6 | 178.7 | 8.2 | R 17.8 | R 204.7 | 59.9 | 0.1 | 0.5 | 137.5 | R 819.6 | R 286.4 | R 1,106.0 |
| 1997 | 2.8 | 385.4 | 176.5 | 9.9 | R 15.8 | R 202.2 | R 84.0 | 0.1 | 0.5 | 136.7 | R 811.8 | R 284.3 | R 1,096.1 |
| 1998 | 1.6 | 348.9 | 158.2 | 10.6 | 15.6 | 184.4 | 74.1 | 0.1 | 0.6 | 137.3 | 747.0 | 283.6 | 1,030.6 |
| 1999 | 1.8 | 380.9 | 166.0 | 13.2 | 17.0 | 196.2 | 79.4 | 0.1 | 0.6 | 146.4 | 805.4 | 286.9 | 1,092.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 211.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, New York

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 890 | 63 | 15,225 | 468 | 376 | 636 | 28,208 | 44,913 | 25 | — | 17,546 | — | 43,644 | — |
| 1965 | 596 | 87 | 19,527 | 467 | 398 | 828 | 37,514 | 58,733 | 20 | — | 23,528 | — | 56,176 | — |
| 1970 | 285 | 139 | 20,376 | 626 | 491 | 1,052 | 43,318 | 65,863 | 21 | — | 32,790 | — | 79,460 | — |
| 1975 | 200 | 128 | 18,965 | 420 | 543 | 1,162 | 28,482 | 49,573 | 21 | — | 37,827 | — | 91,244 | — |
| 1980 | 177 | 162 | 14,492 | 169 | 443 | 1,035 | 25,431 | 41,569 | R 116 | — | 40,471 | — | 98,412 | — |
| 1985 | 226 | 165 | 11,835 | 862 | 569 | 1,911 | 16,677 | 31,855 | R 86 | — | 48,816 | — | 114,688 | — |
| 1990 | 144 | 195 | 12,974 | 269 | 720 | 1,201 | 17,643 | 32,806 | R 148 | — | 56,025 | — | R 122,561 | — |
| 1991 | 148 | 200 | 12,758 | 213 | 891 | 716 | 17,102 | 31,679 | R 156 | — | 56,408 | — | R 122,626 | — |
| 1992 | 147 | 217 | 13,899 | 408 | 876 | 681 | 15,951 | 31,816 | R 168 | — | 56,079 | — | R 119,604 | — |
| 1993 | 112 | 221 | 15,123 | 616 | 758 | 198 | 17,531 | 34,226 | 222 | — | 57,410 | — | R 121,259 | — |
| 1994 | 97 | 223 | 14,592 | 538 | 768 | 180 | 16,301 | 32,379 | 227 | — | 58,802 | — | R 122,716 | — |
| 1995 | 115 | 231 | 15,210 | 714 | 797 | 208 | 13,766 | 30,695 | 227 | — | 62,509 | — | R 130,327 | — |
| 1996 | 148 | 253 | 15,754 | 751 | R 871 | 200 | 13,008 | R 30,585 | R 246 | — | 62,663 | — | R 130,591 | — |
| 1997 | 139 | 321 | 14,794 | 801 | R 773 | 195 | 10,315 | R 26,877 | R 461 | — | 64,029 | — | R 133,186 | — |
| 1998 | 81 | 335 | 12,148 | 981 | 763 | 212 | 7,194 | 21,298 | 461 | — | 63,253 | — | 130,668 | — |
| 1999 | 106 | 360 | 14,023 | 682 | 828 | 200 | 8,932 | 24,664 | 557 | — | 67,969 | — | 133,172 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 22.0 | 65.2 | 88.7 | 2.7 | 1.5 | 3.3 | 177.3 | 273.5 | 0.5 | 0.0 | 59.9 | 421.1 | 148.9 | 570.0 |
| 1965 | 14.5 | 88.8 | 113.7 | 2.6 | 1.6 | 4.3 | 235.9 | 358.2 | 0.4 | 0.0 | 80.3 | 542.2 | 191.7 | 733.8 |
| 1970 | 6.7 | 142.4 | 118.7 | 3.5 | 1.9 | 5.5 | 272.3 | 402.0 | 0.4 | 0.0 | 111.9 | 663.4 | 271.1 | 934.5 |
| 1975 | 4.5 | 130.2 | 110.5 | 2.4 | 2.0 | 6.1 | 179.1 | 300.0 | 0.4 | 0.0 | 129.1 | 564.2 | 311.3 | 875.6 |
| 1980 | 4.2 | 165.5 | 84.4 | 1.0 | 1.6 | 5.4 | 159.9 | 252.3 | 2.3 | 0.0 | 138.1 | 562.4 | 335.8 | 898.2 |
| 1985 | 5.4 | 170.0 | 68.9 | 4.9 | 2.1 | 10.0 | 104.8 | 190.8 | R 1.7 | 0.0 | 166.6 | R 534.5 | 391.3 | R 925.8 |
| 1990 | 3.6 | 200.6 | 75.6 | 1.5 | 2.6 | 6.3 | 110.9 | 196.9 | R 3.0 | e (s) | 191.2 | R e 595.3 | R 418.2 | R e 1,013.5 |
| 1991 | 3.7 | 205.0 | 74.3 | 1.2 | 3.2 | 3.8 | 107.5 | 190.0 | R 3.1 | (s) | 192.5 | R 594.3 | R 418.4 | R 1,012.7 |
| 1992 | 3.6 | 223.5 | 81.0 | 2.3 | 3.2 | 3.6 | 100.3 | 190.3 | R 3.4 | 0.1 | 191.3 | R 612.2 | R 408.1 | R 1,020.3 |
| 1993 | 2.7 | 227.0 | 88.1 | 3.5 | 2.7 | 1.0 | 110.2 | 205.6 | 4.4 | 0.1 | 195.9 | 635.7 | R 413.7 | R 1,049.5 |
| 1994 | 2.4 | 229.4 | 85.0 | 3.1 | 2.8 | 0.9 | 102.5 | 194.3 | 4.5 | 0.1 | 200.6 | 631.3 | 418.7 | 1,050.0 |
| 1995 | 2.9 | 238.0 | 88.6 | 4.1 | 2.9 | 1.1 | 86.5 | 183.2 | 4.5 | 0.1 | 213.3 | 641.9 | R 444.7 | R 1,086.6 |
| 1996 | 3.7 | 259.5 | 91.8 | 4.3 | R 3.1 | R 1.0 | 81.8 | R 182.0 | 4.9 | 0.2 | 213.8 | R 664.1 | R 445.6 | R 1,109.7 |
| 1997 | 3.5 | 329.2 | 86.2 | 4.5 | R 2.8 | 1.0 | 64.8 | R 159.4 | R 9.2 | 0.2 | 218.5 | R 719.9 | R 454.4 | R 1,174.4 |
| 1998 | 2.0 | 344.7 | 70.8 | 5.6 | 2.8 | 1.1 | 45.2 | 125.4 | 9.2 | 0.2 | 215.8 | 697.4 | 445.8 | 1,143.2 |
| 1999 | 2.6 | 370.1 | 81.7 | 3.9 | 3.0 | 1.0 | 56.2 | 145.7 | 11.1 | 0.2 | 231.9 | 761.8 | 454.4 | 1,216.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 212. Industrial Energy Consumption Estimates, Selected Years 1960-1999, New York

| Year | Coal | Natural Gas a | Petroleum Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 11,947 | 72 | 5,424 | 12,930 | 660 | 325 | 944 | 3,369 | 22,444 | R 2,861 | R 48,956 | 341 | — | — | 14,428 | — | 35,888 | — |
| 1965 | 13,811 | 93 | 6,234 | 16,909 | 996 | 485 | 1,099 | 3,708 | 29,213 | R 6,523 | R 65,167 | 275 | — | — | 23,101 | — | 55,156 | — |
| 1970 | 12,125 | 116 | 5,612 | 16,810 | 787 | 1,125 | 1,003 | 3,281 | 33,696 | R 8,360 | R 70,676 | 269 | — | — | 27,152 | — | 65,799 | — |
| 1975 | 6,125 | 105 | 5,733 | 15,761 | 1,039 | 1,442 | 998 | 1,351 | 23,039 | R 9,326 | R 58,689 | 188 | — | — | 27,247 | — | 65,723 | — |
| 1980 | 5,699 | 114 | 4,983 | 9,339 | 417 | 2,598 | 1,027 | 1,535 | 14,815 | R 11,826 | R 46,541 | 233 | — | — | 32,110 | — | 78,081 | — |
| 1985 | 3,723 | 101 | 7,208 | 4,816 | 1,238 | 980 | 935 | 1,224 | 5,553 | 6,862 | 28,816 | 233 | — | — | 28,659 | — | 67,331 | — |
| 1990 | 3,199 | 102 | 5,524 | 3,428 | 249 | 657 | 1,052 | 1,145 | 4,750 | 10,619 | 27,423 | R f 1,417 | — | — | 31,929 | — | R 69,849 | — |
| 1991 | 3,185 | 120 | 6,375 | 3,043 | 335 | 1,107 | 941 | 1,097 | 2,383 | 9,680 | 24,961 | R 1,341 | — | — | 31,112 | — | R 67,634 | — |
| 1992 | 2,758 | 148 | 6,904 | 3,117 | 201 | 1,092 | 959 | 1,110 | 3,095 | 11,110 | 27,587 | R 1,432 | — | — | 31,027 | — | R 66,174 | — |
| 1993 | 2,947 | 161 | 8,068 | 4,047 | 241 | 961 | 977 | 984 | 3,911 | 10,320 | 29,509 | R 1,320 | — | — | 30,187 | — | R 63,760 | — |
| 1994 | 2,893 | 215 | 7,439 | 3,066 | 355 | 948 | 1,021 | 1,079 | 3,208 | 10,812 | 27,928 | R 1,449 | — | — | 29,467 | — | R 61,495 | — |
| 1995 | 2,791 | 280 | 7,073 | 2,973 | 409 | 881 | 1,004 | 1,126 | 2,021 | 10,616 | 26,101 | R 1,211 | — | — | 25,317 | — | R 52,785 | — |
| 1996 | 2,799 | 324 | 6,184 | 3,097 | 682 | R 1,142 | 974 | 1,114 | 2,498 | R 23,045 | R 38,736 | R 1,844 | — | — | 25,947 | — | R 54,075 | — |
| 1997 | 2,740 | 306 | 6,327 | 3,015 | 361 | R 1,445 | 1,029 | 1,173 | 2,006 | R 24,435 | R 39,791 | R 1,626 | — | — | 25,282 | — | R 52,589 | — |
| 1998 | 2,823 | 252 | 6,624 | 3,075 | 511 | 1,687 | 1,077 | 1,030 | 1,986 | 26,124 | 42,115 | 1,570 | — | — | 25,089 | — | 51,829 | — |
| 1999 | 2,657 | 297 | 6,274 | 3,460 | 77 | 1,772 | 1,088 | 899 | 1,949 | 26,892 | 42,411 | 3,519 | — | — | 25,835 | — | 50,620 | — |

### Trillion Btu

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 311.9 | 74.2 | 36.0 | 75.3 | 3.7 | 1.3 | 5.7 | 17.7 | 141.1 | R 16.9 | R 297.7 | 3.7 | 32.9 | 0.0 | 49.2 | R 769.6 | 122.5 | R 892.1 |
| 1965 | 360.1 | 95.3 | 41.4 | 98.5 | 5.6 | 1.9 | 6.7 | 19.5 | 183.7 | R 37.1 | R 394.4 | 2.9 | 36.3 | 0.0 | 78.8 | R 967.8 | 188.2 | R 1,156.0 |
| 1970 | 308.4 | 118.0 | 37.2 | 97.9 | 4.5 | 4.3 | 6.1 | 17.2 | 211.8 | R 47.0 | R 426.0 | 2.8 | 40.3 | 0.0 | 92.6 | R 988.2 | 224.5 | R 1,212.7 |
| 1975 | 155.5 | 106.2 | 38.0 | 91.8 | 5.9 | 5.4 | 6.1 | 7.1 | 144.8 | R 52.8 | R 351.9 | 2.0 | 37.7 | 0.0 | 93.0 | R 746.3 | 224.2 | R 970.6 |
| 1980 | 146.5 | 116.4 | 33.1 | 54.4 | 2.4 | 9.5 | 6.2 | 8.1 | 93.1 | R 66.1 | R 272.9 | 2.4 | R 48.4 | 0.0 | 109.6 | R 696.2 | 266.4 | R 962.6 |
| 1985 | 94.8 | 103.6 | 47.8 | 28.1 | 7.0 | 3.5 | 5.7 | 6.4 | 34.9 | 38.0 | 171.4 | 2.4 | R 56.7 | 0.0 | 97.8 | R 526.7 | 229.7 | R 756.5 |
| 1990 | 82.6 | 105.1 | 36.7 | 20.0 | 1.4 | 2.4 | 6.4 | 6.0 | 29.9 | 59.8 | 162.4 | R f 14.7 | R 54.7 | f 0.0 | 108.9 | R f 528.5 | 238.3 | R f 766.8 |
| 1991 | 82.2 | 123.3 | 42.3 | 17.7 | 1.9 | 4.0 | 5.7 | 5.8 | 15.0 | 54.3 | 146.7 | R 14.0 | R 53.0 | 0.0 | 106.2 | R 525.3 | 230.8 | R 756.0 |
| 1992 | 71.3 | 152.7 | 45.8 | 18.2 | 1.1 | 4.0 | 5.8 | 5.8 | 19.5 | 62.5 | 162.6 | R 14.8 | R 62.8 | 0.0 | 105.9 | R 570.2 | 225.8 | R 795.9 |
| 1993 | 76.2 | 165.6 | 53.5 | 23.6 | 1.4 | 3.5 | 5.9 | 5.2 | 24.6 | 57.7 | 175.3 | R 13.6 | R 59.2 | 0.0 | 103.0 | R 592.8 | 217.5 | R 810.4 |
| 1994 | 75.1 | 221.1 | 49.4 | 17.9 | 2.0 | 3.4 | 6.2 | R 5.6 | 20.2 | 60.5 | 165.2 | R 14.9 | R 66.4 | 0.0 | 100.5 | R 643.3 | 209.8 | R 853.1 |
| 1995 | 72.4 | 287.6 | 46.9 | 17.3 | 2.3 | 3.2 | 6.1 | 5.9 | 12.7 | 59.5 | 153.9 | R 12.5 | R 68.3 | 0.0 | 86.4 | R 681.1 | 180.1 | R 861.3 |
| 1996 | 72.5 | 331.9 | 41.0 | 18.0 | 3.9 | R 4.1 | 5.9 | R 5.8 | 15.7 | R 126.0 | R 220.5 | R 19.1 | R 82.9 | 0.0 | 88.5 | R 815.3 | 184.5 | R 999.8 |
| 1997 | 71.1 | 314.3 | 42.0 | 17.6 | 2.0 | R 5.2 | 6.2 | R 6.1 | 12.6 | R 134.0 | R 225.8 | R 16.8 | R 85.5 | 0.0 | 86.3 | R 799.8 | 179.4 | R 979.2 |
| 1998 | 73.0 | 259.2 | 44.0 | 17.9 | 2.9 | 6.1 | 6.5 | 5.4 | 12.5 | 144.4 | 239.7 | 16.2 | 57.3 | 0.0 | 85.6 | 731.0 | 176.8 | 907.8 |
| 1999 | 68.7 | 305.2 | 41.6 | 20.2 | 0.4 | 6.4 | 6.6 | 4.7 | 12.3 | 148.4 | 240.6 | 36.4 | 83.1 | 0.0 | 88.2 | 822.2 | 172.7 | 994.9 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 213.   Transportation Energy Consumption Estimates, Selected Years 1960-1999, New York

| | | | Petroleum | | | | | | | | | | | | Electrical System | |
| Year | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Energy Losses [d] | Total [c] |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |

### Thousand Barrels

| Year | Coal | Nat Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Elec System Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 201 | 2 | 13,729 | 8,758 | 9,411 | 18 | 1,368 | 91,701 | 17,060 | 142,046 | 0 | 2,045 | — | 5,087 | — |
| 1965 | 44 | 3 | 2,427 | 8,800 | 23,620 | 38 | 1,122 | 104,690 | 16,158 | 156,856 | 0 | 2,144 | — | 5,120 | — |
| 1970 | 19 | 3 | 249 | 10,653 | 38,338 | 107 | 1,196 | 126,403 | 18,450 | 195,396 | 0 | 2,366 | — | 5,734 | — |
| 1975 | 1 | 3 | 274 | 10,488 | 37,252 | 125 | 950 | 130,948 | 8,862 | 188,899 | 0 | 2,057 | — | 4,961 | — |
| 1980 | 0 | 4 | 320 | 10,309 | 35,916 | 79 | 1,064 | 124,853 | 11,344 | 183,885 | 0 | 2,146 | — | 5,218 | — |
| 1985 | 0 | 4 | 221 | 13,551 | 3,856 | 147 | 968 | 133,195 | 884 | 152,822 | e 0 | 2,442 | — | 5,738 | — |
| 1990 | 0 | 5 | 78 | 22,363 | 5,447 | 150 | 1,089 | 136,834 | 1,377 | 167,339 | R 0 | 2,795 | — | R 6,115 | — |
| 1991 | 0 | 5 | 65 | 19,846 | 5,300 | 158 | 975 | 131,498 | 3,971 | 161,813 | R 0 | 2,714 | — | R 5,901 | — |
| 1992 | 0 | 6 | 74 | 20,290 | 5,357 | 144 | 994 | 127,273 | 3,730 | 157,862 | R 0 | 2,644 | — | R 5,639 | — |
| 1993 | 0 | 6 | 60 | 21,625 | 5,131 | 127 | 1,012 | 130,528 | 3,258 | 161,740 | R 83 | 2,676 | — | R 5,651 | — |
| 1994 | 0 | 6 | 99 | 22,381 | 5,729 | 286 | 1,058 | 126,968 | 3,169 | 159,690 | R 205 | 2,803 | — | 5,849 | — |
| 1995 | 0 | 8 | 76 | 22,342 | 7,697 | 138 | 1,039 | 131,294 | 2,354 | 164,941 | R 654 | 2,757 | — | R 5,748 | — |
| 1996 | 0 | 8 | 66 | 22,562 | 11,532 | R 123 | 1,009 | 129,665 | 6,550 | R 171,507 | R 552 | 2,632 | — | R 5,485 | — |
| 1997 | 0 | 8 | 68 | 23,662 | 12,133 | R 90 | 1,066 | 129,555 | 5,215 | R 171,789 | R 532 | 2,567 | — | R 5,340 | — |
| 1998 | 0 | 8 | 238 | 22,541 | 14,787 | 533 | 1,116 | 130,227 | 4,278 | 173,719 | 394 | 2,580 | — | 5,330 | — |
| 1999 | 0 | 8 | 84 | 25,315 | 9,122 | 25 | 1,127 | 132,521 | 7,488 | 175,683 | 341 | 2,654 | — | 5,200 | — |

### Trillion Btu

| Year | Coal | Nat Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Elec System Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5.2 | 2.4 | 69.3 | 51.0 | 52.6 | 0.1 | 8.3 | 481.7 | 107.3 | 770.3 | 0.0 | 7.0 | 784.8 | 17.4 | 802.2 |
| 1965 | 1.1 | 3.4 | 12.3 | 51.3 | 133.2 | 0.2 | 6.8 | 549.9 | 101.6 | 855.2 | 0.0 | 7.3 | 867.1 | 17.5 | 884.5 |
| 1970 | 0.5 | 3.2 | 1.3 | 62.1 | 216.7 | 0.4 | 7.3 | 664.0 | 116.0 | 1,067.7 | 0.0 | 8.1 | 1,079.5 | 19.6 | 1,099.0 |
| 1975 | (s) | 3.0 | 1.4 | 61.1 | 210.7 | 0.5 | 5.8 | 687.9 | 55.7 | 1,023.0 | 0.0 | 7.0 | 1,033.0 | 16.9 | 1,049.9 |
| 1980 | 0.0 | 3.6 | 1.6 | 60.1 | 203.2 | 0.3 | 6.5 | 655.9 | 71.3 | 998.8 | 0.0 | 7.3 | 1,009.7 | 17.8 | 1,027.5 |
| 1985 | 0.0 | 3.6 | 1.1 | 78.9 | 21.4 | 0.5 | 5.9 | 699.7 | 5.6 | 813.0 | e 0.0 | 8.3 | e 825.0 | 19.6 | e 844.6 |
| 1990 | 0.0 | 4.9 | 0.4 | 130.3 | 30.4 | 0.5 | 6.6 | 718.8 | 8.7 | 895.7 | R 0.0 | 9.5 | 910.1 | 20.9 | 931.0 |
| 1991 | 0.0 | 5.2 | 0.3 | 115.6 | 29.6 | 0.6 | 5.9 | 690.8 | 25.0 | 867.7 | R 0.0 | 9.3 | 882.1 | R 20.1 | 902.3 |
| 1992 | 0.0 | 6.1 | 0.4 | 118.2 | 29.9 | 0.5 | 6.0 | 668.6 | 23.4 | 847.0 | R 0.0 | 9.0 | 862.1 | R 19.2 | R 881.3 |
| 1993 | 0.0 | 6.3 | 0.3 | 126.0 | 28.7 | 0.5 | 6.1 | 685.7 | 20.5 | 867.7 | 0.3 | 9.1 | 883.1 | 19.3 | 902.4 |
| 1994 | 0.0 | 6.3 | 0.5 | 130.4 | 32.3 | 1.0 | 6.4 | R 664.0 | 19.9 | R 854.6 | 0.7 | 9.6 | R 870.4 | 20.0 | R 890.4 |
| 1995 | 0.0 | 8.4 | 0.4 | 130.1 | 43.6 | 0.5 | 6.3 | R 684.7 | 14.8 | R 880.5 | R 2.3 | 9.4 | R 898.3 | 19.6 | R 917.9 |
| 1996 | 0.0 | 8.1 | 0.3 | 131.4 | 65.4 | 0.4 | 6.1 | R 676.3 | 41.2 | R 921.2 | R 2.0 | 9.0 | R 938.3 | 18.7 | R 957.0 |
| 1997 | 0.0 | 8.3 | 0.3 | 137.8 | 68.8 | R 0.3 | 6.5 | R 675.4 | 32.8 | R 921.9 | R 1.9 | 8.8 | R 938.9 | 18.2 | R 957.2 |
| 1998 | 0.0 | 8.0 | 1.2 | 131.3 | 83.8 | 1.9 | 6.8 | 678.7 | 26.9 | 930.7 | 1.4 | 8.8 | 947.5 | 18.2 | 965.7 |
| 1999 | 0.0 | 8.6 | 0.4 | 147.5 | 51.7 | 0.1 | 6.8 | 690.6 | 47.1 | 944.2 | 1.2 | 9.1 | 961.9 | 17.7 | 979.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 214.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, New York**

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 12,302 | 58 | 9,851 | 540 | 0 | 10,391 | 0 | 15,369 | 0 | 0 | 0 | — |
| 1965 | 13,591 | 74 | 21,410 | 1,174 | 0 | 22,584 | 727 | 19,797 | 0 | 0 | 0 | — |
| 1970 | 11,125 | 106 | 56,787 | 3,139 | 0 | 59,927 | 4,273 | 25,726 | 0 | 0 | 0 | — |
| 1975 | 6,124 | 14 | 84,338 | 5,319 | 0 | 89,658 | 13,111 | 29,766 | 0 | 0 | 0 | — |
| 1980 | 6,446 | 124 | 63,898 | 749 | 0 | 64,647 | 19,276 | 33,408 | 13 | 0 | 0 | — |
| 1985 | 7,787 | 173 | 43,220 | 821 | 0 | 44,041 | 24,092 | 44,243 | (s) | 0 | 0 | — |
| 1990 | 9,993 | 223 | 53,800 | 1,016 | 0 | 54,816 | 23,623 | R 27,934 | 0 | 0 | 0 | — |
| 1991 | 9,874 | 212 | 44,432 | 884 | 0 | 45,315 | 28,448 | R 27,081 | 0 | 0 | 0 | — |
| 1992 | 9,963 | 209 | 28,784 | 417 | 0 | 29,201 | 24,155 | R 28,113 | 0 | 0 | 0 | — |
| 1993 | 8,699 | 172 | 23,430 | 567 | 0 | 23,998 | 26,889 | R 31,532 | 13 | 0 | 0 | — |
| 1994 | 8,395 | 183 | 17,724 | 941 | 0 | 18,664 | 29,231 | R 34,463 | 11 | 0 | 0 | — |
| 1995 | 8,051 | 246 | 12,251 | 1,146 | 0 | 13,398 | 26,336 | R 29,886 | 12 | 0 | 0 | — |
| 1996 | 8,254 | 143 | 14,919 | 1,079 | 0 | 15,998 | 35,226 | R 31,242 | 40 | 0 | 0 | — |
| 1997 | 8,726 | 218 | 12,805 | 1,031 | 0 | 13,836 | 29,570 | R 29,830 | 18 | 0 | 0 | — |
| 1998 | 9,410 | 208 | 23,068 | 1,282 | 0 | 24,350 | 31,314 | 28,229 | 5 | 0 | 0 | — |
| 1999 | 4,412 | 182 | 18,468 | 1,775 | 0 | 20,243 | 37,019 | 22,121 | (s) | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 326.1 | 59.8 | 61.9 | 3.1 | 0.0 | 65.1 | 0.0 | 165.4 | 0.0 | 0.0 | 0.0 | 616.4 |
| 1965 | 362.6 | 76.1 | 134.6 | 6.8 | 0.0 | 141.4 | 8.6 | 206.9 | 0.0 | 0.0 | 0.0 | 795.7 |
| 1970 | 274.4 | 108.4 | 357.0 | 18.3 | 0.0 | 375.3 | 46.9 | 270.0 | 0.0 | 0.0 | 0.0 | 1,074.9 |
| 1975 | 147.3 | 14.0 | 530.2 | 30.8 | 0.0 | 561.0 | 144.4 | 309.8 | 0.0 | 0.0 | 0.0 | 1,176.4 |
| 1980 | 158.8 | 128.9 | 401.7 | 4.4 | 0.0 | 406.1 | 210.3 | 347.0 | 0.1 | 0.0 | 0.0 | 1,251.2 |
| 1985 | 196.2 | 178.7 | 271.7 | 4.8 | 0.0 | 276.5 | 260.5 | 462.2 | (s) | 0.0 | 0.0 | 1,374.1 |
| 1990 | 256.7 | 230.6 | 338.2 | 5.9 | 0.0 | 344.2 | 252.3 | R 290.6 | 0.0 | 0.0 | 0.0 | R 1,359.0 |
| 1991 | 255.2 | 218.2 | 279.3 | 5.1 | 0.0 | 284.5 | 305.5 | R 282.6 | 0.0 | 0.0 | 0.0 | R 1,355.2 |
| 1992 | 258.6 | 215.0 | 181.0 | 2.4 | 0.0 | 183.4 | 257.9 | R 290.7 | 0.0 | 0.0 | 0.0 | R 1,211.2 |
| 1993 | 224.7 | 177.1 | 147.3 | 3.3 | 0.0 | 150.6 | 287.2 | R 325.1 | 0.1 | 0.0 | 0.0 | R 1,175.2 |
| 1994 | 217.6 | 188.2 | 111.4 | 5.5 | 0.0 | 116.9 | 312.1 | R 355.5 | 0.1 | 0.0 | 0.0 | R 1,226.7 |
| 1995 | 210.1 | 252.7 | 77.0 | 6.7 | 0.0 | 83.7 | 280.7 | R 308.2 | 0.1 | 0.0 | 0.0 | R 1,162.7 |
| 1996 | 214.8 | 146.8 | 93.8 | 6.3 | 0.0 | 100.1 | 374.2 | R 323.0 | 0.4 | 0.0 | 0.0 | R 1,177.8 |
| 1997 | 228.7 | 223.2 | 80.5 | 6.0 | 0.0 | 86.5 | 314.1 | R 308.9 | 0.2 | 0.0 | 0.0 | R 1,157.8 |
| 1998 | 245.6 | 214.4 | 145.0 | 7.5 | 0.0 | 152.5 | 332.6 | 292.1 | (s) | 0.0 | 0.0 | 1,228.8 |
| 1999 | 115.0 | 186.2 | 116.1 | 10.3 | 0.0 | 126.4 | 393.2 | 228.9 | (s) | 0.0 | 0.0 | 1,039.2 |

a  Includes supplemental gaseous fuels.
b  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c  Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d  Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f  "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g  If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 215. Energy Consumption Estimates by Source, Selected Years 1960-1999, North Carolina

| Year | Coal [a] | Natural Gas [b] | Petroleum — Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | Million kWh | | | Million kWh | |
| 1960 | 8,948 | 45 | 2,617 | 692 | 13,445 | 3,401 | 12,091 | 2,635 | 724 | 35,875 | 4,603 | 186 | 76,268 | 0 | 4,998 | — | — | 735 | — |
| 1965 | 12,708 | 76 | 2,699 | 714 | 17,182 | 3,649 | 12,717 | 4,188 | 835 | 43,144 | 4,723 | 835 | 90,687 | 0 | 5,385 | — | — | -6,408 | — |
| 1970 | 20,417 | 151 | 3,621 | 151 | 22,612 | 4,702 | 11,612 | 5,489 | 851 | 56,348 | 6,778 | 1,416 | 113,580 | 0 | 4,374 | — | — | -9,690 | — |
| 1975 | 20,055 | 115 | 3,049 | 219 | 21,259 | 3,809 | 5,832 | 6,445 | 944 | 66,935 | 7,779 | 1,815 | 118,083 | 1,405 | 7,055 | — | — | 22,308 | — |
| 1980 | 25,466 | 153 | 3,089 | 215 | 24,116 | 5,209 | 3,259 | 7,979 | 1,206 | 66,222 | 9,058 | 3,112 | 123,465 | 5,775 | 5,486 | — | — | 10,592 | — |
| 1985 | 22,052 | 134 | 3,450 | 174 | 24,824 | 6,668 | 4,775 | 7,546 | 1,097 | 70,856 | 6,233 | 2,493 | 128,116 | 19,303 | 4,094 | — | — | 23,946 | — |
| 1990 | 21,150 | 161 | 4,207 | 213 | 25,075 | 5,567 | 1,625 | 8,892 | 1,235 | 77,525 | 5,939 | 5,173 | 135,450 | 25,905 | R h 7,037 | — | — | R 50,579 | — |
| 1991 | 20,877 | 166 | 3,821 | 170 | 23,954 | 4,384 | 1,937 | 10,308 | 1,104 | 77,046 | 6,108 | 5,192 | 134,024 | 30,312 | R 6,106 | — | — | R 45,134 | — |
| 1992 | 24,075 | 180 | 4,250 | 154 | 25,733 | 4,684 | 2,026 | 11,092 | 1,126 | 77,196 | 7,529 | 5,801 | 139,592 | 22,754 | R 5,908 | — | — | R 51,286 | — |
| 1993 | 25,760 | 186 | 4,645 | 118 | 26,479 | 4,897 | 2,097 | 11,870 | 1,147 | 81,432 | 8,090 | 5,541 | 146,317 | 23,759 | R 5,275 | — | — | R 50,477 | — |
| 1994 | 23,282 | 188 | 4,824 | 136 | 28,599 | 4,359 | 1,732 | 12,331 | 1,198 | 83,445 | 6,395 | 5,693 | 148,712 | 32,346 | R 7,323 | — | — | R 38,758 | — |
| 1995 | 24,084 | 203 | 6,426 | 139 | 31,828 | 4,947 | 2,360 | 12,137 | 1,178 | 86,421 | 6,361 | 5,528 | 157,325 | 35,910 | R 5,634 | — | — | R 40,303 | — |
| 1996 | 27,624 | 213 | 4,046 | 148 | 33,386 | 9,127 | 2,890 | R 13,917 | 1,143 | 88,147 | 6,944 | R 11,684 | R 171,431 | 33,718 | R 6,253 | — | — | R 30,990 | — |
| 1997 | 29,608 | 214 | 4,163 | 159 | 33,792 | 7,153 | 2,968 | R 15,789 | 1,207 | 90,933 | 6,124 | R 12,418 | R 174,706 | 32,453 | R 5,145 | — | — | R 22,852 | — |
| 1998 | 28,917 | 213 | 4,422 | 138 | 34,459 | 6,755 | 3,394 | 13,100 | 1,264 | 94,177 | 5,193 | 13,148 | 176,050 | 38,778 | 5,804 | — | — | 15,164 | — |
| 1999 | 28,410 | 221 | 4,587 | 187 | 32,504 | 6,802 | 2,216 | 11,858 | 1,277 | 97,421 | 5,239 | 13,546 | 175,638 | 37,524 | 3,860 | — | — | 17,772 | — |

## Trillion Btu

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear | Hydro | Wood and Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 231.4 | 47.0 | 17.4 | 3.5 | 78.3 | 18.2 | 68.6 | 10.6 | 4.4 | 188.4 | 28.9 | 1.1 | 419.4 | 0.0 | 53.8 | 73.7 | 0.0 | 2.5 | 827.8 |
| 1965 | 325.9 | 78.2 | 17.9 | 3.6 | 100.1 | 19.7 | 72.1 | 16.8 | 5.1 | 226.6 | 29.7 | 4.7 | 496.3 | 0.0 | 56.3 | 67.3 | 0.0 | -21.9 | 1,002.2 |
| 1970 | 491.4 | 154.9 | 24.0 | 0.8 | 131.7 | 25.7 | 65.8 | 20.7 | 5.2 | 296.0 | 42.6 | 8.0 | 620.6 | 0.0 | 45.9 | 65.9 | 0.0 | -33.1 | 1,345.6 |
| 1975 | 476.5 | 116.9 | 20.2 | 1.1 | 123.8 | 20.8 | 33.1 | 23.9 | 5.7 | 351.6 | 48.9 | 10.2 | 639.5 | 15.5 | 73.4 | 66.4 | 0.0 | 76.1 | 1,464.3 |
| 1980 | 624.7 | 155.2 | 20.5 | 1.1 | 140.5 | 28.7 | 18.5 | 29.3 | 7.3 | 347.9 | 56.9 | 17.2 | 667.9 | 63.0 | 57.0 | R 71.9 | 0.0 | 36.1 | R 1,675.7 |
| 1985 | 550.5 | 138.4 | 22.9 | 0.9 | 144.6 | 37.0 | 27.1 | 27.2 | 6.7 | 372.2 | 39.2 | 13.7 | 691.5 | 208.7 | 42.8 | 90.8 | 0.0 | 81.7 | 1,804.3 |
| 1990 | 530.2 | 166.4 | 27.9 | 1.1 | 146.1 | 30.8 | 9.2 | 32.2 | 7.5 | 407.2 | 37.3 | 28.7 | 728.1 | 276.7 | R h 73.2 | R 81.2 | h 0.3 | R 172.6 | R h 2,028.6 |
| 1991 | 522.5 | 171.7 | 25.4 | 0.9 | 139.5 | 24.3 | 11.0 | 37.3 | 6.7 | 404.7 | 38.4 | 28.8 | 716.9 | 325.6 | R 63.7 | R 81.2 | 0.3 | R 154.0 | R 2,035.9 |
| 1992 | 600.3 | 185.7 | 28.2 | 0.8 | 149.9 | 26.0 | 11.5 | 40.2 | 6.8 | 405.5 | 47.3 | 32.2 | 748.4 | 243.0 | R 61.1 | R 106.4 | 0.3 | R 175.0 | R 2,120.2 |
| 1993 | 642.7 | 192.1 | 30.8 | 0.6 | 154.2 | 27.2 | 11.9 | 42.8 | 7.0 | 427.8 | 50.9 | 30.6 | 783.8 | 253.8 | R 54.4 | R 107.0 | 0.3 | R 172.2 | R 2,206.4 |
| 1994 | 578.8 | 194.6 | 32.0 | 0.7 | 166.6 | 24.5 | 9.8 | 44.8 | 7.3 | R 436.4 | 40.2 | 31.5 | R 793.8 | 345.3 | R 75.5 | R 110.5 | 0.3 | 132.2 | R 2,231.2 |
| 1995 | 601.1 | 209.4 | 42.6 | 0.7 | 185.4 | 28.0 | 13.4 | 44.0 | 7.1 | 450.7 | 40.0 | 30.6 | 842.5 | 382.7 | R 58.1 | R 113.9 | 0.3 | R 137.5 | R 2,345.7 |
| 1996 | 687.0 | 220.8 | 26.8 | 0.7 | 194.5 | 51.7 | 16.4 | R 50.3 | 6.9 | R 459.8 | 43.7 | R 63.5 | R 914.3 | 358.2 | R 64.7 | R 110.0 | 0.3 | R 105.7 | R 2,461.0 |
| 1997 | 733.1 | 221.9 | 27.6 | 0.8 | 196.8 | 40.6 | 16.8 | R 57.1 | 7.3 | R 474.0 | 38.5 | R 67.8 | R 927.4 | 344.7 | R 53.3 | R 106.3 | 0.3 | R 78.0 | R 2,465.0 |
| 1998 | 717.5 | 221.3 | 29.3 | 0.7 | 200.7 | 38.3 | 19.2 | 47.3 | 7.7 | 490.9 | 32.6 | 72.1 | 939.0 | 411.9 | 60.0 | 68.7 | 0.3 | 51.7 | 2,470.5 |
| 1999 | 707.7 | 228.6 | 30.4 | 0.9 | 189.3 | 38.6 | 12.6 | 42.9 | 7.7 | 507.7 | 32.9 | 74.1 | 937.2 | 398.6 | 39.9 | 73.9 | 0.4 | 60.6 | 2,446.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 216.  Residential Energy Consumption Estimates, Selected Years 1960-1999, North Carolina

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 348 | 9 | 5,887 | 10,429 | 1,615 | 17,931 | 2,196 | — | — | 5,796 | — | 14,417 | — |
| 1965 | 190 | 15 | 6,654 | 10,547 | 2,563 | 19,765 | 1,527 | — | — | 8,601 | — | 20,537 | — |
| 1970 | 153 | 27 | 8,663 | 10,045 | 3,003 | 21,711 | 1,024 | — | — | 14,660 | — | 35,527 | — |
| 1975 | 129 | 27 | 7,261 | 4,901 | 2,245 | 14,408 | 1,047 | — | — | 18,999 | — | 45,828 | — |
| 1980 | 60 | 34 | 7,044 | 2,747 | 2,846 | 12,637 | R 811 | — | — | 24,377 | — | 59,277 | — |
| 1985 | 69 | 29 | 4,880 | 3,994 | 3,194 | 12,067 | 1,267 | — | — | 26,852 | — | 63,086 | — |
| 1990 | 55 | 35 | 3,556 | 1,408 | 4,277 | 9,241 | 772 | — | — | 33,144 | — | R 72,506 | — |
| 1991 | 34 | 38 | 3,201 | 1,674 | 4,790 | 9,664 | 813 | — | — | 34,391 | — | R 74,763 | — |
| 1992 | 71 | 43 | 3,501 | 1,834 | 5,377 | 10,713 | 856 | — | — | 34,761 | — | R 74,137 | — |
| 1993 | 80 | 47 | 3,701 | 1,888 | 5,552 | 11,140 | R 932 | — | — | 37,742 | — | R 79,718 | — |
| 1994 | 92 | 47 | 3,258 | 1,308 | 5,568 | 10,133 | R 914 | — | — | 37,207 | — | R 77,648 | — |
| 1995 | 78 | 49 | 3,895 | 2,098 | 5,850 | 11,842 | R 1,014 | — | — | 39,506 | — | R 82,368 | — |
| 1996 | 72 | 59 | 4,318 | 2,546 | R 6,696 | R 13,560 | R 1,013 | — | — | 41,592 | — | R 86,678 | — |
| 1997 | 67 | 53 | 3,535 | 2,603 | R 6,664 | R 12,803 | R 725 | — | — | 40,611 | — | R 84,475 | — |
| 1998 | 70 | 51 | 3,052 | 2,988 | 6,358 | 12,398 | 640 | — | — | 42,890 | — | 88,603 | — |
| 1999 | 53 | 53 | 2,984 | 1,985 | 6,430 | 11,399 | 685 | — | — | 43,648 | — | 85,521 | — |
| | | | | | Trillion Btu | | | | | | | | |
| 1960 | 8.6 | 8.9 | 34.3 | 59.1 | 6.5 | 99.9 | 43.9 | 0.0 | 0.0 | 19.8 | 181.1 | 49.2 | 230.3 |
| 1965 | 4.7 | 15.1 | 38.8 | 59.8 | 10.3 | 108.8 | 30.5 | 0.0 | 0.0 | 29.3 | 188.5 | 70.1 | 258.5 |
| 1970 | 3.6 | 28.0 | 50.5 | 57.0 | 11.3 | 118.8 | 20.5 | 0.0 | 0.0 | 50.0 | 220.9 | 121.2 | 342.1 |
| 1975 | 3.0 | 28.0 | 42.3 | 27.8 | 8.3 | 78.4 | 20.9 | 0.0 | 0.0 | 64.8 | 195.2 | 156.4 | 351.6 |
| 1980 | 1.5 | 34.4 | 41.0 | 15.6 | 10.5 | 67.1 | 16.2 | 0.0 | 0.0 | 83.2 | 202.3 | 202.3 | 404.5 |
| 1985 | 1.7 | 29.6 | 28.4 | 22.6 | 11.5 | 62.6 | 25.3 | 0.0 | 0.0 | 91.6 | 210.9 | 215.2 | 426.1 |
| 1990 | 1.4 | 36.1 | 20.7 | 8.0 | 15.5 | 44.2 | 15.4 | e 0.1 | R e 0.2 | 113.1 | e 210.5 | R e 247.4 | R e 457.9 |
| 1991 | 0.9 | 39.2 | 18.6 | 9.5 | 17.3 | 45.4 | 16.3 | 0.1 | R 0.2 | 117.3 | 219.4 | R 255.1 | R 474.5 |
| 1992 | 1.8 | 44.0 | 20.4 | 10.4 | 19.5 | 50.3 | 17.1 | 0.1 | R 0.2 | 118.6 | 232.1 | R 253.0 | R 485.1 |
| 1993 | 2.0 | 48.8 | 21.6 | 10.7 | 20.0 | 52.3 | 18.6 | 0.2 | R 0.2 | 128.8 | R 250.8 | R 272.0 | 522.8 |
| 1994 | 2.3 | 49.2 | 19.0 | 7.4 | 20.2 | 46.6 | 18.3 | 0.1 | R 0.2 | 126.9 | 243.6 | 264.9 | R 508.6 |
| 1995 | 2.0 | 51.0 | 22.7 | 11.9 | 21.2 | 55.8 | 20.3 | 0.2 | R 0.2 | 134.8 | R 264.2 | R 281.0 | R 545.2 |
| 1996 | 1.8 | 60.9 | 25.2 | 14.4 | R 24.2 | R 63.8 | R 20.3 | 0.2 | 0.2 | 141.9 | R 289.0 | R 295.7 | R 584.7 |
| 1997 | 1.7 | 54.8 | 20.6 | 14.8 | R 24.1 | R 59.5 | R 14.5 | 0.2 | 0.2 | 138.6 | R 269.3 | R 288.2 | R 557.6 |
| 1998 | 1.7 | 52.8 | 17.8 | 16.9 | 23.0 | 57.7 | 12.8 | 0.2 | 0.2 | 146.3 | 271.7 | 302.3 | 574.0 |
| 1999 | 1.3 | 54.7 | 17.4 | 11.3 | 23.3 | 51.9 | 13.7 | 0.2 | 0.2 | 148.9 | 270.9 | 291.8 | 562.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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**State Energy Data Report 1999**

# Table 217. Commercial Energy Consumption Estimates, Selected Years 1960-1999, North Carolina

| | | | Petroleum | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | | Electricity[a] | | Electrical System Energy Losses[c] | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | Geothermal | Million Kilowatthours | Net Energy | Million Kilowatthours | Total[d] |
| 1960 | 647 | 4 | 1,156 | 248 | 285 | 206 | 122 | 2,018 | 42 | — | 2,667 | — | 6,634 | — |
| 1965 | 352 | 7 | 1,307 | 251 | 452 | 278 | 120 | 2,409 | 29 | — | 5,360 | — | 12,797 | — |
| 1970 | 284 | 22 | 1,701 | 239 | 530 | 355 | 179 | 3,004 | 19 | — | 9,697 | — | 23,499 | — |
| 1975 | 240 | 22 | 1,426 | 117 | 396 | 414 | 233 | 2,586 | 20 | — | 11,679 | — | 28,170 | — |
| 1980 | 111 | 26 | 1,673 | 118 | 502 | 790 | 491 | 3,574 | 19 | — | 14,258 | — | 34,671 | — |
| 1985 | 126 | 25 | 2,649 | 245 | 564 | 633 | 322 | 4,412 | R 34 | — | 19,163 | — | 45,021 | — |
| 1990 | 102 | 31 | 1,938 | 78 | 755 | 782 | 226 | 3,778 | R 49 | — | 25,516 | — | R 55,818 | — |
| 1991 | 63 | 34 | 1,821 | 93 | 845 | 375 | 118 | 3,252 | R 52 | — | 26,411 | — | R 57,417 | — |
| 1992 | 132 | 36 | 1,639 | 46 | 949 | 323 | 112 | 3,070 | R 56 | — | 26,912 | — | R 57,398 | — |
| 1993 | 149 | 37 | 1,886 | 50 | 980 | 59 | 288 | 3,264 | 75 | — | 28,547 | — | R 60,297 | — |
| 1994 | 171 | 39 | 1,959 | 340 | 983 | 78 | 268 | 3,627 | 77 | — | 29,275 | — | R 61,095 | — |
| 1995 | 145 | 37 | 2,270 | 147 | 1,032 | 61 | 188 | 3,699 | 77 | — | 31,104 | — | R 64,849 | — |
| 1996 | 134 | 40 | 2,864 | 178 | R 1,182 | 312 | 223 | R 4,760 | 83 | — | 32,563 | — | R 67,861 | — |
| 1997 | 125 | 38 | 2,952 | 205 | R 1,176 | 176 | 172 | R 4,682 | R 80 | — | 33,344 | — | R 69,358 | — |
| 1998 | 130 | 36 | 2,635 | 261 | 1,122 | 347 | 121 | 4,485 | 80 | — | 35,720 | — | 73,791 | — |
| 1999 | 98 | 38 | 2,173 | 185 | 1,135 | 311 | 120 | 3,924 | 96 | — | 37,202 | — | 72,890 | — |
| | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 16.0 | 3.8 | 6.7 | 1.4 | 1.1 | 1.1 | 0.8 | 11.1 | 0.8 | 0.0 | 9.1 | 40.9 | 22.6 | 63.6 |
| 1965 | 8.7 | 7.5 | 7.6 | 1.4 | 1.8 | 1.5 | 0.8 | 13.1 | 0.6 | 0.0 | 18.3 | 48.1 | 43.7 | 91.8 |
| 1970 | 6.7 | 22.0 | 9.9 | 1.4 | 2.0 | 1.9 | 1.1 | 16.3 | 0.4 | 0.0 | 33.1 | 78.5 | 80.2 | 158.7 |
| 1975 | 5.6 | 22.0 | 8.3 | 0.7 | 1.5 | 2.2 | 1.5 | 14.1 | 0.4 | 0.0 | 39.8 | 82.0 | 96.1 | 178.1 |
| 1980 | 2.7 | 26.5 | 9.7 | 0.7 | 1.8 | 4.1 | 3.1 | 19.5 | 0.4 | 0.0 | 48.6 | 97.7 | 118.3 | 216.0 |
| 1985 | 3.1 | 25.9 | 15.4 | 1.4 | 2.0 | 3.3 | 2.0 | 24.2 | R 0.7 | 0.0 | 65.4 | R 119.3 | 153.6 | R 272.9 |
| 1990 | 2.6 | 32.3 | 11.3 | 0.4 | 2.7 | 4.1 | 1.4 | 20.0 | R 1.0 | e 0.0 | 87.1 | R e 142.9 | R 190.5 | R e 333.3 |
| 1991 | 1.6 | 35.4 | 10.6 | 0.5 | 3.1 | 2.0 | 0.7 | 16.9 | R 1.0 | 0.0 | 90.1 | R 145.1 | R 195.5 | R 341.0 |
| 1992 | 3.3 | 37.7 | 9.5 | 0.3 | 3.4 | 1.7 | 0.7 | 15.7 | R 1.1 | 0.0 | 91.8 | R 149.6 | R 195.8 | R 345.4 |
| 1993 | 3.7 | 38.7 | 11.0 | 0.3 | 3.5 | 0.3 | 1.8 | 16.9 | 1.5 | 0.0 | 97.4 | 158.2 | R 205.7 | 364.0 |
| 1994 | 4.3 | 40.3 | 11.4 | 1.9 | 3.6 | 0.4 | 1.7 | 19.0 | 1.5 | 0.0 | 99.9 | 165.0 | R 208.5 | 373.5 |
| 1995 | 3.7 | 38.6 | 13.2 | 0.8 | 3.7 | 0.3 | 1.2 | 19.3 | 1.5 | 0.0 | 106.1 | 169.2 | R 221.3 | R 390.5 |
| 1996 | 3.3 | 41.9 | 16.7 | 1.0 | R 4.3 | 1.6 | 1.4 | R 25.0 | 1.7 | 0.0 | 111.1 | R 183.0 | R 231.5 | R 414.5 |
| 1997 | 3.1 | 39.4 | 17.2 | 1.2 | R 4.3 | 0.9 | 1.1 | R 24.6 | R 1.6 | 0.0 | 113.8 | R 182.5 | R 236.7 | R 419.1 |
| 1998 | 3.2 | 37.9 | 15.3 | 1.5 | 4.1 | 1.8 | 0.8 | 23.4 | 1.6 | 0.0 | 121.9 | 188.0 | 251.8 | 439.8 |
| 1999 | 2.4 | 39.4 | 12.7 | 1.0 | 4.1 | 1.6 | 0.8 | 20.2 | 1.9 | 0.0 | 126.9 | 190.8 | 248.7 | 439.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 218.   Industrial Energy Consumption Estimates, Selected Years 1960-1999, North Carolina

| | | | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 2,421 | 26 | 2,617 | 3,155 | 1,413 | 730 | 179 | 1,089 | 3,967 | 186 | 13,336 | 48 | — | — | 8,773 | — | 21,822 | — |
| 1965 | 2,563 | 47 | 2,699 | 4,710 | 1,919 | 1,156 | 258 | 1,315 | 4,005 | 835 | 16,896 | 37 | — | — | 10,707 | — | 25,565 | — |
| 1970 | 2,267 | 75 | 3,621 | 4,514 | 1,328 | 1,891 | 328 | 1,004 | 5,809 | 1,416 | 19,911 | 10 | — | — | 16,099 | — | 39,013 | — |
| 1975 | 1,479 | 62 | 3,049 | 4,271 | 814 | 3,695 | 446 | 782 | 7,045 | 1,815 | 21,915 | 5 | — | — | 20,875 | — | 50,354 | — |
| 1980 | 1,375 | 86 | 3,089 | 4,131 | 394 | 4,581 | 571 | 514 | 8,468 | 3,112 | 24,859 | 3 | — | — | 25,254 | — | 61,409 | — |
| 1985 | 2,247 | 75 | 3,450 | 3,236 | 537 | 3,606 | 520 | 832 | 5,814 | 2,493 | 20,486 | 3 | — | — | 26,272 | — | 61,725 | — |
| 1990 | 2,989 | 86 | 4,207 | 2,918 | 139 | 3,700 | 585 | 807 | 5,193 | 5,173 | 22,722 | R f 81 | — | — | 31,265 | — | R 68,395 | — |
| 1991 | 2,702 | 85 | 3,821 | 2,977 | 170 | 4,487 | 523 | 860 | 5,244 | 5,192 | 23,275 | R 82 | — | — | 31,514 | — | R 68,510 | — |
| 1992 | 2,860 | 91 | 4,250 | 3,205 | 146 | 4,623 | 533 | 819 | 6,758 | 5,801 | 26,135 | R 73 | — | — | 32,522 | — | R 69,362 | — |
| 1993 | 2,476 | 92 | 4,645 | 3,138 | 158 | 5,184 | 543 | 845 | 7,374 | 5,541 | 27,430 | R 69 | — | — | 33,488 | — | R 70,731 | — |
| 1994 | 2,396 | 95 | 4,824 | 3,117 | 84 | 5,503 | 568 | 890 | 5,915 | 5,693 | 26,593 | R 1,717 | — | — | 33,307 | — | R 69,509 | — |
| 1995 | 2,437 | 107 | 6,426 | 4,492 | 115 | 5,115 | 558 | 977 | 5,869 | 5,528 | 29,080 | R 1,620 | — | — | 34,063 | — | R 71,019 | — |
| 1996 | 2,336 | 104 | 4,046 | 4,434 | 165 | R 5,908 | 541 | 1,003 | 6,387 | R 11,684 | R 34,167 | R 1,736 | — | — | 34,142 | — | R 71,152 | — |
| 1997 | 2,210 | 112 | 4,163 | 4,147 | 160 | R 7,827 | 572 | 1,041 | 5,669 | R 12,418 | R 35,996 | R 997 | — | — | 35,095 | — | R 73,001 | — |
| 1998 | 1,883 | 106 | 4,422 | 4,916 | 145 | 5,409 | 599 | 923 | 4,914 | 13,148 | 34,477 | 1,693 | — | — | 34,986 | — | 72,274 | — |
| 1999 | 1,753 | 109 | 4,587 | 3,957 | 46 | 4,221 | 605 | 657 | 4,961 | 13,546 | 32,580 | 1,206 | — | — | 34,165 | — | 66,940 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kero-sene | LPG | Lubri-cants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric Power | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 61.6 | 27.0 | 17.4 | 18.4 | 8.0 | 2.9 | 1.1 | 5.7 | 24.9 | 1.1 | 79.5 | 0.5 | 29.0 | 0.0 | 29.9 | 227.6 | 74.5 | 302.0 |
| 1965 | 64.6 | 48.3 | 17.9 | 27.4 | 10.9 | 4.6 | 1.6 | 6.9 | 25.2 | 4.7 | 99.2 | 0.4 | 36.2 | 0.0 | 36.5 | 285.3 | 87.2 | 372.5 |
| 1970 | 53.9 | 76.9 | 24.0 | 26.3 | 7.5 | 7.1 | 2.0 | 5.3 | 36.5 | 8.0 | 116.8 | 0.1 | 45.0 | 0.0 | 54.9 | 347.6 | 133.1 | 480.7 |
| 1975 | 34.7 | 63.2 | 20.2 | 24.9 | 4.6 | 13.7 | 2.7 | 4.1 | 44.3 | 10.2 | 124.8 | 0.1 | 45.1 | 0.0 | 71.2 | 339.1 | 171.8 | 510.9 |
| 1980 | 33.6 | 86.6 | 20.5 | 24.1 | 2.2 | 16.8 | 3.5 | 2.7 | 53.2 | 17.2 | 140.2 | (s) | R 55.3 | 0.0 | 86.2 | R 401.9 | 209.5 | R 611.4 |
| 1985 | 55.9 | 77.4 | 22.9 | 18.8 | 3.0 | 13.0 | 3.2 | 4.4 | 36.6 | 13.7 | 115.6 | (s) | R 64.8 | 0.0 | 89.6 | R 403.3 | 210.6 | R 613.9 |
| 1990 | 74.5 | 88.9 | 27.9 | 17.0 | 0.8 | 13.4 | 3.5 | 4.2 | 32.6 | 28.7 | 128.2 | R f 0.8 | R 64.8 | f 0.0 | 106.7 | R f 464.1 | R 233.4 | R f 697.4 |
| 1991 | 67.8 | 87.6 | 25.4 | 17.3 | 1.0 | 16.2 | 3.2 | 4.5 | 33.0 | 28.8 | 129.3 | R 0.9 | R 63.9 | 0.0 | 107.5 | R 457.1 | R 233.8 | R 690.8 |
| 1992 | 71.7 | 94.1 | 28.2 | 18.7 | 0.8 | 16.8 | 3.2 | 4.3 | 42.5 | 32.2 | 146.6 | R 0.8 | R 88.2 | 0.0 | 111.0 | R 512.4 | R 236.7 | R 749.0 |
| 1993 | 62.3 | 95.5 | 30.8 | 18.3 | 0.9 | 18.7 | 3.3 | 4.4 | 46.4 | 30.6 | 153.4 | R 0.7 | R 86.9 | 0.0 | 114.3 | R 513.0 | R 241.3 | R 754.4 |
| 1994 | 60.1 | 98.3 | 32.0 | 18.2 | 0.5 | 20.0 | 3.4 | 4.7 | 37.2 | 31.5 | 147.4 | R 17.7 | R 90.7 | 0.0 | 113.6 | R 527.8 | R 237.2 | R 765.0 |
| 1995 | 61.6 | 110.3 | 42.6 | 26.2 | 0.7 | 18.5 | 3.4 | 5.1 | 36.9 | 30.6 | 164.0 | R 16.7 | R 92.1 | 0.3 | 116.2 | R 560.8 | R 242.3 | R 803.1 |
| 1996 | 58.7 | 107.9 | 26.8 | 25.8 | 0.9 | R 21.3 | 3.3 | R 5.2 | 40.2 | R 63.5 | R 187.1 | R 18.0 | R 88.0 | 0.0 | 116.5 | R 576.2 | R 242.8 | R 819.0 |
| 1997 | 55.4 | 115.5 | 27.6 | 24.2 | 0.9 | R 28.3 | 3.5 | R 5.4 | 35.6 | R 67.8 | R 193.3 | R 10.3 | R 90.2 | 0.0 | 119.7 | R 584.4 | R 249.1 | R 833.5 |
| 1998 | 47.2 | 110.7 | 29.3 | 28.6 | 0.8 | 19.5 | 3.6 | 4.8 | 30.9 | 72.1 | 189.8 | 17.5 | 54.3 | 0.0 | 119.4 | 538.9 | 246.6 | 785.5 |
| 1999 | 43.9 | 112.7 | 30.4 | 23.0 | 0.3 | 15.3 | 3.7 | 3.4 | 31.2 | 74.1 | 181.4 | 12.5 | 58.3 | 0.0 | 116.6 | 525.3 | 228.4 | 753.7 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours.  — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 219.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, North Carolina

| | | | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | | Electrical System Energy Losses [d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
| 1960 | 43 | 2 | 692 | 3,187 | 3,401 | 5 | 545 | 34,580 | 494 | 42,905 | 0 | 0 | — | 0 | — |
| 1965 | 9 | 4 | 714 | 4,458 | 3,649 | 17 | 578 | 41,551 | 581 | 51,548 | 0 | 0 | — | 0 | — |
| 1970 | 4 | 6 | 151 | 6,301 | 4,702 | 65 | 523 | 54,989 | 345 | 67,077 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 4 | 219 | 8,207 | 3,809 | 108 | 498 | 65,739 | 263 | 78,844 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 6 | 215 | 10,707 | 5,209 | 50 | 635 | 64,918 | 99 | 81,834 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 5 | 174 | 13,617 | 6,668 | 183 | 578 | 69,392 | 97 | 90,708 | R e 228 | 0 | — | 0 | — |
| 1990 | 0 | 6 | 213 | 16,289 | 5,567 | 160 | 650 | 75,937 | 520 | 99,336 | R 0 | 0 | — | 0 | — |
| 1991 | 0 | 6 | 170 | 15,605 | 4,384 | 186 | 581 | 75,811 | 746 | 97,483 | R 121 | 0 | — | 0 | — |
| 1992 | 0 | 6 | 154 | 17,073 | 4,684 | 143 | 593 | 76,054 | 659 | 99,361 | R 78 | 0 | — | 0 | — |
| 1993 | 0 | 6 | 118 | 17,403 | 4,897 | 155 | 604 | 80,528 | 428 | 104,133 | R 78 | 0 | — | 0 | — |
| 1994 | 0 | 6 | 136 | 19,819 | 4,359 | 278 | 631 | 82,476 | 213 | 107,912 | R 298 | 0 | — | 0 | — |
| 1995 | 0 | 6 | 139 | 20,665 | 4,947 | 141 | 620 | 85,383 | 304 | 112,199 | R 28 | 0 | — | 0 | — |
| 1996 | 0 | 7 | 148 | 21,201 | 9,127 | R 131 | 602 | 86,832 | 334 | R 118,375 | R 790 | 0 | — | 0 | — |
| 1997 | 0 | 7 | 159 | 22,690 | 7,153 | R 122 | 636 | 89,716 | 283 | 120,757 | R 798 | 0 | — | 0 | — |
| 1998 | 0 | 7 | 138 | 23,221 | 6,755 | 211 | 665 | 92,908 | 157 | 124,055 | 975 | 0 | — | 0 | — |
| 1999 | 0 | 11 | 187 | 22,758 | 6,802 | 72 | 672 | 96,454 | 158 | 127,102 | 836 | 0 | — | 0 | — |
| | | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 1.1 | 2.5 | 3.5 | 18.6 | 18.2 | (s) | 3.3 | 181.6 | 3.1 | 228.4 | 0.0 | 0.0 | 232.0 | 0.0 | 232.0 |
| 1965 | 0.2 | 4.4 | 3.6 | 26.0 | 19.7 | 0.1 | 3.5 | 218.3 | 3.7 | 274.8 | 0.0 | 0.0 | 279.4 | 0.0 | 279.4 |
| 1970 | 0.1 | 6.3 | 0.8 | 36.7 | 25.7 | 0.2 | 3.2 | 288.9 | 2.2 | 357.7 | 0.0 | 0.0 | 364.0 | 0.0 | 364.0 |
| 1975 | (s) | 3.6 | 1.1 | 47.8 | 20.8 | 0.4 | 3.0 | 345.3 | 1.7 | 420.1 | 0.0 | 0.0 | 423.8 | 0.0 | 423.8 |
| 1980 | 0.0 | 5.9 | 1.1 | 62.4 | 28.7 | 0.2 | 3.8 | 341.0 | 0.6 | 437.8 | 0.0 | 0.0 | 443.7 | 0.0 | 443.7 |
| 1985 | 0.0 | 4.9 | 0.9 | 79.3 | 37.0 | 0.7 | 3.5 | 364.5 | 0.6 | 486.5 | R e 0.8 | 0.0 | e 491.4 | 0.0 | e 491.4 |
| 1990 | 0.0 | 6.5 | 1.1 | 94.9 | 30.8 | 0.6 | 3.9 | 398.9 | 3.3 | 533.5 | R 0.0 | 0.0 | 539.9 | 0.0 | 539.9 |
| 1991 | 0.0 | 6.4 | 0.9 | 90.9 | 24.3 | 0.7 | 3.5 | 398.2 | 4.7 | 523.2 | R 0.4 | 0.0 | 529.6 | 0.0 | 529.6 |
| 1992 | 0.0 | 6.7 | 0.8 | 99.5 | 26.0 | 0.5 | 3.6 | 399.5 | 4.1 | 534.0 | R 0.3 | 0.0 | 540.6 | 0.0 | 540.6 |
| 1993 | 0.0 | 6.2 | 0.6 | 101.4 | 27.2 | 0.6 | 3.7 | 423.0 | 2.7 | 559.1 | 0.3 | 0.0 | 565.3 | 0.0 | 565.3 |
| 1994 | 0.0 | 6.0 | 0.7 | 115.4 | 24.5 | 1.0 | 3.8 | R 431.4 | 1.3 | R 578.2 | R 1.1 | 0.0 | R 584.2 | 0.0 | R 584.2 |
| 1995 | 0.0 | 6.3 | 0.7 | 120.4 | 28.0 | 0.5 | 3.8 | R 445.3 | 1.9 | R 600.6 | 0.1 | 0.0 | R 606.9 | 0.0 | R 606.9 |
| 1996 | 0.0 | 7.6 | 0.7 | 123.5 | 51.7 | 0.5 | 3.6 | R 452.9 | 2.1 | R 635.1 | R 2.8 | 0.0 | R 642.8 | 0.0 | R 642.8 |
| 1997 | 0.0 | 7.5 | 0.8 | 132.2 | 40.6 | 0.4 | 3.9 | R 467.7 | 1.8 | R 647.3 | R 2.8 | 0.0 | R 654.8 | 0.0 | R 654.8 |
| 1998 | 0.0 | 6.9 | 0.7 | 135.3 | 38.3 | 0.8 | 4.0 | 484.2 | 1.0 | 664.3 | 3.5 | 0.0 | 671.2 | 0.0 | 671.2 |
| 1999 | 0.0 | 10.9 | 0.9 | 132.6 | 38.6 | 0.3 | 4.1 | 502.6 | 1.0 | 680.0 | 3.0 | 0.0 | 690.9 | 0.0 | 690.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 220. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, North Carolina

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total [g] |
| 1960 | 5,488 | 5 | 19 | 60 | 0 | 79 | 0 | 4,951 | 0 | 0 | 0 | — |
| 1965 | 9,595 | 3 | 16 | 53 | 0 | 70 | 0 | 5,349 | 0 | 0 | 0 | — |
| 1970 | 17,709 | 21 | 445 | 1,432 | 0 | 1,877 | 0 | 4,363 | 0 | 0 | 0 | — |
| 1975 | 18,206 | (s) | 237 | 93 | 0 | 330 | 1,405 | 7,050 | 0 | 0 | 0 | — |
| 1980 | 23,920 | 2 | (s) | 561 | 0 | 561 | 5,775 | 5,483 | 0 | 0 | 0 | — |
| 1985 | 19,610 | 1 | 0 | 443 | 0 | 443 | 19,303 | 4,091 | 0 | 0 | 0 | — |
| 1990 | 18,005 | 2 | 0 | 373 | 0 | 373 | 25,905 | 6,957 | 0 | 0 | 0 | — |
| 1991 | 18,078 | 3 | 0 | 349 | 0 | 349 | 30,312 | 6,024 | 0 | 0 | 0 | — |
| 1992 | 21,011 | 3 | 0 | 314 | 0 | 314 | 22,754 | 5,835 | 0 | 0 | 0 | — |
| 1993 | 23,055 | 3 | 0 | 351 | 0 | 351 | 23,759 | 5,207 | 0 | 0 | 0 | — |
| 1994 | 20,624 | 1 | 0 | 447 | 0 | 447 | 32,346 | 5,606 | 0 | 0 | 0 | — |
| 1995 | 21,424 | 3 | 0 | 505 | 0 | 505 | 35,910 | 4,014 | 0 | 0 | 0 | — |
| 1996 | 25,083 | 2 | 0 | 569 | 0 | 569 | 33,718 | 4,517 | 0 | 0 | 0 | — |
| 1997 | 27,206 | 5 | 0 | 467 | 0 | 467 | 32,453 | 4,148 | 0 | 0 | 0 | — |
| 1998 | 26,834 | 12 | 0 | 635 | 0 | 635 | 38,778 | 4,111 | 0 | 0 | 0 | — |
| 1999 | 26,507 | 11 | 0 | 632 | 0 | 632 | 37,524 | 2,654 | 0 | 0 | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | |
| 1960 | 144.0 | 4.8 | 0.1 | 0.4 | 0.0 | 0.5 | 0.0 | 53.3 | 0.0 | 0.0 | 0.0 | 202.6 |
| 1965 | 247.7 | 3.0 | 0.1 | 0.3 | 0.0 | 0.4 | 0.0 | 55.9 | 0.0 | 0.0 | 0.0 | 307.0 |
| 1970 | 427.0 | 21.6 | 2.8 | 8.3 | 0.0 | 11.1 | 0.0 | 45.8 | 0.0 | 0.0 | 0.0 | 505.6 |
| 1975 | 433.1 | 0.1 | 1.5 | 0.5 | 0.0 | 2.0 | 15.5 | 73.4 | 0.0 | 0.0 | 0.0 | 524.1 |
| 1980 | 586.9 | 1.8 | (s) | 3.3 | 0.0 | 3.3 | 63.0 | 57.0 | 0.0 | 0.0 | 0.0 | 711.9 |
| 1985 | 489.8 | 0.6 | 0.0 | 2.6 | 0.0 | 2.6 | 208.7 | 42.7 | 0.0 | 0.0 | 0.0 | 744.4 |
| 1990 | 451.7 | 2.5 | 0.0 | 2.2 | 0.0 | 2.2 | 276.7 | 72.4 | 0.0 | 0.0 | 0.0 | 805.5 |
| 1991 | 452.2 | 3.1 | 0.0 | 2.0 | 0.0 | 2.0 | 325.6 | 62.9 | 0.0 | 0.0 | 0.0 | 845.7 |
| 1992 | 523.4 | 3.3 | 0.0 | 1.8 | 0.0 | 1.8 | 243.0 | 60.4 | 0.0 | 0.0 | 0.0 | 831.9 |
| 1993 | 574.8 | 3.0 | 0.0 | 2.0 | 0.0 | 2.0 | 253.8 | 53.7 | 0.0 | 0.0 | 0.0 | 887.3 |
| 1994 | 512.1 | 0.9 | 0.0 | 2.6 | 0.0 | 2.6 | 345.3 | 57.8 | 0.0 | 0.0 | 0.0 | 918.8 |
| 1995 | 533.9 | 3.2 | 0.0 | 2.9 | 0.0 | 2.9 | 382.7 | 41.4 | 0.0 | 0.0 | 0.0 | 964.3 |
| 1996 | 623.2 | 2.5 | 0.0 | 3.3 | 0.0 | 3.3 | 358.2 | 46.7 | 0.0 | 0.0 | 0.0 | 1,033.8 |
| 1997 | 673.0 | 4.7 | 0.0 | 2.7 | 0.0 | 2.7 | 344.7 | R 43.0 | 0.0 | 0.0 | 0.0 | R 1,068.1 |
| 1998 | 665.3 | 13.0 | 0.0 | 3.7 | 0.0 | 3.7 | 411.9 | 42.5 | 0.0 | 0.0 | 0.0 | 1,136.5 |
| 1999 | 660.0 | 10.9 | 0.0 | 3.7 | 0.0 | 3.7 | 398.6 | 27.5 | 0.0 | 0.0 | 0.0 | 1,100.7 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 221. Energy Consumption Estimates by Source, Selected Years 1960-1999, North Dakota

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | — Thousand Barrels | | | | | | | | | | | — Million kWh | | Wood and Waste | | Million kWh | Total [g] |
| | | | | | | | | | | | | | | | | | | | |

**Thousand Barrels**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear | Hydro | Wood and Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2,101 | 26 | 1,123 | 66 | 3,773 | 2,103 | 904 | 1,212 | 202 | 7,719 | 687 | R 794 | R 18,583 | 0 | 1,060 | — | — | -3,501 | — |
| 1965 | 1,719 | 32 | 795 | 165 | 5,170 | 2,069 | 52 | 1,154 | 167 | 8,212 | 868 | R 875 | R 19,526 | 0 | 2,497 | — | — | -6,185 | — |
| 1970 | 4,186 | 33 | 1,402 | 95 | 4,975 | 2,074 | 245 | 1,719 | 166 | 8,766 | 728 | R 972 | R 21,141 | 0 | 3,108 | — | — | -14,183 | — |
| 1975 | 5,100 | 37 | 1,054 | 85 | 4,446 | 1,855 | 70 | 1,580 | 158 | 10,044 | 1,089 | R 1,095 | R 21,477 | 0 | 4,511 | — | — | -18,295 | — |
| 1980 | 12,346 | 23 | 753 | 64 | 8,139 | 1,702 | 15 | 1,302 | 177 | 9,167 | 716 | R 1,048 | R 23,083 | 0 | 5,364 | — | — | -43,747 | — |
| 1985 | 22,958 | 28 | 1,047 | 4 | 7,505 | 1,682 | 15 | 549 | 162 | 8,822 | 505 | R 824 | R 21,115 | 0 | 4,818 | — | — | -58,231 | — |
| 1990 | 28,114 | 32 | 814 | 28 | 6,764 | 1,178 | 6 | 1,426 | 182 | 8,151 | 331 | R 1,138 | R 20,017 | 0 | R h 1,855 | — | — | R -66,959 | — |
| 1991 | 28,597 | 40 | 778 | 28 | 7,413 | 964 | 10 | 2,025 | 163 | 8,255 | 306 | R 986 | R 20,928 | 0 | R 1,926 | — | — | R -68,826 | — |
| 1992 | 30,301 | 37 | 1,465 | 28 | 7,034 | 1,405 | 7 | 1,771 | 166 | 8,233 | 291 | R 1,174 | R 21,574 | 0 | R 2,186 | — | — | R -74,111 | — |
| 1993 | 30,302 | 40 | 915 | 62 | 7,443 | 1,254 | 10 | 1,369 | 169 | 8,482 | 399 | R 1,097 | R 21,199 | 0 | R 2,439 | — | — | R -74,179 | — |
| 1994 | 30,363 | 43 | 1,252 | 43 | 8,338 | 846 | 7 | 1,316 | 176 | 8,387 | 343 | R 1,151 | R 21,861 | 0 | R 2,639 | — | — | R -74,870 | — |
| 1995 | 30,237 | 45 | 791 | 65 | 8,553 | 333 | 5 | 1,754 | 173 | 8,650 | 166 | R 1,106 | R 21,597 | 0 | R 3,004 | — | — | R -73,026 | — |
| 1996 | 30,511 | 49 | 911 | 50 | 8,511 | 246 | 8 | R 2,226 | 168 | 8,683 | 138 | R 1,254 | R 22,194 | 0 | R 3,802 | — | — | R -78,214 | — |
| 1997 | 29,360 | 56 | 1,241 | 33 | 8,424 | 189 | 7 | R 2,534 | 178 | 8,628 | 190 | R 1,239 | R 22,664 | 0 | R 3,490 | — | — | R -72,673 | — |
| 1998 | 31,060 | 50 | 1,440 | 43 | 7,273 | 211 | 8 | 1,976 | 186 | 8,681 | 46 | 1,074 | 20,939 | 0 | 2,443 | — | — | -74,749 | — |
| 1999 | 31,285 | 56 | 2,097 | 39 | 7,344 | 405 | 19 | 2,675 | 188 | 8,711 | 73 | 1,107 | 22,658 | 0 | 2,723 | — | — | -74,776 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear | Hydro | Wood and Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 30.5 | 27.4 | 7.5 | 0.3 | 22.0 | 11.3 | 5.1 | 4.9 | 1.2 | 40.5 | 4.3 | 4.8 | 101.9 | 0.0 | 11.4 | 0.5 | 0.0 | -11.9 | R 159.7 |
| 1965 | 24.7 | 32.4 | 5.3 | 0.8 | 30.1 | 11.1 | 0.3 | 4.6 | 1.0 | 43.1 | 5.5 | R 5.3 | R 107.1 | 0.0 | 26.1 | 0.3 | 0.0 | -21.1 | R 169.6 |
| 1970 | 57.5 | 33.7 | 9.3 | 0.5 | 29.0 | 11.2 | 1.4 | 6.5 | 1.0 | 46.0 | 4.6 | R 5.8 | R 115.3 | 0.0 | 32.6 | 0.4 | 0.0 | -48.4 | R 191.1 |
| 1975 | 67.9 | 36.9 | 7.0 | 0.4 | 25.9 | 10.0 | 0.4 | 5.9 | 1.0 | 52.8 | 6.8 | R 6.6 | R 116.8 | 0.0 | 46.9 | 0.5 | 0.0 | -62.4 | R 206.5 |
| 1980 | 163.3 | 24.0 | 5.0 | 0.3 | 47.4 | 9.2 | 0.1 | 4.8 | 1.1 | 48.2 | 4.5 | R 6.3 | R 126.8 | 0.0 | 55.7 | 2.9 | 0.0 | -149.3 | R 223.6 |
| 1985 | 302.0 | 29.8 | 6.9 | (s) | 43.7 | 9.1 | 0.1 | 2.0 | 1.0 | 46.3 | 3.2 | R 5.1 | R 117.4 | 0.0 | 50.3 | R 2.8 | (s) | -198.7 | R 303.7 |
| 1990 | 374.6 | 33.5 | 5.4 | 0.1 | 39.4 | 6.4 | (s) | 5.2 | 1.1 | 42.8 | 2.1 | R 6.8 | R 109.4 | 0.0 | R h 19.3 | 1.9 | h 0.1 | R -228.5 | R h 309.0 |
| 1991 | 379.2 | 41.6 | 5.2 | 0.1 | 43.2 | 5.2 | 0.1 | 7.3 | 1.0 | 43.4 | 1.9 | R 6.0 | R 113.4 | 0.0 | R 20.1 | R 1.9 | 0.1 | R -234.8 | 321.4 |
| 1992 | 399.1 | 38.2 | 9.7 | 0.1 | 41.0 | 7.6 | (s) | 6.4 | 1.0 | 43.3 | 1.8 | R 7.1 | R 118.0 | 0.0 | R 22.6 | R 2.0 | 0.1 | -252.9 | 329.2 |
| 1993 | 399.7 | 42.4 | 6.1 | 0.3 | 43.4 | 6.8 | 0.1 | 4.9 | 1.0 | 44.6 | 2.5 | R 6.6 | R 116.2 | 0.0 | R 25.1 | R 1.7 | 0.1 | R -253.1 | R 332.6 |
| 1994 | 402.4 | 45.3 | 8.3 | 0.2 | 48.6 | 4.6 | (s) | 4.8 | 1.1 | R 43.9 | 2.2 | R 6.9 | R 120.6 | 0.0 | R 27.2 | R 1.7 | 0.1 | -255.5 | R 343.8 |
| 1995 | 399.8 | 47.6 | 5.2 | 0.3 | 49.8 | 1.9 | (s) | 6.4 | 1.1 | R 45.1 | 1.0 | R 6.7 | R 117.5 | 0.0 | R 31.0 | R 1.8 | 0.1 | -249.2 | R 350.7 |
| 1996 | 404.1 | 51.5 | 6.0 | 0.3 | 49.6 | 1.4 | (s) | R 8.0 | 1.0 | R 45.3 | 0.9 | R 7.5 | R 120.1 | 0.0 | R 39.3 | 2.3 | 0.2 | R -266.9 | R 352.9 |
| 1997 | 386.5 | 58.9 | 8.2 | 0.2 | 49.1 | 1.1 | (s) | R 9.2 | 1.1 | R 45.0 | 1.2 | R 7.5 | R 122.5 | 0.0 | R 36.1 | R 2.0 | 0.2 | R -248.0 | R 357.7 |
| 1998 | 409.6 | 51.4 | 9.6 | 0.2 | 42.4 | 1.2 | (s) | 7.1 | 1.1 | 45.2 | 0.3 | 6.5 | 113.7 | 0.0 | 25.3 | 1.9 | 0.2 | -255.0 | 343.4 |
| 1999 | 411.6 | 58.9 | 13.9 | 0.2 | 42.8 | 2.3 | 0.1 | 9.7 | 1.1 | 45.4 | 0.5 | 6.7 | 122.6 | 0.0 | 28.2 | 2.1 | 0.2 | -255.1 | 365.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 222.  Residential Energy Consumption Estimates, Selected Years 1960-1999, North Dakota

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 195 | 4 | 874 | 860 | 787 | 2,521 | 23 | — | — | 728 | — | 1,810 | — |
| 1965 | 108 | 7 | 1,269 | 40 | 758 | 2,067 | 16 | — | — | 911 | — | 2,176 | — |
| 1970 | 50 | 8 | 1,103 | 190 | 1,283 | 2,576 | 19 | — | — | 1,399 | — | 3,391 | — |
| 1975 | 53 | 10 | 776 | 21 | 1,181 | 1,978 | 22 | — | — | 1,901 | — | 4,584 | — |
| 1980 | 50 | 10 | 1,173 | 5 | 511 | 1,689 | 143 | — | — | 2,456 | — | 5,972 | — |
| 1985 | 69 | 10 | 1,119 | 14 | 169 | 1,302 | 137 | — | — | 3,012 | — | 7,075 | — |
| 1990 | 47 | 9 | 845 | 5 | 653 | 1,502 | 84 | — | — | 2,954 | — | R 6,462 | — |
| 1991 | 47 | 10 | 902 | 7 | 976 | 1,885 | 89 | — | — | 3,096 | — | R 6,731 | — |
| 1992 | 42 | 10 | 642 | 6 | 1,081 | 1,729 | 93 | — | — | 3,020 | — | R 6,441 | — |
| 1993 | 48 | 11 | 751 | 8 | 762 | 1,521 | 77 | — | — | 3,209 | — | R 6,778 | — |
| 1994 | 49 | 11 | 733 | 6 | 693 | 1,432 | 75 | — | — | 3,243 | — | R 6,768 | — |
| 1995 | 38 | 11 | 775 | 4 | 775 | 1,553 | 84 | — | — | 3,384 | — | R 7,055 | — |
| 1996 | 52 | 13 | 829 | 5 | R 945 | R 1,779 | 84 | — | — | 3,602 | — | R 7,506 | — |
| 1997 | 49 | 11 | 638 | 5 | R 1,519 | R 2,162 | R 59 | — | — | 3,437 | — | R 7,149 | — |
| 1998 | 41 | 10 | 524 | 6 | 1,088 | 1,618 | 52 | — | — | 3,272 | — | 6,760 | — |
| 1999 | 45 | 11 | 441 | 17 | 1,439 | 1,898 | 55 | — | — | 3,307 | — | 6,479 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 3.0 | 4.0 | 5.1 | 4.9 | 3.2 | 13.1 | 0.5 | 0.0 | 0.0 | 2.5 | 23.1 | 6.2 | 29.2 |
| 1965 | 1.7 | 6.6 | 7.4 | 0.2 | 3.0 | 10.7 | 0.3 | 0.0 | 0.0 | 3.1 | 22.4 | 7.4 | 29.8 |
| 1970 | 0.7 | 8.4 | 6.4 | 1.1 | 4.8 | 12.4 | 0.4 | 0.0 | 0.0 | 4.8 | 26.7 | 11.6 | 38.3 |
| 1975 | 0.7 | 10.2 | 4.5 | 0.1 | 4.4 | 9.0 | 0.4 | 0.0 | 0.0 | 6.5 | 26.9 | 15.6 | 42.5 |
| 1980 | 0.7 | 10.1 | 6.8 | (s) | 1.9 | 8.7 | 2.9 | 0.0 | 0.0 | 8.4 | 30.8 | 20.4 | 51.2 |
| 1985 | 0.9 | 11.0 | 6.5 | 0.1 | 0.6 | 7.2 | 2.7 | 0.0 | 0.0 | 10.3 | 32.1 | 24.1 | 56.3 |
| 1990 | 0.7 | 9.5 | 4.9 | (s) | 2.4 | 7.3 | 1.7 | e 0.1 | e (s) | 10.1 | e 29.3 | 22.0 | e 51.3 |
| 1991 | 0.7 | 10.8 | 5.3 | (s) | 3.5 | 8.8 | 1.8 | 0.1 | (s) | 10.6 | 32.7 | 23.0 | 55.7 |
| 1992 | 0.6 | 10.1 | 3.7 | (s) | 3.9 | 7.7 | 1.9 | 0.1 | (s) | 10.3 | 30.7 | 22.0 | 52.7 |
| 1993 | 0.7 | 11.4 | 4.4 | (s) | 2.7 | 7.2 | 1.5 | 0.1 | (s) | 10.9 | 31.8 | 23.1 | 54.9 |
| 1994 | 0.7 | 11.3 | 4.3 | (s) | 2.5 | 6.8 | 1.5 | 0.1 | (s) | 11.1 | 31.5 | 23.1 | 54.6 |
| 1995 | 0.6 | 11.8 | 4.5 | (s) | 2.8 | 7.3 | 1.7 | 0.1 | (s) | 11.5 | 33.0 | 24.1 | 57.1 |
| 1996 | 0.8 | 13.2 | 4.8 | (s) | R 3.4 | R 8.3 | 1.7 | 0.1 | (s) | 12.3 | 36.3 | 25.6 | R 62.0 |
| 1997 | 0.7 | 11.9 | 3.7 | (s) | R 5.5 | R 9.2 | 1.2 | 0.1 | (s) | 11.7 | R 34.9 | 24.4 | R 59.3 |
| 1998 | 0.6 | 10.5 | 3.1 | (s) | 3.9 | 7.0 | 1.0 | 0.1 | (s) | 11.2 | 30.4 | 23.1 | 53.5 |
| 1999 | 0.7 | 11.0 | 2.6 | 0.1 | 5.2 | 7.9 | 1.1 | 0.1 | (s) | 11.3 | 32.1 | 22.1 | 54.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 223. Commercial Energy Consumption Estimates, Selected Years 1960-1999, North Dakota

| | | | Petroleum | | | | | | | | | | Electrical System Energy Losses [c] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal[a] | Natural Gas [b] | Distillate Fuel [a] | Kerosene [a] | LPG [a] | Motor Gasoline | Residual Fuel [a] | Total | Wood | | Electricity [a] | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | Geothermal | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [d] |
| 1960 | 362 | 3 | 198 | 0 | 139 | 32 | 73 | 442 | (s) | — | 304 | — | 757 | — |
| 1965 | 201 | 5 | 288 | 0 | 134 | 179 | 209 | 809 | (s) | — | 443 | — | 1,058 | — |
| 1970 | 93 | 8 | 250 | 0 | 226 | 151 | 104 | 731 | (s) | — | 696 | — | 1,686 | — |
| 1975 | 99 | 12 | 176 | 0 | 208 | 95 | 493 | 972 | (s) | — | 805 | — | 1,942 | — |
| 1980 | 93 | 11 | 642 | 0 | 90 | 73 | 400 | 1,206 | 3 | — | 1,145 | — | 2,784 | — |
| 1985 | 128 | 10 | 484 | (s) | 30 | 69 | 64 | 647 | R 4 | — | 2,026 | — | 4,760 | — |
| 1990 | 88 | 10 | 151 | (s) | 115 | 70 | 23 | 359 | R 5 | — | 2,300 | — | R 5,032 | — |
| 1991 | 88 | 11 | 160 | 1 | 172 | 44 | 8 | 384 | R 6 | — | 2,397 | — | R 5,211 | — |
| 1992 | 79 | 10 | 157 | (s) | 191 | 37 | 12 | 397 | R 6 | — | 2,273 | — | R 4,848 | — |
| 1993 | 89 | 11 | 143 | 1 | 134 | 10 | 16 | 305 | 6 | — | 2,318 | — | R 4,896 | — |
| 1994 | 90 | 11 | 192 | 1 | 122 | 10 | 15 | 340 | 6 | — | 2,427 | — | 5,064 | — |
| 1995 | 71 | 12 | 160 | 1 | 137 | 10 | 19 | 327 | 6 | — | 2,728 | — | R 5,687 | — |
| 1996 | 95 | 12 | 211 | 2 | R 167 | 10 | 6 | R 396 | 7 | — | 2,877 | — | R 5,996 | — |
| 1997 | 91 | 11 | 273 | 1 | R 268 | 10 | 9 | R 560 | 6 | — | 2,769 | — | R 5,760 | — |
| 1998 | 77 | 10 | 265 | 1 | 192 | 21 | 17 | 496 | 6 | — | 2,761 | — | 5,704 | — |
| 1999 | 83 | 10 | 213 | 1 | 254 | 22 | 18 | 507 | 8 | — | 2,793 | — | 5,472 | — |

Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Motor Gasoline | Residual Fuel | Total | Wood | Geothermal | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5.6 | 2.9 | 1.2 | 0.0 | 0.6 | 0.2 | 0.5 | 2.3 | (s) | 0.0 | 1.0 | 12.0 | 2.6 | 14.5 |
| 1965 | 3.1 | 5.0 | 1.7 | 0.0 | 0.5 | 0.9 | 1.3 | 4.5 | (s) | 0.0 | 1.5 | 14.1 | 3.6 | 17.7 |
| 1970 | 1.4 | 8.6 | 1.5 | 0.0 | 0.9 | 0.8 | 0.7 | 3.8 | (s) | 0.0 | 2.4 | 16.1 | 5.8 | 21.8 |
| 1975 | 1.4 | 12.4 | 1.0 | 0.0 | 0.8 | 0.5 | 3.1 | 5.4 | (s) | 0.0 | 2.7 | 21.9 | 6.6 | 28.6 |
| 1980 | 1.2 | 11.6 | 3.7 | 0.0 | 0.3 | 0.4 | 2.5 | 7.0 | 0.1 | 0.0 | 3.9 | 23.8 | 9.5 | 33.3 |
| 1985 | 1.7 | 10.7 | 2.8 | (s) | 0.1 | 0.4 | 0.4 | 3.7 | R 0.1 | 0.0 | 6.9 | R 23.1 | 16.2 | 39.3 |
| 1990 | 1.2 | 10.6 | 0.9 | (s) | 0.4 | 0.4 | 0.1 | 1.8 | R 0.1 | e (s) | 7.8 | R e 21.6 | 17.2 | R e 38.7 |
| 1991 | 1.2 | 11.2 | 0.9 | (s) | 0.6 | 0.2 | (s) | 1.8 | R 0.1 | (s) | 8.2 | R 22.6 | 17.8 | R 40.4 |
| 1992 | 1.1 | 10.2 | 0.9 | (s) | 0.7 | 0.2 | 0.1 | 1.9 | R 0.1 | (s) | 7.8 | R 21.1 | R 16.5 | R 37.7 |
| 1993 | 1.3 | 11.3 | 0.8 | (s) | 0.5 | 0.1 | 0.1 | 1.5 | 0.1 | (s) | 7.9 | 22.1 | 16.7 | 38.9 |
| 1994 | 1.3 | 11.4 | 1.1 | (s) | 0.4 | 0.1 | 0.1 | 1.7 | 0.1 | 0.1 | 8.3 | 22.9 | 17.3 | 40.2 |
| 1995 | 1.1 | 12.2 | 0.9 | (s) | 0.5 | 0.1 | 0.1 | 1.6 | 0.1 | 0.1 | 9.3 | 24.4 | 19.4 | 43.8 |
| 1996 | 1.4 | 12.8 | 1.2 | (s) | 0.6 | 0.1 | (s) | 1.9 | 0.1 | 0.1 | 9.8 | 26.1 | R 20.5 | 46.6 |
| 1997 | 1.4 | 11.4 | 1.6 | (s) | R 1.0 | 0.1 | 0.1 | R 2.7 | 0.1 | 0.1 | 9.4 | R 25.1 | R 19.7 | R 44.8 |
| 1998 | 1.2 | 10.5 | 1.5 | (s) | 0.7 | 0.1 | 0.1 | 2.5 | 0.1 | 0.1 | 9.4 | 23.8 | 19.5 | 43.2 |
| 1999 | 1.3 | 10.5 | 1.2 | (s) | 0.9 | 0.1 | 0.1 | 2.4 | 0.2 | 0.1 | 9.5 | 24.0 | 18.7 | 42.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**NORTH DAKOTA**

## Table 224. Industrial Energy Consumption Estimates, Selected Years 1960-1999, North Dakota

| Year | Coal | Natural Gas a | Petroleum Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| **Thousand Barrels** | | | | | | | | | | | | | | | | | | |
| 1960 | 521 | 20 | 1,123 | 2,104 | 44 | 257 | 44 | 2,927 | 530 | R 794 | R 7,823 | 0 | — | — | 121 | — | 300 | — |
| 1965 | 444 | 21 | 795 | 2,696 | 12 | 240 | 20 | 2,533 | 632 | R 875 | R 7,804 | 0 | — | — | 241 | — | 576 | — |
| 1970 | 523 | 16 | 1,402 | 2,174 | 55 | 206 | 28 | 2,315 | 558 | R 972 | R 7,710 | 0 | — | — | 720 | — | 1,745 | — |
| 1975 | 570 | 14 | 1,054 | 1,613 | 49 | 189 | 21 | 2,193 | 577 | R 1,095 | R 6,792 | 0 | — | — | 1,007 | — | 2,428 | — |
| 1980 | 585 | 2 | 753 | 2,460 | 10 | 690 | 26 | 1,540 | 315 | R 1,048 | R 6,842 | 0 | — | — | 1,576 | — | 3,832 | — |
| 1985 | 5,407 | 7 | 1,047 | 2,783 | 1 | 340 | 24 | 1,080 | 440 | R 824 | R 6,539 | 0 | — | — | 1,988 | — | 4,672 | — |
| 1990 | 6,400 | 11 | 814 | 2,596 | 1 | 644 | 27 | 799 | 308 | R 1,138 | R 6,326 | f 0 | — | — | 1,760 | — | R 3,850 | — |
| 1991 | 6,287 | 17 | 778 | 3,063 | 2 | 862 | 24 | 784 | 298 | R 986 | R 6,798 | 0 | — | — | 1,762 | — | R 3,831 | — |
| 1992 | 6,988 | 14 | 1,465 | 2,940 | (s) | 483 | 24 | 720 | 279 | R 1,174 | R 7,085 | 0 | — | — | 1,835 | — | R 3,915 | — |
| 1993 | 6,875 | 14 | 915 | 2,952 | 1 | 455 | 25 | 674 | 383 | R 1,097 | R 6,501 | 0 | — | — | 1,905 | — | R 4,023 | — |
| 1994 | 6,976 | 17 | 1,252 | 3,234 | 1 | 480 | 26 | 698 | 328 | R 1,151 | R 7,171 | 0 | — | — | 2,011 | — | 4,197 | — |
| 1995 | 7,447 | 18 | 791 | 3,272 | (s) | 830 | 25 | 685 | 147 | R 1,106 | R 6,856 | 0 | — | — | 1,771 | — | R 3,693 | — |
| 1996 | 6,724 | 20 | 911 | 2,952 | 1 | R 1,093 | 25 | 575 | 132 | R 1,254 | R 6,941 | 0 | — | — | 1,835 | — | R 3,825 | — |
| 1997 | 6,466 | 29 | 1,241 | 2,768 | 1 | R 734 | 26 | 450 | 181 | R 1,239 | R 6,641 | 0 | — | — | 2,076 | — | R 4,319 | — |
| 1998 | 6,664 | 29 | 1,440 | 2,524 | 1 | 691 | 27 | 562 | 29 | 1,074 | 6,349 | 0 | — | — | 2,187 | — | 4,518 | — |
| 1999 | 6,617 | 26 | 2,097 | 2,151 | 1 | 972 | 28 | 434 | 55 | 1,107 | 6,846 | 0 | — | — | 3,013 | — | 5,902 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | |
| 1960 | 7.7 | 20.3 | 7.5 | 12.3 | 0.2 | 1.0 | 0.3 | 15.4 | 3.3 | 4.8 | R 44.7 | 0.0 | 0.0 | 0.0 | 0.4 | R 73.2 | 1.0 | R 74.2 |
| 1965 | 6.5 | 20.9 | 5.3 | 15.7 | 0.1 | 1.0 | 0.1 | 13.3 | 4.0 | R 5.3 | R 44.7 | 0.0 | 0.0 | 0.0 | 0.8 | R 72.9 | 2.0 | R 74.8 |
| 1970 | 7.2 | 16.3 | 9.3 | 12.7 | 0.3 | 0.8 | 0.2 | 12.2 | 3.5 | R 5.8 | R 44.7 | 0.0 | 0.0 | 0.0 | 2.5 | 70.8 | 6.0 | R 76.7 |
| 1975 | 7.4 | 14.0 | 7.0 | 9.4 | 0.3 | 0.7 | 0.1 | 11.5 | 3.6 | R 6.6 | R 39.2 | 0.0 | 0.0 | 0.0 | 3.4 | R 64.1 | 8.3 | R 72.4 |
| 1980 | 7.7 | 2.1 | 5.0 | 14.3 | 0.1 | 2.5 | 0.2 | 8.1 | 2.0 | R 6.3 | R 38.4 | 0.0 | 0.0 | 0.0 | 5.4 | R 53.6 | 13.1 | R 66.7 |
| 1985 | 71.2 | 7.3 | 6.9 | 16.2 | (s) | 1.2 | 0.1 | 5.7 | 2.8 | R 5.1 | R 38.1 | 0.0 | 0.0 | 0.0 | 6.8 | R 123.4 | 15.9 | R 139.3 |
| 1990 | 86.3 | 11.7 | 5.4 | 15.1 | (s) | 2.3 | 0.2 | 4.2 | 1.9 | R 6.8 | R 36.0 | f 0.0 | R 0.1 | f 0.0 | 6.0 | f 140.1 | 13.1 | f 153.2 |
| 1991 | 84.3 | 17.5 | 5.2 | 17.8 | (s) | 3.1 | 0.1 | 4.1 | 1.9 | R 6.0 | R 38.3 | 0.0 | R 0.1 | 0.0 | 6.0 | R 146.1 | 13.1 | R 159.2 |
| 1992 | 93.1 | 15.1 | 9.7 | 17.1 | (s) | 1.8 | 0.1 | 3.8 | 1.8 | R 7.1 | R 41.3 | 0.0 | R 0.1 | 0.0 | 6.3 | R 155.8 | 13.4 | R 169.2 |
| 1993 | 91.6 | 15.2 | 6.1 | 17.2 | (s) | 1.6 | 0.1 | 3.5 | 2.4 | R 6.6 | R 37.6 | 0.0 | R 0.1 | 0.0 | 6.5 | R 151.1 | 13.7 | R 164.8 |
| 1994 | 93.8 | 18.1 | 8.3 | 18.8 | (s) | 1.7 | 0.2 | 3.7 | 2.1 | R 6.9 | R 41.7 | 0.0 | R (s) | 0.0 | 6.9 | R 160.6 | 14.3 | R 174.9 |
| 1995 | 99.4 | 18.7 | 5.2 | 19.1 | (s) | 3.0 | 0.2 | 3.6 | 0.9 | R 6.7 | R 38.6 | 0.0 | R (s) | 0.0 | 6.0 | R 162.9 | 12.6 | R 175.5 |
| 1996 | 90.0 | 20.5 | 6.0 | 17.2 | (s) | R 3.9 | 0.1 | 3.0 | 0.8 | R 7.5 | R 38.7 | 0.0 | R 0.5 | 0.0 | 6.3 | R 156.0 | R 13.1 | R 169.0 |
| 1997 | 85.9 | 30.6 | 8.2 | 16.1 | (s) | R 2.7 | 0.2 | R 2.3 | 1.1 | R 7.5 | R 38.1 | 0.0 | R 0.7 | 0.0 | 7.1 | R 162.4 | 14.7 | R 177.2 |
| 1998 | 88.9 | 30.0 | 9.6 | 14.7 | (s) | 2.5 | 0.2 | 2.9 | 0.2 | 6.5 | 36.5 | 0.0 | 0.7 | 0.0 | 7.5 | 163.7 | 15.4 | 179.1 |
| 1999 | 88.3 | 27.4 | 13.9 | 12.5 | (s) | 3.5 | 0.2 | 2.3 | 0.3 | 6.7 | 39.4 | 0.0 | 0.8 | 0.0 | 10.3 | 166.3 | 20.1 | 186.4 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 225.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, North Dakota

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 9 | (s) | 66 | 592 | 2,103 | 29 | 158 | 4,760 | 69 | 7,778 | 0 | 0 | — | 0 | — |
| 1965 | 1 | (s) | 165 | 916 | 2,069 | 22 | 147 | 5,499 | 25 | 8,843 | 0 | 0 | — | 0 | — |
| 1970 | 1 | (s) | 95 | 1,441 | 2,074 | 3 | 138 | 6,300 | 41 | 10,092 | 0 | 0 | — | 0 | — |
| 1975 | (s) | (s) | 85 | 1,880 | 1,855 | 2 | 137 | 7,756 | 0 | 11,715 | 0 | 0 | — | 0 | — |
| 1980 | 0 | (s) | 64 | 3,795 | 1,702 | 12 | 151 | 7,553 | 0 | 13,278 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 1 | 4 | 3,046 | 1,682 | 11 | 138 | 7,673 | 0 | 12,553 | R e 69 | 0 | — | 0 | — |
| 1990 | 0 | 2 | 28 | 3,116 | 1,178 | 14 | 155 | 7,282 | 0 | 11,774 | R 85 | 0 | — | 0 | — |
| 1991 | 0 | 2 | 28 | 3,219 | 964 | 15 | 139 | 7,427 | 0 | 11,792 | R 127 | 0 | — | 0 | — |
| 1992 | 0 | 3 | 28 | 3,238 | 1,405 | 16 | 141 | 7,477 | 0 | 12,305 | R 148 | 0 | — | 0 | — |
| 1993 | 0 | 4 | 62 | 3,527 | 1,254 | 18 | 144 | 7,798 | 0 | 12,803 | R 147 | 0 | — | 0 | — |
| 1994 | 0 | 4 | 43 | 4,067 | 846 | 20 | 151 | 7,679 | 0 | 12,805 | R 174 | 0 | — | 0 | — |
| 1995 | 0 | 5 | 65 | 4,248 | 333 | 13 | 148 | 7,955 | 0 | 12,762 | R 164 | 0 | — | 0 | — |
| 1996 | 0 | 5 | 50 | 4,363 | 246 | R 21 | 144 | 8,098 | 0 | R 12,923 | R 122 | 0 | — | 0 | — |
| 1997 | 0 | 5 | 33 | 4,593 | 189 | R 12 | 152 | 8,168 | 0 | R 13,147 | R 119 | 0 | — | 0 | — |
| 1998 | 0 | (s) | 43 | 3,871 | 211 | 4 | 159 | 8,098 | 0 | 12,387 | 116 | 0 | — | 0 | — |
| 1999 | 0 | 10 | 39 | 4,457 | 405 | 9 | 160 | 8,255 | 0 | 13,326 | 123 | 0 | — | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | |
| 1960 | 0.1 | (s) | 0.3 | 3.5 | 11.3 | 0.1 | 1.0 | 25.0 | 0.4 | 41.6 | 0.0 | 0.0 | 41.7 | 0.0 | 41.7 |
| 1965 | (s) | (s) | 0.8 | 5.3 | 11.1 | 0.1 | 0.9 | 28.9 | 0.2 | 47.3 | 0.0 | 0.0 | 47.3 | 0.0 | 47.3 |
| 1970 | (s) | (s) | 0.5 | 8.4 | 11.2 | (s) | 0.8 | 33.1 | 0.3 | 54.2 | 0.0 | 0.0 | 54.3 | 0.0 | 54.3 |
| 1975 | (s) | 0.1 | 0.4 | 11.0 | 10.0 | (s) | 0.8 | 40.7 | 0.0 | 63.0 | 0.0 | 0.0 | 63.1 | 0.0 | 63.1 |
| 1980 | 0.0 | 0.2 | 0.3 | 22.1 | 9.2 | (s) | 0.9 | 39.7 | 0.0 | 72.3 | 0.0 | 0.0 | 72.5 | 0.0 | 72.5 |
| 1985 | 0.0 | 0.7 | (s) | 17.7 | 9.1 | (s) | 0.8 | 40.3 | 0.0 | 68.0 | R e 0.2 | 0.0 | e 68.8 | 0.0 | e 68.8 |
| 1990 | 0.0 | 1.8 | 0.1 | 18.2 | 6.4 | 0.1 | 0.9 | 38.3 | 0.0 | 63.9 | R 0.3 | 0.0 | 65.7 | 0.0 | 65.7 |
| 1991 | 0.0 | 2.1 | 0.1 | 18.8 | 5.2 | 0.1 | 0.8 | 39.0 | 0.0 | 64.0 | R 0.5 | 0.0 | 66.1 | 0.0 | 66.1 |
| 1992 | 0.0 | 2.9 | 0.1 | 18.9 | 7.6 | 0.1 | 0.9 | 39.3 | 0.0 | 66.8 | R 0.5 | 0.0 | 69.6 | 0.0 | 69.6 |
| 1993 | 0.0 | 4.5 | 0.3 | 20.5 | 6.8 | 0.1 | 0.9 | 41.0 | 0.0 | 69.5 | 0.5 | 0.0 | 74.1 | 0.0 | 74.1 |
| 1994 | 0.0 | 4.5 | 0.2 | 23.7 | 4.6 | 0.1 | 0.9 | R 40.2 | 0.0 | R 69.7 | 0.6 | 0.0 | R 74.2 | 0.0 | R 74.2 |
| 1995 | 0.0 | 4.9 | 0.3 | 24.7 | 1.9 | (s) | 0.9 | R 41.5 | 0.0 | R 69.4 | R 0.6 | 0.0 | R 74.3 | 0.0 | R 74.3 |
| 1996 | 0.0 | 5.0 | 0.3 | 25.4 | 1.4 | R 0.1 | 0.9 | R 42.2 | 0.0 | R 70.3 | 0.4 | 0.0 | R 75.3 | 0.0 | R 75.3 |
| 1997 | 0.0 | 5.0 | 0.2 | 26.8 | 1.1 | (s) | 0.9 | R 42.6 | 0.0 | R 71.5 | 0.4 | 0.0 | R 76.5 | 0.0 | R 76.5 |
| 1998 | 0.0 | 0.4 | 0.2 | 22.5 | 1.2 | (s) | 1.0 | 42.2 | 0.0 | 67.1 | 0.4 | 0.0 | 67.6 | 0.0 | 67.6 |
| 1999 | 0.0 | 9.9 | 0.2 | 26.0 | 2.3 | (s) | 1.0 | 43.0 | 0.0 | 72.5 | 0.4 | 0.0 | 82.4 | 0.0 | 82.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 226.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, North Dakota

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 1,014 | (s) | 15 | 4 | 0 | 20 | 0 | 1,060 | 0 | 0 | 0 | — |
| 1965 | 964 | (s) | 2 | 1 | 0 | 3 | 0 | 2,497 | 0 | 0 | 0 | — |
| 1970 | 3,519 | (s) | 25 | 7 | 0 | 32 | 0 | 3,108 | 0 | 0 | 0 | — |
| 1975 | 4,377 | (s) | 18 | 2 | 0 | 20 | 0 | 4,511 | 0 | 0 | 0 | — |
| 1980 | 11,618 | (s) | 0 | 68 | 0 | 68 | 0 | 5,364 | 0 | 0 | 0 | — |
| 1985 | 17,354 | (s) | 0 | 74 | 0 | 74 | 0 | 4,818 | 0 | 0 | (s) | — |
| 1990 | 21,579 | (s) | 0 | 57 | 0 | 57 | 0 | R 1,855 | 0 | 0 | 0 | — |
| 1991 | 22,174 | (s) | 0 | 69 | 0 | 69 | 0 | R 1,926 | 0 | 0 | 0 | — |
| 1992 | 23,192 | (s) | 0 | 58 | 0 | 58 | 0 | R 2,186 | 0 | 0 | 0 | — |
| 1993 | 23,290 | (s) | 0 | 69 | 0 | 69 | 0 | R 2,439 | 0 | 0 | 0 | — |
| 1994 | 23,248 | (s) | 0 | 112 | 0 | 112 | 0 | R 2,639 | 0 | 0 | 0 | — |
| 1995 | 22,680 | (s) | 0 | 99 | 0 | 99 | 0 | R 3,004 | 0 | 0 | 0 | — |
| 1996 | 23,640 | (s) | 0 | 155 | 0 | 155 | 0 | R 3,802 | 0 | 0 | 0 | — |
| 1997 | 22,754 | (s) | 0 | 153 | 0 | 153 | 0 | R 3,490 | 0 | 0 | 0 | — |
| 1998 | 24,278 | 0 | 0 | 89 | 0 | 89 | 0 | 2,443 | 0 | 0 | 0 | — |
| 1999 | 24,540 | 0 | 0 | 81 | 0 | 81 | 0 | 2,723 | 0 | 0 | 0 | — |
| | | | | | Trillion Btu | | | | | | | |
| 1960 | 14.0 | 0.1 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | 11.4 | 0.0 | 0.0 | 0.0 | 25.7 |
| 1965 | 13.4 | (s) | (s) | (s) | 0.0 | (s) | 0.0 | 26.1 | 0.0 | 0.0 | 0.0 | 39.6 |
| 1970 | 48.1 | 0.4 | 0.2 | (s) | 0.0 | 0.2 | 0.0 | 32.6 | 0.0 | 0.0 | 0.0 | 81.3 |
| 1975 | 58.4 | 0.2 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | 46.9 | 0.0 | 0.0 | 0.0 | 105.6 |
| 1980 | 153.8 | (s) | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | 55.7 | 0.0 | 0.0 | 0.0 | 209.9 |
| 1985 | 228.2 | (s) | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | 50.3 | 0.0 | 0.0 | (s) | 279.0 |
| 1990 | 286.4 | (s) | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | R 19.3 | 0.0 | 0.0 | 0.0 | R 304.7 |
| 1991 | 293.0 | (s) | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | R 20.1 | 0.0 | 0.0 | 0.0 | R 313.4 |
| 1992 | 304.2 | (s) | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | R 22.6 | 0.0 | 0.0 | 0.0 | R 329.1 |
| 1993 | 306.0 | (s) | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | R 25.1 | 0.0 | 0.0 | 0.0 | R 332.0 |
| 1994 | 306.5 | (s) | 0.0 | 0.7 | 0.0 | 0.7 | 0.0 | R 27.2 | 0.0 | 0.0 | 0.0 | R 336.4 |
| 1995 | 298.7 | (s) | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | R 31.0 | 0.0 | 0.0 | 0.0 | R 332.1 |
| 1996 | 311.9 | (s) | 0.0 | 0.9 | 0.0 | 0.9 | 0.0 | R 39.3 | 0.0 | 0.0 | 0.0 | R 354.4 |
| 1997 | 298.5 | (s) | 0.0 | 0.9 | 0.0 | 0.9 | 0.0 | R 36.1 | 0.0 | 0.0 | 0.0 | R 335.0 |
| 1998 | 318.8 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 25.3 | 0.0 | 0.0 | 0.0 | 341.0 |
| 1999 | 321.3 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 28.2 | 0.0 | 0.0 | 0.0 | 347.1 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 227. Energy Consumption Estimates by Source, Selected Years 1960-1999, Ohio**

| Year | Coal [a] (Thousand Short Tons) | Natural Gas [b] (Billion Cubic Feet) | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power (Million kWh) | Hydroelectric Power [d] (Million kWh) | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] (Million kWh) | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum (Thousand Barrels) | | | | | | | | | | | | | | | | |
| 1960 | 51,256 | 700 | 6,862 | 1,395 | 23,919 | 1,808 | 3,955 | 3,680 | 3,064 | 78,170 | 11,605 | R 9,400 | R 143,859 | 0 | 20 | — | — | 49,779 | — |
| 1965 | 54,023 | 880 | 7,344 | 2,125 | 27,663 | 3,075 | 6,328 | 5,441 | 3,312 | 86,271 | 10,963 | R 14,683 | R 167,205 | 22 | 11 | — | — | 52,423 | — |
| 1970 | 66,863 | 1,053 | 9,017 | 712 | 34,458 | 5,857 | 6,494 | 8,712 | 3,631 | 106,296 | 6,445 | R 16,418 | R 198,040 | 0 | 7 | — | — | 49,736 | — |
| 1975 | 70,764 | 957 | 8,749 | 491 | 42,168 | 6,039 | 3,600 | 9,910 | 3,609 | 118,808 | 10,399 | R 17,782 | R 221,554 | 0 | 7 | — | — | 41,054 | — |
| 1980 | 64,914 | 897 | 7,324 | 473 | 48,833 | 7,219 | 2,452 | 44,263 | 3,821 | 113,232 | 6,918 | R 23,356 | R 257,892 | 2,119 | 6 | — | — | 47,144 | — |
| 1985 | 57,979 | 733 | 6,339 | 330 | 35,980 | 7,204 | 1,709 | 27,919 | 3,477 | 108,763 | 2,322 | R 15,667 | R 209,710 | 1,943 | 175 | — | — | 84,049 | — |
| 1990 | 59,205 | 747 | 9,880 | 239 | 36,666 | 10,602 | 901 | 10,994 | 3,912 | 110,487 | 1,677 | R 20,439 | R 205,797 | 10,664 | R h 177 | — | — | R 77,793 | — |
| 1991 | 58,578 | 766 | 8,993 | 214 | 35,684 | 10,400 | 971 | 11,120 | 3,500 | 109,920 | 1,345 | R 18,581 | R 200,728 | 14,833 | R 149 | — | — | R 64,867 | — |
| 1992 | 58,671 | 810 | 9,910 | 224 | 38,323 | 10,631 | 932 | 14,638 | 3,568 | 108,696 | 1,623 | R 21,548 | R 210,093 | 14,805 | R 248 | — | — | R 50,850 | — |
| 1993 | 59,031 | 834 | 7,682 | 207 | 39,642 | 10,650 | 1,352 | 15,065 | 3,633 | 114,756 | 2,164 | R 20,341 | R 215,491 | 10,011 | R 188 | — | — | R 65,082 | — |
| 1994 | 56,711 | 843 | 8,847 | 186 | 43,195 | 11,678 | 1,063 | 15,234 | 3,797 | 113,178 | 2,048 | R 21,088 | R 220,314 | 10,952 | R 194 | — | — | R 90,893 | — |
| 1995 | 56,580 | 896 | 8,973 | 235 | 42,641 | 11,236 | 1,024 | 14,273 | 3,732 | 116,222 | 1,444 | R 20,257 | R 220,038 | 16,768 | R 232 | — | — | R 79,205 | — |
| 1996 | 59,835 | 936 | 11,258 | 345 | 45,241 | 11,960 | 1,194 | R 16,019 | 3,622 | 115,361 | 1,713 | R 23,567 | R 230,280 | 13,919 | R 398 | — | — | R 64,322 | — |
| 1997 | 58,933 | 899 | 14,376 | 379 | 49,086 | 12,604 | 1,144 | R 11,105 | 3,826 | 118,336 | 1,272 | R 23,869 | R 235,996 | 15,331 | R 507 | — | — | R 68,253 | — |
| 1998 | 60,338 | 813 | 12,638 | 365 | 47,072 | 13,825 | 1,255 | 8,687 | 4,006 | 119,932 | 962 | 24,582 | 233,324 | 16,476 | 406 | — | — | 53,713 | — |
| 1999 | 57,551 | 847 | 14,091 | 244 | 48,763 | 16,457 | 1,526 | 12,929 | 4,047 | 120,902 | 1,440 | 26,087 | 246,488 | 16,422 | 423 | — | — | 64,566 | — |
| | | | Trillion Btu | | | | | | | | | | | | | | | | |
| 1960 | 1,269.4 | 724.8 | 45.5 | 7.0 | 139.3 | 9.8 | 22.4 | 14.8 | 18.6 | 410.6 | 73.0 | R 56.4 | R 797.4 | 0.0 | 0.2 | 36.8 | 0.0 | 169.8 | R 2,998.4 |
| 1965 | 1,324.4 | 909.4 | 48.7 | 10.7 | 161.1 | 17.0 | 35.9 | 21.8 | 20.1 | 453.2 | 68.9 | R 85.7 | R 923.2 | 0.3 | 0.1 | 38.6 | 0.0 | 178.9 | R 3,374.8 |
| 1970 | 1,571.4 | 1,077.2 | 59.8 | 3.6 | 200.7 | 32.8 | 36.8 | 32.9 | 22.0 | 558.4 | 40.5 | R 94.9 | R 1,082.5 | 0.0 | 0.1 | 44.1 | 0.0 | 169.7 | R 3,944.9 |
| 1975 | 1,619.1 | 978.9 | 58.1 | 2.5 | 245.6 | 33.9 | 20.4 | 36.8 | 21.9 | 624.1 | 65.4 | R 103.5 | R 1,212.2 | 0.0 | 0.1 | 46.2 | 0.0 | 140.1 | R 3,996.5 |
| 1980 | 1,528.1 | 911.3 | 48.6 | 2.4 | 284.5 | 40.6 | 13.9 | 162.6 | 23.2 | 594.8 | 43.5 | R 133.1 | R 1,347.2 | 23.1 | 0.1 | R 103.9 | 0.0 | 160.9 | R 4,074.6 |
| 1985 | 1,389.5 | 765.4 | 42.1 | 1.7 | 209.6 | 40.6 | 9.7 | 100.6 | 21.1 | 571.3 | 14.6 | R 90.4 | R 1,101.6 | 21.0 | 1.8 | R 116.3 | 0.0 | 286.8 | R 3,682.3 |
| 1990 | 1,424.8 | 776.6 | 65.6 | 1.2 | 213.6 | 59.9 | 5.1 | 39.9 | 23.7 | 580.4 | 10.5 | R 117.0 | R 1,116.9 | 113.9 | R h 1.8 | R 70.2 | h 0.4 | R 265.4 | R h 3,770.0 |
| 1991 | 1,413.0 | 799.3 | 59.7 | 1.1 | 207.9 | 58.8 | 5.5 | 40.2 | 21.2 | 577.4 | 8.5 | R 106.6 | R 1,086.8 | 159.3 | 1.6 | R 71.9 | 0.4 | R 221.3 | R 3,753.7 |
| 1992 | 1,418.7 | 839.3 | 65.8 | 1.1 | 223.2 | 60.1 | 5.3 | 53.0 | 21.6 | 571.0 | 10.2 | R 123.2 | R 1,134.5 | 158.1 | 2.6 | R 67.9 | 0.4 | R 173.5 | R 3,795.0 |
| 1993 | 1,432.3 | 865.5 | 51.0 | 1.0 | 230.9 | 60.2 | 7.7 | 54.3 | 22.0 | 602.8 | 13.6 | R 116.3 | R 1,159.9 | 106.9 | R 1.9 | R 45.6 | 0.5 | R 222.1 | R 3,834.8 |
| 1994 | 1,377.1 | 874.5 | 58.7 | 0.9 | 251.6 | 66.1 | 6.0 | 55.4 | 23.0 | R 591.9 | 12.9 | R 120.9 | R 1,187.4 | 116.9 | 2.0 | R 45.5 | 0.5 | R 310.1 | R 3,914.2 |
| 1995 | 1,379.8 | 930.1 | 59.5 | 1.2 | 248.4 | 63.7 | 5.8 | 51.7 | 22.6 | R 606.1 | 9.1 | R 116.3 | R 1,184.4 | 178.7 | 2.4 | R 58.0 | 0.6 | R 270.2 | R 4,004.3 |
| 1996 | 1,448.8 | 972.0 | 74.7 | 1.7 | 263.5 | 67.8 | 6.8 | R 57.9 | 22.0 | R 601.7 | 10.8 | R 134.7 | R 1,241.6 | 147.9 | 4.1 | R 56.7 | 0.6 | R 219.5 | R 4,091.2 |
| 1997 | 1,409.7 | 939.2 | 95.4 | 1.9 | 285.9 | 71.5 | 6.5 | R 40.2 | 23.2 | 616.9 | 8.0 | R 136.4 | R 1,285.9 | 162.9 | R 5.3 | R 73.9 | 0.7 | R 232.9 | R 4,110.4 |
| 1998 | 1,445.2 | 845.5 | 83.9 | 1.8 | 274.2 | 78.4 | 7.1 | 31.4 | 24.3 | 625.1 | 6.0 | 140.5 | 1,272.7 | 175.0 | 4.2 | 51.2 | 0.8 | 183.3 | 3,978.0 |
| 1999 | 1,379.0 | 878.1 | 93.5 | 1.2 | 284.0 | 93.3 | 8.7 | 46.8 | 24.5 | 630.0 | 9.1 | 148.6 | 1,339.8 | 174.5 | 4.4 | 326.6 | 0.9 | 220.3 | 4,323.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 228. Residential Energy Consumption Estimates, Selected Years 1960-1999, Ohio

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 1,206 | 362 | 7,270 | 1,837 | 1,750 | 10,857 | 990 | — | — | 10,786 | — | 26,830 | — |
| 1965 | 797 | 412 | 7,795 | 3,626 | 2,293 | 13,715 | 805 | — | — | 14,504 | — | 34,630 | — |
| 1970 | 571 | 460 | 9,320 | 2,979 | 3,892 | 16,191 | 925 | — | — | 22,266 | — | 53,958 | — |
| 1975 | 399 | 428 | 10,776 | 2,060 | 4,876 | 17,713 | 963 | — | — | 27,890 | — | 67,275 | — |
| 1980 | 196 | 394 | 7,430 | 1,016 | 2,556 | 11,003 | R 2,257 | — | — | 33,459 | — | 81,361 | — |
| 1985 | 304 | 328 | 4,474 | 941 | 3,339 | 8,754 | 2,237 | — | — | 33,945 | — | 79,750 | — |
| 1990 | 229 | 308 | 4,080 | 625 | 4,205 | 8,909 | 1,560 | — | — | 37,889 | — | R 82,887 | — |
| 1991 | 172 | 322 | 4,221 | 677 | 4,451 | 9,348 | 1,644 | — | — | 40,942 | — | R 89,006 | — |
| 1992 | 209 | 341 | 4,662 | 728 | 3,987 | 9,377 | 1,729 | — | — | 39,141 | — | R 83,478 | — |
| 1993 | 205 | 354 | 4,473 | 839 | 4,721 | 10,032 | R 883 | — | — | 41,950 | — | R 88,606 | — |
| 1994 | 177 | 343 | 4,895 | 709 | 4,623 | 10,227 | R 866 | — | — | 41,791 | — | R 87,215 | — |
| 1995 | 143 | 358 | 4,321 | 748 | 4,979 | 10,048 | R 961 | — | — | 44,010 | — | R 91,759 | — |
| 1996 | 232 | 375 | 3,829 | 818 | R 6,683 | R 11,331 | R 959 | — | — | 44,573 | — | R 92,891 | — |
| 1997 | 118 | 355 | 3,522 | 774 | R 6,467 | R 10,764 | R 567 | — | — | 43,635 | — | R 90,765 | — |
| 1998 | 138 | 297 | 2,849 | 774 | 5,593 | 9,217 | 500 | — | — | 44,516 | — | 91,962 | — |
| 1999 | 76 | 318 | 3,126 | 1,295 | 7,483 | 11,903 | 535 | — | — | 46,629 | — | 91,360 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 28.8 | 374.5 | 42.3 | 10.4 | 7.0 | 59.8 | 19.8 | 0.0 | 0.0 | 36.8 | 519.7 | 91.5 | 611.2 |
| 1965 | 18.9 | 425.6 | 45.4 | 20.6 | 9.2 | 75.2 | 16.1 | 0.0 | 0.0 | 49.5 | 585.3 | 118.2 | 703.4 |
| 1970 | 13.1 | 470.6 | 54.3 | 16.9 | 14.7 | 85.9 | 18.5 | 0.0 | 0.0 | 76.0 | 664.0 | 184.1 | 848.1 |
| 1975 | 8.9 | 438.1 | 62.8 | 11.7 | 18.1 | 92.6 | 19.3 | 0.0 | 0.0 | 95.2 | 654.0 | 229.5 | 883.5 |
| 1980 | 4.6 | 400.1 | 43.3 | 5.8 | 9.4 | 58.4 | 45.1 | 0.0 | 0.0 | 114.2 | R 622.4 | 277.6 | R 900.0 |
| 1985 | 7.2 | 342.0 | 26.1 | 5.3 | 12.0 | 43.4 | 44.7 | 0.0 | 0.0 | 115.8 | 553.2 | 272.1 | 825.3 |
| 1990 | 5.5 | 320.7 | 23.8 | 3.5 | 15.2 | 42.5 | 31.2 | e 0.3 | e (s) | 129.3 | e 529.6 | 282.8 | e 812.4 |
| 1991 | 4.2 | 335.9 | 24.6 | 3.8 | 16.1 | 44.5 | 32.9 | 0.4 | (s) | 139.7 | 557.6 | R 303.7 | R 861.3 |
| 1992 | 5.1 | 352.9 | 27.2 | 4.1 | 14.4 | 45.7 | 34.6 | 0.4 | (s) | 133.5 | 572.3 | R 284.8 | R 857.1 |
| 1993 | 5.0 | 367.6 | 26.1 | 4.8 | 17.0 | 47.8 | R 17.7 | 0.4 | (s) | 143.1 | R 581.7 | R 302.3 | R 884.0 |
| 1994 | 4.3 | 356.0 | 28.5 | 4.0 | 16.8 | 49.3 | 17.3 | 0.4 | (s) | 142.6 | 570.0 | 297.6 | R 867.6 |
| 1995 | 3.5 | 371.4 | 25.2 | 4.2 | 18.0 | 47.5 | 19.2 | 0.4 | (s) | 150.2 | R 592.2 | R 313.1 | R 905.3 |
| 1996 | 5.5 | 389.1 | 22.3 | 4.6 | R 24.1 | R 51.1 | 19.2 | 0.5 | (s) | 152.1 | R 617.5 | R 316.9 | R 934.4 |
| 1997 | 2.8 | 370.5 | 20.5 | 4.4 | R 23.4 | R 48.3 | R 11.3 | 0.5 | R 0.1 | 148.9 | R 582.4 | R 309.7 | R 892.1 |
| 1998 | 3.4 | 308.5 | 16.6 | 4.4 | 20.2 | 41.2 | 10.0 | 0.5 | 0.1 | 151.9 | 515.5 | 313.8 | 829.3 |
| 1999 | 1.9 | 330.0 | 18.2 | 7.3 | 27.1 | 52.6 | 10.7 | 0.6 | 0.1 | 159.1 | 555.0 | 311.7 | 866.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 229. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Ohio

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 2,206 | 108 | 1,443 | 95 | 309 | 541 | 2,118 | 4,507 | 19 | — | 7,594 | — | 18,890 | — |
| 1965 | 1,458 | 127 | 1,548 | 188 | 405 | 572 | 1,997 | 4,710 | 15 | — | 10,384 | — | 24,793 | — |
| 1970 | 1,047 | 183 | 1,850 | 155 | 687 | 401 | 824 | 3,917 | 17 | — | 17,073 | — | 41,374 | — |
| 1975 | 733 | 169 | 2,139 | 107 | 861 | 956 | 1,457 | 5,520 | 18 | — | 20,047 | — | 48,355 | — |
| 1980 | 360 | 166 | 2,591 | 130 | 451 | 2,058 | 380 | 5,610 | 54 | — | 23,323 | — | 56,715 | — |
| 1985 | 555 | 143 | 2,036 | 440 | 589 | 604 | 83 | 3,752 | R 60 | — | 29,176 | — | 68,546 | — |
| 1990 | 425 | 144 | 1,652 | 189 | 742 | 1,059 | 22 | 3,665 | R 99 | — | 34,850 | — | R 76,238 | — |
| 1991 | 317 | 150 | 1,615 | 180 | 785 | 925 | 40 | 3,547 | R 105 | — | 36,813 | — | R 80,030 | — |
| 1992 | 379 | 161 | 1,683 | 68 | 704 | 673 | 74 | 3,201 | R 113 | — | 36,150 | — | R 77,100 | — |
| 1993 | 378 | 164 | 1,384 | 201 | 833 | 393 | 27 | 2,838 | 71 | — | 37,740 | — | R 79,712 | — |
| 1994 | 322 | 167 | 1,501 | 144 | 816 | 448 | 8 | 2,916 | R 73 | — | 38,526 | — | R 80,401 | — |
| 1995 | 265 | 175 | 1,847 | 89 | 879 | 438 | 5 | 3,257 | R 73 | — | 40,093 | — | R 83,591 | — |
| 1996 | 423 | 190 | 1,354 | 155 | R 1,179 | 365 | 2 | R 3,054 | 79 | — | 40,570 | — | R 84,548 | — |
| 1997 | 211 | 184 | 1,485 | 127 | R 1,141 | 1,956 | 2 | R 4,711 | R 62 | — | 40,935 | — | R 85,148 | — |
| 1998 | 253 | 157 | 1,107 | 218 | 987 | 744 | 1 | 3,057 | 62 | — | 42,232 | — | 87,242 | — |
| 1999 | 141 | 168 | 1,649 | 129 | 1,321 | 175 | 0 | 3,273 | 75 | — | 43,297 | — | 84,833 | — |
| | | | | | | **Trillion Btu** | | | | | | | | |
| 1960 | 52.6 | 111.7 | 8.4 | 0.5 | 1.2 | 2.8 | 13.3 | 26.3 | 0.4 | 0.0 | 25.9 | 217.0 | 64.5 | 281.4 |
| 1965 | 34.6 | 131.0 | 9.0 | 1.1 | 1.6 | 3.0 | 12.6 | 27.3 | 0.3 | 0.0 | 35.4 | 228.6 | 84.6 | 313.2 |
| 1970 | 24.0 | 187.6 | 10.8 | 0.9 | 2.6 | 2.1 | 5.2 | 21.5 | 0.3 | 0.0 | 58.3 | 291.8 | 141.2 | 432.9 |
| 1975 | 16.4 | 173.4 | 12.5 | 0.6 | 3.2 | 5.0 | 9.2 | 30.4 | 0.4 | 0.0 | 68.4 | 289.0 | 165.0 | 454.0 |
| 1980 | 8.3 | 168.9 | 15.1 | 0.7 | 1.7 | 10.8 | 2.4 | 30.7 | 1.1 | 0.0 | 79.6 | 288.6 | 193.5 | 482.1 |
| 1985 | 13.2 | 149.6 | 11.9 | 2.5 | 2.1 | 3.2 | 0.5 | 20.2 | R 1.2 | 0.0 | 99.5 | R 283.8 | 233.9 | R 517.6 |
| 1990 | 10.3 | 149.3 | 9.6 | 1.1 | 2.7 | 5.6 | 0.1 | 19.1 | R 2.0 | e 0.0 | 118.9 | R e 299.5 | 260.1 | R e 559.6 |
| 1991 | 7.7 | 157.0 | 9.4 | 1.0 | 2.8 | 4.9 | 0.3 | 18.4 | R 2.1 | 0.0 | 125.6 | R 310.7 | R 273.1 | R 583.8 |
| 1992 | 9.2 | 166.4 | 9.8 | 0.4 | 2.5 | 3.5 | 0.5 | 16.7 | R 2.3 | 0.0 | 123.3 | R 318.0 | R 263.1 | R 581.1 |
| 1993 | 9.2 | 170.3 | 8.1 | 1.1 | 3.0 | 2.1 | 0.2 | 14.4 | 1.4 | 0.0 | 128.8 | 324.1 | R 272.0 | 596.1 |
| 1994 | 7.8 | 173.0 | 8.7 | 0.8 | 3.0 | R 2.3 | (s) | 14.9 | R 1.5 | 0.1 | 131.5 | 328.7 | 274.3 | 603.0 |
| 1995 | 6.5 | 181.8 | 10.8 | 0.5 | 3.2 | 2.3 | (s) | 16.8 | R 1.5 | 0.1 | 136.8 | 343.4 | R 285.2 | R 628.6 |
| 1996 | 10.1 | 197.2 | 7.9 | 0.9 | R 4.3 | 1.9 | (s) | R 14.9 | 1.6 | 0.1 | 138.4 | R 362.3 | R 288.5 | R 650.8 |
| 1997 | 5.0 | 192.1 | 8.7 | 0.7 | R 4.1 | R 10.2 | (s) | R 23.7 | R 1.2 | 0.2 | 139.7 | R 362.0 | R 290.5 | R 652.5 |
| 1998 | 6.2 | 162.9 | 6.4 | 1.2 | 3.6 | 3.9 | (s) | 15.1 | 1.2 | 0.2 | 144.1 | 329.8 | 297.7 | 627.4 |
| 1999 | 3.4 | 173.8 | 9.6 | 0.7 | 4.8 | 0.9 | 0.0 | 16.0 | 1.5 | 0.2 | 147.7 | 342.7 | 289.5 | 632.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 230. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Ohio

| Year | Coal | Natural Gas a | Petroleum | | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 25,835 | 218 | 6,862 | 7,112 | 2,023 | 1,585 | 1,683 | 3,354 | 9,082 | R 9,400 | R 41,102 | 12 | — | — | 39,246 | — | 97,619 | — |
| 1965 | 26,758 | 327 | 7,344 | 8,479 | 2,513 | 2,649 | 2,050 | 2,598 | 8,228 | R 14,683 | R 48,544 | 1 | — | — | 41,757 | — | 99,701 | — |
| 1970 | 29,875 | 376 | 9,017 | 11,429 | 3,360 | 3,999 | 2,390 | 1,926 | 4,166 | R 16,418 | R 52,706 | 0 | — | — | 45,827 | — | 111,055 | — |
| 1975 | 22,307 | 345 | 8,749 | 11,150 | 1,433 | 3,993 | 1,987 | 1,519 | 7,038 | R 17,782 | R 53,651 | 0 | — | — | 55,597 | — | 134,108 | — |
| 1980 | 15,821 | 321 | 7,324 | 12,591 | 1,306 | 41,031 | 2,395 | 1,154 | 5,678 | R 23,356 | R 94,834 | 0 | — | — | 55,283 | — | 134,429 | — |
| 1985 | 10,420 | 253 | 6,339 | 6,688 | 328 | 23,612 | 2,180 | 1,074 | 2,098 | R 15,667 | R 57,986 | 0 | — | — | 61,109 | — | 143,571 | — |
| 1990 | 9,703 | 284 | 9,880 | 5,141 | 87 | 5,689 | 2,453 | 973 | 1,514 | R 20,439 | R 46,177 | R f 4 | — | — | 69,682 | — | R 152,436 | — |
| 1991 | 8,511 | 281 | 8,993 | 5,254 | 114 | 5,592 | 2,194 | 963 | 1,128 | R 18,581 | R 42,820 | R 3 | — | — | 67,856 | — | R 147,514 | — |
| 1992 | 7,725 | 296 | 9,910 | 6,395 | 136 | 9,696 | 2,237 | 2,794 | 1,433 | R 21,548 | R 54,149 | R 4 | — | — | 69,674 | — | R 148,599 | — |
| 1993 | 6,992 | 303 | 7,682 | 6,524 | 313 | 9,265 | 2,278 | 1,123 | 2,100 | R 20,341 | R 49,626 | R 5 | — | — | 68,831 | — | R 145,381 | — |
| 1994 | 6,886 | 312 | 8,847 | 7,127 | 209 | 9,334 | 2,381 | 1,099 | 1,949 | R 21,088 | R 52,034 | R 5 | — | — | 74,010 | — | R 154,453 | — |
| 1995 | 6,386 | 338 | 8,973 | 6,334 | 187 | 8,159 | 2,340 | 1,200 | 1,383 | R 20,257 | R 48,834 | R 5 | — | — | 74,473 | — | R 155,273 | — |
| 1996 | 5,636 | 348 | 11,258 | 5,686 | 221 | R 7,922 | 2,271 | 1,203 | 1,627 | R 23,567 | R 53,756 | R 5 | — | — | 73,394 | — | R 152,954 | — |
| 1997 | 5,711 | 337 | 14,376 | 6,060 | 244 | R 3,219 | 2,399 | 1,231 | 1,210 | R 23,869 | R 52,607 | 0 | — | — | 73,888 | — | R 153,695 | — |
| 1998 | 5,492 | 334 | 12,638 | 5,288 | 263 | 1,998 | 2,511 | 1,311 | 900 | 24,582 | 49,491 | 0 | — | — | 72,998 | — | 150,800 | — |
| 1999 | 5,211 | 332 | 14,091 | 4,800 | 103 | 3,936 | 2,537 | 1,126 | 1,432 | 26,087 | 54,112 | 0 | — | — | 74,293 | — | 145,563 | — |
| | | | | | | | **Trillion Btu** | | | | | | | | | | | |
| 1960 | 664.3 | 226.1 | 45.5 | 41.4 | 11.5 | 6.4 | 10.2 | 17.6 | 57.1 | R 56.4 | R 246.1 | 0.1 | 16.5 | 0.0 | 133.9 | R 1,287.1 | 333.1 | R 1,620.1 |
| 1965 | 681.5 | 338.3 | 48.7 | 49.4 | 14.2 | 10.6 | 12.4 | 13.6 | 51.7 | R 85.7 | R 286.5 | (s) | 22.1 | 0.0 | 142.5 | R 1,470.8 | 340.2 | R 1,811.0 |
| 1970 | 738.5 | 384.8 | 59.8 | 66.6 | 19.1 | 15.1 | 14.5 | 10.1 | 26.2 | R 94.9 | R 306.3 | 0.0 | 25.2 | 0.0 | 156.4 | R 1,611.1 | 378.9 | R 1,990.1 |
| 1975 | 556.5 | 352.8 | 58.1 | 64.9 | 8.1 | 14.8 | 12.1 | 8.0 | 44.2 | R 103.5 | R 313.8 | 0.0 | 26.6 | 0.0 | 189.7 | R 1,439.3 | 457.6 | R 1,896.9 |
| 1980 | 404.7 | 326.0 | 48.6 | 73.3 | 7.4 | 150.7 | 14.5 | 6.1 | 35.7 | R 133.1 | R 469.5 | 0.0 | R 57.7 | 0.0 | 188.6 | R 1,446.5 | 458.7 | R 1,905.1 |
| 1985 | 265.7 | 264.4 | 42.1 | 39.0 | 1.9 | 85.1 | 13.2 | 5.6 | 13.2 | R 90.4 | R 290.4 | 0.0 | R 67.6 | 0.0 | 208.5 | R 1,096.5 | 489.9 | R 1,586.4 |
| 1990 | 248.2 | 294.9 | 65.6 | 29.9 | 0.5 | 20.6 | 14.9 | 5.1 | 9.5 | R 117.0 | R 263.2 | R f (s) | R 34.3 | f 0.0 | 237.8 | R f 1,078.3 | R 520.1 | R f 1,598.4 |
| 1991 | 216.8 | 293.6 | 59.7 | 30.6 | 0.6 | 20.2 | 13.3 | 5.1 | 7.1 | R 106.6 | R 243.2 | R (s) | R 33.9 | 0.0 | 231.5 | R 1,019.1 | R 503.3 | R 1,522.4 |
| 1992 | 197.6 | 306.9 | 65.8 | 37.3 | 0.8 | 35.1 | 13.6 | 14.7 | 9.0 | R 123.2 | R 299.4 | R (s) | R 27.8 | 0.0 | 237.7 | R 1,069.5 | R 507.0 | R 1,576.5 |
| 1993 | 178.2 | 314.1 | 51.0 | 38.0 | 1.8 | 33.4 | 13.8 | 5.9 | 13.2 | R 116.3 | R 273.4 | R (s) | R 25.9 | 0.0 | 234.9 | R 1,026.5 | R 496.0 | R 1,522.5 |
| 1994 | 176.0 | 324.0 | 58.7 | 41.5 | 1.2 | 33.9 | 14.4 | R 5.7 | 12.3 | R 120.9 | R 288.7 | R 0.1 | R 26.7 | 0.0 | 252.5 | R 1,068.0 | R 527.0 | R 1,595.0 |
| 1995 | 162.9 | 350.7 | 59.5 | 36.9 | 1.1 | 29.6 | 14.2 | 6.3 | 8.7 | R 116.3 | R 272.5 | R (s) | R 37.4 | 0.0 | 254.1 | R 1,077.6 | R 529.8 | R 1,607.4 |
| 1996 | 142.2 | 361.6 | 74.7 | 33.1 | 1.3 | R 28.6 | 13.8 | 6.3 | 10.2 | R 134.7 | R 302.7 | 0.1 | R 35.9 | 0.0 | 250.4 | R 1,092.9 | R 521.9 | R 1,614.8 |
| 1997 | 143.9 | 352.4 | 95.4 | 35.3 | 1.4 | R 11.6 | 14.5 | R 6.4 | 7.6 | R 136.4 | R 308.7 | 0.0 | R 61.3 | 0.0 | 252.1 | R 1,118.5 | R 524.4 | R 1,642.9 |
| 1998 | 138.3 | 347.5 | 83.9 | 30.8 | 1.5 | 7.2 | 15.2 | 6.8 | 5.7 | 140.5 | 291.6 | 0.0 | 39.9 | 0.0 | 249.1 | 1,066.3 | 514.5 | 1,580.9 |
| 1999 | 131.3 | 344.3 | 93.5 | 28.0 | 0.6 | 14.2 | 15.4 | 5.9 | 9.0 | 148.6 | 315.2 | 0.0 | 314.4 | 0.0 | 253.5 | 1,358.7 | 496.7 | 1,855.3 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 231. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Ohio

**OHIO**

| Year | Coal a | Natural Gas b | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | Ethanol c | Electricity a | Net Energy | Electrical System Energy Losses d | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total c |
| 1960 | 449 | 9 | 1,395 | 7,987 | 1,808 | 36 | 1,381 | 74,274 | 310 | 87,192 | 0 | 91 | — | 226 | — |
| 1965 | 88 | 11 | 2,125 | 9,722 | 3,075 | 94 | 1,263 | 83,101 | 633 | 100,013 | 0 | 57 | — | 135 | — |
| 1970 | 48 | 12 | 712 | 11,068 | 5,857 | 133 | 1,241 | 103,970 | 758 | 123,739 | 0 | 54 | — | 131 | — |
| 1975 | 4 | 9 | 491 | 15,647 | 5,926 | 180 | 1,622 | 116,333 | 592 | 140,790 | 0 | 45 | — | 108 | — |
| 1980 | 0 | 11 | 473 | 24,578 | 7,219 | 225 | 1,425 | 110,021 | 255 | 144,198 | 0 | 46 | — | 111 | — |
| 1985 | 0 | 8 | 330 | 22,274 | 7,204 | 379 | 1,297 | 107,086 | 0 | 138,569 | R e 1,300 | 46 | — | 107 | — |
| 1990 | 0 | 10 | 239 | 25,341 | 10,602 | 358 | 1,459 | 108,455 | 5 | 146,458 | R 2,531 | 44 | — | 97 | — |
| 1991 | 0 | 9 | 214 | 24,010 | 10,400 | 292 | 1,306 | 108,032 | 8 | 144,260 | R 2,665 | 46 | — | 101 | — |
| 1992 | 0 | 10 | 224 | 25,156 | 10,631 | 251 | 1,331 | 105,229 | 55 | 142,877 | R 3,317 | 51 | — | R 109 | — |
| 1993 | 0 | 10 | 207 | 26,716 | 10,650 | 246 | 1,355 | 113,239 | 16 | 152,430 | R 4,692 | 49 | — | 105 | — |
| 1994 | 0 | 18 | 186 | 28,828 | 11,678 | 460 | 1,417 | 111,632 | 64 | 154,265 | R 5,499 | 49 | — | 103 | — |
| 1995 | 0 | 18 | 235 | 29,497 | 11,236 | 256 | 1,392 | 114,584 | 57 | 157,258 | R 5,147 | 49 | — | R 103 | — |
| 1996 | 0 | 20 | 345 | 33,788 | 11,960 | R 234 | 1,351 | 113,793 | 84 | R 161,555 | R 2,030 | 50 | — | 105 | — |
| 1997 | 0 | 20 | 379 | 37,444 | 12,604 | R 277 | 1,427 | 115,149 | 60 | R 167,341 | R 3,675 | 50 | — | 104 | — |
| 1998 | 0 | 18 | 365 | 37,193 | 13,825 | 109 | 1,494 | 117,877 | 61 | 170,924 | 5,404 | 47 | — | 97 | — |
| 1999 | 0 | 18 | 244 | 38,204 | 16,457 | 190 | 1,510 | 119,601 | 9 | 176,214 | 5,537 | 52 | — | 102 | — |

**Trillion Btu**

| Year | Coal a | Natural Gas b | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | Ethanol c | Electricity a | Net Energy | Electrical System Energy Losses d | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 11.1 | 9.4 | 7.0 | 46.5 | 9.8 | 0.1 | 8.4 | 390.2 | 2.0 | 464.0 | 0.0 | 0.3 | 484.9 | 0.8 | 485.6 |
| 1965 | 2.2 | 11.4 | 10.7 | 56.6 | 17.0 | 0.4 | 7.7 | 436.5 | 4.0 | 532.9 | 0.0 | 0.2 | 546.7 | 0.5 | 547.2 |
| 1970 | 1.1 | 12.3 | 3.6 | 64.5 | 32.8 | 0.5 | 7.5 | 546.2 | 4.8 | 659.8 | 0.0 | 0.2 | 673.4 | 0.4 | 673.8 |
| 1975 | 0.1 | 9.2 | 2.5 | 91.1 | 33.3 | 0.7 | 9.8 | 611.1 | 3.7 | 752.2 | 0.0 | 0.2 | 761.7 | 0.4 | 762.1 |
| 1980 | 0.0 | 11.6 | 2.4 | 143.2 | 40.6 | 0.8 | 8.6 | 577.9 | 1.6 | 775.2 | 0.0 | 0.2 | 787.0 | 0.4 | 787.4 |
| 1985 | 0.0 | 8.6 | 1.7 | 129.7 | 40.6 | 1.4 | 7.9 | 562.5 | 0.0 | 743.8 | R e 4.6 | 0.2 | e 752.6 | 0.4 | e 752.9 |
| 1990 | 0.0 | 10.5 | 1.2 | 147.6 | 59.9 | 1.3 | 8.9 | 569.7 | (s) | 788.6 | R 9.0 | 0.2 | 799.2 | 0.3 | 799.6 |
| 1991 | 0.0 | 9.5 | 1.1 | 139.9 | 58.8 | 1.1 | 7.9 | 567.5 | (s) | 776.3 | R 9.4 | 0.2 | 785.9 | 0.3 | 786.3 |
| 1992 | 0.0 | 10.0 | 1.1 | 146.5 | 60.1 | 0.9 | 8.1 | 552.8 | 0.3 | 769.8 | R 11.7 | 0.2 | 780.0 | 0.4 | 780.4 |
| 1993 | 0.0 | 10.7 | 1.0 | 155.6 | 60.2 | 0.9 | 8.2 | 594.8 | 0.1 | 820.9 | R 16.6 | 0.2 | 831.8 | 0.4 | 832.2 |
| 1994 | 0.0 | 18.6 | 0.9 | 167.9 | 66.1 | 1.7 | 8.6 | R 583.8 | 0.4 | R 829.4 | R 19.5 | 0.2 | R 848.2 | 0.4 | R 848.5 |
| 1995 | 0.0 | 18.5 | 1.2 | 171.8 | 63.7 | 0.9 | 8.4 | R 597.6 | 0.4 | R 844.0 | R 18.2 | 0.2 | R 862.7 | 0.3 | R 863.0 |
| 1996 | 0.0 | 21.2 | 1.7 | 196.8 | 67.8 | 0.8 | 8.2 | R 593.5 | 0.5 | R 869.5 | R 7.2 | 0.2 | R 890.8 | 0.4 | R 891.2 |
| 1997 | 0.0 | 20.6 | 1.9 | 218.1 | 71.5 | R 1.0 | 8.7 | R 600.3 | 0.4 | R 901.8 | R 13.0 | 0.2 | R 922.6 | 0.4 | R 922.9 |
| 1998 | 0.0 | 18.8 | 1.8 | 216.6 | 78.4 | 0.4 | 9.1 | 614.4 | 0.4 | 921.1 | 19.1 | 0.2 | 940.1 | 0.3 | 940.4 |
| 1999 | 0.0 | 18.5 | 1.2 | 222.5 | 93.3 | 0.7 | 9.2 | 623.2 | 0.1 | 950.2 | 19.6 | 0.2 | 968.9 | 0.3 | 969.2 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 232. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Ohio**

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|------|------|-----|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 21,559 | 3 | 94 | 107 | 0 | 201 | 0 | 7 | 8 | 0 | 0 | — |
| 1965 | 24,923 | 3 | 105 | 119 | 0 | 223 | 22 | 10 | 7 | 0 | 0 | — |
| 1970 | 35,321 | 21 | 697 | 791 | 0 | 1,487 | 0 | 7 | 5 | 0 | 0 | — |
| 1975 | 47,321 | 6 | 1,312 | 2,568 | 0 | 3,880 | 0 | 7 | (s) | 0 | 0 | — |
| 1980 | 48,537 | 5 | 605 | 1,643 | 0 | 2,248 | 2,119 | 6 | 1 | 0 | 0 | — |
| 1985 | 46,700 | 1 | 141 | 508 | 0 | 649 | 1,943 | 175 | 265 | 0 | 0 | — |
| 1990 | 48,848 | 1 | 136 | 452 | 0 | 588 | 10,664 | 173 | 267 | 0 | 0 | — |
| 1991 | 49,577 | 3 | 169 | 584 | 0 | 753 | 14,833 | 145 | 298 | 0 | 0 | — |
| 1992 | 50,358 | 3 | 62 | 427 | 0 | 489 | 14,805 | 244 | 310 | 0 | 0 | — |
| 1993 | 51,456 | 3 | 21 | 545 | 0 | 565 | 10,011 | 183 | 64 | 0 | 0 | — |
| 1994 | 49,326 | 3 | 28 | 844 | 0 | 872 | 10,952 | 189 | 0 | 0 | 0 | — |
| 1995 | 49,785 | 7 | 0 | 642 | 0 | 642 | 16,768 | 227 | 0 | 0 | 0 | — |
| 1996 | 53,543 | 3 | 0 | 584 | 0 | 584 | 13,919 | 392 | 0 | 0 | 0 | — |
| 1997 | 52,893 | 3 | 0 | 574 | 0 | 574 | 15,331 | 507 | 0 | 0 | 0 | — |
| 1998 | 54,456 | 8 | 0 | 635 | 0 | 635 | 16,476 | 406 | 0 | 0 | 0 | — |
| 1999 | 52,122 | 11 | 0 | 985 | 0 | 985 | 16,422 | 423 | 0 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 512.5 | 3.1 | 0.6 | 0.6 | 0.0 | 1.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 516.9 |
| 1965 | 587.3 | 3.0 | 0.7 | 0.7 | 0.0 | 1.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 592.1 |
| 1970 | 794.7 | 21.9 | 4.4 | 4.6 | 0.0 | 9.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 825.7 |
| 1975 | 1,037.2 | 5.3 | 8.2 | 14.9 | 0.0 | 23.2 | 0.0 | 0.1 | (s) | 0.0 | 0.0 | 1,065.8 |
| 1980 | 1,110.5 | 4.7 | 3.8 | 9.6 | 0.0 | 13.4 | 23.1 | 0.1 | (s) | 0.0 | 0.0 | 1,151.8 |
| 1985 | 1,103.3 | 0.7 | 0.9 | 3.0 | 0.0 | 3.8 | 21.0 | 1.8 | 2.8 | 0.0 | 0.0 | 1,133.5 |
| 1990 | 1,160.8 | 1.3 | 0.9 | 2.6 | 0.0 | 3.5 | 113.9 | 1.8 | 2.8 | 0.0 | 0.0 | 1,284.0 |
| 1991 | 1,184.4 | 3.3 | 1.1 | 3.4 | 0.0 | 4.5 | 159.3 | 1.5 | 3.1 | 0.0 | 0.0 | 1,356.1 |
| 1992 | 1,206.8 | 3.1 | 0.4 | 2.5 | 0.0 | 2.9 | 158.1 | 2.5 | 3.2 | 0.0 | 0.0 | 1,376.6 |
| 1993 | 1,240.0 | 2.8 | 0.1 | 3.2 | 0.0 | 3.3 | 106.9 | 1.9 | 0.7 | 0.0 | 0.0 | 1,355.6 |
| 1994 | 1,189.0 | 2.9 | 0.2 | 4.9 | 0.0 | 5.1 | 116.9 | 1.9 | 0.0 | 0.0 | 0.0 | 1,315.9 |
| 1995 | 1,207.0 | 7.7 | 0.0 | 3.7 | 0.0 | 3.7 | 178.7 | 2.3 | 0.0 | 0.0 | 0.0 | 1,399.4 |
| 1996 | 1,291.0 | 3.0 | 0.0 | 3.4 | 0.0 | 3.4 | 147.9 | 4.1 | 0.0 | 0.0 | 0.0 | 1,449.3 |
| 1997 | 1,257.9 | 3.6 | 0.0 | 3.3 | 0.0 | 3.3 | 162.9 | R 5.3 | 0.0 | 0.0 | 0.0 | 1,432.9 |
| 1998 | 1,297.5 | 7.9 | 0.0 | 3.7 | 0.0 | 3.7 | 175.0 | 4.2 | 0.0 | 0.0 | 0.0 | 1,488.3 |
| 1999 | 1,242.4 | 11.4 | 0.0 | 5.7 | 0.0 | 5.7 | 174.5 | 4.4 | 0.0 | 0.0 | 0.0 | 1,438.4 |

[a] Includes supplemental gaseous fuels.

[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Energy Information Administration**
**State Energy Data Report 1999**

## Table 233.  Energy Consumption Estimates by Source, Selected Years 1960-1999, Oklahoma

**OKLAHOMA**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | Million kWh | | | Million kWh | |
| 1960 | 77 | 308 | 2,034 | 562 | 2,618 | 2,920 | 431 | 6,433 | 661 | 22,708 | 1,454 | R 7,983 | R 47,803 | 0 | R 705 | — | — | -3,605 | — |
| 1965 | 30 | 468 | 3,586 | 745 | 2,877 | 3,453 | 945 | 7,654 | 679 | 25,815 | 851 | R 8,673 | R 55,278 | 0 | 825 | — | — | -4,992 | — |
| 1970 | 7 | 597 | 4,598 | 448 | 5,584 | 4,378 | 1,103 | 9,618 | 622 | 32,521 | 807 | R 8,988 | R 68,667 | 0 | 1,406 | — | — | -18,718 | — |
| 1975 | 23 | 669 | 5,675 | 309 | 9,449 | 3,916 | 328 | 9,342 | 810 | 38,469 | 641 | R 9,645 | R 78,585 | 0 | 2,945 | — | — | -21,277 | — |
| 1980 | 6,046 | 722 | 4,826 | 328 | 12,125 | 4,900 | 342 | 8,987 | 1,356 | 39,633 | 732 | R 9,336 | R 82,565 | 0 | 1,315 | — | — | -28,011 | — |
| 1985 | 13,602 | 587 | 4,003 | 217 | 18,377 | 5,870 | 114 | 8,035 | 1,234 | 42,170 | 219 | R 4,753 | R 84,992 | 0 | 3,980 | — | — | -15,019 | — |
| 1990 | 15,423 | 604 | 3,508 | 146 | 15,348 | 7,832 | 38 | 3,289 | 1,389 | 38,998 | 631 | R 7,473 | R 78,651 | 0 | R h 2,750 | — | — | R -2,304 | — |
| 1991 | 16,345 | 570 | 3,433 | 111 | 14,175 | 10,569 | 31 | 4,878 | 1,242 | 38,816 | 242 | R 6,816 | R 80,315 | 0 | R 1,857 | — | — | R -12,392 | — |
| 1992 | 17,430 | 544 | 2,930 | 124 | 16,287 | 12,948 | 31 | 4,502 | 1,267 | 39,883 | 628 | R 8,070 | R 86,669 | 0 | R 3,210 | — | — | R -20,335 | — |
| 1993 | 18,866 | 579 | 3,721 | 104 | 16,391 | 9,012 | 26 | 5,687 | 1,290 | 40,814 | 713 | R 7,626 | R 85,383 | 0 | R 4,296 | — | — | R -22,967 | — |
| 1994 | 17,726 | 572 | 3,542 | 84 | 17,325 | 10,345 | 32 | 5,626 | 1,348 | 41,524 | 557 | R 7,513 | R 87,896 | 0 | R 2,465 | — | — | R -12,121 | — |
| 1995 | 19,596 | 568 | 3,181 | 154 | 17,675 | 5,359 | 15 | 3,625 | 1,325 | 42,382 | 447 | R 7,299 | R 81,462 | 0 | R 2,715 | — | — | R -18,385 | — |
| 1996 | 20,125 | 567 | 2,762 | 117 | 20,479 | 4,707 | 32 | R 4,076 | 1,286 | 43,763 | 396 | R 8,929 | R 86,546 | 0 | R 2,078 | — | — | R -11,899 | — |
| 1997 | 21,109 | 560 | 1,426 | 80 | 21,857 | 5,257 | 45 | R 4,693 | 1,358 | 42,670 | 274 | R 9,087 | R 86,747 | 0 | R 2,824 | — | — | R -12,484 | — |
| 1998 | 19,586 | 569 | 2,582 | 133 | 22,106 | 5,343 | 46 | 3,821 | 1,422 | 43,349 | 109 | 8,258 | 87,169 | 0 | 3,420 | — | — | -12,020 | — |
| 1999 | 19,088 | 531 | 1,719 | 102 | 22,195 | 6,576 | 45 | 9,198 | 1,437 | 43,571 | 133 | 8,622 | 93,600 | 0 | 3,069 | — | — | -14,938 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.8 | 319.3 | 13.5 | 2.8 | 15.3 | 15.7 | 2.4 | 25.8 | 4.0 | 119.3 | 9.1 | R 47.9 | R 255.9 | 0.0 | 7.6 | 10.2 | 0.0 | -12.3 | R 582.4 |
| 1965 | 0.7 | 480.1 | 23.8 | 3.8 | 16.8 | 18.7 | 5.4 | 30.7 | 4.1 | 135.6 | 5.4 | R 52.0 | R 296.2 | 0.0 | 8.6 | 7.6 | 0.0 | -17.0 | R 776.2 |
| 1970 | 0.2 | 616.3 | 30.5 | 2.3 | 32.5 | 24.0 | 6.3 | 36.3 | 3.8 | 170.8 | 5.1 | R 53.9 | R 365.5 | 0.0 | 14.8 | 7.0 | 0.0 | -63.9 | R 939.8 |
| 1975 | 0.5 | 678.9 | 37.7 | 1.6 | 55.0 | 21.5 | 1.9 | 34.7 | 4.9 | 202.1 | 4.0 | R 57.9 | R 421.2 | 0.0 | 30.6 | 12.0 | 0.0 | -72.6 | R 1,070.7 |
| 1980 | 106.3 | 738.9 | 32.0 | 1.7 | 70.6 | 26.9 | 1.9 | 33.0 | 8.2 | 208.2 | 4.6 | R 56.0 | R 443.2 | 0.0 | 13.7 | R 17.3 | 0.0 | -95.6 | R 1,223.8 |
| 1985 | 237.2 | 603.9 | 26.6 | 1.1 | 107.0 | 32.5 | 0.6 | 29.0 | 7.5 | 221.5 | 1.4 | R 29.5 | R 456.6 | 0.0 | 41.6 | R 14.9 | 0.0 | -51.2 | R 1,302.9 |
| 1990 | 277.1 | 620.7 | 23.3 | 0.7 | 89.4 | 43.8 | 0.2 | 11.9 | 8.4 | 204.9 | 4.0 | R 44.8 | R 431.4 | 0.0 | h 28.6 | R 29.0 | h 0.1 | -7.9 | R h 1,379.1 |
| 1991 | 291.6 | 582.1 | 22.8 | 0.6 | 82.6 | 59.1 | 0.2 | 17.6 | 7.5 | 203.9 | 1.5 | R 41.0 | R 436.8 | 0.0 | 19.4 | R 23.3 | 0.1 | R -42.3 | R 1,311.0 |
| 1992 | 307.2 | 558.0 | 19.4 | 0.6 | 94.9 | 72.8 | 0.2 | 16.3 | 7.7 | 209.5 | 3.9 | R 48.0 | R 473.4 | 0.0 | 33.2 | R 27.0 | 0.1 | R -69.4 | R 1,329.4 |
| 1993 | 331.5 | 593.8 | 24.7 | 0.5 | 95.5 | 50.5 | 0.1 | 20.5 | 7.8 | 214.4 | 4.5 | R 45.7 | R 464.2 | 0.0 | 44.3 | R 23.7 | 0.1 | R -78.4 | R 1,379.3 |
| 1994 | 307.0 | 588.1 | 23.5 | 0.4 | 100.9 | 58.1 | 0.2 | 20.5 | 8.2 | R 217.2 | 3.5 | R 44.9 | R 477.3 | 0.0 | 25.4 | R 25.0 | 0.1 | -41.4 | R 1,381.5 |
| 1995 | 343.5 | 579.5 | 21.1 | 0.8 | 103.0 | 30.3 | 0.1 | 13.1 | 8.0 | R 221.0 | 2.8 | R 43.7 | R 443.9 | 0.0 | 28.0 | R 29.8 | 0.1 | R -62.7 | R 1,362.1 |
| 1996 | 349.9 | 580.2 | 18.3 | 0.6 | 119.3 | 26.7 | 0.2 | R 14.7 | 7.8 | R 228.3 | 2.5 | R 52.8 | R 471.2 | 0.0 | 21.5 | R 25.5 | 0.1 | R -40.6 | R 1,407.8 |
| 1997 | 367.4 | R 566.8 | 9.5 | 0.4 | 127.3 | 29.8 | 0.3 | R 17.0 | 8.2 | R 222.4 | 1.7 | R 53.8 | R 470.4 | 0.0 | R 29.2 | R 20.5 | 0.1 | R -42.6 | R 1,411.8 |
| 1998 | 343.1 | 576.9 | 17.1 | 0.7 | 128.8 | 30.3 | 0.3 | 13.8 | 8.6 | 225.9 | 0.7 | 49.0 | 475.2 | 0.0 | 35.4 | 21.0 | 0.1 | -41.0 | 1,410.6 |
| 1999 | 333.5 | 543.0 | 11.4 | 0.5 | 129.3 | 37.3 | 0.3 | 33.3 | 8.7 | 227.0 | 0.8 | 51.1 | 499.7 | 0.0 | 31.8 | 20.4 | 0.1 | -51.0 | 1,377.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# O K L A H O M A

## Table 234.  Residential Energy Consumption Estimates, Selected Years 1960-1999, Oklahoma

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| 1960 | 18 | 60 | 2 | 18 | 3,938 | 3,959 | 460 | — | — | 2,372 | — | 5,900 | — |
| 1965 | 6 | 65 | 2 | 78 | 4,642 | 4,722 | 331 | — | — | 4,086 | — | 9,756 | — |
| 1970 | 2 | 77 | 3 | 52 | 5,802 | 5,856 | 308 | — | — | 7,293 | — | 17,674 | — |
| 1975 | 1 | 80 | 12 | 24 | 5,628 | 5,663 | 341 | — | — | 9,222 | — | 22,245 | — |
| 1980 | 11 | 77 | 15 | 21 | 1,759 | 1,795 | R 442 | — | — | 12,309 | — | 29,931 | — |
| 1985 | 1 | 76 | 82 | 30 | 2,027 | 2,140 | 251 | — | — | 14,400 | — | 33,831 | — |
| 1990 | (s) | 66 | (s) | 10 | 1,274 | 1,284 | 345 | — | — | 17,077 | — | R 37,358 | — |
| 1991 | (s) | 69 | (s) | 10 | 1,373 | 1,383 | 364 | — | — | 15,325 | — | R 33,315 | — |
| 1992 | (s) | 66 | 2 | 11 | 1,112 | 1,124 | 383 | — | — | 14,254 | — | R 30,400 | — |
| 1993 | (s) | 78 | (s) | 7 | 1,286 | 1,293 | 334 | — | — | 15,901 | — | R 33,586 | — |
| 1994 | (s) | 69 | (s) | 5 | 1,198 | 1,203 | R 327 | — | — | 16,128 | — | R 33,658 | — |
| 1995 | 4 | 69 | 12 | 4 | 1,214 | 1,230 | R 363 | — | — | 16,319 | — | R 34,024 | — |
| 1996 | (s) | 77 | 24 | 20 | R 1,630 | R 1,674 | 363 | — | — | 17,303 | — | R 36,059 | — |
| 1997 | 102 | 72 | 4 | 14 | R 1,533 | R 1,550 | R 158 | — | — | 17,376 | — | R 36,143 | — |
| 1998 | (s) | 67 | 1 | 13 | 1,619 | 1,632 | 139 | — | — | 19,511 | — | 40,305 | — |
| 1999 | 1 | 62 | 2 | 9 | 2,292 | 2,302 | 149 | — | — | 18,301 | — | 35,858 | — |
| | | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 0.4 | 61.9 | (s) | 0.1 | 15.8 | 15.9 | 9.2 | 0.0 | 0.0 | 8.1 | 95.5 | 20.1 | 115.6 |
| 1965 | 0.1 | 66.5 | (s) | 0.4 | 18.6 | 19.1 | 6.6 | 0.0 | 0.0 | 13.9 | 106.3 | 33.3 | 139.6 |
| 1970 | (s) | 79.9 | (s) | 0.3 | 21.9 | 22.2 | 6.2 | 0.0 | 0.0 | 24.9 | 133.3 | 60.3 | 193.6 |
| 1975 | (s) | 79.6 | 0.1 | 0.1 | 20.9 | 21.1 | 6.8 | 0.0 | 0.0 | 31.5 | 139.0 | 75.9 | 214.9 |
| 1980 | 0.2 | 76.8 | 0.1 | 0.1 | 6.5 | 6.7 | 8.8 | 0.0 | 0.0 | 42.0 | 134.5 | 102.1 | 236.6 |
| 1985 | (s) | 77.6 | 0.5 | 0.2 | 7.3 | 8.0 | 5.0 | 0.0 | 0.0 | 49.1 | 139.8 | 115.4 | 255.2 |
| 1990 | (s) | 66.9 | (s) | 0.1 | 4.6 | 4.7 | 6.9 | e (s) | e 0.1 | 58.3 | e 136.9 | R 127.5 | e 264.3 |
| 1991 | (s) | 70.1 | (s) | 0.1 | 5.0 | 5.0 | 7.3 | (s) | 0.1 | 52.3 | 134.8 | R 113.7 | R 248.5 |
| 1992 | (s) | 67.2 | (s) | 0.1 | 4.0 | 4.1 | 7.7 | (s) | 0.1 | 48.6 | 127.7 | R 103.7 | R 231.5 |
| 1993 | (s) | 80.0 | (s) | (s) | 4.6 | 4.7 | 6.7 | (s) | 0.1 | 54.3 | 145.7 | 114.6 | R 260.3 |
| 1994 | (s) | 71.0 | (s) | (s) | 4.4 | 4.4 | R 6.5 | (s) | 0.1 | 55.0 | 137.1 | 114.8 | 251.9 |
| 1995 | 0.1 | 69.7 | 0.1 | (s) | 4.4 | 4.5 | 7.3 | (s) | 0.1 | 55.7 | 137.3 | R 116.1 | R 253.4 |
| 1996 | (s) | 78.4 | 0.1 | 0.1 | R 5.9 | R 6.1 | 7.3 | (s) | 0.1 | 59.0 | R 150.9 | R 123.0 | R 273.9 |
| 1997 | 1.8 | 72.2 | (s) | 0.1 | R 5.5 | R 5.6 | R 3.2 | (s) | 0.1 | 59.3 | R 142.1 | R 123.3 | R 265.4 |
| 1998 | (s) | 67.0 | (s) | 0.1 | 5.8 | 5.9 | 2.8 | (s) | 0.1 | 66.6 | 142.4 | 137.5 | 279.9 |
| 1999 | (s) | 62.9 | (s) | 0.1 | 8.3 | 8.3 | 3.0 | (s) | 0.1 | 62.4 | 136.8 | 122.3 | 259.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 235.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Oklahoma

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Thousand Barrels | | | | | |  |  |  |  |  |  |
| 1960 | 33 | 29 | 72 | 83 | 695 | 177 | 395 | 1,422 | 9 | — | 1,904 | — | 4,737 | — |
| 1965 | 12 | 27 | 68 | 353 | 819 | 204 | 233 | 1,677 | 6 | — | 2,945 | — | 7,032 | — |
| 1970 | 4 | 44 | 95 | 233 | 1,024 | 229 | 190 | 1,771 | 6 | — | 4,415 | — | 10,699 | — |
| 1975 | 2 | 42 | 406 | 106 | 993 | 264 | 196 | 1,965 | 6 | — | 6,810 | — | 16,427 | — |
| 1980 | 20 | 47 | 315 | 15 | 310 | 301 | 30 | 972 | 11 | — | 9,005 | — | 21,897 | — |
| 1985 | 2 | 41 | 705 | 20 | 358 | 338 | 0 | 1,420 | R 7 | — | 11,706 | — | 27,501 | — |
| 1990 | (s) | 37 | 539 | 13 | 225 | 374 | 82 | 1,231 | R 22 | — | 13,663 | — | R 29,890 | — |
| 1991 | 1 | 40 | 485 | 10 | 242 | 231 | 76 | 1,045 | R 23 | — | 12,665 | — | R 27,532 | — |
| 1992 | 1 | 35 | 374 | 4 | 196 | 172 | 43 | 790 | R 25 | — | 12,414 | — | R 26,477 | — |
| 1993 | (s) | 41 | 324 | 5 | 227 | 37 | 0 | 593 | 27 | — | 12,931 | — | R 27,312 | — |
| 1994 | 1 | 37 | 263 | 4 | 211 | 37 | 0 | 515 | 27 | — | 13,294 | — | R 27,744 | — |
| 1995 | 7 | 40 | 292 | 5 | 214 | 38 | (s) | 549 | 27 | — | 13,359 | — | R 27,853 | — |
| 1996 | 1 | 46 | 388 | 5 | R 288 | 38 | 0 | R 719 | 30 | — | 13,828 | — | R 28,818 | — |
| 1997 | 189 | 45 | 600 | 16 | R 270 | 37 | 0 | R 924 | R 17 | — | 14,275 | — | R 29,694 | — |
| 1998 | 1 | 44 | 610 | 21 | 286 | 37 | 0 | 954 | 17 | — | 15,211 | — | 31,423 | — |
| 1999 | 1 | 40 | 330 | 12 | 404 | 37 | 0 | 783 | 21 | — | 15,164 | — | 29,712 | — |
| | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 0.8 | 29.8 | 0.4 | 0.5 | 2.8 | 0.9 | 2.5 | 7.1 | 0.2 | 0.0 | 6.5 | 44.4 | 16.2 | 60.5 |
| 1965 | 0.3 | 27.9 | 0.4 | 2.0 | 3.3 | 1.1 | 1.5 | 8.2 | 0.1 | 0.0 | 10.0 | 46.6 | 24.0 | 70.6 |
| 1970 | 0.1 | 45.3 | 0.6 | 1.3 | 3.9 | 1.2 | 1.2 | 8.1 | 0.1 | 0.0 | 15.1 | 68.7 | 36.5 | 105.2 |
| 1975 | (s) | 41.6 | 2.4 | 0.6 | 3.7 | 1.4 | 1.2 | 9.3 | 0.1 | 0.0 | 23.2 | 74.3 | 56.0 | 130.4 |
| 1980 | 0.5 | 47.2 | 1.8 | 0.1 | 1.1 | 1.6 | 0.2 | 4.8 | 0.2 | 0.0 | 30.7 | 83.5 | 74.7 | 158.2 |
| 1985 | (s) | 41.6 | 4.1 | 0.1 | 1.3 | 1.8 | 0.0 | 7.3 | R 0.1 | 0.0 | 39.9 | R 89.0 | 93.8 | R 182.8 |
| 1990 | (s) | 38.0 | 3.1 | 0.1 | 0.8 | 2.0 | 0.5 | 6.5 | R 0.4 | e 0.0 | 46.6 | R e 91.5 | 102.0 | R e 193.5 |
| 1991 | (s) | 40.1 | 2.8 | 0.1 | 0.9 | 1.2 | 0.5 | 5.5 | R 0.5 | 0.0 | 43.2 | R 89.2 | R 93.9 | R 183.2 |
| 1992 | (s) | 36.0 | 2.2 | (s) | 0.7 | 0.9 | 0.3 | 4.1 | R 0.5 | 0.0 | 42.4 | R 82.9 | R 90.3 | R 173.3 |
| 1993 | (s) | 41.6 | 1.9 | (s) | 0.8 | 0.2 | 0.0 | 2.9 | 0.5 | 0.0 | 44.1 | 89.2 | 93.2 | 182.4 |
| 1994 | (s) | 37.4 | 1.5 | (s) | 0.8 | 0.2 | 0.0 | 2.5 | 0.5 | 0.0 | 45.4 | 85.9 | 94.7 | 180.5 |
| 1995 | 0.2 | 40.2 | 1.7 | (s) | 0.8 | 0.2 | (s) | 2.7 | 0.5 | 0.0 | 45.6 | 89.2 | 95.0 | R 184.3 |
| 1996 | (s) | 47.2 | 2.3 | (s) | R 1.0 | 0.2 | 0.0 | R 3.5 | 0.6 | 0.0 | 47.2 | R 98.5 | R 98.3 | R 196.8 |
| 1997 | 3.3 | 45.4 | 3.5 | 0.1 | R 1.0 | 0.2 | 0.0 | R 4.8 | R 0.3 | 0.0 | 48.7 | R 102.5 | R 101.3 | R 203.8 |
| 1998 | (s) | 44.1 | 3.6 | 0.1 | 1.0 | 0.2 | 0.0 | 4.9 | 0.3 | 0.0 | 51.9 | 101.3 | 107.2 | 208.5 |
| 1999 | (s) | 40.4 | 1.9 | 0.1 | 1.5 | 0.2 | 0.0 | 3.6 | 0.4 | 0.0 | 51.7 | 96.3 | 101.4 | 197.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 236. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Oklahoma

| Year | Coal | Natural Gas a | Petroleum | | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | Total |
| 1960 | 25 | 128 | 2,034 | 1,193 | 330 | 1,511 | 176 | 1,383 | 1,017 | R 7,983 | R 15,626 | 0 | — | — | 2,561 | — | 6,371 | — |
| 1965 | 11 | 236 | 3,586 | 1,203 | 514 | 1,704 | 152 | 812 | 346 | R 8,673 | R 16,990 | 0 | — | — | 3,563 | — | 8,507 | — |
| 1970 | 0 | 218 | 4,598 | 2,084 | 819 | 2,277 | 166 | 515 | 477 | R 8,988 | R 19,924 | 0 | — | — | 4,888 | — | 11,845 | — |
| 1975 | 20 | 223 | 5,675 | 4,166 | 198 | 2,248 | 274 | 437 | 374 | R 9,645 | R 23,018 | 0 | — | — | 7,233 | — | 17,447 | — |
| 1980 | 264 | 246 | 4,826 | 3,705 | 306 | 6,683 | 579 | 359 | 702 | R 9,336 | R 26,495 | 0 | — | — | 9,795 | — | 23,818 | — |
| 1985 | 852 | 245 | 4,003 | 6,949 | 64 | 5,517 | 527 | 977 | 211 | R 4,753 | R 23,001 | 0 | — | — | 10,576 | — | 24,848 | — |
| 1990 | 557 | 307 | 3,508 | 3,091 | 16 | 1,693 | 593 | 834 | 491 | R 7,473 | R 17,699 | f 0 | — | — | 11,764 | — | R 25,734 | — |
| 1991 | 676 | 269 | 3,433 | 3,200 | 12 | 3,154 | 530 | 895 | 154 | R 6,816 | R 18,194 | 0 | — | — | 11,415 | — | R 24,815 | — |
| 1992 | 730 | 268 | 2,930 | 4,200 | 17 | 3,114 | 541 | 831 | 574 | R 8,070 | R 20,278 | 0 | — | — | 11,599 | — | R 24,738 | — |
| 1993 | 1,198 | 279 | 3,721 | 3,135 | 14 | 4,080 | 551 | 1,026 | 708 | R 7,626 | R 20,860 | 0 | — | — | 11,699 | — | R 24,710 | — |
| 1994 | 764 | 287 | 3,542 | 3,484 | 23 | 4,073 | 576 | 1,109 | 550 | R 7,513 | R 20,871 | 0 | — | — | 11,721 | — | R 24,462 | — |
| 1995 | 1,455 | 275 | 3,181 | 3,105 | 6 | 2,138 | 566 | 1,183 | 334 | R 7,299 | R 17,811 | 0 | — | — | 11,714 | — | R 24,424 | — |
| 1996 | 738 | 274 | 2,762 | 3,435 | 7 | R 2,117 | 549 | 1,216 | 263 | R 8,929 | R 19,278 | 0 | — | — | 12,160 | — | R 25,342 | — |
| 1997 | 717 | 288 | 1,426 | 3,668 | 15 | R 2,832 | 580 | 1,248 | 264 | R 9,087 | R 19,119 | 0 | — | — | 12,802 | — | R 26,629 | — |
| 1998 | 701 | 260 | 2,582 | 3,279 | 12 | 1,846 | 607 | 1,319 | 106 | 8,258 | 18,009 | 0 | — | — | 13,175 | — | 27,216 | — |
| 1999 | 733 | 236 | 1,719 | 2,660 | 25 | 6,454 | 613 | 686 | 133 | 8,622 | 20,913 | 0 | — | — | 13,271 | — | 26,002 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | |
| 1960 | 0.6 | 132.5 | 13.5 | 7.0 | 1.9 | 6.1 | 1.1 | 7.3 | 6.4 | R 47.9 | R 91.0 | 0.0 | 0.8 | 0.0 | 8.7 | R 233.8 | 21.7 | R 255.5 |
| 1965 | 0.3 | 242.2 | 23.8 | 7.0 | 2.9 | 6.8 | 0.9 | 4.3 | 2.2 | R 52.0 | R 99.9 | 0.0 | 0.9 | 0.0 | 12.2 | R 355.4 | 29.0 | R 384.4 |
| 1970 | 0.0 | 225.3 | 30.5 | 12.1 | 4.6 | 8.6 | 1.0 | 2.7 | 3.0 | R 53.9 | R 116.5 | 0.0 | 0.7 | 0.0 | 16.7 | R 359.1 | 40.4 | R 399.5 |
| 1975 | 0.5 | 221.7 | 37.7 | 24.3 | 1.1 | 8.4 | 1.7 | 2.3 | 2.4 | R 57.9 | R 135.6 | 0.0 | 5.1 | 0.0 | 24.7 | R 387.4 | 59.5 | R 447.0 |
| 1980 | 5.6 | 246.4 | 32.0 | 21.6 | 1.7 | 24.6 | 3.5 | 1.9 | 4.4 | R 56.0 | R 145.7 | 0.0 | R 8.3 | 0.0 | 33.4 | R 439.4 | 81.3 | R 520.6 |
| 1985 | 18.3 | 249.3 | 26.6 | 40.5 | 0.4 | 19.9 | 3.2 | 5.1 | 1.3 | R 29.5 | R 126.4 | 0.0 | R 9.7 | 0.0 | 36.1 | R 439.8 | 84.8 | R 524.6 |
| 1990 | 12.7 | 312.7 | 23.3 | 18.0 | 0.1 | 6.1 | 3.6 | 4.4 | 3.1 | R 44.8 | R 103.4 | f 0.0 | R 21.7 | f 0.0 | 40.1 | R f 490.6 | 87.8 | R f 578.4 |
| 1991 | 16.1 | 272.6 | 22.8 | 18.6 | 0.1 | 11.4 | 3.2 | 4.7 | 1.0 | R 41.0 | R 102.8 | 0.0 | R 15.5 | 0.0 | 38.9 | R 445.9 | R 84.7 | R 530.6 |
| 1992 | 16.6 | 274.0 | 19.4 | 24.5 | 0.1 | 11.3 | 3.3 | 4.4 | 3.6 | R 48.0 | R 114.6 | 0.0 | R 18.8 | 0.0 | 39.6 | R 463.6 | R 84.4 | R 548.0 |
| 1993 | 26.9 | 285.2 | 24.7 | 18.3 | 0.1 | 14.7 | 3.3 | 5.4 | 4.4 | R 45.7 | R 116.6 | 0.0 | R 16.5 | 0.0 | 39.9 | R 485.1 | 84.3 | R 569.4 |
| 1994 | 16.1 | 294.4 | 23.5 | 20.3 | 0.1 | 14.8 | 3.5 | 5.8 | 3.5 | R 44.9 | R 116.4 | 0.0 | R 17.9 | 0.0 | 40.0 | R 484.7 | 83.5 | R 568.2 |
| 1995 | 33.0 | 279.0 | 21.1 | 18.1 | (s) | 7.7 | 3.4 | 6.2 | 2.1 | R 43.7 | R 102.3 | 0.0 | R 22.0 | 0.0 | 40.0 | R 476.3 | 83.3 | R 559.6 |
| 1996 | 16.4 | 280.3 | 18.3 | 20.0 | (s) | R 7.6 | 3.3 | R 6.3 | 1.7 | R 52.8 | R 110.2 | 0.0 | R 17.7 | 0.0 | 41.5 | R 466.1 | R 86.5 | R 552.5 |
| 1997 | 15.0 | R 289.9 | 9.5 | 21.4 | 0.1 | R 10.2 | 3.5 | R 6.5 | 1.7 | R 53.8 | R 106.6 | 0.0 | R 17.0 | 0.0 | 43.7 | R 472.2 | R 90.9 | R 563.0 |
| 1998 | 16.4 | 261.4 | 17.1 | 19.1 | 0.1 | 6.7 | 3.7 | 6.9 | 0.7 | 49.0 | 103.2 | 0.0 | 17.9 | 0.0 | 45.0 | 443.8 | 92.9 | 536.7 |
| 1999 | 17.1 | 240.5 | 11.4 | 15.5 | 0.1 | 23.3 | 3.7 | 3.6 | 0.8 | 51.1 | 109.6 | 0.0 | 17.0 | 0.0 | 45.3 | 429.5 | 88.7 | 518.2 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 237. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Oklahoma

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Petroleum — Distillate Fuel [a] | Petroleum — Jet Fuel [a] | Petroleum — LPG [a] | Petroleum — Lubricants [a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel [a] | Petroleum — Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | (s) | 9 | 562 | 1,325 | 2,920 | 290 | 485 | 21,148 | 8 | 26,737 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 13 | 745 | 1,582 | 3,453 | 489 | 527 | 24,799 | 244 | 31,839 | 0 | 0 | — | 0 | — |
| 1970 | 0 | 23 | 448 | 3,351 | 4,378 | 516 | 457 | 31,776 | 75 | 41,000 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 24 | 309 | 4,809 | 3,916 | 474 | 537 | 37,768 | 42 | 47,854 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 23 | 328 | 8,030 | 4,900 | 235 | 777 | 38,974 | 0 | 53,244 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 25 | 217 | 10,562 | 5,870 | 133 | 707 | 40,855 | 0 | 58,345 | R e 48 | 0 | — | 0 | — |
| 1990 | 0 | 26 | 146 | 11,690 | 7,832 | 97 | 796 | 37,790 | 0 | 58,351 | 0 | 0 | — | 0 | — |
| 1991 | 0 | 25 | 111 | 10,464 | 10,569 | 109 | 712 | 37,690 | 0 | 59,655 | 0 | 0 | — | 0 | — |
| 1992 | 0 | 26 | 124 | 11,692 | 12,948 | 80 | 726 | 38,880 | 0 | 64,450 | 0 | 0 | — | 0 | — |
| 1993 | 0 | 27 | 104 | 12,911 | 9,012 | 94 | 739 | 39,750 | 0 | 62,610 | 0 | 0 | — | 0 | — |
| 1994 | 0 | 26 | 84 | 13,559 | 10,345 | 144 | 772 | 40,378 | 0 | 65,282 | 0 | 0 | — | 0 | — |
| 1995 | 0 | 31 | 154 | 14,250 | 5,359 | 59 | 759 | 41,161 | 0 | 61,742 | 0 | 0 | — | 0 | — |
| 1996 | 0 | 34 | 117 | 16,548 | 4,707 | R 41 | 737 | 42,509 | 0 | R 64,659 | 0 | 0 | — | 0 | — |
| 1997 | 0 | 26 | 80 | 17,565 | 5,257 | R 58 | 778 | 41,385 | 0 | R 65,123 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 24 | 133 | 18,199 | 5,343 | 72 | 815 | 41,993 | 2 | 66,556 | 0 | 0 | — | 0 | — |
| 1999 | 0 | 24 | 102 | 19,180 | 6,576 | 48 | 823 | 42,847 | 0 | 69,577 | 0 | 0 | — | 0 | — |
| | | | | | | Trillion Btu | | | | | | | | | |
| 1960 | (s) | 9.3 | 2.8 | 7.7 | 15.7 | 1.2 | 2.9 | 111.1 | 0.1 | 141.4 | 0.0 | 0.0 | 150.8 | 0.0 | 150.8 |
| 1965 | (s) | 12.9 | 3.8 | 9.2 | 18.7 | 2.0 | 3.2 | 130.3 | 1.5 | 168.7 | 0.0 | 0.0 | 181.5 | 0.0 | 181.5 |
| 1970 | 0.0 | 23.5 | 2.3 | 19.5 | 24.0 | 1.9 | 2.8 | 166.9 | 0.5 | 217.9 | 0.0 | 0.0 | 241.4 | 0.0 | 241.4 |
| 1975 | (s) | 23.6 | 1.6 | 28.0 | 21.5 | 1.8 | 3.3 | 198.4 | 0.3 | 254.8 | 0.0 | 0.0 | 278.4 | 0.0 | 278.4 |
| 1980 | 0.0 | 22.8 | 1.7 | 46.8 | 26.9 | 0.9 | 4.7 | 204.7 | 0.0 | 285.6 | 0.0 | 0.0 | 308.4 | 0.0 | 308.4 |
| 1985 | 0.0 | 25.8 | 1.1 | 61.5 | 32.5 | 0.5 | 4.3 | 214.6 | 0.0 | 314.5 | R e 0.2 | 0.0 | e 340.3 | 0.0 | e 340.3 |
| 1990 | 0.0 | 26.6 | 0.7 | 68.1 | 43.8 | 0.4 | 4.8 | 198.5 | 0.0 | 316.3 | 0.0 | 0.0 | 342.9 | 0.0 | 342.9 |
| 1991 | 0.0 | 25.4 | 0.6 | 61.0 | 59.1 | 0.4 | 4.3 | 198.0 | 0.0 | 323.3 | 0.0 | 0.0 | 348.7 | 0.0 | 348.7 |
| 1992 | 0.0 | 26.3 | 0.6 | 68.1 | 72.8 | 0.3 | 4.4 | 204.2 | 0.0 | 350.4 | 0.0 | 0.0 | 376.7 | 0.0 | 376.7 |
| 1993 | 0.0 | 27.3 | 0.5 | 75.2 | 50.5 | 0.3 | 4.5 | 208.8 | 0.0 | 339.9 | 0.0 | 0.0 | 367.1 | 0.0 | 367.1 |
| 1994 | 0.0 | 27.0 | 0.4 | 79.0 | 58.1 | 0.5 | 4.7 | R 211.2 | 0.0 | R 353.9 | 0.0 | 0.0 | R 380.9 | 0.0 | R 380.9 |
| 1995 | 0.0 | 31.2 | 0.8 | 83.0 | 30.3 | 0.2 | 4.6 | R 214.7 | 0.0 | R 333.6 | 0.0 | 0.0 | R 364.8 | 0.0 | R 364.8 |
| 1996 | 0.0 | 34.5 | 0.6 | 96.4 | 26.7 | 0.1 | 4.5 | R 221.7 | 0.0 | R 350.0 | 0.0 | 0.0 | R 384.5 | 0.0 | R 384.5 |
| 1997 | 0.0 | 26.4 | 0.4 | 102.3 | 29.8 | R 0.2 | 4.7 | R 215.7 | 0.0 | R 353.2 | 0.0 | 0.0 | R 379.6 | 0.0 | R 379.6 |
| 1998 | 0.0 | 24.5 | 0.7 | 106.0 | 30.3 | 0.3 | 4.9 | 218.9 | (s) | 361.1 | 0.0 | 0.0 | 385.6 | 0.0 | 385.6 |
| 1999 | 0.0 | 24.5 | 0.5 | 111.7 | 37.3 | 0.2 | 5.0 | 223.3 | 0.0 | 378.0 | 0.0 | 0.0 | 402.5 | 0.0 | 402.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 238.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Oklahoma**

| Year | Coal | Natural Gas [a] | Petroleum — Heavy Oil [b,c] | Petroleum — Light Oil [b,d] | Petroleum — Petroleum Coke [b] | Petroleum — Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | (s) | 83 | 33 | 26 | 0 | 59 | 0 | 705 | 0 | 0 | 0 | — |
| 1965 | 1 | 127 | 28 | 22 | 0 | 50 | 0 | 825 | 0 | 0 | 0 | — |
| 1970 | 1 | 235 | 64 | 51 | 0 | 116 | 0 | 1,406 | 0 | 0 | 0 | — |
| 1975 | (s) | 301 | 29 | 55 | 0 | 85 | 0 | 2,945 | 0 | 0 | 0 | — |
| 1980 | 5,752 | 330 | (s) | 59 | 0 | 59 | 0 | 1,315 | 0 | 0 | 0 | — |
| 1985 | 12,747 | 201 | 9 | 79 | 0 | 87 | 0 | 3,980 | 0 | 0 | 0 | — |
| 1990 | 14,866 | 169 | 58 | 28 | 0 | 86 | 0 | 2,750 | 0 | 0 | 0 | — |
| 1991 | 15,668 | 167 | 12 | 26 | 0 | 38 | 0 | 1,857 | 0 | 0 | 0 | — |
| 1992 | 16,699 | 149 | 10 | 18 | 0 | 28 | 0 | 3,210 | 0 | 0 | 0 | — |
| 1993 | 17,668 | 154 | 6 | 21 | 0 | 27 | 0 | 4,296 | 0 | 0 | 0 | — |
| 1994 | 16,961 | 153 | 6 | 19 | 0 | 25 | 0 | 2,465 | 0 | 0 | 0 | — |
| 1995 | 18,130 | 154 | 112 | 17 | 0 | 129 | 0 | 2,715 | 0 | 0 | 0 | — |
| 1996 | 19,386 | 136 | 133 | 84 | 0 | 217 | 0 | 2,078 | 0 | 0 | 0 | — |
| 1997 | 20,101 | 129 | 10 | 20 | 0 | 30 | 0 | 2,824 | 0 | 0 | 0 | — |
| 1998 | 18,884 | 175 | 0 | 18 | 0 | 18 | 0 | 3,420 | 0 | 0 | 0 | — |
| 1999 | 18,353 | 170 | (s) | 24 | 0 | 24 | 0 | 3,069 | 0 | 0 | 0 | — |
| | | | Trillion Btu | | | | | | | | | |
| 1960 | (s) | 85.7 | 0.2 | 0.2 | 0.0 | 0.4 | 0.0 | 7.6 | 0.0 | 0.0 | 0.0 | 93.7 |
| 1965 | (s) | 130.5 | 0.2 | 0.1 | 0.0 | 0.3 | 0.0 | 8.6 | 0.0 | 0.0 | 0.0 | 139.5 |
| 1970 | (s) | 242.2 | 0.4 | 0.3 | 0.0 | 0.7 | 0.0 | 14.8 | 0.0 | 0.0 | 0.0 | 257.7 |
| 1975 | (s) | 312.3 | 0.2 | 0.3 | 0.0 | 0.5 | 0.0 | 30.6 | 0.0 | 0.0 | 0.0 | 343.5 |
| 1980 | 100.0 | 345.8 | (s) | 0.3 | 0.0 | 0.3 | 0.0 | 13.7 | 0.0 | 0.0 | 0.0 | 459.8 |
| 1985 | 218.8 | 209.5 | 0.1 | 0.5 | 0.0 | 0.5 | 0.0 | 41.6 | 0.0 | 0.0 | 0.0 | 470.4 |
| 1990 | 264.4 | 176.6 | 0.4 | 0.2 | 0.0 | 0.5 | 0.0 | 28.6 | 0.0 | 0.0 | 0.0 | 470.1 |
| 1991 | 275.5 | 173.9 | 0.1 | 0.2 | 0.0 | 0.2 | 0.0 | 19.4 | 0.0 | 0.0 | 0.0 | 469.0 |
| 1992 | 290.6 | 154.5 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | 33.2 | 0.0 | 0.0 | 0.0 | 478.4 |
| 1993 | 304.6 | 159.7 | (s) | 0.1 | 0.0 | 0.2 | 0.0 | 44.3 | 0.0 | 0.0 | 0.0 | 508.8 |
| 1994 | 290.8 | 158.3 | (s) | 0.1 | 0.0 | 0.1 | 0.0 | 25.4 | 0.0 | 0.0 | 0.0 | 474.7 |
| 1995 | 310.3 | 159.4 | 0.7 | 0.1 | 0.0 | 0.8 | 0.0 | 28.0 | 0.0 | 0.0 | 0.0 | 498.4 |
| 1996 | 333.4 | 139.9 | 0.8 | 0.5 | 0.0 | 1.3 | 0.0 | 21.5 | 0.0 | 0.0 | 0.0 | 496.1 |
| 1997 | 347.4 | 132.9 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | R 29.2 | 0.0 | 0.0 | 0.0 | R 509.8 |
| 1998 | 326.7 | 179.8 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 35.4 | 0.0 | 0.0 | 0.0 | 542.0 |
| 1999 | 316.4 | 174.6 | (s) | 0.1 | 0.0 | 0.1 | 0.0 | 31.8 | 0.0 | 0.0 | 0.0 | 522.9 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 239. Energy Consumption Estimates by Source, Selected Years 1960-1999, Oregon

| Year | Coal [a] | Natural Gas [b] | Petroleum Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | Wood and Waste | | Million kWh | |

**Thousand Barrels / Million kWh**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 381 | 31 | 1,820 | 655 | 10,966 | 384 | 45 | 1,164 | 476 | 16,361 | 5,562 | 434 | 37,866 | 0 | 12,466 | — | — | 8,038 | — |
| 1965 | 305 | 56 | 1,960 | 277 | 13,085 | 812 | 19 | 961 | 612 | 19,838 | 5,115 | 1,653 | 44,332 | 0 | 16,508 | — | — | 13,499 | — |
| 1970 | 140 | 95 | 2,167 | 305 | 12,904 | 2,086 | 218 | 1,251 | 768 | 24,958 | 6,632 | 1,613 | 52,903 | 0 | 29,912 | — | — | -4,443 | — |
| 1975 | 130 | 110 | 3,218 | 171 | 13,267 | 2,079 | 225 | 726 | 679 | 28,904 | 4,321 | 1,395 | 54,984 | 2 | 34,562 | — | — | 8,289 | — |
| 1980 | 715 | 79 | 2,483 | 260 | 16,764 | 2,465 | 112 | 1,354 | 751 | 30,511 | 4,511 | 1,043 | 60,254 | 5,395 | 30,222 | — | — | 17,611 | — |
| 1985 | 591 | 83 | 2,838 | 141 | 15,394 | 2,142 | 68 | 1,527 | 684 | 29,047 | 4,961 | 813 | 57,615 | 6,911 | 45,876 | — | — | -43,920 | — |
| 1990 | 934 | 109 | 3,026 | 121 | 17,051 | 3,319 | 26 | 1,384 | 769 | 31,728 | 4,492 | 2,150 | 64,066 | 6,074 | R h 41,732 | — | — | R -15,964 | — |
| 1991 | 1,940 | 123 | 2,657 | 126 | 16,152 | 3,744 | 21 | 1,559 | 688 | 32,125 | 6,333 | 2,167 | 65,571 | 1,465 | R 42,008 | — | — | R -7,344 | — |
| 1992 | 2,124 | 122 | 3,297 | 129 | 15,351 | 4,011 | 31 | 1,430 | 702 | 31,921 | 6,570 | 2,904 | 66,346 | 4,573 | R 32,340 | — | — | R 6,530 | — |
| 1993 | 2,100 | 136 | 3,329 | 110 | 14,126 | 4,310 | 41 | 1,561 | 714 | 33,528 | 4,656 | 2,389 | 64,765 | -21 | R 36,761 | — | — | R 13,044 | — |
| 1994 | 2,479 | 146 | 3,422 | 156 | 14,008 | 4,649 | 74 | 1,423 | 747 | 33,837 | 4,452 | 2,578 | 65,346 | 0 | R 32,077 | — | — | R 22,140 | — |
| 1995 | 1,125 | 146 | 2,758 | 143 | 14,700 | 5,114 | 62 | 1,535 | 734 | 34,021 | 3,645 | 2,631 | 65,344 | 0 | R 41,372 | — | — | R 5,631 | — |
| 1996 | 1,134 | 169 | 2,745 | 191 | 14,089 | 5,235 | 89 | R 1,627 | 712 | 35,161 | 3,304 | R 2,544 | R 65,697 | 0 | R 46,868 | — | — | R -7,318 | — |
| 1997 | 918 | 172 | 2,965 | 176 | 15,433 | 5,720 | 62 | R 898 | 752 | 33,594 | 3,521 | R 2,315 | R 65,437 | 0 | R 47,004 | — | — | R -3,637 | — |
| 1998 | 2,074 | 205 | 4,187 | 150 | 15,949 | 5,861 | 147 | 773 | 788 | 36,360 | 4,116 | 3,438 | 71,768 | 0 | 40,366 | — | — | -2,393 | — |
| 1999 | 2,154 | 209 | 3,649 | 160 | 14,805 | 6,437 | 170 | 1,179 | 796 | 36,512 | 3,099 | 4,022 | 70,827 | 0 | 45,940 | — | — | -15,650 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 8.9 | 31.9 | 12.1 | 3.3 | 63.9 | 2.1 | 0.3 | 4.7 | 2.9 | 85.9 | 35.0 | 2.6 | 212.7 | 0.0 | 134.1 | 56.4 | 0.0 | 27.4 | 471.5 |
| 1965 | 7.1 | 60.0 | 13.0 | 1.4 | 76.2 | 4.5 | 0.1 | 3.9 | 3.7 | 104.2 | 32.2 | 9.8 | 249.0 | 0.0 | 172.6 | 57.8 | 0.0 | 46.1 | 592.6 |
| 1970 | 3.0 | 99.6 | 14.4 | 1.5 | 75.2 | 11.8 | 1.2 | 4.7 | 4.7 | 131.1 | 41.7 | 9.5 | 295.7 | 0.0 | 313.9 | 57.4 | 0.0 | -15.2 | 754.5 |
| 1975 | 2.7 | 114.2 | 21.4 | 0.9 | 77.3 | 11.7 | 1.3 | 2.7 | 4.1 | 151.8 | 27.2 | 8.3 | 306.6 | (s) | 359.6 | 57.7 | 0.0 | 28.3 | 869.2 |
| 1980 | 12.1 | 82.3 | 16.5 | 1.3 | 97.7 | 13.9 | 0.6 | 5.0 | 4.6 | 160.3 | 28.4 | 6.1 | 334.3 | 58.8 | 314.0 | R 89.3 | 0.0 | 60.1 | R 950.9 |
| 1985 | 10.0 | 85.5 | 18.8 | 0.7 | 89.7 | 12.1 | 0.4 | 5.5 | 4.1 | 152.6 | 31.2 | 4.8 | 319.9 | 74.7 | 479.3 | R 102.4 | 0.0 | -149.9 | R 922.1 |
| 1990 | 15.7 | 111.7 | 20.1 | 0.6 | 99.3 | 18.8 | 0.1 | 5.0 | 4.7 | 166.7 | 28.2 | 12.8 | 356.3 | 64.9 | R h 434.1 | R 74.4 | h 0.7 | R -54.5 | R h 1,007.1 |
| 1991 | 32.8 | 127.0 | 17.6 | 0.6 | 94.1 | 21.1 | 0.1 | 5.6 | 4.2 | 168.8 | 39.8 | 12.8 | 364.8 | 15.7 | R 438.4 | R 65.6 | R 0.8 | R -25.1 | R 1,024.6 |
| 1992 | 40.8 | 126.6 | 21.9 | 0.7 | 89.4 | 22.7 | 0.2 | 5.2 | 4.3 | 167.7 | 41.3 | 17.2 | 370.4 | 48.8 | R 334.5 | R 52.2 | 0.8 | R 22.3 | R 999.0 |
| 1993 | 37.1 | 140.6 | 22.1 | 0.6 | 82.3 | 24.4 | 0.2 | 5.6 | 4.3 | 176.1 | 29.3 | 14.1 | 359.0 | -0.2 | R 379.0 | R 49.5 | 0.8 | R 44.5 | R 1,012.7 |
| 1994 | 44.6 | 152.3 | 22.7 | 0.8 | 81.6 | 26.4 | 0.4 | 5.2 | 4.5 | R 177.0 | 28.0 | 15.3 | R 361.8 | 0.0 | R 330.9 | R 50.1 | R 0.9 | R 75.5 | R 1,019.2 |
| 1995 | 20.2 | 151.7 | 18.3 | 0.7 | 85.6 | 29.0 | 0.4 | 5.6 | 4.5 | R 177.4 | 22.9 | 15.6 | R 359.9 | 0.0 | R 426.6 | R 52.6 | 0.9 | R 19.2 | R 1,033.7 |
| 1996 | 20.3 | 175.3 | 18.2 | 1.0 | 82.1 | 29.7 | 0.5 | R 5.9 | 4.3 | R 183.4 | 20.8 | R 15.2 | R 361.0 | 0.0 | R 484.6 | R 47.7 | 1.0 | R -25.0 | R 1,073.6 |
| 1997 | 16.4 | 179.5 | 19.7 | 0.9 | 89.9 | 32.4 | 0.4 | R 3.2 | 4.6 | R 175.1 | 22.1 | R 13.8 | R 362.2 | 0.0 | R 486.8 | R 46.5 | R 1.1 | R -12.4 | R 1,083.0 |
| 1998 | 36.1 | 214.3 | 27.8 | 0.8 | 92.9 | 33.2 | 0.8 | 2.8 | 4.8 | 189.5 | 25.9 | 20.6 | 399.0 | 0.0 | 417.6 | 26.8 | 1.4 | -8.2 | 1,088.3 |
| 1999 | 38.6 | 219.3 | 24.2 | 0.8 | 86.2 | 36.5 | 1.0 | 4.3 | 4.8 | 190.3 | 19.5 | 24.1 | 391.6 | 0.0 | 475.3 | 35.5 | 2.2 | -53.4 | 1,109.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 240.  Residential Energy Consumption Estimates, Selected Years 1960-1999, Oregon**

| Year | Coal[a] | Natural Gas[b] | Petroleum | | | | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
| | | | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | | | Million Kilowatthours | | Million Kilowatthours | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 56 | 7 | 2,865 | 1 | 507 | 3,373 | 922 | — | — | 5,263 | — | 13,090 | — |
| 1965 | 45 | 11 | 3,382 | 5 | 785 | 4,172 | 661 | — | — | 7,169 | — | 17,118 | — |
| 1970 | 11 | 20 | 3,101 | 65 | 867 | 4,033 | 460 | — | — | 9,850 | — | 23,871 | — |
| 1975 | 5 | 29 | 2,390 | 48 | 362 | 2,800 | 489 | — | — | 12,096 | — | 29,178 | — |
| 1980 | 6 | 18 | 2,019 | 37 | 574 | 2,630 | R 416 | — | — | 13,545 | — | 32,937 | — |
| 1985 | 1 | 21 | 2,374 | 41 | 517 | 2,932 | 473 | — | — | 14,526 | — | 34,128 | — |
| 1990 | 1 | 23 | 1,784 | 13 | 380 | 2,177 | 558 | — | — | 15,380 | — | R 33,644 | — |
| 1991 | (s) | 26 | 1,487 | 13 | 488 | 1,989 | 587 | — | — | 15,949 | — | R 34,672 | — |
| 1992 | (s) | 23 | 1,068 | 17 | 432 | 1,517 | 618 | — | — | 15,202 | — | R 32,423 | — |
| 1993 | 1 | 30 | 1,036 | 18 | 483 | 1,537 | 522 | — | — | 16,696 | — | R 35,265 | — |
| 1994 | (s) | 29 | 933 | 50 | 510 | 1,493 | R 511 | — | — | 16,462 | — | R 34,355 | — |
| 1995 | (s) | 28 | 942 | 26 | 488 | 1,456 | 568 | — | — | 16,315 | — | R 34,015 | — |
| 1996 | 0 | 33 | 821 | 40 | 463 | 1,324 | 567 | — | — | 17,285 | — | R 36,021 | — |
| 1997 | (s) | 33 | 842 | 34 | R 393 | R 1,269 | R 438 | — | — | 17,185 | — | R 35,746 | — |
| 1998 | (s) | 34 | 882 | 66 | 484 | 1,431 | 386 | — | — | 17,496 | — | 36,143 | — |
| 1999 | 0 | 39 | 644 | 81 | 544 | 1,270 | 414 | — | — | 18,058 | — | 35,381 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.4 | 7.0 | 16.7 | (s) | 2.0 | 18.7 | 18.4 | 0.0 | 0.0 | 18.0 | 63.5 | 44.7 | 108.2 |
| 1965 | 1.1 | 11.6 | 19.7 | (s) | 3.2 | 22.9 | 13.2 | 0.0 | 0.0 | 24.5 | 73.3 | 58.4 | 131.7 |
| 1970 | 0.3 | 20.6 | 18.1 | 0.4 | 3.3 | 21.7 | 9.2 | 0.0 | 0.0 | 33.6 | 85.4 | 81.4 | 166.9 |
| 1975 | 0.1 | 29.9 | 13.9 | 0.3 | 1.3 | 15.5 | 9.8 | 0.0 | 0.0 | 41.3 | 96.6 | 99.6 | 196.1 |
| 1980 | 0.1 | 19.2 | 11.8 | 0.2 | 2.1 | 14.1 | 8.3 | 0.0 | 0.0 | 46.2 | 88.0 | 112.4 | 200.4 |
| 1985 | (s) | 22.1 | 13.8 | 0.2 | 1.9 | 15.9 | 9.5 | 0.0 | 0.0 | 49.6 | 97.1 | 116.4 | 213.5 |
| 1990 | (s) | 23.9 | 10.4 | 0.1 | 1.4 | 11.8 | 11.2 | e 0.1 | e 0.3 | 52.5 | e 99.8 | 114.8 | R e 214.6 |
| 1991 | (s) | 27.1 | 8.7 | 0.1 | 1.8 | 10.5 | 11.7 | 0.1 | R 0.4 | 54.4 | R 104.3 | R 118.3 | R 222.6 |
| 1992 | (s) | 24.0 | 6.2 | 0.1 | 1.6 | 7.9 | 12.4 | 0.1 | R 0.4 | 51.9 | R 96.6 | R 110.6 | R 207.2 |
| 1993 | (s) | 31.0 | 6.0 | 0.1 | 1.7 | 7.9 | 10.4 | 0.1 | 0.4 | 57.0 | 106.8 | R 120.3 | 227.1 |
| 1994 | (s) | 30.2 | 5.4 | 0.3 | 1.9 | 7.6 | 10.2 | 0.1 | R 0.5 | 56.2 | 104.7 | 117.2 | 221.9 |
| 1995 | (s) | 29.3 | 5.5 | 0.1 | 1.8 | 7.4 | 11.4 | 0.1 | 0.5 | 55.7 | R 104.4 | R 116.1 | R 220.4 |
| 1996 | 0.0 | 34.7 | 4.8 | 0.2 | 1.7 | 6.7 | 11.3 | 0.1 | R 0.6 | 59.0 | 112.3 | R 122.9 | R 235.2 |
| 1997 | (s) | 34.1 | 4.9 | 0.2 | R 1.4 | R 6.5 | R 8.8 | 0.1 | 0.6 | 58.6 | R 108.8 | R 122.0 | R 230.7 |
| 1998 | (s) | 36.1 | 5.1 | 0.4 | 1.7 | 7.3 | 7.7 | 0.1 | 0.7 | 59.7 | 111.5 | 123.3 | 234.8 |
| 1999 | 0.0 | 40.7 | 3.8 | 0.5 | 2.0 | 6.2 | 8.3 | 0.2 | 0.7 | 61.6 | 117.7 | 120.7 | 238.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 241.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Oregon

| | | | Petroleum | | | | | | Wood | | Electricity [a] | | Electrical System Energy Losses [c] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Coal[a] | Natural Gas [b] | Distillate Fuel [a] | Kerosene [a] | LPG [a] | Motor Gasoline | Residual Fuel [a] | Total | Wood | Geothermal | Electricity | Net Energy | | Total [d] |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 104 | 3 | 1,485 | (s) | 89 | 139 | 991 | 2,704 | 17 | — | 3,083 | — | 7,669 | — |
| 1965 | 84 | 6 | 1,752 | 4 | 139 | 206 | 1,046 | 3,147 | 13 | — | 4,557 | — | 10,881 | — |
| 1970 | 20 | 11 | 1,607 | 46 | 153 | 249 | 1,326 | 3,382 | 9 | — | 6,674 | — | 16,173 | — |
| 1975 | 9 | 16 | 1,238 | 34 | 64 | 218 | 962 | 2,517 | 9 | — | 8,804 | — | 21,235 | — |
| 1980 | 11 | 15 | 1,792 | 37 | 101 | 291 | 876 | 3,098 | 10 | — | 10,456 | — | 25,425 | — |
| 1985 | 2 | 19 | 1,384 | 26 | 91 | 231 | 191 | 1,922 | R 13 | — | 10,340 | — | 24,292 | — |
| 1990 | 1 | 20 | 1,336 | 8 | 67 | 272 | 287 | 1,971 | R 35 | — | 12,091 | — | R 26,450 | — |
| 1991 | 1 | 22 | 995 | 4 | 86 | 174 | 256 | 1,514 | R 37 | — | 12,395 | — | R 26,946 | — |
| 1992 | 1 | 20 | 767 | 5 | 76 | 165 | 243 | 1,256 | R 40 | — | 12,575 | — | R 26,819 | — |
| 1993 | 1 | 24 | 548 | 11 | 85 | 32 | 175 | 851 | 42 | — | 12,859 | — | R 27,160 | — |
| 1994 | 1 | 23 | 513 | 14 | 90 | 32 | 111 | 760 | 43 | — | 13,426 | — | R 28,019 | — |
| 1995 | 1 | 22 | 783 | 14 | 86 | 33 | 88 | 1,004 | 43 | — | 13,558 | — | R 28,267 | — |
| 1996 | 0 | 26 | 620 | 38 | 82 | 33 | 84 | 856 | R 46 | — | 14,085 | — | R 29,353 | — |
| 1997 | 1 | 25 | 748 | 22 | R 69 | 30 | 49 | R 919 | R 48 | — | 14,476 | — | R 30,112 | — |
| 1998 | (s) | 26 | 917 | 63 | 85 | 30 | 76 | 1,171 | 48 | — | 14,502 | — | 29,959 | — |
| 1999 | 0 | 29 | 493 | 31 | 96 | 30 | 57 | 707 | 58 | — | 15,347 | — | 30,070 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 2.6 | 3.2 | 8.6 | (s) | 0.4 | 0.7 | 6.2 | 16.0 | 0.3 | 0.0 | 10.5 | 32.6 | 26.2 | 58.8 |
| 1965 | 2.1 | 6.0 | 10.2 | (s) | 0.6 | 1.1 | 6.6 | 18.4 | 0.3 | 0.0 | 15.5 | 42.3 | 37.1 | 79.4 |
| 1970 | 0.5 | 11.9 | 9.4 | 0.3 | 0.6 | 1.3 | 8.3 | 19.8 | 0.2 | 0.0 | 22.8 | 55.1 | 55.2 | 110.3 |
| 1975 | 0.2 | 16.5 | 7.2 | 0.2 | 0.2 | 1.1 | 6.0 | 14.8 | 0.2 | 0.0 | 30.0 | 61.8 | 72.5 | 134.2 |
| 1980 | 0.3 | 15.9 | 10.4 | 0.2 | 0.4 | 1.5 | 5.5 | 18.1 | 0.2 | 0.0 | 35.7 | 70.1 | 86.8 | 156.8 |
| 1985 | (s) | 19.6 | 8.1 | 0.1 | 0.3 | 1.2 | 1.2 | 10.9 | R 0.3 | 0.0 | 35.3 | R 66.1 | 82.9 | R 149.0 |
| 1990 | (s) | 20.9 | 7.8 | (s) | 0.2 | 1.4 | 1.8 | 11.3 | R 0.7 | e 0.2 | 41.3 | R e 74.5 | 90.2 | R e 164.7 |
| 1991 | (s) | 23.0 | 5.8 | (s) | 0.3 | 0.9 | 1.6 | 8.6 | R 0.7 | 0.2 | 42.3 | R 75.0 | R 91.9 | R 166.9 |
| 1992 | (s) | 20.3 | 4.5 | (s) | 0.3 | 0.9 | 1.5 | 7.2 | R 0.8 | 0.2 | 42.9 | R 71.4 | R 91.5 | R 163.0 |
| 1993 | (s) | 25.0 | 3.2 | 0.1 | 0.3 | 0.2 | 1.1 | 4.8 | 0.8 | 0.2 | 43.9 | 74.8 | 92.7 | 167.5 |
| 1994 | (s) | 24.0 | 3.0 | 0.1 | 0.3 | 0.2 | 0.7 | 4.3 | 0.9 | 0.2 | 45.8 | 75.2 | 95.6 | 170.8 |
| 1995 | (s) | 23.4 | 4.6 | 0.1 | 0.3 | 0.2 | 0.6 | 5.7 | 0.9 | 0.2 | 46.3 | R 76.4 | 96.4 | R 172.9 |
| 1996 | 0.0 | 26.7 | 3.6 | 0.2 | 0.3 | 0.2 | 0.5 | 4.8 | 0.9 | R 0.3 | 48.1 | 80.8 | R 100.2 | R 180.9 |
| 1997 | (s) | 26.7 | 4.4 | 0.1 | 0.3 | 0.2 | 0.3 | 5.2 | R 1.0 | R 0.2 | 49.4 | R 82.5 | R 102.7 | R 185.3 |
| 1998 | (s) | 27.2 | 5.3 | 0.4 | 0.3 | 0.2 | 0.5 | 6.6 | 1.0 | 0.3 | 49.5 | 84.6 | 102.2 | 186.9 |
| 1999 | 0.0 | 30.1 | 2.9 | 0.2 | 0.3 | 0.2 | 0.4 | 3.9 | 1.2 | 0.3 | 52.4 | 87.9 | 102.6 | 190.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**OREGON**

## Table 242. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Oregon

| Year | Coal Thousand Short Tons | Natural Gas a Billion Cubic Feet | Petroleum — Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b Million kWh | Wood and Waste | Other b,d | Electricity b Million kWh | Net Energy | Electrical System Energy Losses e Million kWh | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | | | | |
| 1960 | 217 | 20 | 1,820 | 3,723 | 44 | 558 | 175 | 1,080 | 3,411 | 434 | 11,244 | 77 | — | — | 5,247 | — | 13,051 | — |
| 1965 | 175 | 39 | 1,960 | 4,287 | 10 | 33 | 208 | 808 | 3,398 | 1,653 | 12,358 | 61 | — | — | 7,167 | — | 17,111 | — |
| 1970 | 109 | 58 | 2,167 | 3,413 | 107 | 212 | 281 | 722 | 4,217 | 1,613 | 12,733 | 77 | — | — | 9,123 | — | 22,109 | — |
| 1975 | 116 | 57 | 3,218 | 2,827 | 143 | 287 | 189 | 560 | 2,922 | 1,395 | 11,541 | 40 | — | — | 12,402 | — | 29,916 | — |
| 1980 | 213 | 39 | 2,483 | 3,992 | 38 | 614 | 221 | 417 | 2,528 | 1,043 | 11,337 | 28 | — | — | 13,847 | — | 33,671 | — |
| 1985 | 170 | 38 | 2,838 | 2,545 | 1 | 728 | 201 | 482 | 1,679 | 813 | 9,289 | 28 | — | — | 11,081 | — | 26,033 | — |
| 1990 | 82 | 49 | 3,026 | 2,843 | 4 | 755 | 227 | 425 | 453 | 2,150 | 9,884 | R f 280 | — | — | 15,498 | — | R 33,904 | — |
| 1991 | 108 | 55 | 2,657 | 2,291 | 4 | 826 | 203 | 489 | 349 | 2,167 | 8,986 | R 281 | — | — | 15,297 | — | R 33,254 | — |
| 1992 | 129 | 59 | 3,297 | 2,270 | 9 | 776 | 207 | 254 | 503 | 2,904 | 10,220 | R 243 | — | — | 15,123 | — | R 32,254 | — |
| 1993 | 117 | 61 | 3,329 | 2,433 | 12 | 849 | 211 | 452 | 677 | 2,389 | 10,352 | R 378 | — | — | 15,012 | — | R 31,708 | — |
| 1994 | 145 | 63 | 3,422 | 2,091 | 10 | 603 | 220 | 498 | 420 | 2,578 | 9,843 | R 399 | — | — | 15,072 | — | R 31,454 | — |
| 1995 | 147 | 69 | 2,758 | 2,624 | 23 | 850 | 216 | 513 | 330 | 2,631 | 9,945 | R 381 | — | — | 15,839 | — | R 33,024 | — |
| 1996 | 90 | 88 | 2,745 | 1,738 | 11 | R 983 | 210 | 565 | 136 | R 2,544 | R 8,933 | R 408 | — | — | 15,804 | — | R 32,936 | — |
| 1997 | 95 | 90 | 2,965 | 2,211 | 6 | R 370 | 222 | 584 | 169 | R 2,315 | R 8,842 | R 234 | — | — | 15,931 | — | R 33,138 | — |
| 1998 | 37 | 103 | 4,187 | 2,428 | 18 | 203 | 232 | 692 | 148 | 3,438 | 11,346 | 398 | — | — | 13,070 | — | 27,000 | — |
| 1999 | 0 | 108 | 3,649 | 1,609 | 58 | 516 | 235 | 396 | 172 | 4,022 | 10,655 | 405 | — | — | 14,106 | — | 27,638 | — |
| | | | Trillion Btu | | | | | | | | | | | | | | | |
| 1960 | 4.9 | 20.9 | 12.1 | 21.7 | 0.3 | 2.2 | 1.1 | 5.7 | 21.4 | 2.6 | 67.0 | 0.8 | 37.3 | 0.0 | 17.9 | 148.9 | 44.5 | 193.4 |
| 1965 | 3.9 | 41.5 | 13.0 | 25.0 | 0.1 | 0.1 | 1.3 | 4.2 | 21.4 | 9.8 | 74.8 | 0.6 | 44.1 | 0.0 | 24.5 | 189.5 | 58.4 | 247.9 |
| 1970 | 2.3 | 60.3 | 14.4 | 19.9 | 0.6 | 0.8 | 1.7 | 3.8 | 26.5 | 9.5 | 77.1 | 0.8 | 47.6 | 0.0 | 31.1 | 219.2 | 75.4 | 294.7 |
| 1975 | 2.4 | 59.6 | 21.4 | 16.5 | 0.8 | 1.1 | 1.1 | 2.9 | 18.4 | 8.3 | 70.4 | 0.4 | 47.8 | 0.0 | 42.3 | 222.9 | 102.1 | 325.0 |
| 1980 | 3.8 | 41.0 | 16.5 | 23.3 | 0.2 | 2.3 | 1.3 | 2.2 | 15.9 | 6.1 | 67.8 | 0.3 | R 79.2 | 0.0 | 47.2 | R 239.2 | 114.9 | R 354.1 |
| 1985 | 3.0 | 39.0 | 18.8 | 14.8 | (s) | 2.6 | 1.2 | 2.5 | 10.6 | 4.8 | 55.4 | 0.3 | R 92.7 | 0.0 | 37.8 | R 228.3 | 88.8 | R 317.2 |
| 1990 | 1.4 | 50.1 | 20.1 | 16.6 | (s) | 2.7 | 1.4 | 2.2 | 2.8 | 12.8 | 58.7 | R f 2.9 | R 62.6 | f 0.1 | 52.9 | R f 228.7 | 115.7 | R f 344.3 |
| 1991 | 1.9 | 56.8 | 17.6 | 13.3 | (s) | 3.0 | 1.2 | 2.6 | 2.2 | 12.8 | 52.8 | R 2.9 | R 53.1 | 0.1 | 52.2 | R 219.8 | 113.5 | R 333.2 |
| 1992 | 2.3 | 60.8 | 21.9 | 13.2 | 0.1 | 2.8 | 1.3 | 1.3 | 3.2 | 17.2 | 60.9 | 2.5 | R 39.0 | 0.1 | 51.6 | R 217.2 | 110.1 | R 327.3 |
| 1993 | 2.2 | 63.2 | 22.1 | 14.2 | 0.1 | 3.1 | 1.3 | 2.4 | 4.3 | 14.1 | 61.4 | R 3.9 | R 38.1 | 0.1 | 51.2 | R 220.1 | 108.2 | 328.3 |
| 1994 | 2.9 | 65.6 | 22.7 | 12.2 | 0.1 | 2.2 | 1.3 | 2.6 | 2.6 | 15.3 | 59.0 | R 4.1 | R 39.0 | 0.1 | 51.4 | R 222.0 | 107.3 | 329.3 |
| 1995 | 2.8 | 72.0 | 18.3 | 15.3 | 0.1 | 3.1 | 1.3 | 2.7 | 2.1 | 15.6 | 58.4 | R 3.9 | R 40.3 | 0.1 | 54.0 | R 231.7 | 112.7 | R 344.3 |
| 1996 | 1.9 | 91.6 | 18.2 | 10.1 | 0.1 | R 3.6 | 1.3 | R 2.9 | 0.9 | R 15.2 | R 52.3 | 4.2 | R 35.5 | 0.1 | 53.9 | R 239.4 | 112.4 | 351.8 |
| 1997 | 1.9 | 94.8 | 19.7 | 12.9 | (s) | R 1.3 | 1.3 | R 3.0 | 1.1 | R 13.8 | R 53.2 | R 2.4 | R 36.8 | 0.1 | 54.4 | R 243.6 | 113.1 | R 356.7 |
| 1998 | 0.8 | 107.7 | 27.8 | 14.1 | 0.1 | 0.7 | 1.4 | 3.6 | 0.9 | 20.6 | 69.3 | 4.1 | 18.1 | 0.3 | 44.6 | 244.8 | 92.1 | 337.0 |
| 1999 | 0.0 | 114.0 | 24.2 | 9.4 | 0.3 | 1.9 | 1.4 | 2.1 | 1.1 | 24.1 | 64.4 | 4.2 | 26.0 | 1.0 | 48.1 | 257.8 | 94.3 | 352.1 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 243. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Oregon

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 4 | (s) | 655 | 2,893 | 384 | 10 | 301 | 15,142 | 1,157 | 20,542 | 0 | 0 | — | 0 | — |
| 1965 | 1 | 1 | 277 | 3,664 | 812 | 4 | 404 | 18,824 | 670 | 24,654 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 6 | 305 | 4,782 | 2,086 | 18 | 487 | 23,987 | 1,070 | 32,736 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 8 | 171 | 6,783 | 2,079 | 13 | 490 | 28,125 | 438 | 38,098 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 6 | 260 | 8,851 | 2,465 | 65 | 530 | 29,803 | 1,107 | 43,080 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 5 | 141 | 9,088 | 2,142 | 191 | 482 | 28,335 | 3,091 | 43,469 | R e (s) | 0 | — | 0 | — |
| 1990 | 0 | 9 | 121 | 11,032 | 3,319 | 183 | 542 | 31,030 | 3,752 | 49,979 | R 0 | 9 | — | 20 | — |
| 1991 | 0 | 9 | 126 | 11,356 | 3,744 | 158 | 485 | 31,462 | 5,729 | 53,060 | R 0 | 10 | — | 22 | — |
| 1992 | 0 | 7 | 129 | 11,227 | 4,011 | 146 | 495 | 31,502 | 5,824 | 53,334 | R 508 | 10 | — | 22 | — |
| 1993 | 0 | 5 | 110 | 10,054 | 4,310 | 144 | 504 | 33,044 | 3,804 | 51,970 | R 874 | 10 | — | 22 | — |
| 1994 | 0 | 6 | 156 | 10,460 | 4,649 | 220 | 527 | 33,306 | 3,921 | 53,239 | 0 | 11 | — | 22 | — |
| 1995 | 0 | 7 | 143 | 10,340 | 5,114 | 110 | 518 | 33,476 | 3,227 | 52,928 | 0 | 14 | — | 28 | — |
| 1996 | 0 | 8 | 191 | 10,899 | 5,235 | R 99 | 502 | 34,562 | 3,084 | R 54,573 | 0 | 11 | — | 23 | — |
| 1997 | 0 | 13 | 176 | 11,609 | 5,720 | R 66 | 531 | 32,980 | 3,302 | R 54,384 | 0 | 11 | — | 23 | — |
| 1998 | 0 | 13 | 150 | 11,664 | 5,861 | 1 | 555 | 35,638 | 3,892 | 57,761 | 353 | 14 | — | 30 | — |
| 1999 | 0 | 10 | 160 | 12,043 | 6,437 | 23 | 561 | 36,085 | 2,869 | 58,180 | 299 | 33 | — | 64 | — |

**Trillion Btu**

| Year | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.1 | 0.1 | 3.3 | 16.9 | 2.1 | (s) | 1.8 | 79.5 | 7.3 | 111.0 | 0.0 | 0.0 | 111.1 | 0.0 | 111.1 |
| 1965 | (s) | 0.7 | 1.4 | 21.3 | 4.5 | (s) | 2.4 | 98.9 | 4.2 | 132.8 | 0.0 | 0.0 | 133.6 | 0.0 | 133.6 |
| 1970 | (s) | 5.8 | 1.5 | 27.9 | 11.8 | 0.1 | 3.0 | 126.0 | 6.7 | 176.9 | 0.0 | 0.0 | 182.7 | 0.0 | 182.7 |
| 1975 | (s) | 8.2 | 0.9 | 39.5 | 11.7 | (s) | 3.0 | 147.7 | 2.8 | 205.6 | 0.0 | 0.0 | 213.8 | 0.0 | 213.8 |
| 1980 | 0.0 | 5.9 | 1.3 | 51.6 | 13.9 | 0.2 | 3.2 | 156.6 | 7.0 | 233.8 | 0.0 | 0.0 | 239.6 | 0.0 | 239.6 |
| 1985 | 0.0 | 4.7 | 0.7 | 52.9 | 12.1 | 0.7 | 2.9 | 148.8 | 19.4 | 237.6 | R e (s) | 0.0 | e 242.3 | 0.0 | e 242.3 |
| 1990 | 0.0 | 9.2 | 0.6 | 64.3 | 18.8 | 0.7 | 3.3 | 163.0 | 23.6 | 274.2 | R 0.0 | (s) | 283.4 | 0.1 | 283.5 |
| 1991 | 0.0 | 9.1 | 0.6 | 66.2 | 21.1 | 0.6 | 2.9 | 165.3 | 36.0 | 292.7 | R 0.0 | (s) | 301.8 | 0.1 | 301.9 |
| 1992 | 0.0 | 7.1 | 0.7 | 65.4 | 22.7 | 0.5 | 3.0 | 165.5 | 36.6 | 294.3 | R 1.8 | (s) | 301.5 | 0.1 | 301.5 |
| 1993 | 0.0 | 5.1 | 0.6 | 58.6 | 24.4 | 0.5 | 3.1 | 173.6 | 23.9 | 284.6 | R 3.1 | (s) | 289.8 | 0.1 | 289.8 |
| 1994 | 0.0 | 6.1 | 0.8 | 60.9 | 26.4 | 0.8 | 3.2 | R 174.2 | 24.7 | R 290.9 | 0.0 | (s) | R 297.0 | 0.1 | R 297.1 |
| 1995 | 0.0 | 7.6 | 0.7 | 60.2 | 29.0 | 0.4 | 3.1 | R 174.6 | 20.3 | R 288.3 | 0.0 | (s) | R 296.0 | 0.1 | R 296.1 |
| 1996 | 0.0 | 8.3 | 1.0 | 63.5 | 29.7 | 0.4 | 3.0 | R 180.3 | 19.4 | R 297.2 | 0.0 | (s) | R 305.5 | 0.1 | R 305.6 |
| 1997 | 0.0 | 13.1 | 0.9 | 67.6 | 32.4 | R 0.2 | 3.2 | R 171.9 | 20.8 | R 297.1 | 0.0 | (s) | R 310.2 | 0.1 | R 310.3 |
| 1998 | 0.0 | 14.0 | 0.8 | 67.9 | 33.2 | (s) | 3.4 | 185.7 | 24.5 | 315.5 | 1.3 | (s) | 329.6 | 0.1 | 329.7 |
| 1999 | 0.0 | 10.9 | 0.8 | 70.2 | 36.5 | 0.1 | 3.4 | 188.0 | 18.0 | 317.0 | 1.1 | 0.1 | 328.0 | 0.2 | 328.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**O R E G O N**

## Table 244.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Oregon

| Year | Coal Thousand Short Tons | Natural Gas a Billion Cubic Feet | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | *Thousand Barrels* | | | | *Million Kilowatthours* | | | | | |
| 1960 | 0 | 1 | 3 | (s) | 0 | 3 | 0 | 12,389 | 24 | 0 | 0 | — |
| 1965 | 0 | (s) | 1 | (s) | 0 | 1 | 0 | 16,447 | 26 | 0 | 0 | — |
| 1970 | 0 | 1 | 18 | (s) | 0 | 19 | 0 | 29,836 | 44 | 0 | 0 | — |
| 1975 | 0 | (s) | 0 | 29 | 0 | 29 | 2 | 34,522 | (s) | 0 | 0 | — |
| 1980 | 485 | (s) | 0 | 110 | 0 | 110 | 5,395 | 30,194 | 160 | 0 | 0 | — |
| 1985 | 418 | 0 | 0 | 3 | 0 | 3 | 6,911 | 45,848 | 0 | 0 | 0 | — |
| 1990 | 850 | 7 | 0 | 56 | 0 | 56 | 6,074 | R 41,452 | 1 | 0 | 0 | — |
| 1991 | 1,831 | 11 | 0 | 23 | 0 | 23 | 1,465 | R 41,727 | (s) | 0 | 0 | — |
| 1992 | 1,994 | 14 | 0 | 19 | 0 | 19 | 4,573 | R 32,097 | 6 | 0 | 0 | — |
| 1993 | 1,981 | 16 | 0 | 56 | 0 | 56 | -21 | R 36,383 | 11 | 0 | 0 | — |
| 1994 | 2,333 | 26 | 0 | 11 | 0 | 11 | 0 | R 31,677 | 0 | 0 | 0 | — |
| 1995 | 977 | 19 | 0 | 12 | 0 | 12 | 0 | R 40,991 | 0 | 0 | 0 | — |
| 1996 | 1,044 | 14 | 0 | 10 | 0 | 10 | 0 | R 46,460 | 0 | 0 | 0 | — |
| 1997 | 822 | 11 | 0 | 23 | 0 | 23 | 0 | R 46,770 | 0 | 0 | 0 | — |
| 1998 | 2,037 | 29 | 0 | 59 | 0 | 59 | 0 | 39,968 | 0 | 0 | 0 | — |
| 1999 | 2,154 | 23 | 0 | 15 | 0 | 15 | 0 | 45,535 | 0 | 0 | 0 | — |
| | | | *Trillion Btu* | | | | | | | | | |
| 1960 | 0.0 | 0.7 | (s) | (s) | 0.0 | (s) | 0.0 | 133.3 | 0.3 | 0.0 | 0.0 | 134.3 |
| 1965 | 0.0 | 0.1 | (s) | (s) | 0.0 | (s) | 0.0 | 171.9 | 0.3 | 0.0 | 0.0 | 172.3 |
| 1970 | 0.0 | 1.1 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | 313.1 | 0.5 | 0.0 | 0.0 | 314.7 |
| 1975 | 0.0 | (s) | 0.0 | 0.2 | 0.0 | 0.2 | (s) | 359.2 | (s) | 0.0 | 0.0 | 359.4 |
| 1980 | 7.9 | 0.3 | 0.0 | 0.6 | 0.0 | 0.6 | 58.8 | 313.7 | 1.7 | 0.0 | 0.0 | 383.1 |
| 1985 | 6.9 | 0.0 | 0.0 | (s) | 0.0 | (s) | 74.7 | 479.0 | 0.0 | 0.0 | 0.0 | 560.7 |
| 1990 | 14.2 | 7.6 | 0.0 | 0.3 | 0.0 | 0.3 | 64.9 | R 431.2 | (s) | 0.0 | 0.0 | R 521.9 |
| 1991 | 30.9 | 11.0 | 0.0 | 0.1 | 0.0 | 0.1 | 15.7 | R 435.5 | (s) | 0.0 | 0.0 | R 497.8 |
| 1992 | 38.4 | 14.4 | 0.0 | 0.1 | 0.0 | 0.1 | 48.8 | R 331.9 | 0.1 | 0.0 | 0.0 | R 436.4 |
| 1993 | 34.9 | 16.3 | 0.0 | 0.3 | 0.0 | 0.3 | -0.2 | R 375.1 | 0.1 | 0.0 | 0.0 | R 428.9 |
| 1994 | 41.7 | 26.4 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | R 326.8 | 0.0 | 0.0 | 0.0 | R 398.1 |
| 1995 | 17.4 | 19.4 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | R 422.7 | 0.0 | 0.0 | 0.0 | R 462.1 |
| 1996 | 18.3 | 14.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | R 480.4 | 0.0 | 0.0 | 0.0 | R 521.5 |
| 1997 | 14.4 | 10.8 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | R 484.4 | 0.0 | 0.0 | 0.0 | R 512.7 |
| 1998 | 35.4 | 29.2 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 413.5 | 0.0 | 0.0 | 0.0 | 479.8 |
| 1999 | 38.6 | 23.6 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 471.1 | 0.0 | 0.0 | 0.0 | 533.5 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Energy Information Administration**
**State Energy Data Report 1999**

**Table 245. Energy Consumption Estimates by Source, Selected Years 1960-1999, Pennsylvania**

**Thousand Barrels**

| Year | Coal a (Thousand Short Tons) | Natural Gas b (Billion Cubic Feet) | Asphalt & Road Oil a | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | Kerosene a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Other a,c | Total | Nuclear Electric Power (Million kWh) | Hydroelectric Power d (Million kWh) | Wood and Waste | Other a,e | Net Interstate Flow of Electricity/Losses f (Million kWh) | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 60,624 | 522 | 4,731 | 1,994 | 46,257 | 1,036 | 3,508 | 2,334 | 2,775 | 80,104 | 42,958 | R 11,310 | R 197,008 | 230 | 1,826 | — | — | -1,496 | — |
| 1965 | 68,907 | 629 | 6,201 | 1,922 | 54,459 | 3,406 | 3,851 | 3,030 | 3,540 | 85,723 | 43,238 | R 14,319 | R 219,689 | 313 | 1,329 | — | — | 4,970 | — |
| 1970 | 68,573 | 772 | 6,600 | 662 | 63,489 | 9,083 | 4,251 | 4,754 | 3,844 | 101,718 | 60,436 | R 14,462 | R 269,299 | 465 | 1,366 | — | — | 2,804 | — |
| 1975 | 67,043 | 654 | 5,663 | 426 | 68,017 | 8,548 | 3,398 | 6,077 | 3,349 | 108,765 | 41,631 | R 15,988 | R 261,861 | 15,869 | 1,576 | — | — | -34,243 | — |
| 1980 | 65,911 | 776 | 5,148 | 337 | 68,602 | 10,148 | 2,763 | 7,255 | 4,069 | 107,925 | 35,099 | R 19,800 | R 261,145 | 12,091 | 734 | — | — | -36,478 | — |
| 1985 | 56,703 | 626 | 4,913 | 208 | 53,862 | 10,126 | 3,557 | 7,577 | 3,703 | 101,979 | 17,799 | R 16,976 | R 220,700 | 26,232 | 972 | — | — | -75,188 | — |
| 1990 | 57,319 | 644 | 7,466 | 145 | 53,913 | 12,042 | 1,654 | 6,313 | 4,166 | 107,467 | 17,687 | R 20,494 | R 231,348 | 57,787 | R h 1,990 | — | — | R -131,453 | — |
| 1991 | 54,931 | 639 | 6,192 | 116 | 52,993 | 11,355 | 1,781 | 7,585 | 3,727 | 107,081 | 15,965 | R 19,061 | R 225,856 | 57,476 | R 957 | — | — | R -117,748 | — |
| 1992 | 56,074 | 683 | 6,036 | 163 | 55,063 | 10,932 | 1,828 | 9,176 | 3,800 | 107,406 | 14,904 | R 22,055 | R 231,364 | 60,133 | R 1,659 | — | — | R -129,256 | — |
| 1993 | 56,158 | 691 | 6,087 | 150 | 61,246 | 11,787 | 2,056 | 5,759 | 3,869 | 109,970 | 18,266 | R 19,735 | R 238,926 | 59,331 | R 1,492 | — | — | R -125,090 | — |
| 1994 | 54,094 | 697 | 7,610 | 136 | 62,323 | 11,748 | 2,078 | 5,634 | 4,044 | 109,532 | 18,981 | R 20,626 | R 242,713 | 67,207 | R 2,008 | — | — | R -131,869 | — |
| 1995 | 55,326 | 721 | 7,808 | 125 | 61,821 | 12,313 | 2,760 | 5,509 | 3,975 | 112,282 | 12,787 | R 21,340 | R 240,721 | 66,462 | R 806 | — | — | R -121,415 | — |
| 1996 | 57,226 | 728 | 7,472 | 121 | 62,598 | 11,831 | 3,116 | R 6,080 | 3,857 | 113,639 | 12,039 | R 19,453 | R 240,207 | 68,672 | R 2,235 | — | — | R -135,963 | — |
| 1997 | 58,591 | 694 | 6,962 | 107 | 61,271 | 14,813 | 3,015 | R 5,283 | 4,075 | 114,779 | 10,573 | R 22,536 | R 243,415 | 67,655 | R 1,690 | — | — | R -137,278 | — |
| 1998 | 54,538 | 621 | 7,890 | 126 | 59,350 | 16,716 | 3,375 | 5,452 | 4,266 | 116,867 | 14,138 | 21,730 | 249,910 | 61,149 | 1,929 | — | — | -133,550 | — |
| 1999 | 45,336 | 672 | 4,996 | 205 | 64,217 | 15,943 | 3,064 | 5,677 | 4,310 | 117,420 | 13,366 | 21,742 | 250,940 | 71,123 | 1,505 | — | — | -109,941 | — |

**Trillion Btu**

| Year | Coal a | Natural Gas b | Asphalt & Road Oil a | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | Kerosene a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Other a,c | Total | Nuclear Electric Power | Hydroelectric Power d | Wood and Waste | Other a,e | Net Interstate Flow of Electricity/Losses f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1,529.9 | 540.1 | 31.4 | 10.1 | 269.4 | 5.7 | 19.9 | 9.4 | 16.8 | 420.8 | 270.1 | R 67.7 | R 1,121.3 | 2.7 | 19.6 | 46.5 | 0.0 | -5.1 | R 3,255.0 |
| 1965 | 1,751.2 | 652.9 | 41.2 | 9.7 | 317.2 | 19.2 | 21.8 | 12.2 | 21.5 | 450.3 | 271.8 | R 84.1 | R 1,249.0 | 3.7 | 13.9 | 47.4 | 0.0 | 17.0 | R 3,735.0 |
| 1970 | 1,699.0 | 797.9 | 43.8 | 3.3 | 369.8 | 51.4 | 24.1 | 18.0 | 23.3 | 534.3 | 380.0 | R 84.9 | R 1,532.9 | 5.1 | 14.3 | 53.2 | 0.0 | 9.6 | R 4,112.0 |
| 1975 | 1,646.7 | 670.1 | 37.6 | 2.1 | 396.2 | 48.4 | 19.3 | 22.6 | 20.3 | 571.3 | 261.7 | R 94.0 | R 1,473.5 | 174.8 | 16.4 | 57.5 | 0.0 | -116.8 | R 3,922.1 |
| 1980 | 1,636.1 | 792.8 | 34.2 | 1.7 | 399.6 | 57.4 | 15.7 | 26.7 | 24.7 | 566.9 | 220.7 | R 114.5 | R 1,462.0 | 131.9 | 7.6 | R 141.0 | 0.0 | -124.5 | R 4,046.8 |
| 1985 | 1,409.1 | 646.9 | 32.6 | 1.1 | 313.7 | 57.3 | 20.2 | 27.3 | 22.5 | 535.7 | 111.9 | R 100.0 | R 1,222.2 | 283.6 | 10.1 | R 132.5 | 0.0 | -256.5 | R 3,447.9 |
| 1990 | 1,427.3 | 667.6 | 49.5 | 0.7 | 314.0 | 68.2 | 9.4 | 22.9 | 25.3 | 564.5 | 111.2 | R 119.9 | R 1,285.7 | 617.2 | h 20.7 | R 63.7 | R h 0.7 | R -448.5 | R h 3,634.3 |
| 1991 | 1,364.8 | 661.7 | 41.1 | 0.6 | 308.7 | 64.3 | 10.1 | 27.4 | 22.6 | 562.5 | 100.4 | R 111.8 | R 1,249.5 | 617.3 | R 10.0 | R 67.6 | R 0.7 | R -401.8 | R 3,569.8 |
| 1992 | 1,407.7 | 707.1 | 40.1 | 0.8 | 320.7 | 61.9 | 10.4 | 33.3 | 23.0 | 564.2 | 93.7 | R 128.5 | R 1,276.6 | 642.1 | 17.2 | R 78.8 | 0.7 | R -441.0 | R 3,689.1 |
| 1993 | 1,409.7 | 716.6 | 40.4 | 0.8 | 356.8 | 66.7 | 11.7 | 20.8 | 23.5 | 577.7 | 114.8 | R 115.1 | R 1,328.1 | 633.8 | 15.4 | R 83.8 | R 0.8 | R -426.8 | R 3,761.3 |
| 1994 | 1,357.8 | 722.3 | 50.5 | 0.7 | 363.0 | 66.5 | 11.8 | 20.5 | 24.5 | R 572.9 | 119.3 | R 120.3 | R 1,350.4 | 717.5 | 20.7 | R 87.2 | R 0.8 | R -449.9 | R 3,806.8 |
| 1995 | 1,387.4 | 746.7 | 51.8 | 0.6 | 360.1 | 69.8 | 15.7 | 20.0 | 24.1 | R 585.6 | 80.4 | R 124.9 | R 1,332.9 | 708.5 | R 8.3 | R 96.0 | 0.8 | R -414.3 | R 3,866.3 |
| 1996 | 1,432.3 | 752.7 | 49.6 | 0.6 | 364.6 | 67.1 | 17.7 | R 22.0 | 23.4 | R 592.7 | 75.7 | R 113.3 | R 1,326.6 | 729.5 | R 23.1 | R 123.4 | 0.9 | R -463.9 | R 3,925.3 |
| 1997 | 1,462.1 | 717.9 | 46.2 | 0.5 | 356.9 | 84.0 | 17.1 | R 19.1 | 24.7 | R 598.3 | 66.5 | R 131.7 | R 1,345.1 | 718.7 | R 17.5 | R 104.2 | 0.9 | R -468.4 | R 3,898.4 |
| 1998 | 1,356.7 | 643.8 | 52.4 | 0.6 | 345.7 | 94.8 | 19.1 | 19.7 | 25.9 | 609.1 | 88.9 | 127.1 | 1,383.3 | 649.6 | 20.0 | 67.0 | 1.0 | -455.7 | 3,663.9 |
| 1999 | 1,142.7 | 696.2 | 33.2 | 1.0 | 374.1 | 90.4 | 17.4 | 20.5 | 26.1 | 611.9 | 84.0 | 126.7 | 1,385.3 | 755.5 | 15.6 | 94.5 | 1.0 | -375.1 | 3,715.5 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels.

c "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

d If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

e "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

f Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

g From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

h There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 246. Residential Energy Consumption Estimates, Selected Years 1960-1999, Pennsylvania

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5,014 | 232 | 25,101 | 2,763 | 1,125 | 28,989 | 1,307 | — | — | 11,094 | — | 27,594 | — |
| 1965 | 3,155 | 256 | 28,391 | 2,753 | 1,349 | 32,493 | 1,060 | — | — | 14,807 | — | 35,352 | — |
| 1970 | 1,999 | 297 | 31,242 | 3,368 | 1,890 | 36,500 | 1,024 | — | — | 23,007 | — | 55,754 | — |
| 1975 | 1,039 | 273 | 31,587 | 2,023 | 2,109 | 35,719 | 1,039 | — | — | 27,678 | — | 66,762 | — |
| 1980 | 825 | 288 | 27,838 | 2,362 | 1,589 | 31,789 | R 3,244 | — | — | 31,767 | — | 77,247 | — |
| 1985 | 642 | 245 | 21,658 | 2,853 | 2,299 | 26,810 | 2,197 | — | — | 32,686 | — | 76,794 | — |
| 1990 | 702 | 240 | 17,007 | 1,377 | 2,533 | 20,917 | 1,039 | — | — | 38,164 | — | R 83,488 | — |
| 1991 | 708 | 243 | 17,482 | 1,508 | 2,940 | 21,930 | 1,094 | — | — | 39,598 | — | R 86,082 | — |
| 1992 | 787 | 267 | 17,640 | 1,585 | 3,109 | 22,333 | 1,151 | — | — | 39,245 | — | R 83,701 | — |
| 1993 | 651 | 269 | 20,914 | 1,655 | 2,840 | 25,409 | R 1,234 | — | — | 41,455 | — | R 87,560 | — |
| 1994 | 630 | 268 | 19,796 | 1,490 | 2,890 | 24,176 | R 1,210 | — | — | 42,239 | — | R 88,149 | — |
| 1995 | 632 | 262 | 19,661 | 2,064 | 3,089 | 24,814 | R 1,343 | — | — | 42,802 | — | R 89,239 | — |
| 1996 | 566 | 279 | 21,001 | 2,411 | R 3,362 | R 26,774 | R 1,341 | — | — | 43,645 | — | R 90,956 | — |
| 1997 | 687 | 262 | 19,780 | 2,541 | R 3,311 | R 25,632 | R 691 | — | — | 42,715 | — | R 88,852 | — |
| 1998 | 487 | 218 | 16,550 | 2,906 | 3,486 | 22,942 | 609 | — | — | 41,358 | — | 85,437 | — |
| 1999 | 364 | 241 | 19,280 | 2,518 | 3,733 | 25,531 | 653 | — | — | 44,126 | — | 86,457 | — |
| **Trillion Btu** | | | | | | | | | | | | | |
| 1960 | 124.0 | 240.2 | 146.2 | 15.7 | 4.5 | 166.4 | 26.1 | 0.0 | 0.0 | 37.9 | 594.5 | 94.1 | 688.7 |
| 1965 | 76.8 | 265.3 | 165.4 | 15.6 | 5.4 | 186.4 | 21.2 | 0.0 | 0.0 | 50.5 | 600.2 | 120.6 | 720.9 |
| 1970 | 47.0 | 306.8 | 182.0 | 19.1 | 7.1 | 208.2 | 20.5 | 0.0 | 0.0 | 78.5 | 661.1 | 190.2 | 851.3 |
| 1975 | 23.3 | 279.5 | 184.0 | 11.5 | 7.8 | 203.3 | 20.8 | 0.0 | 0.0 | 94.4 | 621.3 | 227.8 | 849.1 |
| 1980 | 19.0 | 294.7 | 162.2 | 13.4 | 5.8 | 181.4 | R 64.9 | 0.0 | 0.0 | 108.4 | R 668.3 | 263.6 | R 931.9 |
| 1985 | 15.1 | 253.2 | 126.2 | 16.2 | 8.3 | 150.6 | 43.9 | 0.0 | 0.0 | 111.5 | 574.4 | 262.0 | 836.4 |
| 1990 | 17.7 | 248.9 | 99.1 | 7.8 | 9.2 | 116.1 | 20.8 | e 0.2 | R e 0.5 | 130.2 | e 534.2 | R 284.9 | R e 819.1 |
| 1991 | 17.8 | 251.2 | 101.8 | 8.5 | 10.6 | 121.0 | 21.9 | 0.2 | R 0.5 | 135.1 | R 547.7 | R 293.7 | R 841.4 |
| 1992 | 19.5 | 276.1 | 102.8 | 9.0 | 11.3 | 123.0 | 23.0 | 0.2 | R 0.5 | 133.9 | R 576.3 | R 285.6 | R 861.9 |
| 1993 | 15.9 | 279.0 | 121.8 | 9.4 | 10.2 | 141.4 | 24.7 | 0.2 | R 0.5 | 141.4 | 603.1 | 298.8 | 901.9 |
| 1994 | 15.8 | 278.1 | 115.3 | 8.4 | 10.5 | 134.3 | 24.2 | 0.2 | R 0.5 | 144.1 | R 597.2 | R 300.8 | 897.9 |
| 1995 | 15.7 | 271.3 | 114.5 | 11.7 | 11.2 | 137.4 | 26.9 | 0.2 | 0.5 | 146.0 | R 598.1 | R 304.5 | R 902.6 |
| 1996 | 14.0 | 288.1 | 122.3 | 13.7 | R 12.1 | R 148.1 | 26.8 | 0.2 | 0.5 | 148.9 | R 626.7 | R 310.3 | R 937.1 |
| 1997 | 16.9 | 271.7 | 115.2 | 14.4 | R 12.0 | R 141.6 | R 13.8 | 0.3 | 0.5 | 145.7 | R 590.5 | R 303.2 | R 893.7 |
| 1998 | 11.9 | 225.8 | 96.4 | 16.5 | 12.6 | 125.5 | 12.2 | 0.3 | 0.5 | 141.1 | 517.3 | 291.5 | 808.8 |
| 1999 | 9.0 | 250.2 | 112.3 | 14.3 | 13.5 | 140.1 | 13.1 | 0.3 | 0.5 | 150.6 | 563.6 | 295.0 | 858.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 247. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Pennsylvania

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum Distillate Fuel [a] | Kerosene [a] | LPG [a] | Motor Gasoline | Residual Fuel [a] | Total | Wood Thousand Cords | Geothermal | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [c] Million Kilowatthours | Total [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 3,861 | 56 | 4,363 | 241 | 198 | 2,084 | 5,514 | 12,401 | 25 | — | 7,125 | — | 17,723 | — |
| 1965 | 2,433 | 68 | 4,935 | 240 | 238 | 2,585 | 5,899 | 13,897 | 20 | — | 9,417 | — | 22,484 | — |
| 1970 | 1,623 | 99 | 5,431 | 294 | 334 | 2,455 | 5,254 | 13,767 | 19 | — | 13,435 | — | 32,557 | — |
| 1975 | 830 | 99 | 5,491 | 177 | 372 | 1,310 | 3,630 | 10,980 | 20 | — | 18,608 | — | 44,886 | — |
| 1980 | 743 | 118 | 5,858 | 193 | 280 | 313 | 1,521 | 8,165 | 78 | — | 21,746 | — | 52,880 | — |
| 1985 | 631 | 115 | 4,933 | 359 | 406 | 448 | 1,414 | 7,559 | R 59 | — | 24,580 | — | 57,749 | — |
| 1990 | 606 | 126 | 5,588 | 150 | 447 | 701 | 805 | 7,692 | R 66 | — | 30,198 | — | R 66,062 | — |
| 1991 | 701 | 126 | 5,450 | 131 | 519 | 555 | 632 | 7,287 | R 70 | — | 31,612 | — | R 68,722 | — |
| 1992 | 839 | 134 | 5,409 | 102 | 549 | 334 | 885 | 7,279 | R 75 | — | 31,813 | — | R 67,850 | — |
| 1993 | 606 | 132 | 6,001 | 173 | 501 | 87 | 1,125 | 7,887 | 99 | — | 33,232 | — | R 70,190 | — |
| 1994 | 526 | 138 | 6,916 | 334 | 510 | 87 | 1,385 | 9,232 | 101 | — | 34,361 | — | R 71,708 | — |
| 1995 | 556 | 144 | 6,132 | 528 | 545 | 88 | 1,240 | 8,533 | 101 | — | 35,542 | — | R 74,102 | — |
| 1996 | 428 | 155 | 6,240 | 556 | R 593 | 87 | 1,326 | R 8,802 | 110 | — | 36,373 | — | R 75,803 | — |
| 1997 | 557 | 144 | 4,960 | 323 | R 584 | 284 | 1,050 | R 7,201 | R 76 | — | 36,827 | — | R 76,603 | — |
| 1998 | 354 | 131 | 4,687 | 284 | 615 | 929 | 636 | 7,151 | 76 | — | 37,030 | — | 76,497 | — |
| 1999 | 327 | 143 | 4,777 | 344 | 659 | 188 | 648 | 6,616 | 91 | — | 38,306 | — | 75,054 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 95.5 | 58.1 | 25.4 | 1.4 | 0.8 | 10.9 | 34.7 | 73.2 | 0.5 | 0.0 | 24.3 | 251.6 | 60.5 | 312.1 |
| 1965 | 59.3 | 70.1 | 28.7 | 1.4 | 1.0 | 13.6 | 37.1 | 81.7 | 0.4 | 0.0 | 32.1 | 243.7 | 76.7 | 320.4 |
| 1970 | 38.3 | 102.6 | 31.6 | 1.7 | 1.3 | 12.9 | 33.0 | 80.5 | 0.4 | 0.0 | 45.8 | 267.6 | 111.1 | 378.7 |
| 1975 | 18.7 | 101.5 | 32.0 | 1.0 | 1.4 | 6.9 | 22.8 | 64.1 | 0.4 | 0.0 | 63.5 | 248.2 | 153.2 | 401.3 |
| 1980 | 17.3 | 121.1 | 34.1 | 1.1 | 1.0 | 1.6 | 9.6 | 47.5 | 1.6 | 0.0 | 74.2 | 261.6 | 180.4 | 442.0 |
| 1985 | 15.1 | 119.3 | 28.7 | 2.0 | 1.5 | 2.4 | 8.9 | 43.5 | R 1.2 | 0.0 | 83.9 | R 262.9 | 197.0 | R 459.9 |
| 1990 | 15.2 | 130.3 | 32.6 | 0.9 | 1.6 | 3.7 | 5.1 | 43.8 | R 1.3 | e (s) | 103.0 | R e 293.7 | 225.4 | R e 519.1 |
| 1991 | 17.6 | 129.9 | 31.7 | 0.7 | 1.9 | 2.9 | 4.0 | 41.3 | R 1.4 | (s) | 107.9 | R 298.1 | R 234.5 | R 532.6 |
| 1992 | 20.9 | 139.1 | 31.5 | 0.6 | 2.0 | 1.8 | 5.6 | 41.4 | R 1.5 | 0.1 | 108.5 | R 311.5 | R 231.5 | R 543.0 |
| 1993 | 14.9 | 136.7 | 35.0 | 1.0 | 1.8 | 0.5 | 7.1 | 45.3 | 2.0 | 0.1 | 113.4 | 312.3 | R 239.5 | 551.8 |
| 1994 | 13.2 | 143.5 | 40.3 | 1.9 | 1.9 | 0.5 | 8.7 | 53.2 | 2.0 | 0.1 | 117.2 | 329.2 | R 244.7 | 573.9 |
| 1995 | 13.8 | 148.8 | 35.7 | 3.0 | 2.0 | 0.5 | 7.8 | 48.9 | 2.0 | 0.1 | 121.3 | 335.0 | R 252.8 | R 587.8 |
| 1996 | 10.6 | 159.9 | 36.3 | 3.1 | R 2.1 | 0.5 | 8.3 | R 50.4 | 2.2 | 0.1 | 124.1 | R 347.4 | R 258.6 | R 606.0 |
| 1997 | 13.8 | 149.1 | 28.9 | 1.8 | R 2.1 | 1.5 | 6.6 | 40.9 | R 1.5 | 0.2 | 125.7 | R 331.2 | R 261.4 | R 592.5 |
| 1998 | 8.7 | 135.7 | 27.3 | 1.6 | 2.2 | 4.8 | 4.0 | 40.0 | 1.5 | 0.2 | 126.3 | 312.5 | 261.0 | 573.5 |
| 1999 | 8.1 | 148.4 | 27.8 | 2.0 | 2.4 | 1.0 | 4.1 | 37.2 | 1.8 | 0.2 | 130.7 | 326.5 | 256.1 | 582.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 248. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Pennsylvania

| | Coal | Natural Gas a | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Asphalt and Road Oil b | Distillate Fuel b | Kero-sene b | LPG b | Lubri-cants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | Total |
| 1960 | 33,140 | 213 | 4,731 | 8,645 | 503 | 992 | 1,432 | 1,456 | 29,692 | R 11,310 | R 58,762 | 16 | — | — | 20,693 | — | 51,470 | — |
| 1965 | 40,010 | 285 | 6,201 | 11,641 | 858 | 1,383 | 2,419 | 1,480 | 29,434 | R 14,319 | R 67,734 | 15 | — | — | 29,075 | — | 69,421 | — |
| 1970 | 35,753 | 340 | 6,600 | 10,196 | 589 | 2,396 | 2,518 | 1,181 | 27,132 | R 14,462 | R 65,074 | 12 | — | — | 38,993 | — | 94,494 | — |
| 1975 | 28,510 | 263 | 5,663 | 11,033 | 1,198 | 3,439 | 2,255 | 1,098 | 21,941 | R 15,988 | R 62,614 | 1 | — | — | 41,256 | — | 99,516 | — |
| 1980 | 21,877 | 337 | 5,148 | 11,128 | 208 | 5,238 | 2,756 | 586 | 11,555 | R 19,484 | R 56,104 | 1 | — | — | 46,045 | — | 111,966 | — |
| 1985 | 13,716 | 231 | 4,913 | 5,762 | 345 | 4,624 | 2,508 | 1,276 | 2,624 | R 16,194 | R 38,247 | 1 | — | — | 42,520 | — | 99,898 | — |
| 1990 | 14,546 | 241 | 7,466 | 6,303 | 127 | 3,177 | 2,822 | 1,180 | 5,814 | R 19,489 | R 46,379 | R f 287 | — | — | 45,992 | — | R 100,612 | — |
| 1991 | 12,860 | 235 | 6,192 | 5,354 | 143 | 3,938 | 2,525 | 1,254 | 4,467 | R 18,074 | R 41,947 | R 302 | — | — | 44,728 | — | R 97,236 | — |
| 1992 | 14,041 | 240 | 6,036 | 6,260 | 142 | 5,330 | 2,574 | 1,342 | 4,205 | R 21,034 | R 46,923 | R 442 | — | — | 44,869 | — | R 95,696 | — |
| 1993 | 14,644 | 246 | 6,087 | 6,101 | 227 | 2,222 | 2,621 | 959 | 4,302 | R 18,803 | R 41,323 | R 368 | — | — | 44,949 | — | R 94,940 | — |
| 1994 | 14,894 | 240 | 7,610 | 5,151 | 254 | 1,874 | 2,740 | 908 | 4,125 | R 19,523 | R 42,184 | R 395 | — | — | 46,076 | — | R 96,156 | — |
| 1995 | 14,885 | 253 | 7,808 | 4,253 | 169 | 1,687 | 2,693 | 934 | 2,933 | R 20,030 | R 40,506 | R 347 | — | — | 47,528 | — | R 99,093 | — |
| 1996 | 15,155 | 247 | 7,472 | 4,526 | 150 | R 1,977 | 2,613 | 855 | 3,348 | R 18,090 | R 39,030 | R 451 | — | — | 47,208 | — | R 98,381 | — |
| 1997 | 14,744 | 240 | 6,962 | 4,313 | 151 | R 1,272 | 2,761 | 887 | 2,273 | R 21,218 | R 39,836 | R 470 | — | — | 47,957 | — | R 99,755 | — |
| 1998 | 10,726 | 233 | 7,890 | 4,145 | 186 | 1,224 | 2,890 | 872 | 2,360 | 20,403 | 39,970 | 354 | — | — | 47,490 | — | 98,104 | — |
| 1999 | 10,088 | 241 | 4,996 | 5,061 | 201 | 1,188 | 2,920 | 741 | 2,285 | 21,023 | 38,416 | 342 | — | — | 46,059 | — | 90,244 | — |

| | | | | | | | | Trillion Btu | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 873.1 | 220.0 | 31.4 | 50.4 | 2.9 | 4.0 | 8.7 | 7.6 | 186.7 | R 67.7 | R 359.3 | 0.2 | 19.8 | 0.0 | 70.6 | R 1,543.0 | 175.6 | R 1,718.7 |
| 1965 | 1,053.3 | 296.1 | 41.2 | 67.8 | 4.9 | 5.5 | 14.7 | 7.8 | 185.0 | R 84.1 | R 411.0 | 0.2 | 25.8 | 0.0 | 99.2 | R 1,885.5 | 236.9 | R 2,122.4 |
| 1970 | 932.1 | 351.2 | 43.8 | 59.4 | 3.3 | 9.1 | 15.3 | 6.2 | 170.6 | R 84.9 | R 392.6 | 0.1 | 32.3 | 0.0 | 133.0 | R 1,841.4 | 322.4 | R 2,163.8 |
| 1975 | 743.1 | 269.8 | 37.6 | 64.3 | 6.8 | 12.8 | 13.7 | 5.8 | 137.9 | R 94.0 | R 372.8 | (s) | 36.3 | 0.0 | 140.8 | R 1,562.8 | 339.5 | R 1,902.4 |
| 1980 | 573.1 | 344.0 | 34.2 | 64.8 | 1.2 | 19.2 | 16.7 | 3.1 | 72.6 | R 112.6 | R 324.4 | (s) | R 74.6 | 0.0 | 157.1 | R 1,473.2 | 382.0 | R 1,855.2 |
| 1985 | 359.2 | 238.7 | 32.6 | 33.6 | 2.0 | 16.7 | 15.2 | 6.7 | 16.5 | R 95.3 | R 218.5 | (s) | R 87.4 | 0.0 | 145.1 | R 1,048.9 | 340.9 | R 1,389.7 |
| 1990 | 382.1 | 250.3 | 49.5 | 36.7 | 0.7 | 11.5 | 17.1 | 6.2 | 36.6 | R 113.9 | R 272.2 | R f 3.0 | R 41.6 | f 0.0 | 156.9 | R f 1,106.2 | R 343.3 | R f 1,449.5 |
| 1991 | 337.6 | 243.1 | 41.1 | 31.2 | 0.8 | 14.2 | 15.3 | 6.6 | 28.1 | R 105.9 | R 243.2 | 3.1 | R 44.3 | 0.0 | 152.6 | R 1,024.0 | R 331.8 | R 1,355.7 |
| 1992 | 369.2 | 248.7 | 40.1 | 36.5 | 0.8 | 19.3 | 15.6 | 7.1 | 26.4 | R 122.4 | R 268.1 | 4.6 | R 54.3 | 0.0 | 153.1 | R 1,097.9 | R 326.5 | R 1,424.4 |
| 1993 | 385.0 | 254.8 | 40.4 | 35.5 | 1.3 | 8.0 | 15.9 | 5.0 | 27.0 | R 109.5 | R 242.7 | 3.8 | R 57.1 | 0.0 | 153.4 | R 1,096.8 | R 323.9 | R 1,420.7 |
| 1994 | 392.4 | 248.3 | 50.5 | 30.0 | 1.4 | 6.8 | 16.6 | R 4.7 | 25.9 | R 113.7 | R 249.7 | 4.1 | R 61.0 | 0.0 | 157.2 | R 1,112.7 | 328.1 | R 1,440.8 |
| 1995 | 392.2 | 261.9 | 51.8 | 24.8 | 1.0 | 6.1 | 16.3 | 4.9 | 18.4 | R 117.0 | R 240.3 | 3.6 | R 67.1 | 0.0 | 162.2 | R 1,127.2 | R 338.1 | R 1,465.4 |
| 1996 | 398.4 | 255.2 | 49.6 | 26.4 | 0.8 | R 7.1 | 15.8 | 4.5 | 21.0 | R 105.1 | R 230.4 | 4.7 | R 94.4 | 0.0 | 161.1 | R 1,144.1 | R 335.7 | R 1,479.8 |
| 1997 | 387.9 | 248.9 | 46.2 | 25.1 | 0.9 | R 4.6 | 16.7 | R 4.6 | 14.3 | R 123.8 | R 236.2 | 4.9 | R 88.8 | 0.0 | 163.6 | R 1,130.4 | R 340.4 | R 1,470.7 |
| 1998 | 280.6 | 241.5 | 52.4 | 24.1 | 1.1 | 4.4 | 17.5 | 4.5 | 14.8 | 119.1 | 238.0 | 3.7 | 53.3 | 0.0 | 162.0 | 979.1 | 334.7 | 1,313.8 |
| 1999 | 263.7 | 249.6 | 33.2 | 29.5 | 1.1 | 4.3 | 17.7 | 3.9 | 14.4 | 122.3 | 226.3 | 3.5 | 79.6 | 2.5 | 157.2 | 982.5 | 307.9 | 1,290.4 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 249. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Pennsylvania

| | | | Petroleum | | | | | | | | | | | Electrical System Energy Losses [d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] | Electricity [a] | Net Energy | | Total [c] |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 547 | 15 | 1,994 | 7,662 | 1,036 | 20 | 1,343 | 76,565 | 5,005 | 93,625 | 0 | 306 | — | 760 | — |
| 1965 | 127 | 19 | 1,922 | 8,900 | 3,406 | 60 | 1,121 | 81,658 | 4,554 | 101,622 | 0 | 232 | — | 553 | — |
| 1970 | 56 | 27 | 662 | 12,662 | 9,083 | 134 | 1,327 | 98,082 | 5,548 | 127,497 | 0 | 184 | — | 447 | — |
| 1975 | 5 | 18 | 426 | 16,566 | 8,469 | 157 | 1,094 | 106,357 | 5,788 | 138,857 | 0 | 194 | — | 467 | — |
| 1980 | 0 | 29 | 337 | 21,539 | 10,148 | 147 | 1,312 | 107,026 | 4,796 | 145,306 | 0 | 186 | — | 451 | — |
| 1985 | 0 | 33 | 208 | 20,087 | 10,126 | 249 | 1,194 | 100,255 | 2,139 | 134,258 | e 0 | 365 | — | 859 | — |
| 1990 | 0 | 34 | 145 | 23,830 | 12,042 | 157 | 1,344 | 105,586 | 5,662 | 148,765 | R 0 | 396 | — | 867 | — |
| 1991 | 0 | 34 | 116 | 23,801 | 11,355 | 188 | 1,202 | 105,272 | 5,713 | 147,647 | R 0 | 399 | — | R 868 | — |
| 1992 | 0 | 39 | 163 | 25,036 | 10,932 | 189 | 1,226 | 105,729 | 6,994 | 150,269 | R 0 | 360 | — | R 768 | — |
| 1993 | 0 | 36 | 150 | 27,385 | 11,787 | 196 | 1,248 | 108,924 | 6,082 | 155,772 | R 217 | 345 | — | 729 | — |
| 1994 | 0 | 38 | 136 | 29,058 | 11,748 | 360 | 1,304 | 108,538 | 5,994 | 157,139 | R 556 | 370 | — | 772 | — |
| 1995 | 0 | 38 | 125 | 30,520 | 12,313 | 188 | 1,282 | 111,261 | 4,843 | 160,533 | R 1,730 | 379 | — | R 791 | — |
| 1996 | 0 | 41 | 121 | 29,413 | 11,831 | R 148 | 1,244 | 112,697 | 3,383 | R 158,836 | R 1,298 | 397 | — | R 828 | — |
| 1997 | 0 | 39 | 107 | 31,312 | 14,813 | R 117 | 1,314 | 113,608 | 4,674 | R 165,944 | R 1,437 | 376 | — | R 782 | — |
| 1998 | 0 | 33 | 126 | 32,544 | 16,716 | 127 | 1,376 | 115,066 | 5,828 | 171,782 | 330 | 381 | — | 786 | — |
| 1999 | 0 | 36 | 205 | 33,929 | 15,943 | 97 | 1,390 | 116,491 | 6,007 | 174,061 | 283 | 392 | — | 768 | — |
| | | | | | Trillion Btu | | | | | | | | | | |
| 1960 | 14.0 | 15.6 | 10.1 | 44.6 | 5.7 | 0.1 | 8.1 | 402.2 | 31.5 | 502.3 | 0.0 | 1.0 | 533.0 | 2.6 | 535.6 |
| 1965 | 3.2 | 20.1 | 9.7 | 51.8 | 19.2 | 0.2 | 6.8 | 429.0 | 28.6 | 545.4 | 0.0 | 0.8 | 569.4 | 1.9 | 571.3 |
| 1970 | 1.3 | 27.5 | 3.3 | 73.8 | 51.4 | 0.5 | 8.0 | 515.2 | 34.9 | 687.1 | 0.0 | 0.6 | 716.7 | 1.5 | 718.2 |
| 1975 | 0.1 | 18.1 | 2.1 | 96.5 | 47.9 | 0.6 | 6.6 | 558.7 | 36.4 | 748.9 | 0.0 | 0.7 | 767.8 | 1.6 | 769.4 |
| 1980 | 0.0 | 30.1 | 1.7 | 125.5 | 57.4 | 0.5 | 8.0 | 562.2 | 30.2 | 785.4 | 0.0 | 0.6 | 816.2 | 1.5 | 817.7 |
| 1985 | 0.0 | 34.1 | 1.1 | 117.0 | 57.3 | 0.9 | 7.2 | 526.6 | 13.4 | 723.5 | e 0.0 | 1.2 | e 758.9 | 2.9 | e 761.9 |
| 1990 | 0.0 | 35.7 | 0.7 | 138.8 | 68.2 | 0.6 | 8.1 | 554.6 | 35.6 | 806.7 | R 0.0 | 1.4 | 843.7 | 3.0 | 846.6 |
| 1991 | 0.0 | 35.3 | 0.6 | 138.6 | 64.3 | 0.7 | 7.3 | 553.0 | 35.9 | 800.4 | R 0.0 | 1.4 | 837.1 | 3.0 | 840.0 |
| 1992 | 0.0 | 39.9 | 0.8 | 145.8 | 61.9 | 0.7 | 7.4 | 555.4 | 44.0 | 816.0 | R 0.0 | 1.2 | 857.2 | 2.6 | 859.8 |
| 1993 | 0.0 | 37.6 | 0.8 | 159.5 | 66.7 | 0.7 | 7.6 | 572.2 | 38.2 | 845.6 | R 0.8 | 1.2 | 884.5 | 2.5 | 887.0 |
| 1994 | 0.0 | 39.3 | 0.7 | 169.3 | 66.5 | 1.3 | 7.9 | R 567.7 | 37.7 | R 851.0 | R 2.0 | 1.3 | R 891.6 | 2.6 | R 894.3 |
| 1995 | 0.0 | 39.2 | 0.6 | 177.8 | 69.8 | 0.7 | 7.8 | R 580.2 | 30.5 | R 867.4 | R 6.1 | 1.3 | R 907.9 | 2.7 | R 910.6 |
| 1996 | 0.0 | 42.1 | 0.6 | 171.3 | 67.1 | 0.5 | 7.5 | R 587.8 | 21.3 | R 856.2 | R 4.6 | 1.4 | R 899.6 | 2.8 | R 902.4 |
| 1997 | 0.0 | 40.6 | 0.5 | 182.4 | 84.0 | R 0.4 | 8.0 | R 592.2 | 29.4 | R 896.9 | R 5.1 | 1.3 | R 938.8 | 2.7 | R 941.5 |
| 1998 | 0.0 | 33.7 | 0.6 | 189.6 | 94.8 | 0.5 | 8.3 | 599.7 | 36.6 | 930.1 | 1.2 | 1.3 | 965.2 | 2.7 | 967.9 |
| 1999 | 0.0 | 37.3 | 1.0 | 197.6 | 90.4 | 0.3 | 8.4 | 607.0 | 37.8 | 942.6 | 1.0 | 1.3 | 981.3 | 2.6 | 983.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 250.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Pennsylvania**

| Year | Coal | Natural Gas a | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 18,062 | 6 | 2,747 | 485 | 0 | 3,232 | 230 | 1,810 | 0 | 0 | 0 | — |
| 1965 | 23,182 | 1 | 3,351 | 591 | 0 | 3,943 | 313 | 1,313 | 0 | 0 | 0 | — |
| 1970 | 29,141 | 9 | 22,502 | 3,959 | 0 | 26,460 | 465 | 1,354 | 0 | 0 | 0 | — |
| 1975 | 36,659 | 1 | 10,273 | 3,419 | 0 | 13,691 | 15,869 | 1,575 | 0 | 0 | 0 | — |
| 1980 | 42,466 | 3 | 17,226 | 2,238 | 316 | 19,780 | 12,091 | 734 | 0 | 0 | 0 | — |
| 1985 | 41,713 | 2 | 11,622 | 1,423 | 782 | 13,827 | 26,232 | 971 | 0 | 0 | 0 | — |
| 1990 | 41,465 | 2 | 5,406 | 1,185 | 1,005 | 7,596 | 57,787 | 1,703 | 0 | 0 | 0 | — |
| 1991 | 40,662 | 2 | 5,153 | 907 | 986 | 7,046 | 57,476 | 656 | 0 | 0 | 0 | — |
| 1992 | 40,407 | 3 | 2,820 | 719 | 1,022 | 4,560 | 60,133 | 1,217 | 0 | 0 | 0 | — |
| 1993 | 40,257 | 8 | 6,758 | 845 | 932 | 8,535 | 59,331 | 1,124 | 0 | 0 | 0 | — |
| 1994 | 38,044 | 13 | 7,478 | 1,402 | 1,103 | 9,982 | 67,207 | R 1,613 | 0 | 0 | 0 | — |
| 1995 | 39,252 | 25 | 3,770 | 1,256 | 1,310 | 6,336 | 66,462 | R 459 | 0 | 0 | 0 | — |
| 1996 | 41,076 | 7 | 3,983 | 1,418 | 1,363 | 6,764 | 68,672 | R 1,784 | 0 | 0 | 0 | — |
| 1997 | 42,602 | 7 | 2,576 | 907 | 1,318 | 4,801 | 67,655 | R 1,220 | 0 | 0 | 0 | — |
| 1998 | 42,971 | 7 | 5,314 | 1,424 | 1,327 | 8,065 | 61,149 | 1,575 | 0 | 0 | 0 | — |
| 1999 | 34,558 | 10 | 4,426 | 1,171 | 719 | 6,316 | 70,885 | 1,163 | 0 | 0 | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | |
| 1960 | 423.3 | 6.2 | 17.3 | 2.8 | 0.0 | 20.1 | 2.7 | 19.5 | 0.0 | 0.0 | 0.0 | 471.7 |
| 1965 | 558.6 | 1.3 | 21.1 | 3.4 | 0.0 | 24.5 | 3.7 | 13.7 | 0.0 | 0.0 | 0.0 | 601.8 |
| 1970 | 680.2 | 9.7 | 141.5 | 23.1 | 0.0 | 164.5 | 5.1 | 14.2 | 0.0 | 0.0 | 0.0 | 873.7 |
| 1975 | 861.4 | 1.2 | 64.6 | 19.9 | 0.0 | 84.5 | 174.8 | 16.4 | 0.0 | 0.0 | 0.0 | 1,138.3 |
| 1980 | 1,026.7 | 2.9 | 108.3 | 13.0 | 1.9 | 123.2 | 131.9 | 7.6 | 0.0 | 0.0 | 0.0 | 1,292.3 |
| 1985 | 1,019.7 | 1.6 | 73.1 | 8.3 | 4.7 | 86.1 | 283.6 | 10.1 | 0.0 | 0.0 | 0.0 | 1,401.1 |
| 1990 | 1,012.3 | 2.4 | 34.0 | 6.9 | 6.1 | 46.9 | 617.2 | 17.7 | 0.0 | 0.0 | 0.0 | 1,696.6 |
| 1991 | 991.8 | 2.1 | 32.4 | 5.3 | 5.9 | 43.6 | 617.3 | 6.8 | 0.0 | 0.0 | 0.0 | 1,661.6 |
| 1992 | 998.1 | 3.2 | 17.7 | 4.2 | 6.2 | 28.1 | 642.1 | 12.6 | 0.0 | 0.0 | 0.0 | 1,684.0 |
| 1993 | 993.9 | 8.6 | 42.5 | 4.9 | 5.6 | 53.0 | 633.8 | 11.6 | 0.0 | 0.0 | 0.0 | 1,700.8 |
| 1994 | 936.4 | 13.1 | 47.0 | 8.2 | 6.6 | 61.8 | 717.5 | R 16.6 | 0.0 | 0.0 | 0.0 | R 1,745.9 |
| 1995 | 965.7 | 25.4 | 23.7 | 7.3 | 7.9 | 38.9 | 708.3 | R 4.7 | 0.0 | 0.0 | 0.0 | R 1,743.2 |
| 1996 | 1,009.4 | 7.4 | 25.0 | 8.3 | 8.2 | 41.5 | 729.5 | R 18.4 | 0.0 | 0.0 | 0.0 | R 1,806.8 |
| 1997 | 1,043.5 | 7.6 | 16.2 | 5.3 | 7.9 | 29.4 | 718.7 | R 12.6 | 0.0 | 0.0 | 0.0 | R 1,812.3 |
| 1998 | 1,055.5 | 7.1 | 33.4 | 8.3 | 8.0 | 49.7 | 649.6 | 16.3 | 0.0 | 0.0 | 0.0 | 1,776.4 |
| 1999 | 862.0 | 10.7 | 27.8 | 6.8 | 4.3 | 39.0 | 753.0 | 12.0 | 0.0 | 0.0 | 0.0 | 1,676.5 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.

R=Revised data.

— =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 251.  Energy Consumption Estimates by Source, Selected Years 1960-1999, Rhode Island**

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | \<-- Thousand Barrels --\> | | | | | | | | | | | \<-- Million kWh --\> | | | | Million kWh | |
| **Thousand Barrels** |||||||||||||||||||
| 1960 | 598 | 12 | 735 | 19 | 8,106 | 38 | 886 | 207 | 155 | 5,975 | 9,827 | 221 | 26,170 | 0 | 9 | — | — | 467 | — |
| 1965 | 419 | 16 | 907 | 63 | 6,879 | 49 | 666 | 223 | 153 | 6,492 | 6,276 | 337 | 22,045 | 0 | 2 | — | — | 4,095 | — |
| 1970 | 10 | 25 | 937 | 148 | 8,631 | 137 | 432 | 375 | 125 | 8,009 | 9,727 | 313 | 28,833 | 0 | 3 | — | — | 7,135 | — |
| 1975 | 7 | 23 | 1,330 | 285 | 8,003 | 271 | 128 | 498 | 97 | 8,972 | 4,389 | 149 | 24,122 | 0 | 3 | — | — | 12,289 | — |
| 1980 | 7 | 28 | 1,041 | 269 | 5,032 | 348 | 84 | 293 | 132 | 8,416 | 2,525 | 539 | 18,680 | 0 | 1 | — | — | 14,042 | — |
| 1985 | 9 | 30 | 2,974 | 30 | 4,452 | 498 | 135 | 501 | 120 | 8,665 | 2,232 | 127 | 19,735 | 0 | 421 | — | — | 14,794 | — |
| 1990 | 5 | 36 | 1,634 | 42 | 4,636 | 776 | 54 | 501 | 135 | 8,765 | 1,439 | 58 | 18,040 | 0 | R h 28 | — | — | R 18,031 | — |
| 1991 | 4 | 54 | 461 | 30 | 5,065 | 656 | 52 | 466 | 121 | 8,681 | 1,099 | 13 | 16,642 | 0 | R 364 | — | — | R 17,926 | — |
| 1992 | 5 | 78 | 1,502 | 30 | 5,307 | 556 | 51 | 456 | 123 | 8,756 | 1,204 | 14 | 17,999 | 0 | R 651 | — | — | R 16,824 | — |
| 1993 | 3 | 76 | 819 | 8 | 5,470 | 527 | 50 | 513 | 125 | 8,883 | 1,320 | 15 | 17,730 | 0 | R 856 | — | — | R 16,880 | — |
| 1994 | 3 | 71 | 1,256 | 10 | 5,930 | 529 | 50 | 501 | 131 | 8,630 | 1,180 | 15 | 18,233 | 0 | R 851 | — | — | R 16,408 | — |
| 1995 | 3 | 70 | 990 | 22 | 5,732 | 500 | 64 | 461 | 129 | 8,927 | 949 | 15 | 17,789 | 0 | R 897 | — | — | R 14,956 | — |
| 1996 | 3 | 83 | 337 | 37 | 6,051 | 540 | 35 | R 536 | 125 | 9,006 | 1,001 | R 39 | R 17,706 | 0 | R 939 | — | — | R 8,670 | — |
| 1997 | 3 | 83 | 274 | 11 | 6,878 | 828 | 93 | R 422 | 132 | 9,195 | 923 | R 36 | R 18,791 | 0 | R 1,076 | — | — | R 7,237 | — |
| 1998 | 2 | 86 | 282 | 9 | 5,689 | 919 | 122 | 481 | 138 | 9,391 | 726 | 45 | 17,803 | 0 | 931 | — | — | 12,080 | — |
| 1999 | 2 | 84 | 302 | 11 | 5,534 | 1,057 | 108 | 506 | 140 | 9,593 | 770 | 53 | 18,073 | 0 | 962 | — | — | 16,526 | — |
| **Trillion Btu** |||||||||||||||||||
| 1960 | 16.8 | 12.3 | 4.9 | 0.1 | 47.2 | 0.2 | 5.0 | 0.8 | 0.9 | 31.4 | 61.8 | 1.3 | 153.7 | 0.0 | 0.1 | 2.9 | 0.0 | 1.6 | 187.2 |
| 1965 | 11.5 | 17.0 | 6.0 | 0.3 | 40.1 | 0.3 | 3.8 | 0.9 | 0.9 | 34.1 | 39.5 | 1.9 | 127.8 | 0.0 | (s) | 3.5 | 0.0 | 14.0 | 173.8 |
| 1970 | 0.2 | 25.6 | 6.2 | 0.7 | 50.3 | 0.8 | 2.4 | 1.4 | 0.8 | 42.1 | 61.2 | 1.8 | 167.6 | 0.0 | (s) | 5.2 | 0.0 | 24.3 | 223.1 |
| 1975 | 0.1 | 23.5 | 8.8 | 1.4 | 46.6 | 1.5 | 0.7 | 1.8 | 0.6 | 47.1 | 27.6 | 0.8 | 137.1 | 0.0 | (s) | 4.0 | 0.0 | 41.9 | 206.7 |
| 1980 | 0.2 | 28.2 | 6.9 | 1.4 | 29.3 | 2.0 | 0.5 | 1.1 | 0.8 | 44.2 | 15.9 | 3.0 | 104.9 | 0.0 | (s) | R 5.4 | 0.0 | 47.9 | R 186.6 |
| 1985 | 0.2 | 30.9 | 19.7 | 0.2 | 25.9 | 2.8 | 0.8 | 1.8 | 0.7 | 45.5 | 14.0 | 0.7 | 112.2 | 0.0 | 4.4 | 4.6 | 0.0 | 50.5 | 202.7 |
| 1990 | 0.1 | 36.8 | 10.8 | 0.2 | 27.0 | 4.4 | 0.3 | 1.8 | 0.8 | 46.0 | 9.0 | 0.3 | 100.8 | 0.0 | R h 0.3 | R 4.2 | h (s) | R 61.5 | R h 203.9 |
| 1991 | 0.1 | 55.8 | 3.1 | 0.2 | 29.5 | 3.7 | 0.3 | 1.7 | 0.7 | 45.6 | 6.9 | 0.1 | 91.7 | 0.0 | R 3.8 | R 4.3 | (s) | R 61.2 | R 218.8 |
| 1992 | 0.1 | 79.2 | 10.0 | 0.2 | 30.9 | 3.1 | 0.3 | 1.7 | 0.7 | 46.0 | 7.6 | 0.1 | 100.5 | 0.0 | R 6.7 | R 4.6 | (s) | R 57.4 | R 251.3 |
| 1993 | 0.1 | 77.8 | 5.4 | (s) | 31.9 | 3.0 | 0.3 | 1.9 | 0.8 | 46.7 | 8.3 | 0.1 | 98.2 | 0.0 | R 8.8 | R 4.9 | (s) | 57.6 | R 249.7 |
| 1994 | 0.1 | 73.3 | 8.3 | 0.1 | 34.5 | 3.0 | 0.3 | 1.8 | 0.8 | R 45.1 | 7.4 | 0.1 | R 101.5 | 0.0 | R 8.8 | R 4.7 | (s) | R 56.0 | R 247.9 |
| 1995 | 0.1 | 72.0 | 6.6 | 0.1 | 33.4 | 2.8 | 0.4 | 1.7 | 0.8 | R 46.6 | 6.0 | 0.1 | R 98.3 | 0.0 | R 9.2 | R 5.1 | (s) | R 51.0 | R 239.8 |
| 1996 | 0.1 | 87.7 | 2.2 | 0.2 | 35.2 | 3.1 | 0.2 | 1.9 | 0.8 | R 47.0 | 6.3 | R 0.2 | R 97.1 | 0.0 | R 9.7 | R 5.3 | (s) | R 29.6 | R 233.6 |
| 1997 | 0.1 | 84.9 | 1.8 | 0.1 | 40.1 | 4.7 | 0.5 | R 1.5 | 0.8 | R 47.9 | 5.8 | R 0.2 | R 103.4 | 0.0 | R 11.1 | R 3.8 | (s) | R 24.7 | R 234.6 |
| 1998 | 0.1 | 88.3 | 1.9 | (s) | 33.1 | 5.2 | 0.7 | 1.7 | 0.8 | 48.9 | 4.6 | 0.2 | 97.3 | 0.0 | 9.6 | 3.7 | (s) | 41.2 | 245.2 |
| 1999 | (s) | 86.1 | 2.0 | 0.1 | 32.2 | 6.0 | 0.6 | 1.8 | 0.8 | 50.0 | 4.8 | 0.3 | 98.7 | 0.0 | 10.0 | 4.1 | (s) | 56.4 | 261.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.  A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns.  Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours.  R=Revised data.  — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 252. Residential Energy Consumption Estimates, Selected Years 1960-1999, Rhode Island

| | Coal[a] | Natural Gas[b] | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | Geothermal | Solar[c] | Million Kilowatthours | Net Energy | Million Kilowatthours | Total |
| 1960 | 12 | 7 | 5,507 | 770 | 149 | 6,426 | 52 | — | — | 620 | — | 1,542 | — |
| 1965 | 8 | 9 | 4,828 | 534 | 134 | 5,496 | 46 | — | — | 871 | — | 2,080 | — |
| 1970 | 5 | 12 | 5,835 | 335 | 158 | 6,328 | 58 | — | — | 1,390 | — | 3,368 | — |
| 1975 | 3 | 13 | 5,395 | 87 | 148 | 5,629 | 64 | — | — | 1,684 | — | 4,063 | — |
| 1980 | 2 | 14 | 3,297 | 54 | 115 | 3,466 | 264 | — | — | 1,840 | — | 4,474 | — |
| 1985 | 3 | 15 | 3,419 | 131 | 279 | 3,828 | 223 | — | — | 1,971 | — | 4,630 | — |
| 1990 | 3 | 18 | 2,554 | 38 | 277 | 2,869 | 152 | — | — | 2,376 | — | 5,198 | — |
| 1991 | 2 | 17 | 2,688 | 35 | 280 | 3,003 | 160 | — | — | 2,369 | — | R 5,150 | — |
| 1992 | 3 | 20 | 3,270 | 37 | 267 | 3,574 | 168 | — | — | 2,363 | — | R 5,040 | — |
| 1993 | 2 | 20 | 3,280 | 40 | 319 | 3,639 | 173 | — | — | 2,412 | — | R 5,094 | — |
| 1994 | 2 | 17 | 3,517 | 38 | 313 | 3,868 | R 170 | — | — | 2,457 | — | 5,127 | — |
| 1995 | 2 | 17 | 3,355 | 27 | 283 | 3,665 | 188 | — | — | 2,472 | — | R 5,153 | — |
| 1996 | 2 | 19 | 3,529 | 30 | R 354 | R 3,914 | 188 | — | — | 2,481 | — | R 5,170 | — |
| 1997 | 2 | 18 | 3,722 | 34 | R 318 | R 4,075 | R 122 | — | — | 2,486 | — | R 5,172 | — |
| 1998 | 1 | 16 | 3,329 | 41 | 372 | 3,742 | 107 | — | — | 2,522 | — | 5,209 | — |
| 1999 | 1 | 17 | 3,179 | 49 | 261 | 3,488 | 115 | — | — | 2,667 | — | 5,226 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.3 | 6.9 | 32.1 | 4.4 | 0.6 | 37.0 | 1.0 | 0.0 | 0.0 | 2.1 | 47.5 | 5.3 | 52.7 |
| 1965 | 0.2 | 9.3 | 28.1 | 3.0 | 0.5 | 31.7 | 0.9 | 0.0 | 0.0 | 3.0 | 45.1 | 7.1 | 52.2 |
| 1970 | 0.1 | 12.2 | 34.0 | 1.9 | 0.6 | 36.5 | 1.2 | 0.0 | 0.0 | 4.7 | 54.7 | 11.5 | 66.2 |
| 1975 | 0.1 | 13.2 | 31.4 | 0.5 | 0.5 | 32.5 | 1.3 | 0.0 | 0.0 | 5.7 | 52.8 | 13.9 | 66.6 |
| 1980 | (s) | 14.3 | 19.2 | 0.3 | 0.4 | 19.9 | 5.3 | 0.0 | 0.0 | 6.3 | 45.8 | 15.3 | 61.0 |
| 1985 | 0.1 | 15.5 | 19.9 | 0.7 | 1.0 | 21.7 | 4.5 | 0.0 | 0.0 | 6.7 | 48.4 | 15.8 | 64.2 |
| 1990 | 0.1 | 18.2 | 14.9 | 0.2 | 1.0 | 16.1 | 3.0 | e 0.0 | e (s) | 8.1 | R e 45.6 | 17.7 | e 63.3 |
| 1991 | 0.1 | 17.9 | 15.7 | 0.2 | 1.0 | 16.9 | 3.2 | 0.0 | (s) | 8.1 | 46.1 | 17.6 | 63.7 |
| 1992 | 0.1 | 20.4 | 19.1 | 0.2 | 1.0 | 20.2 | 3.4 | 0.0 | (s) | 8.1 | 52.1 | 17.2 | 69.3 |
| 1993 | (s) | 20.3 | 19.1 | 0.2 | 1.2 | 20.5 | 3.5 | 0.0 | (s) | 8.2 | 52.5 | 17.4 | 69.9 |
| 1994 | (s) | 17.9 | 20.5 | 0.2 | 1.1 | 21.8 | 3.4 | 0.0 | (s) | 8.4 | 51.6 | 17.5 | 69.1 |
| 1995 | (s) | 17.8 | 19.5 | 0.2 | 1.0 | 20.7 | 3.8 | 0.0 | (s) | 8.4 | 50.8 | 17.6 | 68.4 |
| 1996 | (s) | 20.2 | 20.6 | 0.2 | R 1.3 | 22.0 | 3.8 | 0.0 | (s) | 8.5 | R 54.6 | 17.6 | R 72.2 |
| 1997 | (s) | 18.6 | 21.7 | 0.2 | R 1.1 | R 23.0 | R 2.4 | 0.0 | (s) | 8.5 | R 52.6 | 17.6 | R 70.2 |
| 1998 | (s) | 16.9 | 19.4 | 0.2 | 1.3 | 21.0 | 2.1 | 0.0 | (s) | 8.6 | 48.7 | 17.8 | 66.4 |
| 1999 | (s) | 17.0 | 18.5 | 0.3 | 0.9 | 19.7 | 2.3 | (s) | (s) | 9.1 | 48.2 | 17.8 | 66.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 253.   Commercial Energy Consumption Estimates, Selected Years 1960-1999, Rhode Island

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Motor Gasoline | Petroleum Residual Fuel[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 8 | 2 | 1,381 | 17 | 26 | 26 | 1,237 | 2,688 | 1 | — | 376 | — | 935 | — |
| 1965 | 5 | 3 | 1,211 | 12 | 24 | 32 | 634 | 1,913 | 1 | — | 546 | — | 1,304 | — |
| 1970 | 3 | 5 | 1,464 | 7 | 28 | 36 | 971 | 2,506 | 1 | — | 1,285 | — | 3,114 | — |
| 1975 | 2 | 4 | 1,353 | 2 | 26 | 41 | 602 | 2,024 | 1 | — | 1,576 | — | 3,801 | — |
| 1980 | 1 | 7 | 617 | 0 | 20 | 49 | 180 | 866 | 6 | — | 1,892 | — | 4,601 | — |
| 1985 | 2 | 8 | 441 | 4 | 49 | 32 | 552 | 1,078 | R 6 | — | 2,159 | — | 5,073 | — |
| 1990 | 2 | 8 | 673 | 2 | 49 | 39 | 605 | 1,367 | R 10 | — | 2,688 | — | R 5,881 | — |
| 1991 | 2 | 8 | 775 | 1 | 49 | 36 | 588 | 1,451 | R 10 | — | 2,671 | — | R 5,807 | — |
| 1992 | 2 | 9 | 603 | 3 | 47 | 32 | 523 | 1,208 | R 11 | — | 2,670 | — | R 5,695 | — |
| 1993 | 1 | 9 | 640 | 2 | 56 | 10 | 642 | 1,350 | 14 | — | 2,718 | — | R 5,741 | — |
| 1994 | 1 | 12 | 809 | 5 | 55 | 10 | 633 | 1,512 | 14 | — | 2,737 | — | 5,711 | — |
| 1995 | 1 | 12 | 717 | 30 | 50 | 10 | 506 | 1,314 | 14 | — | 2,790 | — | R 5,817 | — |
| 1996 | 1 | 12 | 820 | 2 | R 63 | 10 | 679 | R 1,572 | 15 | — | 2,773 | — | R 5,778 | — |
| 1997 | 1 | 12 | 766 | 55 | R 56 | 11 | 621 | R 1,509 | 13 | — | 2,826 | — | R 5,879 | — |
| 1998 | 1 | 11 | 632 | 67 | 66 | 10 | 412 | 1,187 | 13 | — | 2,908 | — | 6,007 | — |
| 1999 | 1 | 12 | 512 | 40 | 46 | 10 | 446 | 1,054 | 16 | — | 3,324 | — | 6,514 | — |
| | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 0.2 | 1.8 | 8.0 | 0.1 | 0.1 | 0.1 | 7.8 | 16.2 | (s) | 0.0 | 1.3 | 19.4 | 3.2 | 22.6 |
| 1965 | 0.1 | 2.7 | 7.1 | 0.1 | 0.1 | 0.2 | 4.0 | 11.4 | (s) | 0.0 | 1.9 | 16.1 | 4.4 | 20.5 |
| 1970 | 0.1 | 5.2 | 8.5 | (s) | 0.1 | 0.2 | 6.1 | 15.0 | (s) | 0.0 | 4.4 | 24.6 | 10.6 | 35.2 |
| 1975 | (s) | 4.3 | 7.9 | (s) | 0.1 | 0.2 | 3.8 | 12.0 | (s) | 0.0 | 5.4 | 21.7 | 13.0 | 34.7 |
| 1980 | (s) | 6.9 | 3.6 | 0.0 | 0.1 | 0.3 | 1.1 | 5.1 | 0.1 | 0.0 | 6.5 | 18.6 | 15.7 | 34.3 |
| 1985 | (s) | 7.8 | 2.6 | (s) | 0.2 | 0.2 | 3.5 | 6.4 | R 0.1 | 0.0 | 7.4 | R 21.8 | 17.3 | R 39.1 |
| 1990 | 0.1 | 8.3 | 3.9 | (s) | 0.2 | 0.2 | 3.8 | 8.1 | R 0.2 | e 0.0 | 9.2 | R e 25.8 | 20.1 | R e 45.9 |
| 1991 | (s) | 8.5 | 4.5 | (s) | 0.2 | 0.2 | 3.7 | 8.6 | R 0.2 | 0.0 | 9.1 | R 26.4 | 19.8 | R 46.3 |
| 1992 | (s) | 9.2 | 3.5 | (s) | 0.2 | 0.2 | 3.3 | 7.2 | R 0.2 | 0.0 | 9.1 | R 25.8 | R 19.4 | R 45.2 |
| 1993 | (s) | 9.5 | 3.7 | (s) | 0.2 | 0.1 | 4.0 | 8.0 | 0.3 | 0.0 | 9.3 | 27.1 | 19.6 | 46.7 |
| 1994 | (s) | 12.4 | 4.7 | (s) | 0.2 | 0.1 | 4.0 | 9.0 | 0.3 | 0.0 | 9.3 | 31.0 | 19.5 | 50.5 |
| 1995 | (s) | 12.4 | 4.2 | 0.2 | 0.2 | 0.1 | 3.2 | 7.8 | 0.3 | 0.0 | 9.5 | 30.0 | 19.8 | 49.8 |
| 1996 | (s) | 13.2 | 4.8 | (s) | 0.2 | 0.1 | 4.3 | 9.3 | 0.3 | 0.0 | 9.5 | 32.3 | 19.7 | R 52.1 |
| 1997 | (s) | 12.6 | 4.5 | 0.3 | 0.2 | 0.1 | 3.9 | R 8.9 | 0.3 | 0.0 | 9.6 | 31.5 | R 20.1 | 51.5 |
| 1998 | (s) | 11.8 | 3.7 | 0.4 | 0.2 | 0.1 | 2.6 | 6.9 | 0.3 | 0.0 | 9.9 | 28.9 | 20.5 | 49.4 |
| 1999 | (s) | 12.1 | 3.0 | 0.2 | 0.2 | (s) | 2.8 | 6.2 | 0.3 | 0.0 | 11.3 | 30.0 | 22.2 | 52.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 254. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Rhode Island

| | Coal | Natural Gas a | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
| | | | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 4 | 3 | 735 | 367 | 99 | 31 | 52 | 6 | 4,051 | 221 | 5,561 | 1 | — | — | 916 | — | 2,277 | — |
| 1965 | 4 | 4 | 907 | 431 | 120 | 61 | 85 | 5 | 2,135 | 337 | 4,082 | (s) | — | — | 1,274 | — | 3,042 | — |
| 1970 | 2 | 6 | 937 | 672 | 89 | 162 | 49 | 3 | 3,246 | 313 | 5,470 | 0 | — | — | 1,253 | — | 3,036 | — |
| 1975 | 2 | 6 | 1,330 | 440 | 40 | 297 | 40 | 3 | 1,916 | 149 | 4,215 | 0 | — | — | 1,191 | — | 2,874 | — |
| 1980 | 4 | 5 | 1,041 | 415 | 30 | 149 | 62 | 2 | 654 | 539 | 2,892 | 0 | — | — | 1,399 | — | 3,402 | — |
| 1985 | 4 | 5 | 2,974 | 247 | (s) | 150 | 56 | 26 | 973 | 127 | 4,555 | 0 | — | — | 1,300 | — | 3,054 | — |
| 1990 | (s) | 4 | 1,634 | 235 | 14 | 156 | 63 | 35 | 459 | 58 | 2,654 | R f 7 | — | — | 1,354 | — | 2,962 | — |
| 1991 | 0 | 27 | 461 | 229 | 15 | 122 | 57 | 26 | 379 | 13 | 1,302 | R 6 | — | — | 1,363 | — | R 2,963 | — |
| 1992 | 0 | 48 | 1,502 | 282 | 11 | 128 | 58 | 26 | 460 | 14 | 2,480 | R 6 | — | — | 1,359 | — | R 2,899 | — |
| 1993 | 0 | 46 | 819 | 289 | 8 | 129 | 59 | 49 | 601 | 15 | 1,968 | R 8 | — | — | 1,419 | — | R 2,996 | — |
| 1994 | 0 | 41 | 1,256 | 306 | 7 | 118 | 61 | 49 | 471 | 15 | 2,283 | R 9 | — | — | 1,378 | — | R 2,877 | — |
| 1995 | 0 | 35 | 990 | 271 | 7 | 119 | 60 | 54 | 378 | 15 | 1,895 | R 8 | — | — | 1,374 | — | R 2,864 | — |
| 1996 | 0 | 26 | 337 | 298 | 3 | R 112 | 59 | 47 | 320 | R 39 | R 1,214 | R 9 | — | — | 1,351 | — | R 2,815 | — |
| 1997 | 0 | 24 | 274 | 353 | 3 | R 38 | 62 | 51 | 301 | R 36 | R 1,119 | R 5 | — | — | 1,380 | — | R 2,872 | — |
| 1998 | 0 | 42 | 282 | 254 | 13 | 43 | 65 | 45 | 313 | 45 | 1,059 | 9 | — | — | 1,439 | — | 2,972 | — |
| 1999 | 0 | 56 | 302 | 236 | 19 | 197 | 66 | 24 | 320 | 53 | 1,216 | 6 | — | — | 1,158 | — | 2,269 | — |

**Trillion Btu**

| Year | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.1 | 3.0 | 4.9 | 2.1 | 0.6 | 0.1 | 0.3 | (s) | 25.5 | 1.3 | 34.8 | (s) | 1.8 | 0.0 | 3.1 | 42.8 | 7.8 | 50.6 |
| 1965 | 0.1 | 4.4 | 6.0 | 2.5 | 0.7 | 0.2 | 0.5 | (s) | 13.4 | 1.9 | 25.3 | (s) | 2.6 | 0.0 | 4.3 | 36.8 | 10.4 | 47.2 |
| 1970 | (s) | 5.9 | 6.2 | 3.9 | 0.5 | 0.6 | 0.3 | (s) | 20.4 | 1.8 | 33.7 | 0.0 | 4.0 | 0.0 | 4.3 | 47.9 | 10.4 | 58.3 |
| 1975 | 0.1 | 5.9 | 8.8 | 2.6 | 0.2 | 1.1 | 0.2 | (s) | 12.0 | 0.8 | 25.9 | 0.0 | 2.7 | 0.0 | 4.1 | 38.6 | 9.8 | 48.4 |
| 1980 | 0.1 | 5.2 | 6.9 | 2.4 | 0.2 | 0.5 | 0.4 | (s) | 4.1 | 3.0 | 17.5 | 0.0 | R 0.0 | 0.0 | 4.8 | R 27.6 | 11.6 | R 39.2 |
| 1985 | 0.1 | 4.8 | 19.7 | 1.4 | (s) | 0.5 | 0.3 | 0.1 | 6.1 | 0.7 | 29.0 | 0.0 | R 0.0 | 0.0 | 4.4 | R 38.3 | 10.4 | R 48.7 |
| 1990 | (s) | 4.5 | 10.8 | 1.4 | 0.1 | 0.6 | 0.4 | 0.2 | 2.9 | 0.3 | 16.6 | R f 0.1 | R 1.0 | f 0.0 | 4.6 | R f 26.8 | 10.1 | R f 36.9 |
| 1991 | 0.0 | 27.6 | 3.1 | 1.3 | 0.1 | 0.4 | 0.3 | 0.1 | 2.4 | 0.1 | 7.9 | R 0.1 | R 0.9 | 0.0 | 4.7 | R 41.1 | 10.1 | R 51.2 |
| 1992 | 0.0 | 48.8 | 10.0 | 1.6 | 0.1 | 0.5 | 0.4 | 0.1 | 2.9 | 0.1 | 15.6 | 0.1 | R 1.0 | 0.0 | 4.6 | R 70.1 | 9.9 | R 80.0 |
| 1993 | 0.0 | 47.4 | 5.4 | 1.7 | (s) | 0.5 | 0.4 | 0.3 | 3.8 | 0.1 | 12.1 | 0.1 | R 1.1 | 0.0 | 4.8 | R 65.5 | 10.2 | R 75.7 |
| 1994 | 0.0 | 42.1 | 8.3 | 1.8 | (s) | 0.4 | 0.4 | 0.3 | 3.0 | 0.1 | 14.3 | 0.1 | R 1.0 | 0.0 | 4.7 | R 62.2 | 9.8 | R 72.0 |
| 1995 | 0.0 | 36.0 | 6.6 | 1.6 | (s) | 0.4 | 0.4 | 0.3 | 2.4 | 0.1 | 11.7 | 0.1 | R 1.0 | 0.0 | 4.7 | R 53.6 | 9.8 | R 63.3 |
| 1996 | 0.0 | 27.7 | 2.2 | 1.7 | (s) | 0.4 | 0.4 | 0.2 | 2.0 | R 0.2 | R 7.2 | 0.1 | R 1.2 | 0.0 | 4.6 | R 40.9 | 9.6 | R 50.5 |
| 1997 | 0.0 | 25.0 | 1.8 | 2.1 | (s) | R 0.1 | 0.4 | 0.3 | 1.9 | R 0.2 | R 6.8 | 0.1 | R 1.1 | 0.0 | 4.7 | R 37.7 | 9.8 | R 47.5 |
| 1998 | 0.0 | 43.3 | 1.9 | 1.5 | 0.1 | 0.2 | 0.4 | 0.2 | 2.0 | 0.2 | 6.4 | 0.1 | 1.3 | 0.0 | 4.9 | 56.0 | 10.1 | 66.2 |
| 1999 | 0.0 | 56.8 | 2.0 | 1.4 | 0.1 | 0.7 | 0.4 | 0.1 | 2.0 | 0.3 | 7.0 | 0.1 | 1.5 | 0.0 | 4.0 | 69.3 | 7.7 | 77.0 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 255.   Transportation Energy Consumption Estimates, Selected Years 1960-1999, Rhode Island

| Year | Coal a | Natural Gas b | Petroleum | | | | | | | | | Ethanol c | Electricity a | Net Energy | Electrical System Energy Losses d | Total c |
| | | | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0 | (s) | 19 | 838 | 38 | 1 | 103 | 5,943 | 3,826 | 10,768 | 0 | 0 | — | 0 | — |
| 1965 | 0 | (s) | 63 | 393 | 49 | 4 | 69 | 6,455 | 2,637 | 9,669 | 0 | 0 | — | 0 | — |
| 1970 | 0 | (s) | 148 | 604 | 137 | 28 | 77 | 7,970 | 2,519 | 11,482 | 0 | 0 | — | 0 | — |
| 1975 | (s) | (s) | 285 | 788 | 271 | 27 | 57 | 8,929 | 329 | 10,685 | 0 | 0 | — | 0 | — |
| 1980 | 0 | (s) | 269 | 675 | 348 | 9 | 70 | 8,365 | 58 | 9,794 | 0 | 0 | — | 0 | — |
| 1985 | 0 | (s) | 30 | 326 | 498 | 22 | 64 | 8,606 | 0 | 9,545 | e 0 | 0 | — | 0 | — |
| 1990 | 0 | (s) | 42 | 1,156 | 776 | 19 | 72 | 8,692 | 35 | 10,791 | 0 | 0 | — | 0 | — |
| 1991 | 0 | (s) | 30 | 1,353 | 656 | 15 | 64 | 8,618 | 9 | 10,745 | 0 | 0 | — | 0 | — |
| 1992 | 0 | (s) | 30 | 1,136 | 556 | 14 | 65 | 8,697 | 59 | 10,558 | 0 | 0 | — | 0 | — |
| 1993 | 0 | (s) | 8 | 1,244 | 527 | 9 | 66 | 8,824 | 22 | 10,701 | 0 | 0 | — | 0 | — |
| 1994 | 0 | (s) | 10 | 1,282 | 529 | 16 | 69 | 8,572 | 10 | 10,489 | 0 | 0 | — | 0 | — |
| 1995 | 0 | 1 | 22 | 1,368 | 500 | 8 | 68 | 8,864 | 2 | 10,832 | 0 | 0 | — | 0 | — |
| 1996 | 0 | 1 | 37 | 1,329 | 540 | 7 | 66 | 8,950 | 2 | R 10,931 | 0 | 0 | — | 0 | — |
| 1997 | 0 | 1 | 11 | 2,010 | 828 | R 9 | 70 | 9,133 | 1 | R 12,062 | 0 | 0 | — | 0 | — |
| 1998 | 0 | (s) | 9 | 1,455 | 919 | 1 | 73 | 9,337 | 1 | 11,795 | 0 | 0 | — | 0 | — |
| 1999 | 0 | (s) | 11 | 1,589 | 1,057 | 3 | 74 | 9,559 | 4 | 12,296 | 0 | 0 | — | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | |
| 1960 | 0.0 | 0.2 | 0.1 | 4.9 | 0.2 | (s) | 0.6 | 31.2 | 24.1 | 61.1 | 0.0 | 0.0 | 61.3 | 0.0 | 61.3 |
| 1965 | 0.0 | 0.1 | 0.3 | 2.3 | 0.3 | (s) | 0.4 | 33.9 | 16.6 | 53.8 | 0.0 | 0.0 | 53.9 | 0.0 | 53.9 |
| 1970 | 0.0 | (s) | 0.7 | 3.5 | 0.8 | 0.1 | 0.5 | 41.9 | 15.8 | 63.3 | 0.0 | 0.0 | 63.3 | 0.0 | 63.3 |
| 1975 | (s) | (s) | 1.4 | 4.6 | 1.5 | 0.1 | 0.3 | 46.9 | 2.1 | 57.0 | 0.0 | 0.0 | 57.0 | 0.0 | 57.0 |
| 1980 | 0.0 | 0.2 | 1.4 | 3.9 | 2.0 | (s) | 0.4 | 43.9 | 0.4 | 52.0 | 0.0 | 0.0 | 52.2 | 0.0 | 52.2 |
| 1985 | 0.0 | 0.1 | 0.2 | 1.9 | 2.8 | 0.1 | 0.4 | 45.2 | 0.0 | 50.5 | e 0.0 | 0.0 | e 50.7 | 0.0 | e 50.7 |
| 1990 | 0.0 | 0.1 | 0.2 | 6.7 | 4.4 | 0.1 | 0.4 | 45.7 | 0.2 | 57.7 | 0.0 | 0.0 | 57.8 | 0.0 | 57.8 |
| 1991 | 0.0 | 0.2 | 0.2 | 7.9 | 3.7 | 0.1 | 0.4 | 45.3 | 0.1 | 57.5 | 0.0 | 0.0 | 57.7 | 0.0 | 57.7 |
| 1992 | 0.0 | 0.4 | 0.2 | 6.6 | 3.1 | 0.1 | 0.4 | 45.7 | 0.4 | 56.4 | 0.0 | 0.0 | 56.8 | 0.0 | 56.8 |
| 1993 | 0.0 | 0.2 | (s) | 7.2 | 3.0 | (s) | 0.4 | 46.4 | 0.1 | 57.2 | 0.0 | 0.0 | 57.4 | 0.0 | 57.4 |
| 1994 | 0.0 | 0.4 | 0.1 | 7.5 | 3.0 | 0.1 | 0.4 | R 44.8 | 0.1 | R 55.9 | 0.0 | 0.0 | R 56.3 | 0.0 | R 56.3 |
| 1995 | 0.0 | 0.6 | 0.1 | 8.0 | 2.8 | (s) | 0.4 | R 46.2 | (s) | R 57.6 | 0.0 | 0.0 | R 58.2 | 0.0 | R 58.2 |
| 1996 | 0.0 | 0.7 | 0.2 | 7.7 | 3.1 | (s) | 0.4 | R 46.7 | (s) | R 58.1 | 0.0 | 0.0 | R 58.9 | 0.0 | R 58.9 |
| 1997 | 0.0 | 0.9 | 0.1 | 11.7 | 4.7 | (s) | 0.4 | R 47.6 | (s) | R 64.5 | 0.0 | 0.0 | R 65.4 | 0.0 | R 65.4 |
| 1998 | 0.0 | 0.4 | (s) | 8.5 | 5.2 | (s) | 0.4 | 48.7 | (s) | 62.8 | 0.0 | 0.0 | 63.2 | 0.0 | 63.2 |
| 1999 | 0.0 | 0.3 | 0.1 | 9.3 | 6.0 | (s) | 0.4 | 49.8 | (s) | 65.6 | 0.0 | 0.0 | 65.9 | 0.0 | 65.9 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 256. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Rhode Island

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 574 | (s) | 714 | 13 | 0 | 727 | 0 | 8 | 0 | 0 | 0 | — |
| 1965 | 403 | (s) | 870 | 16 | 0 | 886 | 0 | 1 | 0 | 0 | 0 | — |
| 1970 | 0 | 2 | 2,990 | 56 | 0 | 3,047 | 0 | 3 | 0 | 0 | 0 | — |
| 1975 | 0 | (s) | 1,542 | 26 | 0 | 1,568 | 0 | 3 | 0 | 0 | 0 | — |
| 1980 | 0 | 2 | 1,634 | 28 | 0 | 1,662 | 0 | 1 | 0 | 0 | 0 | — |
| 1985 | 0 | 3 | 708 | 20 | 0 | 728 | 0 | 421 | 0 | 0 | 0 | — |
| 1990 | 0 | 5 | 340 | 19 | 0 | 358 | 0 | R 21 | 0 | 0 | 0 | — |
| 1991 | 0 | 2 | 123 | 19 | 0 | 142 | 0 | R 359 | 0 | 0 | 0 | — |
| 1992 | 0 | (s) | 162 | 17 | 0 | 178 | 0 | R 644 | 0 | 0 | 0 | — |
| 1993 | 0 | (s) | 55 | 18 | 0 | 72 | 0 | R 847 | 0 | 0 | 0 | — |
| 1994 | 0 | 1 | 65 | 16 | 0 | 82 | 0 | R 842 | 0 | 0 | 0 | — |
| 1995 | 0 | 5 | 63 | 20 | 0 | 83 | 0 | R 888 | 0 | 0 | 0 | — |
| 1996 | 0 | 25 | 0 | 75 | 0 | 75 | 0 | R 930 | 0 | 0 | 0 | — |
| 1997 | 0 | 27 | 0 | 27 | 0 | 27 | 0 | R 1,071 | 0 | 0 | 0 | — |
| 1998 | 0 | 16 | 0 | 20 | 0 | 20 | 0 | 923 | 0 | 0 | 0 | — |
| 1999 | 0 | 0 | 0 | 19 | 0 | 19 | 0 | 956 | 0 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 16.1 | 0.4 | 4.5 | 0.1 | 0.0 | 4.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 21.2 |
| 1965 | 11.1 | 0.5 | 5.5 | 0.1 | 0.0 | 5.6 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 17.1 |
| 1970 | 0.0 | 2.4 | 18.8 | 0.3 | 0.0 | 19.1 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 21.5 |
| 1975 | 0.0 | (s) | 9.7 | 0.2 | 0.0 | 9.8 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 9.9 |
| 1980 | 0.0 | 1.7 | 10.3 | 0.2 | 0.0 | 10.4 | 0.0 | (s) | 0.0 | 0.0 | 0.0 | 12.2 |
| 1985 | 0.0 | 2.6 | 4.4 | 0.1 | 0.0 | 4.6 | 0.0 | 4.4 | 0.0 | 0.0 | 0.0 | 11.6 |
| 1990 | 0.0 | 5.7 | 2.1 | 0.1 | 0.0 | 2.2 | 0.0 | R 0.2 | 0.0 | 0.0 | 0.0 | R 8.3 |
| 1991 | 0.0 | 1.7 | 0.8 | 0.1 | 0.0 | 0.9 | 0.0 | R 3.7 | 0.0 | 0.0 | 0.0 | R 8.2 |
| 1992 | 0.0 | 0.5 | 1.0 | 0.1 | 0.0 | 1.1 | 0.0 | R 6.7 | 0.0 | 0.0 | 0.0 | R 10.9 |
| 1993 | 0.0 | 0.4 | 0.3 | 0.1 | 0.0 | 0.4 | 0.0 | R 8.7 | 0.0 | 0.0 | 0.0 | 11.9 |
| 1994 | 0.0 | 0.6 | 0.4 | 0.1 | 0.0 | 0.5 | 0.0 | R 8.7 | 0.0 | 0.0 | 0.0 | R 13.2 |
| 1995 | 0.0 | 5.1 | 0.4 | 0.1 | 0.0 | 0.5 | 0.0 | R 9.2 | 0.0 | 0.0 | 0.0 | R 18.8 |
| 1996 | 0.0 | 25.8 | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | R 9.6 | 0.0 | 0.0 | 0.0 | R 39.9 |
| 1997 | 0.0 | 27.9 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | R 11.1 | 0.0 | 0.0 | 0.0 | R 45.6 |
| 1998 | 0.0 | 16.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 9.5 | 0.0 | 0.0 | 0.0 | 30.6 |
| 1999 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 9.9 | 0.0 | 0.0 | 0.0 | 15.8 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 257. Energy Consumption Estimates by Source, Selected Years 1960-1999, South Carolina

S O U T H   C A R O L I N A

| Year | Coal a (Thousand Short Tons) | Natural Gas b (Billion Cubic Feet) | Asphalt & Road Oil a | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | Kerosene a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Other a,c | Total | Nuclear Electric Power (Million kWh) | Hydroelectric Power d (Million kWh) | Wood and Waste | Other a,e | Net Interstate Flow of Electricity/Losses f (Million kWh) | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum — Thousand Barrels | | | | | | | | | | | | | | | | |
| 1960 | 3,718 | 59 | 1,636 | 215 | 5,234 | 3,131 | 4,488 | 1,376 | 375 | 18,094 | 4,732 | 380 | 39,661 | 0 | 3,611 | — | — | 9,266 | — |
| 1965 | 4,760 | 87 | 1,721 | 354 | 4,849 | 2,958 | 3,297 | 2,097 | 351 | 21,430 | 3,916 | 372 | 41,344 | 75 | 3,517 | — | — | 11,622 | — |
| 1970 | 5,817 | 160 | 2,220 | 228 | 9,423 | 3,170 | 2,377 | 2,927 | 386 | 28,756 | 5,335 | 512 | 55,335 | 7 | 2,293 | — | — | 22,290 | — |
| 1975 | 5,842 | 123 | 2,440 | 142 | 8,376 | 2,692 | 1,024 | 3,204 | 461 | 35,429 | 7,666 | 982 | 62,415 | 19,458 | 4,413 | — | — | -18,555 | — |
| 1980 | 9,929 | 142 | 1,535 | 149 | 10,660 | 3,062 | 1,352 | 3,178 | 543 | 35,517 | 7,205 | 3,883 | 67,083 | 17,404 | 3,025 | — | — | -974 | — |
| 1985 | 10,479 | 97 | 1,367 | 136 | 11,731 | 3,184 | 1,484 | 3,161 | 494 | 37,719 | 2,921 | 3,553 | 65,750 | 31,826 | 1,835 | — | — | -9,917 | — |
| 1990 | 11,447 | 130 | 1,983 | 101 | 14,538 | 2,939 | 659 | 2,914 | 556 | 43,264 | 2,450 | 5,444 | 74,848 | 42,881 | R h 2,783 | — | — | R -35,182 | — |
| 1991 | 11,451 | 134 | 1,941 | 180 | 15,289 | 3,442 | 851 | 3,606 | 498 | 42,561 | 2,433 | 7,028 | 77,830 | 43,108 | R 2,541 | — | — | R -34,143 | — |
| 1992 | 11,285 | 138 | 2,067 | 226 | 13,737 | 2,586 | 524 | 3,597 | 507 | 43,441 | 2,394 | 7,908 | 76,988 | 45,537 | R 2,757 | — | — | R -36,777 | — |
| 1993 | 12,914 | 142 | 2,358 | 169 | 13,652 | 2,024 | 760 | 3,660 | 517 | 45,081 | 3,812 | 7,262 | 79,292 | 46,189 | R 2,714 | — | — | R -40,132 | — |
| 1994 | 12,993 | 145 | 1,993 | 114 | 15,516 | 1,451 | 474 | 3,871 | 540 | 45,249 | 2,607 | 7,551 | 79,368 | 44,466 | R 2,414 | — | — | R -35,984 | — |
| 1995 | 12,279 | 152 | 2,641 | 123 | 14,902 | 1,027 | 574 | 3,826 | 531 | 46,973 | 2,689 | 7,355 | 80,641 | 49,173 | R 2,798 | — | — | R -39,456 | — |
| 1996 | 13,852 | 150 | 2,407 | 59 | 15,600 | 1,292 | 673 | R 3,666 | 515 | 47,427 | 3,033 | R 2,685 | R 77,358 | 43,571 | R 2,299 | — | — | R -24,894 | — |
| 1997 | 14,111 | 154 | 3,729 | 64 | 16,354 | 1,328 | 694 | R 6,150 | 544 | 49,468 | 2,643 | R 2,540 | R 83,514 | 44,916 | R 2,086 | — | — | R -27,717 | — |
| 1998 | 14,649 | 157 | 2,536 | 55 | 18,917 | 1,436 | 837 | 4,601 | 570 | 51,216 | 2,339 | 3,429 | 85,935 | 48,759 | 2,580 | — | — | -35,534 | — |
| 1999 | 15,766 | 158 | 2,227 | 100 | 19,043 | 1,536 | 667 | 3,858 | 575 | 52,774 | 2,059 | 3,866 | 86,705 | 50,814 | 691 | — | — | -48,811 | — |
| | | | Trillion Btu | | | | | | | | | | | | | | | | |
| 1960 | 96.4 | 60.6 | 10.9 | 1.1 | 30.5 | 16.8 | 25.4 | 5.5 | 2.3 | 95.0 | 29.7 | 2.2 | 219.5 | 0.0 | 38.8 | 43.1 | 0.0 | 31.6 | 490.0 |
| 1965 | 121.5 | 90.5 | 11.4 | 1.8 | 28.2 | 15.8 | 18.7 | 8.4 | 2.1 | 112.6 | 24.6 | 2.1 | 225.8 | 0.9 | 36.8 | 40.6 | 0.0 | 39.7 | 555.7 |
| 1970 | 140.1 | 164.3 | 14.7 | 1.2 | 54.9 | 17.1 | 13.5 | 11.1 | 2.3 | 151.1 | 33.5 | 2.8 | 302.2 | 0.1 | 24.1 | 41.0 | 0.0 | 76.1 | 747.8 |
| 1975 | 140.2 | 125.9 | 16.2 | 0.7 | 48.8 | 14.5 | 5.8 | 11.9 | 2.8 | 186.1 | 48.2 | 5.5 | 340.5 | 214.3 | 45.9 | 41.9 | 0.0 | -63.3 | 845.4 |
| 1980 | 245.8 | 146.9 | 10.2 | 0.8 | 62.1 | 16.6 | 7.7 | 11.7 | 3.3 | 186.6 | 45.3 | 21.6 | 365.8 | 189.8 | 31.4 | R 36.2 | 0.0 | -3.3 | R 1,012.6 |
| 1985 | 262.7 | 100.2 | 9.1 | 0.7 | 68.3 | 17.2 | 8.4 | 11.4 | 3.0 | 198.1 | 18.4 | 19.8 | 354.4 | 344.1 | 19.2 | 45.8 | 0.0 | -33.8 | R 1,092.5 |
| 1990 | 289.3 | 134.1 | 13.2 | 0.5 | 84.7 | 16.0 | 3.7 | 10.6 | 3.4 | 227.3 | 15.4 | 30.7 | 405.5 | 458.0 | R h 29.0 | R 83.3 | h 0.1 | R -120.0 | R h 1,279.2 |
| 1991 | 290.9 | 137.4 | 12.9 | 0.9 | 89.1 | 18.7 | 4.8 | 13.0 | 3.0 | 223.6 | 15.3 | 39.1 | 420.5 | 463.0 | R 26.5 | R 83.0 | 0.1 | R -116.5 | R 1,304.9 |
| 1992 | 288.3 | 141.8 | 13.7 | 1.1 | 80.0 | 14.1 | 3.0 | 13.0 | 3.1 | 228.2 | 15.1 | 44.1 | 415.4 | 486.2 | R 28.5 | R 84.8 | 0.1 | R -125.5 | R 1,319.7 |
| 1993 | 329.5 | 145.6 | 15.6 | 0.9 | 79.5 | 11.1 | 4.3 | 13.2 | 3.1 | 236.8 | 24.0 | 40.2 | 428.7 | 493.4 | 28.0 | R 85.2 | 0.1 | R -136.9 | R 1,373.6 |
| 1994 | 330.7 | 149.0 | 13.2 | 0.6 | 90.4 | 8.1 | 2.7 | 14.1 | 3.3 | R 236.7 | 16.4 | 41.8 | R 427.2 | 474.7 | 24.9 | R 86.3 | 0.1 | -122.8 | R 1,370.2 |
| 1995 | 314.5 | 156.0 | 17.5 | 0.6 | 86.8 | 5.8 | 3.3 | 13.9 | 3.2 | R 245.0 | 16.9 | 40.8 | R 433.7 | 524.1 | 28.9 | R 82.3 | 0.1 | R -134.6 | R 1,405.0 |
| 1996 | 352.5 | 154.1 | 16.0 | 0.3 | 90.9 | 7.3 | 3.8 | R 13.2 | 3.1 | R 247.4 | 19.1 | R 15.7 | R 416.8 | 462.9 | R 23.8 | R 107.2 | 0.1 | R -84.9 | R 1,432.4 |
| 1997 | 361.6 | 158.7 | 24.7 | 0.3 | 95.3 | 7.5 | 3.9 | R 22.2 | 3.3 | R 257.9 | 16.6 | R 14.8 | R 446.7 | 477.1 | R 21.6 | R 107.9 | 0.1 | R -94.6 | R 1,479.1 |
| 1998 | 374.0 | 162.0 | 16.8 | 0.3 | 110.2 | 8.1 | 4.7 | 16.6 | 3.5 | 266.9 | 14.7 | 20.2 | 462.1 | 518.0 | 26.7 | 76.0 | 0.1 | -121.2 | 1,497.6 |
| 1999 | 402.6 | 162.5 | 14.8 | 0.5 | 110.9 | 8.7 | 3.8 | 13.9 | 3.5 | 275.0 | 12.9 | 22.8 | 466.9 | 539.8 | 7.1 | 80.4 | 0.2 | -166.5 | 1,493.0 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels.

c "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

d If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

e "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

f Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

g From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

h There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 258. Residential Energy Consumption Estimates, Selected Years 1960-1999, South Carolina

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum Distillate Fuel [a] | Kerosene [a] | LPG [a] | Total | Wood Thousand Cords | Geothermal | Solar [c] | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 117 | 7 | 1,595 | 3,475 | 926 | 5,996 | 1,269 | — | — | 3,272 | — | 8,139 | — |
| 1965 | 80 | 12 | 1,178 | 2,606 | 1,419 | 5,203 | 852 | — | — | 4,371 | — | 10,437 | — |
| 1970 | 86 | 19 | 2,400 | 2,011 | 1,778 | 6,188 | 489 | — | — | 7,347 | — | 17,805 | — |
| 1975 | 84 | 18 | 1,695 | 858 | 1,750 | 4,304 | 492 | — | — | 9,837 | — | 23,728 | — |
| 1980 | 69 | 19 | 1,580 | 1,200 | 1,510 | 4,290 | R 413 | — | — | 12,580 | — | 30,590 | — |
| 1985 | 23 | 16 | 1,153 | 1,211 | 1,859 | 4,223 | 647 | — | — | 14,661 | — | 34,445 | — |
| 1990 | 2 | 18 | 1,010 | 550 | 1,682 | 3,241 | 390 | — | — | 18,258 | — | R 39,941 | — |
| 1991 | 8 | 20 | 998 | 731 | 1,970 | 3,698 | 411 | — | — | 18,707 | — | R 40,667 | — |
| 1992 | 11 | 22 | 690 | 441 | 2,117 | 3,248 | 432 | — | — | 18,940 | — | R 40,394 | — |
| 1993 | 41 | 24 | 833 | 645 | 2,141 | 3,619 | R 470 | — | — | 20,687 | — | R 43,694 | — |
| 1994 | 23 | 23 | 668 | 372 | 2,185 | 3,224 | 461 | — | — | 19,903 | — | R 41,536 | — |
| 1995 | 7 | 25 | 670 | 470 | 2,106 | 3,246 | R 511 | — | — | 21,392 | — | R 44,602 | — |
| 1996 | 7 | 29 | 722 | 561 | R 1,951 | R 3,235 | 511 | — | — | 22,514 | — | R 46,918 | — |
| 1997 | (s) | 26 | 552 | 610 | R 1,988 | R 3,151 | R 363 | — | — | 21,611 | — | R 44,954 | — |
| 1998 | 8 | 25 | 485 | 680 | 1,683 | 2,847 | 320 | — | — | 23,558 | — | 48,666 | — |
| 1999 | 83 | 26 | 506 | 553 | 1,980 | 3,038 | 343 | — | — | 23,699 | — | 46,433 | — |
| | | | | | | Trillion Btu | | | | | | | |
| 1960 | 2.9 | 7.1 | 9.3 | 19.7 | 3.7 | 32.7 | 25.4 | 0.0 | 0.0 | 11.2 | 79.2 | 27.8 | 107.0 |
| 1965 | 2.0 | 12.4 | 6.9 | 14.8 | 5.7 | 27.3 | 17.0 | 0.0 | 0.0 | 14.9 | 73.7 | 35.6 | 109.3 |
| 1970 | 2.0 | 19.5 | 14.0 | 11.4 | 6.7 | 32.1 | 9.8 | 0.0 | 0.0 | 25.1 | 88.5 | 60.7 | 149.2 |
| 1975 | 2.0 | 18.6 | 9.9 | 4.9 | 6.5 | 21.2 | 9.8 | 0.0 | 0.0 | 33.6 | 85.3 | 81.0 | 166.2 |
| 1980 | 1.7 | 19.5 | 9.2 | 6.8 | 5.5 | 21.6 | R 8.3 | 0.0 | 0.0 | 42.9 | 93.9 | 104.4 | 198.3 |
| 1985 | 0.6 | 16.9 | 6.7 | 6.9 | 6.7 | 20.3 | 12.9 | 0.0 | 0.0 | 50.0 | 100.7 | 117.5 | 218.2 |
| 1990 | 0.1 | 18.9 | 5.9 | 3.1 | 6.1 | 15.1 | 7.8 | e 0.1 | e (s) | 62.3 | e 104.3 | 136.3 | e 240.5 |
| 1991 | 0.2 | 20.1 | 5.8 | 4.1 | 7.1 | 17.1 | 8.2 | 0.1 | (s) | 63.8 | 109.6 | R 138.8 | R 248.3 |
| 1992 | 0.3 | 23.0 | 4.0 | 2.5 | 7.7 | 14.2 | 8.6 | 0.1 | (s) | 64.6 | 110.8 | R 137.8 | R 248.7 |
| 1993 | 1.0 | 25.1 | 4.9 | 3.7 | 7.7 | 16.2 | 9.4 | 0.1 | (s) | 70.6 | 122.4 | 149.1 | 271.5 |
| 1994 | 0.6 | 24.2 | 3.9 | 2.1 | 7.9 | 13.9 | 9.2 | 0.1 | (s) | 67.9 | 116.0 | 141.7 | 257.7 |
| 1995 | 0.2 | 25.8 | 3.9 | 2.7 | 7.6 | 14.2 | 10.2 | 0.1 | (s) | 73.0 | R 123.5 | R 152.2 | R 275.7 |
| 1996 | 0.2 | 30.3 | 4.2 | 3.2 | R 7.1 | R 14.4 | 10.2 | 0.1 | (s) | 76.8 | R 132.0 | R 160.1 | R 292.1 |
| 1997 | (s) | 26.5 | 3.2 | 3.5 | R 7.2 | R 13.9 | R 7.3 | 0.1 | (s) | 73.7 | R 121.6 | R 153.4 | R 274.9 |
| 1998 | 0.2 | 26.3 | 2.8 | 3.9 | 6.1 | 12.8 | 6.4 | 0.1 | (s) | 80.4 | 126.2 | 166.0 | 292.2 |
| 1999 | 2.0 | 26.5 | 2.9 | 3.1 | 7.2 | 13.2 | 6.9 | 0.1 | (s) | 80.9 | 129.6 | 158.4 | 288.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 259. Commercial Energy Consumption Estimates, Selected Years 1960-1999, South Carolina

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 217 | 5 | 474 | 93 | 163 | 275 | 176 | 1,182 | 24 | — | 1,957 | — | 4,867 | — |
| 1965 | 148 | 7 | 350 | 70 | 250 | 301 | 121 | 1,092 | 16 | — | 2,531 | — | 6,043 | — |
| 1970 | 160 | 14 | 714 | 54 | 314 | 204 | 80 | 1,366 | 9 | — | 4,237 | — | 10,267 | — |
| 1975 | 157 | 17 | 504 | 23 | 309 | 225 | 160 | 1,221 | 9 | — | 7,121 | — | 17,177 | — |
| 1980 | 128 | 23 | 481 | 25 | 266 | 240 | 35 | 1,047 | 10 | — | 8,705 | — | 21,168 | — |
| 1985 | 42 | 15 | 841 | 48 | 328 | 230 | 80 | 1,527 | R 17 | — | 9,778 | — | 22,973 | — |
| 1990 | 4 | 15 | 607 | 12 | 297 | 256 | 17 | 1,189 | R 25 | — | 12,693 | — | R 27,767 | — |
| 1991 | 14 | 16 | 523 | 12 | 348 | 119 | 25 | 1,026 | R 26 | — | 13,002 | — | R 28,265 | — |
| 1992 | 20 | 17 | 671 | 14 | 374 | 103 | 53 | 1,214 | R 28 | — | 13,156 | — | R 28,060 | — |
| 1993 | 68 | 17 | 849 | 20 | 378 | 31 | 28 | 1,306 | 38 | — | 13,979 | — | R 29,526 | — |
| 1994 | 38 | 18 | 651 | 26 | 386 | 31 | 66 | 1,161 | 39 | — | 14,195 | — | R 29,623 | — |
| 1995 | 10 | 19 | 970 | 26 | 372 | 32 | 39 | 1,438 | 39 | — | 14,863 | — | R 30,989 | — |
| 1996 | 12 | 20 | 978 | 23 | R 344 | 32 | 38 | R 1,415 | 42 | — | 15,388 | — | R 32,069 | — |
| 1997 | 1 | 20 | 1,083 | 16 | R 351 | 31 | 10 | R 1,491 | R 40 | — | 15,645 | — | R 32,544 | — |
| 1998 | 15 | 20 | 1,532 | 47 | 297 | 58 | 7 | 1,941 | 40 | — | 17,290 | — | 35,718 | — |
| 1999 | 154 | 21 | 1,049 | 30 | 349 | 34 | 12 | 1,474 | 48 | — | 17,488 | — | 34,264 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Motor Gasoline | Residual Fuel | Total | Wood | Geothermal | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5.4 | 4.8 | 2.8 | 0.5 | 0.7 | 1.4 | 1.1 | 6.5 | 0.5 | 0.0 | 6.7 | 23.9 | 16.6 | 40.5 |
| 1965 | 3.7 | 7.3 | 2.0 | 0.4 | 1.0 | 1.6 | 0.8 | 5.8 | 0.3 | 0.0 | 8.6 | 25.7 | 20.6 | 46.4 |
| 1970 | 3.8 | 14.2 | 4.2 | 0.3 | 1.2 | 1.1 | 0.5 | 7.2 | 0.2 | 0.0 | 14.5 | 39.9 | 35.0 | 74.9 |
| 1975 | 3.7 | 17.6 | 2.9 | 0.1 | 1.1 | 1.2 | 1.0 | 6.4 | 0.2 | 0.0 | 24.3 | 52.2 | 58.6 | 110.8 |
| 1980 | 3.1 | 23.6 | 2.8 | 0.1 | 1.0 | 1.3 | 0.2 | 5.4 | 0.2 | 0.0 | 29.7 | 62.1 | 72.2 | 134.3 |
| 1985 | 1.1 | 15.7 | 4.9 | 0.3 | 1.2 | 1.2 | 0.5 | 8.1 | R 0.3 | 0.0 | 33.4 | R 58.5 | 78.4 | R 136.9 |
| 1990 | 0.1 | 15.8 | 3.5 | 0.1 | 1.1 | 1.3 | 0.1 | 6.1 | R 0.5 | e 0.0 | 43.3 | R e 65.9 | 94.7 | R e 160.6 |
| 1991 | 0.4 | 16.2 | 3.0 | 0.1 | 1.3 | 0.6 | 0.2 | 5.1 | R 0.5 | 0.0 | 44.4 | R 66.6 | R 96.4 | R 163.1 |
| 1992 | 0.5 | 17.1 | 3.9 | 0.1 | 1.4 | 0.5 | 0.3 | 6.2 | R 0.6 | 0.0 | 44.9 | R 69.3 | R 95.7 | R 165.0 |
| 1993 | 1.7 | 17.5 | 4.9 | 0.1 | 1.4 | 0.2 | 0.2 | 6.8 | 0.8 | 0.0 | 47.7 | 74.4 | R 100.7 | 175.2 |
| 1994 | 0.9 | 18.4 | 3.8 | 0.1 | 1.4 | 0.2 | 0.4 | 5.9 | 0.8 | 0.0 | 48.4 | 74.5 | 101.1 | 175.6 |
| 1995 | 0.3 | 19.4 | 5.7 | 0.1 | 1.3 | 0.2 | 0.2 | 7.6 | 0.8 | 0.0 | 50.7 | 78.7 | 105.7 | R 184.4 |
| 1996 | 0.3 | 20.9 | 5.7 | 0.1 | 1.2 | 0.2 | 0.2 | R 7.5 | 0.8 | 0.0 | 52.5 | R 82.1 | R 109.4 | R 191.5 |
| 1997 | (s) | 20.2 | 6.3 | 0.1 | R 1.3 | 0.2 | 0.1 | R 7.9 | R 0.8 | 0.0 | 53.4 | R 82.3 | R 111.0 | R 193.3 |
| 1998 | 0.4 | 20.5 | 8.9 | 0.3 | 1.1 | 0.3 | (s) | 10.6 | 0.8 | 0.0 | 59.0 | 91.3 | 121.9 | 213.1 |
| 1999 | 3.8 | 21.2 | 6.1 | 0.2 | 1.3 | 0.2 | 0.1 | 7.8 | 1.0 | 0.0 | 59.7 | 93.4 | 116.9 | 210.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 260.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, South Carolina**

| | | | Petroleum | | | | | | | | | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal | Natural Gas [a] | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kero-sene [b] | LPG [b] | Lubri-cants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 1,758 | 23 | 1,636 | 1,959 | 920 | 273 | 86 | 614 | 3,392 | 380 | 9,261 | 97 | — | — | 6,234 | — | 15,506 | — |
| 1965 | 1,835 | 47 | 1,721 | 1,748 | 621 | 415 | 108 | 517 | 2,438 | 372 | 7,941 | 79 | — | — | 7,450 | — | 17,789 | — |
| 1970 | 1,861 | 79 | 2,220 | 2,655 | 313 | 775 | 149 | 332 | 1,608 | 512 | 8,564 | 37 | — | — | 10,110 | — | 24,499 | — |
| 1975 | 1,200 | 70 | 2,440 | 2,040 | 143 | 1,066 | 248 | 209 | 2,687 | 982 | 9,813 | 48 | — | 70 | 12,766 | — | 30,793 | — |
| 1980 | 1,805 | 92 | 1,535 | 1,875 | 127 | 1,368 | 282 | 96 | 4,245 | 3,883 | 13,412 | 49 | — | — | 15,979 | — | 38,855 | — |
| 1985 | 2,525 | 63 | 1,367 | 1,699 | 225 | 834 | 257 | 702 | 2,233 | 3,553 | 10,870 | 49 | — | — | 21,829 | — | 51,286 | — |
| 1990 | 2,310 | 87 | 1,983 | 1,950 | 97 | 849 | 289 | 703 | 1,915 | 5,444 | 13,230 | R f 54 | — | — | 24,701 | — | R 54,036 | — |
| 1991 | 2,212 | 86 | 1,941 | 2,102 | 109 | 1,194 | 259 | 672 | 1,606 | 7,028 | 14,910 | R 44 | — | — | 25,361 | — | R 55,133 | — |
| 1992 | 2,177 | 94 | 2,067 | 1,779 | 69 | 1,020 | 264 | 716 | 1,793 | 7,908 | 15,616 | R 47 | — | — | 26,305 | — | R 56,102 | — |
| 1993 | 2,395 | 96 | 2,358 | 1,564 | 94 | 1,058 | 269 | 387 | 3,089 | 7,262 | 16,081 | R 63 | — | — | 26,867 | — | R 56,747 | — |
| 1994 | 2,334 | 98 | 1,993 | 1,339 | 76 | 1,159 | 281 | 414 | 2,456 | 7,551 | 15,269 | R 67 | — | — | 27,760 | — | R 57,933 | — |
| 1995 | 2,188 | 98 | 2,641 | 1,843 | 77 | 1,272 | 276 | 426 | 2,143 | 7,355 | 16,033 | R 63 | — | — | 28,819 | — | R 60,085 | — |
| 1996 | 2,000 | 95 | 2,407 | 2,155 | 88 | R 1,326 | 268 | 452 | 2,284 | R 2,685 | R 11,665 | R 68 | — | — | 29,185 | — | R 60,821 | — |
| 1997 | 2,014 | 103 | 3,729 | 1,998 | 68 | R 3,748 | 283 | 478 | 2,015 | R 2,540 | R 14,860 | R 39 | — | — | 31,278 | — | R 65,061 | — |
| 1998 | 1,962 | 102 | 2,536 | 2,069 | 110 | 2,571 | 296 | 388 | 1,690 | 3,429 | 13,089 | 66 | — | — | 31,606 | — | 65,291 | — |
| 1999 | 1,863 | 103 | 2,227 | 2,202 | 84 | 1,502 | 299 | 346 | 1,345 | 3,866 | 11,871 | 41 | — | — | 32,117 | — | 62,927 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt and Road Oil | Distillate Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Hydro-electric | Wood and Waste | Other | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 44.7 | 23.3 | 10.9 | 11.4 | 5.2 | 1.1 | 0.5 | 3.2 | 21.3 | 2.2 | 55.9 | 1.0 | 17.3 | 0.0 | 21.3 | 163.4 | 52.9 | 216.3 |
| 1965 | 46.2 | 48.7 | 11.4 | 10.2 | 3.5 | 1.7 | 0.7 | 2.7 | 15.3 | 2.1 | 47.6 | 0.8 | 23.2 | 0.0 | 25.4 | 192.0 | 60.7 | 252.7 |
| 1970 | 44.2 | 80.9 | 14.7 | 15.5 | 1.8 | 2.9 | 0.9 | 1.7 | 10.1 | 2.8 | 50.5 | 0.4 | 31.0 | 0.0 | 34.5 | 241.5 | 83.6 | 325.1 |
| 1975 | 28.2 | 72.0 | 16.2 | 11.9 | 0.8 | 4.0 | 1.5 | 1.1 | 16.9 | 5.5 | 57.8 | 0.5 | 31.9 | 0.0 | 43.6 | 233.8 | 105.1 | 338.9 |
| 1980 | 44.0 | 95.1 | 10.2 | 10.9 | 0.7 | 5.0 | 1.7 | 0.5 | 26.7 | 21.6 | 77.4 | 0.5 | R 27.7 | 0.0 | 54.5 | R 299.3 | 132.6 | R 431.9 |
| 1985 | 62.8 | 64.8 | 9.1 | 9.9 | 1.3 | 3.0 | 1.6 | 3.7 | 14.0 | 19.8 | 62.3 | 0.5 | R 32.5 | 0.0 | 74.5 | R 297.4 | 175.0 | R 472.4 |
| 1990 | 58.0 | 89.3 | 13.2 | 11.4 | 0.5 | 3.1 | 1.8 | 3.7 | 12.0 | 30.7 | 76.3 | R f 0.6 | R 75.0 | f 0.0 | 84.3 | R f 383.5 | R 184.4 | R f 567.9 |
| 1991 | 55.8 | 88.1 | 12.9 | 12.2 | 0.6 | 4.3 | 1.6 | 3.5 | 10.1 | 39.1 | 84.4 | R 0.5 | R 74.2 | 0.0 | 86.5 | R 389.5 | R 188.1 | R 577.6 |
| 1992 | 54.8 | 96.9 | 13.7 | 10.4 | 0.4 | 3.7 | 1.6 | 3.8 | 11.3 | 44.1 | 88.9 | R 0.5 | R 75.6 | 0.0 | 89.8 | R 406.5 | R 191.4 | R 597.9 |
| 1993 | 60.3 | 98.3 | 15.6 | 9.1 | 0.5 | 3.8 | 1.6 | 2.0 | 19.4 | 40.2 | 92.4 | 0.6 | R 75.0 | 0.0 | 91.7 | R 418.3 | R 193.6 | R 612.0 |
| 1994 | 58.5 | 100.5 | 13.2 | 7.8 | 0.4 | 4.2 | 1.7 | 2.2 | 15.4 | 41.8 | 86.8 | 0.7 | R 76.3 | 0.0 | 94.7 | R 417.6 | 197.7 | R 615.2 |
| 1995 | 55.1 | 101.0 | 17.5 | 10.7 | 0.4 | 4.6 | 1.7 | 2.2 | 13.5 | 40.8 | 91.5 | 0.7 | R 71.3 | 0.0 | 98.3 | R 417.9 | R 205.0 | R 622.9 |
| 1996 | 50.1 | 98.4 | 16.0 | 12.6 | 0.5 | R 4.8 | 1.6 | 2.4 | 14.4 | R 15.7 | R 67.9 | R 0.7 | R 96.2 | 0.0 | 99.6 | R 412.8 | R 207.5 | R 620.3 |
| 1997 | 50.5 | 106.1 | 24.7 | 11.6 | 0.4 | R 13.6 | 1.7 | 2.5 | 12.7 | R 14.8 | R 82.0 | R 0.4 | R 99.8 | 0.0 | 106.7 | R 445.7 | R 222.0 | R 667.7 |
| 1998 | 49.1 | 105.8 | 16.8 | 12.1 | 0.6 | 9.3 | 1.8 | 2.0 | 10.6 | 20.2 | 73.4 | 0.7 | 68.8 | 0.0 | 107.8 | 405.7 | 222.8 | 628.4 |
| 1999 | 46.6 | 105.9 | 14.8 | 12.8 | 0.5 | 5.4 | 1.8 | 1.8 | 8.5 | 22.8 | 68.4 | 0.4 | 72.6 | 0.0 | 109.6 | 403.5 | 214.7 | 618.2 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours.  — =Not applicable.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 261. Transportation Energy Consumption Estimates, Selected Years 1960-1999, South Carolina**

| | | | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | | Electrical System Energy Losses [d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal [a] | Natural Gas [b] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | Net Energy | | Total [c] |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 30 | 1 | 215 | 1,196 | 3,131 | 13 | 289 | 17,205 | 1,139 | 23,188 | 0 | 0 | — | 0 | — |
| 1965 | 6 | 2 | 354 | 1,556 | 2,958 | 12 | 243 | 20,612 | 1,313 | 27,048 | 0 | 0 | — | 0 | — |
| 1970 | 3 | 3 | 228 | 2,899 | 3,170 | 60 | 237 | 28,220 | 1,605 | 36,420 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 3 | 142 | 4,019 | 2,692 | 79 | 213 | 34,995 | 419 | 42,560 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 3 | 149 | 6,156 | 3,062 | 33 | 261 | 35,181 | 844 | 45,686 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 2 | 136 | 7,855 | 3,184 | 140 | 237 | 36,787 | 606 | 48,945 | R e 1 | 0 | — | 0 | — |
| 1990 | 0 | 3 | 101 | 10,855 | 2,939 | 87 | 267 | 42,305 | 509 | 57,063 | R 148 | 0 | — | 0 | — |
| 1991 | 0 | 3 | 180 | 11,535 | 3,442 | 95 | 239 | 41,770 | 791 | 58,052 | R (s) | 0 | — | 0 | — |
| 1992 | 0 | 3 | 226 | 10,454 | 2,586 | 87 | 244 | 42,622 | 534 | 56,751 | 0 | 0 | — | 0 | — |
| 1993 | 0 | 3 | 169 | 10,266 | 2,024 | 83 | 248 | 44,663 | 634 | 58,087 | 0 | 0 | — | 0 | — |
| 1994 | 0 | 3 | 114 | 12,590 | 1,451 | 142 | 259 | 44,804 | 76 | 59,437 | 0 | 0 | — | 0 | — |
| 1995 | 0 | 3 | 123 | 11,219 | 1,027 | 77 | 255 | 46,515 | 439 | 59,655 | 0 | 0 | — | 0 | — |
| 1996 | 0 | 3 | 59 | 11,478 | 1,292 | R 44 | 247 | 46,944 | 673 | 60,738 | 0 | 0 | — | 0 | — |
| 1997 | 0 | 3 | 64 | 12,320 | 1,328 | R 62 | 261 | 48,959 | 561 | R 63,555 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 3 | 55 | 14,220 | 1,436 | 50 | 273 | 50,770 | 445 | 67,249 | 0 | 0 | — | 0 | — |
| 1999 | 0 | 4 | 100 | 14,729 | 1,536 | 26 | 276 | 52,393 | 453 | 69,514 | 0 | 0 | — | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | | | | |
| 1960 | 0.8 | 1.3 | 1.1 | 7.0 | 16.8 | 0.1 | 1.8 | 90.4 | 7.2 | 124.2 | 0.0 | 0.0 | 126.2 | 0.0 | 126.2 |
| 1965 | 0.1 | 2.4 | 1.8 | 9.1 | 15.8 | (s) | 1.5 | 108.3 | 8.3 | 144.8 | 0.0 | 0.0 | 147.3 | 0.0 | 147.3 |
| 1970 | 0.1 | 3.4 | 1.2 | 16.9 | 17.1 | 0.2 | 1.4 | 148.2 | 10.1 | 195.2 | 0.0 | 0.0 | 198.6 | 0.0 | 198.6 |
| 1975 | (s) | 2.7 | 0.7 | 23.4 | 14.5 | 0.1 | 1.3 | 183.8 | 2.6 | 226.7 | 0.0 | 0.0 | 229.4 | 0.0 | 229.4 |
| 1980 | 0.0 | 3.1 | 0.8 | 35.9 | 16.6 | 0.1 | 1.6 | 184.8 | 5.3 | 245.0 | 0.0 | 0.0 | 248.1 | 0.0 | 248.1 |
| 1985 | 0.0 | 2.3 | 0.7 | 45.8 | 17.2 | 0.5 | 1.4 | 193.2 | 3.8 | 262.7 | R e (s) | 0.0 | e 265.0 | 0.0 | e 265.0 |
| 1990 | 0.0 | 2.9 | 0.5 | 63.2 | 16.0 | 0.3 | 1.6 | 222.2 | 3.2 | 307.2 | R 0.5 | 0.0 | 310.1 | 0.0 | 310.1 |
| 1991 | 0.0 | 2.9 | 0.9 | 67.2 | 18.7 | 0.3 | 1.4 | 219.4 | 5.0 | 313.0 | R (s) | 0.0 | 315.9 | 0.0 | 315.9 |
| 1992 | 0.0 | 3.0 | 1.1 | 60.9 | 14.1 | 0.3 | 1.5 | 223.9 | 3.4 | 305.2 | 0.0 | 0.0 | 308.2 | 0.0 | 308.2 |
| 1993 | 0.0 | 2.8 | 0.9 | 59.8 | 11.1 | 0.3 | 1.5 | 234.6 | 4.0 | 312.1 | 0.0 | 0.0 | 315.0 | 0.0 | 315.0 |
| 1994 | 0.0 | 2.7 | 0.6 | 73.3 | 8.1 | 0.5 | 1.6 | R 234.3 | 0.5 | R 318.9 | 0.0 | 0.0 | R 321.6 | 0.0 | R 321.6 |
| 1995 | 0.0 | 3.0 | 0.6 | 65.4 | 5.8 | 0.3 | 1.5 | R 242.6 | 2.8 | R 318.9 | 0.0 | 0.0 | R 322.0 | 0.0 | R 322.0 |
| 1996 | 0.0 | 3.2 | 0.3 | 66.9 | 7.3 | 0.2 | 1.5 | R 244.9 | 4.2 | R 325.2 | 0.0 | 0.0 | R 328.5 | 0.0 | R 328.5 |
| 1997 | 0.0 | 3.0 | 0.3 | 71.8 | 7.5 | R 0.2 | 1.6 | R 255.2 | 3.5 | R 340.2 | 0.0 | 0.0 | R 343.2 | 0.0 | R 343.2 |
| 1998 | 0.0 | 3.3 | 0.3 | 82.8 | 8.1 | 0.2 | 1.7 | 264.6 | 2.8 | 360.5 | 0.0 | 0.0 | 363.8 | 0.0 | 363.8 |
| 1999 | 0.0 | 3.7 | 0.5 | 85.8 | 8.7 | 0.1 | 1.7 | 273.0 | 2.8 | 372.7 | 0.0 | 0.0 | 376.4 | 0.0 | 376.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 262. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, South Carolina

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 1,596 | 23 | 24 | 9 | 0 | 33 | 0 | 3,513 | 0 | 0 | 0 | — |
| 1965 | 2,690 | 19 | 44 | 16 | 0 | 60 | 75 | 3,438 | 0 | 0 | 0 | — |
| 1970 | 3,708 | 45 | 2,042 | 756 | 0 | 2,798 | 7 | 2,256 | 0 | 0 | 0 | — |
| 1975 | 4,401 | 15 | 4,400 | 118 | 0 | 4,517 | 19,458 | 4,366 | 0 | 0 | 0 | — |
| 1980 | 7,927 | 5 | 2,080 | 567 | 0 | 2,647 | 17,404 | 2,976 | 0 | 0 | 0 | — |
| 1985 | 7,888 | (s) | 1 | 183 | 0 | 184 | 31,826 | 1,786 | 0 | 0 | 0 | — |
| 1990 | 9,131 | 7 | 8 | 117 | 0 | 125 | 42,881 | 2,729 | 0 | 0 | 0 | — |
| 1991 | 9,218 | 10 | 11 | 132 | 0 | 144 | 43,108 | 2,497 | 0 | 0 | 0 | — |
| 1992 | 9,078 | 2 | 15 | 144 | 0 | 159 | 45,537 | 2,710 | 0 | 0 | 0 | — |
| 1993 | 10,410 | 2 | 60 | 139 | 0 | 199 | 46,189 | 2,651 | 0 | 0 | 0 | — |
| 1994 | 10,597 | 3 | 9 | 268 | 0 | 277 | 44,466 | 2,347 | 0 | 0 | 0 | — |
| 1995 | 10,074 | 7 | 68 | 200 | 0 | 268 | 49,173 | 2,734 | 0 | 0 | 0 | — |
| 1996 | 11,832 | 1 | 39 | 267 | 0 | 306 | 43,571 | 2,231 | 0 | 0 | 0 | — |
| 1997 | 12,096 | 3 | 56 | 401 | 0 | 457 | 44,916 | 2,047 | 0 | 0 | 0 | — |
| 1998 | 12,664 | 6 | 198 | 611 | 0 | 809 | 48,759 | 2,513 | 0 | 0 | 0 | — |
| 1999 | 13,666 | 5 | 250 | 558 | 0 | 807 | 50,814 | 650 | 0 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 42.7 | 24.1 | 0.2 | 0.1 | 0.0 | 0.2 | 0.0 | 37.8 | 0.0 | 0.0 | 0.0 | 104.8 |
| 1965 | 69.5 | 19.6 | 0.3 | 0.1 | 0.0 | 0.4 | 0.9 | 35.9 | 0.0 | 0.0 | 0.0 | 126.2 |
| 1970 | 90.0 | 46.3 | 12.8 | 4.4 | 0.0 | 17.2 | 0.1 | 23.7 | 0.0 | 0.0 | 0.0 | 177.3 |
| 1975 | 106.3 | 15.0 | 27.7 | 0.7 | 0.0 | 28.3 | 214.3 | 45.4 | 0.0 | 0.0 | 0.0 | 409.4 |
| 1980 | 196.9 | 5.6 | 13.1 | 3.3 | 0.0 | 16.4 | 189.8 | 30.9 | 0.0 | 0.0 | 0.0 | 439.6 |
| 1985 | 198.2 | 0.5 | (s) | 1.1 | 0.0 | 1.1 | 344.1 | 18.7 | 0.0 | 0.0 | 0.0 | 562.6 |
| 1990 | 231.1 | 7.1 | (s) | 0.7 | 0.0 | 0.7 | 458.0 | 28.4 | 0.0 | 0.0 | 0.0 | 725.3 |
| 1991 | 234.6 | 10.1 | 0.1 | 0.8 | 0.0 | 0.8 | 463.0 | 26.1 | 0.0 | 0.0 | 0.0 | 734.5 |
| 1992 | 232.7 | 1.8 | 0.1 | 0.8 | 0.0 | 0.9 | 486.2 | 28.0 | 0.0 | 0.0 | 0.0 | 749.7 |
| 1993 | 266.5 | 1.9 | 0.4 | 0.8 | 0.0 | 1.2 | 493.4 | 27.3 | 0.0 | 0.0 | 0.0 | 790.3 |
| 1994 | 270.7 | 3.1 | 0.1 | 1.6 | 0.0 | 1.6 | 474.7 | 24.2 | 0.0 | 0.0 | 0.0 | 774.3 |
| 1995 | 258.9 | 6.8 | 0.4 | 1.2 | 0.0 | 1.6 | 524.1 | 28.2 | 0.0 | 0.0 | 0.0 | 819.6 |
| 1996 | 301.9 | 1.2 | 0.2 | 1.6 | 0.0 | 1.8 | 462.9 | 23.1 | 0.0 | 0.0 | 0.0 | 790.9 |
| 1997 | 311.0 | 2.8 | 0.4 | 2.3 | 0.0 | 2.7 | 477.1 | R 21.2 | 0.0 | 0.0 | 0.0 | R 814.8 |
| 1998 | 324.3 | 6.0 | 1.2 | 3.6 | 0.0 | 4.8 | 518.0 | 26.0 | 0.0 | 0.0 | 0.0 | 879.1 |
| 1999 | 350.1 | 5.3 | 1.6 | 3.2 | 0.0 | 4.8 | 539.8 | 6.7 | 0.0 | 0.0 | 0.0 | 906.7 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 263. Energy Consumption Estimates by Source, Selected Years 1960-1999, South Dakota

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Thousand Barrels | | | | | | Million kWh | | | | | |
| 1960 | 374 | 25 | 724 | 106 | 2,941 | 1,145 | 975 | 1,370 | 193 | 8,561 | 102 | 0 | 16,118 | 0 | 1,156 | — | — | -979 | — |
| 1965 | 310 | 27 | 588 | 128 | 3,766 | 1,111 | 563 | 1,541 | 158 | 8,955 | 71 | 0 | 16,881 | 0 | 3,872 | — | — | -7,049 | — |
| 1970 | 338 | 36 | 894 | 99 | 4,375 | 1,173 | 16 | 2,712 | 166 | 9,903 | 328 | 0 | 19,666 | 0 | 6,579 | — | — | -13,856 | — |
| 1975 | 1,888 | 33 | 862 | 77 | 3,841 | 1,056 | 5 | 2,930 | 160 | 10,636 | 218 | 0 | 19,784 | 0 | 7,927 | — | — | -18,221 | — |
| 1980 | 2,827 | 24 | 638 | 97 | 4,801 | 1,311 | 15 | 2,530 | 160 | 9,688 | 122 | 0 | 19,362 | 0 | 5,818 | — | — | -10,269 | — |
| 1985 | 2,703 | 25 | 841 | 87 | 5,003 | 1,019 | 41 | 1,241 | 145 | 9,279 | 36 | 0 | 17,693 | 0 | 5,333 | — | — | -5,993 | — |
| 1990 | 2,571 | 25 | 790 | 93 | 5,525 | 1,097 | 8 | 3,691 | 163 | 8,986 | 61 | 0 | 20,414 | 0 | R h 3,934 | — | — | R -309 | — |
| 1991 | 2,863 | 26 | 768 | 61 | 5,860 | 367 | 7 | 1,794 | 146 | 9,119 | 67 | 18 | 18,209 | 0 | R 3,828 | — | — | R 321 | — |
| 1992 | 2,670 | 27 | 887 | 62 | 5,595 | 1,272 | 8 | 1,930 | 149 | 9,345 | 144 | 19 | 19,412 | 0 | R 3,612 | — | — | R 852 | — |
| 1993 | 2,696 | 31 | 644 | 53 | 6,222 | 1,190 | 7 | 2,591 | 152 | 9,565 | 117 | 21 | 20,562 | 0 | R 2,591 | — | — | R 5,173 | — |
| 1994 | 3,036 | 31 | 629 | 48 | 6,994 | 1,305 | 5 | 2,298 | 159 | 9,839 | 89 | 21 | 21,386 | 0 | R 5,129 | — | — | R -2,605 | — |
| 1995 | 2,537 | 34 | 821 | 46 | 6,662 | 1,463 | 6 | 2,294 | 156 | 10,007 | 14 | 21 | 21,490 | 0 | R 6,010 | — | — | R -4,383 | — |
| 1996 | 1,852 | 37 | 1,136 | 53 | 6,694 | 1,014 | 9 | R 2,908 | 151 | 10,148 | 41 | R 12 | R 22,166 | 0 | R 7,978 | — | — | R -8,283 | — |
| 1997 | 2,442 | R 36 | 1,354 | 48 | 6,416 | 697 | 9 | R 2,627 | 160 | 10,165 | 65 | R 11 | R 21,552 | 0 | R 9,062 | — | — | R -14,418 | — |
| 1998 | 2,316 | 33 | 1,294 | 33 | 5,985 | 818 | 7 | 2,151 | 167 | 10,440 | 107 | 11 | 21,014 | 0 | 5,772 | — | — | -3,881 | — |
| 1999 | 2,650 | 36 | 1,879 | 59 | 6,018 | 770 | 7 | 1,988 | 169 | 10,337 | 106 | 9 | 21,341 | 0 | 6,848 | — | — | -9,257 | — |

## Trillion Btu

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 6.7 | 25.4 | 4.8 | 0.5 | 17.1 | 6.1 | 5.5 | 5.5 | 1.2 | 45.0 | 0.6 | 0.0 | 86.4 | 0.0 | 12.4 | 1.5 | 0.0 | -3.3 | 129.1 |
| 1965 | 5.7 | 26.9 | 3.9 | 0.6 | 21.9 | 6.0 | 3.2 | 6.2 | 1.0 | 47.0 | 0.4 | 0.0 | 90.3 | 0.0 | 40.5 | 1.1 | 0.0 | -24.1 | 140.3 |
| 1970 | 5.7 | 36.5 | 5.9 | 0.5 | 25.5 | 6.3 | 0.1 | 10.2 | 1.0 | 52.0 | 2.1 | 0.0 | 103.7 | 0.0 | 69.0 | 1.1 | 0.0 | -47.3 | 168.7 |
| 1975 | 24.3 | 32.5 | 5.7 | 0.4 | 22.4 | 5.7 | (s) | 10.9 | 1.0 | 55.9 | 1.4 | 0.0 | 103.3 | 0.0 | 82.5 | 1.5 | 0.0 | -62.2 | 181.9 |
| 1980 | 36.6 | 24.0 | 4.2 | 0.5 | 28.0 | 7.1 | 0.1 | 9.3 | 1.0 | 50.9 | 0.8 | 0.0 | 101.8 | 0.0 | 60.4 | 3.9 | 0.0 | -35.0 | 191.6 |
| 1985 | 34.5 | 25.5 | 5.6 | 0.4 | 29.1 | 5.5 | 0.2 | 4.5 | 0.9 | 48.7 | 0.2 | 0.0 | 95.2 | 0.0 | 55.7 | R 3.8 | 0.0 | -20.4 | R 194.3 |
| 1990 | 32.5 | 25.5 | 5.2 | 0.5 | 32.2 | 5.9 | (s) | 13.4 | 1.0 | 47.2 | 0.4 | 0.0 | 105.8 | 0.0 | h 40.9 | R 2.3 | h 0.2 | -1.1 | R h 206.1 |
| 1991 | 36.1 | 26.7 | 5.1 | 0.3 | 34.1 | 2.0 | (s) | 6.5 | 0.9 | 47.9 | 0.4 | 0.1 | 97.4 | 0.0 | R 40.0 | R 2.4 | 0.2 | R 1.1 | R 203.8 |
| 1992 | 33.6 | 27.0 | 5.9 | 0.3 | 32.6 | 6.9 | (s) | 7.0 | 0.9 | 49.1 | 0.9 | 0.1 | 103.7 | 0.0 | R 37.4 | R 2.4 | 0.2 | R 2.9 | R 207.3 |
| 1993 | 34.4 | 31.7 | 4.3 | 0.3 | 36.2 | 6.4 | (s) | 9.3 | 0.9 | 50.2 | 0.7 | 0.1 | 108.6 | 0.0 | 26.7 | R 2.1 | 0.2 | R 17.6 | R 221.4 |
| 1994 | 39.2 | 31.3 | 4.2 | 0.2 | 40.7 | 7.1 | (s) | 8.4 | 1.0 | R 51.5 | 0.6 | 0.1 | R 113.7 | 0.0 | R 52.9 | R 2.1 | 0.2 | R -8.9 | R 230.5 |
| 1995 | 36.7 | 34.8 | 5.4 | 0.2 | 38.8 | 7.9 | (s) | 8.3 | 0.9 | R 52.2 | 0.1 | 0.1 | R 114.1 | 0.0 | 62.0 | R 2.4 | 0.2 | -15.0 | R 235.2 |
| 1996 | 33.2 | 37.4 | 7.5 | 0.3 | 39.0 | 5.7 | (s) | R 10.5 | 0.9 | R 52.9 | 0.3 | 0.1 | R 117.2 | 0.0 | R 82.5 | R 2.5 | 0.3 | -28.3 | R 244.8 |
| 1997 | 42.4 | R 36.8 | 9.0 | 0.2 | 37.4 | 4.0 | (s) | R 9.5 | 1.0 | R 53.0 | 0.4 | 0.1 | R 114.5 | 0.0 | R 93.9 | R 2.0 | 0.3 | R -49.2 | R 241.0 |
| 1998 | 40.5 | 33.4 | 8.6 | 0.2 | 34.9 | 4.6 | (s) | 7.8 | 1.0 | 54.4 | 0.7 | 0.1 | 112.2 | 0.0 | 59.7 | 1.4 | 0.4 | -13.2 | 233.8 |
| 1999 | 45.9 | 36.0 | 12.5 | 0.3 | 35.1 | 4.4 | (s) | 7.2 | 1.0 | 53.9 | 0.7 | 0.1 | 115.0 | 0.0 | 70.9 | 1.8 | 0.4 | -31.6 | 239.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 264.   Residential Energy Consumption Estimates, Selected Years 1960-1999, South Dakota

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] (Thousand Barrels) | Petroleum — Kerosene[a] (Thousand Barrels) | Petroleum — LPG[a] (Thousand Barrels) | Petroleum — Total (Thousand Barrels) | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 43 | 8 | 567 | 903 | 1,067 | 2,537 | 61 | — | — | 847 | — | 2,107 | — |
| 1965 | 24 | 10 | 677 | 524 | 1,198 | 2,398 | 42 | — | — | 1,183 | — | 2,824 | — |
| 1970 | 11 | 14 | 763 | 14 | 2,010 | 2,787 | 33 | — | — | 1,586 | — | 3,843 | — |
| 1975 | 8 | 12 | 574 | 3 | 1,994 | 2,571 | 35 | — | — | 2,068 | — | 4,987 | — |
| 1980 | 6 | 11 | 762 | 10 | 1,165 | 1,937 | 153 | — | — | 2,623 | — | 6,378 | — |
| 1985 | 6 | 11 | 743 | 35 | 703 | 1,481 | 143 | — | — | 2,769 | — | 6,505 | — |
| 1990 | 1 | 10 | 805 | 4 | 1,731 | 2,540 | 89 | — | — | 2,866 | — | R 6,270 | — |
| 1991 | 1 | 11 | 804 | 4 | 1,061 | 1,869 | 94 | — | — | 3,040 | — | R 6,609 | — |
| 1992 | (s) | 11 | 474 | 4 | 1,006 | 1,484 | 99 | — | — | 2,843 | — | R 6,062 | — |
| 1993 | (s) | 12 | 592 | 6 | 1,355 | 1,952 | 82 | — | — | 3,109 | — | R 6,567 | — |
| 1994 | 5 | 12 | 536 | 4 | 1,278 | 1,818 | 81 | — | — | 3,147 | — | R 6,568 | — |
| 1995 | 2 | 13 | 542 | 4 | 1,384 | 1,929 | 90 | — | — | 3,268 | — | R 6,814 | — |
| 1996 | 1 | 14 | 632 | 5 | R 1,857 | R 2,494 | 90 | — | — | 3,426 | — | R 7,140 | — |
| 1997 | (s) | 13 | 490 | 6 | R 1,798 | R 2,294 | R 64 | — | — | 3,376 | — | R 7,023 | — |
| 1998 | (s) | 12 | 377 | 5 | 1,450 | 1,832 | 57 | — | — | 3,303 | — | 6,824 | — |
| 1999 | (s) | 12 | 306 | 4 | 1,396 | 1,706 | 61 | — | — | 3,302 | — | 6,470 | — |

### Trillion Btu

| Year | Coal[a] | Natural Gas[b] | Petroleum — Distillate Fuel[a] | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.8 | 7.9 | 3.3 | 5.1 | 4.3 | 12.7 | 1.2 | 0.0 | 0.0 | 2.9 | 25.6 | 7.2 | 32.8 |
| 1965 | 0.5 | 10.1 | 3.9 | 3.0 | 4.8 | 11.7 | 0.8 | 0.0 | 0.0 | 4.0 | 27.1 | 9.6 | 36.8 |
| 1970 | 0.2 | 13.8 | 4.4 | 0.1 | 7.6 | 12.1 | 0.7 | 0.0 | 0.0 | 5.4 | 32.2 | 13.1 | 45.3 |
| 1975 | 0.1 | 12.0 | 3.3 | (s) | 7.4 | 10.8 | 0.7 | 0.0 | 0.0 | 7.1 | 30.6 | 17.0 | 47.7 |
| 1980 | 0.1 | 10.5 | 4.4 | 0.1 | 4.3 | 8.8 | 3.1 | 0.0 | 0.0 | 8.9 | 31.4 | 21.8 | 53.2 |
| 1985 | 0.1 | 11.5 | 4.3 | 0.2 | 2.5 | 7.1 | 2.9 | 0.0 | 0.0 | 9.4 | 31.0 | 22.2 | 53.2 |
| 1990 | (s) | 10.4 | 4.7 | (s) | 6.3 | 11.0 | 1.8 | e (s) | e (s) | 9.8 | e 33.0 | 21.4 | e 54.4 |
| 1991 | (s) | 11.4 | 4.7 | (s) | 3.8 | 8.5 | 1.9 | (s) | (s) | 10.4 | 32.3 | R 22.5 | R 54.8 |
| 1992 | (s) | 11.0 | 2.8 | (s) | 3.6 | 6.4 | 2.0 | (s) | (s) | 9.7 | 29.1 | 20.7 | 49.8 |
| 1993 | (s) | 12.6 | 3.4 | (s) | 4.9 | 8.4 | 1.6 | (s) | (s) | 10.6 | 33.3 | 22.4 | 55.7 |
| 1994 | 0.1 | 12.2 | 3.1 | (s) | 4.6 | 7.8 | 1.6 | (s) | (s) | 10.7 | 32.5 | 22.4 | 54.9 |
| 1995 | (s) | 12.8 | 3.2 | (s) | 5.0 | 8.2 | 1.8 | (s) | (s) | 11.2 | 34.0 | 23.2 | R 57.3 |
| 1996 | (s) | 14.3 | 3.7 | (s) | R 6.7 | R 10.4 | 1.8 | (s) | (s) | 11.7 | R 38.2 | R 24.4 | R 62.6 |
| 1997 | (s) | 13.4 | 2.9 | (s) | R 6.5 | R 9.4 | 1.3 | 0.1 | (s) | 11.5 | R 35.7 | R 24.0 | R 59.7 |
| 1998 | (s) | 11.8 | 2.2 | (s) | 5.2 | 7.5 | 1.1 | 0.1 | (s) | 11.3 | 31.7 | 23.3 | 55.0 |
| 1999 | (s) | 11.8 | 1.8 | (s) | 5.0 | 6.9 | 1.2 | 0.1 | (s) | 11.3 | 31.3 | 22.1 | 53.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 265.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, South Dakota

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 79 | 7 | 226 | 0 | 188 | 37 | 16 | 466 | 1 | — | 409 | — | 1,016 | — |
| 1965 | 44 | 9 | 269 | 0 | 211 | 46 | 8 | 534 | 1 | — | 645 | — | 1,540 | — |
| 1970 | 20 | 11 | 303 | 0 | 355 | 50 | 16 | 724 | 1 | — | 937 | — | 2,270 | — |
| 1975 | 16 | 11 | 228 | 0 | 352 | 58 | 20 | 658 | 1 | — | 995 | — | 2,400 | — |
| 1980 | 11 | 9 | 365 | 0 | 206 | 65 | 19 | 655 | 4 | — | 1,139 | — | 2,770 | — |
| 1985 | 11 | 10 | 278 | 1 | 124 | 98 | 19 | 519 | R 4 | — | 1,863 | — | 4,377 | — |
| 1990 | 2 | 9 | 208 | (s) | 305 | 78 | 25 | 616 | R 6 | — | 1,811 | — | 3,961 | — |
| 1991 | 3 | 9 | 192 | (s) | 187 | 54 | 35 | 468 | R 6 | — | 1,919 | — | R 4,172 | — |
| 1992 | 1 | 9 | 245 | (s) | 178 | 54 | 36 | 513 | R 6 | — | 1,874 | — | R 3,997 | — |
| 1993 | 1 | 11 | 248 | 1 | 239 | 11 | 1 | 499 | 7 | — | 1,948 | — | R 4,115 | — |
| 1994 | 10 | 10 | 266 | (s) | 226 | 11 | 6 | 509 | 7 | — | 2,265 | — | R 4,727 | — |
| 1995 | 5 | 11 | 325 | 1 | 244 | 11 | 2 | 584 | 7 | — | 2,424 | — | R 5,053 | — |
| 1996 | 1 | 12 | 254 | 1 | R 328 | 11 | 0 | R 594 | 7 | — | 2,525 | — | R 5,263 | — |
| 1997 | 1 | 10 | 278 | 1 | R 317 | 11 | 9 | R 616 | R 7 | — | 2,555 | — | R 5,316 | — |
| 1998 | (s) | 9 | 234 | (s) | 256 | 11 | 6 | 507 | 7 | — | 2,653 | — | 5,480 | — |
| 1999 | 1 | 10 | 184 | 1 | 246 | 11 | 9 | 451 | 9 | — | 2,671 | — | 5,234 | — |

| Year | | | | | Trillion Btu | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.5 | 7.5 | 1.3 | 0.0 | 0.8 | 0.2 | 0.1 | 2.4 | (s) | 0.0 | 1.4 | 12.8 | 3.5 | 16.3 |
| 1965 | 0.9 | 8.8 | 1.6 | 0.0 | 0.8 | 0.2 | (s) | 2.7 | (s) | 0.0 | 2.2 | 14.6 | 5.3 | 19.8 |
| 1970 | 0.4 | 11.4 | 1.8 | 0.0 | 1.3 | 0.3 | 0.1 | 3.5 | (s) | 0.0 | 3.2 | 18.5 | 7.7 | 26.2 |
| 1975 | 0.3 | 11.5 | 1.3 | 0.0 | 1.3 | 0.3 | 0.1 | 3.1 | (s) | 0.0 | 3.4 | 18.2 | 8.2 | 26.4 |
| 1980 | 0.2 | 8.5 | 2.1 | 0.0 | 0.8 | 0.3 | 0.1 | 3.3 | 0.1 | 0.0 | 3.9 | 16.0 | 9.5 | 25.4 |
| 1985 | 0.2 | 10.1 | 1.6 | (s) | 0.4 | 0.5 | 0.1 | 2.7 | R 0.1 | 0.0 | 6.4 | 19.4 | 14.9 | R 34.4 |
| 1990 | (s) | 8.7 | 1.2 | (s) | 1.1 | 0.4 | 0.2 | 2.9 | R 0.1 | e 0.1 | 6.2 | R e 18.0 | 13.5 | R e 31.5 |
| 1991 | (s) | 9.6 | 1.1 | (s) | 0.7 | 0.3 | 0.2 | 2.3 | R 0.1 | 0.1 | 6.5 | R 18.8 | R 14.2 | R 33.0 |
| 1992 | (s) | 9.3 | 1.4 | (s) | 0.6 | 0.3 | 0.2 | 2.6 | R 0.1 | 0.1 | 6.4 | R 18.5 | R 13.6 | R 32.2 |
| 1993 | (s) | 10.8 | 1.4 | (s) | 0.9 | 0.1 | (s) | 2.4 | 0.1 | 0.2 | 6.6 | 20.2 | 14.0 | 34.2 |
| 1994 | 0.2 | 10.4 | 1.5 | (s) | 0.8 | 0.1 | (s) | 2.5 | 0.1 | 0.2 | 7.7 | 21.1 | 16.1 | 37.2 |
| 1995 | 0.1 | 10.8 | 1.9 | (s) | 0.9 | 0.1 | (s) | 2.9 | 0.1 | 0.2 | 8.3 | 22.4 | 17.2 | 39.6 |
| 1996 | (s) | 11.8 | 1.5 | (s) | R 1.2 | 0.1 | 0.0 | R 2.7 | 0.1 | 0.2 | 8.6 | R 23.5 | R 18.0 | R 41.5 |
| 1997 | (s) | 10.6 | 1.6 | (s) | 1.1 | 0.1 | 0.1 | R 2.9 | 0.1 | R 0.2 | 8.7 | R 22.6 | 18.1 | R 40.7 |
| 1998 | (s) | 9.4 | 1.4 | (s) | 0.9 | 0.1 | (s) | 2.4 | 0.1 | 0.3 | 9.1 | 21.3 | 18.7 | 40.0 |
| 1999 | (s) | 9.6 | 1.1 | (s) | 0.9 | 0.1 | 0.1 | 2.1 | 0.2 | 0.3 | 9.1 | 21.3 | 17.9 | 39.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 266. Industrial Energy Consumption Estimates, Selected Years 1960-1999, South Dakota**

| | Coal | Natural Gas [a] | Petroleum | | | | | | | | | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
| | | | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kerosene [b] | LPG [b] | Lubricants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 5 | 5 | 724 | 1,780 | 72 | 93 | 19 | 2,615 | 35 | 0 | 5,339 | 20 | — | — | 258 | — | 642 | — |
| 1965 | 4 | 5 | 588 | 2,177 | 39 | 108 | 15 | 2,455 | 15 | 0 | 5,397 | 38 | — | — | 246 | — | 588 | — |
| 1970 | 5 | 7 | 894 | 2,332 | 2 | 298 | 14 | 2,209 | 35 | 0 | 5,784 | 35 | — | — | 281 | — | 680 | — |
| 1975 | 59 | 6 | 862 | 1,635 | 2 | 527 | 20 | 1,626 | 52 | 0 | 4,725 | 36 | — | — | 994 | — | 2,397 | — |
| 1980 | 127 | 5 | 638 | 1,640 | 5 | 1,090 | 4 | 1,473 | 95 | 0 | 4,943 | 32 | — | — | 1,322 | — | 3,215 | — |
| 1985 | 279 | 4 | 841 | 1,670 | 5 | 389 | 3 | 694 | 16 | 0 | 3,619 | 32 | — | — | 1,019 | — | 2,393 | — |
| 1990 | 223 | 6 | 790 | 2,046 | 3 | 1,632 | 4 | 489 | 36 | 0 | 5,000 | f 0 | — | — | 1,657 | — | R 3,625 | — |
| 1991 | 289 | 5 | 768 | 2,340 | 3 | 532 | 3 | 484 | 32 | 18 | 4,180 | 0 | — | — | 1,726 | — | R 3,753 | — |
| 1992 | 267 | 5 | 887 | 2,181 | 4 | 728 | 3 | 429 | 109 | 19 | 4,359 | 0 | — | — | 1,777 | — | R 3,791 | — |
| 1993 | 335 | 5 | 644 | 2,522 | 1 | 972 | 3 | 539 | 116 | 21 | 4,818 | 0 | — | — | 1,847 | — | R 3,902 | — |
| 1994 | 451 | 6 | 629 | 2,824 | 1 | 755 | 4 | 463 | 83 | 21 | 4,780 | 0 | — | — | 1,762 | — | 3,677 | — |
| 1995 | 393 | 7 | 821 | 2,380 | 2 | 652 | 4 | 534 | 11 | 21 | 4,424 | 0 | — | — | 1,722 | — | R 3,590 | — |
| 1996 | 397 | R 8 | 1,136 | 2,316 | 3 | R 709 | 3 | 540 | 41 | R 12 | R 4,761 | 0 | — | — | 1,785 | — | R 3,719 | — |
| 1997 | 436 | R 8 | 1,354 | 2,177 | 2 | R 503 | 4 | 566 | 56 | R 11 | R 4,674 | 0 | — | — | 1,841 | — | R 3,829 | — |
| 1998 | 450 | 6 | 1,294 | 1,883 | 1 | 433 | 4 | 386 | 101 | 11 | 4,114 | 0 | — | — | 1,868 | — | 3,859 | — |
| 1999 | 490 | 6 | 1,879 | 1,854 | 2 | 341 | 4 | 446 | 96 | 9 | 4,631 | 0 | — | — | 1,949 | — | 3,819 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | |
| 1960 | 0.1 | 5.3 | 4.8 | 10.4 | 0.4 | 0.4 | 0.1 | 13.7 | 0.2 | 0.0 | 30.0 | 0.2 | 0.3 | 0.0 | 0.9 | 36.9 | 2.2 | 39.0 |
| 1965 | 0.1 | 4.7 | 3.9 | 12.7 | 0.2 | 0.4 | 0.1 | 12.9 | 0.1 | 0.0 | 30.3 | 0.4 | 0.3 | 0.0 | 0.8 | 36.6 | 2.0 | 38.6 |
| 1970 | 0.1 | 6.8 | 5.9 | 13.6 | (s) | 1.1 | 0.1 | 11.6 | 0.2 | 0.0 | 32.6 | 0.4 | 0.5 | 0.0 | 1.0 | 41.3 | 2.3 | 43.6 |
| 1975 | 1.1 | 5.8 | 5.7 | 9.5 | (s) | 2.0 | 0.1 | 8.5 | 0.3 | 0.0 | 26.2 | 0.4 | 0.8 | 0.0 | 3.4 | 37.7 | 8.2 | 45.8 |
| 1980 | 2.4 | 4.7 | 4.2 | 9.6 | (s) | 4.0 | (s) | 7.7 | 0.6 | 0.0 | 26.2 | 0.3 | 0.7 | 0.0 | 4.5 | 38.8 | 11.0 | 49.8 |
| 1985 | 4.8 | 3.6 | 5.6 | 9.7 | (s) | 1.4 | (s) | 3.6 | 0.1 | 0.0 | 20.5 | 0.3 | 0.9 | 0.0 | 3.5 | 33.6 | 8.2 | 41.8 |
| 1990 | 3.9 | 6.0 | 5.2 | 11.9 | (s) | 5.9 | (s) | 2.6 | 0.2 | 0.0 | 25.9 | f 0.0 | R 0.4 | f (s) | 5.7 | R f 41.9 | 12.4 | R f 54.3 |
| 1991 | 5.0 | 5.1 | 5.1 | 13.6 | (s) | 1.9 | (s) | 2.5 | 0.2 | 0.1 | 23.5 | 0.0 | R 0.4 | (s) | 5.9 | R 40.0 | 12.8 | R 52.8 |
| 1992 | 4.6 | 5.0 | 5.9 | 12.7 | (s) | 2.6 | (s) | 2.3 | 0.7 | 0.1 | 24.3 | 0.0 | R 0.3 | (s) | 6.1 | R 40.4 | R 12.9 | R 53.3 |
| 1993 | 5.8 | 5.5 | 4.3 | 14.7 | (s) | 3.5 | (s) | 2.8 | 0.7 | 0.1 | 26.2 | 0.0 | R 0.3 | (s) | 6.3 | R 44.1 | 13.3 | R 57.4 |
| 1994 | 7.8 | 6.0 | 4.2 | 16.5 | (s) | 2.7 | (s) | 2.4 | 0.5 | 0.1 | 26.5 | 0.0 | R 0.3 | (s) | 6.0 | R 46.6 | 12.5 | R 59.2 |
| 1995 | 6.8 | 7.4 | 5.4 | 13.9 | (s) | 2.4 | (s) | 2.8 | 0.1 | 0.1 | 24.7 | 0.0 | R 0.4 | (s) | 5.9 | R 45.2 | 12.2 | R 57.5 |
| 1996 | 6.9 | 7.7 | 7.5 | 13.5 | (s) | R 2.6 | (s) | 2.8 | 0.3 | 0.1 | 26.8 | 0.0 | R 0.6 | (s) | 6.1 | R 48.0 | 12.7 | R 60.7 |
| 1997 | 7.6 | R 8.0 | 9.0 | 12.7 | (s) | R 1.8 | (s) | R 2.9 | 0.4 | 0.1 | R 26.9 | 0.0 | R 0.6 | (s) | 6.3 | R 49.4 | R 13.1 | R 62.4 |
| 1998 | 7.9 | 6.5 | 8.6 | 11.0 | (s) | 1.6 | (s) | 2.0 | 0.6 | 0.1 | 23.9 | 0.0 | 0.1 | (s) | 6.4 | 44.8 | 13.2 | 57.9 |
| 1999 | 8.6 | 5.9 | 12.5 | 10.8 | (s) | 1.2 | (s) | 2.3 | 0.6 | 0.1 | 27.5 | 0.0 | 0.4 | 0.1 | 6.6 | 49.2 | 13.0 | 62.2 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 267.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, South Dakota

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | |
| **Thousand Barrels** | | | | | | | | | | | | | | | |
| 1960 | (s) | (s) | 106 | 362 | 1,145 | 22 | 174 | 5,909 | 11 | 7,729 | 0 | 0 | — | 0 | — |
| 1965 | (s) | (s) | 128 | 635 | 1,111 | 24 | 143 | 6,454 | 1 | 8,496 | 0 | 0 | — | 0 | — |
| 1970 | (s) | (s) | 99 | 929 | 1,173 | 50 | 151 | 7,645 | 6 | 10,052 | 0 | 0 | — | 0 | — |
| 1975 | (s) | (s) | 77 | 1,337 | 1,056 | 57 | 140 | 8,952 | 1 | 11,618 | 0 | 0 | — | 0 | — |
| 1980 | 0 | (s) | 97 | 1,977 | 1,311 | 69 | 156 | 8,150 | 0 | 11,760 | 0 | 0 | — | 0 | — |
| 1985 | 0 | (s) | 87 | 2,274 | 1,019 | 24 | 142 | 8,487 | 0 | 12,033 | R e 98 | 0 | — | 0 | — |
| 1990 | 0 | (s) | 93 | 2,434 | 1,097 | 23 | 160 | 8,419 | (s) | 12,226 | R 142 | 0 | — | 0 | — |
| 1991 | 0 | (s) | 61 | 2,490 | 367 | 14 | 143 | 8,581 | 0 | 11,656 | R 325 | 0 | — | 0 | — |
| 1992 | 0 | 2 | 62 | 2,676 | 1,272 | 18 | 146 | 8,863 | 0 | 13,036 | R 424 | 0 | — | 0 | — |
| 1993 | 0 | 3 | 53 | 2,829 | 1,190 | 26 | 148 | 9,015 | 0 | 13,261 | R 471 | 0 | — | 0 | — |
| 1994 | 0 | 3 | 48 | 3,317 | 1,305 | 39 | 155 | 9,365 | 0 | 14,229 | R 540 | 0 | — | 0 | — |
| 1995 | 0 | 3 | 46 | 3,368 | 1,463 | 15 | 152 | 9,462 | 0 | 14,506 | R 506 | 0 | — | 0 | — |
| 1996 | 0 | 3 | 53 | 3,459 | 1,014 | R 14 | 148 | 9,596 | 0 | R 14,285 | R 357 | 0 | — | 0 | — |
| 1997 | 0 | 3 | 48 | 3,447 | 697 | R 9 | 156 | 9,588 | 0 | R 13,946 | R 399 | 0 | — | 0 | — |
| 1998 | 0 | 3 | 33 | 3,423 | 818 | 12 | 164 | 10,043 | 0 | 14,494 | 458 | 0 | — | 0 | — |
| 1999 | 0 | 6 | 59 | 3,615 | 770 | 5 | 165 | 9,880 | 0 | 14,495 | 509 | 0 | — | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | |
| 1960 | (s) | (s) | 0.5 | 2.1 | 6.1 | 0.1 | 1.1 | 31.0 | 0.1 | 41.0 | 0.0 | 0.0 | 41.1 | 0.0 | 41.1 |
| 1965 | (s) | (s) | 0.6 | 3.7 | 6.0 | 0.1 | 0.9 | 33.9 | (s) | 45.2 | 0.0 | 0.0 | 45.2 | 0.0 | 45.2 |
| 1970 | (s) | (s) | 0.5 | 5.4 | 6.3 | 0.2 | 0.9 | 40.2 | (s) | 53.5 | 0.0 | 0.0 | 53.6 | 0.0 | 53.6 |
| 1975 | (s) | (s) | 0.4 | 7.8 | 5.7 | 0.2 | 0.8 | 47.0 | (s) | 62.0 | 0.0 | 0.0 | 62.0 | 0.0 | 62.0 |
| 1980 | 0.0 | 0.1 | 0.5 | 11.5 | 7.1 | 0.3 | 0.9 | 42.8 | 0.0 | 63.1 | 0.0 | 0.0 | 63.2 | 0.0 | 63.2 |
| 1985 | 0.0 | 0.2 | 0.4 | 13.2 | 5.5 | 0.1 | 0.9 | 44.6 | 0.0 | 64.7 | R e 0.3 | 0.0 | e 65.0 | 0.0 | e 65.0 |
| 1990 | 0.0 | 0.1 | 0.5 | 14.2 | 5.9 | 0.1 | 1.0 | 44.2 | (s) | 65.9 | R 0.5 | 0.0 | 66.0 | 0.0 | 66.0 |
| 1991 | 0.0 | 0.3 | 0.3 | 14.5 | 2.0 | (s) | 0.9 | 45.1 | 0.0 | 62.8 | R 1.2 | 0.0 | 63.2 | 0.0 | 63.2 |
| 1992 | 0.0 | 1.8 | 0.3 | 15.6 | 6.9 | 0.1 | 0.9 | 46.6 | 0.0 | 70.3 | R 1.5 | 0.0 | 72.0 | 0.0 | 72.0 |
| 1993 | 0.0 | 2.6 | 0.3 | 16.5 | 6.4 | 0.1 | 0.9 | 47.4 | 0.0 | 71.5 | R 1.7 | 0.0 | 74.1 | 0.0 | 74.1 |
| 1994 | 0.0 | 2.6 | 0.2 | 19.3 | 7.1 | 0.1 | 0.9 | R 49.0 | 0.0 | R 76.7 | R 1.9 | 0.0 | R 79.3 | 0.0 | R 79.3 |
| 1995 | 0.0 | 2.8 | 0.2 | 19.6 | 7.9 | 0.1 | 0.9 | R 49.3 | 0.0 | R 78.1 | R 1.8 | 0.0 | R 80.9 | 0.0 | R 80.9 |
| 1996 | 0.0 | 2.9 | 0.3 | 20.2 | 5.7 | R 0.1 | 0.9 | R 50.1 | 0.0 | R 77.1 | R 1.3 | 0.0 | R 80.1 | 0.0 | R 80.1 |
| 1997 | 0.0 | 3.0 | 0.2 | 20.1 | 4.0 | (s) | 0.9 | R 50.0 | 0.0 | R 75.2 | R 1.4 | 0.0 | R 78.2 | 0.0 | R 78.2 |
| 1998 | 0.0 | 2.8 | 0.2 | 19.9 | 4.6 | (s) | 1.0 | 52.3 | 0.0 | 78.1 | 1.6 | 0.0 | 81.0 | 0.0 | 81.0 |
| 1999 | 0.0 | 6.1 | 0.3 | 21.1 | 4.4 | (s) | 1.0 | 51.5 | 0.0 | 78.2 | 1.8 | 0.0 | 84.3 | 0.0 | 84.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 268.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, South Dakota**

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total [g] |
| 1960 | 246 | 4 | 40 | 7 | 0 | 47 | 0 | 1,136 | 0 | 0 | 0 | — |
| 1965 | 237 | 3 | 47 | 8 | 0 | 55 | 0 | 3,835 | 0 | 0 | 0 | — |
| 1970 | 301 | 4 | 270 | 48 | 0 | 318 | 0 | 6,544 | 0 | 0 | 0 | — |
| 1975 | 1,804 | 3 | 145 | 67 | 0 | 212 | 0 | 7,890 | 0 | 0 | 0 | — |
| 1980 | 2,683 | (s) | 9 | 58 | 0 | 67 | 0 | 5,786 | 0 | 0 | 0 | — |
| 1985 | 2,407 | (s) | 1 | 39 | 0 | 40 | 0 | 5,301 | 0 | 0 | 0 | — |
| 1990 | 2,345 | (s) | 0 | 32 | 0 | 32 | 0 | 3,934 | 0 | 0 | 0 | — |
| 1991 | 2,570 | (s) | 0 | 35 | 0 | 35 | 0 | R 3,828 | 0 | 0 | 0 | — |
| 1992 | 2,402 | (s) | 0 | 19 | 0 | 19 | 0 | R 3,612 | 0 | 0 | 0 | — |
| 1993 | 2,360 | (s) | 0 | 32 | 0 | 32 | 0 | 2,591 | 0 | 0 | 0 | — |
| 1994 | 2,570 | (s) | 0 | 50 | 0 | 50 | 0 | R 5,129 | 0 | 0 | 0 | — |
| 1995 | 2,137 | 1 | 0 | 48 | 0 | 48 | 0 | 6,010 | 0 | 0 | 0 | — |
| 1996 | 1,453 | 1 | 0 | 33 | 0 | 33 | 0 | 7,978 | 0 | 0 | 0 | — |
| 1997 | 2,005 | 2 | 0 | 23 | 0 | 23 | 0 | R 9,062 | 0 | 0 | 0 | — |
| 1998 | 1,866 | 3 | 0 | 68 | 0 | 68 | 0 | 5,772 | 0 | 0 | 0 | — |
| 1999 | 2,159 | 3 | 0 | 59 | 0 | 59 | 0 | 6,848 | 0 | 0 | 0 | — |
| | | | | | Trillion Btu | | | | | | | |
| 1960 | 4.2 | 4.6 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 12.2 | 0.0 | 0.0 | 0.0 | 21.4 |
| 1965 | 4.2 | 3.3 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 40.1 | 0.0 | 0.0 | 0.0 | 48.0 |
| 1970 | 5.0 | 4.4 | 1.7 | 0.3 | 0.0 | 2.0 | 0.0 | 68.7 | 0.0 | 0.0 | 0.0 | 80.0 |
| 1975 | 22.8 | 3.2 | 0.9 | 0.4 | 0.0 | 1.3 | 0.0 | 82.1 | 0.0 | 0.0 | 0.0 | 109.4 |
| 1980 | 33.8 | 0.3 | 0.1 | 0.3 | 0.0 | 0.4 | 0.0 | 60.1 | 0.0 | 0.0 | 0.0 | 94.6 |
| 1985 | 29.4 | (s) | (s) | 0.2 | 0.0 | 0.2 | 0.0 | 55.4 | 0.0 | 0.0 | 0.0 | 85.0 |
| 1990 | 28.6 | 0.2 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 40.9 | 0.0 | 0.0 | 0.0 | 69.9 |
| 1991 | 31.0 | 0.2 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | R 40.0 | 0.0 | 0.0 | 0.0 | R 71.3 |
| 1992 | 29.0 | (s) | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | R 37.4 | 0.0 | 0.0 | 0.0 | R 66.5 |
| 1993 | 28.6 | 0.2 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 26.7 | 0.0 | 0.0 | 0.0 | 55.7 |
| 1994 | 31.1 | 0.2 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | R 52.9 | 0.0 | 0.0 | 0.0 | R 84.4 |
| 1995 | 29.8 | 0.9 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 62.0 | 0.0 | 0.0 | 0.0 | 93.0 |
| 1996 | 26.3 | 0.7 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | R 82.5 | 0.0 | 0.0 | 0.0 | R 109.7 |
| 1997 | 34.8 | 1.8 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | R 93.9 | 0.0 | 0.0 | 0.0 | R 130.9 |
| 1998 | 32.6 | 2.9 | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | 59.7 | 0.0 | 0.0 | 0.0 | 95.1 |
| 1999 | 37.3 | 2.5 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 70.9 | 0.0 | 0.0 | 0.0 | 111.6 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 269. Energy Consumption Estimates by Source, Selected Years 1960-1999, Tennessee

**Tennessee**

| Year | Coal [a] | Natural Gas [b] | Petroleum — Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
| 1960 | 15,436 | 147 | 1,785 | 1,040 | 5,291 | 570 | 2,624 | 1,311 | 760 | 27,268 | 188 | R 1,413 | R 42,250 | 0 | 8,676 | — | — | 20,917 | — |
| 1965 | 14,171 | 202 | 3,441 | 1,024 | 7,295 | 1,174 | 2,540 | 1,912 | 800 | 32,481 | 287 | R 4,292 | R 55,245 | 0 | 8,750 | — | — | 46,329 | — |
| 1970 | 17,726 | 256 | 3,628 | 116 | 10,952 | 3,335 | 4,135 | 3,182 | 825 | 41,869 | 597 | R 6,209 | R 74,849 | 0 | 8,067 | — | — | 50,754 | — |
| 1975 | 21,308 | 217 | 3,765 | 70 | 17,479 | 3,936 | 2,289 | 3,830 | 1,328 | 53,735 | 714 | R 5,571 | R 92,718 | 0 | 11,806 | — | — | 73,642 | — |
| 1980 | 24,687 | 230 | 3,378 | 290 | 19,176 | 4,154 | 1,534 | 2,787 | 1,241 | 54,948 | 1,499 | R 8,213 | R 97,218 | 519 | 8,764 | — | — | 74,740 | — |
| 1985 | 25,167 | 190 | 4,408 | 154 | 22,285 | 4,862 | 1,107 | 2,281 | 1,129 | 58,047 | 539 | R 6,293 | R 101,107 | 9,672 | 6,539 | — | — | 35,536 | — |
| 1990 | 24,878 | 220 | 5,798 | 174 | 23,872 | 4,181 | 438 | 2,906 | 1,270 | 58,001 | 311 | R 10,730 | R 107,681 | 14,003 | R h 9,537 | — | — | R 26,440 | — |
| 1991 | 23,107 | 227 | 5,349 | 145 | 22,618 | 3,413 | 342 | 3,208 | 1,136 | 56,162 | 406 | R 11,331 | R 104,111 | 16,587 | R 10,497 | — | — | R 26,893 | — |
| 1992 | 24,106 | 242 | 5,281 | 343 | 24,044 | 4,479 | 442 | 4,787 | 1,159 | 58,587 | 397 | R 12,578 | R 112,097 | 15,654 | R 9,590 | — | — | R 22,970 | — |
| 1993 | 27,854 | 254 | 4,922 | 395 | 23,976 | 6,569 | 410 | 3,566 | 1,180 | 61,213 | 528 | R 12,043 | R 114,802 | 3,305 | R 8,394 | — | — | R 40,415 | — |
| 1994 | 25,440 | 246 | 5,448 | 392 | 24,805 | 7,762 | 544 | 3,482 | 1,233 | 62,897 | 461 | R 12,790 | R 119,815 | 11,932 | R 11,209 | — | — | R 32,994 | — |
| 1995 | 27,399 | 257 | 5,434 | 397 | 27,388 | 8,096 | 490 | 3,416 | 1,212 | 64,822 | 368 | R 12,420 | R 124,042 | 15,708 | R 8,951 | — | — | R 10,926 | — |
| 1996 | 26,744 | 280 | 5,171 | 231 | 27,554 | 9,317 | 585 | R 4,303 | 1,176 | 64,868 | 214 | R 7,234 | R 120,653 | 22,924 | R 10,720 | — | — | R 5,649 | — |
| 1997 | 28,203 | 282 | 4,917 | 312 | 28,108 | 9,433 | 580 | R 4,028 | 1,242 | 66,148 | 160 | R 7,188 | R 122,117 | 24,648 | R 9,871 | — | — | R -8,704 | — |
| 1998 | 26,808 | 280 | 5,928 | 136 | 29,776 | 9,855 | 613 | 3,264 | 1,301 | 67,522 | 167 | 8,668 | 127,230 | 28,388 | 10,184 | — | — | -281 | — |
| 1999 | 26,640 | 278 | 5,919 | 109 | 27,147 | 11,816 | 528 | 4,709 | 1,314 | 69,769 | 60 | 9,579 | 130,951 | 27,227 | 7,150 | — | — | 10,116 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear | Hydroelectric | Wood and Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 374.4 | 151.7 | 11.8 | 5.2 | 30.8 | 3.1 | 14.9 | 5.3 | 4.6 | 143.2 | 1.2 | R 8.3 | R 228.5 | 0.0 | 93.4 | 45.4 | 0.0 | 71.4 | R 964.7 |
| 1965 | 338.8 | 211.1 | 22.8 | 5.2 | 42.5 | 6.5 | 14.4 | 7.7 | 4.8 | 170.6 | 1.8 | R 24.6 | R 300.9 | 0.0 | 91.5 | 46.5 | 0.0 | 158.1 | R 1,147.0 |
| 1970 | 403.7 | 261.8 | 24.1 | 0.6 | 63.8 | 18.8 | 23.4 | 12.0 | 5.0 | 219.9 | 3.8 | R 35.3 | R 406.7 | 0.0 | 84.7 | 53.8 | 0.0 | 173.2 | R 1,383.8 |
| 1975 | 471.9 | 224.1 | 25.0 | 0.4 | 101.8 | 22.2 | 13.0 | 14.2 | 8.1 | 282.3 | 4.5 | R 32.2 | R 503.6 | 0.0 | 122.9 | 54.4 | 0.0 | 251.3 | R 1,628.2 |
| 1980 | 576.9 | 233.3 | 22.4 | 1.5 | 111.7 | 23.4 | 8.7 | 10.2 | 7.5 | 288.6 | 9.4 | R 46.1 | R 529.7 | 5.7 | 91.0 | R 62.1 | 0.0 | 255.0 | R 1,753.7 |
| 1985 | 599.7 | 196.7 | 29.3 | 0.8 | 129.8 | 27.5 | 6.3 | 8.2 | 6.8 | 304.9 | 3.4 | R 35.6 | R 552.5 | 104.6 | 68.3 | 89.6 | 0.0 | 121.3 | R 1,732.7 |
| 1990 | 600.3 | 227.5 | 38.5 | 0.9 | 139.1 | 23.6 | 2.5 | 10.5 | 7.7 | 304.7 | 2.0 | R 60.1 | R 589.5 | 149.5 | h 99.2 | R 54.9 | h 0.1 | R 90.2 | R h 1,811.2 |
| 1991 | 565.5 | 234.6 | 35.5 | 0.7 | 131.8 | 19.3 | 1.9 | 11.6 | 6.9 | 295.0 | 2.6 | R 63.5 | R 568.7 | 178.1 | 109.5 | R 56.9 | 0.1 | R 91.8 | R 1,805.3 |
| 1992 | 590.6 | 249.2 | 35.0 | 1.7 | 140.1 | 25.3 | 2.5 | 17.3 | 7.0 | 307.8 | 2.5 | R 70.4 | R 609.7 | 167.1 | 99.2 | R 58.0 | 0.1 | R 78.4 | R 1,852.3 |
| 1993 | 685.9 | 263.1 | 32.7 | 2.0 | 139.7 | 37.2 | 2.3 | 12.9 | 7.2 | 321.6 | 3.3 | R 67.2 | R 625.9 | 35.3 | 86.5 | R 52.0 | 0.1 | R 137.9 | R 1,886.8 |
| 1994 | 622.9 | 254.0 | 36.2 | 2.0 | 144.5 | 44.0 | 3.1 | 12.7 | 7.5 | R 328.9 | 2.9 | R 71.5 | R 653.1 | 127.4 | R 115.6 | R 65.4 | 0.1 | R 112.6 | R 1,951.1 |
| 1995 | 668.2 | 264.8 | 36.1 | 2.0 | 159.5 | 45.9 | 2.8 | 12.4 | 7.4 | R 338.0 | 2.3 | R 69.4 | R 675.8 | 167.4 | R 92.3 | R 62.9 | 0.1 | R 37.3 | R 1,968.7 |
| 1996 | 648.6 | 289.3 | 34.3 | 1.2 | 160.5 | 52.8 | 3.3 | R 15.5 | 7.1 | R 338.3 | 1.3 | R 41.8 | R 656.3 | 243.5 | R 110.8 | R 60.4 | 0.1 | R 19.3 | R 2,028.2 |
| 1997 | 673.5 | 291.1 | 32.6 | 1.6 | 163.7 | 53.5 | 3.3 | R 14.6 | 7.5 | R 344.8 | 1.0 | R 41.5 | R 664.1 | 261.8 | R 102.2 | R 49.8 | 0.1 | R -29.7 | R 2,013.0 |
| 1998 | 634.5 | 288.7 | 39.3 | 0.7 | 173.4 | 55.9 | 3.5 | 11.8 | 7.9 | 351.9 | 1.1 | 50.4 | 695.9 | 301.6 | 105.4 | 32.2 | 0.1 | -1.0 | 2,057.3 |
| 1999 | 625.8 | 285.8 | 39.3 | 0.6 | 158.1 | 67.0 | 3.0 | 17.0 | 8.0 | 363.6 | 0.4 | 55.8 | 712.7 | 289.2 | 74.0 | 48.3 | 0.1 | 34.5 | 2,070.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 270. Residential Energy Consumption Estimates, Selected Years 1960-1999, Tennessee

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 336 | 34 | 80 | 797 | 862 | 1,740 | 1,269 | — | — | 8,683 | — | 21,599 | — |
| 1965 | 233 | 37 | 100 | 881 | 1,136 | 2,117 | 949 | — | — | 12,134 | — | 28,971 | — |
| 1970 | 191 | 47 | 169 | 2,027 | 2,316 | 4,512 | 806 | — | — | 17,942 | — | 43,479 | — |
| 1975 | 114 | 44 | 237 | 1,316 | 2,767 | 4,320 | 840 | — | — | 23,034 | — | 55,561 | — |
| 1980 | 82 | 45 | 308 | 549 | 1,501 | 2,358 | R 620 | — | — | 26,207 | — | 63,727 | — |
| 1985 | 59 | 39 | 259 | 737 | 1,209 | 2,205 | 1,543 | — | — | 25,546 | — | 60,018 | — |
| 1990 | 78 | 46 | 237 | 324 | 1,716 | 2,277 | 918 | — | — | 28,757 | — | R 62,908 | — |
| 1991 | 63 | 49 | 268 | 268 | 1,936 | 2,472 | 967 | — | — | 29,605 | — | R 64,360 | — |
| 1992 | 55 | 52 | 259 | 361 | 2,094 | 2,715 | 1,017 | — | — | 29,498 | — | R 62,913 | — |
| 1993 | 39 | 59 | 205 | 311 | 2,201 | 2,716 | R 777 | — | — | 30,199 | — | R 63,786 | — |
| 1994 | 32 | 57 | 302 | 439 | 2,112 | 2,853 | R 761 | — | — | 32,797 | — | R 68,444 | — |
| 1995 | 51 | 60 | 281 | 372 | 2,129 | 2,782 | R 845 | — | — | 30,967 | — | R 64,564 | — |
| 1996 | 39 | 70 | 272 | 456 | R 2,857 | R 3,585 | 843 | — | — | 35,333 | — | R 73,635 | — |
| 1997 | 46 | 64 | 251 | 437 | R 2,582 | R 3,269 | R 407 | — | — | 33,367 | — | R 69,407 | — |
| 1998 | 9 | 59 | 227 | 424 | 2,432 | 3,083 | 359 | — | — | 35,428 | — | 73,187 | — |
| 1999 | 34 | 59 | 210 | 423 | 3,047 | 3,680 | 385 | — | — | 35,425 | — | 69,408 | — |
| | | | | | **Trillion Btu** | | | | | | | | |
| 1960 | 8.3 | 35.1 | 0.5 | 4.5 | 3.5 | 8.4 | 25.4 | 0.0 | 0.0 | 29.6 | 106.8 | 73.7 | 180.5 |
| 1965 | 5.7 | 38.9 | 0.6 | 5.0 | 4.6 | 10.1 | 19.0 | 0.0 | 0.0 | 41.4 | 115.1 | 98.8 | 214.0 |
| 1970 | 4.5 | 47.6 | 1.0 | 11.5 | 8.8 | 21.2 | 16.1 | 0.0 | 0.0 | 61.2 | 150.7 | 148.3 | 299.0 |
| 1975 | 2.7 | 45.4 | 1.4 | 7.5 | 10.3 | 19.1 | 16.8 | 0.0 | 0.0 | 78.6 | 162.6 | 189.6 | 352.2 |
| 1980 | 2.0 | 45.6 | 1.8 | 3.1 | 5.5 | 10.4 | 12.4 | 0.0 | 0.0 | 89.4 | 159.8 | 217.4 | R 377.3 |
| 1985 | 1.4 | 40.8 | 1.5 | 4.2 | 4.4 | 10.0 | 30.9 | 0.0 | 0.0 | 87.2 | 170.3 | 204.8 | 375.1 |
| 1990 | 1.9 | 48.0 | 1.4 | 1.8 | 6.2 | 9.4 | 18.4 | e (s) | e 0.1 | 98.1 | e 175.9 | 214.6 | e 390.5 |
| 1991 | 1.6 | 51.0 | 1.6 | 1.5 | 7.0 | 10.1 | 19.3 | (s) | 0.1 | 101.0 | 183.1 | R 219.6 | R 402.7 |
| 1992 | 1.3 | 53.8 | 1.5 | 2.0 | 7.6 | 11.1 | 20.3 | (s) | 0.1 | 100.6 | 187.4 | R 214.7 | R 402.1 |
| 1993 | 1.0 | 61.0 | 1.2 | 1.8 | 7.9 | 10.9 | 15.5 | (s) | 0.1 | 103.0 | 191.5 | R 217.6 | 409.2 |
| 1994 | 0.8 | 59.2 | 1.8 | 2.5 | 7.7 | 11.9 | 15.2 | (s) | 0.1 | 111.9 | 199.1 | 233.5 | R 432.7 |
| 1995 | 1.3 | 61.9 | 1.6 | 2.1 | 7.7 | 11.5 | 16.9 | (s) | 0.1 | 105.7 | R 197.3 | R 220.3 | R 417.5 |
| 1996 | 1.0 | 72.7 | 1.6 | 2.6 | R 10.3 | R 14.5 | 16.9 | (s) | 0.1 | 120.6 | R 225.7 | R 251.2 | R 476.9 |
| 1997 | 1.1 | 66.1 | 1.5 | 2.5 | R 9.3 | R 13.3 | R 8.1 | (s) | 0.1 | 113.8 | R 202.6 | R 236.8 | R 439.4 |
| 1998 | 0.2 | 61.2 | 1.3 | 2.4 | 8.8 | 12.5 | 7.2 | (s) | 0.1 | 120.9 | 202.1 | 249.7 | 451.8 |
| 1999 | 0.8 | 60.6 | 1.2 | 2.4 | 11.0 | 14.6 | 7.7 | (s) | 0.1 | 120.9 | 204.7 | 236.8 | 441.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 271. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Tennessee

| Year | Coal[a] | Natural Gas[b] | Petroleum — Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|------|---------|----------------|--------------------|-------------|--------|----------------|------------------|-------|------|------------|----------------|------------|------------------------------------|----------|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 618 | 24 | 200 | 157 | 152 | 173 | (s) | 682 | 24 | — | 2,796 | — | 6,956 | — |
| 1965 | 430 | 28 | 248 | 173 | 200 | 277 | (s) | 899 | 18 | — | 4,274 | — | 10,204 | — |
| 1970 | 352 | 43 | 422 | 399 | 409 | 392 | 1 | 1,622 | 15 | — | 6,352 | — | 15,393 | — |
| 1975 | 211 | 42 | 589 | 259 | 488 | 419 | 1 | 1,757 | 16 | — | 7,440 | — | 17,947 | — |
| 1980 | 152 | 44 | 1,015 | 104 | 265 | 465 | 48 | 1,897 | 15 | — | 14,216 | — | 34,568 | — |
| 1985 | 110 | 43 | 3,086 | 167 | 213 | 337 | 98 | 3,901 | R 41 | — | 9,856 | — | 23,156 | — |
| 1990 | 140 | 44 | 636 | 69 | 303 | 464 | 33 | 1,504 | R 58 | — | 13,075 | — | R 28,603 | — |
| 1991 | 109 | 46 | 602 | 32 | 342 | 418 | 17 | 1,410 | R 62 | — | 13,117 | — | R 28,516 | — |
| 1992 | 102 | 47 | 1,042 | 69 | 370 | 346 | 57 | 1,883 | R 66 | — | 7,391 | — | R 15,763 | — |
| 1993 | 72 | 51 | 937 | 61 | 388 | 203 | 34 | 1,622 | 62 | — | 6,102 | — | R 12,889 | — |
| 1994 | 58 | 51 | 1,006 | 73 | 373 | 49 | 33 | 1,533 | 64 | — | 6,121 | — | R 12,775 | — |
| 1995 | 94 | 51 | 798 | 80 | 376 | 50 | 14 | 1,318 | 64 | — | 6,234 | — | R 12,998 | — |
| 1996 | 72 | 58 | 918 | 89 | R 504 | 49 | 28 | R 1,589 | 69 | — | 6,543 | — | R 13,636 | — |
| 1997 | 85 | 55 | 876 | 99 | R 456 | 49 | 45 | R 1,524 | R 45 | — | 25,839 | — | R 53,747 | — |
| 1998 | 16 | 52 | 935 | 123 | 429 | 49 | 2 | 1,537 | 45 | — | 25,859 | — | 53,419 | — |
| 1999 | 64 | 51 | 874 | 52 | 538 | 49 | 0 | 1,512 | 54 | — | 26,260 | — | 51,452 | — |
| | | | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 15.3 | 25.1 | 1.2 | 0.9 | 0.6 | 0.9 | (s) | 3.6 | 0.5 | 0.0 | 9.5 | 54.0 | 23.7 | 77.7 |
| 1965 | 10.6 | 29.6 | 1.4 | 1.0 | 0.8 | 1.5 | (s) | 4.7 | 0.4 | 0.0 | 14.6 | 59.8 | 34.8 | 94.6 |
| 1970 | 8.4 | 43.7 | 2.5 | 2.3 | 1.5 | 2.1 | (s) | 8.3 | 0.3 | 0.0 | 21.7 | 82.3 | 52.5 | 134.9 |
| 1975 | 5.0 | 43.8 | 3.4 | 1.5 | 1.8 | 2.2 | (s) | 8.9 | 0.3 | 0.0 | 25.4 | 83.4 | 61.2 | 144.6 |
| 1980 | 3.6 | 44.8 | 5.9 | 0.6 | 1.0 | 2.4 | 0.3 | 10.2 | 0.3 | 0.0 | 48.5 | 107.4 | 117.9 | 225.4 |
| 1985 | 2.7 | 44.9 | 18.0 | 0.9 | 0.8 | 1.8 | 0.6 | 22.1 | R 0.8 | 0.0 | 33.6 | R 104.1 | 79.0 | R 183.1 |
| 1990 | 3.5 | 45.1 | 3.7 | 0.4 | 1.1 | 2.4 | 0.2 | 7.8 | R 1.2 | e 0.0 | 44.6 | R e 102.1 | 97.6 | R e 199.7 |
| 1991 | 2.7 | 47.5 | 3.5 | 0.2 | 1.2 | 2.2 | 0.1 | 7.2 | R 1.2 | 0.0 | 44.8 | R 103.4 | R 97.3 | R 200.7 |
| 1992 | 2.5 | 48.0 | 6.1 | 0.4 | 1.3 | 1.8 | 0.4 | 10.0 | R 1.3 | 0.0 | 25.2 | R 87.0 | R 53.8 | R 140.7 |
| 1993 | 1.8 | 52.5 | 5.5 | 0.3 | 1.4 | 1.1 | 0.2 | 8.5 | 1.2 | 0.0 | 20.8 | 84.9 | 44.0 | 128.9 |
| 1994 | 1.5 | 52.4 | 5.9 | 0.4 | 1.4 | 0.3 | 0.2 | 8.1 | 1.3 | 0.0 | 20.9 | 84.1 | 43.6 | 127.9 |
| 1995 | 2.4 | 52.8 | 4.6 | 0.5 | 1.4 | 0.3 | 0.1 | 6.8 | 1.3 | 0.0 | 21.3 | 84.6 | R 44.4 | 128.9 |
| 1996 | 1.8 | 60.4 | 5.3 | 0.5 | R 1.8 | 0.3 | 0.2 | R 8.1 | 1.4 | 0.0 | 22.3 | R 94.0 | 46.5 | R 140.5 |
| 1997 | 2.1 | 56.8 | 5.1 | 0.6 | 1.6 | 0.3 | 0.3 | 7.8 | R 0.9 | 0.0 | 88.2 | R 155.9 | R 183.4 | 339.2 |
| 1998 | 0.4 | 54.0 | 5.4 | 0.7 | 1.6 | 0.3 | (s) | 8.0 | 0.9 | 0.0 | 88.2 | 151.4 | 182.3 | 333.7 |
| 1999 | 1.6 | 52.8 | 5.1 | 0.3 | 1.9 | 0.3 | 0.0 | 7.6 | 1.1 | 0.0 | 89.6 | 152.6 | 175.6 | 328.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to report.

# Table 272. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Tennessee

| Year | Coal (Thousand Short Tons) | Natural Gas a (Billion Cubic Feet) | Petroleum — Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b (Million kWh) | Wood and Waste | Other b,d | Electricity b (Million kWh) | Net Energy | Electrical System Energy Losses e (Million kWh) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (Thousand Barrels) | | | | | | | | | | | | | | | |
| 1960 | 2,307 | 76 | 1,785 | 2,096 | 1,670 | 275 | 256 | 627 | 180 | R 1,413 | R 8,301 | 0 | — | — | 27,514 | — | 68,438 | — |
| 1965 | 2,862 | 97 | 3,441 | 2,601 | 1,486 | 522 | 321 | 484 | 264 | R 4,292 | R 13,410 | 0 | — | — | 28,362 | — | 67,716 | — |
| 1970 | 2,452 | 123 | 3,628 | 3,172 | 1,709 | 363 | 334 | 235 | 593 | R 6,209 | R 16,245 | 0 | — | — | 27,776 | — | 67,310 | — |
| 1975 | 2,134 | 112 | 3,765 | 4,712 | 714 | 455 | 522 | 117 | 523 | R 5,571 | R 16,379 | 0 | — | — | 37,904 | — | 91,429 | — |
| 1980 | 2,774 | 123 | 3,378 | 4,252 | 881 | 960 | 565 | 36 | 1,445 | R 8,213 | R 19,730 | 0 | — | — | 32,968 | — | 80,167 | — |
| 1985 | 4,145 | 97 | 4,408 | 3,482 | 203 | 693 | 514 | 642 | 441 | R 6,293 | R 16,677 | 0 | — | — | 33,624 | — | 78,997 | — |
| 1990 | 3,846 | 110 | 5,798 | 2,925 | 46 | 761 | 578 | 583 | 273 | R 10,730 | R 21,694 | f 0 | — | — | 35,313 | — | R 77,250 | — |
| 1991 | 3,720 | 116 | 5,349 | 2,702 | 43 | 796 | 517 | 557 | 339 | R 11,331 | R 21,634 | 0 | — | — | 35,667 | — | R 77,538 | — |
| 1992 | 3,686 | 126 | 5,281 | 3,659 | 12 | 2,204 | 527 | 575 | 295 | R 12,578 | R 25,131 | 0 | — | — | 41,695 | — | R 88,925 | — |
| 1993 | 3,942 | 124 | 4,922 | 3,389 | 38 | 829 | 537 | 724 | 479 | R 12,043 | R 22,962 | 0 | — | — | 43,530 | — | R 91,942 | — |
| 1994 | 4,097 | 119 | 5,448 | 3,746 | 32 | 758 | 561 | 785 | 426 | R 12,790 | R 24,547 | R 810 | — | — | 43,614 | — | R 91,019 | — |
| 1995 | 3,777 | 126 | 5,434 | 3,980 | 37 | 777 | 552 | 865 | 351 | R 12,420 | R 24,416 | R 764 | — | — | 44,828 | — | R 93,463 | — |
| 1996 | 3,670 | 127 | 5,171 | 3,784 | 41 | 810 | 535 | 890 | 184 | R 7,234 | R 18,649 | R 819 | — | — | 45,781 | — | R 95,409 | — |
| 1997 | 3,608 | 139 | 4,917 | 4,590 | 44 | R 871 | 566 | 937 | 110 | R 7,188 | R 19,223 | R 470 | — | — | 27,710 | — | R 57,640 | — |
| 1998 | 3,463 | 146 | 5,928 | 3,917 | 66 | 400 | 592 | 630 | 166 | 8,668 | 20,367 | 799 | — | — | 30,461 | — | 62,927 | — |
| 1999 | 3,325 | 139 | 5,919 | 2,410 | 53 | 1,066 | 598 | 569 | 60 | 9,579 | 20,254 | 652 | — | — | 31,493 | — | 61,705 | — |
| | | | (Trillion Btu) | | | | | | | | | | | | | | | |
| 1960 | 58.1 | 78.6 | 11.8 | 12.2 | 9.5 | 1.1 | 1.5 | 3.3 | 1.1 | R 8.3 | R 48.9 | 0.0 | 19.5 | 0.0 | 93.9 | R 299.0 | 233.5 | R 532.5 |
| 1965 | 71.4 | 101.9 | 22.8 | 15.2 | 8.4 | 2.1 | 1.9 | 2.5 | 1.7 | R 24.6 | R 79.2 | 0.0 | 27.2 | 0.0 | 96.8 | R 376.5 | 231.0 | R 607.5 |
| 1970 | 58.0 | 125.9 | 24.1 | 18.5 | 9.7 | 1.4 | 2.0 | 1.2 | 3.7 | R 35.3 | R 95.5 | 0.0 | 37.3 | 0.0 | 94.8 | R 411.9 | 229.7 | R 641.5 |
| 1975 | 49.9 | 115.1 | 25.0 | 27.4 | 4.1 | 1.7 | 3.2 | 0.6 | 3.3 | R 32.2 | R 97.5 | 0.0 | 37.3 | 0.0 | 129.3 | R 429.2 | 312.0 | R 741.1 |
| 1980 | 67.2 | 125.1 | 22.4 | 24.8 | 5.0 | 3.5 | 3.4 | 0.2 | 9.1 | R 46.1 | R 114.5 | 0.0 | R 49.4 | 0.0 | 112.5 | R 468.7 | 273.5 | R 742.2 |
| 1985 | 102.2 | 100.6 | 29.3 | 20.3 | 1.1 | 2.5 | 3.1 | 3.4 | 2.8 | R 35.6 | R 98.0 | 0.0 | R 57.9 | 0.0 | 114.7 | R 473.4 | 269.5 | R 742.9 |
| 1990 | 96.8 | 113.6 | 38.5 | 17.0 | 0.3 | 2.8 | 3.5 | 3.1 | 1.7 | R 60.1 | R 126.9 | f 0.0 | R 35.4 | f 0.0 | 120.5 | R f 493.2 | R 263.6 | R f 756.7 |
| 1991 | 93.5 | 119.7 | 35.5 | 15.7 | 0.2 | 2.9 | 3.1 | 2.9 | 2.1 | R 63.5 | R 126.0 | 0.0 | R 36.4 | 0.0 | 121.7 | R 497.2 | R 264.6 | R 761.8 |
| 1992 | 93.1 | 130.2 | 35.0 | 21.3 | 0.1 | 8.0 | 3.2 | 3.0 | 1.9 | R 70.4 | R 142.9 | 0.0 | R 36.4 | 0.0 | 142.3 | R 544.8 | R 303.4 | R 848.2 |
| 1993 | 99.2 | 128.7 | 32.7 | 19.7 | 0.2 | 3.0 | 3.3 | 3.8 | 3.0 | R 67.2 | R 132.9 | 0.0 | R 35.2 | 0.0 | 148.5 | R 544.5 | R 313.7 | R 858.2 |
| 1994 | 102.7 | 122.7 | 36.2 | 21.8 | 0.2 | 2.8 | 3.4 | 4.1 | 2.7 | R 71.5 | R 142.6 | R 8.4 | R 48.9 | 0.0 | 148.8 | R 574.0 | R 310.6 | R 884.6 |
| 1995 | 94.9 | 129.8 | 36.1 | 23.2 | 0.2 | 2.8 | 3.3 | 4.5 | 2.2 | R 69.4 | R 141.7 | R 7.9 | R 44.8 | 0.0 | 153.0 | R 572.1 | R 318.9 | R 890.9 |
| 1996 | 91.8 | 130.6 | 34.3 | 22.0 | 0.2 | 2.9 | 3.2 | R 4.6 | 1.2 | R 41.8 | R 110.3 | R 8.5 | R 42.2 | 0.0 | 156.2 | R 539.6 | R 325.5 | R 865.1 |
| 1997 | 90.2 | 143.2 | 32.6 | 26.7 | 0.3 | 3.1 | 3.4 | 4.9 | 0.7 | R 41.5 | R 113.2 | R 4.9 | R 40.8 | 0.0 | 94.5 | R 486.8 | R 196.7 | R 683.5 |
| 1998 | 86.6 | 150.2 | 39.3 | 22.8 | 0.4 | 1.4 | 3.6 | 3.3 | 1.0 | 50.4 | 122.3 | 8.3 | 24.1 | 0.0 | 103.9 | 495.4 | 214.7 | 710.1 |
| 1999 | 83.2 | 143.0 | 39.3 | 14.0 | 0.3 | 3.9 | 3.6 | 3.0 | 0.4 | 55.8 | 120.2 | 6.7 | 39.5 | 0.0 | 107.5 | 500.2 | 210.5 | 710.8 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 273. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Tennessee

| | Coal [a] | Natural Gas [b] | Petroleum — Aviation Gasoline [a] | Petroleum — Distillate Fuel [a] | Petroleum — Jet Fuel [a] | Petroleum — LPG [a] | Petroleum — Lubricants [a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel [a] | Petroleum — Total | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | | Million Kilowatthours | |

| Year | Thousand Short Tons | Billion Cubic Feet | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Elec. Sys. Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 38 | 5 | 1,040 | 2,914 | 570 | 22 | 505 | 26,468 | 8 | 31,527 | 0 | (s) | — | (s) | — |
| 1965 | 9 | 23 | 1,024 | 4,346 | 1,174 | 54 | 479 | 31,721 | 22 | 38,819 | 0 | (s) | — | (s) | — |
| 1970 | 4 | 26 | 116 | 7,189 | 3,335 | 94 | 491 | 41,241 | 3 | 52,469 | 0 | (s) | — | (s) | — |
| 1975 | (s) | 19 | 70 | 10,631 | 3,936 | 120 | 807 | 53,199 | 191 | 68,953 | 0 | (s) | — | (s) | — |
| 1980 | 0 | 16 | 290 | 13,196 | 4,154 | 61 | 676 | 54,446 | 6 | 72,828 | 0 | (s) | — | (s) | — |
| 1985 | 0 | 10 | 154 | 15,221 | 4,862 | 166 | 615 | 57,068 | 0 | 78,087 | R e 686 | (s) | — | 1 | — |
| 1990 | 0 | 20 | 174 | 19,842 | 4,181 | 126 | 692 | 56,954 | 5 | 81,974 | R 583 | (s) | — | 1 | — |
| 1991 | 0 | 16 | 145 | 18,774 | 3,413 | 135 | 619 | 55,187 | 50 | 78,324 | R 426 | (s) | — | 1 | — |
| 1992 | 0 | 16 | 343 | 18,860 | 4,479 | 120 | 631 | 57,667 | 44 | 82,144 | R 516 | (s) | — | 1 | — |
| 1993 | 0 | 19 | 395 | 19,033 | 6,569 | 147 | 643 | 60,286 | 15 | 87,089 | R 593 | (s) | — | 1 | — |
| 1994 | 0 | 18 | 392 | 19,231 | 7,762 | 240 | 672 | 62,062 | 3 | 90,362 | R 841 | 1 | — | 2 | — |
| 1995 | 0 | 18 | 397 | 21,874 | 8,096 | 135 | 660 | 63,907 | 2 | 95,070 | R 358 | 1 | — | 3 | — |
| 1996 | 0 | 24 | 231 | 22,119 | 9,317 | R 133 | 641 | 63,928 | 2 | R 96,370 | R 7 | 1 | — | 3 | — |
| 1997 | 0 | 23 | 312 | 22,017 | 9,433 | R 120 | 677 | 65,162 | 4 | R 97,725 | R 7 | 1 | — | 2 | — |
| 1998 | 0 | 16 | 136 | 23,250 | 9,855 | 3 | 709 | 66,842 | 0 | 100,794 | 8 | 2 | — | 4 | — |
| 1999 | 0 | 25 | 109 | 22,612 | 11,816 | 58 | 716 | 69,151 | 0 | 104,462 | 0 | 2 | — | 4 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Elec. Sys. Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.9 | 5.5 | 5.2 | 17.0 | 3.1 | 0.1 | 3.1 | 139.0 | 0.1 | 167.6 | 0.0 | (s) | 174.0 | (s) | 174.0 |
| 1965 | 0.2 | 23.7 | 5.2 | 25.3 | 6.5 | 0.2 | 2.9 | 166.6 | 0.1 | 206.9 | 0.0 | (s) | 230.9 | (s) | 230.9 |
| 1970 | 0.1 | 27.0 | 0.6 | 41.9 | 18.8 | 0.4 | 3.0 | 216.6 | (s) | 281.2 | 0.0 | (s) | 308.4 | (s) | 308.4 |
| 1975 | (s) | 19.7 | 0.4 | 61.9 | 22.2 | 0.4 | 4.9 | 279.5 | 1.2 | 370.5 | 0.0 | (s) | 390.2 | (s) | 390.2 |
| 1980 | 0.0 | 16.8 | 1.5 | 76.9 | 23.4 | 0.2 | 4.1 | 286.0 | (s) | 392.1 | 0.0 | (s) | 408.9 | (s) | 408.9 |
| 1985 | 0.0 | 10.5 | 0.8 | 88.7 | 27.5 | 0.6 | 3.7 | 299.8 | 0.0 | 421.0 | R e 2.4 | (s) | e 431.5 | (s) | e 431.5 |
| 1990 | 0.0 | 20.3 | 0.9 | 115.6 | 23.6 | 0.5 | 4.2 | 299.2 | (s) | 443.9 | R 2.1 | (s) | 464.2 | (s) | 464.2 |
| 1991 | 0.0 | 16.3 | 0.7 | 109.4 | 19.3 | 0.5 | 3.8 | 289.9 | 0.3 | 423.8 | R 1.5 | (s) | 440.1 | (s) | 440.1 |
| 1992 | 0.0 | 16.9 | 1.7 | 109.9 | 25.3 | 0.4 | 3.8 | 302.9 | 0.3 | 444.4 | R 1.8 | (s) | 461.3 | (s) | 461.3 |
| 1993 | 0.0 | 19.3 | 2.0 | 110.9 | 37.2 | 0.5 | 3.9 | 316.7 | 0.1 | 471.2 | R 2.1 | (s) | 490.5 | (s) | 490.5 |
| 1994 | 0.0 | 18.7 | 2.0 | 112.0 | 44.0 | 0.9 | 4.1 | R 324.6 | (s) | R 487.5 | R 3.0 | (s) | R 506.2 | (s) | R 506.2 |
| 1995 | 0.0 | 18.2 | 2.0 | 127.4 | 45.9 | 0.5 | 4.0 | R 333.3 | (s) | R 513.1 | R 1.3 | (s) | R 531.3 | (s) | R 531.3 |
| 1996 | 0.0 | 25.0 | 1.2 | 128.8 | 52.8 | R 0.5 | 3.9 | R 333.4 | (s) | R 520.7 | (s) | (s) | R 545.7 | (s) | R 545.7 |
| 1997 | 0.0 | 23.3 | 1.6 | 128.2 | 53.5 | 0.4 | 4.1 | R 339.7 | (s) | R 527.6 | (s) | (s) | R 550.8 | (s) | R 550.8 |
| 1998 | 0.0 | 16.9 | 0.7 | 135.4 | 55.9 | (s) | 4.3 | 348.4 | 0.0 | 544.7 | (s) | (s) | 561.6 | (s) | 561.6 |
| 1999 | 0.0 | 25.9 | 0.6 | 131.7 | 67.0 | 0.2 | 4.3 | 360.3 | 0.0 | 564.2 | 0.0 | (s) | 590.1 | (s) | 590.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 274. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Tennessee

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 12,138 | 7 | 0 | (s) | 0 | (s) | 0 | 8,676 | 0 | 0 | 0 | — |
| 1965 | 10,637 | 16 | 0 | 0 | 0 | 0 | 0 | 8,750 | 0 | 0 | 0 | — |
| 1970 | 14,727 | 17 | 0 | 0 | 0 | 0 | 0 | 8,067 | 0 | 0 | 0 | — |
| 1975 | 18,848 | 0 | 0 | 1,310 | 0 | 1,310 | 0 | 11,806 | 0 | 0 | 0 | — |
| 1980 | 21,679 | 1 | 0 | 406 | 0 | 406 | 519 | 8,764 | 0 | 0 | 0 | — |
| 1985 | 20,853 | 0 | 0 | 237 | 0 | 237 | 9,672 | 6,539 | 0 | 0 | 0 | — |
| 1990 | 20,814 | 1 | 0 | 232 | 0 | 232 | 14,003 | 9,537 | 0 | 0 | 0 | — |
| 1991 | 19,216 | (s) | 0 | 272 | 0 | 272 | 16,587 | 10,497 | 0 | 0 | 0 | — |
| 1992 | 20,263 | (s) | 0 | 225 | 0 | 225 | 15,654 | 9,590 | 0 | 0 | 0 | — |
| 1993 | 23,801 | 2 | 0 | 413 | 0 | 413 | 3,305 | 8,394 | 0 | 0 | 0 | — |
| 1994 | 21,253 | 1 | 0 | 519 | 0 | 519 | 11,932 | 10,399 | 0 | 0 | 0 | — |
| 1995 | 23,477 | 2 | 0 | 455 | 0 | 455 | 15,708 | 8,186 | 0 | 0 | 0 | — |
| 1996 | 22,963 | 1 | 0 | 460 | 0 | 460 | 22,924 | 9,900 | 0 | 0 | 0 | — |
| 1997 | 24,464 | 2 | 0 | 375 | 0 | 375 | 24,648 | 9,401 | 0 | 0 | 0 | — |
| 1998 | 23,321 | 6 | 0 | 1,448 | 0 | 1,448 | 28,388 | 9,385 | 0 | 0 | 0 | — |
| 1999 | 23,216 | 3 | 0 | 1,042 | 0 | 1,042 | 27,227 | 6,499 | 0 | 0 | 0 | — |
| | | | | | **Trillion Btu** | | | | | | | |
| 1960 | 291.8 | 7.5 | 0.0 | (s) | 0.0 | (s) | 0.0 | 93.4 | 0.0 | 0.0 | 0.0 | 392.6 |
| 1965 | 250.9 | 17.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 91.5 | 0.0 | 0.0 | 0.0 | 359.4 |
| 1970 | 332.7 | 17.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 84.7 | 0.0 | 0.0 | 0.0 | 435.0 |
| 1975 | 414.3 | 0.0 | 0.0 | 7.6 | 0.0 | 7.6 | 0.0 | 122.9 | 0.0 | 0.0 | 0.0 | 544.8 |
| 1980 | 504.1 | 1.1 | 0.0 | 2.4 | 0.0 | 2.4 | 5.7 | 91.0 | 0.0 | 0.0 | 0.0 | 604.3 |
| 1985 | 493.3 | 0.0 | 0.0 | 1.4 | 0.0 | 1.4 | 104.6 | 68.3 | 0.0 | 0.0 | 0.0 | 667.6 |
| 1990 | 498.1 | 0.6 | 0.0 | 1.4 | 0.0 | 1.4 | 149.5 | 99.2 | 0.0 | 0.0 | 0.0 | 748.8 |
| 1991 | 467.7 | 0.2 | 0.0 | 1.6 | 0.0 | 1.6 | 178.1 | 109.5 | 0.0 | 0.0 | 0.0 | 757.2 |
| 1992 | 493.7 | 0.3 | 0.0 | 1.3 | 0.0 | 1.3 | 167.1 | 99.2 | 0.0 | 0.0 | 0.0 | 761.6 |
| 1993 | 584.0 | 1.6 | 0.0 | 2.4 | 0.0 | 2.4 | 35.3 | 86.5 | 0.0 | 0.0 | 0.0 | 709.8 |
| 1994 | 518.0 | 1.1 | 0.0 | 3.0 | 0.0 | 3.0 | 127.4 | 107.3 | 0.0 | 0.0 | 0.0 | 756.7 |
| 1995 | 569.5 | 2.1 | 0.0 | 2.7 | 0.0 | 2.7 | 167.4 | 84.4 | 0.0 | 0.0 | 0.0 | 826.2 |
| 1996 | 554.0 | 0.6 | 0.0 | 2.7 | 0.0 | 2.7 | 243.5 | R 102.4 | 0.0 | 0.0 | 0.0 | 903.1 |
| 1997 | 580.1 | 1.7 | 0.0 | 2.2 | 0.0 | 2.2 | 261.8 | R 97.4 | 0.0 | 0.0 | 0.0 | R 943.1 |
| 1998 | 547.2 | 6.4 | 0.0 | 8.4 | 0.0 | 8.4 | 301.6 | 97.1 | 0.0 | 0.0 | 0.0 | 960.7 |
| 1999 | 540.2 | 3.6 | 0.0 | 6.1 | 0.0 | 6.1 | 289.2 | 67.2 | 0.0 | 0.0 | 0.0 | 906.3 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 275. Energy Consumption Estimates by Source, Selected Years 1960-1999, Texas

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | \<-- Thousand Barrels --> | | | | | | | | | | | Million kWh | | Wood and Waste | Other | Million kWh | Total |

### Thousand Barrels / Million kWh

| Year | Coal | Nat. Gas | Asphalt | Aviation | Distillate | Jet | Kero | LPG | Lubri | Motor | Residual | Other | Total | Nuclear | Hydro | Wood | Other | Net Inter | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1,067 | 2,720 | 6,284 | 3,261 | 24,400 | 10,842 | 3,391 | 73,297 | 3,493 | 91,841 | 22,584 | R 55,967 | R 295,360 | 0 | 927 | — | — | -1,996 | — |
| 1965 | 1,146 | 3,068 | 7,811 | 3,457 | 24,854 | 15,365 | 3,459 | 109,109 | 3,788 | 107,851 | 14,322 | R 80,537 | R 370,553 | 0 | 661 | — | — | -2,853 | — |
| 1970 | 1,154 | 4,093 | 11,885 | 2,007 | 32,410 | 24,430 | 7,500 | 151,223 | 4,204 | 141,393 | 14,146 | R 100,279 | R 489,477 | 0 | 883 | — | — | 4,903 | — |
| 1975 | 12,765 | 3,944 | 8,150 | 1,312 | 54,706 | 27,308 | 7,196 | 157,246 | 4,321 | 175,538 | 38,536 | R 124,910 | R 599,224 | 0 | 1,584 | — | — | -5,489 | — |
| 1980 | 48,602 | 4,091 | 10,906 | 1,264 | 72,513 | 30,934 | 15,355 | 189,802 | 5,340 | 180,997 | 65,070 | R 218,266 | R 790,447 | 0 | 398 | — | — | -20,069 | — |
| 1985 | 77,017 | 3,386 | 11,808 | 1,317 | 94,121 | 74,500 | 776 | 256,932 | 4,859 | 205,419 | 28,713 | R 141,141 | R 819,586 | 0 | 1,397 | — | — | 30,397 | — |
| 1990 | 91,415 | 3,602 | 14,013 | 838 | 82,338 | 95,903 | 200 | 293,043 | 5,468 | 205,402 | 27,843 | R 177,136 | R 902,184 | 15,859 | R h 1,794 | — | — | R 20,914 | — |
| 1991 | 92,064 | 3,560 | 9,371 | 655 | 84,708 | 90,674 | 93 | 320,936 | 4,891 | 198,780 | 28,600 | R 176,427 | R 915,137 | 19,800 | R 2,225 | — | — | R 17,969 | — |
| 1992 | 91,568 | 3,476 | 11,800 | 783 | 90,279 | 90,029 | 173 | 333,233 | 4,987 | 200,686 | 30,937 | R 190,910 | R 953,817 | 24,496 | R 3,325 | — | — | R 5,201 | — |
| 1993 | 96,809 | 3,741 | 12,734 | 693 | 91,759 | 86,961 | 152 | 322,305 | 5,078 | 207,441 | 22,859 | R 187,535 | R 937,518 | 12,407 | R 1,786 | — | — | R 18,124 | — |
| 1994 | 93,829 | 3,666 | 10,947 | 773 | 89,545 | 83,397 | 148 | 358,599 | 5,308 | 218,772 | 21,946 | R 196,579 | R 986,013 | 28,745 | R 1,530 | — | — | R 7,838 | — |
| 1995 | 92,612 | 3,802 | 11,794 | 645 | 82,610 | 83,002 | 196 | 370,395 | 5,216 | 213,428 | 22,894 | R 188,355 | R 978,535 | 36,151 | R 1,703 | — | — | R 1,804 | — |
| 1996 | 98,997 | 3,991 | 11,962 | 625 | 92,763 | 99,870 | 237 | R 395,062 | 5,062 | 226,381 | 20,630 | R 216,465 | R 1,069,057 | 35,767 | R 960 | — | — | R 23,472 | — |
| 1997 | 101,296 | 3,951 | 10,509 | R 658 | 86,741 | 105,610 | 364 | R 449,056 | 5,348 | 224,997 | 22,550 | R 229,580 | R 1,135,414 | 37,358 | R 2,711 | — | — | R 25,705 | — |
| 1998 | 99,430 | 4,031 | 11,201 | 555 | 92,963 | 108,536 | 430 | 447,111 | 5,599 | 236,779 | 27,121 | 220,387 | 1,150,682 | 38,685 | 1,911 | — | — | 20,258 | — |
| 1999 | 102,476 | 3,859 | 8,438 | 796 | 106,313 | 104,896 | 222 | 445,191 | 5,657 | 242,992 | 21,747 | 221,517 | 1,157,769 | 36,760 | 1,249 | — | — | -13,516 | — |

### Trillion Btu

| Year | Coal | Nat. Gas | Asphalt | Aviation | Distillate | Jet | Kero | LPG | Lubri | Motor | Residual | Other | Total | Nuclear | Hydro | Wood | Other | Net Inter | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 25.0 | 2,815.5 | 41.7 | 16.5 | 142.1 | 58.6 | 19.2 | 294.0 | 21.2 | 482.4 | 142.0 | R 334.3 | R 1,552.0 | 0.0 | 10.0 | 38.3 | 0.0 | -6.8 | R 4,433.9 |
| 1965 | 29.2 | 3,181.5 | 51.8 | 17.5 | 144.8 | 84.3 | 19.6 | 437.6 | 23.0 | 566.5 | 90.0 | R 473.8 | R 1,909.0 | 0.0 | 6.9 | 41.2 | 0.0 | -9.7 | R 5,158.0 |
| 1970 | 30.8 | 4,203.9 | 78.9 | 10.1 | 188.8 | 135.9 | 42.5 | 571.5 | 25.5 | 742.7 | 88.9 | R 584.2 | R 2,469.1 | 0.0 | 9.3 | 52.2 | 0.0 | 16.7 | R 6,781.9 |
| 1975 | 196.2 | 4,046.9 | 54.1 | 6.6 | 318.7 | 152.7 | 40.8 | 584.2 | 26.2 | 922.1 | 242.3 | R 726.8 | R 3,074.4 | 0.0 | 16.5 | 55.8 | 0.0 | -18.7 | R 7,371.1 |
| 1980 | 734.1 | 4,226.1 | 72.4 | 6.4 | 422.4 | 173.3 | 87.1 | 697.3 | 32.4 | 950.8 | 409.1 | R 1,241.1 | R 4,092.2 | 0.0 | 4.1 | R 83.5 | 0.0 | -68.5 | R 9,071.6 |
| 1985 | 1,149.0 | 3,514.4 | 78.4 | 6.6 | 548.3 | 420.5 | 4.4 | 925.7 | 29.5 | 1,079.1 | 180.5 | R 808.2 | R 4,081.1 | 0.0 | 14.6 | R 76.2 | 0.0 | 103.7 | R 8,939.0 |
| 1990 | 1,333.9 | 3,745.9 | 93.0 | 4.2 | 479.6 | 542.1 | 1.1 | 1,062.3 | 33.2 | 1,079.0 | 175.1 | R 1,007.3 | R 4,476.9 | 169.4 | h 18.7 | R 85.4 | h 0.6 | R 71.4 | R h 9,901.6 |
| 1991 | 1,333.1 | 3,691.8 | 62.2 | 3.3 | 493.4 | 512.8 | 0.5 | 1,159.9 | 29.7 | 1,044.2 | 179.8 | R 1,001.7 | R 4,487.5 | 212.7 | 23.2 | R 88.0 | R 0.7 | R 61.3 | R 9,893.6 |
| 1992 | 1,324.2 | 3,625.8 | 78.3 | 4.0 | 525.9 | 509.1 | 1.0 | 1,207.6 | 30.2 | 1,054.2 | 194.5 | R 1,077.3 | R 4,682.1 | 261.6 | R 34.4 | R 96.4 | 0.7 | R 17.7 | R 10,025.9 |
| 1993 | 1,413.2 | 3,846.0 | 84.5 | 3.5 | 534.5 | 492.0 | 0.9 | 1,162.2 | 30.8 | 1,089.7 | 143.7 | R 1,060.2 | R 4,602.1 | 132.5 | 18.4 | R 95.5 | R 0.8 | R 61.8 | R 10,162.2 |
| 1994 | 1,382.8 | 3,802.0 | 72.6 | 3.9 | 521.6 | 472.5 | 0.8 | 1,303.5 | 32.2 | R 1,144.2 | 138.0 | R 1,110.1 | R 4,799.4 | 306.9 | 15.8 | R 96.1 | 0.8 | R 26.7 | R 10,420.5 |
| 1995 | 1,361.7 | 3,943.2 | 78.3 | 3.3 | 481.2 | 470.5 | 1.1 | 1,341.9 | 31.6 | R 1,113.0 | 143.9 | R 1,063.2 | R 4,728.1 | 385.3 | 17.6 | R 89.5 | R 0.9 | R 6.2 | R 10,522.8 |
| 1996 | 1,475.4 | 4,123.0 | 79.4 | 3.2 | 540.3 | 566.2 | 1.3 | R 1,427.4 | 30.7 | R 1,180.8 | 129.7 | R 1,215.7 | R 5,174.7 | 379.9 | 9.9 | R 108.4 | R 1.4 | R 80.1 | R 11,342.3 |
| 1997 | 1,507.1 | 4,061.2 | 69.7 | 3.3 | 505.3 | 598.8 | 2.1 | R 1,623.8 | 32.4 | R 1,172.9 | 141.8 | R 1,292.3 | R 5,442.4 | 396.9 | R 28.1 | R 108.5 | 1.8 | R 87.7 | R 11,624.2 |
| 1998 | 1,489.7 | 4,196.2 | 74.3 | 2.8 | 541.5 | 615.4 | 2.4 | 1,615.9 | 34.0 | 1,234.1 | 170.5 | 1,240.5 | 5,531.4 | 411.0 | 19.8 | 82.4 | 1.9 | 69.1 | 11,793.4 |
| 1999 | 1,534.7 | 3,982.4 | 56.0 | 4.0 | 619.3 | 594.8 | 1.3 | 1,609.8 | 34.3 | 1,266.2 | 136.7 | 1,242.9 | 5,565.3 | 390.5 | 12.9 | 67.8 | 4.5 | -46.1 | 11,501.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## TEXAS

### Table 276. Residential Energy Consumption Estimates, Selected Years 1960-1999, Texas

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 6 | 172 | 96 | 6 | 10,083 | 10,185 | 705 | — | — | 11,316 | — | 28,146 | — |
| 1965 | 2 | 183 | 71 | 7 | 13,052 | 13,131 | 469 | — | — | 18,745 | — | 44,755 | — |
| 1970 | 1 | 232 | 134 | 33 | 15,397 | 15,565 | 322 | — | — | 32,591 | — | 78,980 | — |
| 1975 | 0 | 232 | 270 | 39 | 11,419 | 11,728 | 378 | — | — | 40,892 | — | 98,636 | — |
| 1980 | (s) | 225 | 8 | 198 | 6,131 | 6,337 | R 2,008 | — | — | 57,178 | — | 139,037 | — |
| 1985 | 2 | 213 | 39 | 112 | 7,262 | 7,414 | 1,188 | — | — | 71,740 | — | 168,547 | — |
| 1990 | 4 | 211 | 3 | 26 | 6,133 | 6,162 | 746 | — | — | 82,548 | — | R 180,581 | — |
| 1991 | 4 | 222 | 3 | 34 | 4,040 | 4,078 | 786 | — | — | 84,088 | — | R 182,802 | — |
| 1992 | 4 | 215 | 2 | 23 | 3,448 | 3,473 | 827 | — | — | 81,934 | — | R 174,745 | — |
| 1993 | 2 | 232 | 3 | 30 | 3,674 | 3,707 | 725 | — | — | 87,686 | — | R 185,205 | — |
| 1994 | (s) | 213 | 6 | 20 | 3,627 | 3,653 | 711 | — | — | 89,793 | — | R 187,390 | — |
| 1995 | 0 | 206 | 5 | 22 | 3,319 | 3,346 | 789 | — | — | 92,831 | — | R 193,547 | — |
| 1996 | 0 | 229 | (s) | 38 | 2,312 | 2,351 | 787 | — | — | 99,656 | — | R 207,684 | — |
| 1997 | (s) | 235 | (s) | 45 | R 3,503 | R 3,548 | R 543 | — | — | 101,094 | — | R 210,286 | — |
| 1998 | 5 | 199 | (s) | 31 | 4,552 | 4,583 | 479 | — | — | 110,434 | — | 228,134 | — |
| 1999 | 3 | 176 | 2 | 31 | 9,091 | 9,125 | 513 | — | — | 108,591 | — | 212,764 | — |

#### Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.1 | 177.7 | 0.6 | (s) | 40.4 | 41.0 | 14.1 | 0.0 | 0.0 | 38.6 | 271.5 | 96.0 | 367.6 |
| 1965 | (s) | 189.3 | 0.4 | (s) | 52.4 | 52.8 | 9.4 | 0.0 | 0.0 | 64.0 | 315.5 | 152.7 | 468.2 |
| 1970 | (s) | 238.5 | 0.8 | 0.2 | 58.2 | 59.2 | 6.4 | 0.0 | 0.0 | 111.2 | 415.3 | 269.5 | 684.7 |
| 1975 | 0.0 | 239.2 | 1.6 | 0.2 | 42.4 | 44.2 | 7.6 | 0.0 | 0.0 | 139.5 | 430.5 | 336.5 | 767.1 |
| 1980 | (s) | 231.7 | (s) | 1.1 | 22.5 | 23.7 | R 40.2 | 0.0 | 0.0 | 195.1 | R 490.7 | 474.4 | R 965.1 |
| 1985 | 0.1 | 221.0 | 0.2 | 0.6 | 26.2 | 27.0 | 23.8 | 0.0 | 0.0 | 244.8 | 516.6 | 575.1 | 1,091.7 |
| 1990 | 0.1 | 219.5 | (s) | 0.1 | 22.2 | 22.4 | 14.9 | e 0.2 | R e 0.4 | 281.7 | e 539.1 | R 616.1 | R e 1,155.3 |
| 1991 | 0.1 | 231.0 | (s) | 0.2 | 14.6 | 14.8 | 15.7 | 0.2 | 0.4 | 286.9 | R 549.2 | R 623.7 | R 1,172.9 |
| 1992 | 0.1 | 225.3 | (s) | 0.1 | 12.5 | 12.6 | 16.5 | 0.2 | 0.4 | 279.6 | R 534.8 | R 596.2 | R 1,131.0 |
| 1993 | (s) | 238.5 | (s) | 0.2 | 13.2 | 13.4 | 14.5 | 0.2 | 0.4 | 299.2 | 566.3 | R 631.9 | R 1,198.2 |
| 1994 | (s) | 222.5 | (s) | 0.1 | 13.2 | 13.3 | 14.2 | 0.2 | R 0.5 | 306.4 | 557.1 | R 639.4 | R 1,196.5 |
| 1995 | 0.0 | 215.2 | (s) | 0.1 | 12.0 | 12.2 | 15.8 | 0.2 | R 0.5 | 316.7 | R 560.6 | R 660.4 | R 1,221.0 |
| 1996 | 0.0 | 237.7 | (s) | 0.2 | 8.4 | 8.6 | 15.7 | 0.3 | 0.5 | 340.0 | 602.8 | R 708.6 | R 1,311.4 |
| 1997 | (s) | 242.0 | (s) | 0.3 | R 12.7 | R 12.9 | R 10.9 | 0.3 | 0.5 | 344.9 | R 611.5 | R 717.5 | R 1,329.0 |
| 1998 | 0.1 | 209.1 | (s) | 0.2 | 16.5 | 16.6 | 9.6 | 0.3 | 0.6 | 376.8 | 613.1 | 778.4 | 1,391.5 |
| 1999 | 0.1 | 182.4 | (s) | 0.2 | 32.9 | 33.1 | 10.3 | 0.3 | 0.6 | 370.5 | 597.3 | 726.0 | 1,323.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 277. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Texas

| Year | Coal[a] | Natural Gas[b] | Petroleum: Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 11 | 60 | 595 | 656 | 1,779 | 663 | 191 | 3,884 | 13 | — | 9,801 | — | 24,378 | — |
| 1965 | 4 | 81 | 440 | 788 | 2,303 | 711 | 64 | 4,307 | 9 | — | 14,804 | — | 35,346 | — |
| 1970 | 1 | 146 | 830 | 3,603 | 2,717 | 692 | 78 | 7,920 | 6 | — | 22,869 | — | 55,420 | — |
| 1975 | 0 | 117 | 1,669 | 4,192 | 2,015 | 687 | 677 | 9,240 | 7 | — | 33,884 | — | 81,733 | — |
| 1980 | 1 | 169 | 2,842 | 3,251 | 1,082 | 3,299 | 2,569 | 13,043 | 48 | — | 44,062 | — | 107,144 | — |
| 1985 | 5 | 152 | 9,582 | 250 | 1,282 | 1,954 | 252 | 13,320 | R 32 | — | 60,150 | — | 141,317 | — |
| 1990 | 7 | 172 | 3,274 | 25 | 1,082 | 2,294 | 72 | 6,746 | R 47 | — | 70,781 | — | R 154,840 | — |
| 1991 | 7 | 181 | 2,950 | 12 | 713 | 1,623 | 217 | 5,516 | R 50 | — | 72,141 | — | R 156,830 | — |
| 1992 | 6 | 185 | 3,104 | 68 | 609 | 1,446 | 16 | 5,242 | R 54 | — | 72,076 | — | R 153,722 | — |
| 1993 | 4 | 176 | 2,343 | 25 | 648 | 159 | 0 | 3,174 | 58 | — | 75,466 | — | R 159,395 | — |
| 1994 | (s) | 180 | 2,524 | 29 | 640 | 160 | 1 | 3,355 | 60 | — | 78,058 | — | R 162,900 | — |
| 1995 | 0 | 210 | 2,207 | 46 | 586 | 164 | (s) | 3,003 | 60 | — | 80,354 | — | R 167,534 | — |
| 1996 | 0 | 179 | 2,352 | 38 | 408 | 163 | 0 | 2,961 | 65 | — | 83,477 | — | R 173,968 | — |
| 1997 | (s) | 216 | 1,720 | 38 | R 618 | 163 | 0 | R 2,539 | R 60 | — | 85,162 | — | R 177,146 | — |
| 1998 | 9 | 170 | 2,110 | 52 | 803 | 163 | 0 | 3,129 | 60 | — | 91,548 | — | 189,120 | — |
| 1999 | 5 | 172 | 2,803 | 57 | 1,604 | 165 | 0 | 4,629 | 72 | — | 93,492 | — | 183,180 | — |
| | | | | | | **Trillion Btu** | | | | | | | | | |
| 1960 | 0.2 | 61.8 | 3.5 | 3.7 | 7.1 | 3.5 | 1.2 | 19.0 | 0.3 | 0.0 | 33.4 | 114.7 | 83.2 | 197.9 |
| 1965 | 0.1 | 83.6 | 2.6 | 4.5 | 9.2 | 3.7 | 0.4 | 20.4 | 0.2 | 0.0 | 50.5 | 154.8 | 120.6 | 275.4 |
| 1970 | (s) | 150.0 | 4.8 | 20.4 | 10.3 | 3.6 | 0.5 | 39.7 | 0.1 | 0.0 | 78.0 | 267.9 | 189.1 | 456.9 |
| 1975 | 0.0 | 120.2 | 9.7 | 23.8 | 7.5 | 3.6 | 4.3 | 48.8 | 0.1 | 0.0 | 115.6 | 284.8 | 278.9 | 563.7 |
| 1980 | (s) | 173.7 | 16.6 | 18.4 | 4.0 | 17.3 | 16.2 | 72.4 | 1.0 | 0.0 | 150.3 | 397.5 | 365.6 | 763.0 |
| 1985 | 0.1 | 157.7 | 55.8 | 1.4 | 4.6 | 10.3 | 1.6 | 73.7 | R 0.6 | 0.0 | 205.2 | R 437.4 | 482.2 | R 919.6 |
| 1990 | 0.2 | 179.6 | 19.1 | 0.1 | 3.9 | 12.0 | 0.5 | 35.6 | R 0.9 | e (s) | 241.5 | R e 457.9 | R 528.3 | R e 986.2 |
| 1991 | 0.2 | 188.2 | 17.2 | 0.1 | 2.6 | 8.5 | 1.4 | 29.7 | R 1.0 | 0.1 | 246.1 | R 465.3 | R 535.1 | R 1,000.4 |
| 1992 | 0.1 | 193.8 | 18.1 | 0.4 | 2.2 | 7.6 | 0.1 | 28.4 | R 1.1 | 0.1 | 245.9 | R 469.4 | R 524.5 | R 993.9 |
| 1993 | 0.1 | 181.1 | 13.6 | 0.1 | 2.3 | 0.8 | 0.0 | 17.0 | 1.2 | 0.1 | 257.5 | 456.8 | R 543.9 | R 1,000.7 |
| 1994 | (s) | 187.9 | 14.7 | 0.2 | 2.3 | 0.8 | (s) | 18.0 | 1.2 | 0.1 | 266.3 | 473.6 | 555.8 | 1,029.4 |
| 1995 | 0.0 | 218.5 | 12.9 | 0.3 | 2.1 | 0.9 | (s) | 16.1 | 1.2 | 0.1 | 274.2 | 510.0 | R 571.6 | R 1,081.7 |
| 1996 | 0.0 | 185.1 | 13.7 | 0.2 | 1.5 | 0.9 | 0.0 | 16.2 | 1.3 | 0.2 | 284.8 | 487.6 | R 593.6 | R 1,081.2 |
| 1997 | (s) | 222.8 | 10.0 | 0.2 | R 2.2 | R 0.8 | 0.0 | R 13.3 | R 1.2 | 0.2 | 290.6 | R 528.0 | R 604.4 | R 1,132.5 |
| 1998 | 0.2 | 177.8 | 12.3 | 0.3 | 2.9 | 0.9 | 0.0 | 16.3 | 1.2 | 0.2 | 312.4 | 508.2 | 645.3 | 1,153.5 |
| 1999 | 0.1 | 178.1 | 16.3 | 0.3 | 5.8 | 0.9 | 0.0 | 23.3 | 1.4 | 0.2 | 319.0 | 522.2 | 625.0 | 1,147.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## T E X A S

### Table 278.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Texas

| | | | Petroleum | | | | | | | | | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
| | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1,031 | 2,029 | 6,284 | 10,118 | 2,729 | 59,411 | 1,712 | 3,798 | 4,615 | R 55,967 | R 144,635 | 0 | — | — | 14,602 | — | 36,320 | — |
| 1965 | 1,136 | 2,098 | 7,811 | 8,519 | 2,663 | 89,166 | 1,974 | 2,563 | 1,879 | R 80,537 | R 195,111 | 0 | — | — | 23,685 | — | 56,550 | — |
| 1970 | 1,150 | 2,557 | 11,885 | 8,947 | 3,863 | 127,521 | 2,581 | 1,410 | 2,297 | R 100,279 | R 258,783 | 0 | — | — | 40,274 | — | 97,598 | — |
| 1975 | 3,720 | 2,160 | 8,150 | 15,301 | 2,965 | 138,844 | 2,583 | 997 | 11,070 | R 124,910 | R 304,819 | 5 | — | — | 54,712 | — | 131,973 | — |
| 1980 | 3,250 | 2,163 | 10,906 | 20,250 | 11,906 | 181,940 | 3,431 | 470 | 16,029 | R 218,266 | R 463,198 | 0 | — | — | 78,190 | — | 190,131 | — |
| 1985 | 5,192 | 1,732 | 11,808 | 27,327 | 414 | 247,779 | 3,122 | 4,704 | 5,969 | R 141,141 | R 442,262 | 0 | — | — | 81,235 | — | 190,854 | — |
| 1990 | 4,157 | 2,105 | 14,013 | 25,890 | 149 | 285,349 | 3,513 | 4,336 | 1,291 | R 177,136 | R 511,676 | f 0 | — | — | 84,087 | — | R 183,949 | — |
| 1991 | 4,198 | 2,070 | 9,371 | 23,134 | 47 | 315,838 | 3,142 | 4,618 | 1,101 | R 176,427 | R 533,677 | 0 | — | — | 84,122 | — | R 182,876 | — |
| 1992 | 4,225 | 2,028 | 11,800 | 23,048 | 82 | 328,866 | 3,204 | 4,338 | 822 | R 190,910 | R 563,071 | 0 | — | — | 85,421 | — | R 182,184 | — |
| 1993 | 4,667 | 2,179 | 12,734 | 22,326 | 97 | 317,635 | 3,262 | 3,438 | 2,444 | R 187,216 | R 549,153 | 0 | — | — | 86,933 | — | R 183,615 | — |
| 1994 | 5,350 | 2,128 | 10,947 | 18,918 | 99 | 353,718 | 3,410 | 3,750 | 2,424 | R 196,577 | R 589,843 | 0 | — | — | 90,329 | — | R 188,510 | — |
| 1995 | 4,255 | 2,257 | 11,794 | 16,503 | 128 | 366,168 | 3,351 | 3,944 | 2,497 | R 188,355 | R 592,740 | 0 | — | — | 90,093 | — | R 187,839 | — |
| 1996 | 4,808 | 2,469 | 11,962 | 20,353 | 161 | 392068 | 3,252 | 4,040 | 2,127 | R 216,465 | R 650,428 | R 6 | — | — | 95,308 | — | R 198,624 | — |
| 1997 | 4,759 | 2,361 | 10,509 | 15,620 | 282 | 444688 | 3,436 | 4,236 | 1,886 | R 229,580 | R 710,237 | R 598 | — | — | 100,429 | — | R 208,902 | — |
| 1998 | 4,755 | 2,354 | 11,201 | 16,368 | 347 | 441,020 | 3,597 | 4,961 | 910 | 220,387 | 698,792 | 6 | — | — | 102,702 | — | 212,162 | — |
| 1999 | 4,723 | 2,234 | 8,438 | 20,967 | 134 | 434,130 | 3,634 | 2,501 | 762 | 221,517 | 692,084 | 3 | — | — | 99,741 | — | 195,424 | — |

### Trillion Btu

| Year | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 24.4 | 2,100.3 | 41.7 | 58.9 | 15.5 | 238.3 | 10.4 | 19.9 | 29.0 | R 334.3 | R 748.0 | 0.0 | 23.9 | 0.0 | 49.8 | R 2,946.5 | 123.9 | R 3,070.4 |
| 1965 | 29.0 | 2,175.3 | 51.8 | 49.6 | 15.1 | 357.6 | 12.0 | 13.5 | 11.8 | R 473.8 | R 985.2 | 0.0 | 30.7 | 0.0 | 80.8 | R 3,301.1 | 192.9 | R 3,494.0 |
| 1970 | 30.7 | 2,626.3 | 78.9 | 52.1 | 21.9 | 481.9 | 15.7 | 7.4 | 14.4 | R 584.2 | R 1,256.5 | 0.0 | 44.6 | 0.0 | 137.4 | R 4,095.5 | 333.0 | R 4,428.5 |
| 1975 | 77.7 | 2,224.0 | 54.1 | 89.1 | 16.8 | 515.8 | 15.7 | 5.2 | 69.6 | R 726.8 | R 1,493.1 | 0.1 | 47.2 | 0.0 | 186.7 | R 4,028.6 | 450.3 | R 4,478.9 |
| 1980 | 63.3 | 2,229.7 | 72.4 | 118.0 | 67.5 | 668.4 | 20.8 | 2.5 | 100.8 | R 1,241.1 | R 2,291.4 | 0.0 | R 41.6 | 0.0 | 266.8 | R 4,892.8 | 648.7 | R 5,541.5 |
| 1985 | 85.4 | 1,799.3 | 78.4 | 159.2 | 2.3 | 892.7 | 18.9 | 24.7 | 37.5 | R 808.2 | R 2,021.9 | 0.0 | R 48.7 | 0.0 | 277.2 | R 4,232.6 | 651.2 | R 4,883.8 |
| 1990 | 61.5 | 2,193.7 | 93.0 | 150.8 | 0.8 | 1,034.4 | 21.3 | 22.8 | 8.1 | R 1,007.3 | R 2,338.6 | f 0.0 | R 66.7 | f 0.0 | 286.9 | R f 4,947.3 | R 627.6 | R f 5,575.0 |
| 1991 | 63.2 | 2,152.2 | 62.2 | 134.8 | 0.3 | 1,141.4 | 19.1 | 24.3 | 6.9 | R 1,001.7 | R 2,390.6 | 0.0 | R 68.4 | 0.0 | 287.0 | R 4,961.4 | R 624.0 | R 5,585.4 |
| 1992 | 60.5 | 2,128.3 | 78.3 | 134.3 | 0.5 | 1,191.8 | 19.4 | 22.8 | 5.2 | R 1,077.3 | R 2,529.6 | 0.0 | R 75.9 | 0.0 | 291.5 | R 5,085.7 | R 621.6 | R 5,707.3 |
| 1993 | 70.9 | 2,241.5 | 84.5 | 130.1 | 0.6 | 1,145.4 | 19.8 | 18.1 | 15.4 | R 1,058.3 | R 2,472.0 | 0.0 | R 76.8 | 0.0 | 296.6 | R 5,157.8 | R 626.5 | R 5,784.3 |
| 1994 | 82.8 | 2,218.4 | 72.6 | 110.2 | 0.6 | 1,285.8 | 20.7 | R 19.6 | 15.2 | R 1,110.1 | R 2,634.8 | 0.0 | R 77.5 | 0.0 | 308.2 | R 5,321.8 | R 643.2 | R 5,965.0 |
| 1995 | 63.7 | 2,352.8 | 78.3 | 96.1 | 0.7 | 1,326.6 | 20.3 | R 20.6 | 15.7 | R 1,063.2 | R 2,621.5 | 0.0 | R 72.5 | 0.0 | 307.4 | R 5,418.0 | R 640.9 | R 6,058.9 |
| 1996 | 73.8 | 2,558.9 | 79.4 | 118.6 | 0.9 | 1416.5 | 19.7 | R 21.1 | 13.4 | R 1,215.7 | R 2,885.2 | 0.1 | R 91.3 | R 0.5 | 325.2 | R 5,935.0 | R 677.7 | R 6,612.7 |
| 1997 | 74.0 | 2,431.0 | 69.7 | 91.0 | 1.6 | 1608.0 | 20.8 | R 22.1 | 11.9 | R 1,292.3 | R 3,117.4 | R 6.2 | R 96.4 | R 0.9 | 342.7 | R 6,068.5 | R 712.8 | R 6,781.3 |
| 1998 | 67.7 | 2,467.8 | 74.3 | 95.3 | 2.0 | 1,593.8 | 21.8 | 25.9 | 5.7 | 1,240.5 | 3,059.4 | 0.1 | 71.6 | 0.8 | 350.4 | 6,017.8 | 723.9 | 6,741.7 |
| 1999 | 67.2 | 2,316.3 | 56.0 | 122.1 | 0.8 | 1,569.8 | 22.0 | 13.0 | 4.8 | 1,242.9 | 3,031.5 | (s) | 56.1 | 3.3 | 340.3 | 5,814.7 | 666.8 | 6,481.5 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 279.   Transportation Energy Consumption Estimates, Selected Years 1960-1999, Texas

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] (Thousand Barrels) | Petroleum — Distillate Fuel [a] | Petroleum — Jet Fuel [a] | Petroleum — LPG [a] | Petroleum — Lubricants [a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel [a] | Petroleum — Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 18 | 52 | 3,261 | 13,571 | 10,842 | 2,024 | 1,780 | 87,381 | 17,736 | 136,595 | 0 | 8 | — | 20 | — |
| 1965 | 4 | 68 | 3,457 | 15,810 | 15,365 | 4,588 | 1,814 | 104,577 | 12,346 | 157,957 | 0 | 4 | — | 10 | — |
| 1970 | 2 | 96 | 2,007 | 22,454 | 24,430 | 5,587 | 1,623 | 139,292 | 11,667 | 207,059 | 0 | 0 | — | 0 | — |
| 1975 | 1 | 82 | 1,312 | 37,391 | 27,308 | 4,969 | 1,738 | 173,854 | 25,049 | 271,622 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 105 | 1,264 | 48,286 | 30,934 | 649 | 1,909 | 177,228 | 45,812 | 306,082 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 92 | 1,317 | 56,398 | 74,500 | 609 | 1,738 | 198,761 | 21,610 | 354,933 | R e 807 | 0 | — | 0 | — |
| 1990 | 0 | 106 | 838 | 52,471 | 95,903 | 479 | 1,955 | 198,773 | 26,227 | 376,646 | R 584 | 0 | — | 0 | — |
| 1991 | 0 | 82 | 655 | 58,273 | 90,674 | 345 | 1,749 | 192,539 | 27,179 | 371,414 | R 582 | 0 | — | 0 | — |
| 1992 | 0 | 81 | 783 | 63,829 | 90,029 | 310 | 1,783 | 194,901 | 29,922 | 381,557 | R 658 | 0 | — | 0 | — |
| 1993 | 0 | 82 | 693 | 66,848 | 86,961 | 348 | 1,816 | 203,844 | 20,088 | 380,598 | R 150 | (s) | — | (s) | — |
| 1994 | 0 | 96 | 773 | 67,876 | 83,397 | 614 | 1,898 | 214,861 | 19,178 | 388,597 | R 371 | 0 | — | 0 | — |
| 1995 | 0 | 82 | 645 | 63,563 | 83,002 | 322 | 1,865 | 209,319 | 20,335 | 379,053 | R 1,215 | 0 | — | 0 | — |
| 1996 | 0 | 76 | 625 | 69,386 | 99,870 | R 274 | 1,810 | 222,177 | 18,169 | R 412,311 | R 452 | 8 | — | 16 | — |
| 1997 | 0 | 82 | R 658 | 69,076 | 105,610 | R 246 | 1,912 | 220,599 | 20,640 | R 418,741 | R 1,069 | 19 | — | 39 | — |
| 1998 | 0 | 66 | 555 | 74,226 | 108,536 | 735 | 2,002 | 231,655 | 26,200 | 443,907 | 1,583 | 21 | — | 43 | — |
| 1999 | 0 | 70 | 796 | 82,263 | 104,896 | 365 | 2,023 | 240,326 | 20,976 | 451,645 | 1,364 | 19 | — | 38 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Aviation Gasoline | Distillate Fuel | Jet Fuel | LPG | Lubricants | Motor Gasoline | Residual Fuel | Total | Ethanol | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.3 | 54.1 | 16.5 | 79.1 | 58.6 | 8.1 | 10.8 | 459.0 | 111.5 | 743.5 | 0.0 | (s) | 798.0 | 0.1 | 798.0 |
| 1965 | 0.1 | 70.0 | 17.5 | 92.1 | 84.3 | 18.4 | 11.0 | 549.3 | 77.6 | 850.3 | 0.0 | (s) | 920.4 | (s) | 920.4 |
| 1970 | (s) | 98.8 | 10.1 | 130.8 | 135.9 | 21.1 | 9.8 | 731.7 | 73.3 | 1,112.9 | 0.0 | 0.0 | 1,211.7 | 0.0 | 1,211.7 |
| 1975 | (s) | 84.6 | 6.6 | 217.8 | 152.7 | 18.5 | 10.5 | 913.3 | 157.5 | 1,476.8 | 0.0 | 0.0 | 1,561.4 | 0.0 | 1,561.4 |
| 1980 | 0.0 | 108.1 | 6.4 | 281.3 | 173.3 | 2.4 | 11.6 | 931.0 | 288.0 | 1,693.9 | 0.0 | 0.0 | 1,801.9 | 0.0 | 1,801.9 |
| 1985 | 0.0 | 95.6 | 6.6 | 328.5 | 420.5 | 2.2 | 10.5 | 1,044.1 | 135.9 | 1,948.4 | R e 2.9 | 0.0 | e 2,044.0 | 0.0 | e 2,044.0 |
| 1990 | 0.0 | 110.5 | 4.2 | 305.6 | 542.1 | 1.7 | 11.9 | 1,044.2 | 164.9 | 2,074.6 | R 2.1 | 0.0 | 2,185.2 | 0.0 | 2,185.2 |
| 1991 | 0.0 | 85.2 | 3.3 | 339.4 | 512.8 | 1.2 | 10.6 | 1,011.4 | 170.9 | 2,049.7 | R 2.1 | 0.0 | 2,134.9 | 0.0 | 2,134.9 |
| 1992 | 0.0 | 84.9 | 4.0 | 371.8 | 509.1 | 1.1 | 10.8 | 1,023.8 | 188.1 | 2,108.7 | R 2.3 | 0.0 | 2,193.6 | 0.0 | 2,193.6 |
| 1993 | 0.0 | 84.6 | 3.5 | 389.4 | 492.0 | 1.3 | 11.0 | 1,070.8 | 126.3 | 2,094.3 | 0.5 | (s) | 2,178.9 | (s) | 2,178.9 |
| 1994 | 0.0 | 99.8 | 3.9 | 395.4 | 472.5 | 2.2 | 11.5 | R 1,123.7 | 120.6 | R 2,129.8 | R 1.3 | 0.0 | R 2,229.6 | 0.0 | R 2,229.6 |
| 1995 | 0.0 | 85.4 | 3.3 | 370.3 | 470.5 | 1.2 | 11.3 | R 1,091.6 | 127.8 | R 2,075.9 | R 4.3 | 0.0 | R 2,161.3 | 0.0 | R 2,161.3 |
| 1996 | 0.0 | 78.4 | 3.2 | 404.2 | 566.2 | 1.0 | 11.0 | R 1,158.9 | 114.2 | R 2,258.6 | R 1.6 | (s) | R 2,337.0 | 0.1 | R 2,337.1 |
| 1997 | 0.0 | 84.6 | 3.3 | 402.4 | 598.8 | R 0.9 | 11.6 | R 1,150.0 | 129.8 | R 2,296.7 | R 3.8 | 0.1 | R 2,381.4 | 0.1 | R 2,381.5 |
| 1998 | 0.0 | 69.0 | 2.8 | 432.4 | 615.4 | 2.7 | 12.1 | 1,207.4 | 164.7 | 2,437.5 | 5.6 | 0.1 | 2,506.5 | 0.1 | 2,506.7 |
| 1999 | 0.0 | 73.0 | 4.0 | 479.2 | 594.8 | 1.3 | 12.3 | 1,252.3 | 131.9 | 2,475.8 | 4.8 | 0.1 | 2,548.8 | 0.1 | 2,549.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 280.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Texas

| Year | Coal | Natural Gas [a] | Petroleum Heavy Oil [b,c] | Petroleum Light Oil [b,d] | Petroleum Coke [b] | Petroleum Total | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 0 | 407 | 43 | 18 | 0 | 61 | 0 | 927 | 0 | 0 | 0 | — |
| 1965 | 0 | 640 | 33 | 14 | 0 | 47 | 0 | 661 | 87 | 0 | 0 | — |
| 1970 | 0 | 1,062 | 104 | 45 | 0 | 149 | 0 | 883 | 97 | 0 | 0 | — |
| 1975 | 9,044 | 1,353 | 1,740 | 75 | 0 | 1,815 | 0 | 1,579 | 89 | 0 | 0 | — |
| 1980 | 45,351 | 1,430 | 660 | 1,126 | 0 | 1,786 | 0 | 398 | 79 | 0 | 0 | — |
| 1985 | 71,818 | 1,198 | 881 | 775 | 0 | 1,657 | 0 | 1,397 | 300 | 0 | 0 | — |
| 1990 | 87,248 | 1,007 | 254 | 701 | 0 | 954 | 15,859 | 1,794 | 279 | 0 | (s) | — |
| 1991 | 87,856 | 1,005 | 104 | 348 | 0 | 452 | 19,800 | 2,225 | 276 | 0 | (s) | — |
| 1992 | 87,333 | 968 | 177 | 296 | 0 | 473 | 24,496 | R 3,325 | 281 | 0 | (s) | — |
| 1993 | 92,135 | 1,073 | 328 | 239 | 319 | 885 | 12,407 | 1,786 | 295 | 0 | (s) | — |
| 1994 | 88,479 | 1,049 | 343 | 220 | 2 | 565 | 28,745 | 1,530 | 303 | 0 | (s) | — |
| 1995 | 88,358 | 1,047 | 62 | 331 | 0 | 393 | 36,151 | 1,703 | 0 | 0 | (s) | — |
| 1996 | 94,190 | 1,039 | 335 | 672 | 0 | 1,006 | 35,767 | 954 | 0 | 0 | (s) | — |
| 1997 | 96,537 | 1,057 | 24 | 325 | 0 | 349 | 37,358 | R 2,112 | 0 | 0 | (s) | — |
| 1998 | 94,661 | 1,243 | 11 | 259 | 0 | 271 | 38,685 | 1,905 | 0 | 0 | (s) | — |
| 1999 | 97,746 | 1,207 | 10 | 278 | 0 | 288 | 36,760 | 1,245 | 0 | 0 | (s) | — |
| | | | | | Trillion Btu | | | | | | | |
| 1960 | 0.0 | 421.6 | 0.3 | 0.1 | 0.0 | 0.4 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 431.9 |
| 1965 | 0.0 | 663.2 | 0.2 | 0.1 | 0.0 | 0.3 | 0.0 | 6.9 | 0.9 | 0.0 | 0.0 | 671.3 |
| 1970 | 0.0 | 1,090.3 | 0.7 | 0.3 | 0.0 | 0.9 | 0.0 | 9.3 | 1.0 | 0.0 | 0.0 | 1,101.5 |
| 1975 | 118.5 | 1,379.0 | 10.9 | 0.4 | 0.0 | 11.4 | 0.0 | 16.4 | 0.9 | 0.0 | 0.0 | 1,526.3 |
| 1980 | 670.8 | 1,482.9 | 4.2 | 6.6 | 0.0 | 10.7 | 0.0 | 4.1 | 0.8 | 0.0 | 0.0 | 2,169.4 |
| 1985 | 1,063.4 | 1,240.7 | 5.5 | 4.5 | 0.0 | 10.1 | 0.0 | 14.6 | 3.1 | 0.0 | 0.0 | 2,331.9 |
| 1990 | 1,272.2 | 1,042.6 | 1.6 | 4.1 | 0.0 | 5.7 | 169.4 | 18.7 | 2.9 | 0.0 | (s) | 2,510.8 |
| 1991 | 1,269.6 | 1,035.2 | 0.7 | 2.0 | 0.0 | 2.7 | 212.7 | 23.2 | 2.9 | 0.0 | (s) | 2,541.6 |
| 1992 | 1,263.5 | 993.3 | 1.1 | 1.7 | 0.0 | 2.8 | 261.6 | R 34.4 | 2.9 | 0.0 | (s) | 2,541.5 |
| 1993 | 1,342.2 | 1,100.4 | 2.1 | 1.4 | 1.9 | 5.4 | 132.5 | 18.4 | 3.0 | 0.0 | (s) | 2,593.7 |
| 1994 | 1,299.9 | 1,073.3 | 2.2 | 1.3 | (s) | 3.5 | 306.9 | 15.8 | 3.1 | 0.0 | (s) | 2,692.6 |
| 1995 | 1,298.1 | 1,071.4 | 0.4 | 1.9 | 0.0 | 2.3 | 385.3 | 17.6 | 0.0 | 0.0 | (s) | 2,765.1 |
| 1996 | 1,401.6 | 1,063.1 | 2.1 | 3.9 | 0.0 | 6.0 | 379.9 | 9.9 | 0.0 | 0.0 | (s) | 2,849.9 |
| 1997 | 1,433.1 | 1,080.9 | 0.2 | 1.9 | 0.0 | 2.0 | 396.9 | R 21.9 | 0.0 | 0.0 | (s) | R 2,925.3 |
| 1998 | 1,421.6 | 1,272.4 | 0.1 | 1.5 | 0.0 | 1.6 | 411.0 | 19.7 | 0.0 | 0.0 | (s) | 3,118.2 |
| 1999 | 1,467.3 | 1,232.6 | 0.1 | 1.6 | 0.0 | 1.7 | 390.5 | 12.9 | 0.0 | 0.0 | (s) | 3,093.9 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c] Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 281. Energy Consumption Estimates by Source, Selected Years 1960-1999, Utah

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power Million kWh | Hydroelectric Power [d] Million kWh | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 3,451 | 70 | 813 | 595 | 3,775 | 1,003 | 36 | 452 | 214 | 7,813 | 5,715 | R 1,926 | R 22,341 | 0 | 304 | — | — | 2,036 | — |
| 1965 | 2,857 | 108 | 838 | 383 | 4,193 | 1,244 | 474 | 677 | 251 | 9,001 | 5,662 | R 2,305 | R 25,029 | 0 | 913 | — | — | 3,082 | — |
| 1970 | 3,025 | 122 | 1,576 | 178 | 5,107 | 1,808 | 250 | 939 | 256 | 12,308 | 4,656 | R 2,372 | R 29,450 | 0 | 741 | — | — | 8,216 | — |
| 1975 | 4,636 | 124 | 1,219 | 161 | 9,165 | 1,903 | 146 | 1,169 | 232 | 15,063 | 4,603 | R 2,731 | R 36,391 | 0 | 1,074 | — | — | 8,635 | — |
| 1980 | 7,106 | 115 | 1,477 | 139 | 8,401 | 2,637 | 102 | 1,301 | 299 | 15,534 | 3,495 | R 2,598 | R 35,983 | 0 | 821 | — | — | -278 | — |
| 1985 | 8,303 | 115 | 1,576 | 94 | 5,941 | 3,808 | 31 | 1,486 | 272 | 16,240 | 431 | R 2,155 | R 32,035 | 0 | 1,019 | — | — | -4,107 | — |
| 1990 | 15,738 | 117 | 1,378 | 106 | 7,339 | 5,281 | 13 | 1,074 | 307 | 16,724 | 372 | R 2,670 | R 35,264 | 0 | R h 508 | — | — | R -45,025 | — |
| 1991 | 14,834 | 133 | 2,870 | 118 | 7,789 | 5,917 | 17 | 747 | 274 | 17,395 | 201 | R 2,357 | R 37,685 | 0 | R 627 | — | — | R -40,516 | — |
| 1992 | 15,719 | 123 | 1,633 | 133 | 8,062 | 5,607 | 4 | 696 | 280 | 17,905 | 248 | R 2,736 | R 37,303 | 0 | R 602 | — | — | R -45,647 | — |
| 1993 | 15,848 | 138 | 1,730 | 114 | 8,000 | 5,518 | 9 | 779 | 285 | 18,837 | 288 | R 2,444 | R 38,004 | 0 | R 860 | — | — | R -47,192 | — |
| 1994 | 16,216 | 137 | 1,819 | 88 | 8,401 | 5,270 | 9 | 784 | 298 | 19,433 | 349 | R 2,579 | R 39,028 | 0 | R 750 | — | — | R -47,196 | — |
| 1995 | 15,307 | 157 | 2,179 | 64 | 9,164 | 5,658 | 6 | 1,531 | 292 | 20,771 | 299 | R 2,453 | R 42,417 | 0 | R 969 | — | — | R -39,713 | — |
| 1996 | 15,237 | 161 | 2,361 | 52 | 9,921 | 6,303 | 9 | R 2,621 | 284 | 21,170 | 88 | R 2,996 | R 45,806 | 0 | R 1,049 | — | — | R -36,021 | — |
| 1997 | 15,923 | 165 | 1,992 | R 61 | 11,260 | 6,277 | 12 | R 750 | 300 | 22,024 | 152 | R 2,985 | R 45,813 | 0 | R 1,483 | — | — | R -38,380 | — |
| 1998 | 16,600 | 170 | 2,452 | 51 | 11,191 | 6,373 | 13 | 430 | 314 | 22,735 | 103 | 2,583 | 46,245 | 0 | 1,316 | — | — | -40,603 | — |
| 1999 | 16,349 | 160 | 2,380 | 73 | 10,576 | 7,443 | 13 | 1,013 | 317 | 23,141 | 72 | 2,573 | 47,601 | 0 | 1,255 | — | — | -41,439 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 91.0 | 72.4 | 5.4 | 3.0 | 22.0 | 5.4 | 0.2 | 1.8 | 1.3 | 41.0 | 35.9 | R 11.6 | R 127.6 | 0.0 | 3.3 | 2.2 | 0.0 | 6.9 | R 303.5 |
| 1965 | 75.5 | 99.8 | 5.6 | 1.9 | 24.4 | 6.8 | 2.7 | 2.7 | 1.5 | 47.3 | 35.6 | R 13.9 | R 142.4 | 0.0 | 9.5 | 2.0 | 0.0 | 10.5 | R 339.6 |
| 1970 | 78.8 | 114.4 | 10.5 | 0.9 | 29.8 | 10.0 | 1.4 | 3.5 | 1.6 | 64.7 | 29.3 | R 14.3 | R 165.8 | 0.0 | 7.8 | 2.3 | 0.0 | 28.0 | R 397.1 |
| 1975 | 115.7 | 118.0 | 8.1 | 0.8 | 53.4 | 10.6 | 0.8 | 4.3 | 1.4 | 79.1 | 28.9 | R 16.4 | R 203.9 | 0.0 | 11.2 | 2.9 | 0.0 | 29.5 | R 481.1 |
| 1980 | 168.3 | 125.0 | 9.8 | 0.7 | 48.9 | 14.6 | 0.6 | 4.8 | 1.8 | 81.6 | 22.0 | R 15.6 | R 200.4 | 0.0 | 8.5 | R 4.5 | 0.0 | -0.9 | R 505.7 |
| 1985 | 199.4 | 123.8 | 10.5 | 0.5 | 34.6 | 21.3 | 0.2 | 5.4 | 1.7 | 85.3 | 2.7 | R 13.3 | R 175.3 | 0.0 | 10.6 | 6.2 | 2.3 | -14.0 | R 503.6 |
| 1990 | 366.3 | 126.9 | 9.1 | 0.5 | 42.7 | 29.7 | 0.1 | 3.9 | 1.9 | 87.9 | 2.3 | R 16.1 | R 194.3 | 0.0 | R h 5.3 | R 3.4 | h 3.7 | -153.6 | R h 546.2 |
| 1991 | 345.0 | 142.5 | 19.0 | 0.6 | 45.4 | 33.2 | 0.1 | 2.7 | 1.7 | 91.4 | 1.3 | R 14.3 | R 209.7 | 0.0 | R 6.5 | R 3.5 | 4.4 | R -138.2 | R 573.4 |
| 1992 | 362.6 | 132.2 | 10.8 | 0.7 | 47.0 | 31.5 | (s) | 2.5 | 1.7 | 94.1 | 1.6 | R 16.4 | R 206.2 | 0.0 | 6.2 | R 3.7 | R 4.4 | R -155.7 | R 559.6 |
| 1993 | 368.4 | 149.1 | 11.5 | 0.6 | 46.6 | 31.1 | 0.1 | 2.8 | 1.7 | 98.9 | 1.8 | R 14.8 | R 209.9 | 0.0 | 8.9 | R 3.6 | 3.6 | R -161.0 | R 582.4 |
| 1994 | 376.5 | 146.3 | 12.1 | 0.4 | 48.9 | 29.7 | (s) | 2.8 | 1.8 | R 101.6 | 2.2 | R 15.5 | R 215.2 | 0.0 | 7.7 | R 3.5 | 4.6 | -161.0 | R 592.8 |
| 1995 | 357.2 | 166.7 | 14.5 | 0.3 | 53.4 | 31.8 | (s) | 5.5 | 1.8 | R 108.3 | 1.9 | R 14.8 | R 232.4 | 0.0 | 10.0 | R 3.9 | 3.5 | R -135.5 | R 638.1 |
| 1996 | 355.0 | 167.8 | 15.7 | 0.3 | 57.8 | 35.7 | 0.1 | R 9.5 | 1.7 | R 110.4 | 0.6 | R 18.0 | R 249.6 | 0.0 | 10.8 | R 4.0 | 4.6 | R -122.9 | R 668.9 |
| 1997 | 365.5 | 172.1 | 13.2 | 0.3 | 65.6 | 35.6 | 0.1 | R 2.7 | 1.8 | R 114.8 | 1.0 | R 17.9 | R 253.0 | 0.0 | R 15.4 | R 4.3 | 4.1 | R -131.0 | R 683.5 |
| 1998 | 380.0 | 177.4 | 16.3 | 0.3 | 65.2 | 36.1 | 0.1 | 1.6 | 1.9 | 118.5 | 0.6 | 15.6 | 256.1 | 0.0 | 13.6 | 3.6 | 3.9 | -138.5 | 696.1 |
| 1999 | 382.4 | 168.5 | 15.8 | 0.4 | 61.6 | 42.2 | 0.1 | 3.7 | 1.9 | 120.6 | 0.5 | 15.5 | 262.2 | 0.0 | 13.0 | 5.4 | 3.8 | -141.4 | 693.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
kWh=kilowatthours. R=Revised data. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

### Table 282.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Utah

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Petroleum Kerosene[a] | Petroleum LPG[a] | Petroleum Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 87 | 23 | 100 | 1 | 249 | 349 | 92 | — | — | 1,012 | — | 2,518 | — |
| 1965 | 63 | 31 | 98 | 20 | 505 | 624 | 79 | — | — | 1,243 | — | 2,969 | — |
| 1970 | 38 | 45 | 143 | 6 | 694 | 844 | 87 | — | — | 1,688 | — | 4,091 | — |
| 1975 | 46 | 60 | 357 | 4 | 564 | 925 | 101 | — | — | 2,493 | — | 6,013 | — |
| 1980 | 83 | 58 | 112 | 0 | 349 | 460 | 189 | — | — | 3,116 | — | 7,577 | — |
| 1985 | 88 | 59 | 74 | 10 | 631 | 715 | 269 | — | — | 3,985 | — | 9,362 | — |
| 1990 | 93 | 43 | 137 | 5 | 424 | 566 | 148 | — | — | 4,246 | — | R 9,289 | — |
| 1991 | 107 | 51 | 161 | 5 | 415 | 581 | 156 | — | — | 4,460 | — | R 9,696 | — |
| 1992 | 78 | 45 | 115 | 2 | 334 | 452 | 164 | — | — | 4,505 | — | R 9,609 | — |
| 1993 | 42 | 52 | 148 | 3 | 202 | 354 | R 158 | — | — | 4,726 | — | R 9,982 | — |
| 1994 | 37 | 49 | 113 | 5 | 162 | 280 | R 155 | — | — | 5,009 | — | R 10,453 | — |
| 1995 | 27 | 49 | 84 | 3 | 210 | 296 | R 172 | — | — | 5,041 | — | R 10,510 | — |
| 1996 | 33 | 54 | 100 | 4 | 251 | 355 | R 171 | — | — | 5,481 | — | R 11,423 | — |
| 1997 | 43 | 58 | 117 | 5 | R 489 | R 611 | R 177 | — | — | 5,661 | — | R 11,775 | — |
| 1998 | 40 | 57 | 80 | 4 | 148 | 232 | 156 | — | — | 5,756 | — | 11,890 | — |
| 1999 | 40 | 55 | 90 | 4 | 312 | 406 | 167 | — | — | 6,236 | — | 12,219 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2.3 | 23.4 | 0.6 | (s) | 1.0 | 1.6 | 1.8 | 0.0 | 0.0 | 3.5 | 32.5 | 8.6 | 41.1 |
| 1965 | 1.6 | 28.4 | 0.6 | 0.1 | 2.0 | 2.7 | 1.6 | 0.0 | 0.0 | 4.2 | 38.5 | 10.1 | 48.7 |
| 1970 | 1.0 | 41.9 | 0.8 | (s) | 2.6 | 3.5 | 1.7 | 0.0 | 0.0 | 5.8 | 53.8 | 14.0 | 67.8 |
| 1975 | 1.1 | 56.8 | 2.1 | (s) | 2.1 | 4.2 | 2.0 | 0.0 | 0.0 | 8.5 | 72.6 | 20.5 | 93.1 |
| 1980 | 1.9 | 62.9 | 0.6 | 0.0 | 1.3 | 1.9 | 3.8 | 0.0 | 0.0 | 10.6 | 81.2 | 25.9 | 107.1 |
| 1985 | 2.1 | 63.1 | 0.4 | 0.1 | 2.3 | 2.8 | 5.4 | 0.0 | 0.0 | 13.6 | 86.9 | 31.9 | 118.9 |
| 1990 | 2.2 | 47.3 | 0.8 | (s) | 1.5 | 2.4 | 3.0 | e 0.1 | e (s) | 14.5 | e 69.3 | 31.7 | e 101.0 |
| 1991 | 2.5 | 54.3 | 0.9 | (s) | 1.5 | 2.5 | 3.1 | 0.1 | (s) | 15.2 | R 77.7 | 33.1 | R 110.7 |
| 1992 | 1.8 | 48.2 | 0.7 | (s) | 1.2 | 1.9 | 3.3 | 0.1 | (s) | 15.4 | 70.6 | 32.8 | R 103.4 |
| 1993 | 1.0 | 56.0 | 0.9 | (s) | 0.7 | 1.6 | R 3.2 | 0.1 | (s) | 16.1 | 77.9 | 34.1 | 112.0 |
| 1994 | 0.9 | 52.3 | 0.7 | (s) | 0.6 | 1.3 | 3.1 | 0.1 | R 0.1 | 17.1 | 74.7 | 35.7 | R 110.4 |
| 1995 | 0.6 | 52.1 | 0.5 | (s) | 0.8 | 1.3 | 3.4 | 0.1 | R 0.1 | 17.2 | 74.7 | R 35.9 | R 110.6 |
| 1996 | 0.8 | 56.7 | 0.6 | (s) | 0.9 | 1.5 | 3.4 | 0.1 | R 0.1 | 18.7 | R 81.2 | R 39.0 | 120.1 |
| 1997 | 1.0 | 60.6 | 0.7 | (s) | R 1.8 | R 2.5 | R 3.5 | 0.1 | R 0.1 | 19.3 | R 87.0 | R 40.2 | R 127.2 |
| 1998 | 0.9 | 59.5 | 0.5 | (s) | 0.5 | 1.0 | 3.1 | 0.1 | 0.1 | 19.6 | 84.3 | 40.6 | 124.8 |
| 1999 | 0.9 | 58.6 | 0.5 | (s) | 1.1 | 1.7 | 3.3 | (s) | (s) | 21.3 | 85.8 | 41.7 | 127.5 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 283. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Utah

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum | | | | | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| **Physical Units** | | | | | | | | | | | | | | |
| 1960 | 162 | 10 | 362 | 6 | 44 | 281 | 656 | 1,349 | 2 | — | 640 | — | 1,592 | — |
| 1965 | 118 | 16 | 356 | 148 | 89 | 234 | 1,072 | 1,899 | 1 | — | 1,128 | — | 2,693 | — |
| 1970 | 71 | 10 | 521 | 46 | 122 | 202 | 795 | 1,687 | 2 | — | 1,890 | — | 4,579 | — |
| 1975 | 85 | 6 | 1,300 | 28 | 99 | 210 | 1,098 | 2,736 | 2 | — | 2,479 | — | 5,981 | — |
| 1980 | 154 | (s) | 1,028 | 34 | 62 | 81 | 1,051 | 2,255 | 5 | — | 3,141 | — | 7,638 | — |
| 1985 | 164 | 9 | 541 | 19 | 111 | 88 | 45 | 804 | R 7 | — | 4,596 | — | 10,797 | — |
| 1990 | 174 | 16 | 360 | 5 | 75 | 96 | 74 | 610 | R 9 | — | 5,389 | — | R 11,790 | — |
| 1991 | 198 | 19 | 469 | 8 | 73 | 82 | 23 | 656 | R 10 | — | 5,571 | — | R 12,112 | — |
| 1992 | 145 | 17 | 470 | 1 | 59 | 73 | 21 | 623 | R 11 | — | 5,850 | — | R 12,476 | — |
| 1993 | 79 | 23 | 366 | 3 | 36 | 20 | 55 | 480 | 13 | — | 5,920 | — | R 12,504 | — |
| 1994 | 68 | 27 | 484 | 2 | 29 | 20 | 20 | 554 | 13 | — | 6,340 | — | R 13,231 | — |
| 1995 | 50 | 27 | 443 | 1 | 37 | 21 | 13 | 515 | 13 | — | 6,462 | — | R 13,473 | — |
| 1996 | 61 | 30 | 504 | 3 | 44 | 21 | 14 | 586 | 14 | — | 6,717 | — | R 13,998 | — |
| 1997 | 80 | 31 | 539 | 4 | R 86 | 21 | 11 | R 661 | R 19 | — | 7,285 | — | R 15,153 | — |
| 1998 | 74 | 31 | 597 | 5 | 26 | 21 | 3 | 653 | 19 | — | 7,433 | — | 15,356 | — |
| 1999 | 74 | 30 | 674 | 4 | 55 | 21 | 12 | 765 | 23 | — | 8,074 | — | 15,819 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 4.2 | 10.5 | 2.1 | (s) | 0.2 | 1.5 | 4.1 | 7.9 | (s) | 0.0 | 2.2 | 24.8 | 5.4 | 30.2 |
| 1965 | 3.0 | 14.4 | 2.1 | 0.8 | 0.4 | 1.2 | 6.7 | 11.2 | (s) | 0.0 | 3.8 | 32.5 | 9.2 | 41.7 |
| 1970 | 1.8 | 9.5 | 3.0 | 0.3 | 0.5 | 1.1 | 5.0 | 9.8 | (s) | 0.0 | 6.4 | 27.6 | 15.6 | 43.2 |
| 1975 | 2.0 | 5.8 | 7.6 | 0.2 | 0.4 | 1.1 | 6.9 | 16.1 | (s) | 0.0 | 8.5 | 32.4 | 20.4 | 52.8 |
| 1980 | 3.6 | 0.4 | 6.0 | 0.2 | 0.2 | 0.4 | 6.6 | 13.4 | 0.1 | 0.0 | 10.7 | 28.2 | 26.1 | 54.2 |
| 1985 | 3.9 | 9.1 | 3.1 | 0.1 | 0.4 | 0.5 | 0.3 | 4.4 | R 0.1 | 0.0 | 15.7 | R 33.2 | 36.8 | R 70.1 |
| 1990 | 4.0 | 17.7 | 2.1 | (s) | 0.3 | 0.5 | 0.5 | 3.4 | R 0.2 | e 0.1 | 18.4 | R e 43.8 | 40.2 | R e 84.0 |
| 1991 | 4.6 | 20.7 | 2.7 | (s) | 0.3 | 0.4 | 0.1 | 3.6 | R 0.2 | 0.1 | 19.0 | R 48.2 | R 41.3 | R 89.6 |
| 1992 | 3.3 | 17.9 | 2.7 | (s) | 0.2 | 0.4 | 0.1 | 3.5 | R 0.2 | 0.1 | 20.0 | R 45.0 | 42.6 | R 87.6 |
| 1993 | 1.8 | 24.4 | 2.1 | (s) | 0.1 | 0.1 | 0.3 | 2.7 | 0.3 | 0.1 | 20.2 | 49.6 | 42.7 | 92.2 |
| 1994 | 1.6 | 28.3 | 2.8 | (s) | 0.1 | 0.1 | 0.1 | 3.2 | 0.3 | 0.1 | 21.6 | 55.1 | 45.1 | 100.2 |
| 1995 | 1.2 | 28.5 | 2.6 | (s) | 0.1 | 0.1 | 0.1 | 2.9 | 0.3 | 0.1 | 22.0 | 55.0 | R 46.0 | 101.0 |
| 1996 | 1.4 | 30.8 | 2.9 | (s) | 0.2 | 0.1 | 0.1 | 3.3 | 0.3 | 0.1 | 22.9 | 58.9 | R 47.8 | 106.6 |
| 1997 | 1.8 | 32.4 | 3.1 | (s) | R 0.3 | 0.1 | 0.1 | R 3.7 | R 0.4 | R 0.1 | 24.9 | R 63.3 | R 51.7 | R 115.0 |
| 1998 | 1.7 | 32.4 | 3.5 | (s) | 0.1 | 0.1 | (s) | 3.7 | 0.4 | 0.2 | 25.4 | 63.8 | 52.4 | 116.1 |
| 1999 | 1.7 | 32.0 | 3.9 | (s) | 0.2 | 0.1 | 0.1 | 4.3 | 0.5 | 0.2 | 27.5 | 66.3 | 54.0 | 120.2 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 284. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Utah**

| Year | Coal Thousand Short Tons | Natural Gas[a] Billion Cubic Feet | Petroleum Asphalt and Road Oil[b] | Distillate Fuel[b] | Kero-sene[b] | LPG[b] | Lubri-cants[b] | Motor Gasoline | Residual Fuel[b] | Other[b,c] | Total | Hydro-electric Power[b] Million kWh | Wood and Waste | Other[b,d] | Electricity[b] Million kWh | Net Energy | Electrical System Energy Losses[e] Million kWh | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 2,640 | 33 | 813 | 990 | 29 | 124 | 62 | 299 | 2,399 | R 1,926 | R 6,642 | (s) | — | — | 1,822 | — | 4,531 | — |
| 1965 | 2,306 | 57 | 838 | 1,163 | 305 | 70 | 101 | 233 | 2,895 | R 2,305 | R 7,910 | 3 | — | — | 1,404 | — | 3,353 | — |
| 1970 | 2,477 | 63 | 1,576 | 1,564 | 197 | 116 | 95 | 261 | 2,068 | R 2,372 | R 8,249 | 3 | — | — | 1,648 | — | 3,993 | — |
| 1975 | 2,478 | 55 | 1,219 | 3,356 | 114 | 495 | 73 | 266 | 3,285 | R 2,731 | R 11,541 | 0 | — | — | 2,968 | — | 7,159 | — |
| 1980 | 1,974 | 51 | 1,477 | 2,220 | 68 | 876 | 106 | 165 | 2,386 | R 2,598 | R 9,897 | 0 | — | — | 4,448 | — | 10,816 | — |
| 1985 | 1,726 | 46 | 1,576 | 1,104 | 3 | 668 | 96 | 220 | 360 | R 2,155 | R 6,183 | 0 | — | — | 4,458 | — | 10,473 | — |
| 1990 | 1,907 | 55 | 1,378 | 1,504 | 4 | 524 | 108 | 198 | 249 | R 2,670 | R 6,636 | R f 23 | — | — | 5,766 | — | R 12,614 | — |
| 1991 | 1,700 | 57 | 2,870 | 1,892 | 3 | 215 | 97 | 211 | 179 | R 2,357 | R 7,823 | R 23 | — | — | 5,876 | — | R 12,774 | — |
| 1992 | 1,639 | 53 | 1,633 | 1,947 | 1 | 263 | 99 | 206 | 227 | R 2,736 | R 7,112 | R 23 | — | — | 6,212 | — | R 13,248 | — |
| 1993 | 1,732 | 55 | 1,730 | 1,828 | 2 | 498 | 101 | 247 | 233 | R 2,444 | R 7,084 | R 42 | — | — | 6,221 | — | R 13,140 | — |
| 1994 | 1,842 | 50 | 1,819 | 1,787 | 2 | 536 | 105 | 316 | 329 | R 2,579 | R 7,473 | R 34 | — | — | 6,498 | — | R 13,561 | — |
| 1995 | 1,905 | 69 | 2,179 | 1,601 | 2 | 1,252 | 103 | 323 | 286 | R 2,453 | R 8,200 | R 42 | — | — | 6,957 | — | R 14,506 | — |
| 1996 | 1,558 | 69 | 2,361 | 1,833 | 2 | R 2,301 | 100 | 331 | 74 | R 2,996 | R 9,998 | R 30 | — | — | 7,660 | — | R 15,963 | — |
| 1997 | 1,547 | 69 | 1,992 | 2,398 | 3 | R 160 | 106 | 334 | 141 | R 2,985 | R 8,119 | R 134 | — | — | 7,430 | — | R 15,455 | — |
| 1998 | 1,823 | 73 | 2,452 | 2,496 | 4 | 254 | 111 | 248 | 100 | 2,583 | 8,247 | 16 | — | — | 7,511 | — | 15,517 | — |
| 1999 | 1,645 | 65 | 2,380 | 2,027 | 5 | 612 | 112 | 236 | 61 | 2,573 | 8,004 | 8 | — | — | 7,568 | — | 14,828 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 70.5 | 34.7 | 5.4 | 5.8 | 0.2 | 0.5 | 0.4 | 1.6 | 15.1 | R 11.6 | R 40.4 | (s) | 0.3 | 0.0 | 6.2 | R 152.1 | 15.5 | R 167.6 |
| 1965 | 61.5 | 52.3 | 5.6 | 6.8 | 1.7 | 0.3 | 0.6 | 1.2 | 18.2 | R 13.9 | R 48.2 | (s) | 0.3 | 0.0 | 4.8 | R 167.2 | 11.4 | R 178.6 |
| 1970 | 65.2 | 59.2 | 10.5 | 9.1 | 1.1 | 0.4 | 0.6 | 1.4 | 13.0 | R 14.3 | R 50.3 | (s) | 0.5 | 0.0 | 5.6 | R 180.9 | 13.6 | R 194.5 |
| 1975 | 64.7 | 52.3 | 8.1 | 19.6 | 0.6 | 1.8 | 0.4 | 1.4 | 20.7 | R 16.4 | R 69.0 | 0.0 | 0.8 | 0.0 | 10.1 | R 197.0 | 24.4 | R 221.4 |
| 1980 | 50.7 | 55.8 | 9.8 | 12.9 | 0.4 | 3.2 | 0.6 | 0.9 | 15.0 | R 15.6 | R 58.4 | 0.0 | R 0.6 | 0.0 | 15.2 | R 180.7 | 36.9 | R 217.6 |
| 1985 | 44.1 | 49.9 | 10.5 | 6.4 | (s) | 2.4 | 0.6 | 1.2 | 2.3 | R 13.3 | R 36.6 | 0.0 | R 0.7 | 0.0 | 15.2 | R 146.6 | 35.7 | R 182.3 |
| 1990 | 48.7 | 60.1 | 9.1 | 8.8 | (s) | 1.9 | 0.7 | 1.0 | 1.6 | R 16.1 | R 39.2 | R f 0.2 | R 0.3 | f 0.2 | 19.7 | R f 168.4 | 43.0 | R f 211.4 |
| 1991 | 43.7 | 61.0 | 19.0 | 11.0 | (s) | 0.8 | 0.6 | 1.1 | 1.1 | R 14.3 | R 48.0 | R 0.2 | R 0.2 | 0.2 | 20.0 | R 173.4 | 43.6 | R 217.0 |
| 1992 | 42.0 | 57.7 | 10.8 | 11.3 | (s) | 1.0 | 0.6 | 1.1 | 1.4 | R 16.4 | R 42.7 | 0.2 | R 0.2 | 0.2 | 21.2 | R 164.2 | R 45.2 | R 209.4 |
| 1993 | 44.0 | 59.3 | 11.5 | 10.6 | (s) | 1.8 | 0.6 | 1.3 | 1.5 | R 14.8 | R 42.1 | 0.4 | R 0.2 | 0.2 | 21.2 | R 167.5 | 44.8 | R 212.3 |
| 1994 | 46.1 | 53.3 | 12.1 | 10.4 | (s) | 1.9 | 0.6 | 1.7 | 2.1 | R 15.5 | R 44.3 | 0.4 | R 0.2 | 0.3 | 22.2 | R 166.8 | 46.3 | R 213.0 |
| 1995 | 47.6 | 73.8 | 14.5 | 9.3 | (s) | 4.5 | 0.6 | 1.7 | 1.8 | R 14.8 | R 47.3 | 0.4 | R 0.2 | 0.3 | 23.7 | R 193.3 | 49.5 | R 242.8 |
| 1996 | 40.0 | 72.3 | 15.7 | 10.7 | (s) | R 8.3 | 0.6 | 1.7 | 0.5 | R 18.0 | R 55.5 | 0.3 | R 0.3 | 0.3 | 26.1 | R 194.8 | R 54.5 | R 249.2 |
| 1997 | 39.7 | 71.7 | 13.2 | 14.0 | (s) | R 0.6 | 0.6 | R 1.7 | 0.9 | R 17.9 | R 49.0 | R 1.4 | R 0.4 | 0.3 | 25.4 | R 187.8 | R 52.7 | R 240.5 |
| 1998 | 45.7 | 76.3 | 16.3 | 14.5 | (s) | 0.9 | 0.7 | 1.3 | 0.6 | 15.6 | 49.9 | 0.2 | 0.1 | 0.3 | 25.6 | 198.1 | 52.9 | 251.0 |
| 1999 | 40.7 | 68.3 | 15.8 | 11.8 | (s) | 2.2 | 0.7 | 1.2 | 0.4 | 15.5 | 47.6 | 0.1 | 1.6 | 0.3 | 25.8 | 184.5 | 50.6 | 235.1 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 285.   Transportation Energy Consumption Estimates, Selected Years 1960-1999, Utah

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 46 | (s) | 595 | 2,312 | 1,003 | 35 | 152 | 7,232 | 370 | 11,698 | 0 | 0 | — | 0 | — |
| 1965 | 8 | (s) | 383 | 2,569 | 1,244 | 12 | 151 | 8,534 | 98 | 12,991 | 0 | 0 | — | 0 | — |
| 1970 | 4 | (s) | 178 | 2,870 | 1,808 | 6 | 161 | 11,845 | 25 | 16,893 | 0 | 0 | — | 0 | — |
| 1975 | (s) | (s) | 161 | 4,141 | 1,903 | 11 | 158 | 14,586 | 68 | 21,028 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 1 | 139 | 4,974 | 2,637 | 14 | 194 | 15,288 | 0 | 23,245 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 1 | 94 | 4,168 | 3,808 | 76 | 176 | 15,932 | 0 | 24,254 | R e 12 | 0 | — | 0 | — |
| 1990 | 0 | 1 | 106 | 5,254 | 5,281 | 51 | 198 | 16,430 | 48 | 27,368 | R 1 | 0 | — | 0 | — |
| 1991 | 0 | 1 | 118 | 5,184 | 5,917 | 44 | 177 | 17,102 | 0 | 28,543 | R 1 | 0 | — | 0 | — |
| 1992 | 0 | 1 | 133 | 5,468 | 5,607 | 39 | 181 | 17,626 | 0 | 29,054 | R 7 | 0 | — | 0 | — |
| 1993 | 0 | 3 | 114 | 5,603 | 5,518 | 43 | 184 | 18,569 | 0 | 30,031 | R 19 | 0 | — | 0 | — |
| 1994 | 0 | 3 | 88 | 5,964 | 5,270 | 57 | 192 | 19,097 | 0 | 30,667 | 0 | 0 | — | 0 | — |
| 1995 | 0 | 3 | 64 | 6,975 | 5,658 | 32 | 189 | 20,428 | 0 | 33,345 | 0 | 0 | — | 0 | — |
| 1996 | 0 | 4 | 52 | 7,429 | 6,303 | R 25 | 184 | 20,818 | 0 | R 34,811 | R 22 | 0 | — | 0 | — |
| 1997 | 0 | 3 | R 61 | 8,154 | 6,277 | R 16 | 194 | 21,670 | 0 | R 36,370 | 0 | 0 | — | 0 | — |
| 1998 | 0 | 3 | 51 | 7,960 | 6,373 | 2 | 203 | 22,466 | 0 | 37,054 | 297 | 0 | — | 0 | — |
| 1999 | 0 | 3 | 73 | 7,734 | 7,443 | 34 | 205 | 22,884 | 0 | 38,374 | 253 | 1 | — | 1 | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 1.2 | 0.1 | 3.0 | 13.5 | 5.4 | 0.1 | 0.9 | 38.0 | 2.3 | 63.2 | 0.0 | 0.0 | 64.5 | 0.0 | 64.5 |
| 1965 | 0.2 | 0.4 | 1.9 | 15.0 | 6.8 | (s) | 0.9 | 44.8 | 0.6 | 70.1 | 0.0 | 0.0 | 70.6 | 0.0 | 70.6 |
| 1970 | 0.1 | 0.5 | 0.9 | 16.7 | 10.0 | (s) | 1.0 | 62.2 | 0.2 | 91.0 | 0.0 | 0.0 | 91.5 | 0.0 | 91.5 |
| 1975 | (s) | 0.3 | 0.8 | 24.1 | 10.6 | (s) | 1.0 | 76.6 | 0.4 | 113.6 | 0.0 | 0.0 | 113.8 | 0.0 | 113.8 |
| 1980 | 0.0 | 0.9 | 0.7 | 29.0 | 14.6 | 0.1 | 1.2 | 80.3 | 0.0 | 125.8 | 0.0 | 0.0 | 126.8 | 0.0 | 126.8 |
| 1985 | 0.0 | 1.3 | 0.5 | 24.3 | 21.3 | 0.3 | 1.1 | 83.7 | 0.0 | 131.1 | R e (s) | 0.0 | e 132.3 | 0.0 | e 132.3 |
| 1990 | 0.0 | 1.0 | 0.5 | 30.6 | 29.7 | 0.2 | 1.2 | 86.3 | 0.3 | 148.9 | R (s) | 0.0 | 149.8 | 0.0 | 149.8 |
| 1991 | 0.0 | 0.9 | 0.6 | 30.2 | 33.2 | 0.2 | 1.1 | 89.8 | 0.0 | 155.1 | (s) | 0.0 | 156.0 | 0.0 | 156.0 |
| 1992 | 0.0 | 1.4 | 0.7 | 31.8 | 31.5 | 0.1 | 1.1 | 92.6 | 0.0 | 157.8 | R (s) | 0.0 | 159.2 | 0.0 | 159.2 |
| 1993 | 0.0 | 2.8 | 0.6 | 32.6 | 31.1 | 0.2 | 1.1 | 97.5 | 0.0 | 163.1 | 0.1 | 0.0 | 165.8 | 0.0 | 165.8 |
| 1994 | 0.0 | 3.1 | 0.4 | 34.7 | 29.7 | 0.2 | 1.2 | R 99.9 | 0.0 | R 166.1 | 0.0 | 0.0 | R 169.2 | 0.0 | R 169.2 |
| 1995 | 0.0 | 3.1 | 0.3 | 40.6 | 31.8 | 0.1 | 1.1 | R 106.5 | 0.0 | R 180.6 | 0.0 | 0.0 | R 183.7 | 0.0 | R 183.7 |
| 1996 | 0.0 | 3.9 | 0.3 | 43.3 | 35.7 | 0.1 | 1.1 | R 108.6 | 0.0 | R 189.0 | 0.1 | 0.0 | R 192.9 | 0.0 | R 192.9 |
| 1997 | 0.0 | 3.2 | 0.3 | 47.5 | 35.6 | 0.1 | 1.2 | R 113.0 | 0.0 | R 197.6 | 0.0 | 0.0 | R 200.8 | 0.0 | R 200.8 |
| 1998 | 0.0 | 3.1 | 0.3 | 46.4 | 36.1 | (s) | 1.2 | 117.1 | 0.0 | 201.1 | 1.1 | 0.0 | 204.1 | 0.0 | 204.1 |
| 1999 | 0.0 | 2.8 | 0.4 | 45.1 | 42.2 | 0.1 | 1.2 | 119.2 | 0.0 | 208.2 | 0.9 | (s) | 211.1 | (s) | 211.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 286.   Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Utah**

| Year | Coal | Natural Gas a | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Petroleum | | | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 515 | 4 | 2,291 | 12 | 0 | 2,302 | 0 | 304 | 0 | 0 | 0 | — |
| 1965 | 363 | 5 | 1,597 | 8 | 0 | 1,605 | 0 | 910 | 0 | 0 | 0 | — |
| 1970 | 435 | 4 | 1,768 | 9 | 0 | 1,777 | 0 | 738 | 0 | 0 | 0 | — |
| 1975 | 2,026 | 3 | 152 | 10 | 0 | 162 | 0 | 1,074 | 0 | 0 | 0 | — |
| 1980 | 4,895 | 5 | 58 | 67 | 0 | 126 | 0 | 821 | 0 | 0 | 0 | — |
| 1985 | 6,325 | (s) | 25 | 55 | 0 | 80 | 0 | 1,019 | 0 | 110 | 0 | — |
| 1990 | 13,563 | 1 | 0 | 84 | 0 | 84 | 0 | 486 | 0 | 152 | 0 | — |
| 1991 | 12,829 | 5 | 0 | 82 | 0 | 82 | 0 | 604 | 0 | 186 | 0 | — |
| 1992 | 13,857 | 7 | 0 | 62 | 0 | 62 | 0 | 580 | 0 | 186 | 0 | — |
| 1993 | 13,995 | 6 | 0 | 55 | 0 | 55 | 0 | 818 | 0 | 148 | 0 | — |
| 1994 | 14,269 | 9 | 0 | 53 | 0 | 53 | 0 | 716 | 0 | 195 | 0 | — |
| 1995 | 13,325 | 9 | 0 | 61 | 0 | 61 | 0 | 926 | 0 | 140 | 0 | — |
| 1996 | 13,585 | 4 | 0 | 55 | 0 | 55 | 0 | 1,019 | 0 | 192 | 0 | — |
| 1997 | 14,252 | 4 | 0 | 52 | 0 | 52 | 0 | R 1,349 | 0 | 169 | 0 | — |
| 1998 | 14,664 | 6 | 0 | 58 | 0 | 58 | 0 | 1,300 | 0 | 160 | 0 | — |
| 1999 | 14,590 | 6 | 0 | 52 | 0 | 52 | 0 | 1,247 | 0 | 156 | 0 | — |
| | | | | | Trillion Btu | | | | | | | |
| 1960 | 12.8 | 3.8 | 14.4 | 0.1 | 0.0 | 14.5 | 0.0 | 3.3 | 0.0 | 0.0 | 0.0 | 34.4 |
| 1965 | 9.1 | 4.4 | 10.0 | (s) | 0.0 | 10.1 | 0.0 | 9.5 | 0.0 | 0.0 | 0.0 | 33.1 |
| 1970 | 10.8 | 3.3 | 11.1 | 0.1 | 0.0 | 11.2 | 0.0 | 7.7 | 0.0 | 0.0 | 0.0 | 33.0 |
| 1975 | 47.9 | 2.9 | 1.0 | 0.1 | 0.0 | 1.0 | 0.0 | 11.2 | 0.0 | 0.0 | 0.0 | 63.0 |
| 1980 | 112.1 | 4.9 | 0.4 | 0.4 | 0.0 | 0.8 | 0.0 | 8.5 | 0.0 | 0.0 | 0.0 | 126.3 |
| 1985 | 149.3 | 0.3 | 0.2 | 0.3 | 0.0 | 0.5 | 0.0 | 10.6 | 0.0 | 2.3 | 0.0 | 163.0 |
| 1990 | 311.5 | 0.9 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 5.1 | 0.0 | 3.2 | 0.0 | 321.1 |
| 1991 | 294.3 | 5.5 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 6.3 | 0.0 | 3.9 | 0.0 | 310.5 |
| 1992 | 315.5 | 7.1 | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | 6.0 | 0.0 | 3.9 | 0.0 | 332.8 |
| 1993 | 321.6 | 6.7 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 8.4 | 0.0 | 3.1 | 0.0 | 340.1 |
| 1994 | 327.9 | 9.3 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 7.4 | 0.0 | 4.1 | 0.0 | 349.0 |
| 1995 | 307.8 | 9.2 | 0.0 | 0.4 | 0.0 | 0.4 | 0.0 | 9.6 | 0.0 | 2.9 | 0.0 | 329.8 |
| 1996 | 312.8 | 4.2 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 10.5 | 0.0 | 4.0 | 0.0 | 331.9 |
| 1997 | 323.0 | 4.2 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | R 14.0 | 0.0 | 3.5 | 0.0 | R 345.1 |
| 1998 | 331.7 | 6.2 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 13.5 | 0.0 | 3.4 | 0.0 | 355.1 |
| 1999 | 339.1 | 6.8 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 12.9 | 0.0 | 3.3 | 0.0 | 362.3 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 287. Energy Consumption Estimates by Source, Selected Years 1960-1999, Vermont

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | Million kWh | | | Million kWh | |

**Thousand Barrels / Million kWh**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 137 | 0 | 224 | 19 | 2,958 | 82 | 819 | 404 | 70 | 3,332 | 478 | 46 | 8,431 | 0 | 938 | — | — | 128 | — |
| 1965 | 105 | 0 | 171 | 25 | 4,285 | 79 | 760 | 450 | 63 | 3,789 | 910 | 39 | 10,572 | 0 | 755 | — | — | 1,950 | — |
| 1970 | 87 | 3 | 271 | 14 | 5,741 | 121 | 502 | 542 | 66 | 5,077 | 905 | 45 | 13,285 | 0 | 835 | — | — | 5,662 | — |
| 1975 | 31 | 4 | 28 | 11 | 4,642 | 177 | 317 | 833 | 56 | 5,698 | 796 | 90 | 12,647 | 3,561 | 1,013 | — | — | -4,571 | — |
| 1980 | 22 | 4 | 43 | 25 | 4,095 | 155 | 283 | 666 | 67 | 5,437 | 471 | 89 | 11,331 | 2,979 | 1,000 | — | — | 807 | — |
| 1985 | 80 | 5 | 330 | 22 | 4,193 | 201 | 577 | 791 | 61 | 5,813 | 122 | 75 | 12,183 | 2,999 | 1,243 | — | — | -801 | — |
| 1990 | 8 | 7 | 27 | 15 | 4,045 | 180 | 223 | 1,401 | 69 | 6,696 | 241 | 86 | 12,982 | 3,616 | R h 2,425 | — | — | R -5,702 | — |
| 1991 | 12 | 7 | 527 | 15 | 4,258 | 162 | 274 | 1,634 | 62 | 6,772 | 265 | 0 | 13,970 | 4,108 | R 2,433 | — | — | R -6,766 | — |
| 1992 | 20 | 8 | 335 | 15 | 4,993 | 116 | 230 | 1,912 | 63 | 6,879 | 280 | 0 | 14,823 | 3,735 | R 2,906 | — | — | R -5,454 | — |
| 1993 | 6 | 7 | 31 | 12 | 5,357 | 124 | 277 | 1,641 | 64 | 7,096 | 480 | 0 | 15,082 | 3,372 | R 3,593 | — | — | R -5,638 | — |
| 1994 | 5 | 7 | 230 | 11 | 5,064 | 138 | 213 | 1,663 | 67 | 7,154 | 286 | 0 | 14,827 | 4,316 | R 3,719 | — | — | R -10,075 | — |
| 1995 | 3 | 7 | 253 | 12 | 5,352 | 127 | 204 | 1,673 | 66 | 7,211 | 218 | 0 | 15,116 | 3,859 | R 4,208 | — | — | R -11,269 | — |
| 1996 | 2 | 7 | 290 | 10 | 5,859 | 99 | 239 | R 1,834 | 64 | 7,331 | 287 | 0 | R 16,013 | 3,799 | R 4,075 | — | — | R -10,003 | — |
| 1997 | 2 | 8 | 792 | 12 | 5,521 | 106 | 282 | R 1,540 | 67 | 7,606 | 330 | 0 | R 16,256 | 4,267 | R 3,669 | — | — | R -12,225 | — |
| 1998 | 109 | 8 | 162 | 10 | 5,362 | 121 | 509 | 1,777 | 70 | 7,510 | 292 | 0 | 15,814 | 3,358 | 3,525 | — | — | -7,825 | — |
| 1999 | 82 | 8 | 174 | 12 | 5,570 | 143 | 355 | 1,617 | 71 | 7,699 | 264 | 0 | 15,905 | 4,059 | 5,872 | — | — | -20,389 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 3.5 | 0.0 | 1.5 | 0.1 | 17.2 | 0.4 | 4.6 | 1.6 | 0.4 | 17.5 | 3.0 | 0.3 | 46.7 | 0.0 | 10.1 | 7.9 | 0.0 | 0.4 | 68.7 |
| 1965 | 2.7 | 0.0 | 1.1 | 0.1 | 25.0 | 0.4 | 4.3 | 1.8 | 0.4 | 19.9 | 5.7 | 0.2 | 59.0 | 0.0 | 7.9 | 6.9 | 0.0 | 6.7 | 83.2 |
| 1970 | 2.1 | 2.7 | 1.8 | 0.1 | 33.4 | 0.7 | 2.8 | 2.0 | 0.4 | 26.7 | 5.7 | 0.3 | 73.9 | 0.0 | 8.8 | 6.5 | 0.0 | 19.3 | 113.2 |
| 1975 | 0.7 | 4.0 | 0.2 | 0.1 | 27.0 | 1.0 | 1.8 | 3.1 | 0.3 | 29.9 | 5.0 | 0.5 | 68.9 | 39.2 | 10.5 | 6.6 | 0.0 | -15.6 | 114.4 |
| 1980 | 0.5 | 4.0 | 0.3 | 0.1 | 23.9 | 0.9 | 1.6 | 2.4 | 0.4 | 28.6 | 3.0 | 0.5 | 61.6 | 32.5 | 10.4 | R 13.3 | 0.0 | 2.8 | R 125.0 |
| 1985 | 2.0 | 5.0 | 2.2 | 0.1 | 24.4 | 1.1 | 3.3 | 2.8 | 0.4 | 30.5 | 0.8 | 0.4 | 66.0 | 32.4 | 16.9 | R 16.9 | 0.0 | -2.7 | R 132.6 |
| 1990 | 0.2 | 6.7 | 0.2 | 0.1 | 23.6 | 1.0 | 1.3 | 5.1 | 0.4 | 35.2 | 1.5 | 0.5 | 68.7 | 38.6 | R h 25.2 | R 6.5 | h (s) | R -19.5 | R h 133.5 |
| 1991 | 0.3 | 7.0 | 3.5 | 0.1 | 24.8 | 0.9 | 1.6 | 5.9 | 0.4 | 35.6 | 1.7 | 0.0 | 74.3 | 44.1 | R 25.4 | R 7.1 | (s) | R -23.1 | R 138.8 |
| 1992 | 0.5 | 7.6 | 2.2 | 0.1 | 29.1 | 0.6 | 1.3 | 6.9 | 0.4 | 36.1 | 1.8 | 0.0 | 78.5 | 39.9 | R 30.1 | R 7.2 | (s) | R -18.6 | R 146.3 |
| 1993 | 0.1 | 7.2 | 0.2 | 0.1 | 31.2 | 0.7 | 1.6 | 5.9 | 0.4 | 37.3 | 3.0 | 0.0 | 80.3 | 36.0 | R 37.0 | R 8.8 | (s) | R -19.2 | R 151.9 |
| 1994 | 0.1 | 7.3 | 1.5 | 0.1 | 29.5 | 0.8 | 1.2 | 6.0 | 0.4 | R 37.4 | 1.8 | 0.0 | R 78.7 | 46.1 | R 38.4 | R 11.1 | (s) | R -34.4 | R 153.0 |
| 1995 | 0.1 | 7.2 | 1.7 | 0.1 | 31.2 | 0.7 | 1.2 | 6.1 | 0.4 | R 37.6 | 1.4 | 0.0 | R 80.2 | 41.1 | R 43.4 | R 12.4 | (s) | R -38.5 | R 155.3 |
| 1996 | (s) | 7.4 | 1.9 | 0.1 | 34.1 | 0.6 | 1.4 | R 6.6 | 0.4 | R 38.2 | 1.8 | 0.0 | R 85.1 | 40.4 | R 42.1 | R 10.6 | (s) | R -34.1 | R 160.3 |
| 1997 | 0.1 | 8.2 | 5.3 | 0.1 | 32.2 | 0.6 | 1.6 | R 5.6 | 0.4 | R 39.7 | 2.1 | 0.0 | R 87.4 | 45.3 | R 38.0 | R 10.4 | (s) | R -41.7 | R 162.1 |
| 1998 | 2.7 | 7.8 | 1.1 | 0.1 | 31.2 | 0.7 | 2.9 | 6.4 | 0.4 | 39.1 | 1.8 | 0.0 | 83.8 | 35.7 | 36.5 | 6.0 | (s) | -26.7 | 157.4 |
| 1999 | 2.0 | 8.1 | 1.2 | 0.1 | 32.4 | 0.8 | 2.0 | 5.8 | 0.4 | 40.1 | 1.7 | 0.0 | 84.5 | 43.1 | 60.8 | 9.2 | 0.2 | -69.6 | 165.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 288. Residential Energy Consumption Estimates, Selected Years 1960-1999, Vermont

| | | | Petroleum | | | | | | | | | Electrical System Energy Losses [d] | |
| | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | | | Electricity[a] | Net Energy | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | Geothermal | Solar[c] | Million Kilowatthours | Net Energy | Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 46 | 0 | 2,044 | 701 | 258 | 3,003 | 173 | — | — | 451 | — | 1,121 | — |
| 1965 | 29 | 0 | 3,110 | 649 | 316 | 4,075 | 137 | — | — | 678 | — | 1,619 | — |
| 1970 | 17 | 1 | 3,873 | 436 | 356 | 4,665 | 105 | — | — | 1,216 | — | 2,947 | — |
| 1975 | 9 | 1 | 3,101 | 235 | 555 | 3,891 | 123 | — | — | 1,427 | — | 3,443 | — |
| 1980 | 7 | 1 | 2,171 | 230 | 356 | 2,757 | 160 | — | — | 1,781 | — | 4,331 | — |
| 1985 | 19 | 1 | 2,222 | 514 | 601 | 3,338 | 139 | — | — | 1,538 | — | 3,613 | — |
| 1990 | 4 | 2 | 1,930 | 193 | 1,109 | 3,232 | 99 | — | — | 1,809 | — | R 3,957 | — |
| 1991 | 3 | 2 | 2,036 | 248 | 1,188 | 3,472 | 104 | — | — | 1,783 | — | R 3,877 | — |
| 1992 | 4 | 3 | 2,191 | 210 | 1,424 | 3,825 | 110 | — | — | 1,927 | — | R 4,110 | — |
| 1993 | 4 | 3 | 2,372 | 235 | 1,204 | 3,810 | R 114 | — | — | 1,971 | — | R 4,163 | — |
| 1994 | 2 | 2 | 2,168 | 183 | 1,227 | 3,578 | R 112 | — | — | 2,009 | — | R 4,194 | — |
| 1995 | 2 | 2 | 2,247 | 180 | 1,223 | 3,650 | R 124 | — | — | 1,973 | — | R 4,114 | — |
| 1996 | 1 | 3 | 2,402 | 203 | R 1,378 | R 3,984 | R 124 | — | — | 2,006 | — | R 4,181 | — |
| 1997 | 1 | 3 | 2,382 | 238 | R 1,229 | R 3,850 | R 82 | — | — | 1,992 | — | R 4,144 | — |
| 1998 | 1 | 2 | 2,047 | 326 | 1,388 | 3,761 | 72 | — | — | 1,951 | — | 4,031 | — |
| 1999 | 1 | 3 | 2,027 | 262 | 1,356 | 3,645 | 77 | — | — | 1,999 | — | 3,916 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.1 | 0.0 | 11.9 | 4.0 | 1.0 | 16.9 | 3.5 | 0.0 | 0.0 | 1.5 | 23.0 | 3.8 | 26.9 |
| 1965 | 0.7 | 0.0 | 18.1 | 3.7 | 1.3 | 23.1 | 2.7 | 0.0 | 0.0 | 2.3 | 28.8 | 5.5 | 34.3 |
| 1970 | 0.4 | 1.1 | 22.6 | 2.5 | 1.3 | 26.4 | 2.1 | 0.0 | 0.0 | 4.1 | 34.1 | 10.1 | 44.1 |
| 1975 | 0.2 | 1.1 | 18.1 | 1.3 | 2.1 | 21.5 | 2.5 | 0.0 | 0.0 | 4.9 | 30.1 | 11.7 | 41.9 |
| 1980 | 0.1 | 1.3 | 12.6 | 1.3 | 1.3 | 15.3 | 3.2 | 0.0 | 0.0 | 6.1 | 26.0 | 14.8 | 40.7 |
| 1985 | 0.5 | 1.4 | 12.9 | 2.9 | 2.2 | 18.0 | 2.8 | 0.0 | 0.0 | 5.2 | 28.0 | 12.3 | 40.3 |
| 1990 | 0.1 | 2.1 | 11.2 | 1.1 | 4.0 | 16.4 | 2.0 | e 0.0 | e (s) | 6.2 | e 26.7 | 13.5 | e 40.2 |
| 1991 | 0.1 | 2.2 | 11.9 | 1.4 | 4.3 | 17.6 | 2.1 | 0.0 | (s) | 6.1 | 28.0 | 13.2 | 41.2 |
| 1992 | 0.1 | 2.5 | 12.8 | 1.2 | 5.2 | 19.1 | 2.2 | 0.0 | (s) | 6.6 | 30.5 | 14.0 | 44.5 |
| 1993 | 0.1 | 2.5 | 13.8 | 1.3 | 4.3 | 19.5 | 2.3 | 0.0 | (s) | 6.7 | 31.1 | 14.2 | 45.3 |
| 1994 | (s) | 2.4 | 12.6 | 1.0 | 4.5 | 18.1 | R 2.2 | 0.0 | (s) | 6.9 | 29.7 | 14.3 | 44.0 |
| 1995 | (s) | 2.3 | 13.1 | 1.0 | 4.4 | 18.5 | 2.5 | 0.0 | (s) | 6.7 | 30.1 | 14.0 | R 44.1 |
| 1996 | (s) | 2.6 | 14.0 | 1.2 | R 5.0 | R 20.1 | 2.5 | 0.0 | (s) | 6.8 | R 32.1 | R 14.3 | R 46.3 |
| 1997 | (s) | 2.7 | 13.9 | 1.4 | R 4.4 | R 19.7 | R 1.6 | 0.0 | (s) | 6.8 | R 30.8 | 14.1 | R 45.0 |
| 1998 | (s) | 2.5 | 11.9 | 1.8 | 5.0 | 18.8 | 1.4 | 0.0 | (s) | 6.7 | 29.4 | 13.8 | 43.2 |
| 1999 | (s) | 2.6 | 11.8 | 1.5 | 4.9 | 18.2 | 1.5 | (s) | (s) | 6.8 | 29.2 | 13.4 | 42.6 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 289.   Commercial Energy Consumption Estimates, Selected Years 1960-1999, Vermont

| Year | Coal^a Thousand Short Tons | Natural Gas^b Billion Cubic Feet | Petroleum — Distillate Fuel^a | Kerosene^a | LPG^a | Motor Gasoline | Residual Fuel^a | Total | Wood Thousand Cords | Geothermal | Electricity^a Million Kilowatthours | Net Energy | Electrical System Energy Losses^c Million Kilowatthours | Total^d |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 30 | 0 | 418 | 43 | 46 | 127 | 225 | 859 | 3 | — | 233 | — | 580 | — |
| 1965 | 19 | 0 | 636 | 40 | 56 | 24 | 422 | 1,177 | 3 | — | 303 | — | 723 | — |
| 1970 | 12 | 1 | 792 | 27 | 63 | 25 | 414 | 1,320 | 2 | — | 609 | — | 1,475 | — |
| 1975 | 6 | 1 | 634 | 15 | 98 | 30 | 373 | 1,149 | 2 | — | 709 | — | 1,710 | — |
| 1980 | 4 | 1 | 620 | 44 | 63 | 33 | 237 | 996 | 4 | — | 923 | — | 2,244 | — |
| 1985 | 27 | 2 | 530 | 36 | 106 | 40 | 24 | 735 | R 4 | — | 959 | — | 2,253 | — |
| 1990 | 3 | 2 | 563 | 12 | 196 | 41 | 121 | 933 | R 6 | — | 1,526 | — | 3,339 | — |
| 1991 | 2 | 2 | 700 | 15 | 210 | 27 | 131 | 1,084 | R 7 | — | 1,531 | — | R 3,329 | — |
| 1992 | 2 | 2 | 816 | 14 | 251 | 33 | 106 | 1,221 | R 7 | — | 1,574 | — | R 3,356 | — |
| 1993 | 2 | 2 | 746 | 34 | 212 | 6 | 174 | 1,173 | 9 | — | 1,614 | — | R 3,408 | — |
| 1994 | 3 | 3 | 770 | 19 | 217 | 7 | 87 | 1,099 | 9 | — | 1,622 | — | R 3,386 | — |
| 1995 | 1 | 3 | 670 | 14 | 216 | 7 | 72 | 978 | 9 | — | 1,647 | — | R 3,433 | — |
| 1996 | 1 | 3 | 807 | 13 | R 243 | 7 | 74 | R 1,144 | 10 | — | 1,696 | — | R 3,535 | — |
| 1997 | 1 | 3 | 877 | 21 | R 217 | 7 | 113 | R 1,234 | 9 | — | 1,759 | — | R 3,660 | — |
| 1998 | 1 | 3 | 956 | 32 | 245 | 7 | 113 | 1,353 | 9 | — | 1,878 | — | 3,880 | — |
| 1999 | 1 | 2 | 951 | 35 | 239 | 7 | 86 | 1,318 | 11 | — | 1,941 | — | 3,804 | — |
| **Trillion Btu** | | | | | | | | | | | | | | |
| 1960 | 0.8 | 0.0 | 2.4 | 0.2 | 0.2 | 0.7 | 1.4 | 4.9 | 0.1 | 0.0 | 0.8 | 6.6 | 2.0 | 8.5 |
| 1965 | 0.5 | 0.0 | 3.7 | 0.2 | 0.2 | 0.1 | 2.7 | 6.9 | 0.1 | 0.0 | 1.0 | 8.5 | 2.5 | 10.9 |
| 1970 | 0.3 | 0.6 | 4.6 | 0.2 | 0.2 | 0.1 | 2.6 | 7.7 | (s) | 0.0 | 2.1 | 10.7 | 5.0 | 15.7 |
| 1975 | 0.1 | 0.8 | 3.7 | 0.1 | 0.4 | 0.2 | 2.3 | 6.6 | (s) | 0.0 | 2.4 | 10.0 | 5.8 | 15.9 |
| 1980 | 0.1 | 0.8 | 3.6 | 0.2 | 0.2 | 0.2 | 1.5 | 5.7 | 0.1 | 0.0 | 3.1 | 9.9 | 7.7 | 17.6 |
| 1985 | 0.7 | 1.6 | 3.1 | 0.2 | 0.4 | 0.2 | 0.1 | 4.0 | R 0.1 | 0.0 | 3.3 | R 9.6 | 7.7 | R 17.3 |
| 1990 | 0.1 | 2.0 | 3.3 | 0.1 | 0.7 | 0.2 | 0.8 | 5.0 | R 0.1 | e 0.0 | 5.2 | R e 12.5 | 11.4 | R e 23.9 |
| 1991 | 0.1 | 2.0 | 4.1 | 0.1 | 0.8 | 0.1 | 0.8 | 5.9 | R 0.1 | 0.0 | 5.2 | R 13.3 | 11.4 | R 24.7 |
| 1992 | 0.1 | 2.3 | 4.8 | 0.1 | 0.9 | 0.2 | 0.7 | 6.6 | R 0.1 | 0.0 | 5.4 | R 14.5 | 11.5 | R 25.9 |
| 1993 | 0.1 | 2.4 | 4.3 | 0.2 | 0.8 | (s) | 1.1 | 6.4 | 0.2 | 0.0 | 5.5 | 14.6 | 11.6 | 26.2 |
| 1994 | 0.1 | 2.7 | 4.5 | 0.1 | 0.8 | (s) | 0.5 | 6.0 | 0.2 | 0.0 | 5.5 | 14.4 | 11.6 | 26.0 |
| 1995 | (s) | 2.7 | 3.9 | 0.1 | 0.8 | (s) | 0.5 | 5.2 | 0.2 | 0.0 | 5.6 | 13.7 | 11.7 | 25.5 |
| 1996 | (s) | 2.9 | 4.7 | 0.1 | R 0.9 | (s) | 0.5 | R 6.2 | 0.2 | 0.0 | 5.8 | 15.0 | R 12.1 | R 27.1 |
| 1997 | (s) | 3.1 | 5.1 | 0.1 | 0.8 | (s) | 0.7 | 6.8 | 0.2 | 0.0 | 6.0 | 16.1 | 12.5 | R 28.5 |
| 1998 | (s) | 3.0 | 5.6 | 0.2 | 0.9 | (s) | 0.7 | 7.4 | 0.2 | 0.0 | 6.4 | 17.0 | 13.2 | 30.2 |
| 1999 | (s) | 2.3 | 5.5 | 0.2 | 0.9 | (s) | 0.5 | 7.2 | 0.2 | 0.0 | 6.6 | 16.4 | 13.0 | 29.4 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
b Includes supplemental gaseous fuels.
c Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
d Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# VERMONT

## Table 290. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Vermont

| Year | Coal (Thousand Short Tons) | Natural Gas a (Billion Cubic Feet) | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b (Million kWh) | Wood and Waste | Other b,d | Electricity b (Million kWh) | Net Energy | Electrical System Energy Losses e (Million kWh) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | *Petroleum — Thousand Barrels* | | | | | | | | | | | | | | | |
| 1960 | 41 | 0 | 224 | 234 | 75 | 99 | 2 | 0 | 252 | 46 | 931 | 64 | — | — | 191 | — | 474 | — |
| 1965 | 14 | 0 | 171 | 316 | 71 | 77 | 19 | 100 | 484 | 39 | 1,278 | 53 | — | — | 352 | — | 841 | — |
| 1970 | 3 | 1 | 271 | 463 | 39 | 121 | 17 | 68 | 466 | 45 | 1,489 | 62 | — | — | 787 | — | 1,907 | — |
| 1975 | 2 | 2 | 28 | 364 | 68 | 179 | 10 | 77 | 421 | 90 | 1,237 | 67 | — | — | 858 | — | 2,071 | — |
| 1980 | 2 | 2 | 43 | 501 | 9 | 245 | 15 | 19 | 235 | 89 | 1,155 | 70 | — | — | 1,247 | — | 3,032 | — |
| 1985 | 6 | 2 | 330 | 448 | 26 | 70 | 14 | 117 | 98 | 75 | 1,178 | 70 | — | — | 1,518 | — | 3,567 | — |
| 1990 | 1 | 2 | 27 | 466 | 17 | 85 | 16 | 81 | 116 | 86 | 895 | R f 171 | — | — | 1,381 | — | 3,021 | — |
| 1991 | 7 | 2 | 527 | 447 | 11 | 226 | 14 | 88 | 131 | 0 | 1,444 | R 136 | — | — | 1,390 | — | R 3,021 | — |
| 1992 | 14 | 2 | 335 | 508 | 6 | 226 | 14 | 90 | 169 | 0 | 1,349 | R 142 | — | — | 1,440 | — | R 3,072 | — |
| 1993 | 0 | 2 | 31 | 511 | 8 | 217 | 14 | 76 | 306 | 0 | 1,163 | R 313 | — | — | 1,431 | — | R 3,022 | — |
| 1994 | 0 | 2 | 230 | 347 | 12 | 199 | 15 | 84 | 199 | 0 | 1,085 | R 334 | — | — | 1,435 | — | 2,994 | — |
| 1995 | 0 | 2 | 253 | 317 | 10 | R 220 | 15 | 89 | 146 | 0 | 1,050 | R 315 | — | — | 1,484 | — | R 3,094 | — |
| 1996 | 0 | 2 | 290 | 331 | 22 | R 196 | 14 | 90 | 213 | 0 | R 1,157 | R 338 | — | — | 1,537 | — | R 3,203 | — |
| 1997 | 0 | 2 | 792 | 356 | 23 | R 77 | 15 | 95 | 217 | 0 | R 1,575 | R 194 | — | — | 1,561 | — | R 3,246 | — |
| 1998 | 107 | 2 | 162 | 386 | 151 | 144 | 16 | 76 | 178 | 0 | 1,114 | 329 | — | — | 1,534 | — | 3,169 | — |
| 1999 | 80 | 3 | 174 | 412 | 58 | 19 | 16 | 82 | 179 | 0 | 940 | 775 | — | — | 1,587 | — | 3,110 | — |

**Trillion Btu**

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.1 | 0.0 | 1.5 | 1.4 | 0.4 | 0.4 | (s) | 0.0 | 1.6 | 0.3 | 5.5 | 0.7 | 4.4 | 0.0 | 0.7 | 12.4 | 1.6 | 14.0 |
| 1965 | 0.4 | 0.0 | 1.1 | 1.8 | 0.4 | 0.3 | 0.1 | 0.5 | 3.0 | 0.2 | 7.6 | 0.6 | 4.1 | 0.0 | 1.2 | 13.9 | 2.9 | 16.7 |
| 1970 | 0.1 | 1.1 | 1.8 | 2.7 | 0.2 | 0.5 | 0.1 | 0.4 | 2.9 | 0.3 | 8.8 | 0.6 | 4.3 | 0.0 | 2.7 | 17.6 | 6.5 | 24.1 |
| 1975 | 0.1 | 1.5 | 0.2 | 2.1 | 0.4 | 0.7 | 0.1 | 0.4 | 2.6 | 0.5 | 7.0 | 0.7 | 4.1 | 0.0 | 2.9 | 16.3 | 7.1 | 23.4 |
| 1980 | (s) | 1.6 | 0.3 | 2.9 | 0.1 | 0.9 | 0.1 | 0.1 | 1.5 | 0.5 | 6.3 | 0.7 | R 9.5 | 0.0 | 4.3 | R 22.5 | 10.3 | R 32.8 |
| 1985 | 0.1 | 1.9 | 2.2 | 2.6 | 0.1 | 0.3 | 0.1 | 0.6 | 0.6 | 0.4 | 6.9 | 0.7 | R 11.2 | 0.0 | 5.2 | R 26.0 | 12.2 | R 38.2 |
| 1990 | (s) | 1.9 | 0.2 | 2.7 | 0.1 | 0.3 | 0.1 | 0.4 | 0.7 | 0.5 | 5.0 | R f 1.8 | R 3.4 | f 0.0 | 4.7 | R f 16.8 | 10.3 | R f 27.1 |
| 1991 | 0.2 | 1.7 | 3.5 | 2.6 | 0.1 | 0.8 | 0.1 | 0.5 | 0.8 | 0.0 | 8.4 | R 1.4 | R 3.7 | 0.0 | 4.7 | R 20.1 | 10.3 | R 30.4 |
| 1992 | 0.4 | 1.9 | 2.2 | 3.0 | (s) | 0.8 | 0.1 | 0.5 | 1.1 | 0.0 | 7.7 | R 1.5 | R 3.9 | 0.0 | 4.9 | R 20.3 | 10.5 | R 30.7 |
| 1993 | 0.0 | 2.0 | 0.2 | 3.0 | (s) | 0.8 | 0.1 | 0.4 | 1.9 | 0.0 | 6.4 | R 3.2 | R 5.6 | 0.0 | 4.9 | R 22.2 | 10.3 | R 32.5 |
| 1994 | 0.0 | 2.0 | 1.5 | 2.0 | 0.1 | 0.7 | 0.1 | 0.4 | 1.2 | 0.0 | 6.1 | R 3.4 | R 7.9 | 0.0 | 4.9 | 24.4 | 10.2 | R 34.6 |
| 1995 | 0.0 | 2.2 | 1.7 | 1.8 | 0.1 | 0.8 | 0.1 | 0.5 | 0.9 | 0.0 | 5.9 | R 3.2 | R 8.4 | 0.0 | 5.1 | 24.7 | R 10.6 | 35.3 |
| 1996 | 0.0 | 2.0 | 1.9 | 1.9 | 0.1 | R 0.7 | 0.1 | 0.5 | 1.3 | 0.0 | R 6.6 | R 3.5 | R 6.5 | 0.0 | 5.2 | R 23.8 | 10.9 | R 34.8 |
| 1997 | 0.0 | 2.4 | 5.3 | 2.1 | 0.1 | R 0.3 | 0.1 | 0.5 | 1.4 | 0.0 | R 9.7 | R 2.0 | R 7.0 | 0.0 | 5.3 | R 26.4 | 11.1 | R 37.5 |
| 1998 | 2.6 | 2.1 | 1.1 | 2.2 | 0.9 | 0.5 | 0.1 | 0.4 | 1.1 | 0.0 | 6.3 | 3.4 | 2.8 | 0.0 | 5.2 | 22.5 | 10.8 | 33.4 |
| 1999 | 2.0 | 2.9 | 1.2 | 2.4 | 0.3 | 0.1 | 0.1 | 0.4 | 1.1 | 0.0 | 5.6 | 8.0 | 5.3 | 0.0 | 5.4 | 29.3 | 10.6 | 39.9 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 291. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Vermont

| | | | Petroleum | | | | | | | | | Ethanol c | Electricity a | | Electrical System Energy Losses d | |
| | Coal a | Natural Gas b | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1 | 0 | 19 | 254 | 82 | (s) | 68 | 3,205 | 0 | 3,629 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 0 | 25 | 185 | 79 | 1 | 44 | 3,665 | 0 | 4,000 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 0 | 14 | 346 | 121 | 3 | 49 | 4,985 | 2 | 5,519 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 0 | 11 | 504 | 129 | 1 | 45 | 5,591 | 2 | 6,284 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 0 | 25 | 757 | 137 | 2 | 52 | 5,386 | 0 | 6,359 | 0 | 0 | — | 0 | — |
| 1985 | 0 | (s) | 22 | 959 | 201 | 13 | 47 | 5,656 | 0 | 6,898 | e 0 | 0 | — | 0 | — |
| 1990 | 0 | (s) | 15 | 1,079 | 180 | 11 | 53 | 6,574 | 3 | 7,915 | 0 | 0 | — | 0 | — |
| 1991 | 0 | (s) | 15 | 1,060 | 162 | 11 | 48 | 6,656 | 3 | 7,955 | 0 | 0 | — | 0 | — |
| 1992 | 0 | (s) | 15 | 1,470 | 116 | 11 | 49 | 6,756 | 4 | 8,420 | 0 | 0 | — | 0 | — |
| 1993 | 0 | (s) | 12 | 1,711 | 124 | 8 | 49 | 7,014 | 0 | 8,919 | 0 | 0 | — | 0 | — |
| 1994 | 0 | (s) | 11 | 1,756 | 138 | 21 | 52 | 7,064 | 0 | 9,042 | 0 | 0 | — | 0 | — |
| 1995 | 0 | (s) | 12 | 2,079 | 127 | 15 | 51 | 7,116 | 0 | 9,399 | 0 | 0 | — | 0 | — |
| 1996 | 0 | (s) | 10 | 2,303 | 99 | 16 | 49 | 7,234 | 0 | 9,712 | 0 | 0 | — | 0 | — |
| 1997 | 0 | (s) | 12 | 1,874 | 106 | R 17 | 52 | 7,504 | 0 | R 9,566 | 0 | 0 | — | 0 | — |
| 1998 | 0 | (s) | 10 | 1,865 | 121 | (s) | 55 | 7,428 | 0 | 9,479 | 0 | (s) | — | (s) | — |
| 1999 | 0 | (s) | 12 | 2,116 | 143 | 2 | 55 | 7,610 | 0 | 9,938 | 0 | 0 | — | 0 | — |

| | | | | | | | | Trillion Btu | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | (s) | 0.0 | 0.1 | 1.5 | 0.4 | (s) | 0.4 | 16.8 | 0.0 | 19.3 | 0.0 | 0.0 | 19.3 | 0.0 | 19.3 |
| 1965 | (s) | 0.0 | 0.1 | 1.1 | 0.4 | (s) | 0.3 | 19.3 | 0.0 | 21.2 | 0.0 | 0.0 | 21.2 | 0.0 | 21.2 |
| 1970 | (s) | 0.0 | 0.1 | 2.0 | 0.7 | (s) | 0.3 | 26.2 | (s) | 29.3 | 0.0 | 0.0 | 29.3 | 0.0 | 29.3 |
| 1975 | (s) | 0.0 | 0.1 | 2.9 | 0.7 | (s) | 0.3 | 29.4 | (s) | 33.4 | 0.0 | 0.0 | 33.4 | 0.0 | 33.4 |
| 1980 | 0.0 | 0.0 | 0.1 | 4.4 | 0.8 | (s) | 0.3 | 28.3 | 0.0 | 33.9 | 0.0 | 0.0 | 33.9 | 0.0 | 33.9 |
| 1985 | 0.0 | (s) | 0.1 | 5.6 | 1.1 | (s) | 0.3 | 29.7 | 0.0 | 36.9 | e 0.0 | 0.0 | e 36.9 | 0.0 | e 36.9 |
| 1990 | 0.0 | (s) | 0.1 | 6.3 | 1.0 | (s) | 0.3 | 34.5 | (s) | 42.3 | 0.0 | 0.0 | 42.3 | 0.0 | 42.3 |
| 1991 | 0.0 | (s) | 0.1 | 6.2 | 0.9 | (s) | 0.3 | 35.0 | (s) | 42.5 | 0.0 | 0.0 | 42.5 | 0.0 | 42.5 |
| 1992 | 0.0 | (s) | 0.1 | 8.6 | 0.6 | (s) | 0.3 | 35.5 | (s) | 45.1 | 0.0 | 0.0 | 45.1 | 0.0 | 45.1 |
| 1993 | 0.0 | (s) | 0.1 | 10.0 | 0.7 | (s) | 0.3 | 36.8 | 0.0 | 47.9 | 0.0 | 0.0 | 47.9 | 0.0 | 47.9 |
| 1994 | 0.0 | (s) | 0.1 | 10.2 | 0.8 | 0.1 | 0.3 | R 36.9 | 0.0 | R 48.4 | 0.0 | 0.0 | R 48.4 | 0.0 | R 48.4 |
| 1995 | 0.0 | (s) | 0.1 | 12.1 | 0.7 | 0.1 | 0.3 | R 37.1 | 0.0 | R 50.4 | 0.0 | 0.0 | R 50.4 | 0.0 | R 50.4 |
| 1996 | 0.0 | (s) | 0.1 | 13.4 | 0.6 | 0.1 | 0.3 | R 37.7 | 0.0 | R 52.1 | 0.0 | 0.0 | R 52.1 | 0.0 | R 52.1 |
| 1997 | 0.0 | (s) | 0.1 | 10.9 | 0.6 | 0.1 | 0.3 | R 39.1 | 0.0 | R 51.1 | 0.0 | 0.0 | R 51.1 | 0.0 | R 51.1 |
| 1998 | 0.0 | (s) | 0.1 | 10.9 | 0.7 | (s) | 0.3 | 38.7 | 0.0 | 50.6 | 0.0 | (s) | 50.7 | (s) | 50.7 |
| 1999 | 0.0 | (s) | 0.1 | 12.3 | 0.8 | (s) | 0.3 | 39.7 | 0.0 | 53.2 | 0.0 | 0.0 | 53.2 | 0.0 | 53.2 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 292. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Vermont

| Year | Coal | Natural Gas a | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
| | | | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 19 | 0 | 1 | 8 | 0 | 9 | 0 | 873 | 0 | 0 | 0 | — |
| 1965 | 43 | 0 | 3 | 38 | 0 | 42 | 0 | 702 | 0 | 0 | 0 | — |
| 1970 | 55 | 0 | 23 | 268 | 0 | 291 | 0 | 773 | 0 | 0 | 0 | — |
| 1975 | 13 | 1 | (s) | 86 | 0 | 87 | 3,561 | 946 | 0 | 0 | 0 | — |
| 1980 | 9 | (s) | 0 | 63 | 0 | 63 | 2,979 | 930 | 49 | 0 | 0 | — |
| 1985 | 28 | (s) | 0 | 34 | 0 | 34 | 2,999 | 1,173 | 280 | 0 | 0 | — |
| 1990 | 0 | 1 | 0 | 8 | 0 | 8 | 3,616 | R 2,254 | 94 | 0 | 0 | — |
| 1991 | 0 | 1 | 0 | 15 | 0 | 15 | 4,108 | R 2,297 | 109 | 0 | 0 | — |
| 1992 | 0 | 1 | 0 | 8 | 0 | 8 | 3,735 | R 2,763 | 92 | 0 | 0 | — |
| 1993 | 0 | (s) | 0 | 17 | 0 | 17 | 3,372 | R 3,280 | 64 | 0 | 0 | — |
| 1994 | 0 | (s) | 0 | 23 | 0 | 23 | 4,316 | R 3,385 | 72 | 0 | 0 | — |
| 1995 | 0 | (s) | 0 | 39 | 0 | 39 | 3,859 | R 3,893 | 127 | 0 | 0 | — |
| 1996 | 0 | (s) | 0 | 16 | 0 | 16 | 3,799 | R 3,737 | 135 | 0 | 0 | — |
| 1997 | 0 | (s) | 0 | 31 | 0 | 31 | 4,267 | R 3,475 | 150 | 0 | 0 | — |
| 1998 | 0 | (s) | 0 | 107 | 0 | 107 | 3,358 | 3,195 | 145 | 0 | 0 | — |
| 1999 | 0 | (s) | 0 | 64 | 0 | 64 | 4,059 | 5,097 | 200 | 0 | 14 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 0.5 | 0.0 | (s) | (s) | 0.0 | 0.1 | 0.0 | 9.4 | 0.0 | 0.0 | 0.0 | 10.0 |
| 1965 | 1.2 | 0.0 | (s) | 0.2 | 0.0 | 0.2 | 0.0 | 7.3 | 0.0 | 0.0 | 0.0 | 8.8 |
| 1970 | 1.4 | 0.0 | 0.1 | 1.6 | 0.0 | 1.7 | 0.0 | 8.1 | 0.0 | 0.0 | 0.0 | 11.2 |
| 1975 | 0.3 | 0.6 | (s) | 0.5 | 0.0 | 0.5 | 39.2 | 9.8 | 0.0 | 0.0 | 0.0 | 50.5 |
| 1980 | 0.2 | 0.2 | 0.0 | 0.4 | 0.0 | 0.4 | 32.5 | 9.7 | 0.5 | 0.0 | 0.0 | 43.5 |
| 1985 | 0.7 | 0.1 | 0.0 | 0.2 | 0.0 | 0.2 | 32.4 | 12.3 | 2.9 | 0.0 | 0.0 | 48.6 |
| 1990 | 0.0 | 0.7 | 0.0 | (s) | 0.0 | (s) | 38.6 | 23.4 | 1.0 | 0.0 | 0.0 | R 70.8 |
| 1991 | 0.0 | 1.1 | 0.0 | 0.1 | 0.0 | 0.1 | 44.1 | R 24.0 | 1.1 | 0.0 | 0.0 | R 74.0 |
| 1992 | 0.0 | 0.8 | 0.0 | (s) | 0.0 | (s) | 39.9 | R 28.6 | 1.0 | 0.0 | 0.0 | R 71.4 |
| 1993 | 0.0 | 0.3 | 0.0 | 0.1 | 0.0 | 0.1 | 36.0 | R 33.8 | 0.7 | 0.0 | 0.0 | R 72.5 |
| 1994 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 46.1 | R 34.9 | 0.7 | 0.0 | 0.0 | R 87.7 |
| 1995 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.2 | 41.1 | R 40.1 | 1.3 | 0.0 | 0.0 | R 92.2 |
| 1996 | 0.0 | (s) | 0.0 | 0.1 | 0.0 | 0.1 | 40.4 | R 38.6 | 1.4 | 0.0 | 0.0 | R 89.3 |
| 1997 | 0.0 | (s) | 0.0 | 0.2 | 0.0 | 0.2 | 45.3 | R 36.0 | 1.6 | 0.0 | 0.0 | R 97.5 |
| 1998 | 0.0 | 0.2 | 0.0 | 0.6 | 0.0 | 0.6 | 35.7 | 33.1 | 1.5 | 0.0 | 0.0 | 82.8 |
| 1999 | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 | 0.4 | 43.1 | 52.7 | 2.1 | 0.0 | 0.1 | 125.4 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 293. Energy Consumption Estimates by Source, Selected Years 1960-1999, Virginia

| Year | Coal [a] | Natural Gas [b] | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | | | Million kWh | |
| **1960** | 12,142 | 66 | 1,753 | 382 | 14,146 | 4,441 | 5,038 | 1,146 | 633 | 31,077 | 17,825 | R 1,705 | R 78,148 | 0 | 1,267 | — | — | -13,165 | — |
| 1965 | 14,904 | 96 | 2,681 | 721 | 18,609 | 6,504 | 5,544 | 1,658 | 664 | 36,104 | 16,780 | R 2,647 | R 91,912 | 0 | 883 | — | — | -4,629 | — |
| 1970 | 11,294 | 137 | 2,250 | 356 | 24,640 | 11,093 | 5,029 | 2,412 | 720 | 48,684 | 33,373 | R 3,876 | R 132,434 | 0 | 691 | — | — | 16,309 | — |
| 1975 | 7,130 | 121 | 2,328 | 251 | 22,996 | 11,602 | 2,264 | 3,077 | 734 | 59,293 | 40,953 | R 2,688 | R 146,186 | 8,970 | 1,311 | — | — | 22,851 | — |
| 1980 | 9,291 | 158 | 2,618 | 218 | 24,599 | 12,279 | 1,716 | 3,131 | 952 | 59,035 | 24,651 | R 10,233 | R 139,431 | 11,466 | 892 | — | — | 56,966 | — |
| 1985 | 11,656 | 139 | 4,033 | 131 | 25,252 | 11,038 | 4,032 | 3,932 | 866 | 62,979 | 8,571 | R 4,958 | R 125,792 | 22,303 | 845 | — | — | 62,743 | — |
| 1990 | 13,105 | 181 | 4,701 | 70 | 27,940 | 15,806 | 1,374 | 4,088 | 975 | 70,333 | 7,896 | R 3,979 | R 137,160 | 23,820 | R h 487 | — | — | R 89,111 | — |
| 1991 | 13,980 | 175 | 3,734 | 116 | 26,819 | 11,824 | 1,562 | 4,643 | 872 | 70,526 | 9,195 | R 4,998 | R 134,290 | 23,886 | R 22 | — | — | R 90,578 | — |
| 1992 | 13,418 | 200 | 3,759 | 101 | 26,447 | 11,670 | 1,466 | 4,727 | 889 | 71,533 | 8,083 | R 5,323 | R 133,999 | 23,334 | R 425 | — | — | R 92,676 | — |
| 1993 | 13,584 | 218 | 3,697 | 105 | 28,181 | 11,915 | 1,735 | 4,829 | 905 | 73,827 | 8,503 | R 5,245 | R 138,942 | 22,689 | R 539 | — | — | R 97,564 | — |
| 1994 | 12,792 | 231 | 3,935 | 101 | 29,230 | 12,003 | 1,459 | 4,928 | 946 | 75,047 | 7,982 | R 5,359 | R 140,990 | 25,429 | R 405 | — | — | R 95,433 | — |
| 1995 | 13,378 | 247 | 3,639 | 85 | 30,552 | 10,589 | 1,618 | 4,783 | 930 | 78,828 | 5,543 | R 5,231 | R 141,798 | 25,135 | R 227 | — | — | R 104,053 | — |
| 1996 | 14,983 | 239 | 3,512 | 79 | 36,148 | 9,204 | 1,935 | R 5,156 | 903 | 79,164 | 4,138 | R 6,215 | R 146,453 | 26,286 | R 601 | — | — | R 100,300 | — |
| 1997 | 15,276 | 241 | 3,474 | 50 | 36,869 | 9,402 | 2,046 | R 5,216 | 953 | 81,440 | 5,285 | R 6,616 | R 151,353 | 27,084 | R 202 | — | — | R 93,189 | — |
| 1998 | 15,843 | 243 | 3,889 | 90 | 37,020 | 10,183 | 2,604 | 4,006 | 998 | 82,197 | 7,547 | 6,546 | 155,079 | 27,234 | 328 | — | — | 87,148 | — |
| 1999 | 15,805 | 265 | 4,770 | 106 | 37,079 | 9,314 | 1,922 | 4,587 | 1,009 | 84,814 | 8,115 | 6,704 | 158,419 | 28,301 | -546 | — | — | 80,359 | — |

### Trillion Btu

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1960** | 316.4 | 68.4 | 11.6 | 1.9 | 82.4 | 24.0 | 28.6 | 4.6 | 3.8 | 163.2 | 112.1 | R 10.1 | R 442.5 | 0.0 | 13.6 | 56.1 | 0.0 | -44.9 | R 852.1 |
| 1965 | 386.3 | 98.6 | 17.8 | 3.6 | 108.4 | 35.8 | 31.4 | 6.6 | 4.0 | 189.7 | 105.5 | R 15.4 | R 518.2 | 0.0 | 9.2 | 54.2 | 0.0 | -15.8 | R 1,050.8 |
| 1970 | 275.3 | 140.1 | 14.9 | 1.8 | 143.5 | 61.9 | 28.5 | 9.1 | 4.4 | 255.7 | 209.8 | R 22.5 | R 752.2 | 0.0 | 7.3 | 55.5 | 0.0 | 55.6 | R 1,285.9 |
| 1975 | 169.2 | 123.6 | 15.4 | 1.3 | 133.9 | 64.9 | 12.8 | 11.4 | 4.5 | 311.5 | 257.5 | R 15.5 | R 828.8 | 98.8 | 13.6 | 53.2 | 0.0 | 78.0 | R 1,365.2 |
| 1980 | 231.8 | 161.0 | 17.4 | 1.1 | 143.3 | 68.8 | 9.7 | 11.5 | 5.8 | 310.1 | 155.0 | R 56.8 | R 779.4 | 125.1 | 9.3 | R 70.0 | 0.0 | 194.4 | R 1,571.0 |
| 1985 | 297.1 | 144.9 | 26.8 | 0.7 | 147.1 | 61.7 | 22.9 | 14.2 | 5.3 | 330.8 | 53.9 | R 27.4 | R 690.5 | 241.2 | 8.8 | 87.7 | 0.0 | 214.1 | R 1,684.3 |
| 1990 | 333.0 | 188.7 | 31.2 | 0.4 | 162.7 | 88.5 | 7.8 | 14.8 | 5.9 | 369.5 | 49.6 | R 22.2 | R 752.7 | 254.4 | R h 5.1 | R 102.8 | R h 0.3 | 304.0 | R h 1,941.0 |
| 1991 | 356.6 | 182.0 | 24.8 | 0.6 | 156.2 | 66.7 | 8.9 | 16.8 | 5.3 | 370.5 | 57.8 | R 27.9 | R 735.4 | 256.5 | R 0.2 | R 103.3 | R 0.3 | R 309.1 | R 1,943.4 |
| 1992 | 343.6 | 207.8 | 24.9 | 0.5 | 154.1 | 65.9 | 8.3 | 17.1 | 5.4 | 375.8 | 50.8 | R 29.5 | R 732.3 | 249.2 | 4.4 | R 109.1 | 0.3 | R 316.2 | R 1,963.0 |
| 1993 | 347.6 | 227.5 | 24.5 | 0.5 | 164.2 | 67.3 | 9.8 | 17.4 | 5.5 | 387.8 | 53.5 | R 29.1 | R 759.6 | 242.4 | 5.6 | R 109.9 | 0.3 | R 332.9 | R 2,025.7 |
| 1994 | 326.5 | 239.3 | 26.1 | 0.5 | 170.3 | 68.0 | 8.3 | 17.9 | 5.7 | R 392.5 | 50.2 | R 29.7 | R 769.1 | 271.5 | 4.2 | R 114.3 | R 0.4 | 325.6 | R 2,050.8 |
| 1995 | 341.1 | 254.9 | 24.1 | 0.4 | 178.0 | 60.0 | 9.2 | 17.3 | 5.6 | R 411.1 | 34.8 | R 29.0 | R 769.7 | 267.9 | 2.3 | R 124.6 | 0.4 | R 355.0 | R 2,115.8 |
| 1996 | 378.8 | 248.4 | 23.3 | 0.4 | 210.6 | 52.2 | 11.0 | R 18.6 | 5.5 | R 412.9 | 26.0 | R 34.2 | R 794.6 | 279.2 | 6.2 | R 127.8 | 0.4 | R 342.2 | R 2,177.7 |
| 1997 | 384.8 | 252.0 | 23.1 | 0.3 | 214.8 | 53.3 | 11.6 | R 18.9 | 5.8 | R 424.5 | 33.2 | R 36.5 | R 821.9 | 287.7 | 2.1 | R 119.7 | 0.4 | R 318.0 | R 2,186.7 |
| 1998 | 400.1 | 253.2 | 25.8 | 0.5 | 215.6 | 57.7 | 14.8 | 14.5 | 6.1 | 428.4 | 47.4 | 36.1 | 846.9 | 289.3 | 3.4 | 99.0 | 0.5 | 297.3 | 2,189.8 |
| 1999 | 401.6 | 275.2 | 31.7 | 0.5 | 216.0 | 52.8 | 10.9 | 16.6 | 6.1 | 442.0 | 51.0 | 36.8 | 864.3 | 300.6 | -5.6 | 116.4 | 0.5 | 274.2 | 2,227.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 294. Residential Energy Consumption Estimates, Selected Years 1960-1999, Virginia

| | | | Petroleum | | | | | | | | | Electrical System Energy Losses [d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal[a] | Natural Gas [b] | Distillate Fuel [a] | Kerosene [a] | LPG [a] | Total | Wood | | | Electricity [a] | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | | | Thousand Barrels | | Thousand Cords | Geothermal | Solar [c] | Million Kilowatthours | Net Energy | Million Kilowatthours | Total |
| 1960 | 458 | 27 | 6,520 | 4,655 | 734 | 11,909 | 1,499 | — | — | 4,099 | — | 10,196 | — |
| 1965 | 281 | 36 | 7,471 | 4,847 | 1,133 | 13,452 | 1,110 | — | — | 6,557 | — | 15,655 | — |
| 1970 | 166 | 50 | 9,734 | 4,544 | 1,430 | 15,708 | 882 | — | — | 11,546 | — | 27,979 | — |
| 1975 | 114 | 49 | 9,091 | 2,056 | 1,561 | 12,708 | 925 | — | — | 15,871 | — | 38,283 | — |
| 1980 | 68 | 55 | 7,380 | 1,403 | 1,506 | 10,289 | 721 | — | — | 19,731 | — | 47,979 | — |
| 1985 | 95 | 49 | 5,139 | 3,611 | 1,805 | 10,554 | 1,117 | — | — | 22,568 | — | 53,021 | — |
| 1990 | 83 | 51 | 5,108 | 1,160 | 2,124 | 8,392 | 684 | — | — | 28,130 | — | R 61,536 | — |
| 1991 | 49 | 54 | 4,593 | 1,322 | 2,320 | 8,235 | 721 | — | — | 29,607 | — | R 64,364 | — |
| 1992 | 68 | 62 | 4,781 | 1,283 | 2,429 | 8,494 | 758 | — | — | 29,780 | — | R 63,515 | — |
| 1993 | 109 | 65 | 4,958 | 1,489 | 2,391 | 8,839 | R 821 | — | — | 32,472 | — | R 68,586 | — |
| 1994 | 111 | 65 | 4,914 | 1,256 | 2,440 | 8,610 | R 805 | — | — | 32,343 | — | R 67,497 | — |
| 1995 | 100 | 69 | 4,997 | 1,220 | 2,874 | 9,091 | R 893 | — | — | 33,472 | — | R 69,786 | — |
| 1996 | 139 | 76 | 5,853 | 1,544 | R 3,188 | R 10,585 | R 892 | — | — | 34,651 | — | R 72,212 | — |
| 1997 | 64 | 74 | 5,380 | 1,583 | R 3,438 | R 10,401 | R 618 | — | — | 33,923 | — | R 70,564 | — |
| 1998 | 60 | 63 | 5,119 | 2,053 | 2,624 | 9,796 | 545 | — | — | 34,703 | — | 71,690 | — |
| 1999 | 44 | 69 | 4,978 | 1,548 | 2,927 | 9,454 | 584 | — | — | 35,779 | — | 70,102 | — |
| | | | | | Trillion Btu | | | | | | | | |
| 1960 | 11.4 | 27.9 | 38.0 | 26.4 | 2.9 | 67.3 | 30.0 | 0.0 | 0.0 | 14.0 | 150.5 | 34.8 | 185.3 |
| 1965 | 6.9 | 37.4 | 43.5 | 27.5 | 4.5 | 75.5 | 22.2 | 0.0 | 0.0 | 22.4 | 164.5 | 53.4 | 217.9 |
| 1970 | 4.0 | 50.8 | 56.7 | 25.8 | 5.4 | 87.9 | 17.6 | 0.0 | 0.0 | 39.4 | 199.7 | 95.5 | 295.2 |
| 1975 | 2.7 | 49.7 | 53.0 | 11.7 | 5.8 | 70.4 | 18.5 | 0.0 | 0.0 | 54.2 | 195.4 | 130.6 | 326.1 |
| 1980 | 1.7 | 55.6 | 43.0 | 8.0 | 5.5 | 56.5 | 14.4 | 0.0 | 0.0 | 67.3 | 195.5 | 163.7 | 359.2 |
| 1985 | 2.4 | 50.7 | 29.9 | 20.5 | 6.5 | 56.9 | 22.3 | 0.0 | 0.0 | 77.0 | 209.3 | 180.9 | 390.2 |
| 1990 | 2.1 | 53.6 | 29.8 | 6.6 | 7.7 | 44.0 | 13.7 | e 0.1 | e 0.1 | 96.0 | e 209.6 | R 210.0 | R e 419.6 |
| 1991 | 1.2 | 56.5 | 26.8 | 7.5 | 8.4 | 42.6 | 14.4 | 0.1 | 0.1 | 101.0 | 216.0 | R 219.6 | R 435.6 |
| 1992 | 1.7 | 64.8 | 27.9 | 7.3 | 8.8 | 43.9 | 15.2 | 0.1 | 0.1 | 101.6 | 227.5 | R 216.7 | R 444.2 |
| 1993 | 2.7 | 68.4 | 28.9 | 8.4 | 8.6 | 45.9 | 16.4 | 0.1 | 0.1 | 110.8 | 244.5 | R 234.0 | R 478.5 |
| 1994 | 2.8 | 67.7 | 28.6 | 7.1 | 8.9 | 44.6 | 16.1 | 0.1 | 0.1 | 110.4 | 241.7 | 230.3 | 472.0 |
| 1995 | 2.5 | 70.8 | 29.1 | 6.9 | 10.4 | 46.4 | R 17.9 | 0.1 | 0.1 | 114.2 | 252.1 | R 238.1 | R 490.2 |
| 1996 | 3.5 | 79.1 | 34.1 | 8.8 | R 11.5 | R 54.4 | 17.8 | 0.1 | 0.1 | 118.2 | R 273.3 | R 246.4 | R 519.7 |
| 1997 | 1.6 | 77.1 | 31.3 | 9.0 | R 12.4 | R 52.7 | 12.4 | 0.1 | 0.1 | 115.7 | R 259.9 | R 240.8 | R 500.6 |
| 1998 | 1.5 | 65.9 | 29.8 | 11.6 | 9.5 | 50.9 | 10.9 | 0.1 | 0.1 | 118.4 | 247.9 | 244.6 | 492.5 |
| 1999 | 1.1 | 71.7 | 29.0 | 8.8 | 10.6 | 48.4 | 11.7 | 0.2 | 0.1 | 122.1 | 255.2 | 239.2 | 494.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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# Table 295.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Virginia

| Year | Coal [a]<br>Thousand<br>Short Tons | Natural<br>Gas [b]<br>Billion<br>Cubic Feet | Petroleum<br>Distillate<br>Fuel [a] | Kerosene [a] | LPG [a] | Motor<br>Gasoline | Residual<br>Fuel [a] | Total | Wood<br>Thousand<br>Cords | Geothermal | Electricity [a]<br>Million<br>Kilowatthours | Net<br>Energy | Electrical System<br>Energy Losses [c]<br>Million<br>Kilowatthours | Total [d] |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 841 | 11 | 1,388 | 93 | 130 | 223 | 175 | 2,009 | 28 | — | 3,676 | — | 9,143 | — |
| 1965 | 515 | 15 | 1,591 | 97 | 200 | 275 | 211 | 2,373 | 21 | — | 6,192 | — | 14,784 | — |
| 1970 | 305 | 30 | 2,072 | 91 | 252 | 210 | 118 | 2,744 | 17 | — | 10,804 | — | 26,181 | — |
| 1975 | 209 | 32 | 1,935 | 41 | 275 | 310 | 245 | 2,807 | 18 | — | 14,014 | — | 33,802 | — |
| 1980 | 125 | 38 | 1,634 | 46 | 266 | 371 | 443 | 2,759 | 17 | — | 16,969 | — | 41,262 | — |
| 1985 | 176 | 34 | 2,460 | 214 | 319 | 456 | 443 | 3,892 | R 30 | — | 21,491 | — | 50,492 | — |
| 1990 | 153 | 41 | 2,370 | 139 | 375 | 478 | 221 | 3,582 | R 43 | — | 28,082 | — | R 61,432 | — |
| 1991 | 90 | 44 | 2,132 | 148 | 409 | 341 | 115 | 3,146 | R 46 | — | 29,387 | — | R 63,885 | — |
| 1992 | 124 | 51 | 1,955 | 127 | 429 | 345 | 224 | 3,079 | R 49 | — | 29,863 | — | R 63,691 | — |
| 1993 | 201 | 53 | 2,422 | 159 | 422 | 121 | 182 | 3,307 | 66 | — | 31,419 | — | R 66,361 | — |
| 1994 | 205 | 53 | 2,464 | 101 | 431 | 137 | 157 | 3,290 | 67 | — | 31,624 | — | R 65,998 | — |
| 1995 | 185 | 57 | 2,572 | 275 | 507 | 132 | 208 | 3,694 | 67 | — | 33,051 | — | R 68,909 | — |
| 1996 | 256 | 59 | 3,447 | 277 | R 563 | 130 | 258 | R 4,674 | 73 | — | 33,839 | — | R 70,521 | — |
| 1997 | 118 | 62 | 3,068 | 372 | R 607 | 137 | 130 | R 4,314 | R 68 | — | 34,165 | — | R 71,066 | — |
| 1998 | 111 | 58 | 3,158 | 433 | 463 | 123 | 119 | 4,297 | 68 | — | 35,793 | — | 73,942 | — |
| 1999 | 80 | 62 | 2,880 | 317 | 517 | 166 | 218 | 4,097 | 82 | — | 36,893 | — | 72,285 | — |
| | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 20.8 | 11.7 | 8.1 | 0.5 | 0.5 | 1.2 | 1.1 | 11.4 | 0.6 | 0.0 | 12.5 | 57.1 | 31.2 | 88.3 |
| 1965 | 12.7 | 15.3 | 9.3 | 0.5 | 0.8 | 1.4 | 1.3 | 13.4 | 0.4 | 0.0 | 21.1 | 62.9 | 50.4 | 113.3 |
| 1970 | 7.3 | 30.9 | 12.1 | 0.5 | 1.0 | 1.1 | 0.7 | 15.4 | 0.3 | 0.0 | 36.9 | 90.7 | 89.3 | 180.0 |
| 1975 | 4.9 | 33.0 | 11.3 | 0.2 | 1.0 | 1.6 | 1.5 | 15.7 | 0.4 | 0.0 | 47.8 | 101.7 | 115.3 | 217.1 |
| 1980 | 3.1 | 39.0 | 9.5 | 0.3 | 1.0 | 1.9 | 2.8 | 15.5 | 0.3 | 0.0 | 57.9 | 115.8 | 140.8 | 256.6 |
| 1985 | 4.4 | 35.3 | 14.3 | 1.2 | 1.1 | 2.4 | 2.8 | 21.9 | R 0.6 | 0.0 | 73.3 | R 135.5 | 172.3 | R 307.7 |
| 1990 | 3.8 | 42.8 | 13.8 | 0.8 | 1.4 | 2.5 | 1.4 | 19.8 | R 0.9 | e (s) | 95.8 | R e 163.2 | 209.6 | R e 372.8 |
| 1991 | 2.3 | 45.9 | 12.4 | 0.8 | 1.5 | 1.8 | 0.7 | 17.3 | R 0.9 | (s) | 100.3 | R 166.7 | R 218.0 | R 384.6 |
| 1992 | 3.1 | 52.7 | 11.4 | 0.7 | 1.6 | 1.8 | 1.4 | 16.9 | R 1.0 | 0.1 | 101.9 | R 175.6 | R 217.3 | R 392.9 |
| 1993 | 5.0 | 55.2 | 14.1 | 0.9 | 1.5 | 0.6 | 1.1 | 18.3 | 1.3 | 0.1 | 107.2 | 187.2 | R 226.4 | R 413.6 |
| 1994 | 5.1 | 55.0 | 14.4 | 0.6 | 1.6 | 0.7 | 1.0 | 18.2 | 1.3 | 0.1 | 107.9 | 187.6 | 225.2 | 412.8 |
| 1995 | 4.6 | 58.7 | 15.0 | 1.6 | 1.8 | 0.7 | 1.3 | 20.4 | 1.3 | 0.1 | 112.8 | 197.9 | R 235.1 | R 433.1 |
| 1996 | 6.4 | 61.5 | 20.1 | 1.6 | R 2.0 | 0.7 | 1.6 | R 26.0 | 1.5 | 0.1 | 115.5 | R 211.0 | R 240.6 | R 451.6 |
| 1997 | 2.9 | 64.6 | 17.9 | 2.1 | R 2.2 | 0.7 | 0.8 | R 23.7 | R 1.4 | 0.2 | 116.6 | R 209.3 | R 242.5 | R 451.8 |
| 1998 | 2.8 | 60.8 | 18.4 | 2.5 | 1.7 | 0.6 | 0.8 | 23.9 | 1.4 | 0.2 | 122.1 | 211.1 | 252.3 | 463.4 |
| 1999 | 2.0 | 63.7 | 16.8 | 1.8 | 1.9 | 0.9 | 1.4 | 22.7 | 1.6 | 0.2 | 125.9 | 216.1 | 246.6 | 462.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 296.  Industrial Energy Consumption Estimates, Selected Years 1960-1999, Virginia

| Year | Coal Thousand Short Tons | Natural Gas a Billion Cubic Feet | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b Million kWh | Wood and Waste | Other b,d | Electricity b Million kWh | Net Energy | Electrical System Energy Losses e Million kWh | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 4,503 | 22 | 1,753 | 2,133 | 291 | 275 | 182 | 882 | 5,739 | R 1,705 | R 12,961 | 79 | — | — | 3,786 | — | 9,418 | — |
| 1965 | 5,824 | 36 | 2,681 | 2,977 | 600 | 301 | 236 | 838 | 6,754 | R 2,647 | R 17,033 | 87 | — | — | 5,834 | — | 13,929 | — |
| 1970 | 4,172 | 45 | 2,250 | 4,415 | 395 | 682 | 289 | 653 | 4,170 | R 3,020 | R 15,874 | 41 | — | — | 7,467 | — | 18,095 | — |
| 1975 | 2,816 | 37 | 2,328 | 3,128 | 167 | 1,184 | 307 | 460 | 7,611 | R 2,688 | R 17,872 | 38 | — | — | 9,437 | — | 22,764 | — |
| 1980 | 3,538 | 55 | 2,618 | 3,573 | 267 | 1,312 | 422 | 278 | 5,203 | R 10,233 | R 23,905 | 27 | — | — | 11,637 | — | 28,297 | — |
| 1985 | 4,219 | 51 | 4,033 | 3,035 | 207 | 1,707 | 384 | 686 | 3,408 | R 4,958 | R 18,418 | 27 | — | — | 13,561 | — | 31,861 | — |
| 1990 | 4,641 | 75 | 4,701 | 3,051 | 75 | 1,526 | 432 | 705 | 2,893 | R 3,979 | R 17,362 | R f 59 | — | — | 16,399 | — | R 35,873 | — |
| 1991 | 5,273 | 60 | 3,734 | 2,936 | 92 | 1,812 | 387 | 671 | 2,491 | R 4,998 | R 17,121 | R 48 | — | — | 16,029 | — | R 34,845 | — |
| 1992 | 4,564 | 69 | 3,759 | 2,527 | 56 | 1,767 | 394 | 668 | 2,945 | R 5,323 | R 17,440 | R 72 | — | — | 16,714 | — | R 35,647 | — |
| 1993 | 3,826 | 74 | 3,697 | 2,962 | 87 | 1,906 | 402 | 635 | 2,745 | R 5,245 | R 17,679 | R 66 | — | 74 | 17,390 | — | R 36,731 | — |
| 1994 | 3,807 | 87 | 3,935 | 2,476 | 101 | 1,876 | 420 | 666 | 2,499 | R 5,359 | R 17,333 | R 76 | — | — | 18,154 | — | R 37,885 | — |
| 1995 | 3,551 | 99 | 3,639 | 3,545 | 122 | 1,338 | 412 | 718 | 1,804 | R 5,231 | R 16,810 | R 77 | — | — | 18,554 | — | R 38,684 | — |
| 1996 | 3,594 | 86 | 3,512 | 4,429 | 114 | R 1,349 | 400 | 766 | 1,820 | R 6,215 | R 18,605 | R 91 | — | — | 19,021 | — | R 39,639 | — |
| 1997 | 3,489 | 87 | 3,474 | 5,156 | 91 | R 1,124 | 423 | 801 | 2,463 | R 6,616 | R 20,148 | R 127 | — | — | 19,249 | — | R 40,040 | — |
| 1998 | 3,371 | 94 | 3,889 | 4,518 | 118 | 884 | 443 | 794 | 2,139 | 6,546 | 19,330 | 72 | — | — | 20,024 | — | 41,366 | — |
| 1999 | 3,254 | 103 | 4,770 | 4,303 | 56 | 1,130 | 447 | 571 | 2,046 | 6,704 | 20,026 | 62 | — | — | 20,269 | — | 39,714 | — |

| | | | | | | Trillion Btu | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 114.9 | 23.3 | 11.6 | 12.4 | 1.6 | 1.1 | 1.1 | 4.6 | 36.1 | R 10.1 | R 78.8 | 0.8 | 25.5 | 0.0 | 12.9 | R 256.2 | 32.1 | R 288.4 |
| 1965 | 147.4 | 36.6 | 17.8 | 17.3 | 3.4 | 1.2 | 1.4 | 4.4 | 42.5 | R 15.4 | R 103.4 | 0.9 | 31.6 | 0.0 | 19.9 | R 339.8 | 47.5 | R 387.3 |
| 1970 | 99.3 | 46.0 | 14.9 | 25.7 | 2.2 | 2.6 | 1.8 | 3.4 | 26.2 | R 17.3 | R 94.2 | 0.4 | 37.5 | 0.0 | 25.5 | R 302.8 | 61.7 | R 364.6 |
| 1975 | 66.1 | 37.3 | 15.4 | 18.2 | 0.9 | 4.4 | 1.9 | 2.4 | 47.9 | R 15.5 | R 106.7 | 0.4 | 34.4 | 0.0 | 32.2 | R 277.0 | 77.7 | R 354.7 |
| 1980 | 88.1 | 55.4 | 17.4 | 20.8 | 1.5 | 4.8 | 2.6 | 1.5 | 32.7 | R 56.8 | R 138.0 | 0.3 | R 55.3 | 0.0 | 39.7 | R 376.8 | 96.6 | R 473.3 |
| 1985 | 106.7 | 52.8 | 26.8 | 17.7 | 1.2 | 6.1 | 2.3 | 3.6 | 21.4 | R 27.4 | R 106.5 | 0.3 | R 64.8 | 0.0 | 46.3 | R 377.3 | 108.7 | R 486.0 |
| 1990 | 117.9 | 78.3 | 31.2 | 17.8 | 0.4 | 5.5 | 2.6 | 3.7 | 18.2 | R 22.2 | R 101.7 | R f 0.6 | R 88.3 | f 0.0 | 56.0 | R f 442.7 | 122.4 | R f 565.1 |
| 1991 | 134.3 | 62.8 | 24.8 | 17.1 | 0.5 | 6.5 | 2.3 | 3.5 | 15.7 | R 27.9 | R 98.4 | R 0.5 | R 88.0 | 0.0 | 54.7 | R 438.7 | 118.9 | R 557.6 |
| 1992 | 116.6 | 72.1 | 24.9 | 14.7 | 0.3 | 6.4 | 2.4 | 3.5 | 18.5 | R 29.5 | R 100.3 | R 0.7 | R 93.0 | 0.0 | 57.0 | R 439.7 | 121.6 | R 561.4 |
| 1993 | 97.7 | 77.4 | 24.5 | 17.3 | 0.5 | 6.9 | 2.4 | 3.3 | 17.3 | R 29.1 | R 101.3 | 0.7 | R 92.2 | 0.4 | 59.3 | R 428.5 | 125.3 | R 553.8 |
| 1994 | 97.1 | 90.2 | 26.1 | 14.4 | 0.6 | 6.8 | 2.5 | 3.5 | 15.7 | R 29.7 | R 99.4 | 0.8 | R 96.8 | 0.0 | 61.9 | R 446.1 | 129.4 | R 575.4 |
| 1995 | 90.7 | 101.9 | 24.1 | 20.6 | 0.7 | 4.8 | 2.5 | R 3.7 | 11.3 | R 29.0 | R 96.9 | 0.8 | R 105.4 | 0.0 | 63.3 | R 459.0 | 132.0 | R 591.0 |
| 1996 | 91.9 | 88.8 | 23.3 | 25.8 | 0.6 | R 4.9 | 2.4 | 4.0 | 11.4 | R 34.2 | R 106.7 | R 0.9 | R 108.5 | 0.0 | 64.9 | R 461.7 | 135.2 | R 596.9 |
| 1997 | 88.9 | 90.4 | 23.1 | 30.0 | 0.5 | R 4.1 | 2.6 | 4.2 | 15.5 | R 36.5 | R 116.4 | 1.3 | R 106.0 | 0.0 | 65.7 | R 468.7 | 136.6 | R 605.3 |
| 1998 | 85.8 | 98.0 | 25.8 | 26.3 | 0.7 | 3.2 | 2.7 | 4.1 | 13.4 | 36.1 | 112.3 | 0.7 | 86.8 | 0.0 | 68.3 | 452.0 | 141.1 | 593.1 |
| 1999 | 82.9 | 106.6 | 31.7 | 25.1 | 0.3 | 4.1 | 2.7 | 3.0 | 12.9 | 36.8 | 116.4 | 0.6 | 103.1 | 0.0 | 69.2 | 478.9 | 135.5 | 614.4 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

c "Other" is the subtotal of 16 petroleum products.  See a full description in Appendix A, Section 4, "Other Petroleum Products."

d "Other" is geothermal, wind, photovoltaic, and solar thermal energy.  See Appendix A, Section 5, for explanation of estimation methodology.

e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours.  — =Not applicable.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 297.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, Virginia

| | Coal [a] | Natural Gas [b] | Petroleum | | | | | | | | Ethanol [c] | Electricity [a] | Net Energy | Electrical System Energy Losses [d] | Total [c] |
| | | | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | Thousand Barrels | Million Kilowatthours | Net Energy | Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 79 | 4 | 382 | 4,099 | 4,441 | 7 | 451 | 29,972 | 11,780 | 51,134 | 0 | 0 | — | 0 | — |
| 1965 | 19 | 7 | 721 | 6,564 | 6,504 | 24 | 428 | 34,992 | 9,645 | 58,877 | 0 | 0 | — | 0 | — |
| 1970 | 7 | 8 | 356 | 7,698 | 11,093 | 47 | 430 | 47,821 | 12,000 | 79,446 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 3 | 251 | 8,217 | 11,602 | 57 | 427 | 58,524 | 6,356 | 85,436 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 8 | 218 | 11,219 | 12,279 | 47 | 530 | 58,386 | 4,419 | 87,098 | 0 | 32 | — | 78 | — |
| 1985 | 0 | 4 | 131 | 14,278 | 11,038 | 102 | 482 | 61,837 | 3,419 | 91,287 | R e 658 | 60 | — | 141 | — |
| 1990 | 0 | 7 | 70 | 16,930 | 15,806 | 63 | 542 | 69,150 | 3,362 | 105,922 | R 381 | 86 | — | 189 | — |
| 1991 | 0 | 7 | 116 | 16,856 | 11,824 | 101 | 485 | 69,513 | 3,780 | 102,675 | R 365 | 88 | — | 192 | — |
| 1992 | 0 | 6 | 101 | 16,915 | 11,670 | 102 | 495 | 70,521 | 2,872 | 102,676 | R 275 | 91 | — | 195 | — |
| 1993 | 0 | 6 | 105 | 17,616 | 11,915 | 109 | 504 | 73,071 | 2,396 | 105,715 | R 51 | 91 | — | 192 | — |
| 1994 | 0 | 6 | 101 | 18,887 | 12,003 | 182 | 527 | 74,244 | 1,977 | 107,920 | R 277 | 89 | — | 186 | — |
| 1995 | 0 | 6 | 85 | 19,113 | 10,589 | 64 | 518 | 77,978 | 1,953 | 110,299 | R 1 | 86 | — | 179 | — |
| 1996 | 0 | 8 | 79 | 22,079 | 9,204 | R 56 | 502 | 78,268 | 1,238 | R 111,426 | R 954 | 85 | — | R 178 | — |
| 1997 | 0 | 7 | 50 | 23,065 | 9,402 | R 48 | 531 | 80,503 | 1,483 | R 115,081 | R 737 | 83 | — | R 173 | — |
| 1998 | 0 | 7 | 90 | 23,837 | 10,183 | 35 | 555 | 81,280 | 1,338 | 117,318 | 920 | 88 | — | 181 | — |
| 1999 | 0 | 8 | 106 | 24,432 | 9,314 | 14 | 561 | 84,077 | 1,464 | 119,969 | 787 | 91 | — | 179 | — |

| | | | | | | Trillion Btu | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2.0 | 4.1 | 1.9 | 23.9 | 24.0 | (s) | 2.7 | 157.4 | 74.1 | 284.1 | 0.0 | 0.0 | 290.2 | 0.0 | 290.2 |
| 1965 | 0.5 | 7.0 | 3.6 | 38.2 | 35.8 | 0.1 | 2.6 | 183.8 | 60.6 | 324.8 | 0.0 | 0.0 | 332.2 | 0.0 | 332.2 |
| 1970 | 0.2 | 8.0 | 1.8 | 44.8 | 61.9 | 0.2 | 2.6 | 251.2 | 75.4 | 438.0 | 0.0 | 0.0 | 446.1 | 0.0 | 446.1 |
| 1975 | (s) | 3.1 | 1.3 | 47.9 | 64.9 | 0.2 | 2.6 | 307.4 | 40.0 | 464.3 | 0.0 | 0.0 | 467.4 | 0.0 | 467.4 |
| 1980 | 0.0 | 8.4 | 1.1 | 65.3 | 68.8 | 0.2 | 3.2 | 306.7 | 27.8 | 473.1 | 0.0 | 0.1 | 481.6 | 0.3 | 481.8 |
| 1985 | 0.0 | 4.6 | 0.7 | 83.2 | 61.7 | 0.4 | 2.9 | 324.8 | 21.5 | 495.1 | R e 2.3 | 0.2 | e 499.9 | 0.5 | e 500.4 |
| 1990 | 0.0 | 7.2 | 0.4 | 98.6 | 88.5 | 0.2 | 3.3 | 363.2 | 21.1 | 575.4 | R 1.3 | 0.3 | 582.9 | 0.6 | 583.6 |
| 1991 | 0.0 | 6.9 | 0.6 | 98.2 | 66.7 | 0.4 | 2.9 | 365.2 | 23.8 | 557.7 | R 1.3 | 0.3 | 564.9 | 0.7 | 565.6 |
| 1992 | 0.0 | 6.7 | 0.5 | 98.5 | 65.9 | 0.4 | 3.0 | 370.4 | 18.1 | 556.8 | R 1.0 | 0.3 | 563.8 | 0.7 | 564.5 |
| 1993 | 0.0 | 6.0 | 0.5 | 102.6 | 67.3 | 0.4 | 3.1 | 383.8 | 15.1 | 572.8 | 0.2 | 0.3 | 579.1 | 0.7 | 579.7 |
| 1994 | 0.0 | 6.6 | 0.5 | 110.0 | 68.0 | 0.7 | 3.2 | R 388.3 | 12.4 | R 583.1 | R 1.0 | 0.3 | R 590.0 | 0.6 | R 590.6 |
| 1995 | 0.0 | 6.5 | 0.4 | 111.3 | 60.0 | 0.2 | 3.1 | R 406.7 | 12.3 | R 594.1 | (s) | 0.3 | R 600.9 | 0.6 | R 601.5 |
| 1996 | 0.0 | 8.1 | 0.4 | 128.6 | 52.2 | 0.2 | 3.0 | R 408.2 | 7.8 | R 600.5 | R 3.4 | 0.3 | R 608.9 | 0.6 | R 609.5 |
| 1997 | 0.0 | 7.7 | 0.3 | 134.4 | 53.3 | 0.2 | 3.2 | R 419.7 | 9.3 | R 620.3 | R 2.6 | 0.3 | R 628.3 | 0.6 | R 628.9 |
| 1998 | 0.0 | 7.2 | 0.5 | 138.8 | 57.7 | 0.1 | 3.4 | 423.6 | 8.4 | 632.6 | 3.3 | 0.3 | 640.1 | 0.6 | 640.7 |
| 1999 | 0.0 | 8.3 | 0.5 | 142.3 | 52.8 | (s) | 3.4 | 438.1 | 9.2 | 646.5 | 2.8 | 0.3 | 655.1 | 0.6 | 655.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.
[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 298. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Virginia

| | | | Petroleum | | | | | | Wood and | | | |
| | Coal | Natural Gas [a] | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | Nuclear Electric Power | Hydroelectric Power [e] | Waste | Geothermal Energy | Other [b,f] | Total [g] |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1960 | 6,262 | 1 | 130 | 6 | 0 | 136 | 0 | 1,189 | 0 | 0 | 0 | — |
| 1965 | 8,265 | 2 | 170 | 7 | 0 | 178 | 0 | 797 | 0 | 0 | 0 | — |
| 1970 | 6,644 | 4 | 17,085 | 721 | 856 | 18,662 | 0 | 650 | 0 | 0 | 0 | — |
| 1975 | 3,991 | (s) | 26,741 | 624 | 0 | 27,364 | 8,970 | 1,273 | 0 | 0 | 0 | — |
| 1980 | 5,560 | 2 | 14,586 | 793 | 0 | 15,379 | 11,466 | 864 | 0 | 0 | 0 | — |
| 1985 | 7,166 | 2 | 1,301 | 340 | 0 | 1,641 | 22,303 | 818 | 0 | 0 | 0 | — |
| 1990 | 8,228 | 7 | 1,421 | 482 | 0 | 1,902 | 23,820 | 428 | 0 | 0 | (s) | — |
| 1991 | 8,568 | 9 | 2,810 | 302 | 0 | 3,112 | 23,886 | -26 | 0 | 0 | (s) | — |
| 1992 | 8,661 | 11 | 2,041 | 269 | 0 | 2,310 | 23,334 | 353 | 0 | 0 | (s) | — |
| 1993 | 9,447 | 20 | 3,180 | 222 | 0 | 3,402 | 22,689 | 473 | 0 | 0 | (s) | — |
| 1994 | 8,670 | 19 | 3,348 | 489 | 0 | 3,837 | 25,429 | 329 | 0 | 0 | (s) | — |
| 1995 | 9,543 | 16 | 1,577 | 326 | 0 | 1,903 | 25,135 | 149 | 0 | 0 | (s) | — |
| 1996 | 10,994 | 10 | 822 | 341 | 0 | 1,163 | 26,286 | 510 | 0 | 0 | 0 | — |
| 1997 | 11,605 | 12 | 1,209 | 199 | 0 | 1,408 | 27,084 | 76 | 0 | 0 | 0 | — |
| 1998 | 12,300 | 20 | 3,950 | 388 | 0 | 4,338 | 27,234 | 256 | 0 | 0 | 0 | — |
| 1999 | 12,427 | 23 | 4,387 | 486 | 0 | 4,873 | 28,301 | -608 | 0 | 0 | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | |
| 1960 | 167.4 | 1.5 | 0.8 | (s) | 0.0 | 0.9 | 0.0 | 12.8 | 0.0 | 0.0 | 0.0 | 182.5 |
| 1965 | 218.8 | 2.3 | 1.1 | (s) | 0.0 | 1.1 | 0.0 | 8.3 | 0.0 | 0.0 | 0.0 | 230.6 |
| 1970 | 164.6 | 4.4 | 107.4 | 4.2 | 5.2 | 116.8 | 0.0 | 6.8 | 0.0 | 0.0 | 0.0 | 292.6 |
| 1975 | 95.5 | 0.5 | 168.1 | 3.6 | 0.0 | 171.8 | 98.8 | 13.2 | 0.0 | 0.0 | 0.0 | 379.8 |
| 1980 | 139.1 | 2.5 | 91.7 | 4.6 | 0.0 | 96.3 | 125.1 | 9.0 | 0.0 | 0.0 | 0.0 | 372.0 |
| 1985 | 183.6 | 1.6 | 8.2 | 2.0 | 0.0 | 10.2 | 241.2 | 8.5 | 0.0 | 0.0 | 0.0 | 445.1 |
| 1990 | 209.2 | 6.8 | 8.9 | 2.8 | 0.0 | 11.7 | 254.4 | 4.4 | 0.0 | 0.0 | (s) | 486.6 |
| 1991 | 218.8 | 9.9 | 17.7 | 1.8 | 0.0 | 19.4 | 256.5 | -0.3 | 0.0 | 0.0 | (s) | 504.4 |
| 1992 | 222.3 | 11.5 | 12.8 | 1.6 | 0.0 | 14.4 | 249.2 | 3.6 | 0.0 | 0.0 | (s) | 500.9 |
| 1993 | 242.2 | 20.5 | 20.0 | 1.3 | 0.0 | 21.3 | 242.4 | 4.9 | 0.0 | 0.0 | (s) | 531.2 |
| 1994 | 221.6 | 19.9 | 21.1 | 2.8 | 0.0 | 23.9 | 271.5 | 3.4 | 0.0 | 0.0 | (s) | 540.3 |
| 1995 | 243.2 | 16.9 | 9.9 | 1.9 | 0.0 | 11.8 | 267.9 | 1.5 | 0.0 | 0.0 | (s) | 541.4 |
| 1996 | 277.0 | 10.9 | 5.2 | 2.0 | 0.0 | 7.2 | 279.2 | 5.3 | 0.0 | 0.0 | 0.0 | 579.5 |
| 1997 | 291.4 | 12.1 | 7.6 | 1.2 | 0.0 | 8.8 | 287.7 | 0.8 | 0.0 | 0.0 | 0.0 | 600.8 |
| 1998 | 310.0 | 21.4 | 24.8 | 2.3 | 0.0 | 27.1 | 289.3 | 2.6 | 0.0 | 0.0 | 0.0 | 650.5 |
| 1999 | 315.7 | 24.7 | 27.6 | 2.8 | 0.0 | 30.4 | 300.6 | -6.3 | 0.0 | 0.0 | 0.0 | 665.2 |

[a] Includes supplemental gaseous fuels.

[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[c] Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

[d] Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[e] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f] "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

[g] If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 299. Energy Consumption Estimates by Source, Selected Years 1960-1999, Washington

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Thousand Barrels | | | | | | | Million kWh | | | | | |
| 1960 | 608 | 65 | 1,309 | 2,161 | 18,123 | 4,502 | 105 | 548 | 571 | 23,076 | 9,300 | R 3,562 | R 63,257 | 0 | 34,299 | — | — | -17,081 | — |
| 1965 | 488 | 108 | 1,683 | 434 | 17,116 | 6,919 | 34 | 1,227 | 597 | 26,906 | 9,140 | R 7,881 | R 71,937 | 0 | 48,814 | — | — | -33,455 | — |
| 1970 | 245 | 150 | 2,335 | 351 | 18,201 | 10,637 | 239 | 1,659 | 666 | 36,068 | 10,384 | R 9,620 | R 90,161 | 2,614 | 70,142 | — | — | -60,750 | — |
| 1975 | 4,492 | 164 | 2,910 | 274 | 16,970 | 14,037 | 346 | 763 | 620 | 41,007 | 8,459 | R 12,236 | R 97,622 | 3,308 | 85,438 | — | — | -95,362 | — |
| 1980 | 5,443 | 129 | 2,050 | 356 | 18,471 | 12,036 | 120 | 1,487 | 703 | 42,653 | 17,277 | R 10,218 | R 105,370 | 2,041 | 83,971 | — | — | -46,955 | — |
| 1985 | 5,616 | 135 | 2,039 | 202 | 20,360 | 15,417 | 1,212 | 2,466 | 640 | 44,020 | 11,406 | R 11,021 | R 108,784 | 8,038 | 77,956 | — | — | -33,631 | — |
| 1990 | 5,147 | 163 | 2,481 | 313 | 21,787 | 22,343 | 75 | 2,292 | 720 | 53,464 | 16,500 | R 20,587 | R 140,561 | 5,742 | R h 87,479 | — | — | R -18,059 | — |
| 1991 | 5,461 | 173 | 2,967 | 268 | 19,958 | 21,306 | 70 | 2,596 | 644 | 54,238 | 17,398 | R 20,277 | R 139,722 | 4,230 | R 90,938 | — | — | R -24,295 | — |
| 1992 | 6,402 | 169 | 3,023 | 289 | 18,453 | 24,066 | 47 | 2,549 | 656 | 55,196 | 23,438 | R 26,177 | R 153,895 | 5,692 | R 72,712 | — | — | R 4,786 | — |
| 1993 | 5,934 | 198 | 2,941 | 198 | 15,469 | 22,226 | 63 | 2,582 | 668 | 57,385 | 15,928 | R 22,449 | R 139,909 | 7,135 | R 67,648 | — | — | R 24,980 | — |
| 1994 | 6,303 | 213 | 3,526 | 318 | 18,810 | 21,492 | 89 | 2,594 | 699 | 57,446 | 15,766 | R 24,718 | R 145,459 | 6,740 | R 65,551 | — | — | R 10,702 | — |
| 1995 | 4,158 | 220 | 3,558 | 229 | 18,846 | 23,039 | 121 | 2,913 | 687 | 58,836 | 17,575 | R 24,956 | R 150,760 | 6,942 | R 81,467 | — | — | R -16,187 | — |
| 1996 | 5,682 | 239 | 3,696 | 292 | 18,978 | 22,323 | 142 | R 3,195 | 666 | 61,611 | 12,984 | R 25,566 | R 149,454 | 5,588 | R 101,553 | — | — | R -87,764 | — |
| 1997 | 4,949 | 231 | 4,048 | 202 | 21,630 | 22,454 | 167 | R 5,116 | 704 | 61,213 | 13,193 | R 24,107 | R 152,833 | 6,244 | R 105,156 | — | — | R -97,515 | — |
| 1998 | 6,241 | 263 | 4,087 | 356 | 21,380 | 21,859 | 181 | 4,716 | 737 | 61,833 | 10,242 | 29,775 | 155,164 | 6,916 | 79,938 | — | — | -25,381 | — |
| 1999 | 5,819 | 264 | 4,104 | 283 | 20,305 | 22,155 | 124 | 4,458 | 745 | 63,239 | 9,592 | 32,362 | 157,367 | 6,086 | 95,531 | — | — | -54,329 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 15.2 | 67.2 | 8.7 | 10.9 | 105.6 | 24.4 | 0.6 | 2.2 | 3.5 | 121.2 | 58.5 | R 21.4 | R 356.9 | 0.0 | 369.1 | 58.5 | 0.0 | -58.3 | R 808.7 |
| 1965 | 12.1 | 116.2 | 11.2 | 2.2 | 99.7 | 38.2 | 0.2 | 4.9 | 3.6 | 141.3 | 57.5 | R 47.2 | R 406.0 | 0.0 | 510.3 | 66.2 | 0.0 | -114.1 | R 996.7 |
| 1970 | 5.9 | 158.2 | 15.5 | 1.8 | 106.0 | 59.3 | 1.4 | 6.3 | 4.0 | 189.5 | 65.3 | R 57.6 | R 506.7 | 28.7 | 736.1 | 66.5 | 0.0 | -207.3 | R 1,294.8 |
| 1975 | 76.2 | 171.2 | 19.3 | 1.4 | 98.8 | 78.8 | 2.0 | 2.8 | 3.8 | 215.4 | 53.2 | R 73.4 | R 548.9 | 36.4 | 889.1 | 64.3 | 0.0 | -325.4 | R 1,460.8 |
| 1980 | 91.0 | 135.5 | 13.6 | 1.8 | 107.6 | 67.5 | 0.7 | 5.5 | 4.3 | 224.1 | 108.6 | R 61.1 | R 594.7 | 22.3 | 872.3 | R 91.7 | 0.0 | -160.2 | R 1,647.2 |
| 1985 | 93.7 | 140.0 | 13.5 | 1.0 | 118.6 | 86.6 | 6.9 | 8.9 | 3.9 | 231.2 | 71.7 | R 67.2 | R 609.5 | 86.9 | 814.4 | R 110.2 | 0.0 | -114.8 | R 1,740.0 |
| 1990 | 85.6 | 167.6 | 16.5 | 1.6 | 126.9 | 126.0 | 0.4 | 8.3 | 4.4 | 280.8 | 103.7 | R 123.8 | R 792.5 | 61.3 | R h 910.0 | R 92.8 | h 0.4 | R -61.6 | R h 2,049.8 |
| 1991 | 89.2 | 178.4 | 19.7 | 1.4 | 116.3 | 120.2 | 0.4 | 9.4 | 3.9 | 284.9 | 109.4 | R 121.6 | R 787.1 | 45.4 | R 949.0 | R 91.5 | R 0.5 | R -82.9 | R 2,067.2 |
| 1992 | 106.1 | 174.7 | 20.1 | 1.5 | 107.5 | 136.0 | 0.3 | 9.2 | 4.0 | 289.9 | 147.4 | R 156.4 | R 872.1 | 60.8 | R 752.0 | R 110.5 | R 0.5 | R 16.3 | R 2,111.5 |
| 1993 | 97.8 | 205.7 | 19.5 | 1.0 | 90.1 | 125.6 | 0.4 | 9.3 | 4.1 | 301.4 | 100.1 | R 134.4 | R 785.9 | 76.2 | R 697.4 | R 104.3 | 0.5 | R 85.2 | R 2,057.0 |
| 1994 | 106.9 | 221.5 | 23.4 | 1.6 | 109.6 | 121.7 | 0.5 | 9.4 | 4.2 | R 300.4 | 99.1 | R 147.8 | R 817.8 | 72.0 | R 676.2 | R 105.0 | 0.5 | R 36.5 | R 2,065.6 |
| 1995 | 69.8 | 229.2 | 23.6 | 1.2 | 109.8 | 130.4 | 0.7 | 10.6 | 4.2 | R 306.8 | 110.5 | R 149.4 | R 847.0 | 74.0 | R 840.1 | R 90.6 | R 0.6 | R -55.2 | R 2,098.8 |
| 1996 | 90.9 | 247.5 | 24.5 | 1.5 | 110.5 | 126.5 | 0.8 | R 11.5 | 4.0 | R 321.4 | 81.6 | R 153.4 | R 835.9 | 59.4 | R 1,050.1 | R 95.0 | 0.6 | R -299.5 | R 2,096.1 |
| 1997 | 80.5 | 241.9 | 26.9 | 1.0 | 126.0 | 127.3 | 0.9 | R 18.5 | 4.3 | R 319.1 | 82.9 | R 144.6 | R 851.6 | 66.3 | R 1,089.1 | R 97.4 | 0.6 | R -332.7 | R 2,122.2 |
| 1998 | 103.4 | 275.0 | 27.1 | 1.8 | 124.5 | 123.9 | 1.0 | 17.0 | 4.5 | 322.3 | 64.4 | 179.0 | 865.6 | 73.5 | 827.0 | 76.0 | 0.7 | -86.6 | 2,158.9 |
| 1999 | 96.4 | 277.4 | 27.2 | 1.4 | 118.3 | 125.6 | 0.7 | 16.1 | 4.5 | 329.5 | 60.3 | 194.5 | 878.2 | 64.7 | 988.4 | 86.6 | 0.7 | -185.4 | 2,240.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] Through 1989, includes all net imports electricity, and, from 1990, includes only the portion of net imports of electricity that is derived from hydroelectric power.
[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 300.   Residential Energy Consumption Estimates, Selected Years 1960-1999, Washington**

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 63 | 8 | 7,303 | 0 | 347 | 7,650 | 888 | — | — | 8,755 | — | 21,776 | — |
| 1965 | 51 | 17 | 6,495 | 9 | 894 | 7,399 | 624 | — | — | 11,015 | — | 26,298 | — |
| 1970 | 12 | 32 | 7,035 | 115 | 1,145 | 8,296 | 479 | — | — | 15,355 | — | 37,209 | — |
| 1975 | 7 | 34 | 4,806 | 203 | 404 | 5,413 | 513 | — | — | 19,209 | — | 46,334 | — |
| 1980 | 56 | 30 | 3,422 | 65 | 626 | 4,113 | R 653 | — | — | 24,445 | — | 59,442 | — |
| 1985 | 76 | 33 | 3,095 | 86 | 553 | 3,734 | 757 | — | — | 27,933 | — | 65,625 | — |
| 1990 | 23 | 40 | 2,998 | 49 | 657 | 3,704 | 949 | — | — | 28,809 | — | R 63,022 | — |
| 1991 | 28 | 46 | 2,482 | 46 | 891 | 3,419 | 1,000 | — | — | 29,889 | — | R 64,977 | — |
| 1992 | 32 | 43 | 1,827 | 29 | 880 | 2,737 | 1,052 | — | — | 28,436 | — | R 60,647 | — |
| 1993 | 40 | 53 | 1,517 | 44 | 921 | 2,482 | 899 | — | — | 30,932 | — | R 65,333 | — |
| 1994 | 30 | 53 | 1,523 | 66 | 944 | 2,532 | R 882 | — | — | 29,673 | — | R 61,925 | — |
| 1995 | 27 | 53 | 1,478 | 86 | 1,237 | 2,801 | 978 | — | — | 30,147 | — | R 62,855 | — |
| 1996 | 8 | 63 | 1,499 | 110 | 1,258 | 2,867 | R 977 | — | — | 32,012 | — | R 66,714 | — |
| 1997 | 8 | 62 | 1,455 | 133 | R 2,404 | R 3,992 | R 749 | — | — | 31,749 | — | R 66,042 | — |
| 1998 | 5 | 62 | 1,620 | 123 | 2,182 | 3,926 | 661 | — | — | 31,362 | — | 64,788 | — |
| 1999 | 6 | 72 | 1,119 | 86 | 2,005 | 3,211 | 708 | — | — | 32,817 | — | 64,299 | — |

**Trillion Btu**

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 1.4 | 8.3 | 42.5 | 0.0 | 1.4 | 43.9 | 17.8 | 0.0 | 0.0 | 29.9 | 101.3 | 74.3 | 175.6 |
| 1965 | 1.2 | 18.7 | 37.8 | 0.1 | 3.6 | 41.5 | 12.5 | 0.0 | 0.0 | 37.6 | 111.4 | 89.7 | 201.1 |
| 1970 | 0.3 | 33.7 | 41.0 | 0.7 | 4.3 | 46.0 | 9.6 | 0.0 | 0.0 | 52.4 | 141.9 | 127.0 | 268.8 |
| 1975 | 0.1 | 35.8 | 28.0 | 1.1 | 1.5 | 30.6 | 10.3 | 0.0 | 0.0 | 65.5 | 142.4 | 158.1 | 300.5 |
| 1980 | 1.3 | 31.3 | 19.9 | 0.4 | 2.3 | 22.6 | R 13.1 | 0.0 | 0.0 | 83.4 | 151.6 | 202.8 | 354.4 |
| 1985 | 1.8 | 34.3 | 18.0 | 0.5 | 2.0 | 20.5 | 15.1 | 0.0 | 0.0 | 95.3 | 167.1 | 223.9 | 391.0 |
| 1990 | 0.5 | 41.6 | 17.5 | 0.3 | 2.4 | 20.1 | 19.0 | e (s) | R e 0.4 | 98.3 | R e 179.9 | 215.0 | R e 394.9 |
| 1991 | 0.6 | 47.7 | 14.5 | 0.3 | 3.2 | 17.9 | 20.0 | (s) | R 0.4 | 102.0 | R 188.6 | R 221.7 | R 410.3 |
| 1992 | 0.7 | 44.4 | 10.6 | 0.2 | 3.2 | 14.0 | 21.0 | (s) | R 0.4 | 97.0 | 177.6 | R 206.9 | R 384.6 |
| 1993 | 0.9 | 55.2 | 8.8 | 0.2 | 3.3 | 12.4 | 18.0 | (s) | R 0.4 | 105.5 | 192.4 | R 222.9 | 415.4 |
| 1994 | 0.7 | 55.3 | 8.9 | 0.4 | 3.4 | 12.7 | 17.6 | (s) | R 0.4 | 101.2 | 187.9 | 211.3 | R 399.2 |
| 1995 | 0.6 | 54.9 | 8.6 | 0.5 | 4.5 | 13.6 | 19.6 | (s) | R 0.4 | 102.9 | R 191.9 | R 214.5 | R 406.3 |
| 1996 | 0.2 | 65.0 | 8.7 | 0.6 | 4.5 | 13.9 | 19.5 | (s) | R 0.4 | 109.2 | 208.2 | R 227.6 | R 435.9 |
| 1997 | 0.2 | 64.7 | 8.5 | 0.8 | R 8.7 | R 17.9 | R 15.0 | (s) | 0.4 | 108.3 | R 206.5 | R 225.3 | R 431.8 |
| 1998 | 0.1 | 64.7 | 9.4 | 0.7 | 7.9 | 18.0 | 13.2 | (s) | 0.4 | 107.0 | 203.4 | 221.1 | 424.5 |
| 1999 | 0.1 | 75.4 | 6.5 | 0.5 | 7.3 | 14.3 | 14.2 | (s) | 0.3 | 112.0 | 216.3 | 219.4 | 435.7 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 301.  Commercial Energy Consumption Estimates, Selected Years 1960-1999, Washington

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum — Distillate Fuel[a] | Petroleum — Kerosene[a] | Petroleum — LPG[a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel[a] | Petroleum — Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 117 | 6 | 2,308 | 0 | 61 | 222 | 441 | 3,032 | 17 | — | 3,220 | — | 8,010 | — |
| 1965 | 95 | 11 | 2,053 | 1 | 158 | 255 | 412 | 2,880 | 12 | — | 4,380 | — | 10,457 | — |
| 1970 | 23 | 18 | 2,224 | 15 | 202 | 304 | 481 | 3,226 | 9 | — | 6,723 | — | 16,293 | — |
| 1975 | 13 | 32 | 1,519 | 26 | 71 | 374 | 355 | 2,345 | 10 | — | 10,377 | — | 25,030 | — |
| 1980 | 105 | 31 | 1,073 | 18 | 111 | 478 | 426 | 2,105 | 16 | — | 13,845 | — | 33,667 | — |
| 1985 | 140 | 35 | 4,272 | 206 | 98 | 357 | 748 | 5,681 | R 20 | — | 18,965 | — | 44,557 | — |
| 1990 | 43 | 39 | 2,090 | 14 | 116 | 281 | 53 | 2,555 | R 60 | — | 21,510 | — | R 47,055 | — |
| 1991 | 52 | 42 | 1,611 | 17 | 157 | 189 | 101 | 2,075 | R 64 | — | 21,967 | — | R 47,754 | — |
| 1992 | 59 | 38 | 816 | 12 | 155 | 131 | 56 | 1,171 | R 69 | — | 22,532 | — | R 48,056 | — |
| 1993 | 74 | 44 | 675 | 13 | 163 | 48 | 60 | 959 | 72 | — | 22,959 | — | R 48,493 | — |
| 1994 | 56 | 43 | 721 | 16 | 167 | 48 | 48 | 1,000 | 74 | — | 23,377 | — | R 48,785 | — |
| 1995 | 51 | 43 | 932 | 14 | 218 | 59 | 111 | 1,335 | 74 | — | 23,912 | — | R 49,854 | — |
| 1996 | 15 | 48 | 673 | 8 | 222 | 60 | 170 | 1,134 | 80 | — | 25,142 | — | R 52,396 | — |
| 1997 | 14 | 47 | 854 | 13 | R 424 | 60 | 46 | R 1,398 | R 82 | — | 25,191 | — | R 52,400 | — |
| 1998 | 9 | 46 | 790 | 24 | 385 | 63 | 35 | 1,297 | 82 | — | 25,862 | — | 53,425 | — |
| 1999 | 11 | 51 | 562 | 12 | 354 | 321 | 34 | 1,283 | 99 | — | 26,695 | — | 52,303 | — |
| | | | | | | **Trillion Btu** | | | | | | | | |
| 1960 | 2.7 | 6.7 | 13.4 | 0.0 | 0.2 | 1.2 | 2.8 | 17.6 | 0.3 | 0.0 | 11.0 | 38.3 | 27.3 | 65.7 |
| 1965 | 2.2 | 11.5 | 12.0 | (s) | 0.6 | 1.3 | 2.6 | 16.5 | 0.2 | 0.0 | 14.9 | 45.3 | 35.7 | 81.0 |
| 1970 | 0.5 | 19.5 | 13.0 | 0.1 | 0.8 | 1.6 | 3.0 | 18.4 | 0.2 | 0.0 | 22.9 | 61.5 | 55.6 | 117.1 |
| 1975 | 0.3 | 33.3 | 8.8 | 0.1 | 0.3 | 2.0 | 2.2 | 13.5 | 0.2 | 0.0 | 35.4 | 82.6 | 85.4 | 168.0 |
| 1980 | 2.4 | 32.4 | 6.2 | 0.1 | 0.4 | 2.5 | 2.7 | 11.9 | 0.3 | 0.0 | 47.2 | 94.2 | 114.9 | 209.1 |
| 1985 | 3.3 | 36.9 | 24.9 | 1.2 | 0.4 | 1.9 | 4.7 | 33.0 | R 0.4 | 0.0 | 64.7 | R 138.3 | 152.0 | R 290.3 |
| 1990 | 0.9 | 39.8 | 12.2 | 0.1 | 0.4 | 1.5 | 0.3 | 14.5 | R 1.2 | e 0.1 | 73.4 | R e 129.9 | R 160.6 | R e 290.5 |
| 1991 | 1.2 | 43.0 | 9.4 | 0.1 | 0.6 | 1.0 | 0.6 | 11.7 | R 1.3 | 0.1 | 75.0 | R 132.2 | R 162.9 | R 295.1 |
| 1992 | 1.3 | 39.0 | 4.8 | 0.1 | 0.6 | 0.7 | 0.4 | 6.4 | R 1.4 | 0.1 | 76.9 | R 125.1 | R 164.0 | R 289.1 |
| 1993 | 1.7 | 45.2 | 3.9 | 0.1 | 0.6 | 0.3 | 0.4 | 5.2 | 1.4 | 0.1 | 78.3 | 132.0 | 165.5 | 297.5 |
| 1994 | 1.3 | 44.7 | 4.2 | 0.1 | 0.6 | 0.3 | 0.3 | 5.5 | 1.5 | 0.1 | 79.8 | 132.8 | R 166.5 | 299.3 |
| 1995 | 1.1 | 44.3 | 5.4 | 0.1 | 0.8 | 0.3 | 0.7 | 7.3 | 1.5 | 0.2 | 81.6 | 135.9 | R 170.1 | R 306.0 |
| 1996 | 0.4 | 49.9 | 3.9 | (s) | 0.8 | 0.3 | 1.1 | 6.2 | 1.6 | 0.2 | 85.8 | 144.0 | R 178.8 | R 322.8 |
| 1997 | 0.3 | 48.8 | 5.0 | 0.1 | R 1.5 | 0.3 | 0.3 | R 7.2 | R 1.6 | 0.2 | 86.0 | R 144.2 | R 178.8 | R 323.0 |
| 1998 | 0.2 | 47.6 | 4.6 | 0.1 | 1.4 | 0.3 | 0.2 | 6.7 | 1.6 | 0.3 | 88.2 | 144.6 | 182.3 | 326.9 |
| 1999 | 0.3 | 53.4 | 3.3 | 0.1 | 1.3 | 1.7 | 0.2 | 6.5 | 2.0 | 0.3 | 91.1 | 153.5 | 178.5 | 332.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 302.   Industrial Energy Consumption Estimates, Selected Years 1960-1999, Washington**

| Year | Coal | Natural Gas a | Petroleum Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydro-electric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 420 | 50 | 1,309 | 5,937 | 105 | 134 | 158 | 802 | 7,137 | R 3,562 | R 19,144 | 195 | — | — | 13,975 | — | 34,761 | — |
| 1965 | 341 | 79 | 1,683 | 5,546 | 23 | 155 | 216 | 765 | 7,281 | R 7,881 | R 23,551 | 190 | — | — | 18,703 | — | 44,656 | — |
| 1970 | 210 | 93 | 2,335 | 4,986 | 109 | 274 | 267 | 551 | 7,874 | R 9,620 | R 26,015 | 135 | — | — | 25,530 | — | 61,867 | — |
| 1975 | 463 | 92 | 2,910 | 4,025 | 118 | 250 | 192 | 438 | 5,924 | R 12,236 | R 26,094 | 181 | — | — | 27,416 | — | 66,132 | — |
| 1980 | 332 | 64 | 2,050 | 4,350 | 37 | 658 | 202 | 278 | 6,538 | R 10,218 | R 24,331 | 129 | — | — | 31,366 | — | 76,271 | — |
| 1985 | 208 | 63 | 2,039 | 2,766 | 920 | 1,487 | 184 | 692 | 5,167 | R 11,021 | R 24,276 | 129 | — | — | 29,431 | — | 69,146 | — |
| 1990 | 229 | 78 | 2,481 | 4,456 | 11 | 1,228 | 207 | 658 | 2,017 | R 20,587 | R 31,645 | R f 332 | — | — | 40,712 | — | R 89,062 | — |
| 1991 | 197 | 80 | 2,967 | 3,985 | 7 | 1,302 | 185 | 794 | 1,340 | R 20,277 | R 30,856 | R 267 | — | — | 40,839 | — | R 88,781 | — |
| 1992 | 163 | 80 | 3,023 | 3,404 | 6 | 1,307 | 188 | 806 | 996 | R 26,177 | R 35,909 | R 288 | — | — | 38,332 | — | R 81,753 | — |
| 1993 | 174 | 92 | 2,941 | 2,670 | 6 | 1,284 | 192 | 526 | 859 | R 22,449 | R 30,928 | R 330 | — | — | 36,563 | — | R 77,226 | — |
| 1994 | 201 | 108 | 3,526 | 2,870 | 8 | 1,172 | 200 | 532 | 907 | R 24,718 | R 33,934 | R 376 | — | — | 34,065 | — | R 71,091 | — |
| 1995 | 223 | 110 | 3,558 | 2,748 | 21 | 1,278 | 197 | 555 | 654 | R 24,956 | R 33,968 | R 472 | — | — | 34,276 | — | R 71,464 | — |
| 1996 | 152 | 114 | 3,696 | 2,519 | 24 | R 1,568 | 191 | 565 | 328 | R 25,566 | R 34,457 | R 439 | — | — | 30,241 | — | R 63,023 | — |
| 1997 | 156 | 111 | 4,048 | 2,711 | 21 | R 2,190 | 202 | 593 | 309 | R 24,107 | R 34,182 | R 543 | — | — | 31,348 | — | R 65,207 | — |
| 1998 | 117 | 133 | 4,087 | 3,965 | 33 | 2,049 | 211 | 491 | 271 | 29,775 | 40,881 | 405 | — | — | 33,807 | — | 69,839 | — |
| 1999 | 95 | 127 | 4,104 | 2,135 | 26 | 2,085 | 214 | 506 | 421 | 32,362 | 41,853 | 517 | — | — | 39,499 | — | 77,390 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 10.9 | 51.8 | 8.7 | 34.6 | 0.6 | 0.5 | 1.0 | 4.2 | 44.9 | R 21.4 | R 115.8 | 2.1 | 40.4 | 0.0 | 47.7 | R 268.7 | 118.6 | R 387.3 |
| 1965 | 8.8 | 85.3 | 11.2 | 32.3 | 0.1 | 0.6 | 1.3 | 4.0 | 45.8 | R 47.2 | R 142.6 | 2.0 | 53.5 | 0.0 | 63.8 | R 356.0 | 152.4 | R 508.4 |
| 1970 | 5.1 | 98.3 | 15.5 | 29.0 | 0.6 | 1.0 | 1.6 | 2.9 | 49.5 | R 57.6 | R 157.8 | 1.4 | 56.8 | 0.0 | 87.1 | R 406.5 | 211.1 | R 617.6 |
| 1975 | 10.9 | 96.0 | 19.3 | 23.4 | 0.7 | 0.9 | 1.2 | 2.3 | 37.2 | R 73.4 | R 158.5 | 1.9 | 53.9 | 0.0 | 93.5 | R 414.7 | 225.6 | R 640.3 |
| 1980 | 7.1 | 67.0 | 13.6 | 25.3 | 0.2 | 2.4 | 1.2 | 1.5 | 41.1 | R 61.1 | R 146.5 | 1.3 | R 78.3 | 0.0 | 107.0 | R 407.2 | 260.2 | R 667.5 |
| 1985 | 4.5 | 65.7 | 13.5 | 16.1 | 5.2 | 5.4 | 1.1 | 3.6 | 32.5 | R 67.2 | R 144.6 | 1.4 | R 91.7 | 0.0 | 100.4 | R 408.3 | 235.9 | R 644.2 |
| 1990 | 5.2 | 80.8 | 16.5 | 26.0 | 0.1 | 4.5 | 1.3 | 3.5 | 12.7 | R 123.8 | R 188.2 | R f 3.5 | R 69.1 | f 0.0 | 138.9 | R f 485.6 | R 303.9 | R f 789.5 |
| 1991 | 4.3 | 82.2 | 19.7 | 23.2 | (s) | 4.7 | 1.1 | 4.2 | 8.4 | R 121.6 | R 182.9 | R 2.8 | R 67.4 | 0.0 | 139.3 | R 478.9 | R 302.9 | R 781.9 |
| 1992 | 3.4 | 82.4 | 20.1 | 19.8 | (s) | 4.7 | 1.1 | 4.2 | 6.3 | R 156.4 | R 212.7 | R 3.0 | R 84.3 | 0.0 | 130.8 | R 516.5 | R 278.9 | R 795.4 |
| 1993 | 3.5 | 95.7 | 19.5 | 15.6 | (s) | 4.6 | 1.2 | 2.8 | 5.4 | R 134.4 | R 183.4 | 3.4 | R 80.8 | 0.0 | 124.8 | R 491.5 | R 263.5 | R 755.0 |
| 1994 | 3.9 | 112.0 | 23.4 | 16.7 | (s) | 4.3 | 1.2 | 2.8 | 5.7 | R 147.8 | R 201.9 | 3.9 | R 81.8 | 0.0 | 116.2 | R 519.8 | R 242.6 | R 762.3 |
| 1995 | 4.2 | 114.4 | 23.6 | 16.0 | 0.1 | 4.6 | 1.2 | 2.9 | 4.1 | R 149.4 | R 201.9 | 4.9 | R 66.9 | 0.0 | 117.0 | R 509.2 | R 243.8 | R 753.0 |
| 1996 | 3.0 | 118.4 | 24.5 | 14.7 | 0.1 | R 5.7 | 1.2 | R 2.9 | 2.1 | R 153.4 | R 204.6 | R 4.5 | R 70.2 | 0.0 | 103.2 | R 503.9 | R 215.0 | R 718.9 |
| 1997 | 3.2 | 116.3 | 26.9 | 15.8 | 0.1 | R 7.9 | 1.2 | 3.1 | 1.9 | R 144.6 | R 201.6 | R 5.6 | R 77.1 | 0.0 | 107.0 | R 510.7 | R 222.5 | R 733.2 |
| 1998 | 2.7 | 139.0 | 27.1 | 23.1 | 0.2 | 7.4 | 1.3 | 2.6 | 1.7 | 179.0 | 242.4 | 4.2 | 57.7 | 0.0 | 115.4 | 561.3 | 238.3 | 799.6 |
| 1999 | 2.2 | 133.4 | 27.2 | 12.4 | 0.1 | 7.5 | 1.3 | 2.6 | 2.6 | 194.5 | 248.4 | 5.3 | 67.7 | 0.0 | 134.8 | 591.8 | 264.1 | 855.9 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 303. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Washington

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Petroleum — Distillate Fuel [a] | Petroleum — Jet Fuel [a] | Petroleum — LPG [a] | Petroleum — Lubricants [a] | Petroleum — Motor Gasoline | Petroleum — Residual Fuel [a] | Petroleum — Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 7 | (s) | 2,161 | 2,574 | 4,502 | 6 | 413 | 22,052 | 1,707 | 33,415 | 0 | 1 | — | 3 | — |
| 1965 | 1 | 1 | 434 | 3,022 | 6,919 | 21 | 381 | 25,886 | 1,443 | 38,104 | 0 | 2 | — | 4 | — |
| 1970 | (s) | 6 | 351 | 3,956 | 10,637 | 38 | 400 | 35,213 | 2,025 | 52,620 | 0 | 2 | — | 4 | — |
| 1975 | (s) | 6 | 274 | 6,616 | 14,036 | 37 | 428 | 40,196 | 2,109 | 63,696 | 0 | 2 | — | 4 | — |
| 1980 | 0 | 4 | 356 | 9,595 | 12,036 | 92 | 501 | 41,897 | 10,112 | 74,589 | 0 | 2 | — | 5 | — |
| 1985 | 0 | 3 | 202 | 10,210 | 15,417 | 329 | 456 | 42,971 | 5,492 | 75,076 | R e 14 | 14 | — | 32 | — |
| 1990 | 0 | 5 | 313 | 12,213 | 22,343 | 291 | 513 | 52,525 | 14,428 | 102,626 | R 205 | 16 | — | 34 | — |
| 1991 | 0 | 5 | 268 | 11,866 | 21,306 | 246 | 459 | 53,256 | 15,957 | 103,357 | R 241 | 19 | — | 40 | — |
| 1992 | 0 | 3 | 289 | 12,394 | 24,066 | 207 | 468 | 54,259 | 22,385 | 114,067 | R 1,123 | 20 | — | 42 | — |
| 1993 | 0 | 4 | 198 | 10,545 | 22,226 | 214 | 477 | 56,811 | 15,008 | 105,478 | R 1,945 | 19 | — | 39 | — |
| 1994 | 0 | 7 | 318 | 13,685 | 21,492 | 312 | 498 | 56,866 | 14,810 | 107,981 | R 2,245 | 19 | — | 39 | — |
| 1995 | 0 | 9 | 229 | 13,669 | 23,039 | 179 | 490 | 58,222 | 16,809 | 112,638 | R 739 | 18 | — | 38 | — |
| 1996 | 0 | 7 | 292 | 14,269 | 22,323 | R 148 | 475 | 60,986 | 12,485 | R 110,979 | R 328 | 17 | — | 36 | — |
| 1997 | 0 | 9 | 202 | 16,570 | 22,454 | R 97 | 502 | 60,559 | 12,837 | R 113,222 | R 621 | 18 | — | 38 | — |
| 1998 | 0 | 9 | 356 | 14,921 | 21,859 | 100 | 525 | 61,279 | 9,936 | 108,977 | 835 | 18 | — | 37 | — |
| 1999 | 0 | 8 | 283 | 16,470 | 22,155 | 13 | 531 | 62,412 | 9,136 | 111,001 | 710 | 20 | — | 39 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | |
| 1960 | 0.2 | 0.4 | 10.9 | 15.0 | 24.4 | (s) | 2.5 | 115.8 | 10.7 | 179.4 | 0.0 | (s) | 180.0 | (s) | 180.0 |
| 1965 | (s) | 0.7 | 2.2 | 17.6 | 38.2 | 0.1 | 2.3 | 136.0 | 9.1 | 205.4 | 0.0 | (s) | 206.2 | (s) | 206.2 |
| 1970 | (s) | 6.8 | 1.8 | 23.0 | 59.3 | 0.1 | 2.4 | 185.0 | 12.7 | 284.4 | 0.0 | (s) | 291.2 | (s) | 291.2 |
| 1975 | (s) | 6.1 | 1.4 | 38.5 | 78.7 | 0.1 | 2.6 | 211.1 | 13.3 | 345.8 | 0.0 | (s) | 351.9 | (s) | 351.9 |
| 1980 | 0.0 | 3.9 | 1.8 | 55.9 | 67.5 | 0.3 | 3.0 | 220.1 | 63.6 | 412.2 | 0.0 | (s) | 416.1 | (s) | 416.1 |
| 1985 | 0.0 | 3.0 | 1.0 | 59.5 | 86.6 | 1.2 | 2.8 | 225.7 | 34.5 | 411.3 | R e 0.1 | (s) | e 414.4 | 0.1 | e 414.5 |
| 1990 | 0.0 | 5.3 | 1.6 | 71.1 | 126.0 | 1.1 | 3.1 | 275.9 | 90.7 | 569.5 | R 0.7 | 0.1 | 574.8 | 0.1 | 575.0 |
| 1991 | 0.0 | 5.3 | 1.4 | 69.1 | 120.2 | 0.9 | 2.8 | 279.8 | 100.3 | 574.5 | R 0.9 | 0.1 | 579.8 | 0.1 | 580.0 |
| 1992 | 0.0 | 3.3 | 1.5 | 72.2 | 136.0 | 0.7 | 2.8 | 285.0 | 140.7 | 639.0 | R 4.0 | 0.1 | 642.3 | 0.1 | 642.4 |
| 1993 | 0.0 | 4.5 | 1.0 | 61.4 | 125.6 | 0.8 | 2.9 | 298.4 | 94.4 | 584.5 | R 6.9 | 0.1 | 589.0 | 0.1 | 589.1 |
| 1994 | 0.0 | 6.9 | 1.6 | 79.7 | 121.7 | 1.1 | 3.0 | R 297.4 | 93.1 | R 597.7 | R 7.9 | 0.1 | R 604.6 | 0.1 | R 604.7 |
| 1995 | 0.0 | 9.1 | 1.2 | 79.6 | 130.4 | 0.6 | 3.0 | R 303.6 | 105.7 | R 624.1 | R 2.6 | 0.1 | R 633.2 | 0.1 | R 633.4 |
| 1996 | 0.0 | 7.2 | 1.5 | 83.1 | 126.5 | R 0.5 | 2.9 | R 318.1 | 78.5 | R 611.1 | R 1.2 | 0.1 | R 618.4 | 0.1 | R 618.6 |
| 1997 | 0.0 | 9.4 | 1.0 | 96.5 | 127.3 | R 0.4 | 3.0 | R 315.7 | 80.7 | R 624.7 | R 2.2 | 0.1 | R 634.1 | 0.1 | R 634.2 |
| 1998 | 0.0 | 9.6 | 1.8 | 86.9 | 123.9 | 0.4 | 3.2 | 319.4 | 62.5 | 598.1 | 3.0 | 0.1 | 607.7 | 0.1 | 607.9 |
| 1999 | 0.0 | 8.2 | 1.4 | 95.9 | 125.6 | (s) | 3.2 | 325.2 | 57.4 | 608.9 | 2.5 | 0.1 | 617.1 | 0.1 | 617.3 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## WASHINGTON

### Table 304.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Washington

| Year | Coal | Natural Gas a | Heavy Oil b,c | Light Oil b,d | Petroleum Coke b | Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | | | Thousand Barrels | | | | Million Kilowatthours | | | |
| 1960 | 0 | 0 | 14 | 2 | 0 | 16 | 0 | 34,104 | 1 | 0 | 0 | — |
| 1965 | 0 | 0 | 3 | (s) | 0 | 3 | 0 | 48,624 | 0 | 0 | 0 | — |
| 1970 | 0 | 0 | 3 | (s) | 0 | 4 | 2,614 | 70,008 | (s) | 0 | 0 | — |
| 1975 | 4,009 | 0 | 71 | 4 | 0 | 75 | 3,308 | 85,257 | 0 | 0 | 0 | — |
| 1980 | 4,950 | 1 | 201 | 31 | 0 | 232 | 2,041 | 83,841 | 0 | 0 | 0 | — |
| 1985 | 5,192 | (s) | 0 | 17 | 0 | 17 | 8,038 | 77,827 | 282 | 0 | 0 | — |
| 1990 | 4,852 | (s) | 1 | 30 | 0 | 31 | 5,742 | R 87,146 | 333 | 0 | 0 | — |
| 1991 | 5,184 | (s) | 1 | 15 | 0 | 16 | 4,230 | R 90,670 | 274 | 0 | 0 | — |
| 1992 | 6,148 | 5 | 1 | 12 | 0 | 13 | 5,692 | R 72,424 | 361 | 0 | 0 | — |
| 1993 | 5,646 | 5 | 1 | 62 | 0 | 62 | 7,135 | R 67,318 | 395 | 0 | 0 | — |
| 1994 | 6,016 | 2 | 0 | 12 | 0 | 12 | 6,740 | R 65,175 | 396 | 0 | 0 | — |
| 1995 | 3,857 | 6 | 0 | 18 | 0 | 18 | 6,942 | R 80,995 | 261 | 0 | 0 | — |
| 1996 | 5,507 | 7 | 0 | 16 | 0 | 16 | 5,588 | R 101,114 | 360 | 0 | 0 | — |
| 1997 | 4,771 | 3 | 0 | 39 | 0 | 39 | 6,244 | R 104,613 | 353 | 0 | 0 | — |
| 1998 | 6,111 | 13 | 0 | 83 | 0 | 83 | 6,916 | 79,533 | 337 | 0 | 0 | — |
| 1999 | 5,707 | 7 | 0 | 19 | 0 | 19 | 6,086 | 95,014 | 270 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 0.0 | 0.0 | 0.1 | (s) | 0.0 | 0.1 | 0.0 | 367.0 | (s) | 0.0 | 0.0 | 367.1 |
| 1965 | 0.0 | 0.0 | (s) | (s) | 0.0 | (s) | 0.0 | 508.3 | 0.0 | 0.0 | 0.0 | 508.3 |
| 1970 | 0.0 | 0.0 | (s) | (s) | 0.0 | (s) | 28.7 | 734.7 | (s) | 0.0 | 0.0 | 763.4 |
| 1975 | 64.9 | 0.0 | 0.4 | (s) | 0.0 | 0.5 | 36.4 | 887.2 | 0.0 | 0.0 | 0.0 | 989.0 |
| 1980 | 80.2 | 1.0 | 1.3 | 0.2 | 0.0 | 1.4 | 22.3 | 870.9 | 0.0 | 0.0 | 0.0 | 975.8 |
| 1985 | 84.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 86.9 | 813.1 | 2.9 | 0.0 | 0.0 | 987.2 |
| 1990 | 78.9 | 0.2 | (s) | 0.2 | 0.0 | 0.2 | 61.3 | R 906.5 | 3.5 | 0.0 | 0.0 | R 1,051.8 |
| 1991 | 83.1 | 0.1 | (s) | 0.1 | 0.0 | 0.1 | 45.4 | R 946.2 | 2.9 | 0.0 | 0.0 | R 1,086.9 |
| 1992 | 100.7 | 5.7 | (s) | 0.1 | 0.0 | 0.1 | 60.8 | R 749.0 | 3.7 | 0.0 | 0.0 | R 938.4 |
| 1993 | 91.7 | 5.1 | (s) | 0.4 | 0.0 | 0.4 | 76.2 | R 694.0 | 4.1 | 0.0 | 0.0 | R 875.5 |
| 1994 | 101.1 | 2.6 | 0.0 | 0.1 | 0.0 | 0.1 | 72.0 | R 672.3 | 4.1 | 0.0 | 0.0 | R 881.2 |
| 1995 | 63.8 | 6.7 | 0.0 | 0.1 | 0.0 | 0.1 | 74.0 | R 835.2 | 2.7 | 0.0 | 0.0 | R 985.2 |
| 1996 | 87.4 | 6.9 | 0.0 | 0.1 | 0.0 | 0.1 | 59.4 | R 1,045.5 | 3.7 | 0.0 | 0.0 | R 1,219.3 |
| 1997 | 76.7 | 2.7 | 0.0 | 0.2 | 0.0 | 0.2 | 66.3 | R 1,083.5 | R 3.7 | 0.0 | 0.0 | R 1,260.8 |
| 1998 | 100.4 | 14.1 | 0.0 | 0.5 | 0.0 | 0.5 | 73.5 | 822.9 | 3.5 | 0.0 | 0.0 | 1,039.0 |
| 1999 | 93.9 | 7.1 | 0.0 | 0.1 | 0.0 | 0.1 | 64.7 | 983.0 | 2.8 | 0.0 | 0.0 | 1,185.3 |

ᵃ Includes supplemental gaseous fuels.
ᵇ The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
ᶜ Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
ᵈ Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
ᵉ Through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of net imports of electricity that is derived from hydroelectric power.

ᶠ "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
ᵍ If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 305. Energy Consumption Estimates by Source, Selected Years 1960-1999, West Virginia

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Asphalt & Road Oil [a] | Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | Kerosene [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Other [a,c] | Total | Nuclear Electric Power | Hydroelectric Power [d] | Wood and Waste | Other [a,e] | Net Interstate Flow of Electricity/Losses [f] Million kWh | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum — Thousand Barrels | | | | | | | | | | | Million kWh | Million kWh | | | | |

## Thousand Barrels / Physical Units

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 14,060 | 150 | 918 | 119 | 2,473 | 169 | 276 | 558 | 570 | 11,609 | 1,481 | R 4,691 | R 22,864 | 0 | 938 | — | — | -12,238 | — |
| 1965 | 19,049 | 164 | 907 | 201 | 2,837 | 130 | 253 | 961 | 636 | 12,762 | 2,153 | 11,875 | 32,714 | 0 | 828 | — | — | -16,716 | — |
| 1970 | 25,376 | 181 | 863 | 78 | 3,917 | 290 | 320 | 1,230 | 684 | 15,831 | 2,065 | 14,523 | 39,801 | 0 | 996 | — | — | -52,336 | — |
| 1975 | 34,469 | 158 | 944 | 58 | 5,922 | 249 | 325 | 1,498 | 686 | 19,314 | 2,504 | 16,544 | 48,043 | 0 | 1,063 | — | — | -120,635 | — |
| 1980 | 34,939 | 143 | 717 | 65 | 10,541 | 357 | 496 | 3,435 | 671 | 19,390 | 1,463 | 20,395 | 57,530 | 0 | 1,114 | — | — | -133,702 | — |
| 1985 | 34,999 | 117 | 430 | 39 | 9,718 | 235 | 696 | 1,157 | 610 | 18,513 | 970 | 13,876 | 46,243 | 0 | 1,058 | — | — | -160,204 | — |
| 1990 | 34,896 | 120 | 728 | 36 | 9,760 | 273 | 295 | 1,612 | 687 | 19,643 | 1,285 | 19,421 | 53,740 | 0 | R h 1,223 | — | — | R -146,290 | — |
| 1991 | 31,843 | 111 | 528 | 33 | 9,626 | 237 | 300 | 1,821 | 614 | 19,342 | 1,070 | 13,299 | 46,871 | 0 | R 1,081 | — | — | R -128,729 | — |
| 1992 | 32,019 | 129 | 550 | 0 | 9,455 | 271 | 337 | 1,692 | 626 | 19,860 | 581 | 14,304 | 47,676 | 0 | R 939 | — | — | R -133,126 | — |
| 1993 | 32,046 | 135 | 427 | 26 | 10,758 | 257 | 424 | 1,821 | 638 | 19,638 | 516 | 13,864 | 48,367 | 0 | R 1,051 | — | — | R -129,066 | — |
| 1994 | 34,767 | 145 | 692 | 26 | 11,075 | 225 | 412 | 1,972 | 666 | 19,960 | 501 | 14,508 | 50,037 | 0 | R 1,098 | — | — | R -146,985 | — |
| 1995 | 34,489 | 148 | 639 | 27 | 11,346 | 174 | 394 | 1,944 | 655 | 20,891 | 200 | 14,036 | 50,308 | 0 | R 1,088 | — | — | R -144,906 | — |
| 1996 | 36,139 | 155 | 944 | 32 | 9,385 | 170 | 490 | R 2,199 | 636 | 18,899 | 358 | R 3,560 | R 36,673 | 0 | R 1,389 | — | — | R -159,397 | — |
| 1997 | 37,121 | 159 | 1,157 | 22 | 10,871 | 172 | 513 | R 2,874 | 672 | 19,752 | 236 | R 3,524 | R 39,793 | 0 | R 6,592 | — | — | R -171,484 | — |
| 1998 | 38,649 | 143 | 1,227 | 30 | 12,779 | 175 | 583 | 2,157 | 703 | 19,724 | 77 | 4,363 | 41,817 | 0 | 1,086 | — | — | -173,904 | — |
| 1999 | 39,369 | 140 | 762 | 22 | 12,230 | 184 | 633 | 1,076 | 710 | 19,491 | 111 | 4,821 | 40,040 | 0 | 930 | — | — | -182,765 | — |

## Trillion Btu

| Year | Coal | Natural Gas | Asphalt & Road Oil | Aviation Gasoline | Distillate Fuel | Jet Fuel | Kerosene | LPG | Lubricants | Motor Gasoline | Residual Fuel | Other | Total | Nuclear Electric Power | Hydroelectric Power | Wood and Waste | Other | Net Interstate Flow | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 354.5 | 155.6 | 6.1 | 0.6 | 14.4 | 0.9 | 1.6 | 2.2 | 3.5 | 61.0 | 9.3 | 27.3 | R 126.8 | 0.0 | 10.1 | 13.4 | 0.0 | -41.8 | R 618.6 |
| 1965 | 477.4 | 176.1 | 6.0 | 1.0 | 16.5 | 0.7 | 1.4 | 3.9 | 3.9 | 67.0 | 13.5 | 67.0 | 181.0 | 0.0 | 8.7 | 11.9 | 0.0 | -57.0 | 798.0 |
| 1970 | 612.4 | 186.5 | 5.7 | 0.4 | 22.8 | 1.6 | 1.8 | 4.6 | 4.2 | 83.2 | 13.0 | 80.4 | 217.7 | 0.0 | 10.4 | 10.7 | 0.0 | -178.6 | 859.2 |
| 1975 | 817.4 | 164.3 | 6.3 | 0.3 | 34.5 | 1.4 | 1.8 | 5.6 | 4.2 | 101.5 | 15.7 | 92.8 | 264.0 | 0.0 | 11.1 | 11.7 | 0.0 | -411.6 | 856.9 |
| 1980 | 857.8 | 147.6 | 4.8 | 0.3 | 61.4 | 2.0 | 2.8 | 12.6 | 4.1 | 101.9 | 9.2 | 112.5 | 311.5 | 0.0 | 11.6 | R 9.6 | 0.0 | -456.2 | R 881.9 |
| 1985 | 871.7 | 125.0 | 2.9 | 0.2 | 56.6 | 1.3 | 3.9 | 4.2 | 3.7 | 97.2 | 6.1 | 75.8 | 251.9 | 0.0 | 11.1 | R 13.0 | 0.0 | -546.6 | R 726.1 |
| 1990 | 872.7 | 129.0 | 4.8 | 0.2 | 56.9 | 1.5 | 1.7 | 5.8 | 4.2 | 103.2 | 8.1 | 106.7 | 293.0 | 0.0 | R h 12.7 | R 7.1 | h (s) | R -499.1 | R h 815.4 |
| 1991 | 799.7 | 118.8 | 3.5 | 0.2 | 56.1 | 1.3 | 1.7 | 6.6 | 3.7 | 101.6 | 6.7 | 73.3 | 254.7 | 0.0 | R 11.3 | R 7.0 | (s) | R -439.2 | R 752.4 |
| 1992 | 804.6 | 137.2 | 3.6 | 0.0 | 55.1 | 1.5 | 1.9 | 6.1 | 3.8 | 104.3 | 3.7 | 78.6 | 258.7 | 0.0 | R 9.7 | R 7.1 | (s) | R -454.2 | R 763.1 |
| 1993 | 803.5 | 144.0 | 2.8 | 0.1 | 62.7 | 1.4 | 2.4 | 6.6 | 3.9 | 103.2 | 3.2 | 76.0 | 262.3 | 0.0 | R 10.8 | R 7.4 | (s) | R -440.4 | R 787.7 |
| 1994 | 870.3 | 154.7 | 4.6 | 0.1 | 64.5 | 1.3 | 2.3 | 7.2 | 4.0 | R 104.4 | 3.1 | 79.5 | R 271.1 | 0.0 | R 11.3 | R 7.3 | (s) | R -501.5 | R 813.2 |
| 1995 | 860.4 | 157.4 | 4.2 | 0.1 | 66.1 | 1.0 | 2.2 | 7.0 | 4.0 | R 108.9 | 1.3 | 76.9 | R 271.8 | 0.0 | R 11.2 | R 8.4 | (s) | R -494.4 | R 814.8 |
| 1996 | 898.3 | R 164.1 | 6.3 | 0.2 | 54.7 | 1.0 | 2.8 | R 7.9 | 3.9 | R 98.6 | 2.2 | R 20.5 | R 197.9 | 0.0 | R 14.4 | R 8.4 | (s) | R -543.9 | R 739.3 |
| 1997 | 922.5 | 169.9 | 7.7 | 0.1 | 63.3 | 1.0 | 2.9 | R 10.4 | 4.1 | R 103.0 | 1.5 | R 20.2 | R 214.1 | 0.0 | R 68.3 | R 6.7 | (s) | R -585.1 | R 796.4 |
| 1998 | 955.3 | 151.6 | 8.1 | 0.2 | 74.4 | 1.0 | 3.3 | 7.8 | 4.3 | 102.8 | 0.5 | 25.3 | 227.7 | 0.0 | 11.2 | 4.0 | (s) | -593.4 | 756.5 |
| 1999 | 976.6 | 147.4 | 5.1 | 0.1 | 71.2 | 1.0 | 3.6 | 3.9 | 4.3 | 101.6 | 0.7 | 28.0 | 219.5 | 0.0 | 9.6 | 5.8 | 0.1 | -623.6 | 735.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.

[c] "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

[d] If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[e] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

[f] Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

[g] From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

[h] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 306.  Residential Energy Consumption Estimates, Selected Years 1960-1999, West Virginia**

| | | | Petroleum | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood | Geothermal | Solar[c] | Electricity[a] | Net Energy | Electrical System Energy Losses[d] | Total |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Thousand Cords | | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 85 | 50 | 204 | 148 | 226 | 578 | 416 | — | — | 1,714 | — | 4,263 | — |
| 1965 | 84 | 50 | 304 | 184 | 280 | 768 | 320 | — | — | 2,365 | — | 5,647 | — |
| 1970 | 67 | 58 | 250 | 267 | 266 | 783 | 287 | — | — | 3,459 | — | 8,383 | — |
| 1975 | 83 | 51 | 581 | 172 | 331 | 1,084 | 298 | — | — | 4,979 | — | 12,010 | — |
| 1980 | 55 | 48 | 1,169 | 408 | 395 | 1,973 | 264 | — | — | 6,606 | — | 16,064 | — |
| 1985 | 29 | 37 | 462 | 390 | 225 | 1,078 | 395 | — | — | 6,712 | — | 15,770 | — |
| 1990 | 63 | 33 | 574 | 210 | 416 | 1,200 | 214 | — | — | 7,578 | — | R 16,577 | — |
| 1991 | 34 | 33 | 537 | 197 | 394 | 1,128 | 226 | — | — | 8,106 | — | R 17,622 | — |
| 1992 | 33 | 35 | 462 | 245 | 454 | 1,162 | 237 | — | — | 8,138 | — | R 17,357 | — |
| 1993 | 38 | 35 | 568 | 323 | 483 | 1,374 | 245 | — | — | 8,682 | — | R 18,338 | — |
| 1994 | 30 | 35 | 584 | 304 | 487 | 1,375 | 240 | — | — | 8,663 | — | R 18,079 | — |
| 1995 | 24 | 35 | 480 | 287 | 416 | 1,183 | R 266 | — | — | 9,166 | — | R 19,110 | — |
| 1996 | 38 | 37 | 608 | 377 | R 479 | R 1,464 | 266 | — | — | 9,277 | — | R 19,332 | — |
| 1997 | 37 | 36 | 623 | 399 | R 677 | R 1,699 | R 175 | — | — | 9,027 | — | R 18,776 | — |
| 1998 | 57 | 30 | 558 | 473 | 512 | 1,543 | 154 | — | — | 9,053 | — | 18,702 | — |
| 1999 | 59 | 31 | 484 | 551 | 712 | 1,747 | 165 | — | — | 9,452 | — | 18,520 | — |

| | | | | | | Trillion Btu | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 2.1 | 51.4 | 1.2 | 0.8 | 0.9 | 2.9 | 8.3 | 0.0 | 0.0 | 5.8 | 70.7 | 14.5 | 85.2 |
| 1965 | 2.1 | 53.2 | 1.8 | 1.0 | 1.1 | 3.9 | 6.4 | 0.0 | 0.0 | 8.1 | 73.7 | 19.3 | 92.9 |
| 1970 | 1.6 | 59.7 | 1.5 | 1.5 | 1.0 | 4.0 | 5.7 | 0.0 | 0.0 | 11.8 | 82.8 | 28.6 | 111.4 |
| 1975 | 2.0 | 53.2 | 3.4 | 1.0 | 1.2 | 5.6 | 6.0 | 0.0 | 0.0 | 17.0 | 83.8 | 41.0 | 124.7 |
| 1980 | 1.3 | 49.8 | 6.8 | 2.3 | 1.5 | 10.6 | 5.3 | 0.0 | 0.0 | 22.5 | 89.5 | 54.8 | 144.3 |
| 1985 | 0.7 | 39.2 | 2.7 | 2.2 | 0.8 | 5.7 | 7.9 | 0.0 | 0.0 | 22.9 | 76.5 | 53.8 | 130.3 |
| 1990 | 1.6 | 34.9 | 3.3 | 1.2 | 1.5 | 6.0 | 4.3 | e 0.0 | e (s) | 25.9 | e 72.7 | 56.6 | R e 129.3 |
| 1991 | 0.8 | 35.0 | 3.1 | 1.1 | 1.4 | 5.7 | 4.5 | 0.0 | (s) | 27.7 | 73.7 | R 60.1 | R 133.8 |
| 1992 | 0.8 | 37.6 | 2.7 | 1.4 | 1.6 | 5.7 | 4.7 | 0.0 | (s) | 27.8 | 76.7 | R 59.2 | R 135.9 |
| 1993 | 0.9 | 37.5 | 3.3 | 1.8 | 1.7 | 6.9 | 4.9 | 0.0 | (s) | 29.6 | 79.9 | 62.6 | R 142.4 |
| 1994 | 0.8 | 37.5 | 3.4 | 1.7 | 1.8 | 6.9 | 4.8 | 0.0 | (s) | 29.6 | 79.5 | 61.7 | 141.2 |
| 1995 | 0.6 | 37.5 | 2.8 | 1.6 | 1.5 | 5.9 | 5.3 | 0.0 | (s) | 31.3 | 80.7 | 65.2 | 145.9 |
| 1996 | 0.9 | 39.7 | 3.5 | 2.1 | 1.7 | R 7.4 | 5.3 | 0.0 | (s) | 31.7 | 85.0 | R 66.0 | R 151.0 |
| 1997 | 0.9 | 38.4 | 3.6 | 2.3 | R 2.4 | R 8.3 | R 3.5 | 0.0 | (s) | 30.8 | R 82.0 | R 64.1 | R 146.1 |
| 1998 | 1.4 | 31.5 | 3.2 | 2.7 | 1.8 | 7.8 | 3.1 | 0.0 | (s) | 30.9 | 74.7 | 63.8 | 138.6 |
| 1999 | 1.4 | 33.1 | 2.8 | 3.1 | 2.6 | 8.5 | 3.3 | (s) | (s) | 32.3 | 78.7 | 63.2 | 141.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified.  See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 307. Commercial Energy Consumption Estimates, Selected Years 1960-1999, West Virginia

| Year | Coal[a] | Natural Gas[b] | Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood | Geothermal | Electricity[a] | Net Energy | Electrical System Energy Losses[c] | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | Thousand Cords | | Million Kilowatthours | | Million Kilowatthours | |
| 1960 | 158 | 15 | 75 | 8 | 40 | 65 | 8 | 195 | 8 | — | 1,134 | — | 2,821 | — |
| 1965 | 157 | 15 | 111 | 9 | 49 | 66 | 12 | 248 | 6 | — | 1,620 | — | 3,869 | — |
| 1970 | 124 | 22 | 92 | 14 | 47 | 56 | 9 | 218 | 5 | — | 2,238 | — | 5,423 | — |
| 1975 | 155 | 25 | 213 | 9 | 58 | 59 | 9 | 349 | 6 | — | 2,858 | — | 6,893 | — |
| 1980 | 101 | 22 | 262 | 37 | 70 | 110 | 5 | 484 | 6 | — | 3,658 | — | 8,895 | — |
| 1985 | 52 | 17 | 603 | 129 | 40 | 307 | 5 | 1,084 | R 11 | — | 4,462 | — | 10,483 | — |
| 1990 | 116 | 21 | 443 | 46 | 73 | 330 | 66 | 958 | R 14 | — | 5,085 | — | R 11,124 | — |
| 1991 | 62 | 21 | 517 | 64 | 70 | 262 | 51 | 964 | R 14 | — | 5,313 | — | R 11,549 | — |
| 1992 | 54 | 24 | 322 | 32 | 80 | 219 | 56 | 708 | R 15 | — | 5,323 | — | R 11,353 | — |
| 1993 | 64 | 24 | 437 | 36 | 85 | 20 | 20 | 597 | 20 | — | 5,572 | — | R 11,769 | — |
| 1994 | 56 | 25 | 408 | 38 | 86 | 20 | 5 | 557 | 20 | — | 5,631 | — | R 11,752 | — |
| 1995 | 41 | 26 | 345 | 37 | 73 | 20 | 0 | 475 | 20 | — | 5,944 | — | R 12,393 | — |
| 1996 | 71 | 28 | 267 | 37 | R 85 | 20 | 0 | R 408 | 22 | — | 6,030 | — | R 12,566 | — |
| 1997 | 68 | 26 | 326 | 51 | R 120 | 19 | 0 | R 516 | 19 | — | 6,040 | — | R 12,564 | — |
| 1998 | 105 | 25 | 378 | 57 | 90 | 19 | 0 | 544 | 19 | — | 6,297 | — | 13,009 | — |
| 1999 | 109 | 27 | 320 | 64 | 126 | 19 | 0 | 529 | 23 | — | 6,565 | — | 12,864 | — |
| | | | | | | Trillion Btu | | | | | | | | |
| 1960 | 4.0 | 16.0 | 0.4 | (s) | 0.2 | 0.3 | (s) | 1.0 | 0.2 | 0.0 | 3.9 | 25.0 | 9.6 | 34.7 |
| 1965 | 3.9 | 15.6 | 0.6 | 0.1 | 0.2 | 0.3 | 0.1 | 1.3 | 0.1 | 0.0 | 5.5 | 26.4 | 13.2 | 39.6 |
| 1970 | 3.0 | 22.3 | 0.5 | 0.1 | 0.2 | 0.3 | 0.1 | 1.1 | 0.1 | 0.0 | 7.6 | 34.2 | 18.5 | 52.7 |
| 1975 | 3.7 | 25.7 | 1.2 | 0.1 | 0.2 | 0.3 | 0.1 | 1.9 | 0.1 | 0.0 | 9.8 | 41.1 | 23.5 | 64.7 |
| 1980 | 2.4 | 22.7 | 1.5 | 0.2 | 0.3 | 0.6 | (s) | 2.6 | 0.1 | 0.0 | 12.5 | 40.3 | 30.3 | 70.7 |
| 1985 | 1.3 | 18.4 | 3.5 | 0.7 | 0.1 | 1.6 | (s) | 6.0 | R 0.2 | 0.0 | 15.2 | R 41.1 | 35.8 | R 76.9 |
| 1990 | 2.9 | 22.9 | 2.6 | 0.3 | 0.3 | 1.7 | 0.4 | 5.3 | R 0.3 | e 0.0 | 17.4 | R e 48.7 | R 38.0 | R e 86.6 |
| 1991 | 1.6 | 22.6 | 3.0 | 0.4 | 0.3 | 1.4 | 0.3 | 5.3 | R 0.3 | 0.0 | 18.1 | R 47.9 | R 39.4 | R 87.3 |
| 1992 | 1.4 | 26.0 | 1.9 | 0.2 | 0.3 | 1.2 | 0.3 | 3.8 | R 0.3 | 0.0 | 18.2 | R 49.7 | R 38.7 | R 88.4 |
| 1993 | 1.6 | 26.0 | 2.5 | 0.2 | 0.3 | 0.1 | 0.1 | 3.3 | 0.4 | 0.0 | 19.0 | 50.2 | 40.2 | 90.4 |
| 1994 | 1.4 | 26.6 | 2.4 | 0.2 | 0.3 | 0.1 | (s) | 3.0 | 0.4 | 0.0 | 19.2 | 50.6 | 40.1 | 90.7 |
| 1995 | 1.0 | 27.5 | 2.0 | 0.2 | 0.3 | 0.1 | 0.0 | 2.6 | 0.4 | 0.0 | 20.3 | 51.7 | 42.3 | 94.0 |
| 1996 | 1.7 | 29.7 | 1.6 | 0.2 | 0.3 | 0.1 | 0.0 | 2.2 | 0.4 | 0.0 | 20.6 | 54.7 | R 42.9 | 97.5 |
| 1997 | 1.7 | 27.7 | 1.9 | 0.3 | R 0.4 | 0.1 | 0.0 | R 2.7 | 0.4 | 0.0 | 20.6 | R 53.1 | R 42.9 | R 95.9 |
| 1998 | 2.6 | 26.6 | 2.2 | 0.3 | 0.3 | 0.1 | 0.0 | 2.9 | 0.4 | 0.0 | 21.5 | 54.0 | 44.4 | 98.4 |
| 1999 | 2.7 | 28.8 | 1.9 | 0.4 | 0.5 | 0.1 | 0.0 | 2.8 | 0.5 | (s) | 22.4 | 57.1 | 43.9 | 101.0 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 308. Industrial Energy Consumption Estimates, Selected Years 1960-1999, West Virginia

**Thousand Barrels / Physical Units**

| Year | Coal (Thousand Short Tons) | Natural Gas a (Billion Cubic Feet) | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b (Million kWh) | Wood and Waste | Other b,d | Electricity b (Million kWh) | Net Energy | Electrical System Energy Losses e (Million kWh) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 7,802 | 76 | 918 | 452 | 120 | 290 | 372 | 204 | 1,437 | R 4,691 | R 8,485 | 540 | — | — | 5,915 | — | 14,713 | — |
| 1965 | 10,747 | 81 | 907 | 890 | 60 | 627 | 438 | 155 | 2,080 | 11,875 | 17,033 | 493 | — | — | 7,984 | — | 19,063 | — |
| 1970 | 10,279 | 93 | 863 | 1,087 | 39 | 907 | 500 | 114 | 1,621 | 14,523 | 19,655 | 558 | — | — | 9,426 | — | 22,842 | — |
| 1975 | 8,424 | 68 | 944 | 1,533 | 144 | 1,095 | 447 | 78 | 1,787 | 16,544 | 22,571 | 595 | — | — | 9,102 | — | 21,955 | — |
| 1980 | 6,284 | 59 | 717 | 3,585 | 51 | 2,955 | 420 | 81 | 1,458 | 20,395 | 29,663 | 690 | — | — | 10,567 | — | 25,695 | — |
| 1985 | 3,551 | 45 | 430 | 1,897 | 177 | 871 | 383 | 229 | 964 | 13,876 | 18,827 | 690 | — | — | 9,673 | — | 22,726 | — |
| 1990 | 4,845 | 58 | 728 | 2,670 | 39 | 1,103 | 430 | 249 | 1,219 | 19,421 | 25,860 | R f 788 | — | — | 10,469 | — | R 22,903 | — |
| 1991 | 4,189 | 49 | 528 | 2,580 | 39 | 1,340 | 385 | 259 | 1,019 | 13,299 | 19,449 | R 725 | — | — | 10,206 | — | R 22,187 | — |
| 1992 | 3,882 | 52 | 550 | 2,192 | 60 | 1,136 | 393 | 250 | 526 | 14,304 | 19,409 | R 516 | — | — | 10,370 | — | R 22,117 | — |
| 1993 | 4,162 | 54 | 427 | 2,729 | 65 | 1,232 | 400 | 161 | 496 | 13,864 | 19,373 | R 689 | — | — | 10,187 | — | R 21,517 | — |
| 1994 | 4,363 | 55 | 692 | 2,962 | 70 | 1,373 | 418 | 181 | 496 | 14,508 | 20,701 | R 735 | — | — | 10,482 | — | R 21,874 | — |
| 1995 | 3,768 | 60 | 639 | 3,209 | 71 | 1,443 | 411 | 194 | 200 | 14,036 | 20,203 | R 694 | — | — | 10,867 | — | R 22,657 | — |
| 1996 | 3,256 | 57 | 944 | 3,187 | 77 | R 1,625 | 399 | 189 | 354 | R 3,560 | R 10,334 | R 893 | — | — | 10,820 | — | R 22,550 | — |
| 1997 | 2,530 | 65 | 1,157 | 2,933 | 63 | R 2,077 | 421 | 199 | 236 | R 3,524 | R 10,611 | R 6,215 | — | — | 11,180 | — | R 23,256 | — |
| 1998 | 3,354 | 57 | 1,227 | 3,107 | 53 | 1,555 | 441 | 226 | 77 | 4,363 | 11,049 | 725 | — | — | 11,161 | — | 23,057 | — |
| 1999 | 3,109 | 51 | 762 | 3,057 | 18 | 237 | 445 | 187 | 111 | 4,821 | 9,638 | 628 | — | — | 11,126 | — | 21,800 | — |

**Trillion Btu**

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 204.4 | 78.4 | 6.1 | 2.6 | 0.7 | 1.2 | 2.3 | 1.1 | 9.0 | 27.3 | R 50.2 | 5.8 | 4.9 | 0.0 | 20.2 | R 363.8 | 50.2 | R 414.0 |
| 1965 | 280.0 | 87.1 | 6.0 | 5.2 | 0.3 | 2.5 | 2.7 | 0.8 | 13.1 | 67.0 | 97.6 | 5.1 | 5.4 | 0.0 | 27.2 | 502.5 | 65.0 | 567.5 |
| 1970 | 260.2 | 95.7 | 5.7 | 6.3 | 0.2 | 3.4 | 3.0 | 0.6 | 10.2 | 80.4 | 109.9 | 5.9 | 4.9 | 0.0 | 32.2 | 508.8 | 77.9 | 586.7 |
| 1975 | 212.5 | 70.5 | 6.3 | 8.9 | 0.8 | 4.1 | 2.7 | 0.4 | 11.2 | 92.8 | 127.2 | 6.2 | 5.7 | 0.0 | 31.1 | 453.2 | 74.9 | 528.1 |
| 1980 | 162.4 | 61.4 | 4.8 | 20.9 | 0.3 | 10.9 | 2.5 | 0.4 | 9.2 | 112.5 | 161.4 | 7.2 | R 4.2 | 0.0 | 36.1 | R 432.5 | 87.7 | R 520.2 |
| 1985 | 91.0 | 48.4 | 2.9 | 11.1 | 1.0 | 3.1 | 2.3 | 1.2 | 6.1 | 75.8 | 103.4 | 7.2 | R 4.9 | 0.0 | 33.0 | R 287.9 | 77.5 | R 365.4 |
| 1990 | 124.3 | 61.7 | 4.8 | 15.6 | 0.2 | 4.0 | 2.6 | 1.3 | 7.7 | 106.7 | 142.9 | R f 8.2 | R 2.5 | f 0.0 | 35.7 | R f 375.3 | 78.1 | R f 453.5 |
| 1991 | 108.1 | 52.2 | 3.5 | 15.0 | 0.2 | 4.8 | 2.3 | 1.4 | 6.4 | 73.3 | 107.0 | R 7.6 | R 2.2 | 0.0 | 34.8 | R 311.9 | R 75.7 | R 387.6 |
| 1992 | 99.8 | 55.7 | 3.6 | 12.8 | 0.3 | 4.1 | 2.4 | 1.3 | 3.3 | 78.6 | 106.5 | R 5.3 | R 2.0 | 0.0 | 35.4 | R 304.8 | R 75.5 | R 380.2 |
| 1993 | 107.0 | 57.8 | 2.8 | 15.9 | 0.4 | 4.4 | 2.4 | 0.8 | 3.1 | 76.0 | 105.9 | R 7.1 | R 2.1 | 0.0 | 34.8 | R 314.7 | 73.4 | R 388.1 |
| 1994 | 112.1 | 58.4 | 4.6 | 17.3 | 0.4 | 5.0 | 2.5 | R 0.9 | 3.1 | 79.5 | 113.3 | R 7.6 | R 2.1 | 0.0 | 35.8 | R 329.3 | 74.6 | R 403.9 |
| 1995 | 97.4 | 64.0 | 4.2 | 18.7 | 0.4 | 5.2 | 2.5 | 1.0 | 1.3 | 76.9 | 110.2 | R 7.2 | R 2.7 | 0.0 | 37.1 | R 318.4 | R 77.3 | R 395.7 |
| 1996 | 84.2 | R 60.0 | 6.3 | 18.6 | 0.4 | R 5.9 | 2.4 | 1.0 | 2.2 | R 20.5 | R 57.2 | R 9.2 | R 2.7 | 0.0 | 36.9 | R 250.3 | R 76.9 | R 327.2 |
| 1997 | 64.8 | 69.0 | 7.7 | 17.1 | 0.4 | R 7.5 | 2.6 | 1.0 | 1.5 | R 20.2 | R 57.9 | R 64.4 | R 2.9 | 0.0 | 38.1 | R 297.0 | R 79.3 | R 376.4 |
| 1998 | 86.6 | 60.3 | 8.1 | 18.1 | 0.3 | 5.6 | 2.7 | 1.2 | 0.5 | 25.3 | 61.8 | 7.5 | 0.5 | 0.0 | 38.1 | 254.8 | 78.7 | 333.5 |
| 1999 | 80.2 | 53.6 | 5.1 | 17.8 | 0.1 | 0.9 | 2.7 | 1.0 | 0.7 | 28.0 | 56.2 | 6.5 | 2.1 | 0.0 | 38.0 | 236.5 | 74.4 | 310.8 |

a Includes supplemental gaseous fuels.
b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 309. Transportation Energy Consumption Estimates, Selected Years 1960-1999, West Virginia

| Year | Coal a (Thousand Short Tons) | Natural Gas b (Billion Cubic Feet) | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Total | Ethanol c (Thousand Barrels) | Electricity a (Million Kilowatthours) | Net Energy | Electrical System Energy Losses d (Million Kilowatthours) | Total c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | | |
| 1960 | 137 | 8 | 119 | 1,742 | 169 | 2 | 199 | 11,340 | 3 | 13,573 | 0 | 0 | — | 0 | — |
| 1965 | 36 | 18 | 201 | 1,530 | 130 | 4 | 198 | 12,541 | 0 | 14,603 | 0 | 0 | — | 0 | — |
| 1970 | 17 | 8 | 78 | 2,485 | 290 | 10 | 185 | 15,660 | 5 | 18,713 | 0 | 0 | — | 0 | — |
| 1975 | 1 | 14 | 58 | 3,589 | 242 | 14 | 239 | 19,176 | 0 | 23,318 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 13 | 65 | 4,846 | 353 | 14 | 250 | 19,199 | 0 | 24,728 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 18 | 39 | 6,386 | 235 | 22 | 228 | 17,977 | (s) | 24,886 | e 0 | 0 | — | 0 | — |
| 1990 | 0 | 9 | 36 | 5,706 | 273 | 19 | 256 | 19,063 | 0 | 25,354 | R 0 | 0 | — | 0 | — |
| 1991 | 0 | 8 | 33 | 5,653 | 237 | 17 | 229 | 18,821 | 0 | 24,990 | R 0 | 0 | — | 0 | — |
| 1992 | 0 | 17 | 0 | 6,172 | 271 | 21 | 234 | 19,392 | 0 | 26,090 | R 111 | 0 | — | 0 | — |
| 1993 | 0 | 21 | 26 | 6,667 | 257 | 21 | 238 | 19,457 | 0 | 26,666 | R 65 | 0 | — | 0 | — |
| 1994 | 0 | 30 | 26 | 6,697 | 225 | 26 | 249 | 19,759 | 0 | 26,982 | R 48 | 0 | — | 0 | — |
| 1995 | 0 | 26 | 27 | 6,973 | 174 | 12 | 244 | 20,678 | 0 | 28,108 | R 33 | 0 | — | 0 | — |
| 1996 | 0 | 32 | 32 | 4,970 | 170 | 10 | 237 | 18,691 | 4 | 24,114 | R 5 | 0 | — | 0 | — |
| 1997 | 0 | 32 | 22 | 6,698 | 172 | R (s) | 250 | 19,533 | 0 | R 26,676 | R 5 | 0 | — | 0 | — |
| 1998 | 0 | 31 | 30 | 8,412 | 175 | (s) | 262 | 19,479 | 0 | 28,358 | 1 | 0 | — | 0 | — |
| 1999 | 0 | 30 | 22 | 8,049 | 184 | 1 | 265 | 19,284 | 0 | 27,806 | R (s) | 0 | — | 0 | — |
| | | | | | | Trillion Btu | | | | | | | | | |
| 1960 | 3.5 | 8.7 | 0.6 | 10.1 | 0.9 | (s) | 1.2 | 59.6 | (s) | 72.5 | 0.0 | 0.0 | 84.7 | 0.0 | 84.7 |
| 1965 | 0.9 | 19.3 | 1.0 | 8.9 | 0.7 | (s) | 1.2 | 65.9 | 0.0 | 77.7 | 0.0 | 0.0 | 97.9 | 0.0 | 97.9 |
| 1970 | 0.4 | 8.1 | 0.4 | 14.5 | 1.6 | (s) | 1.1 | 82.3 | (s) | 99.9 | 0.0 | 0.0 | 108.5 | 0.0 | 108.5 |
| 1975 | (s) | 14.6 | 0.3 | 20.9 | 1.3 | 0.1 | 1.5 | 100.7 | 0.0 | 124.8 | 0.0 | 0.0 | 139.4 | 0.0 | 139.4 |
| 1980 | 0.0 | 13.6 | 0.3 | 28.2 | 2.0 | 0.1 | 1.5 | 100.9 | 0.0 | 133.0 | 0.0 | 0.0 | 146.6 | 0.0 | 146.6 |
| 1985 | 0.0 | 19.0 | 0.2 | 37.2 | 1.3 | 0.1 | 1.4 | 94.4 | (s) | 134.6 | e 0.0 | 0.0 | e 153.5 | 0.0 | e 153.5 |
| 1990 | 0.0 | 9.3 | 0.2 | 33.2 | 1.5 | 0.1 | 1.6 | 100.1 | 0.0 | 136.7 | R 0.0 | 0.0 | 146.0 | 0.0 | 146.0 |
| 1991 | 0.0 | 8.9 | 0.2 | 32.9 | 1.3 | 0.1 | 1.4 | 98.9 | 0.0 | 134.7 | R 0.0 | 0.0 | 143.6 | 0.0 | 143.6 |
| 1992 | 0.0 | 17.8 | 0.0 | 36.0 | 1.5 | 0.1 | 1.4 | 101.9 | 0.0 | 140.8 | R 0.4 | 0.0 | 158.6 | 0.0 | 158.6 |
| 1993 | 0.0 | 22.6 | 0.1 | 38.8 | 1.4 | 0.1 | 1.4 | 102.2 | 0.0 | 144.1 | 0.2 | 0.0 | 166.7 | 0.0 | 166.7 |
| 1994 | 0.0 | 32.1 | 0.1 | 39.0 | 1.3 | 0.1 | 1.5 | R 103.3 | 0.0 | R 145.3 | 0.2 | 0.0 | R 177.4 | 0.0 | R 177.4 |
| 1995 | 0.0 | 28.0 | 0.1 | 40.6 | 1.0 | (s) | 1.5 | R 107.8 | 0.0 | R 151.1 | 0.1 | 0.0 | R 179.1 | 0.0 | R 179.1 |
| 1996 | 0.0 | 34.5 | 0.2 | 28.9 | 1.0 | (s) | 1.4 | R 97.5 | (s) | R 129.1 | (s) | 0.0 | R 163.5 | 0.0 | R 163.5 |
| 1997 | 0.0 | 34.5 | 0.1 | 39.0 | 1.0 | (s) | 1.5 | R 101.8 | 0.0 | R 143.4 | (s) | 0.0 | R 178.0 | 0.0 | R 178.0 |
| 1998 | 0.0 | 32.8 | 0.2 | 49.0 | 1.0 | (s) | 1.6 | 101.5 | 0.0 | 153.3 | (s) | 0.0 | 186.1 | 0.0 | 186.1 |
| 1999 | 0.0 | 31.5 | 0.1 | 46.9 | 1.0 | (s) | 1.6 | 100.5 | 0.0 | 150.1 | (s) | 0.0 | 181.6 | 0.0 | 181.6 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 310.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, West Virginia**

| Year | Coal | Natural Gas [a] | Petroleum | | | | Nuclear Electric Power | Hydroelectric Power [e] | Wood and Waste | Geothermal Energy | Other [b,f] | Total [g] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Heavy Oil [b,c] | Light Oil [b,d] | Petroleum Coke [b] | Total | | | | | | |
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | |
| 1960 | 5,879 | 1 | 33 | (s) | 0 | 33 | 0 | 398 | 0 | 0 | 0 | — |
| 1965 | 8,025 | 1 | 61 | (s) | 0 | 62 | 0 | 336 | 0 | 0 | 0 | — |
| 1970 | 14,889 | 1 | 430 | 3 | 0 | 433 | 0 | 437 | (s) | 0 | 0 | — |
| 1975 | 25,805 | (s) | 708 | 14 | 0 | 722 | 0 | 467 | 0 | 0 | 0 | — |
| 1980 | 28,499 | (s) | 0 | 683 | 0 | 683 | 0 | 424 | 0 | 0 | 0 | — |
| 1985 | 31,367 | (s) | 0 | 369 | 0 | 369 | 0 | 368 | 0 | 0 | 0 | — |
| 1990 | 29,873 | (s) | 0 | 368 | 0 | 368 | 0 | 435 | 0 | 0 | 0 | — |
| 1991 | 27,557 | (s) | 0 | 340 | 0 | 340 | 0 | 356 | 0 | 0 | 0 | — |
| 1992 | 28,050 | (s) | 0 | 307 | 0 | 307 | 0 | 423 | 0 | 0 | 0 | — |
| 1993 | 27,782 | (s) | 0 | 357 | 0 | 357 | 0 | 362 | 0 | 0 | 0 | — |
| 1994 | 30,318 | (s) | 0 | 423 | 0 | 423 | 0 | 363 | 0 | 0 | 0 | — |
| 1995 | 30,657 | (s) | 0 | 338 | 0 | 338 | 0 | 394 | 0 | 0 | 0 | — |
| 1996 | 32,774 | (s) | 0 | 353 | 0 | 353 | 0 | 497 | 0 | 0 | 0 | — |
| 1997 | 34,487 | (s) | 0 | 292 | 0 | 292 | 0 | 377 | 0 | 0 | 0 | — |
| 1998 | 35,132 | (s) | 0 | 324 | 0 | 324 | 0 | 361 | 0 | 0 | 0 | — |
| 1999 | 36,093 | (s) | 0 | 321 | 0 | 321 | 0 | 303 | 0 | 0 | 0 | — |
| | | | | | | **Trillion Btu** | | | | | | |
| 1960 | 140.6 | 1.0 | 0.2 | (s) | 0.0 | 0.2 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 | 146.0 |
| 1965 | 190.5 | 1.0 | 0.4 | (s) | 0.0 | 0.4 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 | 195.4 |
| 1970 | 347.2 | 0.7 | 2.7 | (s) | 0.0 | 2.7 | 0.0 | 4.6 | (s) | 0.0 | 0.0 | 355.2 |
| 1975 | 599.2 | 0.2 | 4.4 | 0.1 | 0.0 | 4.5 | 0.0 | 4.9 | 0.0 | 0.0 | 0.0 | 608.8 |
| 1980 | 691.7 | 0.1 | 0.0 | 4.0 | 0.0 | 4.0 | 0.0 | 4.4 | 0.0 | 0.0 | 0.0 | 700.1 |
| 1985 | 778.7 | 0.1 | 0.0 | 2.1 | 0.0 | 2.1 | 0.0 | 3.8 | 0.0 | 0.0 | 0.0 | 784.9 |
| 1990 | 743.9 | 0.1 | 0.0 | 2.1 | 0.0 | 2.1 | 0.0 | 4.5 | 0.0 | 0.0 | 0.0 | 750.7 |
| 1991 | 689.2 | 0.1 | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 3.7 | 0.0 | 0.0 | 0.0 | 695.1 |
| 1992 | 702.6 | 0.2 | 0.0 | 1.8 | 0.0 | 1.8 | 0.0 | 4.4 | 0.0 | 0.0 | 0.0 | 709.0 |
| 1993 | 694.0 | 0.1 | 0.0 | 2.1 | 0.0 | 2.1 | 0.0 | 3.7 | 0.0 | 0.0 | 0.0 | 699.9 |
| 1994 | 756.0 | 0.2 | 0.0 | 2.5 | 0.0 | 2.5 | 0.0 | 3.7 | 0.0 | 0.0 | 0.0 | 762.5 |
| 1995 | 761.4 | 0.4 | 0.0 | 2.0 | 0.0 | 2.0 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 767.8 |
| 1996 | 811.4 | 0.2 | 0.0 | 2.1 | 0.0 | 2.1 | 0.0 | 5.1 | 0.0 | 0.0 | 0.0 | 818.8 |
| 1997 | 855.1 | 0.2 | 0.0 | 1.7 | 0.0 | 1.7 | 0.0 | 3.9 | 0.0 | 0.0 | 0.0 | 860.9 |
| 1998 | 864.6 | 0.4 | 0.0 | 1.9 | 0.0 | 1.9 | 0.0 | 3.7 | 0.0 | 0.0 | 0.0 | 870.7 |
| 1999 | 892.3 | 0.4 | 0.0 | 1.9 | 0.0 | 1.9 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 897.7 |

[a]  Includes supplemental gaseous fuels.
[b]  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
[c]  Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
[d]  Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
[e]  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

[f]  "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
[g]  If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
  Note:  Totals may not equal sum of components due to independent rounding.
  Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

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## Table 311. Energy Consumption Estimates by Source, Selected Years 1960-1999, Wisconsin

| Year | Coal a | Natural Gas b | Asphalt & Road Oil a | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | Kerosene a | LPG a | Lubricants a | Motor Gasoline a | Residual Fuel a | Other a,c | Total | Nuclear Electric Power | Hydroelectric Power d | Wood and Waste | Other a,e | Net Interstate Flow of Electricity/Losses f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | | | Million kWh | | Wood and Waste | | Million kWh | |
| **Thousand Barrels** | | | | | | | | | | | | | | | | | | | |
| 1960 | 12,737 | 91 | 2,847 | 427 | 21,750 | 245 | 2,964 | 4,258 | 872 | 33,125 | 4,394 | 530 | R 71,412 | 0 | 2,399 | — | — | -185 | — |
| 1965 | 14,528 | 200 | 2,806 | 636 | 23,508 | 629 | 1,249 | 5,246 | 898 | 36,295 | 3,209 | R 1,240 | R 75,716 | 0 | 2,131 | — | — | 1,343 | — |
| 1970 | 16,899 | 338 | 4,671 | 332 | 25,841 | 1,603 | 3,002 | 7,679 | 992 | 45,483 | 2,936 | R 1,539 | R 94,078 | 157 | 1,904 | — | — | -1,922 | — |
| 1975 | 12,733 | 365 | 3,019 | 173 | 26,561 | 2,206 | 974 | 8,448 | 923 | 51,548 | 2,106 | R 1,979 | R 97,936 | 10,293 | 2,037 | — | — | -1,338 | — |
| 1980 | 15,644 | 352 | 3,016 | 124 | 22,495 | 2,397 | 222 | 6,036 | 1,019 | 49,606 | 1,772 | R 2,051 | R 88,738 | 9,911 | 2,115 | — | — | 4,498 | — |
| 1985 | 18,034 | 308 | 1,690 | 102 | 22,605 | 1,663 | 234 | 5,377 | 927 | 46,557 | 402 | R 2,371 | R 81,929 | 10,979 | 2,546 | — | — | 18,817 | — |
| 1990 | 20,097 | 309 | 3,685 | 122 | 23,051 | 1,424 | 48 | 6,664 | 1,044 | 48,989 | 1,125 | R 2,099 | R 88,249 | 11,226 | R h 2,020 | — | — | R 12,319 | — |
| 1991 | 20,659 | 332 | 3,332 | 105 | 23,013 | 1,352 | 49 | 8,471 | 934 | 49,898 | 851 | R 2,828 | R 90,832 | 10,991 | R 2,524 | — | — | R 12,804 | — |
| 1992 | 20,071 | 332 | 3,105 | 121 | 22,753 | 1,721 | 51 | 7,780 | 952 | 50,285 | 854 | R 3,138 | R 90,760 | 11,207 | R 2,386 | — | — | R 12,667 | — |
| 1993 | 20,897 | 348 | 3,253 | 119 | 24,475 | 1,912 | 76 | 8,626 | 969 | 51,634 | 1,264 | R 3,173 | R 95,502 | 11,465 | R 2,471 | — | — | R 14,979 | — |
| 1994 | 21,731 | 356 | 3,521 | 285 | 26,029 | 1,975 | 58 | 8,957 | 1,013 | 53,048 | 1,287 | R 3,188 | R 99,361 | 11,516 | R 2,220 | — | — | R 16,207 | — |
| 1995 | 23,066 | 380 | 4,154 | 374 | 24,949 | 2,044 | 59 | 8,753 | 996 | 55,053 | 842 | R 3,017 | R 100,240 | 10,970 | R 2,371 | — | — | R 18,989 | — |
| 1996 | 24,020 | 403 | 4,126 | 367 | 25,534 | 1,530 | 73 | R 11,139 | 966 | 56,313 | 1,037 | R 13,418 | R 114,503 | 10,121 | R 2,805 | — | — | R 18,041 | — |
| 1997 | 25,491 | 401 | 5,155 | 486 | 26,131 | 1,949 | 67 | R 9,935 | 1,021 | 55,696 | 1,087 | R 14,518 | R 116,045 | 3,916 | R 3,032 | — | — | R 27,550 | — |
| 1998 | 24,720 | 360 | 6,012 | 454 | 25,737 | 1,864 | 65 | 8,461 | 1,069 | 58,740 | 980 | 14,565 | 117,946 | 9,397 | 2,286 | — | — | 22,080 | — |
| 1999 | 25,262 | 374 | 6,192 | 134 | 28,290 | 3,407 | 117 | 11,009 | 1,080 | 58,976 | 1,212 | 14,755 | 125,170 | 11,495 | 2,238 | — | — | 14,370 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 304.7 | 93.8 | 18.9 | 2.2 | 126.7 | 1.3 | 16.8 | 17.1 | 5.3 | 174.0 | 27.6 | 3.1 | 393.0 | 0.0 | 25.8 | 39.2 | 0.0 | -0.6 | 855.8 |
| 1965 | 347.9 | 204.1 | 18.6 | 3.2 | 136.9 | 3.5 | 7.1 | 21.0 | 5.4 | 190.7 | 20.2 | 6.9 | R 413.5 | 0.0 | 22.3 | 39.4 | 0.0 | 4.6 | R 1,031.8 |
| 1970 | 381.6 | 344.2 | 31.0 | 1.7 | 150.5 | 9.0 | 17.0 | 29.0 | 6.0 | 238.9 | 18.5 | 8.8 | 510.5 | 1.7 | 20.0 | 38.3 | 0.0 | -6.6 | 1,289.8 |
| 1975 | 272.0 | 372.1 | 20.0 | 0.9 | 154.7 | 12.5 | 5.5 | 31.4 | 5.6 | 270.8 | 13.2 | R 11.2 | 525.8 | 113.4 | 21.2 | 44.9 | 0.0 | -4.6 | 1,344.8 |
| 1980 | 327.3 | 354.7 | 20.0 | 0.6 | 131.0 | 13.5 | 1.3 | 22.2 | 6.2 | 260.6 | 11.1 | R 11.5 | R 478.0 | 108.1 | 22.0 | R 163.8 | 0.0 | 15.3 | R 1,469.2 |
| 1985 | 360.7 | 311.4 | 11.2 | 0.5 | 131.7 | 9.3 | 1.3 | 19.4 | 5.6 | 244.6 | 2.5 | R 13.1 | 439.3 | 118.7 | 26.6 | R 188.6 | (s) | 64.2 | 1,509.5 |
| 1990 | 397.1 | 310.9 | 24.5 | 0.6 | 134.3 | 8.0 | 0.3 | 24.2 | 6.3 | 257.3 | 7.1 | 11.7 | 474.2 | 119.9 | R h 21.0 | R 101.2 | h 0.3 | 42.0 | R h 1,466.6 |
| 1991 | 407.9 | 333.8 | 22.1 | 0.5 | 134.1 | 7.6 | 0.3 | 30.6 | 5.7 | 262.1 | 5.3 | R 15.6 | R 483.9 | 118.0 | R 26.3 | R 87.4 | 0.3 | R 43.7 | R 1,501.4 |
| 1992 | 399.2 | 334.6 | 20.6 | 0.6 | 132.5 | 9.7 | 0.3 | 28.2 | 5.8 | 264.1 | 5.4 | 17.3 | R 484.5 | 119.7 | R 24.7 | R 88.0 | 0.3 | R 43.2 | R 1,494.2 |
| 1993 | 405.9 | 351.8 | 21.6 | 0.6 | 142.6 | 10.8 | 0.4 | 31.1 | 5.9 | 271.2 | 7.9 | R 17.5 | R 509.6 | 122.5 | 25.5 | R 81.8 | 0.3 | R 51.1 | R 1,548.5 |
| 1994 | 426.0 | 359.9 | 23.4 | 1.4 | 151.6 | 11.1 | 0.3 | 32.6 | 6.1 | R 277.4 | 8.1 | R 17.6 | R 529.8 | 122.9 | R 22.9 | R 86.3 | 0.3 | R 55.3 | R 1,603.4 |
| 1995 | 443.0 | 384.7 | 27.6 | 1.9 | 145.3 | 11.6 | 0.3 | 31.7 | 6.0 | R 287.1 | 5.3 | R 16.7 | R 533.5 | 116.9 | R 24.4 | R 96.1 | 0.3 | R 64.8 | R 1,663.6 |
| 1996 | 452.8 | 408.0 | 27.4 | 1.9 | 148.7 | 8.7 | 0.4 | R 40.2 | 5.9 | R 293.7 | 6.5 | R 72.4 | R 605.8 | 107.5 | R 29.0 | R 102.9 | 0.3 | R 61.6 | R 1,768.5 |
| 1997 | 488.4 | 405.0 | 34.2 | 2.5 | 152.2 | 11.1 | 0.4 | R 35.9 | 6.2 | R 290.3 | 6.8 | R 78.8 | R 618.4 | 41.6 | R 31.4 | R 113.5 | 0.3 | R 94.0 | R 1,796.1 |
| 1998 | 470.2 | 363.9 | 39.9 | 2.3 | 149.9 | 10.6 | 0.4 | 30.6 | 6.5 | 306.2 | 6.2 | 79.1 | 631.5 | 99.8 | 23.6 | 65.2 | 0.4 | 75.3 | 1,732.5 |
| 1999 | 471.6 | 378.5 | 41.1 | 0.7 | 164.8 | 19.3 | 0.7 | 39.8 | 6.5 | 307.3 | 7.6 | 79.7 | 667.5 | 122.1 | 23.2 | 96.8 | 0.4 | 49.0 | 1,810.5 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels.

c "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

d If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

e "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

f Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

g From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

h There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 312. Residential Energy Consumption Estimates, Selected Years 1960-1999, Wisconsin

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 964 | 47 | 11,206 | 1,227 | 2,675 | 15,107 | 974 | — | — | 5,298 | — | 13,178 | — |
| 1965 | 709 | 79 | 11,790 | 660 | 3,692 | 16,142 | 744 | — | — | 6,963 | — | 16,624 | — |
| 1970 | 453 | 105 | 11,721 | 1,608 | 5,606 | 18,935 | 595 | — | — | 9,825 | — | 23,810 | — |
| 1975 | 202 | 120 | 11,019 | 530 | 5,405 | 16,953 | 587 | — | — | 11,782 | — | 28,420 | — |
| 1980 | 18 | 123 | 8,155 | 124 | 2,983 | 11,261 | R 1,029 | — | — | 13,597 | — | 33,063 | — |
| 1985 | 9 | 116 | 6,423 | 195 | 3,045 | 9,663 | 1,033 | — | — | 16,307 | — | 38,312 | — |
| 1990 | 2 | 114 | 4,634 | 29 | 4,187 | 8,851 | 734 | — | — | 16,385 | — | R 35,844 | — |
| 1991 | 4 | 124 | 5,128 | 30 | 5,241 | 10,399 | 773 | — | — | 17,349 | — | R 37,717 | — |
| 1992 | 2 | 123 | 4,753 | 29 | 4,950 | 9,732 | 813 | — | — | 16,615 | — | R 35,435 | — |
| 1993 | 13 | 130 | 5,132 | 47 | 5,575 | 10,754 | R 421 | — | — | 17,373 | — | R 36,695 | — |
| 1994 | 18 | 128 | 4,799 | 34 | 5,479 | 10,311 | R 413 | — | — | 17,660 | — | R 36,855 | — |
| 1995 | 45 | 136 | 3,955 | 34 | 5,560 | 9,549 | R 458 | — | — | 18,635 | — | R 38,853 | — |
| 1996 | 37 | 148 | 3,922 | 41 | R 7,463 | R 11,426 | R 457 | — | — | 18,685 | — | R 38,939 | — |
| 1997 | 57 | 136 | 3,431 | 44 | R 6,596 | R 10,071 | R 275 | — | — | 18,510 | — | R 38,504 | — |
| 1998 | 45 | 116 | 2,759 | 39 | 5,926 | 8,725 | 243 | — | — | 19,087 | — | 39,431 | — |
| 1999 | 55 | 128 | 2,951 | 61 | 6,995 | 10,006 | 260 | — | — | 19,502 | — | 38,210 | — |
| **Trillion Btu** | | | | | | | | | | | | | |
| 1960 | 21.1 | 49.1 | 65.3 | 7.0 | 10.7 | 83.0 | 19.5 | 0.0 | 0.0 | 18.1 | 190.7 | 45.0 | 235.7 |
| 1965 | 15.5 | 80.9 | 68.7 | 3.7 | 14.8 | 87.2 | 14.9 | 0.0 | 0.0 | 23.8 | 222.2 | 56.7 | 278.9 |
| 1970 | 9.5 | 107.2 | 68.3 | 9.1 | 21.2 | 98.6 | 11.9 | 0.0 | 0.0 | 33.5 | 260.8 | 81.2 | 342.0 |
| 1975 | 3.8 | 122.4 | 64.2 | 3.0 | 20.1 | 87.3 | 11.7 | 0.0 | 0.0 | 40.2 | 265.5 | 97.0 | 362.4 |
| 1980 | 0.4 | 124.2 | 47.5 | 0.7 | 11.0 | 59.2 | R 20.6 | 0.0 | 0.0 | 46.4 | 250.8 | 112.8 | 363.6 |
| 1985 | 0.2 | 117.4 | 37.4 | 1.1 | 11.0 | 49.5 | 20.7 | 0.0 | 0.0 | 55.6 | 243.4 | 130.7 | 374.1 |
| 1990 | 0.1 | 114.7 | 27.0 | 0.2 | 15.2 | 42.3 | 14.7 | e 0.1 | e 0.2 | 55.9 | e 228.0 | 122.3 | R e 350.3 |
| 1991 | 0.1 | 124.9 | 29.9 | 0.2 | 18.9 | 49.0 | 15.5 | 0.1 | 0.2 | 59.2 | R 249.0 | R 128.7 | R 377.7 |
| 1992 | (s) | 124.5 | 27.7 | 0.2 | 17.9 | 45.8 | 16.3 | 0.1 | 0.2 | 56.7 | 243.6 | R 120.9 | R 364.5 |
| 1993 | 0.3 | 131.6 | 29.9 | 0.3 | 20.1 | 50.3 | 8.4 | 0.1 | 0.2 | 59.3 | R 250.2 | 125.2 | 375.4 |
| 1994 | 0.5 | 129.7 | 28.0 | 0.2 | 19.9 | 48.1 | R 8.3 | 0.1 | 0.2 | 60.3 | R 247.1 | R 125.8 | R 372.8 |
| 1995 | 1.1 | 137.5 | 23.0 | 0.2 | 20.1 | 43.4 | R 9.2 | 0.1 | 0.2 | 63.6 | 255.1 | R 132.6 | R 387.7 |
| 1996 | 0.9 | 149.8 | 22.8 | 0.2 | R 27.0 | R 50.0 | 9.1 | 0.1 | 0.2 | 63.8 | R 274.0 | R 132.9 | R 406.9 |
| 1997 | 1.4 | 137.3 | 20.0 | 0.3 | R 23.8 | R 44.1 | R 5.5 | 0.1 | 0.2 | 63.2 | R 251.8 | R 131.4 | R 383.2 |
| 1998 | 1.1 | 117.2 | 16.1 | 0.2 | 21.4 | 37.7 | 4.9 | 0.1 | 0.2 | 65.1 | 226.4 | 134.5 | 360.9 |
| 1999 | 1.4 | 129.1 | 17.2 | 0.3 | 25.3 | 42.8 | 5.2 | 0.1 | 0.2 | 66.5 | 245.4 | 130.4 | 375.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 313. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Wisconsin

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand Barrels | | | | | | | | |
| 1960 | 1,785 | 11 | 1,817 | 101 | 472 | 295 | 556 | 3,239 | 18 | — | 3,059 | — | 7,608 | — |
| 1965 | 1,314 | 24 | 1,911 | 54 | 652 | 309 | 407 | 3,332 | 14 | — | 4,160 | — | 9,933 | — |
| 1970 | 840 | 55 | 1,900 | 132 | 989 | 56 | 244 | 3,321 | 11 | — | 6,180 | — | 14,975 | — |
| 1975 | 375 | 67 | 1,786 | 43 | 954 | 52 | 168 | 3,004 | 11 | — | 8,342 | — | 20,121 | — |
| 1980 | 33 | 77 | 1,682 | 57 | 526 | 76 | 30 | 2,371 | 25 | — | 10,019 | — | 24,363 | — |
| 1985 | 17 | 73 | 3,172 | 18 | 537 | 283 | 106 | 4,117 | R 28 | — | 12,087 | — | 28,398 | — |
| 1990 | 3 | 66 | 1,832 | 9 | 739 | 320 | 220 | 3,118 | R 47 | — | 13,408 | — | R 29,331 | — |
| 1991 | 6 | 72 | 1,960 | 9 | 925 | 247 | 179 | 3,319 | R 49 | — | 13,997 | — | R 30,429 | — |
| 1992 | 3 | 71 | 1,551 | 10 | 873 | 212 | 231 | 2,878 | R 53 | — | 13,929 | — | R 29,707 | — |
| 1993 | 24 | 77 | 1,547 | 11 | 984 | 50 | 197 | 2,789 | 34 | — | 14,373 | — | R 30,357 | — |
| 1994 | 33 | 79 | 1,306 | 8 | 967 | 89 | 167 | 2,536 | 35 | — | 15,037 | — | R 31,382 | — |
| 1995 | 84 | 85 | 1,062 | 10 | 981 | 51 | 110 | 2,214 | 35 | — | 15,642 | — | R 32,612 | — |
| 1996 | 68 | 94 | 991 | 12 | R 1,317 | 80 | 133 | R 2,533 | R 37 | — | 16,188 | — | R 33,736 | — |
| 1997 | 105 | 89 | 1,332 | 7 | R 1,164 | 51 | 135 | R 2,688 | R 30 | — | 16,480 | — | R 34,280 | — |
| 1998 | 83 | 81 | 1,364 | 10 | 1,046 | 52 | 249 | 2,721 | 30 | — | 16,934 | — | 34,982 | — |
| 1999 | 102 | 82 | 1,318 | 7 | 1,234 | 85 | 201 | 2,845 | 36 | — | 18,381 | — | 36,014 | — |
| | | | | | | **Trillion Btu** | | | | | | | | |
| 1960 | 39.1 | 11.3 | 10.6 | 0.6 | 1.9 | 1.5 | 3.5 | 18.1 | 0.4 | 0.0 | 10.4 | 79.3 | 26.0 | 105.2 |
| 1965 | 28.6 | 24.0 | 11.1 | 0.3 | 2.6 | 1.6 | 2.6 | 18.2 | 0.3 | 0.0 | 14.2 | 85.3 | 33.9 | 119.2 |
| 1970 | 17.7 | 55.6 | 11.1 | 0.7 | 3.7 | 0.3 | 1.5 | 17.4 | 0.2 | 0.0 | 21.1 | 112.0 | 51.1 | 163.1 |
| 1975 | 7.1 | 68.9 | 10.4 | 0.2 | 3.5 | 0.3 | 1.1 | 15.5 | 0.2 | 0.0 | 28.5 | 120.2 | 68.7 | 188.8 |
| 1980 | 0.8 | 77.7 | 9.8 | 0.3 | 1.9 | 0.4 | 0.2 | 12.6 | 0.5 | 0.0 | 34.2 | 125.8 | 83.1 | 209.0 |
| 1985 | 0.4 | 73.5 | 18.5 | 0.1 | 1.9 | 1.5 | 0.7 | 22.7 | R 0.6 | 0.0 | 41.2 | R 138.4 | 96.9 | R 235.3 |
| 1990 | 0.1 | 66.7 | 10.7 | (s) | 2.7 | 1.7 | 1.4 | 16.5 | R 0.9 | e 0.0 | 45.7 | R e 129.9 | 100.1 | R e 230.0 |
| 1991 | 0.2 | 72.0 | 11.4 | (s) | 3.3 | 1.3 | 1.1 | 17.2 | R 1.0 | 0.0 | 47.8 | R 138.1 | R 103.8 | R 242.0 |
| 1992 | 0.1 | 72.0 | 9.0 | 0.1 | 3.2 | 1.1 | 1.5 | 14.8 | R 1.1 | 0.0 | 47.5 | R 135.4 | R 101.4 | R 236.8 |
| 1993 | 0.6 | 77.9 | 9.0 | 0.1 | 3.5 | 0.3 | 1.2 | 14.1 | 0.7 | 0.0 | 49.0 | 142.4 | 103.6 | R 245.9 |
| 1994 | 0.8 | 79.6 | 7.6 | (s) | 3.5 | 0.5 | 1.0 | 12.7 | 0.7 | 0.0 | 51.3 | 145.1 | 107.1 | 252.1 |
| 1995 | 2.1 | 85.8 | 6.2 | 0.1 | 3.6 | 0.3 | 0.7 | 10.8 | 0.7 | 0.0 | 53.4 | 152.7 | R 111.3 | R 264.0 |
| 1996 | 1.7 | 95.0 | 5.8 | 0.1 | R 4.8 | 0.4 | 0.8 | R 11.9 | R 0.7 | 0.0 | 55.2 | R 164.6 | R 115.1 | R 279.7 |
| 1997 | 2.6 | 89.7 | 7.8 | (s) | 4.2 | 0.3 | 0.8 | 13.1 | 0.6 | 0.0 | 56.2 | R 162.3 | R 117.0 | R 279.3 |
| 1998 | 2.1 | 82.2 | 7.9 | 0.1 | 3.8 | 0.3 | 1.6 | 13.6 | 0.6 | 0.0 | 57.8 | 156.3 | 119.4 | 275.6 |
| 1999 | 2.5 | 82.7 | 7.7 | (s) | 4.5 | 0.4 | 1.3 | 13.9 | 0.7 | 0.0 | 62.7 | 162.6 | 122.9 | 285.4 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 314. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Wisconsin

### Thousand Barrels (petroleum)

| Year | Coal (Thousand Short Tons) | Natural Gas a (Billion Cubic Feet) | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b (Million kWh) | Wood and Waste | Other b,d | Electricity b (Million kWh) | Net Energy | Electrical System Energy Losses e (Million kWh) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 4,710 | 30 | 2,847 | 6,950 | 1,636 | 1,088 | 345 | 2,774 | 3,416 | 530 | R 19,585 | 338 | — | — | 4,230 | — | 10,520 | — |
| 1965 | 5,789 | 82 | 2,806 | 7,654 | 535 | 866 | 405 | 2,541 | 2,371 | R 1,240 | R 18,419 | 306 | — | — | 6,153 | — | 14,691 | — |
| 1970 | 5,147 | 141 | 4,671 | 7,917 | 1,262 | 1,009 | 440 | 2,471 | 1,554 | R 1,299 | R 20,623 | 306 | — | — | 8,570 | — | 20,767 | — |
| 1975 | 2,439 | 152 | 3,019 | 7,150 | 401 | 1,996 | 426 | 2,027 | 1,105 | R 1,942 | R 18,065 | 318 | — | — | 10,823 | — | 26,106 | — |
| 1980 | 2,364 | 130 | 3,016 | 3,589 | 41 | 2,444 | 497 | 1,633 | 1,439 | R 2,043 | R 14,701 | 258 | — | — | 13,290 | — | 32,317 | — |
| 1985 | 2,132 | 115 | 1,690 | 3,074 | 21 | 1,611 | 452 | 1,137 | 158 | R 2,348 | R 10,492 | 258 | — | — | 17,195 | — | 40,398 | — |
| 1990 | 1,960 | 122 | 3,685 | 3,596 | 11 | 1,619 | 508 | 780 | 903 | R 2,099 | R 13,201 | R f 229 | — | — | 19,405 | — | R 42,450 | — |
| 1991 | 1,878 | 129 | 3,332 | 4,103 | 10 | 2,166 | 455 | 997 | 672 | R 2,828 | R 14,562 | R 254 | — | — | 19,686 | — | R 42,795 | — |
| 1992 | 1,835 | 130 | 3,105 | 4,181 | 12 | 1,836 | 464 | 816 | 614 | R 3,096 | R 14,124 | R 263 | — | — | 20,382 | — | R 43,469 | — |
| 1993 | 1,811 | 134 | 3,253 | 4,779 | 19 | 1,916 | 472 | 825 | 1,056 | R 3,063 | R 15,383 | R 280 | — | — | 21,410 | — | R 45,222 | — |
| 1994 | 1,984 | 135 | 3,521 | 5,040 | 16 | 2,217 | 494 | 914 | 1,109 | R 3,027 | R 16,337 | R 306 | — | — | 22,714 | — | R 47,403 | — |
| 1995 | 1,949 | 146 | 4,154 | 4,443 | 15 | 2,089 | 485 | 934 | 710 | R 2,873 | R 15,703 | R 274 | — | — | 23,690 | — | R 49,392 | — |
| 1996 | 1,678 | 150 | 4,126 | 4,787 | 20 | R 2,253 | 471 | 921 | 872 | R 13,285 | R 26,734 | R 289 | — | — | 23,871 | — | R 49,747 | — |
| 1997 | 1,761 | 156 | 5,155 | 4,888 | 15 | R 2,077 | 497 | 914 | 940 | R 14,340 | R 28,827 | R 297 | — | — | 25,103 | — | R 52,218 | — |
| 1998 | 1,689 | 142 | 6,012 | 4,521 | 16 | 1,312 | 521 | 669 | 717 | 14,383 | 28,151 | 214 | — | — | 26,040 | — | 53,794 | — |
| 1999 | 1,655 | 146 | 6,192 | 6,339 | 49 | 2,727 | 526 | 753 | 1,003 | 14,554 | 32,144 | 251 | — | — | 25,665 | — | 50,285 | — |

### Trillion Btu

| Year | Coal | Natural Gas a | Asphalt and Road Oil b | Distillate Fuel b | Kerosene b | LPG b | Lubricants b | Motor Gasoline | Residual Fuel b | Other b,c | Total | Hydroelectric Power b | Wood and Waste | Other b,d | Electricity b | Net Energy | Electrical System Energy Losses e | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 116.6 | 30.8 | 18.9 | 40.5 | 9.3 | 4.4 | 2.1 | 14.6 | 21.5 | 3.1 | 114.2 | 3.6 | 19.3 | 0.0 | 14.4 | 299.0 | 35.9 | 334.9 |
| 1965 | 142.4 | 83.0 | 18.6 | 44.6 | 3.0 | 3.5 | 2.5 | 13.3 | 14.9 | 6.9 | R 107.3 | 3.2 | 24.2 | 0.0 | 21.0 | R 381.1 | 50.1 | 431.3 |
| 1970 | 119.6 | 143.6 | 31.0 | 46.1 | 7.2 | 3.8 | 2.7 | 13.0 | 9.8 | R 7.3 | R 120.8 | 3.2 | 26.1 | 0.0 | 29.2 | 442.6 | 70.9 | R 513.4 |
| 1975 | 54.7 | 155.5 | 20.0 | 41.6 | 2.3 | 7.4 | 2.6 | 10.6 | 6.9 | R 11.0 | 102.5 | 3.3 | 32.9 | 0.0 | 36.9 | 385.9 | 89.1 | 475.0 |
| 1980 | 54.6 | 130.6 | 20.0 | 20.9 | 0.2 | 9.0 | 3.0 | 8.6 | 9.0 | R 11.4 | R 82.2 | 2.7 | R 142.1 | 0.0 | 45.3 | R 457.4 | 110.3 | R 567.7 |
| 1985 | 49.7 | 116.4 | 11.2 | 17.9 | 0.1 | 5.8 | 2.7 | 6.0 | 1.0 | R 12.9 | R 57.7 | 2.7 | R 166.5 | 0.0 | 58.7 | R 451.7 | 137.8 | R 589.5 |
| 1990 | 47.3 | 122.6 | 24.5 | 20.9 | 0.1 | 5.9 | 3.1 | 4.1 | 5.7 | 11.7 | 75.9 | R f 2.4 | R 83.8 | f 0.0 | 66.2 | R f 398.2 | 144.8 | R f 543.0 |
| 1991 | 45.6 | 129.7 | 22.1 | 23.9 | 0.1 | 7.8 | 2.8 | 5.2 | 4.2 | R 15.6 | 81.8 | R 2.7 | R 69.3 | 0.0 | 67.2 | R 396.2 | R 146.0 | R 542.3 |
| 1992 | 44.5 | 131.4 | 20.6 | 24.4 | 0.1 | 6.7 | 2.8 | 4.3 | 3.9 | R 17.0 | 79.7 | 2.7 | R 69.2 | 0.0 | 69.5 | R 397.1 | R 148.3 | R 545.4 |
| 1993 | 43.4 | 135.5 | 21.6 | 27.8 | 0.1 | 6.9 | 2.9 | 4.3 | 6.6 | 16.9 | R 87.1 | 2.9 | R 70.4 | 0.0 | 73.1 | R 412.5 | 154.3 | R 566.8 |
| 1994 | 47.9 | 136.7 | 23.4 | 29.4 | 0.1 | 8.1 | 3.0 | 4.8 | 7.0 | 16.7 | R 92.3 | 3.2 | R 74.6 | 0.0 | 77.5 | R 432.2 | 161.7 | 594.0 |
| 1995 | 47.2 | 147.7 | 27.6 | 25.9 | 0.1 | 7.6 | 2.9 | 4.9 | 4.5 | R 15.8 | R 89.2 | R 2.8 | R 83.3 | 0.0 | 80.8 | R 451.0 | R 168.5 | R 619.6 |
| 1996 | 40.1 | 151.5 | 27.4 | 27.9 | 0.1 | 8.1 | 2.9 | 4.8 | 5.5 | R 71.6 | R 148.2 | 3.0 | R 89.7 | 0.0 | 81.4 | R 513.9 | R 169.7 | R 683.6 |
| 1997 | 42.5 | 157.4 | 34.2 | 28.5 | 0.1 | R 7.5 | 3.0 | 4.8 | 5.9 | R 77.7 | R 161.7 | 3.1 | R 103.5 | 0.0 | 85.7 | R 553.9 | R 178.2 | R 732.0 |
| 1998 | 41.0 | 143.5 | 39.9 | 26.3 | 0.1 | 4.7 | 3.2 | 3.5 | 4.5 | 78.0 | 160.2 | 2.2 | 55.2 | 0.0 | 88.8 | 491.0 | 183.5 | 674.5 |
| 1999 | 40.2 | 148.2 | 41.1 | 36.9 | 0.3 | 9.9 | 3.2 | 3.9 | 6.3 | 78.4 | 180.0 | 2.6 | 87.3 | 0.0 | 87.6 | 545.9 | 171.6 | 717.4 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatthours. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 315.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, Wisconsin

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | | |
| 1960 | 83 | 1 | 427 | 1,773 | 245 | 23 | 527 | 30,056 | 378 | 33,430 | 0 | 0 | — | 0 | — |
| 1965 | 19 | 2 | 636 | 2,148 | 629 | 36 | 493 | 33,446 | 378 | 37,765 | 0 | 0 | — | 0 | — |
| 1970 | 8 | 7 | 332 | 4,179 | 1,603 | 74 | 552 | 42,956 | 6 | 49,703 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 5 | 173 | 6,064 | 2,169 | 93 | 497 | 49,469 | 285 | 58,751 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 8 | 124 | 8,570 | 2,397 | 84 | 523 | 47,897 | 235 | 59,829 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 3 | 102 | 9,685 | 1,663 | 184 | 476 | 45,136 | 138 | 57,383 | R e 28 | 0 | — | 0 | — |
| 1990 | 0 | 4 | 122 | 12,875 | 1,424 | 118 | 535 | 47,890 | 2 | 62,965 | R 196 | 0 | — | 0 | — |
| 1991 | 0 | 4 | 105 | 11,676 | 1,352 | 139 | 479 | 48,655 | (s) | 62,406 | R 489 | 0 | — | 0 | — |
| 1992 | 0 | 4 | 121 | 12,186 | 1,721 | 120 | 488 | 49,257 | 8 | 63,901 | R 425 | 0 | — | 0 | — |
| 1993 | 0 | 4 | 119 | 12,895 | 1,912 | 151 | 497 | 50,759 | 11 | 66,344 | R 356 | 0 | — | 0 | — |
| 1994 | 0 | 10 | 285 | 14,666 | 1,975 | 294 | 519 | 52,045 | 11 | 69,795 | R 392 | (s) | — | (s) | — |
| 1995 | 0 | 4 | 374 | 15,296 | 2,044 | 123 | 511 | 54,068 | 22 | 72,438 | R 861 | (s) | — | (s) | — |
| 1996 | 0 | 4 | 367 | 15,673 | 1,530 | R 106 | 495 | 55,313 | 32 | R 73,516 | R 1,362 | (s) | — | (s) | — |
| 1997 | 0 | 5 | 486 | 16,216 | 1,949 | R 99 | 523 | 54,731 | 12 | R 74,017 | R 1,594 | (s) | — | (s) | — |
| 1998 | 0 | 4 | 454 | 16,781 | 1,864 | 176 | 548 | 58,019 | 15 | 77,856 | 824 | (s) | — | (s) | — |
| 1999 | 0 | 4 | 134 | 17,342 | 3,407 | 52 | 554 | 58,138 | 8 | 79,633 | 697 | (s) | — | (s) | — |
| | | | Trillion Btu | | | | | | | | | | | | |
| 1960 | 2.0 | 0.6 | 2.2 | 10.3 | 1.3 | 0.1 | 3.2 | 157.9 | 2.4 | 177.4 | 0.0 | 0.0 | 180.0 | 0.0 | 180.0 |
| 1965 | 0.5 | 1.6 | 3.2 | 12.5 | 3.5 | 0.1 | 3.0 | 175.7 | 2.4 | 200.4 | 0.0 | 0.0 | 202.5 | 0.0 | 202.5 |
| 1970 | 0.2 | 6.7 | 1.7 | 24.3 | 9.0 | 0.3 | 3.3 | 225.7 | (s) | 264.4 | 0.0 | 0.0 | 271.3 | 0.0 | 271.3 |
| 1975 | (s) | 5.1 | 0.9 | 35.3 | 12.3 | 0.3 | 3.0 | 259.9 | 1.8 | 313.5 | 0.0 | 0.0 | 318.5 | 0.0 | 318.5 |
| 1980 | 0.0 | 8.3 | 0.6 | 49.9 | 13.5 | 0.3 | 3.2 | 251.6 | 1.5 | 320.6 | 0.0 | 0.0 | 328.9 | 0.0 | 328.9 |
| 1985 | 0.0 | 2.8 | 0.5 | 56.4 | 9.3 | 0.7 | 2.9 | 237.1 | 0.9 | 307.8 | R e 0.1 | 0.0 | e 310.6 | 0.0 | e 310.6 |
| 1990 | 0.0 | 4.4 | 0.6 | 75.0 | 8.0 | 0.4 | 3.2 | 251.6 | (s) | 338.9 | R 0.7 | 0.0 | 343.3 | 0.0 | 343.3 |
| 1991 | 0.0 | 4.5 | 0.5 | 68.0 | 7.6 | 0.5 | 2.9 | 255.6 | (s) | 335.1 | R 1.7 | 0.0 | 339.6 | 0.0 | 339.6 |
| 1992 | 0.0 | 4.0 | 0.6 | 71.0 | 9.7 | 0.4 | 3.0 | 258.7 | 0.1 | 343.5 | R 1.5 | 0.0 | 347.5 | 0.0 | 347.5 |
| 1993 | 0.0 | 3.7 | 0.6 | 75.1 | 10.8 | 0.5 | 3.0 | 266.6 | 0.1 | 356.7 | R 1.3 | 0.0 | 360.4 | 0.0 | 360.4 |
| 1994 | 0.0 | 10.0 | 1.4 | 85.4 | 11.1 | 1.1 | 3.2 | R 272.2 | 0.1 | R 374.5 | R 1.4 | (s) | R 384.5 | (s) | R 384.5 |
| 1995 | 0.0 | 4.3 | 1.9 | 89.1 | 11.6 | 0.4 | 3.1 | R 282.0 | 0.1 | R 388.2 | R 3.0 | (s) | R 392.5 | (s) | R 392.5 |
| 1996 | 0.0 | 4.3 | 1.9 | 91.3 | 8.7 | 0.4 | 3.0 | R 288.5 | 0.2 | R 393.9 | R 4.8 | (s) | R 398.2 | (s) | R 398.2 |
| 1997 | 0.0 | 4.7 | 2.5 | 94.5 | 11.1 | R 0.4 | 3.2 | R 285.3 | 0.1 | R 396.9 | R 5.6 | (s) | R 401.5 | (s) | R 401.5 |
| 1998 | 0.0 | 4.4 | 2.3 | 97.7 | 10.6 | 0.6 | 3.3 | 302.4 | 0.1 | 417.1 | 2.9 | (s) | 421.4 | (s) | 421.4 |
| 1999 | 0.0 | 4.2 | 0.7 | 101.0 | 19.3 | 0.2 | 3.4 | 303.0 | (s) | 427.6 | 2.5 | (s) | 431.8 | (s) | 431.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 316.  Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Wisconsin

| Year | Coal | Natural Gas a | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | Million Kilowatthours | | | | | Total g |
| 1960 | 5,195 | 2 | 45 | 5 | 0 | 50 | 0 | 2,061 | 0 | 0 | 0 | — |
| 1965 | 6,697 | 14 | 53 | 6 | 0 | 59 | 0 | 1,825 | 2 | 0 | 0 | — |
| 1970 | 10,450 | 31 | 1,132 | 124 | 240 | 1,497 | 157 | 1,597 | 8 | 0 | 0 | — |
| 1975 | 9,716 | 20 | 548 | 578 | 37 | 1,163 | 10,293 | 1,719 | 0 | 0 | 0 | — |
| 1980 | 13,229 | 14 | 68 | 499 | 9 | 576 | 9,911 | 1,857 | 62 | 0 | 0 | — |
| 1985 | 15,876 | 1 | 0 | 251 | 24 | 274 | 10,979 | 2,288 | 88 | 0 | (s) | — |
| 1990 | 18,133 | 2 | 0 | 113 | 0 | 113 | 11,226 | 1,791 | 173 | 0 | (s) | — |
| 1991 | 18,771 | 3 | 0 | 147 | 0 | 147 | 10,991 | R 2,270 | 157 | 0 | (s) | — |
| 1992 | 18,231 | 3 | 0 | 82 | 43 | 125 | 11,207 | R 2,123 | 150 | 0 | 0 | — |
| 1993 | 19,049 | 3 | 0 | 123 | 110 | 233 | 11,465 | 2,191 | 220 | 0 | 0 | — |
| 1994 | 19,696 | 4 | 0 | 220 | 161 | 380 | 11,516 | R 1,914 | 265 | 0 | 0 | — |
| 1995 | 20,987 | 9 | 0 | 194 | 144 | 337 | 10,970 | R 2,097 | 285 | 0 | 0 | — |
| 1996 | 22,236 | 7 | 0 | 161 | 133 | 293 | 10,121 | R 2,517 | 319 | 0 | 0 | — |
| 1997 | 23,568 | 16 | 0 | 263 | 178 | 441 | 3,916 | R 2,736 | 372 | 0 | 0 | — |
| 1998 | 22,903 | 16 | 0 | 312 | 181 | 493 | 9,397 | 2,071 | 441 | 0 | 0 | — |
| 1999 | 23,450 | 14 | 0 | 341 | 201 | 542 | 11,495 | 1,988 | 343 | 0 | 0 | — |
| **Trillion Btu** | | | | | | | | | | | | |
| 1960 | 125.8 | 2.1 | 0.3 | (s) | 0.0 | 0.3 | 0.0 | 22.2 | 0.0 | 0.0 | 0.0 | 150.4 |
| 1965 | 161.0 | 14.7 | 0.3 | (s) | 0.0 | 0.4 | 0.0 | 19.1 | (s) | 0.0 | 0.0 | 195.1 |
| 1970 | 234.6 | 31.2 | 7.1 | 0.7 | 1.4 | 9.3 | 1.7 | 16.8 | 0.1 | 0.0 | 0.0 | 293.6 |
| 1975 | 206.3 | 20.3 | 3.4 | 3.4 | 0.2 | 7.0 | 113.4 | 17.9 | 0.0 | 0.0 | 0.0 | 364.8 |
| 1980 | 271.5 | 13.8 | 0.4 | 2.9 | 0.1 | 3.4 | 108.1 | 19.3 | 0.6 | 0.0 | 0.0 | 416.8 |
| 1985 | 310.3 | 1.3 | 0.0 | 1.5 | 0.1 | 1.6 | 118.7 | 23.9 | 0.9 | 0.0 | (s) | 456.8 |
| 1990 | 349.7 | 2.4 | 0.0 | 0.7 | 0.0 | 0.7 | 119.9 | 18.6 | 1.8 | 0.0 | (s) | 493.0 |
| 1991 | 362.0 | 2.7 | 0.0 | 0.9 | 0.0 | 0.9 | 118.0 | R 23.7 | 1.6 | 0.0 | (s) | R 509.0 |
| 1992 | 354.6 | 2.6 | 0.0 | 0.5 | 0.3 | 0.7 | 119.7 | R 22.0 | 1.5 | 0.0 | 0.0 | R 501.1 |
| 1993 | 361.5 | 3.1 | 0.0 | 0.7 | 0.7 | 1.4 | 122.5 | 22.6 | 2.3 | 0.0 | 0.0 | 513.3 |
| 1994 | 376.8 | 3.9 | 0.0 | 1.3 | 1.0 | 2.2 | 122.9 | R 19.7 | 2.7 | 0.0 | 0.0 | R 528.3 |
| 1995 | 392.5 | 9.4 | 0.0 | 1.1 | 0.9 | 2.0 | 116.9 | R 21.6 | 2.9 | 0.0 | 0.0 | R 545.4 |
| 1996 | 410.1 | 7.4 | 0.0 | 0.9 | 0.8 | 1.7 | 107.5 | R 26.0 | 3.3 | 0.0 | 0.0 | R 556.6 |
| 1997 | 441.9 | 15.9 | 0.0 | 1.5 | 1.1 | 2.6 | 41.6 | R 28.3 | R 3.9 | 0.0 | 0.0 | R 537.5 |
| 1998 | 426.0 | 16.6 | 0.0 | 1.8 | 1.1 | 2.9 | 99.8 | 21.4 | 4.6 | 0.0 | 0.0 | 573.9 |
| 1999 | 427.5 | 14.2 | 0.0 | 2.0 | 1.2 | 3.2 | 122.1 | 20.6 | 3.5 | 0.0 | 0.0 | 592.6 |

a  Includes supplemental gaseous fuels.
b  The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.
c  Prior to 1980, based on oil used in steam plants.  Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.
d  Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.
e  If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f  "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.
g  If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns.  See data in appendix Table A8.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note:  Totals may not equal sum of components due to independent rounding.
 Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 317. Energy Consumption Estimates by Source, Selected Years 1960-1999, Wyoming

| Year | Coal a (Thousand Short Tons) | Natural Gas b (Billion Cubic Feet) | Asphalt & Road Oil a | Aviation Gasoline a | Distillate Fuel a | Jet Fuel a | Kerosene a | LPG a | Lubricants a | Motor Gasoline | Residual Fuel a | Other a,c | Total | Nuclear Electric Power | Hydroelectric Power d | Wood and Waste | Other a,e | Net Interstate Flow of Electricity/Losses f (Million kWh) | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Petroleum (Thousand Barrels) | | | | | | | | | | | Million kWh | Million kWh | | | | |
| **Thousand Barrels** | | | | | | | | | | | | | | | | | | | |
| 1960 | 993 | 51 | 734 | 132 | 3,278 | 56 | 91 | 1,114 | 93 | 4,431 | 1,749 | R 1,824 | R 13,502 | 0 | 609 | — | — | -3,186 | — |
| 1965 | 2,109 | 59 | 743 | 217 | 3,696 | 74 | 206 | 1,171 | 84 | 4,739 | 2,171 | R 2,301 | R 15,401 | 0 | 884 | — | — | -4,049 | — |
| 1970 | 3,802 | 110 | 1,099 | 256 | 5,059 | 128 | 341 | 1,848 | 114 | 5,900 | 1,487 | R 2,327 | R 18,558 | 0 | 1,006 | — | — | -10,347 | — |
| 1975 | 7,628 | 87 | 606 | 218 | 7,656 | 124 | 172 | 1,815 | 154 | 7,354 | 2,076 | R 3,147 | R 23,321 | 0 | 1,120 | — | — | -21,926 | — |
| 1980 | 15,208 | 69 | 1,160 | 108 | 13,247 | 162 | 62 | 2,030 | 208 | 8,501 | 2,171 | R 3,309 | R 30,959 | 0 | 1,108 | — | — | -48,625 | — |
| 1985 | 23,155 | 82 | 1,676 | 51 | 7,669 | 154 | 21 | 1,942 | 189 | 7,671 | 211 | R 2,150 | R 21,734 | 0 | 1,068 | — | — | -77,560 | — |
| 1990 | 25,514 | 92 | 955 | 35 | 9,603 | 143 | 4 | 1,263 | 213 | 7,105 | 40 | R 2,961 | R 22,321 | 0 | R h 645 | — | — | R -86,141 | — |
| 1991 | 25,150 | 97 | 1,016 | 28 | 8,813 | 119 | 9 | 1,228 | 191 | 7,212 | 40 | R 2,006 | R 20,663 | 0 | R 736 | — | — | R -83,802 | — |
| 1992 | 27,339 | 124 | 772 | 25 | 9,286 | 153 | 7 | 1,184 | 194 | 7,429 | 10 | R 2,342 | R 21,403 | 0 | R 636 | — | — | R -95,603 | — |
| 1993 | 26,171 | 105 | 756 | 20 | 10,072 | 140 | 21 | 1,752 | 198 | 7,572 | 72 | R 2,162 | R 22,765 | 0 | R 787 | — | — | R -89,663 | — |
| 1994 | 27,459 | 106 | 902 | 33 | 10,007 | 152 | 23 | 1,580 | 207 | 7,683 | 41 | R 2,314 | R 22,940 | 0 | R 897 | — | — | R -97,048 | — |
| 1995 | 25,933 | 98 | 665 | 179 | 11,312 | 160 | 24 | 1,979 | 203 | 7,936 | 21 | R 2,203 | R 24,681 | 0 | R 799 | — | — | R -90,278 | — |
| 1996 | 26,647 | 101 | 835 | 213 | 12,467 | 151 | 27 | R 1,651 | 197 | 7,905 | 6 | R 2,692 | R 26,145 | 0 | R 1,232 | — | — | R -93,380 | — |
| 1997 | 26,096 | 101 | 972 | 151 | 13,252 | 121 | 25 | R 308 | 208 | 7,603 | 4 | R 2,698 | R 25,343 | 0 | R 1,381 | — | — | R -91,690 | — |
| 1998 | 28,763 | 109 | 857 | 151 | 12,092 | 116 | 10 | 253 | 218 | 7,888 | 7 | 2,409 | 24,000 | 0 | 1,342 | — | — | -106,107 | — |
| 1999 | 27,672 | 97 | 1,227 | 234 | 14,900 | 174 | 6 | 480 | 220 | 7,879 | 10 | 2,398 | 27,528 | 0 | 1,170 | — | — | -100,888 | — |
| **Trillion Btu** | | | | | | | | | | | | | | | | | | | |
| 1960 | 15.8 | 52.8 | 4.9 | 0.7 | 19.1 | 0.3 | 0.5 | 4.5 | 0.6 | 23.3 | 11.0 | R 11.0 | R 75.7 | 0.0 | 6.6 | 1.6 | 0.0 | -10.9 | R 141.6 |
| 1965 | 34.5 | 54.8 | 4.9 | 1.1 | 21.5 | 0.4 | 1.2 | 4.7 | 0.5 | 24.9 | 13.6 | R 13.8 | R 86.7 | 0.0 | 9.2 | 1.6 | 0.0 | -13.8 | R 172.9 |
| 1970 | 63.5 | 112.5 | 7.3 | 1.3 | 29.5 | 0.7 | 1.9 | 7.0 | 0.7 | 31.0 | 9.3 | R 14.0 | R 102.7 | 0.0 | 10.6 | 1.6 | 0.0 | -35.3 | R 255.5 |
| 1975 | 128.0 | 81.4 | 4.0 | 1.1 | 44.6 | 0.7 | 1.0 | 6.7 | 0.9 | 38.6 | 13.1 | R 18.9 | R 129.6 | 0.0 | 11.7 | 1.6 | 0.0 | -74.8 | R 277.5 |
| 1980 | 268.1 | 73.1 | 7.7 | 0.5 | 77.2 | 0.9 | 0.4 | 7.5 | 1.3 | 44.7 | 13.6 | R 19.9 | R 173.6 | 0.0 | 11.5 | 2.7 | 0.0 | -165.9 | R 363.1 |
| 1985 | 405.5 | 86.4 | 11.1 | 0.3 | 44.7 | 0.9 | 0.1 | 7.0 | 1.1 | 40.3 | 1.3 | R 13.3 | R 120.1 | 0.0 | 11.2 | R 3.6 | (s) | -264.6 | R 362.1 |
| 1990 | 458.3 | 101.3 | 6.3 | 0.2 | 55.9 | 0.8 | (s) | 4.6 | 1.3 | 37.3 | 0.3 | R 17.8 | R 124.5 | 0.0 | h 6.7 | R 2.3 | h 0.7 | R -293.9 | R h 399.9 |
| 1991 | 449.8 | 103.1 | 6.7 | 0.1 | 51.3 | 0.7 | 0.1 | 4.4 | 1.2 | 37.9 | 0.3 | R 12.2 | R 114.9 | 0.0 | 7.7 | R 2.3 | 0.7 | R -285.9 | R 392.5 |
| 1992 | 490.8 | 130.7 | 5.1 | 0.1 | 54.1 | 0.9 | (s) | 4.3 | 1.2 | 39.0 | 0.1 | R 14.1 | R 118.9 | 0.0 | 6.6 | R 1.7 | 0.7 | R -326.2 | R 423.0 |
| 1993 | 466.7 | 110.5 | 5.0 | 0.1 | 58.7 | 0.8 | 0.1 | 6.3 | 1.2 | 39.8 | 0.5 | R 13.1 | R 125.5 | 0.0 | 8.1 | R 1.5 | 0.7 | -305.9 | R 407.1 |
| 1994 | 489.5 | 112.3 | 6.0 | 0.2 | 58.3 | 0.8 | 0.1 | 5.7 | 1.3 | R 40.2 | 0.3 | R 14.0 | R 126.8 | 0.0 | 9.3 | R 2.1 | 0.7 | -331.1 | R 409.4 |
| 1995 | 461.9 | 103.9 | 4.4 | 0.9 | 65.9 | 0.9 | 0.1 | 7.2 | 1.2 | R 41.4 | 0.1 | R 13.3 | R 135.5 | 0.0 | 8.2 | R 1.7 | 0.7 | R -308.0 | R 403.9 |
| 1996 | 473.0 | 107.6 | 5.5 | 1.1 | 72.6 | 0.9 | 0.2 | R 6.0 | 1.2 | R 41.2 | (s) | R 16.1 | R 144.8 | 0.0 | 12.7 | R 1.2 | 0.7 | R -318.6 | R 421.4 |
| 1997 | 466.5 | 107.9 | 6.4 | 0.8 | 77.2 | 0.7 | 0.1 | R 1.1 | 1.3 | R 39.6 | (s) | R 16.1 | R 143.4 | 0.0 | R 14.3 | R 1.2 | 0.7 | R -312.8 | R 421.1 |
| 1998 | 514.3 | 116.5 | 5.7 | 0.8 | 70.4 | 0.7 | 0.1 | 0.9 | 1.3 | 41.1 | (s) | 14.5 | 135.5 | 0.0 | 13.9 | 1.0 | 0.7 | -362.0 | 419.9 |
| 1999 | 494.6 | 101.7 | 8.1 | 1.2 | 86.8 | 1.0 | (s) | 1.7 | 1.3 | 41.1 | 0.1 | 14.4 | 155.7 | 0.0 | 12.1 | 1.1 | 0.8 | -344.2 | 421.8 |

a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

b Includes supplemental gaseous fuels.

c "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

d If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

e "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

f Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

g From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.

h There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=kilowatthours. R=Revised data. — =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 318. Residential Energy Consumption Estimates, Selected Years 1960-1999, Wyoming

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] Thousand Barrels | Kerosene[a] | LPG[a] | Total | Wood Thousand Cords | Geothermal | Solar[c] | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[d] Million Kilowatthours | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 20 | 9 | 4 | 8 | 561 | 573 | 61 | — | — | 275 | — | 684 | — |
| 1965 | 15 | 11 | 7 | 32 | 532 | 570 | 51 | — | — | 442 | — | 1,055 | — |
| 1970 | 7 | 18 | 12 | 39 | 1,001 | 1,053 | 49 | — | — | 604 | — | 1,463 | — |
| 1975 | 17 | 12 | 26 | 11 | 960 | 997 | 55 | — | — | 891 | — | 2,149 | — |
| 1980 | 37 | 10 | 23 | 0 | 644 | 667 | 73 | — | — | 1,410 | — | 3,429 | — |
| 1985 | 37 | 14 | 50 | 8 | 496 | 555 | 103 | — | — | 1,815 | — | 4,263 | — |
| 1990 | 46 | 11 | 24 | 1 | 487 | 512 | 50 | — | — | 1,720 | — | R 3,763 | — |
| 1991 | 48 | 12 | 87 | 3 | 595 | 685 | 53 | — | — | 1,819 | — | R 3,955 | — |
| 1992 | 35 | 11 | 58 | 1 | 506 | 566 | 56 | — | — | 1,763 | — | R 3,759 | — |
| 1993 | 65 | 13 | 51 | 2 | 452 | 505 | 51 | — | — | 1,906 | — | R 4,026 | — |
| 1994 | 85 | 12 | 68 | 1 | 420 | 489 | 50 | — | — | 1,865 | — | 3,892 | — |
| 1995 | 51 | 12 | 55 | 1 | 592 | 648 | 55 | — | — | 1,939 | — | R 4,043 | — |
| 1996 | 134 | 14 | 37 | 1 | 458 | 496 | 55 | — | — | 2,022 | — | R 4,214 | — |
| 1997 | 49 | 13 | 60 | 2 | R 119 | R 180 | R 53 | — | — | 2,007 | — | R 4,175 | — |
| 1998 | 56 | 13 | 29 | 2 | 64 | 94 | 46 | — | — | 2,013 | — | 4,158 | — |
| 1999 | 36 | 12 | 32 | 1 | 239 | 272 | 50 | — | — | 2,025 | — | 3,968 | — |

**Trillion Btu**

| Year | Coal | Natural Gas | Distillate Fuel | Kerosene | LPG | Total | Wood | Geothermal | Solar | Electricity | Net Energy | Electrical System Energy Losses | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1960 | 0.4 | 9.1 | (s) | (s) | 2.3 | 2.3 | 1.2 | 0.0 | 0.0 | 0.9 | 14.0 | 2.3 | 16.3 |
| 1965 | 0.3 | 9.9 | (s) | 0.2 | 2.1 | 2.4 | 1.0 | 0.0 | 0.0 | 1.5 | 15.1 | 3.6 | 18.7 |
| 1970 | 0.1 | 18.4 | 0.1 | 0.2 | 3.8 | 4.1 | 1.0 | 0.0 | 0.0 | 2.1 | 25.7 | 5.0 | 30.7 |
| 1975 | 0.3 | 11.3 | 0.2 | 0.1 | 3.6 | 3.8 | 1.1 | 0.0 | 0.0 | 3.0 | 19.6 | 7.3 | 26.9 |
| 1980 | 0.7 | 10.3 | 0.1 | 0.0 | 2.4 | 2.5 | 1.5 | 0.0 | 0.0 | 4.8 | 19.8 | 11.7 | 31.5 |
| 1985 | 0.6 | 15.1 | 0.3 | (s) | 1.8 | 2.1 | 2.1 | 0.0 | 0.0 | 6.2 | 26.1 | 14.5 | 40.7 |
| 1990 | 0.9 | 12.6 | 0.1 | (s) | 1.8 | 1.9 | 1.0 | e 0.0 | e (s) | 5.9 | e 22.3 | 12.8 | e 35.2 |
| 1991 | 1.1 | 12.7 | 0.5 | (s) | 2.2 | 2.7 | 1.1 | 0.0 | (s) | 6.2 | 23.8 | 13.5 | 37.3 |
| 1992 | 0.7 | 11.5 | 0.3 | (s) | 1.8 | 2.2 | 1.1 | 0.0 | (s) | 6.0 | 21.5 | 12.8 | 34.3 |
| 1993 | 1.2 | 13.4 | 0.3 | (s) | 1.6 | 1.9 | 1.0 | 0.0 | (s) | 6.5 | 24.0 | 13.7 | 37.8 |
| 1994 | 1.6 | 12.2 | 0.4 | (s) | 1.5 | 1.9 | 1.0 | 0.0 | (s) | 6.4 | 23.1 | 13.3 | 36.3 |
| 1995 | 0.9 | 12.9 | 0.3 | (s) | 2.1 | 2.5 | 1.1 | 0.0 | (s) | 6.6 | 24.0 | 13.8 | 37.8 |
| 1996 | 2.4 | 14.4 | 0.2 | (s) | 1.7 | 1.9 | 1.1 | 0.0 | (s) | 6.9 | 26.7 | 14.4 | 41.0 |
| 1997 | 0.9 | 13.9 | 0.3 | (s) | R 0.4 | R 0.8 | R 1.1 | 0.0 | (s) | 6.8 | R 23.5 | 14.2 | R 37.7 |
| 1998 | 1.0 | 13.6 | 0.2 | (s) | 0.2 | 0.4 | 0.9 | 0.0 | (s) | 6.9 | 22.8 | 14.2 | 36.9 |
| 1999 | 0.7 | 12.7 | 0.2 | (s) | 0.9 | 1.1 | 1.0 | (s) | (s) | 6.9 | 22.3 | 13.5 | 35.9 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.
[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

# Table 319. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Wyoming

| Year | Coal[a] Thousand Short Tons | Natural Gas[b] Billion Cubic Feet | Petroleum Distillate Fuel[a] | Kerosene[a] | LPG[a] | Motor Gasoline | Residual Fuel[a] | Total | Wood Thousand Cords | Geothermal | Electricity[a] Million Kilowatthours | Net Energy | Electrical System Energy Losses[c] Million Kilowatthours | Total[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Thousand Barrels | | | | | | | | | | | |
| 1960 | 37 | 5 | 9 | 29 | 99 | 73 | 37 | 246 | 1 | — | 174 | — | 432 | — |
| 1965 | 28 | 8 | 16 | 119 | 94 | 73 | 40 | 341 | 1 | — | 594 | — | 1,419 | — |
| 1970 | 14 | 14 | 30 | 147 | 177 | 85 | 48 | 487 | 1 | — | 657 | — | 1,591 | — |
| 1975 | 32 | 10 | 63 | 43 | 169 | 72 | 83 | 431 | 1 | — | 775 | — | 1,870 | — |
| 1980 | 68 | 5 | 428 | 23 | 114 | 103 | 27 | 694 | 2 | — | 1,138 | — | 2,767 | — |
| 1985 | 70 | 9 | 440 | 6 | 88 | 67 | 69 | 670 | R 3 | — | 2,321 | — | 5,454 | — |
| 1990 | 85 | 8 | 216 | 1 | 86 | 74 | 1 | 378 | R 3 | — | 2,319 | — | R 5,074 | — |
| 1991 | 90 | 9 | 240 | 3 | 105 | 87 | 1 | 436 | R 3 | — | 2,439 | — | R 5,303 | — |
| 1992 | 65 | 8 | 222 | (s) | 89 | 78 | 0 | 390 | R 4 | — | 2,496 | — | R 5,322 | — |
| 1993 | 122 | 10 | 214 | (s) | 80 | 7 | 0 | 301 | 4 | — | 2,616 | — | R 5,525 | — |
| 1994 | 157 | 9 | 233 | (s) | 74 | 7 | 1 | 315 | 4 | — | 2,572 | — | 5,367 | — |
| 1995 | 95 | 10 | 307 | 2 | 104 | 8 | (s) | 421 | 4 | — | 2,443 | — | R 5,093 | — |
| 1996 | 248 | 10 | 356 | 1 | 81 | 36 | (s) | 474 | 5 | — | 2,562 | — | R 5,340 | — |
| 1997 | 91 | 11 | 292 | 1 | R 21 | 8 | (s) | R 322 | R 6 | — | 2,568 | — | R 5,342 | — |
| 1998 | 103 | 10 | 168 | 2 | 11 | 8 | (s) | 189 | 6 | — | 2,678 | — | 5,532 | — |
| 1999 | 68 | 10 | 414 | (s) | 42 | 8 | 0 | 464 | 7 | — | 2,693 | — | 5,276 | — |
| | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 0.8 | 5.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.2 | 1.2 | (s) | 0.0 | 0.6 | 7.7 | 1.5 | 9.2 |
| 1965 | 0.6 | 7.4 | 0.1 | 0.7 | 0.4 | 0.4 | 0.2 | 1.8 | (s) | 0.0 | 2.0 | 11.8 | 4.8 | 16.7 |
| 1970 | 0.3 | 14.3 | 0.2 | 0.8 | 0.7 | 0.4 | 0.3 | 2.4 | (s) | 0.0 | 2.2 | 19.3 | 5.4 | 24.7 |
| 1975 | 0.6 | 9.6 | 0.4 | 0.2 | 0.6 | 0.4 | 0.5 | 2.1 | (s) | 0.0 | 2.6 | 15.0 | 6.4 | 21.4 |
| 1980 | 1.2 | 5.3 | 2.5 | 0.1 | 0.4 | 0.5 | 0.2 | 3.7 | (s) | 0.0 | 3.9 | 14.2 | 9.4 | 23.6 |
| 1985 | 1.2 | 9.6 | 2.6 | (s) | 0.3 | 0.4 | 0.4 | 3.7 | R 0.1 | 0.0 | 7.9 | R 22.5 | 18.6 | R 41.1 |
| 1990 | 1.7 | 9.3 | 1.3 | (s) | 0.3 | 0.4 | (s) | 2.0 | R 0.1 | e 0.6 | 7.9 | e 21.5 | 17.3 | e 38.8 |
| 1991 | 2.1 | 9.6 | 1.4 | (s) | 0.4 | 0.5 | (s) | 2.3 | R 0.1 | 0.6 | 8.3 | R 23.0 | 18.1 | R 41.1 |
| 1992 | 1.2 | 8.5 | 1.3 | (s) | 0.3 | 0.4 | 0.0 | 2.0 | R 0.1 | 0.6 | 8.5 | 20.9 | 18.2 | R 39.1 |
| 1993 | 2.3 | 10.8 | 1.2 | (s) | 0.3 | (s) | 0.0 | 1.6 | 0.1 | 0.6 | 8.9 | 24.3 | R 18.8 | R 43.1 |
| 1994 | 2.9 | 9.7 | 1.4 | (s) | 0.3 | (s) | (s) | 1.7 | 0.1 | 0.6 | 8.8 | 23.8 | 18.3 | 42.1 |
| 1995 | 1.7 | 10.5 | 1.8 | (s) | 0.4 | (s) | (s) | 2.2 | 0.1 | 0.6 | 8.3 | 23.4 | 17.4 | 40.8 |
| 1996 | 4.5 | 10.3 | 2.1 | (s) | 0.3 | 0.2 | (s) | 2.6 | 0.1 | 0.6 | 8.7 | 26.8 | 18.2 | R 45.1 |
| 1997 | 1.6 | 11.5 | 1.7 | (s) | R 0.1 | (s) | (s) | R 1.8 | 0.1 | 0.6 | 8.8 | R 24.5 | 18.2 | R 42.7 |
| 1998 | 1.9 | 11.1 | 1.0 | (s) | (s) | (s) | (s) | 1.1 | 0.1 | 0.6 | 9.1 | 23.9 | 18.9 | 42.8 |
| 1999 | 1.2 | 10.3 | 2.4 | (s) | 0.2 | (s) | 0.0 | 2.6 | 0.1 | 0.6 | 9.2 | 24.1 | 18.0 | 42.1 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[b] Includes supplemental gaseous fuels.
[c] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.
[d] Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
— =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 320. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Wyoming

| | | | Petroleum | | | | | | | | | Hydro-electric Power [b] | Wood and Waste | Other [b,d] | Electricity [b] | Net Energy | Electrical System Energy Losses [e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coal | Natural Gas [a] | Asphalt and Road Oil [b] | Distillate Fuel [b] | Kero-sene [b] | LPG [b] | Lubri-cants [b] | Motor Gasoline | Residual Fuel [b] | Other [b,c] | Total | | | | | | | |
| Year | Thousand Short Tons | Billion Cubic Feet | Thousand Barrels | | | | | | | | | Million kWh | | | Million kWh | | Million kWh | |
| 1960 | 119 | 35 | 734 | 1,458 | 55 | 384 | 2 | 320 | 756 | R 1,824 | R 5,534 | 0 | — | — | 270 | — | 671 | — |
| 1965 | 124 | 38 | 743 | 1,790 | 55 | 496 | 3 | 510 | 942 | R 2,301 | R 6,841 | 0 | — | — | 1,285 | — | 3,067 | — |
| 1970 | 210 | 70 | 1,099 | 1,931 | 155 | 578 | 30 | 552 | 960 | R 2,327 | R 7,631 | 0 | — | — | 1,896 | — | 4,595 | — |
| 1975 | 640 | 59 | 606 | 3,596 | 117 | 569 | 45 | 591 | 1,881 | R 3,147 | R 10,552 | 0 | — | — | 2,918 | — | 7,038 | — |
| 1980 | 1,605 | 48 | 1,160 | 6,255 | 39 | 1,199 | 57 | 365 | 2,144 | R 3,309 | R 14,529 | 0 | — | — | 4,621 | — | 11,237 | — |
| 1985 | 1,875 | 54 | 1,676 | 2,750 | 7 | 1,312 | 52 | 530 | 142 | R 2,150 | R 8,619 | 0 | — | — | 6,212 | — | 14,596 | — |
| 1990 | 1,857 | 67 | 955 | 2,271 | 2 | 663 | 59 | 417 | 39 | R 2,961 | R 7,367 | f 0 | — | — | 7,729 | — | R 16,909 | — |
| 1991 | 1,896 | 68 | 1,016 | 2,659 | 4 | 479 | 53 | 502 | 39 | R 2,006 | R 6,757 | 0 | — | — | 7,498 | — | R 16,300 | — |
| 1992 | 2,126 | 97 | 772 | 2,717 | 6 | 561 | 54 | 490 | 10 | R 2,342 | R 6,951 | 0 | — | — | 7,442 | — | R 15,872 | — |
| 1993 | 1,873 | 75 | 756 | 2,739 | 19 | 1,192 | 55 | 387 | 72 | R 2,162 | R 7,380 | 0 | — | — | 7,363 | — | R 15,553 | — |
| 1994 | 1,867 | 79 | 902 | 2,764 | 22 | 1,047 | 57 | 416 | 40 | R 2,314 | R 7,562 | 0 | — | — | 7,260 | — | R 15,150 | — |
| 1995 | 1,937 | 68 | 665 | 2,198 | 22 | 1,265 | 56 | 443 | 20 | R 2,203 | R 6,872 | 0 | — | — | 6,817 | — | R 14,212 | — |
| 1996 | 1,835 | 70 | 835 | 3,072 | 25 | R 1,095 | 54 | 451 | 6 | R 2,692 | R 8,231 | 0 | — | — | 6,891 | — | R 14,361 | — |
| 1997 | 1,959 | 67 | 972 | 3,738 | 22 | R 160 | 57 | 470 | 4 | R 2,698 | R 8,121 | 0 | — | — | 7,211 | — | R 14,999 | — |
| 1998 | 1,929 | 74 | 857 | 3,238 | 7 | 154 | 60 | 249 | 7 | 2,409 | 6,980 | 0 | — | — | 6,950 | — | 14,358 | — |
| 1999 | 1,929 | 61 | 1,227 | 3,660 | 5 | 195 | 61 | 237 | 10 | 2,398 | 7,792 | 0 | — | — | 7,065 | — | 13,842 | — |
| | | | | | | | Trillion Btu | | | | | | | | | | | |
| 1960 | 2.4 | 36.1 | 4.9 | 8.5 | 0.3 | 1.5 | (s) | 1.7 | 4.8 | R 11.0 | R 32.6 | 0.0 | 0.4 | 0.0 | 0.9 | R 72.5 | 2.3 | R 74.8 |
| 1965 | 2.5 | 35.2 | 4.9 | 10.4 | 0.3 | 2.0 | (s) | 2.7 | 5.9 | R 13.8 | R 40.1 | 0.0 | 0.5 | 0.0 | 4.4 | R 82.7 | 10.5 | R 93.2 |
| 1970 | 4.0 | 71.3 | 7.3 | 11.2 | 0.9 | 2.2 | 0.2 | 2.9 | 6.0 | R 14.0 | R 44.7 | 0.0 | 0.6 | 0.0 | 6.5 | R 127.1 | 15.7 | R 142.7 |
| 1975 | 11.8 | 55.2 | 4.0 | 20.9 | 0.7 | 2.1 | 0.3 | 3.1 | 11.8 | R 18.9 | R 61.8 | 0.0 | 0.4 | 0.0 | 10.0 | 139.2 | 24.0 | R 163.2 |
| 1980 | 28.8 | 51.1 | 7.7 | 36.4 | 0.2 | 4.4 | 0.3 | 1.9 | 13.5 | R 19.9 | R 84.4 | 0.0 | 1.2 | 0.0 | 15.8 | R 181.3 | 38.3 | R 219.6 |
| 1985 | 32.9 | 56.3 | 11.1 | 16.0 | (s) | 4.7 | 0.3 | 2.8 | 0.9 | R 13.3 | R 49.2 | 0.0 | 1.5 | 0.0 | 21.2 | R 161.1 | 49.8 | R 210.9 |
| 1990 | 41.2 | 73.8 | 6.3 | 13.2 | (s) | 2.4 | 0.4 | 2.2 | 0.2 | R 17.8 | R 42.6 | f 0.0 | R 1.2 | f (s) | 26.4 | R f 185.2 | 57.7 | R f 242.9 |
| 1991 | 41.8 | 72.4 | 6.7 | 15.5 | (s) | 1.7 | 0.3 | 2.6 | 0.2 | R 12.2 | R 39.4 | 0.0 | R 1.1 | (s) | 25.6 | R 180.4 | R 55.6 | R 236.0 |
| 1992 | 44.9 | 102.3 | 5.1 | 15.8 | (s) | 2.0 | 0.3 | 2.6 | 0.1 | R 14.1 | R 40.0 | 0.0 | R 0.5 | (s) | 25.4 | R 213.1 | 54.2 | R 267.2 |
| 1993 | 39.9 | 79.0 | 5.0 | 16.0 | 0.1 | 4.3 | 0.3 | 2.0 | 0.5 | R 13.1 | R 41.3 | 0.0 | R 0.4 | (s) | 25.1 | R 185.8 | 53.1 | R 238.8 |
| 1994 | 40.6 | 83.6 | 6.0 | 16.1 | 0.1 | 3.8 | 0.3 | 2.2 | 0.3 | R 14.0 | R 42.7 | 0.0 | R 1.0 | (s) | 24.8 | R 192.8 | 51.7 | R 244.4 |
| 1995 | 42.5 | 72.6 | 4.4 | 12.8 | 0.1 | 4.6 | 0.3 | 2.3 | 0.1 | R 13.3 | R 38.0 | 0.0 | R 0.5 | (s) | 23.3 | R 177.0 | 48.5 | R 225.5 |
| 1996 | 40.2 | 74.2 | 5.5 | 17.9 | 0.1 | R 4.0 | 0.3 | 2.4 | (s) | R 16.1 | R 46.4 | 0.0 | R 0.0 | (s) | 23.5 | R 184.3 | R 49.0 | R 233.3 |
| 1997 | 42.3 | 71.2 | 6.4 | 21.8 | 0.1 | R 0.6 | 0.3 | 2.5 | (s) | R 16.1 | R 47.9 | 0.0 | R 0.0 | (s) | 24.6 | R 186.0 | R 51.2 | R 237.2 |
| 1998 | 42.3 | 79.2 | 5.7 | 18.9 | (s) | 0.6 | 0.4 | 1.3 | (s) | 14.5 | 41.3 | 0.0 | 0.0 | (s) | 23.7 | 186.6 | 49.0 | 235.6 |
| 1999 | 42.3 | 64.0 | 8.1 | 21.3 | (s) | 0.7 | 0.4 | 1.2 | 0.1 | 14.4 | 46.2 | 0.0 | 0.0 | 0.1 | 24.1 | 176.8 | 47.2 | 224.0 |

[a] Includes supplemental gaseous fuels.
[b] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
[c] "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."
[d] "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
[e] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[f] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
R=Revised data.
kWh=kilowatthours. — =Not applicable.
(s)=Btu value less than 0.05 and physical unit value less than 0.5.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Table 321.  Transportation Energy Consumption Estimates, Selected Years 1960-1999, Wyoming

| Year | Coal [a] Thousand Short Tons | Natural Gas [b] Billion Cubic Feet | Petroleum — Aviation Gasoline [a] | Distillate Fuel [a] | Jet Fuel [a] | LPG [a] | Lubricants [a] | Motor Gasoline | Residual Fuel [a] | Total | Ethanol [c] Thousand Barrels | Electricity [a] Million Kilowatthours | Net Energy | Electrical System Energy Losses [d] Million Kilowatthours | Total [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand Barrels | | | | | | | | | | |
| 1960 | 2 | 2 | 132 | 1,801 | 56 | 70 | 91 | 4,038 | 951 | 7,138 | 0 | 0 | — | 0 | — |
| 1965 | (s) | 2 | 217 | 1,864 | 74 | 49 | 81 | 4,157 | 1,173 | 7,615 | 0 | 0 | — | 0 | — |
| 1970 | (s) | 6 | 256 | 3,072 | 128 | 91 | 85 | 5,262 | 469 | 9,363 | 0 | 0 | — | 0 | — |
| 1975 | (s) | 5 | 218 | 3,965 | 124 | 116 | 108 | 6,691 | 0 | 11,223 | 0 | 0 | — | 0 | — |
| 1980 | 0 | 6 | 108 | 6,419 | 162 | 73 | 151 | 8,034 | 0 | 14,946 | 0 | 0 | — | 0 | — |
| 1985 | 0 | 5 | 51 | 4,287 | 154 | 45 | 137 | 7,073 | (s) | 11,747 | R e 1 | 0 | — | 0 | — |
| 1990 | 0 | 5 | 35 | 6,993 | 143 | 27 | 154 | 6,613 | 0 | 13,965 | R 22 | 0 | — | 0 | — |
| 1991 | 0 | 8 | 28 | 5,705 | 119 | 49 | 138 | 6,623 | 0 | 12,662 | R 82 | 0 | — | 0 | — |
| 1992 | 0 | 8 | 25 | 6,189 | 153 | 27 | 141 | 6,861 | 0 | 13,396 | R 137 | 0 | — | 0 | — |
| 1993 | 0 | 7 | 20 | 6,965 | 140 | 29 | 143 | 7,178 | 0 | 14,475 | R 156 | 0 | — | 0 | — |
| 1994 | 0 | 6 | 33 | 6,856 | 152 | 38 | 150 | 7,259 | 0 | 14,488 | R 177 | 0 | — | 0 | — |
| 1995 | 0 | 7 | 179 | 8,624 | 160 | 17 | 147 | 7,486 | 0 | 16,612 | R 135 | 0 | — | 0 | — |
| 1996 | 0 | 8 | 213 | 8,892 | 151 | R 16 | 143 | 7,418 | 0 | R 16,832 | R 49 | 0 | — | 0 | — |
| 1997 | 0 | 10 | 151 | 9,058 | 121 | R 8 | 151 | 7,125 | 0 | R 16,615 | R 3 | 0 | — | 0 | — |
| 1998 | 0 | 12 | 151 | 8,577 | 116 | 25 | 158 | 7,631 | 0 | 16,657 | 0 | 0 | — | 0 | — |
| 1999 | 0 | 14 | 234 | 10,708 | 174 | 4 | 160 | 7,634 | 0 | 18,915 | 0 | 0 | — | 0 | — |
| | | | | | Trillion Btu | | | | | | | | | | |
| 1960 | (s) | 1.8 | 0.7 | 10.5 | 0.3 | 0.3 | 0.5 | 21.2 | 6.0 | 39.5 | 0.0 | 0.0 | 41.3 | 0.0 | 41.3 |
| 1965 | (s) | 2.0 | 1.1 | 10.9 | 0.4 | 0.2 | 0.5 | 21.8 | 7.4 | 42.3 | 0.0 | 0.0 | 44.3 | 0.0 | 44.3 |
| 1970 | (s) | 6.0 | 1.3 | 17.9 | 0.7 | 0.3 | 0.5 | 27.6 | 2.9 | 51.3 | 0.0 | 0.0 | 57.4 | 0.0 | 57.4 |
| 1975 | (s) | 4.9 | 1.1 | 23.1 | 0.7 | 0.4 | 0.7 | 35.2 | 0.0 | 61.1 | 0.0 | 0.0 | 66.1 | 0.0 | 66.1 |
| 1980 | 0.0 | 6.2 | 0.5 | 37.4 | 0.9 | 0.3 | 0.9 | 42.2 | 0.0 | 82.2 | 0.0 | 0.0 | 88.4 | 0.0 | 88.4 |
| 1985 | 0.0 | 5.2 | 0.3 | 25.0 | 0.9 | 0.2 | 0.8 | 37.2 | (s) | 64.2 | R e (s) | 0.0 | e 69.5 | 0.0 | e 69.5 |
| 1990 | 0.0 | 5.6 | 0.2 | 40.7 | 0.8 | 0.1 | 0.9 | 34.7 | 0.0 | 77.5 | R 0.1 | 0.0 | 83.0 | 0.0 | 83.0 |
| 1991 | 0.0 | 8.3 | 0.1 | 33.2 | 0.7 | 0.2 | 0.8 | 34.8 | 0.0 | 69.8 | R 0.3 | 0.0 | 78.1 | 0.0 | 78.1 |
| 1992 | 0.0 | 8.4 | 0.1 | 36.1 | 0.9 | 0.1 | 0.9 | 36.0 | 0.0 | 74.0 | R 0.5 | 0.0 | 82.4 | 0.0 | 82.4 |
| 1993 | 0.0 | 7.2 | 0.1 | 40.6 | 0.8 | 0.1 | 0.9 | 37.7 | 0.0 | 80.1 | R 0.6 | 0.0 | 87.3 | 0.0 | 87.3 |
| 1994 | 0.0 | 6.6 | 0.2 | 39.9 | 0.8 | 0.1 | 0.9 | R 38.0 | 0.0 | R 80.0 | 0.6 | 0.0 | R 86.5 | 0.0 | R 86.5 |
| 1995 | 0.0 | 7.7 | 0.9 | 50.2 | 0.9 | 0.1 | 0.9 | R 39.0 | 0.0 | R 92.0 | R 0.5 | 0.0 | R 99.7 | 0.0 | R 99.7 |
| 1996 | 0.0 | 8.7 | 1.1 | 51.8 | 0.9 | 0.1 | 0.9 | R 38.7 | 0.0 | R 93.3 | 0.2 | 0.0 | R 102.0 | 0.0 | R 102.0 |
| 1997 | 0.0 | 11.2 | 0.8 | 52.8 | 0.7 | R (s) | 0.9 | R 37.1 | 0.0 | R 92.3 | (s) | 0.0 | R 103.5 | 0.0 | R 103.5 |
| 1998 | 0.0 | 12.3 | 0.8 | 50.0 | 0.7 | 0.1 | 1.0 | 39.8 | 0.0 | 92.2 | 0.0 | 0.0 | 104.5 | 0.0 | 104.5 |
| 1999 | 0.0 | 14.5 | 1.2 | 62.4 | 1.0 | (s) | 1.0 | 39.8 | 0.0 | 105.3 | 0.0 | 0.0 | 119.8 | 0.0 | 119.8 |

[a] The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.  See the "Additional Notes" under each type of energy in Appendix A.

[b] Includes supplemental gaseous fuels.  Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

[c] Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

[d] Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

[e] There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note:  Totals may not equal sum of components due to independent rounding.

Sources:  Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 322. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Wyoming**

| Year | Coal | Natural Gas a | Petroleum Heavy Oil b,c | Petroleum Light Oil b,d | Petroleum Coke b | Petroleum Total | Nuclear Electric Power | Hydroelectric Power e | Wood and Waste | Geothermal Energy | Other b,f | Total g |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Short Tons | Billion Cubic Feet | | | Thousand Barrels | | | | Million Kilowatthours | | | |
| 1960 | 815 | 1 | 5 | 6 | 0 | 12 | 0 | 609 | 0 | 0 | 0 | — |
| 1965 | 1,941 | (s) | 15 | 19 | 0 | 34 | 0 | 884 | 0 | 0 | 0 | — |
| 1970 | 3,571 | 2 | 11 | 13 | 0 | 25 | 0 | 1,006 | 0 | 0 | 0 | — |
| 1975 | 6,938 | 1 | 112 | 6 | 0 | 118 | 0 | 1,120 | 0 | 0 | 0 | — |
| 1980 | 13,498 | (s) | 0 | 123 | 0 | 123 | 0 | 1,108 | 0 | 0 | 0 | — |
| 1985 | 21,173 | (s) | 0 | 143 | 0 | 143 | 0 | 1,068 | 0 | 0 | 3 | — |
| 1990 | 23,526 | (s) | 0 | 99 | 0 | 99 | 0 | 645 | 0 | 0 | 0 | — |
| 1991 | 23,115 | (s) | 0 | 122 | 0 | 122 | 0 | 736 | 0 | 0 | 0 | — |
| 1992 | 25,114 | (s) | 0 | 100 | 0 | 100 | 0 | 636 | 0 | 0 | 0 | — |
| 1993 | 24,111 | (s) | 0 | 104 | 0 | 104 | 0 | 787 | 0 | 0 | 0 | — |
| 1994 | 25,350 | (s) | 0 | 86 | 0 | 86 | 0 | 897 | 0 | 0 | 0 | — |
| 1995 | 23,850 | (s) | 0 | 128 | 0 | 128 | 0 | 799 | 0 | 0 | 0 | — |
| 1996 | 24,430 | (s) | 0 | 110 | 0 | 110 | 0 | 1,232 | 0 | 0 | 0 | — |
| 1997 | 23,996 | (s) | 0 | 105 | 0 | 105 | 0 | 1,381 | 0 | 0 | 0 | — |
| 1998 | 26,674 | (s) | 0 | 80 | 0 | 80 | 0 | 1,342 | 0 | 0 | 0 | — |
| 1999 | 25,639 | (s) | 0 | 85 | 0 | 85 | 0 | 1,170 | 0 | 0 | 0 | — |
| | | | | | | Trillion Btu | | | | | | |
| 1960 | 12.1 | 0.7 | (s) | (s) | 0.0 | 0.1 | 0.0 | 6.6 | 0.0 | 0.0 | 0.0 | 19.4 |
| 1965 | 31.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | 9.2 | 0.0 | 0.0 | 0.0 | 40.6 |
| 1970 | 59.0 | 2.4 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 10.6 | 0.0 | 0.0 | 0.0 | 72.2 |
| 1975 | 115.4 | 0.4 | 0.7 | (s) | 0.0 | 0.7 | 0.0 | 11.7 | 0.0 | 0.0 | 0.0 | 128.2 |
| 1980 | 237.4 | 0.2 | 0.0 | 0.7 | 0.0 | 0.7 | 0.0 | 11.5 | 0.0 | 0.0 | 0.0 | 249.8 |
| 1985 | 370.7 | 0.1 | 0.0 | 0.8 | 0.0 | 0.8 | 0.0 | 11.2 | 0.0 | 0.0 | (s) | 382.9 |
| 1990 | 414.6 | 0.1 | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | 6.7 | 0.0 | 0.0 | 0.0 | 421.9 |
| 1991 | 404.8 | 0.1 | 0.0 | 0.7 | 0.0 | 0.7 | 0.0 | 7.7 | 0.0 | 0.0 | 0.0 | 413.3 |
| 1992 | 444.0 | 0.1 | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | 6.6 | 0.0 | 0.0 | 0.0 | 451.3 |
| 1993 | 423.3 | 0.1 | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | 8.1 | 0.0 | 0.0 | 0.0 | 432.1 |
| 1994 | 444.4 | 0.1 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 9.3 | 0.0 | 0.0 | 0.0 | 454.3 |
| 1995 | 416.8 | 0.1 | 0.0 | 0.7 | 0.0 | 0.7 | 0.0 | 8.2 | 0.0 | 0.0 | 0.0 | 425.9 |
| 1996 | 425.9 | 0.1 | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | 12.7 | 0.0 | 0.0 | 0.0 | 439.4 |
| 1997 | 421.7 | 0.1 | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | R 14.3 | 0.0 | 0.0 | 0.0 | R 436.7 |
| 1998 | 469.2 | 0.3 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 13.9 | 0.0 | 0.0 | 0.0 | 483.8 |
| 1999 | 450.4 | 0.2 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 12.1 | 0.0 | 0.0 | 0.0 | 463.2 |

a Includes supplemental gaseous fuels.

b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Appendix A

# Documentation

## Section 1.  Documentation Guide

Appendix A of the *State Energy Data Report* describes how the estimates in the report were derived by the Combined State Energy Data System (CSEDS).  The following five sections, one for each energy source, provide:  descriptions of all the data series that are entered into CSEDS; the formulas applied in CSEDS for creating additional data series; and notes on special circumstances for any series.

Appendix B is an alphabetical listing of the variable names and formulas used in the system; Appendix C lists the conversion factors used in CSEDS to convert physical units into British thermal units and gives the sources for those factors; Appendix D provides the U.S. Department of Commerce, Bureau of the Census, resident population data used in per capita calculations; Appendix E presents metric and other physical conversion factors for information, although they are not currently used in CSEDS; Appendix F lists carbon dioxide emission factors for coal consumed by State for information, although they are not used in CSEDS; Appendix G is a summary of the changes made in CSEDS since the last report, which was released in December 1997; and Appendix H is a list of other Energy Information Administration reports containing State-level data.

There are 475 variables used in CSEDS to create the estimates in this report.  All of the variables are identified by seven-letter names, such as MGTCPAL. In the following example, MGTCPAL is the identifying code for data on motor gasoline total consumption in physical units in Alabama

| Characters: | MG | TC | P | AL |
|---|---|---|---|---|
| **Positions:** | 1 and 2 | 3 and 4 | 5 | 6 and 7 |
| **Identity:** | Type of Energy | Energy activity or consumption end-use sector | Type of data | Geographic |

The type of energy categories in CSEDS, which are represented by the first two letters of the variable name, are:

| | | |
|---|---|---|
| AB | = | aviation gasoline blending components |
| AC | = | anthracite |
| AI | = | aluminum ingot |
| AR | = | asphalt and road oil |
| AS | = | asphalt |
| AV | = | aviation gasoline |
| BC | = | bituminous coal and lignite |
| BM | = | biomass |
| CC | = | coal coke |
| CG | = | corrugated and solid fiber boxes |
| CL | = | coal |
| CO | = | crude oil, including lease condensate |
| CT | = | catalytic cracking |
| DF | = | distillate fuel |
| DK | = | distillate fuel, including kerosene-type jet fuel |

| | | |
|---|---|---|
| EL | = | electricity |
| EN | = | ethanol |
| ER | = | electricity generated from renewable energy |
| ES | = | electricity sales |
| EX | = | electricity generated from non-renewable energy |
| FF | = | fossil fuels |
| FN | = | petrochemical feedstocks, naphtha less than 401º F |
| FO | = | petrochemical feedstocks, other oils equal to or greater than 401º F |
| FS | = | petrochemical feedstocks, still gas |
| GE | = | geothermal energy |
| GO | = | geothermal, wind, photovoltaic, and solar thermal energy |
| HP | = | hydroelectric power from pumped storage |
| HV | = | conventional hydroelectric power |
| HY | = | hydroelectric power, all types |
| JF | = | jet fuel |
| JK | = | jet fuel, kerosene-type |
| JN | = | jet fuel, naphtha-type |
| KS | = | kerosene |
| LG | = | liquefied petroleum gases |
| LO | = | electrical system energy losses |
| LU | = | lubricants |
| MB | = | motor gasoline blending components |
| MG | = | motor gasoline |
| MS | = | miscellaneous petroleum products |
| NA | = | natural gasoline (including isopentane) |
| NG | = | natural gas |
| NU | = | nuclear electric power |
| OC | = | organic chemicals |
| PA | = | all petroleum products |
| PC | = | petroleum coke |
| PI | = | paints and allied products |
| PL | = | plant condensate |
| PO | = | other petroleum products |
| PP | = | pentanes plus |
| RD | = | road oil |
| RE | = | renewable energy |
| RF | = | residual fuel |
| SG | = | still gas |
| SN | = | special naphtha |
| SO | = | photovoltaic and solar thermal energy |

| | | |
|---|---|---|
| TE | = | total energy |
| TN | = | total net energy |
| TP | = | resident population |
| UO | = | unfinished oils |
| US | = | unfractionated stream |
| WD | = | wood |
| WN | = | wind, photovoltaic, and solar thermal energy |
| WS | = | waste |
| WW | = | wood and waste |
| WX | = | waxes |
| WY | = | wind |

The consumption end-use sectors, identified by characters three and four of each variable name, such as:

| | | |
|---|---|---|
| AC | = | transportation sector consumption |
| CC | = | commercial sector consumption |
| EU | = | electric utility sector consumption |
| IC | = | industrial sector consumption |
| RC | = | residential sector consumption |
| TC | = | total consumption of all sectors |

Many other characters occur in the third and fourth positions of the variable names for the sales, deliveries, and distribution data series used in the intermediate calculations in CSEDS to derive the end-use consumption estimates. Examples of these codes are:

| | | |
|---|---|---|
| AG | = | sales for use in agriculture |
| BK | = | sales for use in vessel bunkering |
| IN | = | deliveries to the industrial sector |
| OD | = | distribution to other industrial users |

Combining the first two components (the first four letters) produces variable names, such as:

| | | |
|---|---|---|
| MGAG | = | motor gasoline sold for use in agriculture |
| MGAC | = | motor gasoline consumed by the transportation sector |
| NGIN | = | natural gas delivered to the industrial sector |
| NGIC | = | natural gas consumed by the industrial sector |

The fifth character of the variable names in CSEDS identifies the type of data by using one of the following letters:

B = data in British thermal units (Btu)
K = factor for converting data from physical units to Btu
M = data in alternative physical units
P = data in standardized physical units
S = share or ratio expressed as a fraction
V = value added in manufacture

Data entered into CSEDS are in physical units, represented by a "P" in the fifth character; for example, coal data are in thousand short tons, petroleum data are in thousand barrels, and natural gas data are in million cubic feet. In a few cases, data are obtained from the source documents in different units, such as thousand gallons instead of thousand barrels, and are represented by an "M" until converted in CSEDS to the unit that is consistent with other variables. Conversion factors, represented by a "K" in the fifth character, are applied to the physical unit data to convert the data to British thermal units, a common unit for all forms of energy. The derived data series in thousand British thermal units are represented by "B" in the fifth character. In a few cases, consumption estimates are derived by calculating shares of aggregated consumption data. The fractions used to calculate the consumption shares are identified by an "S" in the fifth character. The consumption estimates for some petroleum products are based on the value added in the manufacturing process by related industries in each State. The data series for those industry activities are in dollars, and the variable names contain "V" in the fifth character.

The last two characters of each variable name are for geographic identification. Geographic areas used in CSEDS are the 50 States and the District of Columbia (represented by the U.S. Postal Service State abbreviations) and the United States as a whole. Some estimates of electricity sales and losses are derived by using only the contiguous 48 States and the District of Columbia, and the variables used in those calculations are identified by "48" in the last two characters of the names. The geographic area codes used in CSEDS are shown in Table A1.

Throughout this report, the term "State" includes the District of Columbia. Throughout this documentation, "ZZ" is used as a geographic identifier to

**Table A1. Geographic Area Codes Used in the State Energy Data System**

| Code | State | Code | State |
|------|-------|------|-------|
| AK | Alaska | NC | North Carolina |
| AL | Alabama | ND | North Dakota |
| AR | Arkansas | NE | Nebraska |
| AZ | Arizona | NH | New Hampshire |
| CA | California | NJ | New Jersey |
| CO | Colorado | NM | New Mexico |
| CT | Connecticut | NV | Nevada |
| DC | District of Columbia | NY | New York |
| DE | Delaware | OH | Ohio |
| FL | Florida | OK | Oklahoma |
| GA | Georgia | OR | Oregon |
| HI | Hawaii | PA | Pennsylvania |
| IA | Iowa | RI | Rhode Island |
| ID | Idaho | SC | South Carolina |
| IL | Illinois | SD | South Dakota |
| IN | Indiana | TN | Tennessee |
| KS | Kansas | TX | Texas |
| KY | Kentucky | UT | Utah |
| LA | Louisiana | VA | Virginia |
| MA | Massachusetts | VT | Vermont |
| MD | Maryland | WA | Washington |
| ME | Maine | WI | Wisconsin |
| MI | Michigan | WV | West Virginia |
| MN | Minnesota | WY | Wyoming |
| MO | Missouri | US | United States |
| MS | Mississippi | 48 | The contiguous 48 States |
| MT | Montana | | and the District of Columbia |

represent the different State abbreviations that would be interchanged in that position of the variable name.

# Section 2.  Coal

Two forms of coal—anthracite (AC) and bituminous coal and lignite (BC)—are added to provide coal totals (CL).

## Anthracite

### *Physical Units*

There are seven input data series used to estimate the State end-use consumption of anthracite, and all are in units of thousand short tons.  "ZZ" in the variable names is used to represent the two-letter State code that differs for each State:

ACEUPZZ   = anthracite consumed by the electric utilities in each State;
ACHCPUS   = anthracite consumed by the residential and commercial sectors in the United States;
ACHDPZZ   = anthracite distributed to the residential and commercial sectors in each State;
ACKCPUS   = anthracite consumed by coke plants in the United States;
ACKDPZZ   = anthracite distributed to coke plants in each State;
ACOCPUS   = anthracite consumed by other industrial users in the United States; and
ACODPZZ   = anthracite distributed to other industrial users in each State.

The U.S. totals for the four State-level series, ACEUPZZ, ACHDPZZ, ACKDPZZ, and ACOCDPZZ, are calculated by summing the State data.

Estimates of anthracite consumed by the residential and commercial sectors combined are made by assuming that anthracite is consumed in proportion to the amount of anthracite distributed to the residential and commercial sectors in each State:

ACHCPZZ   = (ACHDPZZ/ACHDPUS) * ACHCPUS

Little information is available regarding disaggregating the combined residential and commercial estimates.  An estimate of 60 percent to the residential sector and 40 percent to the commercial sector is made for all States and years.  Therefore, the residential sector consumption of anthracite, ACRCPZZ, is estimated:

ACRCPZZ   = ACHCPZZ * 0.60

and the commercial sector consumption, ACCCPZZ, is estimated:

ACCCPZZ   = ACHCPZZ * 0.40

To gain a perspective on these estimates: all anthracite consumed in the United States in 1999 accounted for 0.2 percent of total coal consumption, and the residential and commercial use of anthracite was less than half of all anthracite consumed.

The industrial sector consumption is estimated by State.  An assumption is made that anthracite is consumed by coke plants in proportion to the amount of anthracite distributed to coke plants in each State.  It is also assumed that the consumption of anthracite by industrial users other than coke plants is in proportion to the amount of anthracite delivered to the other industrial users in each State.  The industrial sector consumption is the sum of anthracite consumed by coke plants and by other industrial users for each State:

ACKCPZZ   = ACKDPZZ/ACKDPUS) * ACKCPUS
ACOCPZZ   = (ACODPZZ/ACODPUS) * ACOCPUS
ACICPZZ   = ACKCPZZ + ACOCPZZ

Total anthracite consumption in each State is the sum of the sectors' consumption:

ACTCPZZ = ACRCPZZ + ACCCPZZ + ACICPZZ + ACEUPZZ

The U.S. anthracite consumption estimates for each of the sectors and the total are calculated as the sum of the States' values.

### British Thermal Units (Btu)

Two factors are used for converting anthracite consumption from physical units to Btu. The factors, in million Btu per short ton, are:

ACEUKUS = the factor for converting anthracite consumed in the electric utility sector from short tons to Btu; and

ACNUKUS = the factor for converting anthracite consumed by all sectors other than electric utilities from short tons to Btu.

The industrial sector Btu consumption is estimated in three steps in order to maintain separate series for anthracite used as coking coal (ACKCB) and anthracite consumed by other industrial users (ACOCB):

ACKCBZZ = ACKCPZZ * ACNUKUS
ACOCBZZ = ACOCPZZ * ACNUKUS
ACICBZZ = ACKCBZZ + ACOCBZZ

The remaining end-use sectors are calculated for all States:

ACEUBZZ = ACEUPZZ * ACEUKUS
ACRCBZZ = ACRCPZZ * ACNUKUS
ACCCBZZ = ACCCPZZ * ACNUKUS
ACTCBZZ = ACRCBZZ + ACCCBZZ + ACICBZZ + ACEUBZZ

Total U.S. end-use consumption estimates are calculated as the sum of the States' data.

### Additional Notes on Anthracite

Anthracite consumption at the national level for the residential and commercial sectors (ACHCPUS), coke plants (ACKCPUS), and industries other than coke plants (ACOCPUS) are continuous data series. However, the total coal distribution and anthracite distribution data series used to develop State-level estimates are not continuous.

For 1960 through 1979, State-level anthracite data are not available and the 1980 State data are used to apportion the U.S. totals to the States. From 1980 forward, the data in the distribution series variables—ACKDPZZ, ACODPZZ, and ACHDPZZ—are estimates of actual anthracite consumption rather than the distribution.

For 1980 forward, State-level total coal consumption data are available, but consumption by sector within many States is withheld. Estimates of the withheld sector consumption of total coal are derived by using the distribution series for the residential and commercial sectors to fill in withheld residential and commercial consumption. In most States, this leaves only one sector withheld and it can be derived by subtracting known sectors from the State total. This gives total coal consumption estimates for the end-use sectors that are compatible with State coal consumption data published in other EIA reports. Anthracite consumption is then derived by using anthracite distribution data to estimate consumption within each sector and State. These estimates equal U.S. totals for anthracite consumption by sector contained in other EIA databases.

### Data Sources for Anthracite

ACEUKUS — Factor for converting anthracite consumed by the electric utilities from physical units to Btu.
- 1960 through 1972: Energy Information Administration (EIA) assumed that all anthracite consumed at electric utilities was recovered from culm banks and river dredging and was estimated to have an average heat content of 17.500 million Btu per short ton.
- 1973 through 1997: Calculated annually by EIA by dividing the heat content of anthracite receipts at electric utilities by the quantity of anthracite received at electric utilities. These data are reported on the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and predecessor forms.
- 1998 and 1999: No data available. The 1997 value is repeated.

ACEUPZZ — Anthracite consumed by the electric utilities by State.

- EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms.

**ACHCPUS** — Anthracite consumed by the residential and commercial sectors in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Pennsylvania Anthracite Annual."
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 9.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 8.
- 1988 forward: EIA, Unpublished data from Form EIA-6.

**ACHDPZZ** — Anthracite distributed to the residential and commercial sectors.

- 1960 through 1979: No data available. The 1980 State data are used for years 1960 through 1979.
- 1980 forward: Consumption estimates are used for this distribution series. Consumption of all types of coal by State is published in EIA, *Quarterly Coal Report, October–December* for each year. Data are from the report of the following year, i.e., 1982 final data are published in the *Quarterly Coal Report, October–December 1983*. The specific tables are:
  — 1980: Unpublished data.
  — 1981 through 1983: Table 27.
  — 1984 through 1990: Table 29.
  — 1991 through 1994: Table 51.
  — 1995: Table 43.
  — 1996 forward: Table 44.
  Withheld State values for consumption of all types of coal are estimated by using distribution data. When U.S. residential and commercial coal distribution does not equal U.S. residential and commercial coal consumption, the State distribution values are adjusted proportionally until the sum of State distribution values equals the U.S. consumption value published in the *Quarterly Coal Report*. The distribution data are published in:
  — 1980 through 1984: EIA, *Coal Distribution, January-December 1984*, Table 21.
  — 1985 through 1989: EIA, *Coal Distribution, January-December 1989*, Table 15.
  — 1990 and 1991: EIA, *Coal Distribution, January-December* for each year, Table 16.
  — 1992 through 1994: EIA, *Quarterly Coal Report, October-December* for the following year, Table 10.
  — 1995 thourgh 1997: Unpublished data from Form EIA-6.
  — 1998 forward: EIA, *Coal Industry Annual*, Table 64.
  Anthracite consumption is estimated by using distribution data published in EIA, *Coal Distribution, January-December* for each year. The specific tables are:
  ("District 24" represents all anthracite.)
  — 1980 through 1983: Tables 8 and 9.
  — 1984: Tables 6 and 8.
  — 1985 through 1989: Tables 6 and 3.
  ("Origin: Pennsylvania, Anthracite" represents all anthracite.)
  — 1990 and 1991: Table 33.
  — 1992 through 1997: Unpublished data from Form EIA-6.
  — 1998 forward: EIA *Coal Industry Annual*, Table 63.
  State distribution data are increased or decreased proportionally until the sum of the States' distribution values equals the U.S. consumption (ACHCPUS).

**ACKCPUS** — Anthracite carbonized by coke plants in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Pennsylvania Anthracite Annual."
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 9.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 8.
- 1988 forward: EIA, Unpublished data from Form EIA-5.

**ACKDPZZ** — Anthracite distributed to coke plants by State.

- 1960 through 1979: No data available. The 1980 State data are used for years 1960 through 1979.
- 1980 forward: Consumption estimates are used for this distribution series. Consumption of all types of coal by State is published in EIA, *Quarterly Coal Report, October-December* for each year. Data are from the report of the following year, i.e., 1982 final data are published in the *Quarterly Coal Report, October-December 1983*. The specific tables are:
  — 1980: Unpublished data.
  — 1981 through 1983: Table 25.

— 1984, 1985, and 1987:  Table 27.
— 1986, 1988, and 1989:  Unpublished State revisions that are components of the U.S. revisions published in the *Quarterly Coal Report, October-December 1991,* Table 45.
— 1990:  Table 27.
— 1991 through 1994:  Table 48.
— 1995:  Table 40.
— 1996 forward:  Table 41.

Withheld State values for consumption of all types of coal are estimated by using distribution data.  After withheld residential and commercial coal consumption values have been estimated, withheld coke plant consumption is the difference between the sum of the published and estimated end-use sectors' consumption and the published State total consumption.  For States where both coke plant and other industrial coal use are withheld, it is assumed that a State not listed in the EIA *Coal Industry Annual 1998*, Table 73 has no coke plant consumption.

Anthracite consumption is estimated by using distribution data published in EIA, *Coal Distribution, January-December* for each year.  The specific tables are:

("District 24" represents all anthracite.)
— 1980 through 1983:  Tables 8 and 9.
— 1984:  Tables 6 and 8.
— 1985 through 1989:  Tables 6 and 33.

("Origin: Pennsylvania, Anthracite" represents all anthracite.)
— 1990 and 1991:  Table 33.
— 1992 through 1997:  Unpublished data from Form EIA-6.
— 1998 forward:  EIA *Coal Industry Annual*, Table 63.

State distribution data are increased or decreased proportionally until the sum of the States' distribution values equals the U.S. consumption  (ACKCPUS).

**ACNUKUS** — Factor for converting anthracite consumed by all sectors other than the electric utility sector from physical units to Btu.

• 1960 through 1997:  Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumption by all sectors other than the electric utility sector less the quantity of anthracite stock changes, losses, and "unaccounted for."

• 1998 and 1999:  No data available.  The 1997 value is repeated.

**ACOCPUS** — Anthracite consumed by industrial users other than coke plants in the United States.

• 1960 through 1972:  U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Pennsylvania Anthracite, Annual."

• 1973 through 1984:  EIA, *Weekly Coal Production*, August 9, 1986, Table 9.

• 1985 through 1987:  EIA, *Weekly Coal Production*, July 16, 1988, Table 8.

• 1988 forward:  EIA, Unpublished data from Forms EIA-3 and EIA-6.

**ACODPZZ** — Anthracite distributed to industrial plants (other than coke plants) by State.

• 1960 through 1979:  No data available.  The 1980 State data are used for years 1960 through 1979.

• 1980 forward:  Consumption estimates are used for this distribution series.  Consumption of all types of coal by State is published in EIA, *Quarterly Coal Report, October-December* for each year.  Data are from the report of the following year, i.e., 1982 final data are published in the *Quarterly Coal Report, October-December 1983*.  The specific tables are:

— 1980:  Unpublished data.
— 1981 through 1983:  Table 26.
— 1984 through 1990:  Table 28.
— 1991 through 1994:  Table 49.
— 1995:  Table 41.
— 1996 forward:  Table 42.

Withheld State values for consumption of all types of coal are estimated by using distribution data.  After withheld residential and commercial coal consumption values have been estimated, withheld consumption by other industrial users is the difference between the sum of the published and estimated end-use sectors' consumption and the published State total consumption.

Anthracite consumption is estimated by using distribution data published in EIA, *Coal Distribution, January-December* for each year.  The specific tables are:

("District 24" represents all anthracite.)
— 1980 through 1983:  Tables 8 and 9.
— 1984:  Tables 6 and 8.
— 1985 through 1989:  Tables 6 and 33.

("Origin: Pennsylvania, Anthracite" represents all anthracite.)
— 1990 and 1991:  Table 33.

— 1992 through 1997:  Unpublished data from Form EIA-6.

— 1998 forward:  EIA *Coal Industry Annual*, Table 63.

State distribution data are increased or decreased  proportionally until the sum of the States' distribution values equals total U.S. consumption (ACOCPUS).

## Bituminous Coal and Lignite

### *Physical Units*

Eight data series are used to estimate bituminous coal and lignite consumption.  They are consumption and distribution data, and they are all in units of thousand short tons:

BCACPUS = bituminous coal and lignite consumed by the transportation sector in the United States;

BCEUPZZ = bituminous coal and lignite consumed by the electric utilities in each State;

BCHCPUS = bituminous coal and lignite consumed by the residential and commercial sectors in the United States;

BCHDPZZ = bituminous coal and lignite distributed to the residential and commercial sectors in each State.

BCKCPUS = bituminous coal and lignite consumed by coke plants in the United States;

BCKDPZZ = bituminous coal and lignite distributed to coke plants in each State;

BCOCPUS = bituminous coal and lignite consumed by other industrial users in the United States; and

BCODPZZ = bituminous coal and lignite distributed to other industrial users in each State.

The U.S. totals for the four State-level series,  BCEUPZZ, BCHDPZZ, BCKDPZZ, and BCODPZZ, are calculated by summing the State data.

An assumption is made that bituminous coal and lignite are consumed by the residential and commercial sectors combined in proportion to the amount of bituminous coal and lignite distributed to the residential and commercial sectors in each State:

BCHCPZZ = (BCHDPZZ / BCHDPUS) * BCHCPUS

Little information exists for disaggregating the combined residential and commercial estimates.  An estimate of 35 percent to the residential sector and 65 percent to the commercial sector is made for all States and years. That is, the residential sector consumption, BCRCPZZ, is estimated:

BCRCPZZ = BCHCPZZ * 0.35

and the commercial sector consumption, BCCCPZZ, is estimated:

BCCCPZZ = BCHCPZZ * 0.65

To gain a perspective on these estimates: bituminous coal and lignite consumed by residential and commercial users in 1999 accounted for only 0.4 percent of all bituminous coal and lignite consumed—that is, 4 million short tons out of the 991 million short tons consumed in 1999.

Consumption in the industrial sector is estimated by State.  An assumption is made that bituminous coal and lignite is consumed by coke plants in proportion to the amount of bituminous coal and lignite distributed to coke plants in each State.  It is also assumed that the consumption of bituminous coal and lignite by industrial users other than coke plants is in proportion to the amount delivered to other industrial users in each State.  The industrial sector consumption is the sum of bituminous coal and lignite consumed by coke plants and by other industrial users for each State:

BCKCPZZ = (BCKDPZZ / BCKDPUS) * BCKCPUS
BCOCPZZ = (BCODPZZ / BCODPUS) * BCOCPUS
BCICPZZ = BCKCPZZ + BCOCPZZ

There are no data available for estimating the transportation sector's consumption of bituminous coal and lignite by State.  The quantity would be very small.  The transportation sector accounted for only 1 percent of the national total consumption in 1960 and none since 1978.  An assumption is made that when transportation sector consumption exists, the consumption by State, BCACPZZ, is in proportion to the share of the U.S. industrial sector attributed to each State:

BCACPZZ   = (BCICPZZ / BCICPUS) * BCACPUS

Total consumption in each State, BCTCPZZ, is the sum of the sectors' consumption:

BCTCPZZ   = BCRCPZZ + BCCCPZZ + BCICPZZ + BCACPZZ +
                        BCEUPZZ

The U.S. bituminous coal and lignite consumption estimates for each of the sectors and the total are calculated as the sum of the States' values.

### British Thermal Units (Btu)

Three factors are used for converting bituminous coal and lignite from physical units to Btu. The three factors, State-specific for each year, in units of million Btu per short ton, are:

BCEUKZZ   = the factor for converting bituminous coal and lignite con-
                        sumed by the electric utility sector in each State from
                        short tons to Btu;
BCHCKZZ   = the factor for converting bituminous coal and lignite con-
                        sumed by  the residential and commercial sectors in each
                        State from short tons to Btu; and
BCOCKZZ   = the factor for converting bituminous coal and lignite con-
                        sumed by other industrial users in each State from short
                        tons to Btu.

The electric utility factor for each State is applied to estimate bituminous coal and lignite consumed by electric utilities in Btu:

BCEUBZZ   = BCEUPZZ * BCEUKZZ

The residential and commercial sectors' State factor is applied to estimate bituminous coal and lignite consumed by the two sectors in Btu:

BCRCBZZ   = BCRCPZZ * BCHCKZZ
BCCCBZZ   = BCCCPZZ * BCHCKZZ

The industrial sector Btu consumption is estimated in three steps. A constant conversion factor of 26.80 million Btu per short ton is used for coking

coal consumption for all years. The conversion factor for industrial users other than coke plants in each State is applied to other industrial users sector consumption. The industrial sector Btu consumption is then estimated by adding coking coal Btu consumption and other industrial users Btu consumption:

BCKCBZZ   = BCKCPZZ * 26.80
BCOCBZZ   = BCOCPZZ * BCOCKZZ
BCICBZZ   = BCKCBZZ + BCOCBZZ

The transportation sector Btu consumption is estimated by applying the other industrial users' State factor to the transportation consumption:

BCACBZZ   = BCACPZZ * BCOCKZZ

Total consumption for each State is the sum of the sectors' consumption:

BCTCBZZ   = BCRCBZZ + BCCCBZZ + BCICBZZ + BCACBZZ +
                        BCEUBZZ

The U.S. consumption estimates in Btu are calculated by summing the State values for each of the data series.

### Additional Notes for Bituminous Coal and Lignite

1.   Bituminous coal and lignite consumption at the national level for the residential and commercial sectors (BCHCPUS), coke plants (BCKCPUS), and industries other than coke plants (BCOCPUS) are continuous data series. However, the distribution data series used to develop State-level estimates by end-use sector are not continuous.

      For 1960 through 1979, State-level bituminous coal and lignite distribution data are used to apportion the U.S. consumption data to the States. From 1980 forward, the data in the distribution series variables—BCKDPZZ, BCODPZZ, and BCHDPZZ—are estimates of actual bituminous coal and lignite consumption rather than the distribution data used for the previous years.

      For 1980 forward, State-level total coal consumption data are available, but data for consumption by sector within many States are withheld. Estimates of the withheld sector consumption of total coal are

derived by using the distribution series for the residential and commercial sectors to fill in withheld residential and commercial consumption. In most States, this leaves only one sector withheld and it can be derived by subtracting known sectors from the State total. This gives total coal consumption estimates for the end-use sectors that are compatible with State coal consumption data published in other EIA reports. Anthracite consumption is derived by using anthracite distribution data to estimate consumption within each sector and State that sum to the U.S. totals for anthracite consumption by sector contained in other EIA databases. Bituminous coal and lignite consumption for each sector and State is, then, the difference between the total coal consumption estimates and anthracite consumption estimates.

2.  Prior to 1974, data for distribution of bituminous coal and lignite by State included several groupings of States for which separate State data were unavailable. These groupings were: (1) Maine, New Hampshire, Vermont, and Rhode Island; (2) North Dakota and South Dakota; (3) Delaware and Maryland; (4) Georgia and Florida; (5) Alabama and Mississippi; (6) Arkansas, Louisiana, Oklahoma, and Texas; (7) Montana and Idaho; (8) Arizona and Nevada; and (9) Washington and Oregon. Beginning with 1974, individual State distribution data became available. To estimate the 1960 through 1973 State distribution data, the combined States were disaggregated in proportion to the individual States' shares of each similar State grouping in 1974.

3.  Total coal consumption by State for 1980 through 1989 published in the EIA *Quarterly Coal Report* do not sum to the U.S. totals due to a quantity called "Unknown" in the source tables. This unknown coal consumption is assumed to be bituminous coal and lignite and is added to the residential, commercial, and "other industrial" sectors of Alabama, Illinois, Kentucky, Pennsylvania, Tennessee, and West Virginia.

### Data Sources for Bituminous Coal and Lignite

BCACPUS — Bituminous coal and lignite consumed by the transportation sector in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite."

- 1976 and 1977: EIA, *Energy Data Reports*, "Coal-Bituminous and Lignite by Consumer and Retail Deliveries."
- 1978 forward: Small amounts of bituminous coal and lignite consumed by the transportation sector are included in the other industrial category (see BCOCPUS). Zero is entered for this variable.

BCEUKZZ — Factor for converting bituminous coal and lignite consumed by the electric utilities from physical units to Btu by State.
- 1960 through 1972: EIA adopted the average thermal conversion factor of the Bureau of Mines, which used the National Coal Association (NCA) average thermal conversion factor for electric utilities calculated from the Federal Power Commission's (FPC) Form 1 and published in *Steam Electric Plant Factors*, an NCA annual report. The specific tables are:
  — 1960 and 1961: Table 1.
  — 1962 through 1972: Table 2.
- 1973 through 1982: The average heat content of coal received at steam electric plants 25 megawatts or greater from the Federal Energy Regulatory Commission (FERC) Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*, tables titled "Destination and Origin of Coal 'Delivered to' (1973–1979) 'Receipts to' (1980) 'Received at' (1981–1982) Steam-Electric Plants 25-MW or Greater."
- 1983 forward: The average heat content of coal received at steam electric plants 50 megawatts capacity or larger from FERC Form 423 and published in Btu per pound in the EIA, *Cost and Quality of Fuels for Electric Utility Plants.* This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Cost and Quality of Fuels for Electric" and click on the "Go" button. Select the report from the list. The specific tables are:
  — 1983 and 1984: Table 58.
  — 1985 through 1989: Table 48.
  — 1990 and 1991: Table 35.
  — 1992: Table 22.
  — 1993 forward: Table 4 and Table 22.

Notes: The State conversion factors for 1960 through 1972 were derived from actual consumption data, while the conversion factors for 1973 to the present were based on receipts of coal. The factors for 1960 through 1972 may also have included some quantities of anthracite. These breaks in the series create some data discrepancies. Alaska and Hawaii were excluded

from the NCA report, FPC Form 423, and FERC Form 423. However, Alaska reported consumption of bituminous coal and lignite at electric utilities for all years. An FPC heat rate for coal at electric utilities in Alaska was used for 1960 through 1978 as published in EIA, *Federal Energy Data System (FEDS) Technical Documentation*, June 1978, Table 21. The 1972 conversion factor (the last year for which a conversion factor was reported for Alaska) was used for 1972 through 1978. According to industry sources, new mines were opened in 1978 and a more representative factor was used for 1979 and following years. In instances where a State had no receipts for a particular year but did report consumption, it was assumed that the coal received in one year was consumed during the following year and the Btu value of the previous year's receipts was used.

**BCEUPZZ** — Bituminous coal and lignite consumed by the electric utilities by State.

- EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms.

**BCHCKZZ** — State factor for converting bituminous coal and lignite consumed by the residential and commercial sectors from physical units to Btu.

- 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed in the residential and commercial sector by the ratios of 1960 through 1973 national averages for the sector to its 1974 average.
- 1974 through 1998: Calculated by EIA by assuming that the bituminous coal and lignite consumed in the residential and commercial sector in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." The average Btu content of coal delivered from each coal-producing district was applied to deliveries to the residential and commercial sector in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, "Coal Distribution Report," and predecessor Bureau of Mines Form 6-1419-Q.
- 1999: No data available. The 1998 value is repeated.

**BCHCPUS** — Bituminous coal and lignite consumed by the residential and commercial sectors in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," column titled "Retail dealers" or "Retail sales."
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 8.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 7.
- 1988 forward: EIA, Unpublished data from Form EIA-6.

**BCHDPZZ** — Bituminous coal and lignite distributed to the residential and commercial sectors by State.

- 1960 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," column titled "Retail dealers."
- 1977 through 1979: EIA, *Energy Data Reports*, "Coal-Bituminous and Lignite." The specific tables are:
  — 1977: "Comparative Summary of Distribution of Bituminous Coal and Lignite Produced in the United States During the First Nine Months of 1977" and "Distribution of Bituminous Coal and Lignite Produced in the United States During October-December 1977, by Geographic Division and State Destination," columns titled "Retail dealers."
  — 1978: "Distribution of Bituminous Coal and Lignite Produced in the United States," column titled "Retail sales."
  — 1979: "Overall Summary of Distribution of Bituminous, Subbituminous, and Lignite Coal Produced in the United States," column titled "Retail sales."
- 1980 forward: Consumption estimates are used for this distribution series. Bituminous coal and lignite consumption is the remainder when estimated anthracite consumption is subtracted from all coal consumption in each State. (See ACHDPZZ for data sources and estimation procedures.) Consumption shown as "Unknown" is assumed to be bituminous coal and lignite and is allocated to six States (Alabama, Illinois, Kentucky, Pennsylvania, Tennessee, and West Virginia) in proportion to their total distribution of all coal.

**BCKCPUS** — Bituminous coal and lignite carbonized at coke plants in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," sum of columns "Beehive coke plants" and "Oven coke plants."
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 8.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 7.
- 1988 forward: EIA, Unpublished data from Form EIA-5.

BCKDPZZ — Bituminous coal and lignite distributed to coke plants, a portion of the industrial sector by State.
- 1960 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite."
- 1977 through 1979: EIA, *Energy Data Reports*, "Coal-Bituminous and Lignite." The specific tables are:
— 1977: "Comparative Summary of Distribution of Bituminous Coal and Lignite Produced in the United States During the First Nine Months of 1977" and "Distribution of Bituminous Coal and Lignite Produced in the United States During October-December 1977, by Geographic Division and State Destination."
— 1978: "Distribution of Bituminous Coal and Lignite Produced in the United States."
— 1979: "Overall Summary of Distribution of Bituminous, Sub-bituminous, and Lignite Coal Produced in the United States."
- 1980 forward: Consumption estimates are used for this distribution series. Bituminous coal and lignite consumption is the remainder when estimated anthracite consumption is subtracted from all coal consumption in each State. See ACKDPZZ for data sources and estimation procedures.

BCOCKZZ — State factor for converting bituminous coal and lignite consumed by other industrial users from physical units to Btu.
- 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed by industrial users other than coke plants by the ratios of 1960 through 1973 national averages for the other industrial users to its 1974 average.
- 1974 through 1998: Calculated by EIA by assuming that the bituminous coal and lignite consumed by industrial users other than coke plants in each State contained heating values equal to those of

bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." The average Btu content of coal delivered from each coal-producing district was applied to deliveries to other industrial users in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, "Coal Distribution Report," and predecessor Bureau of Mines Form 6-1419-Q.
- 1999: No data are available. The 1998 value is repeated.

BCOCPUS — Bituminous coal and lignite consumed by industrial users other than coke plants in the United States.
- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," table titled "Consumption of bituminous coal and lignite, by consumer class, and retail deliveries in the United States." Sum of columns titled "Steel and rolling mills," "Cement mills," and "Other manufacturing and mining industries."
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 8.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 7.
- 1988 forward: EIA, Unpublished data from Forms EIA-3 and EIA-6.

BCODPZZ — Bituminous coal and lignite distributed to industrial plants (other than coke plants) by State.
- 1960 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite."
- 1977 through 1979: EIA, *Energy Data Reports*, "Coal-Bituminous and Lignite." The specific tables are:
— 1977: "Comparative Summary of Distribution of Bituminous Coal and Lignite Produced in the United States During the First Nine Months of 1977" and "Distribution of Bituminous Coal and Lignite Produced in the United States During October-December 1977, by Geographic Division and State Destination."
— 1978: "Distribution of Bituminous Coal and Lignite Produced in the United States."

— 1979: "Overall Summary of Distribution of Bituminous, Sub-bituminous, and Lignite Coal Produced in the United States."

- 1980 forward: Consumption estimates are used for this distribution series. Bituminous coal and lignite consumption is the remainder when estimated anthracite consumption is subtracted from all coal consumption in each State. (See ACODPZZ for data sources and estimation procedures.) Consumption shown as "Unknown" is assumed to be bituminous coal and lignite and is allocated to six States (Alabama, Illinois, Kentucky, Pennsylvania, Tennessee, and West Virginia) in proportion to their total distribution of all coal.

## Coal

### Physical Units

All coal totals are the sum of the anthracite and bituminous coal and lignite estimates for the residential and commercial sectors and electric utilities. The industrial sector includes total coal by nonutility power producers. It is assumed that no anthracite is consumed by the transportation sector. The calculations for each State and the U.S. total are:

$$CLRCP = ACRCP + BCRCP$$
$$CLCCP = ACCCP + BCCCP$$
$$CLICP = ACICP + BCICP$$
$$CLACP = BCACP$$
$$CLEUP = ACEUP + BCEUP$$
$$CLTCP = ACTCP + BCTCP$$

### British Thermal Units (Btu)

Estimates of total coal consumption in Btu for each State and the U.S. are calculated:

$$CLRCB = ACRCB + BCRCB$$
$$CLCCB = ACCCB + BCCCB$$
$$CLICB = ACICB + BCICB$$
$$CLACB = BCACB$$

$$CLEUB = ACEUB + BCEUB$$
$$CLTCB = ACTCB + BCTCB$$

### Additonal Calculations

Additional calculations are performed in the Combined State Energy Data System (CSEDS) to provide coal consumption estimates for the price and expenditure calculations published in the *State Energy Price and Expenditure Report*. Total coal used at coke plants (CLKCB) and total coal consumed by all other industrial users (CLOCP and CLOCB) are calculated at the State and U.S. levels:

$$CLKCB = ACKCB + BCKCB$$
$$CLOCP = ACOCP + BCOCP$$
$$CLOCB = ACOCB + BCOCB$$

## Net Imports of Coal Coke

### Physical Units

Net imports of coal coke is a component of total U.S. energy consumption. There is no attempt to estimate State allocations of this energy source. All of it is considered to be used by the industrial sector. In the *State Energy Data Report*, net imports of coal coke is included in the U.S. data but not in the State-level data in all tables of total energy consumption and industrial sector energy consumption. Variables for net imports of coal coke into the United States are:

CCIMPUS = coal coke imported into the United States, in thousand short tons; and

CCEXPUS = coal coke exported from the United States, in thousand short tons.

Net imports is calculated:

$$CCNIPUS = CCIMPUS - CCEXPUS$$

### British Thermal Units (Btu)

The factor for converting coal coke from short tons to Btu is 24.80 million Btu per short ton:

CCIMBUS = CCIMPUS * 24.80
CCEXBUS = CCEXPUS * 24.80
CCNIBUS = CCIMBUS – CCEXBUS

### Data Sources for Net Imports of Coal

CCEXPUS — Coal coke exported from the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals Annual."
- 1976 through 1979: EIA, *Energy Data Reports*, "Coke and Coal Chemicals Monthly."
- 1980 through 1990: EIA, *Quarterly Coal Report* (January-March of the following year). The specific tables are:
  — 1980: Table 7.
  — 1981 through 1984: Table A10.
  — 1985 through 1990: Table A9.
- 1991 and 1992: Unpublished revisions in short tons from the EIA, Office of Energy Markets and End Use, Integrated Modeling Data System.

- 1993 through 1997: Unpublished revisions in short tons from the EIA, Office of Energy Markets and End Use, Integrated Modeling Data System, as published in thousand short tons in the EIA, *Quarterly Coal Report October-December 1999*, Table 2.
- 1998 and 1999: EIA, *Quarterly Coal Report October-December 1999*, Table 15.

CCIMPUS — Coal coke imported into the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals Annual."
- 1976 through 1979: EIA, *Energy Data Reports*, "Coke and Coal Chemicals Monthly."
- 1980 through 1990: EIA, *Quarterly Coal Report* (October-December of the following year). The specific tables are:
  — 1980: Table 8.
  — 1981 through 1984: Table A12.
  — 1985 through 1987: Table A11.
  — 1988 through 1990: Table A10.
- 1991 and 1992: Unpublished revisions in short tons from the EIA, Office of Energy Markets and End Use, Integrated Modeling Data System.
- 1993 through 1997: Unpublished revisions in short tons from the EIA, Office of Energy Markets and End Use, Integrated Modeling Data System, as published in thousand short tons in the EIA, *Quarterly Coal Report October-December 1999*, Table 2.
- 1998 and 1999: EIA, *Quarterly Coal Report October-December 1999*, Table 19.

*Physical Units*

Six natural gas data series are used to derive the natural gas consumption estimates in the Combined State Energy Data System (CSEDS).  Three of these data series are deliveries of natural gas to the end user by State and are used as consumption because actual consumption data at these levels are not available.  The sources for the natural gas data are the reports in the *Natural Gas Annual* series published by the Energy Information Administration (EIA) and its predecessors.  These series, in million cubic feet,  for each State are as follows (the two-letter State code is represented by "ZZ" in the following variable names):

NGCCPZZ   = natural gas delivered to the commercial sector (includes gas used by nonmanufacturing organizations, such as hotels, restaurants, retail stores, laundries, and other service enterprises, and) plus natural gas delivered to other consumers (includes deliveries to municipalities and public authorities for institutional heating and street lighting). Prior to 1996, includes gas used in agriculture, forestry, and fisheries;

NGEUPZZ   = natural gas consumed by electric utilities;

NGINPZZ   = a portion of the natural gas delivered to the industrial sector (includes gas used as fuel and feedstock in chemical plants and to produce carbon black).  Beginning in 1996, includes gas used in agriculture, forestry, and fisheries;

NGLEPZZ   = natural gas consumed as lease fuel;

NGPLPZZ   = natural gas consumed as plant fuel;

NGPZPZZ   = natural gas consumed as pipeline fuel;

NGRCPZZ   = natural gas delivered to the residential sector; and

NGVHPZZ   = natural gas delivered for use as vehicle fuel.

The U.S. totals of these independent variables are calculated as the sum of the States' values.

The data are combined into the four major end-use sectors used in CSEDS as closely as possible.  However, natural gas data are collected by using different aggregations of users.  The industrial sector in CSEDS is intended to contain energy used in agriculture, forestry, and fisheries.  For natural gas, these categories were reported with commercial use of natural gas through 1995 and in the industrial sector for 1996 forward.  These data cannot be separately identified and no adjustment for this end-use inconsistency could be made in CSEDS.

The residential sector's consumption of natural gas is represented by the variable for deliveries to the residential sector, NGRCPZZ.

The commercial sector's consumption of natural gas is represented by the variable for deliveries to the commercial sector, NGCCPZZ.

The industrial sector's consumption of natural gas in CSEDS, NGICPZZ, is estimated to be the sum of natural gas delivered to the industrial sector, NGINPZZ, natural gas consumed as lease fuel, NGLEPZZ, and natural gas consumed as plant fuel, NGPLPZZ.  The source document reports lease and plant fuel combined for 1960 through 1992; the combined data series is stored as NGLEPZZ in CSEDS.

NGICPZZ    = NGINPZZ + NGLEPZZ + NGPLPZZ

The transportation sector's consumption of natural gas, NGACPZZ, is the sum of natural gas consumed in pipeline operations, primarily in compressors,  NGPZPZZ, and natural gas delivered for use as vehicle fuel, NGVHPZZ.  Prior to 1990, the small amounts of natural gas consumed as vehicle fuel are included in the commercial sector consumption and cannot be identified separately; therefore, NGVHPZZ is zero prior to 1990.

NGACPZZ   = NGPZPZZ + NGVHPZZ

Electric utilities' consumption of natural gas is represented by the data series NGEUPZZ.

The total consumption of natural gas, estimated for each State, is the sum of the consumption by the end-use sectors and electric utilities:

NGTCPZZ   = NGRCPZZ + NGCCPZZ + NGICPZZ + NGACPZZ +
                    NGEUPZZ

The U.S. consumption estimates for each of the sectors and the U.S. total are calculated as the sum of the States' values.

### British Thermal Units (Btu)

Three factors for each State are used for converting the consumption of natural gas from its physical units of million cubic feet into thousand Btu per cubic foot.  Two of these State-level factors are:

NGEUKZZ  =  The factor for converting natural gas consumed by electric utilities from physical units to Btu; and

NGTCKZZ  =  The factor for converting natural gas consumed by all sectors from physical units to Btu.

These two factors are used to derive a third factor, NGNUKZZ, for converting natural gas used by all sectors other than electric utilities from physical units to Btu:

NGTCBZZ   = NGTCPZZ * NGTCKZZ
NGEUBZZ   = NGEUPZZ * NGEUKZZ
NGNUKZZ  = (NGTCBZZ – NGEUBZZ) / (NGTCPZZ – NGEUPZZ)

Natural gas consumption in Btu for the residential, commercial, industrial, and transportation sectors in each State is calculated by multiplying the physical unit data by the factor NGNUKZZ, such as:

NGACBZZ   = NGACPZZ * NGNUKZZ
NGCCBZZ   = NGCCPZZ * NGNUKZZ

The U.S. consumption estimates in Btu for each of the sectors and the U.S. total are calculated as the sum of the States' Btu values:

NGTCBUS   = ΣNGTCBZZ
NGEUBUS   = ΣNGEUBZZ
NGACBUS   = ΣNGACBZZ
NGCCBUS   = ΣNGCCBZZ

Prior to 1972, conversion factors for natural gas consumed by electric utilities were not collected; therefore, the factor for all natural gas consumed (NGTCKZZ) is used for electric utilities (NGEUKZZ) and for the other sectors (NGNUKZZ) for 1963 through 1971.   Prior to 1963, State-level conversion factors for natural gas consumption were not collected and a standard factor of 1.035 thousand Btu per cubic foot is used for all sectors in all States for 1960 through 1962.

### Additional Calculations

Although CSEDS does not use U.S.-level conversion factors for calculating natural gas consumption, these factors are calculated by CSEDS for reference and are shown in the natural gas tables in Appendix C:

NGEUKUS  = NGEUBUS / NGEUPUS
NGTCKUS   = NGTCBUS / NGTCPUS
NGNUKUS  = (NGTCBUS – NGEUBUS) / (NGTCPUS – NGEUPUS)

To produce price and expenditure data for the *State Energy Price and Expenditure Report* (*SEPER*), CSEDS differentiates between natural gas used in the transportation sector as pipeline fuel, which is not sold and has no price, and natural gas purchased and consumed as vehicle fuel.  CSEDS also differentiates between natural gas used as lease and plant fuel by the natural gas industry, which is not costed, and natural gas purchased by industrial consumers.  Btu values are calculated in CSEDS for use in *SEPER*:

NGPZBZZ   = NGPZPZZ * NGNUKZZ
NGVHBZZ   = NGVHPZZ * NGNUKZZ
NGLPPZZ   = NGLEPZZ + NGPLPZZ
NGLPBZZ   = NGLPPZZ * NGNUKZZ

The U.S. totals for each series are calculated as the sum of the States' values.

*Data Sources*

NGCCPZZ — Natural gas delivered to the commercial sector and to other consumers (municipalities and public authorities for institutional heating and street lighting), including natural gas consumed as vehicle fuel through 1989 and natural gas used in agriculture, forestry, and fisheries through 1995, by State.

- 1960 through 1966:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Natural Gas Production and Consumption," table titled "Number of consumers and volume of natural gas consumed by principal users in the United States," column "Commercial."
- 1967 forward:  EIA, *Historical Natural Gas Annual 1930 Through 1999*, Table 16.  This report is available only via the Internet at http://www.eia.doe.gov.  In the box titled "Search EIA by Google" type "Historical Natural Gas Annual 1930" and click the "Go" button.  Select the report from the list.

NGEUKZZ — Factor for converting natural gas consumed by the electric utilities from physical units to Btu.

- 1960 through 1971:  Assumed by the EIA to be equal to the thermal conversion factor for the consumption of natural gas by all users (NGTCKZZ).
- 1972 through 1982:  Calculated annually by EIA by dividing the total heat content of natural gas received at steam electric plants 25 megawatts or greater by the total quantity received at those electric plants.  The heat contents and quantities received are from the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."
- 1983 forward:  The average heat content of natural gas received at steam electric plants 50 megawatts capacity or larger from FERC Form 423 and published from 1993 forward in Btu per cubic foot in the EIA, *Cost and Quality of Fuels for Electric Utility Plants,* Table 14.  This report is available only via the Internet at http://www.eia.doe.gov.  In the box titled "Search EIA by Google" type "Cost and Quality of Fuels for Electric" and click on the "Go" button.  Select the report from the list.

Note:  For States that reported consumption on EIA-759 but were not large enough to report on FERC Form 423, factors were estimated by using previous years' factors or the factor for total natural gas consumption in the State.

NGEUPZZ — Natural gas consumed by the electric utilities by State.

- 1960 through 1975:  Federal Power Commission, News Release, "Power Production, Fuel Consumption, and Installed Capacity Data," table titled "Consumption of Fuel by Electric Utilities for Production of Electric Energy by State, Kind of Fuel, and Type of Prime Mover," sum of columns, "steam and gas turbine" and "internal combustion" under column heading "gas."
- 1976 through 1981:  EIA, *Electric Power Annual* (1981), Table 67.
- 1982 through 1986:  Unrounded data as published in rounded form in EIA, *Electric Power Annual, 1986*, Table 14.
- 1987 forward:  Unrounded data as published in rounded form in EIA, *Electric Power Annual*.  Data are from the report of the following year, i.e., 1987 final data are published in the *Electric Power Annual, 1988*:  The specific tables are:
  - 1987:  Table 13.
  - 1988 and 1989:  Table 19.
  - 1990 through 1993:  Table 18.
  - 1994 through 1996:  Volume I, Table 15.
  - 1997:  Volume I, Table A5.
  - 1998 and 1999:  Volume I, Table A16.

NGINPZZ — A portion of the natural gas delivered to the industrial sector, including natural gas used in agriculture, forestry, and fisheries beginning in 1996, by State.

- 1960 through 1966:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Natural Gas Production and Consumption," table titled "Number of consumers and volume of natural gas consumed by principal users in the United States."  Sum of data in columns "Carbon black," "Refinery fuel," and "Other industrial fuel" (which includes electric utility fuel) minus data in column "Fuel used at electric utility plants."
- 1967 forward:  EIA, *Historical Natural Gas Annual 1930 Through 1999*, Table 16.  This report is available only via the Internet at http://www.eia.doe.gov.  In the box titled "Search EIA by Google" type "Historical Natural Gas Annual 1930" and click the "Go" button.  Select the report from the list.

NGLEPZZ — Natural gas consumed as lease fuel by State (includes natural gas consumed as plant fuel in 1960 through 1992).

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, Natural Gas chapter. State data are not available from 1960 through 1966, although U.S. totals are available. State estimates were calculated by apportioning the U.S. totals to the States on the basis of each State's share of the U.S. total in 1967.
- 1967 through 1992: EIA, *Natural Gas Annual 1994 Volume II*, Table 14.
- 1993 forward: EIA, *Historical Natural Gas Annual 1930 Through 1999*, Table 15. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Historical Natural Gas Annual 1930" and click the "Go" button. Select the report from the list.

NGPLPZZ — Natural gas consumed as plant fuel by State.

- 1960 through 1992: Included with natural gas consumed as lease fuel (see NGLEPZZ).
- 1993 forward: EIA, *Historical Natural Gas Annual 1930 Through 1999,* Table 15. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Historical Natural Gas Annual 1930" and click the "Go" button. Select the report from the list.

NGPZPZZ — Natural gas consumed as pipeline fuel by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Natural Gas Production and Consumption," table titled "Number of consumers and volume of natural gas consumed by principal users in the United States," column "Used as pipeline fuel."
- 1967 through 1992: EIA, *Natural Gas Annual 1994 Volume II*, Table 14.
- 1993 forward: EIA, *Historical Natural Gas Annual 1930 Through 1999*, Table 15. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google"

type "Historical Natural Gas Annual 1930" and click the "Go" button. Select the report from the list.

NGRCPZZ — Natural gas delivered to the residential sector, used as consumption, by State.
- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Natural Gas Production and Consumption," table titled "Number of consumers and volume of natural gas consumed by principal users in the United States," column "Residential."
- 1967 forward: EIA, *Historical Natural Gas Annual 1930 Through 1999*, Table 16. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Historical Natural Gas Annual 1930" and click the "Go" button. Select the report from the list.

NGVHPZZ — Natural gas delivered for use as vehicle fuel by State.
- 1960 through 1989: Included in natural gas consumed by the commercial sector (See NGCCPZZ).
- 1990 forward: EIA, *Historical Natural Gas Annual 1930 Through 1999*, Table 16. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Historical Natural Gas Annual 1930" and click the "Go" button. Select the report from the list.

NGTCKZZ — Factor for converting natural gas consumed by all users from physical units to Btu.
- 1960 through 1962: EIA adopted the thermal conversion factor of 1,035 Btu per cubic foot as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.
- 1963 through 1979: EIA adopted the thermal conversion factors calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual.
- 1980 forward: EIA, *Historical Natural Gas Annual 1930 Through 1999*, Table 16. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Historical Natural Gas Annual 1930" and click the "Go" button. Select the report from the list.

# Section 4.  Petroleum

## Petroleum Overview

The 27 petroleum products included in the Combined State Energy Data System (CSEDS) are explained in this section.  For 12 of these products, the means of estimating their individual consumption by State is described in individual sections.  The 12 petroleum products are:

- asphalt (AS)
- aviation gasoline (AV)
- distillate fuel (DF)
- jet fuel, kerosene-type (JK)
- jet fuel, naphtha-type (JN)
- kerosene (KS)
- liquefied petroleum gases (LG)
- lubricants (LU)
- motor gasoline (MG)
- petroleum coke (PC)
- residual fuel (RF)
- road oil (RD)

The remaining 15 products are described in the section "Other Petroleum Products" and include the following:

- crude oil, including lease condensate (CO)
- miscellaneous petroleum products (MS)
- natural gasoline (NA) (including isopentane)
- petroleum feedstocks, naphtha less than 401° F (FN)
- petroleum feedstocks, other oils equal to or greater than 401° F (FO)
- petroleum feedstocks, still gas (FS)
- plant condensate (PL)
- pentanes plus (PP)

- special naphthas (SN)
- still gas (SG)
- unfractionated stream (US)
- waxes (WX)
- unfinished oils (UO)
- motor gasoline blending components (MB)
- aviation gasoline blending components (AB)

The last petroleum documentation section, "Petroleum Summaries," describes how the 27 petroleum products are combined for each major end-use sector's estimated consumption.

Table A2 summarizes the petroleum products' end-use assignments in CSEDS.  Shown in this table are the first four letters of the seven-letter variable names used to identify all energy sources.  The first two letters identify the petroleum product and the next two letters identify the end-use sector.  For example, the table shows that the aviation gasoline estimated to be consumed by the transportation sector is all aviation gasoline consumed, and that there is some estimated consumption of lubricants in the industrial and transportation sectors, while distillate fuel is consumed in every sector.

## Asphalt and Road Oil

### Physical Units

There are no State-level consumption data for asphalt and road oil available.  Therefore, the State-level sales data are used to apportion the national consumption numbers to the States.

**Table A2. Summary of Petroleum Products in the State Energy Data System**

| Petroleum Products | Residential Sector Estimated Consumption (RC) | | Commercial Sector Estimated Consumption (CC) | | Industrial Sector Estimated Consumption (IC) | | Transportation Sector Estimated Consumption (AC) | | Electric Utility Sector Estimated Consumption (EU) | | Total Estimated Consumption (TC) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Asphalt and Road Oil (AR) | | | | | ARIC | | | | | = | ARTC + |
| Aviation Gasoline (AV) | | | | | + | | AVAC + | | | = | AVTC + |
| Distillate Fuel (DF) | DFRC + | + | DFCC + | + | DFIC + | + | DFAC + | + | DFEU + | = | DFTC + |
| Jet Fuel, Kerosene (JK) | | | | | | | JKAC + | | JKEU | = | JKTC + |
| Jet Fuel, Naphtha (JN) | | | | | | | JNAC + | | | = | JNTC + |
| Kerosene (KS) | KSRC + | + | KSCC + | + | KSIC + | | | | | = | KSTC + |
| Liquefied Petroleum Gases (LG) | LGRC + | + | LGCC + | + | LGIC + | + | LGAC + | | | = | LGTC + |
| Lubricants (LU) | | | + | | LUIC + | | LUAC + | | | = | LUTC + |
| Motor Gasoline (MG) | | | MGCC + | | MGIC + | | MGAC + | | | = | MGTC + |
| Residual Fuel (RF) | | | RFCC | | RFIC + | + | RFAC + | + | RFEU + | = | RFTC + |
| Other Petroleum Products (PO) | | | | | POIC[1] | | | | PCEU[2] | = | POTC |
| Total Petroleum (PA) | PARC | + | PACC | + | PAIC | + | PAAC | + | PAEU | = | PATC |

[1] The category "Other petroleum products" consumed by the industrial sector comprises crude oil, including lease condensate; unfinished oils; plant condensate; aviation gasoline and motor gasoline blending components; natural gasoline; petroleum feedstocks (naphtha less than 401° F, other oils equal to or greater than 401° F, and still gas); pentanes plus; special naphthas; still gas; unfractionated stream; waxes; miscellaneous petroleum products; and petroleum coke for industrial use.

[2] Petroleum coke consumed at electric utilities.

The asphalt and road oil sales data are in short tons, while the consumption data are in thousand barrels. Because the sales data are used only for apportioning the U.S. consumption data to the States, they do not need to be converted into thousand barrels.

The four data series that are used to estimate consumption of asphalt and road oil are ("ZZ" in the variable name represents the two-letter State code that differs for each State):

ASINPZZ = asphalt sold for use in the industrial sector of each State, in short tons;

ASTCPUS = asphalt total consumed in the United States, in thousand barrels;

RDINPZZ = road oil sold for use in the industrial sector of each State, in short tons; and

RDTCPUS = road oil total consumed in the United States, in thousand barrels.

All asphalt and road oil consumption are assigned to the industrial sector because they are used in construction activity. ASTCPUS represents total U.S. consumption of asphalt, and RDTCPUS represents total U.S. consumption of road oil. Both are the "product supplied" data series in the publication *Petroleum Supply Annual,* published by the Energy Information Administration (EIA). Beginning in 1983, asphalt product supplied includes road oil, and RDTCPUS is entered as zero in CSEDS.

ASINPZZ represents all asphalt sold as paving products, as roofing products, and for all other uses. RDINPZZ represents all sales of road oil. The source of these variables is the report "Sales of Asphalt" for 1960 through 1980, published by EIA. These sales series was discontinued by EIA and after 1980 the data are collected and published by the Asphalat Institute. Values for RDINPZZ for 1981 and 1982 are estimated as described under "Additional Notes" in this section. Beginning with 1983 data, when road oil is included in asphalt product supplied data in the source publication, RDINPZZ is entered as zero in CSEDS.

To calculate State consumption estimates of asphalt, total sales of asphalt and road oil in the United States to the industrial sector are first calculated as the sum of the State data:

$$ASINPUS = \Sigma ASINPZZ$$
$$RDINPUS = \Sigma RDINPZZ$$

Each State's consumption of asphalt in the industrial sector (ASICPZZ) is calculated to be in proportion to each State's sales:

$$ASICPZZ = (ASINPZZ / ASINPUS) * ASTCPUS$$
$$ASICPUS = \Sigma ASICPZZ$$

$$RDICPZZ = (RDINPZZ / RDINPUS) * RDTCPUS$$
$$RDICPUS = \Sigma RDICPZZ$$

Since all consumption of asphalt and road oil are assumed to be in the industrial sector, their total consumption in each State equals the industrial sector consumption:

$$ASTCPZZ = ASICPZZ$$
$$RDTCPZZ = RDICPZZ$$

Asphalt and road oil consumption are added together:

$$ARICPZZ = ASICPZZ + RDICPZZ$$
$$ARICPUS = \Sigma ARICPZZ$$
$$ARTCPZZ = ASTCPZZ + RDTCPZZ$$
$$ARTCPUS = \Sigma ARTCPZZ$$

### British Thermal Units (Btu)

Asphalt and road oil have a heat content value of approximately 6.636 million Btu per barrel. This factor is applied to convert asphalt and road oil estimated consumption from physical units to Btu:

$$ARICBZZ = ARICPZZ * 6.636$$
$$ARICBUS = \Sigma ARICBZZ$$

Because all asphalt and road oil are assumed to be used by the industrial sector, total asphalt and road oil consumption in each State and in the United States is assumed to equal the industrial sector consumption:

$$ARTCBZZ = ARICBZZ$$
$$ARTCBUS = ARICBUS$$

### Additional Notes on Asphalt and Road Oil

The Federal Government stopped collecting asphalt and road oil sales data in 1980 and the source for these numbers in recent years has been reports published by the Asphalt Institute. There is an inherent problem in the methodology of using sales to estimate consumption because asphalt and road oil sold by a producer in one State may be easily transported across State lines and consumed in a neighboring State. The Asphalt Institute acknowledges this problem and estimates that, in any one year, about 15 States may have consumption estimates as much as 20 percent too high or too low.

Asphalt and road oil data for Maryland and the District of Columbia are published combined to avoid disclosure of proprietary data. Prior to being entered into CSEDS, the combined data are allocated to each State based on their reported sales in 1974 (99.4 percent to Maryland and 0.6 percent to the District of Columbia) and the assumption that their relative proportions do not change significantly over time

The EIA report series "Sales of Asphalt," and predecessor reports, which are the source for road oil sales by State (RDINPZZ) in CSEDS for 1960 through 1980, was discontinued after the 1980 report. For 1981 and 1982, State estimates of road oil sales were created by first converting the annual total U.S. road oil product supplied data into short tons (one short ton contains 5.5 barrels of road oil). Then, the U.S. total road oil product supplied, in short tons, was disaggregated to each State in proportion to the State's share of total U.S. asphalt sales as reported in the Asphalt Institute's *Report on Sales of Asphalt in the U.S.*

### Data Sources for Asphalt and Road Oil

ASINPZZ — Asphalt sold to the industrial sector by State.
- 1960 through 1977: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Sales of Asphalt," the specific tables are:
  — 1960 through 1962: Table 6.
  — 1963 through 1977: Table 5.
- 1978 through 1980: EIA, *Energy Data Reports*, "Sales of Asphalt," Table 2.

- 1981 through 1986: The Asphalt Institute, *Asphalt Usage 1987 United States and Canada*, Table B.
- 1987 and 1988: The Asphalt Institute, *Asphalt Usage 1988 United States and Canada*, Tables A and B for State data. *Asphalt Usage 1989 United States and Canada*, page 2 for revised U.S. totals. The Asphalt Institute did not publish corresponding revised State data but did advise EIA on an estimation procedure to adjust 19 State values to sum to the revised U.S. totals.
- 1989 through 1995: The Asphalt Institute, *Asphalt Usage United States and Canada*, table titled "U.S. Asphalt Usage."
- 1996 and 1997: The Asphalt Institute, *Asphalt Usage United States and Canada*, table titled "1997 vs. 1996 U.S. Asphalt Usage."
- 1998 and 1999: The Asphalt Institute, *Asphalt Usage United States and Canada*, table titled "1998 vs. 1999 U.S. Asphalt Usage." 1998 data for Delaware, New Hampshire, Rhode Island, and Vermont are repeated for 1999 because nonresponse to the survey caused those States data for 1999 to be more than 75 percent lower than their 1998 values.

ASTCPUS — Asphalt total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2. (Beginning in 1983, this variable includes road oil.)

RDINPZZ — Road oil sold to the industrial sector by State.
- 1960 through 1977: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Sales of Asphalt." The specific tables are:
  — 1960 through 1962: Table 6.
  — 1963 through 1977: Table 5.
- 1978 through 1980: EIA, *Energy Data Reports*, "Sales of Asphalt," Table 2.
- 1981 and 1982: EIA estimates. (See explanation in "Additional Notes" on page 358.)
- 1983 forward: Road oil is included in asphalt data (see ASINPZZ).

RDTCPUS — Road oil total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 2.
- 1983 forward: EIA, *Petroleum Supply Annual*, Table 2, included in "Asphalt and Road Oil."

## Aviation Gasoline

### Physical Units

The three data series used to estimate consumption of aviation gasoline are:

AVMIPZZ = aviation gasoline issued to the military in each State, in thousand barrels;

AVNMMZZ = aviation gasoline sold to nonmilitary users in each State, in thousand gallons; and

AVTCPUS = aviation gasoline total consumed in the United States, in thousand barrels.

The U.S. Department of Transportation, Federal Highway Administration publishes the nonmilitary aviation gasoline sales data by State (AVNMMZZ) in *Highway Statistics*.

AVMIPZZ is the issues of aviation gasoline to the military in each State and is obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center.

Total U.S. consumption of aviation gasoline (AVTCPUS) is the product supplied data series in the publication *Petroleum Supply Annual,* published by the Energy Information Administration (EIA).

The State-level data series are summed to provide totals for the United States:

AVMIPUS = ΣAVMIPZZ
AVNMMUS = ΣAVNMMZZ

The State sales of nonmilitary aviation gasoline data are converted from thousand gallons to thousand barrels (42 gallons = 1 barrel):

AVNMPZZ = AVNMMZZ / 42

The U.S. nonmilitary sales is the sum of the States' sales:

AVNMPUS = ΣAVNMPZZ

The total sales of aviation gasoline is estimated as the sum of nonmilitary sales and military issues:

AVTTPZZ = AVNMPZZ + AVMIPZZ
AVTTPUS = ΣAVTTPZZ

All aviation gasoline is assumed to be used by the transportation sector. An estimate of aviation gasoline consumption by the transportation sector by State (AVACPZZ) is calculated by assuming that each State consumes aviation gasoline in proportion to the amount sold to that State:

AVACPZZ = (AVTTPZZ / AVTTPUS) * AVTCPUS
AVACPUS = ΣAVACPZZ

Total aviation gasoline consumption in each State, AVTCPZZ, equals the transportation sector consumption in each State:

AVTCPZZ = AVACPZZ

### British Thermal Units (Btu)

Aviation gasoline has a heat content value of approximately 5.048 million Btu per barrel. This factor is applied to convert aviation gasoline estimated consumption from physical units to Btu:

AVACBZZ = AVACPZZ * 5.048
AVACBUS = ΣAVACBZZ

Because all aviation gasoline is assumed to be used for transportation, aviation gasoline total consumption in each State and in the United States equals the transportation sector consumption:

AVTCBZZ   = AVACBZZ
AVTCBUS   = AVACBUS

### Additional Notes on Aviation Gasoline

Aviation gasoline issues to the military for each State (AVMIPZZ) are obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. There are no data available for 1960 through 1974, and the data available for 1975 and 1976 are not consistent; therefore, the 1977 values are used for 1960 through 1976 in CSEDS. The data are reported by fiscal year for 1977 through 1988 and are taken from the Defense Energy Information System. For 1989 and 1990, fiscal-year data from two databases, Defense Fuel Automated Management System and the Into-Plane Database, are summed. For 1991 forward, data from the same two databases, reported by calendar year, are used.

### Data Sources for Aviation Gasoline

AVMIPZZ  —  Aviation fuel issued to the military in the United States by State.
- 1960 through 1974:  No data are available.  The 1977 data are used for each year.
- 1975 and 1976:  No consistent data series are available.  The 1977 data are used for both years.
- 1977 through 1988:  U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Energy Information System, military retail issues based on fiscal year data.  The District of Columbia issues are assumed to be zero; therefore, values reported for the District of Columbia are added to Maryland.
- 1989 and 1990:  U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center.  State data for the fiscal year from two databases are summed:  Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports).  Into-plane values reported for the District of Columbia are added to Virginia.

- 1991 forward:  U.S. Department of Defense, Defense Logistics Agency, Defense Energy Supply Center.  State data for the calendar year from two databases are summed:  Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports).  Into-plane values reported for the District of Columbia are added to Virginia.

AVNMMZZ — Aviation gasoline sold to nonmilitary users by State.
- 1960 through 1964:  U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward:  U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

AVTCPUS — Aviation gasoline total consumed in the United States.
- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980:  EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward:  EIA, *Petroleum Supply Annual*, Table 2.

## Distillate Fuel

### Physical Units

Since State-level and end-use consumption data for distillate fuel (except for that consumed by electric utilities) are not available, sales of distillate fuel into or within each State, in thousand barrels, published by the Energy Information Administration (EIA) are used to estimate distillate fuel consumption. The sales data are adjusted to sum to the Petroleum Administration for Defense District subtotals of the EIA distillate fuel product supplied data series. Both the sales data and the adjusted sales series are published in the EIA *Fuel Oil and Kerosene Sales Report*. The following variable names have been assigned to the adjusted sales series ("ZZ" in the variable names  represents the two-letter State code that differs for each State):

DFBKPZZ = distillate fuel adjusted sales for vessel bunkering use (i.e., the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies, and fueling for other marine purposes), excluding that sold to the Armed Forces;

DFCMPZZ = distillate fuel adjusted sales to commercial establishments for space heating, water heating, and cooking;

DFIBPZZ = distillate fuel adjusted sales to industrial establishments for space heating and for other industrial use (i.e., for all uses to mines, smelters, plants engaged in producing manufactured products, in processing goods, and in assembling), including farm use;

DFMIPZZ = distillate fuel adjusted sales to the Armed Forces, regardless of use;

DFOCPZZ = distillate fuel adjusted sales for oil company use, including all fuel oil, crude oil, or acid sludge used as fuel at refineries, by pipelines, or in field operations;

DFOFPZZ = distillate fuel adjusted sales as diesel fuel for off-highway use in construction (i.e., earthmoving equipment, cranes, stationary generators, air compressors, etc.) and for off-highway uses other than construction (i.e., logging);

DFONPZZ = distillate fuel adjusted sales as diesel fuel for on-highway use (i.e., as engine fuel for trucks, buses, and automobiles);

DFOTPZZ = distillate fuel adjusted sales for all other uses not identified in other adjusted sales categories;

DFRRPZZ = distillate fuel adjusted sales to the railroads for use in fueling trains, operating railroad equipment, space heating of buildings, and other operations; and

DFRSPZZ = distillate fuel adjusted sales to the residential sector for space heating, water heating, and cooking, excluding farm houses.

Three series are used in CSEDS for consumption data:

DKEUPZZ = distillate fuel consumed by electric utilities, in thousand barrels;

JKEUPZZ = kerosene-type jet fuel consumed by electric utilities, in thousand barrels; and

DFTCPUS = distillate fuel total consumed in the United States, in thousand barrels.

Distillate fuel consumed by electric utilities (DKEUPZZ) is collected by EIA on Form EIA-759, "Monthly Power Plant Report," and predecessor forms. (See Note 4 at the end of this distillate fuel section for further information on changes in this series' data definitions.) The series DKEUPZZ includes kerosene-type jet fuel consumed at electric utilities that is identified as JKEUPZZ. The kerosene-type jet fuel is subtracted from the distillate fuel data and accounted for in the jet fuel data described in a following section of this documentation.

Total consumption of distillate fuel in the United States, DFTCPUS, is the product supplied series in the EIA publication *Petroleum Supply Annual*.

To begin calculating distillate fuel State and end-use consumption, all of the State-level data series are summed to provide totals for the United States.

Next, the variables are combined as closely as possible into the major end-use sectors used in CSEDS. The residential sector adjusted sales and the commercial sector adjusted sales contain only DFRSPZZ and DFCMPZZ, respectively.

The adjusted sales of distillate fuel to the industrial sector for each State, DFINPZZ, is the sum of the distillate fuel adjusted sales for industrial use, including industrial space heating and farm use (DFIBPZZ), for oil company use (DFOCPZZ), for off-highway use (DFOFPZZ), and for all other uses (DFOTPZZ):

DFINPZZ = DFIBPZZ + DFOCPZZ + DFOFPZZ + DFOTPZZ
DFINPUS = $\Sigma$DFINPZZ

The adjusted sales of distillate fuel to the transportation sector for each State, DFTRPZZ, is the sum of the distillate fuel adjusted sales for vessel bunkering, military use, railroad use, and the diesel fuel used on-highway:

DFTRPZZ = DFBKPZZ + DFMIPZZ + DFRRPZZ + DFONPZZ
DFTRPUS = $\Sigma$DFTRPZZ

Adjusted sales of distillate fuel oil to the residential, commercial, industrial, and transportation sectors are added to create a subtotal of adjusted sales to all sectors other than the electric utility sector, DFNDPZZ:

$$DFNDPZZ = DFRSPZZ + DFCMPZZ + DFINPZZ + DFTRPZZ$$
$$DFNDPUS = \Sigma DFNDPZZ$$

Consumption of distillate fuel by electric utilities (DFEUPZZ) is calculated by subtracting the kerosene-type jet fuel consumed by electric utilities from the input series DKEUPZZ:

$$DFEUPZZ = DKEUPZZ - JKEUPZZ$$
$$DFEUPUS = \Sigma DFEUPZZ$$

The estimated U.S. distillate fuel consumption by all sectors other than the electric utility sector, DFNCPUS, is calculated by subtracting the distillate fuel consumption at electric utilities from the total U.S. distillate fuel consumption:

$$DFNCPUS = DFTCPUS - DFEUPUS$$

This U.S. subtotal of distillate fuel consumption by the four end-use sectors, DFNCPUS, is apportioned to the States by use of the end-use sectors' State-level adjusted sales data. The assumption is made that each State consumes distillate fuel in proportion to the amount of adjusted sales to that State:

$$DFNCPZZ = (DFNDPZZ / DFNDPUS) * DFNCPUS$$

The end-use sectors' subtotal for each State, DFNCPZZ, is further divided into estimates for the four end-use sectors in proportion to each sector's adjusted sales. The estimated residential sector consumption in each State, DFRCPZZ, is calculated:

$$DFRCPZZ = (DFRSPZZ / DFNDPZZ) * DFNCPZZ$$
$$DFRCPUS = \Sigma DFRCPZZ$$

The commercial sector's estimated consumption in each State, DFCCPZZ, is calculated:

$$DFCCPZZ = (DFCMPZZ / DFNDPZZ) * DFNCPZZ$$
$$DFCCPUS = \Sigma DFCCPZZ$$

The industrial sector's estimated consumption in each State, DFICPZZ, is calculated:

$$DFICPZZ = (DFINPZZ / DFNDPZZ) * DFNCPZZ$$
$$DFICPUS = \Sigma DFICPZZ$$

The transportation sector's estimated consumption in each State, DFACPZZ, is calculated:

$$DFACPZZ = (DFTRPZZ / DFNDPZZ) * DFNCPZZ$$
$$DFACPUS = \Sigma DFACPZZ$$

Total State distillate fuel consumption is the sum of the end-use sectors' consumption subtotal and the electric utilities consumption:

$$DFTCPZZ = DFNCPZZ + DFEUPZZ$$

### British Thermal Units (Btu)

Distillate fuel has a heat content value of approximately 5.825 million Btu per barrel. This factor is applied to convert distillate fuel estimated consumption for the five consuming sectors from physical units to Btu as shown in the following examples:

$$DFRCBZZ = DFRCPZZ * 5.825$$
$$DFCCBZZ = DFCCPZZ * 5.825$$
$$DFTCBZZ = DFRCBZZ + DFCCBZZ + DFICBZZ + DFACBZZ + DFEUBZZ$$

The U.S. Btu consumption estimates are calculated as the sum of all the States' data.

In the *State Energy Data Report* tables, "Estimates of Energy Input at Electric Utilities," the data used in the column headed "Light Oil" is the variable DKEUP (distillate fuel plus jet kerosene) in physical units. The Btu variable, DKEUB, is calculated:

DKEUBZZ  = DFEUBZZ + JKEUBZZ
DKEUBUS  = ΣDKEUBZZ

### *Additional Notes on Distillate Fuel*

1. "Deliveries" data are actually called "shipments" in the source document for 1960 and 1961; "consumption" for 1962 through 1966; "shipments" for 1967; "sales" from 1968 through 1978; "deliveries" for 1979 through 1987; and "adjusted sales" for 1988 forward.

2. State data for the variables DFONPZZ (on-highway use), DFOFPZZ (off-highway use), and DFOTPZZ (other) for 1967 are unavailable from published sources. These three variables compose the miscellaneous use category for distillate fuel, which is known for all years by State. State estimates of DFONPZZ and DFOFPZZ for 1967 were developed by dividing the 1966 values for DFONPZZ and DFOFPZZ by the 1966 total miscellaneous use for each State and applying these percentages to the 1967 total miscellaneous use for each State. The 1967 State estimates for DFOTPZZ are the remainder of the 1967 miscellaneous category after DFONPZZ and DFOFPZZ have been subtracted.

3. In 1979, EIA implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report,* "Deliveries of Fuel Oil and Kerosene in 1979.") In the new survey form, certain end-use categories were redefined—in many cases to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in the Combined State Energy Data System (CSEDS) to conform with the 1979 fuel oil deliveries classifications. The pre-1979 deliveries estimates are not published in this report, but are used in CSEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

For distillate fuel deliveries in 1979, the end-use categories called "residential," "commercial," "industrial," and "farm" are available. The pre-1979 deliveries categories are called "heating" and "industrial" (which included farm use). While the pre-1979 categories individually are not continuous with the 1979 categories, their subtotals are related. That is, a general comparison can be made between the sum of residential, commercial, industrial, and farm deliveries in 1979 and the sum of heating and industrial deliveries in the pre-1979 years. Therefore, the following method was applied to present a comparable series for distillate fuel delivered to the residential, commercial, and industrial sectors:

- For each of the pre-1979 years, a subtotal was created for each State by adding each State's heating and industrial deliveries categories. A comparable 1979 subtotal was created by adding each State's residential, commercial, industrial, and farm deliveries categories.

- Residential, commercial, and industrial (including farm) shares of the subtotal in 1979 were calculated for each State.

- These 1979 end-use shares were then applied to each pre-1979 subtotal of distillate fuel deliveries in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 distillate fuel deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report." EIA did not conduct a fuel oil and kerosene deliveries survey for 1983. The 1983 estimates in CSEDS are based on 1984 data obtained from the Form EIA-821. Statistical procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the deliveries data for 1983 forward are reported in thousand gallons. These data are first converted to thousand barrels before being entered into CSEDS.)

Some of the No. 2 diesel fuel reported as sold to the commercial and industrial sectors, DFCMPZZ and DFINPZZ, on the EIA forms may also be included in the on-highway data, DFONPZZ, obtained from the Federal Highway Administration. Included in the commercial sector is some diesel fuel consumed by government vehicles and

school buses, and included in the industrial sector is some diesel fuel consumed by fleets of trucks. Because the specific quantities involved are unknown, CSEDS reflects the diesel fuel consumption as reported in the EIA *Petroleum Marketing Monthly* and no attempt has been made to adjust the end-use reporting.

4. The data on fuel oil consumed at electric utilities for all years and States are actual fuel oil consumption numbers collected from electric utilities on the EIA Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Due to changes in fuel oil reporting classifications on the Form EIA-759 over the years, it is not possible to develop a thoroughly consistent series for all years. However, over time, data more accurately disaggregating fuel oil into distillate fuel and residual fuel have become available. For 1960 through 1969, only data on total fuel oil consumed at electric utilities by State are available. For 1970 through 1979, fuel oil consumed by plant type (internal combustion and gas turbine plants combined and steam plants) by State are available. For 1980 forward, data on consumption of light oil at all plant types combined and consumption of heavy oil at all plant types combined are available by State. In CSEDS, the following assumptions have been made:

- 1960 through 1969 — State estimates of fuel oil consumption by plant type have been created for each year by applying the shares of steam plants (primarily residual fuel) and internal combustion and gas turbine plants (primarily distillate fuel plus small amounts of jet kerosene) by State in 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.

- 1970 through 1979 — fuel oil consumed by steam plants is assumed to equal residual fuel consumption, and fuel oil consumed by internal combustion and gas turbine plants is assumed to equal distillate fuel plus jet kerosene consumption.

- 1980 and forward — total heavy oil consumption at all plant types is assumed to equal residual fuel consumption, and total light oil consumption at all plant types is assumed to equal distillate fuel plus jet kerosene consumption.

The data series thus derived for CSEDS for residual fuel and distillate fuel plus jet kerosene consumption at electric utilities is considered to be actual consumption at electric utilities for each State and each year.

### Data Sources for Distillate Fuel

DFBKPZZ — Distillate fuel adjusted sales for vessel bunkering use by State, excluding that sold to the Armed Forces.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
  — 1960 and 1961: Table 17.
  — 1962 and 1963: Table 16.
  — 1964 and 1965: Table 15.
  — 1966 through 1975: Table 11.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 11.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.
Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.
- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983 and 1984: July 1985 issue, Table A12.
  — 1985 and 1986: July 1987 issue, Table A16.
  — 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFCMPZZ — Distillate fuel adjusted sales to the commercial sector for space heating, water heating, and cooking.
- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of distillate fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 1. State ratios based on 1979 commercial sector deliveries were applied to each State's sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 3, on page 363.)

- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983 and 1984: July 1985 issue, Table A12.
  — 1985 and 1986: July 1987 issue, Table A16.
  — 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFIBPZZ — Distillate fuel adjusted sales to industrial establishments for space heating and for other industrial use, including farm use.

- 1960 through 1978: EIA estimates based on statistics of industrial sector deliveries of distillate fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 1. State ratios based on 1979 industrial sector deliveries were applied to each State's sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 3, on page 363.)
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983 and 1984: July 1985 issue, Table A12.
  — 1985 and 1986: July 1987 issue, Table A16.
  — 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFMIPZZ — Distillate fuel adjusted sales for military use (including imports for the military) by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:

  — 1960 and 1961: Table 18.
  — 1962 and 1963: Table 17.
  — 1964 and 1965: Table 16.
  — 1966 through 1975: Table 12.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 12.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983 and 1984: July 1985 issue, Table A12.
  — 1985 and 1986: July 1987 issue, Table A16.
  — 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFOCPZZ — Distillate fuel adjusted sales for use by oil companies by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
  — 1960 and 1961: Table 14.
  — 1962 and 1963: Table 13.
  — 1964 and 1965: Table 12.
  — 1966 through 1975: Table 9.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 9.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983 and 1984: July 1985 issue, Table A12.
  — 1985 and 1986: July 1987 issue, Table A16.
  — 1987: June 1988 issue, Table A16.

- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFOFPZZ — Distillate fuel adjusted sales as diesel fuel for off-highway use by State.

- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene."  The specific tables are:
  — 1960 through 1962:  Table 19.
  — 1963 and 1964:  Table 18.
  — 1965 through 1967:  Table 17.
  — 1968 through 1975:  Table 14.
- 1976 through 1978:  EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 14.
- 1979 and 1980:  EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982:  EIA, *Petroleum Supply Annual*, Table 4.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983 and 1984:  July 1985 issue, Table A12.
  — 1985 and 1986:  July 1987 issue, Table A16.
  — 1987:  June 1988 issue, Table A16.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFONPZZ — Distillate fuel adjusted sales as diesel fuel for on-highway use by State.

- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene."  The specific tables are:
  — 1960 through 1962:  Table 19.
  — 1963 and 1964:  Table 18.
  — 1965 through 1967:  Table 17.
  — 1968 through 1975:  Table 14.
- 1976 through 1978:  EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 14.
- 1979 and 1980:  EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982:  EIA, *Petroleum Supply Annual*, Table 4.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983 and 1984:  July 1985 issue, Table A12.
  — 1985 and 1986:  July 1987 issue, Table A16.
  — 1987:  June 1988 issue, Table A16.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFOTPZZ — Distillate fuel adjusted sales for all other uses not identified in other adjusted sales categories.

- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene."  The specific tables are:
  — 1960 through 1962:  Table 19.
  — 1963 and 1964:  Table 18.
  — 1965 through 1967:  Table 17.
  — 1968 through 1975:  Table 14.
- 1976 through 1978:  EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 14.
- 1979 and 1980:  EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982:  EIA, *Petroleum Supply Annual*, Table 4.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983 and 1984:  July 1985 issue, Table A12.
  — 1985 and 1986:  July 1987 issue, Table A16.
  — 1987:  June 1988 issue, Table A16.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFRRPZZ — Distillate fuel adjusted sales for use by railroads by State.

- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene."  The specific tables are:
  — 1960 and 1961:  Table 16.
  — 1962 and 1963:  Table 15.
  — 1964 and 1965:  Table 14.

— 1966 through 1975:  Table 10.
- 1976 through 1978:  EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 10.
- 1979 and 1980:  EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982:  EIA, *Petroleum Supply Annual*, Table 4.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.
- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983 and 1984:  July 1985 issue, Table A12.
  — 1985 and 1986:  July 1987 issue, Table A16.
  — 1987:  June 1988 issue, Table A16.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 16.


DFRSPZZ  —  Distillate fuel adjusted sales to the residential sector for space heating, water heating, and cooking.

- 1960 through 1978:  EIA estimates based on statistics of residential sector deliveries of distillate fuel from the EIA,  *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 1.  State ratios based on 1979 residential sector deliveries were applied to each State's sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978.  (See explanation in Note 3, on page 363.)
- 1979 and 1980:  EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 1.
- 1981 and 1982:  EIA, *Petroleum Supply Annual*, Table 4.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.
- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983 and 1984:  July 1985 issue, Table A12.
  — 1985 and 1986:  July 1987 issue, Table A16.
  — 1987: June 1988 issue, Table A16.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFTCPUS  —  Distillate fuel total consumed in the United States.
- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement Annual," Table 1.
- 1976 through 1980:  EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward:  EIA, *Petroleum Supply Annual*, Table 2.


DKEUPZZ  —  Distillate fuel consumed by the electric utilities, including kerosene-type jet fuel.

- EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms.  The following assumptions have been made:
  — 1960 through 1969:  Only total fuel oil consumed at electric utilities by State is available.  State estimates of distillate fuel consumption were created for each year by applying the shares of internal combustion and gas turbine plants (primarily distillate fuel plus small amounts of jet kerosene) by State from 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.
  — 1970 through 1979:  Fuel oil consumed by plant type by State is available.  Fuel oil consumed by internal combustion and gas turbine plants combined is assumed to equal distillate and jet kerosene consumption.
  — 1980 forward:  Consumption of light and heavy oil at all plant types by State is available.  Total light oil consumption at all plant types is assumed to equal distillate and jet kerosene consumption.


## Jet Fuel

There are two types of jet fuel with different heat contents, kerosene-type jet fuel (JK) and naphtha-type jet fuel (JN), which are added in the Combined State Energy Data System (CSEDS) to give total jet fuel (JF).  Jet fuel is used primarily for transportation, although, for 1972 through 1982, small amounts of the kerosene-type jet fuel were reported as used in the electric utility sector.

## J E T F U E L

## Kerosene-Type Jet Fuel

### Physical Units

Data series used to calculate kerosene-type jet fuel consumption estimates are ("ZZ" in the variable name represents the two-letter State code that differs for each State):

JKTCPUS = kerosene-type jet fuel total consumed, in thousand barrels;
JKEUPZZ = the electric utility sector consumption of kerosene-type jet fuel in each State, in thousand barrels; and
JKTTPZZ = kerosene-type jet fuel total sold, in thousand gallons.

Total U.S. consumption of kerosene-type jet fuel, JKTCPUS, is the product supplied data series in the publication *Petroleum Supply Annual,* published by the Energy Information Administration (EIA).

Kerosene-type jet fuel consumed by electric utilities, JKEUPZZ, is published by EIA in the *Cost and Quality of Fuels for Electric Utility Plants*. These data are available for 1972 through 1982 only. Consumption in all other years is assumed to be zero.

Kerosene-type jet fuel total sold, JKTTPZZ, was collected by the Ethyl Corporation, Petroleum Chemicals Division, for 1960 through 1983 and by EIA for 1984 forward. The Ethyl Corporation data are sales to commercial users and are used to represent total sales based on the assumption that there is little military use of kerosene-type jet fuel during 1960 through 1983. (See Note 1 in the "Additional Notes" section for the source reference for this assumption.) The EIA data for 1984 forward include commercial and military sales.

U.S. totals for the two State series are calculated as the sum of the State data.

Most kerosene-type jet fuel is used by the transportation sector. The transportation sector consumption for the United States (JKACPUS) is estimated as the difference between the total kerosene-type jet fuel consumed and the electric utility consumption:

JKACPUS = JKTCPUS – JKEUPUS

It is assumed that kerosene-type jet fuel consumption in each State is in proportion to the amount sold in each State:

JKACPZZ = (JKTTPZZ / JKTTPUS) * JKACPUS

Total kerosene-type jet fuel by State is estimated as:

JKTCPZZ = JKACPZZ + JKEUPZZ

### British Thermal Units (Btu)

Kerosene-type jet fuel has a heat content value of approximately 5.670 million Btu per barrel. This factor is applied to convert kerosene-type jet fuel from physical units to Btu:

JKACBZZ = JKACPZZ * 5.670
JKACBUS = ΣJKACBZZ
JKEUBZZ = JKEUPZZ * 5.670
JKEUBUS = ΣJKEUBZZ
JKTCBZZ = JKTCPZZ * 5.670
JKTCBUS = ΣJKTCBZZ

### Additional Notes on Kerosene-Type Jet Fuel

1. An assumption is made that kerosene-type jet fuel use by the military in 1960 through 1983 is negligible. This assumption is based on product definitions from the American Petroleum Institute's *Standard Definitions for Petroleum Statistics*, Technical Report No. 1, Third Edition (1981), page 13, which states that kerosene-type jet fuel is used primarily by commercial aircraft engines.

2. Ethyl Corporation jet fuel sales to commercial users by State include some sales data that were improperly allocated between the States of Illinois and Indiana for 1960 through 1973. To adjust for this error, the average relative proportions of Illinois and Indiana sales from 1974 through 1978 were applied to the sum of the Illinois and Indiana sales in 1960 through 1973. From 1974 through 1983, sales data were correctly allocated.

3. Jet fuel sales in Illinois decreased sharply from 1984 forward, while sales in Indiana increased by about the same amount. It is possible that jet fuel for use at Chicago, Illinois, airports may have been purchased in Indiana. The same anomaly may have happened between New York and New Jersey beginning in 1981, when jet fuel for consumption at New York City airports may have been purchased in New Jersey. This is an inherent problem when using sales data as an indication of consumption, and no attempt has been made to adjust the numbers.

4. Prior to 1964, kerosene-type jet fuel was included in the total kerosene product supplied data in the source, the U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 2, "Salient Statistics of the Major Refined Petroleum Products in the United States." Table A3 summarizes the derivation of kerosene and jet fuel consumption estimates (columns 4 and 5) from data published in the source (columns 1, 2, and 3) for 1960 through 1963. For 1964 and years following, kerosene and kerosene-type jet fuel are reported separately in the source documents.

5. Kerosene-type jet fuel consumed by electric utilities, JKEUPZZ, is published in the EIA *Cost and Quality of Fuels for Electric Utility Plants*. These data are available for 1972 through 1982 only. Consumption in all other years is assumed to be zero. State-level data for 1972 through 1974 are not available. The percentage of each State's consumption of the total U.S. consumption in 1975 was used to apportion the 1972 through 1974 national data to the States.

### *Data Sources for Kerosene-type Jet Fuel*

JKEUPZZ — Kerosene-type jet fuel consumed by electric utilities by State.
- 1960 through 1971: No data available. Values are assumed to be zero.
- 1972 through 1974: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Sales of Fuel Oil and Kerosene," Table 15 footnote for U.S. value. These data were apportioned to the States by using the 1975 State proportions of the 1975 U.S. total from the source below.
- 1975 through 1979: Office of Electric Power Regulation, Federal Energy Regulatory Commission, *Annual Summary of Cost and Quality of Electric Utility Plant Fuels*, "Fuel Oil Deliveries for Combustion Turbine and Internal Combustion Units."
- 1980 through 1982: EIA, *Cost and Quality of Fuel for Electric Utility Plants*, Table 30.
- 1983 forward: Series discontinued; no data available. Values are assumed to be zero.

**Table A3. Estimate of U.S. Consumption of Kerosene and Jet Fuel for 1960 through 1963**
(Thousand barrels)

| Year | (1) Kerosene Demand, Including Commercial Jet Fuel | (2) Jet Fuel Demand, Military Use Only | (3) Sales of Kerosene for Commercial Jet Fuel Use | (4) Estimated Kerosene Consumption (1) – (3) | (5) Estimated Total Jet Fuel Consumption (2) + (3) |
|---|---|---|---|---|---|
| 1960 | 132,499 | 102,803 | 33,159 | 99,340 | 135,962 |
| 1961 | 144,435 | 104,436 | 47,187 | 97,248 | 151,623 |
| 1962 | 164,167 | 112,401 | 66,134 | 98,033 | 178,535 |
| 1963 | 172,212 | 115,237 | 75,236 | 96,976 | 190,473 |

JKTTPZZ — Kerosene-type jet fuel total sold by State.
- 1960 through 1983: Ethyl Corporation, Petroleum Chemicals Division, *Yearly Report of Gasoline Sales by States*, "Aviation Turbine Fuel Sales."
- 1984 and 1985: EIA, *Petroleum Marketing Annual 1985*, Volume 2.
  - 1984: Table A6.
  - 1985: Table 34.
- 1986 through 1988: EIA, *Petroleum Marketing Annual*, Table 46.
- 1989 through 1993: EIA, *Petroleum Marketing Annual*, Table 48.
- 1994 forward: Unpublished data in thousand gallons from Form EIA-782C, "Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption." Data published in thousand gallons per day in EIA, *Petroleum Marketing Annual*, Table 49 and on the EIA, *Energy InfoDisc* in the Oil and Gas Information System database. Withheld data were estimated by using averages of published months to fill in withheld months; subtracting published States from published PAD District totals; and assigning values based on previous years' quantities.

JKTCPUS — Kerosene-type jet fuel total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

## Naphtha-Type Jet Fuel

### *Physical Units*

Two data series are used to estimate naphtha-type jet fuel consumption:

JNTCPUS = naphtha-type jet fuel total consumed, in thousand barrels; and

JNMIPZZ = naphtha-type jet fuel issued to the military in each State, in thousand barrels.

Total U.S. consumption of naphtha-type jet fuel, JNTCPUS, is the product supplied data series in the publication *Petroleum Supply Annual,* published by the Energy Information Administration (EIA).

It is assumed that all naphtha-type jet fuel is used in military aircraft engines. (See the Additional Notes at the end of this section for the source reference for this assumption.) Data on naphtha-type jet fuel issued to the military in each State, JNMIPZZ, are from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center.

The total U.S. military issues is the sum of the State data:

JNMIPUS = ΣJNMIPZZ

An estimate of naphtha-type jet fuel consumption by State, JNTCPZZ, is calculated by assuming that each State consumes naphtha-type jet fuel in proportion to the amount issued to the military in that State:

JNTCPZZ = (JNMIPZZ / JNMIPUS) * JNTCPUS

All naphtha-type jet fuel is assumed to be used for transportation purposes so the transportation consumption equals the estimated total consumption for each State and for the United States:

JNACPZZ = JNTCPZZ  
JNACPUS = JNTCPUS

### *British Thermal Units (Btu)*

Naphtha-type jet fuel has a heat content value of approximately 5.355 million Btu per barrel. This factor is applied to convert naphtha-type jet fuel from physical units to Btu:

JNTCBZZ = JNTCPZZ * 5.355  
JNTCBUS = ΣJNTCBZZ  
JNACBZZ = JNTCBZZ  
JNACBUS = JNTCBUS

### Additional Notes on Naphtha-Type Jet Fuel

1. An assumption was made that the naphtha-type jet fuel is for military use only. This assumption was based on product definitions from the American Petroleum Institute's *Standard Definitions for Petroleum Statistics*, Technical Report No. 1, Third Edition (1981), page 13, which states that naphtha-type jet fuel is used primarily by military aircraft engines.

2. Data on naphtha-type jet fuel issued to the military for each State (JNMIPZZ) are obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. There are no data available for 1960 through 1974, and the data available for 1975 and 1976 are not consistent; therefore, the 1977 values are used for 1960 through 1976 in CSEDS. The data are reported by fiscal year for 1977 through 1988 and are taken from the Defense Energy Information System. For 1989 and 1990, fiscal-year data from two databases, Defense Fuel Automated Management System and the Into-Plane Database, are summed. For 1991 and 1992, data from the same two databases, reported by calendar year, are used.

### Data Sources for Naphtha-type Jet Fuel

JNMIPZZ — Naphtha-type jet fuel issued to the military in the United States.

- 1960 through 1974: No data are available. The 1977 data are used for each year.
- 1975 and 1976: No consistent data series are available. The 1977 data are used for both years.
- 1977 through 1987: The U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Energy Information System, military retail issues based on fiscal year data. The District of Columbia issues are assumed to be zero; therefore, values reported for the District of Columbia are added to Maryland.
- 1988: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, average of 1987 data (see source above) and 1989 data (see source below).
- 1989 and 1990: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Fuel Automated

Management System, military wholesale issues based on fiscal year data.
- 1991 forward: U.S. Department of Defense, Defense Logistics Agency, Defense Energy Supply Center. State data for the calendar year from two databases are summed: Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports). Into-plane values reported for the District of Columbia are added to Virginia.

JNTCPUS — Naphtha-type jet fuel total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

## Jet Fuel Totals

### Physical Unit

The following calculations are used to provide total jet fuel consumption estimates by end use in physical units:

$$JFACPZZ = JKACPZZ + JNACPZZ$$
$$JFACPUS = \Sigma JFACPZZ$$
$$JFEUPZZ = JKEUPZZ$$
$$JFEUPUS = JKEUPUS$$
$$JFTCPZZ = JFACPZZ + JFEUPZZ$$
$$JFTCPUS = \Sigma JFTCPZZ$$

### British Thermal Units (Btu)

The following calculations are used to provide total jet fuel consumption estimates by end use in Btu:

$$JFACBZZ = JKACBZZ + JNACBZZ$$
$$JFACBUS = \Sigma JFACBZZ$$
$$JFEUBZZ = JKEUBZZ$$

JFEUBUS    = JKEUBUS
JFTCBZZ    = JFACBZZ + JFEUBZZ
JFTCBUS    = ΣJFTCBZZ

## Kerosene

### *Physical Units*

Because State-level and end-use consumption data for kerosene are not available, four data series published by EIA representing sales of kerosene into or within each State are used to estimate kerosene consumption. The fifth data series, the U.S. total consumption, is the product supplied series from the EIA *Petroleum Supply Annual*. The sales series are used to apportion the known U.S. total consumption into State-level estimates of end-use consumption. The following variable names have been assigned to the five data series ("ZZ" in the variable names represents the two-letter State code that differs for each State):

KSCMPZZ    = kerosene sold to the commercial sector for heating, in thousand barrels;

KSIHPZZ    = kerosene sold to the industrial sector for heating, in thousand barrels;

KSOTPZZ    = kerosene sold for all other uses, including farm use, in thousand barrels;

KSRSPZZ    = kerosene sold to the residential sector for heating, in thousand barrels; and

KSTCPUS    = kerosene total consumed in the United States, in thousand barrels.

U.S. sales totals for each of the four State-level series are created by summing the State values.

The variables are combined as closely as possible into the major end-use sectors used in CSEDS. The residential and commercial sectors contain only KSRSPZZ and KSCMPZZ, respectively.

The sales of kerosene to the industrial sector, KSINPZZ, for each State is the sum of kerosene sold for industrial space heating (KSIHPZZ) and

kerosene sold for all other uses (KSOTPZZ), including farm use. Sales of kerosene to the industrial sector are calculated:

KSINPZZ    = KSOTPZZ + KSIHPZZ
KSINPUS    = ΣKSINPZZ

Total sales of kerosene in each State is the sum of these three sectors' sales:

KSTTPZZ    = KSRSPZZ + KSCMPZZ + KSINPZZ
KSTTPUS    = ΣKSTTPZZ

An estimate of each State's total consumption of kerosene is made by disaggregating the U.S. total consumption to the States in proportion to each State's sales share of the U.S. total sales:

KSTCPZZ    = (KSTTPZZ / KSTTPUS) * KSTCPUS

Each State's residential sector sales percentage of total sales is applied to the State's estimated total consumption to create estimated residential sector consumption for the State, KSRCPZZ:

KSRCPZZ    = (KSRSPZZ / KSTTPZZ) * KSTCPZZ

The commercial sector's estimated consumption in each State, KSCCPZZ, is calculated:

KSCCPZZ    = (KSCMPZZ / KSTTPZZ) * KSTCPZZ

The industrial sector's estimated consumption in each State, KSICPZZ, is calculated:

KSICPZZ    = (KSINPZZ / KSTTPZZ) * KSTCPZZ

U.S. totals for the three sectors' consumption estimates are the sums of the States' estimated consumption.

### *British Thermal Units (Btu)*

Kerosene has a heat content value of approximately 5.670 million Btu per barrel. This factor is applied to convert kerosene estimated consumption from physical units to Btu:

KSRCBZZ  = KSRCPZZ * 5.670
KSCCBZZ  = KSCCPZZ * 5.670
KSICBZZ  = KSICPZZ * 5.670
KSTCBZZ  = KSRCBZZ + KSCCBZZ + KSICBZZ

The U.S. Btu consumption estimates for the three consuming sectors and the U.S. total are calculated as the sum of the State-level data.

### Additional Notes on Kerosene

1. See Note 4 at the end of the "Kerosene-Type Jet Fuel" section on page 369 for comments concerning the inclusion of kerosene-type jet fuel with the kerosene total product supplied prior to 1964 in the source documents.

2. "Sales" data are actually called "shipments" in the source documents for 1960 and 1961; "consumption" for 1962 through 1966; "shipments" for 1967; "sales" from 1968 through 1978; "deliveries" for 1979 through 1983; and "sales" for 1984 forward.

3. In 1979, the Energy Information Administration (EIA) implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report* "Deliveries of Fuel Oil and Kerosene in 1979.") In the new survey form, certain end-use categories were redefined—in many cases, to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in CSEDS to conform with the 1979 kerosene deliveries classifications. The pre-1979 deliveries estimates are not published in this report but are used in CSEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

   For kerosene deliveries in 1979, the end-use categories called "residential," "commercial," and "industrial" are available. The pre-1979 deliveries category called "heating" is related to the sum of "residential," "commercial," and "industrial" in 1979. Therefore, the following method was applied to present a comparable series for kerosene delivered to the residential, commercial, and industrial sectors:

- A 1979 subtotal for heating was created by summing each State's residential, commercial, and industrial deliveries categories, thereby creating a comparable deliveries subtotal for all years.

- Residential, commercial, and industrial shares of the heating subtotal in 1979 were calculated for each State.

- These 1979 end-use shares were then applied to each pre-1979 heating subtotal in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 kerosene deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report." EIA did not conduct a fuel oil and kerosene sales survey for 1983. The 1983 estimates in CSEDS are based on 1984 data obtained from the Form EIA-821. Statistical procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the sales data for 1983 forward are reported in thousand gallons. These data were first converted to thousand barrels before being entered into CSEDS.)

4. In 1975 through 1977, the industrial sector consumption of kerosene includes small quantities of kerosene-type jet fuel that were produced as jet fuel and sold as kerosene.

### Data Sources for Kerosene

KSCMPZZ — Kerosene sold to the commercial sector for heating.
- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of kerosene from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene, in 1979," Table 3. State ratios based on 1979 commercial sector deliveries were applied to each State's heating deliveries category from the fuel oil deliveries reports

for each year 1960 through 1978.  (See explanation in Note 3, on page 373.)

- 1979 and 1980:  EIA, *Energy Data Report*, "Deliveries of Fuel  Oil and Kerosene," Table 3.
- 1981 and 1982:  EIA, *Petroleum Supply Annual*, Table 6.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983:  July 1985 issue, Table A14.
  — 1984:  July 1986 issue, Table A4.
  — 1985 and 1986:  July 1987 issue, Table A6.
  — 1987:  June 1988 issue, Table A6.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 6.


KSIHPZZ — Kerosene sold to the industrial sector for heating.

- 1960 through 1978:  EIA estimates based on statistics of industrial sector deliveries of kerosene from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 3.  State ratios based on 1979 industrial sector deliveries were applied to each State's heating deliveries category from the fuel oil deliveries reports for each year 1960 through 1978.  (See explanation in  Note 3, on page 373.)
- 1979 and 1980:  EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 3.
- 1981 and 1982:  EIA, *Petroleum Supply Annual*, Table 6.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983:  July 1985 issue, Table A14.
  — 1984:  July 1986 issue, Table A4.
  — 1985 and 1986:  July 1987 issue, Table A6.
  — 1987:  June 1988 issue, Table A6.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 6.


KSOTPZZ — Kerosene sold for all other uses, including farm use.

- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene."  The specific tables are:
  — 1960 and 1961:  Table 10.
  — 1962 and 1963:  Table 9.
  — 1964 and 1965:  Table 8.
  — 1966 through 1975:  Table 5.
- 1976 through 1978:  EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 5.
- 1979 and 1980:  EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene."  Calculated as the sum of kerosene delivered for farm and other use from Table 3.
- 1981 and 1982:  EIA, *Petroleum Supply Annual*, Table 6.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983:  July 1985 issue, Table A14.
  — 1984:  July 1986 issue, Table A4.
  — 1985 and 1986:  July 1987 issue, Table A6.
  — 1987:  June 1988 issue, Table A6.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 6.


KSRSPZZ — Kerosene sold to the residential sector for heating.

- 1960 through 1978:  EIA, *Energy Data Report* "Deliveries of  Fuel Oil and Kerosene in 1979," Table 3.  State ratios based on 1979 residential sector deliveries were applied to each State's heating deliveries category from the fuel oil deliveries reports for each year 1960 through 1978.  (See explanation in Note 3, on page 373.)
- 1979 and 1980:  EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene," Table 3.
- 1981 and  1982:  EIA, *Petroleum Supply Annual*, Table 6.

Note:  Data for 1983 forward were published in thousand gallons.  They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987:  EIA, *Petroleum Marketing Monthly*.  The specific tables are:
  — 1983:  July 1985 issue, Table A14.
  — 1984:  July 1986 issue, Table A4.
  — 1985 and 1986:  July 1987 issue, Table A6.

— 1987:  June 1988 issue, Table A6.
- 1988 forward:  EIA, *Fuel Oil and Kerosene Sales*, Table 6.

KSTCPUS — Kerosene total consumed in the United States.
- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. "Petroleum Statement, Annual," Table 1.
- 1976 through 1980:  EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward:  EIA, *Petroleum Supply Annual*, Table 2.

## Liquefied Petroleum Gases

Liquefied petroleum gases (LPG) in CSEDS include:  ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane.

### *Physical Units*

The following data series used in CSEDS to estimate LPG consumption represent sales or estimated sales by State in thousand gallons.

LGCBMZZ  = LPG sold for internal combustion engine fuel use.  Included are sales for use in all kinds of highway vehicles, forklifts, industrial tractors, and for use in oil field drilling and production;

LGHCMZZ  = LPG sold for residential and commercial use.  Included are sales for nonfarm private households for space heating, cooking, water heating, and other household uses, such as clothes drying and incineration.  Also included are sales to nonmanufacturing organizations, such as motels, restaurants, retail stores, laundries, and other service enterprises, primarily for use in space heating, water heating, and cooking; and

LGTTPZZ  = LPG total sales for all uses.

The U.S. totals for each of these State-level LPG sales data series are calculated as the sum of the State values.

Total U.S. consumption of LPG is the product supplied data series in the publication *Petroleum Supply Annual,* published by the Energy Information Administration (EIA):

LGTCPUS  = LPG total consumed in the United States, in thousand barrels.

Another variable is used in CSEDS to estimate LPG consumption by the transportation sector.  It is described in detail in Note 2 on page 376.

LGTRSUS  = the transportation sector share of LPG internal combustion engine sales.

Since the LPG sales data are in gallons, they must be converted to barrels (42 U.S. gallons per U.S. barrel) to be comparable to total consumption estimates.  The formulas for calculating State sales data are:

LGCBPZZ  = LGCBMZZ / 42
LGCBPUS  = ΣLGCBPZZ
LGHCPZZ  = LGHCMZZ / 42
LGHCPUS  = ΣLGHCPZZ

An assumption is made that 85 percent of the LPG sold for residential and commercial use (LGHCPZZ) is sold to the residential sector (LGRCPZZ), and 15 percent is sold to the commercial sector (LGCCPZZ) for all States and years.  (See Note 3 on page 376.)  It is also assumed that LPG sales to the residential and commercial sectors are equal to the consumption in those sectors.  The formulas used are:

LGRCPZZ  = LGHCPZZ * 0.85
LGCCPZZ  = LGHCPZZ * 0.15

The LPG consumption by the transportation sector is estimated to be the transportation share of the sales for internal combustion engine fuel:

LGACPZZ  = LGCBPZZ * LGTRSUS

An estimate of each State's total LPG consumption (LGTCPZZ) is made by allocating the U.S. total consumption to the States in proportion to each State's sales share of the U.S. total sales:

$$LGTCPZZ = (LGTTPZZ / LGTTPUS) * LGTCPUS$$

The industrial (LGICPZZ) sector consumption of each State is the difference between the State's total LPG consumption and the sum of its residential, commercial, and transportation sectors' consumption:

$$LGICPZZ = LGTCPZZ – (LGRCPZZ + LGCCPZZ + LGACPZZ)$$

U.S. totals for the four end-use sector consumption estimates are calculated as the sums of the State estimates.

### British Thermal Units (Btu)

The factor for converting LPG from physical unit values to British thermal units, LGTCKUS, is calculated annually for 1967 forward by EIA as a consumption-weighted average of the heat contents of the component products (ethane, propane, butane, butane-propane, ethane-propane, and isobutane) as shown in Appendix C. LGTCKUS is shown in Table C1 on page 469 and the individual product heat contents are listed beginning on page 482. For 1960 through 1966, EIA adopted the Bureau of Mines thermal conversion factor of 4.011 million Btu per barrel.

This factor is used to estimate consumption in Btu for all States and end uses:

$$LGRCBZZ = LGRCPZZ * LGTCKUS$$
$$LGCCBZZ = LGCCPZZ * LGTCKUS$$
$$LGICBZZ = LGICPZZ * LGTCKUS$$
$$LGACBZZ = LGACPZZ * LGTCKUS$$

Total estimated consumption of LPG in Btu is the sum of the end-use consumption estimates:

$$LGTCBZZ = LGRCBZZ + LGCCBZZ + LGICBZZ + LGACBZZ$$

The U.S. Btu consumption estimates for the four sectors and total LGP are calculated as the sum of the State data.

### Additional Notes on Liquefied Petroleum Gases

1. Sales data for Maryland and the District of Columbia are combined in the source documents. Sales data are published in six categories. The percentages shown in Table A4 are applied to disaggregate the combined State data in each of the sectors for all years.

2. The sales of LPG for internal combustion engine fuel use are divided between the transportation sector and the industrial sector by using LGTRSUS, the transportation sector's share of internal combustion engine use. LGTRSUS is estimated from data on "special fuels used on highways," a category that includes only LPG and diesel fuel. The special fuels data are published by the U.S. Department of Transportation, Federal Highway Administration (see MGSFPZZ on page 384). The quantity of LPG included in special fuels is estimated each year (the LPG portion ranges from 8.4 percent in 1960 to 0.5 percent in 1999). LGTRSUS is then derived by dividing the quantity of LPG included in special fuels used on highways by the quantity of LPG sold for internal combustion engine use. This U.S. factor is applied to each of the States. LGTRSUS values are shown in Table A5.

3. Little information exists for allocating the residential and commercial use of LPG to the individual sectors. CSEDS applies an 85 percent residential and 15 percent commercial split for all States and years

**Table A4. Percentages Used to Disaggregate Maryland and D.C. Combined LPG Sales Data**

| Sales Category | Maryland | D.C. |
|---|---|---|
| Residential and Commercial | 99.9% | 0.1% |
| Internal combustion engine fuel | 98.9 | 1.1 |
| Industrial | 99.4 | 0.6 |
| Chemical | 100.0 | 0.0 |
| Utility gas | 100.0 | 0.0 |
| Miscellaneous | 100.0 | 0.0 |

**Table A5. Transportation Sector Share of LPG Internal Combustion Engine Use, 1960 Forward**

| Year | LGTRSUS | Year | LGTRSUS | Year | LGTRSUS |
|------|---------|------|---------|------|---------|
| 1960 | 0.229 | 1974 | 0.381 | 1988 | 0.437 |
| 1961 | 0.258 | 1975 | 0.406 | 1989 | 0.428 |
| 1962 | 0.266 | 1976 | 0.440 | 1990 | 0.471 |
| 1963 | 0.273 | 1977 | 0.478 | 1991 | 0.426 |
| 1964 | 0.259 | 1978 | 0.594 | 1992 | 0.425 |
| 1965 | 0.290 | 1979 | 0.536 | 1993 | 0.443 |
| 1966 | 0.325 | 1980 | 0.380 | 1994 | 0.734 |
| 1967 | 0.368 | 1981 | 0.671 | 1995 | 0.416 |
| 1968 | 0.389 | 1982 | 0.579 | 1996 | 0.337 |
| 1969 | 0.341 | 1983 | 0.578 | 1997 | 0.278 |
| 1970 | 0.363 | 1984 | 0.631 | 1998 | 0.592 |
| 1971 | 0.423 | 1985 | 0.440 | 1999 | 0.364 |
| 1972 | 0.392 | 1986 | 0.456 | | |
| 1973 | 0.384 | 1987 | 0.375 | | |

based on figures published in the Federal Energy Administration Project Independence Blueprint Task Force Report, "Residential and Commercial Energy Use Patterns, 1970–1990," November 1974, Table 1.A.1.

4. LPG sales data by State and end-use categories for 1960 through 1982 are from EIA's "Sales of Liquefied Petroleum Gases and Ethane." In 1979, EIA modified the LPG sales survey, Form EIA-174, and changed the list of respondents. Because of the updated sampling frame, the 1979 through 1982 sales data may not be directly comparable to the pre-1979 sales when a different estimation procedure was used. Explanation of the discontinuities caused by the change in the 1979 sampling frame are provided in EIA's *Energy Data Report,* "Sales of Liquefied Petroleum Gases and Ethane in 1979."

Because of the change in survey techniques used for measuring LPG sales, many States' data were withheld from publication in the 1979

through 1982 LPG sales reports to avoid disclosure of company-level data. The consumption estimates in CSEDS use all data published in the 1979 through 1982 LPG sales reports and estimates prepared by EIA's Office of Oil and Gas for data that were withheld from publication. (See Note 5 below for estimation procedures.)

Some end-use categories changed in 1979 due to redefinition of the classifications. One of these changes, for example, occurred with LPG sold to farms for household heating and cooking. Prior to 1979 these sales were reported as part of the residential and commercial category, while in 1979 they were counted in the farm use category that goes into the industrial sector in CSEDS. No attempt has been made to adjust for this type of inconsistency.

The Form EIA-174 was cancelled after collection of 1982 data. The 1983 LPG consumption estimates are based on the assumption that LPG end-use sector demand in 1983 occurred in the same proportion as 1982 sector demand within each State; i.e., the 1983 LPG product supplied figure was allocated to the States by using the distribution of volumes consumed for 1982.

5. The following procedures were used to estimate the State end-use sales that were withheld from publication in the 1979-1982 LPG sales reports:

- For each year, missing State total sales were estimated by allocating the sum of the missing State sales within each Petroleum Administration for Defense (PAD) District to the individual States, in proportion to the sum of the known end-use sales for those States.

- Missing PAD District end-use totals for 1979 and 1980 were obtained by using the 1980 and 1981 sales reports. Missing PAD District chemical sales were estimated by allocating the total missing volume of chemical sales to the PAD District in proportion to the number of chemical plants in each PAD District. The remaining PAD District end-use totals were obtained by subtraction. For 1981 and 1982, no PAD District estimations were necessary because all PAD District end-use totals are known.

- The published data and the estimated State and PAD District end-use totals were used to estimate missing State end-use sales volumes within a PAD District: missing State end-use sector values were estimated by allocating the missing volume for the State approximately proportional to the PAD District end-use sector totals.

6. Prior to 1979, State data for chemical use of LPG were withheld from publication, although they were included in the U.S. total in the tables in EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports. Beginning in 1979, State-level chemical use data were published in the LPG sales reports, but data for several States were withheld. Estimates for the withheld data for chemical use sales for 1979 and 1980 were created by using the estimation procedure described in Note 5 above. Then the published and the estimated State data for 1979 were used to create State shares of the total U.S. chemical use sales. These percentage shares (shown in Table A6) were applied to the total U.S. LPG chemical use sales in 1960 through 1978 to create State chemical use estimates. The chemical use estimates were added to the States' total LPG sales series, LGTTPZZ.

7. Beginning in 1984, the American Petroleum Institute (API), the Gas Processors Association, and the National LP-Gas Association jointly sponsored an LPG sales survey. The results are published in the API's report *Sales of Natural Gas Liquids and Liquefied Refinery Gases*. These data include sales of pentanes plus; the pentanes plus data were removed prior to use in CSEDS.

Beginning in 1997, API incorporated additional imports and exports data in their estimates. Those trade data are removed prior to use in CSEDS.

The API report publishes total LPG sales for Alaska and Hawaii, but disaggregated data for those States are withheld. EIA estimates the withheld data for the "Residential and Commercial" and the "Internal Combustion Fuel" columns as follows:

- Alaska and Hawaii are the only States of the seven States in PAD District V for which data are withheld. Therefore, subtracting the available data for the other five States from the PAD District V total gives the withheld data for Alaska and Hawaii combined.

- The withheld data are assigned to Alaska and Hawaii in proportion to each State's share of their combined published total sales.

**Table A6. State Shares of the Total U.S. LPG Sold for Chemical Use, 1960 Through 1978**

| State | Percent | State | Percent |
|---|---|---|---|
| Alabama | 0.000 | Montana | 0.000 |
| Alaska | 0.589 | Nebraska | 0.000 |
| Arizona | 0.000 | Nevada | 0.000 |
| Arkansas | 0.000 | New Hampshire | 0.000 |
| California | 2.667 | New Jersey | 2.040 |
| Colorado | 0.232 | New Mexico | 0.603 |
| Connecticut | 0.053 | New York | 0.000 |
| Delaware | 0.811 | North Carolina | 0.327 |
| District of Columbia | 0.000 | North Dakota | 0.000 |
| Florida | 0.000 | Ohio | 1.103 |
| Georgia | 0.699 | Oklahoma | 0.309 |
| Hawaii | 0.000 | Oregon | 0.000 |
| Idaho | 0.000 | Pennsylvania | 0.354 |
| Illinois | 7.066 | Rhode Island | 0.000 |
| Indiana | 0.243 | South Carolina | 0.021 |
| Iowa | 0.900 | South Dakota | 0.000 |
| Kansas | 0.451 | Tennessee | 0.000 |
| Kentucky | 2.548 | Texas | 57.425 |
| Louisiana | 20.566 | Utah | 0.000 |
| Maine | 0.012 | Vermont | 0.000 |
| Maryland | 0.050 | Virginia | 0.025 |
| Massachusetts | 0.009 | Washington | 0.000 |
| Michigan | 0.151 | West Virginia | 0.286 |
| Minnesota | 0.000 | Wisconsin | 0.000 |
| Mississippi | 0.315 | Wyoming | 0.091 |
| Missouri | 0.054 | United States | 100.000 |

### Data Sources for Liquefied Petroleum Gases

**LGCBMZZ** — LPG sold for internal combustion engine use by State.
Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Note 1, on page 376.
- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Liquefied Petroleum Gases and Ethane." The specific tables are:
  — 1960 and 1961: Table 5 (data called "Shipments").
  — 1962 through 1966: Table 2 (data called "Consumption").
  — 1967: Table 2 (data called "Shipments").
- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Sales of Liquefied Petroleum Gases and Ethane," Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, "Sales of Liquefied Petroleum Gases and Ethane," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, "Sales of Liquefied Petroleum Gases and Ethane," Table 3.
- 1983: EIA estimates.
Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Note 7, on page 378.)
- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.
- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.
- 1992 forward: American Petroleum Institute, *Sales of Natural Gas Liquids and Liquefied Refinery Gases,* Table 3. Final data for each year is published in the report for the next year.

**LGHCMZZ** — LPG sold for residential and commercial use by State.
Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Note 1, on page 376.
- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Liquefied Petroleum Gases and Ethane." The specific tables are:
  — 1960 and 1961: Table 5 (data called "Shipments").
  — 1962 through 1966: Table 2 (data called "Consumption").
  — 1967: Table 2 (data called "Shipments").

- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Sales of Liquefied Petroleum Gases and Ethane," Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, "Sales of Liquefied Petroleum Gases and Ethane," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, "Sales of Liquefied Petroleum Gases and Ethane," Table 3.
- 1983: EIA estimates.
Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Note 7, on page 378.)
- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.
- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.
- 1992 forward: American Petroleum Institute, Sales of Natural Gas Liquids and Liquefied Refinery Gases, Table 3. Final data for each year is published in the report for the next year.

**LGTCKUS** — Factor for converting LPG from physical units to Btu.
- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Crude Petroleum and Petroleum Products, 1956," Table 4 footnote, constant value of 4.011 million Btu per barrel.
- 1967 forward: Calculated annually by EIA as a weighted average by multiplying the quantity consumed of each of the component products by each product's conversion factor and dividing the sum of those heat contents by the sum of the quantities consumed. The component products are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. Their heat content conversion factors are listed in Appendix C beginning on page 482. Quantities consumed are from:
  — 1967 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
  — 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

**LGTCPUS** — LPG total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. "Petroleum Statement, Annual," Table 1.

- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

LGTRSUS — The transportation sector share of LPG internal combustion engine sales.

- EIA estimates based on the LPG portion of the special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration (variable MGSFPUS in CSEDS), as a percentage of the LPG sold for internal combustion engine use published by the American Petroleum Institute (variable LGCBMUS in CSEDS). For an explanation of the estimation method, see Note 2, on page 376.

LGTTPZZ — LPG total sales for all uses by State.

Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Note 1, on page 376.

- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Liquefied Petroleum Gases and Ethane." The specific tables are:
  — 1960 and 1961: Table 5 (data called "Shipments").
  — 1962 through 1966: Table 2 (data called "Consumption").
  — 1967: Table 2 (data called "Shipments").
- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Sales of Liquefied Petroleum Gases and Ethane," Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, "Sales of Liquefied Petroleum Gases and Ethane," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, "Sales of Liquefied Petroleum Gases and Ethane," Table 3.
- 1983: EIA estimates.

Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Note 7, on page 378.)

- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.
- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.

- 1992 forward: American Petroleum Institute, *Sales of Natural Gas Liquids and Liquefied Refinery Gases,* Table 3. Final data for each year are published in the report for the next year.

## Lubricants

### *Physical Units*

Three data series are used to estimate State consumption of lubricants. The two State-level sales data series are used to apportion the U.S. total consumption data to the States and the end-use sectors within the States. "ZZ" in the variable names represents the two-letter State code that differs for each State:

LUINPZZ = lubricants sold to the industrial sector, in thousand barrels;

LUTRPZZ = lubricants sold to the transportation sector, in thousand barrels; and

LUTCPUS = lubricants total consumed in the United States, in thousand barrels.

Data for the first two variables are developed from the Bureau of the Census reports "Sales of Lubricating and Industrial Oils and Greases" in the *Current Industrial Reports* series. These series were discontinued in 1977 and the method of estimation for 1978 forward is explained in Note 1 at the end of this "Lubricants" section. The third variable for lubricants is the product supplied data series in the publication *Petroleum Supply Annual,* published by the Energy Information Administration (EIA). The first two variables are used for apportioning the third into State total consumption and State end-use consumption estimates by using the following calculations.

Total sales of lubricants for each State, LUTTPZZ, is created by adding the industrial and transportation sales:

LUTTPZZ = LUINPZZ + LUTRPZZ

U.S. sales totals are calculated by summing the State sales data.

Each State's proportion of total U.S. sales is used to calculate each State's estimated consumption of lubricants:

LUTCPZZ = (LUTTPZZ / LUTTPUS) * LUTCPUS

Each State's estimated total consumption of lubricants is further divided into end-use estimates in proportion to that State's sales by sector as a portion of total sales in the State. Lubricants consumed by State for industrial use, LUICPZZ, and for transportation use, LUACPZZ, are calculated:

LUICPZZ = (LUINPZZ / LUTTPZZ) * LUTCPZZ
LUACPZZ = (LUTRPZZ / LUTTPZZ) * LUTCPZZ

The consumption of lubricants in the United States by these two end-use sectors is created by summing the State estimates.

### British Thermal Units (Btu)

Lubricants have a heat content value of approximately 6.065 million Btu per barrel. This factor is applied to convert lubricants estimated consumption from physical units to Btu:

LUICBZZ = LUICPZZ * 6.065
LUACBZZ = LUACPZZ * 6.065

The State total consumption in Btu is the sum of the two sectors' consumption in Btu:

LUTCBZZ = LUICBZZ + LUACBZZ

The U.S. sector and total consumption estimates in Btu are calculated as the sum of the State data.

### Additional Notes on Lubricants

1.  The lubricants sales data (LUINPZZ and LUTRPZZ) were published approximately every other year by the Bureau of the Census until the discontinuation of the series after 1977. Each year's sales data have been used to calculate that year's and at least one other year's

**Table A7. Lubricants Sales Data Used in Consumption Estimates**

| Year of Sales Data | Year of Consumption Estimates |
|---|---|
| 1960 | 1960 and 1961 |
| 1962 | 1962, 1963, and 1964 |
| 1965 | 1965 and 1966 |
| 1967 | 1967 and 1968 |
| 1969 | 1969 and 1970 |
| 1971 | 1971 and 1972 |
| 1973 | 1973 and 1974 |
| 1975 | 1975 and 1976 |
| 1977 | 1977 forward |

consumption estimates. Table A7 specifies which years of consumption estimates depend on which years of the sales data.

2.  The sales data from the source document for LUINPZZ and LUTRPZZ are available in incompatible units. The industrial series, LUINPZZ, is oils and greases sold for industrial lubricating and other uses measured in thousand gallons. The transportation series, LUTRPZZ, is oils and greases sold for automotive and aviation uses measured in thousand pounds. Prior to use in CSEDS, these were converted to thousand barrels by dividing the oil data by 42 gallons per barrel and dividing the greases data by 300 pounds per barrel. In the source document, some State data are not published to avoid disclosing figures for individual companies. The undisclosed data were entered as zero in CSEDS.

### Data Sources for Lubricants

LUINPZZ — Lubricants sold to the industrial sector by State. Calculated from:
*   U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases," for 1960, 1962, 1965, 1967, 1969, 1971, 1973, 1975, and 1977. (See explanation in Notes 1 and 2 above.)

LUTCPUS — Lubricants total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

LUTRPZZ — Lubricants sold to the transportation sector by State. Calculated from:
- U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases," for 1960, 1962, 1965, 1967, 1969, 1971, 1973, 1975, and 1977. (See explanation in Notes 1 and 2 on page 381.)

## Motor Gasoline

### *Physical Units*

Nine data series are used to estimate the State end-use consumption of motor gasoline. Eight of the series are from the U.S. Department of Transportation, Federal Highway Administration publication, *Highway Statistics*, and represent sales of motor gasoline. The sales data are categorized as sales for highway and nonhighway use:

- **Highway Use** sales data (MGMFP) are from the *Highway Statistics* Table MF-21; however, they are reduced by the amount of highway "special fuels" (MGSFP) used in each State each year as reported on Table MF-25 (prior to 1994) and Table MF-21 (1994 forward). Special fuels are primarily diesel fuels, not motor gasoline, and are included in the transportation sector of distillate fuel.

- **Nonhighway Use** sales are further subdivided into sales for: (1) public use by States, counties, and municipalities (MGPNP) from Table MF-21, and (2) private and commercial use as reported on MF-24. The private and commercial nonhighway use of motor gasoline has the following components: agricultural use (MGAGP), industrial and commercial use (MGIYP), construction use (MGCUP), marine use

(MGMRP), and miscellaneous and unclassified uses (MGMSP). Another component of the private and commercial nonhighway series is aviation gasoline (AVNMM), which is discussed under the "Aviation Gasoline" section of this documentation.

The ninth motor gasoline data series (MGTCPUS) is the total U.S. consumption of motor gasoline published in the product supplied series in the EIA publication *Petroleum Supply Annual*.

The nine motor gasoline data series are ("ZZ" in the variable names represent the two-letter State code that differs for each State):

MGAGPZZ = motor gasoline sold for agricultural use in each State, in thousand gallons;

MGCUPZZ = motor gasoline sold for construction use in each State, in thousand gallons;

MGIYPZZ = motor gasoline sold for industrial and commercial use in each State, in thousand gallons;

MGMFPZZ = motor fuel sold for highway use in each State, in thousand gallons;

MGMRPZZ = motor gasoline sold for marine use in each State, in thousand gallons;

MGMSPZZ = motor gasoline sold for miscellaneous and unclassified uses in each State, in thousand gallons;

MGPNPZZ = motor fuel sold for public nonhighway use in each State, in thousand gallons;

MGSFPZZ = special fuels (primarily diesel fuel with small amounts of liquefied petroleum gases) sold in each State, in thousand gallons; and

MGTCPUS = motor gasoline total consumed in the United States, in thousand barrels.

U.S. totals for the eight State series named above are calculated as the sum of the State data.

The transportation sector accounts for most of the motor gasoline sales. Sales to the transportation sector is estimated to be the sum of motor fuel sales for marine use and for highway use (minus the sales of special fuels, which are primarily diesel fuels and are accounted for in the transportation sector of distillate fuel). Sales of motor gasoline to the transportation sector in each State (MGTRPZZ) is calculated:

MGTRPZZ   = MGMFPZZ + MGMRPZZ – MGSFPZZ

Two sales data series are added to estimate motor gasoline sales to the commercial sector: miscellaneous (including unclassified) and public nonhighway sales. Sales of motor gasoline to the commercial sector in each State (MGCMPZZ) is calculated:

MGCMPZZ  = MGMSPZZ + MGPNPZZ

Sales of motor gasoline for use in the industrial sector in each State (MGINPZZ) is calculated as the sum of the sales for agricultural use, for construction use, and for industrial and commercial use:

MGINPZZ   = MGAGPZZ + MGCUPZZ + MGIYPZZ

Total sales of motor gasoline in each State (MGTTPZZ) is calculated as the sum of the sales to the major sectors:

MGTTPZZ   = MGCMPZZ + MGINPZZ + MGTRPZZ

U.S. totals for the three end-use sectors' sales and for total sales are calculated as the sum of the States' sales.

The motor gasoline sales data for the three end-use sectors in each State are used to apportion the U.S. total consumption of motor gasoline to the States and to the major end-use sectors within each State.

The estimated consumption of motor gasoline in each State is calculated according to each State's share of the total sales. Estimated consumption of motor gasoline in each State (MGTCPZZ) is calculated:

MGTCPZZ   = (MGTTPZZ / MGTTPUS) * MGTCPUS

The commercial sector estimated consumption of motor gasoline (MGCCPZZ) is calculated:

MGCCPZZ   = (MGCMPZZ / MGTTPZZ) * MGTCPZZ

The industrial sector estimated consumption (MGICPZZ) is calculated:

MGICPZZ   = (MGINPZZ / MGTTPZZ) * MGTCPZZ

The transportation sector estimated consumption (MGACPZZ) is calculated:

MGACPZZ  = (MGTRPZZ / MGTTPZZ) * MGTCPZZ

The consumption of motor gasoline by major end-use sector in the United States is estimated by summing the States' estimated consumption.

### British Thermal Units (Btu)

A national factor, MGTCKUS, is used to convert motor gasoline consumption from physical units to British thermal units for each State. A constant heat content of 5.253 million Btu per barrel is used for 1960 through 1993. Beginning in 1994, an annual quantity-weighted average factor for conventional, reformulated, and oxygenated motor gasoline is calculated by EIA. The factors, listed in Table C1 on page 469, are used for each State:

MGCCBZZ   = MGCCPZZ * MGTCKUS
MGICBZZ   = MGICPZZ * MGTCKUS
MGACBZZ   = MGACPZZ * MGTCKUS
MGTCBZZ   = MGCCBZZ + MGICBZZ + MGACBZZ

The U.S. level Btu consumption estimates are calculated by summing the State data.

### Data Sources for Motor Gasoline

MGAGPZZ — Motor gasoline sold for agricultural use by State.
- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGCUPZZ — Motor gasoline sold for construction use by State.
- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.

- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGIYPZZ — Motor gasoline sold for industrial and commercial use by State.
- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGMFPZZ — Motor fuel sold for highway use by State.
- 1960 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995*, Table MF-221 gives revised U.S. totals. State revisions can be calculated by adding data from Tables MF-225 and MF-226.
- 1996 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-21.

MGMRPZZ — Motor gasoline sold for marine use by State.
- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGMSPZZ — Motor gasoline sold for miscellaneous uses by State.
- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24. Sum of the "Miscellaneous" column plus the "Unclassified" column minus the "Total Classified" column.
- 1965: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24. Sum of the "Miscellaneous" column plus the "Unclassified" column minus the "Total Classified" column.
- 1966 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-24. The specific columns are:

— 1966 through 1981: Sum of the "Miscellaneous" and "Unclassified" columns.
— 1982 forward: The "Miscellaneous" column.

MGPNPZZ — Motor fuel sold for public nonhighway use by State.
- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-21.
- 1985, 1987, and 1992: Unpublished revised State data comparable to the U.S. values published in *Highway Statistics Summary to 1995*, Table 221.
- 1965 through 1984, 1986, 1988 through 1991, and 1993 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-21 in 1965 and Table MF-21 in 1966 forward.

MGSFPZZ — Motor gasoline special fuels sales by State (primarily diesel fuel with small amounts of liquefied petroleum gases).
- 1960 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1995*, Table MF-225.
- 1996 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-21.

MGTCKUS — Factor for converting motor gasoline from physical units to Btu.
- 1960 through 1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.
- 1994 forward: EIA calculated national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (shown in Appendix C Table C1 on page 469). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in the Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, *Fuel Economy Impact Analysis of Reformulated Gasoline*.

MGTCPUS — Motor gasoline total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. "Petroleum Statement, Annual," Table 1.

  For 1960 through 1963, motor gasoline was combined with aviation gasoline and published as "gasoline" in the source table. Table 19 in the "Petroleum Statement, Annual" titled "Salient Statistics of Aviation Gasoline" provided separate data for aviation gasoline for those years. The aviation gasoline data from the second table were subtracted from the gasoline data in the first table to derive the motor gasoline consumption series used in CSEDS.

- 1976 through 1980: EIA, *Energy Data Reports*. "Petroleum Statement, Annual," Table 1.

- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

## Petroleum Coke

### Physical Units

Five data series are used to estimate the consumption of petroleum coke. Three are measures of petroleum coke consumption and two are indicators of industrial activity used to apportion U.S. consumption to the States. "ZZ" in the variable name represents the two-letter State code that differs for each State:

PCTCPUS = petroleum coke total consumed in the United States (electric utility and industrial sectors), in thousand barrels;

PCEUMZZ = petroleum coke consumed by electric utilities in each State, in thousand short tons;

PCRFPUS = petroleum coke used at refineries as both catalytic and marketable coke in the United States, in thousand barrels;

PCRFPZZ = petroleum coke used at refineries as both catalytic and marketable coke in each State, or group of States, or PAD district, in thousand barrels;

CTCAPZZ = catalytic cracking charge capacity of petroleum refineries in each State, in barrels per calendar day (1960 through 1979) and barrels per stream day (1980 forward); and

AICAPZZ = aluminum ingot production capacity in each State, in short tons.

The total consumption of petroleum coke in the United States (PCTCPUS) is the product supplied series from the EIA publication *Petroleum Supply Annual*.

Petroleum coke consumed at electric utilities, PCEUMZZ, is available from 1970 forward from the Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Prior to 1970, no data are available for this series and zero is used. These data are in thousand short tons and are converted into thousand barrels in CSEDS by applying a conversion factor of 5 barrels per short ton, and the U.S. value is the sum of the State data:

PCEUPZZ = PCEUMZZ * 5
PCEUPUS = ΣPCEUPZZ

Other than the petroleum coke consumed by electric utilities, all remaining petroleum coke consumption is accredited to the industrial sector in CSEDS. Industrial petroleum coke is used as catalyst coke at refineries in a process for increasing the yield of gasoline from crude oil (catalytic cracking) or for other industrial uses (mainly for conversion into electrodes that are consumed in the production of aluminum). To estimate industrial consumption of petroleum coke, electric utility consumption is subtracted from the total U.S. petroleum coke product supplied:

PCICPUS = PCTCPUS – PCEUPUS

The petroleum coke used at refineries in the United States as catalytic coke (PCRFPUS) is subtracted from the U.S. industrial sector consumption to derive consumption of petroleum coke for all other industrial uses, mainly aluminum production:

PCOCPUS = PCICPUS – PCRFPUS

State-level estimates of the petroleum coke consumed by the other industrial users are assumed to be in proportion to each State's aluminum ingot production capacity (AICAPZZ). Although AICAPZZ is measured in short tons, it is not converted to thousand barrels because it is used only as a State-level allocator. The U.S. total is calculated as the sum of the State

data and other industrial use of petroleum coke is allocated to the States as follows:

$$AICAPUS = \Sigma AICAPZZ$$
$$PCOCPZZ = (AICAPZZ / AICAPUS) * PCOCPUS$$

The source for petroleum coke used at refineries, PCRFPUS and PCRFPGZ, is the EIA *Petroleum Supply Annual* and predecessor reports. For 1960 through 1980, the data are provided in thousand short tons. For consistency with later years' data, the 1960 through 1980 data are first converted into thousand barrels before being used in CSEDS. For 1960 through 1967, the data are published for Texas and New Mexico and for groups of other States. For 1968 through 1980, the data are given for 19 individual States with the remaining States are combined into 7 groups. For 1981 forward, the data are published by Petroleum Administration for Defense (PAD) districts only. The data for 1960 through 1967 are disaggregated into the 19 States and 7 groups used for the later years, prior to being entered into CSEDS, by using the proportions of the 1968 data, which was published in both formats.

State-level estimates of the refinery consumption of petroleum coke are calculated by assuming that each State consumes petroleum coke in proportion to the catalytic cracking charge capacity (CTCAPZZ) of the refineries in the State. The U.S. total for the State-level data allocating series is calculated by summing the State data.

$$CTCAPUS = \Sigma CTCAPZZ$$

The estimates of petroleum coke consumed by refineries for 1960 through 1980 use available State data directly and allocate the group sums (G1 through G7 indicated by GZ in the following formulas) to the States within each group in proportion to each State's portion of the group's catalytic cracking charge capacity. For 1981 forward, PAD district data (P1 through P5 indicated by PZ in the following formulas) are allocated in the same way to the States within each district:

$$PCRFPZZ = PCRFPZZ, \text{ or}$$
$$PCRFPZZ = (CTCAPZZ / CTCAPGZ) * PCRFPGZ \text{ (1 through 7), or}$$
$$PCRFPZZ = (CTCAPZZ / CTCAPPZ) * PCRFPPZ \text{ (I through V)}$$

The State totals for the industrial sector use of petroleum coke are added:

$$PCICPZZ = PCRFPZZ + PCOCPZZ$$

Total petroleum coke consumption by State is industrial use plus electric utility use:

$$PCTCPZZ = PCICPZZ + PCEUPZZ$$

### British Thermal Units (Btu)

Petroleum coke has a heat content value of approximately 6.024 million Btu per barrel. This factor is applied to convert petroleum coke estimated consumption from physical units to Btu by State and at the U.S. level:

$$PCICBZZ = PCICPZZ * 6.024$$
$$PCICBUS = \Sigma PCICBZZ$$
$$PCEUBZZ = PCEUPZZ * 6.024$$
$$PCEUBUS = \Sigma PCEUBZZ$$
$$PCTCBZZ = PCICBZZ + PCEUBZZ$$
$$PCTCBUS = \Sigma PCTCBZZ$$

### Additional Calculations

Additional calculations are performed in the Combined State Energy Data System (CSEDS) to provide petroleum coke consumption estimates for the price and expenditure calculations published in the *State Energy Price and Expenditure Report*. The Btu equivalents of petroleum coke used at refineries (PCRFB) and petroleum coke consumed by all other industrial users (PCOCB) are calculated at the State and U.S. levels:

$$PCOCBZZ = PCOCPZZ * 6.024$$
$$PCOCBUS = \Sigma PCOCBZZ$$
$$PCRFBZZ = PCRFPZZ * 6.024$$
$$PCRFBUS = \Sigma PCRFBZZ$$

### Data Sources for Petroleum Coke

AICAPZZ — Aluminum ingot production capacity in each State.

- 1960 through 1973:  American Bureau of Metal Statistics, *Year Book*.
- 1974 through 1994:  American Bureau of Metal Statistics, *Non-Ferrous Metal Data*, table titled "Aluminum Ingot Production Capacity."
  Note: Capacities for individual plants owned by one company have been withheld since 1986.  The company's total capacity has been apportioned to the individual plants on the basis of their proportional capacities in 1985.
- 1995 forward: Data series is discontinued.  1994 data are used for all years.

CTCAPZZ  —  Catalytic cracking charge capacity of petroleum refineries by State.

- 1960:  Data are unavailable from published reports.  The 1961 values are used for 1960.
- 1961 through 1963:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States."  The specific tables are:
  — 1961 and 1962: Table 7, under "Cracking Capacity" column heading "Charge."
  — 1963:  Table 6, under "Catalytic-Cracking Capacity" column heading "Charge."
- 1964 through 1976:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States and Puerto Rico," Table 2, all entries next to "Cat. Ck." summed by State.
- 1977:  EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and Puerto Rico," Table 2, all entries next to "Cat. Ck." summed by State.
- 1978:  EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and U.S. Territories," Table 2, all entries next to "Cat. Ck." summed by State.
- 1979 and 1980:  EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and U.S Territories."  The specific tables are:
  — 1979:  Table 2, sum of "Catalytic Cracking" columns, "Fresh" and "Recycle."
  — 1980:  Table 1, sum of "Catalytic Cracking (fresh)" and "Catalytic Cracking (recycle)" columns.
- 1981 forward:  EIA, *Petroleum Supply Annual*, sum of "Catalytic Cracking (Fresh)" and "Catalytic Cracking (Recycled)" columns in the following tables:

  — 1981 through 1983:  Table 1.
  — 1984:  Table 30.
  — 1985 through 1989:  Table 29.
  — 1989 through 1994:  Table 36.
  — 1995: Data series became biannual.  1994 data used for 1995.
  — 1996:  Table 36.
  — 1997:  1996 data used for 1997.
  — 1998 and 1999:  Table 36.

PCEUMZZ — Petroleum coke consumed by the electric utilities by State.
- 1960 through 1969:  No data available.  Values are assumed to be zero.
- 1970 forward:  EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms.

PCRFPUS and PCRFPZZ, PCRFPGZ, or PCRFPPZ  — Petroleum coke consumed at refineries (both catalyst and marketable) in the United States, total and by State or groups of States.
- 1960:  No data available.  The 1961 value is used for 1960.
- 1961 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual."  The specific tables are:
  — 1961 and 1962:  Table 18.
  — 1962 through 1966:  Table 19.
  — 1967:  Table 18.
  — 1968:  Table 19.
  — 1969 through 1972:  Table 18.
  — 1973 and 1974:  Table 21.
  — 1975:  Table 22.
- 1976 through 1980:  EIA, *Energy Data Reports*, "Petroleum Statement, Annual."  The specific tables are:
  — 1976:  Table 22.
  — 1977:  Table 21.
  — 1978 through 1980:  Table 20.
- 1981 forward:  EIA, *Petroleum Supply Annual*.  The specific tables are:
  — 1981 and 1982:  Table 17.
  — 1983:  Table 15.
  — 1984:  Table 44.
  — 1985:  Table 43.
  — 1986 through 1988:  Table 38.
  — 1989 through 1992:  Table 45.

— 1993 and 1994:  Table 47.
— 1995:  Table 36.
— 1996:  Table 47.
— 1997:  Table 36.
— 1998 forward:  Table 47.

PCTCPUS — Petroleum coke total consumed in the United States.

- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. "Petroleum Statement, Annual," Table 1.
- 1976 through 1980:  EIA, *Energy Data Report*, "Petroleum Statement, Annual," Table 1.
- 1981 forward:  EIA, *Petroleum Supply Annual*, Table 2.

## Residual Fuel

### *Physical Units*

Since State-level end-use consumption data for residual fuel (with the exception of electric utilities data) are not available, sales of residual fuel into or within each State, in thousand barrels, published by the Energy Information Administration (EIA), are used to estimate residual fuel consumption.  "ZZ" in the following variable names represents the two-letter State code that differs for each State:

RFBKPZZ  = residual fuel sold for vessel bunkering use (i.e., the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies, and fueling for other marine purposes), excluding sales to the Armed Forces;

RFCMPZZ  = residual fuel sold to the commercial sector for heating;

RFIBPZZ  = residual fuel sold to industrial establishments for space heating and for other industrial use (i.e., for all uses to mines, smelters, plants engaged in producing manufactured  products, in processing goods, and in assembling);

RFMIPZZ  = residual fuel sold to the Armed Forces, regardless of use;

RFMSPZZ  = residual fuel sold for all other uses not identified in other sales categories;

RFOCPZZ  = residual fuel sold for oil company use, including all fuel oil, crude oil, or acid sludge used as fuel at refineries, by pipelines, or in field operations; and

RFRRPZZ  = residual fuel sold to the railroads for use in fueling trains, operating railroad equipment, space heating of buildings, and other operations.

Two other data series that represent consumption of residual fuel are:

RFEUPZZ  = residual fuel consumed by electric utilities in each State, in thousand barrels.

RFTCPUS  = residual fuel total supplied in the United States, in thousand barrels.

Residual fuel oil consumed by electric utilities, RFEUPZZ, is collected by EIA on Form EIA-759, "Monthly Power Plant Report," and predecessor forms.  (See Note 3 at the end of this residual fuel section for further information on changes in this series' data definitions.)

Total U.S. consumption of residual fuel, RFTCPUS, is the product supplied series in EIA's publication *Petroleum Supply Annual*.

To begin calculating residual fuel State and end-use consumption estimates, all State-level data series are summed to provide totals for the United States.

Then the data series are combined as closely as possible into the major end-use sectors used in CSEDS.  No residual fuel is sold to the residential sector.  Residual fuel sales to the commercial sector is the RFCMPZZ series.

The sales of residual fuel to the industrial sector in each State, RFINPZZ, is the sum of the residual fuel sold for industrial use, including industrial space heating (RFIBPZZ), for oil company use (RFOCPZZ), and for all other uses (RFMSPZZ):

RFINPZZ  = RFIBPZZ + RFOCPZZ + RFMSPZZ
RFINPUS  = $\Sigma$RFINPZZ

The sales of residual fuel to the transportation sector in each State, RFTRPZZ, is the sum of the residual fuel sales for vessel bunkering (RFBKPZZ), military use (RFMIPZZ), and railroad use (RFRRPZZ):

RFTRPZZ = RFBKPZZ + RFMIPZZ + RFRRPZZ
RFTRPUS = ΣRFTRPZZ

Sales of residual fuel oil to the commercial, industrial, and transportation sectors are added to create a subtotal of sales to all sectors other than the electric utility sector (RFNDPZZ):

RFNDPZZ = RFCMPZZ + RFINPZZ + RFTRPZZ
RFNDPUS = ΣRFNDPZZ

The estimated residual fuel consumption for the United States by all sectors other than the electric utility sector (RFNCPUS) is calculated by subtracting the total residual fuel consumption at electric utilities from the total U.S. residual fuel consumption:

RFNCPUS = RFTCPUS – RFEUPUS

This U.S. subtotal of residual fuel consumption by the end-use sectors combined (RFNCPUS) is apportioned to the States by using the States' end-use sector sales data. The assumption is made that each State consumes residual fuel in proportion to the amount sold in that State:

RFNCPZZ = (RFNDPZZ / RFNDPUS) * RFNCPUS

The end-use sectors' subtotal for each State is further divided into estimates for each sector in proportion to each sector's sales. The estimated commercial sector consumption in each State, RFCCPZZ, is calculated:

RFCCPZZ = (RFCMPZZ / RFNDPZZ) * RFNCPZZ

The industrial sector's estimated consumption in each State, RFICPZZ, is calculated:

RFICPZZ = (RFINPZZ / RFNDPZZ) * RFNCPZZ

The transportation sector's estimated consumption in each State, RFACPZZ, is calculated:

RFACPZZ = (RFTRPZZ / RFNDPZZ) * RFNCPZZ

The consumption of residual fuel in the United States by the major end-use sectors is estimated by adding the States' estimated consumption.

Total State residual fuel consumption is the sum of the end-use sectors' consumption subtotal and the electric utilities consumption:

RFTCPZZ = RFNCPZZ + RFEUPZZ

### British Thermal Units (Btu)

Residual fuel has a heat content value of approximately 6.287 million Btu per barrel. This factor is applied to convert residual fuel estimated consumption from physical units to Btu as shown in the following examples:

RFCCBZZ = RFCCPZZ * 6.287
RFICBZZ = RFICPZZ * 6.287
RFTCBZZ = RFCCBZZ + RFICBZZ + RFACBZZ + RFEUBZZ

The U.S. level Btu consumption estimates are calculated as the sum of the States' Btu consumption.

### Additional Notes on Residual Fuel

1. "Sales" data are actually called "shipments" in the source documents for 1960 and 1961; "consumption" for 1962 through 1966; "shipments" for 1967; "sales" from 1968 through 1978; "deliveries" for 1979 through 1983; and "sales" for 1984 forward.

2. In 1979, the Energy Information Administration implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report,* "Deliveries of Fuel Oil and Kerosene in 1979.") In the new survey form, certain end-use categories were redefined—in many cases, to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no

longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in CSEDS to conform with the 1979 fuel oil deliveries classifications. The pre-1979 deliveries estimates are not published in this report but are used in CSEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

For residual fuel deliveries in 1979, the end-use categories "commercial" and "industrial" are available. The pre-1979 deliveries categories are called "heating" and "industrial." While the pre-1979 categories individually are not continuous with the 1979 categories, their subtotals are related. That is, a general comparison can be made between the sum of commercial and industrial deliveries in 1979 and the sum of heating and industrial deliveries in the pre-1979 years. Therefore, the following method was applied to present a comparable series for residual fuel delivered to the commercial and industrial sectors:

- For each of the pre-1979 years, a subtotal was created for each State by adding each State's heating and industrial deliveries categories. A comparable 1979 subtotal was created by adding each State's commercial and industrial deliveries categories.

- Commercial and industrial shares of the subtotal in 1979 were calculated for each State.

- These 1979 end-use shares were then applied to each pre-1979 subtotal of residual fuel deliveries in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 residual fuel deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report." EIA did not conduct a fuel oil and kerosene sales survey for 1983. The 1983 estimates in CSEDS are based on 1984 data obtained from the Form EIA-821. Statistical

procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the sales data for 1983 forward are reported in thousand gallons. These data were first converted to thousand barrels before being entered into CSEDS.)

3. The fuel oil at electric utilities data for all years and States are actual fuel oil consumption numbers collected from electric utilities by EIA on Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Due to changes in fuel oil reporting classifications on the Form EIA-759 over the years, it is not possible to develop a thoroughly consistent series for all years. However, over time, data more accurately disaggregating fuel oil into distillate fuel and residual fuel have become available. For 1960 through 1969, only total fuel oil consumed at electric utilities by State is available. For 1970 through 1979, fuel oil consumed by plant type (internal combustion and gas turbine plants combined and steam plants) by State are available. For 1980 forward, consumption of light oil at all plant types combined and consumption of heavy oil at all plant types combined are available by State. In CSEDS, the following assumptions have been made:

- 1960 through 1969 — State estimates of fuel oil consumption by plant type have been created for each year by applying the shares of steam plants (primarily residual fuel) and internal combustion and gas turbine plants (primarily distillate fuel plus small amounts of jet kerosene) by State in 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.

- 1970 through 1979 — fuel oil consumed by steam plants is assumed to equal residual fuel consumption, and fuel oil consumed by internal combustion and gas turbine plants is assumed to equal distillate fuel plus jet kerosene consumption.

- 1980 and forward — total heavy oil consumption at all plant types is assumed to equal residual fuel consumption, and total light oil consumption at all plant types is assumed to equal distillate fuel plus jet kerosene consumption.

The data series thus derived for CSEDS for residual fuel and distillate fuel plus jet kerosene consumption at electric utilities is considered to be actual consumption at electric utilities for each State and each year.

### Data Sources for Residual Fuel

RFBKPZZ — Residual fuel sold for vessel bunkering use by State.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
  — 1960 and 1961: Table 17.
  — 1962 and 1963: Table 16.
  — 1964 and 1965: Table 15.
  — 1966 through 1975: Table 11.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 11.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.
- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983: July 1985 issue, Table A13.
  — 1984 and 1985: July 1986 issue, Table A3.
  — 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFCMPZZ — Residual fuel sold to the commercial sector for heating.
- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of residual fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 2. State ratios based on 1979 commercial sector deliveries were applied to each State's sum of heating plus industrial deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 2, on page 389.)
- 1979 and 1980: EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene," Table 2.

- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.
Notes: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS. Data for Hawaii in 1986 through 1990 reflect unpublished revisions from an EIA internal memorandum from the Office of Oil and Gas to the Office of Energy Markets and End Use, "Revising Historical Petroleum Data," February 26, 1993.
- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983: July 1985 issue, Table A13.
  — 1984 and 1985: July 1986 issue, Table A3.
  — 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFEUPZZ — Residual fuel consumed at electric utilities.
- EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms. The following assumptions have been made:
  — 1960 through 1969: Only total fuel oil consumed at electric utilities by State is available. State estimates of residual fuel consumption were created for each year by applying the shares of steam plants (primarily residual fuel) by State from 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.
  — 1970 through 1979: Fuel oil consumed by plant type by State is available. Fuel oil consumed by steam plants is assumed to equal residual fuel consumption.
  — 1980 forward: Consumption of light and heavy oil at all plant types by State is available. Total heavy oil consumption at all plant types is assumed to equal residual fuel consumption.

RFIBPZZ — Residual fuel sold to industrial establishments for heating and for other industrial use.
- 1960 through 1978: EIA, estimates based on statistics of industrial sector deliveries of residual fuel from the EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979," Table 2. State ratios based on 1979 industrial sector deliveries were applied to each State's sum of heating plus industrial deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Note 2, on page 389.)
- 1979 and 1980: EIA, *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene," Table 2.

- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983: July 1985 issue, Table A13.
  — 1984 and 1985: July 1986 issue, Table A3.
  — 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFMIPZZ — Residual fuel sold to the Armed Forces regardless of use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
  — 1960 and 1961: Table 18.
  — 1962 and 1963: Table 17.
  — 1964 and 1965: Table 16.
  — 1966 through 1975: Table 12.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 12.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983: July 1985 issue, Table A13.
  — 1984 and 1985: July 1986 issue, Table A3.
  — 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFMSPZZ — Residual fuel sold for miscellaneous uses by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
  — 1960 through 1962: Table 19.

— 1963 and 1964: Table 18.
— 1965 through 1967: Table 17.
— 1968 through 1975: Table 14.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2, column "Other."
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5, column "All Other."

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS. The data series is titled "All Other."

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983: July 1985 issue, Table A13.
  — 1984 and 1985: July 1986 issue, Table A3.
  — 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales,* Table 5.

RFOCPZZ — Residual fuel sold for use by oil companies by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
  — 1960 and 1961: Table 14.
  — 1962 and 1963: Table 13.
  — 1964 and 1965: Table 12.
  — 1966 through 1975: Table 9.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 9.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983: July 1985 issue, Table A13.
  — 1984 and 1985: July 1986 issue, Table A3.
  — 1986 and 1987: June 1988 issue, Table A5.

- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFRRPZZ — Residual fuel sold for use by railroads by State.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Shipments of Fuel Oil and Kerosene." The specific tables are:
  — 1960 and 1961: Table 16.
  — 1962 and 1963: Table 15.
  — 1964 and 1965: Table 14.
  — 1966 through 1975: Table 10.
- 1976 through 1978: EIA, *Energy Data Reports*, "Sales of Fuel Oil and Kerosene," Table 10.
- 1979 and 1980: EIA, *Energy Data Reports*, "Deliveries of Fuel Oil and Kerosene," Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into CSEDS.
- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  — 1983: July 1985 issue, Table A13.
  — 1984 and 1985: July 1986 issue, Table A3.
  — 1986 and 1987: June 1988 issue, Table A5.
- 1988 and 1989: EIA, *Fuel Oil and Kerosene Sales 1989*, Table 5.
- 1990 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5, included in the "All Other" data (RFMSPZZ in CSEDS).

RFTCPUS — Residual fuel total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

# Other Petroleum Products

There are 16 petroleum products that are summed and called "other petroleum products" in CSEDS. These products, in thousand barrels, are:

ABTCPUS = aviation gasoline blending components total consumed in the United States;

COTCPZZ = crude oil (including lease condensate) total consumed in each State;

FNTCPUS = petroleum feedstocks, naphtha less than 401° F, total consumed in the United States;

FOTCPUS = petroleum feedstocks, other oils equal to or greater than 401° F, total consumed in the United States;

FSTCPUS = petroleum feedstocks, still gas, total consumed in the United States;

MBTCPUS = motor gasoline blending components total consumed in the United States;

MSTCPUS = miscellaneous petroleum products total consumed in the United States;

NATCPUS = natural gasoline (including isopentane) total consumed in the United States;

PCTCPUS = petroleum coke total consumed in the United States;

PLTCPUS = plant condensate total consumed in the United States;

PPTCPUS = pentanes plus total consumed in the United States;

SGTCPUS = still gas total consumed in the United States;

SNTCPUS = special naphthas total consumed in the United States;

UOTCPUS = unfinished oils total consumed in the United States;

USTCPUS = unfractionated stream total consumed in the United States; and

WXTCPUS = waxes total consumed in the United States.

The methods used to create State estimates for each of these products (except petroleum coke, which was described earlier in the petroleum coke documentation) are explained in the following sections. It is assumed that all of these products are used by the industrial sector, except for the small portion of petroleum coke consumed at electric utilities. State estimates are created for other petroleum products by using the following four variables to allocate the products to the States:

COCAPZZ = crude oil operating capacity at refineries in each State, in barrels per calendar day;

OCVAVZZ = value added in the manufacture of industrial organic chemicals in each State, in million dollars;

PIVAVZZ = value added in the manufacture of paints and allied products in each State, in million dollars; and

CGVAVZZ = value added in the manufacture of corrugated and solid fiber boxes, in million dollars.

Value added by manufacture is a measure of manufacturing activity that is derived by subtracting the cost of materials (which covers materials, supplies, containers, fuel, purchased electricity, and contract work) from the value of shipments. This difference is then adjusted by the net change in finished goods and work-in-process between the beginning and end-of-year inventories. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas. The value added data are from the Department of Commerce *Economic Census (*previously, *Census of Manufactures)* reports.

## Crude Oil

### Physical Units

State estimates for crude oil consumed in petroleum industry operations are the data series COTCPZZ. The U.S. total for this data series is summed:

COTCPUS = ΣCOTCPZZ

Industrial consumption equals total consumption of crude oil:

COICPZZ = COTCPZZ
COICPUS = COTCPUS

### British Thermal Units (Btu)

Crude oil has a heat content value of approximately 5.800 million Btu per barrel. The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

COTCBZZ = COTCPZZ * 5.800
COTCBUS = ΣCOTCBZZ
COICBZZ = COTCBZZ
COICBUS = COTCBUS

### Data Source

COTCPZZ — Crude oil consumed in petroleum industry operations by State.

- 1960 through 1982: Crude oil used directly was included in distillate and residual fuel product supplied when reported to EIA. Zeros are entered for all years.

- 1983 forward: Data are available for Petroleum Administration for Defense (PAD) Districts, not by State. State estimates are calculated by allocating all crude oil consumption to the six States (Alaska, California, Colorado, Louisiana, Texas, and Utah) that reported distillate and residual fuels consumed by pipeline and leases in 1982. (Data on pipeline and lease consumption of fuels are not available after 1982.) Each State's 1982 ratio of distillate and residual fuels consumed by pipeline and leases to its respective 1982 PAD District total consumption of those fuels is calculated. This ratio is then applied to the 1983 forward PAD District totals of crude oil product supplied. The 1982 ratios are taken from the Form EIA-90, "Crude Oil Stocks Report," and the crude oil product supplied data are taken from the EIA *Petroleum Supply Annual*. The specific tables are:
  - 1983 through 1988: Tables 2 and 4 through 8.
  - 1989 forward: Tables 2, 4, 6, 8, 10, and 12.

## Aviation Gasoline Blending Components; Petroleum Feedstocks, Still Gas; Motor Gasoline Blending Components; Still Gas; and Unfinished Oils

### Physical Units

The five petroleum products in this category are consumed as refinery fuels. Beginning in 1986, still gas for petrochemical feedstocks and still gas for other uses are reported together in the source document. State consumption estimates of these products are created in proportion to each

State's crude oil operating capacity at refineries (COCAPZZ). The U.S. total for this variable is summed:

COCAPUS   = ΣCOCAPZZ

Aviation gasoline blending components State and U.S. consumption are estimated:

ABTCPZZ   = (COCAPZZ / COCAPUS) * ABTCPUS
ABICPZZ   = ABTCPZZ
ABICPUS   = ABTCPUS

Petroleum feedstocks, still gas, State and U.S. consumption are estimated:

FSTCPZZ   = (COCAPZZ / COCAPUS) * FSTCPUS
FSICPZZ   = FSTCPZZ
FSICPUS   = FSTCPUS

Motor gasoline blending components State and U.S. consumption are estimated:

MBTCPZZ   = (COCAPZZ / COCAPUS) * MBTCPUS
MBICPZZ   = MBTCPZZ
MBICPUS   = MBTCPUS

Still gas State and U.S. consumption are estimated:

SGTCPZZ   = (COCAPZZ / COCAPUS) * SGTCPUS
SGICPZZ   = SGTCPZZ
SGICPUS   = SGTCPUS

Unfinished oils State and U.S. consumption are estimated:

UOTCPZZ   = (COCAPZZ / COCAPUS) * UOTCPUS
UOICPZZ   = UOTCPZZ
UOICPUS   = UOTCPUS

### British Thermal Units (Btu)

Btu estimates for the five products in this group are developed by multiplying the estimated consumption of each individual product in physical units by its respective heat content conversion factor. The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

ABTCBZZ   = ABTCPZZ * 5.048
ABTCBUS   = ΣABTCBZZ
ABICBZZ   = ABTCBZZ
ABICBUS   = ABTCBUS

FSTCBZZ   = FSTCPZZ * 6.000
FSTCBUS   = ΣFSTCBZZ
FSICBZZ   = FSTCBZZ
FSICBUS   = FSTCBUS

MBTCBZZ   = MBTCPZZ * 5.253
MBTCBUS   = ΣMBTCBZZ
MBICBZZ   = MBTCBZZ
MBICBUS   = MBTCBUS

SGTCBZZ   = SGTCPZZ * 6.000
SGTCBUS   = ΣSGTCBZZ
SGICBZZ   = SGTCBZZ
SGICBUS   = SGTCBUS

UOTCBZZ   = UOTCPZZ * 5.825
UOTCBUS   = ΣUOTCBZZ
UOICBZZ   = UOTCBZZ
UOICBUS   = UOTCBUS

### Data Sources

ABTCPUS — Aviation gasoline blending components total consumed in the United States.
- 1960 through 1980: No data available. Values are assumed to be zero.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2

**O T H E R   P E T R O L E U M   P R O D U C T S**

COCAPZZ — Crude oil operating capacity at refineries by State.
- 1960: U.S. Department of the Interior, Bureau of Mines, *Petroleum Refineries, Including Cracking Plants, in the United States*, Table 3.
- 1961 through 1963: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States." The specific tables are:
  — 1961 and 1962: Table 3.
  — 1963: Table 1.
- 1964 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States and Puerto Rico," Table 1.
- 1977: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and Puerto Rico," Table 1.
- 1978 through 1980: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and U.S. Territories," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*. The specific tables are:
  — 1981 through 1983: Table 1.
  — 1984: Table 30.
  — 1985 through 1988: Table 29.
  — 1989 through 1994: Table 36.
  — 1995: Unpublished data based on Form EIA-810.
  — 1996 forward: Table 36.

FSTCPUS — Petrochemical feedstocks, still gas, total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, Petroleum Statement, Annual," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 14.
- 1983 through 1985: EIA, *Petroleum Supply Annual*, Table 12.
- 1986 forward: EIA, *Petroleum Supply Annual*, Table 2, included in "Still Gas."

MBTCPUS — Motor gasoline blending components total consumed in the United States.
- 1960 through 1980: No data available. Values are assumed to be zero.

- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

SGTCPUS — Still gas total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 14.
- 1983 through 1985: EIA, *Petroleum Supply Annual*, Table 12.
- 1986 forward: EIA, *Petroleum Supply Annual*, Table 2.

UOTCPUS — Unfinished oils total consumed in the United States.
- 1960 through 1980: No data available. Values assumed to be zero.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

**Petroleum Feedstocks, Naphtha Less Than 401° F; Petroleum Feedstocks, Other Oils Equal to or Greater Than 401° F; Miscellaneous Petroleum Products; Natural Gasoline (Including Isopentane); Plant Condensate; Pentanes Plus; and Unfractionated Stream.**

### Physical Units

The seven petroleum products in this category are allocated to the States in proportion to the value added in the manufacture of industrial organic chemicals in each State (OCVAVZZ).

The two petroleum feedstocks are consumed by the chemical industry in producing petrochemical "building blocks" that, in turn, are converted to such products as synthetic fibers, synthetic rubber, and plastics.

Miscellaneous products include such products as petrolatum, synthetic natural gas feedstocks, and specialty oils (e.g., hydraulic oils, insulating oils, medicinal oils, rust preventatives, and spray oils). Finished petrochemicals usually constitute the largest volume of miscellaneous product, and it is assumed that the chief consuming industry for this product line is the chemical industry.

Natural gasoline (including isopentane), plant condensate, pentanes plus, and unfractionated stream are included in this group because the chemical industry is the only one that could readily utilize these lighter liquid hydrocarbons (as petrochemical feedstocks).  Beginning in 1984, in the source document, natural gasoline (including isopentane) and plant condensate are reported together as a new product, pentanes plus.  At the same time, unfractionated stream was dropped because its components were reported separately as liquefied petroleum gases.

The U.S. total for the data series used to apportion these products to the States is summed:

OCVAVUS   = ΣOCVAVZZ

Total petroleum feedstocks, naphtha less than 401° F, State and U.S. consumption are estimated:

FNTCPZZ   = (OCVAVZZ / OCVAVUS) * FNTCPUS
FNICPZZ    = FNTCPZZ
FNICPUS   = FNTCPUS

Petroleum feedstocks, other oils equal to or greater than 401° F, State and U.S. consumption are estimated:

FOTCPZZ   = (OCVAVZZ / OCVAVUS) * FOTCPUS
FOICPZZ    = FOTCPZZ
FOICPUS   = FOTCPUS

Miscellaneous petroleum products State and U.S. consumption are estimated:

MSTCPZZ   = (OCVAVZZ / OCVAVUS) * MSTCPUS
MSICPZZ    = MSTCPZZ
MSICPUS   = MSTCPUS

Natural gasoline (including isopentane) State and U.S. consumption are estimated:

NATCPZZ   = (OCVAVZZ / OCVAVUS) * NATCPUS
NAICPZZ    = NATCPZZ
NAICPUS   = NATCPUS

Plant condensate State and U.S. consumption are estimated:

PLTCPZZ   = (OCVAVZZ / OCVAVUS) * PLTCPUS
PLICPZZ    = PLTCPZZ
PLICPUS   = PLTCPUS

Pentane plus State and U.S. consumption are estimated:

PPTCPZZ   = (OCVAVZZ / OCVAVUS) * PPTCPUS
PPICPZZ    = PPTCPZZ
PPICPUS   = PPTCPUS

Unfractionated stream State and U.S. consumption are estimated:

USTCPZZ   = (OCVAVZZ / OCVAVUS) * USTCPUS
USICPZZ    = USTCPZZ
USICPUS   = USTCPUS

### British Thermal Units (Btu)

Btu estimates for the seven petroleum products in this group are developed by multiplying each individual product's estimated consumption in physical units by its respective approximate heat content conversion factor.  The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

FNTCBZZ   = FNTCPZZ * 5.248
FNTCBUS   = ΣFNTCBZZ
FNICBZZ    = FNTCBZZ
FNICBUS    = FNTCBUS

FOTCBZZ   = FOTCPZZ * 5.825
FOTCBUS   = ΣFOTCBZZ
FOICBZZ    = FOTCBZZ
FOICBUS   =  FOTCBUS

**O T H E R   P E T R O L E U M   P R O D U C T S**

MSTCBZZ   = MSTCPZZ * 5.796
MSTCBUS   = ΣMSTCBZZ
MSICBZZ   = MSTCBZZ
MSICBUS   = MSTCBUS

NATCBZZ   = NATCPZZ * 4.620
NATCBUS   = ΣNATCBZZ
NAICBZZ   = NATCBZZ
NAICBUS   = NATCBUS

PLTCBZZ   = PLTCPZZ * 5.418
PLTCBUS   = ΣPLTCBZZ
PLICBZZ   = PLTCBZZ
PLICBUS   = PLTCBUS

PPTCBZZ   = PPTCPZZ * 4.620
PPTCBUS   = ΣPPTCBZZ
PPICBZZ   = PPTCBZZ
PPICBUS   = PPTCBUS

USTCBZZ   = USTCPZZ * 5.418
USTCBUS   = ΣUSTCBZZ
USICBZZ   = USTCBZZ
USICBUS   = USTCBUS

### Data Sources

FNTCPUS — Petrochemical feedstocks, naphtha, less than 401° F, total consumed in the United States.

- *1960 through 1975: U.S. Department of the Interior, Bureau of Mines, Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

FOTCPUS — Petrochemical feedstocks, other oils, equal to or greater than 401° F, total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.

- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

MSTCPUS — Miscellaneous petroleum products consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*. "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

NATCPUS — Natural gasoline total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*. "Petroleum Statement, Annual," Table 1.
- 1981 through 1983: EIA, *Petroleum Supply Annual*, Table 2.
- 1984 forward: EIA, *Petroleum Supply Annual*, Table 2, included in "Pentanes Plus."

OCVAVZZ — Value added by the manufacture of industrial organic chemicals by State.

- 1960 through 1970: U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, SIC 2818. The 1963 State data are used for the years 1960 through 1965, and the 1967 State data are used for 1966 through 1970.
- 1971 through 1980: U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2869. The 1972 State data are used for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.
- 1981 through 1985: U.S. Department of Commerce, *1987 Census of Manufactures* (Final Report), Industry Series, SIC 2869. The 1982 State data are used for 1981 through 1985.
- 1986 through 1995: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2869. The 1987 State data are used for 1986 through 1990, and the 1992 State data are used for 1991 through 1995.

- 1996 forward:  U.S. Department of Commerce, *1997 Economic Census, Manufacturing, Industry Series*, EC97M-3251A for NAICS 325110 "Petrochemical Manufacturing" and EC97M-3251G for NAICS 325119 "All Other Basic Inorganic Chemical Manufacturing."  The value added by manufacture for both categories are summed to create a data series generally comparable to the SIC 2869 used previously.

PLTCPUS — Plant condensate total consumed in the United States.
- 1960 through 1975:  U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. "Petroleum Statement, Annual," Table 1.
- 1976 through 1980:  EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 through 1983:  EIA, *Petroleum Supply Annual*, Table 2.
- 1984 forward:  EIA, *Petroleum Supply Annual*, Table 2, included in "Pentanes Plus."

PPTCPUS — Pentanes plus total consumed in the United States.
- 1960 through 1983:  Data were reported separately as natural gasoline, isopentane, and plant condensate.
- 1984 forward:  EIA, *Petroleum Supply Annual*, Table 2.

USTCPUS — Unfractionated stream total consumed in the United States.
- 1960 through 1978:  EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1, included in "Plant Condensate."
- 1979 and 1980:  EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 through 1983:  EIA, *Petroleum Supply Annual*, Table 2.
- 1984 forward:  EIA, *Petroleum Supply Annual*, Table 2, individual components are reported separately.

## Special Naphthas

### *Physical Units*

Special naphthas are used as paint and varnish thinners and dry cleaning liquids or solvents.  This petroleum product is allocated to the States in proportion to the value added in the manufacture of paints and allied products in each State (PIVAVZZ).

The U.S. total for the apportioning data series is calculated:

PIVAVUS    $= \Sigma$PIVAVZZ

Special naphthas State and U.S. consumption are estimated:

SNTCPZZ    = (PIVAVZZ / PIVAVUS) * SNTCPUS
SNICPZZ    = SNTCPZZ
SNICPUS    = SNTCPUS

### *British Thermal Units (Btu)*

Special naphthas have a heat content value of approximately 5.248 million Btu per barrel.  This factor is applied to convert special naphthas estimated consumption from physical units to Btu by State and for the United States:

SNTCBZZ    = SNTCPZZ * 5.248
SNTCBUS    $= \Sigma$SNTCBZZ
SNICBZZ    = SNTCBZZ
SNICBUS    = SNTCBUS

### *Data Sources*

PIVAVZZ — Value added by the manufacture of paints and allied products by State.
- 1960 through 1970:  U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, SIC 2851.  The 1963 State data are used for the years 1960 through 1965, and the 1967 State data are used for 1966 through 1970.
- 1971 through 1980:  U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2851.  The 1972 State data are used for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.
- 1981 through 1985:  U.S. Department of Commerce, *1987 Census of Manufactures* (Final Report), Industry Series, SIC 2851.  The 1982 State data are used for the years 1981 through 1985.

- 1986 through 1995: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2851. The 1987 State data are used for the years 1986 through 1990, and the 1992 State data are used for 1991 through 1995.
- 1996 forward: U.S. Department of Commerce, *1997 Economic Census, Manufacturing, Industry Series*, EC97M-3255A for NAICS 325510 "Paint and Coating Manufacturing".

SNTCPUS — Special naphthas total consumed in the United States.
- 1960 through 1963: Data included in motor gasoline.
- 1964 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

## Waxes

### Physical Units

Because petroleum waxes are very cost-effective moisture and gas barriers, food packaging is the largest market for petroleum waxes in the United States, accounting for more than 50 percent of petroleum wax consumption. Therefore, waxes are allocated to the States in proportion to the value added in the manufacture of corrugated and solid fiber boxes (CGVAVZZ).

The U.S. total for this variable is summed:

$$\text{CGVAVUS} = \Sigma \text{CGVAVZZ}$$

State and U.S. consumption are estimated:

$$\text{WXTCPZZ} = (\text{CGVAVZZ} / \text{CGVAVUS}) * \text{WXTCPUS}$$
$$\text{WXICPZZ} = \text{WXTCPZZ}$$
$$\text{WXICPUS} = \text{WXTCPUS}$$

### British Thermal Units (Btu)

Waxes have a heat content value of approximately 5.537 million Btu per barrel. This factor is applied to convert the estimated consumption of waxes from physical units to Btu by State and at the U.S. level:

$$\text{WXTCBZZ} = \text{WXTCPZZ} * 5.537$$
$$\text{WXTCBUS} = \Sigma \text{WXTCBZZ}$$
$$\text{WXICBZZ} = \text{WXTCBZZ}$$
$$\text{WXICBUS} = \text{WXTCBUS}$$

### Data Sources

CGVAVZZ — Value added by the manufacture of sanitary food containers by State. Beginning with 1992 data, this series became value added by the manufacture of corrugated and solid fiber boards by State.
- 1960 through 1965: U.S. Department of Commerce, *1963 Census of Manufactures*, Volume II, Part 1, SIC 2654. The 1963 State data are used for the years 1960 through 1965.
- 1966 through 1970: U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, SIC 2654. The 1967 State data are used for 1966 through 1970.
- 1971 through 1980: U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2654. The 1972 State data are used for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.
- 1981 through 1990: U.S. Department of Commerce, *1982 Census of Manufactures* (Final Report), Industry Series, SIC 2654. The 1982 State data are used for 1981 through 1990.
- 1991 through 1995: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2653. The 1992 State data are used for 1991 through 1995.
- 1996 forward: U.S. Department of Commerce, *1997 Economic Census, Manufacturing, Industry Series*, EC97M-3222A for NAICS 322211 "Corrugated and Solid Fiber Box Manufacturing".

WXTCPUS — Waxes total consumed in the United States.
- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.

- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

## Total Other Petroleum Products

### *Physical Units*

Total other petroleum products is the sum of the 16 "other petroleum products." All of these products are consumed by the industrial sector except for some petroleum coke consumed by electric utilities (PCEUP), which is calculated in CSEDS with electric utility fuel consumption. State and U.S. industrial use of these other petroleum products are calculated:

POICPZZ = ABICPZZ + COICPZZ + FNICPZZ + FOICPZZ + FSICPZZ + MBICPZZ + MSICPZZ + NAICPZZ + PCICPZZ + PLICPZZ + PPICPZZ + SGICPZZ + SNICPZZ + UOICPZZ + USICPZZ + WXICPZZ

POICPUS = ΣPOICPZZ

Total consumption of these products (including petroleum coke consumption by electric utilities) is calculated:

POTCPZZ = ABTCPZZ + COTCPZZ + FNTCPZZ + FOTCPZZ + FSTCPZZ + MBTCPZZ + MSTCPZZ + NATCPZZ + PCTCPZZ + PLTCPZZ + PPTCPZZ + SGTCPZZ + SNTCPZZ + UOTCPZZ + USTCPZZ + WXTCPZZ

POTCPUS = ΣPOTCPZZ

### *British Thermal Units (Btu)*

Estimated consumption of all 16 "other petroleum products" in Btu is the sum of the Btu consumption of each product by the industrial sector. The State and U.S. totals are calculated:

POICBZZ = ABICBZZ + COICBZZ + FNICBZZ + FOICBZZ + FSICBZZ + MBICBZZ + MSICBZZ + NAICBZZ + PCICBZZ + PLICBZZ + PPICBZZ + SGICBZZ + SNICBZZ + UOICBZZ + USICBZZ + WXICBZZ

POICBUS = ΣPOICBZZ

State and U.S. total consumption of these products, which includes electric utility consumption of petroleum coke, is calculated:

POTCBZZ = ABTCBZZ + COTCBZZ + FNTCBZZ + FOTCBZZ + FSTCBZZ + MBTCBZZ + MSTCBZZ + NATCBZZ + PCTCBZZ + PLTCBZZ + PPTCBZZ + SGTCBZZ + SNTCBZZ + UOTCBZZ + USTCBZZ + WXTCBZZ

POTCBUS = ΣPOTCBZZ

### *Additional Notes on Other Petroleum Products*

1. In the "Energy Consumption Estimates by Source" tables in this report, a petroleum column called "Other" comprises the other products, including petroleum coke consumed by electric utilities (POTCB and POTCP). In the "Industrial Energy Consumption Estimates" tables, the petroleum "Other" column is the other petroleum products consumption total for industrial use (POICB and POICP).

2. The data for "value added by manufacture" that are used to allocate many of the other petroleum products are from the Department of Commerce, *Census of Manufactures* reports. For all years, several States' data were withheld from publication to avoid disclosing operations of individual companies. The total withheld data was apportioned to the withheld States on the basis of those States' proportional values in the previous census.

In 1982, all respondents to the Census of Manufactures survey were requested to report their inventories at cost or market prior to accounting adjustments for "last in, first out" cost. This is a change from prior years in which respondents were permitted to value their inventories by using any generally accepted accounting valuation method. Consequently, data for value added by manufacture after 1982 are not comparable to the prior years' data.

# Petroleum Summaries

This section describes the method of estimating consumption by the major end-use sectors within the States for all petroleum data series. Table A2 on page 356 of this section indicates which petroleum products are consumed in each of the five major end-use sectors. In the preceding portions of this section, end-use consumption estimates have been derived for each petroleum product. These petroleum product subtotals are now summed, in physical units of thousand barrels and in Btu, to create estimated end-use consumption for all petroleum products.

## Residential Sector

Petroleum products consumed by the residential sector are: distillate fuel (DF), kerosene (KS), and liquefied petroleum gas (LG). For the residential sector, the State and U.S. totals in physical units are:

PARCPZZ = DFRCPZZ + KSRCPZZ + LGRCPZZ
PARCPUS = ΣPARCPZZ

State and U.S. totals in Btu are:

PARCBZZ = DFRCBZZ + KSRCBZZ + LGRCBZZ
PARCBUS = ΣPARCBZZ

## Commercial Sector

The commercial sector's use of petroleum products includes: distillate fuel (DF), kerosene (KS), liquefied petroleum gases (LG), motor gasoline (MG), and residual fuel (RF). In physical units, the State and the U.S. totals for the commercial sector are calculated:

PACCPZZ = DFCCPZZ + KSCCPZZ + LGCCPZZ + MGCCPZZ + RFCCPZZ
PACCPUS = ΣPACCPZZ

State and U.S. totals in Btu are:

PACCBZZ = DFCCBZZ + KSCCBZZ + LGCCBZZ + MGCCBZZ + RFCCBZZ
PACCBUS = ΣPACCBZZ

## Industrial Sector

Petroleum used in the industrial sector includes: asphalt and road oil (AR); distillate fuel (DF); kerosene (KS); liquefied petroleum gases (LG); lubricants (LU); motor gasoline (MG); residual fuel (RF); and the 16 products that are already summed in the "other petroleum products" (PO) subtotal. The State and U.S. total estimates in physical units are:

PAICPZZ = ARICPZZ + DFICPZZ + KSICPZZ + LGICPZZ + LUICPZZ + MGICPZZ + RFICPZZ + POICPZZ
PAICPUS = ΣPAICPZZ

State and U.S. totals in Btu are:

PAICBZZ = ARICBZZ + DFICBZZ + KSICBZZ + LGICBZZ + LUICBZZ + MGICBZZ + RFICBZZ + POICBZZ
PAICBUS = ΣPAICBZZ

## Transportation Sector

Petroleum products used in the transportation sector are: aviation gasoline (AV), distillate fuel (DF), kerosene-type jet fuel (JK), naphtha-type jet fuel (JN), liquefied petroleum gases (LG), lubricants (LU), motor gasoline (MG), and residual fuel (RF). The State and U.S. totals in physical units are:

PAACPZZ = AVACPZZ + DFACPZZ + JKACPZZ + JNACPZZ + LGACPZZ + LUACPZZ + MGACPZZ + RFACPZZ
PAACPUS = ΣPAACPZZ

State and U.S. totals in Btu are:

PAACBZZ = AVACBZZ + DFACBZZ + JKACBZZ + JNACBZZ + LGACBZZ + LUACBZZ + MGACBZZ + RFACBZZ

PAACBUS = ΣPAACBZZ

## Electric Utility Sector

Petroleum products consumed by the electric utility sector are: distillate fuel (DF), kerosene-type jet fuel (JK), petroleum coke (PC), and residual fuel (RF). In physical units, the State and U.S. totals are:

PAEUPZZ = DFEUPZZ + JKEUPZZ + PCEUPZZ + RFEUPZZ
PAEUPUS = ΣPAEUPZZ

State and U.S. totals in Btu are:

PAEUBZZ = DFEUBZZ + JKEUBZZ + PCEUBZZ + RFEUBZZ
PAEUBUS = ΣPAEUBZZ

## Total Consumption of Petroleum Products

Total consumption of all petroleum products is the sum of all of the individual product totals. The State and U.S. physical unit totals are:

PATCPZZ = ARTCPZZ + AVTCPZZ + DFTCPZZ + JKTCPZZ +
JNTCPZZ + KSTCPZZ + LGTCPZZ + LUTCPZZ +
MGTCPZZ + RFTCPZZ + POTCPZZ
PATCPUS = ΣPATCPZZ

State and U.S. totals in Btu are:

PATCBZZ = ARTCBZZ + AVTCBZZ + DFTCBZZ + JKTCBZZ +
JNTCBZZ + KSTCBZZ + LGTCBZZ + LUTCBZZ +
MGTCBZZ + RFTCBZZ + POTCBZZ
PATCBUS = ΣPATCBZZ

## Additional Calculations

Additional calculations are performed by CSEDS to provide data that are used in EIA's *Annual Energy Review* and published in the conversion factor section of EIA's *Monthly Energy Review*. Conversion factors for all petroleum products consumed by each sector, as well as data for the residential and commercial sectors combined, are calculated by CSEDS.

The conversion factor for all petroleum products consumed by the residential sector is calculated:

PARCKUS = PARCBUS / PARCPUS

The conversion factor for all petroleum products consumed by the commercial sector is calculated:

PACCKUS = PACCBUS / PACCPUS

Consumption of all petroleum products by the residential and commercial sectors combined, in physical units, in Btu, and the average conversion factor are calculated:

PAHCPUS = PARCPUS + PACCPUS
PAHCBUS = PARCBUS + PACCBUS
PAHCKUS = PAHCBUS / PAHCPUS

The conversion factor for all petroleum products consumed by the industrial sector is calculated:

PAICKUS = PAICBUS / PAICPUS

The conversion factor for all petroleum products consumed by the transportation sector is calculated:

PAACKUS = PAACBUS / PAACPUS

The conversion factor for all petroleum products consumed by electric utilities is calculated:

PAEUKUS = PAEUBUS / PAEUPUS

The conversion factor for all petroleum products consumed by all sectors is calculated:

PATCKUS = PATCBUS / PATCPUS

# Section 5.  Renewable Energy

Renewable energy sources included in the Combined State Energy Data System (CSEDS) comprise wood, waste, hydroelectric, geothermal, wind, photovoltaic, solar thermal energy and ethanol.  Renewable energy consumption estimates for all sectors are available for 1960 forward.

## Ethanol

The transportation sector uses ethanol as an additive to motor gasoline.  Ethanol can be derived from sugar cane, sugar beets, corn, sweet sorghum, wheat, and other grains.  The U.S. total in CSEDS is a series developed by EIA from monthly reports of field production of oxygenated gasoline and refinery input of ethanol.  The State data series, used to allocate the U.S. total to the States is based on the U.S. Department of Transportation, Federal Highway Administration data series published in *Highway Statistics,* which represents ethanol consumed in gasohol for 1993 forward and total gasohol sales in earler years.  Ethanol estimates are kept separately in CSEDS and shown in the *SEDR* tables to illustrate renewable energy use, but ethanol consumption is already accounted for within the motor gasoline data series.  The ethanol data series are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

ENTRPZZ  = ethanol blended into motor gasoline (1993 forward) or total gasohol sales (1982 through 1992) by State, in thousand gallons; and

ENACPUS  = ethanol consumed in the transportation sector in the United States, in thousand barrels.

The U.S. value, ENACPUS, is allocated to the States in proportion the *Highway Statistics* State estimates, ENTRPZZ:

$$ENTRPUS = \Sigma ENTRPZZ$$
$$ENACPZZ = (ENTRPZZ / ENTRPUS) * ENACPUS$$

Ethanol is converted to equivalent British thermal units (Btu) by using a conversion factor of 3.539 Btu per barrel.

$$ENACBZZ = ENACPZZ * 3.539$$
$$ENACBUS = \Sigma ENACBZZ$$

### Data Sources

ENACPUS — Ethanol consumed by the transportation sector in the United States.

- 1960 through 1980:  No data are available.  Values are assumed to be zero.
- 1981 through 1992:
  — 1981, 1984, 1987, and 1989:  EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.
  — 1982 and 1983:  EIA, CNEAF, estimates.
  — 1985, 1986, 1988, and 1991:  Values interpolated.
  — 1990 and 1992;  EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D1.
- 1993 forward:  EIA estimates based on data in the EIA *Petroleum Supply Monthly,* Tables 2 and 28.

ENTRPZZ — Ethanol blended into motor gasoline by State.

- 1960 through 1980:  Values are set to be zero.
- 1981 through 1992:   U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1995,* Table MF-233GLA.

- 1993 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1995,* Table MF-233E, column titled "Total Ethanol Used in Gasohol."
- 1996 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-33E, column titled "Total Ethanol Used in Gasohol."

## Geothermal

Geothermal energy used as direct heat or from heat pumps in the residential, commercial, and industrial sectors is included in the Combined State Energy Data System (CSEDS) for 1989 forward. Geothermal energy used to generate electricity by nonutility power producers is also included in CSEDS industrial sector from 1989 forward. CSEDS data on energy input at electric utilities includes geothermal energy for all years, 1960 forward, and includes imports of electricity from Mexico that are generated from geothermal energy for 1989 forward These data series are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

GECCBZZ = direct use of geothermal energy and heat pumps in the commercial sector by State, in billion Btu;

GEEOPZZ = electricity produced from geothermal energy at electric utilities by State, in million kilowatthours;

GEIMPZZ = electricity produced from geothermal energy and imported into the United States by State, in million kilowatthours;

GEINBZZ = direct use of geothermal energy and heat pumps in the industrial sector by State, in billion Btu;

GENGPZZ = electricity produced from geothermal energy by nonutility power producers by State, in million kilowatthours; and

GERCBZZ = direct use of geothermal energy and heat pumps in the residential sector by State, in billion Btu.

The U.S. totals for the State-level series are calculated by summing the State data:

GECCBUS = ΣGECCBZZ  GEINBUS = ΣGEINBZZ
GEEOPUS = ΣGEEOPZZ  GENGPUS = ΣGENGPZZ
GEIMPUS = ΣGEIMPZZ  GERCBUS = ΣGERCBZZ

Electricity imports produced from geothermal energy are added to the electricity produced from geothermal energy at electric utilities to be shown in the "Geothermal Energy" column of the *State Energy Data Report* (*SEDR*) tables titled "Energy Input at Electric Utilities."

GEENPZZ = GEEOPZZ + GEIMPZZ
GEENPUS = ΣGEENPZZ

To convert electricity produced from geothermal energy from kilowatthours into comparable British thermal units, a U.S. average factor that varies by year is used. The values for the factor, GEEOKUS, are shown in Appendix C, Table C1.

GEEOKUS = factor for converting electricity produced from geothermal energy from kilowatthours to Btu.

The values for each sector within each State are converted to Btu:

GEEOBZZ = GEEOPZZ * GEEOKUS
GEEOBUS = ΣGEEOBZZ
GEIMBZZ = GEIMPZZ * GEEOKUS
GEIMBUS = ΣGEIMBZZ
GEENBZZ = GEEOBZZ + GEIMBZZ
GEENBUS = ΣGEENBZZ
GENGBZZ = GENGPZZ * GEEOKUS
GENGBUS = ΣGENGBZZ

Industrial sector use of geothermal energy is the sum of direct use and heat pumps and electricity produced by nonutility power producers:

GEICBZZ = GEINBZZ + GENGBZZ
GEICBUS = ΣGEICBZZ

The State totals for geothermal energy are the sum of the residential, commercial, and industrial sectors' use and the electric utilities' geothermal-based generation (including imports). The U.S. total is the sum of the State data.

GETCBZZ = GERCBZZ + GECCBZZ + GEICBZZ + GEENBZZ
GETCBUS = ΣGETCBZZ

### *Additional Note*

Geothermal energy from direct use and heat pumps in the residential, commercial, and industrial sectors are from the Oregon Institute of Technology Geoheat Center. State data for 1989, 1994, 1998 and 1999 are from surveys. U.S. totals for intervening years are estimates. The State data for 1989, 1994, and 1998 are used to estimate the State values for intervening years by using the following methodology. States with the same value in two survey years are assigned that value for each intervening year. For States with increases or decreases in the survey data, the difference is allocated evenly over the intervening years. If a State went from zero to a value or from a value to zero, it was given zero in the intervening years. The State data for each intervening year are summed and States with increasing or decreasing values are adjusted until the U.S. total equals the U.S. total estimated by the Oregon Institute of Technology Geoheat Center.

### *Data Sources*

GECCBZZ — Direct use and heat pump geothermal energy in the commercial sector.
- 1960 through 1988: No data available. Values assumed to be zero.
- 1989: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1990 through 1993: U.S. totals are estimates from the Oregon Institute of Technology Geoheat Center, unpublished tables. State data for 1989 and 1994 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the "Additional Note" on page 407.
- 1994: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1995 through 1997: U.S. totals are from the Oregon Institute of Technology Geoheat Center, unpublished tables. State data for 1994 and 1998 are used to estimate State values for the intervening years.

For an the explanation of the estimation methodology, see the "Additional Note" on page 407.
- 1998 and 1999: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999 and September 2000), based on a survey and estimations.

GEEOKUS — Factor for converting electricity produced from geothermal energy from physical units to Btu.
- 1960 through 1981: Calculated by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Federal Power Commission Form 12.
- 1982 forward: Estimated annually by the EIA on the basis of an informal survey of relevant plants.

GEEOPZZ — Electricity produced from geothermal energy at electric utilities by State.
- EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms.

GEIMPZZ — Electricity produced from geothermal energy and imported into the United States by State.
- 1960 through 1988: No data available. Values assumed to be zero.
- 1989 forward: EIA estimates based on data from U.S. Department of Energy, Fossil Energy, Form FE-781R, "Annual Report of International Electricity Export/Import Data."

GEINBZZ — Direct use and heat pump geothermal energy in the industrial sector.
- 1960 through 1988: No data available. Values assumed to be zero.
- 1989: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1990 through 1993: U.S. totals are estimates from the Oregon Institute of Technology Geoheat Center, unpublished tables. State data for 1989 and 1994 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the "Additional Note" on page 407.

- 1994: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1995 through 1997: U.S. totals are from the Oregon Institute of Technology Geoheat Center, unpublished tables. State data for 1994 and 1998 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the "Additional Note" on page 407.
- 1998 and 1999: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999 and September 2000), based on a survey and estimations.

GENGPZZ — Electricity produced from geothermal energy by nonutility power producers by State.

- 1960 through 1988: No data available. Values assumed to be zero.
- 1989 forward: EIA estimates based on data collected on Form EIA-867, "Annual Nonutility Power Producers Report" and the Form EIA-860B, "Annual Electric Generator Report–Nonutility."

GERCBZZ — Direct use and heat pump geothermal energy in the residential sector.

- 1960 through 1988: No data available. Values assumed to be zero.
- 1989: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1990 through 1993: U.S. totals are estimates from the Oregon Institute of Technology Geoheat Center, unpublished tables. State data for 1989 and 1994 are used to estimate State values for the intervening years. For an the explanation of the estimation methodology, see the "Additional Note" on page 407.
- 1994: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999), based on a survey.
- 1995 through 1997: U.S. totals are from the Oregon Institute of Technology Geoheat Center, unpublished tables. State data for 1994 and 1998 are used to estimate State values for the intervening years. For an explanation of the estimation methodology, see the "Additional Note" on page 407.

- 1998 and 1999: Lund, John W., Oregon Institute of Technology Geoheat Center, unpublished tables, (Klamath Falls, Oregon: April 1999 and September 2000), based on a survey and estimations.

## Hydroelectric Power

Electricity produced from hydropower in the industrial sector and by electric utilities is included in CSEDS for all years. From 1990 forward, data are available separately for the two types of hydropower—conventional and pumped storage. Conventional hydroelectric power uses falling water to drive turbines to produce electricity. With pumped storage hydroelectricity, energy is used to pump water into higher storage areas during non-peak hours so that it can be released to drive turbines during times of peak electricity demand. Because pumped storage hydroelectricity uses energy, it is not considered a renewable energy source; however, it is discussed in this chapter with other hydropower. The industrial sector includes estimates of hydroelectricity generation by industries for their own use for all years, as well as generation by nonutility power producers for sale in 1989 forward as collected on the Form EIA-867, "Annual Nonutility Power Producers Report" and the Form EIA-860B, "Annual Electric Generator Report–Nonutility." Data on electric utilities' use of hydropower are collected on the Form EIA-759, "Monthly Power Plant Report." CSEDS hydroelectricity data also include electricity imports and exports traded with Canada that are generated from hydropower.

The hydroelectric data series included in CSEDS are identified by the following names ("ZZ" in the name represents the two-letter State code that differs for each State):

HVEOPZZ = electricity produced by conventional hydroelectric power at electric utilities, in million kilowatthours;

HPEOPZZ = electricity produced by pumped storage hydroelectric power at electric utilities, in million kilowatthours;

HVATPZZ = electricity produced by conventional hydroelectric power at nonutility power producers by State, in million kilowatthours;

HPATPZZ = electricity produced by pumped storage hydroelectric power at nonutility power producers, by State, in million kilowatthours;

HYIMPZZ   = electricity produced from hydroelectric power and im-
ported into the United States, by State, in million kilo-
watthours; and

HYEXPZZ   = electricity produced from hydroelectric power and ex-
ported from the United States, by State, in million kilo-
watthours.

The U.S. value for each of the series is the sum of the State data.

Total electricity produced from hydropower at electric utilities and at
nonutility power producers is calculated as the sum of conventional and
pumped storage hydroelectric power.

HYEOPZZ   = HVEOPZZ + HPEOPZZ
HYATPZZ   = HVATPZZ + HPATPZZ
HYEOPUS   = ΣHYEOPZZ
HYATPUS   = ΣHYATPZZ

Hydroelectric-based electricity that is imported and exported across U.S.
borders is added to the electric utility hydroelectric generation and shown
in the "Hydroelectric Power" column of the *State Energy Data Report
(SEDR)* tables titled "Energy Input at Electric Utilities."

HYENPZZ   = HYEOPZZ + HYIMPZZ – HYEXPZZ
HYENPUS   = ΣHYENPZZ

Additional calculations are made to estimate the renewable portion of
hydroelectric power at electric utilities, i.e., excluding hydroelectricity pro-
duced from pumped storage:

HVENPZZ   = HVEOPZZ + HYIMPZZ – HYEXPZZ
HVENPUS   = ΣHVENPZZ

Electricity produced from hydroelectric power is converted from
kilowatthours into Btu by using a conversion factor that is the U.S. average
heat content of fossil fuels consumed at steam-electric power plants,
FFEOKUS.  The annual values for this factor are shown in Appendix C,
Table C1.

HVATBZZ   = HVATPZZ * FFEOKUS

HPATBZZ   = HPATPZZ * FFEOKUS
HYATBZZ   = HVATBZZ + HPATBZZ

HPEOBZZ   = HPEOPZZ * FFEOKUS
HVEOBZZ   = HVEOPZZ * FFEOKUS
HYEOBZZ   = HPEOBZZ + HVEOBZZ

HYIMBZZ   = HYIMPZZ * FFEOKUS
HYEXBZZ   = HYEXPZZ * FFEOKUS
HYENBZZ   = HYEOBZZ + HYIMBZZ – HYEXBZZ
HVENBZZ   = HVEOBZZ + HYIMBZZ – HYEXBZZ

The U.S. value for each of the series is the sum of the State data.

Total hydroelectricity consumption for each State is the sum of the electric
utilities generation (plus imports and minus exports) and the nonutility
power producers generation:

HYTCPZZ   = HYENPZZ + HYATPZZ
HYTCPUS   = ΣHYTCPZZ

HYTCBZZ   = HYENBZZ + HYATBZZ
HYTCBUS   = ΣHYTCBZZ

### *Data Sources*

FFEOKUS — Fossil fuel steam-electric power plant conversion factor.
- 1960 through 1988:  Estimated by EIA as the weighted annual
average heat rate for fossil-fueled steam-electric plants in the United
States as published in the EIA, *Electric Plant Cost and Power Production
Expenses 1991*, Table 9.
- 1989 forward:  Calculated annually by EIA on the basis of data from
Form EIA-767 "Steam-Electric Plant Operation and Design Report."

HPATPZZ  —  Electricity produced from pumped storage hydropower at
industrial facilities by State.
- 1960 through 1988:  No data available.  Assumed to be zero.
- 1989 forward:  EIA estimates based on data collected on Form
EIA-867, "Annual Nonutility Power Producers Report" and the
Form EIA-860B, "Annual Electric Generator Report–Nonutility."

HPEOPZZ — Electricity produced from pumped storage hydropower at electric utilities by State.

- 1960 through 1989: Included in conventional hydroelectric power.
- 1990 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

HVATPZZ — Electricity produced from conventional hydropower at industrial facilities by State

- 1960 through 1978: Federal Power Commission, Form 4, "Monthly Power Plant Report."
- 1979 and 1980: EIA estimates based on previous years' data.
- 1981 through 1988: No data available. The 1980 data are repeated for each year.
- 1989 forward: EIA estimates based on data collected on Form EIA-867, "Annual Nonutility Power Producers Report" and the Form EIA-860B, "Annual Electric Generator Report–Nonutility."

HVEOPZZ — Electricity produced from conventional hydropower at electric utilities (includes pumped storage hydroelectric power through 1989) by State.

- 1960 through 1977: Federal Power Commission, News Release, "Power Production, Fuel Consumption, and Installed Capacity Data."
- 1978 through 1980: EIA, *Energy Data Reports*, "Power Production, Fuel Consumption and Installed Capacity Data."
- 1981 through 1989: EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Published data rounded to gigawatthours in the following reports:
  — 1981 through 1985: EIA, *Electric Power Annual 1985*, Table 6.
  — 1986 and 1987: EIA, *Electric Power Annual 1987*, Table 18.
  — 1988 and 1989: EIA, *Electric Power Annual 1989*, Table 14.
- 1990 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

HYEXPZZ — Electricity produced from hydroelectric power and exported from the United States by State.

- 1960 through 1988: Assumed to be equal to total electricity exports (ELEXPZZ).
- 1989 forward: EIA estimates based on data from Natural Resources Canada and the National Energy Board of Canada.

HYIMPZZ — Electricity produced from hydroelectric power and imported into the United States by State.

- 1960 through 1988: Assumed to be equal to total electricity imports (ELIMPZZ).
- 1989 forward: EIA estimates based on data from Natural Resources Canada and the National Energy Board of Canada.

## Solar

Estimates of solar energy use for the residential and commercial sectors combined and the industrial sector are included in the Combined State Energy Data System (CSEDS) for 1989 forward. Generation of electricity by electric utilities from solar energy sources is included in CSEDS for 1984 forward.

### Residential/Commercial Sector

Solar thermal energy use in the residential and commercial sectors combined in the United States is estimated by EIA in billion Btu and published in the EIA *Annual Energy Review* for 1989 forward. A State-level series for allocating the U.S. total to the States is developed by EIA from accumulated data on shipments of solar thermal collectors to States, measured in square feet, as collected on the EIA Form CE-63A, "Annual Solar Thermal Collector Manufacturers Survey," and predecessor surveys. The data are published for recent years in the EIA *Renewable Energy Annual*. The assumption is made that the retirement/replacement period for solar thermal collectors is 20 years. The data series are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

SOTTPZZ = shipments of solar thermal energy collectors, in square feet, and

SOHCBUS = energy produced by solar thermal and photovoltaic energy collectors in the residential and commercial sectors combined, in billion Btu.

The U.S. total of the allocating series is calculated as the sum of the State data and the U.S. total residential/commercial solar energy is allocated to the States as follows:

SOTTPUS　　= ΣSOTTPZZ
SOHCBZZ　　= (SOTTPZZ / SOTTPUS) * SOHCBUS

## Industrial Sector and Electric Utilities

Estimates of electricity produced from photovoltaic and solar thermal energy sources by nonutility power producers are included in the CSEDS industrial sector for 1989 forward from data collected on the Form EIA-867, "Annual Nonutility Power Producers Report." and the Form EIA-860B, "Annual Electric Generator Report–Nonutility." Electric utilities' generation from solar sources are included for 1984 forward as collected on the Form EIA-759, "Monthly Power Plant Report." The data series are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

SOEOPZZ　　= electricity produced from photovoltaic and solar thermal energy sources at electric utilities, by State, in million kilowatthours; and
SOICPZZ　　= electricity produced from photovoltaic and solar thermal energy sources by nonutility power producers, by State, in million kilowatthours.

U.S. totals for these series are calculated as the sum of the State data:

SOEOPUS　　= ΣSOEOPZZ
SOICPUS　　= ΣSOICPZZ

Electricity produced from photovoltaic and solar thermal energy at electric utilities is converted from kilowatthours to Btu by using a conversion factor that is the U.S. average heat content of fossil fuels consumed at steam-electric power plants, FFEOKUS. The annual values for this factor are shown in Appendix C, Table C1.

SOEOBZZ　　= SOEOPZZ * FFEOKUS
SOEOBUS　　= ΣSOEOBZZ

SOICBZZ　　= SOICPZZ * FFEOKUS
SOICBUS　　= ΣSOICBZZ

### *Totals*

Each State's total use of photovoltaic and solar thermal energy sources is the sum of the sectors' values, and the U.S. total is the sum of the States' totals:

SOTCBZZ　　= SOHCBZZ + SOICBZZ + SOEOBZZ
SOTCBUS　　= ΣSOTCBZZ

### *Data Sources*

FFEOKUS — Fossil fuel steam-electric power plant conversion factor.
- 1960 through 1988: Estimated by EIA as the weighted annual average heat rate for fossil-fueled steam-electric plants in the United States as published in the EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9.
- 1989 forward: Calculated annually by EIA on the basis of data from Form EIA-767 "Steam-Electric Plant Operation and Design Report."

SOEOPZZ — Electricity produced from solar thermal energy sources at electric utilities by State.
- 1960 through 1983: No data available. Values are assumed to be zero.
- 1984 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

SOHCBUS — Electricity produced from solar thermal energy sources in the residential and commercial sectors in the United States.
- 1960 through 1988: No data available. Values are zero.
- 1989 forward: EIA, *Annual Energy Review 1999,* Table 10.2.

SOICPZZ — Electricity produced from solar thermal energy sources in the industrial sector by State.
- 1960 through 1988: No data available. Values are assumed to be zero.

- 1989 forward: EIA estimates based on data collected on Form EIA-867, "Annual Nonutility Power Producers Report" and the Form EIA-860B, "Annual Electric Generator Report–Nonutility."

SOTTPZZ — Electricity produced from solar thermal energy sources in the residential and commercial sectors combined by State.

- 1960 through 1988: Values are assumed to be zero for consistency with other EIA reports.
- 1989 forward: Shipments of solar thermal collectors in the United States, in thousand square feet, for 1974 forward that are collected on the EIA Form CE-63A, "Annual Solar Thermal Collector Manufacturers Survey," are accumulated each year on the basis of the assumption that the replacement/retirement period for solar thermal collectors is 20 years. Data for 1974 through 1985 are available for the U.S. total only. U.S. values are allocated to the States by using an allocating series that is the simple average of each State's 1986 and 1987 data. The U.S. data are adjusted to remove Puerto Rico and the Virgin Islands. California data for 1986 forward are reduced by the number of high-temperature solar thermal collectors (used at an electric utility in California).
  — State data for 1986 through 1992 used in the accumulated data series are published in the EIA, *Solar Collector Manufacturing Activity* for each year. The table numbers are:
    - 1986 through 1988: Table 5.
    - 1989: Table 4.
    - 1990 through 1992: Table 13.
    California data for 1986 through 1992 are reduced by the number of high-temperature solar thermal collectors shown in the EIA, *Renewable Energy Annual 1995*, Table 13.
  — 1993 and 1994: EIA, *Renewable Energy Annual 1995*, Tables 13 and H3.
  — 1995: EIA, *Renewable Energy Annual 1996,* Tables F9 and F10.
  — 1996: EIA, *Renewable Energy Annual 1997,* Tables 16 and 17.
  — 1997: EIA, *Renewable Energy Annual 1998,* Tables 15 and 19.
  — 1998: EIA, *Renewable Energy Annual 1999,* Tables 12 and 16.
  — 1999: Data not available. 1998 values used for 1999.

## Wind

Wind energy used to produce electricity by nonutility power producers is included in the CSEDS industrial sector for 1989 forward from data collected on the Form EIA-867, "Annual Nonutility Power Producers Report" and the Form EIA-860B, "Annual Electric Generator Report–Nonutility." Electricity generation from wind energy by electric utilities is included for 1983 forward as collected on the Form EIA-759, "Monthly Power Plant Report." The data are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

WYEOPZZ = electricity produced from wind energy at electric utilities, by State, in million kilowatthours; and

WYICPZZ = electricity produced from wind energy in the industrial sector, by State, in million kilowatthours.

The U.S. totals are calculated as the sum of the State data:

WYEOPUS = ΣWYEOPZZ
WYICPUS = ΣWYICPZZ

Electricity produced from wind energy at electric utilities is converted from kilowatthours to Btu by using a conversion factor that is the U.S. average heat content of fossil fuels consumed at steam-electric power plants, FFEOKUS. The annual values for this factor are shown in Appendix C, Table C1.

WYEOBZZ = WYEOPZZ * FFEOKUS
WYEOBUS = ΣWYEOBZZ
WYICBZZ = WYICPZZ * FFEOKUS
WYICBUS = ΣWYICBZZ

The State and U.S. totals for wind energy are calculated:

WYTCBZZ = WYEOBZZ + WYICBZZ
WYTCBUS = ΣWYTCBZZ

## Data Sources

FFEOKUS — Fossil fuel steam-electric power plant conversion factor.

- 1960 through 1988: Estimated by EIA as the weighted annual average heat rate for fossil-fueled steam-electric plants in the United States as published in the EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9.
- 1989 forward: Calculated annually by EIA on the basis of data from Form EIA-767 "Steam-Electric Plant Operation and Design Report."

WYEOPZZ — Electricity produced from wind at electric utilities by State.

- 1960 through 1982: No data available. Values are assumed to be zero.
- 1983 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

WYICPZZ — Electricity produced from wind in the industrial sector by State.

- 1960 through 1988: No data available. Values are assumed to be zero.
- 1989 forward: EIA estimates based on data collected on Form EIA-867, "Annual Nonutility Power Producers Report" and the Form EIA-860B, "Annual Electric Generator Report–Nonutility."

# Wood and Waste

Different forms of wood and waste are used by each consuming sector. The residential and commercial sectors burn wood for space heating. The industrial sector uses combustible industrial by-products and wood chips for electricity generation and process steam. Electric utilities use wood, industrial wood waste and waste gas, and municipal waste as cofiring or primary fuels to produce electricity. Consumption of wood and waste in all sectors is included in CSEDS for 1960 forward.

## Residential Sector

### Physical Units

Estimates of wood consumed in the residential sector by State for 1960 through 1979 are from the EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*. For 1980 forward, State estimates are developed from U.S. totals published in the EIA *Annual Energy Review*, from Census division data collected on the EIA triennial survey, *Residential Energy Consumption Survey (RECS)* for 1981, 1984, 1987, 1990, 1993, and 1997, and from U.S. Department of Commerce, Bureau of the Census, annual estimates of number of housing units per State. The 1981 *RECS* provides wood consumption data for the national total and Census Regions. For all other years, *RECS* provides data for the national total and Census Divisions. In addition, the survey sample size of the 1993 *RECS* was large enough to provide data for California, Florida, New York, and Texas and the 1997 RECS provides data for California, New York, and Texas. Estimates for the other States in 1993 and 1997, and for all States in the other years are developed by allocating the U.S. total from the *AER* to the Census Divisions or Regions in proportion to *RECS* data. The regional values are then allocated to the States within the regions in proportion to the Census Bureau housing units per State. Estimates for the years intervening the *RECS* surveys are based on the annual U.S. totals from the *AER* and the State proportions of the preceding available *RECS*, i.e., 1982 and 1983 estimates are based on the State proportions of the 1981 data. On the basis of *RECS* data, the assumption is made that no wood is consumed in the residential sector in Hawaii.

The State data derived above are used in CSEDS as wood consumption in the residential sector, identified in the system as WDRCPZZ. "ZZ" in the following variable name represents the two-letter State code that differs for each State.

WDRCPZZ = wood consumed in the residential sector of each State, in thousand cords.

The State-level data are summed to a U.S. total:

WDRCPUS = ΣWDRCPZZ

### British Thermal Units (Btu)

The residential sector data in cords are converted to Btu by using the conversion factor of 20 million Btu per cord:

WDRCBZZ  = WDRCPZZ * 20
WDRCBUS  = ΣWDRCBZZ

### Data Sources

WDRCPZZ — Wood energy consumed by the residential sector by State.
- 1960 through 1979:  EIA, *Estimates of U.S. Wood Consumption from 1949 to 1981*, Table A4.  Data published in thousand short tons are converted to thousand cords by using the factors of one short ton equals 17.2 million Btu (as published in the footnote of Table A4) and 20 million Btu equal one cord of wood, (as published in EIA, *Household Energy Consumption and Expenditures 1993*, page 314.
- 1980 forward:  U.S. totals published in the EIA *Annual Energy Review 1999,* Table 10.4 are converted from trillion Btu to thousand cords (by using the factor of 20 million Btu per cord) and allocated to the States as described below.  Hawaii residential wood consumption is assumed to be zero for all years.
  - 1980 through 1983:  U.S. Census Region wood consumption in thousand cords from Form EIA-457, "1981 Residential Energy Consumption Survey" is allocated to the States within each Region in proportion to the U.S. Department of Commerce, Bureau of the Census, *American Housing Survey*, "Total Housing Units for States, July 1, 1981."  This derived 1981 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1980 through 1983.
  - 1984 through 1986:  U.S. Census Division wood consumption in thousand cords from Form EIA-457, "1984 Residential Energy Consumption Survey" is allocated to the States within each Division in proportion to the U.S. Department of Commerce, Bureau of the Census, *American Housing Survey*, "Total Housing Units for States, July 1, 1984."  This derived 1984 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1984 through 1986.
  - 1987 through 1989:  U.S. Census Division wood consumption in thousand cords from Form EIA-457, "1987 Residential Energy

Consumption Survey" is allocated to the States within each Division in proportion to the U.S. Department of Commerce, Bureau of the Census, *American Housing Survey*, "Total Housing Units for States, July 1, 1987."  This derived 1987 series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1987 through 1989.
  - 1990 through 1992:  U.S. Census Division wood consumption in thousand cords are from Form EIA-457, "1990 Residential Energy Consumption Survey."  State-level estimates are available for 1993 for California, Florida, New York, and Texas from the Form EIA-457, "1993 Residential Energy Consumption Survey."  Those four States' percentages of their respective Division totals in the 1993 survey are applied to the 1990 Census Division data to derive their 1990 values.  Wood consumption by the other States in each Division is estimated by allocating the remaining Division data to the States in proportion to the U.S. Department of Commerce, Bureau of the Census, Internet file (ST-98-51) "Estimates of Housing Units,…Annual Time Series,...(includes revised April 1, 1990 census housing...)" column titled "4/1/90 Census" at http://www.census.gov/population/estimates/housing/sthuhh6.txt.  This derived 1990 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1990 through 1992.
  - 1993 through 1996:  Residential wood consumption data for U.S. Census Divisions and for California, Florida, New York, and Texas are from Form EIA-457, "1993 Residential Energy Consumption Survey."  Data for the other States in each Division are estimated by allocating the remaining Division data to the States in proportion to the U.S. Department of Commerce, Bureau of the Census, Internet file (ST-98-51) "Estimates of Housing Units,...Annual Time Series, July 1, 1991 to July 1, 1998...," column titled "7/1/93" at http://www.census.gov/population/estimates/housing/sthuhh6.txt.  This derived 1993 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1993 through 1996.
  - 1997 forward:  Residential wood consumption data for U.S. Census Divisions and for California, Florida, New York, and Texas are from Form EIA-457, "1997 Residential Energy Consumption Survey."  Data for the other States in each Division are estimated by allocating the remaining Division data to the States in proportion to the U.S. Department of Commerce, Bureau of the

Census, Internet file (ST-98-51) "Estimates of Housing Units,...Annual Time Series, July 1, 1991 to July 1, 1998...," column titled "7/1/97" at http://www.census.gov/population/estimates/housing/sthuhh6.txt. This derived 1997 State series is used to allocate the *AER* annual U.S. residential wood consumption to the States for 1997 forward.

## Commercial Sector

### Physical Units

Estimates of wood consumed in the commercial sector by State for 1960 through 1979 are from the EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*. The data published in thousand short tons are converted to billion Btu by using the conversion factor of one short ton equals 17.2 million Btu. The assumption was made in that report that wood is consumed in the commercial sector in proportion to consumption in the residential sector each year. For 1980 forward national level commercial wood consumption estimates in trillion Btu are from the EIA, *Annual Energy Review*. Using the same methodology as for previous years, the national data are allocated to the States in proportion to residential sector wood use each year.

The data series derived above are used in CSEDS as estimated wood consumption in the commercial sector, WDCCBZZ. "ZZ" in the variable names represents the two-letter State code that differs for each State.

WDCCBUS = wood consumed by the commercial sector in the United States, in billion Btu; and

WDRCPZZ = wood consumed in the residential sector of each State, in thousand cords.

The national wood value is allocated to the States in proportion to residential wood series:

$$WDCCBZZ = (WDRCPZZ / WDRCPUS) * WDCCBUS$$

### British Thermal Units (Btu)

The commercial wood consumption estimates are converted from Btu to cords by using the conversion factor of 20 million Btu per cord:

$$WDCCPZZ = WDCCBZZ / 20$$
$$WDCCPUS = \Sigma WDCCPZZ$$

### Data Sources

WDCCBUS — Wood consumed by the commercial sector in the United States.

- 1960 through 1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A7. Data published in thousand short tons are converted to Btu using the factor of one short ton equals 17.2 million Btu (as stated in the footnote of Table A7).
- 1980 forward: EIA, data in billion Btu shown in trillion Btu in the *Annual Energy Review 1999*, Table 10.4.

WDRCPZZ — Wood energy consumed by the residential sector by State. See sources on page 414.

## Industrial Sector

Industrial sector wood and waste consumption estimates by State for 1960 through 1979 are from the EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*. The data, published in thousand short tons, are converted to billion Btu using the factor 1 short ton equals 17.2 million Btu.

Estimates for 1980 through 1995 are based on a national-level data series published for 1989 forward in the EIA, *Annual Energy Review (AER)*. National wood and waste consumption by type is collected by Standard Industrial Code (SIC) on the EIA triennial survey Form EIA-846, "Manufacturing Energy Consumption Survey" (MECS) for 1985, 1988, 1991, and 1994. The assumption is made that wood and waste use in the manufacturing sector occurs primarily in the industries included in SIC series 2421 (sawmills and planing mills), 2511 (wood household furniture), 2621 (paper mills), 2046 (wet corn milling), and 2061 (raw cane sugar). The amount of wood and waste consumed by each of the SIC groups of

industries is estimated from the MECS data, and the MECS proportions are used to allocate the U.S. totals from the *AER* to SIC groups for each year. The SIC annual subtotals are allocated to the States using State-level data on the value added in manufacturing processes for each of the SIC series published in the U.S. Department of Commerce, Bureau of the Census, *Census of Manufactures, Industry Series*, for 1982, 1987, and 1992.

Estimates for 1996 forward use the same methodology described in the previous paragraph with the exception that the Bureau of the Census *1997 Economic Census* uses North American Industry Classification System (NAICS) instead of Standard Industrial Codes. Some categories used in CSEDS estimations are directly comparable (NAICS 311221 to SIC 2046, NAICS 311311 to SIC 2061, and NAICS 322130 to SIC 2631), some are closely (over 97 percent) comparable (NAICS 337122 to SIC 2511 and the sum of NAICS 321113 and 321912 to SIC 2421), and one is roughly (74 percent) comparable (NAICS 322121 to SIC 2621). The discontinuity in these State allocating series is not significant in light of the broad assumptions of the estimation methodology.

For 1989 forward, State-level data on wood and waste consumption by nonutility power producers are available from the Form EIA-867, "Annual Nonutility Power Producer Report" and the Form EIA-860B, "Annual Electric Generator Report–Nonutility." These data are used with the manufacturing data to estimate total industrial sector wood and waste consumption for each State.

Industrial wood and waste data series are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

WWATBZZ = electricity produced from wood and waste by nonutility power producers in each State, in billion Btu; and

WWINBZZ = wood and waste consumed by the manufacturing portion of the industrial sector of each State, in billion Btu.

The U.S. total of the State series is calculated as the sum of the State data:

WWATBUS = ΣWWATBZZ
WWINBUS = ΣWWINBZZ

The total industrial sector is calculated as the sum of consumption by non-utilities and the manufacturing sector:

WWICBZZ = WWINBZZ + WWATBZZ
WWICBUS = ΣWWICBZZ

There are no comparable physical units because industrial wood and waste consumption is measured in a variety of units (e.g., tons, cubic feet, and kilowatthours).

### *Data Sources*

WWATBZZ — Wood and waste consumed by nonutility power producers by State.
- 1960 through 1988: No data available. Values are assumed to be zero.

1989 forward: EIA estimates based on data collected on Form EIA-867, "Annual Nonutility Power Producers Report" and the Form EIA-860B, "Annual Electric Generator Report–Nonutility."

WWINBZZ — Wood and waste consumed by the manufacturing sector by State.
- 1960 through 1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A10. Data published in thousand short tons are converted to Btu by using the factor of one short ton equals 17.2 million Btu (as published in the footnote of Table A10).
- 1980 forward: EIA estimates developed by using three data sources. U.S. totals for each year are as published for selected years in the EIA, *Annual Energy Review 1998 (AER)*, Table 10.3.
  — 1980 through 1985: U.S. totals from the *AER* are allocated to Standard Industrial Code (SIC) groups 20, 24, 25, and 26 based on data from the EIA "Manufacturing Energy Consumption Survey 1985 (MECS)," Table 3. These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1982 Census of Manufactures,* Table 2, column titled "Value Added by Manufacture," from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper

Mills, and Industry 2631 Paperboard Mills. The State values for each of the four SIC groups are summed to derive State total wood and waste industrial consumption estimates.

— 1986 through 1989: U.S. totals from the *AER* are allocated to Standard Industrial Code (SIC) groups 20, 24, 25, and 26 based on data from the EIA "Manufacturing Energy Consumption Survey 1988 (MECS)," Tables 2 and 18. These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1987 Census of Manufactures,* Table 2, column titled "Value Added by Manufacture," from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper Mills, and Industry 2631 Paperboard Mills. The State values for each of the four SIC groups are summed to derive State total wood and waste industrial consumption estimates.

For 1989 only, State-level data on wood and waste consumption by nonutility power producers are available from the Form EIA-867, "Annual Nonutility Power Producer Report" in billion Btu. These nonutility State data are summed and subtracted from the *AER* U.S. total. The remaining value is assumed to be the manufacturing sector and is allocated to the States using the method above. The State values for each of the four SIC groups and the nonutilities are summed to derive State total wood and waste industrial consumption estimates.

— 1990 through 1993: State-level data on wood and waste consumption by nonutility power producers from the Form EIA-867, "Annual Nonutility Power Producer Report" in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to Standard Industrial Code (SIC) groups 20, 24, 25, and 26 based on unpublished data from the EIA "Manufacturing Energy Consumption Survey 1991 (MECS)." SIC groups 20 and 26 are grouped as "Other" in MECS 1991. The proportions of those two groups in the 1988 and 1994 MECS are averaged and used to estimate the breakout for 1991. These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1992 Census of Manufactures,* Table 2, column titled "Value Added by Manufacture," from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn

Milling, Industry 2421 Sawmills and Planing Mills, Industry 2541 Wood Partitions and Fixtures, and Industry 2621 Paper Mills. The State values for each of the four SIC groups and the nonutilities are summed to derive State total wood and waste industrial consumption estimates.

— 1994 and 1995: State-level data on wood and waste consumption by nonutility power producers from the Form EIA-867, "Annual Nonutility Power Producer Report" in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to Standard Industrial Code (SIC) groups 20, 24, 25, and 26 based on data from the EIA "1994 Manufacturing Energy Consumption Survey (MECS), Table A7." These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1992 Census of Manufactures,* Table 2, column titled "Value Added by Manufacture," from the publications for Industry 2061 Raw Cane Sugar, Industry 2046 Wet Corn Milling, Industry 2421 Sawmills and Planing Mills, Industry 2511 Wood Household Furniture, Industry 2621 Paper Mills, and Industry 2631 Paperboard Mills. The State values for each of the four SIC groups and the nonutilities are summed to derive State total wood and waste industrial consumption estimates.

— 1994 forward: State-level data on wood and waste consumption by nonutility power producers from the Form EIA-867, "Annual Nonutility Power Producer Report" or Form EIA-860B, "Annual Electric Generator Report–Nonutility" in billion Btu are summed and subtracted from the *AER* U.S. total. The remaining national value is allocated to Standard Industrial Code (SIC) groups 20, 24, 25, and 26 based on data from the EIA "1994 Manufacturing Energy Consumption Survey (MECS), Table A7." These SIC subtotals are allocated to the States using State-level series from the U.S. Department of Commerce, Bureau of the Census, *1997 Economic Census.* In the *Economic Census* the SIC groupings for the State data are replaced by North American Industry Classification System (NAICS) industry groups. The two industry classification systems are not identical, but NAICS groups are chosen that compare with SIC categories as closely as possible. The State series are from Table 2, column titled "Value Added by Manufacture," from the publications for NAICS Industry 311311 Sugar Cane Mills, Industry 311221 Wet Corn Milling, Industry 321113 Sawmills, Industry 321912 Cut

Stock, Resawing Lumber, and Planing, Industry 337122 Nonupholstered Wood Household Furniture Manufacturing, Industry 322121 Paper Mills, and Industry 322130 Paperboard Mills. The State values for each of the four NAICS group subtotals and the nonutilities are summed to derive State total wood and waste industrial consumption estimates.

## Electric Utilities

Electric utilities' generation of electricity from wood and waste energy, by State, are available combined from 1960 through 1981 and separately from 1982 forward from the Form EIA-759, "Monthly Power Plant Report." The data series are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

$WDEOPZZ$ = electricity produced from wood energy sources at electric utilities in each State (included in waste energy for 1960 through 1981), in million kilowatthours; and

$WSEOPZZ$ = electricity produced from waste energy sources at electric utilities in each State (includes wood energy for 1960 through 1981), in million kilowatthours.

The U.S. totals are calculated as the sum of the State data, and wood and waste are summed to provide a total (WW) value:

$WDEOPUS$ = $\Sigma WDEOPZZ$
$WSEOPUS$ = $\Sigma WSEOPZZ$
$WWEOPZZ$ = $WDEOPZZ + WSEOPZZ$
$WWEOPUS$ = $\Sigma WWEOPZZ$

Electricity produced from wood and waste sources is converted into Btu by use of a conversion factor that is the U.S. average heat content of fossil fuels burned at steam-electric power plants, FFEOKUS. The annual values for this factor are shown in Appendix C, Table C1.

$WDEOBZZ$ = $WDEOPZZ * FFEOKUS$
$WDEOBUS$ = $\Sigma WDEOBZZ$

$WSEOBZZ$ = $WSEOPZZ * FFEOKUS$
$WSEOBUS$ = $\Sigma WSEOBZZ$

$WWEOBZZ$ = $WDEOBZZ + WSEOBZZ$
$WWEOBUS$ = $\Sigma WWEOBZZ$

### Data Sources

$WDEOPZZ$ — Electricity produced from wood energy sources at electric utilities by State.
- 1960 through 1981: Data included in waste energy sources, see WSEOPZZ.
- 1982 forward: EIA, Form EIA-759, "Monthly Power Plant Report.

$WSEOPZZ$ — Electricity produced from waste energy sources at electric utilities by State.
- 1960 forward: EIA, Form EIA-759, "Monthly Power Plant Report" (includes wood energy sources from 1960 through 1981).

$FFEOKUS$ — Fossil fuel steam-electric power plant conversion factor.
- 1960 through 1988: Estimated by EIA as the weighted annual average heat rate for fossil-fueled steam-electric plants in the United States as published in the EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9.
- 1989 forward: Calculated annually by EIA on the basis of data from Form EIA-767 "Steam-Electric Plant Operation and Design Report."

## Totals

State total consumption of wood and waste is calculated as the sum of the consumption in the residential, commercial, and industrial sectors as well as consumption at electric utilities. The U.S. total is the sum of the State data:

$WWTCBZZ$ = $WDRCBZZ + WDCCBZZ + WWICBZZ + WWEOBZZ$
$WWTCBUS$ = $\Sigma WWTCBZZ$

## Additional Calculations

Additional calculations are made in CSEDS to aggregate some data series to be shown in the tables of this report. Geothermal, wind, photovoltaic, and solar thermal energy sources are combined to be shown in the "Other" column in tables titled "Energy Consumption Estimates by Source." Those renewable sources and nuclear-electric power are combined to be shown in the "Other" column in tables titled "Industrial Energy Consumption Estimates." The variables are calculated for each State and the United States in billion Btu as follows:

$$\text{GOTCBZZ} = \text{GETCBZZ} + \text{SOTCBZZ} + \text{WYTCBZZ}$$
$$\text{GOTCBUS} = \Sigma\text{GOTCBZZ}$$

$$\text{GOICBZZ} = \text{GEICBZZ} + \text{SOICBZZ} + \text{WYICBZZ} + \text{NUATBZZ}$$
$$\text{GOICBUS} = \Sigma\text{GOICBZZ}$$

Wind, photovoltaic, and solar thermal energy sources are combined to be shown in the "Other" column in tables titled "Estimates of Energy Input at Electric Utilities." The variables are calculated for each State and the United States in million kilowatthours and billion Btu as follows:

$$\text{WNEOPZZ} = \text{WYEOPZZ} + \text{SOEOPZZ}$$
$$\text{WNEOPUS} = \Sigma\text{WNEOPZZ}$$

$$\text{WNEOBZZ} = \text{WYEOBZZ} + \text{SOEOBZZ}$$
$$\text{WNEOBUS} = \Sigma\text{WNEOBZZ}$$

## Renewable Energy Total

Renewable energy subtotals for each consuming sector in thousand Btu can be calculated for 1989 forward by using the same formulas for each State and the U.S. totals. Renewable energy subtotals can also be calculated in physical units for the transportation sector (thousand barrels) and electric utilities (million kilowatthours).

$$\text{RERCB} = \text{WDRCB} + \text{GERCB} + \text{SOHCB}$$

$$\text{RECCB} = \text{WDCCB} + \text{GECCB}$$

$$\text{REICB} = \text{GEICB} + \text{HVATB} + \text{SOICB} + \text{WWICB} + \text{WYICB}$$

$$\text{REACP} = \text{ENACP}$$
$$\text{REACB} = \text{ENACB}$$

$$\text{REEOP} = \text{HVENP} + \text{GEENP} + \text{WWEOP} + \text{WNEOP}$$
$$\text{REEOB} = \text{HVENB} + \text{GEENB} + \text{WWEOB} + \text{WNEOB}$$

$$\text{RETCB} = \text{RERCB} + \text{RECCB} + \text{REICB} + \text{REACB} + \text{REEOB}$$

# Section 6.  Electricity

This section describes electrical energy sources; electricity consumed by end users (i.e., electricity sold to end users); estimates of the electrical system energy losses incurred in the generation, transmission, and distribution of electricity; and estimates of net interstate sales of electricity.

## Electrical Energy Sources

### *Physical Units*

Electricity is produced from a number of energy sources.  In the Combined State Energy Data System (CSEDS), coal, natural gas, and petroleum are measured in physical units of thousand short tons, million cubic feet, and thousand barrels, respectively, as they are consumed by the electric utilities.  Because comparable measures in physical units for nuclear power, hydroelectric, wood, waste, geothermal, wind, photovoltaic, and solar thermal energy sources are not available, energy output in the form of electricity produced from these energy sources, in million kilowatthours, is used instead.  The variable names for these data are as follows ("ZZ" in the variable name represents the two-letter State code that differs for each State):

CLEUPZZ = coal consumed by electric utilities (described in Section 2 of this report), in thousand short tons;

ELEXPZZ = electricity exported from the United States (assumed to be produced from hydroelectric power through 1988), in million kilowatthours;

ELIMPZZ = electricity imported into the United States (assumed to be produced from hydroelectric power  through 1988), in million kilowatthours;

GEEOPZZ = electricity produced from geothermal energy at electric utilities (described in Section 5), in million kilowatthours;

GEIMPZZ = electricity produced from geothermal energy and imported into the United States (described in Section 5), in million kilowatthours;

HPEOPZZ = electricity produced from pumped storage hydroelectric power at electric utilities (described in Section 5), in million kilowatthours;

HVEOPZZ = electricity produced from conventional hydroelectric power at electric utilities (described in Section 5), in million kilowatthours;

HYEXPZZ = electricity produced from hydroelectric power and exported from the United States (described in Section 5), in million kilowatthours;

HYIMPZZ = electricity produced from hydroelectric power and imported into the United States (described in Section 5), in million kilowatthours;

NGEUPZZ = natural gas consumed by electric utilities (described in Section 3), in million cubic feet;

NUATPZZ = electricity produced from nuclear power by nonutility power producers, in million kilowatthours;

NUEOPZZ = electricity produced from nuclear power at electric utilities, in million kilowatthours;

PAEUPZZ = petroleum consumed by electric utilities (described in Section 4), in thousand barrels;

SOEOPZZ = electricity produced from photovoltaic and solar thermal energy sources at electric utilities (described in  Section 5), in million kilowatthours;

WDEOPZZ = electricity produced from wood energy sources at electric utilities (described in Section 5), in million kilowatthours;

WSEOPZZ = electricity produced from waste energy sources at electric utilities (described in Section 5), in million kilowatthours; and

WYEOPZZ = electricity produced from wind energy at electric utilities (described in Section 5), in million kilowatthours.

The U.S. totals for these series are calculated as the sum of the State data, with the exception of coal, which is the sum of the U.S. totals for each rank of coal as described in Section 2.

### British Thermal Units (Btu)

In order to total all the energy that is used to produce electricity, the energy sources are converted to the common unit of Btu. The methods for calculating the Btu content of coal, natural gas, petroleum, and renewable energy sources consumed by utilities are explained in their respective sections of this documentation. Nuclear electric power is described in the following section.

A total of all energy input at electric utilities, including imports and exports of electricity across U.S. borders, is calculated by the following formulas for each State and for the United States:

TEEUBZZ = PAEUBZZ + NGEUBZZ + CLEUBZZ + HYENBZZ + NUEOBZZ + GEENBZZ + WWEOBZZ + WNEOBZZ + EXNIBZZ

TEEUBUS = ΣTEEUBZZ

## Nuclear Electric Power

CSEDS contains estimates of electricity generated from nuclear power at electric utilities and by nonutility power producers. Electric utilities nuclear electricity is shown in the "Nuclear Electric Power" column of tables titled, "Estimates of Energy Input at Electric Utilities" The nonutilities nuclear electricity generation is a component of the "Other" column in the tables titled, "Industrial Energy Consumption Estimates." Total electricity generated from nuclear power is the sum of nuclear-electric power generated at electric utilities and by nonutility power producers:

NUETPZZ = NUEOPZZ + NUATPZZ

NUETPUS = ΣNUETPZZ

The factor for converting electricity produced from nuclear energy (NUEOKUS) is developed from data collected from nuclear steam-electric power plants. These U.S. average factors, which vary from year to year, can be found in Appendix C, Table C1.

NUEOKUS = factor for converting nuclear electricity from kilowatthours to Btu.

The formulas for applying the nuclear factor are:

NUEOBZZ = NUEOPZZ * NUEOKUS
NUEOBUS = ΣNUEOBZZ

NUATBZZ = NUATPZZ * NUEOKUS
NUATBUS = ΣNUATBZZ

NUETBZZ = NUEOBZZ + NUATBZZ
NUETBUS = ΣNUETBZZ

### Data Sources

NUATPZZ — Electricity generated from nuclear energy by nonutility power producers.
- 1960 through 1988: No data available. Values assumed to be zero.
- 1989 forward: EIA, data from the Form EIA-860B, "Annual Electric Generator Report – Nonutility," database as published for 1998 and 1999 in the EIA *Electric Power Annual, Volume I*, Table A11.

NUEOKUS — Factor for converting electricity produced from nuclear power from physical units to Btu.
- 1960 through 1991: Calculated annually by EIA by dividing the total heat content consumed in reactors at nuclear plants by the total (net) electricity generated by nuclear plants. The heat content and electricity generation are reported on FERC Form 1, "Annual Report of Major Electric Utilities, Licensees, and Others;" Form EIA-412, "Annual Report of Public Electric Utilities;" and predecessor forms. The factors for 1982 through 1991 are published in the following:

— 1982: EIA, *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215.
— 1983 through 1991: EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 13.
- 1992 forward: Calculated annually by EIA by dividing the total heat content of the steam leaving nuclear generating units to generate electricity by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation data are reported in the Nuclear Regulatory Commission, *Licensed Operating Reactors—Status Summary Report*.

NUEOPZZ — Electricity produced from nuclear power at electric utilities by State.
- 1960 through 1977: Federal Power Commission, News Release, "Power Production, Fuel Consumption, and Installed Capacity Data," table titled "Net Generation of Electric Utilities by State and Source."
- 1978 through 1980: EIA, *Energy Data Reports*, "Power Production, Fuel Consumption and Installed Capacity Data;" 1978: table titled "Net Generation of Electric Utilities by State and Source;" 1979 and 1980: Table 36.
- 1981 through 1985: EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Data are published in the EIA, *Electric Power Annual 1985*, Table 6.
- 1986 forward: EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Data are published in the EIA *Electric Power Annual*. Data are from the report of the following year., i.e., 1986 final data are published in the *Electric Power Annual, 1987*. The specific tables are:
— 1986: Table 19.
— 1987: Table 10.
— 1988 and 1989: Table 14.
— 1990 through 1993: Table 13.
— 1994 forward: *Volume I,* Table 10.
— 1997: *Volume I*, Table A2.
— 1998 and 1999: *Volume I*, Table A11.

## Electricity Imports and Exports

Imports and exports of electricity across U.S. borders prior to 1989 are assumed to be based on hydroelectric power. Beginning with 1989, traded electricity is identified in CSEDS as derived from hydroelectric power, geothermal energy, or nonrenewable energy sources. Electricity imports and exports based on renewable energy sources are discussed in more detail in the Renewables section of this documentation on pages 406 and 408. Renewable-based electricity imports and exports are summed in million kilowatthours and billion Btu and identified with "ER" as the source code in the variable name:

EREXPZZ = HYEXPZZ
EREXPUS = ΣEREXPZZ
ERIMPZZ = HYIMPZZ + GEIMPZZ
ERIMPUS = ΣERIMPZZ

EREXBZZ = HYEXBZZ
EREXBUS = ΣEREXBZZ
ERIMBZZ = HYIMBZZ + GEIMBZZ
ERIMBUS = ΣERIMBZZ

Imports and exports of electricity produced from nonrenewable energy sources ("EX"), in million kilowatthours, are calculated by subtracting renewable-based imports and exports from total electricity imports and exports :

EXIMPZZ = ELIMPZZ – ERIMPZZ
EXIMPUS = ΣEXIMPZZ
EXEXPZZ = ELEXPZZ – EREXPZZ
EXEXPUS = ΣEXEXPZZ

Nonrenewable-based electricity imports and exports are converted from million kilowatthours to billion Btu by using a conversion factor that is the U.S. average heat content of fossil fuels consumed at steam-electric power plants (FFEOKUS). The annual values for this factor are shown in Appendix C, Table C1.

EXIMBZZ = EXIMPZZ * FFEOKUS
EXIMBUS = ΣEXIMBZZ

**Table A8. Net Imports of Electricity Produced from Nonrenewable Energy Sources, 1989–1999**
(Trillion Btu)

| State | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Alaska | 0.000 | 0.004 | 0.002 | 0.002 | 0.003 | 0.004 | 0.003 | 0.004 | 0.006 | 0.004 | 0.005 |
| Arizona | 0.000 | -0.022 | 1.110 | -0.022 | -0.023 | -0.026 | 3.464 | -0.027 | 0.125 | -0.019 | 0.000 |
| Arkansas | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| California | 20.792 | 23.353 | 15.498 | 11.676 | 11.077 | 8.041 | 8.472 | 4.141 | 2.698 | 4.205 | 5.874 |
| Colorado | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.165 | 0.004 | 0.009 |
| Connecticut | 0.494 | 0.162 | 1.864 | 2.668 | 2.354 | 3.478 | 4.000 | 4.086 | 6.512 | 4.943 | 5.805 |
| Delaware | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Dist. of Col. | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Florida | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Georgia | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Hawaii | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Idaho | 0.062 | 0.470 | 0.501 | 0.778 | 0.000 | 0.199 | 0.009 | 0.525 | 0.650 | 0.523 | 0.098 |
| Illinois | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Indiana | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Iowa | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.633 | -0.046 | -0.158 |
| Kansas | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.013 | -0.077 |
| Kentucky | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Louisiana | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Maine | 5.642 | 9.146 | 3.995 | 2.253 | 3.079 | 8.917 | 14.213 | 13.022 | 13.106 | 20.119 | 18.916 |
| Maryland | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Massachusetts | 4.468 | 8.497 | 7.912 | 4.907 | 4.025 | 4.522 | 5.611 | 4.905 | 7.139 | 4.943 | 5.805 |
| Michigan | 0.029 | -113.809 | -5.405 | -3.009 | 4.998 | 20.366 | 17.757 | 4.288 | -7.792 | -29.687 | -8.064 |
| Minnesota | 4.363 | -2.847 | 8.024 | 15.704 | 9.738 | 22.002 | 25.392 | 25.391 | 37.113 | 21.073 | 15.753 |
| Mississippi | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Missouri | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.004 | -0.001 | 0.012 |
| Montana | 0.039 | 0.206 | 0.086 | 0.048 | 0.003 | -0.002 | -0.004 | 0.115 | 0.021 | 0.052 | -0.294 |
| Nebraska | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | -0.701 | -0.605 |
| Nevada | 0.156 | 0.009 | 0.028 | 0.007 | 0.002 | 0.020 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| New Hampshire | 0.401 | 0.162 | 1.864 | 2.668 | 2.354 | 3.478 | 4.000 | 4.086 | 6.512 | 4.943 | 5.805 |
| New Jersey | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| New Mexico | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| New York | 13.554 | -15.329 | 9.200 | 5.503 | 10.334 | 36.296 | 27.150 | 18.376 | -3.817 | -8.491 | -10.558 |
| North Carolina | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| North Dakota | 0.541 | -1.285 | -0.064 | 1.942 | 0.448 | 1.952 | 1.901 | 2.242 | -0.539 | -3.597 | -2.838 |
| Ohio | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Oklahoma | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Oregon | 4.623 | 3.770 | 4.590 | 2.574 | 2.366 | 3.145 | 2.594 | 8.551 | 2.960 | 1.316 | 0.093 |
| Pennsylvania | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.417 | (s) | 0.558 | 0.431 | -1.770 | -0.257 |
| Rhode Island | 0.207 | 0.162 | 1.864 | 2.668 | 2.354 | 3.478 | 4.000 | 4.086 | 6.512 | 4.943 | 5.805 |
| South Carolina | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| South Dakota | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.297 | -0.462 | 0.581 |
| Tennessee | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Texas | 0.014 | -0.660 | -4.663 | -17.061 | -8.258 | -9.952 | -9.542 | -10.589 | -9.372 | -8.013 | -11.149 |
| Utah | (s) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.109 | 0.005 | 0.000 |
| Vermont | 4.971 | 6.971 | 3.628 | 1.179 | 1.629 | 5.709 | 9.236 | 8.752 | 14.445 | 11.752 | 26.682 |
| Virginia | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Washington | 6.706 | 1.238 | 9.080 | 18.464 | 3.941 | 29.121 | 2.769 | 16.247 | 27.586 | 24.243 | 33.798 |
| West Virginia | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Wisconsin | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.504 | 3.366 | 2.618 | 1.507 |
| Wyoming | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| United States | 67.063 | -79.799 | 59.113 | 52.945 | 50.424 | 141.163 | 121.024 | 109.261 | 108.874 | 52.911 | 92.552 |

(s)=Number less than 0.0005.
Source: Combined State Energy Data System 1999.

$$EXEXBZZ = EXEXPZZ * FFEOKUS$$
$$EXEXBUS = \Sigma EXEXBZZ$$

Net imports of electricity produced from nonrenewable energy sources is calculated by subtracting exports from imports:

$$EXNIPZZ = EXIMPZZ - EXEXPZZ$$
$$EXNIPUS = \Sigma EXNIPZZ$$
$$EXNIBZZ = EXIMBZZ - EXEXBZZ$$
$$EXNIBUS = \Sigma EXNIBZZ$$

Net imports of nonrenewable-based electricity are included in the "Total" column of *SEDR* tables titled "Energy Consumption Estimates by Source" and "Estimates of Energy Input at Electric Utilities" but are not shown separately in the tables' columns. Table A8 provides the data by State and year.

Total imports and exports of electricity are calculated in billion Btu by summing the renewable and nonrenewable components:

$$ELIMBZZ = HYIMBZZ + GEIMBZZ + EXIMBZZ$$
$$ELIMBUS = \Sigma ELIMBZZ$$
$$ELEXBZZ = HYEXBZZ + EXEXBZZ$$
$$ELEXBUS = \Sigma ELEXBZZ$$

### Data Sources

ELEXPZZ — Electricity exported from the United States (assumed to be produced by hydroelectric power through 1988) by State.

- 1960 through 1981: Economic Regulatory Administration, *Staff Reports*, "Report on Electric Energy Exchanges with Canada and Mexico." Source data are arranged by the Regional Reliability Council Areas and then by the electric utility. State data were tabulated by aggregating the data of all electric utilities within each State.

- 1982 and 1983: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, "Annual Report of Electrical Export/Import Data." State estimates are consistent with national and regional totals published in the ERA, *Electricity Exchanges Across International Borders.*
- 1984 through 1987: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, "Annual Report of Electrical Export/Import Data," the Federal Energy Regulatory Commission Form 1, and the Bonneville Power Administration Annual Report. State estimates are consistent with national and regional totals published in the ERA, *Electricity Transactions Across International Borders.*
- 1988 forward: EIA State estimates are based on data from DOE, Fossil Fuels, Fuels Programs, Office of Coal and Electricity, Form FE-781R, "Annual Report of International Electrical Export/Import Data," and predecessor forms, and the Canada National Energy Board report, "Electricity Exports and Imports, Monthly Statistics for December...."

ELIMPZZ — Electricity imported into the United States (assumed to be produced by hydroelectric power through 1988) by State.

- 1960 through 1981: Economic Regulatory Administration, *Staff Reports*, "Report on Electric Energy Exchanges with Canada and Mexico." Source data are arranged by the Regional Reliability Council Areas and then by the electric utility. State data were tabulated by aggregating the data of all electric utilities within each State.
- 1982 and 1983: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, "Annual Report of Electrical Export/Import Data." State estimates are consistent with national and regional totals published in the ERA, *Electricity Exchanges Across International Borders.*
- 1984 through 1987: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, "Annual Report of Electrical Export/Import Data," the Federal Energy Regulatory Commission Form 1, and the Bonneville Power Administration Annual Report. State estimates are consistent with national and regional totals published in the ERA, *Electricity Transactions Across International Borders.*

- 1988 forward: EIA State estimates are based on data from DOE, Fossil Fuels, Fuels Programs, Office of Coal and Electricity, Form FE-781R, "Annual Report of International Electrical Export/Import Data," and predecessor forms, and the Canada National Energy Board report, "Electricity Exports and Imports, Monthly Statistics for December...."

FFEOKUS — Fossil fuel steam-electric power plant conversion factor.
- 1960 through 1988: Estimated by EIA as the weighted annual average heat rate for fossil-fueled steam-electric plants in the United States as published in the EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9.
- 1989 forward: Calculated annually by EIA on the basis of data from Form EIA-767 "Steam-Electric Plant Operation and Design Report."

## Electricity Consumed by the End User

*Physical Units*

The amount of electricity sold to end users is considered to be the amount of electricity consumed by the end-use sectors. Five electricity sales data series, in physical units of million kilowatthours, are used to estimate consumption of electricity by end-use sector:

ESRCPZZ = electricity sold to the residential sector of each State;
ESCMPZZ = a portion of the electricity sold to the commercial sector of each State;
ESICPZZ = electricity sold to the industrial sector of each State;
ESOTPZZ = electricity sold to "Other" users (i.e., public street and highway lighting, other public authorities, railroads and railways, and interdepartmental sales) in each State; and
ESTRPZZ = electricity consumed by transit systems, in each State.

U.S. totals for the five State-level series are calculated as the sum of the State data.

The sales of electricity to the residential and industrial sectors are used directly as consumption of electricity by these sectors.

Electricity consumed by transit systems in each State is assumed to be the total electricity used for transportation:

ESACPZZ = ESTRPZZ
ESACPUS = ΣESACPZZ

The commercial sector consumption of electricity, represented by ESCCPZZ, is estimated as the sum of sales to the commercial sector and the portion of sales to the "Other" sector that is not used for transportation:

ESCCPZZ = ESCMPZZ + ESOTPZZ – ESACPZZ
ESCCPUS = ΣESCCPZZ

Total electricity consumed by the major end-use sectors is represented by ESTCPZZ and is calculated by adding the four major sector estimates:

ESTCPZZ = ESRCPZZ + ESCCPZZ + ESICPZZ + ESACPZZ
ESTCPUS = ΣESTCPZZ

### British Thermal Units (Btu)

Electricity consumption estimates are converted into Btu by applying a constant factor of 3.412 thousand Btu per kilowatthour as illustrated in the formulas:

ESRCBZZ = ESRCPZZ * 3.412
ESTCBZZ = ESTCPZZ * 3.412

And U.S. totals in Btu are calculated by summing the States' Btu values.

### Additional Calculations

Additional calculations are performed in CSEDS to provide data for the EIA *Monthly Energy Review* and *Annual Energy Review*. The share of electricity sold to the "Other" category of consumers that is used for transportation is calculated:

ESTRSUS = ESACPUS / ESOTPUS

### Data Sources

ESCMPZZ — A portion of the electricity sold to the commercial sector by State.
Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Note 3 on page 430.
- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, "Sales of Electric Energy to Ultimate Consumers."
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 125.
- 1981 through 1983: EIA, Form EIA-826, "Electric Utility Company Monthly Statement," and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, "Annual Electric Utility Report." Unpublished data.
- 1987: EIA, Form EIA-861, "Annual Electric Utility Report." Published in the EIA, *Electric Power Annual 1988,* Table 19.
- 1988 forward: EIA, Form EIA-861, "Annual Electric Utility Report." Published in the following reports:
  — 1988 through 1990: EIA, *Electric Power Annual,* Table 27.
  — 1991 through 1998: EIA, *Electric Sales and Revenue,* Table 15.
  — 1999: EIA, *Electric Sales and Revenue,* Sum of sales by electric utilities shown in Table 15, and sales in deregulated markets shown in Table C2.

ESICPZZ — Electricity consumed by the industrial sector by State.
Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Appendix A, Note 3, on page 430.
- 1960 through 1975: Federal Power Commission, Electric Power Statistics, "Sales of Electric Energy to Ultimate Consumers."
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 126.
- 1981 through 1983: EIA, Form EIA-826, "Electric Utility Company Monthly Statement," and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, "Annual Electric Utility Report." Unpublished data.
- 1987: EIA, Form EIA-861, "Annual Electric Utility Report." Published in the EIA, *Electric Power Annual 1988*, Table 19.

- 1988 forward: EIA, Form EIA-861, "Annual Electric Utility Report." Published in the following reports:
  — 1988 through 1990: EIA, *Electric Power Annual,* Table 27.
  — 1991 through 1998: EIA, *Electric Sales and Revenue,* Table 16.
  — 1999: EIA, *Electric Sales and Revenue,* Sum of sales by electric utilities shown in Table 16, and sales in deregulated markets shown in Table C2.

ESOTPZZ — Electricity sold to the "Other" sector (i.e., public street and highway lighting, sales to other public authorities, railroads and railways, and interdepartmental sales) by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Appendix A, Note 3, on page 430.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, "Sales of Electric Energy to Ultimate Consumers."
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 127.
- 1981 through 1983: EIA, Form EIA-826, "Electric Utility Company Monthly Statement," and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, "Annual Electric Utility Report." Unpublished data.
- 1987: EIA, Form EIA-861, "Annual Electric Utility Report." Published in the EIA, *Electric Power Annual 1988*, Table 19.
- 1988 forward: EIA, Form EIA-861, "Annual Electric Utility Report." Published in the following reports:.
  — 1988 through 1990: EIA, *Electric Power Annual*, Table 27.
  — 1991 forward: EIA, *Electric Sales and Revenue,* Table 6.
  — 1999: EIA, *Electric Sales and Revenue,* Sum of sales by electric utilities shown in Table 6, and sales in deregulated markets from the Form EIA-861 database.

ESRCPZZ — Electricity consumed by the residential sector by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Appendix A, Note 3, on page 430.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, "Sales of Electric Energy to Ultimate Consumers."

- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 124.
- 1981 through 1983: EIA, Form EIA-826, "Electric Utility Company Monthly Statement," and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, "Annual Electric Utility Report." Unpublished data.
- 1987: EIA, Form EIA-861, "Annual Electric Utility Report." Published in the EIA, *Electric Power Annual 1988*, Table 19.
- 1988 forward: EIA, Form EIA-861, "Annual Electric Utility Report." Published in the following reports:
  — 1988 through 1990: *Electric Power Annual*, Table 27.
  — 1991 through 1998: EIA, *Electric Sales and Revenue,* Table 14.
  — 1999: EIA, *Electric Sales and Revenue,* Sum of sales by electric utilities shown in Table 14, and sales in deregulated markets shown in Table C2.

ESTRPZZ — Electricity consumed by transit systems by State.

Notes: The transit system data include electricity used to operate commuter rail, rapid rail, streetcars or light rail, cable cars, trolley-buses, motorbuses, automated guideways, inclined plane railways, and aerial tramways. These data do not include electricity used by Amtrak. These data are available on a fiscal year basis (July 1 through June 30) for 1979 through 1982 and for calendar years 1983 forward. Some data for 1979 through 1983 were adjusted by EIA on the basis of an analysis of historical trends. Electricity consumption for the District of Columbia for 1976 forward is partially apportioned to Maryland and Virginia on the basis of electricity consumption data from the Washington Metropolitan Area Transit Authority.

- 1960 through 1978: EIA estimates are based on data from:
  — The American Public Transit Association (formerly the American Transit Association) annual operating reports.
  — Pushkarev, Boris S. and others, *Urban Rail in America*. (Bloomington, IN: Indiana University Press, 1982.)
  — U.S. Department of Transportation, *A Directory of Regularly Scheduled, Fixed Route, Local Public Transportation Service in Urbanized Areas Over 50,000 Population*, 1980 and 1981.
- 1979 through 1989: U.S. Department of Transportation, Urban Mass Transportation Administration, *National Urban Mass Transportation Statistics, Section 15 Annual Report*, table titled "Energy Consumption: Details by Transit System."

— 1979 and 1980: Table 2.13.1.
— 1981 and 1982: Table 3.13.1.
— 1983 through 1989: Table 3.12.
- 1990 forward: U.S. Department of Transportation, Federal Transit Administration, *Data Tables for the Section 15 Report Year.*
  — 1990: Table 2.12.
  — 1991: Table 13.
  — 1992 through 1997: Table 15.
  — 1998: Table 16
  — 1999: Table 17
- Data for 1996 forward are also available via the Internet at http://www.ntdprogram.com. Click on "Publications/Data" and then "Data Tables."

## Estimates of Electrical System Energy Losses

### British Thermal Units (Btu)

Electrical system energy losses, identified by "LO," include all losses incurred in the generation, transmission, and distribution of electricity, including plant use and unaccounted for quantities. Total losses for the United States, LOTCBUS, is assumed to be the difference between the total of all energy input at electric utilities (TEEUBUS) and the total electricity sold to end users (ESTCBUS). Total losses for the United States is calculated in billion Btu as follows:

$$LOTCBUS = TEEUBUS - ESTCBUS$$

Because Alaska and Hawaii have no exchanges of electricity with other States, their electrical system energy losses are estimated as the difference between the sum of all energy input at the State's electric utilities and the electricity sold within the State:

$$LOTCBAK = TEEUBAK - ESTCBAK$$
$$LOTCBHI = TEEUBHI - ESTCBHI$$

Individual State electrical system energy losses for the remaining States are estimated by a different method. The difference between each of the contiguous 48 States' (including the District of Columbia) TEEUB series and ESTCB is not only the losses but also any net interstate flow of electricity that may occur between States. In some cases these net interstate flows are substantial. Therefore, an effort is made to estimate separately each State's losses and net interstate flow. The methodology is to calculate the contiguous-48-State subtotal of losses and subtotal of sales; to create annual losses-to-sales ratios for the aggregate of the 48 States; and to apply the annual losses-to-sales ratios from the total 48 States to the individual 48 States' sales to estimate their losses.

The following steps are performed to complete the losses estimates. A subtotal of losses in the contiguous 48 States, LOTCB48, is created by subtracting the Alaska and Hawaii losses from the total United States' losses:

$$LOTCB48 = LOTCBUS - (LOTCBAK + LOTCBHI)$$

A similar subtotal of electricity sales in the 48 States only, ESTCB48, is calculated:

$$ESTCB48 = ESTCBUS - (ESTCBAK + ESTCBHI)$$

The losses-to-sales ratio for the contiguous 48 States only, ELLSS48, is calculated:

$$ELLSS48 = LOTCB48 / ESTCB48$$

Over the 40-year period now covered in CSEDS, the ratio is fairly constant, with a slight downward trend. For 1960, the ratio is 2.5; for 1961 through 1983 the ratio is 2.4; for 1984 through 1988 the ratio is 2.3; for 1989 through 1991 it is 2.2; and for 1992 forward the losses-to-sales ratio is 2.1. The decline in the ratio in recent years is attributed partially to the fact that electricity produced by nonutility power producers is included in the electricity sales data, while the resources consumed to produce the nonutility electricity are not included in the energy input. When the electricity purchased by utilities from nonutilities is subtracted from the electricity sales, the ratio is 2.3 for 1989 through 1993, and 2.2 for 1994 forward.

The U.S. ratios are applied to each State's sales to the major end-use sectors and total sales (temporarily including Alaska, Hawaii, and the 48-State subtotal for processing convenience):

LORCBZZ   = ESRCBZZ * ELLSS48
LOCCBZZ   = ESCCBZZ * ELLSS48
LOICBZZ    = ESICBZZ * ELLSS48
LOACBZZ   = ESACBZZ * ELLSS48
LOTCBZZ   = ESTCBZZ * ELLSS48

Alaska, Hawaii, and the contiguous 48-State subtotal are recalculated to their original estimates. The end-use losses for Alaska and Hawaii are created in proportion to each sector's share of the State's total electricity sales:

LOTCBAK   = TEEUBAK – ESTCBAK
LOTCBHI    = TEEUBHI – ESTCBHI
LOTCB48    = LOTCBUS – (LOTCBAK + LOTCBHI)

LORCBAK(HI) = (ESRCBAK(HI) / ESTCBAK(HI)) *
              LOTCBAK(HI)
LOCCBAK(HI) = (ESCCBAK(HI) / ESTCBAK(HI)) *
              LOTCBAK(HI)
LOICBAK(HI)  = (ESICBAK(HI) / ESTCBAK(HI)) * LOTCBAK(HI)
LOACBAK(HI) = (ESACBAK(HI) / ESTCBAK(HI)) *
              LOTCBAK(HI)

Losses for the United States, including Alaska and Hawaii, are the sums of all the States' losses.

### Physical Units

Estimates of losses in physical units of million kilowatthours are made by dividing the Btu estimate by the constant 3.412 thousand Btu per kilowatthour as illustrated in the following formulas:

LORCPZZ   = LORCBZZ/3.412    LORCPUS   = LORCBUS/3.412
LOTCPZZ   = LOTCBZZ/3.412    LOTCPUS   = LOTCBUS/3.412

## Net Interstate Flow of Electricity

### British Thermal Units (Btu)

An estimate of the net interstate flow of electricity is calculated as the difference between the total electricity sales and attributed losses and the total energy input to the electric utilities within each State. The estimated net interstate flow of electricity (ELISB) for each State and the United States is calculated:

ELISBZZ   = (ESTCBZZ + LOTCBZZ) – TEEUBZZ
ELISBUS   = ΣELISBZZ

### Physical Units

Estimates of net interstate flow of electricity in physical units of million kilowatthours are calculated by dividing the Btu value by the constant 3.412 thousand Btu per kilowatthour:

ELISPZZ   = ELISBZZ / 3.412
ELISPUS   = ΣELISPZZ

Positive net interstate flow for a State means that the amount consumed within the State (including attributed losses) is greater than the amount of energy input at electric utilities in the State. That is, the State is using more electricity than it generates and, therefore, is a net buyer from other States.

A negative number indicates that the State's input into its electric utilities is greater than the requirements for electricity within its own borders, and, therefore, it is a net seller of electricity to other States.

## Additional Notes on Electricity

1. The source for the electricity sales data for 1960 through 1983 is the Energy Information Administration (EIA) Form EIA-826, "Electric Utility Company Monthly Statement," and predecessor forms. Electricity sales data for 1984 forward are from Form EIA-861, "Annual

Electric Utility Report."  At the national level, data from both forms correspond closely (within 3 percent) for all end-use sectors.  However, differences in the number of survey respondents and the reporting of commercial and industrial sales caused inconsistencies between 1983 and 1984 data in those end-use sectors for some States.  See the EIA's, *Electric Power Annual, 1991,* DOE/EIA-0348(91), p. 130, and *An Assessment of the Quality of Selected EIA Data Series, Electric Power Data*, DOE/EIA-0292(87), pp. 17–28, for detailed discussions of the reporting differences.

2.  The source for the electricity sales data for 1960 through 1983 is the EIA Form EIA-826, "Electric Utility Company Monthly Statement," and predecessor forms.  Electricity sales data for the District of Columbia and Maryland are combined on those forms.  Estimates of separate sales for the District of Columbia and Maryland were created by using electricity sales data by end-use sector by communities from the FERC Form 1, "Annual Report of Major Electric Utilities, Licensees, and Others," filed by the Potomac Electric Power Company (PEPCO).  PEPCO sales to the District of Columbia were assumed to be total electricity sales in the District of Columbia.  Electricity sales to the District of Columbia reported by PEPCO on the FERC Form 1 were subtracted from the EIA-826 District of Columbia and Maryland aggregate figures to obtain estimates of Maryland electricity sales by sector.  Beginning with 1981 data, electric utilities were no longer required to report sales to specific communities.  Therefore, sales data for the District of Columbia for 1981 through 1983 were obtained directly from PEPCO's accounting department.

# Section 7.  Total Energy

## Total Energy Consumed

The preceding sections of this documentation describe how State end-use consumption estimates are made by individual energy source.  This section describes how all energy sources are added in Btu to create end-use sector and total energy consumption estimates.

Energy consumption estimates for the residential sector include solar energy consumed in the commercial sector that cannot be identified separately.   The code "RC" in the data identifier indicates residential sector and "HC" indicates residential and commercial sectors combined in the following calculation used for each State and the United States:

$$TERCB = CLRCB + NGRCB + PARCB + WDRCB + GERCB + SOHCB + ESRCB + LORCB$$

The commercial sector calculations for each State and the U.S. total are:

$$TECCB = CLCCB + NGCCB + PACCB + WDCCB + GECCB + ESCCB + LOCCB$$

For the industrial sector, the State calculations are slightly different from the U.S. calculation ("ZZ" in the variable name represents the two-letter State code that differs for each State).  The industrial sector includes net imports of coal coke (CCNIBUS) in the U.S. total but not in the individual State estimates because no reliable means of allocating the U.S. amount to the States has been developed.

$$TEICBZZ = CLICBZZ + NGICBZZ + PAICBZZ + HYATBZZ + WWICBZZ + GOICBZZ + ESICBZZ + LOICBZZ$$

$$TEICBUS = CLICBUS + CCNIBUS + NGICBUS + PAICBUS + HYATBUS + WWICBUS + GOICBUS + ESICBUS + LOICBUS$$

For the transportation sector, the calculations are:

$$TEACB = CLACB + NGACB + PAACB + ESACB + LOACB$$

Total energy consumed is calculated as the sum of all energy sources.  It includes net imports of electricity generated from nonrenewable energy sources.  The US and State calculations differ slightly.  The States' calculations include net interstate flow of electricity and associated electricity system losses, and the U.S. calculation includes net imports of coal coke:

$$TETCBZZ = CLTCBZZ + NGTCBZZ + PATCBZZ + NUETBZZ + HYTCBZZ + WWTCBZZ + GOTCBZZ + EXNIBZZ + ELISBZZ$$

$$TETCBUS = CLTCBUS + CCNIBUS + NGTCBUS + PATCBUS + NUETBUS + HYTCBUS + WWTCBUS + GOTCBUS + EXNIBUS$$

As a cross-check that is not used in the report tables, total energy consumed is also calculated in CSEDS as the sum of the consumption by the four end-use sectors for each State and US total:

$$TESSB = TERCB + TECCB + TEICB + TEACB$$

# Total Net Energy Consumed

A set of totals is calculated to estimate consumption in the four major end use sectors excluding each sector's share of all electrical system energy losses that are incurred in the generation, transmission, and distribution of electricity. This series is total net energy consumed and is represented by "TN."

Total net energy consumed by the residential, commercial, industrial, and transportation sectors are calculated:

$$TNRCB = TERCB - LORCB \qquad TNICB = TEICB - LOICB$$
$$TNCCB = TECCB - LOCCB \qquad TNACB = TEACB - LOACB$$

# Total Energy Consumed per Capita

The energy consumed per person residing in each State and in the United States is estimated by dividing the total energy series ("TE") by the resident population as published by the U.S. Department of Commerce, Bureau of the Census. The U.S. total population published by the Bureau of the Census is based on unrounded numbers that are not available by State so that the sum of the States' population does not equal the U.S. total. Therefore, the U.S. total population is input to CSEDS instead of being calculated as the sum of the States' values. The Bureau of the Census series are estimated, in thousands of people, as of July 1 of each year, except in 1960, 1970, 1980, and 1990, when the April 1 census data were used. The variable names for the series are:

TPOPPZZ = The resident population of each State; and
TPOPPUS = The resident population of the United States.

Estimated energy consumption per capita for each State and the United States, in million Btu, is represented by "TETP" and is calculated:

$$TETPB = TETCB / TPOPP$$

The residential, commercial, industrial, and transportation sectors' energy consumption per capita are estimated:

$$TERPB = TERCB / TPOPP$$
$$TECPB = TECCB / TPOPP$$
$$TEIPB = TEICB / TPOPP$$
$$TEAPB = TEACB / TPOPP$$

### *Data Sources*

TPOPPUS — Resident population of the United States. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.
- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections," Series P-25. Specific publication and table numbers:
  — 1960 through 1969: Number 990, Table 4.
  — 1970 through 1979: Number 957, Table 4.
  — 1980 through 1989: Number 1058, Table 3.
- 1990: U.S. Department of Commerce, Bureau of the Census, Internet Release "Table 4. Resident Population of the 50 States, the District of Columbia, and Puerto Rico:...(1990 Census)," December 28, 2000. http://www.census.gov/population/www/cen2000/respop.html.
- 1991 forward: U.S. Department of Commerce, Bureau of the Census, Internet Release ST-99-3, December 29, 1999. http://www.census.gov/population/www/estimates/statepop.html, select "Annual Time Series."

TPOPPZZ — Resident population by State. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.
- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections," Series P-25. Specific publication and table numbers:
  — 1960 through 1969: Number 460, Table 1.
  — 1970 through 1979: Number 957, Table 4.
  — 1980 through 1989: Number 1058, Table 3.
- 1990: U.S. Department of Commerce, Bureau of the Census, Internet Release "Table 4. Resident Population of the 50 States, the District of Columbia, and Puerto Rico:...(1990 Census)," December 28, 2000. http://www.census.gov/population/www/cen2000/respop.html.
- 1991 forward: U.S. Department of Commerce, Bureau of the Census, Internet Release ST-99-3, December 29, 1999. http://www.census.gov/population/www/estimates/statepop.html, select "Annual Time Series."

Appendix B

# Combined State Energy Data System Variables

This is an alphabetical listing of all the variable names used in the Combined State Energy Data System (CSEDS). Provided for each variable on the system are: a brief description of the variable; units of the variable as found in CSEDS; and the formulas used in CSEDS to create the variable. If a variable is not one created by CSEDS but is entered into the system, it is described as an independent variable. Formulas are provided for the State calculations ("ZZ" in the variable name would be replaced by the two-letter code for each State) and for the U.S. calculation (wherever appropriate).

Variables in the CSEDS have seven-letter names that consist of the following components:

| Character Positions: | 1 and 2 | 3 and 4 | 5 | 6 and 7 |
|---|---|---|---|---|
| **Identify:** | Type of energy | Energy activity or consumption end-use sector | Type of data | Geographic area |

Characters 1 through 4 are explained in the description of each variable.

Character 5 is always one of the following:

B = Data in British thermal units (Btu)
K = Factor for converting data from physical units to Btu
M = Data in alternative physical units
P = Data in standardized physical units
S = Share or ratio expressed as a fraction
V = Value added in manufacture.

Characters 6 and 7 are two-letter U.S. Postal Service codes for the 50 States and the District of Columbia (represented by "ZZ" in the following variable names) and the United States ("US"). In this system, the United States means the 50 States and the District of Columbia. Some estimates of electricity sales and losses are derived by using only the contiguous 48 States and the District of Columbia. The variables used in those calculations are identified by "48" as characters 6 and 7 in the variable names.

| ABICB | Aviation gasoline blending components total consumed by the industrial sector. | Billion Btu | ABICBZZ = ABTCBZZ<br>ABICBUS = ABTCBUS |
|---|---|---|---|
| ABICP | Aviation gasoline blending components total consumed by the industrial sector. | Thousand barrels | ABICPZZ = ABTCPZZ<br>ABICPUS = ABTCPUS |
| ABTCB | Aviation gasoline blending components total consumed. | Billion Btu | ABTCBZZ = ABTCPZZ * 5.048<br>ABTCBUS = ΣABTCBZZ |
| ABTCP | Aviation gasoline blending components total consumed. | Thousand barrels | ABTCPZZ = (COCAPZZ / COCAPUS) * ABTCPUS<br>ABTCPUS is independent. |
| ACCCB | Anthracite consumed by the commercial sector. | Billion Btu | ACCCBZZ = ACCCPZZ * ACNUKUS<br>ACCCBUS = ΣACCCBZZ |
| ACCCP | Anthracite consumed by the commercial sector. | Thousand short tons | ACCCPZZ = ACHCPZZ * 0.40<br>ACCCPUS = ΣACCCPZZ |
| ACEUB | Anthracite consumed by the electric utilities. | Billion Btu | ACEUBZZ = ACEUPZZ * ACEUKUS<br>ACEUBUS = ΣACEUBZZ |
| ACEUKUS | Factor for converting anthracite consumed by the electric utilities from physical units to Btu. | Million Btu per short ton | ACEUKUS is independent. |
| ACEUP | Anthracite consumed by the electric utilities. | Thousand short tons | ACEUPZZ is independent.<br>ACEUPUS = ΣACEUPZZ |
| ACHCP | Anthracite consumed by the residential and commercial sectors. | Thousand short tons | ACHCPZZ = (ACHDPZZ / ACHDPUS) * ACHCPUS<br>ACHCPUS is independent. |
| ACHDP | Anthracite distributed to the residential and commercial sectors. | Thousand short tons | ACHDPZZ is independent.<br>ACHDPUS = ΣACHDPZZ |
| ACICB | Anthracite consumed by the industrial sector. | Billion Btu | ACICBZZ = ACKCBZZ + ACOCBZZ<br>ACICBUS = ΣACICBZZ |
| ACICP | Anthracite consumed by the industrial sector. | Thousand short tons | ACICPZZ = ACKCPZZ + ACOCPZZ<br>ACICPUS = ΣACICPZZ |
| ACKCB | Anthracite consumed at coke plants. | Billion Btu | ACKCBZZ = ACKCPZZ * ACNUKUS<br>ACKCBUS = ΣACKCBZZ |
| ACKCP | Anthracite consumed at coke plants. | Thousand short tons | ACKCPZZ = (ACKDPZZ / ACKDPUS) * ACKCPUS<br>ACKCPUS is independent. |

| | | | |
|---|---|---|---|
| ACKDP | Anthracite distributed to coke plants. | Thousand short tons | ACKDPZZ is independent.<br>ACKDPUS = ΣACKDPZZ |
| ACNUKUS | Factor for converting anthracite consumed by all sectors other than the electric utility sector from physical units to Btu. | Million Btu per short ton | ACNUKUS is independent. |
| ACOCB | Anthracite consumed by other industrial users. | Billion Btu | ACOCBZZ = ACOCPZZ * ACNUKUS<br>ACOCBUS = ΣACOCBZZ |
| ACOCP | Anthracite consumed by other industrial users. | Thousand short tons | ACOCPZZ = (ACODPZZ / ACODPUS) * ACOCPUS<br>ACOCPUS is independent. |
| ACODP | Anthracite distributed to other industrial users. | Thousand short tons | ACODPZZ is independent.<br>ACODPUS = ΣACODPZZ |
| ACRCB | Anthracite consumed by the residential sector. | Billion Btu | ACRCBZZ = ACRCPZZ * ACNUKUS<br>ACRCBUS = ΣACRCBZZ |
| ACRCP | Anthracite consumed by the residential sector. | Thousand short tons | ACRCPZZ = ACHCPZZ * 0.60<br>ACRCPUS = ΣACRCPZZ |
| ACTCB | Anthracite total consumed. | Billion Btu | ACTCBZZ = ACRCBZZ + ACCCBZZ + ACICBZZ + ACEUBZZ<br>ACTCBUS = ΣACTCBZZ |
| ACTCP | Anthracite total consumed. | Thousand short tons | ACTCPZZ = ACRCPZZ + ACCCPZZ + ACICPZZ + ACEUPZZ<br>ACTCPUS = ΣACTCPZZ |
| AICAP | Aluminum ingot production capacity. | Short tons | AICAPZZ is independent.<br>AICAPUS = ΣAICAPZZ |
| ARICB | Asphalt and road oil consumed by the industrial sector. | Billion Btu | ARICBZZ = ARICPZZ * 6.636<br>ARICBUS = ΣARICBZZ |
| ARICP | Asphalt and road oil consumed by the industrial sector. | Thousand barrels | ARICPZZ = ASICPZZ + RDICPZZ<br>ARICPUS = ΣARICPZZ |
| ARTCB | Asphalt and road oil total consumed. | Billion Btu | ARTCBZZ = ARICBZZ<br>ARTCBUS = ARICBUS |
| ARTCP | Asphalt and road oil total consumed. | Thousand barrels | ARTCPZZ = ASTCPZZ + RDTCPZZ<br>ARTCPUS = ΣARTCPZZ |

**A**
**P**
**P**
**E**
**N**
**D**
**I**
**X**

**B**

| | | | | |
|---|---|---|---|---|
| ASICP | Asphalt consumed by the industrial sector. | Thousand barrels | ASICPZZ = (ASINPZZ / ASINPUS) * ASTCPUS<br>ASICPUS = ΣASICPZZ |
| ASINP | Asphalt sold to the industrial sector. | Short tons | ASINPZZ is independent.<br>ASINPUS = ΣASINPZZ |
| ASTCP | Asphalt total consumed. | Thousand barrels | ASTCPZZ = ASICPZZ<br>ASTCPUS is independent. |
| AVACB | Aviation gasoline consumed by the transportation sector. | Billion Btu | AVACBZZ = AVACPZZ * 5.048<br>AVACBUS = ΣAVACBZZ |
| AVACP | Aviation gasoline consumed by the transportation sector. | Thousand barrels | AVACPZZ = (AVTTPZZ / AVTTPUS) * AVTCPUS<br>AVACPUS = ΣAVACPZZ |
| AVMIP | Aviation gasoline issued to the military. | Thousand barrels | AVMIPZZ is independent.<br>AVMIPUS = ΣAVMIPZZ |
| AVNMM | Aviation gasoline sold to nonmilitary users. | Thousand gallons | AVNMMZZ is independent.<br>AVNMMUS = ΣAVNMMZZ |
| AVNMP | Aviation gasoline sold to nonmilitary users. | Thousand barrels | AVNMPZZ = AVNMMZZ / 42<br>AVNMPUS = ΣAVNMPZZ |
| AVTCB | Aviation gasoline total consumed. | Billion Btu | AVTCBZZ = AVACBZZ<br>AVTCBUS = AVACBUS |
| AVTCP | Aviation gasoline total consumed. | Thousand barrels | AVTCPZZ = AVACPZZ<br>AVTCPUS is independent. |
| AVTTP | Aviation gasoline total sales to the transportation sector. | Thousand barrels | AVTTPZZ = AVNMPZZ + AVMIPZZ<br>AVTTPUS = ΣAVTTPZZ |
| BCACB | Bituminous coal and lignite consumed by the transportation sector. | Billion Btu | BCACBZZ = BCACPZZ * BCOCKZZ<br>BCACBUS = ΣBCACBZZ |
| BCACP | Bituminous coal and lignite consumed by the transportation sector. | Thousand short tons | BCACPZZ = (BCICPZZ / BCICPUS) * BCACPUS<br>BCACPUS is independent. |
| BCCCB | Bituminous coal and lignite consumed by the commercial sector. | Billion Btu | BCCCBZZ = BCCCPZZ * BCHCKZZ<br>BCCCBUS = ΣBCCCBZZ |
| BCCCP | Bituminous coal and lignite consumed by the commercial sector. | Thousand short tons | BCCCPZZ = BCHCPZZ * 0.65<br>BCCCPUS = ΣBCCCPZZ |

| BCEUB | Bituminous coal and lignite consumed by the electric utilities. | Billion Btu | BCEUBZZ = BCEUPZZ * BCEUKZZ <br> BCEUBUS = ΣBCEUBZZ |
| BCEUKZZ | Factor for converting bituminous coal and lignite consumed by the electric utilities from physical units to Btu. | Million Btu per short ton | BCEUKZZ is independent. |
| BCEUP | Bituminous coal and lignite consumed by the electric utilities. | Thousand short tons | BCEUPZZ is independent. <br> BCEUPUS = ΣBCEUPZZ |
| BCHCKZZ | The factor for converting bituminous coal and lignite consumed by the residential and commercial sectors from physical units to Btu. | Million Btu per short ton | BCHCKZZ is independent. |
| BCHCP | Bituminous coal and lignite consumed by the residential and commercial sectors. | Thousand short tons | BCHCPZZ = (BCHDPZZ / BCHDPUS) * BCHCPUS <br> BCHCPUS is independent. |
| BCHDP | Bituminous coal and lignite distributed to the residential and commercial sectors. | Thousand short tons | BCHDPZZ is independent. <br> BCHDPUS = ΣBCHDPZZ |
| BCICB | Bituminous coal and lignite consumed by the industrial sector. | Billion Btu | BCICBZZ = BCKCBZZ + BCOCBZZ <br> BCICBUS = ΣBCICBZZ |
| BCICP | Bituminous coal and lignite consumed by the industrial sector. | Thousand short tons | BCICPZZ = BCKCPZZ + BCOCPZZ <br> BCICPUS = ΣBCICPZZ |
| BCKCB | Bituminous coal and lignite consumed by coke plants. | Billion Btu | BCKCBZZ = BCKCPZZ * 26.80 <br> BCKCBUS = ΣBCKCBZZ |
| BCKCP | Bituminous coal and lignite consumed by coke plants. | Thousand short tons | BCKCPZZ = (BCKDPZZ / BCKDPUS) * BCKCPUS <br> BCKCPUS is independent. |
| BCKDP | Bituminous coal and lignite distributed to coke plants. | Thousand short tons | BCKDPZZ is independent. <br> BCKDPUS = ΣBCKDPZZ |
| BCOCB | Bituminous coal and lignite consumed by other industrial users. | Billion Btu | BCOCBZZ = BCOCPZZ * BCOCKZZ <br> BCOCBUS = ΣBCOCBZZ |
| BCOCKZZ | The factor for converting bituminous coal and lignite consumed by other industrial users from physical units to Btu. | Million Btu per short ton | BCOCKZZ is independent. |
| BCOCP | Bituminous coal and lignite consumed by other industrial users. | Thousand short tons | BCOCPZZ = (BCODPZZ / BCODPUS) * BCOCPUS <br> BCOCPUS is independent. |

| | | | |
|---|---|---|---|
| BCODP | Bituminous coal and lignite distributed to other industrial users. | Thousand short tons | BCODPZZ is independent. <br> BCODPUS = ΣBCODPZZ |
| BCRCB | Bituminous coal and lignite consumed by the residential sector. | Billion Btu | BCRCBZZ = BCRCPZZ * BCHCKZZ <br> BCRCBUS = ΣBCRCBZZ |
| BCRCP | Bituminous coal and lignite consumed by the residential sector. | Thousand short tons | BCRCPZZ = BCHCPZZ * 0.35 <br> BCRCPUS = ΣBCRCPZZ |
| BCTCB | Bituminous coal and lignite total consumed. | Billion Btu | BCTCBZZ = BCRCBZZ + BCCCBZZ + <br>          BCICBZZ + BCACBZZ + BCEUBZZ <br> BCTCBUS = ΣBCTCBZZ |
| BCTCP | Bituminous coal and lignite total consumed. | Thousand short tons | BCTCPZZ = BCRCPZZ + BCCCPZZ + <br>          BCICPZZ + BCACPZZ + BCEUPZZ <br> BCTCPUS = ΣBCTCPZZ |
| CCEXBUS | Coal coke exported from the United States. | Billion Btu | CCEXBUS = CCEXPUS * 24.80 |
| CCEXPUS | Coal coke exported from the United States. | Thousand short tons | CCEXPUS is independent. |
| CCIMBUS | Coal coke imported into the United States. | Billion Btu | CCIMBUS = CCIMPUS * 24.80 |
| CCIMPUS | Coal coke imported into the United States. | Thousand short tons | CCIMPUS is independent. |
| CCNIBUS | Coal coke net imports into the United States. | Billion Btu | CCNIBUS = CCIMBUS – CCEXBUS |
| CCNIPUS | Coal coke net imports into the United States. | Thousand short tons | CCNIPUS = CCIMPUS – CCEXPUS |
| CGVAV | Value added in the manufacture of corrugated and solid fiber boxes. | Million dollars | CGVAVZZ is independent. <br> CGVAVUS = ΣCGVAVZZ |
| CLACB | Coal consumed by the transportation sector. | Billion Btu | CLACBZZ = BCACBZZ <br> CLACBUS = BCACBUS |
| CLACP | Coal consumed by the transportation sector. | Thousand short tons | CLACPZZ = BCACPZZ <br> CLACPUS = BCACPUS |
| CLCCB | Coal consumed by the commercial sector. | Billion Btu | CLCCBZZ = ACCCBZZ + BCCCBZZ <br> CLCCBUS = ACCCBUS + BCCCBUS |
| CLCCP | Coal consumed by the commercial sector. | Thousand short tons | CLCCPZZ = ACCCPZZ + BCCCPZZ <br> CLCCPUS = ACCCPUS + BCCCPUS |
| CLEUB | Coal consumed by the electric utilities. | Billion Btu | CLEUBZZ = ACEUBZZ + BCEUBZZ <br> CLEUBUS = ACEUBUS + BCEUBUS |

| CLEUP | Coal consumed by the electric utilities. | Thousand short tons | CLEUPZZ = ACEUPZZ + BCEUPZZ<br>CLEUPUS = ACEUPUS + BCEUPUS |

| CLICB | Coal consumed by the industrial sector. | Billion Btu | CLICBZZ = ACICBZZ + BCICBZZ<br>CLICBUS = ACICBUS + BCICBUS |
| CLICP | Coal consumed by the industrial sector. | Thousand short tons | CLICPZZ = ACICPZZ + BCICPZZ<br>CLICPUS = ACICPUS + BCICPUS |
| CLKCB | Coal consumed at coke plants (coking coal). | Billion Btu | CLKCBZZ = ACKCBZZ + BCKCBZZ<br>CLKCBUS = ACKCBUS + BCKCBUS |
| CLOCB | Coal consumed by other industrial users. | Billion Btu | CLOCBZZ = ACOCBZZ + BCOCBZZ<br>CLOCBUS = ACOCBUS + BCOCBUS |
| CLOCP | Coal consumed by other industrial users. | Thousand short tons | CLOCPZZ = ACOCPZZ + BCOCPZZ<br>CLOCPUS = ACOCPUS + BCOCPUS |
| CLRCB | Coal consumed by the residential sector. | Billion Btu | CLRCBZZ = ACRCBZZ + BCRCBZZ<br>CLRCBUS = ACRCBUS + BCRCBUS |
| CLRCP | Coal consumed by the residential sector. | Thousand short tons | CLRCPZZ = ACRCPZZ + BCRCPZZ<br>CLRCPUS = ACRCPUS + BCRCPUS |
| CLSCB | Coal consumed other than at coke plants (steam coal). | Billion Btu | CLSCBZZ = CLTCBZZ – CLKCBZZ<br>CLSCBUS = CLTCBUS – CLKCBUS |
| CLTCB | Coal total consumed. | Billion Btu | CLTCBZZ = ACTCBZZ + BCTCBZZ<br>CLTCBUS = ACTCBUS + BCTCBUS |
| CLTCP | Coal total consumed. | Thousand short tons | CLTCPZZ = ACTCPZZ + BCTCPZZ<br>CLTCPUS = ACTCPUS + BCTCPUS |
| COCAP | Crude oil operating capacity at refineries. | Barrels per calendar day | COCAPZZ is independent.<br>COCAPUS = ΣCOCAPZZ |
| COICB | Crude oil consumed by the industrial sector. | Billion Btu | COICBZZ = COTCBZZ<br>COICBUS = COTCBUS |
| COICP | Crude oil consumed by the industrial sector. | Thousand barrels | COICPZZ = COTCPZZ<br>COICPUS = COTCPUS |
| COTCB | Crude oil consumed in petroleum industry operations. | Billion Btu | COTCBZZ = COTCPZZ * 5.800<br>COTCBUS = ΣCOTCBZZ |

| COTCP | Crude oil consumed in petroleum industry operations. | Thousand barrels | COTCPZZ is independent.<br>COTCPUS = ΣCOTCPZZ |
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| CTCAP | Catalytic cracking charge capacity of petroleum refineries. | 1960 through 1979:<br>Barrels per calendar day<br>1980 forward:<br>Barrels per stream day | CTCAPZZ is independent.<br>CTCAPUS = ΣCTCAPZZ |
| DFACB | Distillate fuel consumed by the transportation sector. | Billion Btu | DFACBZZ = DFACPZZ * 5.825<br>DFACBUS = ΣDFACBZZ |
| DFACP | Distillate fuel consumed by the transportation sector. | Thousand barrels | DFACPZZ = (DFTRPZZ / DFNDPZZ) * DFNCPZZ<br>DFACPUS = ΣDFACPZZ |
| DFBKP | Distillate fuel adjusted sales for vessel bunkering use, excluding that sold to the Armed Forces. | Thousand barrels | DFBKPZZ is independent.<br>DFBKPUS = ΣDFBKPZZ |
| DFCCB | Distillate fuel consumed by the commercial sector. | Billion Btu | DFCCBZZ = DFCCPZZ * 5.825<br>DFCCBUS = ΣDFCCBZZ |
| DFCCP | Distillate fuel consumed by the commercial sector. | Thousand barrels | DFCCPZZ = (DFCMPZZ / DFNDPZZ) * DFNCPZZ<br>DFCCPUS = ΣDFCCPZZ |
| DFCMP | Distillate fuel adjusted sales to the commercial sector. | Thousand barrels | DFCMPZZ is independent.<br>DFCMPUS = ΣDFCMPZZ |
| DFEUB | Distillate fuel consumed by the electric utilities. | Billion Btu | DFEUBZZ = DFEUPZZ * 5.825<br>DFEUBUS = ΣDFEUBZZ |
| DFEUP | Distillate fuel (excluding kerosene-type jet fuel) consumed by the electric utilities. | Thousand barrels | DFEUPZZ = DKEUPZZ – JKEUPZZ<br>DFEUPUS = ΣDFEUPZZ |
| DFIBP | Distillate fuel adjusted sales for industrial space heating and other industrial use, including farm use. | Thousand barrels | DFIBPZZ is independent.<br>DFIBPUS = ΣDFIBPZZ |
| DFICB | Distillate fuel consumed by the industrial sector. | Billion Btu | DFICBZZ = DFICPZZ * 5.825<br>DFICBUS = ΣDFICBZZ |
| DFICP | Distillate fuel consumed by the industrial sector. | Thousand barrels | DFICPZZ = (DFINPZZ / DFNDPZZ) * DFNCPZZ<br>DFICPUS = ΣDFICPZZ |
| DFINP | Distillate fuel adjusted sales to the industrial sector. | Thousand barrels | DFINPZZ = DFIBPZZ + DFOCPZZ +<br>DFOFPZZ + DFOTPZZ<br>DFINPUS = ΣDFINPZZ |

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| DFMIP | Distillate fuel adjusted sales to the Armed Forces, regardless of use. | Thousand barrels | DFMIPZZ is independent.<br>DFMIPUS = ΣDFMIPZZ |
| DFNCP | Distillate fuel consumption by all sectors other than the electric utility sector. | Thousand barrels | DFNCPZZ = (DFNDPZZ / DFNDPUS) * DFNCPUS<br>DFNCPUS = DFTCPUS – DFEUPUS |
| DFNDP | Distillate fuel adjusted sales to all sectors other than the electric utility sector. | Thousand barrels | DFNDPZZ = DFRSPZZ + DFCMPZZ +<br>　　　　　DFINPZZ + DFTRPZZ<br>DFNDPUS = ΣDFNDPZZ |
| DFOCP | Distillate fuel adjusted sales for use by oil companies. | Thousand barrels | DFOCPZZ is independent.<br>DFOCPUS = ΣDFOCPZZ |
| DFOFP | Distillate fuel adjusted sales as diesel fuel for off-highway use. | Thousand barrels | DFOFPZZ is independent.<br>DFOFPUS = ΣDFOFPZZ |
| DFONP | Distillate fuel adjusted sales as diesel fuel for on-highway use. | Thousand barrels | DFONPZZ is independent.<br>DFONPUS = ΣDFONPZZ |
| DFOTP | Distillate fuel adjusted sales for all other uses not identified in other adjusted sales categories. | Thousand barrels | DFOTPZZ is independent.<br>DFOTPUS = ΣDFOTPZZ |
| DFRCB | Distillate fuel consumed by the residential sector. | Billion Btu | DFRCBZZ = DFRCPZZ * 5.825<br>DFRCBUS = ΣDFRCBZZ |
| DFRCP | Distillate fuel consumed by the residential sector. | Thousand barrels | DFRCPZZ = (DFRSPZZ / DFNDPZZ) * DFNCPZZ<br>DFRCPUS = ΣDFRCPZZ |
| DFRRP | Distillate fuel adjusted sales for use by railroads. | Thousand barrels | DFRRPZZ is independent.<br>DFRRPUS = ΣDFRRPZZ |
| DFRSP | Distillate fuel adjusted sales to the residential sector. | Thousand barrels | DFRSPZZ is independent.<br>DFRSPUS = ΣDFRSPZZ |
| DFTCB | Distillate fuel total consumed. | Billion Btu | DFTCBZZ = DFRCBZZ + DFCCBZZ +<br>　　　　　DFICBZZ + DFACBZZ + DFEUBZZ<br>DFTCBUS = ΣDFTCBZZ |
| DFTCP | Distillate fuel total consumed. | Thousand barrels | DFTCPZZ = DFNCPZZ + DFEUPZZ<br>DFTCPUS is independent. |
| DFTRP | Distillate fuel adjusted sales to the transportation sector. | Thousand barrels | DFTRPZZ = DFBKPZZ + DFMIPZZ +<br>　　　　　DFRRPZZ + DFONPZZ<br>DFTRPUS = ΣDFTRPZZ |

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| DKEUB | Distillate fuel and kerosene-type jet fuel consumed by the electric utilities. | Billion Btu | DKEUBZZ = DFEUBZZ + JKEUBZZ<br>DKEUBUS = ΣDKEUBZZ | |
| DKEUP | Distillate fuel and kerosene-type jet fuel consumed by the electric utilities. | Thousand barrels | DKEUPZZ is independent.<br>DKEUPUS = ΣDKEUPZZ | |
| ELEXB | Electricity exported from the United States (assumed to be produced from hydroelectric power through 1988). | Billion Btu | ELEXBZZ = HYEXBZZ + EXEXBZZ<br>ELEXBUS = ΣELEXBZZ | |
| ELEXP | Electricity exported from the United States (assumed to be produced from hydroelectric power through 1988). | Million kilowatthours | ELEXPZZ is independent.<br>ELEXPUS = ΣELEXPZZ | |
| ELIMB | Electricity imported into the United States (assumed to be produced from hydroelectric power through 1988). | Billion Btu | ELIMBZZ = HYIMBZZ + GEIMBZZ + EXIMBZZ<br>ELIMBUS = ΣELIMBZZ | |
| ELIMP | Electricity imported into the United States (assumed to be produced from hydroelectric power through 1988). | Million kilowatthours | ELIMPZZ is independent.<br>ELIMPUS = ΣELIMPZZ | |
| ELISB | Net interstate flow of electricity. (Negative indicates flow out of State; positive indicates flow into State.) | Billion Btu | ELISBZZ = (ESTCBZZ + LOTCBZZ) – TEEUBZZ<br>ELISBUS = ΣELISBZZ | |
| ELISP | Net interstate flow of electricity. (Negative indicates flow out of State; positive indicates flow into State.) | Million kilowatthours | ELISPZZ = ELISBZZ / 3.412<br>ELISPUS = ΣELISPZZ | |
| ELLSS48 | The ratio of electrical system energy losses to electricity sold in the contiguous 48 States and the District of Columbia. | Fraction | ELLSS48 = LOTCB48 / ESTCB48 | |
| ENACB | Ethanol consumed by the transportation sector. | Billion Btu | ENACBZZ = ENACPZZ * 3.539<br>ENACBUS = ΣENACBZZ | |
| ENACP | Ethanol consumed by the transportation sector. | Thousand barrels | ENACPZZ = (ENTRPZZ / ENTRPUS) * ENACPUS<br>ENACPUS is independent. | |
| ENTRP | Ethanol blended into motor gasoline. | Thousand gallons | ENTRPZZ is independent.<br>ENTRPUS = ΣENTRPZZ | |
| EREXB | Electricity produced from renewable energy sources and exported from the United States. | Billion Btu | EREXBZZ = HYEXBZZ<br>EREXBUS = ΣEREXBZZ | |

| EREXP | Electricity produced from renewable energy sources and exported from the United States. | Million kilowatthours | EREXPZZ = HYEXPZZ<br>EREXPUS = ΣEREXPZZ |
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| ERIMB | Electricity produced from renewable energy sources and imported into the United States. | Billion Btu | ERIMBZZ = HYIMBZZ + GEIMBZZ<br>ERIMBUS = ΣERIMBZZ |
| ERIMP | Electricity produced from renewable energy sources and imported into the United States. | Million kilowatthours | ERIMPZZ = HYIMPZZ + GEIMPZZ<br>ERIMPUS = ΣERIMPZZ |
| ESACB | Electricity consumed by (i.e., sold to) the transportation sector. | Billion Btu | ESACBZZ = ESACPZZ * 3.412<br>ESACBUS = ΣESACBZZ |
| ESACP | Electricity consumed by (i.e., sold to) the transportation sector. | Million kilowatthours | ESACPZZ = (ESTRPZZ / ESTRPUS) * ESACPUS<br>ESACPUS = ESOTPUS * ESTRSUS |
| ESCCB | Electricity consumed by (i.e., sold to) the commercial sector. | Billion Btu | ESCCBZZ = ESCCPZZ * 3.412<br>ESCCBUS = ΣESCCBZZ |
| ESCCP | Electricity consumed by (i.e., sold to) the commercial sector. | Million kilowatthours | ESCCPZZ = ESCMPZZ + ESOTPZZ – ESACPZZ<br>ESCCPUS = ΣESCCPZZ |
| ESCMP | Electricity sold to a portion of the commercial sector. | Million kilowatthours | ESCMPZZ is independent.<br>ESCMPUS = ΣESCMPZZ |
| ESICB | Electricity consumed by (i.e., sold to) the industrial sector. | Billion Btu | ESICBZZ = ESICPZZ * 3.412<br>ESICBUS = ΣESICBZZ |
| ESICP | Electricity consumed by (i.e., sold to) the industrial sector. | Million kilowatthours | ESICPZZ is independent.<br>ESICPUS = ΣESICPZZ |
| ESOTP | Electricity sold to the "Other" sector (i.e., public street and highway lighting, sales to other public authorities, railroads and railways, and interdepartmental sales). | Million kilowatthours | ESOTPZZ is independent.<br>ESOTPUS = ΣESOTPZZ |
| ESRCB | Electricity consumed by (i.e., sold to) the residential sector. | Billion Btu | ESRCBZZ = ESRCPZZ * 3.412<br>ESRCBUS = ΣESRCBZZ |
| ESRCP | Electricity consumed by (i.e., sold to) the residential sector. | Million kilowatthours | ESRCPZZ is independent.<br>ESRCPUS = ΣESRCPZZ |
| ESTCB | Electricity total consumed (i.e., sold). | Billion Btu | ESTCBZZ = ESTCPZZ * 3.412<br>ESTCBUS = ΣESTCBZZ<br>ESTCB48 = ESTCBUS – (ESTCBAK + ESTCBHI) |

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| ESTCP | Electricity total consumed (i.e., sold). | Million kilowatthours | ESTCPZZ = ESRCPZZ + ESCCPZZ + ESICPZZ + ESACPZZ ESTCPUS = ΣESTCPZZ | |
| ESTRP | Electricity consumed by transit systems. | Million kilowatthours | ESTRPZZ is independent. ESTRPUS = ΣESTRPZZ | |
| ESTRSUS | The share of electricity sold to the "Other" sector (ESOTP) that is used for transportation. | Fraction | ESTRSUS is independent. | |
| EXEXB | Electricity produced from nonrenewable energy sources and exported from the United States. | Billion Btu | EXEXBZZ = EXEXPZZ * FFEOKUS EXEXBUS = ΣEXEXBZZ | |
| EXEXP | Electricity produced from nonrenewable energy sources and exported from the United States. | Million kilowatthours | EXEXPZZ = ELEXPZZ – EREXPZZ EXEXPUS = ΣEXEXPZZ | |
| EXIMB | Electricity produced from nonrenewable energy sources and imported into the United States. | Billion Btu | EXIMBZZ = EXIMPZZ * FFEOKUS EXIMBUS = ΣEXIMBZZ | |
| EXIMP | Electricity produced from nonrenewable energy sources and imported into the United States. | Million kilowatthours | EXIMPZZ = ELIMPZZ – ERIMPZZ EXIMPUS = ΣEXIMPZZ | |
| EXNIB | Net imports of electricity into the United States produced from nonrenewable energy sources. | Billion Btu | EXNIBZZ = EXIMBZZ – EXEXBZZ EXNIBUS = ΣEXNIBZZ | |
| EXNIP | Net imports of electricity into the United States produced from nonrenewable energy sources. | Million kilowatthours | EXNIPZZ = EXIMPZZ – EXEXPZZ EXNIPUS = ΣEXNIPZZ | |
| FFEOKUS | Fossil fuel steam-electric power plant conversion factor. | Thousand Btu per kilowatthour | FFEOKUS is independent. | |
| FNICB | Petrochemical feedstocks, naphtha less than 401° F, consumed by the industrial sector. | Billion Btu | FNICBZZ = FNTCBZZ FNICBUS = FNTCBUS | |
| FNICP | Petrochemical feedstocks, naphtha less than 401° F, consumed by the industrial sector. | Thousand barrels | FNICPZZ = FNTCPZZ FNICPUS = FNTCPUS | |
| FNTCB | Petrochemical feedstocks, naphtha less than 401° F, total consumed. | Billion Btu | FNTCBZZ = FNTCPZZ * 5.248 FNTCBUS = ΣFNTCBZZ | |
| FNTCP | Petrochemical feedstocks, naphtha less than 401° F, total consumed. | Thousand barrels | FNTCPZZ = (OCVAVZZ / OCVAVUS) * FNTCPUS FNTCPUS is independent. | |
| FOICB | Petrochemical feedstocks, other oils equal to or greater than 401° F, consumed by the industrial sector. | Billion Btu | FOICBZZ = FOTCBZZ FOICBUS = FOTCBUS | |

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| FOICP | Petrochemical feedstocks, other oils equal to or greater than 401° F, consumed by the industrial sector. | Thousand barrels | FOICPZZ = FOTCPZZ<br>FOICPUS = FOTCPUS |
| FOTCB | Petrochemical feedstocks, other oils equal to or greater than 401° F, total consumed. | Billion Btu | FOTCBZZ = FOTCPZZ * 5.825<br>FOTCBUS = ΣFOTCBZZ |
| FOTCP | Petrochemical feedstocks, other oils equal to or greater than 401° F, total consumed. | Thousand barrels | FOTCPZZ = (OCVAVZZ / OCVAVUS) * FOTCPUS<br>FOTCPUS is independent. |
| FSICB | Petrochemical feedstocks, still gas, consumed by the industrial sector. | Billion Btu | FSICBZZ = FSTCBZZ<br>FSICBUS = FSTCBUS |
| FSICP | Petrochemical feedstocks, still gas, consumed by the industrial sector. | Thousand barrels | FSICPZZ = FSTCPZZ<br>FSICPUS = FSTCPUS |
| FSTCB | Petrochemical feedstocks, still gas, total consumed. | Billion Btu | FSTCBZZ = FSTCPZZ * 6.000<br>FSTCBUS = ΣFSTCBZZ |
| FSTCP | Petrochemical feedstocks, still gas, total consumed. | Thousand barrels | FSTCPZZ = (COCAPZZ / COCAPUS) * FSTCPUS<br>FSTCPUS is independent. |
| GECCB | Direct use of geothermal energy and heat pumps in the commerical sector. | Billion Btu | GECCBZZ is independent.<br>GECCBUS = ΣGECCBZZ |
| GEENB | Geothermal subtotal: electricity produced from geothermal energy at electric utilities plus imports of electricity into the United States. | Billion Btu | GEENBZZ = GEEOBZZ + GEIMBZZ<br>GEENBUS = ΣGEENBZZ |
| GEENP | Geothermal subtotal: electricity produced from geothermal energy at electric utilities plus imports of electricity into the United States. | Million kilowatthours | GEENPZZ = GEEOPZZ + GEIMPZZ<br>GEENPUS = ΣGEENPZZ |
| GEEOB | Electricity produced from geothermal energy at electric utilities. | Billion Btu | GEEOBZZ = GEEOPZZ * GEEOKUS<br>GEEOBUS = ΣGEEOBZZ |
| GEEOKUS | Factor for converting electricity produced from geothermal energy from physical units to Btu. | Thousand Btu per kilowatthour | GEEOKUS is independent. |
| GEEOP | Electricity produced from geothermal energy at electric utilities. | Million kilowatthours | GEEOPZZ is independent.<br>GEEOPUS = ΣGEEOPZZ |
| GEICB | Geothermal energy used in the indusrial sector. | Billion Btu | GEICBZZ = GEINBZZ + GENGBZZ<br>GEICBUS = ΣGEICBZZ |

| GEIMB | Electricity produced from geothermal energy and imported into the United States. | Billion Btu | GEIMBZZ = GEIMPZZ * GEEOKUS<br>GEIMBUS = ΣGEIMBZZ |
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| GEIMP | Electricity produced from geothermal energy and imported into the United States. | Million kilowatthours | GEIMPZZ is independent.<br>GEIMPUS = ΣGEIMPZZ |
| GEINB | Direct use of geothermal energy and heat pumps in the industrial sector. | Billion Btu | GEINBZZ is independent.<br>GEINBUS = ΣGEINBZZ |
| GENGB | Electricity produced from geothermal energy by nonutility power producers. | Billion Btu | GENGBZZ = GENGPZZ * GEEOKUS<br>GENGBUS = ΣGENGBZZ |
| GENGP | Electricity produced from geothermal energy by nonutility power producers. | Million kilowatthours | GENGPZZ is independent.<br>GENGPUS = ΣGENGPZZ |
| GERCB | Direct use of geothermal energy and heat pumps in the residential sector. | Billion Btu | GERCBZZ is independent.<br>GERCBUS = ΣGERCBZZ |
| GETCB | Geothermal total energy consumed (including imports of geothermal-based electricity). | Billion Btu | GETCBZZ = GERCBZZ + GECCBZZ + GEICBZZ + GEENBZZ<br>GETCBUS = ΣGETCBZZ |
| GOICB | Electricity produced from geothermal, wind, nuclear, photovoltaic, and solar thermal energy sources in the industrial sector. | Billion Btu | GOICBZZ = GEICBZZ + SOICBZZ + WYICBZZ + NUATBZZ<br>GOICBUS = ΣGOICBZZ |
| GOTCB | Electricity produced from geothermal, wind, photovoltaic, and solar thermal energy sources; total produced. | Billion Btu | GOTCBZZ = GETCBZZ + SOTCBZZ + WYTCBZZ<br>GOTCBUS = ΣGOTCBZZ |
| HPATB | Electricity produced from pumped storage hydroelectric power by nonutility power producers. | Billion Btu | HPATBZZ = HPATPZZ * FFEOKUS.<br>HPATBUS = ΣHPATBZZ |
| HPATP | Electricity produced from pumped storage hydroelectric power by nonutility power producers. | Million kilowatthours | HPATPZZ is independent.<br>HPATPUS = ΣHPATPZZ |
| HPEOB | Electricity produced from pumped storage hydroelectric power at electric utilities. | Billion Btu | HPEOBZZ = HPEOPZZ * FFEOKUS<br>HPEOBUS = ΣHPEOBZZ |
| HPEOP | Electricity produced from pumped storage hydroelectric power at electric utilities. | Million kilowatthours | HPEOPZZ is independent.<br>HPEOPUS = ΣHPEOPZZ |
| HVATB | Electricity produced from conventional hydropower by nonutility power producers. | Billion Btu | HVATBZZ = HVATPZZ * FFEOKUS<br>HVATBUS = ΣHVATBZZ |

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| HVATP | Electricity produced from conventional hydropower by nonutility power producers. | Million kilowatthours | HVATPZZ is independent.<br>HVATPUS = ΣHVATPZZ |
| HVENB | Renewable hydroelectric subtotal: electricity produced from conventional hydropower at electric utilities plus net imports of electricity into the United States. | Billion Btu | HVENBZZ = HVEOBZZ + HYIMBZZ – HYEXBZZ<br>HVENBUS = ΣHVENBZZ |
| HVENP | Renewable hydroelectric subtotal: electricity produced from conventional hydropower at electric utilities plus net imports of electricity into the United States. | Million kilowatthours | HVENPZZ = HVEOPZZ + HYIMPZZ – HYEXPZZ<br>HVENPUS = ΣHVENPZZ |
| HVEOB | Electricity produced from conventional hydropower at electric utilities. | Billion Btu | HVEOBZZ = HVEOPZZ * FFEOKUS<br>HVEOBUS = ΣHVEOBZZ |
| HVEOP | Electricity produced from conventional hydropower at electric utilities. | Million kilowatthours | HVEOPZZ is independent.<br>HVEOPUS = ΣHVEOPZZ |
| HYATB | Electricity produced from all types of hydropower by nonutility power producers. | Billion Btu | HYATBZZ = HPATBZZ + HVATBZZ<br>HYATBUS = ΣHYATBZZ |
| HYATP | Electricity produced from all types of hydropower by nonutility power producers. | Million kilowatthours | HYATPZZ = HPATPZZ + HVATPZZ<br>HYATPUS = ΣHYATPZZ |
| HYENB | Electricity produced from all types of hydropower at electric utilities plus net imports of electricity into the United States. | Billion Btu | HYENBZZ = HYEOBZZ + HYIMBZZ – HYEXBZZ<br>HYENBUS = ΣHYENBZZ |
| HYENP | Electricity produced from all types of hydropower at electric utilities plus net imports of electricity into the United States. | Million kilowatthours | HYENPZZ = HYEOPZZ + HYIMPZZ – HYEXPZZ<br>HYENPUS = ΣHYENPZZ |
| HYEOB | Electricity produced from all types of hydropower at electric utilities. | Billion Btu | HYEOBZZ = HPEOBZZ + HVEOBZZ<br>HYEOBUS = ΣHYEOBZZ |
| HYEOP | Electricity produced from all types of hydropower at electric utilities. | Million kilowatthours | HYEOPZZ = HPEOPZZ + HVEOPZZ<br>HYEOPUS = ΣHYEOPZZ |
| HYEXB | Electricity produced from hydroelectric power and exported from the United States. | Billion Btu | HYEXBZZ = HYEXPZZ * FFEOKUS<br>HYEXBUS = ΣHYEXBZZ |
| HYEXP | Electricity produced from hydroelectric power and exported from the United States. | Million kilowatthours | HYEXPZZ is independent.<br>HYEXPUS = ΣHYEXPZZ |

| HYIMB | Electricity produced from hydroelectric power and imported into the United States. | Billion Btu | HYIMBZZ = HYIMPZZ * FFEOKUS<br>HYIMBUS = ΣHYIMBZZ |
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| HYIMP | Electricity produced from hydroelectric power and imported into the United States. | Million kilowatthours | HYIMPZZ is independent.<br>HYIMPUS = ΣHYIMPZZ |
| HYTCB | Electricity produced from hydropower at electric utilities (including net imports of electricity) and by nonutility power producers. | Billion Btu | HYTCBZZ = HYENBZZ + HYATBZZ<br>HYTCBUS = ΣHYTCBZZ |
| HYTCP | Electricity produced from hydropower at electric utilities (including net imports of electricity) and by nonutility power producers. | Million kilowatthours | HYTCPZZ = HYENPZZ + HYATPZZ<br>HYTCPUS = ΣHYTCPZZ |
| JFACB | Jet fuel consumed by the transportation sector. | Billion Btu | JFACBZZ = JKACBZZ + JNACBZZ<br>JFACBUS = ΣJFACBZZ |
| JFACP | Jet fuel consumed by the transportation sector. | Thousand barrels | JFACPZZ = JKACPZZ + JNACPZZ<br>JFACPUS = ΣJFACPZZ |
| JFEUB | Jet fuel consumed by electric utilities. | Billion Btu | JFEUBZZ = JKEUBZZ<br>JFEUBUS = JKEUBUS |
| JFEUP | Jet fuel consumed by electric utilities. | Thousand barrels | JFEUPZZ = JKEUPZZ<br>JFEUPUS = JKEUPUS |
| JFTCB | Jet fuel total consumed. | Billion Btu | JFTCBZZ = JFACBZZ + JFEUBZZ<br>JFTCBUS = ΣJFTCBZZ |
| JFTCP | Jet fuel total consumed. | Thousand barrels | JFTCPZZ = JFACPZZ + JFEUPZZ<br>JFTCPUS = ΣJFTCPZZ |
| JKACB | Kerosene-type jet fuel consumed by the transportation sector. | Billion Btu | JKACBZZ = JKACPZZ * 5.670<br>JKACBUS = ΣJKACBZZ |
| JKACP | Kerosene-type jet fuel consumed by the transportation sector. | Thousand barrels | JKACPZZ = (JKTTPZZ / JKTTPUS) * JKACPUS<br>JKACPUS = JKTCPUS – JKEUPUS |
| JKEUB | Kerosene-type jet fuel consumed by electric utilities. | Billion Btu | JKEUBZZ = JKEUPZZ * 5.670<br>JKEUBUS = ΣJKEUBZZ |
| JKEUP | Kerosene-type jet fuel consumed by electric utilities. | Thousand barrels | JKEUPZZ is independent.<br>JKEUPUS = ΣJKEUPZZ |
| JKTCB | Kerosene-type jet fuel total consumed. | Billion Btu | JKTCBZZ = JKTCPZZ * 5.670<br>JKTCBUS = ΣJKTCBZZ |

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| JKTCP | Kerosene-type jet fuel total consumed. | Thousand barrels | JKTCPZZ = JKACPZZ + JKEUPZZ<br>JKTCPUS is independent. |
| JKTTP | Kerosene-type jet fuel total sold. | Thousand gallons | JKTTPZZ is independent.<br>JKTTPUS = ΣJKTTPZZ |
| JNACB | Naphtha-type jet fuel consumed by the transportation sector. | Billion Btu | JNACBZZ = JNTCBZZ<br>JNACBUS = JNTCBUS |
| JNACP | Naphtha-type jet fuel consumed by the transportation sector. | Thousand barrels | JNACPZZ = JNTCPZZ<br>JNACPUS = JNTCPUS |
| JNMIP | Naphtha-type jet fuel issued to the military. | Thousand barrels | JNMIPZZ is independent.<br>JNMIPUS = ΣJNMIPZZ |
| JNTCB | Naphtha-type jet fuel total consumed. | Billion Btu | JNTCBZZ = JNTCPZZ * 5.355<br>JNTCBUS = ΣJNTCBZZ |
| JNTCP | Naphtha-type jet fuel total consumed. | Thousand barrels | JNTCPZZ = (JNMIPZZ / JNMIPUS) * JNTCPUS<br>JNTCPUS is independent. |
| KSCCB | Kerosene consumed by the commercial sector. | Billion Btu | KSCCBZZ = KSCCPZZ * 5.670<br>KSCCBUS = ΣKSCCBZZ |
| KSCCP | Kerosene consumed by the commercial sector. | Thousand barrels | KSCCPZZ = (KSCMPZZ / KSTTPZZ) * KSTCPZZ<br>KSCCPUS = ΣKSCCPZZ |
| KSCMP | Kerosene sold to the commercial sector. | Thousand barrels | KSCMPZZ is independent.<br>KSCMPUS = ΣKSCMPZZ |
| KSICB | Kerosene consumed by the industrial sector. | Billion Btu | KSICBZZ = KSICPZZ * 5.670<br>KSICBUS = ΣKSICBZZ |
| KSICP | Kerosene consumed by the industrial sector. | Thousand barrels | KSICPZZ = (KSINPZZ / KSTTPZZ) * KSTCPZZ<br>KSICPUS = ΣKSICPZZ |
| KSIHP | Kerosene sold for industrial heating. | Thousand barrels | KSIHPZZ is independent.<br>KSIHPUS = ΣKSIHPZZ |
| KSINP | Kerosene sold to the industrial sector. | Thousand barrels | KSINPZZ = KSOTPZZ + KSIHPZZ<br>KSINPUS = ΣKSINPZZ |
| KSOTP | Kerosene sold for all other uses, including farm use. | Thousand barrels | KSOTPZZ is independent.<br>KSOTPUS = ΣKSOTPZZ |

| KSRCB | Kerosene consumed by the residential sector. | Billion Btu | $KSRCBZZ = KSRCPZZ * 5.670$<br>$KSRCBUS = \Sigma KSRCBZZ$ |
| KSRCP | Kerosene consumed by the residential sector. | Thousand barrels | $KSRCPZZ = (KSRSPZZ / KSTTPZZ) * KSTCPZZ$<br>$KSRCPUS = \Sigma KSRCPZZ$ |
| KSRSP | Kerosene sold to the residential sector. | Thousand barrels | KSRSPZZ is independent.<br>$KSRSPUS = \Sigma KSRSPZZ$ |
| KSTCB | Kerosene total consumed. | Billion Btu | $KSTCBZZ = KSRCBZZ + KSICBZZ + KSCCBZZ$<br>$KSTCBUS = \Sigma KSTCBZZ$ |
| KSTCP | Kerosene total consumed. | Thousand barrels | $KSTCPZZ = (KSTTPZZ / KSTTPUS) * KSTCPUS$<br>KSTCPUS is independent. |
| KSTTP | Kerosene total sold. | Thousand barrels | $KSTTPZZ = KSRSPZZ + KSCMPZZ + KSINPZZ$<br>$KSTTPUS = \Sigma KSTTPZZ$ |
| LGACB | LPG consumed by the transportation sector. | Billion Btu | $LGACBZZ = LGACPZZ * LGTCKUS$<br>$LGACBUS = \Sigma LGACBZZ$ |
| LGACP | LPG consumed by the transportation sector. | Thousand barrels | $LGACPZZ = LGCBPZZ * LGTRSUS$<br>$LGACPUS = \Sigma LGACPZZ$ |
| LGCBM | LPG sales for internal combustion engine use. | Thousand gallons | LGCBMZZ is independent.<br>$LGCBMUS = \Sigma LGCBMZZ$ |
| LGCBP | LPG consumed for internal combustion engine use. | Thousand barrels | $LGCBPZZ = LGCBMZZ / 42$<br>$LGCBPUS = \Sigma LGCBPZZ$ |
| LGCCB | LPG consumed by the commercial sector. | Billion Btu | $LGCCBZZ = LGCCPZZ * LGTCKUS$<br>$LGCCBUS = \Sigma LGCCBZZ$ |
| LGCCP | LPG consumed by the commercial sector. | Thousand barrels | $LGCCPZZ = LGHCPZZ * 0.15$<br>$LGCCPUS = \Sigma LGCCPZZ$ |
| LGHCM | LPG sold for residential and commercial use. | Thousand gallons | LGHCMZZ is independent.<br>$LGHCMUS = \Sigma LGHCMZZ$ |
| LGHCP | LPG consumed by the residential and commercial sectors. | Thousand barrels | $LGHCPZZ = LGHCMZZ / 42$<br>$LGHCPUS = \Sigma LGHCPZZ$ |
| LGICB | LPG consumed by the industrial sector. | Billion Btu | $LGICBZZ = LGICPZZ * LGTCKUS$<br>$LGICBUS = \Sigma LGICBZZ$ |

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| LGICP | LPG consumed by the industrial sector. | Thousand barrels | $LGICPZZ = LGTCPZZ - (LGRCPZZ + LGCCPZZ + LGACPZZ)$ <br> $LGICPUS = \Sigma LGICPZZ$ |
|-------|----------------------------------------|------------------|------------------------------------------------|
| LGRCB | LPG consumed by the residential sector. | Billion Btu | $LGRCBZZ = LGRCPZZ * LGTCKUS$ <br> $LGRCBUS = \Sigma LGRCBZZ$ |
| LGRCP | LPG consumed by the residential sector. | Thousand barrels | $LGRCPZZ = LGHCPZZ * 0.85$ <br> $LGRCPUS = \Sigma LGRCPZZ$ |
| LGTCB | LPG total consumed. | Billion Btu | $LGTCBZZ = LGRCBZZ + LGCCBZZ + LGICBZZ + LGACBZZ$ <br> $LGTCBUS = \Sigma LGTCBZZ$ |
| LGTCKUS | Factor for converting LPG from physical units to Btu. | Million Btu per barrel | $LGTCKUS$ is independent. |
| LGTCP | LPG total consumed. | Thousand barrels | $LGTCPZZ = (LGTTPZZ / LGTTPUS) * LGTCPUS$ <br> $LGTCPUS$ is independent. |
| LGTRSUS | The transportation sector's share of LPG internal combustion engine sales. | Fraction | $LGTRSUS$ is independent. |
| LGTTP | LPG total sold. | Thousand gallons | $LGTTPZZ$ is independent. <br> $LGTTPUS = \Sigma LGTTPZZ$ |
| LOACB | The transportation sector's share of electrical system energy losses. | Billion Btu | $LOACBZZ = ESACBZZ * ELLSS48$ <br> Exceptions: <br> $LOACBAK = (ESACBAK / ESTCBAK) * LOTCBAK$ <br> $LOACBHI = (ESACBHI / ESTCBHI) * LOTCBHI$ <br> $LOACBUS = \Sigma LOACBZZ$ |
| LOACP | The transportation sector's share of electrical system energy losses. | Million kilowatthours | $LOACPZZ = LOACBZZ / 3.412$ <br> $LOACPUS = LOACBUS / 3.412$ |
| LOCCB | The commercial sector's share of electrical system energy losses. | Billion Btu | $LOCCBZZ = ESCCBZZ * ELLSS48$ <br> Exceptions: <br> $LOCCBAK = (ESCCBAK / ESTCBAK) * LOTCBAK$ <br> $LOCCBHI = (ESCCBHI / ESTCBHI) * LOTCBHI$ <br> $LOCCBUS = \Sigma LOCCBZZ$ |
| LOCCP | The commercial sector's share of electrical system energy losses. | Million kilowatthours | $LOCCPZZ = LOCCBZZ / 3.412$ <br> $LOCCPUS = LOCCBUS / 3.412$ |
| LOICB | The industrial sector's share of electrical system energy losses. | Billion Btu | $LOICBZZ = ESICBZZ * ELLSS48$ <br> Exceptions: |

$$\text{LOICBAK} = (\text{ESICBAK} / \text{ESTCBAK}) * \text{LOTCBAK}$$
$$\text{LOICBHI} = (\text{ESICBHI} / \text{ESTCBHI}) * \text{LOTCBHI}$$
$$\text{LOICBUS} = \Sigma\text{LOICBZZ}$$

| | | | |
|---|---|---|---|
| LOICP | The industrial sector's share of electrical system energy losses. | Million kilowatthours | LOICPZZ = LOICBZZ / 3.412<br>LOICPUS = LOICBUS / 3.412 |
| LORCB | The residential sector's share of electrical system energy losses. | Billion Btu | LORCBZZ = ESRCBZZ * ELLSS48<br>  Exceptions:<br>    LORCBAK = (ESRCBAK / ESTCBAK) * LOTCBAK<br>    LORCBHI = (ESRCBHI / ESTCBHI) * LOTCBHI<br>LORCBUS = ΣLORCBZZ |
| LORCP | The residential sector's share of electrical system energy losses. | Million kilowatthours | LORCPZZ = LORCBZZ / 3.412<br>LORCPUS = LORCBUS / 3.412 |
| LOTCB | Total electrical system energy losses. | Billion Btu | LOTCBZZ = ESTCBZZ * ELLSS48<br>  Exceptions:<br>    LOTCBAK = TEEUBAK – ESTCBAK<br>    LOTCBHI = TEEUBHI – ESTCBHI<br>LOTCBUS = TEEUBUS – ESTCBUS<br>LOTCB48 = LOTCBUS – (LOTCBAK + LOTCBHI) |
| LOTCP | Total electrical system energy losses. | Million kilowatthours | LOTCPZZ = LOTCBZZ / 3.412<br>LOTCPUS = LOTCBUS / 3.412 |
| LUACB | Lubricants consumed by the transportation sector. | Billion Btu | LUACBZZ = LUACPZZ * 6.065<br>LUACBUS = ΣLUACBZZ |
| LUACP | Lubricants consumed by the transportation sector. | Thousand barrels | LUACPZZ = (LUTRPZZ / LUTTPZZ) * LUTCPZZ<br>LUACPUS = ΣLUACPZZ |
| LUICB | Lubricants consumed by the industrial sector. | Billion Btu | LUICBZZ = LUICPZZ * 6.065<br>LUICBUS = ΣLUICBZZ |
| LUICP | Lubricants consumed by the industrial sector. | Thousand barrels | LUICPZZ = (LUINPZZ / LUTTPZZ) * LUTCPZZ<br>LUICPUS = ΣLUICPZZ |
| LUINP | Lubricants sold to the industrial sector. | Thousand barrels | LUINPZZ is independent.<br>LUINPUS = ΣLUINPZZ |
| LUTCB | Lubricants total consumed. | Billion Btu | LUTCBZZ = LUICBZZ + LUACBZZ<br>LUTCBUS = ΣLUTCBZZ |
| LUTCP | Lubricants total consumed. | Thousand barrels | LUTCPZZ = (LUTTPZZ / LUTTPUS) * LUTCPUS<br>LUTCPUS is independent. |

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|---|---|---|---|
| LUTRP | Lubricants sold to the transportation sector. | Thousand barrels | LUTRPZZ is independent.<br>LUTRPUS = ΣLUTRPZZ |
| LUTTP | Lubricants total sold. | Thousand barrels | LUTTPZZ = LUINPZZ + LUTRPZZ<br>LUTTPUS = ΣLUTTPZZ |
| MBICB | Motor gasoline blending components consumed by the industrial sector. | Billion Btu | MBICBZZ = MBTCBZZ<br>MBICBUS = MBTCBUS |
| MBICP | Motor gasoline blending components consumed by the industrial sector. | Thousand barrels | MBICPZZ = MBTCPZZ<br>MBICPUS = MBTCPUS |
| MBTCB | Motor gasoline blending components total consumed. | Billion Btu | MBTCBZZ = MBTCPZZ * 5.253<br>MBTCBUS = ΣMBTCBZZ |
| MBTCP | Motor gasoline blending components total consumed. | Thousand barrels | MBTCPZZ = (COCAPZZ / COCAPUS) * MBTCPUS<br>MBTCPUS is independent. |
| MGACB | Motor gasoline consumed by the transportation sector. | Billion Btu | MGACBZZ = MGACPZZ * 5.253<br>MGACBUS = ΣMGACBZZ |
| MGACP | Motor gasoline consumed by the transportation sector. | Thousand barrels | MGACPZZ = (MGTRPZZ / MGTTPZZ) * MGTCPZZ<br>MGACPUS = ΣMGACPZZ |
| MGAGP | Motor gasoline sold for agricultural use. | Thousand gallons | MGAGPZZ is independent.<br>MGAGPUS = ΣMGAGPZZ |
| MGCCB | Motor gasoline consumed by the commercial sector. | Billion Btu | MGCCBZZ = MGCCPZZ * 5.253<br>MGCCBUS = ΣMGCCBZZ |
| MGCCP | Motor gasoline consumed by the commercial sector. | Thousand barrels | MGCCPZZ = (MGCMPZZ / MGTTPZZ) * MGTCPZZ<br>MGCCPUS = ΣMGCCPZZ |
| MGCMP | Motor gasoline sold to the commercial sector. | Thousand gallons | MGCMPZZ = MGMSPZZ + MGPNPZZ<br>MGCMPUS = ΣMGCMPZZ |
| MGCUP | Motor gasoline sold for construction use. | Thousand gallons | MGCUPZZ is independent.<br>MGCUPUS = ΣMGCUPZZ |
| MGICB | Motor gasoline consumed by the industrial sector. | Billion Btu | MGICBZZ = MGICPZZ * 5.253<br>MGICBUS = ΣMGICBZZ |
| MGICP | Motor gasoline consumed by the industrial sector. | Thousand barrels | MGICPZZ = (MGINPZZ / MGTTPZZ) * MGTCPZZ<br>MGICPUS = ΣMGICPZZ |

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|---|---|---|---|---|
| MGINP | Motor gasoline sold to the industrial sector. | Thousand gallons | MGINPZZ = MGAGPZZ + MGCUPZZ + MGIYPZZ<br>MGINPUS = ΣMGINPZZ | |
| MGIYP | Motor gasoline sold for industrial and commercial use (Federal Highway Administration terminology). | Thousand gallons | MGIYPZZ is independent<br>MGIYPUS = ΣMGIYPZZ | |
| MGMFP | Motor gasoline sold for highway use. | Thousand gallons | MGMFPZZ is independent.<br>MGMFPUS = ΣMGMFPZZ | |
| MGMRP | Motor gasoline sold for marine use. | Thousand gallons | MGMRPZZ is independent.<br>MGMRPUS = ΣMGMRPZZ | |
| MGMSP | Motor gasoline sold for miscellaneous and unclassified uses. | Thousand gallons | MGMSPZZ is independent.<br>MGMSPUS = ΣMGMSPZZ | |
| MGPNP | Motor gasoline sold for public nonhighway use. | Thousand gallons | MGPNPZZ is independent.<br>MGPNPUS = ΣMGPNPZZ | |
| MGSFP | Motor gasoline special fuels sold (primarily diesel fuel with small amounts of liquefied petroleum gases). | Thousand gallons | MGSFPZZ is independent.<br>MGSFPUS = ΣMGSFPZZ | |
| MGTCB | Motor gasoline total consumed. | Billion Btu | MGTCBZZ = MGCCBZZ + MGICBZZ + MGACBZZ<br>MGTCBUS = ΣMGTCBZZ | |
| MGTCP | Motor gasoline total consumed. | Thousand barrels | MGTCPZZ = (MGTTPZZ / MGTTPUS) * MGTCPUS<br>MGTCPUS is independent. | |
| MGTRP | Motor gasoline sold to the transportation sector. | Thousand gallons | MGTRPZZ = MGMFPZZ + MGMRPZZ – MGSFPZZ<br>MGTRPUS = ΣMGTRPZZ | |
| MGTTP | Motor gasoline total sold. | Thousand gallons | MGTTPZZ = MGCMPZZ + MGINPZZ + MGTRPZZ<br>MGTTPUS = ΣMGTTPZZ | |
| MSICB | Miscellaneous petroleum products consumed by the industrial sector. | Billion Btu | MSICBZZ = MSTCBZZ<br>MSICBUS = MSTCBUS | |
| MSICP | Miscellaneous petroleum products consumed by the industrial sector. | Thousand barrels | MSICPZZ = MSTCPZZ<br>MSICPUS = MSTCPUS | |
| MSTCB | Miscellaneous petroleum products total consumed. | Billion Btu | MSTCBZZ = MSTCPZZ * 5.796<br>MSTCBUS = ΣMSTCBZZ | |
| MSTCP | Miscellaneous petroleum products total consumed. | Thousand barrels | MSTCPZZ = (OCVAVZZ / OCVAVUS) * MSTCPUS<br>MSTCPUS is independent. | |

| NAICB | Natural gasoline consumed by the industrial sector. | Billion Btu | NAICBZZ = NATCBZZ<br>NAICBUS = NATCBUS |
|---|---|---|---|
| NAICP | Natural gasoline consumed by the industrial sector. | Thousand barrels | NAICPZZ = NATCPZZ<br>NAICPUS = NATCPUS |
| NATCB | Natural gasoline total consumed. | Billion Btu | NATCBZZ = NATCPZZ * 4.620<br>NATCBUS = ΣNATCBZZ |
| NATCP | Natural gasoline total consumed. | Thousand barrels | NATCPZZ = (OCVAVZZ / OCVAVUS) * NATCPUS<br>NATCPUS is independent. |
| NGACB | Natural gas consumed by the transportation sector. | Billion Btu | NGACBZZ = NGACPZZ * NGNUKZZ<br>NGACBUS = ΣNGACBZZ |
| NGACP | Natural gas consumed by the transportation sector. | Million cubic feet | NGACPZZ = NGPZPZZ + NGVHPZZ<br>NGACPUS = ΣNGACPZZ |
| NGCCB | Natural gas delivered to the commercial sector, used as consumption. | Billion Btu | NGCCBZZ = NGCCPZZ * NGNUKZZ<br>NGCCBUS = ΣNGCCBZZ |
| NGCCP | Natural gas delivered to the commercial sector, used as consumption. | Million cubic feet | NGCCPZZ is independent.<br>NGCCPUS = ΣNGCCPZZ |
| NGEUB | Natural gas consumed by the electric utilities. | Billion Btu | NGEUBZZ = NGEUPZZ * NGEUKZZ<br>NGEUBUS = ΣNGEUBZZ |
| NGEUK | Factor for converting natural gas consumed by the electric utilities from physical units to Btu. | Thousand Btu per cubic foot | NGEUKZZ is independent.<br>NGEUKUS = NGEUBUS / NGEUPUS |
| NGEUP | Natural gas consumed by the electric utilities. | Million cubic feet | NGEUPZZ is independent.<br>NGEUPUS = ΣNGEUPZZ |
| NGICB | Natural gas consumed by the industrial sector. | Billion Btu | NGICBZZ = NGICPZZ * NGNUKZZ<br>NGICBUS = ΣNGICBZZ |
| NGICP | Natural gas consumed by the industrial sector. | Million cubic feet | NGICPZZ = NGINPZZ + NGLEPZZ + NGPLPZZ<br>NGICPUS = ΣNGICPZZ |
| NGINP | A portion of the natural gas delivered to the industrial sector. | Million cubic feet | NGINPZZ is independent.<br>NGINPUS = ΣNGINPZZ |
| NGLPB | Natural gas consumed as lease and plant fuel. | Billion Btu | NGLPBZZ = NGLPPZZ * NGNUKZZ<br>NGLPBUS = ΣNGLPBZZ |

| NGLPP | Natural gas consumed as lease and plant fuel. | Million cubic feet | NGLPPZZ = NGLEPZZ + NGPLPZZ<br>NGLPPUS = ΣNGLPPZZ |
|---|---|---|---|
| NGLEP | Natural gas consumed as lease fuel. | Million cubic feet | NGLEPZZ is independent.<br>NGLEPUS = ΣNGLEPZZ |
| NGNUK | Factor for converting natural gas consumed by all sectors other than the electric utility sector from physical units to Btu. | Thousand Btu per cubic foot | NGNUKZZ = (NGTCBZZ – NGEUBZZ) /<br>            (NGTCPZZ – NGEUPZZ)<br>NGNUKUS = (NGTCBUS – NGEUBUS) /<br>            (NGTCPUS – NGEUPUS) |
| NGPLP | Natural gas consumed as plant fuel. | Million cubic feet | NGPLPZZ is independent.<br>NGPLPUS = ΣNGPLPZZ |
| NGPZB | Natural gas consumed as pipeline fuel. | Billion Btu | NGPZBZZ = NGPZPZZ * NGNUKZZ<br>NGPZBUS = ΣNGPZBZZ |
| NGPZP | Natural gas consumed as pipeline fuel. | Million cubic feet | NGPZPZZ is independent.<br>NGPZPUS = ΣNGPZPZZ |
| NGRCB | Natural gas delivered to the residential sector, used as consumption. | Billion Btu | NGRCBZZ = NGRCPZZ * NGNUKZZ<br>NGRCBUS = ΣNGRCBZZ |
| NGRCP | Natural gas delivered to the residential sector, used as consumption. | Million cubic feet | NGRCPZZ is independent.<br>NGRCPUS = ΣNGRCPZZ |
| NGTCB | Natural gas total consumed. | Billion Btu | NGTCBZZ = NGTCPZZ * NGTCKZZ<br>NGTCBUS = ΣNGTCBZZ |
| NGTCK | Factor for converting natural gas total consumed from physical units to Btu. | Thousand Btu per cubic foot | NGTCKZZ is independent.<br>NGTCKUS = NGTCBUS / NGTCPUS |
| NGTCP | Natural gas total consumed. | Million cubic feet | NGTCPZZ = NGRCPZZ + NGCCPZZ +<br>            NGICPZZ + NGACPZZ + NGEUPZZ<br>NGTCPUS = ΣNGTCPZZ |
| NGVHB | Natural gas consumed as vehicle fuel. | Billion Btu | NGVHBZZ = NGVHPZZ * NGNUKZZ<br>NGVHBUS = ΣNGVHBZZ |
| NGVHP | Natural gas consumed as vehicle fuel. | Million cubic feet | NGVHPZZ is independent.<br>NGVHPUS = ΣNGVHPZZ |
| NUATB | Electricity produced from nuclear power by nonutility power producers. | Billion Btu | NUATBZZ = NUATPZZ * NUEOKUS<br>NUATBUS = ΣNUATBZZ |

| | | | |
|---|---|---|---|
| NUATP | Electricity produced from nuclear power by nonutility power producers. | Million kilowatthours | NUATPZZ is independent.<br>NUATPUS = ΣNUATPZZ |
| NUEOB | Electricity produced from nuclear power at electric utilities. | Billion Btu | NUEOBZZ = NUEOPZZ * NUEOKUS<br>NUEOBUS = ΣNUEOBZZ |
| NUEOKUS | Factor for converting electricity produced from nuclear power from physical units to Btu. | Thousand Btu per kilowatthour | NUEOKUS is independent. |
| NUEOP | Electricity produced from nuclear power at electric utilities. | Million kilowatthours | NUEOPZZ is independent.<br>NUEOPUS = ΣNUEOPZZ |
| NUETB | Electricity total produced from nuclear power. | Billion Btu | NUETBZZ = NUEOBZZ + NUATBZZ<br>NUETBUS = ΣNUETBZZ |
| NUETP | Electricity total produced from nuclear power. | Million kilowatthours | NUETPZZ = NUEOPZZ + NUATPZZ<br>NUETPUS = ΣNUETPZZ |
| OCVAV | Value added in manufacture of industrial organic chemicals. | Million dollars | OCVAVZZ is independent.<br>OCVAVUS = ΣOCVAVZZ |
| PAACB | All petroleum products consumed by the transportation sector. | Billion Btu | PAACBZZ = AVACBZZ + DFACBZZ +<br>JKACBZZ + JNACBZZ + LGACBZZ +<br>LUACBZZ + MGACBZZ + RFACBZZ<br>PAACBUS = ΣPAACBZZ |
| PAACKUS | Factor for converting all petroleum products consumed by the transportation sector from physical units to Btu. | Million Btu per barrel | PAACKUS = PAACBUS / PAACPUS |
| PAACP | All petroleum products consumed by the transportation sector. | Thousand barrels | PAACPZZ = AVACPZZ + DFACPZZ +<br>JKACPZZ + JNACPZZ + LGACPZZ +<br>LUACPZZ + MGACPZZ + RFACPZZ<br>PAACPUS = ΣPAACPZZ |
| PACCB | All petroleum products consumed by the commercial sector. | Billion Btu | PACCBZZ = DFCCBZZ + KSCCBZZ +<br>LGCCBZZ + MGCCBZZ + RFCCBZZ<br>PACCBUS = ΣPACCBZZ |
| PACCKUS | Factor for converting all petroleum products consumed by the commercial sector from physical units to Btu. | Million Btu per barrel | PACCKUS = PACCBUS / PACCPUS |
| PACCP | All petroleum products consumed by the commercial sector. | Thousand barrels | PACCPZZ = DFCCPZZ + KSCCPZZ +<br>LGCCPZZ + MGCCPZZ + RFCCPZZ<br>PACCPUS = ΣPACCPZZ |

**APPENDIX B**

| PAEUB | All petroleum products consumed by the electric utilities. | Billion Btu | PAEUBZZ = DFEUBZZ + JKEUBZZ + PCEUBZZ + RFEUBZZ<br>PAEUBUS = ΣPAEUBZZ |
| PAEUKUS | Factor for converting all petroleum products consumed by the electric utilities from physical units to Btu. | Million Btu per barrel | PAEUKUS = PAEUBUS / PAEUPUS |
| PAEUP | All petroleum products consumed by the electric utilities. | Thousand barrels | PAEUPZZ = DFEUPZZ + JKEUPZZ + PCEUPZZ + RFEUPZZ<br>PAEUPUS = ΣPAEUPZZ |
| PAHCBUS | All petroleum products consumed by the residential and commercial sectors combined. | Billion Btu | PAHCBUS = PARCBUS + PACCBUS |
| PAHCKUS | Factor for converting all petroleum products consumed by the residential and commercial sectors combined from physical units to Btu. | Million Btu per barrel | PAHCKUS = PAHCBUS / PAHCPUS |
| PAHCPUS | All petroleum products consumed by the residential and commercial sectors combined. | Thousand barrels | PAHCPUS = PARCPUS + PACCPUS |
| PAICB | All petroleum products consumed by the industrial sector. | Billion Btu | PAICBZZ = ARICBZZ + DFICBZZ + KSICBZZ + LGICBZZ + LUICBZZ + MGICBZZ + RFICBZZ + POICBZZ<br>PAICBUS = ΣPAICBZZ |
| PAICKUS | Factor for converting all petroleum products consumed by the industrial sector from physical units to Btu. | Million Btu per barrel | PAICKUS = PAICBUS / PAICPUS |
| PAICP | All petroleum products consumed by the industrial sector. | Thousand barrels | PAICPZZ = ARICPZZ + DFICPZZ + KSICPZZ + LGICPZZ + LUICPZZ + MGICPZZ + RFICPZZ + POICPZZ<br>PAICPUS = ΣPAICPZZ |
| PARCB | All petroleum products consumed by the residential sector. | Billion Btu | PARCBZZ = DFRCBZZ + KSRCBZZ + LGRCBZZ<br>PARCBUS = ΣPARCBZZ |
| PARCKUS | Factor for converting all petroleum products consumed by the residential sector from physical units to Btu. | Million Btu per barrel | PARCKUS = PARCBUS / PARCPUS |
| PARCP | All petroleum products consumed by the residential sector. | Thousand barrels | PARCPZZ = DFRCPZZ + KSRCPZZ + LGRCPZZ<br>PARCPUS = ΣPARCPZZ |

| PATCB | All petroleum products consumed by all sectors. | Billion Btu | PATCBZZ = ARTCBZZ + AVTCBZZ + DFTCBZZ + JKTCBZZ + JNTCBZZ + KSTCBZZ + LGTCBZZ + LUTCBZZ + MGTCBZZ + RFTCBZZ + POTCBZZ<br>PATCBUS = ΣPATCBZZ |
|---|---|---|---|
| PATCKUS | Factor for converting all petroleum products consumed by all sectors from physical units to Btu. | Million Btu per barrel | PATCKUS = PATCBUS / PATCPUS |
| PATCP | All petroleum products consumed by all sectors. | Thousand barrels | PATCPZZ = ARTCPZZ + AVTCPZZ + DFTCPZZ + JKTCPZZ + JNTCPZZ + KSTCPZZ + LGTCPZZ + LUTCPZZ + MGTCPZZ + RFTCPZZ + POTCPZZ<br>PATCPUS = ΣPATCPZZ |
| PCEUB | Petroleum coke consumed by the electric utilities. | Billion Btu | PCEUBZZ = PCEUPZZ * 6.024<br>PCEUBUS = ΣPCEUBZZ |
| PCEUM | Petroleum coke consumed by the electric utilities. | Thousand tons | PCEUMZZ is independent.<br>PCEUMUS = ΣPCEUMZZ |
| PCEUP | Petroleum coke consumed by the electric utilities. | Thousand barrels | PCEUPZZ = PCEUMZZ * 5<br>PCEUPUS = ΣPCEUPZZ |
| PCICB | Petroleum coke consumed by the industrial sector. | Billion Btu | PCICBZZ = PCICPZZ * 6.024<br>PCICBUS = ΣPCICBZZ |
| PCICP | Petroleum coke consumed by the industrial sector. | Thousand barrels | PCICPZZ = PCRFPZZ + PCOCPZZ<br>PCICPUS = PCTCPUS – PCEUPUS |
| PCOCB | Industrial use of petroleum coke other than that used for catalytic cracking. | Billion Btu | PCOCBZZ = PCOCPZZ * 6.024<br>PCOCBUS = ΣPCOCBZZ |
| PCOCP | Industrial use of petroleum coke other than that used for catalytic cracking. | Thousand barrels | PCOCPZZ = (AICAPZZ / AICAPUS) * PCOCPUS<br>PCOCPUS = PCICPUS – PCRFPUS |
| PCRFB | Petroleum coke used at refineries as both catalytic and marketable coke. | Billion Btu | PCRFBZZ = PCRFPZZ * 6.024<br>PCRFBUS = ΣPCRFBZZ |
| PCRFP | Petroleum coke used at refineries as both catalytic and marketable coke. | Thousand barrels | PCRFPZZ = (CTCAPZZ / CTCAPGZ) * PCRFPGZ or (CTCAPZZ / CTCAPPZ) * PCRFPPZ or is independent.<br>PCRFPUS is independent. |

| | PCTCB | Petroleum coke total consumed. | Billion Btu | PCTCBZZ = PCICBZZ + PCEUBZZ<br>PCTCBUS = ΣPCTCBZZ |
|---|---|---|---|---|
| | PCTCP | Petroleum coke total consumed. | Thousand barrels | PCTCPZZ = PCICPZZ + PCEUPZZ<br>PCTCPUS is independent. |
| | PIVAV | Value added in the manufacture of paints<br>and allied products. | Million dollars | PIVAVZZ is independent.<br>PIVAVUS = ΣPIVAVZZ |
| | PLICB | Plant condensate consumed by the industrial<br>sector. | Billion Btu | PLICBZZ = PLTCBZZ<br>PLICBUS = PLTCBUS |
| | PLICP | Plant condensate consumed by the industrial<br>sector. | Thousand barrels | PLICPZZ = PLTCPZZ<br>PLICPUS = PLTCPUS |
| | PLTCB | Plant condensate total consumed. | Billion Btu | PLTCBZZ = PLTCPZZ * 5.418<br>PLTCBUS = ΣPLTCBZZ |
| | PLTCP | Plant condensate total consumed. | Thousand barrels | PLTCPZZ = (OCVAVZZ / OCVAVUS) * PLTCPUS<br>PLTCPUS is independent. |
| | POICB | Other petroleum products consumed by the<br>industrial sector. | Billion Btu | POICBZZ = ABICBZZ + COICBZZ +<br>FNICBZZ + FOICBZZ + FSICBZZ +<br>MBICBZZ + MSICBZZ + NAICBZZ +<br>PCICBZZ + PLICBZZ + PPICBZZ +<br>SGICBZZ + SNICBZZ + UOICBZZ +<br>USICBZZ + WXICBZZ<br>POICBUS = ΣPOICBZZ |
| | POICP | Other petroleum products consumed by the<br>industrial sector. | Thousand barrels | POICPZZ = ABICPZZ + COICPZZ +<br>FNICPZZ + FOICPZZ + FSICPZZ +<br>MBICPZZ + MSICPZZ + NAICPZZ +<br>PCICPZZ + PLICPZZ + PPICPZZ +<br>SGICPZZ + SNICPZZ + UOICPZZ +<br>USICPZZ + WXICPZZ<br>POICPUS = ΣPOICPZZ |
| | POTCB | Other petroleum products total consumed. | Billion Btu | POTCBZZ = ABTCBZZ + COTCBZZ +<br>FNTCBZZ + FOTCBZZ + FSTCBZZ +<br>MBTCBZZ + MSTCBZZ + NATCBZZ +<br>PCTCBZZ + PLTCBZZ + PPTCBZZ +<br>SGTCBZZ + SNTCBZZ + UOTCBZZ +<br>USTCBZZ + WXTCBZZ<br>POTCBUS = ΣPOTCBZZ |

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|---|---|---|---|
| POTCP | Other petroleum products total consumed. | Thousand barrels | POTCPZZ = ABTCPZZ + COTCPZZ + FNTCPZZ + FOTCPZZ + FSTCPZZ + MBTCPZZ + MSTCPZZ + NATCPZZ + PCTCPZZ + PLTCPZZ + PPTCPZZ + SGTCPZZ + SNTCPZZ + UOTCPZZ + USTCPZZ + WXTCPZZ<br>POTCPUS = ΣPOTCPZZ |
| PPICB | Pentanes plus consumed by the industrial sector. | Billion Btu | PPICBZZ = PPTCBZZ<br>PPICBUS = PPTCBUS |
| PPICP | Pentanes plus consumed by the industrial sector. | Thousand barrels | PPICPZZ = PPTCPZZ<br>PPICPUS = PPTCPUS |
| PPTCB | Pentanes plus total consumed. | Billion Btu | PPTCBZZ = PPTCPZZ * 4.620<br>PPTCBUS = ΣPPTCBZZ |
| PPTCP | Pentanes plus total consumed. | Thousand barrels | PPTCPZZ = (OCVAVZZ / OCVAVUS) * PPTCPUS<br>PPTCPUS is independent. |
| RDICP | Road oil consumed by the industrial sector. | Thousand barrels | RDICPZZ = (RDINPZZ / RDINPUS) * RDTCPUS<br>RDICPUS = ΣRDICPZZ |
| RDINP | Road oil sold to the industrial sector. | Short tons | RDINPZZ is independent.<br>RDINPUS = ΣRDINPZZ |
| RDTCP | Road oil total consumed. | Thousand barrels | RDTCPZZ = RDICPZZ<br>RDTCPUS is independent. |
| REACB | Renewable energy sources consumed by the transportation sector. | Billion Btu | REACBZZ = ENACBZZ<br>REACBUS = ENACBUS |
| REACP | Renewable energy sources consumed by the transportation sector. | Thousand gallons | REACPZZ = ENACPZZ<br>REACPUS = ENACPUS |
| REEOB | Renewable energy sources consumed by the electric utilities. | Billion Btu | REEOBZZ = HVENBZZ + GEENBZZ + WWEOBZZ + WNEOBZZ<br>REEOBUS = HVENBUS + GEENBUS + WWEOBUS + WNEOBUS |
| REEOP | Renewable energy sources consumed by the electric utilities. | Million kilowatthours | REEOPZZ = HVENPZZ + GEENPZZ + WWEOPZZ + WNEOPZZ<br>REEOPUS = HVENPUS + GEENPUS + WWEOPUS + WNEOPUS |

| RECCB | Renewable energy sources consumed by the commercial sector. | Billion Btu | RECCBZZ = WDCCBZZ + GECCBZZ<br>RECCBUS = WDCCBUS + GECCBUS |
| REICB | Renewable energy sources consumed by the<br><br>industrial sector. | Billion Btu | REICBZZ = GEICBZZ + HVATBZZ + SOICBZZ +<br>WWICBZZ + WYICBZZ<br>REICBUS = GEICBUS + HVATBUS + SOICBUS +<br>WWICBUS + WYICBUS |
| RERCB | Renewable energy sources consumed by the residential sector. | Billion Btu | RERCBZZ = WDRCBZZ + GERCBZZ + SOHCBZZ<br>RERCBUS = WDRCBUS + GERCBUS + SOHCBUS |
| RETCB | Renewable energy sources total consumed. | Billion Btu | RETCBZZ = RERCBZZ + RECCBZZ + REICBZZ +<br>REACBZZ + REEOBZZ<br>RETCBUS = RERCBUS + RECCBUS + REICBUS +<br>REACBUS + REEOBUS |
| RFACB | Residual fuel consumed by the transportation sector. | Billion Btu | RFACBZZ = RFACPZZ * 6.287<br>RFACBUS = ΣRFACBZZ |
| RFACP | Residual fuel consumed by the transportation sector. | Thousand barrels | RFACPZZ = (RFTRPZZ / RFNDPZZ) * RFNCPZZ<br>RFACPUS = ΣRFACPZZ |
| RFBKP | Residual fuel sold for vessel bunkering use, excluding deliveries to the Armed Forces. | Thousand barrels | RFBKPZZ is independent.<br>RFBKPUS = ΣRFBKPZZ |
| RFCCB | Residual fuel consumed by the commercial sector. | Billion Btu | RFCCBZZ = RFCCPZZ * 6.287<br>RFCCBUS = ΣRFCCBZZ |
| RFCCP | Residual fuel consumed by the commercial sector. | Thousand barrels | RFCCPZZ = (RFCMPZZ / RFNDPZZ) * RFNCPZZ<br>RFCCPUS = ΣRFCCPZZ |
| RFCMP | Residual fuel sold to the commercial sector. | Thousand barrels | RFCMPZZ is independent.<br>RFCMPUS = ΣRFCMPZZ |
| RFEUB | Residual fuel consumed by the electric utilities. | Billion Btu | RFEUBZZ = RFEUPZZ * 6.287<br>RFEUBUS = ΣRFEUBZZ |
| RFEUP | Residual fuel consumed by the electric utilities. | Thousand barrels | RFEUPZZ is independent.<br>RFEUPUS = ΣRFEUPZZ |
| RFIBP | A portion of residual fuel sold for industrial use, including industrial space heating. | Thousand barrels | RFIBPZZ is independent.<br>RFIBPUS = ΣRFIBPZZ |
| RFICB | Residual fuel consumed by the industrial sector. | Billion Btu | RFICBZZ = RFICPZZ * 6.287<br>RFICBUS = ΣRFICBZZ |

| RFICP | Residual fuel consumed by the industrial sector. | Thousand barrels | RFICPZZ = (RFINPZZ / RFNDPZZ) * RFNCPZZ<br>RFICPUS = ΣRFICPZZ |
|---|---|---|---|
| RFINP | Residual fuel sold to the industrial sector. | Thousand barrels | RFINPZZ = RFIBPZZ + RFOCPZZ + RFMSPZZ<br>RFINPUS = ΣRFINPZZ |
| RFMIP | Residual fuel sold to the Armed Forces, regardless of use. | Thousand barrels | RFMIPZZ is independent.<br>RFMIPUS = ΣRFMIPZZ |
| RFMSP | Residual fuel sold for miscellaneous uses. | Thousand barrels | RFMSPZZ is independent.<br>RFMSPUS = ΣRFMSPZZ |
| RFNCP | Residual fuel consumption by all sectors other than the electric utility sector. | Thousand barrels | RFNCPZZ = (RFNDPZZ / RFNDPUS) * RFNCPUS<br>RFNCPUS = RFTCPUS – RFEUPUS |
| RFNDP | Residual fuel sold to all sectors other than the electric utility sector. | Thousand barrels | RFNDPZZ = RFCMPZZ + RFINPZZ + RFTRPZZ<br>RFNDPUS = ΣRFNDPZZ |
| RFOCP | Residual fuel sold for use by oil companies. | Thousand barrels | RFOCPZZ is independent.<br>RFOCPUS = ΣRFOCPZZ |
| RFRRP | Residual fuel sold for use by railroads. | Thousand barrels | RFRRPZZ is independent.<br>RFRRPUS = ΣRFRRPZZ |
| RFTCB | Residual fuel total consumed. | Billion Btu | RFTCBZZ = RFCCBZZ + RFICBZZ + RFACBZZ + RFEUBZZ<br>RFTCBUS = ΣRFTCBZZ |
| RFTCP | Residual fuel total consumed. | Thousand barrels | RFTCPZZ = RFNCPZZ + RFEUPZZ<br>RFTCPUS is independent. |
| RFTRP | Residual fuel sold to the transportation sector. | Thousand barrels | RFTRPZZ = RFBKPZZ + RFMIPZZ + RFRRPZZ<br>RFTRPUS = ΣRFTRPZZ |
| SGICB | Still gas consumed by the industrial sector. | Billion Btu | SGICBZZ = SGTCBZZ<br>SGICBUS = SGTCBUS |
| SGICP | Still gas consumed by the industrial sector. | Thousand barrels | SGICPZZ = SGTCPZZ<br>SGICPUS = SGTCPUS |
| SGTCB | Still gas total consumed. | Billion Btu | SGTCBZZ = SGTCPZZ * 6.000<br>SGTCBUS = ΣSGTCBZZ |
| SGTCP | Still gas total consumed. | Thousand barrels | SGTCPZZ = (COCAPZZ / COCAPUS) * SGTCPUS<br>SGTCPUS is independent. |

| | | | |
|---|---|---|---|
| SNICB | Special naphthas consumed by the industrial sector. | Billion Btu | SNICBZZ = SNTCBZZ<br>SNICBUS = SNTCBUS |
| SNICP | Special naphthas consumed by the industrial sector. | Thousand barrels | SNICPZZ = SNTCPZZ<br>SNICPUS = SNTCPUS |
| SNTCB | Special naphthas total consumed. | Billion Btu | SNTCBZZ = SNTCPZZ * 5.248<br>SNTCBUS = ΣSNTCBZZ |
| SNTCP | Special naphthas total consumed. | Thousand barrels | SNTCPZZ = (PIVAVZZ / PIVAVUS) * SNTCPUS<br>SNTCPUS is independent. |
| SOEOB | Electricity produced from photovoltaic and solar thermal energy by electric utilities. | Billion Btu | SOEOBZZ = SOEOPZZ * FFEOKUS<br>SOEOBUS = ΣSOEOBZZ |
| SOEOP | Electricity produced from photovoltaic and solar thermal energy by electric utilities. | Million kilowatthours | SOEOPZZ is independent.<br>SOEOPUS = ΣSOEOPZZ |
| SOHCB | Solar thermal energy consumed by the residential and commercial sectors. | Billion Btu | SOHCBZZ = (SOTTPZZ / SOTTPUS) * SOHCBUS<br>SOHCBUS is independent. |
| SOICB | Electricity produced from photovoltaic and solar thermal energy sources in the industrial sector. | Billion Btu | SOICBZZ = SOICPZZ * FFEOKUS<br>SOICBUS = ΣSOICBZZ |
| SOICP | Electricity produced from photovoltaic and solar thermal energy sources in the industrial sector. | Million kilowatthours | SOICPZZ is independent.<br>SOICPUS = ΣSOICPZZ |
| SOTCB | Photovoltaic and solar thermal energy sources total consumed. | Billion Btu | SOTCBZZ = SOHCBZZ + SOICBZZ + SOEOBZZ<br>SOTCBUS = ΣSOTCBZZ |
| SOTTP | Shipments of solar thermal collectors. | Square feet | SOTTPZZ is independent.<br>SOTTPUS = ΣSOTTPZZ |
| TEACB | Total energy consumed by the transportation sector. | Billion Btu | TEACBZZ = CLACBZZ + NGACBZZ + PAACBZZ + ESACBZZ + LOACBZZ<br>TEACBUS = CLACBUS + NGACBUS + PAACBUS + ESACBUS + LOACBUS |
| TEAPB | The transportation sector's energy consumption per capita. | Million Btu | TEAPBZZ = TEACBZZ / TPOPPZZ<br>TEAPBUS = TEACBUS / TPOPPUS |
| TECCB | Total energy consumed by the commercial sector. | Billion Btu | TECCBZZ = CLCCBZZ + NGCCBZZ + PACCBZZ + WDCCBZZ + GECCBZZ + ESCCBZZ + LOCCBZZ |

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|---|---|---|---|
| | | | TECCBUS = CLCCBUS + NGCCBUS + PACCBUS + WDCCBUS + GECCBUS + ESCCBUS + LOCCBUS |
| TECPB | The commercial sector's energy consumption per capita. | Million Btu | TECPBZZ = TECCBZZ / TPOPPZZ<br>TECPBUS = TECCBUS / TPOPPUS |
| TEEUB | Total energy consumed by the electric utilities plus net imports of electricity into the United States. | Billion Btu | TEEUBZZ = CLEUBZZ + NGEUBZZ + PAEUBZZ + HYENBZZ + NUEOBZZ + GEENBZZ + WWEOBZZ + WNEOBZZ + EXNIBZZ<br>TEEUBUS = CLEUBUS + NGEUBUS + PAEUBUS + HYENBUS + NUEOBUS + GEENBUS + WWEOBUS + WNEOBUS + EXNIBUS |
| TEICB | Total energy consumed by the industrial sector. | Billion Btu | TEICBZZ = CLICBZZ + NGICBZZ + PAICBZZ + HYATBZZ + WWICBZZ + GOICBZZ + ESICBZZ + LOICBZZ<br>TEICBUS = CLICBUS + NGICBUS + PAICBUS + HYATBUS + WWICBUS + GOICBUS + ESICBUS + LOICBUS + CCNIBUS |
| TEIPB | The industrial sector's energy consumption per capita. | Million Btu | TEIPBZZ = TEICBZZ / TPOPPZZ<br>TEIPBUS = TEICBUS / TPOPPUS |
| TERCB | Total energy consumed by the residential sector. | Billion Btu | TERCBZZ = CLRCBZZ + NGRCBZZ + PARCBZZ + WDRCBZZ + GERCBZZ + SOHCBZZ + ESRCBZZ + LORCBZZ<br>TERCBUS = CLRCBUS + NGRCBUS + PARCBUS + WDRCBUS + GERCBUS + SOHCBUS + ESRCBUS + LORCBUS |
| TERPB | The residential sector's energy consumption per capita. | Million Btu | TERPBZZ = TERCBZZ / TPOPPZZ<br>TERPBUS = TERCBUS / TPOPPUS |
| TESSB | Total energy consumed (sum of the four end-use sectors). CSEDS cross-check not used in *SEDR* tables. | Billion Btu | TESSBZZ = TERCBZZ + TECCBZZ + TEICBZZ + TEACBZZ<br>TESSBUS = TERCBUS + TECCBUS + TEICBUS + TEACBUS |
| TETCB | Total energy consumed (sum of all energy sources) used in *SEDR* tables. | Billion Btu | TETCBZZ = CLTCBZZ + NGTCBZZ + PATCBZZ + NUETBZZ + HYTCBZZ + WWTCBZZ + GOTCBZZ + EXNIBZZ + ELISBZZ<br>TETCBUS = CLTCBUS + CCNIBUS + NGTCBUS + PATCBUS + NUETBUS + HYTCBUS + WWTCBUS + GOTCBUS + EXNIBUS |

| | | | |
|---|---|---|---|
| TETPB | Total energy consumption per capita. | Million Btu | TETPBZZ = TETCBZZ / TPOPPZZ<br>TETPBUS = TETCBUS / TPOPPUS |
| TNACB | Total net energy consumed by the transporta-<br>tion sector excluding the sector's share of<br>electrical system energy losses. | Billion Btu | TNACBZZ = TEACBZZ – LOACBZZ<br>TNACBUS = TEACBUS – LOACBUS |
| TNCCB | Total net energy consumed by the commercial<br>sector excluding the sector's share of<br>electrical system energy losses. | Billion Btu | TNCCBZZ = TECCBZZ – LOCCBZZ<br>TNCCBUS = TECCBUS – LOCCBUS |
| TNICB | Total net energy consumed by the industrial<br>sector excluding the sector's share of<br>electrical system energy losses. | Billion Btu | TNICBZZ = TEICBZZ – LOICBZZ<br>TNICBUS = TEICBUS – LOICBUS |
| TNRCB | Total net energy consumed by the residential<br>sector excluding the sector's share of<br>electrical system energy losses. | Billion Btu | TNRCBZZ = TERCBZZ – LORCBZZ<br>TNRCBUS = TERCBUS – LORCBUS |
| TPOPP | The resident population including the Armed<br>Forces residing in each State. | Thousand | TPOPPZZ is independent.<br>TPOPPUS is independent. |
| UOICB | Unfinished oils consumed by the industrial<br>sector. | Billion Btu | UOICBZZ = UOTCBZZ<br>UOICBUS = UOTCBUS |
| UOICP | Unfinished oils consumed by the industrial<br>sector. | Thousand barrels | UOICPZZ = UOTCPZZ<br>UOICPUS = UOTCPUS |
| UOTCB | Unfinished oils total consumed. | Billion Btu | UOTCBZZ = UOTCPZZ * 5.825<br>UOTCBUS = ΣUOTCBZZ |
| UOTCP | Unfinished oils total consumed. | Thousand barrels | UOTCPZZ = (COCAPZZ / COCAPUS) * UOTCPUS<br>UOTCPUS is independent. |
| USICB | Unfractionated stream consumed by the<br>industrial sector. | Billion Btu | USICBZZ = USTCBZZ<br>USICBUS = USTCBUS |
| USICP | Unfractionated stream consumed by the<br>industrial sector. | Thousand barrels | USICPZZ = USTCPZZ<br>USICPUS = USTCPUS |
| USTCB | Unfractionated stream total consumed. | Billion Btu | USTCBZZ = USTCPZZ * 5.418<br>USTCBUS = ΣUSTCBZZ |
| USTCP | Unfractionated stream total consumed. | Thousand barrels | USTCPZZ = (OCVAVZZ / OCVAVUS) * USTCPUS<br>USTCPUS is independent. |

| | | | |
|---|---|---|---|
| WDCCB | Wood energy consumed by the commercial sector. | Billion Btu | WDCCBZZ = (WDRCPZZ / WDRCPUS) * WDCCBUS<br>WDCCBUS is independent. |
| WDCCP | Wood energy consumed by the commercial sector. | Thousand cords | WDCCPZZ = WDCCBZZ / 20<br>WDCCPUS = ΣWDCCPZZ |
| WDEOB | Electricity produced from wood energy sources at electric utilities. | Billion Btu | WDEOBZZ = WDEOPZZ * FFEOKUS<br>WDEOBUS = ΣWDEOBZZ |
| WDEOP | Electricity produced from wood energy sources at electric utilities. | Million kilowatthours | WDEOPZZ is independent.<br>WDEOPUS = ΣWDEOPZZ |
| WDRCB | Wood energy consumed by the residential sector. | Billion Btu | WDRCBZZ = WDRCPZZ * 20<br>WDRCBUS = ΣWDRCBZZ |
| WDRCP | Wood energy consumed by the residential sector. | Thousand cords | WDRCPZZ is independent.<br>WDRCPUS = ΣWDRCPZZ |
| WNEOB | Electricity produced from wind, photo-voltaic, and solar thermal energy sources at electric utilities. | Billion Btu | WNEOBZZ = SOEOBZZ + WYEOBZZ<br>WNEOBUS = ΣWNEOBZZ |
| WNEOP | Electricity produced from wind, photo-voltaic, and solar thermal energy sources at electric utilities. | Million kilowatthours | WNEOPZZ = SOEOPZZ + WYEOPZZ<br>WNEOPUS = ΣWNEOPZZ |
| WSEOB | Electricity produced from waste energy sources at electric utilities. | Billion Btu | WSEOBZZ = WSEOPZZ * FFEOKUS<br>WSEOBUS = ΣWSEOBZZ |
| WSEOP | Electricity produced from waste energy sources at electric utilities. | Million kilowatthours | WSEOPZZ is independent.<br>WSEOPUS = ΣWSEOPZZ |
| WWATB | Electricity produced from wood and waste at nonutility power producers. | Billion Btu | WWATBZZ is independent.<br>WWATBUS = ΣWWATBZZ |
| WWATP | Electricity produced from wood and waste at nonutility power producers. | Million kilowatthours | WWATPZZ is independent.<br>WWATPUS = ΣWWATPZZ |
| WWEOB | Electricity produced from wood and waste at electric utilities. | Billion Btu | WWEOBZZ = WDEOBZZ + WSEOBZZ<br>WWEOBUS = ΣWWEOBZZ |
| WWEOP | Electricity produced from wood and waste at electric utilities. | Million kilowatthours | WWEOPZZ = WDEOPZZ + WSEOPZZ<br>WWEOPUS = ΣWWEOPZZ |

| WWICB | Wood and waste consumed by the industrial sector. | Billion Btu | WWICBZZ = WWATBZZ + WWINBZZ<br>WWICBUS = ΣWWICBZZ |
|---|---|---|---|
| WWINB | Wood and waste consumed by the manufacturing portion of the industrial sector. | Billion Btu | WWINBZZ is independent.<br>WWINBUS = ΣWWINBZZ |
| WWTCB | Wood and waste total consumed. | Billion Btu | WWTCBZZ = WDRCBZZ + WDCCBZZ + WWICBZZ + WWEOBZZ<br>WWTCBUS = ΣWWTCBZZ |
| WXICB | Waxes consumed by the industrial sector. | Billion Btu | WXICBZZ = WXTCBZZ<br>WXICBUS = WXTCBUS |
| WXICP | Waxes consumed by the industrial sector. | Thousand barrels | WXICPZZ = WXTCPZZ<br>WXICPUS = WXTCPUS |
| WXTCB | Waxes total consumed. | Billion Btu | WXTCBZZ = WXTCPZZ * 5.537<br>WXTCBUS = ΣWXTCBZZ |
| WXTCP | Waxes total consumed. | Thousand barrels | WXTCPZZ = (CGVAVZZ / CGVAVUS) * WXTCPUS<br>WXTCPUS is independent. |
| WYEOB | Electricity produced from wind energy at electric utilities. | Billion Btu | WYEOBZZ = WYEOPZZ * FFEOKUS<br>WYEOBUS = ΣWYEOBZZ |
| WYEOP | Electricity produced from wind energy at electric utilities. | Million kilowatthours | WYEOPZZ is independent.<br>WYEOPUS = ΣWYEOPZZ |
| WYICB | Electricity produced from wind energy by the industrial sector. | Billion Btu | WYICBZZ = WYICPZZ * FFEOKUS<br>WYICBUS = ΣWYICBZZ |
| WYICP | Electricity produced from wind energy by the industrial sector. | Million kilowatthours | WYICPZZ is independent.<br>WYICPUS = ΣWYICPZZ |
| WYTCB | Electricity produced from wind energy total produced. | Billion Btu | WYTCBZZ = WYICBZZ + WYEOBZZ<br>WYTCBUS = ΣWYTCBZZ |

Appendix C

# Thermal Conversion Factors

**Table C1.  Approximate Heat Content of Petroleum and Coal and Heat Rates for Electricity, 1960-1999**

| | Petroleum Consumption | | | Anthracite Consumption | | | | Electricity Net Generation | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Liquefied Petroleum Gases (LGTCKUS) | Motor Gasoline (MGTCKUS) | Total Petroleum Products a (PATCKUS) | Sectors Other Electric (ACNUKUS) | Electric Utilities (ACEUKUS) | Total a (ACTCKUS) | Bituminous Coal and Lignite Consumption a (BCTCKUS) | Fossil-Fueled Steam-Electric Plants b (FFEOKUS) | Nuclear Steam-Electric Plants (NUEOKUS) | Geothermal Energy Plants (GEEOKUS) |
| | Million Btu per Barrel | | | Million Btu per Short Ton | | | | Btu per Kilowatthour | | |
| 1960 | 4.011 | 5.253 | 5.55503 | 24.721 | 17.500 | 23.592 | 24.765 | 10,760 | 11,629 | 23,200 |
| 1961 | 4.011 | 5.253 | 5.55163 | 24.870 | 17.500 | 23.707 | 24.693 | 10,650 | 11,629 | 23,200 |
| 1962 | 4.011 | 5.253 | 5.54496 | 24.666 | 17.500 | 23.515 | 24.668 | 10,558 | 11,629 | 23,200 |
| 1963 | 4.011 | 5.253 | 5.53379 | 24.110 | 17.500 | 23.107 | 24.639 | 10,482 | 11,877 | 22,182 |
| 1964 | 4.011 | 5.253 | 5.52758 | 24.164 | 17.500 | 23.128 | 24.652 | 10,462 | 11,912 | 22,182 |
| 1965 | 4.011 | 5.253 | 5.53200 | 24.316 | 17.500 | 23.175 | 24.575 | 10,453 | 11,804 | 22,182 |
| 1966 | 4.011 | 5.253 | 5.53178 | 24.193 | 17.500 | 22.906 | 24.431 | 10,415 | 11,623 | 22,182 |
| 1967 | 3.838 | 5.253 | 5.51469 | 23.506 | 17.500 | 22.291 | 24.287 | 10,432 | 11,555 | 21,770 |
| 1968 | 3.818 | 5.253 | 5.50368 | 23.293 | 17.500 | 22.037 | 24.229 | 10,398 | 11,297 | 21,606 |
| 1969 | 3.805 | 5.253 | 5.49220 | 23.200 | 17.500 | 22.003 | 24.011 | 10,447 | 11,037 | 21,606 |
| 1970 | 3.779 | 5.253 | 5.50317 | 23.476 | 17.500 | 22.102 | 23.461 | 10,494 | 10,977 | 21,606 |
| 1971 | 3.772 | 5.253 | 5.50449 | 23.572 | 17.500 | 22.210 | 23.138 | 10,478 | 10,837 | 21,655 |
| 1972 | 3.760 | 5.253 | 5.50004 | 23.403 | 17.500 | 21.822 | 23.050 | 10,379 | 10,792 | 21,668 |
| 1973 | 3.746 | 5.253 | 5.51461 | 22.674 | 17.920 | 21.464 | 23.073 | 10,389 | 10,903 | 21,674 |
| 1974 | 3.730 | 5.253 | 5.50388 | 22.330 | 17.200 | 20.919 | 22.694 | 10,442 | 11,161 | 21,674 |
| 1975 | 3.715 | 5.253 | 5.49427 | 22.272 | 17.064 | 20.762 | 22.522 | 10,406 | 11,013 | 21,611 |
| 1976 | 3.711 | 5.253 | 5.50448 | 22.618 | 17.526 | 21.254 | 22.509 | 10,373 | 11,047 | 21,611 |
| 1977 | 3.677 | 5.253 | 5.51825 | 24.101 | 17.244 | 22.066 | 22.266 | 10,435 | 10,769 | 21,611 |
| 1978 | 3.669 | 5.253 | 5.51865 | 24.388 | 17.104 | 22.398 | 22.014 | 10,361 | 10,941 | 21,611 |
| 1979 | 3.680 | 5.253 | 5.49383 | 24.272 | 17.454 | 22.069 | 22.100 | 10,353 | 10,879 | 21,545 |
| 1980 | 3.674 | 5.253 | 5.47933 | 22.719 | 17.652 | 21.405 | 21.950 | 10,388 | 10,908 | 21,639 |
| 1981 | 3.643 | 5.253 | 5.44818 | 23.749 | 18.168 | 22.080 | 21.710 | 10,453 | 11,030 | 21,639 |
| 1982 | 3.615 | 5.253 | 5.41514 | 24.578 | 18.160 | 22.518 | 21.670 | 10,454 | 11,073 | 21,629 |
| 1983 | 3.614 | 5.253 | 5.40567 | 24.536 | 16.516 | 21.583 | 21.576 | 10,520 | 10,905 | 21,290 |
| 1984 | 3.599 | 5.253 | 5.39530 | 25.128 | 17.018 | 22.322 | 21.570 | 10,440 | 10,843 | 21,303 |
| 1985 | 3.603 | 5.253 | 5.38744 | 23.031 | 16.784 | 20.817 | 21.368 | 10,447 | 10,813 | 21,263 |
| 1986 | 3.640 | 5.253 | 5.41832 | 24.399 | 15.578 | 21.512 | 21.462 | 10,446 | 10,799 | 21,263 |
| 1987 | 3.659 | 5.253 | 5.40281 | 26.293 | 15.962 | 22.435 | 21.514 | 10,419 | 10,776 | 21,263 |
| 1988 | 3.652 | 5.253 | 5.41017 | 26.021 | 17.312 | 22.423 | 21.324 | 10,324 | 10,743 | 21,096 |
| 1989 | 3.683 | 5.253 | 5.40967 | 27.196 | 16.310 | 22.623 | 21.268 | 10,432 | 10,724 | 21,096 |
| 1990 | 3.625 | 5.253 | 5.41084 | 25.199 | 16.140 | 21.668 | 21.330 | 10,402 | 10,680 | 21,096 |
| 1991 | 3.614 | 5.253 | 5.38408 | 25.268 | 15.858 | 21.410 | 21.146 | 10,436 | 10,740 | 20,997 |
| 1992 | 3.624 | 5.253 | 5.37773 | 24.617 | 16.944 | 21.423 | 21.142 | 10,342 | 10,678 | 20,914 |
| 1993 | 3.606 | 5.253 | 5.37911 | 24.096 | 16.534 | 21.262 | 20.983 | 10,309 | 10,682 | 20,914 |
| 1994 | 3.635 | c 5.230 | 5.36097 | 25.037 | 14.680 | 20.828 | 21.011 | 10,316 | 10,676 | 20,914 |
| 1995 | 3.623 | 5.215 | 5.34138 | 24.696 | 14.572 | 20.808 | 20.845 | 10,312 | 10,658 | 20,914 |
| 1996 | 3.613 | 5.216 | 5.33638 | 24.638 | 14.360 | 20.652 | 20.857 | 10,340 | 10,623 | 20,960 |
| 1997 | 3.616 | 5.213 | 5.33598 | 24.497 | 15.022 | 20.878 | 20.861 | 10,357 | 10,623 | 20,960 |
| 1998 | 3.614 | 5.212 | 5.34900 | 24.497 | 15.022 | 20.878 | 20.861 | 10,346 | 10,623 | 21,017 |
| 1999 | 3.616 | 5.211 | 5.32807 | 24.497 | 15.022 | 20.878 | 20.861 | 10,346 | 10,623 | 21,017 |

a  This factor is not actually applied in CSEDS but is displayed here for information.
b  This factor is the average for electricity generated at U.S. fossil-fueled steam-electric plants.  In CSEDS, it is applied to convert hydroelectricity, electricity generated for distribution from wood, waste, wind, photovoltaic, and solar thermal energy, and imports and exports of electricity produced at hydroelectric and conventional power plants.

c  There is a discontinuity in this time series between 1993 and 1994; beginning in 1994, the single constant factor is replaced by a factor that is a quantity-weighted average of motor gasoline's major components.
Sources: See source listing at the end of this appendix.

**Table C2. Approximate Heat Content of Natural Gas Consumed by Electric Utilities, 1960-1985, Selected Years**

(Thousand Btu per Cubic Foot)

| State | 1960 | 1965 | 1970 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1.03500 | 1.03400 | 1.03100 | 1.03300 | 1.15300 | 1.18200 | 1.12600 | 1.12100 | 1.13300 | 1.13400 | 1.12500 | 1.10300 | 1.12400 | 1.09900 |
| Alaska | — | 1.01000 | 1.00500 | 1.00600 | 1.00600 | 1.00600 | 1.00600 | 1.00600 | 1.00600 | 1.00600 | 1.00500 | 1.00600 | 1.00600 | 1.00600 |
| Arizona | 1.03500 | 1.07600 | 1.05900 | 1.07100 | 1.07200 | 1.06600 | 1.06400 | 1.05700 | 1.05700 | 1.04900 | 1.05100 | 1.04200 | 1.05100 | 1.05900 |
| Arkansas | 1.03500 | 1.00100 | 1.00400 | 1.01100 | 1.01300 | 1.05100 | 1.05300 | 1.02600 | 1.02600 | 1.02300 | 1.03200 | 1.03500 | 1.03700 | 1.05500 |
| California | 1.03500 | 1.07300 | 1.05400 | 1.06300 | 1.06100 | 1.05900 | 1.06000 | 1.05500 | 1.05200 | 1.05500 | 1.05300 | 1.04800 | 1.05000 | 1.05100 |
| Colorado | 1.03500 | 0.91200 | 0.97400 | 0.99600 | 0.99200 | 0.98800 | 0.99200 | 0.98200 | 0.98100 | 0.97500 | 0.96400 | 0.98900 | 0.98800 | 0.98900 |
| Connecticut | 1.03500 | 1.02200 | 1.01600 | 1.00500 | 1.00800 | — | — | — | — | — | — | — | 1.02800 | 1.03100 |
| Delaware | 1.03500 | 1.04300 | 1.02000 | 1.07300 | 1.07800 | 1.10300 | 1.07000 | 1.04300 | 1.04200 | 1.03600 | 1.03300 | 1.03500 | 1.03900 | 1.03800 |
| District of Columbia | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Florida | 1.03500 | 1.03700 | 1.04100 | 1.00900 | 1.01400 | 1.01900 | 1.02400 | 1.02000 | 1.01500 | 1.01300 | 1.01400 | 1.01100 | 1.01100 | 1.01100 |
| Georgia | 1.03500 | 1.04000 | 1.03100 | 1.02900 | 1.02900 | 1.02600 | 1.02600 | 1.09700 | 1.03500 | 1.02700 | 1.02800 | 1.02500 | 1.02300 | 1.02400 |
| Hawaii | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Idaho | — | — | — | 1.05300 | 1.05900 | 1.05600 | 1.04800 | 1.04200 | 1.03700 | 1.08700 | 1.07500 | 1.04700 | 1.04500 | 1.04900 |
| Illinois | 1.03500 | 1.02900 | 1.02500 | 1.02900 | 1.02800 | 1.02800 | 1.02800 | 1.02100 | 1.02400 | 1.02300 | 1.02400 | 1.02900 | 1.03100 | 1.02700 |
| Indiana | 1.03500 | 0.99900 | 1.00600 | 1.00000 | 1.00300 | 1.00800 | 1.00100 | 1.00200 | 1.00400 | 1.00200 | 1.00200 | 1.00200 | 1.00300 | 1.00500 |
| Iowa | 1.03500 | 1.01000 | 1.00900 | 1.00800 | 1.01100 | 1.01200 | 1.02100 | 1.00900 | 1.00800 | 1.00700 | 1.01900 | 1.02700 | 1.03500 | 1.02100 |
| Kansas | 1.03500 | 0.99500 | 0.99800 | 0.99100 | 0.98200 | 0.98000 | 0.96800 | 0.96200 | 0.96000 | 0.96200 | 0.95600 | 0.95300 | 0.97500 | 0.96800 |
| Kentucky | 1.03500 | 1.02800 | 1.01700 | 1.01700 | 1.01800 | 1.02000 | 1.02400 | 1.02300 | 1.02400 | 1.02400 | 1.02400 | 1.02300 | 1.02400 | 1.02400 |
| Louisiana | 1.03500 | 1.04200 | 1.02900 | 1.05900 | 1.06100 | 1.05300 | 1.05600 | 1.04700 | 1.04100 | 1.04100 | 1.04600 | 1.04900 | 1.04800 | 1.04700 |
| Maine | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Maryland | 1.03500 | 1.02500 | 1.02200 | 0.94300 | 0.94600 | 0.99800 | 1.06200 | 1.07600 | 1.02300 | 1.01500 | 1.02500 | 1.02500 | 1.02500 | 1.02500 |
| Massachusetts | 1.03500 | 1.01300 | 1.01200 | 1.00200 | 1.00100 | 1.00000 | 1.00000 | 1.00100 | 1.00000 | 1.00000 | 1.04800 | 1.05400 | 1.06000 | 1.03900 |
| Michigan | 1.03500 | 1.01400 | 1.01500 | 0.83400 | 0.76700 | 0.69800 | 0.77400 | 0.67700 | 0.73700 | 0.65300 | 0.66200 | 0.21300 | 0.59200 | 0.46000 |
| Minnesota | 1.03500 | 0.99800 | 1.00200 | 0.98400 | 0.97200 | 0.97200 | 0.92800 | 0.99200 | 0.99400 | 0.99400 | 0.99900 | 1.01100 | 1.00100 | 1.00200 |
| Mississippi | 1.03500 | 1.02900 | 1.02500 | 1.03000 | 1.01600 | 1.02000 | 1.00900 | 1.00900 | 1.01700 | 1.01600 | 1.02200 | 1.02900 | 1.02700 | 1.03900 |
| Missouri | 1.03500 | 1.02000 | 1.00700 | 0.97700 | 0.97400 | 0.97300 | 0.97400 | 0.97600 | 0.97900 | 0.98600 | 1.02200 | 0.99500 | 0.99800 | 0.99200 |
| Montana | 1.03500 | 1.00100 | 1.03200 | 1.14900 | 1.19200 | 1.17300 | 1.14600 | 1.08400 | 1.04900 | 1.07500 | 1.17300 | 1.19700 | 1.17900 | 1.20400 |
| Nebraska | 1.03500 | 0.99100 | 1.00800 | 0.98200 | 0.97100 | 0.96700 | 0.96800 | 0.95400 | 0.95000 | 0.94200 | 0.98200 | 0.94900 | 0.94800 | 0.95700 |
| Nevada | 1.03500 | 1.06200 | 1.08200 | 1.06700 | 1.06800 | 1.06300 | 1.07700 | 1.06400 | 1.07100 | 1.07500 | 1.06800 | 1.06300 | 1.06000 | 1.06500 |
| New Hampshire | — | — | — | 1.00000 | 1.00000 | 1.00000 | — | 1.00000 | — | 1.02500 | — | 1.02500 | 1.02700 | — |
| New Jersey | 1.03500 | 1.04500 | 1.02600 | 1.02800 | 1.02900 | 1.02800 | 1.03000 | 1.03900 | 1.03400 | 1.03600 | 1.03300 | 1.03700 | 1.03600 | 1.04600 |
| New Mexico | 1.03500 | 1.10800 | 1.08300 | 1.03300 | 1.02900 | 1.02800 | 1.04200 | 1.03400 | 1.02900 | 1.02900 | 1.02100 | 0.99200 | 0.99600 | 1.01300 |
| New York | 1.03500 | 1.02600 | 1.02100 | 1.02500 | 1.02500 | 1.02800 | 1.02900 | 1.03000 | 1.03600 | 1.03200 | 1.03000 | 1.03100 | 1.03300 | 1.03500 |
| North Carolina | 1.03500 | 1.03300 | 1.02400 | 1.03100 | 1.03300 | 1.03300 | 1.03300 | 1.03000 | 1.03400 | 1.03500 | 1.03300 | 1.03300 | 1.03300 | 1.03300 |
| North Dakota | 1.03500 | 1.00000 | 1.00310 | 1.05400 | 1.05400 | 1.05400 | 1.05400 | 1.05400 | 1.05400 | 1.05400 | 1.05400 | 1.05400 | 1.05400 | 1.05400 |
| Ohio | 1.03500 | 1.03300 | 1.02300 | 0.86400 | 0.82500 | 0.69600 | 0.65300 | 0.86200 | 1.00400 | 1.01000 | 1.01400 | 1.01100 | 1.01400 | 1.01400 |
| Oklahoma | 1.03500 | 1.02600 | 1.03200 | 1.03800 | 1.04200 | 1.04600 | 1.04800 | 1.05000 | 1.04800 | 1.04700 | 1.04500 | 1.05100 | 1.04000 | 1.04400 |
| Oregon | 1.03500 | 1.07000 | 1.04500 | 1.03700 | 1.03500 | 1.04200 | — | 1.04600 | 0.99800 | 1.04700 | 0.99000 | 0.99000 | 0.99000 | — |
| Pennsylvania | 1.03500 | 1.03800 | 1.03300 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00400 | 1.02000 | 1.01500 | 1.00900 | 1.00000 | 1.00000 | 1.00000 |
| Rhode Island | 1.03500 | 1.04200 | 1.02100 | 1.04200 | 1.04200 | — | — | 1.04600 | 1.02200 | 1.02200 | 1.02000 | 1.03900 | 1.03000 | 1.03400 |
| South Carolina | 1.03500 | 1.04200 | 1.02800 | 1.02800 | 1.02800 | 1.02800 | 1.04800 | 1.07600 | 1.03000 | 1.02300 | 1.02900 | 1.02600 | 1.02700 | 1.02900 |
| South Dakota | 1.03500 | 0.99700 | 1.00400 | 1.00000 | 0.99600 | 0.99000 | 0.92800 | 0.98300 | 0.98800 | 0.99300 | 0.94800 | 1.01100 | 1.01100 | 1.01000 |
| Tennessee | 1.03500 | 1.04600 | 1.02200 | — | 1.02900 | — | — | — | 1.01600 | 1.01600 | — | 1.02300 | — | — |
| Texas | 1.03500 | 1.03700 | 1.02700 | 1.01900 | 1.01800 | 1.02600 | 1.03300 | 1.03800 | 1.03700 | 1.03000 | 1.03300 | 1.02400 | 1.03000 | 1.03600 |
| Utah | 1.03500 | 0.92500 | 0.93800 | 0.94100 | 0.95200 | 0.94500 | 0.95100 | 0.96300 | 0.95500 | 0.93200 | 0.94000 | 0.94100 | 1.03000 | 1.07500 |
| Vermont | — | — | — | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 |
| Virginia | 1.03500 | 1.03100 | 1.02600 | 1.09800 | 1.09100 | 1.17400 | 1.21800 | 1.10100 | 1.10400 | 1.09700 | 1.08100 | 1.04600 | 1.04100 | 1.04000 |
| Washington | — | — | — | — | — | — | — | 1.03000 | 1.03000 | 1.03000 | 1.03100 | 1.03300 | 1.03300 | 1.03300 |
| West Virginia | 1.03500 | 1.07100 | 1.02900 | 0.57500 | 0.68300 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 |
| Wisconsin | 1.03500 | 1.01800 | 1.01900 | 1.01600 | 1.01400 | 1.01400 | 1.00500 | 1.01000 | 1.00700 | 1.00800 | 1.01200 | 0.99100 | 0.99200 | 1.00000 |
| Wyoming | 1.03500 | 0.92600 | 1.02300 | 0.84300 | 0.84300 | 0.85400 | 0.83700 | 0.84700 | 0.84700 | 0.85500 | 0.84700 | 1.03900 | 1.04700 | 1.04800 |
| U.S. Average | 1.03500 | 1.03765 | 1.02944 | 1.02341 | 1.02345 | 1.02841 | 1.03289 | 1.03263 | 1.03313 | 1.03258 | 1.03396 | 1.02794 | 1.03332 | 1.03706 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

# Table C3. Approximate Heat Content of Natural Gas Consumed by Electric Utilities, 1986-1999
(Thousand Btu per Cubic Foot)

| State | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1.09100 | 1.05400 | 1.03900 | 1.03000 | 1.03000 | 1.02200 | 1.02100 | 1.01600 | 1.01100 | 1.01600 | 1.02400 | 1.03100 | 1.04400 | 1.01100 |
| Alaska | 1.00600 | 1.00600 | 1.00600 | 1.00600 | 1.00600 | 1.00100 | 1.00000 | 0.99900 | 0.99900 | 1.00200 | 1.00100 | 1.00000 | 1.00000 | 1.00000 |
| Arizona | 1.04400 | 1.03400 | 1.03400 | 1.03500 | 1.03400 | 1.02700 | 1.03100 | 1.02700 | 1.02300 | 1.02200 | 1.01500 | 1.01400 | 1.01400 | 1.01100 |
| Arkansas | 1.05300 | 1.03100 | 1.02900 | 1.01900 | 1.01800 | 1.02000 | 1.02500 | 1.02900 | 1.02400 | 1.02300 | 1.02400 | 1.02900 | 1.02300 | 1.02200 |
| California | 1.04500 | 1.03800 | 1.03600 | 1.04000 | 1.03300 | 1.02800 | 1.03300 | 1.03000 | 1.02900 | 1.02700 | 1.02600 | 1.01900 | 1.01800 | 1.00600 |
| Colorado | 0.99400 | 0.98800 | 0.98500 | 0.97700 | 0.98800 | 0.99500 | 1.00000 | 1.01200 | 1.04200 | 1.00800 | 0.99800 | 0.99500 | 0.99400 | 1.03200 |
| Connecticut | 1.03600 | 1.03100 | 1.03100 | 1.03000 | 1.03300 | 1.03300 | 1.03100 | 1.03200 | 1.01700 | 1.01700 | 1.01900 | 1.01900 | 1.03000 | 1.02500 |
| Delaware | 1.04600 | 1.03600 | 1.07200 | 1.07500 | 1.05400 | 1.05200 | 1.03700 | 1.03300 | 1.03700 | 1.03200 | 1.03400 | 1.03500 | 0.97100 | 0.98300 |
| District of Columbia | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Florida | 1.00800 | 1.00800 | 1.00800 | 1.01000 | 1.01100 | 1.01400 | 1.01100 | 1.00900 | 1.01000 | 1.01000 | 1.00800 | 1.04400 | 1.05300 | 1.04400 |
| Georgia | 1.02400 | 1.02300 | 1.02300 | 1.02400 | 1.02400 | 1.02500 | 1.02400 | 1.02300 | 1.02500 | 1.02400 | 1.02400 | 1.02400 | 1.02800 | 1.03200 |
| Hawaii | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Idaho | 1.02100 | 1.01700 | — | — | — | — | — | — | — | — | — | — | — | — |
| Illinois | 1.02600 | 1.02500 | 1.02100 | 1.01700 | 1.02100 | 1.01800 | 1.01600 | 1.01600 | 1.02200 | 1.01600 | 1.02000 | 1.01600 | 1.01900 | 1.02200 |
| Indiana | 1.00600 | 1.00500 | 1.00200 | 1.00200 | 1.00200 | 1.00100 | 1.00100 | 1.01300 | 1.02300 | 1.02100 | 1.02100 | 1.02100 | 1.02500 | 1.02600 |
| Iowa | 1.01700 | 1.00700 | 1.00700 | 1.00700 | 1.00600 | 1.00400 | 1.00400 | 1.00600 | 1.00600 | 1.00500 | 1.00300 | 1.00300 | 1.00300 | 1.00400 |
| Kansas | 0.96900 | 0.98800 | 0.99300 | 0.97100 | 0.99000 | 0.96800 | 0.97000 | 0.97500 | 0.98300 | 0.98000 | 0.97300 | 0.97800 | 1.00100 | 1.01000 |
| Kentucky | 1.02200 | 1.02100 | 1.02300 | 1.02100 | 1.02000 | 1.02000 | 1.02000 | 1.02000 | 1.02100 | 1.02200 | 1.02200 | 1.02300 | 1.02400 | 1.02500 |
| Louisiana | 1.04400 | 1.04300 | 1.04500 | 1.04400 | 1.04500 | 1.04200 | 1.04300 | 1.04300 | 1.04600 | 1.04300 | 1.04300 | 1.03600 | 1.04300 | 1.03900 |
| Maine | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Maryland | 1.05800 | 1.04300 | 1.04200 | 1.04500 | 1.04200 | 1.04600 | 1.04500 | 1.04100 | 1.04300 | 1.03900 | 1.04100 | 1.04100 | 1.04700 | 1.04000 |
| Massachusetts | 1.02900 | 1.02600 | 1.02900 | 1.04800 | 1.05200 | 1.04100 | 1.03200 | 1.03400 | 1.03700 | 1.02600 | 1.03700 | 1.03300 | 1.02900 | 1.02600 |
| Michigan | 0.34600 | 0.40400 | 0.16100 | 0.10800 | 0.22400 | 0.38900 | 0.41400 | 0.37900 | 0.40300 | 0.36500 | 0.27400 | 0.31000 | 0.54200 | 0.60800 |
| Minnesota | 0.99900 | 0.99800 | 1.00300 | 1.00500 | 1.00300 | 1.00800 | 1.00800 | 1.00800 | 1.00500 | 1.00600 | 1.00300 | 1.00400 | 1.00800 | 1.01100 |
| Mississippi | 1.03800 | 1.02800 | 1.02600 | 1.02500 | 1.03600 | 1.02500 | 1.02900 | 1.02200 | 1.04300 | 1.03900 | 1.03800 | 1.03600 | 1.03900 | 1.02700 |
| Missouri | 0.98300 | 0.99000 | 0.99400 | 1.01600 | 1.01800 | 1.01400 | 1.00800 | 1.00800 | 1.00000 | 1.00600 | 1.01100 | 1.00600 | 1.01100 | 1.00300 |
| Montana | 1.20100 | 1.20500 | 1.20800 | 1.21300 | 1.21800 | 1.19400 | 1.20600 | 1.16500 | 1.05500 | 1.07300 | 1.07500 | 1.07100 | 1.07200 | 1.09100 |
| Nebraska | 0.97100 | 0.97700 | 0.95400 | 0.95900 | 0.94600 | 0.94200 | 0.95900 | 0.97600 | 0.98700 | 0.99800 | 1.00400 | 0.99800 | 0.98900 | 0.99500 |
| Nevada | 1.05300 | 1.03500 | 1.02700 | 1.02700 | 1.03100 | 1.02400 | 1.02500 | 1.02900 | 1.03300 | 1.02900 | 1.02900 | 1.02900 | 1.03400 | 1.03700 |
| New Hampshire | — | 1.02700 | 1.02700 | 1.02700 | — | — | 1.01800 | 1.01600 | 1.01500 | 1.01800 | 1.01800 | 1.01700 | 1.01700 | 1.02400 |
| New Jersey | 1.03600 | 1.03300 | 1.03300 | 1.03300 | 1.03200 | 1.03200 | 1.03400 | 1.03400 | 1.03500 | 1.03100 | 1.02000 | 1.03700 | 1.04500 | 1.03100 |
| New Mexico | 1.04100 | 1.02600 | 1.02600 | 1.03300 | 1.03400 | 1.01600 | 1.01700 | 1.01600 | 1.02200 | 1.01700 | 1.01200 | 1.01700 | 1.01000 | 1.01300 |
| New York | 1.03600 | 1.03000 | 1.03100 | 1.02800 | 1.03300 | 1.03100 | 1.03000 | 1.03100 | 1.03100 | 1.02600 | 1.02900 | 1.02600 | 1.02900 | 1.02400 |
| North Carolina | 1.03300 | 1.03300 | 1.03300 | 1.03300 | 1.03300 | 1.03200 | 1.03600 | 1.03300 | 1.03800 | 1.03300 | 1.03600 | 1.03700 | 1.04800 | 1.03100 |
| North Dakota | 1.05400 | 1.07200 | 1.06500 | 1.05000 | 1.03800 | 1.00400 | 1.03700 | 1.08000 | 1.09500 | 1.06600 | 1.05900 | 1.06600 | — | — |
| Ohio | 1.01800 | 1.00900 | 1.01200 | 1.00700 | 1.00800 | 1.00700 | 1.03300 | 1.03000 | 1.02900 | 1.02700 | 1.02800 | 1.02400 | 1.02700 | 1.02800 |
| Oklahoma | 1.04300 | 1.04700 | 1.03900 | 1.04300 | 1.04500 | 1.04000 | 1.03700 | 1.03900 | 1.03400 | 1.03400 | 1.02800 | 1.03200 | 1.03000 | 1.02800 |
| Oregon | 0.99000 | — | — | 1.03500 | 1.02300 | 1.01100 | 1.01100 | 1.01100 | 1.01100 | 1.01200 | 1.00900 | 1.01100 | 1.01100 | 1.01200 |
| Pennsylvania | 1.02500 | 1.03100 | 1.03500 | 1.02900 | 1.03200 | 1.03400 | 1.03100 | 1.03000 | 1.03100 | 1.03000 | 1.02800 | 1.03400 | 1.02900 | 1.03300 |
| Rhode Island | — | 1.03100 | 1.03200 | 1.03100 | 1.03300 | 1.03200 | 1.03100 | 1.05100 | 1.02900 | 1.02800 | 1.02800 | 1.02700 | 1.02800 | — |
| South Carolina | 1.02300 | 1.02700 | 1.03200 | 1.02300 | 1.02300 | 1.02500 | 1.02200 | 1.02100 | 1.02300 | 1.02400 | 1.02500 | 1.02400 | 1.02400 | 1.02800 |
| South Dakota | 1.00500 | 1.01300 | 1.02000 | 1.01700 | 1.01600 | 1.00600 | 1.01900 | 1.01400 | 0.97200 | 1.00200 | 1.01400 | 1.01800 | 1.00000 | 1.00600 |
| Tennessee | — | — | 1.03100 | 1.03200 | 1.03500 | 1.03300 | 1.03100 | 1.03500 | 1.03200 | 1.03100 | 1.03200 | 1.03100 | 1.03000 | 1.02700 |
| Texas | 1.03500 | 1.03500 | 1.03300 | 1.03400 | 1.03500 | 1.03000 | 1.02600 | 1.02600 | 1.02300 | 1.02300 | 1.02300 | 1.02300 | 1.02400 | 1.02100 |
| Utah | 1.08700 | 1.07800 | 1.07800 | 1.07800 | 1.00000 | 1.06700 | 1.07400 | 1.06300 | 1.04400 | 1.05500 | 1.02100 | 1.03200 | 1.04400 | 1.04300 |
| Vermont | 1.00000 | — | — | 1.00000 | 1.00000 | 0.98800 | 0.98800 | 0.99800 | 0.99600 | 1.00100 | 1.01500 | 1.01200 | 1.01400 | 1.01200 |
| Virginia | 1.05300 | 1.03900 | 1.05400 | 1.04100 | 1.04100 | 1.04400 | 1.05000 | 1.03800 | 1.03700 | 1.03100 | 1.05700 | 1.04800 | 1.04900 | 1.05500 |
| Washington | 1.03300 | 1.03300 | 1.03300 | 1.03300 | 1.03300 | 1.05000 | 1.05000 | 1.05000 | 1.05000 | 1.05000 | 1.05000 | 1.05000 | 1.04800 | 1.05500 |
| West Virginia | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 |
| Wisconsin | 1.00300 | 0.99200 | 1.00200 | 1.00300 | 1.00700 | 1.00800 | 1.00900 | 1.01200 | 1.01100 | 1.00900 | 1.01000 | 1.00800 | 1.01300 | 1.01000 |
| Wyoming | 1.02200 | 1.01900 | 1.02600 | 1.03600 | 1.03500 | 1.05100 | 1.03900 | 1.04400 | 1.03300 | 1.04300 | 1.04000 | 1.04100 | 1.04400 | 1.04400 |
| U.S. Average | 1.03311 | 1.03153 | 1.02742 | 1.02720 | 1.02658 | 1.02316 | 1.02297 | 1.02300 | 1.02337 | 1.01779 | 1.01543 | 1.01837 | 1.02136 | 1.01851 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

## Table C4. Approximate Heat Content of Natural Gas Consumed by Sectors Other Than Electric Utilities, 1960-1985, Selected Years

(Thousand Btu per Cubic Foot)

| State | 1960 | 1965 | 1970 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1.03500 | 1.03400 | 1.03100 | 1.02891 | 1.02782 | 1.02863 | 1.02965 | 1.02608 | 1.03349 | 1.03535 | 1.05159 | 1.03784 | 1.03286 | 1.03770 |
| Alaska | 1.03500 | 1.01000 | 1.00500 | 1.00470 | 1.00467 | 1.00475 | 0.99878 | 0.99868 | 1.00231 | 1.00369 | 0.99910 | 1.00140 | 1.00144 | 1.00600 |
| Arizona | 1.03500 | 1.07600 | 1.05900 | 1.04957 | 1.04869 | 1.05386 | 1.06502 | 1.04051 | 1.04558 | 1.05486 | 1.05490 | 1.04560 | 1.04594 | 1.04578 |
| Arkansas | 1.03500 | 1.00100 | 1.00400 | 0.99503 | 0.99590 | 1.02007 | 0.99920 | 1.01577 | 0.99415 | 0.99524 | 0.99681 | 1.02070 | 1.01884 | 1.01677 |
| California | 1.03500 | 1.07300 | 1.05400 | 1.05594 | 1.05139 | 1.05022 | 1.05157 | 1.04797 | 1.04358 | 1.04419 | 1.04714 | 1.04083 | 1.03782 | 1.03848 |
| Colorado | 1.03500 | 0.91200 | 0.97400 | 0.89576 | 0.90136 | 0.88783 | 0.86156 | 0.88005 | 0.99471 | 0.99530 | 1.00099 | 1.00637 | 1.00231 | 0.99923 |
| Connecticut | 1.03500 | 1.02200 | 1.01600 | 1.00500 | 1.00800 | 1.01000 | 1.01300 | 1.01170 | 1.02200 | 1.02500 | 1.02700 | 1.02900 | 1.02903 | 1.02998 |
| Delaware | 1.03500 | 1.04300 | 1.02000 | 1.01468 | 1.01779 | 1.02350 | 1.02787 | 1.02801 | 1.03285 | 1.03477 | 1.03300 | 1.01514 | 1.01746 | 1.02197 |
| District of Columbia | 1.03500 | 1.02400 | 1.01600 | 1.01200 | 1.01200 | 1.01600 | 1.01600 | 1.01600 | 1.00300 | 1.01400 | 1.01700 | 1.01000 | 1.01200 | 1.01500 |
| Florida | 1.03500 | 1.03700 | 1.04100 | 1.07754 | 1.06174 | 1.06668 | 1.06968 | 1.05369 | 1.06968 | 1.10649 | 1.08246 | 1.09719 | 1.10065 | 1.10911 |
| Georgia | 1.03500 | 1.04000 | 1.03100 | 1.02672 | 1.02696 | 1.02702 | 1.02794 | 1.03843 | 1.03196 | 1.02700 | 1.03001 | 1.02601 | 1.02601 | 1.02801 |
| Hawaii | — | — | — | — | — | — | — | — | 0.96300 | 0.95900 | 0.98900 | 1.02300 | 1.02600 | 1.08200 |
| Idaho | 1.03500 | 1.06500 | 1.06100 | 1.05500 | 1.05700 | 1.06006 | 1.05340 | 1.04715 | 1.05301 | 1.06999 | 1.07200 | 1.04700 | 1.04500 | 1.04900 |
| Illinois | 1.03500 | 1.02900 | 1.02500 | 1.02590 | 1.02492 | 1.02800 | 1.01811 | 1.02450 | 1.02196 | 1.01996 | 1.02198 | 1.04115 | 1.04005 | 1.04008 |
| Indiana | 1.03500 | 0.99900 | 1.00600 | 0.98976 | 0.98990 | 0.98995 | 0.98901 | 0.99034 | 0.98894 | 0.99290 | 1.01608 | 1.00603 | 1.00701 | 1.00801 |
| Iowa | 1.03500 | 1.01000 | 1.00900 | 1.00800 | 1.00773 | 1.00359 | 1.00153 | 1.00210 | 1.00287 | 1.00295 | 1.00788 | 1.01381 | 1.01474 | 1.01091 |
| Kansas | 1.03500 | 0.99500 | 0.99800 | 0.98159 | 0.98069 | 0.98134 | 0.98107 | 0.98175 | 0.99404 | 0.99267 | 1.00673 | 1.00627 | 0.99365 | 0.99990 |
| Kentucky | 1.03500 | 1.02800 | 1.01700 | 1.00799 | 1.01100 | 1.01097 | 1.00982 | 1.00984 | 1.00886 | 1.01387 | 1.01392 | 1.01998 | 1.02198 | 1.03004 |
| Louisiana | 1.03500 | 1.04200 | 1.02900 | 1.03153 | 1.03299 | 1.03515 | 1.04248 | 1.03433 | 1.03707 | 1.03578 | 1.04731 | 1.04014 | 1.04060 | 1.03819 |
| Maine | — | — | 1.01200 | 1.02400 | 1.02400 | 1.02400 | 1.02400 | 1.00000 | 1.02400 | 1.02500 | 1.02500 | 1.02600 | 1.03200 | 1.03500 |
| Maryland | 1.03500 | 1.02500 | 1.02200 | 1.01323 | 1.01411 | 1.01604 | 1.02998 | 1.04291 | 1.01990 | 1.01396 | 1.01796 | 1.02095 | 1.02601 | 1.03408 |
| Massachusetts | 1.03500 | 1.01300 | 1.01200 | 1.00402 | 1.00608 | 1.00714 | 1.00919 | 1.00947 | 1.01646 | 1.01662 | 1.02196 | 1.02077 | 1.02454 | 1.02388 |
| Michigan | 1.03500 | 1.01400 | 1.01500 | 1.02420 | 1.02345 | 1.01996 | 1.01668 | 1.02013 | 1.01961 | 1.02596 | 1.02823 | 1.03896 | 1.02283 | 1.02304 |
| Minnesota | 1.03500 | 0.99800 | 1.00200 | 1.00225 | 0.99914 | 0.99745 | 0.99704 | 0.99537 | 0.99709 | 0.99502 | 1.00508 | 1.02314 | 1.00302 | 1.00401 |
| Mississippi | 1.03500 | 1.02900 | 1.02500 | 1.02189 | 1.02438 | 1.02623 | 1.02449 | 1.02946 | 1.03421 | 1.02898 | 1.03068 | 1.02647 | 1.03091 | 1.02459 |
| Missouri | 1.03500 | 1.02000 | 1.00700 | 1.00822 | 1.00508 | 1.00419 | 1.00625 | 0.97972 | 1.01577 | 1.01581 | 1.01794 | 1.02735 | 1.01718 | 1.01714 |
| Montana | 1.03500 | 1.00100 | 1.03200 | 1.01927 | 1.01229 | 1.00677 | 0.99866 | 0.98687 | 1.00926 | 1.00837 | 1.00995 | 1.00662 | 1.00365 | 0.99897 |
| Nebraska | 1.03500 | 0.99100 | 1.00800 | 0.99650 | 0.99652 | 1.00080 | 1.00035 | 0.99737 | 0.98019 | 0.97923 | 0.98099 | 0.98241 | 0.98137 | 0.98226 |
| Nevada | 1.03500 | 1.06200 | 1.08200 | 1.06700 | 1.06480 | 1.03695 | 1.00292 | 0.96765 | 1.05209 | 1.07753 | 1.07101 | 1.06689 | 1.05871 | 1.06122 |
| New Hampshire | 1.03500 | 1.01200 | 1.01000 | 1.01024 | 1.01001 | 1.00000 | 1.00730 | 1.04014 | 1.02000 | 1.02196 | 1.02000 | 1.02099 | 1.02700 | 1.02700 |
| New Jersey | 1.03500 | 1.04500 | 1.02600 | 1.03111 | 1.03416 | 1.03418 | 1.03502 | 1.03549 | 1.03269 | 1.03348 | 1.03058 | 1.02912 | 1.02046 | 1.02214 |
| New Mexico | 1.03500 | 1.10800 | 1.08300 | 1.07555 | 1.06632 | 1.06976 | 1.06047 | 1.06537 | 1.04776 | 1.05393 | 1.05173 | 1.04148 | 1.06146 | 1.08795 |
| New York | 1.03500 | 1.02600 | 1.02100 | 1.01476 | 1.01390 | 1.01088 | 1.01186 | 1.01349 | 1.02277 | 1.01751 | 1.02128 | 1.02607 | 1.02536 | 1.02724 |
| North Carolina | 1.03500 | 1.03300 | 1.02400 | 1.01799 | 1.01800 | 1.01900 | 1.02080 | 1.02186 | 1.01175 | 1.01186 | 1.03300 | 1.03300 | 1.03400 | 1.03400 |
| North Dakota | 1.03500 | 1.00000 | 1.00310 | 1.00077 | 0.99994 | 0.99994 | 0.99997 | 0.99997 | 1.05200 | 1.04199 | 1.02598 | 1.04500 | 1.04900 | 1.06200 |
| Ohio | 1.03500 | 1.03300 | 1.02300 | 1.02403 | 1.02606 | 1.02531 | 1.02425 | 1.02592 | 1.01606 | 1.02303 | 1.02902 | 1.03403 | 1.03702 | 1.04403 |
| Oklahoma | 1.03500 | 1.02600 | 1.03200 | 0.99619 | 0.99240 | 1.01236 | 1.00408 | 1.00543 | 1.00198 | 1.02610 | 1.01036 | 1.03656 | 1.01711 | 1.01970 |
| Oregon | 1.03500 | 1.07000 | 1.04500 | 1.03900 | 1.03600 | 1.04200 | 1.04510 | 1.04477 | 1.04620 | 1.04399 | 1.04402 | 1.04100 | 1.03600 | 1.03000 |
| Pennsylvania | 1.03500 | 1.03800 | 1.03300 | 1.02505 | 1.02502 | 1.02101 | 1.02151 | 1.02064 | 1.02201 | 1.02203 | 1.02804 | 1.02907 | 1.03413 | 1.03409 |
| Rhode Island | 1.03500 | 1.04200 | 1.02100 | 1.01399 | 1.01208 | 1.01300 | 1.01290 | 1.00891 | 1.02094 | 1.02200 | 1.03647 | 1.03453 | 1.03000 | 1.03291 |
| South Carolina | 1.03500 | 1.04200 | 1.02800 | 1.02346 | 1.02287 | 1.02189 | 1.03126 | 1.01547 | 1.03312 | 1.02300 | 1.03001 | 1.02701 | 1.02600 | 1.02800 |
| South Dakota | 1.03500 | 0.99700 | 1.00400 | 1.00000 | 0.99910 | 1.00005 | 0.99925 | 0.99566 | 0.99811 | 1.00202 | 0.99906 | 1.01100 | 1.01100 | 1.01000 |
| Tennessee | 1.03500 | 1.04600 | 1.02200 | 1.03100 | 1.02900 | 1.03100 | 1.02800 | 1.03260 | 1.01600 | 1.01600 | 1.02400 | 1.02300 | 1.02400 | 1.03400 |
| Texas | 1.03500 | 1.03700 | 1.02700 | 1.02966 | 1.02872 | 1.02756 | 1.02542 | 1.02954 | 1.03085 | 1.03308 | 1.03139 | 1.03190 | 1.03950 | 1.03909 |
| Utah | 1.03500 | 0.92500 | 0.93800 | 0.95023 | 0.94792 | 0.95026 | 0.95656 | 0.95963 | 1.09212 | 1.07740 | 0.93897 | 1.07655 | 1.07511 | 1.07500 |
| Vermont | — | — | 1.00600 | 1.00930 | 1.00814 | 1.00899 | 1.01061 | 1.01151 | 0.98936 | 0.99268 | 0.99282 | 0.99157 | 0.99153 | 0.99185 |
| Virginia | 1.03500 | 1.03100 | 1.02600 | 1.01868 | 1.01872 | 1.02124 | 1.01933 | 1.01923 | 1.01471 | 1.02294 | 1.02590 | 1.02962 | 1.03589 | 1.03899 |
| Washington | 1.03500 | 1.07500 | 1.05500 | 1.04200 | 1.04100 | 1.04500 | 1.04761 | 1.04713 | 1.05216 | 1.05007 | 1.05302 | 1.04300 | 1.04500 | 1.04000 |
| West Virginia | 1.03500 | 1.07100 | 1.02900 | 1.03805 | 1.04369 | 1.04201 | 1.03140 | 1.02371 | 1.03201 | 1.04005 | 1.04705 | 1.03804 | 1.05305 | 1.06707 |
| Wisconsin | 1.03500 | 1.01800 | 1.01900 | 1.02023 | 1.01712 | 1.01502 | 1.01247 | 1.01308 | 1.00804 | 1.00902 | 1.01200 | 1.00921 | 1.00810 | 1.01004 |
| Wyoming | 1.03500 | 0.92600 | 1.02300 | 0.93453 | 0.95069 | 0.93775 | 0.91433 | 0.92963 | 1.06069 | 1.05932 | 1.00223 | 1.05903 | 1.05301 | 1.05100 |
| U.S. Average | 1.03500 | 1.03182 | 1.02543 | 1.02232 | 1.02149 | 1.02212 | 1.02040 | 1.01988 | 1.02375 | 1.02575 | 1.02739 | 1.03099 | 1.03023 | 1.03156 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

## Table C5. Approximate Heat Content of Natural Gas Consumed by Sectors Other Than Electric Utilities, 1986-1999
(Thousand Btu per Cubic Foot)

| State | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1.03571 | 1.03285 | 1.02889 | 1.03000 | 1.02898 | 1.02708 | 1.02809 | 1.03023 | 1.03026 | 1.02931 | 1.03317 | 1.04132 | 1.03858 | 1.03661 |
| Alaska | 1.00960 | 1.00942 | 1.00376 | 0.99821 | 0.94820 | 1.00209 | 1.00216 | 0.99360 | 1.00117 | 1.00630 | 0.98918 | 1.00000 | 0.99893 | 1.00000 |
| Arizona | 1.03683 | 1.03659 | 1.03400 | 1.04268 | 1.03153 | 1.02454 | 1.03100 | 1.02822 | 1.02786 | 1.03742 | 1.01024 | 1.02252 | 1.01667 | 1.01685 |
| Arkansas | 1.01334 | 1.01250 | 1.00673 | 1.00426 | 1.00756 | 1.01654 | 1.00681 | 1.01249 | 1.02177 | 1.08374 | 1.02629 | 1.01354 | 1.02417 | 1.01845 |
| California | 1.03655 | 1.02602 | 1.02879 | 1.03582 | 1.03168 | 1.02670 | 1.02746 | 1.03785 | 1.02063 | 1.01316 | 1.03328 | 1.01776 | 1.05151 | 1.01780 |
| Colorado | 1.00322 | 1.00046 | 1.00681 | 1.01222 | 1.00540 | 1.02976 | 1.02347 | 1.01098 | 1.00433 | 1.01814 | 1.02447 | 1.01231 | 1.01263 | 1.00539 |
| Connecticut | 1.02994 | 1.03100 | 1.03201 | 1.03414 | 1.03300 | 1.03090 | 1.02794 | 1.02697 | 1.03093 | 1.02988 | 1.02880 | 1.02811 | 1.02561 | 1.02389 |
| Delaware | 1.01639 | 1.00929 | 1.01777 | 1.01404 | 1.01536 | 1.02464 | 1.03446 | 1.03553 | 1.03544 | 1.03561 | 1.03576 | 1.03500 | 1.06179 | 1.06673 |
| District of Columbia | 1.01300 | 1.01400 | 1.01100 | 1.01000 | 1.00800 | 1.00600 | 1.00700 | 1.00700 | 1.01100 | 1.00600 | 1.00900 | 1.02100 | 1.02700 | 1.02100 |
| Florida | 1.07589 | 1.09473 | 1.07984 | 1.08571 | 1.08663 | 1.09834 | 1.10018 | 1.09842 | 1.12409 | 1.07028 | 1.10872 | 1.05429 | 1.04796 | 1.04140 |
| Georgia | 1.02706 | 1.02601 | 1.02501 | 1.02600 | 1.02702 | 1.02701 | 1.02500 | 1.02703 | 1.03002 | 1.02604 | 1.02299 | 1.02706 | 1.02693 | 1.02667 |
| Hawaii | 1.08600 | 1.06800 | 1.07800 | 1.08000 | 1.07000 | 1.08000 | 1.07300 | 1.06200 | 1.05100 | 1.04800 | 1.05700 | 1.03000 | 1.05600 | 1.05500 |
| Idaho | 1.02100 | 1.01700 | 1.02000 | 1.02700 | 1.02800 | 1.03300 | 1.03000 | 1.03800 | 1.03800 | 1.03000 | 1.03000 | 1.03100 | 1.03800 | 1.03800 |
| Illinois | 1.02097 | 1.01496 | 1.01798 | 1.02204 | 1.02201 | 1.01901 | 1.01802 | 1.02108 | 1.02097 | 1.02015 | 1.01898 | 1.02122 | 1.02219 | 1.02200 |
| Indiana | 1.00901 | 1.00901 | 1.01510 | 1.01612 | 1.01824 | 1.01429 | 1.01116 | 1.01300 | 1.01282 | 1.01186 | 1.01092 | 1.01092 | 1.01686 | 1.01789 |
| Iowa | 1.00995 | 1.00802 | 1.00700 | 1.01104 | 1.00702 | 1.00806 | 1.00400 | 1.00295 | 1.00802 | 1.00500 | 1.00604 | 1.00910 | 1.01121 | 1.01935 |
| Kansas | 0.98581 | 1.04899 | 0.98560 | 0.99325 | 0.99975 | 1.01121 | 0.98772 | 0.98770 | 0.99905 | 1.00381 | 0.99756 | 1.00290 | 0.99424 | 0.99525 |
| Kentucky | 1.03804 | 1.03703 | 1.03703 | 1.03903 | 1.04003 | 1.04703 | 1.05805 | 1.04804 | 1.06207 | 1.09629 | 1.04921 | 1.05026 | 1.03429 | 1.03219 |
| Louisiana | 1.03908 | 1.03941 | 1.04137 | 1.04281 | 1.04138 | 1.04801 | 1.04420 | 1.03590 | 1.03877 | 1.03315 | 1.04418 | 1.13446 | 1.07687 | 1.04282 |
| Maine | 1.03100 | 1.04000 | 1.02700 | 1.00300 | 1.00500 | 1.00600 | 1.01300 | 1.01400 | 1.01400 | 1.01600 | 1.01600 | 1.01400 | 1.01700 | 1.01800 |
| Maryland | 1.03568 | 1.03333 | 1.03168 | 1.03054 | 1.02641 | 1.02506 | 1.02684 | 1.02733 | 1.03011 | 1.02460 | 1.02845 | 1.03361 | 1.03626 | 1.03345 |
| Massachusetts | 1.02574 | 1.02965 | 1.03010 | 1.03559 | 1.03419 | 1.03863 | 1.03775 | 1.03841 | 1.02458 | 1.02600 | 1.02556 | 1.02028 | 1.02265 | 1.04854 |
| Michigan | 1.03829 | 1.03126 | 1.03962 | 1.05189 | 1.04510 | 1.03863 | 1.03742 | 1.03457 | 1.03340 | 1.04195 | 1.03617 | 1.04083 | 1.04905 | 1.04230 |
| Minnesota | 0.99900 | 0.99902 | 1.00707 | 1.00601 | 1.00402 | 1.01208 | 1.01105 | 1.01104 | 1.01111 | 1.01317 | 1.01822 | 1.01825 | 1.02029 | 1.01916 |
| Mississippi | 1.02130 | 1.01554 | 1.01533 | 1.03124 | 1.03196 | 1.03033 | 1.05226 | 1.02321 | 1.02829 | 1.01782 | 1.02642 | 1.03320 | 1.04924 | 1.03993 |
| Missouri | 1.01114 | 1.01113 | 1.00608 | 1.00796 | 1.01089 | 1.00874 | 1.00194 | 1.00393 | 1.00610 | 1.00705 | 1.01100 | 1.01011 | 1.01100 | 1.01379 |
| Montana | 0.99799 | 1.01769 | 1.02374 | 1.01857 | 1.02614 | 1.02802 | 1.02211 | 1.01725 | 1.02362 | 1.02971 | 1.02965 | 1.03072 | 1.02560 | 1.02369 |
| Nebraska | 0.99337 | 0.98513 | 0.98349 | 0.98762 | 0.98430 | 0.98538 | 0.97936 | 0.97498 | 0.98495 | 0.97959 | 1.00705 | 0.99800 | 1.00356 | 0.99916 |
| Nevada | 1.06045 | 1.00363 | 0.99619 | 1.03172 | 1.03100 | 1.03603 | 1.03432 | 1.03567 | 1.03593 | 1.03526 | 1.04028 | 1.02565 | 1.04615 | 1.03174 |
| New Hampshire | 1.02700 | 1.02900 | 1.02499 | 1.01899 | 1.01400 | 1.00700 | 1.00865 | 1.00995 | 1.01286 | 1.01011 | 1.01900 | 1.01083 | 1.01095 | 1.00857 |
| New Jersey | 1.02595 | 1.02448 | 1.02502 | 1.02503 | 1.02525 | 1.02508 | 1.02539 | 1.03614 | 1.03931 | 1.03425 | 1.03672 | 1.03490 | 1.03761 | 1.03945 |
| New Mexico | 1.08337 | 1.08057 | 1.07381 | 1.05044 | 1.05639 | 1.04239 | 1.04287 | 1.04238 | 0.99975 | 1.02052 | 1.03166 | 1.01931 | 0.97655 | 0.97276 |
| New York | 1.02743 | 1.03000 | 1.02854 | 1.02927 | 1.02895 | 1.02704 | 1.02872 | 1.02855 | 1.02734 | 1.02855 | 1.02557 | 1.02600 | 1.02778 | 1.02753 |
| North Carolina | 1.03300 | 1.03098 | 1.02998 | 1.03098 | 1.03198 | 1.03200 | 1.03396 | 1.03503 | 1.03599 | 1.03300 | 1.03600 | 1.03598 | 1.03950 | 1.03520 |
| North Dakota | 1.04300 | 1.04800 | 1.05500 | 1.04900 | 1.03200 | 1.04600 | 1.04500 | 1.06000 | 1.05800 | 1.05000 | 1.05100 | 1.05000 | 1.03800 | 1.04500 |
| Ohio | 1.04602 | 1.04504 | 1.04003 | 1.04204 | 1.04005 | 1.04416 | 1.03601 | 1.03803 | 1.03703 | 1.03809 | 1.03803 | 1.04508 | 1.04012 | 1.03712 |
| Oklahoma | 1.02282 | 1.03094 | 1.03757 | 1.02168 | 1.02002 | 1.01312 | 1.02185 | 1.02130 | 1.02581 | 1.01479 | 1.02274 | 1.00603 | 1.00692 | 1.02065 |
| Oregon | 1.02200 | 1.02800 | 1.02300 | 1.03500 | 1.02300 | 1.03074 | 1.03817 | 1.04052 | 1.04630 | 1.04423 | 1.04281 | 1.04832 | 1.04824 | 1.05590 |
| Pennsylvania | 1.03601 | 1.03602 | 1.03600 | 1.03705 | 1.03702 | 1.03500 | 1.03602 | 1.03709 | 1.03609 | 1.03518 | 1.03406 | 1.03501 | 1.03608 | 1.03605 |
| Rhode Island | 1.02900 | 1.02748 | 1.02697 | 1.02673 | 1.02710 | 1.02788 | 1.01792 | 1.02889 | 1.02900 | 1.02585 | 1.07392 | 1.02254 | 1.02434 | 1.02300 |
| South Carolina | 1.03010 | 1.02801 | 1.02689 | 1.02607 | 1.02828 | 1.02716 | 1.02707 | 1.02911 | 1.03117 | 1.02714 | 1.03004 | 1.03113 | 1.03439 | 1.03110 |
| South Dakota | 1.00500 | 1.01300 | 1.02000 | 1.01700 | 1.01600 | 1.01808 | 1.01499 | 1.01299 | 1.01020 | 1.01433 | 1.01400 | 1.01800 | 1.01095 | 1.00600 |
| Tennessee | 1.03200 | 1.03200 | 1.03100 | 1.03200 | 1.03500 | 1.03300 | 1.03100 | 1.03500 | 1.03200 | 1.03100 | 1.03200 | 1.03100 | 1.03000 | 1.02700 |
| Texas | 1.04266 | 1.04233 | 1.04010 | 1.03958 | 1.04194 | 1.03975 | 1.04956 | 1.02880 | 1.04261 | 1.04232 | 1.03652 | 1.02983 | 1.04858 | 1.03701 |
| Utah | 0.94770 | 1.08001 | 1.08101 | 1.08705 | 1.08869 | 1.07324 | 1.07823 | 1.08081 | 1.06860 | 1.06347 | 1.04255 | 1.04225 | 1.04607 | 1.05551 |
| Vermont | 0.98699 | 0.98700 | 0.99000 | 0.98591 | 0.98554 | 0.98800 | 0.99582 | 0.99800 | 0.99600 | 0.99590 | 1.01500 | 1.01200 | 1.01195 | 1.01200 |
| Virginia | 1.03992 | 1.04001 | 1.04091 | 1.04100 | 1.04204 | 1.04189 | 1.03836 | 1.04460 | 1.03809 | 1.03100 | 1.03819 | 1.04380 | 1.04245 | 1.03635 |
| Washington | 1.02900 | 1.03300 | 1.02592 | 1.03195 | 1.03000 | 1.03098 | 1.03244 | 1.03667 | 1.04089 | 1.03970 | 1.03663 | 1.04598 | 1.04447 | 1.05192 |
| West Virginia | 1.07620 | 1.07415 | 1.07705 | 1.07707 | 1.07108 | 1.07309 | 1.06510 | 1.06506 | 1.06411 | 1.06117 | 1.06108 | 1.06809 | 1.06318 | 1.05515 |
| Wisconsin | 1.01005 | 1.00813 | 1.00805 | 1.00501 | 1.00599 | 1.00699 | 1.00900 | 1.01099 | 1.01201 | 1.01105 | 1.01306 | 1.01112 | 1.01090 | 1.01208 |
| Wyoming | 1.05005 | 1.05704 | 1.05306 | 1.05502 | 1.09905 | 1.06001 | 1.05801 | 1.05601 | 1.05603 | 1.06303 | 1.06102 | 1.06903 | 1.06706 | 1.05101 |
| U.S. Average | 1.03018 | 1.03127 | 1.02995 | 1.03182 | 1.03076 | 1.03110 | 1.03164 | 1.02884 | 1.03022 | 1.03000 | 1.03064 | 1.03496 | 1.03680 | 1.02921 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

## Table C6. Approximate Heat Content of Natural Gas Total Consumption, 1960-1985, Selected Years

(Thousand Btu per Cubic Foot)

| State | 1960 | 1965 | 1970 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1.03500 | 1.03400 | 1.03100 | 1.02900 | 1.03000 | 1.03100 | 1.03250 | 1.02840 | 1.03400 | 1.03600 | 1.05200 | 1.03800 | 1.03300 | 1.03800 |
| Alaska | 1.03500 | 1.01000 | 1.00500 | 1.00500 | 1.00500 | 1.00500 | 1.00000 | 1.00000 | 1.00300 | 1.00400 | 1.00000 | 1.00200 | 1.00200 | 1.00600 |
| Arizona | 1.03500 | 1.07600 | 1.05900 | 1.05200 | 1.05200 | 1.05600 | 1.06470 | 1.04540 | 1.04900 | 1.05300 | 1.05400 | 1.04500 | 1.04700 | 1.05000 |
| Arkansas | 1.03500 | 1.00100 | 1.00400 | 0.99700 | 0.99700 | 1.02100 | 1.00090 | 1.01700 | 1.00100 | 1.00100 | 1.00200 | 1.02300 | 1.02100 | 1.01900 |
| California | 1.03500 | 1.07300 | 1.05400 | 1.05700 | 1.05300 | 1.05200 | 1.05320 | 1.04970 | 1.04600 | 1.04800 | 1.04900 | 1.04300 | 1.04200 | 1.04300 |
| Colorado | 1.03500 | 0.91200 | 0.97400 | 0.91300 | 0.91400 | 0.90000 | 0.87590 | 0.89240 | 0.99300 | 0.99400 | 1.00000 | 1.00600 | 1.00200 | 0.99900 |
| Connecticut | 1.03500 | 1.02200 | 1.01600 | 1.00500 | 1.00800 | 1.01000 | 1.01300 | 1.01170 | 1.02200 | 1.02500 | 1.02700 | 1.02900 | 1.02900 | 1.03000 |
| Delaware | 1.03500 | 1.04300 | 1.02000 | 1.02000 | 1.02500 | 1.03000 | 1.03090 | 1.03110 | 1.03500 | 1.03500 | 1.03300 | 1.01800 | 1.02100 | 1.02500 |
| District of Columbia | 1.03500 | 1.02400 | 1.01600 | 1.01200 | 1.01200 | 1.01600 | 1.01600 | 1.01600 | 1.00300 | 1.01400 | 1.01700 | 1.01000 | 1.01200 | 1.01500 |
| Florida | 1.03500 | 1.03700 | 1.04100 | 1.04300 | 1.04100 | 1.04500 | 1.04700 | 1.03730 | 1.04100 | 1.05900 | 1.04400 | 1.04800 | 1.04900 | 1.05300 |
| Georgia | 1.03500 | 1.04000 | 1.03100 | 1.02700 | 1.02700 | 1.02700 | 1.02790 | 1.03900 | 1.03200 | 1.02700 | 1.03000 | 1.02600 | 1.02600 | 1.02800 |
| Hawaii | 1.03500 | — | 0.96200 | 0.94700 | 0.91100 | 0.94900 | 0.95800 | 0.95000 | 0.96300 | 0.95900 | 0.98900 | 1.02300 | 1.02600 | 1.08200 |
| Idaho | 1.03500 | 1.06500 | 1.06100 | 1.05500 | 1.05700 | 1.06000 | 1.05340 | 1.04710 | 1.05300 | 1.07000 | 1.07200 | 1.04700 | 1.04500 | 1.04900 |
| Illinois | 1.03500 | 1.02900 | 1.02500 | 1.02600 | 1.02500 | 1.02800 | 1.01830 | 1.02440 | 1.02200 | 1.02000 | 1.02200 | 1.04100 | 1.04000 | 1.04000 |
| Indiana | 1.03500 | 0.99900 | 1.00600 | 0.99000 | 0.99000 | 0.99000 | 0.98910 | 0.99040 | 0.98900 | 0.99300 | 1.01600 | 1.00600 | 1.00700 | 1.00800 |
| Iowa | 1.03500 | 1.01000 | 1.00900 | 1.00800 | 1.00800 | 1.00400 | 1.00220 | 1.00230 | 1.00300 | 1.00300 | 1.00800 | 1.01400 | 1.01500 | 1.01100 |
| Kansas | 1.03500 | 0.99500 | 0.99800 | 0.98400 | 0.98100 | 0.98100 | 0.97810 | 0.97780 | 0.98700 | 0.98700 | 0.99900 | 0.99900 | 0.99200 | 0.99800 |
| Kentucky | 1.03500 | 1.02800 | 1.01700 | 1.00800 | 1.01100 | 1.01100 | 1.00990 | 1.00990 | 1.00900 | 1.01400 | 1.01400 | 1.02000 | 1.02200 | 1.03000 |
| Louisiana | 1.03500 | 1.04200 | 1.02900 | 1.03700 | 1.03800 | 1.03800 | 1.04470 | 1.03690 | 1.03800 | 1.03700 | 1.04700 | 1.04200 | 1.04200 | 1.04000 |
| Maine | 1.03500 | — | 1.01200 | 1.02400 | 1.02400 | 1.02400 | 1.02400 | 1.00000 | 1.02400 | 1.02500 | 1.02500 | 1.02600 | 1.03200 | 1.03500 |
| Maryland | 1.03500 | 1.02500 | 1.02200 | 1.01300 | 1.01400 | 1.01600 | 1.03010 | 1.04480 | 1.02000 | 1.01400 | 1.01800 | 1.02100 | 1.02600 | 1.03400 |
| Massachusetts | 1.03500 | 1.01300 | 1.01200 | 1.00400 | 1.00600 | 1.00700 | 1.00910 | 1.00910 | 1.01600 | 1.01600 | 1.02400 | 1.02500 | 1.03000 | 1.02700 |
| Michigan | 1.03500 | 1.01400 | 1.01500 | 1.01200 | 1.00800 | 1.00600 | 1.00550 | 1.00530 | 1.01100 | 1.01700 | 1.02200 | 1.02400 | 1.01700 | 1.01500 |
| Minnesota | 1.03500 | 0.99800 | 1.00200 | 1.00100 | 0.99800 | 0.99700 | 0.99670 | 0.99530 | 0.99700 | 0.99500 | 1.00500 | 1.02300 | 1.00300 | 1.00400 |
| Mississippi | 1.03500 | 1.02900 | 1.02500 | 1.02300 | 1.02300 | 1.02500 | 1.02120 | 1.02430 | 1.02800 | 1.02500 | 1.02800 | 1.02700 | 1.03000 | 1.02800 |
| Missouri | 1.03500 | 1.02000 | 1.00700 | 1.00600 | 1.00300 | 1.00200 | 1.00380 | 0.97950 | 1.01400 | 1.01500 | 1.01800 | 1.02700 | 1.01700 | 1.01700 |
| Montana | 1.03500 | 1.00100 | 1.03200 | 1.02100 | 1.01400 | 1.00900 | 1.00050 | 0.99010 | 1.01200 | 1.01100 | 1.01100 | 1.00800 | 1.00500 | 1.00100 |
| Nebraska | 1.03500 | 0.99100 | 1.00800 | 0.99400 | 0.99400 | 0.99800 | 0.99780 | 0.99380 | 0.97800 | 0.97800 | 0.98100 | 0.98200 | 0.98100 | 0.98200 |
| Nevada | 1.03500 | 1.06200 | 1.08200 | 1.06700 | 1.06600 | 1.04900 | 1.02790 | 1.01310 | 1.06100 | 1.07600 | 1.07000 | 1.06600 | 1.05900 | 1.06200 |
| New Hampshire | 1.03500 | 1.01200 | 1.01000 | 1.01000 | 1.01000 | 1.00000 | 1.00730 | 1.04000 | 1.02000 | 1.02200 | 1.02000 | 1.02100 | 1.02700 | 1.02700 |
| New Jersey | 1.03500 | 1.04500 | 1.02600 | 1.03100 | 1.03400 | 1.03400 | 1.03500 | 1.03590 | 1.03300 | 1.03400 | 1.03100 | 1.03100 | 1.02400 | 1.02600 |
| New Mexico | 1.03500 | 1.10800 | 1.08300 | 1.06400 | 1.05700 | 1.05700 | 1.05500 | 1.05640 | 1.04300 | 1.04700 | 1.04500 | 1.03300 | 1.04900 | 1.07400 |
| New York | 1.03500 | 1.02600 | 1.02100 | 1.01500 | 1.01400 | 1.01100 | 1.01190 | 1.01550 | 1.02500 | 1.02000 | 1.02300 | 1.02700 | 1.02700 | 1.02900 |
| North Carolina | 1.03500 | 1.03300 | 1.02400 | 1.01800 | 1.01800 | 1.01900 | 1.02080 | 1.02190 | 1.01200 | 1.01200 | 1.03300 | 1.03300 | 1.03400 | 1.03400 |
| North Dakota | 1.03500 | 1.00000 | 1.03100 | 1.00100 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.05200 | 1.04200 | 1.02600 | 1.04500 | 1.04900 | 1.06200 |
| Ohio | 1.03500 | 1.03300 | 1.02300 | 1.02300 | 1.02500 | 1.02400 | 1.02300 | 1.02490 | 1.01600 | 1.02300 | 1.02900 | 1.03400 | 1.03700 | 1.04400 |
| Oklahoma | 1.03500 | 1.02600 | 1.03200 | 1.01500 | 1.01400 | 1.02700 | 1.02390 | 1.02350 | 1.02300 | 1.03500 | 1.02300 | 1.04200 | 1.02500 | 1.02800 |
| Oregon | 1.03500 | 1.07000 | 1.04500 | 1.03900 | 1.03600 | 1.04200 | 1.04510 | 1.04480 | 1.04600 | 1.04400 | 1.04400 | 1.04100 | 1.03600 | 1.03000 |
| Pennsylvania | 1.03500 | 1.03800 | 1.03300 | 1.02500 | 1.02500 | 1.02100 | 1.02150 | 1.02060 | 1.02200 | 1.02200 | 1.02800 | 1.02900 | 1.03400 | 1.03400 |
| Rhode Island | 1.03500 | 1.04200 | 1.02100 | 1.01400 | 1.01300 | 1.01300 | 1.01290 | 1.01130 | 1.02100 | 1.02200 | 1.03600 | 1.03500 | 1.03000 | 1.03300 |
| South Carolina | 1.03500 | 1.04200 | 1.02800 | 1.02400 | 1.02300 | 1.02200 | 1.03200 | 1.01810 | 1.03300 | 1.02300 | 1.03000 | 1.02700 | 1.02600 | 1.02800 |
| South Dakota | 1.03500 | 0.99700 | 1.00400 | 1.00000 | 0.99900 | 1.00000 | 0.99920 | 0.99560 | 0.99800 | 1.00200 | 0.99900 | 1.01100 | 1.01100 | 1.01000 |
| Tennessee | 1.03500 | 1.04600 | 1.02200 | 1.03100 | 1.02900 | 1.03100 | 1.02800 | 1.03260 | 1.01600 | 1.01600 | 1.02400 | 1.02300 | 1.02400 | 1.03400 |
| Texas | 1.03500 | 1.03700 | 1.02700 | 1.02600 | 1.02500 | 1.02700 | 1.02810 | 1.03250 | 1.03300 | 1.03200 | 1.03200 | 1.02900 | 1.03600 | 1.03800 |
| Utah | 1.03500 | 0.92500 | 0.93800 | 0.95000 | 0.94800 | 0.95000 | 0.95620 | 0.95980 | 1.08600 | 1.07300 | 0.93900 | 1.07500 | 1.07500 | 1.07500 |
| Vermont | 1.03500 | — | 1.00600 | 1.00800 | 1.00800 | 1.00800 | 1.01050 | 1.01010 | 0.99000 | 0.99300 | 0.99300 | 0.99200 | 0.99200 | 0.99200 |
| Virginia | 1.03500 | 1.03100 | 1.02600 | 1.01900 | 1.01900 | 1.02300 | 1.02080 | 1.02140 | 1.01600 | 1.02400 | 1.02700 | 1.03000 | 1.03600 | 1.03900 |
| Washington | 1.03500 | 1.07500 | 1.05500 | 1.04200 | 1.04100 | 1.04500 | 1.04760 | 1.04690 | 1.05200 | 1.05000 | 1.05300 | 1.04300 | 1.04500 | 1.04000 |
| West Virginia | 1.03500 | 1.07100 | 1.02900 | 1.03700 | 1.04300 | 1.04200 | 1.03140 | 1.02370 | 1.03200 | 1.04000 | 1.04700 | 1.03800 | 1.05300 | 1.06700 |
| Wisconsin | 1.03500 | 1.01800 | 1.01900 | 1.02000 | 1.01700 | 1.01500 | 1.01230 | 1.01290 | 1.00800 | 1.00900 | 1.01200 | 1.00900 | 1.00800 | 1.01000 |
| Wyoming | 1.03500 | 0.92600 | 1.02300 | 0.93400 | 0.95000 | 0.93700 | 0.91370 | 0.92920 | 1.06000 | 1.05900 | 1.00200 | 1.05900 | 1.05300 | 1.05100 |
| U.S. Average | 1.03500 | 1.03271 | 1.02618 | 1.02249 | 1.02179 | 1.02315 | 1.02243 | 1.02208 | 1.02549 | 1.02703 | 1.02856 | 1.03046 | 1.03077 | 1.03253 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

Energy Information Administration
State Energy Data Report 1999

## Table C7. Approximate Heat Content of Natural Gas Total Consumption, 1986-1999
(Thousand Btu per Cubic Foot)

| State | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 1.03600 | 1.03300 | 1.02900 | 1.03000 | 1.02900 | 1.02700 | 1.02800 | 1.03000 | 1.03000 | 1.02900 | 1.03300 | 1.04100 | 1.03900 | 1.03500 |
| Alaska | 1.00900 | 1.00900 | 1.00400 | 0.99900 | 0.95400 | 1.00200 | 1.00200 | 0.99400 | 1.00100 | 1.00600 | 0.99000 | 1.00000 | 0.99900 | 1.00000 |
| Arizona | 1.03900 | 1.03600 | 1.03400 | 1.04000 | 1.03200 | 1.02500 | 1.03100 | 1.02800 | 1.02700 | 1.03500 | 1.01100 | 1.02100 | 1.01600 | 1.01500 |
| Arkansas | 1.01900 | 1.01600 | 1.00900 | 1.00600 | 1.00900 | 1.01700 | 1.00900 | 1.01400 | 1.02200 | 1.07600 | 1.02600 | 1.01500 | 1.02400 | 1.01900 |
| California | 1.03900 | 1.03000 | 1.03100 | 1.03700 | 1.03200 | 1.02700 | 1.02900 | 1.03600 | 1.02300 | 1.01600 | 1.03200 | 1.01800 | 1.04700 | 1.01700 |
| Colorado | 1.00300 | 1.00000 | 1.00600 | 1.01100 | 1.00500 | 1.02900 | 1.02300 | 1.01100 | 1.00500 | 1.01800 | 1.02400 | 1.01200 | 1.01200 | 1.00700 |
| Connecticut | 1.03000 | 1.03100 | 1.03200 | 1.03400 | 1.03300 | 1.03100 | 1.02800 | 1.02700 | 1.03000 | 1.02800 | 1.02800 | 1.02700 | 1.02600 | 1.02400 |
| Delaware | 1.01800 | 1.01500 | 1.02300 | 1.02800 | 1.02600 | 1.03400 | 1.03500 | 1.03500 | 1.03600 | 1.03400 | 1.03500 | 1.03500 | 1.03700 | 1.03700 |
| District of Columbia | 1.01300 | 1.01400 | 1.01100 | 1.01000 | 1.00800 | 1.00600 | 1.00700 | 1.00700 | 1.01100 | 1.00600 | 1.00900 | 1.02100 | 1.02700 | 1.02100 |
| Florida | 1.03600 | 1.04400 | 1.04200 | 1.04200 | 1.04300 | 1.04900 | 1.04900 | 1.05200 | 1.06800 | 1.03300 | 1.05000 | 1.04800 | 1.05100 | 1.04300 |
| Georgia | 1.02700 | 1.02600 | 1.02500 | 1.02600 | 1.02700 | 1.02700 | 1.02500 | 1.02700 | 1.03000 | 1.02600 | 1.02300 | 1.02700 | 1.02700 | 1.02700 |
| Hawaii | 1.08600 | 1.06800 | 1.07800 | 1.08000 | 1.07000 | 1.08000 | 1.07300 | 1.06200 | 1.05100 | 1.04800 | 1.05700 | 1.03000 | 1.05600 | 1.05500 |
| Idaho | 1.02100 | 1.01700 | 1.02000 | 1.02700 | 1.02800 | 1.03300 | 1.03000 | 1.03800 | 1.03800 | 1.03000 | 1.03000 | 1.03100 | 1.03800 | 1.03800 |
| Illinois | 1.02100 | 1.01500 | 1.01800 | 1.02200 | 1.02200 | 1.01900 | 1.01800 | 1.02100 | 1.02100 | 1.02000 | 1.01900 | 1.02100 | 1.02200 | 1.02200 |
| Indiana | 1.00900 | 1.00900 | 1.01500 | 1.01600 | 1.01800 | 1.01400 | 1.01100 | 1.01300 | 1.01300 | 1.01200 | 1.01100 | 1.01100 | 1.01700 | 1.01800 |
| Iowa | 1.01000 | 1.00800 | 1.00700 | 1.01100 | 1.00700 | 1.00800 | 1.00400 | 1.00300 | 1.00800 | 1.00500 | 1.00600 | 1.00900 | 1.01100 | 1.01900 |
| Kansas | 0.98500 | 1.04600 | 0.98600 | 0.99200 | 0.99900 | 1.00700 | 0.98700 | 0.98700 | 0.99800 | 1.00200 | 0.99600 | 1.00100 | 0.99500 | 0.99700 |
| Kentucky | 1.03800 | 1.03700 | 1.03700 | 1.03900 | 1.04000 | 1.04700 | 1.05800 | 1.04800 | 1.06200 | 1.09600 | 1.04900 | 1.05000 | 1.03400 | 1.03200 |
| Louisiana | 1.04000 | 1.04000 | 1.04200 | 1.04300 | 1.04200 | 1.04700 | 1.04400 | 1.03700 | 1.04000 | 1.03500 | 1.04400 | 1.11800 | 1.07000 | 1.04200 |
| Maine | 1.03100 | 1.04000 | 1.02700 | 1.00300 | 1.00500 | 1.00600 | 1.01300 | 1.01400 | 1.01400 | 1.01600 | 1.01600 | 1.01400 | 1.01700 | 1.01800 |
| Maryland | 1.03600 | 1.03400 | 1.03200 | 1.03200 | 1.02800 | 1.02700 | 1.02800 | 1.02800 | 1.03100 | 1.02600 | 1.02900 | 1.03400 | 1.03700 | 1.03400 |
| Massachusetts | 1.02600 | 1.02900 | 1.03000 | 1.03800 | 1.03800 | 1.03900 | 1.03700 | 1.03800 | 1.02600 | 1.02600 | 1.02700 | 1.02200 | 1.02300 | 1.04800 |
| Michigan | 1.02700 | 1.02100 | 1.02200 | 1.02900 | 1.02200 | 1.02000 | 1.02000 | 1.02100 | 1.02100 | 1.01700 | 1.01200 | 1.01600 | 1.02000 | 1.01800 |
| Minnesota | 0.99900 | 0.99900 | 1.00700 | 1.00600 | 1.00400 | 1.01200 | 1.01100 | 1.01100 | 1.01100 | 1.01300 | 1.01800 | 1.01800 | 1.02000 | 1.01900 |
| Mississippi | 1.02500 | 1.01800 | 1.01700 | 1.03000 | 1.03300 | 1.02900 | 1.04700 | 1.02300 | 1.03300 | 1.02600 | 1.03000 | 1.03400 | 1.04600 | 1.03600 |
| Missouri | 1.01100 | 1.01100 | 1.00600 | 1.00800 | 1.01100 | 1.00900 | 1.00200 | 1.00400 | 1.00600 | 1.00700 | 1.01100 | 1.01000 | 1.01100 | 1.01300 |
| Montana | 1.00000 | 1.02000 | 1.02500 | 1.02000 | 1.02800 | 1.02900 | 1.02300 | 1.01800 | 1.02400 | 1.03000 | 1.03000 | 1.03100 | 1.02600 | 1.02400 |
| Nebraska | 0.99300 | 0.98500 | 0.98300 | 0.98700 | 0.98300 | 0.98400 | 0.97900 | 0.97500 | 0.98500 | 0.98000 | 1.00700 | 0.99800 | 1.00300 | 0.99900 |
| Nevada | 1.05900 | 1.00900 | 1.00300 | 1.03000 | 1.03100 | 1.03200 | 1.03100 | 1.03400 | 1.03500 | 1.03300 | 1.03600 | 1.02700 | 1.04100 | 1.03400 |
| New Hampshire | 1.02700 | 1.02900 | 1.02500 | 1.01900 | 1.01400 | 1.00700 | 1.00900 | 1.01000 | 1.01300 | 1.01100 | 1.01900 | 1.01100 | 1.01100 | 1.00900 |
| New Jersey | 1.02700 | 1.02600 | 1.02600 | 1.02600 | 1.02600 | 1.02600 | 1.02600 | 1.03600 | 1.03900 | 1.03400 | 1.03600 | 1.03500 | 1.03800 | 1.03900 |
| New Mexico | 1.07700 | 1.07400 | 1.06800 | 1.04800 | 1.05400 | 1.03900 | 1.04000 | 1.03900 | 1.00300 | 1.02000 | 1.02900 | 1.01900 | 0.98200 | 0.97900 |
| New York | 1.02900 | 1.03000 | 1.02900 | 1.02900 | 1.03000 | 1.02800 | 1.02900 | 1.02900 | 1.02800 | 1.02800 | 1.02600 | 1.02600 | 1.02800 | 1.02700 |
| North Carolina | 1.03300 | 1.03100 | 1.03000 | 1.03100 | 1.03200 | 1.03200 | 1.03400 | 1.03500 | 1.03600 | 1.03300 | 1.03600 | 1.03600 | 1.04000 | 1.03500 |
| North Dakota | 1.04300 | 1.04800 | 1.05500 | 1.04900 | 1.03200 | 1.04600 | 1.04500 | 1.06000 | 1.05800 | 1.05000 | 1.05100 | 1.05000 | 1.03800 | 1.04500 |
| Ohio | 1.04600 | 1.04500 | 1.04000 | 1.04200 | 1.04000 | 1.04400 | 1.03600 | 1.03800 | 1.03700 | 1.03800 | 1.03800 | 1.04500 | 1.04000 | 1.03700 |
| Oklahoma | 1.03000 | 1.03600 | 1.03800 | 1.02800 | 1.02700 | 1.02100 | 1.02600 | 1.02600 | 1.02800 | 1.02000 | 1.02400 | 1.01200 | 1.01400 | 1.02300 |
| Oregon | 1.02200 | 1.02800 | 1.02300 | 1.03500 | 1.02300 | 1.02900 | 1.03500 | 1.03700 | 1.04000 | 1.04000 | 1.04000 | 1.04600 | 1.04300 | 1.05100 |
| Pennsylvania | 1.03600 | 1.03600 | 1.03600 | 1.03700 | 1.03700 | 1.03500 | 1.03600 | 1.03700 | 1.03600 | 1.03500 | 1.03400 | 1.03500 | 1.03600 | 1.03600 |
| Rhode Island | 1.02900 | 1.02800 | 1.02700 | 1.02700 | 1.02800 | 1.02800 | 1.01800 | 1.02900 | 1.02900 | 1.02600 | 1.06000 | 1.02400 | 1.02500 | 1.02300 |
| South Carolina | 1.03000 | 1.02800 | 1.02700 | 1.02600 | 1.02800 | 1.02700 | 1.02700 | 1.02900 | 1.03100 | 1.02700 | 1.03000 | 1.03100 | 1.03400 | 1.03100 |
| South Dakota | 1.00500 | 1.01300 | 1.02000 | 1.01700 | 1.01600 | 1.01800 | 1.01500 | 1.01300 | 1.01000 | 1.01400 | 1.01400 | 1.01800 | 1.01000 | 1.00600 |
| Tennessee | 1.03200 | 1.03200 | 1.03100 | 1.03200 | 1.03500 | 1.03300 | 1.03100 | 1.03500 | 1.03200 | 1.03100 | 1.03200 | 1.03100 | 1.03000 | 1.02700 |
| Texas | 1.04000 | 1.04000 | 1.03800 | 1.03800 | 1.04000 | 1.03700 | 1.04300 | 1.02800 | 1.03700 | 1.03700 | 1.03300 | 1.02800 | 1.04100 | 1.03200 |
| Utah | 0.94800 | 1.08000 | 1.08100 | 1.08700 | 1.08800 | 1.07300 | 1.07800 | 1.08000 | 1.06700 | 1.06300 | 1.04200 | 1.04200 | 1.04600 | 1.05500 |
| Vermont | 0.98700 | 0.98700 | 0.99000 | 0.98600 | 0.98700 | 0.98800 | 0.99500 | 0.99800 | 0.99600 | 0.99600 | 1.01500 | 1.01200 | 1.01200 | 1.01200 |
| Virginia | 1.04000 | 1.04000 | 1.04100 | 1.04100 | 1.04200 | 1.04200 | 1.03900 | 1.04400 | 1.03800 | 1.03100 | 1.03900 | 1.04400 | 1.04300 | 1.03800 |
| Washington | 1.02900 | 1.03300 | 1.02600 | 1.03200 | 1.03000 | 1.03100 | 1.03300 | 1.03700 | 1.04100 | 1.04000 | 1.03700 | 1.04600 | 1.04500 | 1.05200 |
| West Virginia | 1.07600 | 1.07400 | 1.07700 | 1.07700 | 1.07100 | 1.07300 | 1.06500 | 1.06500 | 1.06400 | 1.06100 | 1.06100 | 1.06800 | 1.06300 | 1.05500 |
| Wisconsin | 1.01000 | 1.00800 | 1.00800 | 1.00500 | 1.00600 | 1.00700 | 1.00900 | 1.01100 | 1.01200 | 1.01100 | 1.01300 | 1.01100 | 1.01100 | 1.01200 |
| Wyoming | 1.05000 | 1.05700 | 1.05300 | 1.05500 | 1.09900 | 1.06000 | 1.05800 | 1.05600 | 1.05600 | 1.05600 | 1.06300 | 1.06100 | 1.06900 | 1.06700 | 1.05100 |
| U.S. Average | 1.03065 | 1.03131 | 1.02958 | 1.03113 | 1.03014 | 1.02994 | 1.03041 | 1.02806 | 1.02923 | 1.02819 | 1.02875 | 1.03271 | 1.03444 | 1.02768 |

Sources: See source listing at the end of this appendix.

**Table C8.  Approximate Heat Content of Bituminous Coal and Lignite Consumed by the Residential and Commercial Sector, 1960-1985, Selected Years**
(Million Btu per Short Ton)

| State | 1960 | 1965 | 1970 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 24.90955 | 24.77905 | 23.93285 | 23.51979 | 23.61816 | 23.50701 | 23.94624 | 24.01274 | 24.04242 | 24.22595 | 24.31358 | 24.15500 | 24.30488 | 24.40711 |
| Alaska | 18.90636 | 18.80731 | 18.16504 | 17.68304 | 17.73431 | 17.65792 | 17.64148 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 |
| Arizona | — | — | — | — | — | 23.13886 | 23.03907 | — | — | 19.98524 | 19.99547 | 19.86600 | 19.79000 | 19.78800 |
| Arkansas | 23.58822 | 23.46464 | 22.66333 | 22.78461 | — | 23.25776 | 24.55559 | — | 23.89952 | 26.51913 | 22.89048 | 22.94800 | 22.81074 | 22.99047 |
| California | 23.01295 | 22.89238 | 22.11061 | 21.37302 | — | 21.42094 | 22.18359 | 22.38055 | 23.10930 | 23.02922 | 23.28646 | 23.09600 | 23.14219 | 23.55520 |
| Colorado | 22.95289 | 22.83264 | 22.05291 | 20.82582 | 21.41799 | 21.55660 | 19.87246 | 21.73459 | 21.46057 | 21.33917 | 21.51570 | 21.37000 | 21.55892 | 21.21743 |
| Connecticut | 25.06247 | 24.93116 | 24.07977 | — | — | — | 22.40550 | 24.09419 | 24.45394 | 24.29057 | 25.13790 | 25.92800 | — | 24.66397 |
| Delaware | — | — | — | — | — | — | — | — | 24.41454 | 24.28610 | 24.41599 | 24.59400 | — | 24.66000 |
| District of Columbia | 25.10862 | 24.97707 | 24.12411 | 23.24075 | 23.71388 | — | — | 24.14581 | 24.54122 | 24.30399 | 24.49389 | 24.78500 | 24.81371 | 24.88768 |
| Florida | 24.33573 | 24.20824 | 23.38153 | 23.49264 | — | — | — | 24.06838 | 24.28341 | 24.32752 | 22.98457 | 24.68400 | 24.75000 | 24.88200 |
| Georgia | 24.74225 | 24.61262 | 23.77210 | 23.49417 | 23.84904 | 23.59090 | 23.62811 | 24.09985 | 24.32123 | 24.31119 | 24.36058 | 24.50100 | 24.74515 | 24.88078 |
| Hawaii | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Idaho | 24.83140 | 24.70130 | 23.85776 | 22.66294 | 21.31072 | 21.63582 | 20.09020 | 19.14751 | 22.29152 | 21.71739 | 21.67035 | 22.12100 | 22.22887 | 22.83215 |
| Illinois | 24.04090 | 23.91495 | 23.09826 | 22.52306 | 22.45631 | 22.23331 | 22.26637 | 22.26385 | 22.06574 | 22.06493 | 22.01927 | 22.21700 | 22.27314 | 22.26660 |
| Indiana | 24.06302 | 23.93695 | 23.11951 | 22.13211 | 22.47946 | 22.89893 | 22.29510 | 22.38371 | 21.87750 | 21.95293 | 22.06379 | 22.05200 | 22.08060 | 22.25712 |
| Iowa | 21.32126 | 21.20956 | 20.48526 | 18.27722 | 18.94425 | 21.89519 | 19.92939 | 21.33432 | 20.22308 | 20.61051 | 20.52589 | 21.64800 | 20.92480 | 21.39008 |
| Kansas | 21.78815 | 21.67400 | 20.93384 | 19.74632 | — | — | 21.09194 | 20.90868 | 21.18218 | 21.18317 | 22.42143 | 21.32800 | 21.43826 | 21.14600 |
| Kentucky | 24.41023 | 24.28234 | 23.45311 | 23.20915 | 23.73730 | 23.44388 | 23.40679 | 23.94161 | 23.86491 | 23.96212 | 23.97577 | 24.00400 | 24.28360 | 24.34440 |
| Louisiana | — | — | — | 20.47422 | — | — | — | — | 21.36502 | — | 21.42848 | — | 22.77784 | — |
| Maine | 25.15186 | 25.02009 | 24.16566 | 23.25980 | 23.71388 | 23.36163 | 23.47358 | 24.18655 | 24.44110 | 24.39970 | 24.50683 | 24.75000 | 24.74849 | 24.88310 |
| Maryland | 25.11916 | 24.98756 | 24.13424 | 23.33369 | 23.75979 | 23.57470 | 23.80769 | 24.31769 | 24.46833 | 24.30977 | 24.51908 | 24.60400 | 24.74104 | 24.85439 |
| Massachusetts | 25.07336 | 24.94200 | 24.09023 | 23.24075 | 23.71388 | 23.33604 | 23.59895 | 23.06344 | 24.50975 | 24.73845 | 24.82777 | 25.01800 | 24.82431 | 25.07917 |
| Michigan | 24.75962 | 24.62990 | 23.78880 | 23.47415 | 23.57719 | 23.31103 | 23.06861 | 24.08615 | 24.36325 | 24.24302 | 24.38544 | 24.56500 | 24.38057 | 24.47177 |
| Minnesota | 21.97087 | 21.85576 | 21.10939 | 19.25676 | 23.25512 | 23.22381 | 20.59904 | 18.75714 | 20.82860 | 18.49710 | 18.04556 | 19.19900 | 18.57345 | 19.14210 |
| Mississippi | 23.04357 | 22.92284 | 22.14003 | 21.95036 | — | — | 23.31499 | 24.09419 | 22.99343 | — | — | 23.87900 | 24.75000 | 24.54115 |
| Missouri | 22.94167 | 22.82147 | 22.04212 | 21.40447 | 21.61124 | 21.51115 | 21.34634 | 21.24613 | 21.80697 | 21.54143 | 21.47124 | 21.66500 | 21.67702 | 22.80191 |
| Montana | 21.33557 | 21.22380 | 20.49901 | 20.38911 | 20.03721 | 18.94201 | 18.43165 | 18.69575 | 22.04235 | 17.67068 | 17.59846 | 20.40500 | 17.70690 | 17.68025 |
| Nebraska | 20.91322 | 20.80366 | 20.09322 | 18.40616 | 18.41033 | 18.07395 | 17.96742 | 18.44085 | 18.03826 | 17.70058 | 19.19546 | 20.61600 | 21.37525 | 21.52621 |
| Nevada | 25.23114 | 25.09895 | 24.24182 | 23.52145 | 22.47754 | 23.07994 | 18.67965 | 17.79288 | 22.33387 | 22.62540 | 23.09437 | 23.09600 | 21.78448 | 23.56200 |
| New Hampshire | 24.95798 | 24.82722 | 23.97937 | — | — | — | — | — | 24.45810 | — | 24.49270 | 24.75000 | 24.58800 | — |
| New Jersey | 24.74372 | 24.61409 | 23.77352 | 21.82099 | — | — | — | — | 24.32119 | 24.28610 | 24.88430 | 24.59400 | 24.74516 | 24.87099 |
| New Mexico | 22.99301 | 22.87255 | 22.09146 | — | — | 21.82706 | 19.97236 | 20.00716 | 19.78553 | 20.01748 | 20.06988 | 19.86600 | 19.79000 | 19.81693 |
| New York | 24.62410 | 24.49509 | 23.65859 | 23.38572 | 23.83645 | 23.38315 | 23.87414 | 24.01167 | 24.36952 | 24.21078 | 24.36286 | 24.66000 | 24.56787 | 24.65957 |
| North Carolina | 24.76213 | 24.63240 | 23.79120 | 23.49258 | 23.86489 | 23.59213 | 23.46900 | 24.09999 | 24.42236 | 24.32632 | 24.49270 | 24.74900 | 24.75007 | 24.87841 |
| North Dakota | 15.55018 | 15.46871 | 14.94046 | 13.75718 | 13.48724 | 13.49456 | 13.28937 | 13.45096 | 13.24298 | 13.22083 | 13.26253 | 13.15700 | 13.00063 | 13.13815 |
| Ohio | 23.84944 | 23.72449 | 22.91430 | 22.32524 | 22.92489 | 22.69671 | 22.65768 | 22.97712 | 23.21312 | 23.47004 | 23.57085 | 23.74600 | 23.80036 | 23.84836 |
| Oklahoma | 22.72718 | 22.60811 | 21.83605 | 20.67259 | 20.96468 | 21.30529 | 21.53110 | 25.72233 | 23.29143 | 21.66746 | 21.84151 | 21.31800 | 21.50073 | 23.39403 |
| Oregon | 24.60503 | 24.47612 | 23.64027 | 22.38275 | 21.53895 | 21.41286 | 20.44651 | 19.56036 | 22.72195 | 20.26182 | 19.75846 | 20.24000 | 21.75434 | 22.60723 |
| Pennsylvania | 24.79066 | 24.66078 | 23.81862 | 23.49453 | 23.80811 | 23.82432 | 24.03394 | 24.02308 | 24.18275 | 24.12648 | 24.48508 | 24.62600 | 24.64525 | 24.84190 |
| Rhode Island | 25.87949 | 25.74390 | 24.86475 | — | — | — | — | — | 24.41454 | — | — | 24.59400 | 24.58800 | 24.66000 |
| South Carolina | 24.76172 | 24.63199 | 23.79081 | 23.49264 | 23.86489 | 23.59214 | 23.62799 | 24.09999 | 24.41433 | 24.14642 | 24.49270 | 24.75000 | 24.67873 | 24.88200 |
| South Dakota | 19.41154 | 19.30984 | 18.65041 | 16.85997 | 19.54143 | 19.15533 | 22.22392 | 17.79288 | 18.42630 | 18.29957 | 18.03164 | 19.83900 | 23.33603 | 19.36902 |
| Tennessee | 24.71529 | 24.58580 | 23.74620 | 23.48538 | 23.85462 | 23.52067 | 23.32331 | 23.37282 | 23.97514 | 24.15563 | 24.00493 | 24.58200 | 24.27867 | 24.38903 |
| Texas | 14.95177 | 14.87344 | 14.36552 | 13.10400 | — | 13.20200 | — | — | 15.20049 | 19.31609 | 17.79300 | 23.10500 | — | 22.51056 |
| Utah | 25.89198 | 25.75633 | 24.87676 | 23.74007 | 22.41031 | 23.08304 | 22.96192 | 23.36462 | 23.17910 | 23.13998 | 23.27931 | 23.09600 | 23.14200 | 23.56200 |
| Vermont | 25.14754 | 25.01579 | 24.16151 | 24.28203 | — | — | — | — | — | 24.32752 | 25.16538 | 24.59400 | 24.74251 | 24.88200 |
| Virginia | 24.78594 | 24.65608 | 23.81408 | 23.47257 | 23.85106 | 23.58575 | 23.56409 | 24.04433 | 24.43211 | 24.36232 | 24.58812 | 24.84300 | 24.79707 | 24.87725 |
| Washington | 22.90924 | 22.78922 | 22.01097 | 19.96772 | 19.34891 | 22.16433 | 21.80682 | 21.65332 | 22.77100 | 22.97649 | 23.03893 | 22.74400 | 22.78786 | 23.45190 |
| West Virginia | 24.99691 | 24.86595 | 24.01679 | 23.70919 | 24.02458 | 23.88573 | 24.18947 | 24.14787 | 24.05881 | 24.18392 | 24.71583 | 24.89700 | 24.81981 | 24.93027 |
| Wisconsin | 21.91550 | 21.80068 | 21.05619 | 18.97225 | 23.53615 | 23.47004 | 20.61526 | 20.48444 | 24.29637 | 23.34779 | 23.42252 | 23.24900 | 24.16838 | 24.62943 |
| Wyoming | 20.62538 | 20.51732 | 19.81665 | 18.57163 | 18.61369 | 18.37162 | 18.05772 | 17.84923 | 17.80856 | 17.90710 | 17.58366 | 17.46800 | 17.91289 | 17.26200 |
| U.S. Average | 24.05400 | 23.92800 | 23.11100 | 22.25800 | 22.81900 | 22.59400 | 22.07800 | 21.88400 | 22.48800 | 22.01000 | 22.22600 | 22.43800 | 22.40600 | 22.56800 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

## Table C9.  Approximate Heat Content of Bituminous Coal and Lignite Consumed by the Residential and Commercial Sector, 1986-1999
(Million Btu per Short Ton)

| State | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 24.63975 | 25.08310 | 25.79266 | 24.43388 | 24.62888 | 24.64340 | 24.20326 | 24.25081 | 24.43623 | 24.64589 | 24.63827 | 24.64237 | 24.71187 | 24.71187 |
| Alaska | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.84800 | 15.71000 | 15.71000 |
| Arizona | 19.88600 | 20.38358 | 19.88400 | 21.63113 | 18.69800 | 18.61200 | 21.70074 | 21.38908 | — | 21.96150 | 19.28500 | 19.10307 | 19.90042 | 19.90042 |
| Arkansas | — | 21.49000 | 21.92000 | 24.24994 | 24.83400 | 25.96800 | 24.96800 | 23.89800 | 26.55800 | — | — | — | 24.43167 | 24.43167 |
| California | 18.98169 | 22.68814 | 23.12753 | 22.37275 | 23.18400 | 23.14011 | 23.07808 | 23.20120 | 23.23636 | 23.29600 | 23.28200 | 23.10055 | 23.04000 | 23.04000 |
| Colorado | 21.56464 | 21.39947 | 21.95565 | 21.38168 | 21.43489 | 21.57494 | 20.91578 | 21.81200 | 22.14453 | 22.16939 | 22.10652 | 18.70031 | 22.19459 | 22.19459 |
| Connecticut | 24.95467 | 24.95908 | 25.04400 | 24.80362 | 24.95377 | 25.02600 | 25.04256 | 25.18800 | 25.23600 | 23.33821 | 25.23000 | 25.41000 | — | — |
| Delaware | 24.72400 | 24.77250 | 24.98711 | 24.69741 | 24.85030 | 25.02600 | 25.18400 | 23.83055 | 23.80800 | — | 25.03700 | 25.17800 | 25.14287 | 25.14287 |
| District of Columbia | 24.96200 | 25.06317 | 25.10269 | 24.81697 | 24.96081 | 25.03991 | 24.93954 | 24.99205 | 24.95656 | 25.17800 | 24.74271 | 24.57969 | 24.44600 | 24.44600 |
| Florida | 24.96195 | 25.03600 | 25.04400 | 24.88400 | 24.83209 | — | 23.20460 | 24.98000 | 24.94600 | 24.64400 | 25.04400 | — | 24.95800 | 24.95800 |
| Georgia | 24.96009 | 25.12917 | 25.21017 | 24.65345 | 25.14236 | 25.18717 | 25.19639 | 25.01321 | 25.34707 | 24.98009 | 25.04400 | 25.69800 | 25.73000 | 25.73000 |
| Hawaii |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho | 22.85769 | 22.57736 | 22.58220 | 21.56850 | 22.47778 | 22.57314 | 22.43044 | 22.43248 | 22.45583 | 21.71685 | 21.72486 | 22.68311 | 22.80723 | 22.80723 |
| Illinois | 22.34029 | 22.53093 | 22.45239 | 22.62147 | 22.43881 | 22.55972 | 22.81144 | 22.61095 | 22.44583 | 22.50579 | 22.66766 | 22.80180 | 22.89998 | 22.89998 |
| Indiana | 22.39394 | 22.71158 | 22.58785 | 22.29989 | 22.44825 | 22.43100 | 22.44030 | 22.58687 | 22.62002 | 22.24440 | 22.17831 | 22.14894 | 22.26866 | 22.26866 |
| Iowa | 21.12940 | 20.63182 | 20.47464 | 22.67388 | 23.94746 | 24.08615 | 23.69806 | 23.40503 | 23.48865 | 24.36084 | 24.52912 | 23.56166 | 23.80418 | 23.80418 |
| Kansas | 21.37600 | 21.49000 | 21.92000 | 23.70114 | 24.27952 | 24.17200 | 24.41040 | 22.71888 | 24.51341 | 23.94481 | 24.10800 | 22.52800 | 23.04000 | 23.04000 |
| Kentucky | 24.55696 | 24.57961 | 24.40565 | 23.50634 | 24.44827 | 24.71214 | 24.79946 | 24.87999 | 24.86187 | 24.92797 | 24.35637 | 23.26357 | 24.28534 | 24.28534 |
| Louisiana | — | — | — | 24.88400 | — | 24.83202 | 24.97980 | 25.08398 | 24.98302 | — | 25.07800 | 24.53000 | 25.18061 | 25.18061 |
| Maine | 25.11291 | 25.27582 | 25.16907 | 25.20764 | — | — | — | — | — | 25.27600 | — | 25.30930 | — | — |
| Maryland | 24.86479 | 24.83938 | 24.92307 | 24.93809 | 25.05609 | 25.15721 | 25.25327 | 25.32011 | 25.28911 | 24.84383 | 25.09521 | 25.17919 | 25.18171 | 25.18171 |
| Massachusetts | 24.88914 | 24.99179 | 25.60034 | 25.46184 | 24.95675 | 24.99377 | 24.95331 | 24.96353 | 24.94911 | 25.07519 | 24.98651 | 24.94094 | 24.95852 | 24.95852 |
| Michigan | 24.86180 | 24.92704 | 25.02796 | 24.85836 | 24.81175 | 24.88522 | 24.91553 | 24.73038 | 24.47621 | 24.66145 | 24.85003 | 24.59371 | 24.91677 | 24.91677 |
| Minnesota | 18.97575 | 17.94151 | 18.19799 | 19.27225 | 17.89230 | 17.72586 | 17.73500 | 18.34923 | 19.59694 | 20.25825 | 17.54796 | 18.40250 | 23.48431 | 23.48431 |
| Mississippi | 24.96200 | 24.40747 | 23.61910 | 23.28820 | 24.85200 |  |  |  |  |  |  |  |  |  |
| Missouri | 22.61640 | 21.77716 | 22.01127 | 22.36218 | 21.93585 | 21.94880 | 22.01651 | 22.43578 | 22.86555 | 22.63423 | 22.66103 | 22.82506 | 22.71555 | 22.71555 |
| Montana | 17.57944 | 17.57643 | 17.76117 | 19.70627 | 18.78135 | 18.01546 | 18.17794 | 18.88756 | 18.05498 | 21.22785 | 18.18800 | 17.85986 | 18.04509 | 18.04509 |
| Nebraska | 20.80859 | 20.93504 | 18.27452 | 21.37921 | 21.37396 | 21.54400 | 20.43600 | 21.70581 | 21.88812 | 20.32116 | 17.30000 | 17.33200 | 17.33400 | 17.33400 |
| Nevada | 23.23400 | 23.41600 | 23.15000 | 22.87600 | 23.18400 | 23.14800 | 23.09600 | 23.20000 | 23.23600 | 23.44269 | 23.28200 | 23.09600 | 23.04000 | 23.04000 |
| New Hampshire | 24.96200 | — | 24.73200 | 24.93406 | 24.86200 | 25.02600 | 25.18400 | — | — | 25.21627 | 25.23000 | 25.41000 | 25.31400 | 25.31400 |
| New Jersey | 24.72400 | 24.75000 | — | 24.66400 | 24.86200 | 25.02600 | 25.18400 | 25.18800 | — | — | 25.17800 | 25.03108 | 25.12600 | — |
| New Mexico | 19.88600 | 17.96000 | 19.89220 | 22.98538 | 18.69800 | 18.63858 | 19.68776 | 19.18470 | 19.32173 | 19.23183 | 19.32888 | 18.92150 | 18.87750 | 18.87750 |
| New York | 24.62179 | 24.81538 | 24.78285 | 24.69638 | 24.53057 | 24.78691 | 24.84495 | 24.97660 | 25.05627 | 25.23274 | 25.02655 | 25.06754 | 25.03727 | 25.03727 |
| North Carolina | 24.96217 | 25.05752 | 25.05591 | 24.88555 | 25.18700 | 25.26828 | 25.03913 | 25.01686 | 24.99583 | 25.16371 | 24.83876 | 24.99475 | 24.84401 | 24.84401 |
| North Dakota | 13.12892 | 13.19509 | 13.09800 | 13.08417 | 13.90962 | 13.89793 | 14.54945 | 14.76482 | 14.92006 | 15.53547 | 14.75327 | 14.93796 | 15.51366 | 15.51366 |
| Ohio | 23.98021 | 24.14433 | 24.27434 | 23.87649 | 24.14209 | 24.17118 | 24.36112 | 24.32488 | 24.31907 | 24.43814 | 23.78173 | 23.87340 | 24.36456 | 24.36456 |
| Oklahoma | 21.89519 | 22.90130 | 21.87471 | 23.17382 | 24.83400 | 25.96800 | 24.96800 | 23.89800 | 26.55800 | 25.89400 | 26.12800 | 17.35345 | 25.32800 | 25.32800 |
| Oregon | 20.67402 | 22.83495 | 24.26966 | 24.37594 | 23.18400 | 23.14800 | 23.09600 | 23.20000 | 23.23600 | 23.29600 | 23.28200 | 23.09600 | 23.04000 | 23.04000 |
| Pennsylvania | 24.94691 | 24.89646 | 24.99069 | 25.07618 | 24.87715 | 25.01966 | 25.16609 | 25.17773 | 25.11524 | 25.19002 | 25.17498 | 25.29357 | 25.20810 | 25.20810 |
| Rhode Island | 24.72400 | — | — | — | — | 21.38800 | — | — | 24.80800 | — | — | 24.53000 | — | — |
| South Carolina | 24.96200 | 25.03600 | 25.04400 | 24.88400 | 24.85514 | 25.13802 | 24.98563 | 24.98327 | 24.93865 | 25.69344 | 24.71660 | 24.97200 | 24.67971 | 24.67971 |
| South Dakota | 20.80221 | 17.78380 | 16.94015 | 17.32800 | 18.37453 | 17.28738 | 17.26200 | 17.29400 | 20.51158 | 19.07166 | 21.61937 | 17.33200 | 17.33400 | 17.33400 |
| Tennessee | 24.08855 | 24.32695 | 24.71849 | 24.35723 | 24.72241 | 25.10340 | 24.27660 | 25.12128 | 25.16428 | 25.28058 | 25.04338 | 25.02948 | 24.44179 | 24.44179 |
| Texas | 24.95990 | 23.52781 | 23.44597 | 23.69531 | 25.89608 | 25.72253 | 21.62533 | 18.08517 | 26.55800 | — | 25.23000 | 25.51017 | 25.72933 | 25.72933 |
| Utah | 23.23400 | 23.41600 | 23.04841 | 22.82872 | 23.14974 | 23.14775 | 23.09571 | 23.20000 | 23.23600 | 23.29600 | 23.28200 | 23.09345 | 23.04000 | 23.04000 |
| Vermont | 24.99482 | 24.75000 | — | 24.66400 | 24.86200 | 25.02600 | — | 25.18800 | 24.83200 | — | 25.23000 | 25.41000 | — | — |
| Virginia | 25.01061 | 25.07076 | 25.17455 | 25.00443 | 25.08653 | 25.12406 | 25.14160 | 24.99711 | 24.98384 | 24.99803 | 25.10558 | 24.93091 | 24.88224 | 24.88224 |
| Washington | 22.18962 | 22.47533 | 22.02189 | 22.05743 | 21.73662 | 22.32965 | 22.18045 | 22.50221 | 22.42899 | 22.63392 | 23.09783 | 22.87154 | 23.04000 | 23.04000 |
| West Virginia | 25.21287 | 25.27135 | 25.27741 | 25.22664 | 25.01710 | 25.01287 | 24.98555 | 24.90895 | 24.95371 | 24.83139 | 24.68019 | 24.73779 | 24.53394 | 24.53394 |
| Wisconsin | 24.59992 | 24.06919 | 24.40016 | 24.67810 | 24.90557 | 25.06289 | 25.06301 | 24.96835 | 24.94350 | 25.07766 | 25.05235 | 24.92049 | 24.95800 | 24.95800 |
| Wyoming | 17.65003 | 17.36854 | 17.83575 | 17.55041 | 19.93489 | 23.14800 | 18.91636 | 18.55083 | 18.45662 | 18.24057 | 18.19276 | 18.03000 | 18.03200 | 18.03200 |
| U.S. Average | 22.66900 | 22.80000 | 23.13500 | 22.91700 | 22.67800 | 22.63500 | 22.76800 | 22.74900 | 22.68300 | 22.76700 | 22.64895 | 22.04800 | 22.54054 | 22.54054 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

**Table C10.  Approximate Heat Content of Bituminous Coal and Lignite Consumed by Other Industrial Users, 1960-1985, Selected Years**
(Million Btu per Short Ton)

| State | 1960 | 1965 | 1970 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 25.21478 | 24.99246 | 23.54274 | 22.99662 | 23.44664 | 23.46569 | 23.81664 | 24.03186 | 24.11858 | 24.21881 | 24.19950 | 24.14200 | 24.28378 | 24.38730 |
| Alaska | 19.42837 | 19.25707 | 18.14004 | 17.68383 | 17.73431 | 17.71652 | — | — | — | — | — | — | — | — |
| Arizona | 21.61434 | 21.42376 | 20.18105 | 19.77788 | 20.06876 | 20.52769 | 20.36556 | 20.23336 | 20.37305 | 20.35804 | 20.32161 | 20.17200 | 20.30712 | 20.25740 |
| Arkansas | 25.42843 | 25.20422 | 23.74222 | 21.33575 | 21.42189 | 21.16227 | 21.38481 | 21.26347 | 21.40613 | 21.48376 | 21.43682 | 21.39500 | 21.54256 | 21.30956 |
| California | 26.05221 | 25.82250 | 24.32464 | 22.98540 | 22.10274 | 22.53203 | 22.27807 | 22.45862 | 22.17313 | 22.20901 | 22.12114 | 21.99800 | 22.30241 | 23.29923 |
| Colorado | 23.55826 | 23.35054 | 21.99607 | 21.39183 | 20.81646 | 21.03070 | 21.44647 | 21.58818 | 21.81821 | 21.41732 | 21.38437 | 21.38500 | 21.62012 | 21.56832 |
| Connecticut | 25.78016 | 25.55285 | 24.07063 | 23.62736 | 23.86489 | 24.28112 | 23.13179 | 24.37246 | 24.45810 | 24.32752 | 25.03611 | 24.63900 | 22.06048 | 24.88200 |
| Delaware | 25.44489 | 25.22054 | 23.75760 | 23.49264 | 23.86489 | 23.78426 | 24.12927 | 24.40975 | 24.48200 | 24.29050 | 24.42794 | 24.59900 | 24.61639 | 24.72755 |
| District of Columbia | 25.88358 | 25.65536 | 24.16719 | 23.78591 | 24.16220 | 23.96173 | 24.27625 | 24.37709 | 24.35746 | 24.32752 | — | — | — | — |
| Florida | 25.65932 | 25.43308 | 23.95781 | 23.54145 | 23.61816 | 23.50909 | 23.59896 | 22.82220 | 22.89184 | 23.91138 | 24.48338 | 24.68100 | 24.57895 | 24.78536 |
| Georgia | 25.42319 | 25.19903 | 23.73733 | 23.50777 | 23.77935 | 23.55063 | 23.69765 | 24.06854 | 24.33122 | 24.31279 | 24.47558 | 24.71700 | 24.72146 | 24.81892 |
| Hawaii | — | — | — | — | — | — | — | — | — | — | 24.68800 | 24.68800 | 24.68800 | 24.68800 |
| Idaho | 22.54363 | 22.34486 | 21.04872 | 19.93455 | 19.02890 | 18.89684 | 18.40186 | 18.78585 | 17.68403 | 17.67976 | 17.49468 | 17.61400 | 17.59828 | 17.76163 |
| Illinois | 23.82775 | 23.61766 | 22.24769 | 21.68412 | 21.83288 | 21.83742 | 21.66987 | 22.08390 | 22.34991 | 22.34499 | 22.47097 | 22.57300 | 22.70065 | 22.79768 |
| Indiana | 24.01079 | 23.79909 | 22.41859 | 21.82403 | 21.88521 | 21.87688 | 21.82879 | 22.00770 | 22.25313 | 22.45291 | 22.17212 | 22.24700 | 22.35404 | 22.43106 |
| Iowa | 23.49229 | 23.28515 | 21.93447 | 21.29119 | 20.98514 | 20.91487 | 20.97292 | 21.33605 | 21.48878 | 21.66708 | 21.95357 | 22.04500 | 22.34207 | 22.60618 |
| Kansas | 22.67087 | 22.47098 | 21.16753 | 20.47974 | 21.06172 | 21.23720 | 21.43162 | 21.16215 | 21.56793 | 21.44305 | 21.40247 | 21.44300 | 21.44035 | 21.50635 |
| Kentucky | 24.73684 | 24.51873 | 23.09650 | 22.94563 | 23.22292 | 23.10392 | 23.28813 | 23.69344 | 24.11828 | 24.04754 | 24.15263 | 24.32300 | 24.40871 | 24.53122 |
| Louisiana | 24.03617 | 23.82424 | 22.44229 | 21.03356 | — | 22.54598 | 21.73372 | 21.42447 | 22.15263 | 21.99870 | 22.87269 | 22.60500 | 23.21779 | 24.05362 |
| Maine | 25.90485 | 25.67644 | 24.18705 | 24.10633 | 24.47161 | 23.61095 | 23.63873 | 24.67511 | 24.47496 | 24.29991 | 24.49638 | 24.66700 | 24.70565 | 24.88489 |
| Maryland | 25.90896 | 25.68051 | 24.19089 | 23.66256 | 24.02590 | 24.03565 | 24.26513 | 24.17525 | 24.48732 | 24.25471 | 24.48312 | 24.68200 | 24.67448 | 24.73226 |
| Massachusetts | 26.15947 | 25.92882 | 24.42479 | 23.83052 | 23.92185 | 24.10376 | 23.91167 | 24.32701 | 24.64126 | 24.42603 | 24.68320 | 24.76600 | 24.76600 | 24.82907 | 24.88114 |
| Michigan | 24.83219 | 24.61324 | 23.18553 | 22.89705 | 23.39704 | 23.17567 | 23.32079 | 23.68529 | 24.05295 | 24.04816 | 24.24167 | 24.50300 | 24.63379 | 24.74502 |
| Minnesota | 19.52134 | 19.34921 | 18.22684 | 18.91730 | 18.66561 | 17.38097 | 16.78420 | 17.74574 | 17.08375 | 17.80847 | 16.76763 | 16.83900 | 18.34313 | 20.68817 |
| Mississippi | 25.68109 | 25.45466 | 23.97813 | 23.21260 | 23.65472 | 23.21358 | 22.75569 | 22.72431 | 23.44243 | 22.97063 | 24.19676 | 23.75100 | 23.41970 | 23.39939 |
| Missouri | 23.59774 | 23.38967 | 22.03293 | 21.42920 | 21.79111 | 21.70699 | 21.65832 | 21.78163 | 22.00164 | 21.95193 | 21.99374 | 22.07900 | 22.35139 | 22.32881 |
| Montana | 22.82715 | 22.62588 | 21.31344 | 20.87854 | 19.46858 | 18.70236 | 18.18885 | 19.52277 | 19.03489 | 19.40601 | 19.55212 | 19.53400 | 18.98653 | 18.06841 |
| Nebraska | 21.97456 | 21.78080 | 20.51738 | 19.28537 | 19.24307 | 19.04364 | 18.54137 | 18.82053 | 19.19380 | 18.66559 | 18.82961 | 19.69900 | 19.39072 | 18.59708 |
| Nevada | 26.61837 | 26.38367 | 24.85326 | 23.45688 | 22.17008 | 22.68446 | 23.03907 | 23.33191 | 23.16753 | 23.14666 | 23.28646 | 23.08500 | 23.15000 | 23.56200 |
| New Hampshire | 24.43928 | 24.22379 | 22.81867 | 23.62685 | — | 23.62119 | 23.89769 | 24.40709 | 24.26685 | 24.24115 | 24.42698 | 24.59400 | 24.59400 | 24.65243 | 24.66504 |
| New Jersey | 25.41947 | 25.19535 | 23.73386 | 23.90927 | 24.32098 | 24.02806 | 23.80699 | 24.23881 | 24.62203 | 24.59997 | 24.49725 | 25.25600 | 25.15405 | 25.18567 |
| New Mexico | 23.03750 | 22.83438 | 21.50984 | 20.84886 | 19.87440 | 20.02211 | 20.61728 | 21.64103 | 21.86701 | 21.59372 | 21.73974 | 21.46000 | 21.64352 | 21.62540 |
| New York | 25.78738 | 25.56001 | 24.07738 | 23.71372 | 24.07562 | 24.05600 | 24.08523 | 24.31275 | 24.54285 | 24.36094 | 24.67995 | 24.82600 | 24.76577 | 24.90054 |
| North Carolina | 25.44614 | 25.22177 | 23.75876 | 23.49028 | 23.86331 | 23.59142 | 23.62761 | 24.09967 | 24.41869 | 24.34556 | 24.49462 | 24.75700 | 24.75049 | 24.88021 |
| North Dakota | 14.81208 | 14.68148 | 13.82987 | 13.03850 | 13.13702 | 13.15741 | 13.20285 | 13.20499 | 13.12013 | 13.14596 | 13.19186 | 13.11100 | 13.15921 | 13.16040 |
| Ohio | 24.79041 | 24.57183 | 23.14651 | 22.67857 | 23.09331 | 22.87035 | 22.85510 | 23.02076 | 23.34608 | 23.34324 | 23.69772 | 23.96100 | 24.02854 | 24.18707 |
| Oklahoma | 25.38348 | 25.15967 | 23.70025 | 23.43863 | 21.24853 | 21.13670 | 21.32772 | 20.97569 | 21.21166 | 21.29758 | 21.16918 | 21.59600 | 21.22483 | 21.43419 |
| Oregon | 22.67719 | 22.47724 | 21.17342 | 20.34784 | 19.03680 | 18.62700 | 18.42399 | 18.27389 | 17.69347 | 18.85957 | 17.62852 | 17.85400 | 18.79888 | 17.86804 |
| Pennsylvania | 25.63637 | 25.41032 | 23.93637 | 23.55093 | 23.91019 | 23.86696 | 23.92417 | 24.10154 | 24.27132 | 24.17713 | 24.43020 | 24.71100 | 24.68425 | 24.75865 |
| Rhode Island | 25.88998 | 25.66170 | 24.17316 | 23.62848 | 24.02602 | — | 23.90094 | 24.09419 | 24.55884 | 24.80291 | — | 24.75000 | 24.75000 | 24.88200 |
| South Carolina | 25.44802 | 25.22364 | 23.76052 | 23.49264 | 23.86447 | 23.59214 | 23.62575 | 24.09992 | 24.41495 | 24.32772 | 24.49270 | 24.74800 | 24.74514 | 24.87375 |
| South Dakota | 19.90924 | 19.73370 | 18.58902 | 18.76511 | 18.39672 | 18.31700 | 18.13422 | 18.32970 | 19.21967 | 18.90864 | 19.53656 | 17.49100 | 17.30716 | 17.26200 |
| Tennessee | 25.07407 | 24.85299 | 23.41137 | 23.14381 | 23.60742 | 23.28270 | 23.52987 | 23.89406 | 24.16031 | 24.07700 | 24.21983 | 24.13900 | 24.44395 | 24.58220 |
| Texas | 16.66356 | 16.51663 | 15.55857 | 18.82199 | 15.35991 | 15.19524 | 15.53031 | 15.97410 | 16.28985 | 16.09697 | 17.14501 | 15.67900 | 15.95326 | 15.57497 |
| Utah | 26.19847 | 25.96747 | 24.46120 | 23.64361 | 22.29235 | 22.51964 | 22.58035 | 22.85108 | 22.33114 | 22.37915 | 22.74751 | 22.49900 | 22.29674 | 22.27355 |
| Vermont | 26.52519 | 26.29132 | 24.76626 | 24.05572 | 24.47161 | 24.25426 | 24.14397 | 24.61088 | 24.88781 | 24.82061 | 24.94685 | 25.29600 | 24.75000 | 24.88200 |
| Virginia | 25.46723 | 25.24268 | 23.77845 | 23.47709 | 23.86786 | 23.60175 | 23.64080 | 24.11594 | 24.45338 | 24.30873 | 24.52204 | 24.88000 | 24.78298 | 24.90295 |
| Washington | 25.95480 | 25.72596 | 24.23369 | 23.54643 | 21.42615 | 22.04600 | 21.84493 | 22.14239 | 21.36337 | 21.14070 | 20.83484 | 20.19800 | 21.42922 | 21.63429 |
| West Virginia | 25.52388 | 25.29883 | 23.83135 | 23.52495 | 23.97297 | 23.89849 | 23.75104 | 24.24072 | 24.35268 | 24.24070 | 24.49161 | 24.69900 | 24.63634 | 24.85455 |
| Wisconsin | 24.59672 | 24.37985 | 22.96567 | 21.95711 | 22.52296 | 22.55520 | 22.31512 | 22.70310 | 22.73536 | 22.59751 | 22.86002 | 22.76400 | 22.65053 | 23.32322 |
| Wyoming | 20.53852 | 20.35742 | 19.17657 | 18.35566 | 18.41033 | 18.22728 | 18.01954 | 18.11049 | 17.95474 | 17.97026 | 17.82097 | 17.72300 | 17.51430 | 17.55529 |
| U.S. Average | 24.60400 | 24.38700 | 22.97300 | 22.43900 | 22.52800 | 22.29000 | 22.17500 | 22.43600 | 22.69000 | 22.57200 | 22.69500 | 22.68000 | 22.52500 | 22.01300 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

# Table C11. Approximate Heat Content of Bituminous Coal and Lignite Consumed by Other Industrial Users, 1986-1999
(Million Btu per Short Ton)

| State | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 24.61848 | 24.79504 | 24.64061 | 24.39340 | 24.67898 | 24.58103 | 24.64284 | 24.53609 | 24.65595 | 24.84816 | 24.78515 | 24.67910 | 24.87526 | 24.87526 |
| Alaska | — | — | — | — | — | — | — | 15.80000 | 15.80000 | — | 15.80000 | 15.84800 | 15.71000 | 15.71000 |
| Arizona | 20.21439 | 19.87616 | 20.71750 | 20.70390 | 20.07050 | 19.94197 | 20.31671 | 19.99280 | 20.15568 | 19.96204 | 19.78877 | 19.52533 | 19.23730 | 19.23730 |
| Arkansas | 22.44673 | 22.33706 | 22.22411 | 22.39587 | 22.80790 | 24.18843 | 24.00052 | 23.45036 | 24.82737 | 23.95685 | 23.98664 | 23.58123 | 24.43167 | 24.43167 |
| California | 22.80372 | 23.24871 | 23.00565 | 22.70929 | 22.52224 | 22.73094 | 22.97040 | 23.20010 | 23.22941 | 23.29600 | 23.28200 | 23.05469 | 22.99659 | 22.99659 |
| Colorado | 21.47479 | 21.01452 | 21.29274 | 20.79333 | 21.10513 | 21.08138 | 20.10740 | 20.92088 | 21.49432 | 21.64981 | 21.44989 | 21.51822 | 21.16491 | 21.16491 |
| Connecticut | 24.83445 | 21.64868 | 24.74529 | 24.78080 | — | 24.84324 | 24.93613 | 24.80412 | 25.27560 | — | 24.62879 | 24.53000 | — | — |
| Delaware | 24.80786 | 24.82025 | 24.76803 | 24.71851 | 24.93784 | 25.07321 | 25.26267 | 25.30129 | 25.25866 | 25.22011 | 25.17571 | 25.23956 | 25.18449 | 25.18449 |
| District of Columbia | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Florida | 24.91018 | 25.04755 | 25.12819 | 24.78882 | 25.00386 | 25.13063 | 25.00227 | 24.88729 | 24.92714 | 25.10990 | 25.11787 | 25.05439 | 25.00308 | 25.00308 |
| Georgia | 24.93856 | 25.02236 | 24.99673 | 24.79070 | 25.14817 | 25.13954 | 25.14666 | 25.10259 | 25.07264 | 25.19814 | 25.13735 | 25.08994 | 25.07959 | 25.07959 |
| Hawaii | 24.68800 | 24.97000 | 24.83000 | 24.83000 | 24.81000 | 24.83000 | 24.83000 | 24.83000 | 21.50000 | 21.50000 | 21.50000 | 22.49862 | 23.04000 | 23.04000 |
| Idaho | 18.12203 | 17.71016 | 17.85648 | 17.70091 | 17.85823 | 17.75592 | 17.52799 | 18.16027 | 17.69006 | 19.03477 | 18.16585 | 17.33200 | 18.15972 | 18.15972 |
| Illinois | 23.05064 | 23.04103 | 22.86002 | 22.75566 | 22.55466 | 21.86176 | 22.75323 | 22.85602 | 22.64953 | 22.83250 | 22.84669 | 23.16804 | 23.04668 | 23.04668 |
| Indiana | 22.44890 | 22.44930 | 22.46119 | 22.52258 | 22.71130 | 22.92005 | 22.95050 | 22.85572 | 22.63550 | 23.05468 | 22.71501 | 23.18017 | 23.25622 | 23.25622 |
| Iowa | 22.67574 | 22.83502 | 23.03526 | 22.90901 | 22.55246 | 22.17587 | 20.55435 | 20.11837 | 20.06032 | 20.92318 | 21.25463 | 20.89736 | 21.15456 | 21.15456 |
| Kansas | 21.37701 | 21.74703 | 21.92655 | 22.21132 | 24.22372 | 24.42437 | 24.48764 | 23.55143 | 23.96144 | 24.24071 | 25.47579 | 24.52319 | 24.79699 | 24.79699 |
| Kentucky | 24.62470 | 24.82229 | 24.93611 | 24.74632 | 24.63025 | 24.89972 | 24.89276 | 24.84423 | 24.75628 | 24.84817 | 24.74611 | 24.48054 | 24.69688 | 24.69688 |
| Louisiana | 24.02294 | 24.00203 | 19.27825 | 20.30941 | 19.97897 | 18.36116 | 18.56416 | 18.32271 | 18.37139 | 17.96874 | 25.04400 | 24.89054 | 25.18061 | 25.18061 |
| Maine | 24.74816 | 24.97847 | 24.85678 | 24.83842 | 24.92293 | 25.01017 | 25.06970 | 24.97451 | 24.96127 | 25.10225 | 25.02589 | 24.98213 | 24.50979 | 24.50979 |
| Maryland | 24.74789 | 24.76853 | 24.69124 | 24.73817 | 25.11786 | 25.14565 | 25.20668 | 25.26208 | 25.40234 | 25.32641 | 25.13270 | 25.11468 | 25.02943 | 25.02943 |
| Massachusetts | 25.05734 | 25.16054 | 25.20906 | 25.15893 | 24.86533 | 24.92877 | 24.89677 | 24.90752 | 24.96412 | 25.17556 | 24.90749 | 25.03547 | 24.47621 | 24.47621 |
| Michigan | 24.82194 | 24.86182 | 24.85242 | 24.66003 | 24.45049 | 24.52137 | 24.40007 | 24.20803 | 24.22411 | 24.02413 | 24.34512 | 24.35386 | 23.73938 | 23.73938 |
| Minnesota | 20.99743 | 20.25035 | 19.15527 | 19.58753 | 18.56250 | 19.36088 | 18.52981 | 18.12766 | 18.48813 | 19.04840 | 19.11958 | 18.85851 | 18.60075 | 18.60075 |
| Mississippi | 23.79343 | 23.70762 | 23.66379 | 23.34870 | 23.25386 | 23.26526 | 23.34142 | 24.01947 | 23.89320 | 24.07263 | 23.90664 | 23.67600 | 24.07408 | 24.07408 |
| Missouri | 22.56149 | 23.01241 | 23.10553 | 22.94751 | 22.98843 | 23.26695 | 23.43390 | 23.57752 | 23.00175 | 23.17545 | 23.13412 | 22.82012 | 22.90858 | 22.90858 |
| Montana | 17.73772 | 17.89376 | 18.28221 | 18.48953 | 18.37578 | 18.47768 | 18.78661 | 18.54933 | 18.33343 | 18.09956 | 18.10811 | 18.24449 | 17.91315 | 17.91315 |
| Nebraska | 18.41177 | 18.61192 | 18.72166 | 19.12737 | 19.03574 | 18.90751 | 18.44837 | 18.73037 | 19.09831 | 19.35912 | 18.82313 | 19.07998 | 18.95268 | 18.95268 |
| Nevada | 23.23400 | 23.41600 | 23.15000 | 21.18601 | 23.18400 | 23.14800 | 23.09600 | 23.20000 | 23.23600 | 22.66808 | 22.61981 | 22.98074 | 23.13890 | 23.13890 |
| New Hampshire | 24.72400 | 24.75000 | 24.75555 | 24.87616 | 24.83592 | 25.26108 | 25.31936 | 24.98000 | — | 25.21627 | — | — | — | — |
| New Jersey | 25.34722 | 25.25123 | 25.30837 | 25.18493 | 25.23731 | 25.26678 | 25.33398 | 25.34405 | 25.07266 | 22.50200 | — | — | 22.83642 | 22.83642 |
| New Mexico | 21.81340 | 21.38000 | 21.92000 | 24.43675 | 21.38800 | 21.54400 | 20.39800 | 21.70600 | 21.92600 | 22.00800 | 21.97600 | 21.78800 | 21.98800 | 21.98800 |
| New York | 25.15288 | 25.10523 | 25.10772 | 25.05043 | 25.10695 | 25.19113 | 25.16182 | 25.18280 | 25.21171 | 25.12813 | 25.03732 | 25.17514 | 25.05062 | 25.05062 |
| North Carolina | 24.96369 | 25.03348 | 25.04250 | 24.88239 | 24.93830 | 25.10847 | 25.08579 | 25.14487 | 25.10471 | 25.26890 | 25.14978 | 25.06093 | 25.06878 | 25.06878 |
| North Dakota | 13.24260 | 13.37441 | 13.28101 | 13.32203 | 13.48903 | 13.41305 | 13.32713 | 13.32856 | 13.44457 | 13.35266 | 13.38232 | 13.28668 | 13.34170 | 13.34170 |
| Ohio | 24.40010 | 24.46262 | 24.51939 | 24.30903 | 24.30127 | 24.44324 | 24.42126 | 24.55259 | 24.54913 | 24.51123 | 24.46909 | 24.43842 | 24.36416 | 24.36416 |
| Oklahoma | 21.48813 | 21.10301 | 21.25901 | 21.31431 | 22.80216 | 23.80519 | 22.75512 | 22.42719 | 21.08848 | 22.67545 | 22.23193 | 20.88353 | 23.32931 | 23.32931 |
| Oregon | 17.83270 | 17.90776 | 17.39654 | 17.66001 | 17.35230 | 17.33432 | 17.88959 | 18.41864 | 19.41867 | 18.49627 | 20.83590 | 20.09775 | 18.86882 | 18.86882 |
| Pennsylvania | 24.95376 | 24.99285 | 24.94624 | 24.87805 | 24.90486 | 25.05394 | 25.10939 | 25.11823 | 25.12576 | 25.16321 | 25.08764 | 25.20190 | 24.92877 | 24.92877 |
| Rhode Island | 25.33053 | 25.03600 | 25.04400 | 24.88400 | — | — | — | — | — | — | — | — | — | — |
| South Carolina | 24.96200 | 25.03642 | 25.03879 | 24.88075 | 25.11758 | 25.22592 | 25.19592 | 25.17505 | 25.07482 | 25.19274 | 25.06364 | 25.09419 | 25.03948 | 25.03948 |
| South Dakota | 17.34693 | 17.27400 | 17.41784 | 17.35218 | 17.33800 | 17.46595 | 17.29575 | 17.29400 | 17.26800 | 17.25800 | 17.30000 | 17.41854 | 17.51564 | 17.51564 |
| Tennessee | 24.68635 | 24.81370 | 24.77826 | 24.67578 | 25.12432 | 25.12430 | 25.25292 | 25.16308 | 25.05633 | 25.13795 | 25.02275 | 25.00474 | 25.02279 | 25.02279 |
| Texas | 15.90663 | 15.15325 | 14.06793 | 14.56476 | 14.78802 | 15.05199 | 14.30566 | 15.18034 | 15.47725 | 14.96020 | 15.34020 | 15.54805 | 14.22230 | 14.22230 |
| Utah | 21.75533 | 22.08866 | 22.91453 | 22.46491 | 23.18867 | 23.12437 | 23.09600 | 23.49325 | 22.92070 | 23.00279 | 23.28200 | 23.48478 | 23.05627 | 23.05627 |
| Vermont | — | 25.03600 | 25.04400 | 24.88400 | 24.84559 | 25.74698 | 25.70000 | 25.18800 | — | 25.05076 | 25.08578 | 25.09909 | 24.44600 | 24.44600 |
| Virginia | 25.00743 | 25.06726 | 25.09173 | 24.97442 | 25.06917 | 25.16462 | 25.19564 | 25.10255 | 25.09909 | 25.05076 | 25.08578 | 24.94650 | 24.86122 | 24.86122 |
| Washington | 19.84933 | 19.76416 | 20.92868 | 20.75464 | 20.70686 | 21.74506 | 20.69363 | 20.21833 | 19.27531 | 19.00628 | 19.65817 | 20.64702 | 23.00664 | 23.00664 |
| West Virginia | 25.05416 | 25.06408 | 25.10557 | 24.99539 | 24.88783 | 24.99394 | 24.94784 | 24.94007 | 24.97733 | 24.97866 | 24.94501 | 24.97478 | 24.78655 | 24.78655 |
| Wisconsin | 23.60191 | 23.10643 | 21.87589 | 22.59549 | 24.14900 | 24.30622 | 24.27108 | 23.95833 | 24.16061 | 24.21811 | 23.88933 | 24.13023 | 24.27883 | 24.27883 |
| Wyoming | 17.33729 | 17.46332 | 17.77149 | 17.74126 | 22.17752 | 22.05079 | 21.11792 | 21.28113 | 21.75576 | 21.94055 | 21.89552 | 21.57904 | 21.93124 | 21.93124 |
| U.S. Average | 22.18500 | 22.36000 | 22.34100 | 22.32400 | 22.44400 | 22.44800 | 22.24200 | 22.11100 | 22.04600 | 21.93100 | 22.08694 | 22.15700 | 22.09290 | 22.09290 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

## Table C12.  Approximate Heat Content of Bituminous Coal and Lignite Consumed by Electric Utilities, 1960-1985, Selected Years

(Million Btu per Short Ton)

| State | 1960 | 1965 | 1970 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 24.12600 | 23.70400 | 23.31400 | 23.16350 | 23.13570 | 23.17042 | 23.63231 | 23.75441 | 23.91189 | 23.99756 | 24.04115 | 23.97230 | 24.05936 | 24.11116 |
| Alaska | 17.72900 | 17.85800 | 17.08000 | 17.40000 | 17.40000 | 17.40000 | 17.40000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 |
| Arizona | — | 20.85000 | 21.23800 | 21.08957 | 21.10154 | 21.55725 | 21.52545 | 21.22455 | 21.24312 | 21.01265 | 21.08605 | 21.26936 | 21.19024 | 20.98564 |
| Arkansas | — | — | — | — | — | — | 16.79503 | 16.81367 | 17.00887 | 16.96304 | 17.04517 | 17.46096 | 17.18364 | 17.20748 |
| California | — | — | — | — | — | — | — | — | — | — | — | — | 22.78020 | — |
| Colorado | 20.54600 | 21.32200 | 21.53000 | 19.80780 | 19.59369 | 20.19681 | 20.06857 | 20.26222 | 19.99201 | 20.11977 | 19.62760 | 19.46681 | 19.31025 | 19.49701 |
| Connecticut | 26.54800 | 25.90800 | 23.54800 | 23.90400 | 23.90400 | 23.90400 | 23.90400 | 23.90400 | — | — | — | — | 26.27193 | 26.31651 |
| Delaware | 25.98200 | 26.39200 | 24.18600 | 24.53412 | 24.93623 | 24.17667 | 24.50155 | 24.73148 | 24.92212 | 24.96266 | 25.21723 | 25.59153 | 25.97302 | 25.92406 |
| District of Columbia | 27.46000 | 26.94800 | 25.92000 | 25.61888 | 25.61900 |  |  |  |  |  |  |  |  |  |
| Florida | 24.60600 | 23.76200 | 22.74800 | 23.09252 | 23.29396 | 23.12095 | 23.57892 | 23.75577 | 23.68622 | 23.82572 | 24.02140 | 24.36947 | 24.45588 | 24.45038 |
| Georgia | 25.04200 | 24.93200 | 23.75600 | 23.75121 | 23.76698 | 23.71061 | 23.74715 | 23.76535 | 23.80495 | 23.90946 | 23.99180 | 24.12916 | 24.25098 | 24.24094 |
| Hawaii | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Idaho | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Illinois | 21.69400 | 21.44800 | 21.00200 | 20.25912 | 20.49264 | 20.59551 | 20.56480 | 20.56107 | 20.59267 | 20.81535 | 20.85878 | 20.80897 | 21.18724 | 20.96903 |
| Indiana | 22.64000 | 22.46600 | 22.03000 | 21.22923 | 21.47196 | 21.46193 | 21.35963 | 21.64839 | 21.63186 | 21.64290 | 21.77556 | 21.89759 | 21.57470 | 21.31356 |
| Iowa | 20.76800 | 21.21800 | 20.88800 | 20.27400 | 20.25500 | 20.00208 | 19.72120 | 18.89463 | 18.63318 | 18.28830 | 18.27544 | 18.28866 | 17.94484 | 18.19661 |
| Kansas | 23.75400 | 24.19200 | 24.10000 | 19.95680 | 20.38510 | 19.04115 | 18.27252 | 18.64276 | 18.36976 | 18.12214 | 17.74540 | 17.55593 | 17.58032 | 17.53691 |
| Kentucky | 22.97200 | 22.89200 | 21.85200 | 21.48102 | 21.89305 | 22.00190 | 22.05307 | 22.52345 | 22.91705 | 22.89628 | 22.80264 | 22.97313 | 22.87114 | 22.76930 |
| Louisiana | — | 16.03800 | — | — | — | — | — | — | 16.03794 | 16.18703 | 16.71399 | 17.05934 | 17.01545 | 16.90673 |
| Maine | 28.58000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 26.61600 | 26.37200 | 24.61200 | 24.32290 | 24.54193 | 24.40737 | 24.40198 | 24.57160 | 24.75727 | 24.51454 | 24.82195 | 25.34179 | 25.23585 | 25.32555 |
| Massachusetts | 26.35200 | 26.07200 | 23.26000 | 24.34726 | — | — | — | 27.00400 | 26.75129 | 26.11421 | 26.30974 | 26.59218 | 26.46597 | 26.56066 |
| Michigan | 24.88400 | 24.80400 | 24.20200 | 23.66213 | 23.69480 | 23.56164 | 23.09854 | 23.62384 | 24.02458 | 23.48699 | 23.90599 | 23.35495 | 23.33954 | 23.39292 |
| Minnesota | 22.39000 | 22.17600 | 20.27400 | 17.94022 | 17.80782 | 17.58357 | 17.46097 | 17.64346 | 17.55670 | 17.54394 | 17.61363 | 17.67612 | 17.35450 | 17.45075 |
| Mississippi | 24.85800 | 24.89000 | 24.09800 | 23.16389 | 23.28381 | 22.85098 | 23.70814 | 23.41259 | 23.99361 | 24.10518 | 24.17577 | 24.27107 | 24.23072 | 24.25244 |
| Missouri | 21.90400 | 21.55000 | 21.51800 | 21.49363 | 21.68849 | 21.77477 | 21.49045 | 21.47318 | 21.30576 | 21.18322 | 21.39835 | 21.42307 | 21.41418 | 21.28922 |
| Montana | 13.50000 | 13.14000 | 15.47400 | 15.95909 | 16.67636 | 16.98389 | 16.91115 | 17.05584 | 17.00328 | 17.08734 | 17.01129 | 16.69349 | 17.02300 | 17.30703 |
| Nebraska | 24.78200 | 24.56800 | 23.91400 | 20.95357 | 20.82335 | 21.31316 | 20.57478 | 19.18090 | 18.80879 | 18.01500 | 17.85122 | 17.57216 | 17.79651 | 17.29876 |
| Nevada | — | 25.48800 | 25.65400 | 22.38788 | 22.23695 | 22.14854 | 22.06110 | 22.09228 | 22.07779 | 22.06220 | 22.09859 | 22.27924 | 22.38221 | 22.76835 |
| New Hampshire | 25.44800 | 27.90400 | 27.43200 | 26.70098 | 26.91783 | 26.72821 | 26.02806 | 26.85374 | 26.81635 | 26.95102 | 27.04008 | 27.09411 | 27.08116 | 26.90451 |
| New Jersey | 26.77200 | 26.45800 | 24.94400 | 25.40124 | 26.11872 | 25.97444 | 26.12003 | 26.09810 | 26.18199 | 26.22582 | 26.40196 | 26.44328 | 26.42461 | 26.47525 |
| New Mexico | 25.00000 | 18.00400 | 17.96600 | 17.84874 | 17.85784 | 17.91460 | 18.01263 | 17.81728 | 17.69514 | 18.27875 | 18.28261 | 18.19864 | 18.06930 | 18.37577 |
| New York | 26.59600 | 26.67800 | 24.66400 | 24.05032 | 24.49860 | 24.25853 | 24.06477 | 24.50405 | 24.63519 | 24.41983 | 24.84383 | 24.96993 | 25.10649 | 25.20035 |
| North Carolina | 26.24200 | 25.81400 | 24.11400 | 23.78836 | 24.08088 | 23.86663 | 24.05255 | 24.36301 | 24.53799 | 24.44275 | 24.53774 | 24.88739 | 24.95315 | 24.97487 |
| North Dakota | 13.83600 | 13.91800 | 13.66600 | 13.34445 | 13.21203 | 13.28981 | 13.38652 | 13.35023 | 13.23368 | 13.24692 | 13.18710 | 13.04344 | 13.15028 |  |
| Ohio | 23.77000 | 23.56400 | 22.50000 | 21.91934 | 22.00498 | 21.78940 | 21.82734 | 22.24000 | 22.88041 | 22.70638 | 23.10614 | 23.57204 | 23.51935 | 23.62539 |
| Oklahoma | 25.94200 | 24.00000 | 25.07600 | 25.07600 | 16.54801 | 16.80255 | 17.08004 | 17.40878 | 17.39280 | 17.11773 | 17.06022 | 17.15725 | 17.20674 | 17.16768 |
| Oregon | — | — | — | — | — | — | — | 20.05400 | 16.39258 | 16.57304 | 16.61288 | 16.61300 | 16.65419 | 16.58400 |
| Pennsylvania | 24.44600 | 24.77200 | 23.74800 | 23.76856 | 24.18296 | 24.14879 | 24.20162 | 24.27728 | 24.32574 | 24.19477 | 24.41086 | 24.66268 | 24.63148 | 24.63954 |
| Rhode Island | 28.15200 | 27.46800 | — | — | — | — | — | — | — | — | — | — | — | — |
| South Carolina | 26.73400 | 25.82200 | 24.27400 | 24.16051 | 24.35910 | 23.86756 | 24.17648 | 24.73525 | 24.84295 | 24.60532 | 24.76354 | 25.05966 | 25.05792 | 25.13214 |
| South Dakota | 17.16800 | 17.90400 | 16.57200 | 12.61613 | 12.69515 | 12.62262 | 12.45706 | 12.66039 | 12.59940 | 12.62686 | 12.68694 | 12.29735 | 12.20422 | 12.20986 |
| Tennessee | 24.04000 | 23.59000 | 22.59400 | 21.98283 | 22.43149 | 22.19482 | 22.56593 | 22.97477 | 23.25397 | 23.22690 | 23.62140 | 23.55640 | 23.61027 | 23.67577 |
| Texas | — | — | — | 13.10305 | 13.23206 | 14.07706 | 14.22569 | 14.42718 | 14.79112 | 14.99738 | 14.98340 | 14.85580 | 14.66297 | 14.80734 |
| Utah | 24.94000 | 25.18400 | 24.81200 | 23.64976 | 23.19920 | 23.28042 | 23.28369 | 23.35795 | 22.90042 | 22.91941 | 23.08217 | 22.86611 | 22.85458 | 23.60722 |
| Vermont | 27.76000 | 27.34000 | 24.87000 | 25.74400 | 25.74400 | 25.70862 | 25.70900 | 25.92600 | 25.92600 | 25.09632 | 25.62833 | 25.62800 | 25.62800 | 25.62800 |
| Virginia | 26.72600 | 26.47400 | 24.78200 | 23.93019 | 24.52895 | 24.35599 | 24.45058 | 24.74846 | 25.01317 | 24.79074 | 24.97461 | 25.31446 | 25.24274 | 25.62794 |
| Washington | — | — | — | 16.20000 | 16.20000 | 16.20000 | 16.20000 | 16.20000 | 16.20000 | 16.20000 | 16.20000 | 16.20000 | 16.20000 | 16.20000 |
| West Virginia | 23.90800 | 23.73600 | 23.31800 | 23.22075 | 23.49564 | 23.30439 | 23.46206 | 23.89989 | 24.26929 | 24.20780 | 24.45099 | 24.71696 | 24.66725 | 24.82719 |
| Wisconsin | 24.20800 | 24.03600 | 22.44600 | 21.23552 | 21.34361 | 21.11875 | 20.90142 | 20.84450 | 20.52333 | 19.76022 | 20.08694 | 19.87583 | 19.90783 | 19.54733 |
| Wyoming | 14.84600 | 15.99000 | 16.53400 | 16.62585 | 17.53234 | 17.62611 | 17.54996 | 17.48885 | 17.59029 | 17.31142 | 17.33698 | 17.42590 | 17.29186 | 17.50962 |
| U.S. Average | 24.02900 | 23.83600 | 22.60300 | 21.65900 | 21.69200 | 21.52100 | 21.28400 | 21.37200 | 21.30100 | 21.09100 | 21.20000 | 21.14100 | 21.10800 | 20.96500 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

**Table C13. Approximate Heat Content of Bituminous Coal and Lignite Consumed by Electric Utilities, 1986-1999**
(Million Btu per Short Ton)

| State | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 24.34921 | 24.44506 | 24.32805 | 24.04527 | 24.18828 | 24.21421 | 24.12231 | 24.18379 | 24.17560 | 23.72228 | 23.58782 | 23.16839 | 23.03741 | 21.92557 |
| Alaska | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.80000 | 15.71000 | 15.71000 |
| Arizona | 21.04448 | 21.21656 | 21.29993 | 21.19271 | 20.96337 | 20.71212 | 20.60673 | 20.54290 | 20.56138 | 20.54809 | 20.46484 | 20.31761 | 20.37299 | 20.51329 |
| Arkansas | 17.33929 | 17.36371 | 17.32804 | 17.43904 | 17.47970 | 17.46879 | 17.44830 | 17.32933 | 17.41418 | 17.37423 | 17.40510 | 17.41407 | 17.34133 | 17.30145 |
| California | — | | | | | | | | | | | | | |
| Colorado | 19.54026 | 19.68454 | 19.54309 | 19.69685 | 19.61551 | 19.77520 | 19.83981 | 19.77533 | 19.89191 | 19.79050 | 19.71663 | 19.74334 | 19.66760 | 19.49709 |
| Connecticut | 26.34394 | 26.26827 | 26.27739 | 26.61558 | 26.46571 | 26.47664 | 26.33450 | 26.28876 | 26.18816 | 26.21972 | 26.20002 | 26.26388 | 26.27555 | — |
| Delaware | 26.00008 | 26.13094 | 25.80238 | 25.88695 | 26.06988 | 26.10578 | 26.12845 | 26.05318 | 25.90726 | 26.17075 | 26.04029 | 26.12436 | 25.92332 | 25.87070 |
| District of Columbia | — | | | | | | | | | | | | | |
| Florida | 24.55139 | 24.79878 | 24.84874 | 24.76555 | 24.72855 | 24.70131 | 24.73977 | 24.66394 | 24.58521 | 24.59295 | 24.38601 | 24.24307 | 24.28767 | 24.59737 |
| Georgia | 24.29147 | 24.34988 | 24.34509 | 24.19948 | 23.78608 | 23.87269 | 24.07813 | 24.29572 | 23.54887 | 23.15189 | 23.16181 | 23.51077 | 23.50066 | 23.47906 |
| Hawaii | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Idaho | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Illinois | 21.07475 | 21.39665 | 21.27149 | 21.41052 | 21.57798 | 21.44217 | 21.33289 | 20.72305 | 20.36161 | 19.94090 | 19.75506 | 19.56279 | 19.40084 | 19.12098 |
| Indiana | 21.35811 | 21.75674 | 21.66827 | 21.39682 | 21.12394 | 21.13900 | 21.25663 | 21.07839 | 21.06908 | 20.67609 | 20.71372 | 20.92237 | 21.03476 | 21.23983 |
| Iowa | 18.37163 | 18.30428 | 18.42196 | 17.87940 | 17.78347 | 17.78073 | 17.73343 | 17.31996 | 17.56560 | 17.35696 | 17.31594 | 17.32483 | 17.27195 | 17.16250 |
| Kansas | 17.45659 | 17.52886 | 17.95627 | 17.75137 | 17.89698 | 17.99569 | 17.79922 | 17.30731 | 17.41698 | 17.46010 | 17.65448 | 17.53189 | 17.39208 | 17.25612 |
| Kentucky | 23.04657 | 22.99234 | 23.05611 | 22.98604 | 23.11655 | 23.10311 | 23.24019 | 23.39372 | 23.36552 | 23.24978 | 23.07184 | 23.14125 | 23.15715 | 23.16483 |
| Louisiana | 16.24104 | 16.32004 | 16.38486 | 16.37353 | 16.38807 | 16.44601 | 16.24345 | 16.18493 | 16.27256 | 16.21951 | 16.34229 | 16.20350 | 16.19456 | 16.29872 |
| Maine | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Maryland | 25.37716 | 25.35115 | 25.44911 | 25.39531 | 25.46891 | 25.59121 | 25.50566 | 25.50384 | 25.64809 | 25.93085 | 25.75778 | 25.82585 | 25.82899 | 25.88507 |
| Massachusetts | 26.43708 | 26.25661 | 26.21825 | 26.01748 | 26.12464 | 26.28298 | 26.14010 | 25.90208 | 25.62884 | 25.39576 | 25.26651 | 25.14198 | 25.23391 | 26.31921 |
| Michigan | 23.44262 | 23.12783 | 23.22394 | 22.55661 | 22.26254 | 22.10306 | 21.99037 | 21.70619 | 21.85082 | 21.35367 | 21.00751 | 21.13297 | 21.12631 | 20.97363 |
| Minnesota | 17.45061 | 17.48309 | 17.47699 | 17.53444 | 17.57650 | 17.60493 | 17.67522 | 17.68736 | 17.64162 | 17.65591 | 17.82721 | 17.78977 | 17.76587 | 17.76626 |
| Mississippi | 24.45673 | 25.34749 | 25.32763 | 25.30847 | 25.08625 | 25.11010 | 25.01366 | 24.67509 | 22.62320 | 22.44121 | 22.04690 | 20.97206 | 21.13795 | 22.12427 |
| Missouri | 21.37715 | 21.19511 | 20.80806 | 20.73534 | 20.79962 | 20.59603 | 20.64120 | 19.71902 | 19.43673 | 18.43195 | 18.12585 | 17.98834 | 17.87674 | 17.89638 |
| Montana | 17.09975 | 17.18001 | 17.03980 | 17.01785 | 17.12889 | 17.04419 | 17.15114 | 16.99101 | 17.00015 | 17.04023 | 16.87714 | 16.85154 | 16.86633 | 16.87000 |
| Nebraska | 17.42659 | 17.20153 | 17.23870 | 17.32878 | 17.42200 | 17.08328 | 17.10544 | 17.12281 | 17.14137 | 17.18777 | 17.19766 | 17.19864 | 17.16895 | 16.99644 |
| Nevada | 22.44442 | 22.36459 | 22.15912 | 22.23307 | 22.24492 | 22.24210 | 22.10266 | 22.02420 | 22.58166 | 22.15036 | 22.27947 | 22.33768 | 22.39808 | 22.51434 |
| New Hampshire | 26.88676 | 26.83174 | 26.66593 | 26.71818 | 26.60524 | 26.49442 | 26.52056 | 26.35868 | 26.06363 | 26.22105 | 26.29103 | 26.10859 | 26.26535 | 26.26674 |
| New Jersey | 26.45777 | 26.47223 | 26.64705 | 26.63810 | 26.85863 | 26.80446 | 26.93038 | 26.79478 | 26.68271 | 26.56460 | 25.98652 | 26.16773 | 26.22677 | 26.29982 |
| New Mexico | 18.21464 | 18.09713 | 18.07206 | 18.25702 | 18.23411 | 18.18453 | 18.02544 | 17.98299 | 18.08502 | 18.06533 | 18.23235 | 18.13797 | 18.16456 | 18.26448 |
| New York | 25.44420 | 25.57463 | 25.62880 | 25.64752 | 25.69197 | 25.84622 | 25.95997 | 25.82701 | 25.91765 | 26.10186 | 26.02591 | 26.21098 | 26.10375 | 26.06778 |
| North Carolina | 25.10762 | 25.09931 | 25.15052 | 25.06111 | 25.08769 | 25.01190 | 24.91255 | 24.92951 | 24.83219 | 24.92268 | 24.84374 | 24.73536 | 24.79516 | 24.90022 |
| North Dakota | 13.15796 | 13.20282 | 13.16802 | 13.15988 | 13.27219 | 13.21236 | 13.11531 | 13.13958 | 13.18516 | 13.16914 | 13.18155 | 13.11843 | 13.13244 | 13.09457 |
| Ohio | 23.82083 | 23.80822 | 23.79040 | 23.66929 | 23.76388 | 23.89059 | 23.96512 | 24.09765 | 24.10449 | 24.24332 | 24.11103 | 23.78207 | 23.82583 | 23.83596 |
| Oklahoma | 17.32594 | 17.70292 | 17.82347 | 17.65022 | 17.78795 | 17.58356 | 17.40032 | 17.24222 | 17.14643 | 17.11329 | 17.20030 | 17.28203 | 17.30245 | 17.23900 |
| Oregon | — | 16.96721 | 17.05667 | 17.05668 | 16.69610 | 16.85865 | 19.28329 | 17.60154 | 17.87428 | 17.76458 | 17.56307 | 17.51491 | 17.37052 | 17.92286 |
| Pennsylvania | 24.66989 | 24.70677 | 24.65095 | 24.66892 | 24.62435 | 24.60441 | 24.89437 | 24.88653 | 24.91671 | 24.85950 | 24.83063 | 24.72415 | 24.75911 | 25.14382 |
| Rhode Island | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| South Carolina | 25.32515 | 25.29714 | 25.35043 | 25.23524 | 25.30955 | 25.44893 | 25.63409 | 25.60405 | 25.54228 | 25.70337 | 25.51496 | 25.71003 | 25.61042 | 25.61851 |
| South Dakota | 12.16911 | 12.12305 | 12.67660 | 12.27333 | 12.19168 | 12.05040 | 12.06852 | 12.11449 | 12.09793 | 13.94369 | 18.06768 | 17.37335 | 17.45545 | 17.25950 |
| Tennessee | 23.81593 | 23.95699 | 24.08916 | 23.78969 | 23.93271 | 24.33817 | 24.36350 | 24.53656 | 24.37185 | 24.26010 | 24.12411 | 23.71094 | 23.46508 | 23.27013 |
| Texas | 14.58271 | 14.48383 | 14.60802 | 14.57334 | 14.58137 | 14.45089 | 14.46813 | 14.56804 | 14.69177 | 14.69101 | 14.88092 | 14.84508 | 15.01800 | 15.01164 |
| Utah | 22.97536 | 23.23687 | 22.98103 | 22.64441 | 22.96536 | 22.93866 | 22.76877 | 22.97756 | 22.98241 | 23.09903 | 23.02688 | 22.66014 | 22.62079 | 23.24037 |
| Vermont | 25.62800 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Virginia | 25.70845 | 25.62891 | 25.59915 | 25.38617 | 25.42742 | 25.53520 | 25.66017 | 25.63333 | 25.55607 | 25.48669 | 25.19465 | 25.10770 | 25.20529 | 25.40303 |
| Washington | 16.20000 | 16.20811 | 16.41283 | 16.32236 | 16.27014 | 16.02823 | 16.37826 | 16.24949 | 16.80068 | 16.53312 | 15.87148 | 16.08594 | 16.43006 | 16.44807 |
| West Virginia | 24.87872 | 24.87305 | 24.94550 | 24.79060 | 24.90334 | 25.01093 | 25.04815 | 24.97885 | 24.93653 | 24.83633 | 24.75682 | 24.79556 | 24.61094 | 24.72214 |
| Wisconsin | 19.32331 | 19.25995 | 19.38606 | 19.41028 | 19.28421 | 19.28565 | 19.44991 | 18.98003 | 19.12997 | 18.70226 | 18.44322 | 18.74990 | 18.59798 | 18.22942 |
| Wyoming | 17.41260 | 17.55502 | 17.51124 | 17.57672 | 17.62122 | 17.51118 | 17.68028 | 17.55731 | 17.53159 | 17.47534 | 17.43285 | 17.57360 | 17.58854 | 17.56763 |
| U.S. Average | 21.09100 | 21.14300 | 20.90500 | 20.85400 | 20.93500 | 20.76100 | 20.79200 | 20.64400 | 20.68100 | 20.50200 | 20.53200 | 20.55400 | 20.48453 | 20.32669 |

— =Not applicable.
Sources: See source listing at the end of this appendix.

# Thermal Conversion Factor Source Documentation

## Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

**Asphalt.** EIA adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

**Aviation Gasoline.** EIA adopted the Bureau of Mines thermal conversion factor of 5.048 million Btu per barrel for "Gasoline, Aviation" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Butane.** EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Butane-Propane Mixture.** EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane.  See **Butane** and **Propane**.

**Crude Oil (Including Lease Condensate) Used Directly.** EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950."

**Distillate Fuel Oil.** EIA adopted the thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950."

**Ethane.** EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in the *California Oil World and Petroleum Industry,* First Issue, April 1942.

**Ethane-Propane Mixture.** EIA calculated 3.308 million Btu per barrel on the basis of an assumed mixture of 70 percent ethane and 30 percent propane.  See **Ethane** and **Propane**.

**Isobutane.** EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Jet Fuel, Kerosene Type.** EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for "Jet Fuel, Commercial" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Jet Fuel, Naphtha Type.** EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for "Jet Fuel, Military" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Kerosene.** EIA adopted the thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950.

**Liquefied Petroleum Gases.** (LGTCKUS) • 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Crude Petroleum and Petroleum Products, 1956," Table 4 footnote, constant value of 4.011 million Btu per barrel. • 1967 forward: Calculated annually

by EIA as a weighted average by multiplying the quantity consumed of each of the component products by each product's conversion factor, listed in this appendix, and dividing the sum of those heat contents by the sum of the quantities consumed. The component products are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. Quantities consumed are from: 1967 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1. 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

**Lubricants.** EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.*

**Miscellaneous Products.** EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.*

**Motor Gasoline.** (MGTCKUS) • 1960 through 1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics. • 1994 forward: EIA calculated national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (shown in appendix Table C1). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in the Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, *Fuel Economy Impact Analysis of Reformulated Gasoline.*

**Natural Gasoline.** EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.*

**Pentanes Plus.** EIA assumed the thermal conversion factor to be 4.620 million Btu per barrel, equal to that for natural gasoline. See **Natural Gasoline**.

**Petrochemical Feedstocks, Naphtha Less Than 401 ºF.** EIA assumed the thermal conversion factor to be 5.248 million Btu per barrel, equal to that for special naphthas. See **Special Naphthas**.

**Petrochemical Feedstock, Other Oils Equal to or Greater Than 401 ºF.** EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel, equal to that for distillate fuel oil. See **Distillate Fuel Oil**.

**Petrochemical Feedstock, Still Gas.** Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See **Still Gas**.

**Petroleum Coke.** EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950." The Bureau of Mines calculated this factor by dividing 30,120,000 Btu per short ton, as given in the referenced Bureau of Mines internal memorandum, by 5.0 barrels per short ton, as given in the Bureau of Mines Form 6–1300–M and successor EIA forms.

**Petroleum Products, Total Consumption.** Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed, weighted by the quantity of each petroleum product consumed.

**Plant Condensate.** EIA estimated 5.418 million Btu per barrel from data provided by McClanahan Consultants, Inc., Houston, Texas.

**Propane.** EIA adopted the thermal conversion factor of 3.836 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Residual Fuel Oil.** EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Road Oil.** EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, equal to that of asphalt and first published by the Bureau of Mines in the *Petroleum Statement, Annual, 1970.* See **Asphalt**.

**Special Naphthas.** EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, equal to that of total gasoline (aviation and motor) and first published in the *Petroleum Statement, Annual, 1970*.

**Still Gas.** EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel and first published in the *Petroleum Statement, Annual, 1970*.

**Unfinished Oil.** EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel, equal to that for distillate fuel oil and first published in the *Annual Report to Congress, Volume 3, 1977*. See **Distillate Fuel Oil**.

**Unfractionated Stream.** EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel, equal to that for plant condensate and first published in the EIA, *Annual Report to Congress, Volume 2, 1981*. See **Plant Condensate**.

**Waxes.** EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the EIA, *Petroleum Statement, Annual, 1956*.

## Approximate Heat Content of Natural Gas

**Natural Gas, Total Consumption.** (NGTCKZZ) • 1960 through 1962: EIA adopted the thermal conversion factor of 1,035 Btu per cubic foot as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*. • 1963 through 1979: EIA adopted the thermal conversion factors calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual. • 1980 forward: EIA, *Historical Natural Gas Annual 1930 Through 1999*, Table 16. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Historical Natural Gas Annual 1930" and click the "Go" button. Select the report from the list.

**Natural Gas, Consumption by Electric Utilities.** (NGEUKZZ) • 1960 through 1971: Assumed by EIA to be equal to the thermal conversion factor for the consumption of natural gas by all users. See **Natural Gas, Total Consumption**. • 1972 through 1982: Calculated annually by EIA by dividing the total heat content of natural gas received at steam

electric plants 25 megawatts or greater by the total quantity received at those electric plants. The heat contents and quantities received are from the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." • 1983 forward: The average heat content of natural gas received at steam electric plants 50 megawatts capacity or larger from FERC Form 423 and published from 1993 forward in Btu per cubic foot in the EIA, *Cost and Quality of Fuels for Electric Utility Plants,* Table 14. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Cost and Quality of Fuels for Electric" and click on the "Go" button. Select the report from the list.

**Natural Gas, Consumption by Sectors Other Than Electric Utilities.** (NGNUKZZ) • 1960 through 1972: Assumed by EIA to be equal to the thermal conversion factor for the consumption of natural gas. See **Natural Gas, Total Consumption**. • 1973 forward: Calculated annually by EIA by dividing the heat content of all natural gas consumed less the heat content of natural gas consumed at electric utilities by the quantity of all natural gas consumed less the quantity of electric utility consumption. Data are from FERC Form 423, Forms EIA–176 and EIA–759, and predecessor forms.

## Approximate Heat Content of Coal and Coal Coke

**Anthracite, Total Consumption.** Calculated annually by EIA by dividing the sum of the heat content of anthracite consumed by electric utilities and by all other sectors combined by the total quantity of anthracite consumed.

**Anthracite, Consumption by Electric Utilities.** (ACEUKUS) • 1960 through 1972: EIA assumed that all anthracite consumed at electric utilities was recovered from culm banks and river dredging and was estimated to have an average heat content of 17.500 million Btu per short ton. • 1973 forward: Calculated annually by EIA by dividing the heat content of anthracite received at electric utilities by the quantity of anthracite received at electric utilities, as reported on FERC Form 423 and predecessor forms.

**Anthracite, Consumption by Sectors Other Than Electric Utilities.** (ACNUKUS) Calculated annually by EIA by dividing the heat content of

anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumed by all sectors other than electric utilities less the quantity of anthracite stock changes, losses, and "unaccounted for."

**Bituminous Coal and Lignite, Total Consumption.** Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite consumed by electric utilities, coal coke plants, other industrial plants, the residential and commercial sector, and the transportation sector by the sum of their respective tonnages.

**Bituminous Coal and Lignite, Consumption by Coke Plants.** Estimated by EIA to be 26.800 million Btu per short ton on the basis of an input-output analysis of coal carbonization.

**Bituminous Coal and Lignite, Consumption by Electric Utilities.** (BCEUKZZ) • 1960 through 1972: EIA adopted the average thermal conversion factor of the Bureau of Mines, which used the National Coal Association (NCA) average thermal conversion factor for electric utilities calculated from the Federal Power Commission's (FPC) Form 1 and published in *Steam Electric Plant Factors*, an NCA annual report. • 1973 through 1982: The average heat content of coal received at steam electric plants 25 megawatts or greater from FERC Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*, "Destination and Origin of Coal 'Delivered to' (1973–1979) 'Receipts to' (1980) 'Received at' (1981–1982) Steam-Electric Plants 25–MW or Greater." • 1983 forward: The average heat content of coal received at steam electric plants having 50 megawatts capacity or larger from FERC Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*. This report is available only via the Internet at http://www.eia.doe.gov. In the box titled "Search EIA by Google" type "Cost and Quality of Fuels for Electric" and click on the "Go" button. Select the report from the list.

Notes: • The State conversion factors for 1960 through 1972 were derived from actual consumption data, while the conversion factors for 1973 to the present were based on receipts of coal. The factors for 1960 through 1972 may also have included some quantities of anthracite. These breaks in the series create some data discrepancies. • Alaska and Hawaii were excluded from the NCA report, FPC Form 423 and FERC Form 423. However,

Alaska reported consumption of bituminous coal and lignite at electric utilities for all years. An FPC heat rate for coal at electric utilities in Alaska was used for 1960 through 1978 as published by EIA in *Federal Energy Data System (FEDS) Technical Documentation*, June 1978, Table 21. The 1972 conversion factor (the last year for which a conversion factor was reported for Alaska) was used for 1972 through 1978. According to industry sources, new mines were opened in 1978 and a more representative factor was used for 1979 and following years. • In instances where a State had no receipts for a particular year but did report consumption, it was assumed that the coal received in one year was consumed during the following year and the Btu value of the previous year's receipts was used.

**Bituminous Coal and Lignite, Consumption by Other Industrial Users.** (BCOCKZZ) • 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed by industrial users other than coke plants by the ratios of 1960 through 1973 national averages for the other industrial users to its 1974 average. • 1974 forward: Calculated by EIA by assuming that the bituminous coal and lignite consumed by industrial users other than coke plants in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on FERC Form 423. The average Btu content of coal delivered from each coal-producing district was applied to deliveries to other industrial users in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA–6 and predecessor Bureau of Mines Form 6–1419–Q.

**Bituminous Coal and Lignite, Consumption by Residential and Commercial Users.** (BCHCKZZ) • 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed in the residential and commercial sector by the ratios of 1960 through 1973 national averages for the sector to its 1974 average. • 1974 forward: Calculated by EIA by assuming that the bituminous coal and lignite consumed in the residential and commercial sector in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on FERC Form 423. The average Btu content of coal delivered from each coal-producing district was applied to deliveries to the residential and commercial sector in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal

distribution data by coal-producing district are reported on Form EIA-6 and predecessor Bureau of Mines Form 6–1419–Q.

**Bituminous Coal and Lignite, Consumption by Transportation Users.** Assumed by EIA to be equal to the Btu conversion factor for bituminous coal and lignite consumption by other industrial users. See **Bituminous Coal and Lignite, Consumption by Other Industrial Users**.

**Coal Coke, Imports and Exports.** EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

## Approximate Heat Content of Renewable Energy Sources

**Ethanol, Consumption by the Transportation Sector.** Fuel ethanol, which is derived from agricultural feedstocks (primarily corn) and blended into motor gasoline, is shown separately in *SEDR* to display the use of renewable energy in the transportation sector. Its gross heat content, calculated by EIA, is 3.539 million Btu per barrel.

**Wood, Consumption by the Residential and Commercial Sectors.** Estimated by EIA to be 20 million Btu per cord of wood. This rough average factor takes into account a number of variables, such as moisture content and species of wood, as explained in the EIA, *Household Energy Consumption and Expenditures 1993*, page 314.

## Approximate Heat Rates for Electricity

**Fossil-Fueled Steam-Electric Plant Generation.** (FFEOKUS) There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydroelectric, biomass fuels, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA uses data from Form EIA–767 to calculate a rate factor that is equal to the prevailing annual average heat rate factor for fossil-fueled steam-electric power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatthour. • 1960 through 1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published by EIA in *Electric Plant Cost and Power Production Expenses 1991*, Table 9. • 1989 forward: Calculated annually by EIA on the basis of data from Form EIA-767 "Steam-Electric Plant Operation and Design Report."

**Geothermal Energy Plant Generation.** (GEEOKUS) • 1960 through 1981: Calculated by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on FPC Form 12. • 1982 forward: Estimated annually by EIA based on an informal survey of relevant plants.

**Nuclear Steam-Electric Plant Generation.** (NUEOKUS) • 1960 through 1991: Calculated annually by EIA by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation data are reported on FERC Form 1, Form EIA-–412, and predecessor forms. The factors for 1982 through 1991 are published in the following EIA reports—1982: *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215; 1983 through 1991: *Electric Plant Cost and Power Production Expenses 1991*, Table 13. • 1992 forward: Calculated annually by EIA by dividing the total heat content of the steam leaving nuclear generating units to generate electricity by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation data are reported in the Nuclear Regulatory Commission, *Licensed Operating Reactors—Status Summary Report*.

Appendix D

# Resident Population

The population data used in the Energy Information Administration Combined State Energy Data System (CSEDS) to calculate per capita consumption are shown in Tables D1 and D2. The data are the U.S. Department of Commerce, Bureau of the Census, census of resident population by State conducted every 10 years with estimates of population for intervening years.

### Data Sources

TPOPPUS — Resident population of the United States. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.
- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections," Series P-25. Specific publication numbers and table numbers:
  — 1960 through 1969: Number 990, Table 4.
  — 1970 through 1979: Number 957, Table 4.
  — 1980 through 1989: Number 1058, Table 3.

- 1990 forward: U.S. Department of Commerce, Bureau of the Census, Internet Release ST-99-3, December 29, 1999. http://www.census. gov/population/www/estimates/statepop.html, select "Annual Time Series."

TPOPPZZ — Resident population by State. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.
- 1960 through 1989: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Population Estimates and Projections," Series P-25. Specific publication numbers and table numbers:
  — 1960 through 1969: Number 460, Table 1.
  — 1970 through 1979: Number 957, Table 4.
  — 1980 through 1989: Number 1058, Table 3.
- 1990 forward: U.S. Department of Commerce, Bureau of the Census, Internet Release ST-99-3, December 29, 1999. http://www.census. gov/population/www/estimates/statepop.html, select "Annual Time Series."

### Table D1.  Resident Population by State, 1960-1969
(Thousand People)

| State | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 3,267.000 | 3,316.000 | 3,323.000 | 3,358.000 | 3,395.000 | 3,443.000 | 3,464.000 | 3,458.000 | 3,446.000 | 3,440.000 |
| Alaska | 226.000 | 238.000 | 246.000 | 256.000 | 263.000 | 271.000 | 271.000 | 278.000 | 285.000 | 296.000 |
| Arizona | 1,302.000 | 1,407.000 | 1,471.000 | 1,521.000 | 1,556.000 | 1,584.000 | 1,614.000 | 1,646.000 | 1,682.000 | 1,737.000 |
| Arkansas | 1,786.000 | 1,806.000 | 1,853.000 | 1,875.000 | 1,897.000 | 1,894.000 | 1,899.000 | 1,901.000 | 1,902.000 | 1,913.000 |
| California | 15,717.000 | 16,497.000 | 17,072.000 | 17,668.000 | 18,151.000 | 18,585.000 | 18,858.000 | 19,176.000 | 19,394.000 | 19,711.000 |
| Colorado | 1,754.000 | 1,844.000 | 1,899.000 | 1,936.000 | 1,970.000 | 1,985.000 | 2,007.000 | 2,053.000 | 2,120.000 | 2,166.000 |
| Connecticut | 2,535.000 | 2,586.000 | 2,647.000 | 2,727.000 | 2,798.000 | 2,857.000 | 2,903.000 | 2,935.000 | 2,964.000 | 3,000.000 |
| Delaware | 446.000 | 461.000 | 469.000 | 483.000 | 497.000 | 507.000 | 516.000 | 525.000 | 534.000 | 540.000 |
| District of Columbia | 764.000 | 778.000 | 788.000 | 798.000 | 798.000 | 797.000 | 791.000 | 791.000 | 778.000 | 762.000 |
| Florida | 4,952.000 | 5,243.000 | 5,458.000 | 5,628.000 | 5,781.000 | 5,954.000 | 6,104.000 | 6,242.000 | 6,433.000 | 6,641.000 |
| Georgia | 3,943.000 | 4,015.000 | 4,086.000 | 4,172.000 | 4,258.000 | 4,332.000 | 4,379.000 | 4,408.000 | 4,482.000 | 4,551.000 |
| Hawaii | 633.000 | 659.000 | 684.000 | 682.000 | 700.000 | 704.000 | 710.000 | 723.000 | 734.000 | 750.000 |
| Idaho | 667.000 | 684.000 | 692.000 | 683.000 | 680.000 | 686.000 | 689.000 | 688.000 | 695.000 | 707.000 |
| Illinois | 10,081.000 | 10,130.000 | 10,280.000 | 10,402.000 | 10,580.000 | 10,693.000 | 10,836.000 | 10,947.000 | 10,995.000 | 11,039.000 |
| Indiana | 4,662.000 | 4,730.000 | 4,736.000 | 4,799.000 | 4,856.000 | 4,922.000 | 4,999.000 | 5,053.000 | 5,093.000 | 5,143.000 |
| Iowa | 2,758.000 | 2,756.000 | 2,750.000 | 2,747.000 | 2,746.000 | 2,742.000 | 2,762.000 | 2,793.000 | 2,803.000 | 2,805.000 |
| Kansas | 2,179.000 | 2,215.000 | 2,231.000 | 2,217.000 | 2,209.000 | 2,206.000 | 2,200.000 | 2,197.000 | 2,216.000 | 2,236.000 |
| Kentucky | 3,038.000 | 3,054.000 | 3,079.000 | 3,096.000 | 3,129.000 | 3,140.000 | 3,147.000 | 3,172.000 | 3,195.000 | 3,198.000 |
| Louisiana | 3,257.000 | 3,287.000 | 3,345.000 | 3,377.000 | 3,446.000 | 3,496.000 | 3,550.000 | 3,581.000 | 3,603.000 | 3,619.000 |
| Maine | 969.000 | 995.000 | 994.000 | 993.000 | 993.000 | 997.000 | 999.000 | 1,004.000 | 994.000 | 992.000 |
| Maryland | 3,101.000 | 3,176.000 | 3,263.000 | 3,386.000 | 3,492.000 | 3,600.000 | 3,695.000 | 3,757.000 | 3,815.000 | 3,868.000 |
| Massachusetts | 5,149.000 | 5,219.000 | 5,263.000 | 5,344.000 | 5,448.000 | 5,502.000 | 5,535.000 | 5,594.000 | 5,618.000 | 5,650.000 |
| Michigan | 7,823.000 | 7,893.000 | 7,933.000 | 8,058.000 | 8,187.000 | 8,357.000 | 8,512.000 | 8,630.000 | 8,696.000 | 8,781.000 |
| Minnesota | 3,414.000 | 3,470.000 | 3,513.000 | 3,531.000 | 3,558.000 | 3,592.000 | 3,617.000 | 3,659.000 | 3,703.000 | 3,758.000 |
| Mississippi | 2,178.000 | 2,206.000 | 2,243.000 | 2,244.000 | 2,241.000 | 2,246.000 | 2,245.000 | 2,228.000 | 2,219.000 | 2,220.000 |
| Missouri | 4,320.000 | 4,349.000 | 4,357.000 | 4,392.000 | 4,442.000 | 4,467.000 | 4,523.000 | 4,539.000 | 4,568.000 | 4,640.000 |
| Montana | 675.000 | 696.000 | 698.000 | 703.000 | 706.000 | 706.000 | 707.000 | 701.000 | 700.000 | 694.000 |
| Nebraska | 1,411.000 | 1,446.000 | 1,464.000 | 1,476.000 | 1,482.000 | 1,471.000 | 1,456.000 | 1,457.000 | 1,467.000 | 1,474.000 |
| Nevada | 285.000 | 315.000 | 352.000 | 397.000 | 426.000 | 444.000 | 446.000 | 449.000 | 464.000 | 480.000 |
| New Hampshire | 607.000 | 618.000 | 632.000 | 649.000 | 663.000 | 676.000 | 681.000 | 697.000 | 709.000 | 724.000 |
| New Jersey | 6,067.000 | 6,265.000 | 6,376.000 | 6,531.000 | 6,660.000 | 6,767.000 | 6,851.000 | 6,928.000 | 7,005.000 | 7,095.000 |
| New Mexico | 951.000 | 965.000 | 979.000 | 989.000 | 1,006.000 | 1,012.000 | 1,007.000 | 1,000.000 | 994.000 | 1,011.000 |
| New York | 16,782.000 | 17,061.000 | 17,301.000 | 17,461.000 | 17,589.000 | 17,734.000 | 17,843.000 | 17,935.000 | 18,051.000 | 18,105.000 |
| North Carolina | 4,556.000 | 4,663.000 | 4,707.000 | 4,742.000 | 4,802.000 | 4,863.000 | 4,896.000 | 4,952.000 | 5,004.000 | 5,031.000 |
| North Dakota | 632.000 | 641.000 | 637.000 | 644.000 | 649.000 | 649.000 | 647.000 | 626.000 | 621.000 | 621.000 |
| Ohio | 9,706.000 | 9,854.000 | 9,929.000 | 9,986.000 | 10,080.000 | 10,201.000 | 10,330.000 | 10,414.000 | 10,516.000 | 10,563.000 |
| Oklahoma | 2,328.000 | 2,380.000 | 2,427.000 | 2,439.000 | 2,446.000 | 2,440.000 | 2,454.000 | 2,489.000 | 2,503.000 | 2,535.000 |
| Oregon | 1,769.000 | 1,787.000 | 1,818.000 | 1,853.000 | 1,888.000 | 1,937.000 | 1,969.000 | 1,979.000 | 2,004.000 | 2,062.000 |
| Pennsylvania | 11,319.000 | 11,392.000 | 11,355.000 | 11,424.000 | 11,519.000 | 11,620.000 | 11,664.000 | 11,681.000 | 11,741.000 | 11,741.000 |
| Rhode Island | 859.000 | 858.000 | 871.000 | 876.000 | 885.000 | 893.000 | 899.000 | 909.000 | 922.000 | 932.000 |
| South Carolina | 2,383.000 | 2,409.000 | 2,423.000 | 2,460.000 | 2,475.000 | 2,494.000 | 2,520.000 | 2,533.000 | 2,559.000 | 2,570.000 |
| South Dakota | 681.000 | 693.000 | 705.000 | 708.000 | 701.000 | 692.000 | 683.000 | 671.000 | 669.000 | 668.000 |
| Tennessee | 3,567.000 | 3,622.000 | 3,673.000 | 3,718.000 | 3,771.000 | 3,798.000 | 3,822.000 | 3,859.000 | 3,878.000 | 3,897.000 |
| Texas | 9,580.000 | 9,820.000 | 10,053.000 | 10,159.000 | 10,270.000 | 10,378.000 | 10,492.000 | 10,599.000 | 10,819.000 | 11,045.000 |
| Utah | 891.000 | 936.000 | 958.000 | 974.000 | 978.000 | 991.000 | 1,009.000 | 1,019.000 | 1,029.000 | 1,047.000 |
| Vermont | 390.000 | 390.000 | 393.000 | 397.000 | 399.000 | 404.000 | 413.000 | 423.000 | 430.000 | 437.000 |
| Virginia | 3,967.000 | 4,095.000 | 4,180.000 | 4,276.000 | 4,357.000 | 4,411.000 | 4,456.000 | 4,508.000 | 4,558.000 | 4,614.000 |
| Washington | 2,853.000 | 2,882.000 | 2,942.000 | 2,955.000 | 2,961.000 | 2,967.000 | 3,057.000 | 3,174.000 | 3,270.000 | 3,343.000 |
| West Virginia | 1,860.000 | 1,828.000 | 1,809.000 | 1,796.000 | 1,797.000 | 1,786.000 | 1,775.000 | 1,769.000 | 1,763.000 | 1,746.000 |
| Wisconsin | 3,952.000 | 4,009.000 | 4,049.000 | 4,112.000 | 4,165.000 | 4,232.000 | 4,274.000 | 4,303.000 | 4,345.000 | 4,378.000 |
| Wyoming | 330.000 | 337.000 | 333.000 | 336.000 | 339.000 | 332.000 | 323.000 | 322.000 | 324.000 | 329.000 |
| U.S. Total | 179,323.000 | 182,973.000 | 185,738.000 | 188,438.000 | 191,085.000 | 193,460.000 | 195,501.000 | 197,374.000 | 199,312.000 | 201,306.000 |

Source: See first page of this appendix.

**Energy Information Administration**
**State Energy Data Report 1999**

**Table D2. Resident Population by State, 1970-1979**
(Thousand People)

| State | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 |
|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 3,444.354 | 3,497.076 | 3,539.400 | 3,579.780 | 3,626.499 | 3,678.814 | 3,735.139 | 3,780.403 | 3,831.836 | 3,866.248 |
| Alaska | 302.583 | 315.510 | 324.464 | 330.543 | 341.063 | 376.170 | 400.969 | 403.436 | 404.766 | 402.753 |
| Arizona | 1,775.399 | 1,895.814 | 2,008.291 | 2,124.438 | 2,223.196 | 2,284.847 | 2,346.157 | 2,425.197 | 2,515.316 | 2,635.571 |
| Arkansas | 1,923.322 | 1,972.312 | 2,018.638 | 2,059.256 | 2,101.403 | 2,159.526 | 2,170.161 | 2,209.010 | 2,243.127 | 2,271.333 |
| California | 19,971.069 | 20,345.939 | 20,585.469 | 20,868.728 | 21,173.865 | 21,537.849 | 21,935.909 | 22,352.396 | 22,835.958 | 23,256.880 |
| Colorado | 2,209.596 | 2,303.524 | 2,404.619 | 2,495.868 | 2,541.406 | 2,586.192 | 2,632.306 | 2,696.140 | 2,766.748 | 2,849.234 |
| Connecticut | 3,032.217 | 3,060.938 | 3,068.699 | 3,067.814 | 3,074.047 | 3,082.500 | 3,083.335 | 3,085.722 | 3,091.627 | 3,095.917 |
| Delaware | 548.104 | 564.708 | 572.913 | 577.759 | 581.418 | 586.589 | 590.166 | 591.829 | 594.776 | 594.984 |
| District of Columbia | 756.668 | 749.781 | 742.241 | 731.488 | 717.947 | 706.871 | 692.295 | 677.228 | 665.052 | 650.016 |
| Florida | 6,791.418 | 7,158.304 | 7,511.463 | 7,913.696 | 8,298.762 | 8,518.422 | 8,667.379 | 8,856.183 | 9,102.032 | 9,426.159 |
| Georgia | 4,587.930 | 4,711.550 | 4,809.490 | 4,910.374 | 4,999.419 | 5,064.075 | 5,132.812 | 5,219.697 | 5,295.751 | 5,401.384 |
| Hawaii | 769.913 | 801.644 | 828.331 | 851.595 | 867.978 | 886.160 | 904.191 | 918.259 | 931.584 | 953.306 |
| Idaho | 713.015 | 738.753 | 763.237 | 782.074 | 807.990 | 831.982 | 856.983 | 883.469 | 910.690 | 932.627 |
| Illinois | 11,110.285 | 11,202.397 | 11,251.948 | 11,251.367 | 11,262.145 | 11,291.743 | 11,342.853 | 11,386.316 | 11,412.561 | 11,396.837 |
| Indiana | 5,195.392 | 5,253.396 | 5,302.435 | 5,338.277 | 5,361.890 | 5,365.766 | 5,389.088 | 5,425.638 | 5,470.214 | 5,501.174 |
| Iowa | 2,825.368 | 2,851.705 | 2,860.287 | 2,863.715 | 2,867.530 | 2,880.847 | 2,903.082 | 2,913.573 | 2,918.069 | 2,915.739 |
| Kansas | 2,249.071 | 2,246.600 | 2,256.375 | 2,265.603 | 2,269.499 | 2,280.578 | 2,301.001 | 2,320.647 | 2,335.657 | 2,350.906 |
| Kentucky | 3,220.711 | 3,298.053 | 3,335.728 | 3,371.024 | 3,416.315 | 3,467.769 | 3,529.257 | 3,573.693 | 3,609.976 | 3,641.804 |
| Louisiana | 3,644.637 | 3,710.487 | 3,761.646 | 3,788.375 | 3,820.109 | 3,886.104 | 3,950.605 | 4,014.459 | 4,068.579 | 4,137.665 |
| Maine | 993.722 | 1,015.390 | 1,034.292 | 1,045.655 | 1,059.040 | 1,071.995 | 1,088.412 | 1,103.578 | 1,113.566 | 1,122.563 |
| Maryland | 3,923.897 | 4,018.324 | 4,073.499 | 4,097.974 | 4,118.815 | 4,139.096 | 4,150.539 | 4,169.595 | 4,183.603 | 4,191.160 |
| Massachusetts | 5,689.170 | 5,737.580 | 5,760.302 | 5,781.172 | 5,773.548 | 5,757.756 | 5,743.672 | 5,738.199 | 5,736.469 | 5,738.404 |
| Michigan | 8,881.826 | 8,974.186 | 9,028.944 | 9,077.956 | 9,117.507 | 9,117.668 | 9,129.205 | 9,171.110 | 9,217.761 | 9,266.268 |
| Minnesota | 3,806.103 | 3,853.486 | 3,869.747 | 3,889.332 | 3,903.925 | 3,932.515 | 3,964.680 | 3,989.364 | 4,015.341 | 4,050.316 |
| Mississippi | 2,216.994 | 2,265.432 | 2,307.117 | 2,349.546 | 2,378.268 | 2,399.449 | 2,429.756 | 2,459.201 | 2,487.816 | 2,507.069 |
| Missouri | 4,677.623 | 4,725.764 | 4,758.780 | 4,782.645 | 4,795.930 | 4,808.308 | 4,839.029 | 4,863.173 | 4,889.399 | 4,912.430 |
| Montana | 694.409 | 710.814 | 718.732 | 726.798 | 736.419 | 748.208 | 757.317 | 769.953 | 782.317 | 787.305 |
| Nebraska | 1,485.333 | 1,504.604 | 1,519.013 | 1,529.567 | 1,539.191 | 1,543.117 | 1,550.911 | 1,556.842 | 1,563.884 | 1,567.344 |
| Nevada | 488.738 | 520.018 | 546.789 | 568.991 | 596.822 | 619.972 | 646.975 | 678.333 | 719.436 | 765.367 |
| New Hampshire | 737.681 | 761.851 | 781.107 | 800.951 | 815.914 | 828.555 | 845.248 | 869.763 | 891.520 | 909.074 |
| New Jersey | 7,171.112 | 7,281.107 | 7,335.042 | 7,333.083 | 7,332.411 | 7,337.765 | 7,339.745 | 7,337.169 | 7,350.804 | 7,366.512 |
| New Mexico | 1,017.055 | 1,053.737 | 1,078.697 | 1,105.529 | 1,131.309 | 1,159.944 | 1,189.295 | 1,215.720 | 1,238.034 | 1,284.722 |
| New York | 18,241.391 | 18,357.982 | 18,339.400 | 18,177.063 | 18,049.775 | 18,003.485 | 17,940.541 | 17,812.602 | 17,680.589 | 17,583.838 |
| North Carolina | 5,084.411 | 5,203.531 | 5,301.150 | 5,389.852 | 5,470.911 | 5,547.188 | 5,607.964 | 5,685.607 | 5,759.492 | 5,823.491 |
| North Dakota | 617.792 | 626.760 | 631.119 | 632.675 | 634.559 | 638.886 | 645.797 | 649.769 | 651.301 | 652.896 |
| Ohio | 10,657.423 | 10,734.818 | 10,746.993 | 10,767.314 | 10,765.759 | 10,770.425 | 10,752.662 | 10,771.394 | 10,795.581 | 10,798.298 |
| Oklahoma | 2,559.463 | 2,618.601 | 2,658.646 | 2,695.931 | 2,734.768 | 2,774.683 | 2,826.815 | 2,870.014 | 2,917.336 | 2,975.310 |
| Oregon | 2,091.533 | 2,151.022 | 2,197.297 | 2,241.932 | 2,285.013 | 2,329.661 | 2,378.262 | 2,446.673 | 2,518.298 | 2,588.012 |
| Pennsylvania | 11,800.766 | 11,886.400 | 11,908.233 | 11,890.527 | 11,870.884 | 11,906.095 | 11,897.378 | 11,893.591 | 11,879.396 | 11,887.975 |
| Rhode Island | 949.723 | 963.107 | 974.790 | 975.738 | 950.615 | 942.788 | 946.089 | 950.230 | 951.816 | 950.382 |
| South Carolina | 2,590.713 | 2,662.269 | 2,719.197 | 2,776.605 | 2,844.749 | 2,902.028 | 2,943.657 | 2,991.681 | 3,044.364 | 3,090.267 |
| South Dakota | 666.257 | 671.297 | 677.234 | 678.715 | 679.585 | 681.042 | 686.390 | 688.480 | 688.580 | 688.335 |
| Tennessee | 3,926.018 | 4,013.608 | 4,094.611 | 4,147.401 | 4,213.509 | 4,275.566 | 4,346.928 | 4,422.921 | 4,486.314 | 4,560.473 |
| Texas | 11,198.655 | 11,509.848 | 11,759.148 | 12,019.543 | 12,268.629 | 12,568.843 | 12,904.089 | 13,193.050 | 13,500.429 | 13,888.371 |
| Utah | 1,059.273 | 1,101.192 | 1,135.449 | 1,170.040 | 1,200.471 | 1,236.030 | 1,274.928 | 1,319.512 | 1,367.510 | 1,420.238 |
| Vermont | 444.732 | 454.318 | 463.143 | 468.430 | 473.002 | 479.713 | 484.928 | 491.931 | 498.109 | 505.372 |
| Virginia | 4,651.448 | 4,750.838 | 4,824.472 | 4,901.292 | 4,971.069 | 5,047.395 | 5,121.863 | 5,193.112 | 5,270.240 | 5,307.945 |
| Washington | 3,413.244 | 3,447.553 | 3,447.885 | 3,478.782 | 3,549.946 | 3,621.339 | 3,693.610 | 3,776.050 | 3,889.073 | 4,017.632 |
| West Virginia | 1,744.237 | 1,770.657 | 1,797.648 | 1,806.360 | 1,815.447 | 1,842.250 | 1,879.503 | 1,908.088 | 1,923.395 | 1,942.146 |
| Wisconsin | 4,417.821 | 4,462.155 | 4,502.412 | 4,524.244 | 4,545.782 | 4,578.986 | 4,595.904 | 4,626.514 | 4,646.108 | 4,682.811 |
| Wyoming | 332.416 | 340.285 | 347.345 | 354.061 | 365.501 | 381.695 | 396.952 | 413.354 | 432.880 | 454.378 |
| U.S. Total | 203,302.031 | 206,827.026 | 209,283.905 | 211,357.481 | 213,341.554 | 215,465.255 | 217,562.735 | 219,759.869 | 222,095.080 | 224,567.241 |

Source: See first page of this appendix.

**Table D3. Resident Population by State, 1980-1989**

(Thousand People)

| State | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 3,893.888 | 3,918.531 | 3,925.266 | 3,934.102 | 3,951.820 | 3,972.523 | 3,991.569 | 4,015.264 | 4,023.844 | 4,030.222 |
| Alaska | 401.851 | 418.491 | 449.606 | 488.417 | 513.702 | 532.495 | 544.268 | 539.309 | 541.983 | 547.159 |
| Arizona | 2,718.215 | 2,810.107 | 2,889.861 | 2,968.925 | 3,067.135 | 3,183.538 | 3,308.262 | 3,437.103 | 3,535.183 | 3,622.185 |
| Arkansas | 2,286.435 | 2,293.201 | 2,294.257 | 2,305.761 | 2,319.768 | 2,327.046 | 2,331.984 | 2,342.355 | 2,342.656 | 2,346.358 |
| California | 23,667.902 | 24,285.933 | 24,820.009 | 25,360.026 | 25,844.393 | 26,441.109 | 27,102.237 | 27,777.158 | 28,464.249 | 29,218.164 |
| Colorado | 2,889.964 | 2,977.898 | 3,061.564 | 3,133.630 | 3,169.992 | 3,208.723 | 3,237.450 | 3,260.480 | 3,262.281 | 3,275.818 |
| Connecticut | 3,107.576 | 3,128.836 | 3,139.013 | 3,162.354 | 3,180.014 | 3,201.131 | 3,223.740 | 3,247.291 | 3,271.953 | 3,283.403 |
| Delaware | 594.338 | 595.975 | 599.148 | 605.458 | 611.565 | 618.280 | 627.559 | 636.947 | 647.622 | 658.273 |
| District of Columbia | 638.333 | 636.893 | 634.174 | 632.433 | 633.382 | 634.549 | 638.269 | 636.930 | 630.432 | 624.168 |
| Florida | 9,746.324 | 10,192.774 | 10,471.407 | 10,749.851 | 11,039.925 | 11,351.118 | 11,667.505 | 11,997.283 | 12,306.395 | 12,637.715 |
| Georgia | 5,463.105 | 5,568.345 | 5,649.792 | 5,728.250 | 5,834.954 | 5,962.661 | 6,084.666 | 6,208.467 | 6,316.142 | 6,411.099 |
| Hawaii | 964.691 | 978.195 | 993.780 | 1,012.717 | 1,027.922 | 1,039.698 | 1,051.762 | 1,067.918 | 1,079.828 | 1,094.588 |
| Idaho | 943.935 | 962.204 | 973.721 | 981.869 | 990.839 | 994.051 | 990.224 | 984.997 | 985.664 | 994.416 |
| Illinois | 11,426.518 | 11,443.458 | 11,423.412 | 11,408.818 | 11,412.132 | 11,399.806 | 11,387.257 | 11,391.178 | 11,390.183 | 11,409.782 |
| Indiana | 5,490.224 | 5,480.435 | 5,467.922 | 5,450.395 | 5,458.322 | 5,459.211 | 5,454.108 | 5,473.012 | 5,491.735 | 5,523.693 |
| Iowa | 2,913.808 | 2,907.983 | 2,888.189 | 2,870.543 | 2,858.618 | 2,829.684 | 2,791.970 | 2,767.011 | 2,768.388 | 2,770.592 |
| Kansas | 2,363.679 | 2,384.849 | 2,401.202 | 2,415.531 | 2,424.086 | 2,427.405 | 2,432.619 | 2,445.367 | 2,461.996 | 2,472.849 |
| Kentucky | 3,660.777 | 3,670.394 | 3,683.445 | 3,694.484 | 3,695.453 | 3,694.826 | 3,687.809 | 3,683.329 | 3,679.999 | 3,677.306 |
| Louisiana | 4,205.900 | 4,283.303 | 4,352.608 | 4,395.316 | 4,400.477 | 4,408.118 | 4,406.919 | 4,344.148 | 4,288.863 | 4,252.894 |
| Maine | 1,124.660 | 1,133.033 | 1,136.684 | 1,144.772 | 1,155.635 | 1,162.936 | 1,170.126 | 1,184.574 | 1,203.840 | 1,219.961 |
| Maryland | 4,216.975 | 4,261.905 | 4,282.923 | 4,313.327 | 4,365.243 | 4,413.071 | 4,486.957 | 4,565.557 | 4,657.904 | 4,727.301 |
| Massachusetts | 5,737.037 | 5,768.685 | 5,771.222 | 5,799.407 | 5,840.733 | 5,880.733 | 5,902.678 | 5,935.204 | 5,979.982 | 6,015.478 |
| Michigan | 9,262.078 | 9,209.287 | 9,115.198 | 9,047.754 | 9,049.452 | 9,076.293 | 9,127.775 | 9,187.481 | 9,217.998 | 9,253.295 |
| Minnesota | 4,075.970 | 4,111.728 | 4,131.450 | 4,141.456 | 4,157.706 | 4,184.302 | 4,205.212 | 4,235.136 | 4,296.166 | 4,338.057 |
| Mississippi | 2,520.638 | 2,539.036 | 2,556.777 | 2,567.717 | 2,578.051 | 2,588.102 | 2,593.597 | 2,588.545 | 2,580.352 | 2,574.269 |
| Missouri | 4,916.686 | 4,932.064 | 4,929.451 | 4,943.733 | 4,975.278 | 5,000.268 | 5,023.068 | 5,056.696 | 5,081.736 | 5,095.830 |
| Montana | 786.690 | 795.328 | 803.986 | 814.031 | 820.905 | 822.320 | 813.739 | 805.063 | 800.202 | 799.636 |
| Nebraska | 1,569.825 | 1,578.515 | 1,581.780 | 1,584.293 | 1,588.639 | 1,584.664 | 1,574.333 | 1,566.547 | 1,571.477 | 1,574.864 |
| Nevada | 800.493 | 847.655 | 881.537 | 901.977 | 924.922 | 951.030 | 980.613 | 1,023.376 | 1,075.022 | 1,137.382 |
| New Hampshire | 920.610 | 936.621 | 947.719 | 958.134 | 976.864 | 996.753 | 1,025.053 | 1,054.289 | 1,082.577 | 1,104.522 |
| New Jersey | 7,364.823 | 7,407.472 | 7,430.968 | 7,467.785 | 7,515.473 | 7,565.528 | 7,622.159 | 7,670.742 | 7,712.333 | 7,726.089 |
| New Mexico | 1,302.894 | 1,332.748 | 1,363.823 | 1,394.361 | 1,416.717 | 1,438.361 | 1,462.729 | 1,478.520 | 1,490.337 | 1,503.901 |
| New York | 17,558.072 | 17,567.734 | 17,589.738 | 17,686.905 | 17,745.684 | 17,791.672 | 17,833.419 | 17,868.848 | 17,941.309 | 17,983.086 |
| North Carolina | 5,881.766 | 5,956.653 | 6,019.101 | 6,077.056 | 6,164.006 | 6,253.954 | 6,321.578 | 6,403.700 | 6,480.594 | 6,565.459 |
| North Dakota | 652.717 | 659.505 | 668.972 | 676.688 | 680.497 | 676.980 | 669.512 | 661.136 | 655.331 | 646.351 |
| Ohio | 10,797.630 | 10,788.330 | 10,757.087 | 10,737.632 | 10,737.746 | 10,734.926 | 10,730.268 | 10,760.090 | 10,798.552 | 10,829.217 |
| Oklahoma | 3,025.290 | 3,096.164 | 3,206.123 | 3,290.402 | 3,285.533 | 3,271.332 | 3,252.735 | 3,210.122 | 3,167.057 | 3,150.307 |
| Oregon | 2,633.105 | 2,667.982 | 2,664.922 | 2,653.066 | 2,666.588 | 2,672.652 | 2,683.528 | 2,700.991 | 2,741.297 | 2,790.575 |
| Pennsylvania | 11,863.895 | 11,858.567 | 11,845.146 | 11,837.723 | 11,815.172 | 11,770.862 | 11,782.752 | 11,810.866 | 11,845.752 | 11,865.996 |
| Rhode Island | 947.154 | 953.013 | 954.170 | 956.382 | 961.894 | 968.955 | 977.341 | 989.604 | 996.408 | 1,000.666 |
| South Carolina | 3,121.820 | 3,179.255 | 3,207.614 | 3,234.066 | 3,271.868 | 3,303.209 | 3,342.758 | 3,380.506 | 3,412.096 | 3,456.775 |
| South Dakota | 690.768 | 689.584 | 690.597 | 693.008 | 697.249 | 698.402 | 696.034 | 696.036 | 698.165 | 696.701 |
| Tennessee | 4,591.120 | 4,627.658 | 4,646.041 | 4,659.749 | 4,686.737 | 4,715.296 | 4,738.708 | 4,782.927 | 4,822.437 | 4,854.444 |
| Texas | 14,229.191 | 14,746.318 | 15,331.415 | 15,751.676 | 16,007.086 | 16,272.734 | 16,561.113 | 16,621.791 | 16,667.022 | 16,806.735 |
| Utah | 1,461.037 | 1,515.471 | 1,558.314 | 1,594.943 | 1,622.342 | 1,642.910 | 1,662.834 | 1,678.119 | 1,689.372 | 1,705.864 |
| Vermont | 511.456 | 515.594 | 519.109 | 523.302 | 526.660 | 530.035 | 534.066 | 540.267 | 549.763 | 557.707 |
| Virginia | 5,346.818 | 5,444.097 | 5,492.783 | 5,564.657 | 5,643.870 | 5,715.153 | 5,811.700 | 5,932.268 | 6,036.909 | 6,120.246 |
| Washington | 4,132.156 | 4,235.731 | 4,276.552 | 4,300.266 | 4,343.656 | 4,400.098 | 4,452.720 | 4,531.901 | 4,639.893 | 4,746.316 |
| West Virginia | 1,949.644 | 1,954.124 | 1,949.604 | 1,945.061 | 1,927.697 | 1,906.831 | 1,882.350 | 1,857.585 | 1,830.215 | 1,806.568 |
| Wisconsin | 4,705.767 | 4,726.343 | 4,728.870 | 4,721.438 | 4,735.563 | 4,747.767 | 4,755.618 | 4,777.919 | 4,822.388 | 4,856.574 |
| Wyoming | 469.557 | 491.712 | 506.400 | 510.345 | 504.896 | 499.695 | 495.633 | 476.965 | 465.101 | 458.374 |
| U.S. Total | 226,545.805 | 229,465.714 | 231,664.458 | 233,791.994 | 235,824.902 | 237,923.795 | 240,132.887 | 242,288.918 | 244,498.982 | 246,819.230 |

Source: See first page of this appendix.

# Table D4. Resident Population by State, 1990-1999

(Thousand People)

| State | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | R 4,040.587 | R 4,091.025 | R 4,139.269 | R 4,193.114 | R 4,232.965 | R 4,262.731 | R 4,290.403 | R 4,320.281 | 4,351.037 | 4,369.862 |
| Alaska | 550.043 | R 569.273 | R 587.073 | R 596.993 | R 600.624 | R 601.345 | R 604.918 | R 608.846 | 615.205 | 619.500 |
| Arizona | R 3,665.228 | R 3,762.394 | R 3,867.333 | R 3,993.390 | R 4,147.561 | R 4,306.908 | R 4,432.308 | R 4,552.207 | 4,667.277 | 4,778.332 |
| Arkansas | R 2,350.725 | R 2,370.666 | R 2,394.098 | R 2,423.743 | R 2,450.605 | R 2,480.121 | R 2,504.858 | R 2,524.007 | 2,538.202 | 2,551.373 |
| California | R 29,760.021 | R 30,414.114 | R 30,875.920 | R 31,147.208 | R 31,317.179 | R 31,493.525 | R 31,780.829 | R 32,217.708 | 32,682.794 | 33,145.121 |
| Colorado | R 3,294.394 | R 3,367.567 | R 3,459.995 | R 3,560.884 | R 3,653.910 | R 3,738.061 | R 3,812.716 | R 3,891.293 | 3,968.967 | 4,056.133 |
| Connecticut | 3,287.116 | R 3,288.640 | R 3,274.997 | R 3,272.325 | R 3,268.346 | R 3,265.293 | R 3,267.030 | R 3,268.514 | 3,272.563 | 3,282.031 |
| Delaware | 666.168 | R 680.495 | R 690.158 | R 699.475 | R 708.416 | R 718.265 | R 727.090 | R 735.024 | 744.066 | 753.538 |
| District of Columbia | 606.900 | R 593.239 | R 584.183 | R 576.605 | R 564.982 | R 551.273 | R 538.273 | R 528.752 | 521.426 | 519.000 |
| Florida | R 12,937.926 | R 13,289.497 | R 13,504.775 | R 13,713.593 | R 13,961.798 | R 14,185.403 | R 14,426.911 | R 14,683.350 | 14,908.230 | 15,111.244 |
| Georgia | R 6,478.216 | R 6,621.279 | R 6,759.474 | R 6,894.092 | R 7,045.900 | R 7,188.538 | R 7,332.225 | R 7,486.094 | 7,636.522 | 7,788.240 |
| Hawaii | 1,108.229 | R 1,131.412 | R 1,149.926 | R 1,161.508 | R 1,173.903 | R 1,180.490 | R 1,184.434 | R 1,189.322 | 1,190.472 | 1,185.497 |
| Idaho | R 1,006.749 | R 1,038.915 | R 1,066.490 | R 1,101.204 | R 1,135.459 | R 1,165.000 | R 1,187.706 | R 1,210.638 | 1,230.923 | 1,251.700 |
| Illinois | 11,430.602 | R 11,535.973 | R 11,635.197 | R 11,725.984 | R 11,804.986 | R 11,884.935 | R 11,953.003 | R 12,011.509 | 12,069.774 | 12,128.370 |
| Indiana | R 5,544.159 | R 5,602.062 | R 5,648.649 | R 5,701.965 | R 5,745.626 | R 5,791.819 | R 5,834.908 | R 5,872.370 | 5,907.617 | 5,942.901 |
| Iowa | R 2,776.755 | R 2,791.227 | R 2,806.923 | R 2,820.525 | R 2,829.422 | R 2,840.860 | R 2,848.473 | R 2,854.396 | 2,861.025 | 2,869.413 |
| Kansas | R 2,477.574 | R 2,495.209 | R 2,526.042 | R 2,547.605 | R 2,569.118 | R 2,586.942 | R 2,598.266 | R 2,616.339 | 2,638.667 | 2,654.052 |
| Kentucky | R 3,685.296 | R 3,714.686 | R 3,756.358 | R 3,792.288 | R 3,823.215 | R 3,855.248 | R 3,881.051 | R 3,907.816 | 3,934.310 | 3,960.825 |
| Louisiana | R 4,219.973 | R 4,240.950 | R 4,270.849 | R 4,284.749 | R 4,306.500 | R 4,327.978 | R 4,338.763 | R 4,351.390 | 4,362.758 | 4,372.035 |
| Maine | 1,227.928 | R 1,235.439 | R 1,235.748 | R 1,238.256 | R 1,237.687 | R 1,237.438 | R 1,241.436 | R 1,245.215 | 1,247.554 | 1,253.040 |
| Maryland | R 4,781.468 | R 4,856.176 | R 4,902.545 | R 4,942.504 | R 4,985.411 | R 5,023.650 | R 5,057.142 | R 5,092.914 | 5,130.072 | 5,171.634 |
| Massachusetts | 6,016.425 | R 5,998.652 | R 5,993.474 | R 6,010.884 | R 6,031.352 | R 6,062.335 | R 6,085.393 | R 6,115.476 | 6,144.407 | 6,175.169 |
| Michigan | R 9,295.297 | R 9,395.022 | R 9,470.323 | R 9,529.240 | R 9,584.481 | R 9,659.871 | R 9,739.184 | R 9,785.450 | 9,820.231 | 9,863.775 |
| Minnesota | R 4,375.099 | R 4,427.429 | R 4,471.503 | R 4,521.709 | R 4,566.028 | R 4,605.445 | R 4,647.723 | R 4,687.726 | 4,726.411 | 4,775.508 |
| Mississippi | R 2,573.216 | R 2,591.230 | R 2,610.193 | R 2,635.574 | R 2,663.450 | R 2,690.788 | R 2,709.925 | R 2,731.826 | 2,751.335 | 2,768.619 |
| Missouri | R 5,117.073 | R 5,157.770 | R 5,193.686 | R 5,237.757 | R 5,281.206 | R 5,324.610 | R 5,367.888 | R 5,407.113 | 5,437.562 | 5,468.338 |
| Montana | 799.065 | R 807.837 | R 822.436 | R 839.876 | R 854.923 | R 868.522 | R 876.656 | R 878.706 | 879.533 | 882.779 |
| Nebraska | R 1,578.385 | R 1,590.805 | R 1,602.406 | R 1,612.149 | R 1,621.551 | R 1,635.142 | R 1,647.657 | R 1,656.042 | 1,660.772 | 1,666.028 |
| Nevada | R 1,201.833 | R 1,285.046 | R 1,330.694 | R 1,380.197 | R 1,456.388 | R 1,525.777 | R 1,596.476 | R 1,675.581 | 1,743.772 | 1,809.253 |
| New Hampshire | 1,109.252 | R 1,107.055 | R 1,112.766 | R 1,122.191 | R 1,133.054 | R 1,145.604 | R 1,160.768 | R 1,173.239 | 1,185.823 | 1,201.134 |
| New Jersey | R 7,730.188 | R 7,784.269 | R 7,827.770 | R 7,874.891 | R 7,918.796 | R 7,965.523 | R 8,009.624 | R 8,054.178 | 8,095.542 | 8,143.412 |
| New Mexico | 1,515.069 | R 1,547.115 | R 1,580.750 | R 1,614.937 | R 1,653.329 | R 1,682.417 | R 1,706.151 | R 1,722.939 | 1,733.535 | 1,739.844 |
| New York | R 17,990.455 | R 18,029.532 | R 18,082.032 | R 18,140.894 | R 18,156.652 | R 18,150.928 | R 18,143.805 | R 18,143.184 | 18,159.175 | 18,196.601 |
| North Carolina | R 6,628.637 | R 6,748.135 | R 6,831.850 | R 6,947.412 | R 7,060.959 | R 7,185.403 | R 7,307.658 | R 7,428.672 | 7,545.828 | 7,650.789 |
| North Dakota | 638.800 | R 634.199 | R 635.427 | R 637.229 | R 639.762 | R 641.548 | R 642.858 | R 640.945 | 637.808 | 633.666 |
| Ohio | 10,847.115 | R 10,933.683 | R 11,007.609 | R 11,070.385 | R 11,111.451 | R 11,155.493 | R 11,187.032 | R 11,212.498 | 11,237.752 | 11,256.654 |
| Oklahoma | R 3,145.585 | R 3,166.471 | R 3,204.174 | R 3,228.829 | R 3,246.119 | R 3,265.547 | R 3,289.634 | R 3,314.259 | 3,339.478 | 3,358.044 |
| Oregon | R 2,842.321 | R 2,918.745 | R 2,973.934 | R 3,034.490 | R 3,087.142 | R 3,141.421 | R 3,195.087 | R 3,243.254 | 3,282.055 | 3,316.154 |
| Pennsylvania | R 11,881.643 | R 11,943.160 | R 11,980.819 | R 12,022.128 | R 12,042.545 | R 12,044.780 | R 12,038.008 | R 12,015.888 | 12,002.329 | 11,994.016 |
| Rhode Island | 1,003.464 | R 1,003.990 | R 1,000.571 | R 997.852 | R 993.412 | R 989.203 | R 987.858 | R 986.966 | 987.704 | 990.819 |
| South Carolina | R 3,486.703 | R 3,559.470 | R 3,600.576 | R 3,634.507 | R 3,666.456 | R 3,699.943 | R 3,738.974 | R 3,790.066 | 3,839.578 | 3,885.736 |
| South Dakota | 696.004 | R 701.445 | R 708.698 | R 716.258 | R 723.038 | R 728.251 | R 730.699 | R 730.855 | 730.789 | 733.133 |
| Tennessee | R 4,877.185 | R 4,946.886 | R 5,013.999 | R 5,085.666 | R 5,163.016 | R 5,241.168 | R 5,313.576 | R 5,378.433 | 5,432.679 | 5,483.535 |
| Texas | R 16,986.510 | R 17,339.904 | R 17,650.479 | R 17,996.764 | R 18,338.319 | R 18,679.706 | R 19,006.240 | R 19,355.427 | 19,712.389 | 20,044.141 |
| Utah | 1,722.850 | R 1,771.941 | R 1,821.498 | R 1,875.993 | R 1,930.436 | R 1,976.774 | R 2,022.253 | R 2,065.397 | 2,100.562 | 2,129.836 |
| Vermont | 562.758 | R 567.141 | R 570.115 | R 574.004 | R 578.900 | R 582.827 | R 586.352 | R 588.665 | 590.579 | 593.740 |
| Virginia | R 6,187.358 | R 6,283.853 | R 6,383.315 | R 6,464.795 | R 6,536.771 | R 6,601.392 | R 6,665.491 | R 6,732.878 | 6,789.225 | 6,872.912 |
| Washington | R 4,866.692 | R 5,013.443 | R 5,139.011 | R 5,247.704 | R 5,334.896 | R 5,431.024 | R 5,509.963 | R 5,604.105 | 5,687.832 | 5,756.361 |
| West Virginia | 1,793.477 | R 1,798.212 | R 1,805.462 | R 1,816.179 | R 1,818.490 | R 1,820.560 | R 1,818.983 | R 1,815.588 | 1,811.688 | 1,806.928 |
| Wisconsin | 4,891.769 | R 4,952.675 | R 5,004.636 | R 5,055.318 | R 5,095.504 | R 5,137.004 | R 5,173.828 | R 5,200.235 | 5,222.124 | 5,250.446 |
| Wyoming | R 453.588 | R 457.739 | R 463.491 | R 469.033 | R 474.982 | R 478.447 | R 480.085 | R 480.031 | 480.045 | 479.602 |
| U.S. Total | R 248,709.873 | R 252,153.092 | R 255,029.699 | R 257,782.608 | R 260,327.021 | R 262,803.276 | R 265,228.572 | R 267,783.607 | 270,248.003 | 272,690.813 |

Source: See first page of this appendix.

Appendix E

# Metric and Other Physical Conversion Factors

Data presented in the *State Energy Data Report* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table E1 can be used to calculate the metric-unit equivalents of values expressed in U.S. customary units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table E2.

The conversion factors presented in Table E3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

**Table E1.  Metric Conversion Factors**

| U.S. Unit | multiplied by | Conversion Factor | equals | Metric Unit | U.S. Unit | multiplied by | Conversion Factor | equals | Metric Unit |
|---|---|---|---|---|---|---|---|---|---|
| **Mass** | | | | | **Volume** | | | | |
| short tons (2,000 lb) | x | 0.907 184 7 | = | metric tons (t) | barrels of oil (bbl) | x | 0.158 987 3 | = | cubic meters ($cm^3$) |
| long tons | x | 1.016 047 | = | metric tons (t) | cubic yards ($yd^3$) | x | 0.764 555 | = | cubic meters ($cm^3$) |
| pounds (lb) | x | 0.453 592 37[a] | = | kilograms (kg) | cubic feet ($ft^3$) | x | 0.028 316 85 | = | cubic meters ($cm^3$) |
| pounds uranium oxide | x | 0.384 647[b] | = | kilograms | U.S. gallons (gal) | x | 3.785 412 | = | liters (L) |
| (lb $U_3O_8$ ) | | | | uranium (kgU) | ounces, fluid (fl oz) | x | 29.573 53 | = | milliliters (mL) |
| ounces, avoirdupois | x | 28.349 52 | = | grams (g) | cubic inches ($in^3$) | x | 16.387 06 | = | milliliters (mL) |
| (avdp oz) | | | | | | | | | |
| **Length** | | | | | **Area** | | | | |
| miles (mi) | x | 1.609 344[a] | = | kilometers (km) | acres | x | 0.404 69 | = | hectares (ha) |
| yard (yd) | x | 0.914 4[a] | = | meters (m) | square miles ($mi^2$) | x | 2.589 988 | = | square kilometers ($km^2$) |
| feet (ft) | x | 0.304 8[a] | = | meters (m) | square yards ($yd^2$) | x | 0.836 127 4 | = | square meters ($m^2$) |
| inches (in) | x | 2.54[a] | = | centimeters (cm) | square feet ($ft^2$) | x | 0.092 903 04[a] | = | square meters ($m^2$) |
| | | | | | square inches ($in^2$) | x | 6.451 6[a] | = | square centimeters ($cm^2$) |
| **Energy** | | | | | | | | | |
| British Thermal Units (Btu) | x | 1,055.055 852 62[a,c] | = | joules (J) | **Temperature** | | | | |
| calories (cal) | x | 4.186 8[a] | = | joules (J) | degrees | x | 5/9 (after | = | degrees |
| kilowatthours (kWh) | x | 3.6[a] | = | megajoules (MJ) | Fahrenheit ($^oF$) | | subtracting 32)[a,d] | | Celsius ($^oC$) |

[a]Exact conversion.
[b]Calculated by the Energy Information Administration.
[c]The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.
[d]To convert degrees Celsius ( $^oC$) to degrees Fahrenheit ( $^oF$) exactly, multiply by 9/5, then add 32.
Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading.
• Most metric units shown belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units.  For more information about the SI units, contact Dr. Barry Taylor at Building 221, Room B160, National Institute of Standards and Technology, Gaithersburg, MD 20899, or on telephone number 301–975–4220.

**Table E2.  Metric Prefixes**

| Unit Multiple | Prefix | Symbol | Unit Subdivision | Prefix | Symbol |
|---|---|---|---|---|---|
| $10^1$ | deka | da | $10^{-1}$ | deci | d |
| $10^2$ | hecto | h | $10^{-2}$ | centi | c |
| $10^3$ | kilo | k | $10^{-3}$ | milli | m |
| $10^6$ | mega | M | $10^{-6}$ | micro | $\mu$ |
| $10^9$ | giga | G | $10^{-9}$ | nano | n |
| $10^{12}$ | tera | T | $10^{-12}$ | pico | p |
| $10^{15}$ | peta | P | $10^{-15}$ | femto | f |
| $10^{18}$ | exa | E | $10^{-18}$ | atto | a |
| $10^{21}$ | zetta | Z | $10^{-21}$ | zepto | z |
| $10^{24}$ | yotta | Y | $10^{-24}$ | yocto | Y |

Source:  U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI),* NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p. 10.

**Table E3.  Other Physical Conversion Factors**

| Energy Source | Original Unit | | Conversion Factor | | Final Unit |
|---|---|---|---|---|---|
| **Petroleum** | barrels (bbl) | x | 42[a] | = | U.S. gallons (gal) |
| **Coal** | short tons | x | 2,000[a] | = | pounds (lb) |
| | long tons | x | 2,240[a] | = | pounds (lb) |
| | metric tons (t) | x | 1,000[a] | = | kilograms (kg) |
| **Wood** | cords (cd) | x | 1.25[b] | = | short tons |
| | cords (cd) | x | 128[a] | = | cubic feet (ft$^3$) |

[a]Exact conversion.

[b]Calculated by the Energy Information Administration.

Source:  U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices*, NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B-10, C-17, and C-21.

Appendix F

# Carbon Dioxide Emission Factors for Coal

The need for accurate estimates of carbon dioxide emissions produced during the combustion of coal has led the Energy Information Administration (EIA) to develop basic emission factors. Basic emission factors reflect the carbon-to-heat-content ratio of coal, a ratio that measures carbon dioxide emissions per unit of energy (pounds per million Btu), assuming complete combustion. These basic factors are derived from 5,426 sample analyses maintained in EIA's Coal Analysis File. Variations in the carbon-to-heat-content of different coals were observed to follow coal rank and geographic origin, leading EIA to develop basic emission factors specific to the rank and the State of origin of the coal.

On the basis of these rank- and State-specific basic emission factors for coal, EIA has also developed emission factors by sector. These sectoral emission factors weight the coal consumed in a given sector by its rank and State of origin. Tables F1 through F5 present the U.S. average carbon dioxide emission factors for coal by sector.

## Table F1. Average Carbon Dioxide Emission Factors for Coal Consumed by the Residential and Commercial Sector, 1980-1999
(Pounds of Carbon Dioxide per Million Btu)

| State | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 205.4 | 205.5 | 205.7 | 205.2 | 205.4 | 205.4 | 205.4 | 205.9 | 205.9 | 205.7 | 206.0 | 205.6 | 205.5 | 205.7 | 205.7 | 205.7 | 205.5 | 205.3 | 205.5 | 205.5 |
| Alaska | — | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 |
| Arizona | — | 209.7 | 209.7 | 209.7 | 209.7 | 209.7 | 209.9 | 212.1 | 210.8 | 206.2 | 208.3 | 218.3 | 208.6 | 212.0 | 227.4 | 212.7 | 206.9 | 206.8 | 210.2 | 212.7 |
| Arkansas | 205.3 | 211.3 | 203.4 | 206.5 | 202.5 | 205.4 | 227.4 | 201.3 | 203.8 | 205.4 | 205.9 | 205.9 | 222.3 | 209.9 | 207.2 | — | — | 227.4 | — | 227.4 |
| California | 204.5 | 205.3 | 204.6 | 204.4 | 204.1 | 204.1 | 209.7 | 203.7 | 204.2 | 203.6 | 204.1 | 204.2 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 |
| Colorado | 212.6 | 212.3 | 212.4 | 211.8 | 212.0 | 212.4 | 212.5 | 212.5 | 212.5 | 212.5 | 212.4 | 212.4 | 211.0 | 212.0 | 211.2 | 211.6 | 211.8 | 212.2 | 211.0 | 206.2 |
| Connecticut | 226.1 | 225.7 | 227.2 | 227.3 | 227.4 | 227.2 | 226.9 | 226.9 | 226.5 | 226.3 | 226.7 | 227.3 | 220.2 | 226.9 | 226.3 | 211.9 | 226.4 | 226.6 | 224.0 | 226.9 |
| Delaware | 221.8 | 227.0 | 211.3 | 213.8 | 227.4 | 214.2 | 213.9 | 207.0 | 207.1 | 206.4 | 206.7 | 206.0 | 221.1 | 203.0 | 203.4 | 227.4 | 209.7 | 209.2 | 208.5 | 218.1 |
| Dist. of Columbia | 205.5 | 204.9 | 205.0 | 205.1 | 205.3 | 204.9 | 205.2 | 205.1 | 205.3 | 205.4 | 206.4 | 205.5 | 206.3 | 206.4 | 206.5 | 207.8 | 207.2 | 207.2 | 207.4 | 206.2 |
| Florida | 205.0 | 205.3 | 203.7 | 204.9 | 204.8 | 204.8 | 204.8 | 206.9 | 214.3 | 215.2 | 207.5 | 227.4 | 205.7 | 205.1 | 205.0 | 207.8 | 204.8 | — | 204.8 | 204.9 |
| Georgia | 204.7 | 204.8 | 204.9 | 205.4 | 204.8 | 205.3 | 205.2 | 205.0 | 205.0 | 205.4 | 205.1 | 206.3 | 204.9 | 205.1 | 206.0 | 205.9 | 204.8 | 206.2 | 206.2 | 205.7 |
| Hawaii | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Idaho | 205.4 | 205.8 | 206.0 | 205.2 | 205.1 | 204.8 | 204.5 | 205.0 | 204.7 | 205.7 | 204.9 | 204.7 | 205.0 | 204.9 | 205.0 | 206.0 | 205.9 | 204.6 | 207.3 | 204.1 |
| Illinois | 203.9 | 204.1 | 203.6 | 203.7 | 203.6 | 203.6 | 203.6 | 203.7 | 203.6 | 203.7 | 203.5 | 203.9 | 203.9 | 203.6 | 203.6 | 203.6 | 203.8 | 204.1 | 203.6 | 203.7 |
| Indiana | 203.7 | 203.9 | 203.8 | 203.6 | 203.6 | 203.6 | 203.6 | 203.7 | 203.6 | 203.8 | 203.7 | 203.8 | 203.8 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.2 | 204.1 |
| Iowa | 205.1 | 202.6 | 202.8 | 202.8 | 202.8 | 202.9 | 202.0 | 205.0 | 206.9 | 204.2 | 204.1 | 203.7 | 204.2 | 204.5 | 204.6 | 204.8 | — | 203.9 | 204.8 | 204.4 |
| Kansas | 202.2 | 202.3 | 202.8 | 201.3 | 201.3 | 201.3 | 201.3 | 201.3 | 201.5 | 203.6 | 203.2 | 203.8 | 202.9 | 203.9 | 203.6 | 202.8 | 202.8 | 202.8 | 204.1 | 204.9 |
| Kentucky | 204.6 | 204.7 | 204.4 | 204.2 | 204.8 | 204.2 | 204.4 | 204.6 | 204.3 | 204.0 | 204.3 | 204.3 | 204.6 | 205.1 | 205.0 | 204.7 | 205.0 | 203.2 | 205.0 | 205.2 |
| Louisiana | 201.3 | — | 201.4 | — | 203.5 | — | 227.4 | — | 227.4 | 204.8 | — | 227.4 | — | 227.4 | — | 204.8 | — | 207.1 | — | 227.4 |
| Maine | 216.2 | 224.1 | 215.1 | 215.2 | 214.2 | 211.9 | 210.1 | 213.0 | 210.9 | 213.6 | 212.0 | 223.9 | 213.0 | 212.2 | 226.8 | 226.7 | 227.4 | 226.2 | 227.4 | 227.2 |
| Maryland | 210.6 | 216.0 | 208.2 | 207.0 | 207.9 | 207.3 | 207.1 | 206.8 | 207.8 | 207.5 | 207.8 | 208.1 | 211.7 | 212.1 | 208.6 | 207.9 | 207.8 | 208.2 | 207.6 | 208.2 |
| Massachusetts | 218.2 | 220.9 | 217.0 | 217.4 | 214.2 | 219.1 | 219.9 | 223.7 | 218.1 | 217.6 | 213.8 | 221.5 | 214.1 | 217.0 | 225.8 | 217.7 | 214.2 | 215.9 | 213.3 | 210.6 |
| Michigan | 205.0 | 205.1 | 204.8 | 204.8 | 204.4 | 204.6 | 204.7 | 204.9 | 204.8 | 204.8 | 204.9 | 204.9 | 205.0 | 204.6 | 204.3 | 204.3 | 204.8 | 204.6 | 204.9 | 205.9 |
| Minnesota | 208.6 | 211.6 | 212.2 | 209.9 | 211.0 | 210.8 | 210.8 | 211.8 | 211.6 | 209.5 | 212.0 | 212.2 | 212.3 | 211.7 | 209.4 | 208.6 | 212.5 | 211.0 | 205.8 | 208.3 |
| Mississippi | 202.6 | 227.4 | 227.4 | 204.6 | 204.8 | 205.2 | 204.8 | 204.0 | 202.8 | 206.2 | 208.4 | 227.4 | 227.4 | 227.4 | — | — | — | 227.4 | — | — |
| Missouri | 202.1 | 201.9 | 201.7 | 202.0 | 202.0 | 204.4 | 203.9 | 201.9 | 201.8 | 203.4 | 202.7 | 202.8 | 203.4 | 204.1 | 203.5 | 203.1 | 203.3 | 203.8 | 203.5 | 204.5 |
| Montana | 205.6 | 213.1 | 213.2 | 209.7 | 213.3 | 213.3 | 213.1 | 213.1 | 213.2 | 209.3 | 211.7 | 213.4 | 213.3 | 211.3 | 213.4 | 207.2 | 213.4 | 211.8 | 209.2 | 209.3 |
| Nebraska | 212.6 | 212.6 | 212.7 | 212.9 | 212.6 | 212.6 | 212.7 | 212.7 | 212.5 | 212.7 | 212.7 | 217.4 | 219.2 | 212.7 | 212.7 | 210.1 | 227.0 | 212.7 | 212.7 | 212.7 |
| Nevada | 208.4 | 207.7 | 204.3 | 204.3 | 211.9 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 212.3 | 204.1 | 204.1 | 204.1 | 204.1 | 204.3 | 204.1 | 204.1 | 204.1 | 204.2 |
| New Hampshire | 227.2 | 227.4 | 225.9 | 225.8 | 226.9 | 227.4 | 227.2 | 227.4 | 226.1 | 226.6 | 226.4 | 226.9 | 225.4 | 227.4 | 227.4 | 217.7 | 215.5 | 223.5 | 222.4 | 227.4 |
| New Jersey | 227.2 | 226.1 | 227.1 | 227.3 | 224.8 | 225.0 | 226.7 | 226.9 | 227.4 | 226.1 | 227.2 | 226.9 | 227.1 | 227.3 | 227.0 | 227.3 | 227.2 | 227.1 | 227.4 | 227.4 |
| New Mexico | 209.8 | 209.7 | 209.8 | 209.6 | 209.7 | 209.7 | 209.7 | 209.7 | 209.7 | 208.1 | 205.7 | 205.8 | 206.3 | 206.5 | 206.6 | 206.6 | 207.1 | 206.3 | 209.0 | 205.7 |
| New York | 218.9 | 217.3 | 215.3 | 215.2 | 215.1 | 216.4 | 213.3 | 216.1 | 214.6 | 215.5 | 214.0 | 215.4 | 218.0 | 218.8 | 214.8 | 216.0 | 214.1 | 213.7 | 212.2 | 209.9 |
| North Carolina | 204.9 | 204.8 | 204.8 | 204.9 | 204.8 | 205.0 | 204.8 | 204.9 | 204.8 | 204.9 | 206.7 | 206.1 | 206.2 | 205.9 | 206.0 | 206.4 | 206.0 | 205.6 | 205.9 | 205.8 |
| North Dakota | 218.5 | 218.6 | 218.6 | 218.6 | 218.7 | 218.6 | 218.6 | 218.7 | 218.8 | 218.8 | 217.6 | 217.6 | 216.8 | 216.5 | 216.4 | 215.7 | 216.9 | 216.4 | 216.2 | 215.0 |
| Ohio | 203.8 | 203.8 | 203.6 | 203.5 | 203.7 | 203.9 | 203.6 | 203.8 | 204.3 | 203.9 | 204.2 | 204.4 | 205.5 | 204.2 | 204.5 | 204.4 | 203.4 | 204.1 | 205.5 | 204.4 |
| Oklahoma | 205.7 | 201.9 | 202.7 | 201.4 | 201.5 | 205.7 | 202.6 | 204.8 | 212.3 | 203.0 | 206.2 | 205.9 | 207.0 | 205.9 | 206.9 | 205.9 | 205.9 | 212.7 | 205.9 | 205.9 |
| Oregon | 205.6 | 208.4 | 209.2 | 207.5 | 205.7 | 205.1 | 207.2 | 204.7 | 204.7 | 204.6 | 204.1 | 204.1 | 204.1 | 214.2 | 213.6 | 204.1 | 204.1 | 204.1 | 207.1 | 204.1 |
| Pennsylvania | 221.2 | 222.8 | 219.8 | 219.8 | 220.6 | 219.3 | 218.9 | 218.1 | 218.7 | 218.8 | 219.0 | 218.2 | 219.7 | 218.6 | 220.1 | 220.4 | 220.3 | 221.7 | 221.3 | 221.0 |
| Rhode Island | 223.9 | 227.4 | 227.4 | 224.2 | 226.7 | 227.1 | 225.8 | 227.4 | 227.4 | 227.4 | 227.3 | 227.4 | 227.4 | 227.2 | 227.4 | 227.4 | 227.4 | 227.4 | 227.2 | 227.4 |
| South Carolina | 204.8 | 204.5 | 204.8 | 204.8 | 204.8 | 205.2 | 204.8 | 204.8 | 204.8 | 204.8 | 204.9 | 205.1 | 205.3 | 207.0 | 207.0 | 209.5 | 206.8 | 204.8 | 206.2 | 207.1 |
| South Dakota | 212.0 | 212.3 | 211.7 | 209.1 | 205.9 | 209.9 | 208.3 | 211.9 | 213.2 | 212.9 | 211.6 | 212.8 | 212.8 | 212.7 | 209.9 | 212.2 | 208.9 | 212.7 | 212.7 | 212.7 |
| Tennessee | 204.5 | 204.6 | 204.1 | 204.6 | 204.2 | 204.2 | 203.7 | 204.0 | 204.4 | 204.8 | 205.4 | 206.3 | 204.6 | 205.1 | 205.0 | 205.5 | 204.8 | 204.9 | 204.5 | 204.6 |
| Texas | 213.7 | 209.8 | 215.3 | 216.3 | 227.4 | 207.5 | 205.4 | 204.3 | 204.5 | 206.8 | 206.8 | 207.1 | 211.0 | 213.3 | 227.0 | — | 213.0 | 205.9 | 206.2 | 206.3 |
| Utah | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.2 | 204.2 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 |
| Vermont | 227.4 | 227.3 | 227.3 | 224.3 | 227.0 | 210.4 | 226.1 | 227.2 | 227.4 | 227.1 | 227.2 | 227.1 | 227.4 | 227.3 | 227.2 | 227.4 | 227.1 | 227.2 | 227.4 | 227.4 |
| Virginia | 205.0 | 205.1 | 205.2 | 205.3 | 205.4 | 205.2 | 205.1 | 205.2 | 205.3 | 205.1 | 205.9 | 206.2 | 206.3 | 206.0 | 206.4 | 206.7 | 206.5 | 205.9 | 206.0 | 205.7 |
| Washington | 204.3 | 204.6 | 204.4 | 204.4 | 204.5 | 204.2 | 208.5 | 204.8 | 205.2 | 204.8 | 206.8 | 207.5 | 206.9 | 207.6 | 209.2 | 208.1 | 204.4 | 204.4 | 204.2 | 204.1 |
| West Virginia | 205.0 | 205.2 | 205.9 | 205.6 | 205.7 | 206.8 | 206.1 | 206.5 | 205.3 | 206.3 | 206.2 | 207.0 | 210.2 | 208.3 | 207.0 | 208.4 | 207.1 | 207.4 | 207.2 | 207.2 |
| Wisconsin | 205.8 | 203.7 | 205.1 | 204.4 | 205.2 | 205.6 | 205.3 | 203.8 | 205.3 | 205.8 | 211.8 | 205.0 | 204.9 | 204.9 | 204.9 | 204.9 | 204.9 | 205.1 | 204.8 | 204.8 |
| Wyoming | 212.3 | 211.9 | 212.5 | 212.8 | 212.9 | 212.7 | 212.7 | 212.7 | 212.7 | 212.3 | 212.7 | 212.7 | 212.7 | 212.8 | 212.8 | 213.0 | 212.9 | 212.8 | 213.0 | 212.7 |
| U.S. Average [a] | 210.6 | 212.0 | 210.4 | 209.2 | 209.5 | 209.3 | 209.2 | 209.4 | 209.1 | 209.7 | 209.5 | 210.2 | 211.2 | 209.9 | 209.8 | 210.2 | 209.5 | 210.2 | 209.7 | 208.8 |

[a] Weighted average. The weights used are consumption values by State.
— =Not applicable.

Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

## Table F2.  Average Carbon Dioxide Emission Factors for Coal Consumed[a] by Coke Plants, 1980-1999
(Pounds of Carbon Dioxide per Million Btu)

| State | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 205.5 | 205.5 | 205.4 | 205.4 | 205.4 | 205.4 | 205.5 | 205.3 | 205.3 | 205.4 | 206.0 | 206.2 | 206.1 | 206.2 | 206.2 | 206.2 | 206.1 | 206.2 | 206.4 | 206.5 |
| Alaska | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Arizona | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Arkansas | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| California | 208.7 | 207.8 | 207.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Colorado | 212.6 | 212.4 | 212.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Connecticut | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Delaware | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dist. of Columbia | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Florida | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Georgia | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hawaii | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Idaho | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Illinois | 205.2 | 205.4 | 205.6 | 205.7 | 205.4 | 204.6 | 205.0 | 204.6 | 204.7 | 204.5 | 205.8 | 206.4 | 206.5 | 206.4 | 206.8 | 206.6 | 206.6 | 206.7 | 206.8 | 206.7 |
| Indiana | 205.0 | 205.1 | 204.9 | 205.0 | 204.9 | 205.1 | 205.0 | 204.9 | 204.9 | 204.9 | 205.8 | 206.0 | 206.0 | 206.1 | 206.3 | 206.4 | 206.3 | 206.9 | 206.8 | 206.8 |
| Iowa | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Kansas | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Kentucky | 204.6 | 204.3 | 205.9 | 205.2 | 205.1 | 204.9 | 204.8 | 204.8 | 204.8 | 205.0 | 206.7 | 206.8 | 206.3 | 206.4 | 206.7 | 206.8 | 206.5 | 206.4 | 206.6 | 206.5 |
| Louisiana | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Maine | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Maryland | 205.9 | 206.1 | 205.7 | 205.5 | 205.5 | 205.5 | 205.5 | 205.5 | 205.3 | 205.1 | 206.2 | 205.9 | — | — | — | — | — | — | — | — |
| Massachusetts | — | — | — | — | — | — | — | — | — | — | — | — | — | - | — | — | — | — | — | — |
| Michigan | 205.5 | 205.4 | 205.4 | 205.3 | 205.4 | 205.4 | 205.5 | 205.8 | 205.4 | 205.3 | 206.4 | 206.7 | 207.8 | 207.6 | 205.7 | 206.0 | 206.4 | 206.1 | 206.1 | 206.2 |
| Minnesota | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mississippi | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Missouri | 205.2 | 205.6 | 205.7 | 205.1 | 205.4 | 205.4 | 204.9 | 206.0 | 205.3 | — | — | — | — | — | — | — | — | — | — | — |
| Montana | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Nebraska | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Nevada | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| New Hampshire | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| New Jersey | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| New Mexico | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| New York | 205.5 | 205.4 | 205.4 | 205.4 | 205.5 | 205.5 | 205.5 | 205.4 | 205.5 | 205.6 | 206.2 | 206.1 | 206.1 | 206.8 | 206.7 | 206.7 | 206.7 | 206.1 | 207.0 | 206.8 |
| North Carolina | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| North Dakota | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Ohio | 205.4 | 205.3 | 205.3 | 205.3 | 205.2 | 205.3 | 205.2 | 205.1 | 205.1 | 205.1 | 206.6 | 206.4 | 206.4 | 206.0 | 206.4 | 206.6 | 206.6 | 206.4 | 206.6 | 206.6 |
| Oklahoma | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Oregon | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Pennsylvania | 205.7 | 205.6 | 205.5 | 205.6 | 205.6 | 205.7 | 205.6 | 205.6 | 205.5 | 205.4 | 206.2 | 206.2 | 206.1 | 206.2 | 206.2 | 206.2 | 206.3 | 206.5 | 206.6 | 206.7 |
| Rhode Island | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| South Carolina | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| South Dakota | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Tennessee | 210.2 | 207.1 | 205.3 | 205.1 | 205.3 | 205.3 | 205.2 | 205.1 | 204.8 | 204.8 | 207.6 | 207.6 | 206.2 | — | 204.8 | — | — | — | — | — |
| Texas | 209.8 | 212.2 | 212.3 | 212.7 | 212.7 | 212.7 | 212.7 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Utah | 210.8 | 210.6 | 211.3 | 212.4 | 211.7 | 212.5 | 207.9 | 208.3 | 209.7 | 209.9 | 208.2 | 206.0 | 205.6 | 205.5 | 205.8 | 207.3 | 208.4 | 209.0 | 206.4 | 206.4 |
| Vermont | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Virginia | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 | 206.2 |
| Washington | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| West Virginia | 205.4 | 205.4 | 205.6 | 205.5 | 205.3 | 205.3 | 205.0 | 205.1 | 204.9 | 205.1 | 206.7 | 206.8 | 206.7 | 206.8 | 206.8 | 207.0 | 206.8 | 206.8 | 207.1 | 207.1 |
| Wisconsin | 205.3 | 205.3 | 205.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Wyoming | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| U.S. Average [b] | 205.8 | 205.8 | 205.7 | 205.5 | 205.6 | 205.6 | 205.4 | 205.2 | 205.3 | 205.3 | 206.2 | 206.2 | 206.2 | 206.2 | 206.3 | 206.4 | 206.5 | 206.6 | 206.7 | 206.7 |

[a] No allowances have been made for carbon retained in non-energy coal chemical byproducts from the coal carbonization process.
[b] Weighted average.  The weights used are consumption values by State.

— =Not applicable.
Source:  Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

**Table F3.  Average Carbon Dioxide Emission Factors for Coal Consumed by Other Industrial Users, 1980-1999**

(Pounds of Carbon Dioxide per Million Btu)

| State | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 205.5 | 205.5 | 205.3 | 205.2 | 205.5 | 205.5 | 205.5 | 205.4 | 205.4 | 205.4 | 205.5 | 205.6 | 205.7 | 205.4 | 205.4 | 205.4 | 205.4 | 205.5 | 205.4 | 205.4 |
| Alaska | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 227.4 | — | — | — | — | — |
| Arizona | 209.2 | 210.4 | 210.3 | 210.3 | 210.0 | 210.1 | 209.9 | 210.1 | 209.4 | 209.6 | 207.5 | 207.0 | 206.7 | 206.9 | 207.2 | 206.7 | 207.0 | 206.4 | 208.0 | 208.1 |
| Arkansas | 201.4 | 201.4 | 201.4 | 201.4 | 201.5 | 201.6 | 203.7 | 203.2 | 202.4 | 203.9 | 205.3 | 205.1 | 205.2 | 206.0 | 206.3 | 205.9 | 206.0 | 205.8 | 206.0 | 205.7 |
| California | 205.6 | 205.9 | 206.1 | 206.4 | 205.6 | 204.7 | 205.0 | 204.4 | 204.6 | 204.7 | 204.6 | 204.6 | 204.2 | 204.1 | 204.1 | 204.1 | 204.1 | 204.3 | 204.6 | 204.6 |
| Colorado | 212.6 | 212.7 | 212.4 | 212.7 | 212.7 | 212.7 | 212.7 | 212.1 | 212.8 | 212.6 | 212.0 | 212.6 | 212.5 | 212.7 | 213.1 | 213.0 | 213.1 | 213.2 | 206.3 | 206.2 |
| Connecticut | 225.4 | 223.2 | 213.9 | 207.6 | 215.9 | 209.2 | 208.2 | 212.8 | 207.5 | 224.8 | 227.4 | 205.9 | 204.7 | 207.1 | 207.1 | 227.4 | 207.1 | — | 207.1 | 205.0 |
| Delaware | 205.9 | 205.6 | 205.6 | 205.8 | 205.8 | 205.9 | 205.9 | 205.9 | 205.8 | 205.9 | 206.1 | 206.0 | 207.4 | 208.0 | 207.7 | 207.6 | 208.0 | 208.0 | 205.2 | 205.7 |
| Dist. of Columbia | 205.0 | 204.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 227.4 | — | 208.4 | 208.5 |
| Florida | 204.2 | 204.8 | 204.8 | 204.9 | 204.8 | 205.0 | 205.0 | 205.0 | 205.2 | 205.2 | 205.4 | 205.2 | 205.1 | 205.2 | 205.1 | 205.4 | 205.3 | 205.2 | 204.9 | 204.8 |
| Georgia | 204.9 | 204.9 | 204.9 | 204.8 | 204.9 | 204.9 | 204.9 | 204.9 | 204.8 | 204.8 | 205.1 | 205.0 | 204.9 | 204.9 | 205.0 | 205.0 | 205.0 | 205.1 | 204.9 | 205.1 |
| Hawaii | — | — | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.3 | 204.1 | — |
| Idaho | 212.6 | 212.4 | 212.5 | 212.3 | 212.1 | 211.9 | 211.4 | 212.0 | 211.8 | 212.4 | 212.1 | 212.1 | 212.2 | 211.1 | 212.1 | 209.7 | 211.1 | 212.7 | 212.2 | 207.9 |
| Illinois | 204.2 | 204.3 | 204.1 | 204.1 | 204.1 | 204.0 | 203.9 | 203.9 | 203.7 | 203.7 | 203.9 | 205.1 | 203.7 | 203.9 | 203.9 | 204.0 | 204.3 | 204.5 | 204.0 | 204.0 |
| Indiana | 203.7 | 203.9 | 203.8 | 203.7 | 203.8 | 203.7 | 203.7 | 203.7 | 203.7 | 203.8 | 204.2 | 204.4 | 204.5 | 204.2 | 204.1 | 204.3 | 204.1 | 204.4 | 204.4 | 204.6 |
| Iowa | 205.7 | 205.7 | 204.5 | 204.4 | 204.1 | 203.6 | 203.9 | 203.9 | 204.1 | 204.6 | 205.0 | 206.1 | 208.3 | 208.2 | 208.6 | 207.8 | 204.4 | 208.3 | 207.7 | 207.7 |
| Kansas | 201.9 | 201.3 | 201.7 | 201.4 | 201.3 | 201.8 | 201.3 | 201.6 | 201.4 | 201.8 | 203.4 | 205.2 | 205.3 | 203.3 | 203.2 | 203.6 | 205.3 | 205.4 | 203.2 | 203.0 |
| Kentucky | 205.4 | 204.9 | 204.9 | 205.0 | 204.9 | 204.7 | 204.9 | 205.1 | 205.4 | 205.2 | 205.5 | 205.6 | 205.4 | 205.3 | 205.1 | 205.1 | 205.0 | 205.5 | 205.1 | 205.2 |
| Louisiana | 203.9 | 203.4 | 204.2 | 204.4 | 204.1 | 204.4 | 204.3 | 205.2 | 209.9 | 207.5 | 208.0 | 211.3 | 210.9 | 211.5 | 211.3 | 212.3 | 207.7 | 206.9 | 204.8 | 204.8 |
| Maine | 206.0 | 205.7 | 205.1 | 205.4 | 205.1 | 207.9 | 206.0 | 206.5 | 207.0 | 205.2 | 207.0 | 204.9 | 204.9 | 204.9 | 204.8 | 205.0 | 205.0 | 204.8 | 204.9 | 205.0 |
| Maryland | 206.1 | 205.9 | 206.0 | 205.9 | 205.8 | 205.8 | 205.5 | 205.8 | 205.6 | 205.9 | 207.8 | 207.8 | 208.4 | 208.7 | 208.2 | 208.6 | 208.3 | 208.0 | 208.4 | 208.5 |
| Massachusetts | 206.3 | 207.6 | 206.9 | 206.3 | 206.6 | 206.4 | 206.8 | 207.0 | 207.1 | 207.4 | 208.0 | 206.7 | 207.0 | 206.7 | 206.6 | 206.8 | 206.7 | 206.9 | 207.1 | 205.0 |
| Michigan | 204.8 | 204.8 | 204.7 | 204.9 | 205.0 | 205.0 | 204.9 | 204.9 | 204.8 | 204.8 | 204.9 | 204.9 | 205.3 | 205.6 | 205.6 | 205.9 | 205.3 | 205.2 | 205.3 | 205.5 |
| Minnesota | 211.6 | 210.8 | 212.9 | 213.0 | 211.8 | 208.9 | 208.9 | 209.8 | 210.8 | 210.3 | 211.6 | 211.1 | 211.8 | 212.1 | 211.7 | 211.2 | 211.2 | 211.5 | 209.3 | 209.7 |
| Mississippi | 204.0 | 203.5 | 205.0 | 204.5 | 204.2 | 204.0 | 204.4 | 204.0 | 204.0 | 204.0 | 203.7 | 204.2 | 204.6 | 205.2 | 205.2 | 205.2 | 204.9 | 204.8 | 204.8 | 204.3 |
| Missouri | 203.6 | 203.3 | 203.3 | 203.2 | 203.5 | 203.5 | 203.6 | 203.8 | 203.7 | 203.3 | 204.1 | 204.1 | 204.5 | 204.6 | 204.2 | 204.4 | 203.9 | 203.7 | 204.1 | 204.0 |
| Montana | 211.2 | 210.3 | 209.7 | 209.7 | 210.5 | 212.6 | 213.4 | 213.1 | 211.8 | 211.6 | 211.7 | 211.6 | 211.4 | 212.1 | 212.8 | 213.4 | 213.4 | 212.9 | 215.5 | 214.8 |
| Nebraska | 212.3 | 212.7 | 212.8 | 212.7 | 213.1 | 213.1 | 213.2 | 213.2 | 213.1 | 212.9 | 213.3 | 213.3 | 213.1 | 213.2 | 212.9 | 213.2 | 210.9 | 211.1 | 209.3 | 209.7 |
| Nevada | 204.5 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 206.7 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 208.2 | 208.3 | 204.8 | 205.4 | 204.4 |
| New Hampshire | 207.0 | 217.3 | 214.2 | 206.7 | 206.9 | 219.5 | 218.6 | 218.8 | 218.6 | 207.0 | 216.2 | 206.8 | 207.1 | 204.8 | — | 227.4 | 227.4 | — | 207.1 | 205.0 |
| New Jersey | 218.3 | 224.6 | 213.8 | 212.9 | 213.4 | 217.5 | 210.8 | 210.0 | 209.1 | 207.9 | 207.9 | 207.7 | 207.3 | 208.0 | 210.3 | 227.3 | 227.4 | 227.4 | 221.2 | 220.1 |
| New Mexico | 212.0 | 212.7 | 212.3 | 212.7 | 212.7 | 212.6 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 206.2 | 206.2 |
| New York | 206.9 | 206.7 | 207.0 | 207.1 | 206.8 | 206.9 | 206.9 | 207.1 | 207.4 | 206.9 | 206.9 | 206.9 | 207.0 | 206.8 | 207.0 | 207.2 | 207.3 | 207.2 | 206.6 | 206.1 |
| North Carolina | 204.8 | - | 204.8 | 204.8 | 204.8 | 204.8 | 204.8 | 204.8 | 204.8 | 204.8 | 205.7 | 205.4 | 205.7 | 205.4 | 205.6 | 205.5 | 205.4 | 205.4 | 205.4 | 205.5 |
| North Dakota | 218.8 | 218.7 | 218.7 | 218.7 | 218.5 | 218.6 | 218.5 | 218.4 | 218.5 | 218.5 | 218.3 | 218.3 | 218.3 | 218.4 | 218.2 | 218.4 | 218.5 | 218.5 | 218.4 | 218.3 |
| Ohio | 204.0 | 203.9 | 204.0 | 203.9 | 204.1 | 204.3 | 204.3 | 204.2 | 204.4 | 204.3 | 204.6 | 204.7 | 204.5 | 204.8 | 204.9 | 204.5 | 204.7 | 204.5 | 203.6 | 203.8 |
| Oklahoma | 202.2 | 201.9 | 201.8 | 203.3 | 201.9 | 202.4 | 202.5 | 202.2 | 203.1 | 205.7 | 207.8 | 207.5 | 207.5 | 207.5 | 209.1 | 207.8 | 208.1 | 208.0 | 203.4 | 206.0 |
| Oregon | 212.7 | 211.3 | 211.9 | 212.0 | 210.0 | 211.8 | 211.9 | 211.7 | 212.7 | 212.2 | 212.7 | 212.7 | 211.5 | 212.8 | 210.4 | 213.0 | 212.5 | 212.5 | 212.7 | 204.7 |
| Pennsylvania | 207.9 | 206.9 | 207.0 | 207.0 | 206.8 | 207.3 | 207.4 | 207.1 | 208.8 | 208.8 | 207.8 | 208.4 | 208.5 | 206.4 | 206.9 | 207.1 | 207.0 | 207.3 | 208.2 | 208.1 |
| Rhode Island | 210.0 | 210.3 | — | 204.8 | 204.8 | 205.7 | 206.9 | 219.6 | 204.8 | 204.8 | 227.4 | — | — | 227.4 | — | — | — | — | 207.1 | 205.0 |
| South Carolina | 205.0 | 205.0 | 205.0 | 205.0 | 204.9 | 205.0 | 205.1 | 205.1 | 205.1 | 205.0 | 205.3 | 205.3 | 205.3 | 205.3 | 205.5 | 205.4 | 205.4 | 205.5 | 205.5 | 205.5 |
| South Dakota | 210.5 | 210.7 | 209.6 | 212.7 | 212.7 | 212.7 | 212.6 | 212.7 | 212.7 | 212.7 | 212.7 | 212.6 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.6 | 210.0 | 208.9 |
| Tennessee | 204.8 | 204.9 | 204.7 | 204.3 | 204.8 | 204.7 | 204.6 | 204.7 | 204.7 | 204.8 | 205.2 | 205.2 | 205.5 | 205.4 | 205.2 | 205.3 | 205.3 | 205.1 | 205.2 | 205.3 |
| Texas | 212.3 | 212.9 | 212.9 | 212.9 | 213.0 | 213.1 | 213.0 | 213.2 | 213.3 | 213.2 | 212.5 | 212.1 | 212.3 | 212.1 | 212.1 | 212.5 | 212.0 | 212.0 | 210.3 | 210.4 |
| Utah | 205.2 | 205.3 | 204.8 | 205.0 | 205.1 | 205.6 | 206.0 | 206.2 | 204.9 | 204.6 | 204.2 | 204.1 | 204.1 | 204.6 | 206.1 | 206.0 | 204.1 | 204.7 | 204.4 | 204.4 |
| Vermont | 207.8 | 207.0 | 220.3 | 223.8 | 226.7 | 216.3 | 227.4 | 226.6 | 223.8 | 218.5 | 226.3 | 206.2 | 212.2 | 205.7 | — | — | — | — | 207.1 | 205.0 |
| Virginia | 205.1 | 205.0 | 205.0 | 205.1 | 205.1 | 205.1 | 205.1 | 205.1 | 205.1 | 205.1 | 205.9 | 205.9 | 206.2 | 205.9 | 206.0 | 206.0 | 205.9 | 205.9 | 206.0 | 206.5 |
| Washington | 206.3 | 207.1 | 207.1 | 207.6 | 205.6 | 206.1 | 208.7 | 209.7 | 208.9 | 208.7 | 207.9 | 206.6 | 205.8 | 205.5 | 206.1 | 206.4 | 206.3 | 205.3 | 204.2 | 204.3 |
| West Virginia | 205.4 | 205.3 | 205.3 | 205.1 | 205.1 | 205.5 | 205.8 | 205.6 | 205.4 | 205.4 | 206.4 | 206.5 | 206.6 | 206.5 | 206.8 | 206.9 | 207.0 | 207.1 | 206.6 | 206.6 |
| Wisconsin | 205.5 | 204.9 | 204.9 | 205.0 | 204.6 | 205.0 | 205.4 | 205.6 | 206.3 | 206.0 | 206.1 | 205.9 | 206.1 | 206.5 | 206.0 | 205.9 | 206.2 | 209.7 | 205.5 | 205.4 |
| Wyoming | 212.0 | 212.2 | 212.5 | 212.7 | 212.7 | 212.7 | 212.7 | 212.6 | 212.4 | 212.1 | 212.2 | 212.3 | 212.5 | 212.6 | 212.6 | 212.5 | 212.7 | 212.7 | 212.2 | 212.3 |
| U.S. Average [a] | 205.9 | 205.9 | 206.0 | 205.9 | 206.2 | 206.4 | 206.5 | 206.4 | 206.4 | 206.6 | 206.8 | 206.9 | 207.1 | 207.0 | 207.2 | 207.2 | 207.0 | 207.2 | 206.9 | 207.0 |

[a] Weighted average. The weights used are consumption values by State.
— =Not applicable.

Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

## Table F4. Average Carbon Dioxide Emission Factors for Coal Consumed by Electric Utilities, 1980-1999

(Pounds of Carbon Dioxide per Million Btu)

| State | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 205.0 | 204.8 | 204.9 | 205.0 | 205.0 | 204.9 | 205.0 | 204.9 | 204.9 | 204.9 | 205.1 | 205.3 | 205.3 | 205.3 | 205.3 | 205.8 | 205.8 | 206.2 | 203.1 | 203.0 |
| Alaska | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | — | 214.0 | 214.0 | — | 206.1 | 206.1 |
| Arizona | 208.0 | 208.1 | 208.0 | 207.9 | 207.9 | 207.8 | 207.9 | 208.0 | 207.8 | 207.9 | 207.7 | 207.7 | 207.7 | 207.5 | 207.5 | 207.6 | 207.6 | 207.5 | 204.0 | 205.8 |
| Arkansas | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 211.0 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 206.1 | 206.1 |
| California | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Colorado | 211.5 | 209.5 | 209.7 | 211.0 | 212.1 | 212.0 | 211.9 | 211.9 | 210.3 | 210.3 | 209.9 | 209.8 | 209.8 | 209.9 | 209.7 | 209.8 | 210.1 | 209.9 | 204.0 | 204.8 |
| Connecticut | — | — | — | — | 204.8 | 204.8 | 204.8 | 204.8 | 204.8 | 204.9 | 204.8 | 204.8 | 204.9 | 205.0 | 205.0 | 204.8 | 204.8 | 205.2 | 203.1 | — |
| Delaware | 206.0 | 206.1 | 206.2 | 206.4 | 206.5 | 206.5 | 206.1 | 206.8 | 206.6 | 206.7 | 206.7 | 206.8 | 206.9 | 206.9 | 207.1 | 207.3 | 207.3 | 206.9 | 203.1 | 204.7 |
| Dist. of Columbia | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Florida | 204.0 | 204.1 | 204.0 | 204.5 | 204.4 | 204.3 | 204.3 | 204.4 | 204.6 | 204.5 | 204.5 | 204.4 | 204.4 | 204.5 | 204.6 | 204.5 | 204.6 | 204.8 | 203.7 | 203.0 |
| Georgia | 204.3 | 204.4 | 204.4 | 204.4 | 204.7 | 204.7 | 204.7 | 204.7 | 204.8 | 204.8 | 205.2 | 205.2 | 204.8 | 205.3 | 206.2 | 206.6 | 206.6 | 206.4 | 203.2 | 203.2 |
| Hawaii | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Idaho | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Illinois | 207.1 | 207.1 | 206.5 | 206.6 | 205.9 | 206.6 | 206.6 | 206.1 | 206.3 | 205.8 | 205.6 | 205.9 | 206.2 | 206.9 | 207.3 | 207.8 | 207.9 | 208.0 | 204.3 | 203.5 |
| Indiana | 204.0 | 204.2 | 204.2 | 204.2 | 204.3 | 204.6 | 204.7 | 204.5 | 204.6 | 205.0 | 205.4 | 205.6 | 205.6 | 205.8 | 206.0 | 206.5 | 206.5 | 206.3 | 203.1 | 202.3 |
| Iowa | 207.2 | 208.2 | 210.3 | 210.3 | 210.8 | 210.2 | 210.1 | 210.4 | 209.9 | 210.5 | 210.7 | 210.8 | 211.1 | 211.9 | 211.5 | 211.9 | 211.9 | 211.9 | 205.0 | 205.3 |
| Kansas | 209.2 | 209.7 | 210.8 | 210.9 | 210.6 | 210.5 | 210.7 | 210.6 | 210.7 | 210.8 | 210.7 | 210.6 | 210.9 | 211.9 | 211.4 | 211.5 | 211.1 | 211.4 | 204.9 | 204.3 |
| Kentucky | 204.0 | 204.0 | 204.0 | 204.0 | 204.0 | 203.9 | 204.1 | 204.0 | 204.1 | 204.0 | 204.1 | 204.3 | 204.1 | 204.3 | 204.3 | 204.3 | 204.5 | 204.6 | 203.2 | 202.9 |
| Louisiana | 212.7 | 212.7 | 212.7 | 212.6 | 212.7 | 212.7 | 212.9 | 212.7 | 212.7 | 212.7 | 212.7 | 212.8 | 212.9 | 212.9 | 212.9 | 212.9 | 212.9 | 212.9 | 206.2 | 207.1 |
| Maine | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Maryland | 206.6 | 206.7 | 206.9 | 207.2 | 206.9 | 206.9 | 207.0 | 207.1 | 207.0 | 207.0 | 207.2 | 207.2 | 207.0 | 206.8 | 207.0 | 207.0 | 207.0 | 207.0 | 203.1 | 204.6 |
| Massachusetts | 206.4 | 206.5 | 206.4 | 206.5 | 206.3 | 206.4 | 206.5 | 206.5 | 206.7 | 206.4 | 206.5 | 206.7 | 206.8 | 206.8 | 206.7 | 206.6 | 206.6 | 206.4 | 203.1 | 203.1 |
| Michigan | 206.0 | 206.6 | 206.4 | 207.1 | 207.1 | 207.0 | 207.3 | 207.8 | 207.9 | 208.5 | 208.7 | 208.9 | 208.9 | 209.1 | 209.0 | 209.4 | 209.8 | 209.6 | 203.5 | 204.1 |
| Minnesota | 212.9 | 213.0 | 212.9 | 213.0 | 213.3 | 213.0 | 212.9 | 212.9 | 213.0 | 213.0 | 213.0 | 213.0 | 213.0 | 213.0 | 213.0 | 213.0 | 213.0 | 213.0 | 206.1 | 206.0 |
| Mississippi | 204.7 | 204.8 | 204.7 | 204.9 | 205.0 | 205.2 | 204.9 | 204.9 | 204.6 | 204.2 | 204.2 | 204.5 | 204.5 | 204.8 | 206.9 | 206.9 | 207.3 | 208.9 | 204.3 | 202.9 |
| Missouri | 204.5 | 204.6 | 204.4 | 204.2 | 204.3 | 204.4 | 204.4 | 204.7 | 205.4 | 205.5 | 205.7 | 206.2 | 206.2 | 208.4 | 208.7 | 210.6 | 211.1 | 211.5 | 204.8 | 204.7 |
| Montana | 213.9 | 213.8 | 213.8 | 214.0 | 213.7 | 213.6 | 213.6 | 213.6 | 213.5 | 213.6 | 213.5 | 213.5 | 213.5 | 213.6 | 213.5 | 213.6 | 213.5 | 213.5 | 206.3 | 206.3 |
| Nebraska | 211.7 | 212.2 | 212.4 | 212.6 | 212.2 | 212.4 | 212.4 | 212.6 | 212.6 | 212.6 | 212.7 | 212.7 | 212.7 | 212.7 | 212.6 | 212.7 | 212.7 | 212.7 | 205.8 | 206.0 |
| Nevada | 208.2 | 207.9 | 208.1 | 207.8 | 207.8 | 206.3 | 207.6 | 207.8 | 208.2 | 207.9 | 207.7 | 208.0 | 208.4 | 208.4 | 208.4 | 208.1 | 207.7 | 207.6 | 203.1 | 205.2 |
| New Hampshire | 206.9 | 207.1 | 207.1 | 207.1 | 207.1 | 206.8 | 206.8 | 207.0 | 206.9 | 206.7 | 206.7 | 206.2 | 206.3 | 206.3 | 206.1 | 206.1 | 206.2 | 206.2 | 203.1 | 203.8 |
| New Jersey | 206.6 | 206.6 | 206.7 | 206.8 | 206.9 | 206.9 | 206.9 | 206.9 | 206.8 | 206.7 | 206.7 | 206.7 | 206.6 | 206.7 | 206.5 | 206.4 | 206.7 | 206.6 | 203.1 | 204.6 |
| New Mexico | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 206.1 | 206.1 |
| New York | 205.7 | 205.8 | 205.8 | 205.8 | 206.0 | 206.1 | 206.1 | 206.2 | 206.0 | 206.1 | 206.3 | 206.2 | 206.1 | 206.0 | 206.0 | 206.3 | 206.2 | 206.4 | 203.1 | 203.9 |
| North Carolina | 205.6 | 205.6 | 205.8 | 206.0 | 205.8 | 205.8 | 205.8 | 205.8 | 205.8 | 205.7 | 205.8 | 205.8 | 205.8 | 205.8 | 205.8 | 205.8 | 205.7 | 205.7 | 203.1 | 203.6 |
| North Dakota | 218.8 | 213.8 | 218.8 | 218.8 | 218.8 | 218.8 | 218.8 | 218.8 | 218.8 | 218.8 | 214.9 | 218.8 | 218.8 | 218.8 | 218.8 | 218.8 | 218.7 | 218.7 | 213.1 | 216.6 |
| Ohio | 204.4 | 204.3 | 204.5 | 204.3 | 204.3 | 204.3 | 204.4 | 204.4 | 204.5 | 204.5 | 204.5 | 204.4 | 204.4 | 204.5 | 204.6 | 205.0 | 205.0 | 205.0 | 203.1 | 202.9 |
| Oklahoma | 210.5 | 212.5 | 212.7 | 212.7 | 212.7 | 212.7 | 212.5 | 212.1 | 212.2 | 212.2 | 212.1 | 212.4 | 212.6 | 212.7 | 212.6 | 212.6 | 212.7 | 212.7 | 205.5 | 205.6 |
| Oregon | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | — | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.9 | 212.4 | 212.2 | 212.7 | 212.7 | 212.7 | 206.1 | 202.1 |
| Pennsylvania | 206.1 | 206.0 | 206.1 | 206.0 | 205.9 | 205.9 | 205.8 | 206.0 | 206.1 | 206.1 | 206.2 | 206.2 | 206.2 | 206.0 | 206.0 | 206.2 | 206.2 | 206.2 | 203.1 | 202.2 |
| Rhode Island | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| South Carolina | 204.9 | 204.9 | 205.0 | 205.0 | 204.9 | 204.9 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 203.2 | 202.3 |
| South Dakota | 218.1 | 218.1 | 218.0 | 218.8 | 218.4 | 218.8 | 218.8 | 218.8 | 218.3 | 218.8 | 218.7 | 218.8 | 218.8 | 218.8 | 218.8 | 216.9 | 213.4 | 213.4 | 206.1 | 206.1 |
| Tennessee | 204.0 | 204.0 | 204.0 | 204.0 | 204.2 | 204.2 | 204.0 | 204.1 | 204.1 | 204.2 | 204.1 | 204.0 | 204.0 | 204.3 | 204.1 | 204.0 | 204.2 | 204.7 | 203.4 | 202.5 |
| Texas | 213.0 | 212.9 | 212.8 | 212.9 | 212.9 | 212.9 | 212.9 | 212.9 | 213.1 | 212.9 | 212.9 | 212.9 | 212.9 | 212.9 | 213.1 | 212.8 | 212.9 | 213.0 | 209.1 | 208.3 |
| Utah | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.5 | 204.3 | 204.2 | 204.3 | 204.3 | 204.3 | 204.3 | 204.3 | 204.3 | 204.2 | 204.3 | 204.4 | 203.1 | 202.2 |
| Vermont | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Virginia | 205.9 | 205.7 | 205.8 | 206.0 | 205.7 | 205.8 | 206.0 | 206.0 | 206.1 | 205.9 | 206.0 | 206.0 | 206.0 | 205.9 | 205.9 | 205.9 | 206.0 | 206.1 | 203.1 | 203.8 |
| Washington | 208.7 | 208.7 | 208.7 | 208.7 | 208.7 | 208.7 | 208.7 | 208.8 | 209.0 | 209.2 | 209.0 | 208.7 | 209.3 | 209.4 | 209.2 | 209.2 | 208.8 | 209.1 | 206.1 | 206.1 |
| West Virginia | 206.9 | 206.9 | 207.0 | 207.0 | 207.0 | 207.0 | 207.1 | 207.1 | 207.2 | 207.0 | 206.9 | 207.1 | 207.0 | 207.1 | 207.1 | 207.1 | 207.0 | 207.0 | 203.1 | 204.9 |
| Wisconsin | 207.0 | 208.0 | 207.7 | 207.8 | 207.8 | 208.6 | 209.3 | 209.2 | 209.3 | 209.5 | 209.8 | 209.7 | 209.9 | 210.7 | 210.4 | 210.8 | 211.2 | 210.9 | 205.2 | 205.4 |
| Wyoming | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.6 | 212.0 | 212.0 | 212.0 | 212.0 | 211.9 | 211.9 | 211.9 | 211.9 | 205.8 | 205.9 |
| U.S. Average [a] | 206.7 | 206.9 | 207.0 | 207.1 | 207.1 | 207.3 | 207.3 | 207.3 | 207.6 | 207.5 | 207.6 | 207.7 | 207.7 | 207.8 | 207.9 | 208.1 | 208.1 | 208.2 | 204.4 | 204.6 |

[a] Weighted average. The weights used are consumption values by State.
— =Not applicable.

Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

## Table F5.  Average Carbon Dioxide Emission Factors for Total Coal Consumed, 1980-1999
(Pounds of Carbon Dioxide per Million Btu)

| State | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 205.1 | 205.0 | 205.0 | 205.0 | 205.1 | 205.0 | 205.1 | 205.0 | 205.0 | 205.0 | 205.3 | 205.4 | 205.4 | 205.4 | 205.4 | 205.9 | 205.8 | 206.2 | 205.4 | 203.4 |
| Alaska | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.0 | 214.1 | 214.0 | 214.0 | 214.0 | 212.1 | 212.0 |
| Arizona | 208.1 | 208.2 | 208.2 | 208.2 | 208.1 | 208.1 | 208.2 | 208.1 | 207.9 | 207.9 | 207.7 | 207.7 | 207.6 | 207.4 | 207.5 | 207.6 | 207.5 | 207.4 | 208.0 | 205.9 |
| Arkansas | 210.7 | 211.9 | 212.0 | 212.1 | 212.1 | 212.3 | 212.4 | 212.4 | 209.5 | 212.4 | 212.5 | 212.5 | 212.5 | 212.5 | 212.5 | 212.5 | 212.5 | 212.5 | 206.0 | 206.1 |
| California | 207.5 | 206.8 | 206.8 | 206.4 | 205.6 | 204.7 | 205.0 | 204.4 | 204.6 | 204.7 | 204.6 | 204.6 | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.3 | 204.6 | 204.6 |
| Colorado | 211.7 | 209.9 | 210.0 | 211.1 | 212.1 | 212.0 | 212.0 | 211.9 | 210.4 | 210.4 | 210.0 | 210.0 | 209.9 | 210.0 | 209.9 | 210.0 | 210.1 | 210.1 | 206.2 | 204.9 |
| Connecticut | 226.1 | 225.6 | 225.6 | 221.8 | 221.4 | 205.7 | 205.8 | 205.5 | 205.2 | 205.2 | 205.1 | 205.1 | 205.2 | 205.5 | 205.3 | 205.0 | 204.9 | 205.3 | 203.3 | 226.9 |
| Delaware | 206.0 | 206.1 | 206.2 | 206.4 | 206.5 | 206.4 | 206.5 | 206.7 | 206.6 | 206.7 | 206.6 | 206.7 | 207.0 | 206.9 | 207.1 | 207.3 | 207.3 | 207.0 | 207.4 | 206.2 |
| Dist. of Columbia | 205.4 | 204.9 | 205.0 | 205.1 | 205.3 | 204.9 | 205.2 | 205.1 | 205.3 | 205.4 | 206.4 | 205.5 | 206.3 | 206.4 | 206.5 | 207.8 | 207.2 | 207.2 | — | — |
| Florida | 204.0 | 204.1 | 204.0 | 204.5 | 204.4 | 204.3 | 204.3 | 204.4 | 204.6 | 204.5 | 204.5 | 204.5 | 204.5 | 204.5 | 204.6 | 204.6 | 204.6 | 204.8 | 204.8 | 203.0 |
| Georgia | 204.3 | 204.4 | 204.4 | 204.5 | 204.7 | 204.7 | 204.7 | 204.8 | 204.8 | 204.8 | 205.2 | 205.2 | 204.8 | 205.3 | 206.1 | 206.1 | 206.5 | 206.3 | 204.9 | 203.3 |
| Hawaii | — | — | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.4 | 204.3 | 204.1 | 204.1 |
| Idaho | 210.7 | 211.2 | 211.5 | 210.9 | 210.6 | 211.1 | 210.7 | 211.6 | 210.6 | 211.2 | 211.1 | 211.1 | 211.3 | 210.5 | 211.4 | 209.3 | 210.7 | 211.8 | 212.2 | 207.4 |
| Illinois | 206.7 | 206.8 | 206.2 | 206.3 | 205.7 | 206.2 | 206.2 | 205.7 | 205.8 | 205.4 | 205.4 | 205.8 | 205.9 | 206.5 | 206.9 | 207.3 | 207.4 | 207.6 | 204.1 | 203.8 |
| Indiana | 204.3 | 204.4 | 204.3 | 204.3 | 204.4 | 204.6 | 204.7 | 204.5 | 204.6 | 204.8 | 205.4 | 205.5 | 205.5 | 205.7 | 205.9 | 206.3 | 206.3 | 206.2 | 204.4 | 203.1 |
| Iowa | 207.0 | 207.8 | 209.4 | 209.4 | 209.8 | 209.2 | 209.1 | 209.3 | 209.0 | 209.4 | 209.7 | 209.9 | 210.7 | 211.3 | 211.0 | 211.2 | 211.1 | 211.1 | 207.7 | 205.6 |
| Kansas | 209.0 | 209.3 | 210.4 | 210.6 | 210.4 | 210.2 | 210.5 | 210.4 | 210.5 | 210.6 | 210.6 | 210.5 | 210.8 | 211.8 | 211.3 | 211.4 | 211.0 | 211.3 | 203.3 | 204.3 |
| Kentucky | 204.1 | 204.1 | 204.1 | 204.1 | 204.1 | 204.0 | 204.2 | 204.1 | 204.2 | 204.2 | 204.3 | 204.4 | 204.2 | 204.4 | 204.4 | 204.5 | 204.6 | 204.7 | 205.1 | 203.1 |
| Louisiana | 212.1 | 210.3 | 211.7 | 212.1 | 212.1 | 212.2 | 212.6 | 212.3 | 212.6 | 212.4 | 212.4 | 212.7 | 212.8 | 212.8 | 212.8 | 212.9 | 212.8 | 212.9 | 205.0 | 207.1 |
| Maine | 207.9 | 211.0 | 207.1 | 207.1 | 207.4 | 208.8 | 206.7 | 207.6 | 207.6 | 206.0 | 207.8 | 205.6 | 205.3 | 205.3 | 205.1 | 205.2 | 205.3 | 205.2 | 204.9 | 206.2 |
| Maryland | 206.3 | 206.5 | 206.5 | 206.7 | 206.5 | 206.5 | 206.6 | 206.7 | 206.7 | 206.7 | 207.1 | 207.1 | 207.1 | 207.0 | 207.1 | 207.2 | 207.1 | 207.0 | 208.3 | 204.9 |
| Massachusetts | 207.6 | 208.2 | 206.8 | 206.9 | 206.7 | 206.8 | 206.8 | 206.8 | 206.8 | 206.6 | 206.6 | 206.8 | 206.9 | 206.9 | 206.8 | 206.6 | 206.7 | 206.5 | 206.8 | 203.8 |
| Michigan | 205.7 | 206.2 | 206.1 | 206.6 | 206.6 | 206.6 | 206.8 | 207.4 | 207.4 | 208.0 | 208.2 | 208.5 | 208.5 | 208.7 | 208.5 | 208.8 | 209.2 | 209.1 | 205.3 | 204.2 |
| Minnesota | 212.7 | 212.8 | 212.8 | 212.9 | 213.1 | 212.6 | 212.5 | 212.7 | 212.9 | 212.8 | 212.9 | 212.9 | 212.9 | 212.9 | 212.8 | 212.9 | 212.9 | 212.9 | 209.3 | 206.2 |
| Mississippi | 204.7 | 204.8 | 204.7 | 204.9 | 204.9 | 205.1 | 204.8 | 204.8 | 204.5 | 204.2 | 204.2 | 204.4 | 204.5 | 204.8 | 206.7 | 206.7 | 207.2 | 208.8 | 204.7 | 202.9 |
| Missouri | 204.5 | 204.5 | 204.4 | 204.1 | 204.2 | 204.4 | 204.4 | 204.7 | 205.3 | 205.4 | 205.6 | 206.0 | 206.1 | 208.1 | 208.5 | 210.3 | 210.7 | 211.1 | 204.1 | 204.6 |
| Montana | 213.7 | 213.5 | 213.4 | 213.7 | 213.5 | 213.5 | 213.6 | 213.6 | 213.5 | 213.5 | 213.5 | 213.5 | 213.5 | 213.5 | 213.5 | 213.5 | 213.5 | 213.5 | 214.8 | 206.4 |
| Nebraska | 211.7 | 212.2 | 212.5 | 212.6 | 212.2 | 212.4 | 212.4 | 212.6 | 212.6 | 212.6 | 212.7 | 212.7 | 212.7 | 212.7 | 212.6 | 212.7 | 212.7 | 212.6 | 209.2 | 206.1 |
| Nevada | 208.1 | 207.7 | 208.0 | 207.7 | 207.7 | 206.2 | 207.6 | 207.7 | 208.1 | 207.9 | 207.6 | 207.9 | 208.3 | 208.3 | 208.3 | 208.1 | 207.7 | 207.6 | 205.3 | 205.1 |
| New Hampshire | 207.0 | 207.3 | 207.6 | 207.3 | 207.3 | 207.2 | 207.1 | 207.2 | 207.1 | 206.9 | 207.1 | 206.5 | 206.5 | 206.3 | 206.2 | 206.2 | 206.2 | 206.3 | 203.2 | 203.9 |
| New Jersey | 207.1 | 207.3 | 207.6 | 207.7 | 207.6 | 208.2 | 207.6 | 207.3 | 207.1 | 206.9 | 206.9 | 206.9 | 206.8 | 206.8 | 206.7 | 206.5 | 206.8 | 206.7 | 217.6 | 204.7 |
| New Mexico | 205.7 | 205.8 | 205.8 | 205.8 | 205.8 | 205.8 | 205.8 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.7 | 205.8 | 205.8 | 205.8 | 205.8 | 206.2 | 206.1 |
| New York | 206.3 | 206.3 | 206.5 | 206.4 | 206.5 | 206.6 | 206.5 | 206.5 | 206.4 | 206.4 | 206.5 | 206.5 | 206.5 | 206.5 | 206.4 | 206.6 | 206.6 | 206.6 | 206.6 | 205.0 |
| North Carolina | 205.6 | 205.6 | 205.7 | 205.9 | 205.7 | 205.7 | 205.7 | 205.6 | 205.6 | 205.6 | 205.8 | 205.8 | 205.8 | 205.7 | 205.8 | 205.7 | 205.7 | 205.7 | 205.4 | 203.7 |
| North Dakota | 218.8 | 214.1 | 218.8 | 218.8 | 218.7 | 218.7 | 218.7 | 218.7 | 218.7 | 218.7 | 218.6 | 218.6 | 218.6 | 218.7 | 218.6 | 218.7 | 218.7 | 218.7 | 218.4 | 217.0 |
| Ohio | 204.5 | 204.4 | 204.5 | 204.4 | 204.3 | 204.4 | 204.5 | 204.4 | 204.6 | 204.5 | 204.7 | 204.6 | 204.6 | 204.6 | 204.8 | 205.0 | 205.0 | 205.0 | 203.6 | 203.1 |
| Oklahoma | 210.0 | 211.5 | 211.9 | 212.2 | 212.0 | 211.9 | 211.8 | 211.5 | 211.8 | 211.9 | 211.9 | 212.1 | 212.3 | 212.3 | 212.5 | 212.2 | 212.4 | 212.5 | 206.3 | 205.7 |
| Oregon | 212.5 | 212.4 | 212.5 | 208.3 | 211.9 | 212.4 | 211.9 | 212.3 | 212.6 | 212.4 | 212.7 | 212.7 | 212.8 | 212.4 | 212.1 | 212.8 | 212.7 | 212.7 | 212.4 | 202.2 |
| Pennsylvania | 206.4 | 206.4 | 206.5 | 206.3 | 206.3 | 206.2 | 206.2 | 206.3 | 206.5 | 206.5 | 206.6 | 206.7 | 206.7 | 206.4 | 206.4 | 206.6 | 206.5 | 206.7 | 208.2 | 203.6 |
| Rhode Island | 217.2 | 222.8 | 227.4 | 223.0 | 223.7 | 217.9 | 210.1 | 226.6 | 205.3 | 207.5 | 227.3 | 227.4 | 227.4 | 227.3 | 227.4 | 227.4 | 227.4 | 227.2 | 227.4 | 227.4 |
| South Carolina | 204.9 | 204.9 | 205.0 | 205.0 | 204.9 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.0 | 205.1 | 205.1 | 205.1 | 205.0 | 205.0 | 205.5 | 202.8 |
| South Dakota | 217.6 | 217.3 | 216.6 | 218.0 | 218.0 | 217.8 | 217.7 | 217.1 | 217.7 | 217.9 | 218.0 | 217.9 | 217.9 | 217.7 | 217.5 | 216.1 | 213.3 | 213.3 | 210.0 | 206.7 |
| Tennessee | 204.1 | 204.1 | 204.1 | 204.1 | 204.3 | 204.3 | 204.1 | 204.2 | 204.2 | 204.3 | 204.3 | 204.2 | 204.2 | 204.5 | 204.3 | 204.2 | 204.3 | 204.7 | 205.2 | 202.9 |
| Texas | 212.8 | 212.9 | 212.8 | 212.9 | 212.9 | 212.9 | 212.9 | 212.9 | 213.1 | 212.9 | 212.9 | 212.9 | 212.9 | 212.9 | 213.0 | 212.8 | 212.9 | 212.9 | 210.3 | 208.4 |
| Utah | 205.7 | 205.7 | 205.2 | 205.3 | 205.6 | 205.6 | 204.9 | 204.3 | 204.8 | 204.8 | 204.6 | 204.4 | 204.4 | 204.4 | 204.5 | 204.5 | 204.6 | 204.8 | 204.4 | 202.5 |
| Vermont | 216.0 | 218.3 | 213.1 | 208.4 | 212.7 | 209.2 | 216.6 | 227.1 | 226.3 | 222.7 | 227.1 | 215.2 | 216.8 | 226.9 | 227.2 | 227.4 | 227.1 | 227.2 | 227.4 | 227.4 |
| Virginia | 205.7 | 205.5 | 205.5 | 205.8 | 205.5 | 205.6 | 205.7 | 205.8 | 205.8 | 205.7 | 206.0 | 206.0 | 206.1 | 205.9 | 205.9 | 206.0 | 206.0 | 206.1 | 206.0 | 204.4 |
| Washington | 208.3 | 208.4 | 208.3 | 208.4 | 208.3 | 208.3 | 208.7 | 208.8 | 208.9 | 209.1 | 208.9 | 208.6 | 209.1 | 209.3 | 209.1 | 209.0 | 208.7 | 208.9 | 204.3 | 206.1 |
| West Virginia | 206.6 | 206.6 | 206.8 | 206.8 | 206.8 | 206.8 | 206.9 | 206.9 | 206.9 | 206.7 | 206.9 | 207.0 | 207.0 | 207.0 | 207.1 | 207.0 | 207.0 | 207.0 | 206.5 | 205.1 |
| Wisconsin | 206.8 | 207.5 | 207.2 | 207.4 | 207.4 | 208.1 | 208.8 | 208.8 | 208.9 | 209.1 | 209.4 | 209.3 | 209.5 | 210.3 | 209.9 | 210.3 | 210.8 | 210.8 | 205.5 | 205.4 |
| Wyoming | 212.6 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.7 | 212.6 | 212.0 | 212.1 | 212.1 | 212.1 | 212.0 | 212.0 | 212.0 | 212.0 | 212.2 | 206.4 |
| U.S. Average [a] | 206.5 | 206.7 | 206.9 | 207.0 | 207.0 | 207.1 | 207.1 | 207.2 | 207.3 | 207.3 | 207.4 | 207.5 | 207.6 | 207.7 | 207.8 | 207.9 | 208.0 | 208.0 | 206.9 | 204.8 |

[a] Weighted average.  The weights used are consumption values by sector and State.
— =Not applicable.

Source:  Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

Appendix G

# Summary of Changes Since the *State Energy Data Report 1997*

Modifications to the Combined State Energy Data System (CSEDS) that are incorporated in this edition of the *State Energy Data Report* (*SEDR*) are summarized in this appendix. The constraint of page size in *SEDR* does not allow for all 40 years of CSEDS data to be included in the published tables. Data for selected years 1960 through 1997 are shown in the report tables; data for all years are included in the data files and html-formatted tables available via the Internet and are covered by this documentation.

## Natural Gas

**Commercial and Transportation Sectors, 1997.** Deliveries of natural gas to the commercial sector are published in the Energy Information Administration (EIA) *Historical Natural Gas Annual* and include revisions for two States in 1997; consumption in Kansas increased by 246 million cubic feet to 41,482 million cubic feet and consumption in New Mexico decreased by 3,940 million cubic feet to 27,403 million cubic feet, causing a 0.1-percent decrease in the U.S. total. Natural gas used as pipeline fuel, shown in CSEDS transportation sector, decreased for New Mexico by 125 million cubic feet to 61,772 million cubic feet in 1997 causing the same small decrease in the U.S. total.

**Industrial Sector, 1995 Through 1997.** Data for natural gas used as lease fuel are published in the EIA *Historical Natural Gas Annual* and include revisions for Missouri and Nevada in 1995, West Virginia in 1996, and South Dakota in 1997. Additional revisions to deliveries of natural gas to industrial customers in 1997 occur in Kansas, New Mexico, Oklahoma, and South Dakota. These revisions cause industrial natural gas

consumption estimates in CSEDS to be revised by less than 1 percent (too small to be seen in *SEDR* tables) in Missouri and Nevada in 1995, West Virginia in 1996, Oklahoma in 1997, and the U.S. total industrial natural gas for 1995 and 1996. Natural gas industrial use in 1997 decreases by 14 percent in New Mexico, increases by 10 percent in South Dakota, and increases by 3 percent in Kansas, causing a net decrease in the U.S. total of 0.1 percent.

**Thermal Conversion Factors, 1997.** In addition to the data revisions described above, the factors for converting cubic feet of natural gas into equivalent British thermal units (Btu) were revised in the EIA *Historical Natural Gas Annual* for Kansas (from 1,000 to 1,001 Btu per cubic foot) and New Mexico (from 1,021 to 1,019 Btu per cubic foot) in 1997. These revisions cause small changes in the natural gas Btu values for all sectors in those two States in 1997.

## Coal

### *Coal Coke Imports and Exports, 1991 Through 1997*

The Energy Information Administration reviewed the U.S. coal coke imports and exports data that it provides to international statistical organizations and revised the data for 1991 through 1997. These data are included in CSEDS U.S. industrial sector and total energy, but are not available by State and not included in the State data. All U.S. values increase, and imports increase more than exports. Coal coke imports double for 1994 through 1997, while increases in exports range from 45 percent in 1996 to

81 percent in 1995.  The smallest increases of 7 percent for exports and 8 percent for imports occur in 1991.

## Petroleum

### *Aviation Gasoline, 1996 and 1997*

Although the U.S. total aviation gasoline consumption values are not revised for 1996 and 1997, replacement of preliminary estimates for military use of aviation gasoline in the six States with military consumption causes all State aviation gasoline consumption estimates to be reallocated and revised by less than 1 percent in both years.

### *Liquefied Petroleum Gases, 1995 Through 1997*

**Hawaii and California, 1995.**  The American Petroleum Institute (API) revised internal combustion engine use of liquefied petroleum gases (LPG) in 1995.  Consumption was decreased by 15 thousand gallons in Hawaii to 793 thousand gallons and increased by 15 thousand gallons in California to 56,935 thousand gallons.  These revisions cause small shifts in industrial, transportation, and total consumption estimates of LPG for both States but do not affect other State data or the U.S. total.

**All Sectors, 1996.**  The U.S. total consumption of LPG for 1996 remains unchanged, but API data series that are used as allocators for estimating the State and consuming sector portions of the total were revised; therefore, estimates of LPG consumption for all sectors in all States are revised for 1996 in CSEDS.  Total LPG consumption for most of the States in Petroleum Administration for Defense District (PADD) I increase by 2 percent; in PADD II increase by 10 percent; and in PADD's III, IV, and V decrease by 3 percent.  The exceptions are increases of 1 percent in Delaware, 5 percent in Illinois, 3 percent in Kansas, 9 percent in Kentucky, and 12 percent in North Dakota.  Although residential and commercial estimates are not revised for all States, they do increase by 13 percent in nearly all 15 States in PADD II; the one exception is a 3-percent increase in North Dakota.  Residential and commercial LPG estimates also increased by 5 percent in all 18 States in PADD I.  Estimates of transportation use of LPG decreased by 1 percent for all States in PADD I and by 6 percent for all States in PADD II and PADD V (with the exception of North Dakota's

increase from 8,424 barrels to 20,966 barrels).  Industrial sector consumption for each State is estimated by subtracting the consumption of the other sectors from the State total; therefore, all States have revisions to industrial consumption and the size of the revisions range from a 1-percent increase in Delaware to a 12-percent increase in North Dakota.

**All Sectors 1997.**  In the previous edition of *SEDR*, 1997 State-level estimates of LPG consumption were not available, and 1996 data were repeated for 1997.  In this edition, the use of actual 1997 estimates causes revisions to all sectors in all States, although the U.S. total consumption remains the same.  Revisions in total consumption values range from decreases of 83 percent (the largest percentage, equivalent to 1,400 thousand barrels) in Montana to a 1-percent decrease in Iowa (the smallest percentage equaling 128 thousand barrels) and from an increase of 39,594 thousand barrels (the largest quantity, equivalent to a 10-percent change) in Texas to an increase of 2 thousand barrels (the smallest quantity, equaling a 29-percent change) in the District of Columbia.

### *Motor Gasoline, 1994 Through 1997*

Although motor gasoline consumption in thousand barrels for 1994 through 1997 has not changed in CSEDS, the equivalent values expressed in British thermal units (Btu) are revised due to a change in the factor used to convert barrels to Btu.  For 1994 forward, the constant factor has been replaced with a factor that varies from year to year and is a quantity-weighted average that takes into account the increased use of motor gasoline additives.  The new factors, shown in Table G1, are applied to all motor gasoline consumption in 1994 through 1997, causing Btu values for

**Table G1.  Revisions to Motor Gasoline Thermal Conversion Factors**

| Year | Previous | Current | Percent Change |
|------|----------|---------|----------------|
|      | (Million Btu per barrel) | | |
| 1994 | 5.253 | 5.230 | − 0.4 |
| 1995 | 5.253 | 5.215 | − 0.7 |
| 1996 | 5.253 | 5.216 | − 0.7 |
| 1997 | 5.253 | 5.213 | − 0.8 |

all States in a year to be reduced by the same percentages as shown in the table.

### Other Petroleum Products

**Petroleum Coke, 1960 Through 1997.** U.S. total petroleum coke consumption at refineries was previously allocated to the States in CSEDS on the basis of each State's petroleum refinery catalytic cracking capacity. Investigation of data sources revealed that refinery use of petroleum coke was available by groups of States and by some individual States for 1960 through 1982 and by Petroleum Administration for Defense Districts (PADD) for 1983 forward. By using the State-level data or allocating the smaller State groupings to the States based on their catalytic cracking capacity, more accurate estimates of refinery use of petroleum coke are incorporated in this version of CSEDS. Petroleum coke industrial sector and total consumption estimates for all States 1960 through 1997 are revised. The largest revisions occur where individual State data replace calculated estimates in 1960 through 1982. Refinery use of petroleum coke in Arkansas for 1973 through 1989 and West Virginia from 1960 through 1962 are revised to zero. Mississippi's refinery petroleum coke in 1960 though 1962 is increased from around 95 thousand barrels to approximately 900 thousand barrels. Colorado refinery use of petroleum coke in 1980 is revised from 79 to 260 thousand barrels. Estimates of consumption in Delaware, Massachusetts, and Virginia are doubled or tripled in the 1960's and 1970's because their combined reported petroleum coke consumption is larger than their portions of the U.S. total refinery catalytic cracking capacity, the previous allocator. A few States' petroleum coke consumption is revised by as little as 1 percent in some years; Arkansas, Kentucky, Tennessee, and Washington are among those States.

A review of aluminum ingot production capacity, which is the allocating series for all other industrial uses of petroleum coke, the capacity for the Washington, and, as a result, the U.S. total, was reduced by 1 metric ton in 1995 through 1997 to be consistent with the intended methodology. This change caused insignificant decreases in Washington's industrial petroleum coke consumption and insignificant increases in the other 13 States with that type of petroleum coke consumption in 1995, 1996, and 1997. The revisions can be seen only in the CSEDS full precision data files available on the Internet.

**Special Naphthas, Waxes, and Petrochemical Industry Feedstocks, 1996 and 1997.** Although the U.S. total consumption of special naphthas, waxes, petrochemical feedstocks, and other minor petroleum products is not changed in this edition of *SEDR*, the State-level estimates are revised due to revisions in the State-level allocating data series. State estimates of consumption of these petroleum products are based on three data series that are measures of industrial activity from the U.S. Department of Commerce, Bureau of the Census. The series are from the Economic Census, previously called the Census of Manufactures, and are available every 5 years. In this version of CSEDS, the 1997 Census replaces the 1992 Census data for 1996 and 1997. Since the same allocating series is used for both years, the percentage changes for each State are the same in both years.

The most significant changes in estimates of special naphthas consumption, which is generally used in paint and varnish manufacturing, occur in Arkansas, Colorado, Delaware, and Mississippi where consumption estimates more than double in 1996 and 1997 and in South Carolina where consumption decreases by 89 percent. Estimates of special naphthas consumption in Nevada, Rhode Island, and West Virginia are revised from zero to small amounts in 1996 and 1997.

The Bureau of the Census data series that is used to allocate the U.S. totals of petrochemical feedstocks, miscellaneous petroleum products, natural gasoline, plant condensate, pentanes plus, and unfractionated stream to the States was changed by the conversion from Standard Industrial Categories to North American Industrial Codes causing a discontinuity in the data series. Consumption estimates based on the new series are revised for the 39 States with consumption of those petroleum products in 1996 and 1997. Oregon's consumption is revised to zero, while consumption changes from zero to small quantities in Arizona, Colorado, and Wyoming. Estimates for Texas, the State with the most consumption in the old and new series, increase by 10 percent in 1996 and 1997. Estimates for Louisiana and New Jersey the second- and third-largest consuming States in the previous CSEDS, are decreased by 81 percent and 47 percent, respectively. Estimates for Kentucky and New York, the second- and third-largest consumers in the new series increase by 75 percent and 180 percent, respectively. The smallest revisions to estimates occur in Maryland and Mississippi, with increases of 2 percent and 4 percent, respectively.

Revisions to estimates of waxes consumption in the 43 States where it occurs are smaller than revisions to the other petroleum products, with half of the estimates changing by 10 percent or less. Consumption estimates in South Dakota decrease by 51 percent in 1996 and 1997, the largest decrease. The largest increase is 24 percent in West Virginia in 1996 and 1997.

## Nuclear Electric Power

**Industrial Sector, 1989 Through 1997.** Electricity generation by nuclear plants that are not owned by traditional electric utilities are added to the industrial sector of this version of CSEDS for 1989 through 1997. The U.S. sums of the additional generation range from 47 million kilowatthours in 1989 to 113 million kilowatthours in 1990 (representing less than 0.02 percent of the U.S. total nuclear generation) and are zero in 1995 through 1997.

## Renewable Energy Sources

### Ethanol

Ethanol consumption in the transportation sector for 1981 through 1988 have been included in this version of CSEDS. The data, previously shown in thousand gallons in the *SEDR* tables, are now in thousand barrels in the tables and data system to be comparable to the motor gasoline data. A new data series is used as a State allocator for the U.S. total in 1989 through 1992. A different conversion factor of 3.539 million Btu per barrel, which represents gross heat content, is applied to data for all years in this edition of CSEDS.

All of these revisions have no effect on consumption estimates in CSEDS since quantities of ethanol actually consumed are included in the motor gasoline volumes in the system. This ethanol data series, which is shown separately in the report tables and data system, is included only to indicate trends in ethanol use as a renewable energy source.

### Geothermal

**Residential, Commercial, and Industrial Sectors, 1990 Through 1993, 1995 Through 1997.** U.S. totals for the residential, commercial, and industrial use of geothermal energy for 1990 Through 1993 and 1995 through 1997 are revised in this edition of CSEDS to be consistent with U.S. totals published in the EIA *Annual Energy Review 1999*. This causes all State-level estimates for those sectors to be revised by the same percentage each year, 1990 through 1993 and 1995 through 1997. The percentage changes vary from year to year, but all are by 3 percent or less.

**Industrial Sector, 1989 Through 1997.** In addition to the industrial sector revisions above, electricity generation from geothermal energy by nonutility power producers is revised in this edition of CSEDS. Some of the revisions are caused by a review of the data collected on Form EIA-867 and Form EIA-860B. In addition, the gross electricity generation estimates previously used are replaced with net generation for 1989 through 1997. Estimates of generation by smaller facilities, with capacities of 1 to 5 megawatts, are added for 1989 through 1991. These revisions cause the U.S. total nonutility geothermal-based generation estimates to be revised by 3 percent or less in 1989 through 1997. Most State revisions are also small with the exception of a 42-percent decrease in Hawaii in 1992 and a 42-percent decrease in Illinois in 1991.

### Hydroelectric Power

**Industrial Sector, 1989 Through 1997.** Estimates of electricity generation from hydropower by nonutility power producers are revised in this edition of CSEDS. There were a number of revisions caused by a review of the data collected on Form EIA-867 and Form EIA-860B. In addition, the gross electricity generation estimates previously used are replaced with net generation for 1989 through 1997. Estimates of generation by smaller facilities, with capacities of 1 to 5 megawatts, are added for 1989 through 1991. The addition of smaller facilities adds Nevada and Rhode Island to the list of 29 other States with nonutilities hydropower generation in 1989 through 1991 and causes the U.S. total to increase by 15 to 20 percent for those 3 years. In 1992 through 1997 the revised estimates affect all 32 States with nonutility hydropower generation, some by only 1 percent while other State generation values more than doubled.

**Hydroelectricity Imports and Exports, 1990 Through 1997.** Although there are no revisions to electricity generation from hydropower at electric utilities in kilowatthours in 1990 through 1997, revisions can be seen in the "Hydroelectric Power" column of the *SEDR* tables titled "Estimates of Energy Input at Electric Utilities." The revisions to electricity imports and exports from Canada and Mexico described on page 509 affect the estimates of the hydro-based electricity imports and exports. These trade estimates are added to the electric utilities' hydroelectric generation to be shown in the "Hydroelectric Power" column. Data for as many as 27 States are affected by the revised hydro-based electricity imports and exports; some State trade data change by as little as 2 percent while others more than double. The U.S. total values decrease by as much as 42 percent in 1990 and 1991 and by as little as 2 percent in 1994 and 1995.

**Conversion Factors, 1996 and 1997.** The factor used to convert kilowatthours to British thermal units (Btu) is revised for 1996 and 1997. This factor, FFEOKUS, is the U.S. average heat content of fossil fuels consumed at steam-electric power plants. The Btu values for electricity generated from hydropower in all sectors, as well as imports and exports, are revised by the small percentages shown in Table G2.

*Solar*

**Residential/Commercial Sector, 1989 Through 1997**. The method of estimating residential (including the commercial) use of solar energy is revised in this edition of CSEDS to be more consistent with other EIA reports. The U.S. totals are revised to be the same as those published in the EIA *Annual Energy Review 1999*, Table 10.2. The U.S. data are allocated to the States by a State-level series compiled from data collected on Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey," which is published in the EIA *Renewable Energy Annual* (and predecessor reports). Adjustments are made to the compiled State series to account for

**Table G2.  Revisions to Fossil-Fueled Steam-Electric Plants Thermal Conversion  Factors**

|  | Previous | Current | |
|---|---|---|---|
| Year | (Btu per Kilowatthour) | | Percent Change |
| 1996 | 10,335 | 10,340 | + 0.05 |
| 1997 | 10,311 | 10,357 | + 0.45 |

an estimated 20-year period for equipment replacement and retirement. Increases in the estimates of residential/commercial solar energy use for all States in 1989 through 1995 range from 12 percent to 16 percent. In 1996 increases in all States ranged from 16 percent in Montana to 9 percent in South Dakota, and in 1997 increases ranged from 16 percent in Montana to 2 percent in South Dakota.

**Industrial Sector, 1989 Through 1997.** Electricity generation from solar energy by nonutility power producers is revised in this edition of CSEDS. The gross electricity generation estimates previously used are replaced with net generation for 1989 through 1997. Estimates of generation by smaller facilities, with capacities of 1 to 5 megawatts, are added for 1989 through 1991. These revisions cause the California and U.S. total industrial solar generation to be increased by 27 percent in 1989 and reduced by 3 percent in 1990 through 1997. Small revisions also occur in the Btu values in 1996 and 1997 due to the conversion factor change described in the next paragraph and shown in Table G2.

**Electric Utilities, 1996 and 1997.** Although there are no revisions to electricity generation by electric utilities from solar energy in kilowatthours, the factor used to convert kilowatthours to British thermal units (Btu) is revised for 1996 and 1997. This factor, FFEOKUS, is the U.S. average heat content of fossil fuels consumed at steam-electric power plants. The Btu values for electricity generated from solar energy in California and Texas, as well as the U.S. total, are revised by the percentages shown in Table G2.

*Wind*

**Industrial Sector, 1989 Through 1997.** Electricity generation from wind energy by nonutility power producers is revised in this edition of CSEDS. The gross electricity generation estimates previously used are replaced with net generation for 1989 through 1997. Estimates of generation by smaller facilities, with capacities of 1 to 5 megawatts, are added for 1989 through 1991. The addition of smaller facilities increases wind-power generation estimates for California, Hawaii, and Oregon in 1989 through 1991 and causes the U.S. total nonutilities wind generation to increase in those 3 years by 24 percent, 35 percent, and 16 percent, respectively. Revisions from gross to net generation causes the U.S. total nonutilities wind generation to decrease by less than 5 percent in 1992 through 1997 even with the addition of facilities in Minnesota, Iowa, and Texas. Small revisions occur

in the comparable Btu values in 1996 and 1997 due to the conversion factor change described in the next paragraph and shown in Table G2.

**Electric Utilities, 1996 and 1997.**  Although there are no revisions to electricity generated from wind energy at electric utilities in kilowatthours, the factor used to convert kilowatthours to Btu is revised.  This factor, FFEOKUS, is the U.S. average heat content of fossil fuels consumed at steam-electric power plants.  The Btu values for wind-generated electricity in California, Iowa, and Minnesota, as well as the U.S. total, are revised by the percentages shown in Table G2.

### Wood and Waste

**Residential Sector, 1980, 1990 Through 1997.**  A small revision to the 1980 U.S. total wood consumption published in the EIA *Annual Energy Review 1999* causes a 0.1-percent increase in consumption estimates for all States.  Revisions to the U.S. Bureau of the Census's number of housing units for April 1, 1990, July 1, 1993, and July 1, 1997, cause revisions to residential wood consumption estimates to all years 1990 forward.  In 1990 through 1992, only Alabama, Kentucky, Mississippi, and Tennessee are affected and the revisions are too small to be seen in the *SEDR* tables, although they may be noticed in the full-precision data files available via the Internet.  All States' residential wood consumption estimates are revised in 1993 through 1996, but all revisions are less than 1 percent.  The estimates for 1997 are affected by both a revision in the U.S. total and revisions in the State-level allocating series causing changes to consumption for all States ranging from a 93-percent increase in New York to 1-percent decreases in Georgia, North Carolina, and South Dakota.

**Commercial Sector, 1980, 1985 Through 1992, 1996, and 1997.**  U.S. total commercial sector wood consumption as published in the EIA *Annual Energy Review 1999 (AER)* were revised for 1980, 1996, and 1997.  This edition of CSEDS also includes estimates for commercial wood consumption in 1985 through 1992, as published in the *AER,* which were previously unavailable.  State-level residential wood consumption is used to allocate the U.S. total commercial wood use to the States; therefore, the revisions in the residential sector data described above cause proportional State-level commercial sector revisions for 1993 through 1996.  In 1997 the 12-percent increase in the estimate of U.S. total consumption from the *AER,* in addition to the revisions to residential sector State allocators, cause revisions to

all State commercial wood consumption estimates.  The 1997 State revisions range from a more than doubling of commercial wood use in New York to a 32-percent decrease in Oklahoma with the smallest revision being a 1-percent increase in Rhode Island.

**Industrial Sector, 1980 Through 1997.**  All three data series used to estimate wood and waste consumption were revised in their source documents and affect CSEDS estimates.  (1) Small revisions in the estimates of U.S. total industrial wood and waste use as published in the EIA *Annual Energy Review 1999* are reflected in CSEDS data for 1980 through 1997, all of which are less than 1 percent.  (2) State-level series that are measures of industrial activity in each State from the U.S. Department of Commerce, Bureau of the Census, are used to allocate the U.S. total wood and waste consumption to the States.  A different series is used to represent waste wood consumed by furniture manufacturing industries for 1980 through 1995.  In addition, the Census series used to estimate all types of wood and waste consumption are changed in 1996 and 1997 to adopt the new North American Industry Classification System data categories used in the 1997 Economic Census, which replaced the Standard Industrial Code groups used in previous Censuses.  (3) Electricity generation from wood and waste by nonutility power producers is revised in this CSEDS.  The gross electricity generation estimates previously used are replaced with net generation for 1989 through 1997.  Estimates of generation by smaller facilities, with capacities of 1 to 5 megawatts, are added for 1989 through 1991.  All State industrial wood and waste consumption estimates are revised from 1980 through 1997 by these three series changes.  Most revisions are by more than 10 percent and estimates more than double for several States in some years.  Additional small revisions occur in the corresponding Btu values in 1996 and 1997 due to the conversion factor change described in the next paragraph and shown in Table G2.

**Electric Utilities, 1996 and 1997.**  Although there are no revisions to electricity generated from wood and waste at electric utilities in kilowatthours, the factor used to convert kilowatthours to Btu is revised.  This factor, FFEOKUS, is the U.S. average heat content of fossil fuels consumed at steam-electric power plants.  The Btu values for electricity generated from wood and waste in the 12 States with that type of generation, and the U.S. totals, are revised by the percentages shown in Table G2.

## Electricity Imports and Exports, 1990 Through 1997

The Energy Information Administration reviewed the methodology for estimating electricity imports and exports from Canada and Mexico and developed a new methodology that is less complex. The trade estimates are revised in this edition of CSEDS for the 20 States with electricity trade activity in 1990 through 1997. The revisions range from less than 1 percent to more than 200 percent with about half the estimates changing by less than 40 percent. These electricity imports and exports data are not shown separately in *SEDR* tables, but are included in the values shown in "Estimates of Energy Input at Electric Utilities" table columns for geothermal, hydroelectric power, and total energy input. Small revisions occur in the corresponding Btu values for hydroelectricity and total energy input for 1996 and 1997 due to the revised conversion factors shown in Table G2.

## Electrical System Energy Losses, 1990 Through 1997

Electrical system energy losses are estimated at the national level and allocated to the States in proportion to electricity sales. Revisions to the fossil-fueled steam-electric power plant factor for 1996 and 1997, shown in Table G2, and the estimates of electricity international trade in 1990 through 1997, described in the preceding paragraph, affect estimates of electrical system energy losses. The annual percentage shares of electrical system losses that are used to allocate total losses to all States and sectors are revised by less than 0.2 percent for 1990 through 1997 causing revisions in electrical system energy losses that are too small to be seen in most of the report tables, but can be seen in the data files available via the Internet.

## Net Interstate Flow of Electricity, 1990 Through 1997

The revisions to electricity international trade in 1990 through 1997, described in the preceding paragraphs, affect the calculated estimates of net interstate flow of electricity for all States in those years. Most State's revisions are small, but for the 20 States with international electricity trade, the size of the revisions to net interstate flow is directly comparable to the size of the revisions in their international trade. In 1996 and 1997, additional changes in net interstate flow estimates for all States are caused by the revisions to the factor used to convert kilowatthours of electricity generated from wood, waste, hydroelectric, solar, and wind energy sources into British thermal units. Those revisions are shown in Table G2.

## Population, 1990 Through 1997

The U.S. Department of Commerce, Bureau of the Census, revised the resident population series for 1990 through 1997. The revisions are by less than 1 percent in all States and years. The population estimates, which are used in the calculation of the data shown in the "Total Energy per Capita" ranking column of Table 9, are shown in Appendix D and are included in the Internet data files.

Appendix H

# State Data from EIA

Many Energy Information Administration (EIA) reports contain tables with State-level data on various subjects. The following is a list of some of those publications.

## Multiple Energy Sources

*State Energy Data Report, Consumption Estimates*, DOE/EIA-0214. (Also available electronically at http://www.eia.doe.gov/emeu/sedr/contents .html) Energy consumption estimates by energy sources within consuming sectors from 1960 through 1999; State rankings of consumption by major energy sources and total consumption per capita; thermal conversion factors for bituminous and lignite coal and natural gas; carbon emission factors for coal; resident population.

*State Energy Price and Expenditure Report*, DOE/EIA-0376. (Also available electronically at http://www.eia.doe.gov/emeu/seper/contents.html) Energy prices and expenditures by energy sources within consuming sectors from 1970 through 1997 based on the consumption values estimated in the *State Energy Data Report;* State rankings of prices and expenditures by major energy sources and total expenditures per capita.

*Energy Market Maps*, (Only available electronically via the Internet at http://www.eia.doe.gov/emeu/reps/states/maps/contents.html) Customized maps showing the geographic location of key energy sites. Electric plants and transmission lines, oil ports, refineries, natural gas pipeline flows and market centers, and other sites are included. The series will include maps on each of the 50 States plus Washington, DC, the nine Census Divisions, and the four Census Regions.

## Petroleum

*Petroleum Supply Monthly*, DOE/EIA-0109. (Also available electronically at http://www.eia.doe.gov/oil_gas/petroleum/data_publications/ petroleum_supply_monthly/psm.html) Production of crude oil; imports of residual fuel by State of entry and sulfur content; and refinery, bulk terminal, and natural gas plant stocks of selected petroleum products.

*Petroleum Supply Annual, Volume 1*, DOE/EIA-0340/1. (Also available electronically at http://www.eia.doe.gov/oil_gas/petroleum/data_ publications/petroleum_supply_annual/psa_volume1/psa_volume1.html) Annual data on production of crude oil; imports of residual fuel by State of entry and sulfur content; refinery, bulk terminal, and natural gas plant stocks of selected petroleum products. Biennual tables on number, capacity and production capacity of operable refineries.

*Petroleum Supply Annual, Volume 2*, DOE/EIA-0340/2. (Only available electronically via the Internet at http://www.eia.doe.gov/oil_gas/ petroleum/data_publications/petroleum_supply_annual/psa_volume2/ psa_volume2.html) Data series as in Volume 1 shown by month for production of crude oil; refinery, bulk terminal, and natural gas plant stocks of selected petroleum products; and imports of residual fuel oil by State of entry and sulfur content.

*Petroleum Marketing Monthly*, DOE/EIA-0380. (Also available electronically at http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_marketing_monthly/pmm.html) Prices of No. 2 distillate to residences; domestic crude oil first purchase price; refiner/reseller sales prices for conventional, oxygenated, reformulated, and unleaded regular, midgrade, premium, and all grades motor gasoline by type of seller; refiner sales prices and volumes to end users and for resale of motor gasoline, aviation gasoline, kerosene-type jet fuel, kerosene, No. 1 distillate, No. 2 distillate, No. 4 fuel oil, and residual fuel; prices of No. 2 distillate for selected States by seller type and end user; prices of No. 2 fuel oil for selected States by end user; residual fuel oil prices for selected States by sulfur content; and prime supplier sales volumes of motor gasoline by grades, aviation gasoline, kerosene-type and naphtha-type jet fuels, propane, residual fuel oil (by sulfur content), kerosene, No. 1 and No. 2 distillates, and No. 4 fuel oil. The explanatory notes contain Federal and State motor fuel taxes.

*Petroleum Marketing Annual*, DOE/EIA-0487. (Only available electronically via the Internet at http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_marketing_annual/pma.html) Refiner/reseller sales prices for conventional, oxygenated, reformulated, and unleaded regular, midgrade, premium, and all grades of motor gasoline by seller type; refiner motor gasoline volumes by grade and formulation; refiner sales prices and volumes to end users and for resale of motor gasoline, aviation gasoline, kerosene-type jet fuels, kerosene, No. 1 distillate, No. 2 distillate, No. 4 fuel oil, and propane (consumer grade); sales prices of No. 2 distillate for selected States by seller type and end user; sales prices of No. 2 diesel for selected States by end user; residual fuel oil prices for selected States by sulfur content; prime supplier sales volumes of motor gasoline by seller type, grade, and formulation, aviation gasoline, kerosene-type and naphtha-type jet fuels, propane, residual fuel oil (by sulfur content), kerosene, distillate fuel oils, and No. 4 fuel oil; prices of No. 2 distillate to residences by PAD district and selected States; domestic crude oil first purchase prices; domestic crude oil first purchase prices for selected crude streams; No. 2 diesel fuel prices by sulphur content, sales type, and PAD district; Explanatory notes contain Federal and State motor fuel taxes.

*Fuel Oil and Kerosene Sales,* DOE/EIA-0535 (Annual). (Also available electronically at http://www.eia.doe.gov/oil_gas/petroleum/data_publications/fuel_oil_and_kerosene_sales/foks.html) Sales and adjusted sales of distillate fuel oil, residual fuel oil, and kerosene by the following sectors: residential, commercial, industrial, farm, electric utilities, oil companies, military, off-highway, onhighway, railroad, vessel bunkering, and "all other."

*Weekly Petroleum Status Report*, DOE/EIA-0208. (Also available electronically at http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html) During the winter season only has residential heating oil prices, wholesale heating oil prices, residential propane prices, and wholesale propane prices.

## Natural Gas

*U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, DOE/EIA-0216 (Annual). (Also available electronically at http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/crude_oil_natural_gas_reserves/cr99.html) Crude oil proved reserves and indicated additional reserves, reserves changes, and production; total, nonassociated, and associated-dissolved natural gas proved reserves, reserves changes, and production (wet after lease separation); coalbed methane proved reserves and production; reported reserves of natural gas, wet after lease separation, in nonproducing reservoirs; dry natural gas and natural gas liquids proved reserves, reserves changes, and production; and natural gas plant liquids and lease condensate proved reserves and production. Appendix D contains historic reserves statistics, 1977 forward.

*Natural Gas Monthly*, DOE/EIA-0130. (Also available electronically at http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_monthly/ngm.html) Marketed production of natural gas; gross withdrawals and marketed production; net withdrawals from underground storage; activities of underground storage operators; deliveries and average prices to residential, commercial, industrial, electric utility consumers; deliveries to all consumers; average city gate prices; and percentage of total deliveries represented by onsystem sales.

*Natural Gas Annual*, DOE/EIA-0131. (Also available electronically at http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_annual/nga.html) Natural gas production, transmission, and consumption balance table; gross withdrawals and marketed production;

offshore withdrawals; number of producing wells and gas condensate wells; estimated total dry natural gas proved reserves; wellhead value and marketed production; natural gas processed, liquids extracted, and estimated extraction loss; interstate movements and movements across U.S. borders; additions to and withdrawals from gas storage; underground storage capacity; supplemental gas supplies; consumption of natural gas; number of consumers and quantity of natural gas delivered to consuming sectors, and heat content of total natural gas delivered; natural gas delivered for the account of others to commercial and industrial customers, and electric utilities; firm and interruptible deliveries to consuming sectors; average city gate price; average price of natural gas delivered to consuming sectors, including average firm and interruptible prices; average consumption and annual cost per customer for the residential sector; and extensive summary statistics tables for each State; leading suppliers of natural gas sold to residential customers in the United States; leading suppliers of natural gas sold to commercial consumers in the United States. Appendix A contains a comparison of electric utilities consumption data from forms EIA-176 and EIA-759; volumes of natural gas "unaccounted for;" and natural gas processing plant volumes and composition of liquids extracted, extraction losses, estimated heat content of extraction losses, and estimated dry natural gas proved reserves.

*Historical Natural Gas Annual,* DOE/EIA-E-0110. (Only available electronically via the Internet at http://www.eia.doe.gov/ oil_gas/natural_gas/data_publications/historical_ natural_gas_ annual/hnga.html) Data for 1967 forward for gross withdrawals and marketed production; number of producing gas and gas condensate wells; average wellhead price, marketed production, and imputed wellhead value; movements of natural gas by state; changes to underground and liquefied natural gas storage; supplemental gas supplies 1980 forward; production, transmission, and consumption balance table; consumption of natural gas; firm and interruptible deliveries to consumers, 1993 forward; quantity and number of consumers of natural gas delivered by sector, and heat content of total natural gas delivered; average price and heat content price of natural gas delivered to consuming sectors; and average consumption and annual cost per consumer in the residential, commercial, and industrial sectors.

*Oil and Gas Field Code Master List*, DOE/EIA-0370 (Annual). (Also available electronically at http://www.eia.doe.gov/oil_gas/ natural_gas/data_publications/field_code_master_list/fcml.html) List of

all oil and gas fields grouped by State including field name, county, field code, type of field, and year of discovery; list of authorities on oil and gas field nomenclature; coalbed methane fields; subdivisions of Alaska, California, Louisiana, New Mexico, Texas, and the Gulf of Mexico Continental Shelf Region.

## Coal

*U.S. Coal Reserves: A Review and Update*, DOE/EIA-0529. (Only available electronically via the internet at http://www.eia.doe.gov/cneaf/coal/ reserves/front-1.html) Demonstrated reserve base of coal by State and rank; demonstrated reserve base of coal by State and potential mining method; demonstrated reserve base of coal by State, rank, and potentially minable by underground methods; demonstrated reserve base of coal by State, rank, and potentially minable by surface methods. Has numerous tables on Illinois. Appendix A1 and A2 contain estimates of recoverable reserves at active mines by heat and sulfur content.

*Weekly Coal Production,* DOE/EIA-0218. (Only available electronically via the Internet at http://www.eia.doe.gov/cneaf/coal/weekly/ weekly_html/wcppage.html) Weekly coal production by region and State.

*Quarterly Coal Report*, DOE/EIA-0121. (Also available electronically at http://www.eia.doe.gov/cneaf/coal/quarterly/qcr_sum.html) Coal production; destination of coal received at electric utilities by origin; origin of coal received at electric utilities by destination; coal receipts and average price at other industrial plants; total coal consumption by end use sectors; receipts and consumption by residential and commercial sectors; consumer coal stocks; stocks at electric utilities and other industrial plants; coal receipts; quantity and price of coal receipts, contract coal, and spot coal at electric utilities; average cost of coal receipts at electric utilities; coal receipts and prices by sulfur content at electric utilities; change in electric utility net generation; and cost and quality of all coal received at electric utilities that import coal by origin.

*Coal Industry Annual*, DOE/EIA-0584. (Also available electronically at http://www.eia.doe.gov/cneaf/coal/cia/summary/cia_sum.html) Coal production and number of mines by type of mining, and mine production range; bituminous, subbituminous, lignite, and anthracite production by coal group; acreage, production and royalties from federal and Indian

leases; underground production by mining method; production and average mine price and real mine price by type of mining, disposition, coal rank, and productivity range; recoverable coal reserves and average recovery percentage by type of mining; productivity by mine type; weighted average days worked by type and mine production range; average price of coal delivered by end-use sector; average quality of coal received by electric utilities and manufacturing and coke plants; year-end producer and distributor stocks; imports received by electric utilities and manufacturing and coke plants; consumption and stocks by end-use sector; and detailed statistics for major coal-producing States; coal production by mine type, union type, and disposition; production, productive capacity, and capacity utilization of mines by mine type, rank, mining method, and production range; production and capacity utilization by recoverable reserves and union type; receipts of imported coal by country of origin and destination State; average number of miners by mine type, production range, and union type; productivity by mining method and production range; coal carbonized at coke plants; recoverable reserves by sulfur range and mine type; and domestic and foreign distribution by origin, destination, and method of transportation.

*State Coal Profiles,* (Only available electronically via the Internet at http://www.eia.doe.gov/cneaf/coal/st_coal_pdf/content. html). Coal statistics for the 16 major coal-producing States. Recoverable reserves, productive capacity, production by underground and surface mines, number of miners and productivity by type of mine, producer/distributor stocks, imports, distribution within the State and to other States, to Canada, and overseas. Coal consumption and stocks by consuming sector and prices at underground and surface mines and delivered to consuming sectors. Net generation of electricity by type of fuel. Coal used for electricity generation: average quality and delivered cost, heat, sulfur and ash content, price per million Btu and by short ton. Demonstrated and estimated reserves by sulfur content, recoverable reserves at mines, number of mines, production range in thousand short tons, by type of mine.

## Electric Power

*Electric Power Monthly*, DOE/EIA-0226. (Also available electronically in Adobe format at http://www.eia.doe.gov/cneaf/electricity/epm/epm_ sum.html) Net generation, total and by energy source; consumption of fossil fuels by type of fuel; receipts by type, average cost of coal, total and by type of purchase; receipts by type, average cost of petroleum products, and average cost of petroleum products by type of purchase; receipts and average cost of heavy oil by sulfur content; receipts and average cost of natural gas by type of purchase; estimated sales of electricity to ultimate consumers by sector; revenue from sales to ultimate consumers by sector; estimated average revenue per kilowatthour by sector; and average heat content of fossil-fuel receipts.

*Electric Power Annual Volume I,* DOE/EIA-0348/1. (Also available electronically at http://www.eia.doe.gov/cneaf/electricity/epav1/epav1_ sum.html) Number of electricity generators and generating capability, by fuel source and by type of generating unit; net generation by type of generating unit and by energy source; consumption and receipts of fossil fuels; stocks of coal and petroleum; average cost of fossil fuel receipts; and estimated sales, revenue, and average revenue per kilowatthour to ultimate consumers.

*Electric Power Annual Volume II,* DOE/EIA-0348/2. (Also available electronically in Adobe format at http://www.eia.doe.gov/cneaf/electricity/ epav2/epav2_sum.html) Sales, number of consumers, revenue, and average revenue per kilowatthour by consuming sectors; sulfur dioxide, nitrogen oxides, and carbon dioxide emissions by type of fossil fuel; number and capacity of generators with environmental equipment by type of equipment for coal-fired generators and for petroleum-and gas-fired generators combined; average quality of fossil fuels burned; average flue gas desulfurization costs; installed capacity at nonutility generating facilities by energy source and gross generation for nonutility power producers by energy source and by receipts, sales, and facility use; and carbon-emission factors by type of coal.

*Cost and Quality of Fuels for Electric Utility Plants*, DOE/EIA-0191 (Only available electronically via the Internet at http://www.eia.doe.gov/cneaf/ electricity/cq/cq_sum.html) Data for steam-electric plants with a capacity of 50 megawatts or larger: total heating value and cost of fossil fuels; receipts of coal and average cost by sulfur content; receipts by type of coal; petroleum receipts by product type; gas receipts by type of gas; average cost of coal receipts by type of purchase, type of mining, rank, and sulfur content, of petroleum receipts by type of purchase, product, fuel-type, and sulfur content, and of gas receipts by type of purchase and fuel type; coal and petroleum receipts and average cost by sulfur content; average sulfur

content of coal shipped to electric utilities by State of origin; origin and destination of coal receipts; destination and origin of coal receipts; quantity, quality, and cost of coal; and average quality of coal by State of origin.

*Inventory of Electric Power Plants in the United States*, DOE/EIA-0095(Annual)/1. (Also available electronically at http://www.eia.doe.gov/cneaf/electricity/ipp/ipp99_sum.html) Number of generating units, nameplate capacity, new summer and winter capability, and planned capacity additions by energy source; generating units that started operation and retired from service during report year; generating units' capacity, type, energy source, and year of initial operation by company and plant; existing renewable generating units capacity, type, energy source and year of initial operation by company and plant; planned generating unit changes and additions by company and plant; existing capacity of nonutility power producers by owner and facility. Appendix C contains jointly-owned generating units by company and plant.

*Inventory of Nonutility Electric Power Plants in the United States*, DOE/EIA-0095(Annual)/2. (Also Available electronically at http://www.eia.doe.gov/cneaf/electricity/ipp/ipp_sum2.html) Exisiting capacity and planned capacity additions at US nonutilities by energy source and State; generating units that started operation at US nonutilities by State, company, and facilities; exsisting generating units at US nonutilities by State, company, and facilities; exsisting generating units powered by renewable energy sources at US nonutilities by State, company, and facilities. Appendix C contains US nonutility electric power plants.

*State Electricity Profiles*, DOE/EIA-0629. (Also available electronically at http://www.eia.doe.gov/cneaf/electricity/st_profiles/e_profiles_sum.html) Capability, generation, and other summary data for the electric power industry; type and net capability of the five largest utility plants; top utilities with largest generating capability by type; generation, generating

capability, and consumption by prime energy source; utility delivered fuel prices for fossil fuels; emission estimates by type; retail sales by sector; and number of utilities, customers, retail sales, and revenue from retail sales by ownership type.

*Electric Sales and Revenue*, DOE/EIA-0540. (Also available electronically in Adobe format at http://www.eia.doe.gov/cneaf/electricity/esr/esr_sum.html) Electric sales, revenues from sales, average revenue per kilowatthour, and number of consumers by consuming sector and by utility, plant, and class of ownership.

## Nuclear Energy

*Uranium Industry Annual*, DOE/EIA-0478. (Also available electronically at http://www.eia.doe.gov/cneaf/nuclear/uia/summary/uia_sum.html) Employment in the uranium industry; and forward-cost uranium reserves.

## Renewable Energy

*Renewable Energy Annual,* DOE/EIA-0603. (Also available electronically at http://www.eia.doe.gov/cneaf/solar.renewables/page/rea_data/rea_sum.html) Shipments of solar thermal collectors by destination; renewable electric utility net generation by type of energy; nonutility gross generation by type of energy.

## Alternative Fuels

*Alternatives to Traditional Transportation Fuels* (Annual). (Only available electronically via the Internet at http://www.eia.doe.gov/cneaf/alternate/page/datatables/atf1-13_00.html) Estimated number of Alternative-Fueled Vehicles in use, by State and by fuel type.

# Glossary

**Anthracite:** The highest rank of coal; used primarily for residential and commercial space heating. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million Btu per ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). Note: Since the 1980's anthracite refuse or mine waste has been used for steam electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.

**Asphalt:** A dark brown-to-black cement-like material obtained by petroleum processing and containing bitumens as the predominant component; used primarily for road construction. It includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

**ASTM:** The American Society for Testing and Materials.

**Aviation Gasoline:** A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL–G–5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

**Aviation Gasoline Blending Components:** Naphthas that are used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excluded are oxygenates (alcohols and ethers), butane, and pentanes plus.

**Barrel (petroleum):** A unit of volume equal to 42 U.S. gallons.

**Barrels per Calendar Day (operable refinery capacity):** The amount of input that a distillation facility can process under usual operating conditions during a 24-hour period after making allowances for the following limitations: the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery (no reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation); the types and grades of inputs to be processed; the types and grades of products to be manufactured; the environmental constraints associated with refinery operations; the reduction of capacity for scheduled downtime, such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and the reduction of capacity for unscheduled downtime, such as mechanical problems, repairs, and slowdowns.

**Barrels per Stream Day (operable refinery capacity):** The maximum number of barrels of input that a distillation facility can process within a 24-hour period when running at full capacity under optimal crude and product slate conditions with no allowance for downtime.

**Bituminous Coal:** A dense, black coal, often with well-defined bands of bright and dull material; used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make coke. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million Btu per ton on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24

million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). In this report, bituminous coal includes subbituminous coal.

**British Thermal Unit (Btu):** The quantity of heat needed to raise the temperature of 1 pound of water by 1° F at or near 39.2° F.

**Butane:** A normally gaseous straight-chain or branched-chain hydrocarbon ($C_4H_{10}$). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

- *Isobutane:* A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.
- *Normal Butane:* A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

**Butylene:** An olefinic hydrocarbon ($C_4H_8$) recovered from refinery processes.

**Catalytic Cracking:** A refining process that consists of using a catalyst and heat to break down the heavier and more complex hydrocarbon molecules into lighter and simpler molecules.

**Coal:** A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time. Coals are classified according to their degree of progressive alteration from lignite to anthracite. In the U.S. classification, the ranks of coal include lignite, subbituminous coal, bituminous coal, and anthracite and are based on fixed carbon, volatile matter, heating value, and agglomerating (or caking) properties.

**Coal Coke:** A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees

Fahrenheit so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace.

**Coke Plants:** Plants where coal is carbonized in slot or beehive ovens for the manufacture of coke.

**Commercial Sector:** An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment.

**Conversion Factor:** A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents. See **British Thermal Unit**.

**Cord (wood):** A cord of wood measures 4 feet by 4 feet by 8 feet or 128 cubic feet.

**Crude Oil (Including Lease Condensate):** A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

**Crude Oil Used Directly:** Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

**Cubic foot (cf), natural gas**: The amount of natural gas contained at standard temperature and pressure (60 degrees Fahrenheit and 14.73 pounds standard per square inch) in a cube whose edges are one foot long.

**Diesel Fuel:** Fuel used for internal combustion in diesel engines; usually that fraction of crude oil that distills after kerosene. See **Distillate Fuel Oil**.

**Distillate Fuel Oil:** A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

**Electrical System Energy Losses:** The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

**Electricity Sales:** The amount of kilowatthours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and highway lighting and other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

**Electric Utility:** A corporation, person, agency, authority, or other legal entity or instrumentality that owns and/or operates facilities for the generation, transmission, distribution, or sale of electric energy for use primarily by the public. Utilities provide electricity within a designated franchised service area and file forms listed in the *Code of Federal Regulations*, Title 18, Part 141. Note: Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Power Act (PURPA) are not considered electric utilities. See **Nonutility power producer**.

**Electric Utility Sector:** The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

**End-Use Sectors:** The residential, commercial, industrial, and transportation sectors of the economy.

**Energy:** The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

**Energy Consumption:** The use of energy as a source of heat or power or as an input in the manufacturing process.

**Energy Consumption, End-Use:** The sum of fossil fuel consumption by the four end-use sectors (residential, commercial, industrial, and transportation) plus electric utility sales to those sectors and generation of hydroelectric power by nonelectric utilities. **Net** end-use energy consumption excludes electrical system energy losses. **Total** end-use energy consumption includes electrical system energy losses.

**Energy Consumption, Total:** The sum of fossil fuel consumption by the five sectors (residential, commercial, industrial, transportation, and electric utility) plus hydroelectric power, nuclear electric power, net imports of coal coke, and electricity generated for distribution from wood and waste and geothermal, wind, photovoltaic, and solar thermal energy.

**Ethane:** A normally gaseous straight-chain hydrocarbon ($C_2H_6$). It is a colorless, paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

**Ethanol:** An anhydrous, denatured aliphatic alcohol ($C_2H_5OH$) intended for motor gasoline blending.

**Ethylene:** An olefinic hydrocarbon ($C_2H_4$) recovered from refinery processes or petrochemical processes.

**Exports:** Shipments of goods from within the 50 States and the District of Columbia to U.S. possessions and territories or to any foreign country.

**Federal Energy Regulatory Commission (FERC):** The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates,

hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

**Federal Power Commission (FPC):** The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

**Fiscal Year:** The U.S. Government's fiscal year runs from October 1 through September 30. The fiscal year is designated by the calendar year in which it ends; e.g., fiscal year 1992 begins on October 1, 1991, and ends on September 30, 1992.

**Fossil Fuel:** Any naturally occurring fuel, such as petroleum, coal, and natural gas, formed in the Earth's crust from long-term organic matter.

**Fossil-Fueled Steam-Electric Power Plant:** An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

**Gasohol:** A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration of 10 percent or less by volume. Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside carbon monoxide nonattainment areas are included in data on oxygenated gasoline.

**Geothermal Energy:** Hot water or steam extracted from geothermal reservoirs in the earth's crust. Water or steam extracted from geothermal reservoirs can be used for geothermal heat pumps, water heating, or electricity generation.

**Heat Content of a Quantity of Fuel, Gross:** The total amount of heat released when a fuel is burned. Coal, crude oil, and natural gas all include chemical compounds of carbon and hydrogen. When those fuels are burned, the carbon and hydrogen combine with oxygen in the air to produce carbon dioxide and water. Some of the energy released in burning goes into transforming the water into steam and is usually lost. The amount of heat spent in transforming the water into steam is counted as part of gross heat content but is not counted as part of net heat content. Also referred to as the higher heating value. Btu conversion factors typically used in EIA represent gross heat content.

**Heat Content of a Quantity of Fuel, Net:** The amount of usable heat energy released when a fuel is burned under conditions similar to those in which it is normally used. Also referred to as the lower heating value. Btu conversion factors typically used in EIA represent gross heat content.

**Heavy Oil:** The fuel oils remaining after the lighter oils have been distilled off during the refining process. Except for start-up and flame stabilization, virtually all petroleum used in steam-electric power plants is heavy oil.

**Hydroelectric Power:** The production of electricity from the kinetic energy of falling water.

**Hydroelectric Power Plant:** A plant in which the turbine generators are driven by falling water.

**Imports:** Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from any foreign country.

**Industrial Sector:** An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing; agriculture, forestry, and fisheries; mining; and construction. Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. In this report, nonutility power producers are included in the industrial sector.

**Internal Combustion Electric Power Plant:** A power plant in which the prime mover is an internal combustion engine. Diesel or gas-fired engines are the principal types used in electric power plants. The plant is usually operated during periods of high demand for electricity.

**Isopentane:**  A saturated branched-chain hydrocarbon ($C_5H_{12}$) obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Jet Fuel, Kerosene-Type:**  A kerosene-based product with a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL–T–5624P and MIL–T–83133D (Grades JP–5 and JP–8). It is used for commercial and military turbojet and turboprop aircraft engines.

**Jet Fuel, Naphtha-Type:**  A fuel in the heavy naphtha boiling range having an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., and meeting Military Specification MIL–T–5624L (Grade JP–4).  It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds.

**Kilowatthour (kWh):**  The electrical energy unit of measure equal to one thousand watts of power supplied to, or taken from, an electric circuit steadily for one hour.

**Kerosene:**  A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps.  Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit.  Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil.  See **Jet Fuel, Kerosene-Type**.

**Lease and Plant Fuel:**  Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors), and as fuel in natural gas processing plants.

**Lease Condensate:**  A mixture consisting primarily of pentanes and heavier hydrocarbons which is recovered as a liquid from natural gas in lease separation facilities.  This category excludes natural gas plant liquids, such as butane and propane, which are recovered at downstream natural gas processing plants or facilities.

**Light Oil:**  Lighter fuel oils distilled off during the refining process.  Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

**Lignite:**  The lowest rank of coal, often referred to as brown coal,  used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent.  The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis.  The heat content of lignite consumed in the United States averages 13 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Liquefied Petroleum Gases (LPG):**  A group of hydrocarbon-based gases derived from crude oil refining or natural gas fractionation.  They include ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene.  For convenience of transportation, these gases are liquefied through pressurization.

**Lubricants:**  Substances used to reduce friction between bearing surfaces, or incorporated into other materials used as processing aids in the manufacture of other products, or used as carriers of other materials.  Petroleum lubricants may be produced either from distillates or residues.  Lubricants include all grades of lubricating oils, from spindle oil to cylinder oil to those used in greases.

**Methanol:**  A light, volatile alcohol ($CH_3OH$) eligible for motor gasoline blending.

**Miscellaneous Petroleum Products:**  All finished petroleum products not classified elsewhere—for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

**Motor Gasoline:**  A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines.  Motor gasoline, as defined in ASTM Specification D–4814 or Federal Specification VV–G–1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10-percent recovery point to 365 to 374 degrees Fahrenheit at the 90-percent recovery point.  "Motor Gasoline" includes conventional

gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. *Note:* Volumetric data on blending components, such as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

**Motor Gasoline Blending Components:** Naphthas (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock for oxygenate blending (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus.

**Natural Gas (dry natural gas):** Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

**Natural Gasoline:** A term used in the gas processing industry to refer to a mixture of liquid hydrocarbons (mostly pentanes and heavier hydrocarbons) extracted from natural gas. It includes isopentane.

**Net Interstate Flow of Electricity:** The difference between the sum of electricity sales and losses within a State and the total amount of electricity generated within that State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

**Nonutilities:** See **Nonutility Power Producer**.

**Nonutility Power Producer:** A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for electric generation and is not an electric utility. Nonutility power producers include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers). Nonutility power producers are without a designated franchised service area and do not file forms listed in the *Code of Federal Regulations*, Title 18, Part 141.

**North American Industrial Classification System (NAICS):** A system of numeric codes used to categorize businesses by type of activity in which they are engaged. It replaces the Standard Industrial Classification (SIC). This new structure was developed jointly by the United States, Canada, and Mexico to provide consistent, comparable information on an industry-by-industry basis for all three economies.

**Nuclear Electric Power (nuclear power):** Electricity generated by an electric power plant whose turbines are driven by steam produced by the heat from the fission of nuclear fuel in a reactor.

**Pentanes Plus:** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Included are isopentane, natural gasoline, and plant condensate.

**Petrochemical Feedstocks:** Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphthas Less Than 401° F. Endpoint" and "Other Oils Equal to or Greater Than 401° F. Endpoint."

**Petroleum:** A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Nonhydrocarbon compounds blended into finished petroleum products, such as additives and detergents, are included after blending has been completed.

**Petroleum Coke:** A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke.

**Petroleum Coke, Catalyst:** The carbonaceous residue that is deposited on and deactivates the catalyst used in many catalytic operations (e.g., catalytic cracking). Carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. That carbon or coke is not recoverable in a concentrated form.

**Petroleum Coke, Marketable:** Those grades of coke produced in delayed or fluid cokers that may be recovered as relatively pure carbon. Marketable petroleum coke may be sold as is or further purified by calcining.

**Petroleum Consumption:** The sum of all refined petroleum products supplied. For each refined petroleum product, the amount supplied is calculated by adding production and imports, then subtracting changes in primary stocks (net withdrawals are a plus quantity and net additions are a minus quantity) and exports.

**Petroleum Products:** Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Petroleum Products Supplied:** See **Petroleum Consumption**.

**Photovoltaic and Solar Thermal Energy:** Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted into electricity by means of solar (photovoltaic) cells or concentrating (focusing) collectors.

**Plant Condensate:** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

**Propane:** A normally gaseous straight-chain hydrocarbon ($C_3H_8$). It is a colorless paraffinic gas that boils at a temperature of –43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD–5 propane.

**Propylene:** An olefinic hydrocarbon ($C_3H_6$) recovered from refinery or petrochemical processes.

**Refinery (petroleum):** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

**Renewable energy resources:** Energy resources that are naturally replenishing but flow-limited. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include: alcohol fuels, wood, waste, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action.

**Residential Sector:** An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters.

**Residual Fuel Oil:** The heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D396 and D975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore powerplants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

**Road Oil:** Any heavy petroleum oil, including residual asphaltic oil, used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

**Short Ton (coal):** A unit of weight equal to 2,000 pounds.

**Solar Energy:** The radiant energy of the sun that can be converted into other forms of energy, such as heat or electricity.

**Special Naphthas:** All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836

and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

**Standard Industrial Classification (SIC):** A set of codes developed by the Office of Management and Budget which categorizes industries into groups with similar economic activities. It has been replaced by **North American Industry Classification System**.

**Still Gas (refinery gas):** Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and petrochemical feedstock.

**Subbituminous Coal:** A coal whose properties range from those of lignite to those of bituminous coal and used primarily as fuel for steam-electric power generation. It may be dull, dark brown or black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). In this report, subbituminous coal is included in bituminous coal.

**Supplemental Gaseous Fuels:** Any gaseous substance that, introduced into or commingled with natural gas, increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, and air or inert gases added for Btu stabilization.

**Transportation Sector:** An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. In this report, natural gas used in the operation of natural gas pipelines is included in the transportation sector.

**Unfinished Oils:** All oils requiring further processing, except those requiring only mechanical blending. In most cases, these are produced by partial refining or are purchased in an unfinished state for conversion to finished products by further refining.

**Unfractionated Streams:** Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

**United States:** The 50 States and the District of Columbia.

**Value Added by Manufacture:** A measure of manufacturing activity that is derived by subtracting the cost of materials (which covers materials, supplies, containers, fuel, purchased electricity, and contract work) from the value of shipments. This difference is then adjusted by the net change in finished goods and work-in-progress between the beginning and end-of-year inventories.

**Waste Energy:** Garbage, bagasse, sewerage gas, and other industrial, agricultural, and urban refuse used to generate electricity.

**Waxes:** Solid or semisolid materials derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

**Wind Energy:** The kinetic energy of wind converted into mechanical energy by wind turbines (i.e., blades rotating from a hub) that drive generators to produce electricity for distribution.

**Wood Energy:** Wood and wood products used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, pulp waste, and spent pulping liquor.

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