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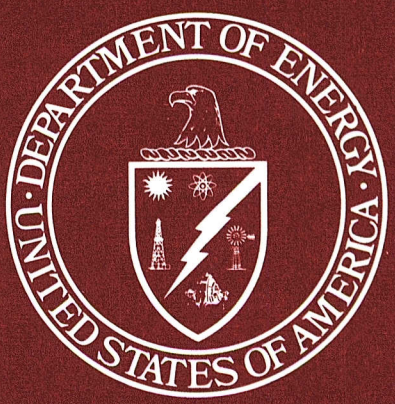
# Monthly Energy Review

## March 1980




**U.S. Department of Energy**
Energy Information Administration

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# Trends in the Installation of Energy Using Equipment in New Residential Buildings

**Howard L. Walton***

Significant trends concerning four types of heating and air conditioning systems installed in new residential buildings are revealed from data collected by the Bureau of the Census. Especially noteworthy is the steady decline in the number of new single-family homes heated by natural gas. From a 1967 high of 66 percent heated by natural gas, the total dropped to 54 percent in 1972 and fell steadily to 37 percent in 1978 (see Table 1). Further examination of the data collected for both single-family homes and multifamily buildings provides useful insights.

From 1972 to 1978, the percentage of new homes equipped with fuel oil furnaces remained relatively constant, ranging from 8 to 11 percent. Over the same period, the number of new homes with electric heating systems increased steadily from 36 to 52 percent, compensating for the decline in natural gas systems.

In existing single-family homes, the proportions of the types of heating systems are significantly different than the proportions in new single-family homes. For example, in 1977 (the year with the most current data available), 50 percent of new single-family homes contained electrical systems, 9 percent contained fuel oil systems, and 38 percent contained natural gas systems. The corresponding percentages for existing single-family homes were 13, 19, and 62 percent, respectively.[1]

*Office of Program Development, Energy Information Administration.

[1]Unpublished data from the Bureau of the Census, *Annual Housing Survey: 1977.* These data cover owner-occupied single-family homes, which represent approximately 80 percent of all single-family homes.

**Table 1. Space Heating Systems Installed in New Single-Family Houses in the United States—1972 to Second Quarter 1979**

| Year | New Single-Family Units (thousands) | Space Heating Systems (percentage) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Electric | | | Fuel Oil | Natural Gas | Other[b] |
| | | Resistance[a] | Heat Pump | Total | | | |
| 1972 | 1,143 | NA | NA | 36 | 8 | 54 | 2 |
| 1973 | 1,197 | NA | NA | 42 | 10 | 47 | 1 |
| 1974 | 940 | NA | NA | 49 | 9 | 41 | 1 |
| 1975 | 875 | NA | NA | 49 | 9 | 40 | 2 |
| 1976 | 1,034 | NA | NA | 48 | 11 | 39 | 2 |
| 1977 | 1,258 | NA | NA | 50 | 9 | 38 | 2 |
| 1978 | 1,366 | 27 | 25 | 52 | 8 | 37 | 3 |
| 1978 | | | | | | | |
| First Quarter | 269 | 28 | 25 | 53 | 8 | 36 | 3 |
| Second Quarter | 335 | 29 | 24 | 53 | 7 | 39 | 1 |
| Third Quarter | 374 | 26 | 26 | 52 | 8 | 37 | 3 |
| Fourth Quarter | 388 | 26 | 24 | 50 | 9 | 38 | 3 |
| 1979 | | | | | | | |
| First Quarter | 284 | 25 | 28 | 53 | 7 | 37 | 3 |
| Second Quarter | 324 | 28 | 24 | 52 | 6 | 39 | 3 |

[a]Includes electric furnaces, baseboard heating, ceiling cables, wall units, and others.
[b]May include coal, wood, solar, tank or bottled gas, liquid petroleum gas.
NA = Not available.
Sources: • Annual data—*Characteristics of New Housing,* Bureau of the Census, Washington, D.C.
• Quarterly data—Unpublished Bureau of the Census tabulations from their *Survey of Housing Starts, Sales, and Completions,* Form SOC-900.

Heat pumps operate on electricity and are used for both heating and cooling.[2] In the cooling mode, a heat pump acts like a conventional electric compressor-operated air conditioner. The heat pump uses mechanical energy derived from electricity, and extracts heat from air inside the house, transferring that heat to the air outside the house. In the heating mode, the operation is reversed. The heat pump extracts heat from the cooler air outside the house and transfers this heat to the air inside the house. Simultaneously, the heat from the mechanical energy used to extract the heat from the outside air is also brought into the house.

Initially, the cost for the purchase and installation of heat pumps is greater than the cost for conventional heating and cooling systems. The financial savings results from lower operating costs, especially in regions with significant heating and air conditioning demands. (Table 1 contains information on the use of heat pumps.)

The data in Table 1 indicate that approximately 25 percent of all new single family homes were equipped with heat pumps in 1978. Heat pumps were also installed in approximately 50 percent of all new homes equipped with electric heating.

[2]Gas operated heat pumps are in late stages of development and are expected to be marketed in several years.

During the third quarter of 1977, at the request of the DOE, the Bureau of the Census gathered information on the extent to which different fuels were being used for water heating in new homes. The percentage of new single-family homes using various types of fuels for water heating during 1978 and the first two quarters of 1979 is shown in Table 2. The pattern is similar to that shown in Table 1 for space heating, except that electricity was used more frequently, while fuel oil was used less frequently. In new single-family homes, the proportion of water heating systems using electricity is significantly higher than in existing homes. During 1978, 58 percent of new single-family homes contained electrical water heating systems, compared to 29 percent of existing single-family dwellings.[3]

When examining the data, the reader should bear in mind that natural gas remained the lowest cost fuel during the 1972 to 1978 period, partially due to the continuation of pricing regulations by the Federal Government. In 1978, residential natural gas prices were approximately 20 percent of electricity prices and 70 percent of heating oil prices. The demand for natural gas increased because it remained the least ex-

[3]Preliminary data from the Bureau of the Census, *Annual Housing Survey: 1977.* These data cover owner-occupied single-family homes, which represent 80 percent of the single-family homes. No data exist on the types of energy used for water heating systems in new single-family houses in 1977.

**Table 2. Water Heating Systems Installed in New Single-Family Houses in the United States—First Quarter 1978 to Second Quarter 1979**

| Year | New Single-Family Units (thousands) | Water Heating Systems (percentage) | | | |
|---|---|---|---|---|---|
| | | Electric | Fuel Oil | Natural Gas | Other* |
| 1978 | | | | | |
| First Quarter | 269 | 59 | 4 | 36 | 1 |
| Second Quarter | 335 | 59 | 3 | 37 | 1 |
| Third Quarter | 374 | 58 | 4 | 37 | 1 |
| Fourth Quarter | 388 | 57 | 5 | 38 | 1 |
| **Total** | **1,366** | **58** | **4** | **37** | **1** |
| 1979 | | | | | |
| First Quarter | 284 | 59 | 4 | 36 | 1 |
| Second Quarter | 324 | 56 | 4 | 39 | 1 |

*May include coal, wood, solar, tank or bottled gas, liquid petroleum gas.
Source: • Unpublished Bureau of the Census tabulations from their *Survey of Housing Starts, Sales, and Completions,* Form SOC-900.

pensive fuel. Available supplies of natural gas dwindled from 1972 through 1978, causing widespread moratoriums on natural gas hookups for new residential buildings. In the Southeast and the Far West, there were severe curtailments of natural gas to industrial, utility, and commercial users so that sufficient fuel could be provided for heating existing homes.

Due to the preponderance of homes being built in the South,[4] the moratoriums on natural gas hookups for new residential buildings, and the growing popularity of central air conditioning, 60 percent of all new single-family homes built in the United States during 1978 were equipped with central air conditioning. Fifty-two percent of total homes built contained electric heating systems.

In the southern region of the United States, heating requirements are low, but cooling requirements are high. Almost 85 percent of the homes currently being constructed in the South have central air conditioning systems.[5] Approximately 70 percent of the homes built in this region contain electric heating systems; it is more convenient for builders to install combined electric heating and cooling systems than individually operated systems.

In the northern regions of the United States, there are greater heating demands and fewer cooling requirements. In the Northeast and North Central Census Regions, less than 40 percent of the new single-family homes built in 1978 were equipped with central air conditioning systems. Less than 20 percent of new homes in the Northeastern States are equipped with central air conditioning systems, and only 35 percent are heated with electricity.

In 1977, the Bureau of the Census also started collecting information on applications of solar space and water heating systems in new homes. Data have been collected on the use of solar heating systems as a primary energy source (see Table 3). Because these data contain information on solar systems designed to provide at least 50 percent of total heating requirements, it is possible that a significant number of backup solar systems were not counted by the Census Survey. Only a small proportion of new single-family homes are equipped with either solar space or solar water heating systems. The number equipped with solar water heating systems is greater than those with solar space sys-

[4]During 1978, approximately 42 percent of all new single-family homes completed in the United States were in the South. Bureau of the Census unpublished tabulations from the *Survey of Housing Starts, Sales, and Completions*, Form SOC-900.

[5]Census Region information on new housing starts and types of heating systems comes from unpublished data from the Bureau of the Census, *Survey of Housing Starts, Sales, and Completions*, Form SOC-900.

**Table 3. Solar Systems Installed in New Single-Family Houses in the United States, as Primary Energy Source for Space and Water Heating**

| Year | New Single-Family Units (thousands) | Solar Systems (percentage) | | | |
|---|---|---|---|---|---|
| | | Space Heating Systems Only | Water Heating Systems Only | Space and Water Heating Systems | Total Solar Systems |
| 1978 | | | | | |
| First Quarter | 269 | 0.2 | 1.1 | 1.3 | 2.6 |
| Second Quarter | 335 | 0.2 | 1.1 | 0.5 | 1.8 |
| Third Quarter | 374 | 1.4 | 1.2 | 0.2 | 2.8 |
| Fourth Quarter | 388 | 0.7 | 1.6 | 0.9 | 3.2 |
| **Total** | **1,366** | **0.7** | **1.3** | **0.7** | **2.6** |
| 1979 | | | | | |
| First Quarter | 284 | 0.7 | 1.1 | 0.1 | 1.9 |
| Second Quarter | 324 | 0.2 | 1.0 | 0.2 | 1.4 |

Note: Totals may not equal sum of components due to independent rounding.
Source: • Unpublished Bureau of the Census tabulations from their *Survey of Housing Starts, Sales, and Completions*, Form SOC-900.

tems. In most regions, solar water heating systems are more economical than either solar space heating systems or combined space and water heating systems. (Water heating represents the most economical use of solar heating systems currently in use.)

Estimates in 1978 placed the number of new single-family homes equipped with solar systems at approximately 10,300. The relative standard error on this estimate is 13 percent; therefore, the actual number may be as low as 7,622 or as high as 12,978 (95 percent confidence level).

Since 1974, the Bureau of the Census has collected information on the fuels used for heating and cooling new multifamily buildings. Data on the applications of water heating systems, heat pumps, and solar systems in these buildings have been collected since the third quarter of 1977.

The percentage of new multifamily buildings equipped with electric heating systems is greater than the percentage for new single-family homes (see Table 4). This is probably due to the restrictions on natural gas hookups to new multifamily buildings. The restrictions were even more severe than those experienced for single-family houses from 1972 to 1978. Moreover, building owners probably felt that electricity was a more secure energy source than either natural gas or heating oil. Also, building contractors find it more convenient to install combined electric heating and cooling systems. This is especially true for multifamily buildings; approximately 70 percent are currently equipped with central air conditioning.

Data in Table 4 also show a smaller percentage of heat pumps used in electrically heated units of new multifamily buildings, compared to the percentage of heat pumps used in new single-family homes.

**Table 4. Space Heating Systems Installed in New Multifamily Buildings in the United States—1974 to Second Quarter 1979.**

| Year | New Multifamily Buildings (thousands) | Space Heating Systems (percentage) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Electric | | | | | |
| | | Resistance | Heat Pump | Total | Fuel Oil | Natural Gas | Other[a] |
| **1974** | **788** | **NA** | **NA** | **60** | **4** | **35** | **1** |
| **1975** | **442** | **NA** | **NA** | **59** | **7** | **33** | **2** |
| **1976** | **343** | **NA** | **NA** | **59** | **7** | **33** | **1** |
| **1977** | **399** | **NA** | **NA** | **66** | **5** | **29** | **1** |
| **1978** | **499** | **45** | **23** | **68** | **5** | **26** | **1** |
| 1978 | | | | | | | |
| First Quarter | 106 | 44 | 25 | 69 | 7 | 24 | * |
| Second Quarter | 115 | 48 | 21 | 69 | 3 | 27 | 1 |
| Third Quarter | 146 | 49 | 20 | 69 | 6 | 25 | * |
| Fourth Quarter | 131 | 43 | 24 | 67 | 4 | 29 | * |
| 1979 | | | | | | | |
| First Quarter | 122 | 50 | 21 | 71 | 2 | 27 | * |
| Second Quarter | 139 | 51 | 15 | 66 | 6 | 27 | 1 |

[a]May include coal, wood, solar, tank or bottled gas, liquid petroleum gas, or none.
*Negligible.
NA = Not available.
Note: Totals may not equal sum of components due to independent rounding.
Source: • Annual data—*Characteristics of New Housing,* Bureau of the Census, Washington, D.C. • Quarterly data—Unpublished Bureau of the Census tabulations from their *Survey of Housing Starts, Sales, and Completions,* Form SOC-900.

The percentage of new multifamily buildings with various types of water heating systems is given in Table 5. These percentages are approximately the same as those for single-family units. Some housing units within multifamily buildings, although heated and cooled with electricity, probably have their water heated with natural gas from a central location within or near the building.

Solar water and/or space heating systems in new multifamily buildings occurred so infrequently that the resulting estimates are not reliable.

The Bureau of the Census continues to collect data quarterly on heating and cooling systems for the Energy Information Administration, and findings will be reported periodically.

**Table 5. Water Heating Systems Installed in New Multifamily Buildings in the United States—First Quarter 1978 to Second Quarter 1979**

| Year | Total New Multifamily Buildings (thousands) | Water Heating Systems (percentage) | | | |
|---|---|---|---|---|---|
| | | Electric | Fuel Oil | Natural Gas | Other[a] |
| 1978 | | | | | |
| First Quarter | 106 | 60 | 7 | 33 | * |
| Second Quarter | 115 | 55 | 2 | 42 | * |
| Third Quarter | 146 | 56 | 6 | 38 | * |
| Fourth Quarter | 131 | 57 | 4 | 39 | * |
| **Total** | **499** | **57** | **4** | **38** | * |
| 1979 | | | | | |
| First Quarter | 122 | 59 | 2 | 39 | * |
| Second Quarter | 139 | 54 | 6 | 40 | * |

[a]May include coal, wood, solar, tank or bottled gas, liquid petroleum gas, or none.
*Negligible.
Source: • Unpublished Bureau of the Census tabulations from their *Survey of Housing Starts, Sales, and Completions*, Form SOC-900.

# Part 1 Executive Summary

## Overview

Domestic energy production in December 1979 was 5.2 quadrillion Btu, 1.0 percent lower than in November and 1.7 percent lower than in December 1978. In December 1979 total domestic energy was produced from the following sources: natural gas, 1.7 quadrillion Btu, or 31.7 percent; crude oil, 1.5 quadrillion Btu, or 29.3 percent of the total; coal, 1.4 quadrillion Btu, or 26.2 percent; and 0.7 quadrillion Btu, or 12.9 percent of the total from hydroelectric power, nuclear electric power, natural gas plant liquids, and electricity produced from geothermal power and wood and waste.

While the United States produced a total of 5.2 quadrillion Btu of energy in December 1979, it consumed a total of 7.0 quadrillion Btu of energy. Consumption was 8.8 percent higher than in November and 5.1 percent lower than in December 1978. Petroleum consumption was 3.2 quadrillion Btu, representing 45.5 percent of the total U.S. consumption of energy. Natural gas consumption was 2.0 quadrillion Btu, or 28.3 percent of the total. Coal consumption was 1.3 quadrillion Btu, or 19.1 percent of the total. All remaining fuels provided 0.5 quadrillion Btu, or 7.1 percent of the total consumption.

Energy imports in December 1979 totaled 1.6 quadrillion Btu and supplied 23.5 percent of consumed energy in December. The December 1979 total import figure was 9.6 percent lower than during December 1978. The United States exported 0.3 quadrillion Btu of energy in December and had a domestic net import total of 1.4 quadrillion Btu. Crude oil accounted for 1.1 quadrillion Btu of the total net imports, while petroleum products accounted for 0.4 quadrillion Btu. Natural gas, electricity, and coal coke contributed small amounts to the net import total. Coal exports exceeded coal imports, causing coal to appear as a net export item of 0.2 quadrillion Btu.

In this issue of the *Monthly Energy Review*, (MER), many small revisions to data series have been made. This was necessary to assure consistency between the MER and comparable EIA reports.

One year ago standard procedures and common data series were implemented in the MER, the EIA *Quarterly Report to Congress*, and Volume II of the EIA *Annual Report to Congress*. During the past year, an extensive review of data and calculation methodologies has been conducted with a view toward merging the attractive features of the *State Energy Data Report* with the three standardized reports. Where possible that activity is now complete. With minor exceptions (notably end-use consumption) all four reports which are scheduled to be published in March and April 1980 are now consistent.

# Executive Summary

## Energy Summary

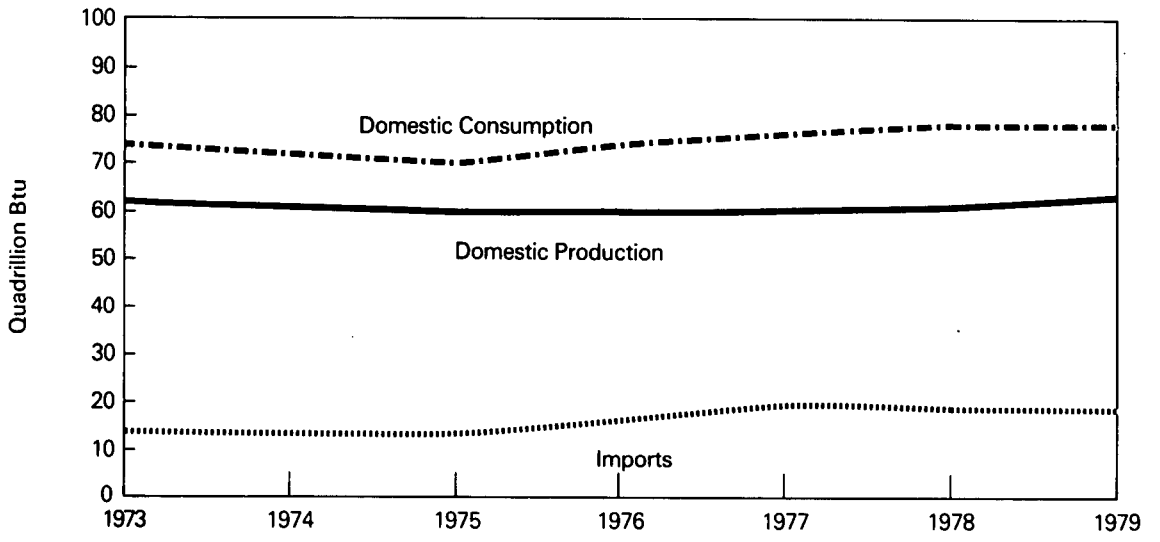
| | | Energy Production[1] | Energy Consumption[2] | Energy Imports[3] | Energy Exports[4] |
|---|---|---|---|---|---|
| | | Quadrillion ($10^{15}$) Btu | | | |
| **1973** | **TOTAL** | **R62.433** | **R74.609** | **14.732** | **2.073** |
| **1974** | **TOTAL** | **R61.229** | **R72.759** | **14.417** | **2.241** |
| **1975** | **TOTAL** | **R60.059** | **R70.707** | **R14.113** | **2.389** |
| **1976** | **TOTAL** | **60.091** | **R74.509** | **R16.838** | **2.213** |
| **1977** | **TOTAL** | **R60.297** | **R76.390** | **R20.092** | **2.097** |
| **1978** | January | R4.475 | R7.579 | R1.622 | R0.078 |
| | February | R4.160 | R6.910 | R1.432 | R0.058 |
| | March | R4.871 | R6.806 | R1.659 | R0.066 |
| | April | R5.182 | R6.022 | R1.479 | R0.134 |
| | May | R5.503 | R6.189 | R1.493 | R0.186 |
| | June | R5.322 | R6.000 | R1.525 | R0.223 |
| | July | R5.179 | R6.184 | R1.614 | R0.163 |
| | August | R5.374 | R6.331 | R1.615 | R0.179 |
| | September | R5.048 | R5.947 | R1.695 | R0.186 |
| | October | R5.435 | R6.283 | R1.630 | R0.226 |
| | November | R5.358 | R6.552 | R1.679 | R0.240 |
| | December | R5.300 | R7.350 | R1.818 | R0.212 |
| | **TOTAL** | **R61.208** | **R78.154** | **R19.262** | **R1.951** |
| **1979** | January | R5.253 | R7.936 | R1.755 | R0.174 |
| | February | R4.848 | R7.194 | R1.515 | R0.160 |
| | March | R5.433 | R6.929 | R1.719 | R0.240 |
| | April | R5.167 | R6.077 | R1.504 | R0.235 |
| | May | R5.371 | R6.124 | R1.582 | R0.256 |
| | June | R5.222 | R5.927 | R1.588 | R0.252 |
| | July | R4.972 | R6.034 | R1.581 | R0.271 |
| | August | R5.472 | R6.265 | R1.656 | R0.261 |
| | September | R5.084 | R5.824 | R1.521 | R0.222 |
| | October | R5.501 | R6.321 | R1.693 | R0.288 |
| | November | R5.267 | R6.414 | R1.526 | R0.264 |
| | December | R5.212 | R6.978 | R1.643 | R0.259 |
| | **TOTAL** | **R62.803** | **R78.022** | **R19.282** | **R2.883** |

Totals may not equal sum of components due to independent rounding.
[1]See Explanatory Note 1.
[2]See Explanatory Note 2.
[3]See Explanatory Note 3.
[4]See Explanatory Note 4.
R = Revised data.
Note: The sum of domestic energy production and net imports of energy does not equal domestic energy consumption. The difference is attributed to stock changes; losses and gains in conversion, transportation and distribution; the addition of blending compounds; shipments of anthracite to U.S. Armed Forces in Europe; and adjustments to account for discrepancies between reporting systems.
*Source:* • Energy Information Administration calculations based on data appearing elsewhere in this publication.

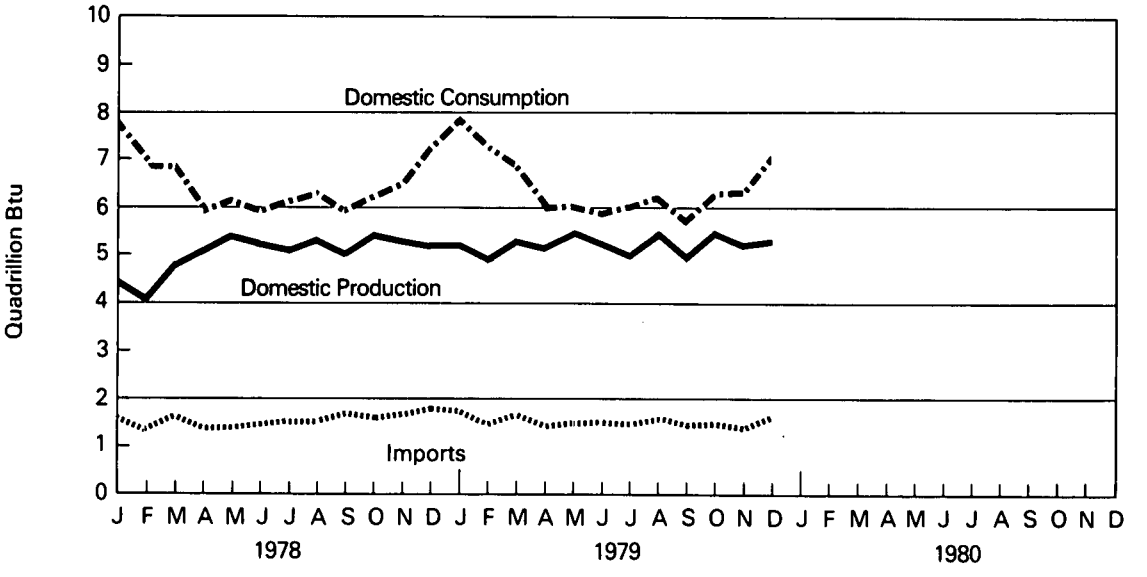
# Executive Summary

## Domestic Energy Summary

Yearly




Monthly



# Executive Summary

## Production of Energy by Primary Type

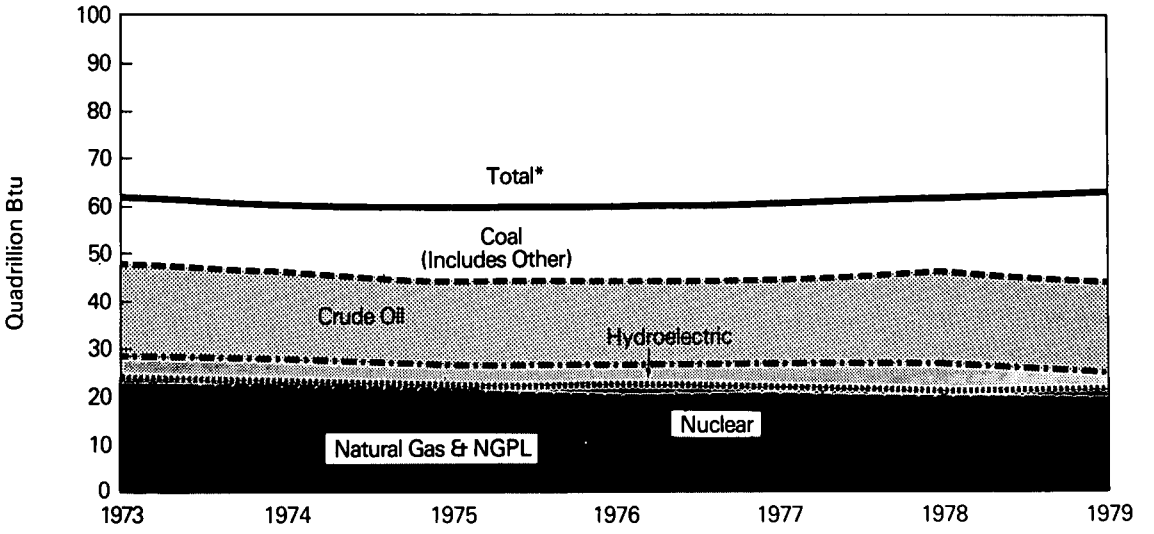
| | | Coal[1] | Crude Oil[2] | NGPL[3] | Natural Gas (dry) | Hydro-electric Power[4] | Nuclear Electric Power | Other[5] | Total Energy Produced |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Quadrillion ($10^{15}$) Btu | | | | |
| **1973** | **TOTAL** | **14.366** | **19.493** | **2.569** | **22.187** | **R2.861** | **0.910** | **0.046** | **R62.433** |
| **1974** | **TOTAL** | **14.468** | **18.575** | **2.471** | **R21.210** | **R3.177** | **1.272** | **0.056** | **R61.229** |
| **1975** | **TOTAL** | **15.189** | **17.729** | **2.374** | **R19.640** | **R3.155** | **1.900** | **0.072** | **R60.059** |
| **1976** | **TOTAL** | **15.853** | **17.262** | **2.327** | **19.480** | **2.976** | **2.111** | **0.081** | **60.091** |
| **1977** | **TOTAL** | **R15.829** | **17.454** | **2.327** | **19.565** | **2.337** | **2.702** | **0.082** | **R60.297** |
| **1978** | January | R0.531 | 1.503 | R0.189 | R1.701 | 0.265 | 0.278 | 0.007 | R4.475 |
| | February | R0.543 | 1.360 | 0.172 | R1.609 | R0.235 | 0.235 | 0.006 | R4.160 |
| | March | R0.898 | 1.568 | 0.194 | R1.705 | 0.260 | 0.242 | 0.005 | R4.871 |
| | April | R1.369 | 1.534 | 0.191 | R1.627 | 0.267 | 0.189 | 0.004 | R5.182 |
| | May | R1.580 | 1.587 | R0.186 | R1.623 | 0.303 | 0.220 | 0.004 | R5.503 |
| | June | R1.506 | 1.537 | R0.186 | R1.584 | 0.265 | 0.239 | 0.005 | R5.322 |
| | July | R1.231 | 1.574 | 0.190 | R1.652 | 0.258 | 0.269 | 0.005 | R5.179 |
| | August | R1.477 | 1.575 | R0.189 | R1.617 | 0.234 | 0.276 | 0.006 | R5.374 |
| | September | R1.328 | 1.531 | R0.182 | R1.538 | 0.224 | 0.239 | 0.007 | R5.048 |
| | October | R1.608 | 1.586 | R0.187 | R1.595 | 0.206 | 0.248 | 0.005 | R5.435 |
| | November | R1.597 | 1.521 | 0.189 | R1.567 | 0.211 | 0.268 | 0.006 | R5.358 |
| | December | R1.370 | 1.557 | 0.191 | R1.668 | 0.233 | 0.274 | 0.007 | R5.300 |
| | **TOTAL** | **R15.037** | **18.434** | **R2.245** | **R19.485** | **R2.962** | **2.977** | **0.068** | **R61.208** |
| **1979** | January | R1.278 | 1.521 | R0.213 | R1.672 | R0.264 | 0.299 | 0.007 | R5.253 |
| | February | R1.211 | 1.380 | R0.187 | R1.560 | 0.225 | 0.279 | 0.006 | R4.848 |
| | March | R1.480 | 1.544 | R0.210 | R1.656 | 0.274 | 0.262 | 0.008 | R5.433 |
| | April | R1.420 | 1.485 | R0.201 | R1.589 | 0.268 | 0.198 | 0.007 | R5.167 |
| | May | R1.536 | 1.544 | R0.200 | R1.617 | 0.305 | 0.162 | 0.007 | R5.371 |
| | June | R1.568 | 1.463 | R0.193 | R1.554 | 0.264 | 0.173 | 0.007 | R5.222 |
| | July | R1.232 | 1.502 | R0.200 | R1.565 | 0.241 | 0.224 | 0.007 | R4.972 |
| | August | R1.630 | 1.564 | R0.196 | R1.588 | R0.225 | 0.261 | 0.008 | R5.472 |
| | September | R1.445 | 1.473 | R0.190 | R1.534 | 0.201 | 0.235 | 0.007 | R5.084 |
| | October | R1.717 | R1.540 | R0.202 | R1.595 | R0.213 | R0.225 | 0.008 | R5.501 |
| | November | R1.528 | 1.484 | 0.192 | R1.611 | R0.237 | 0.207 | 0.008 | R5.267 |
| | December | R1.363 | 1.525 | R0.199 | R1.651 | R0.240 | R0.224 | 0.009 | R5.212 |
| | **TOTAL** | **R17.406** | **R18.024** | **R2.384** | **R19.191** | **R2.957** | **R2.750** | **R0.089** | **R62.803** |

Totals may not equal sum of components due to independent rounding.
[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes lease condensate.
[3]Natural gas plant liquids.
[4]Includes industrial and utility production of hydropower.
[5]Includes geothermal power and electricity produced from wood and waste.
R = Revised data.
*Source:* • Energy Information Administration calculations based on data reported elsewhere in this publication.

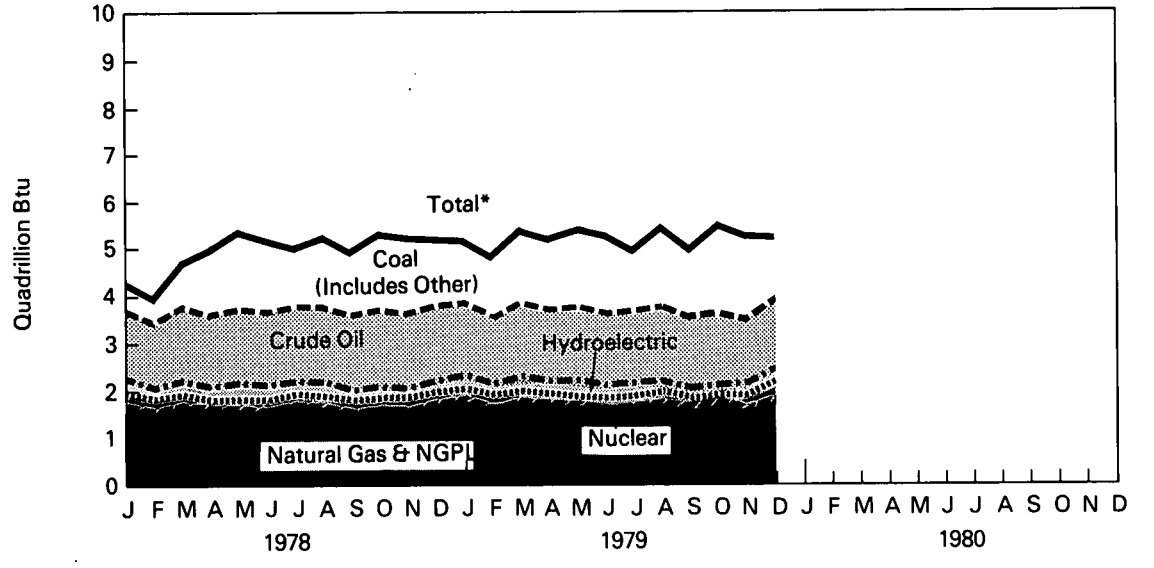
# Executive Summary

## Energy Production (Primary Energy Type)

Yearly




Monthly




*Btu equivalents for all fuels are cumulated to create total.

# Executive Summary

## Consumption of Energy by Primary Energy Type

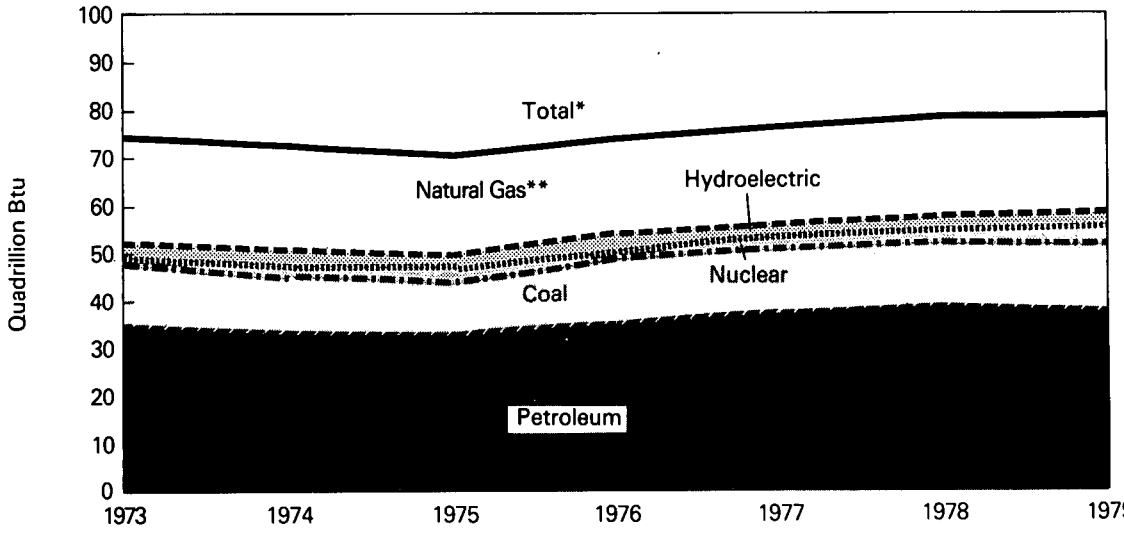
| | | Coal[1] | Natural Gas (dry) | Petroleum | Hydroelectric Power[2] | Nuclear Electric Power | Net Imports of Coal Coke[3] | Other[4] | Total Energy Consumed | Yearly Cumulative Energy Consumed |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Quadrillion ($10^{15}$) Btu | | | | | |
| **1973** | **TOTAL** | **13.300** | **22.512** | **R34.840** | **R3.010** | **0.910** | **(0.008)** | **0.046** | **R74.609** | |
| **1974** | **TOTAL** | **12.876** | **21.732** | **R33.455** | **R3.309** | **1.272** | **0.059** | **0.056** | **R72.759** | |
| **1975** | **TOTAL** | **12.823** | **19.948** | **R32.731** | **R3.219** | **1.900** | **0.014** | **0.072** | **R70.707** | |
| **1976** | **TOTAL** | **R13.732** | **20.345** | **R35.175** | **R3.066** | **2.111** | **0.000** | **0.081** | **R74.509** | |
| **1977** | **TOTAL** | **R13.965** | **19.931** | **37.176** | **2.519** | **2.702** | **0.015** | **0.082** | **R76.390** | |
| **1978** | January | R1.203 | R2.427 | R3.379 | R0.282 | 0.278 | 0.001 | 0.007 | R7.579 | R7.579 |
| | February | R1.007 | R2.180 | R3.230 | R0.251 | 0.235 | 0.001 | 0.006 | R6.910 | R14.488 |
| | March | R0.959 | R1.954 | R3.362 | R0.278 | 0.242 | 0.005 | 0.005 | R6.806 | R21.294 |
| | April | R1.025 | R1.568 | R2.938 | R0.284 | 0.189 | 0.012 | 0.004 | R6.022 | R27.316 |
| | May | R1.094 | R1.406 | R3.119 | R0.321 | 0.220 | 0.025 | 0.004 | R6.189 | R33.505 |
| | June | R1.169 | R1.273 | R3.023 | R0.282 | 0.239 | 0.009 | 0.005 | R6.000 | R39.505 |
| | July | R1.245 | R1.358 | R3.017 | R0.275 | 0.269 | 0.015 | 0.005 | R6.184 | R45.689 |
| | August | R1.286 | R1.309 | R3.189 | R0.251 | 0.276 | 0.013 | 0.006 | R6.331 | R52.020 |
| | September | R1.218 | R1.258 | R2.973 | R0.241 | 0.239 | 0.012 | 0.007 | R5.947 | R57.968 |
| | October | R1.174 | R1.467 | R3.151 | R0.223 | 0.248 | 0.015 | 0.005 | R6.283 | R64.251 |
| | November | R1.177 | R1.690 | R3.172 | R0.228 | 0.268 | 0.013 | 0.006 | R6.552 | R70.804 |
| | December | R1.289 | R2.108 | R3.412 | R0.251 | 0.274 | 0.009 | 0.007 | R7.350 | R78.154 |
| | **TOTAL** | **R13.846** | **R20.000** | **R37.965** | **R3.168** | **2.977** | **0.131** | **0.068** | **R78.154** | |
| **1979** | January | R1.396 | R2.417 | R3.531 | R0.282 | 0.299 | 0.004 | 0.007 | R7.936 | R7.936 |
| | February | R1.207 | R2.190 | R3.269 | R0.241 | 0.279 | 0.003 | 0.006 | R7.194 | R15.130 |
| | March | R1.216 | R1.869 | R3.282 | R0.291 | 0.262 | 0.002 | 0.008 | R6.929 | R22.059 |
| | April | R1.144 | R1.571 | R2.866 | R0.285 | 0.198 | 0.005 | 0.007 | R6.077 | R28.136 |
| | May | R1.197 | R1.395 | R3.028 | R0.323 | 0.162 | 0.011 | 0.007 | R6.124 | R34.259 |
| | June | R1.242 | R1.288 | R2.926 | R0.281 | 0.173 | 0.010 | 0.007 | R5.927 | R40.186 |
| | July | R1.339 | R1.304 | R2.893 | R0.258 | 0.224 | 0.008 | 0.007 | R6.034 | R46.220 |
| | August | R1.347 | R1.304 | R3.093 | R0.242 | 0.261 | 0.009 | 0.008 | R6.265 | R52.485 |
| | September | R1.202 | R1.294 | R2.860 | R0.218 | 0.235 | 0.008 | 0.007 | R5.824 | R58.309 |
| | October | R1.229 | R1.523 | R3.101 | R0.231 | R0.225 | 0.004 | 0.008 | R6.321 | R64.630 |
| | November | R1.228 | R1.725 | R2.993 | R0.253 | 0.207 | 0.000 | 0.008 | R6.414 | R71.044 |
| | December | R1.333 | R1.977 | R3.175 | R0.258 | R0.224 | R0.002 | 0.009 | R6.978 | R78.022 |
| | **TOTAL** | **R15.079** | **R19.858** | **R37.017** | **R3.163** | **R2.750** | **R0.066** | **R0.089** | **R78.022** | |

Totals may not equal sum of components due to independent rounding.
[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes industrial and utility production, and net imports of electricity.
[3]Parenthesis indicate exports are greater than imports.
[4]Includes geothermal power and electricity produced from wood and waste.
R = Revised data.
*Source:* • Energy Information Administration calculations based on data reported elsewhere in this publication.

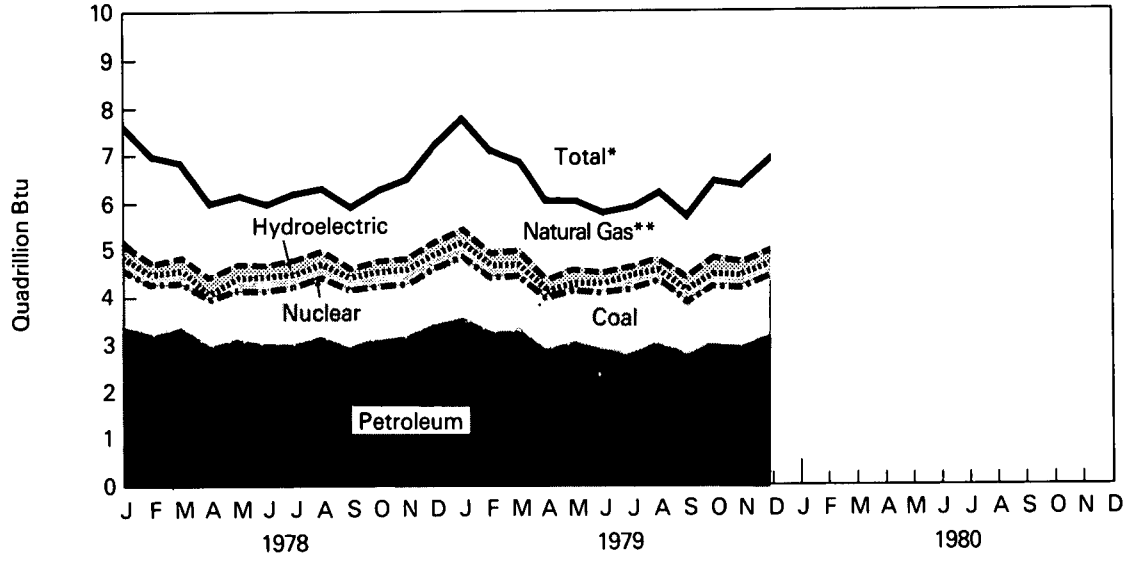
# Executive Summary

## Energy Consumption (Primary Energy Type)

Yearly




Monthly




*Btu equivalents for all fuels were cumulated to create total.
**Includes net imports of coal coke and other.

# Executive Summary

## Consumption of Energy by End-Use Sector[1] *

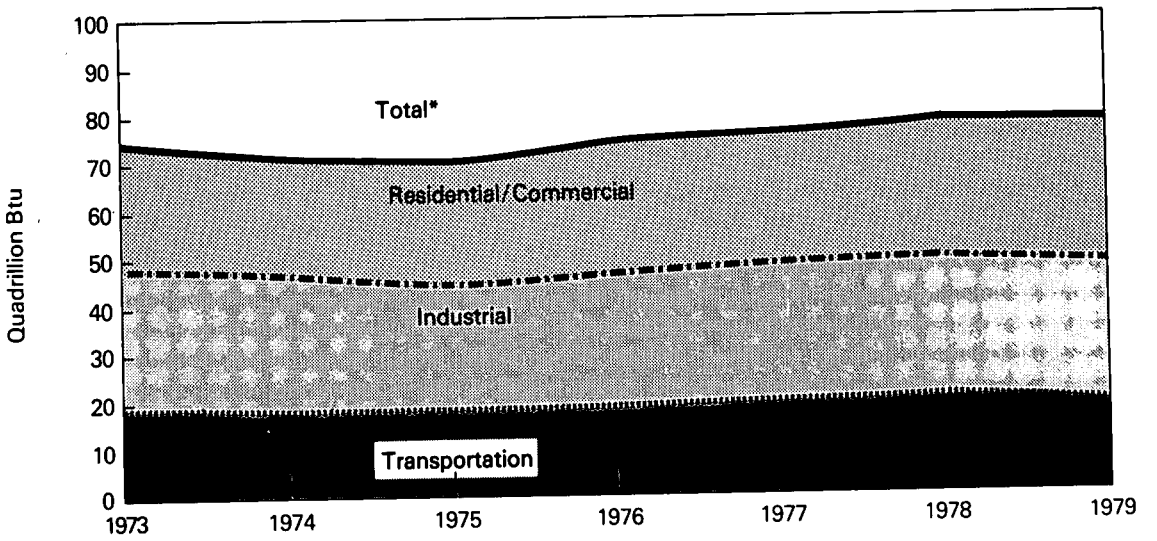
| | | Residential and Commercial | Industrial | Transportation | Total Energy Consumed |
|---|---|---|---|---|---|
| | | Quadrillion ($10^{15}$) Btu | | | |
| **1973** | **TOTAL** | **R27.559** | **R28.518** | **R18.526** | **R74.609** |
| **1974** | **TOTAL** | **R26.800** | **R27.895** | **R18.058** | **R72.759** |
| **1975** | **TOTAL** | **R26.743** | **R25.763** | **R18.195** | **R70.707** |
| **1976** | **TOTAL** | **R27.933** | **R27.495** | **R19.074** | **R74.509** |
| **1977** | **TOTAL** | **R28.268** | **R28.362** | **R19.753** | **R76.390** |
| **1978** | January | R3.351 | R2.530 | R1.698 | R7.579 |
| | February | R3.055 | R2.236 | R1.618 | R6.910 |
| | March | R2.767 | R2.244 | R1.793 | R6.806 |
| | April | R2.157 | R2.230 | R1.635 | R6.022 |
| | May | R2.049 | R2.378 | R1.761 | R6.189 |
| | June | R1.969 | R2.307 | R1.724 | R6.000 |
| | July | R2.129 | R2.350 | R1.705 | R6.184 |
| | August | R2.143 | R2.391 | R1.797 | R6.331 |
| | September | R1.994 | R2.313 | R1.640 | R5.947 |
| | October | R2.068 | R2.488 | R1.727 | R6.283 |
| | November | R2.321 | R2.508 | R1.724 | R6.552 |
| | December | R2.939 | R2.607 | R1.803 | R7.350 |
| | **TOTAL** | **R28.941** | **R28.581** | **R20.625** | **R78.154** |
| **1979** | January | R3.663 | R2.510 | R1.761 | R7.936 |
| | February | R3.230 | R2.296 | R1.668 | R7.194 |
| | March | R2.764 | R2.415 | R1.749 | R6.929 |
| | April | R2.217 | R2.274 | R1.585 | R6.077 |
| | May | R2.064 | R2.389 | R1.670 | R6.124 |
| | June | R1.964 | R2.358 | R1.604 | R5.927 |
| | July | R2.058 | R2.383 | R1.592 | R6.034 |
| | August | R2.166 | R2.410 | R1.688 | R6.265 |
| | September | R1.986 | R2.277 | R1.560 | R5.824 |
| | October | R2.140 | R2.526 | R1.655 | R6.321 |
| | November | R2.381 | R2.457 | R1.576 | R6.414 |
| | December | R2.869 | R2.450 | R1.659 | R6.978 |
| | **TOTAL** | **R29.503** | **R28.746** | **R19.766** | **R78.022** |

Totals may not equal sum of components due to independent rounding.
[1]See Explanatory Note 5 for definitions of the Residential and Commercial, Industrial, and Transportation sectors. The methodology used for sector calculations is provided in the Notes and Sources on page 26.
R = Revised data.
*Source:* • See Notes and Sources on page 26.

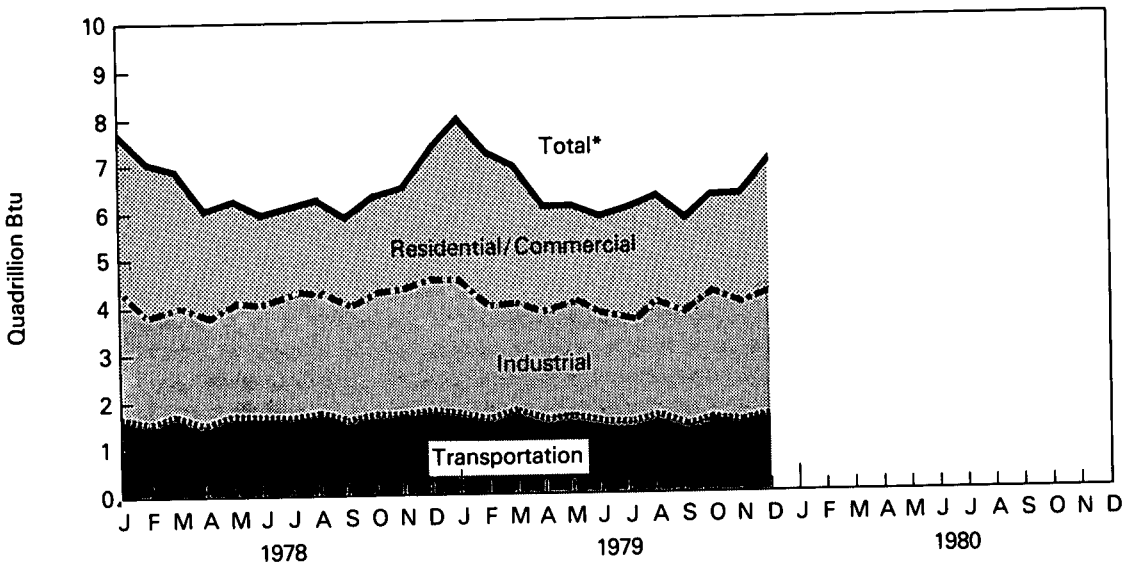
# Executive Summary

## Energy Consumption (End-Use Sector)

Yearly




Monthly




*Btu consumption for all sectors was cumulated to create total.

# Executive Summary

## Net Imports of Energy[1]

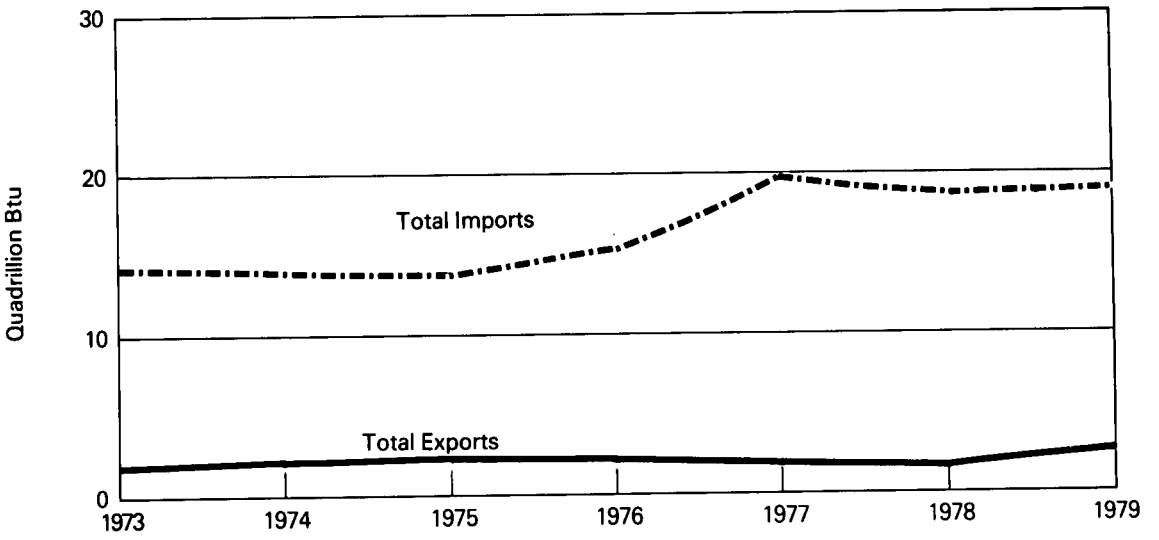
| | | Coal[2] | Crude Oil[3] | Refined Petroleum Products[4] | Natural Gas (Dry) | Electricity[5] | Coal Coke | Net Imports |
|---|---|---|---|---|---|---|---|---|
| | | | | Quadrillion ($10^{15}$) Btu | | | | |
| **1973** | **TOTAL** | **(1.443)** | **6.883** | **6.097** | **0.981** | **0.148** | **(0.008)** | **12.659** |
| **1974** | **TOTAL** | **(1.585)** | **7.389** | **5.273** | **0.907** | **0.133** | **0.059** | **12.175** |
| **1975** | **TOTAL** | **(1.766)** | **R8.708** | **R3.800** | **0.904** | **0.064** | **0.014** | **11.725** |
| **1976** | **TOTAL** | **(1.590)** | **R11.221** | **3.982** | **0.922** | **0.089** | **0.000** | **R14.625** |
| **1977** | **TOTAL** | **(1.424)** | **13.921** | **R4.321** | **0.981** | **0.182** | **0.015** | **17.995** |
| **1978** | January | (0.021) | R1.105 | R0.358 | R0.084 | R0.017 | 0.001 | R1.544 |
| | February | (0.012) | R0.935 | R0.360 | 0.074 | R0.016 | 0.001 | R1.374 |
| | March | (0.004) | R1.098 | R0.394 | R0.084 | R0.017 | 0.005 | R1.594 |
| | April | (0.060) | R0.963 | R0.335 | 0.077 | R0.017 | 0.012 | R1.345 |
| | May | (0.113) | R1.008 | R0.299 | 0.071 | R0.017 | 0.025 | R1.308 |
| | June | (0.139) | R1.092 | R0.257 | 0.066 | R0.017 | 0.009 | R1.302 |
| | July | (0.089) | R1.114 | R0.325 | 0.069 | R0.017 | 0.015 | R1.451 |
| | August | (0.092) | R1.125 | R0.302 | 0.071 | R0.017 | 0.013 | R1.436 |
| | September | (0.088) | R1.184 | R0.315 | 0.069 | R0.017 | 0.012 | R1.508 |
| | October | (0.127) | R1.137 | R0.282 | 0.079 | R0.017 | 0.015 | R1.404 |
| | November | (0.160) | R1.151 | R0.328 | R0.091 | R0.017 | 0.013 | R1.439 |
| | December | (0.118) | R1.213 | R0.378 | 0.106 | R0.017 | 0.009 | R1.605 |
| | **TOTAL** | **(1.023)** | **R13.125** | **R3.932** | **R0.941** | **R0.206** | **0.131** | **R17.311** |
| **1979** | January | (0.093) | R1.185 | R0.369 | 0.098 | R0.017 | 0.004 | R1.581 |
| | February | (0.067) | R0.997 | R0.312 | R0.093 | R0.016 | 0.003 | R1.354 |
| | March | (0.122) | R1.067 | R0.398 | 0.116 | R0.017 | 0.002 | R1.479 |
| | April | (0.138) | R1.019 | R0.257 | 0.109 | R0.017 | 0.005 | R1.269 |
| | May | (0.165) | R1.082 | R0.284 | R0.096 | R0.017 | 0.011 | R1.326 |
| | June | (0.156) | R1.106 | R0.260 | 0.099 | R0.017 | 0.010 | R1.336 |
| | July | (0.168) | R1.064 | R0.283 | 0.105 | R0.017 | 0.008 | R1.310 |
| | August | (0.160) | R1.166 | R0.271 | R0.091 | R0.017 | 0.009 | R1.395 |
| | September | (0.134) | R1.070 | R0.244 | R0.095 | R0.017 | 0.008 | R1.299 |
| | October | R(0.197) | R1.188 | R0.283 | 0.110 | R0.017 | 0.004 | R1.405 |
| | November | (0.163) | R1.021 | R0.281 | R0.106 | R0.017 | 0.000 | R1.262 |
| | December | R(0.166) | R1.069 | R0.362 | 0.099 | R0.017 | 0.002 | R1.384 |
| | **TOTAL** | **R(1.729)** | **R13.036** | **R3.604** | **R1.217** | **R0.206** | **0.066** | **R16.400** |

Totals may not equal sum of components due to independent rounding.
[1]Net imports = imports minus exports. Parentheses indicate exports are greater than imports.
[2]Includes bituminous coal, lignite, and anthracite.
[3]Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve.
[4]Includes refined petroleum products, unfinished oils, natural gasoline, and plant condensate.
[5]Only yearly totals are available for electricity imports and exports data. Figures shown are estimates derived by dividing the yearly net import total by the number of days in the year and multiplying by the number of days in the month. Annual data for 1977 are used in estimating 1978 and 1979 data until actual annual data become available.
R = Revised data.
*Source:* • Energy Information Administration calculations based on data reported elsewhere in this publication.

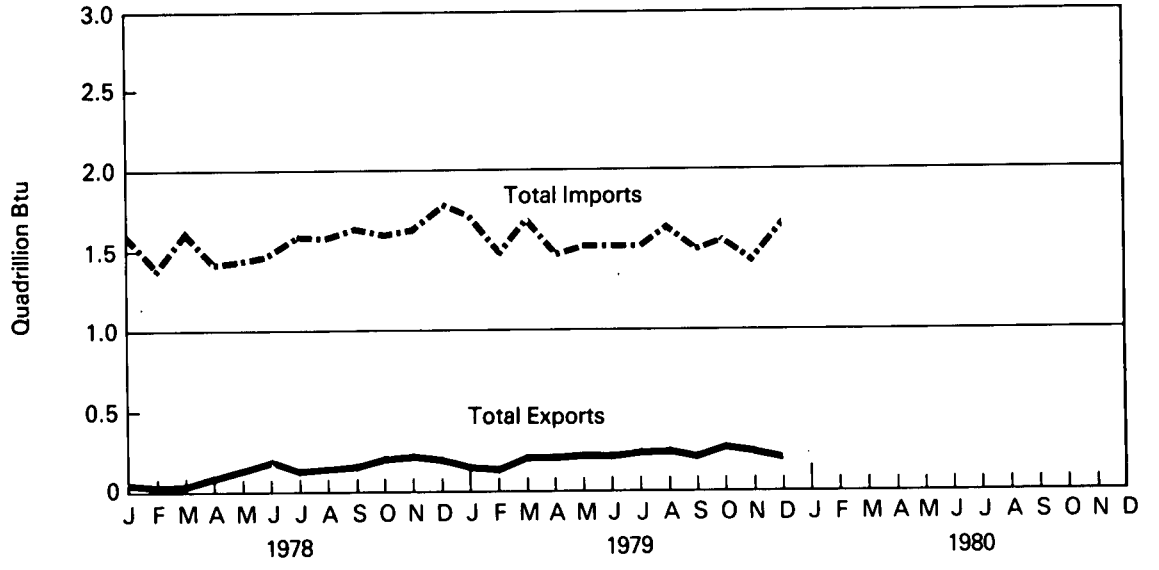
# Executive Summary

## Energy Imports and Exports

Yearly




Monthly



# Executive Summary

## Merchandise Trade Value[1]

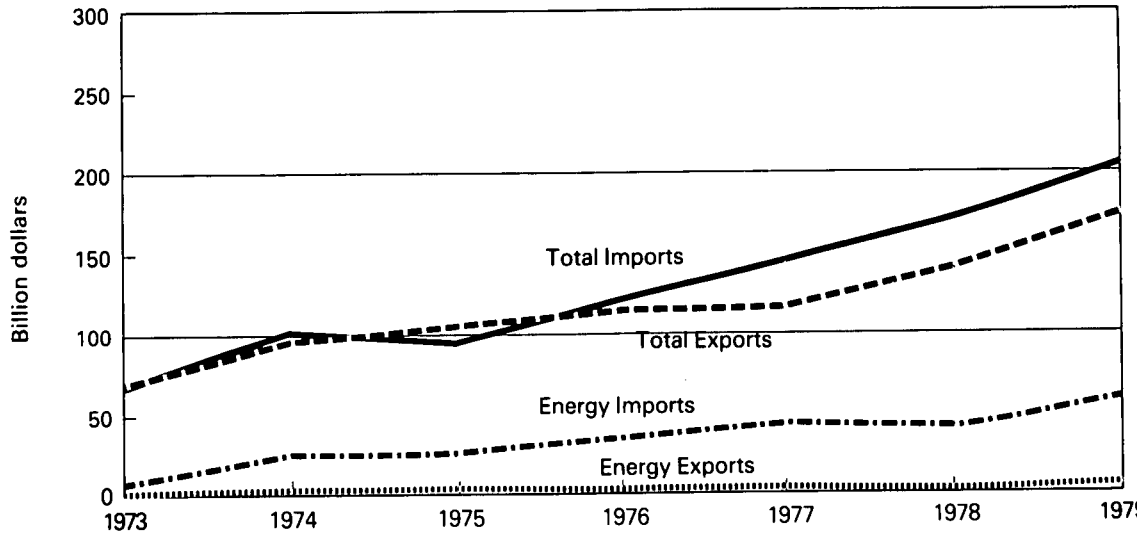
| | | Exports | | | | Imports | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Energy | Manufactured Products | Agricultural, Chemical, and Other | Total | Energy | Manufactured Products | Agricultural, Chemical, and Other | Total |
| | | Million dollars | | | | | | | |
| **1973** | **TOTAL** | **1,671** | **38,982** | **29,643** | **70,296** | **8,173** | **42,537** | **19,122** | **69,832** |
| **1974** | **TOTAL** | **3,444** | **54,704** | **39,085** | **97,233** | **25,454** | **51,205** | **23,989** | **100,648** |
| **1975** | **TOTAL** | **4,470** | **62,260** | **39,832** | **106,562** | **26,476** | **47,384** | **22,714** | **96,574** |
| **1976** | **TOTAL** | **4,226** | **67,282** | **42,159** | **113,667** | **33,996** | **60,004** | **27,010** | **121,010** |
| **1977** | **TOTAL** | **4,184** | **69,339** | **45,484** | **119,007** | **44,537** | **71,583** | **31,550** | **147,670** |
| **1978** | January | 189 | 5,346 | 3,670 | 9,205 | 3,422 | 6,604 | 2,692 | 12,718 |
| | February | 141 | 5,472 | 3,719 | 9,332 | 3,502 | 7,027 | 2,722 | 13,252 |
| | March | 165 | 7,082 | 4,578 | 11,826 | 3,431 | 7,896 | 3,221 | 14,548 |
| | April | 285 | 6,938 | 4,632 | 11,854 | 3,514 | 7,908 | 3,065 | 14,486 |
| | May | 364 | 7,130 | 4,741 | 12,234 | 3,234 | 7,840 | 3,126 | 14,199 |
| | June | 426 | 7,016 | 4,821 | 12,264 | 3,472 | 8,086 | 2,957 | 14,514 |
| | July | 322 | 6,198 | 4,251 | 10,770 | 3,377 | 8,311 | 3,014 | 14,702 |
| | August | 335 | 6,471 | 4,612 | 11,418 | 3,675 | 7,553 | 2,793 | 14,022 |
| | September | 348 | 7,165 | 4,992 | 12,505 | 3,699 | 7,800 | 2,919 | 14,418 |
| | October | 422 | 7,659 | 4,843 | 12,924 | 3,492 | 8,466 | 3,161 | 15,118 |
| | November | 466 | 7,554 | 5,391 | 13,411 | 3,536 | 8,405 | 3,107 | 15,049 |
| | December | 418 | 7,819 | 5,061 | 13,298 | 3,743 | 7,990 | 3,220 | 14,952 |
| | **TOTAL** | **3,881** | **81,850** | **55,310** | **141,041** | **42,096** | **93,887** | **35,996** | **171,979** |
| **1979** | January | 350 | 7,035 | 4,965 | 12,349 | 4,228 | 8,391 | 3,227 | 15,846 |
| | February | 292 | 7,446 | 4,966 | 12,705 | 3,525 | 7,480 | 2,771 | 13,776 |
| | March | 436 | 8,842 | 6,020 | 15,298 | 3,948 | 8,432 | 3,385 | 15,765 |
| | April | 467 | 8,038 | 5,506 | 14,011 | 4,241 | 8,550 | 3,381 | 16,172 |
| | May | 471 | 8,474 | 5,584 | 14,529 | 4,166 | 8,690 | 3,655 | 16,512 |
| | June | 500 | 8,527 | 6,054 | 15,081 | 4,528 | 9,247 | 3,661 | 17,436 |
| | July | 534 | 7,879 | 6,077 | 14,490 | 5,075 | 8,778 | 3,262 | 17,115 |
| | August | 496 | 7,981 | 6,237 | 14,714 | 5,460 | 8,988 | 3,482 | 17,931 |
| | September | 438 | 8,086 | 6,142 | 14,666 | 6,084 | 8,539 | 3,452 | 18,076 |
| | October | 567 | 9,072 | 7,352 | 16,991 | 6,559 | 9,255 | 3,430 | 19,243 |
| | November | 522 | 8,849 | 7,577 | 16,948 | 5,411 | 9,363 | 3,884 | 18,658 |
| | December | 543 | 9,030 | 7,039 | 16,612 | 6,836 | 9,037 | 3,924 | 19,797 |
| | **TOTAL** | **5,616** | **99,259** | **73,519** | **178,394** | **60,061** | **104,750** | **41,514** | **206,327** |
| **1980** | January | 481 | 8,837 | 6,696 | 16,015 | 6,559 | 9,779 | 3,801 | 20,139 |

Totals may not equal sum of components due to independent rounding.
[1]Data presented are free alongside ship (f.a.s.) basis and are unadjusted for seasonality and working days. Beginning January 1979, the data excludes U.S. Department of Defense Military Assistance Program Grant-Aid Shipments. Commodity categories shown above include groups of BOC sections as follows: Energy—BOC section 3. (Mineral fuels, lubricants, and related materials). Manufactured products—BOC sections 6. (Manufactured goods classified chiefly by material), 7. (Machinery and transport equipment), and 8. (Miscellaneous manufactured articles, not elsewhere classified). Agricultural, chemical, and other—BOC sections 0. (Food and live animals), 1. (Beverages and tobacco), 2. (Crude material inedible, except fuels), 4. (Animal and vegetable fats and oils), 5. (Chemicals), and 9. (Commodities and transactions not classified according to kind).
R = Revised data.
*Source:* • U.S. Department of Commerce, Bureau of the Census (BOC) publication FT 900, *Summary of U.S. Export and Import Merchandise Trade.*

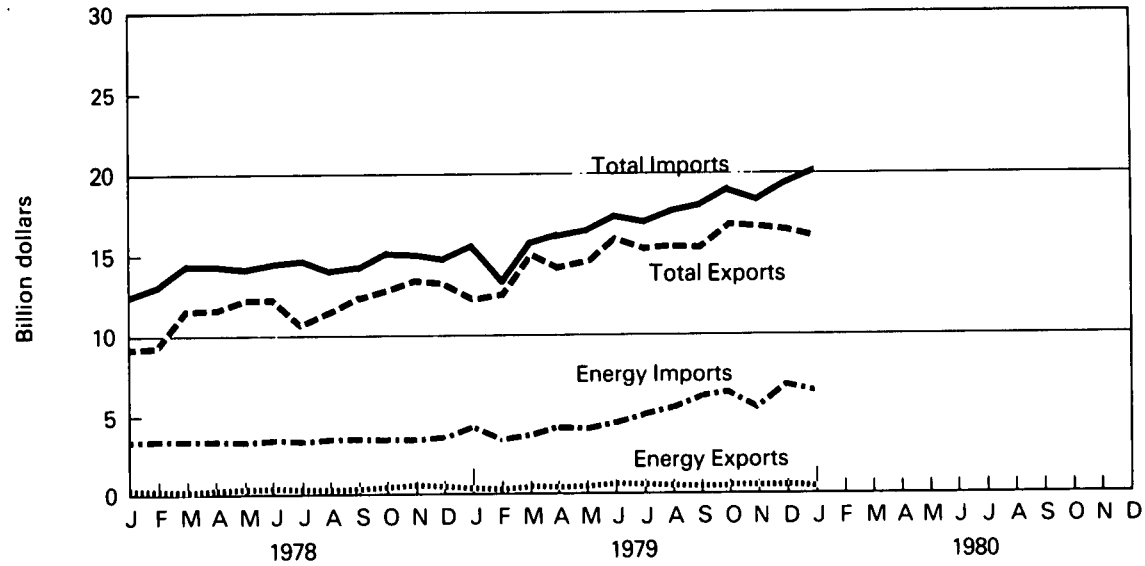
# Executive Summary

## Merchandise Trade Value

Yearly




Monthly



# Executive Summary

## Heating Degree-Days[1]

| Petroleum Administration For Defense (PAD) Districts | February 4 through March 2 | | | | | July 1 through March 2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1979[2] | | Normal (1941–70)[2] | | 1979–80 | 1978–79[2] | | Normal (1941–70)[2] | |
| PAD District I | 887.3 | 969.2 | (−8.4) | 790.1 | (12.3) | 3,442.1 | 3,639.7 | (−5.4) | 3,474.7 | (−0.9) |
| New England Conn., Maine, Mass., N.H., R.I., Vt. | 1,107.2 | 1,212.6 | (−8.7) | 1,023.8 | (8.1) | 4,481.0 | 4,812.7 | (−6.9) | 4,551.6 | (−1.6) |
| Middle Atlantic Del., Md., N.J., N.Y., Pa. | 1,031.4 | 1,174.9 | (−12.2) | 931.8 | (10.7) | 4,023.4 | 4,319.0 | (−6.8) | 4,074.1 | (−1.2) |
| Lower Atlantic Fla., Ga., N.C., S.C., Va., W. Va. | 574.1 | 552.8 | (3.9) | 474.2 | (21.1) | 2,111.8 | 2,102.9 | (0.4) | 2,100.5 | (0.5) |
| PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc. | 1,083.0 | 1,216.4 | (−11.0) | 994.6 | (8.9) | 4,624.0 | 5,122.3 | (−9.7) | 4,581.4 | (0.9) |
| PAD District III Ala., Ark., La., Miss., N. Mex., Tex. | 478.9 | 465.7 | (2.8) | 414.1 | (15.6) | 1,971.9 | 2,129.6 | (−7.4) | 1,911.2 | (3.2) |
| PAD District IV Colo., Idaho, Mont., Utah, Wyo. | 848.7 | 919.2 | (−7.7) | 919.7 | (−7.7) | 4,490.1 | 5,408.8 | (−17.0) | 4,705.7 | (−4.6) |
| PAD District V Ariz., Calif., Nev., Oreg., Wash. | 276.2 | 388.9 | (−29.0) | 392.4 | (−29.6) | 1,560.0 | 2,139.0 | (−27.1) | 2,047.1 | (−23.8) |
| **U.S. AVERAGE** | **815.5** | **906.8** | **(−10.1)** | **759.3** | **(7.4)** | **3,414.1** | **3,776.8** | **(−9.6)** | **3,479.8** | **(−1.9)** |

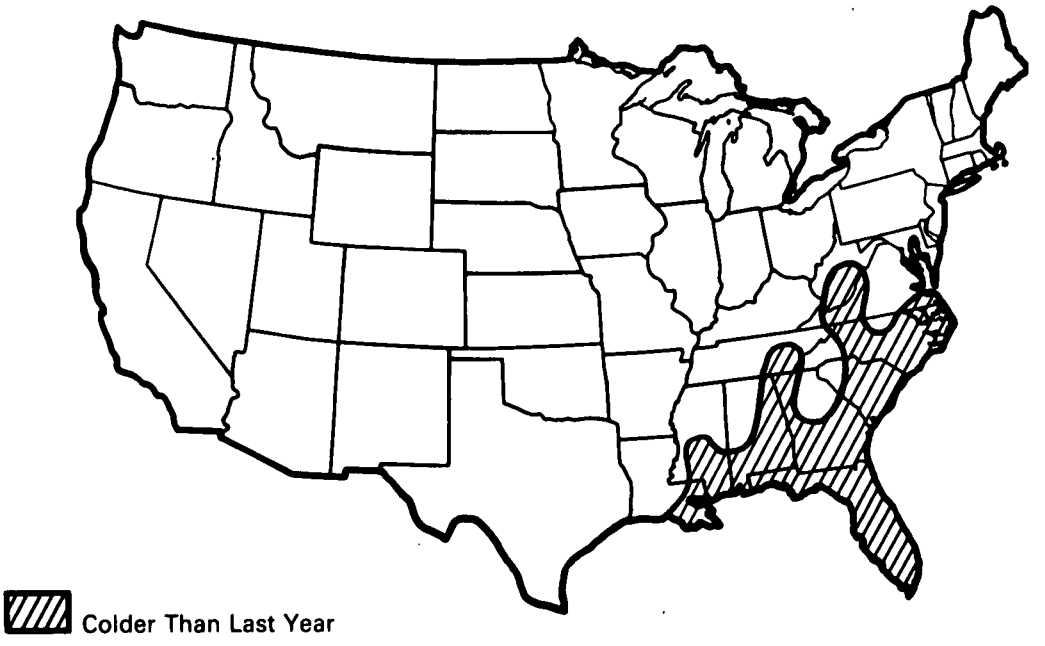
[1]See Explanatory Note 6 for explanation of degree-days.
[2]Percentage change in parentheses.

# Executive Summary

## Heating Degree-Days

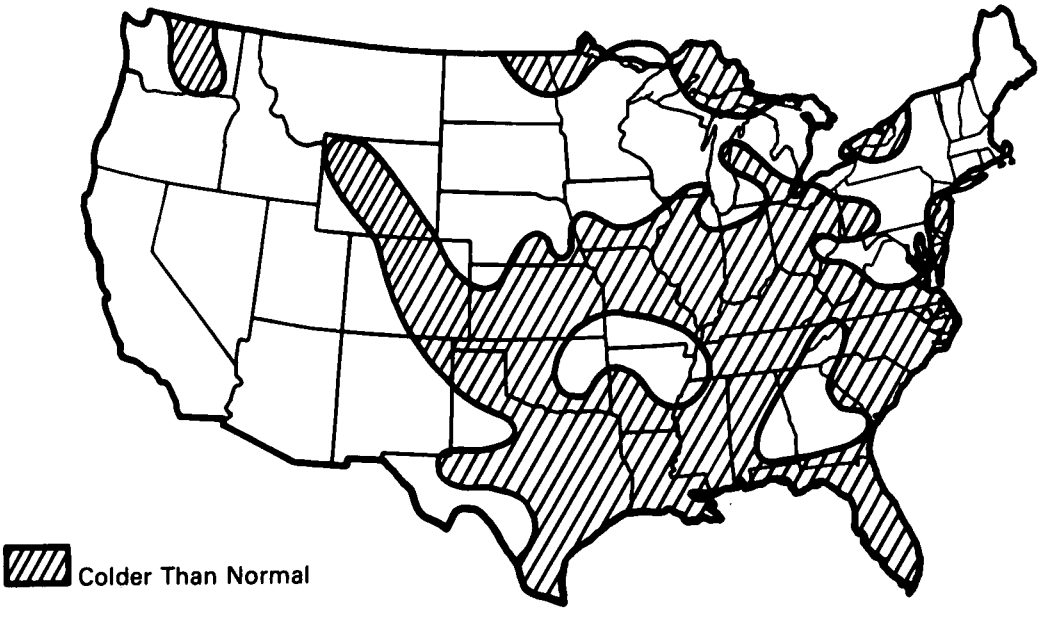
**Heating Degree-Days Accumulated from July 1 through March 2**

Departure from 1978–79



Colder Than Last Year

Departure from Normal (1941–70)



Colder Than Normal

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*Source:* • Department of Commerce — NOAA.

# Executive Summary

## Energy Indicators—

| | | Energy Consumption per GNP Dollar | | | | U.S. Dependence on Petroleum Imports[3] | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Gross National Product (Annual rate) | | Direct Imports | | | |
| | | Energy Consumption per GNP Dollar[1] | Yearly Rate of Energy Consumption | Current Dollars | 1972 Dollars[2] | From Arab/OPEC Countries | From OPEC Countries | Total All Countries | Domestic Petroleum Products Supplied |
| ANNUAL RATE | | | Quadrillion Btu | Trillion dollars | | Million barrels per day | | | |
| 1973 | AVERAGE | 60.4 | R74.609 | 1.307 | 1.235 | 0.91 | 2.99 | 6.26 | 17.31 |
| 1974 | AVERAGE | 59.7 | R72.759 | 1.413 | 1.218 | 0.75 | 3.28 | 6.11 | 16.65 |
| 1975 | AVERAGE | 58.8 | R70.707 | 1.529 | 1.202 | 1.38 | 3.60 | 6.06 | 16.32 |
| 1976 | AVERAGE | 58.5 | R74.509 | 1.702 | 1.273 | 2.42 | 5.07 | 7.31 | 17.46 |
| 1977 | AVERAGE | R56.0 | R76.390 | 1.900 | 1.341 | 3.18 | 6.19 | 8.81 | 18.43 |
| 1978 | 1st Qtr | R63.1 | R86.363 | 2.011 | 1.368 | 2.90 | 5.75 | R8.32 | 20.08 |
| | 2nd Qtr | R52.4 | R73.044 | 2.104 | 1.395 | 2.76 | 5.31 | 7.79 | 18.08 |
| | 3rd Qtr | R52.1 | R73.246 | 2.160 | 1.407 | 2.98 | 5.82 | 8.53 | 18.08 |
| | 4th Qtr | R56.1 | R80.082 | 2.235 | 1.427 | 3.21 | 6.12 | 8.80 | 19.17 |
| | AVERAGE | R55.9 | R78.154 | 2.128 | 1.399 | 2.96 | 5.75 | 8.36 | 18.85 |
| 1979 | 1st Qtr | R62.5 | R89.462 | 2.292 | 1.431 | 3.23 | 5.81 | 8.73 | 20.30 |
| | 2nd Qtr | R51.1 | R72.711 | 2.330 | 1.422 | 3.14 | 5.38 | 8.01 | 17.56 |
| | 3rd Qtr | R50.2 | R71.901 | 2.397 | 1.433 | R2.94 | R5.55 | R8.09 | R17.42 |
| | 4th Qtr | 54.4 | 78.209 | 2.456 | 1.438 | 2.78 | 5.39 | 8.30 | 18.25 |
| | AVERAGE | 54.5 | 78.022 | 2.369 | 1.431 | 3.02 | 5.53 | 8.28 | 18.38 |

Note: Revisions on this page incorporate corrections to Gross National Product Current Dollars.
[1]Thousand Btu per 1972 constant dollar.
[2]Current dollars converted to 1972 constant dollars by the formula:

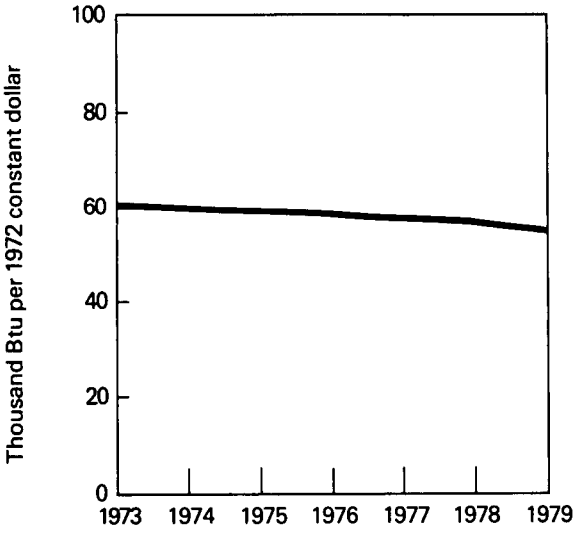
$$\text{Constant 1972 dollars} = \frac{\text{Current dollars in year N}}{\text{Gross National Product implicit price deflator in year N}} \times 100$$

The Gross National Product deflators (1972 = 100) were determined by the Department of Commerce, Bureau of Economic Analysis. GNP rates are from the Business Conditions Digest published by the Bureau of Economic Analysis.
[3]Beginning in October 1977 Strategic Petroleum Reserve imports are included.
R = Revised data.

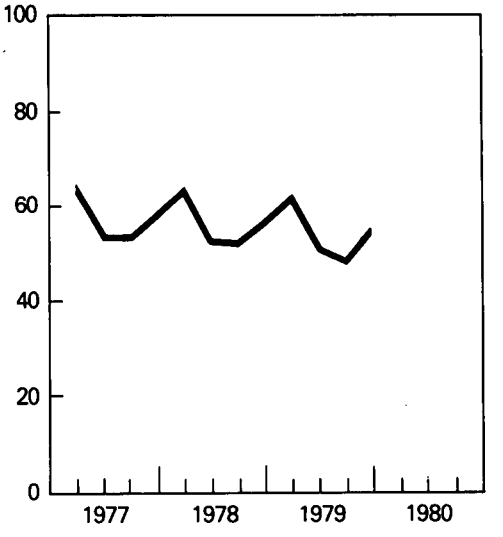
# Executive Summary

## Energy Consumption per GNP Dollar

Yearly

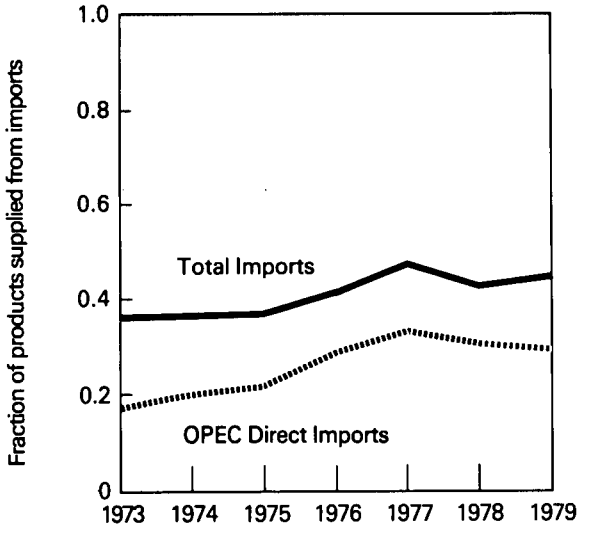



Quarterly

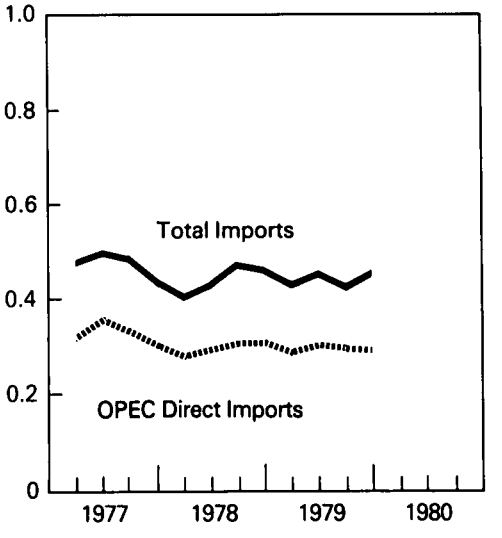



## U.S. Dependence on Petroleum Imports

Yearly




Quarterly

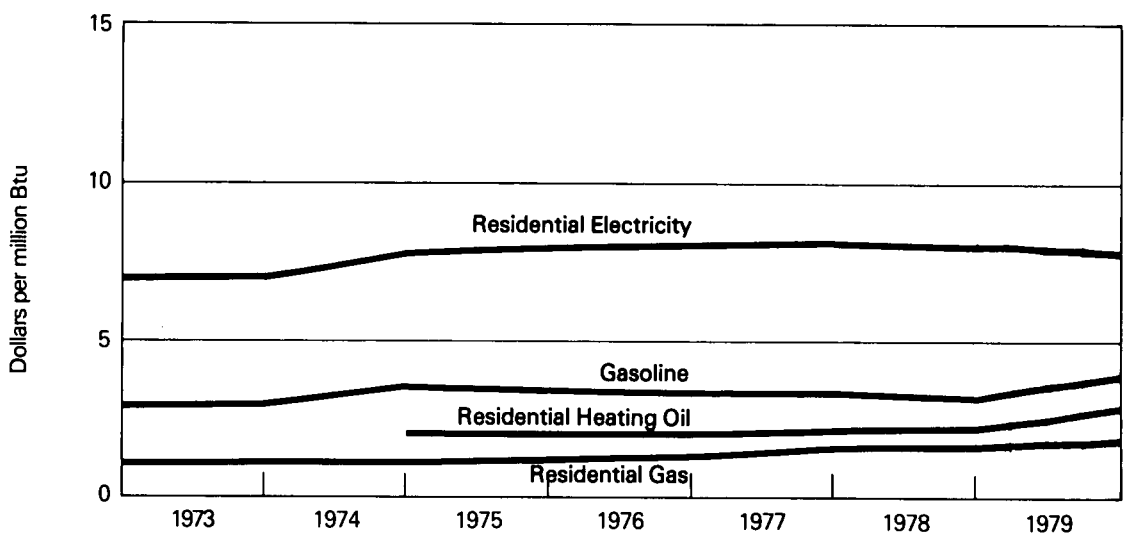


# Executive Summary

## Energy Indicator—Cost of Fuels to End Users (1972 Dollars)

| | | Leaded Regular Motor Gasoline | | Residential Heating Oil | | Residential Natural Gas | | Residential Electricity | |
|---|---|---|---|---|---|---|---|---|---|
| | | cent/gal | $/MMBtu | cent/gal | $/MMBtu | cent/Mcf | $/MMBtu | cent/kWh | $/MMBtu |
| **1973** | **AVERAGE** | **36.5** | **2.92** | **NA** | **NA** | **121.2** | **1.19** | **2.39** | **7.00** |
| **1974** | **AVERAGE** | **44.8** | **3.59** | **29.4** | **2.12** | **121.4** | **1.19** | **2.63** | **7.71** |
| **1975** | **AVERAGE** | **43.7** | **3.50** | **29.3** | **2.11** | **132.8** | **1.30** | **2.73** | **8.00** |
| **1976** | **AVERAGE** | **43.1** | **3.46** | **30.2** | **2.18** | **145.4** | **1.43** | **2.74** | **8.03** |
| **1977** | **AVERAGE** | **43.2** | **3.46** | **31.2** | **2.25** | **162.2** | **1.59** | **2.80** | **8.20** |
| **1978** | 1st Qtr | 41.0 | 3.28 | 32.3 | 2.33 | 155.0 | 1.58 | 2.65 | 7.76 |
| | 2nd Qtr | 40.6 | 3.25 | 31.4 | 2.26 | 169.7 | 1.73 | 2.88 | 8.44 |
| | 3rd Qtr | 41.3 | 3.31 | 30.7 | 2.21 | 196.3 | 2.00 | 2.85 | 8.35 |
| | 4th Qtr | 41.3 | 3.31 | 32.1 | 2.31 | 164.5 | 1.68 | 2.70 | 7.91 |
| | **AVERAGE** | **41.0** | **3.28** | **31.7** | **2.29** | **164.4** | **R1.62** | **2.76** | **8.10** |
| **1979** | 1st Qtr | 42.6 | 3.41 | 33.8 | 2.44 | R179.4 | R1.77 | 2.51 | 7.36 |
| | 2nd Qtr | 47.5 | 3.80 | 37.2 | 2.68 | R181.3 | R1.79 | 2.74 | 8.03 |
| | 3rd Qtr | 54.9 | 4.39 | 44.0 | 3.17 | R189.0 | R1.86 | 2.79 | 8.17 |
| | 4th Qtr | 55.6 | 4.44 | 46.4 | 3.35 | 193.1 | 1.90 | 2.64 | 7.74 |
| | **AVERAGE** | **49.8** | **3.98** | **40.8** | **2.94** | **185.3** | **1.88** | **2.66** | **7.79** |

Average Cost of Fuels to End Users (1972 constant dollars)



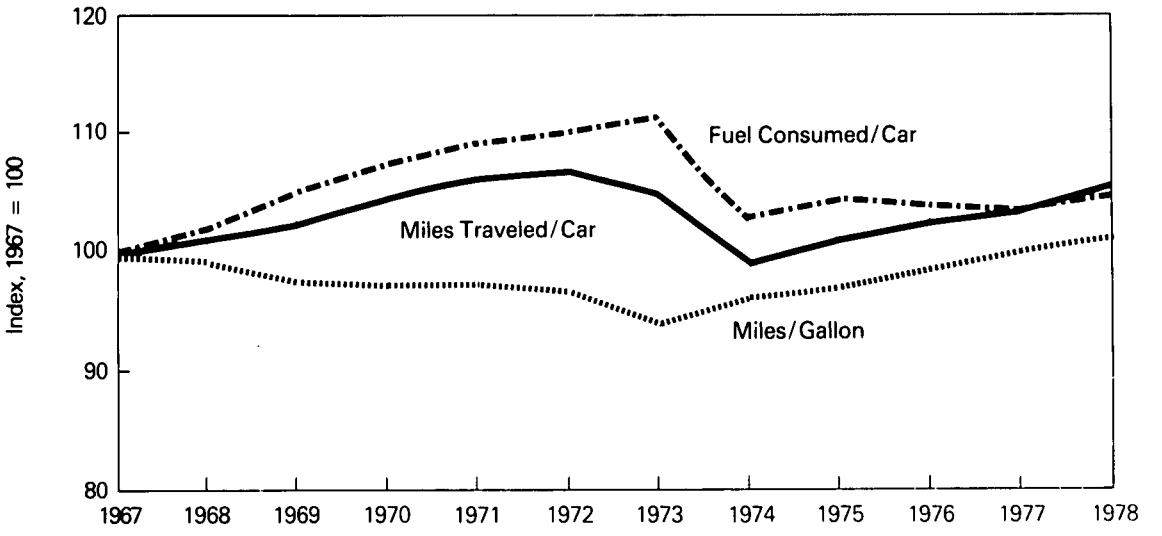

R = Revised data.
NA = Not available.
*Sources:* • Motor Gasoline—1973 through 1977, Lundberg Survey Inc.; 1978 and forward, U.S. Department of Energy Forms EIA-8 and EIA 79, "Retail Motor Fuels Service Station Survey".
- Heating Oil—1974 and 1975, Form CLC-92, "No. 2 Heating Oil Monthly Price Adjustment Report," and 1976 forward, FEA Form P112 M 1, and EIA 9, "No. 2 Heating Oil Supply/Price Monitoring Report."
- Natural Gas—1973 through 1978 annual numbers, Bureau of Mines and Energy Information Administration Form 1340 A, "Supply and Disposition of Natural Gas to Non-Producing Distributors;" and Form 1341 A, "Supply and Disposition of Natural Gas to Producers and Pipelines;" 1978 quarterly numbers, the American Gas Association, "Quarterly Report of Gas Industry Operations." 1979 quarterly numbers, Bureau of Labor Statistics.
- Electricity—FPC Form 5, "Reports of Classes A and B Privately Owned Electric Utilities."
- Deflator—The Consumer Price Index.

# Executive Summary

## Energy Indicator — U.S. Passenger Car Efficiency

| | Average Fuel Consumed per Car | | Average Miles Traveled per Car | | Average Miles Traveled per Gallon of Fuel Consumed | |
|---|---|---|---|---|---|---|
| | Gallons | Index | Miles | Index | Miles | Index |
| **1967** | **684** | **100.0** | **9,531** | **100.0** | **13.93** | **100.0** |
| **1968** | **698** | **102.0** | **9,627** | **101.0** | **13.79** | **99.0** |
| **1969** | **718** | **105.0** | **9,782** | **102.6** | **13.63** | **97.8** |
| **1970** | **735** | **107.5** | **9,978** | **104.7** | **13.57** | **97.4** |
| **1971** | **746** | **109.1** | **10,121** | **106.2** | **13.57** | **97.4** |
| **1972** | **755** | **110.4** | **10,184** | **106.9** | **13.49** | **96.8** |
| **1973** | **763** | **111.5** | **9,992** | **104.8** | **13.10** | **94.0** |
| **1974** | **704** | **102.9** | **9,448** | **99.1** | **13.43** | **96.4** |
| **1975** | **712** | **104.1** | **9,634** | **101.1** | **13.53** | **97.1** |
| **1976** | **711** | **103.9** | **9,763** | **102.4** | **13.72** | **98.5** |
| **1977** | **706** | **103.2** | **9,839** | **103.2** | **13.94** | **100.1** |
| **1978** | **715** | **104.5** | **10,046** | **105.4** | **14.06** | **100.9** |

U.S. Passenger Car Efficiency Index




*Source:* • U.S. Department of Transportation, Federal Highway Administration, Federal Highway Statistics Division, "Highway Statistics", Table VM–1.

## Energy Consumption

Domestic energy consumption in December 1979 was 7.0 quadrillion Btu, 8.8 percent higher than during a month earlier. This figure was 5.1 percent lower than the December 1978 consumption level.

The residential and commercial sector consumption was 2.9 quadrillion Btu in December 1979, 20.5 percent higher than in November and 2.4 percent lower than the amount consumed during December 1978. The residential and commercial sector consumed 41.1 percent of the total consumption for December 1979, up from the sector's 40.0 percent share in December 1978.

The industrial sector consumption was 2.4 quadrillion Btu in December 1979, down 0.3 percent from November 1979, and down 6.0 percent from the consumption level in December 1978. The industrial sector consumed 35.1 percent of the December 1979 total, as compared to the 35.5 percent share of December 1978.

The transportation sector consumption was 1.7 quadrillion Btu in December 1979, up 5.3 percent from November 1979 and down 8.0 percent from the consumption level in December 1978. This sector consumed 23.8 percent of the December 1979 total, as compared to a 24.5 percent share in December 1978.

The electric utilities consumption was an estimated 2.1 quadrillion Btu of energy in December 1979, 7.1 percent higher than in the previous month, and 2.0 percent higher than the energy consumed in December 1978. Coal contributed 48.5 percent of the energy consumed by electric utilities in December 1979, while petroleum contributed 15.5 percent, natural gas 12.4 percent, hydroelectric power 12.3 percent, nuclear power 10.8 percent, and geothermal, wood and waste 0.4 percent. Of the total energy consumed by electric utilities in December 1979, 60.2 percent was ultimately consumed by the residential and commercial sector (including electricity distributed and losses), 39.7 percent by the industrial sector, and 0.1 percent by the transportation sector.

### Energy Consumption Summary for December 1979
### Quadrillion ($10^{15}$) Btu

| Primary Energy Source | Sector[1] Residential and Commercial | Industrial | Transportation | Electric Utilities | TOTAL |
|---|---|---|---|---|---|
| Coal[2] | R0.026 | R0.301 | 0.000 | R1.006 | R1.333 |
| Natural Gas (dry)[3] | R0.974 | R0.700 | R0.045 | R0.257 | R1.977 |
| Petroleum[4] | R0.622 | R0.621 | R1.611 | R0.321 | R3.175 |
| Hydroelectric[5] | 0.000 | 0.003 | 0.000 | R0.255 | R0.258 |
| Nuclear[6] | 0.000 | 0.000 | 0.000 | R0.224 | R0.224 |
| Net Coke Imports[7] | 0.000 | R0.002 | 0.000 | 0.000 | R0.002 |
| Other[8] | 0.000 | 0.000 | 0.000 | 0.009 | 0.009 |
| **TOTAL PRIMARY ENERGY** | **R1.622** | **R1.627** | **R1.656** | **R2.073** | **R6.978** |
| Electricity Sales[9] | R0.355 | 0.234 | 0.001 | (0.590) | |
| Net Energy Consumption | R1.977 | R1.861 | R1.657 | | R5.495 |
| Electrical Energy Losses[10] | R0.892 | R0.589 | R0.002 | R(1.482) | R1.482 |
| **TOTAL ENERGY CONSUMED** | **R2.869** | **R2.450** | **R1.659** | | **R6.978** |

Totals may not equal sum of components due to independent rounding. Notes and sources for this table and all other tables in this section are provided on page 26.

# Consumption

## Consumption of Energy by the Residential and Commercial Sector[1]

| | | Coal | Natural Gas (dry) | Petroleum | Electricity Sales | Electrical Energy Losses[2] | Total Energy Consumed | Yearly Cumulative Energy Consumed |
|---|---|---|---|---|---|---|---|---|
| | | | | Quadrillion ($10^{15}$) Btu | | | | |
| **1973** | **TOTAL** | **R0.292** | **R7.790** | **R7.524** | **R3.495** | **R8.460** | **R27.559** | |
| **1974** | **TOTAL** | **R0.293** | **R7.619** | **R6.865** | **R3.475** | **R8.548** | **R26.800** | |
| **1975** | **TOTAL** | **R0.239** | **R7.688** | **R6.413** | **R3.588** | **R8.815** | **R26.743** | |
| **1976** | **TOTAL** | **R0.228** | **R7.967** | **R6.920** | **R3.729** | **R9.089** | **R27.933** | |
| **1977** | **TOTAL** | **R0.225** | **R7.537** | **R6.868** | **R3.936** | **R9.703** | **R28.268** | |
| **1978** | January | R0.032 | R1.389 | R0.662 | 0.375 | R0.892 | R3.351 | R3.351 |
| | February | R0.033 | R1.241 | R0.637 | 0.367 | R0.776 | R3.055 | R6.404 |
| | March | 0.023 | R1.001 | R0.611 | R0.343 | R0.790 | R2.767 | R9.172 |
| | April | R0.017 | R0.639 | R0.492 | 0.293 | R0.716 | R2.157 | R11.329 |
| | May | R0.015 | R0.446 | R0.535 | 0.283 | R0.770 | R2.049 | R13.379 |
| | June | R0.015 | R0.261 | R0.527 | R0.325 | R0.840 | R1.969 | R15.347 |
| | July | R0.013 | R0.254 | R0.524 | 0.376 | R0.961 | R2.129 | R17.477 |
| | August | R0.014 | R0.211 | R0.572 | 0.385 | R0.959 | R2.143 | R19.619 |
| | September | R0.016 | R0.228 | R0.537 | R0.378 | R0.836 | R1.994 | R21.614 |
| | October | R0.022 | R0.371 | R0.599 | 0.325 | R0.751 | R2.068 | R23.682 |
| | November | R0.023 | R0.655 | R0.581 | 0.304 | R0.756 | R2.321 | R26.001 |
| | December | R0.026 | R1.067 | R0.636 | 0.340 | R0.870 | R2.939 | R28.941 |
| | **TOTAL** | **R0.249** | **R7.761** | **R6.915** | **R4.096** | **R9.918** | **R28.941** | |
| **1979** | January | R0.033 | R1.505 | R0.706 | R0.398 | R1.022 | R3.663 | R3.663 |
| | February | R0.021 | R1.308 | R0.643 | R0.386 | R0.872 | R3.230 | R6.894 |
| | March | 0.017 | R0.930 | R0.579 | R0.350 | R0.889 | R2.764 | R9.658 |
| | April | R0.015 | R0.654 | R0.495 | 0.309 | R0.744 | R2.217 | R11.875 |
| | May | R0.014 | R0.442 | R0.540 | 0.297 | R0.772 | R2.064 | R13.938 |
| | June | R0.014 | R0.286 | R0.527 | 0.321 | R0.816 | R1.964 | R15.903 |
| | July | R0.014 | R0.240 | R0.527 | R0.363 | R0.916 | R2.058 | R17.961 |
| | August | 0.012 | R0.220 | R0.579 | R0.390 | R0.965 | R2.166 | R20.127 |
| | September | R0.015 | R0.246 | R0.528 | 0.368 | R0.828 | R1.986 | R22.114 |
| | October | 0.022 | R0.394 | R0.597 | 0.321 | R0.807 | R2.140 | R24.252 |
| | November | R0.025 | R0.691 | R0.567 | 0.314 | R0.785 | R2.381 | R26.634 |
| | December | R0.026 | R0.974 | R0.622 | R0.355 | R0.892 | R2.869 | R29.503 |
| | **TOTAL** | **R0.225** | **R7.889** | **R6.910** | **R4.173** | **R10.306** | **R29.503** | |

Totals may not equal sum of components due to independent rounding.
[1]The residential and commercial sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. Notes on the methodology used for sector calculations are provided in the Notes and Sources on page 26.
[2]Proportion of total electrical energy losses incurred in the generation and transmission of electricity that are attributed to this sector.
R = Revised data.
*Source:* • See Notes and Sources on page 26.

# Consumption

## Consumption of Energy by the Industrial Sector[1]

| | | Coal | Natural Gas (dry) | Petro-leum | Hydro-electric | Net Coke Imports[2] | Electricity Sales | Electrical Energy Losses[3] | Total Energy Consumed | Yearly Cumulative Energy Consumed |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Quadrillion ($10^{15}$) Btu | | | | |
| **1973** | **TOTAL** | **R4.350** | **R10.231** | **R5.893** | **R0.035** | **(0.008)** | **2.341** | **R5.676** | **R28.518** | |
| **1974** | **TOTAL** | **R4.057** | **R9.909** | **R5.750** | **R0.033** | **0.059** | **2.337** | **R5.751** | **R27.895** | |
| **1975** | **TOTAL** | **R3.801** | **R8.422** | **R5.521** | **R0.032** | **0.014** | **2.304** | **R5.669** | **R25.763** | |
| **1976** | **TOTAL** | **R3.791** | **R8.663** | **R6.322** | **0.033** | **0.000** | **2.525** | **R6.162** | **R27.495** | |
| **1977** | **TOTAL** | **R3.494** | **R8.564** | **R7.104** | **0.037** | **0.015** | **2.635** | **R6.513** | **R28.362** | |
| **1978** | January | R0.337 | R0.756 | R0.685 | 0.003 | 0.001 | 0.221 | R0.526 | R2.530 | R2.530 |
| | February | R0.279 | R0.679 | R0.628 | 0.003 | 0.001 | 0.208 | R0.438 | R2.236 | R4.766 |
| | March | R0.249 | R0.668 | R0.625 | 0.003 | 0.005 | 0.210 | R0.483 | R2.244 | R7.010 |
| | April | R0.269 | R0.654 | R0.550 | 0.003 | 0.012 | 0.215 | R0.526 | R2.230 | R9.240 |
| | May | R0.277 | R0.645 | R0.583 | 0.003 | 0.025 | 0.227 | R0.617 | R2.378 | R11.618 |
| | June | R0.273 | R0.635 | R0.547 | 0.003 | 0.009 | 0.234 | R0.605 | R2.307 | R13.925 |
| | July | R0.288 | R0.684 | R0.547 | 0.003 | 0.015 | 0.229 | R0.585 | R2.350 | R16.275 |
| | August | R0.289 | R0.699 | R0.561 | 0.002 | 0.013 | 0.237 | R0.589 | R2.391 | R18.665 |
| | September | R0.287 | R0.678 | R0.564 | 0.003 | 0.012 | 0.239 | R0.529 | R2.313 | R20.978 |
| | October | R0.292 | R0.779 | R0.593 | 0.003 | 0.015 | 0.243 | R0.562 | R2.488 | R23.466 |
| | November | R0.294 | R0.754 | R0.616 | 0.003 | 0.013 | 0.238 | R0.591 | R2.508 | R25.973 |
| | December | R0.326 | R0.768 | R0.681 | 0.003 | 0.009 | 0.231 | R0.589 | R2.607 | R28.581 |
| | **TOTAL** | **R3.462** | **R8.400** | **R7.179** | **0.036** | **0.131** | **2.731** | **R6.641** | **R28.581** | |
| **1979** | January | R0.317 | R0.631 | R0.728 | 0.003 | 0.004 | 0.232 | R0.596 | R2.510 | R2.510 |
| | February | R0.295 | R0.606 | R0.646 | 0.003 | 0.003 | 0.228 | R0.515 | R2.296 | R4.806 |
| | March | R0.300 | R0.623 | R0.656 | 0.003 | 0.002 | 0.235 | R0.596 | R2.415 | R7.222 |
| | April | R0.289 | R0.604 | R0.574 | 0.003 | 0.005 | 0.235 | R0.564 | R2.274 | R9.495 |
| | May | R0.289 | R0.623 | R0.598 | 0.003 | 0.011 | 0.240 | R0.624 | R2.389 | R11.885 |
| | June | R0.282 | R0.627 | R0.579 | 0.003 | 0.010 | 0.242 | 0.615 | R2.358 | R14.243 |
| | July | R0.318 | R0.638 | R0.574 | 0.003 | 0.008 | 0.239 | R0.602 | R2.383 | R16.626 |
| | August | R0.298 | R0.649 | R0.609 | 0.003 | 0.009 | 0.242 | R0.600 | R2.410 | R19.036 |
| | September | R0.286 | R0.654 | R0.549 | 0.003 | 0.008 | 0.239 | R0.538 | R2.277 | R21.313 |
| | October | R0.290 | R0.751 | R0.622 | 0.003 | 0.004 | 0.244 | R0.613 | R2.526 | R23.839 |
| | November | R0.285 | R0.722 | R0.614 | 0.003 | 0.000 | 0.238 | R0.595 | R2.457 | R26.296 |
| | December | R0.301 | R0.700 | R0.621 | 0.003 | R0.002 | 0.234 | R0.589 | R2.450 | R28.746 |
| | **TOTAL** | **R3.549** | **R7.827** | **R7.371** | **0.037** | **R0.066** | **2.848** | **R7.048** | **R28.746** | |

Totals may not equal sum of components due to independent rounding.
[1]The industrial sector is made up of construction, manufacturing, agriculture, and mining establishments. Notes on the methodology used for sector calculations are provided in the Notes and Sources on page 26.
[2]Net Imports = imports minus exports. Parentheses indicate exports are greater than imports.
[3]Proportion of total electrical energy losses incurred in the generation and transmission of electricity that are attributed to this sector.
R = Revised data.
*Source:* • See Notes and Sources on page 26.

# Consumption

## Consumption of Energy by the Transportation Sector[1]

| | | Coal | Natural Gas (dry) | Petroleum | Electricity Sales | Electrical Energy Losses[2] | Total Energy Consumed | Yearly Cumulative Energy Consumed |
|---|---|---|---|---|---|---|---|---|
| | | | | Quadrillion ($10^{15}$) Btu | | | | |
| **1973** | **TOTAL** | **0.003** | **0.743** | **R17.751** | **R0.009** | **R0.020** | **R18.526** | |
| **1974** | **TOTAL** | **0.002** | **0.685** | **R17.341** | **R0.009** | **R0.021** | **R18.058** | |
| **1975** | **TOTAL** | **0.001** | **R0.594** | **R17.566** | **R0.010** | **R0.024** | **R18.195** | |
| **1976** | **TOTAL** | [3] | **0.559** | **R18.480** | **R0.010** | **R0.025** | **R19.074** | |
| **1977** | **TOTAL** | [3] | **0.543** | **R19.175** | **R0.010** | **R0.024** | **R19.753** | |
| **1978** | January | [3] | R0.046 | R1.650 | 0.001 | R0.002 | R1.698 | R1.698 |
| | February | [3] | R0.041 | R1.575 | 0.001 | R0.002 | R1.618 | R3.316 |
| | March | [3] | R0.046 | R1.745 | 0.001 | R0.002 | R1.793 | R5.110 |
| | April | [3] | 0.044 | R1.588 | 0.001 | R0.001 | R1.635 | R6.744 |
| | May | [3] | R0.046 | R1.713 | 0.001 | R0.002 | R1.761 | R8.506 |
| | June | [3] | R0.044 | 1.677 | 0.001 | R0.002 | R1.724 | R10.229 |
| | July | [3] | R0.046 | R1.656 | 0.001 | R0.002 | R1.705 | R11.934 |
| | August | [3] | R0.046 | R1.749 | 0.001 | R0.002 | R1.797 | R13.731 |
| | September | [3] | R0.044 | R1.593 | 0.001 | R0.002 | R1.640 | R15.371 |
| | October | [3] | R0.046 | R1.679 | 0.001 | R0.002 | R1.727 | R17.098 |
| | November | [3] | R0.044 | R1.677 | 0.001 | R0.002 | R1.724 | R18.822 |
| | December | [3] | R0.046 | R1.755 | 0.001 | R0.002 | R1.803 | R20.625 |
| | **TOTAL** | [3] | **R0.539** | **R20.057** | **R0.009** | **R0.020** | **R20.625** | |
| **1979** | January | [3] | R0.045 | R1.713 | 0.001 | R0.002 | R1.761 | R1.761 |
| | February | [3] | R0.041 | R1.624 | 0.001 | R0.002 | R1.668 | R3.429 |
| | March | [3] | R0.045 | R1.701 | 0.001 | R0.002 | 1.749 | R5.177 |
| | April | [3] | R0.044 | R1.540 | 0.001 | R0.002 | R1.585 | R6.763 |
| | May | [3] | R0.045 | R1.622 | 0.001 | R0.002 | R1.670 | R8.432 |
| | June | [3] | R0.044 | R1.558 | 0.001 | R0.002 | R1.604 | R10.036 |
| | July | [3] | R0.045 | R1.545 | 0.001 | R0.002 | R1.592 | R11.628 |
| | August | [3] | R0.045 | R1.641 | 0.001 | R0.002 | R1.688 | R13.316 |
| | September | [3] | R0.043 | 1.514 | 0.001 | R0.002 | R1.560 | R14.877 |
| | October | [3] | R0.045 | R1.607 | 0.001 | R0.002 | R1.655 | R16.532 |
| | November | [3] | R0.044 | R1.529 | 0.001 | R0.002 | R1.576 | R18.107 |
| | December | [3] | R0.045 | R1.611 | 0.001 | R0.002 | R1.659 | R19.766 |
| | **TOTAL** | [3] | **R0.530** | **R19.206** | **R0.009** | **R0.021** | **R19.766** | |

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

[1]The transportation sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. Notes on the methodology used for sector calculations are provided in the Notes and Sources on page 26.

[2]Proportion of total electrical energy losses incurred in the generation and transmission of electricity that are attributed to this sector.

[3]Since 1976 the amount of coal consumed by the transportation sector has been negligible.

R = Revised data.

*Source:* • See Notes and Sources on page 26.

# Consumption

## Consumption of Energy by the Electric Utilities

| | | Coal[1] | Natural Gas (dry) | Petroleum | Hydro-electric Power[2] | Nuclear Electric Power | Other[3] | Total Energy Consumed | Yearly Cumulative Energy Consumed |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Quadrillion ($10^{15}$) Btu | | | | |
| **1973** | **TOTAL** | **R8.655** | **3.746** | **R3.671** | **2.975** | **0.910** | **0.046** | **R20.004** | |
| **1974** | **TOTAL** | **R8.524** | **3.518** | **R3.499** | **3.276** | **1.272** | **0.056** | **R20.144** | |
| **1975** | **TOTAL** | **R8.783** | **3.241** | **R3.231** | **3.187** | **1.900** | **0.072** | **R20.414** | |
| **1976** | **TOTAL** | **R9.714** | **3.153** | **R3.454** | **3.032** | **2.111** | **0.081** | **R21.544** | |
| **1977** | **TOTAL** | **R10.245** | **3.285** | **R4.028** | **2.482** | **2.702** | **0.082** | **R22.825** | |
| **1978** | January | R0.834 | 0.236 | R0.383 | R0.279 | 0.278 | 0.007 | R2.017 | R2.017 |
| | February | R0.695 | 0.218 | R0.390 | R0.248 | 0.235 | 0.006 | R1.792 | R3.809 |
| | March | R0.686 | 0.240 | R0.382 | R0.275 | 0.242 | 0.005 | R1.829 | R5.638 |
| | April | R0.739 | 0.231 | R0.308 | R0.281 | 0.189 | 0.004 | R1.752 | R7.390 |
| | May | R0.802 | 0.270 | R0.288 | R0.318 | 0.220 | 0.004 | R1.901 | R9.291 |
| | June | R0.882 | 0.332 | R0.271 | R0.279 | 0.239 | 0.005 | R2.007 | R11.299 |
| | July | R0.942 | 0.375 | R0.290 | R0.273 | 0.269 | 0.005 | R2.154 | R13.453 |
| | August | R0.983 | 0.353 | R0.307 | R0.249 | 0.276 | 0.006 | R2.174 | R15.627 |
| | September | R0.915 | 0.308 | R0.278 | R0.238 | 0.239 | 0.007 | R1.985 | R17.611 |
| | October | R0.859 | 0.272 | R0.280 | R0.221 | 0.248 | 0.005 | R1.885 | R19.496 |
| | November | R0.860 | 0.236 | R0.297 | R0.225 | 0.268 | 0.006 | R1.892 | R21.388 |
| | December | R0.937 | 0.227 | R0.340 | R0.248 | 0.274 | 0.007 | R2.033 | R23.421 |
| | **TOTAL** | **R10.134** | **3.297** | **R3.813** | **R3.132** | **2.977** | **0.068** | **R23.421** | |
| **1979** | January | R1.046 | 0.236 | R0.385 | R0.279 | 0.299 | 0.007 | R2.251 | R2.251 |
| | February | R0.892 | 0.235 | R0.355 | 0.238 | 0.279 | 0.006 | R2.003 | R4.255 |
| | March | R0.900 | 0.270 | R0.345 | R0.288 | 0.262 | 0.008 | R2.073 | R6.328 |
| | April | R0.840 | 0.270 | R0.257 | R0.282 | 0.198 | 0.007 | R1.854 | R8.182 |
| | May | R0.894 | 0.286 | R0.268 | R0.319 | 0.162 | 0.007 | R1.936 | R10.119 |
| | June | R0.946 | 0.331 | R0.262 | R0.278 | 0.173 | 0.007 | R1.996 | R12.115 |
| | July | R1.007 | 0.382 | R0.247 | R0.255 | 0.224 | 0.007 | R2.122 | R14.237 |
| | August | R1.037 | 0.390 | R0.265 | R0.239 | 0.261 | 0.008 | R2.201 | R16.438 |
| | September | R0.901 | 0.350 | R0.268 | R0.215 | 0.235 | 0.007 | R1.976 | R18.414 |
| | October | R0.918 | 0.334 | R0.274 | R0.228 | R0.225 | 0.008 | R1.988 | R20.402 |
| | November | R0.918 | 0.270 | R0.282 | R0.250 | 0.207 | 0.008 | R1.935 | R22.337 |
| | December | R1.006 | R0.257 | R0.321 | R0.255 | R0.224 | 0.009 | R2.073 | R24.410 |
| | **TOTAL** | **R11.304** | **R3.610** | **R3.530** | **R3.126** | **R2.750** | **R0.089** | **R24.410** | |

Totals may not equal sum of components due to independent rounding.
[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes net imports of electricity.
[3]Includes geothermal power and electricity produced from wood and waste.
R = Revised data.
*Source:* ● See Notes and Sources on page 26.

# Notes and Sources for the Consumption Section

1. See Explanatory Note 5 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.
2. Coal is bituminous coal, anthracite, and lignite. *Sources:* • Anthracite—1973 through 1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook,* "Coal—Pennsylvania Anthracite, Annual."
• 1977 through 1979, U.S. Department of Energy (DOE), Energy Information Administration, (EIA) *Energy Data Reports,* "Weekly Coal Report."
• Bituminous coal and lignite—1973 through 1975, U.S. DOI, BOM, *Minerals Yearbook,* "Bituminous Coal and Lignite, Annual," Federal Power Commission (FPC), Form 4, "Monthly Power Plant Report," 1976 through 1979, DOE, EIA, *Energy Data Reports,* "Weekly Coal Report."
• Electric Utility consumption of coal sources: same as Note 6 below.
3. Total natural gas consumption is estimated monthly based on a supply/disposition balance calculation. Transportation use of natural gas is for pipeline use. It is estimated monthly by dividing the annual transportation use of natural gas by the number of days in the year and multiplying by the number of days in the month. Data for the most complete year are used for months of an incomplete year. Electric utility consumption of natural gas is reported on the "Monthly Power Plant Report." For each month, an estimate of natural gas consumed by the residential and commercial sector and the industrial sector combined is calculated as the total minus the transportation and electric utility consumption. Monthly data from the American Gas Association, "Monthly Gas Utility Statistical Report," are then applied to provide an estimate for the residential and commercial sector and industrial sector proportions.
*Sources:* • 1973 through 1975: DOI, BOM, *Minerals Yearbook,* "Natural Gas" chapter.
• 1976 through 1979, DOE, *Energy Data Report,* "Natural Gas Monthly Production and Consumption."
• Electric Utilities consumption: 1973 through 1976, FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1979, FPC, Form 4, "Monthly Power Plant Report." Residential and Commercial Sector annual data sources are the same as for total natural gas consumption.
4. Petroleum consumption by end-use is the sum of all individual petroleum products consumed in each end-use. First, total consumption by product is determined. Petroleum consumption in this section of the *Monthly Energy Review* uses the series called "products supplied" in the Petroleum Section.
*Sources* for petroleum products supplied by individual products are:
• 1973 through 1975: DOI, BOM, *Mineral Industry Surveys,* "Petroleum Statement, Annual."
• 1976 through 1978: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Annual."
• 1979: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Monthly." DOE, EIA, Monthly Petroleum Statistics Report. DOE, EIA, estimates based on EIA weekly data. DOE, EIA estimates for current and previous month data for several minor petroleum products' total consumption.
Each product's total is allocated to end-use sectors as follows:
• Aviation gasoline—transportation.
• Asphalt and road oil—commercial.
• Distillate fuel, residual fuel, kerosene end-uses are proportioned according to sales by end-use reported for 1973 through 1976 in the DOI, BOM, *Mineral Industry Surveys,* "Fuel Oil Sales, Annual," and for 1976 through 1978 in the DOE, EIA, *Energy Data Reports,* "Fuel Oil Sales, Annual." The proportions from 1978 are applied to 1979 data.
• Jet fuel—small amounts in 1975 through 1977 are used in industrial and small amounts in all months are consumed by the electric utilities. All remaining jet fuel is allocated to the transportation sector.
• Liquefied petroleum gases—end-uses are proportioned according to sales by end-use reported for 1973 through 1975 in the DOI, BOM, *Mineral Industry Surveys,* "Liquefied Petroleum Gas Sales, Annual," and for 1976 through 1978 in the DOE, EIA, *Energy Data Reports,* "Liquefied Petroleum Gas Sales, Annual."
• Lubricants—allocated to industrial and transportation sectors for all months according to proportions of sales to those sectors from U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports,* "Sales of Lubricating and Industrial Oils and Greases, 1977."
• Motor gasoline—the DOE motor gasoline consumption data are allocated to end-use according to shares derived from the U.S. Department of Transportration, Federal Highway Administration, *Highway Statistics,* Tables MF-21, MF-24 and MF-25.
• Petroleum coke consumed by the electric utilities—Federal Power Commission, Form 4, "Monthly Power Plant Report."
• All other products are allocated to the industrial sector.
*Sources:* • 1973 through 1975: DOI, BOM, *Mineral Industry Surveys,* "Petroleum Statement, Annual."
• 1976 through 1978: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Annual."
• 1979: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Monthly" and "Monthly Petroleum Statistics Report," and EIA estimates based on data from the American Petroleum Institute, "Weekly Statistical Bulletin."
• Electric Utility consumption of petroleum sources: 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1979: FPC, Form 4, "Monthly Power Plant Report."
5. Industrial and electric utility generation of hydropower. *Sources:* • 1973 through 1976, FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1979: FPC, Form 4, "Monthly Power Plant Report."
• Imports and exports of electricity—*Sources:* DOE, Economic Regulatory Administration, "Report on Electric Energy Exchanges with Canada and Mexico." Monthly estimates are derived from annual data by dividing by the number of days in the year and multiplying by the number of days in the month. 1978 data are temporarily used for 1979.
6. *Sources:* • 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1979: FPC, Form 4, "Monthly Power Plant Report."
7. Net coke imports is coke made from coal. *Sources:* • 1973 through 1975, DOI, BOM, *Minerals Yearbook,* "Coke and Coal Chemicals, Annual."
• 1976 through 1979: DOE, EIA, *Energy Data Reports,* "Coke and Coal Chemicals, Monthly."
8. "Other" is electricity produced from geothermal power and from wood and waste. *Sources:* same as Note 6 above.
9. Energy consumed by electric utilities to produce electricity is distributed to the major end-use sectors using EIA data in kilowatt-hour sales to ultimate customers. "Other" sales, largely for use in government buildings, are distributed to the residential and commercial sector and a small portion to the transportation sector. *Source:*
• Sales data—FPC, Form 5, "Monthly Statement of Electric Operating Revenue and Income."
10. In generating electricity with nuclear or fossil fuels, approximately 65 percent of the energy is lost in the form of heat. Transmission and distribution losses consume about an additional 3 percent of the energy inputs of the utility industry. In order to fully account for all energy consumed both directly and indirectly (i.e., utillities energy disposition), the electricity losses are allocated to the final end-use sectors in proportion to their direct kilowatt-hour usage.

## Crude Oil and Refined Petroleum Products*

Domestic crude oil production during January 1980 averaged 8.5 million barrels per day. This production rate was 0.4 percent higher than in January 1979 and 0.1 percent higher than in December 1979.

Total petroleum imports averaged 8.5 million barrels per day in January 1980, 3.5 percent less than the January 1979 rate and 1.2 percent higher than in December 1979.

In January 1980, 19.2 million barrels per day of petroleum products were supplied for domestic use. Motor gasoline accounted for 34.5 percent of the total, distillate fuel 20.2 percent, and residual fuel oil 15.9 percent.

The average for motor gasoline supplied during January 1980 was 6.6 million barrels per day, 3.9 percent lower than the amount supplied in January 1979 and 1.2 percent lower than in December 1979.

In January 1980, 3.9 million barrels of distillate fuel oil were supplied per day, 14.8 percent lower than a year ago and 4.2 percent higher than in December 1979. Distillate fuel oil stocks were 210.6 million barrels at the end of January 1980, 19.9 percent above the stock level 1 year ago and 7.7 percent lower than in December 1979.

Residual fuel oil supplied in January 1980 averaged 3.0 million barrels per day, 13.8 percent lower than in January 1979. Residual fuel oil stocks measured 94.3 million barrels at the end of January 1980, 15.0 percent above the level a year ago and 1.0 percent lower than in the previous month.

*January 1980 estimates are based on data from EIA weekly data (except imports and crude production) and will be revised to conform with data from the EIA Petroleum Reporting System as available. January 1980 crude production figures are EIA estimates. January 1980 imports are estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin," which excludes crude petroleum imported for the Strategic Petroleum Reserve.

# Petroleum

## Crude Oil

| | | Crude Input to Refineries | Total Domestic Production[1,2] | Alaskan Production | Crude Oil Imports[1,3] | Strategic Petroleum Reserve (SPR) Imports[5] | Exports | Crude Oil Stocks[1,4] | Strategic Petroleum Reserve (SPR) Stocks[5] |
|---|---|---|---|---|---|---|---|---|---|
| | | Thousand barrels per day | | | | | | Thousand barrels | |
| **1973** | **AVERAGE** | **12,431** | **9,208** | **198** | **3,244** | | **2** | **‡242,478** | |
| **1974** | **AVERAGE** | **12,133** | **8,774** | **193** | **3,477** | | **3** | **‡265,020** | |
| **1975** | **AVERAGE** | **12,442** | **8,375** | **191** | **4,105** | | **6** | **‡271,354** | |
| **1976** | **AVERAGE** | **13,416** | **8,132** | **173** | **5,287** | | **8** | **‡285,471** | |
| **1977** | **AVERAGE** | **14,602** | **8,245** | **464** | **6,594** | **21** | **50** | **‡339,857** | **‡7,826** |
| **1978** | January | 14,150 | 8,360 | 869 | 6,126 | 114 | 98 | 341,371 | 11,106 |
| | February | 13,969 | 8,377 | 854 | 5,655 | 109 | 8 | 335,890 | 14,276 |
| | March | 14,148 | 8,720 | 1,151 | 6,031 | 132 | 60 | 345,482 | 18,437 |
| | April | 13,886 | 8,818 | 1,289 | 5,519 | 108 | 92 | 343,363 | 21,825 |
| | May | 14,996 | 8,825 | 1,281 | 5,594 | 133 | 124 | 329,101 | 25,629 |
| | June | 14,693 | 8,832 | 1,306 | 6,322 | 146 | 195 | 333,340 | 30,140 |
| | July | 14,911 | 8,756 | 1,295 | 6,175 | 154 | 138 | 332,909 | 35,248 |
| | August | 15,196 | 8,758 | 1,316 | 6,251 | 184 | 182 | 316,866 | 40,968 |
| | September | 15,085 | 8,800 | 1,322 | 6,829 | 225 | 251 | 321,172 | 47,090 |
| | October | 15,005 | 8,820 | 1,342 | 6,400 | 195 | 272 | 325,081 | 53,113 |
| | November | 15,336 | 8,741 | 1,351 | 6,643 | 188 | 218 | 322,045 | 59,312 |
| | December | 15,421 | 8,662 | 1,347 | 6,751 | 245 | 251 | 309,421 | 66,860 |
| | **AVERAGE** | **14,739** | **8,707** | **1,229** | **6,195** | **161** | **158** | | |
| **1979** | January | 14,658 | 8,457 | 1,351 | 6,562 | 204 | 177 | 302,728 | 73,142 |
| | February | 14,121 | 8,498 | 1,267 | 6,249 | 179 | 288 | 302,981 | 78,166 |
| | March | 14,062 | 8,585 | 1,355 | 6,180 | 122 | 370 | 317,432 | 82,501 |
| | April | 14,346 | 8,533 | 1,347 | 6,047 | 66 | 260 | 319,759 | 83,867 |
| | May | 14,273 | 8,585 | 1,350 | 6,092 | 97 | 171 | 316,355 | 86,880 |
| | June | 14,655 | 8,409 | 1,247 | 6,523 | 65 | 235 | 325,893 | 88,567 |
| | July | 14,977 | 8,355 | 1,405 | 6,120 | 41 | 244 | 312,852 | 90,101 |
| | August | 14,827 | 8,699 | 1,434 | 6,692 | 35 | 242 | 320,745 | 91,189 |
| | September | 14,461 | 8,466 | 1,436 | 6,321 | 0 | 175 | 323,854 | 91,189 |
| | October | R14,330 | R8,568 | R1,481 | R6,783 | 0 | 179 | R344,679 | [6]91,191 |
| | Novemberᵗ | 14,533 | *8,530* | *1,332* | R6,131 | 0 | 264 | R347,095 | 91,191 |
| | Decemberᵗ | R14,856 | *8,480* | *1,350* | R6,161 | 0 | 215 | R339,686 | 91,191 |
| | **AVERAGE** | **R14,512** | **R8,514** | **R1,364** | **R6,323** | **67** | **235** | | |
| **1980** | Januaryᵗ | *14,583* | *8,490* | *1,630* | *6,447* | NA | NA | *349,151* | NA |

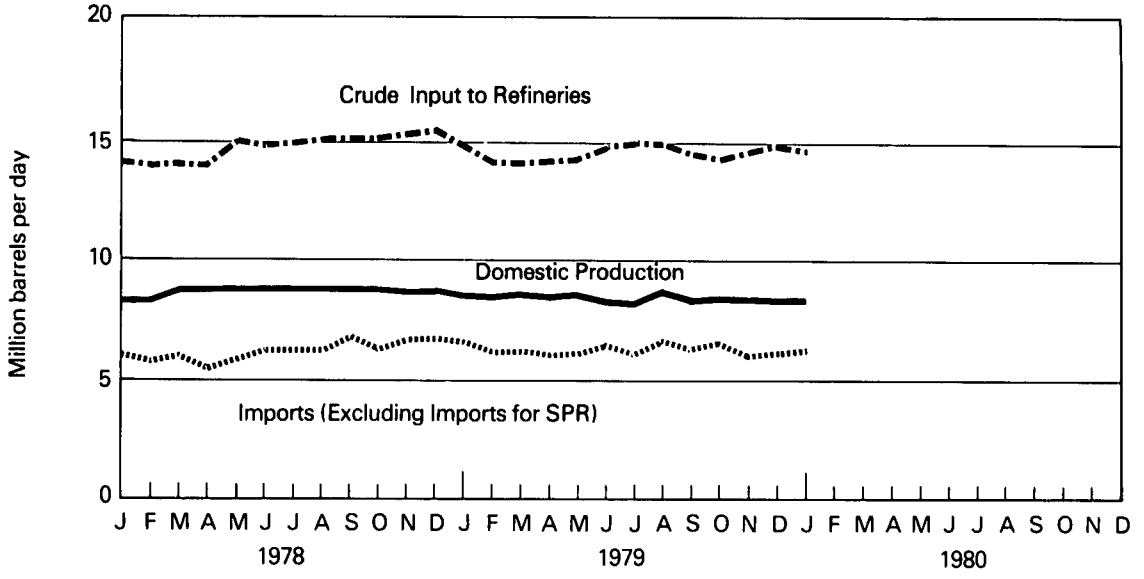
[1]See Definitions.
[2]Includes Alaskan production.
[3]Excludes SPR imports.
[4]Excludes SPR stocks.
[5]Strategic Petroleum Reserve storage began in October 1977.
[6]Indicates an adjustment in reported barrels in storage.
Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
ᵗPreliminary data.
R = Revised data.
NA = Not available.

*Sources:* • 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
- 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
- January 1979 through October 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
- November 1979 through December 1979: EIA "Monthly Petroleum Statistics Report" (except domestic production and exports).
- Domestic production for November 1979 through January 1980 is based on historical data from Economic Regulatory Administration Form 182, "First Purchasers Report—Crude Production" and partial returns from State Conservation Agencies where available.
- Exports for November 1979 through December 1979 are preliminary data based on the EIA 87 and the Bureau of the Census publication EM 522.
- January 1980 data are EIA estimates based on EIA weekly data (except imports).
- January 1980 imports are EIA estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin".
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: EIA Form 87 (Refinery Report), Form 90 (Crude Stock Report), ERA Form 60 (Imports); Form ERA-182, (First Purchasers Report—Crude Production); Bureau of the Census publication EM 522 (Exports); and State Conservation Agencies.

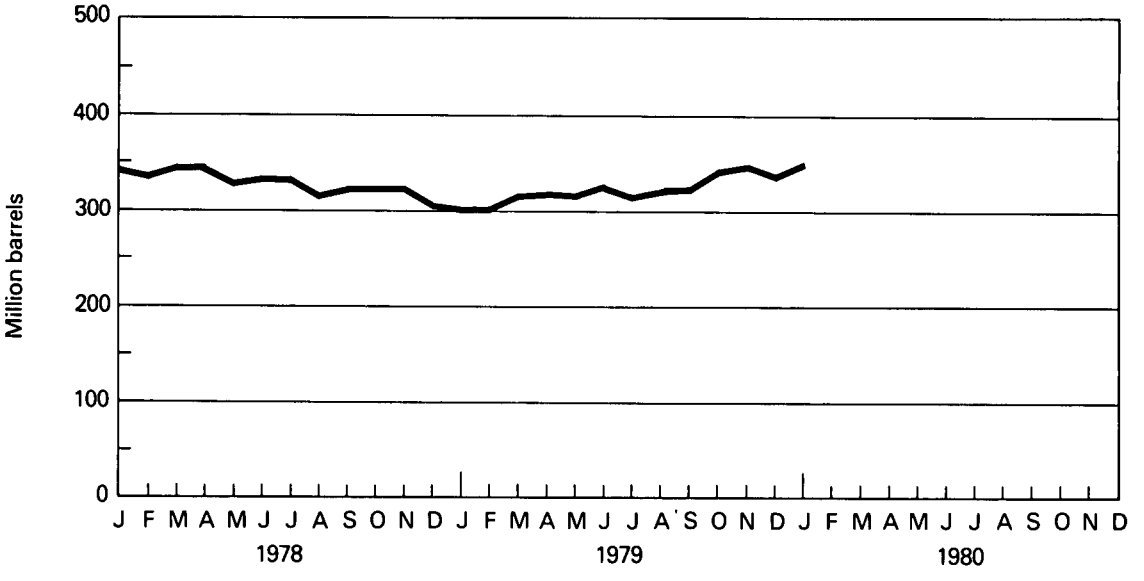
# Petroleum

## Crude Oil

### Production, Refinery Input and Imports




### Stocks (Excluding SPR)



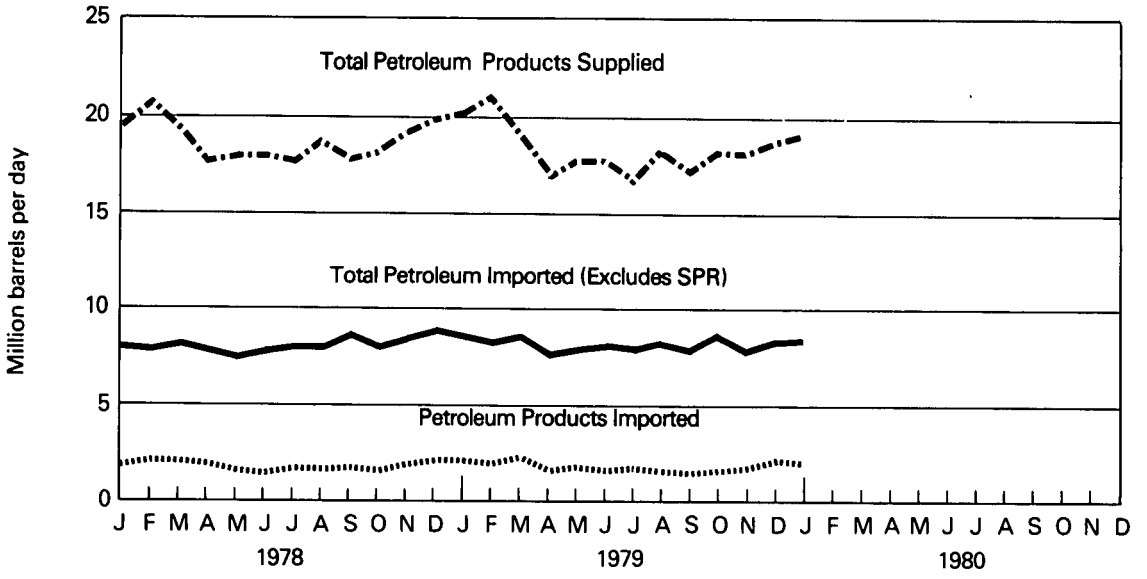
# Petroleum

| | | Total Petroleum Products[1] | | | Total Petroleum Imports (Crude Oil and Products) | | |
|---|---|---|---|---|---|---|---|
| | | Products Supplied[1] | Imports[3] | Exports | Total Imports (Excluding SPR) | SPR Imports[2] | Total Imports (Including SPR)[2] |
| | | Thousand barrels per day | | | Thousand barrels per day | | |
| **1973** | **AVERAGE** | **17,308** | **3,012** | **229** | **6,256** | | |
| **1974** | **AVERAGE** | **16,653** | **2,635** | **218** | **6,112** | | |
| **1975** | **AVERAGE** | **16,322** | **1,951** | **204** | **6,056** | | |
| **1976** | **AVERAGE** | **17,461** | **2,026** | **215** | **7,313** | | |
| **1977** | **AVERAGE** | **18,431** | **2,193** | **193** | **8,787** | **21** | **8,807** |
| **1978** | January | 19,752 | 2,092 | 158 | 8,218 | 114 | 8,332 |
| | February | 20,900 | 2,355 | 200 | 8,010 | 109 | 8,119 |
| | March | 19,652 | 2,338 | 209 | 8,369 | 132 | 8,501 |
| | April | 17,747 | 2,115 | 245 | 7,634 | 108 | 7,743 |
| | May | 18,230 | 1,804 | 189 | 7,398 | 133 | 7,531 |
| | June | 18,260 | 1,640 | 204 | 7,962 | 146 | 8,108 |
| | July | 17,633 | 1,948 | 192 | 8,123 | 154 | 8,277 |
| | August | 18,639 | 1,858 | 229 | 8,109 | 184 | 8,292 |
| | September | 17,954 | 1,983 | 226 | 8,811 | 225 | 9,036 |
| | October | 18,417 | 1,718 | 197 | 8,119 | 195 | 8,313 |
| | November | 19,156 | 2,021 | 191 | 8,664 | 188 | 8,852 |
| | December | 19,944 | 2,245 | 205 | 8,996 | 245 | 9,241 |
| | **AVERAGE** | **18,847** | **2,008** | **204** | **8,202** | **161** | **8,363** |
| **1979** | January | 20,640 | 2,205 | 212 | 8,767 | 204 | 8,970 |
| | February | 21,152 | 2,069 | 200 | 8,318 | 179 | 8,497 |
| | March | 19,180 | 2,385 | 234 | 8,565 | 122 | 8,687 |
| | April | 17,311 | 1,666 | 235 | 7,713 | 66 | 7,779 |
| | May | 17,701 | 1,809 | 278 | 7,901 | 97 | 7,999 |
| | June | 17,675 | 1,672 | 220 | 8,195 | 65 | 8,260 |
| | July | 16,906 | 1,783 | 258 | 7,902 | 41 | 7,943 |
| | August | 18,081 | 1,675 | 210 | 8,367 | 35 | 8,402 |
| | September | 17,273 | 1,599 | 241 | 7,921 | 0 | 7,921 |
| | October | R18,124 | R1,785 | 258 | R8,568 | 0 | R8,568 |
| | November† | R18,075 | R1,815 | 246 | R7,947 | 0 | R7,947 |
| | December† | R18,557 | R2,199 | 245 | R8,360 | 0 | 8,360 |
| | **AVERAGE** | **R18,376** | **R1,889** | **237** | **R8,212** | **67** | **8,279** |
| **1980** | January† | *19,179* | *2,015* | NA | *8,462* | NA | NA |

Note: Totals may not equal sum of components due to independent rounding.
[1]See Definitions.
[2]Strategic Petroleum Reserve storage began in October 1977.
[3]Includes plant condensate, natural gasoline and unfinished oils.
Estimated data in italics. These are likely to be revised next month.
†Preliminary data.
R = Revised data.
NA = Not available.
*Sources:* • 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
- 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
- January 1979 through October 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
- November 1979 through December 1979: EIA "Monthly Petroleum Statistics Report" (except exports).
- Exports for November 1979 through December 1979 are preliminary data based on the Bureau of the Census publication EM 522.
- January 1980 data are EIA estimates based on EIA weekly data (except imports).
- January 1980 imports are EIA estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin."
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), Form FEA P133 (Imports from Puerto Rico), EIA Form 64 (Natural Gas Liquids Operations Report), Form 87 (Refinery Report), Form 88 (Bulk Terminal), Form 89 (Pipeline Report), Form 90 (Crude Stock Report), Form ERA-182 (First Purchasers Report—Crude Production); Bureau of the Census publications IM 145 (Imports), EM 522 (Exports), and FT 800 (Exports); and State Conservation Agencies.

# Petroleum

**Products Supplied and Imports**



# Petroleum

## Petroleum Imports from OPEC Sources

| | Algeria | Indonesia | Iran | Libya | Nigeria | Saudi Arabia | United Arab Emirates | Venezuela | Other OPEC[1] | Total OPEC | Arab Members of OPEC[2] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand barrels per day | | | | | | | | | | |
| **1973** | | | | | | | | | | | |
| **AVERAGE** | **136.0** | **213.3** | **222.8** | **164.4** | **458.8** | **485.7** | **70.6** | **1,134.9** | **106.4** | **2,992.9** | **914.7** |
| **1974** | | | | | | | | | | | |
| **AVERAGE** | **190.1** | **300.4** | **468.8** | **4.4** | **713.4** | **461.3** | **73.9** | **979.1** | **88.4** | **3,279.8** | **752.5** |
| **1975** | | | | | | | | | | | |
| **AVERAGE** | **282.4** | **389.6** | **280.4** | **231.8** | **761.8** | **714.6** | **116.7** | **702.5** | **121.5** | **3,601.3** | **1,382.6** |
| **1976** | | | | | | | | | | | |
| **AVERAGE** | **432.2** | **538.8** | **298.5** | **453.3** | **1,024.7** | **1,229.8** | **254.4** | **700.1** | **134.0** | **5,065.8** | **2,424.1** |
| **1977** | | | | | | | | | | | |
| **AVERAGE** | **558.6** | **541.0** | **535.0** | **722.6** | **1,143.0** | **1,380.4** | **335.3** | **690.4** | **286.7** | **6,193.1** | **3,185.1** |
| **1978** | | | | | | | | | | | |
| January | 707.5 | 527.9 | 689.6 | 570.9 | 834.6 | 1,206.3 | 348.8 | 643.2 | 227.8 | 5,756.5 | 2,969.4 |
| February | 658.2 | 405.7 | 539.2 | 594.4 | 793.0 | 971.4 | 486.1 | 798.1 | 251.5 | 5,497.5 | 2,822.4 |
| March | 715.9 | 603.7 | 535.2 | 583.7 | 960.3 | 1,131.7 | 296.2 | 894.6 | 254.0 | 5,975.3 | 2,903.7 |
| April | 597.5 | 532.1 | 441.9 | 612.0 | 584.2 | 1,020.5 | 480.5 | 658.7 | 228.2 | 5,155.6 | 2,829.7 |
| May | 701.1 | 549.6 | 746.3 | 498.7 | 779.8 | 786.3 | 418.7 | 556.6 | 84.5 | 5,121.7 | 2,445.0 |
| June | 776.1 | 666.1 | 536.0 | 648.7 | 858.0 | 1,107.8 | 345.0 | 494.1 | 219.3 | 5,651.3 | 3,029.0 |
| July | 659.0 | 648.0 | 532.5 | 629.3 | 1,003.2 | 1,053.2 | 293.8 | 538.3 | 301.3 | 5,658.6 | 2,831.4 |
| August | 464.2 | 575.3 | 574.2 | 798.6 | 942.6 | 1,127.6 | 415.9 | 514.0 | 206.6 | 5,619.0 | 2,926.0 |
| September | 615.9 | 634.0 | 590.6 | 762.4 | 1,029.6 | 1,247.5 | 389.2 | 650.3 | 261.9 | 6,181.5 | 3,184.5 |
| October | 709.7 | 571.5 | 608.2 | 712.6 | 927.7 | 1,173.1 | 397.2 | 524.5 | 112.6 | 5,737.2 | 3,034.7 |
| November | 619.2 | 548.6 | 494.7 | 758.4 | 1,188.1 | 1,365.2 | 408.6 | 635.1 | 222.1 | 6,240.0 | 3,292.5 |
| December | 561.5 | 604.1 | 368.8 | 676.3 | 1,119.6 | 1,524.8 | 356.8 | 841.6 | 345.6 | 6,399.1 | 3,292.4 |
| **AVERAGE** | **648.7** | **573.3** | **555.3** | **653.9** | **919.5** | **1,143.9** | **385.4** | **644.9** | **226.0** | **5,750.9** | **2,963.2** |
| **1979** | | | | | | | | | | | |
| January | 663.1 | 502.8 | 187.1 | 734.9 | 1,115.0 | 1,557.1 | 341.4 | 656.9 | 229.0 | 5,987.3 | 3,393.9 |
| February | 723.7 | 504.8 | 85.8 | 609.3 | 963.1 | 1,613.4 | 309.8 | 754.8 | 170.7 | 5,735.4 | 3,362.0 |
| March | 579.0 | 400.5 | 22.2 | 598.3 | 1,385.5 | 1,296.7 | 298.3 | 843.0 | 272.5 | 5,696.0 | 2,936.6 |
| April | 673.5 | 348.3 | 34.9 | 770.8 | 963.0 | 1,483.5 | 285.2 | 612.0 | 129.5 | 5,300.7 | 3,297.6 |
| May | 718.0 | 333.1 | 196.5 | 650.5 | 1,104.4 | 1,266.9 | 291.9 | 671.2 | 147.6 | 5,380.1 | 2,979.7 |
| June | 543.8 | 390.5 | 318.3 | 764.2 | 932.0 | 1,262.1 | 290.5 | 596.4 | 363.9 | 5,461.7 | 3,152.9 |
| July | 591.4 | 354.8 | 410.7 | 627.9 | 937.6 | 1,319.5 | 244.3 | 609.2 | 170.5 | 5,265.9 | 2,880.9 |
| August | 666.4 | 480.7 | 501.7 | 657.3 | 1,158.4 | 1,330.5 | 268.2 | 666.5 | 232.9 | 5,962.6 | 3,068.1 |
| September | 490.5 | 327.4 | 358.5 | 610.7 | 1,106.4 | 1,330.8 | 280.6 | 721.4 | 177.0 | 5,403.3 | 2,858.8 |
| October | R617.1 | R460.4 | R471.8 | R761.5 | R948.8 | R1,277.2 | 221.6 | R613.0 | R304.4 | R5,675.8 | R3,082.4 |
| November† | R610.1 | R305.7 | R548.6 | R458.4 | R1,007.1 | R1,148.8 | R307.1 | R693.2 | R131.2 | R5,210.2 | R2,559.0 |
| December† | 577.0 | 342.3 | 413.8 | 562.3 | 1,070.7 | 1,280.5 | 241.5 | 684.9 | 110.8 | 5,283.8 | 2,701.9 |
| **AVERAGE** | **620.8** | **395.6** | **297.3** | **650.8** | **1,059.0** | **1,345.5** | **281.4** | **676.5** | **203.6** | **5,530.6** | **3,020.6** |

Totals may not equal sum of components due to independent rounding.
Beginning in October 1977 Strategic Petroleum Reserve imports are included.
[1]Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.
[2]Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.
†Preliminary data.
R = Revised data.
*Sources:* • 1973 through 1976: Bureau of Mines' *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "PAD Districts Supply/Demand, Annual."
• January 1979 through October 1979: EIA *Energy Data Reports,* "PAD Districts Supply/Demand, Monthly."
• November 1979 through December 1979: EIA, "Monthly Petroleum Statistics Report."
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico); and Bureau of the Census publication IM 145 (Imports).

# Petroleum

## Petroleum Imports from Non-OPEC Sources

| | Bahamas | Canada | Mexico | Netherlands Antilles | Puerto Rico | Trinidad and Tobago | Virgin Islands | Other | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Thousand barrels per day | | | | | |
| **1973** | | | | | | | | | |
| **AVERAGE** | **174.0** | **1,324.8** | **15.7** | **584.7** | **99.5** | **254.8** | **329.4** | **480.3** | **3,263.2** |
| **1974** | | | | | | | | | |
| **AVERAGE** | **163.8** | **1,069.5** | **8.5** | **511.0** | **90.4** | **250.8** | **391.0** | **347.4** | **2,832.4** |
| **1975** | | | | | | | | | |
| **AVERAGE** | **152.4** | **846.4** | **71.4** | **331.8** | **89.7** | **242.4** | **406.4** | **313.9** | **2,454.4** |
| **1976** | | | | | | | | | |
| **AVERAGE** | **118.5** | **599.3** | **87.2** | **275.4** | **88.1** | **274.3** | **422.3** | **381.7** | **2,246.8** |
| **1977** | | | | | | | | | |
| **AVERAGE** | **170.5** | **516.9** | **179.4** | **210.9** | **105.1** | **289.3** | **466.2** | **675.8** | **2,614.1** |
| **1978** | | | | | | | | | |
| January | 167.5 | 474.4 | 236.4 | 215.2 | 111.7 | 295.0 | 466.0 | 609.7 | 2,575.8 |
| February | 217.6 | 498.7 | 211.2 | 211.4 | 103.1 | 296.1 | 490.6 | 592.9 | 2,621.6 |
| March | 211.5 | 434.7 | 230.9 | 238.1 | 63.6 | 281.3 | 505.5 | 559.9 | 2,525.7 |
| April | 140.9 | 394.6 | 231.4 | 258.3 | 99.8 | 304.5 | 371.9 | 785.9 | 2,587.1 |
| May | 194.3 | 389.6 | 257.6 | 230.6 | 104.3 | 189.0 | 310.2 | 733.8 | 2,409.3 |
| June | 144.6 | 469.2 | 287.1 | 221.3 | 117.6 | 199.3 | 324.5 | 693.3 | 2,456.7 |
| July | 166.0 | 532.5 | 309.3 | 201.6 | 93.8 | 281.8 | 402.2 | 631.4 | 2,618.6 |
| August | 187.7 | 422.4 | 392.6 | 291.0 | 82.3 | 247.6 | 431.0 | 618.6 | 2,673.2 |
| September | 120.1 | 427.2 | 460.6 | 217.1 | 95.2 | 262.1 | 431.7 | 840.7 | 2,854.6 |
| October | 105.9 | 425.9 | 392.1 | 175.5 | 88.5 | 203.8 | 476.3 | 708.1 | 2,576.3 |
| November | 153.7 | 481.4 | 401.8 | 223.4 | 71.3 | 230.6 | 489.1 | 560.8 | 2,612.1 |
| December | 111.9 | 650.7 | 396.0 | 265.0 | 96.3 | 249.6 | 448.3 | 624.4 | 2,842.2 |
| **AVERAGE** | **159.9** | **466.8** | **317.8** | **229.2** | **93.8** | **253.1** | **428.7** | **663.2** | **2,612.5** |
| **1979** | | | | | | | | | |
| January | 159.5 | 564.1 | 560.3 | 227.0 | 109.1 | 116.0 | 477.0 | 770.1 | 2,983.1 |
| February | 103.5 | 561.7 | 415.4 | 254.8 | 68.2 | 191.4 | 421.1 | 745.4 | 2,761.5 |
| March | 93.7 | 614.5 | 397.4 | 314.1 | 63.8 | 214.7 | 561.6 | 731.1 | 2,990.9 |
| April | 129.4 | 576.9 | 301.6 | 175.9 | 64.9 | 144.1 | 474.7 | 610.6 | 2,478.1 |
| May | 134.8 | 554.8 | 389.7 | 183.1 | 101.7 | 216.6 | 382.0 | 655.7 | 2,618.4 |
| June | 138.1 | 468.4 | 457.7 | 171.4 | 105.7 | 169.5 | 413.7 | 874.1 | 2,798.6 |
| July | 120.8 | 488.6 | 357.4 | 208.7 | 117.2 | 169.1 | 451.2 | 764.7 | 2,677.5 |
| August | 130.0 | 463.1 | 427.0 | 246.5 | 92.5 | 237.9 | 357.1 | 485.2 | 2,439.2 |
| September | 141.6 | 463.4 | 407.3 | 275.8 | 86.2 | 166.2 | 285.7 | 691.1 | 2,517.3 |
| October | R150.5 | R471.0 | R521.2 | 242.4 | 60.2 | R199.7 | R406.7 | R840.1 | R2,891.7 |
| Novemberᵗ | 168.7 | R501.9 | R416.8 | R190.8 | 109.7 | 160.9 | 438.4 | R749.6 | R2,736.8 |
| Decemberᵗ | 151.5 | 553.2 | 438.7 | 252.5 | 120.4 | 236.7 | 508.9 | 814.3 | 3,076.2 |
| **AVERAGE** | **135.3** | **523.4** | **424.6** | **228.6** | **91.8** | **185.5** | **431.9** | **727.5** | **2,748.6** |

Totals may not equal sum of components due to independent rounding.
Beginning in October 1977 Strategic Petroleum Reserve imports are included.
ᵗPreliminary data.
R = Revised data.
*Sources:* • 1973 through 1976: Bureau of Mines' *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
- 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "PAD Districts Supply/Demand, Annual."
- January 1979 through October 1979: EIA *Energy Data Reports,* "PAD Districts Supply/Demand, Monthly."
- November 1979 through December 1979: EIA, "Monthly Petroleum Statistics Report."
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico); and Bureau of the Census publication IM 145 (Imports).

# Petroleum

## Motor Gasoline

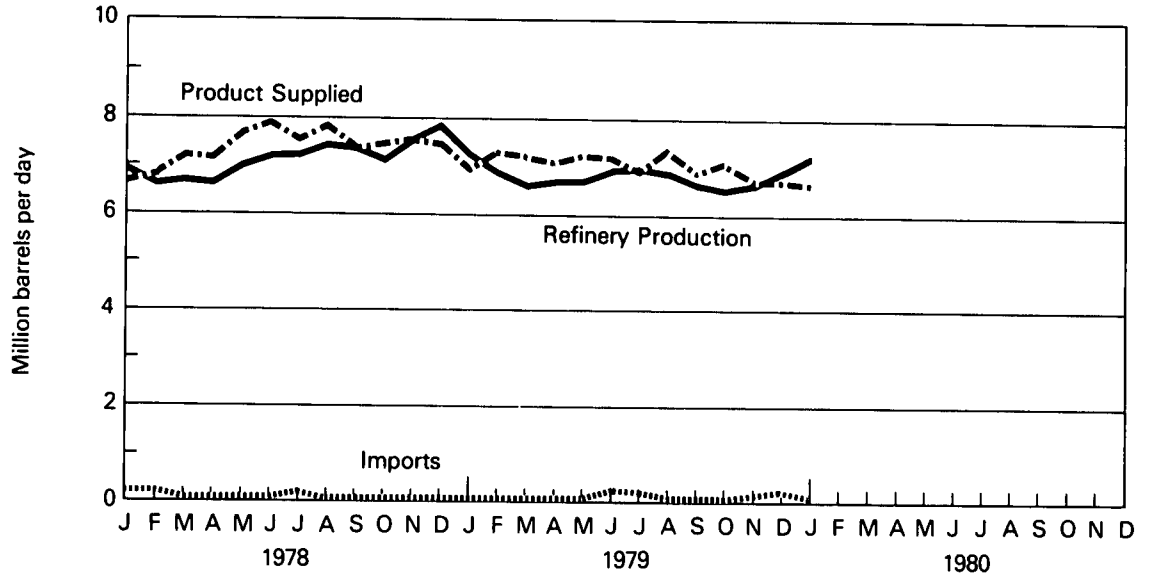
| | | Product Supplied | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total | Unleaded | Unleaded Percent of Total | Refinery Production[1] | Imports | Exports | Stocks[1] |
| | | Thousand barrels per day | | | | | | Thousand barrels |
| **1973** | **AVERAGE** | **6,674** | **NA** | **NA** | **6,527** | **134** | **4** | **‡209,395** |
| **1974** | **AVERAGE** | **6,537** | **NA** | **NA** | **6,358** | **204** | **2** | **‡218,346** |
| **1975** | **AVERAGE** | **6,675** | **NA** | **NA** | **6,518** | **184** | **2** | **‡234,925** |
| **1976** | **AVERAGE** | **6,978** | **NA** | **NA** | **6,838** | **131** | **3** | **‡231,387** |
| **1977** | **AVERAGE** | **7,177** | **1,976** | **27.5** | **7,031** | **217** | **2** | **‡257,578** |
| **1978** | January | 6,681 | 2,097 | 31.4 | 6,933 | 214 | 1 | 272,064 |
| | February | 6,876 | 2,162 | 31.4 | 6,631 | 200 | 1 | 270,832 |
| | March | 7,255 | 2,425 | 33.4 | 6,750 | 141 | 1 | 259,556 |
| | April | 7,202 | 2,391 | 33.2 | 6,668 | 177 | 1 | 248,876 |
| | May | 7,724 | 2,343 | 30.3 | 7,059 | 169 | 2 | 233,471 |
| | June | 7,913 | 2,697 | 34.1 | 7,210 | 234 | 1 | 219,441 |
| | July | 7,576 | 2,629 | 34.7 | 7,264 | 212 | 2 | 216,368 |
| | August | 7,872 | 2,834 | 36.0 | 7,454 | 179 | 1 | 208,975 |
| | September | 7,399 | 2,607 | 35.2 | 7,399 | 251 | 2 | 216,500 |
| | October | 7,448 | 2,576 | 34.6 | 7,176 | 180 | 2 | 213,666 |
| | November | 7,503 | 2,713 | 36.2 | 7,583 | 147 | 1 | 220,523 |
| | December | 7,451 | 2,751 | 36.9 | 7,831 | 182 | 1 | 237,956 |
| | **AVERAGE** | **7,412** | **2,521** | **34.0** | **7,167** | **190** | **1** | |
| **1979** | January | 6,893 | 2,609 | 37.8 | 7,272 | 179 | 2 | 255,664 |
| | February | 7,267 | 2,715 | 37.4 | 6,941 | 160 | 2 | 251,346 |
| | March | 7,221 | 2,733 | 37.8 | 6,654 | 168 | 1 | 239,162 |
| | April | 7,068 | 2,786 | 39.4 | 6,765 | 156 | 1 | 235,192 |
| | May | 7,203 | 2,751 | 38.2 | 6,786 | 145 | 2 | 227,193 |
| | June | 7,187 | 2,787 | 38.8 | 6,987 | 261 | 1 | 229,349 |
| | July | 6,850 | 2,789 | 40.7 | 7,006 | 222 | 1 | 241,536 |
| | August | 7,332 | 2,970 | 40.5 | 6,882 | 147 | 1 | 232,742 |
| | September | 6,878 | 2,815 | 40.9 | 6,626 | 135 | 1 | 229,608 |
| | October | R7,022 | 2,802 | 39.9 | R6,483 | R150 | 1 | R218,066 |
| | November† | 6,758 | 2,928 | 43.3 | 6,653 | R182 | 1 | R220,579 |
| | December† | R6,702 | R2,890 | R43.1 | R6,963 | R260 | (s) | R236,711 |
| | **AVERAGE** | **R7,031** | **R2,798** | **R39.8** | **R6,835** | **R181** | **1** | |
| **1980** | January† | *6,622* | NA | NA | *7,204* | *157* | NA | *259,044* |

[1]See Definitions.
Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
†Preliminary data.
R = Revised data.
NA = Not available.
(s) = less than 500 barrels per day.
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.
*Sources:* • 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual" (except unleaded gasoline).
- 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
- January 1979 through October 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
- November 1979 through December 1979; EIA "Monthly Petroleum Statistics Report" (except exports).
- Exports for November 1979 through December 1979 are preliminary data based on the Bureau of the Census publication EM 522.
- Unleaded gasoline — December 1979 and back: EIA "Monthly Petroleum Statistics Report."
- January 1980 data are EIA estimates based on EIA weekly data (except imports).
- January 1980 imports are EIA estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin."
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico); EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of the Census publications IM 145 (Imports), EM 522 (Exports), and FT 800 (Exports).

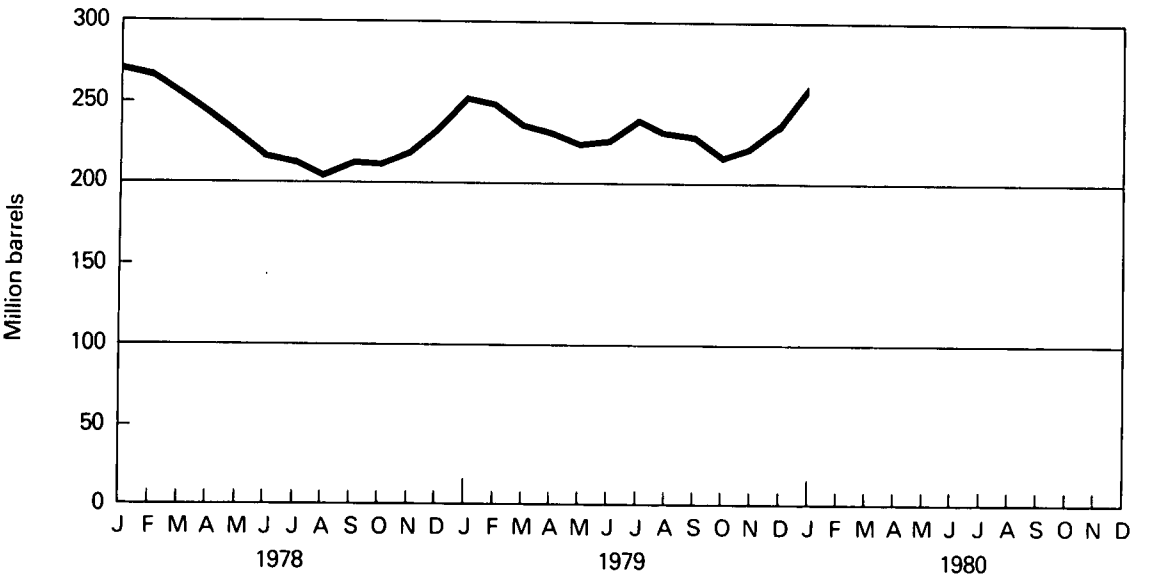
# Petroleum

## Motor Gasoline

### Product Supplied, Refinery Production and Imports




### Stocks



# Petroleum

## Jet Fuel

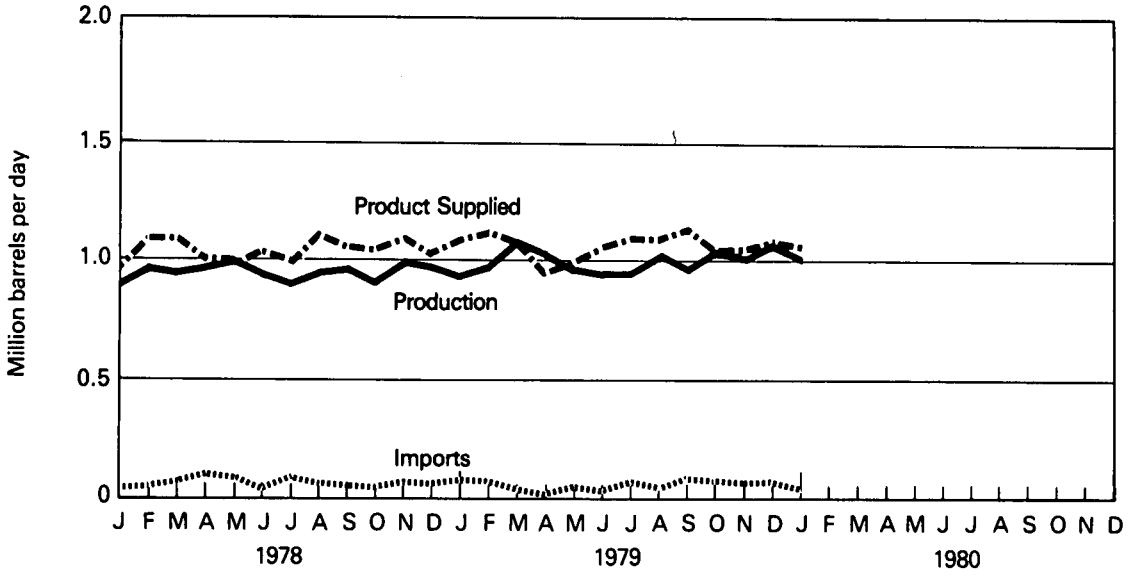
| | | Product Supplied | Refinery Production | Imports | Exports | Stocks |
|---|---|---|---|---|---|---|
| | | Thousand barrels per day | | | | Thousand barrels |
| **1973** | **AVERAGE** | **1,059** | **859** | **212** | **4** | **‡28,544** |
| **1974** | **AVERAGE** | **993** | **836** | **163** | **3** | **‡29,435** |
| **1975** | **AVERAGE** | **1,001** | **871** | **133** | **2** | **‡30,380** |
| **1976** | **AVERAGE** | **987** | **918** | **76** | **2** | **‡32,085** |
| **1977** | **AVERAGE** | **1,039** | **973** | **75** | **2** | **‡34,548** |
| **1978** | January | 980 | 921 | 60 | 1 | 34,535 |
| | February | 1,108 | 989 | 76 | 2 | 33,297 |
| | March | 1,107 | 967 | 98 | 2 | 31,950 |
| | April | 1,011 | 980 | 122 | 1 | 34,631 |
| | May | 997 | 1,011 | 108 | 2 | 38,372 |
| | June | 1,044 | 963 | 59 | 2 | 37,654 |
| | July | 1,014 | 923 | 105 | 2 | 38,050 |
| | August | 1,126 | 966 | 86 | 1 | 35,747 |
| | September | 1,077 | 989 | 75 | 1 | 35,328 |
| | October | 1,067 | 932 | 65 | 2 | 33,104 |
| | November | 1,107 | 1,011 | 89 | 2 | 32,829 |
| | December | 1,046 | 989 | 86 | 2 | 33,665 |
| | **AVERAGE** | **1,057** | **970** | **86** | **1** | |
| **1979** | January | 1,100 | 950 | 97 | 1 | 31,993 |
| | February | 1,137 | 996 | 88 | 2 | 30,449 |
| | March | 1,088 | 1,097 | 61 | 1 | 32,607 |
| | April | 961 | 1,040 | 43 | 1 | 36,217 |
| | May | 1,008 | 976 | 75 | 1 | 37,547 |
| | June | 1,073 | 956 | 57 | 1 | 35,741 |
| | July | 1,105 | 964 | 90 | 1 | 34,152 |
| | August | 1,088 | 1,040 | 49 | 1 | 34,156 |
| | September | 1,105 | 958 | 84 | 1 | 32,251 |
| | October | R1,050 | 1,046 | R90 | (s) | R34,891 |
| | November† | R1,057 | R1,028 | R71 | 1 | R36,101 |
| | December† | R1,071 | R1,062 | R83 | 1 | R38,405 |
| | **AVERAGE** | **R1,070** | **R1,010** | **74** | **1** | |
| **1980** | January† | *1,061* | *1,006* | *54* | NA | *38,053* |

Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
†Preliminary data.
R = Revised data.
NA = Not available.
(s) = Less than 500 barrels per day.
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.
*Sources:* • 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
- 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
- January 1979 through October 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
- November 1979 through December 1979: EIA, "Monthly Petroleum Statistics Report" (except exports).
- Exports for November 1979 through December 1979 are preliminary data based on the Bureau of the Census publication EM 522.
- January 1980 data are EIA estimates based on EIA weekly data (except imports).
- January 1980 imports are EIA estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin."
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico), EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of the Census publications IM 145 (Imports), EM 522 (Exports), and FT 800 (Exports).

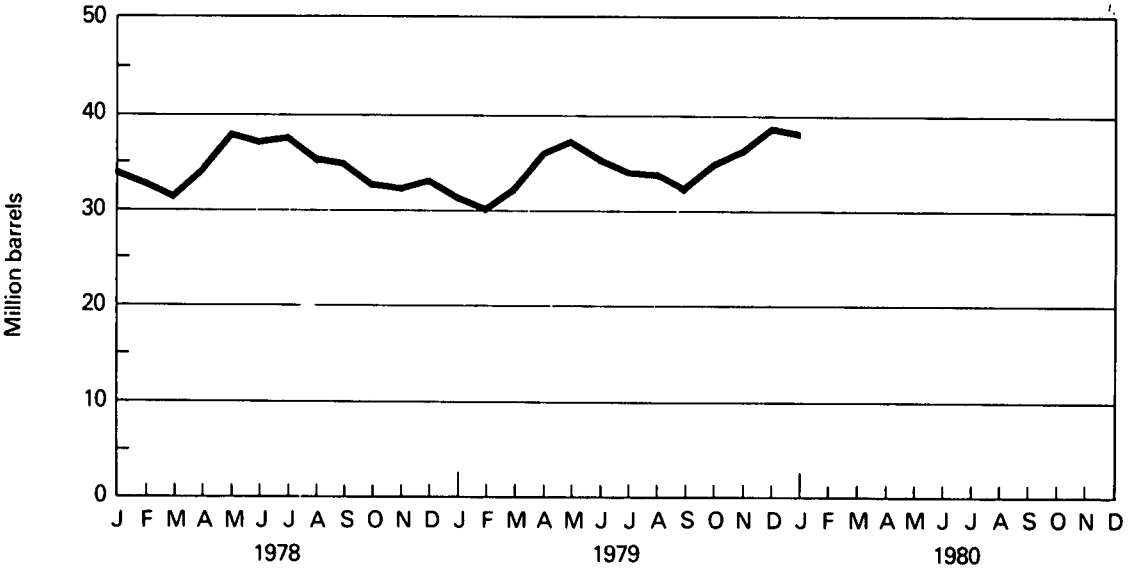
# Petroleum

## Jet Fuel

### Product Supplied, Refinery Production and Imports




### Stocks



# Petroleum

## Distillate Fuel Oil

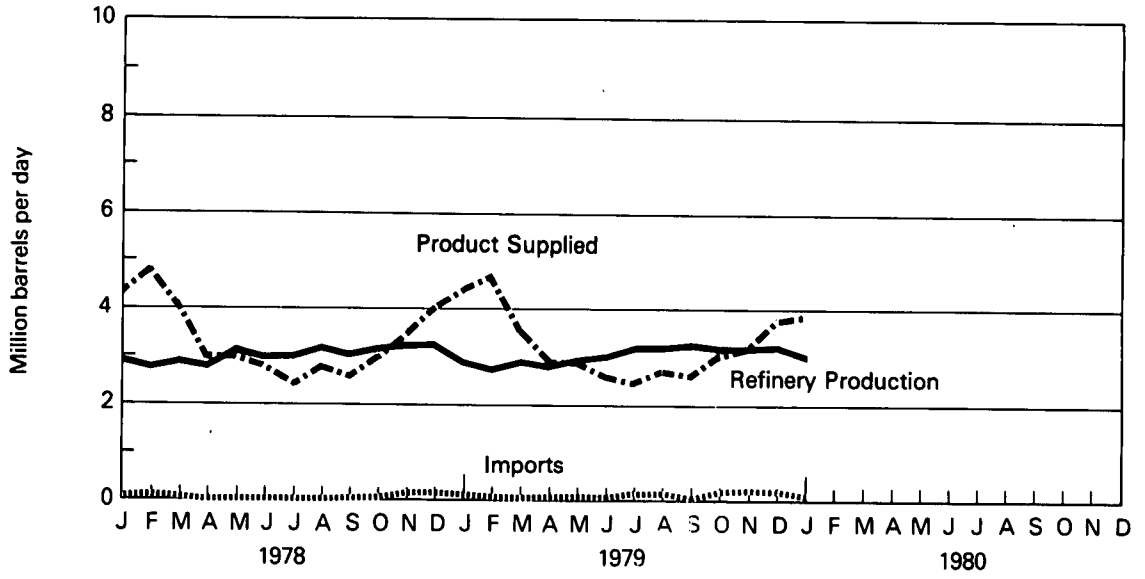
| | | Product Supplied | Refinery Production[1] | Imports | Exports | Stocks[1] |
|---|---|---|---|---|---|---|
| | | Thousand barrels per day | | | | Thousand barrels |
| **1973** | **AVERAGE** | **3,092** | **2,820** | **392** | **9** | **‡196,421** |
| **1974** | **AVERAGE** | **2,948** | **2,668** | **289** | **2** | **‡200,029** |
| **1975** | **AVERAGE** | **2,851** | **2,653** | **155** | **1** | **‡208,787** |
| **1976** | **AVERAGE** | **3,133** | **2,924** | **146** | **1** | **‡185,948** |
| **1977** | **AVERAGE** | **3,352** | **3,277** | **250** | **1** | **‡250,260** |
| **1978** | January | 4,458 | 3,067 | 196 | 1 | 213,245 |
| | February | 4,848 | 2,952 | 212 | 16 | 165,697 |
| | March | 4,108 | 3,014 | 193 | (s) | 137,826 |
| | April | 3,111 | 2,959 | 100 | 6 | 136,143 |
| | May | 3,103 | 3,250 | 125 | 1 | 144,619 |
| | June | 2,837 | 3,109 | 146 | (s) | 157,237 |
| | July | 2,522 | 3,123 | 149 | 4 | 180,420 |
| | August | 2,800 | 3,296 | 143 | 4 | 200,157 |
| | September | 2,664 | 3,185 | 163 | 2 | 220,687 |
| | October | 3,077 | 3,299 | 178 | 2 | 233,082 |
| | November | 3,583 | 3,366 | 223 | 3 | 233,231 |
| | December | 4,156 | 3,360 | 254 | 2 | 216,439 |
| | **AVERAGE** | **3,432** | **3,167** | **173** | **3** | |
| **1979** | January | 4,543 | 3,005 | 226 | 1 | 175,695 |
| | February | 4,792 | 2,863 | 196 | 7 | 127,034 |
| | March | 3,627 | 2,992 | 176 | 5 | 112,728 |
| | April | 3,006 | 2,935 | 149 | 4 | 114,989 |
| | May | 2,989 | 3,064 | 185 | 2 | 123,059 |
| | June | 2,707 | 3,137 | 180 | 1 | 141,365 |
| | July | 2,552 | 3,305 | 219 | 9 | 171,243 |
| | August | 2,772 | 3,332 | 217 | 2 | 195,339 |
| | September | 2,659 | 3,368 | 126 | 3 | 220,328 |
| | October | R3,104 | R3,248 | R211 | 10 | R231,083 |
| | November† | 3,250 | 3,200 | R242 | (s) | R236,296 |
| | December† | R3,714 | R3,240 | R226 | (s) | R228,294 |
| | **AVERAGE** | **R3,302** | **R3,143** | **196** | **4** | |
| **1980** | January† | *3,869* | *3,030* | *184* | NA | *210,637* |

[1]See Definitions.
Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
†Preliminary data.
R = Revised data.
NA = Not available.
(s) = Less than 500 barrels per day.
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.
*Sources:* • 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
- 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
- January 1979 through October 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
- November 1979 through December 1979: EIA, "Monthly Petroleum Statistics Report" (except exports).
- Exports for November 1979 through December 1979 are preliminary data based on the Bureau of the Census publication EM 522.
- January 1980 data are EIA estimates based on EIA weekly data (except imports).
- January 1980 imports are EIA estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin."
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico), EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of the Census publications IM 145 (Imports), EM 522 (Exports), and FT 800 (Exports).

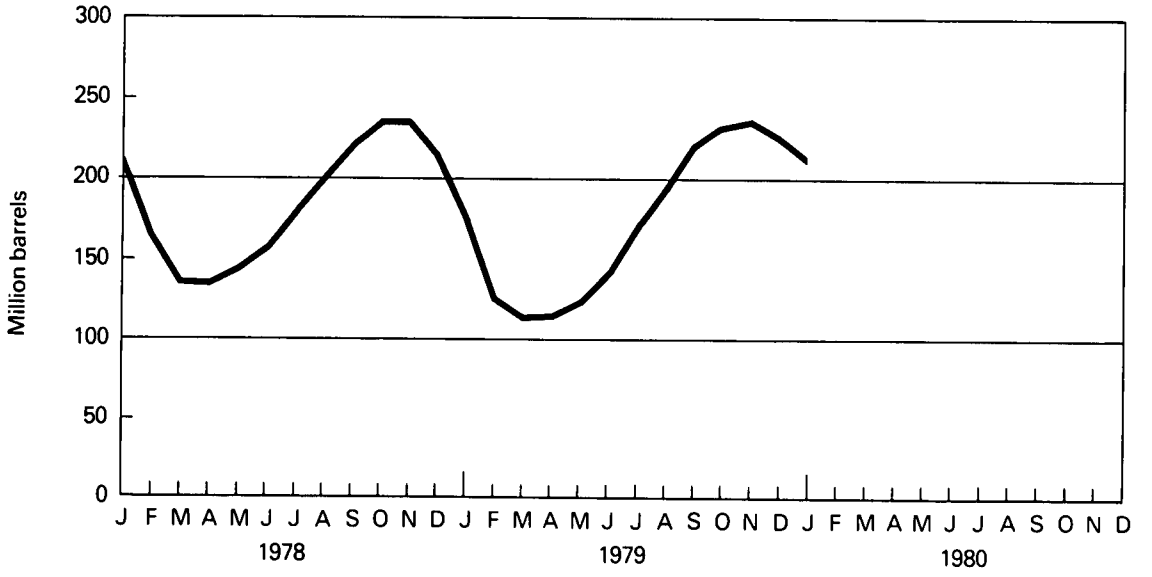
# Petroleum

## Distillate Fuel Oil

### Product Supplied, Refinery Production and Imports




### Stocks



# Petroleum

## Residual Fuel Oil

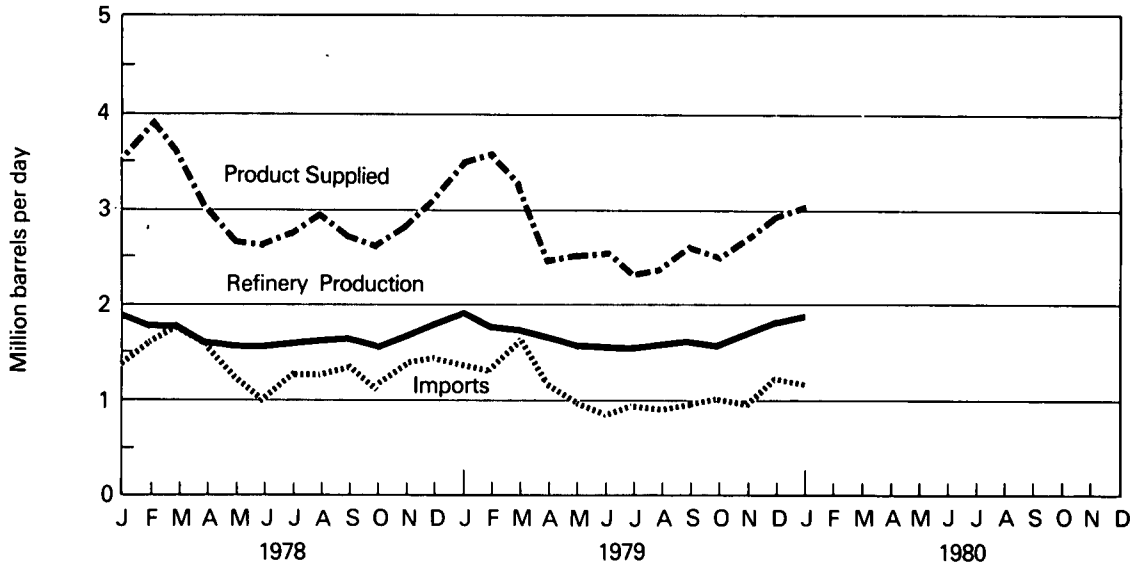
| | | Product Supplied | Refinery Production | Imports | Exports | Stocks |
|---|---|---|---|---|---|---|
| | | Thousand barrels per day | | | | Thousand barrels |
| **1973** | **AVERAGE** | **2,822** | **971** | **1,853** | **23** | **‡53,480** |
| **1974** | **AVERAGE** | **2,639** | **1,070** | **1,587** | **14** | **‡59,694** |
| **1975** | **AVERAGE** | **2,462** | **1,235** | **1,223** | **15** | **‡74,126** |
| **1976** | **AVERAGE** | **2,801** | **1,377** | **1,413** | **12** | **‡72,344** |
| **1977** | **AVERAGE** | **3,071** | **1,754** | **1,359** | **6** | **‡89,993** |
| **1978** | January | 3,518 | 1,868 | 1,380 | 13 | 81,657 |
| | February | 3,974 | 1,795 | 1,582 | 10 | 65,091 |
| | March | 3,540 | 1,751 | 1,710 | 22 | 62,388 |
| | April | 3,003 | 1,548 | 1,575 | 7 | 66,209 |
| | May | 2,686 | 1,653 | 1,231 | 16 | 72,233 |
| | June | 2,625 | 1,572 | 1,031 | 4 | 71,860 |
| | July | 2,772 | 1,586 | 1,295 | 10 | 75,320 |
| | August | 2,929 | 1,630 | 1,275 | 25 | 74,166 |
| | September | 2,716 | 1,636 | 1,318 | 12 | 81,314 |
| | October | 2,621 | 1,564 | 1,120 | 8 | 83,435 |
| | November | 2,845 | 1,662 | 1,352 | 6 | 88,729 |
| | December | 3,107 | 1,750 | 1,410 | 19 | 90,194 |
| | **AVERAGE** | **3,023** | **1,667** | **1,355** | **13** | |
| **1979** | January | 3,533 | 1,907 | 1,355 | 6 | 81,997 |
| | February | 3,596 | 1,792 | 1,307 | 10 | 68,229 |
| | March | 3,238 | 1,718 | 1,642 | 14 | 71,968 |
| | April | 2,479 | 1,643 | 1,126 | 2 | 81,002 |
| | May | 2,502 | 1,588 | 1,034 | 8 | 84,855 |
| | June | 2,552 | 1,534 | 880 | 8 | 80,893 |
| | July | 2,302 | 1,576 | 916 | 18 | 86,631 |
| | August | 2,479 | 1,590 | 920 | 14 | 87,542 |
| | September | 2,620 | 1,638 | 982 | 2 | 87,775 |
| | October | R2,553 | R1,611 | R1,042 | 8 | R90,896 |
| | November† | R2,723 | 1,712 | R996 | 5 | 90,591 |
| | December† | R2,980 | R1,875 | R1,266 | 7 | R95,302 |
| | **AVERAGE** | **R2,792** | **R1,682** | **R1,122** | **9** | |
| **1980** | January† | *3,044* | *1,902* | *1,203* | NA | *94,326* |

Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
†Preliminary data.
R = Revised data.
NA = Not available.
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.
*Sources:*
- 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
- 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
- January 1979 through October 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
- November 1979 through December 1979: EIA, "Monthly Petroleum Statistics Report" (except exports).
- Exports for November 1979 through December 1979 are preliminary data based on the Bureau of the Census publication EM 522.
- January 1980 data are EIA estimates based on EIA weekly data (except imports).
- January 1980 imports are EIA estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin."
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico); EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of the Census publications IM 145 (Imports), EM 522 (Exports), and FT 800 (Exports).

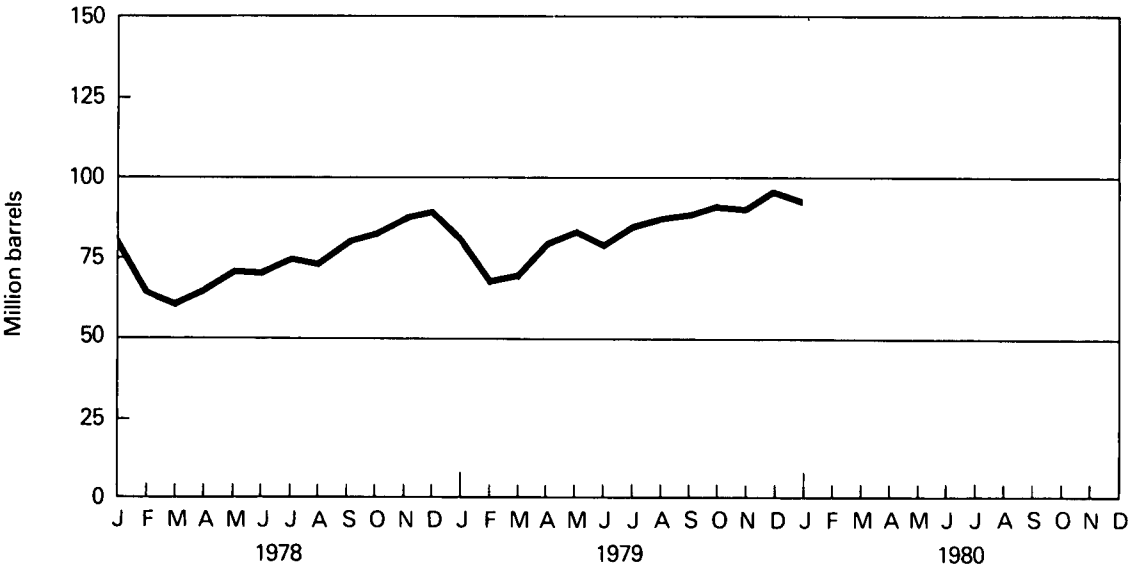
# Petroleum

## Residual Fuel Oil

### Product Supplied, Refinery Production and Imports




### Stocks



# Petroleum

## Natural Gas Plant Liquids, Including Liquefied Refinery Gases

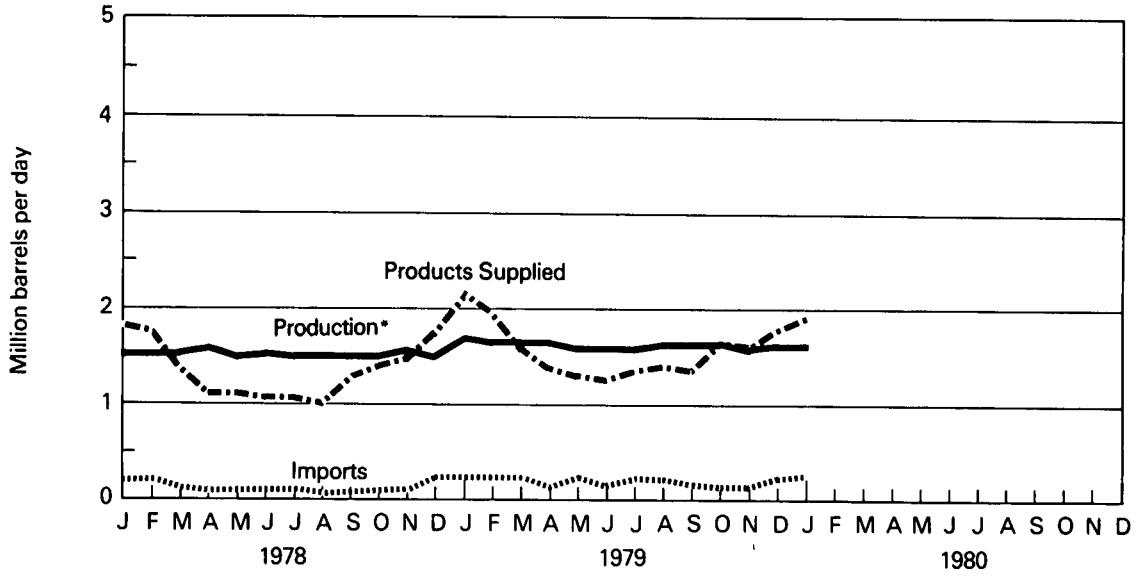
| | | Products Supplied[1] | Production[1] | | Used at Refineries[1] | Imports | Stocks[1] |
|---|---|---|---|---|---|---|---|
| | | | At processing plants | At refineries | | | |
| | | Thousand barrels per day | | | | | Thousand barrels |
| **1973** | **AVERAGE** | **1,454** | **1,738** | **375** | **815** | **239** | **‡106,659** |
| **1974** | **AVERAGE** | **1,422** | **1,688** | **338** | **746** | **212** | **‡120,175** |
| **1975** | **AVERAGE** | **1,352** | **1,633** | **311** | **710** | **185** | **‡132,653** |
| **1976** | **AVERAGE** | **1,407** | **1,603** | **340** | **725** | **196** | **‡124,518** |
| **1977** | **AVERAGE** | **1,427** | **1,618** | **352** | **673** | **203** | **‡144,902** |
| **1978** | January | 1,875 | 1,557 | 326 | 647 | 200 | 130,682 |
| | February | 1,803 | 1,562 | 338 | 657 | 207 | 120,217 |
| | March | 1,429 | 1,590 | 361 | 602 | 132 | 121,232 |
| | April | 1,164 | 1,619 | 352 | 601 | 101 | 129,870 |
| | May | 1,171 | 1,530 | 363 | 494 | 109 | 139,581 |
| | June | 1,125 | 1,583 | 367 | 649 | 109 | 147,540 |
| | July | 1,124 | 1,558 | 348 | 563 | 122 | 157,527 |
| | August | 1,090 | 1,556 | 351 | 657 | 93 | 164,537 |
| | September | 1,338 | 1,546 | 379 | 644 | 106 | 165,600 |
| | October | 1,481 | 1,540 | 352 | 658 | 116 | 161,006 |
| | November | 1,588 | 1,602 | 357 | 755 | 122 | 152,519 |
| | December | 1,832 | 1,566 | 363 | 743 | 258 | [2]140,052 |
| | **AVERAGE** | **1,416** | **1,567** | **355** | **639** | **139** | |
| **1979** | January | 2,222 | 1,748 | 337 | 763 | 256 | 124,138 |
| | February | 1,998 | 1,703 | 325 | 757 | 252 | 110,412 |
| | March | 1,654 | 1,728 | 333 | 718 | 257 | 107,759 |
| | April | 1,449 | 1,708 | 354 | 679 | 160 | 110,216 |
| | May | 1,357 | 1,647 | 389 | 655 | 255 | 118,505 |
| | June | 1,316 | 1,641 | 382 | 606 | 175 | 126,468 |
| | July | 1,410 | 1,643 | 361 | 565 | 240 | 134,523 |
| | August | 1,477 | 1,614 | 363 | 599 | 236 | 138,491 |
| | September | 1,376 | 1,612 | 323 | 584 | 194 | 143,336 |
| | October | R1,669 | R1,663 | R321 | R596 | R193 | R140,215 |
| | November | 1,625 | 1,628 | 351 | 716 | 173 | 136,000 |
| | December | 1,808 | 1,638 | 348 | 708 | 252 | 127,000 |
| | **AVERAGE** | **R1,612** | **1,664** | **R349** | **R662** | **R221** | |
| **1980** | January | 1,909 | 1,610 | 323 | 626 | 259 | 116,000 |

[1]See Explanatory Note 7, and Definitions.
[2]EIA natural gas plant coverage was expanded in January 1979 to include approximately 80 more plants. Calculated on the new basis, December 1978 closing stocks of natural gas plant liquids totaled 144,500 thousand barrels.
‡Total as of December 31.
R = Revised data.
*Sources:* • 1973 through 1977: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
• 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
• January 1979 through October 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
• November 1979 through January 1980: EIA estimates based on historical analyses.
• Sources for the *Energy Data Reports* are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico), EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of the Census publications IM 145 (Imports), FM 522 (Exports), and FT 800 (Exports).

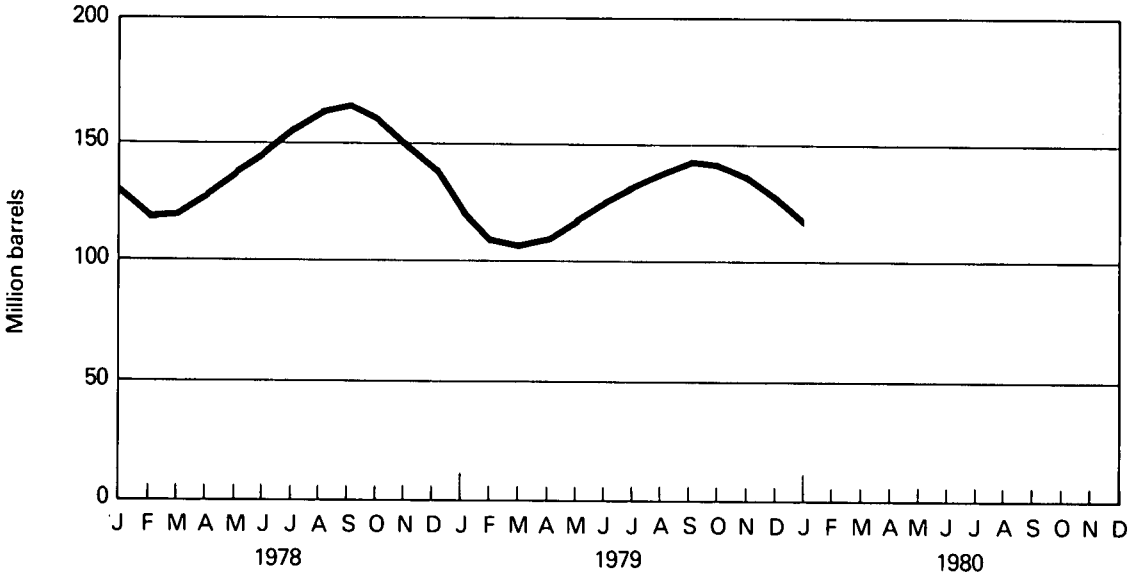
# Petroleum

## Natural Gas Plant Liquids

### Products Supplied, Production and Imports




### Stocks




*At processing plants.

# Petroleum

## Petroleum Primary Supply Balance

| | 1978 | | | | |
|---|---|---|---|---|---|
| | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | Year |
| | Thousand barrels per day | | | | |
| **Primary Supply** | | | | | |
| Crude oil and lease condensate production | 8,489 | 8,825 | 8,771 | 8,741 | 8,707 |
| Natural gas plant liquids production | 1,570 | 1,577 | 1,554 | 1,569 | 1,567 |
| Other hydrocarbon supply | 55 | 47 | 55 | 54 | 53 |
| Crude oil imported[1] | 6,066 | 5,938 | 6,601 | 6,807 | 6,356 |
| Petroleum products imported[2] | 2,259 | 1,853 | 1,929 | 1,995 | 2,008 |
| Total new primary supply | 18,438 | 18,240 | 18,910 | 19,165 | 18,691 |
| Processing gain | 491 | 466 | 470 | 558 | 496 |
| Stock change—all oils[3] | −1,601 | +190 | +846 | +160 | −94 |
| Total net primary supply | 20,531 | 18,515 | 18,534 | 19,563 | 19,281 |
| Unaccounted for crude oil[4] | −194 | −71 | −37 | +70 | −57 |
| **Disposition** | | | | | |
| Crude oil and petroleum products exported | 246 | 349 | 405 | 445 | 362 |
| Crude oil losses | 15 | 16 | 16 | 16 | 16 |
| Total products supplied[5] | 20,075 | 18,081 | 18,076 | 19,173 | 18,847 |
| Total disposition | 20,336 | 18,445 | 18,498 | 19,634 | 19,224 |

| | 1979 | | | | |
|---|---|---|---|---|---|
| | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr.† | Year† |
| **Primary Supply** | | | | | |
| Crude oil and lease condensate production | 8,514 | 8,510 | R8,507 | 8,526 | 8,514 |
| Natural gas plant liquids production | 1,727 | 1,665 | R1,623 | 1,643 | 1,664 |
| Other hydrocarbon supply | 32 | 38 | 64 | 70 | 51 |
| Crude oil imported[1] | 6,501 | 6,296 | R6,404 | 6,361 | 6,390 |
| Petroleum products imported[2] | 2,225 | 1,717 | R1,687 | 1,934 | 1,889 |
| Total new primary supply | 18,998 | 18,225 | R18,285 | 18,534 | 18,508 |
| Processing gain | 458 | 498 | R567 | 529 | 513 |
| Stock change—all oils[3] | −1,512 | +707 | R+1,061 | +366 | +163 |
| Total net primary supply | R20,968 | 18,016 | R17,791 | 18,697 | 18,858 |
| Unaccounted for crude oil[4] | −163 | +29 | R+104 | +42 | +5 |
| **Disposition** | | | | | |
| Crude oil and petroleum products exported | 494 | 466 | 457 | 469 | 471 |
| Crude oil losses | 15 | 15 | 16 | 16 | 16 |
| Total products supplied[5] | 20,297 | 17,564 | R17,422 | 18,254 | 18,376 |
| Total disposition | 20,805 | 18,045 | R17,894 | 18,739 | 18,863 |

Totals may not equal sum of components due to independent rounding.
[1]Includes oil imported for the Strategic Petroleum Reserve.
[2]Includes plant condensate, natural gasoline and unfinished oils.
[3]Includes petroleum stored in the Strategic Petroleum Reserve.
[4]Balancing item resulting from statistical inconsistencies.
[5]Includes international bunkers.
R = Revised data.
†Preliminary data.
*Sources:* • 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
- 1st, 2nd and 3rd Quarters 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
- 4th Quarter 1979: EIA, "Monthly Petroleum Statistics Report and "Petroleum Statement, Monthly" (except domestic production and exports).
- Exports for November 1979 through December 1979 are preliminary data based on the Bureau of the Census publication EM 522 and EIA 87.
- Domestic production for November 1979 through December 1979 is based on historical data from Economic Regulatory Administration Form 182, "First Purchasers Report—Crude Production" and partial returns from State Conservation Agencies where available.
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are : ERA Form 60 (Imports), FEA P133 (Imports from Puerto Rico); EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 89 (Pipeline Report), Form 90 (Crude Stock Report), ERA-182 (First Purchasers Report—Crude Production); Bureau of the Census publications IM 145 (Imports), EM 522 (Exports), FT 800 (Exports), and State Conservation Agencies.

## Natural Gas

Consumption of natural gas in the United States during January 1980 was an estimated 2.2 trillion cubic feet (Tcf). This was 7.3 percent less than in January 1979 and 13.4 percent greater than in December 1979.

Production of dry natural gas in January 1980 was an estimated 1.7 Tcf, slightly greater than in January 1979 and 1.9 percent higher than in December 1979.

Imports of natural gas in January 1980 were an estimated 122 billion cubic feet (Bcf), 22.0 percent higher than in the previous January. Receipts of foreign natural gas during January 1980 included Algerian liquefied natural gas (LNG) equivalent to approximately 18 Bcf.

Domestic producer sales to major interstate pipeline companies in November 1979 totaled 921 Bcf, 9.9 percent above sales for the previous November. Total sales during the first 11 months of 1979 were 9.5 Tcf, 5.6 percent above those for the same period in 1978.

Net withdrawals of natural gas from underground storage reservoirs during January 1980 were 444 Bcf, 31.9 percent less than during the previous January. Stocks of working gas* in storage at the end of January 1980 totaled 2.3 Tcf, 23.3 percent above those available a year earlier.

*Natural gas available for withdrawal.

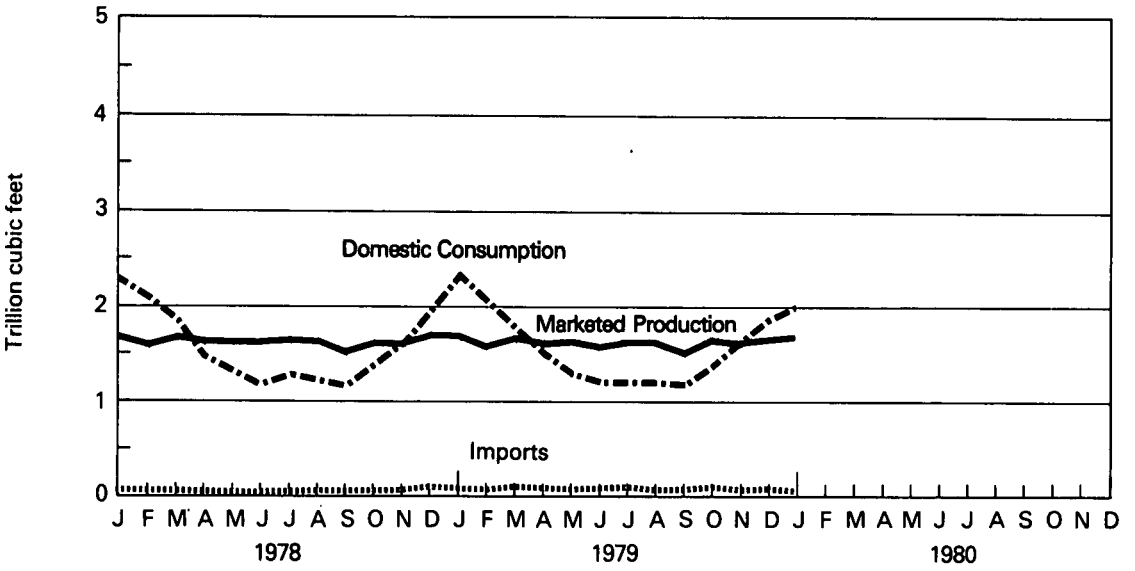
# Natural Gas

| | | Domestic Consumption | Production | | Domestic Producer Sales to Major Interstate Pipelines | Imports | Exports |
|---|---|---|---|---|---|---|---|
| | | | Marketed | Dry | | | |
| | | Billion cubic feet | | | | | |
| **1973** | **TOTAL** | **22,049** | **22,648** | **21,731** | **12,067** | **1,033** | **77** |
| **1974** | **TOTAL** | **21,223** | **21,601** | **20,714** | **11,462** | **959** | **77** |
| **1975** | **TOTAL** | **19,538** | **20,109** | **19,237** | **10,652** | **953** | **73** |
| **1976** | **TOTAL** | **19,946** | **19,952** | **19,098** | **10,140** | **964** | **65** |
| **1977** | **TOTAL** | **19,521** | **20,025** | **19,163** | **9,883** | **1,011** | **56** |
| **1978** | January | 2,382 | 1,743 | 1,669 | 862 | 86 | 5 |
| | February | 2,139 | 1,649 | 1,579 | 756 | 77 | 5 |
| | March | 1,918 | 1,748 | 1,673 | 861 | 86 | 5 |
| | April | 1,539 | 1,668 | 1,597 | 836 | 78 | 3 |
| | May | 1,380 | 1,664 | 1,593 | 819 | 74 | 5 |
| | June | 1,249 | 1,623 | 1,554 | 768 | 68 | 4 |
| | July | 1,333 | 1,693 | 1,621 | 821 | 72 | 5 |
| | August | 1,285 | 1,658 | 1,587 | 821 | 74 | 5 |
| | September | 1,235 | 1,576 | 1,509 | 800 | 73 | 6 |
| | October | 1,440 | 1,635 | 1,565 | 847 | 80 | 3 |
| | November | 1,658 | 1,607 | 1,538 | 838 | 91 | 3 |
| | December | 2,069 | 1,710 | 1,637 | 882 | 107 | 4 |
| | **TOTAL** | **19,627** | **19,974** | **19,122** | **9,911** | **966** | **53** |
| **1979** | January | 2,372 | 1,714 | 1,641 | 890 | 100 | 5 |
| | February | 2,149 | 1,599 | 1,531 | 819 | 94 | 4 |
| | March | 1,834 | 1,698 | 1,625 | 907 | 116 | 3 |
| | April | 1,542 | 1,629 | 1,559 | 871 | 109 | 3 |
| | May | 1,369 | 1,658 | 1,587 | 877 | 97 | 4 |
| | June | 1,264 | 1,593 | 1,525 | 812 | 101 | 5 |
| | July | 1,280 | 1,604 | 1,536 | 851 | 107 | 5 |
| | August | 1,280 | 1,627 | 1,558 | 880 | 94 | 6 |
| | September | 1,270 | 1,572 | 1,505 | 820 | 97 | 5 |
| | October | 1,495 | 1,635 | 1,565 | 888 | 110 | 3 |
| | November | R1,693 | R1,652 | R1,581 | 921 | R106 | 3 |
| | December | 1,940 | 1,690 | 1,620 | NA | 100 | 4 |
| | **TOTAL** | **R19,488** | **R19,671** | **R18,833** | **NA** | **R1,231** | **50** |
| **1980** | January | 2,200 | 1,720 | 1,650 | NA | 122 | 5 |

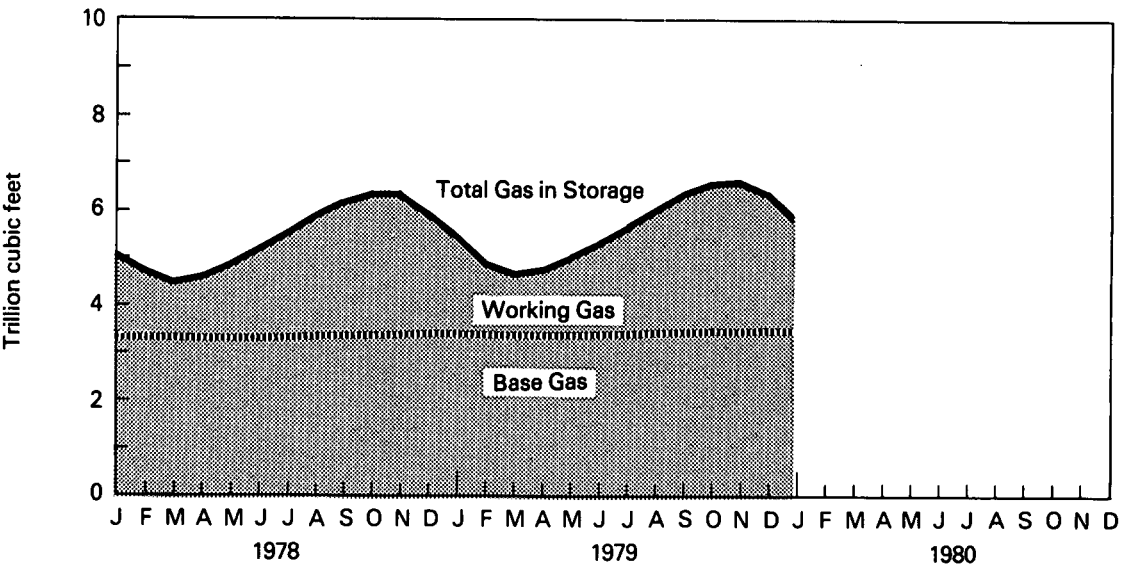
R = Revised data.
NA = Not available.
*Sources:* • Domestic Consumption — 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook,* "Natural Gas" chapter; January 1977 forward: EIA estimates based on a supply/disposition balance calculation.
- Production — State reports to the Interstate Oil Compact Commission and EIA estimates for states that do not report monthly data on a regular or timely basis.
- Domestic Producer Sales — Federal Power Commission (FPC) Form 11, "Natural Gas Pipeline Company Monthly Statement."
- Imports — 1973 through 1978: FPC Form 14, "Imports and Exports of Natural Gas"; January 1979 forward: EIA estimates based on import data from FPC Form 11.
- Exports — 1973 through 1978: FPC Form 14; January 1979 forward: EIA estimates based primarily on historical data reported on FPC Form 14.

# Natural Gas

**Domestic Consumption, Marketed Production and Imports**




**Gas in Storage**



# Natural Gas

## Natural Gas in Underground Storage[1]

| | | Total Gas in Storage | Base Gas | Working Gas | Storage Injections | Storage Withdrawals | Net Storage Injections[2] |
|---|---|---|---|---|---|---|---|
| | | | | Billion cubic feet | | | |
| **1975** | | **‡5,358** | **‡3,150** | **‡2,208** | **NA** | **NA** | **NA** |
| **1976** | | **‡5,231** | **‡3,310** | **‡1,921** | **1,952** | **2,074** | **(122)** |
| **1977** | | **‡5,844** | **‡3,377** | **‡2,467** | **2,390** | **1,767** | **623** |
| **1978** | January | 5,193 | 3,374 | 1,819 | 21 | 668 | (647) |
| | February | 4,683 | 3,373 | 1,310 | 21 | 530 | (509) |
| | March | 4,497 | 3,374 | 1,123 | 92 | 278 | (186) |
| | April | 4,608 | 3,377 | 1,231 | 179 | 68 | 111 |
| | May | 4,870 | 3,379 | 1,491 | 291 | 30 | 261 |
| | June | 5,217 | 3,381 | 1,836 | 365 | 18 | 347 |
| | July | 5,550 | 3,386 | 2,164 | 349 | 16 | 333 |
| | August | 5,904 | 3,403 | 2,501 | 359 | 12 | 347 |
| | September | 6,224 | 3,411 | 2,813 | 329 | 9 | 320 |
| | October | 6,402 | 3,444 | 2,958 | 209 | 28 | 181 |
| | November | 6,352 | 3,425 | 2,927 | 82 | 135 | (53) |
| | December | 5,999 | 3,459 | 2,540 | 33 | 384 | (351) |
| **1979** | January | 5,348 | 3,458 | 1,890 | 21 | 673 | (652) |
| | February | 4,806 | 3,457 | 1,349 | 23 | 566 | (543) |
| | March | 4,695 | 3,459 | 1,236 | 94 | 205 | (111) |
| | April | 4,762 | 3,427 | 1,335 | 182 | 73 | 109 |
| | May | 5,057 | 3,438 | 1,619 | 308 | 13 | 295 |
| | June | 5,399 | 3,449 | 1,950 | 350 | 8 | 342 |
| | July | 5,743 | 3,459 | 2,284 | 361 | 19 | 342 |
| | August | 6,095 | 3,467 | 2,628 | 362 | 12 | 350 |
| | September | 6,401 | 3,481 | 2,920 | 326 | 14 | 312 |
| | October | 6,563 | 3,484 | 3,079 | 196 | 34 | 162 |
| | November | 6,541 | 3,496 | 3,045 | 108 | 132 | (24) |
| | December | 6,297 | 3,537 | 2,760 | 53 | 292 | (239) |
| **1980** | January | 5,865 | 3,535 | 2,330 | 21 | 465 | (444) |

[1]See Explanatory Note 9.
[2]Net Storage Injections = storage injection minus storage withdrawal. Parentheses indictate withdrawal greater than injection.
‡Total as of December 31.
NA = Not available.
*Source:* • Energy Information Administration Form 191 and Federal Power Commission Form 8, "Underground Gas Storage Report."

# Part 5 Oil and Gas Resource Development

## Oil and Gas Resource Development

The rotary rig count increased to 2,571 in January 1980, up from the 2,552 count of the month before. This represents a 16.9 percent increase over the January 1979 count of 2,199 rotary rigs.

Wells completed in January 1980 totaled 3,464. This is a 5.0 percent decrease from the number completed during January 1979.

Oil well completions in January 1980 (1,440 well completions) were up 5.0 percent from January 1979 (1,372 completions). The number of gas wells completed decreased. In January 1980, 781 gas wells were completed, 21.6 percent below the January 1979 level. Dry holes were down 2.7 percent (1,243 as compared to 1,278 during the previous January). Total footage drilled dropped 8.5 percent (16.4 million feet as compared to 18.0 million feet the year before).

# Oil and Gas Resource Development

| | | Rotary Rigs in Operation | | Exploratory and Development Wells Completed[1,2] | | | | Total Footage of Wells Completed[1] |
|---|---|---|---|---|---|---|---|---|
| | | Monthly average | | Oil | Gas | Dry | Total | Thousand feet |
| **1973** | **AVERAGE** | **1,194** | **TOTAL** | **9,902** | **6,385** | **10,305** | **26,592** | **136,391** |
| **1974** | **AVERAGE** | **1,475** | **TOTAL** | **12,784** | **7,240** | **11,674** | **31,698** | **150,551** |
| **1975** | **AVERAGE** | **1,660** | **TOTAL** | **16,408** | **7,580** | **13,247** | **37,235** | **174,434** |
| **1976** | **AVERAGE** | **1,656** | **TOTAL** | **17,059** | **9,085** | **13,621** | **39,765** | **181,780** |
| **1977** | **AVERAGE** | **2,001** | **TOTAL** | **18,912** | **11,378** | **14,692** | **44,982** | **210,848** |
| **1978** | January | 2,128 | | 1,184 | 783 | 1,233 | 3,200 | 15,394 |
| | February | 2,135 | | 1,486 | 851 | 1,239 | 3,576 | 16,933 |
| | March | 2,158 | | 1,499 | 1,247 | 1,420 | 4,166 | 20,392 |
| | April | 2,198 | | 1,369 | 971 | 1,112 | 3,452 | 17,559 |
| | May | 2,249 | | 1,209 | 1,004 | 1,166 | 3,379 | 17,189 |
| | June | 2,286 | | 1,812 | 1,071 | 1,489 | 4,372 | 21,115 |
| | July | 2,307 | | 1,503 | 985 | 1,191 | 3,679 | 17,258 |
| | August | 2,325 | | 1,516 | 1,085 | 1,290 | 3,891 | 18,440 |
| | September | 2,332 | | 1,619 | 1,227 | 1,511 | 4,357 | 21,234 |
| | October | 2,346 | | 1,395 | 1,102 | 1,441 | 3,938 | 19,109 |
| | November | 2,356 | | 1,294 | 1,027 | 1,308 | 3,629 | 17,805 |
| | December | 2,286 | | 1,861 | 1,588 | 1,828 | 5,277 | 24,108 |
| | **AVERAGE** | **2,259** | **TOTAL** | **17,775** | **13,064** | **16,218** | **47,057** | **227,110** |
| **1979** | January | 2,199 | | 1,372 | 996 | 1,278 | 3,646 | 17,963 |
| | February | 2,064 | | 1,463 | 1,139 | 1,076 | 3,678 | 18,917 |
| | March | 1,970 | | 1,544 | 1,343 | 1,372 | 4,259 | 21,175 |
| | April | 1,943 | | 1,138 | 1,083 | 930 | 3,151 | 16,069 |
| | May | 1,960 | | 1,307 | 992 | 1,130 | 3,429 | 16,974 |
| | June | 1,999 | | 1,681 | 1,194 | 1,243 | 4,118 | 19,413 |
| | July | 2,094 | | 1,526 | 1,080 | 1,130 | 3,736 | 16,749 |
| | August | 2,222 | | 1,523 | 1,246 | 1,368 | 4,137 | 19,565 |
| | September | 2,284 | | 1,819 | 1,374 | 1,428 | 4,621 | 22,590 |
| | October | 2,380 | | 1,623 | 1,123 | 1,287 | 4,033 | 18,840 |
| | November | 2,460 | | 1,867 | 1,273 | 1,496 | 4,636 | 21,846 |
| | December | 2,552 | | 2,383 | 1,739 | 1,886 | 6,008 | 27,010 |
| | **AVERAGE** | **2,177** | **TOTAL** | **19,331** | **14,673** | **15,739** | **46,743** | **238,275** |
| **1980** | January | 2,571 | | 1,440 | 781 | 1,243 | 3,464 | 16,438 |

[1]Excludes service wells and stratigraphic and core tests.
[2]Data reported for the first 2 months of each quarter cover 4 weeks of drilling activity, and data for the last month of the quarter cover 5 weeks of drilling activity.
Note: Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.
*Sources:* • Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running — By State."
• Wells: American Petroleum Institute (API), "Monthly Drilling Report" and "Quarterly Review of Drilling Statistics for the United States."

# Oil and Gas Resource Development

| | | Crews Engaged in Seismic Exploration | | | Line-Miles of Seismic Exploration | | |
|---|---|---|---|---|---|---|---|
| | | Offshore | Onshore | Total | Offshore[1] | Onshore[1] | Total[1] |
| | | Monthly average | | | Annual total | | |
| **1973** | **AVERAGE** | **23** | **227** | **250** | **258,944** | **127,160** | **386,104** |
| **1974** | **AVERAGE** | **31** | **274** | **305** | **341,784** | **158,629** | **500,413** |
| **1975** | **AVERAGE** | **30** | **254** | **284** | **309,283** | **150,694** | **459,977** |
| **1976** | **AVERAGE** | **25** | **237** | **262** | **226,303** | **142,926** | **369,229** |
| **1977** | **AVERAGE** | **27** | **281** | **308** | **124,676** | **120,072** | **244,748** |
| **1978** | January | 26 | 302 | 328 | | | |
| | February | 23 | 305 | 328 | | | |
| | March | 20 | 314 | 334 | | | |
| | April | 21 | 315 | 336 | | | |
| | May | 21 | 330 | 351 | | | |
| | June | 26 | 336 | 362 | | | |
| | July | 26 | 341 | 367 | | | |
| | August | 27 | 338 | 365 | | | |
| | September | 21 | 333 | 354 | | | |
| | October | 29 | 342 | 371 | | | |
| | November | 27 | 342 | 369 | | | |
| | December | 30 | 328 | 358 | | | |
| | **AVERAGE** | **25** | **327** | **352** | **174,607** | **135,899** | **310,506** |
| **1979** | January | 28 | 327 | 355 | | | |
| | February | 29 | 321 | 350 | | | |
| | March | 32 | 332 | 364 | | | |
| | April | 30 | 330 | 360 | | | |
| | May | 28 | 355 | 383 | | | |
| | June | 32 | 372 | 404 | | | |
| | July | 31 | 376 | 407 | | | |
| | August | 31 | 393 | 424 | | | |
| | September | 30 | 403 | 433 | | | |
| | October | 29 | 407 | 436 | | | |
| | November | 31 | 408 | 439 | | | |
| | December | 31 | 419 | 450 | | | |
| | **AVERAGE** | **30** | **370** | **400** | | | |
| **1980** | January | 29 | 439 | 468 | | | |

[1]Monthly data not available.
*Sources:* • Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports published in their bulletin, *Geophysics.*

## Coal

Coal production in January 1980 was 66.4 million tons, 16.5 percent above the 56.9 million tons produced in January 1979.

Domestic consumption of coal in 1979 totaled 680.9 million tons, an increase of 55.7 million tons, or 8.9 percent above consumption in 1978. Electric utility coal consumption* totaled 528.8 million tons in 1979, 9.9 percent more than the 481.2 million tons consumed in 1978. Coke plants, the second largest coal-consuming sector, used 77.1 million tons in 1979, an increase of 8.0 percent above the amount consumed in 1978. Coal consumption by other industrial sectors in 1979 totaled 65.9 million tons, 4.5 percent above the amount consumed in 1978. The 9.1 million tons of coal delivered to residential and commercial consumers in 1979 was 4.2 percent lower than the amount delivered in 1978.

Monthly coal consumption figures in the other industrial sector have been revised for 1978 and the first 9 months of 1979. Coal consumption in the other industrial sector has been revised upward for 1978 from 60.5 million tons to 63.1 million tons. Coal consumption in the other industrial sector for the first 9 months of 1979 has been revised upward from 43.4 to 49.7 million tons. These revisions were made using data reported on Form EIA–6, "Distribution of Bituminous Coal and Lignite," and Form EIA–3, "Monthly Fuel Consumption Report—Manufacturing Plants."

Total stocks of coal held by consumers increased 23.4 percent over end-of-year 1978 to 179.6 million tons at the end of December 1979. Electric utility stockpiles increased from 128.2 million tons at the end of December 1978 to 159.7 million tons at the end of December 1979. Coal stocks held by coke plants increased from 8.3 million tons at the end of December 1978 to 10.2 million tons at the end of December 1979. Other industrial stockpiles of coal at the end of December 1979 totaled 9.8 million tons, 0.7 million tons above the level at the end of the corresponding month in 1978.

Monthly coal stock figures in the other industrial sector have been revised upward for 1978 and 1979. The December 1977 stock figure has also been revised upward from 8.5 million tons to 11.1 million tons. These revisions were made using data reported by U.S. manufacturing plants on Form EIA–3, "Monthly Fuel Consumption Report—Manufacturing Plants."

Imports of bituminous coal in 1979 totaled 2.1 million tons, 0.9 million tons below the amount imported during 1978. Exports of bituminous coal and anthracite in 1979 totaled 66.0 million tons, 62.2 percent more than the amount of coal exported in 1978. During 1979, coal exports were principally to Canada (29.5 percent) and Japan (23.8 percent).

*Includes bituminous, lignite, and anthracite consumption, but excludes petroleum coke consumption.

# Coal

## Bituminous, Lignite, and Anthracite

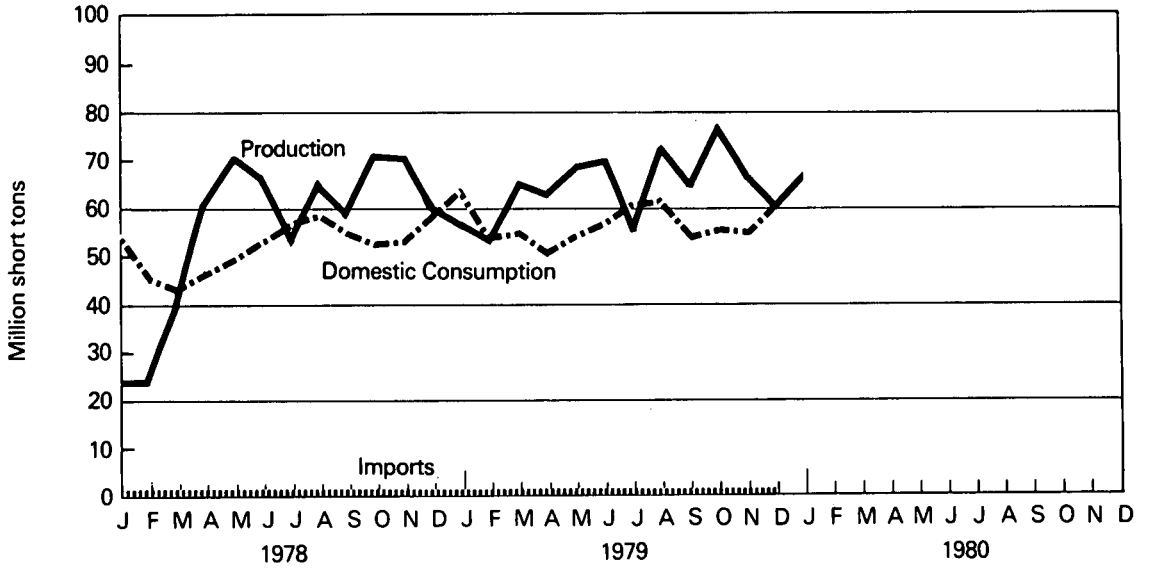
| | | Production[1] | Domestic Consumption[1] | Imports[2] | Exports[3] | Stocks[4] |
|---|---|---|---|---|---|---|
| | | | Thousand short tons | | | |
| **1973** | **TOTAL** | **598,568** | **R562,584** | **127** | **53,587** | **104,335** |
| **1974** | **TOTAL** | **610,023** | **558,402** | **2,080** | **60,661** | **96,323** |
| **1975** | **TOTAL** | **654,641** | **R562,641** | **940** | **66,309** | **128,050** |
| **1976** | **TOTAL** | **684,913** | **R603,791** | **1,203** | **60,021** | **134,438** |
| **1977** | **TOTAL** | **697,205** | **R625,290** | **1,647** | **54,312** | **157,098** |
| **1978** | January | R23,664 | R54,313 | 139 | 894 | 122,435 |
| | February | R24,198 | R45,488 | 159 | 588 | 97,057 |
| | March | R40,001 | R43,288 | 231 | 377 | 87,403 |
| | April | R61,011 | R46,283 | 417 | 2,613 | 100,378 |
| | May | R70,417 | R49,417 | 323 | 4,473 | 114,530 |
| | June | R67,111 | R52,795 | 291 | 5,429 | 126,694 |
| | July | R54,856 | R56,200 | 313 | 3,574 | 123,327 |
| | August | R65,813 | R58,056 | 227 | 3,634 | 126,343 |
| | September | R59,189 | R55,024 | 196 | 3,454 | 129,407 |
| | October | R71,681 | R53,003 | 371 | 5,053 | 137,279 |
| | November | R71,156 | R53,155 | 98 | 6,030 | 146,816 |
| | December | R61,066 | R58,203 | 188 | 4,572 | 145,551 |
| | **TOTAL** | **R670,164** | **R625,225** | **2,953** | **40,691** | |
| **1979** | January | 56,941 | R63,022 | 186 | 3,605 | 136,307 |
| | February | 53,988 | R54,510 | 252 | 2,726 | 128,929 |
| | March | 65,952 | R54,892 | 123 | 4,642 | 133,916 |
| | April | 63,265 | R51,651 | 161 | 5,268 | 142,245 |
| | May | 68,455 | R54,047 | 112 | 6,215 | 151,006 |
| | June | 69,865 | R56,086 | 209 | 5,975 | 154,814 |
| | July | 54,910 | R60,468 | 88 | 6,297 | 148,195 |
| | August | 72,640 | R60,816 | 320 | 6,248 | 152,430 |
| | September | 64,380 | R54,288 | 180 | R5,146 | 157,958 |
| | October | 76,510 | R55,486 | R152 | 7,446 | 169,382 |
| | November | 68,105 | R55,448 | 130 | 6,170 | 178,422 |
| | December | 60,739 | 60,191 | 146 | 6,278 | 179,617 |
| | **TOTAL** | **775,750** | **680,908** | **2,059** | **66,016** | |
| **1980** | January | 66,350 | NA | NA | NA | NA |

Totals may not equal sum of components due to independent rounding.
[1]Consumption and production data are revised and finalized for 1978 and prior years.
See Explanatory Note 10 for methodology used to calculate domestic consumption for 1978 and first nine months of 1979.
[2]Bituminous coal only.
[3]Bituminous coal and anthracite only through 1979.
[4]Stocks held by electric utilities, coke plants, and the other industrial sector at the end of period.
R = Revised data.
NA = Not available.
*Sources:* • 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys.*
- October 1977 forward: Production: Association of American Railroads, Statement CS54A; Commonwealth of Pennsylvania, Department of Environmental Resources, "Anthracite Mines—Monthly Tonnage, Manhour and Accident Report" and "Annual Report on Mining, Oil and Gas, and Land Reclamation and Conservation Activities"; Energy Information Administration (EIA) "Weekly Coal Report," "Bituminous Coal and Lignite Quarterly Distribution Report" (Form EIA-6), "Bituminous Coal and Lignite, Production and Mine Operation—Annual Report" (Form EIA-7), and Bureau of Mines Form 6–1385A, "Pennsylvania Anthracite Production, Mines Without Preparation Plants," BOM Form 6–1387A, "Pennsylvania Anthracite Production, Contractor's Report, BOM Form 6–1388A, "Pennsylvania Anthracite Production, River Coal Report"; and Various States, Annual Coal Mining Reports.
- October 1977 forward: Domestic Consumption and Stocks: EIA, "Monthly Power Plant Report" (FPC Form 4), "Monthly Fuel Consumption Report—Manufacturing Plants" (Form EIA-3), "Coke and Coal Chemicals—Monthly/Annual" (Form EIA-5/5A), and "Bituminous Coal and Lignite—Quarterly Distribution Report" (Form EIA-6).
- October 1977 forward: Imports/Exports: Bureau of the Census, Monthly Reports IM 145 (Imports) and EM 522 (Exports).

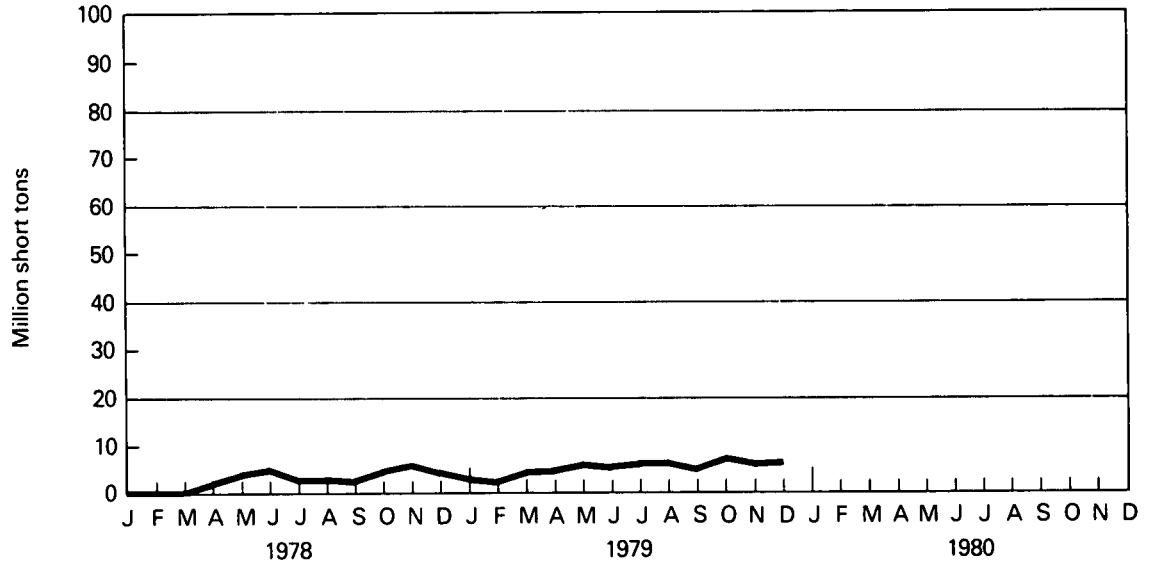
# Coal

## Bituminous, Lignite, and Anthracite

### Domestic Production, Consumption, and Imports




### Exports



# Coal[1]

## Consumption — Bituminous, Lignite, and Anthracite

| | | Electric Utilities | Industrial: Coke Plants[2] | Industrial: Other Industrial[3] Including Transportation | Residential and Commercial | Total |
|---|---|---|---|---|---|---|
| | | Thousand short tons | | | | |
| **1973** | **TOTAL** | **389,212** | **94,101** | **R68,154** | **11,117** | **R562,584** |
| **1974** | **TOTAL** | **391,811** | **90,191** | **64,983** | **11,417** | **558,402** |
| **1975** | **TOTAL** | **405,962** | **83,598** | **R63,670** | **9,410** | **R562,641** |
| **1976** | **TOTAL** | **448,371** | **84,704** | **R61,800** | **8,916** | **R603,791** |
| **1977** | **TOTAL** | **477,126** | **R77,739** | **R61,472** | **8,954** | **R625,290** |
| **1978** | January | R42,709 | 5,425 | R5,155 | 1,024 | R54,313 |
| | February | R35,833 | 4,182 | R4,422 | 1,051 | R45,488 |
| | March | R34,005 | R4,014 | R4,451 | 818 | R43,288 |
| | April | R34,618 | R5,529 | R5,445 | 692 | R46,283 |
| | May | 37,199 | R6,424 | R5,169 | 624 | R49,417 |
| | June | 40,794 | R6,399 | R4,998 | 604 | R52,795 |
| | July | 44,118 | R6,552 | R4,983 | 547 | R56,200 |
| | August | R46,040 | 6,460 | R4,998 | 558 | R58,056 |
| | September | 42,646 | 6,417 | R5,323 | 638 | R55,024 |
| | October | 39,853 | R6,706 | R5,523 | 921 | R53,003 |
| | November | 39,751 | R6,523 | R5,902 | 979 | R53,155 |
| | December | 43,669 | 6,763 | R6,716 | 1,055 | R58,203 |
| | **TOTAL** | **R481,235** | **R71,394** | **R63,085** | **9,511** | **R625,225** |
| **1979** | January | 48,646 | R6,565 | R6,455 | 1,356 | R63,022 |
| | February | 41,891 | R5,916 | R5,863 | 840 | R54,510 |
| | March | 41,779 | R6,799 | R5,644 | 670 | R54,892 |
| | April | 38,977 | R6,532 | R5,538 | 604 | R51,651 |
| | May | 41,532 | R6,658 | R5,296 | 561 | R54,047 |
| | June | R44,012 | R6,439 | R5,061 | 574 | R56,086 |
| | July | R48,220 | R6,499 | R5,250 | 499 | R60,468 |
| | August | 48,550 | R6,403 | R5,390 | 473 | R60,816 |
| | September | R42,165 | R6,321 | R5,186 | 616 | R54,288 |
| | October | R42,973 | R6,391 | R5,273 | 849 | R55,486 |
| | November | R42,981 | R6,119 | R5,346 | 1,002 | R55,448 |
| | December | 47,076 | 6,426 | 5,625 | 1,064 | 60,191 |
| | **TOTAL** | **528,803** | **77,070** | **65,927** | **9,108** | **680,908** |

Totals may not equal sum of components due to independent rounding.
[1]Consumption data are revised and finalized for 1978 and prior years. See Explanatory Note 10 for methodology used to calculate Other Industrial Including Transportation Consumption for 1978 and first 9 months of 1979.
[2]Bituminous coal and anthracite only. Lignite is not used at coke plants.
[3]See Explanatory Note 10.
R = Revised data.
*Sources:* • 1973 through September 1977, Bureau of Mines *Minerals Yearbook* and *Mineral Industry Surveys.*
• October 1977 forward: Energy Information Administration (EIA), "Monthly Power Plant Report" (FPC Form 4), "Monthly Fuel Consumption Report—Manufacturing Plants"
(Form EIA-3), "Coke and Coal Chemicals—Monthly/Annual" (Forms EIA-5/5A), "Bituminous Coal and Lignite—Quarterly Distribution Report" (Form EIA-6), "Monthly Coal Report—Retail Dealers" (Form EIA-2).
• Imports/Exports: Bureau of the Census, Monthly Reports IM 145 (Imports) and EM 522 (Exports).

# Coal

## Stocks [1] — Bituminous, Lignite and Anthracite

| | | | Industrial | | |
|---|---|---|---|---|---|
| | | Electric Utilities | Coke Plants[2] | Other Industrial | Total |
| | | | Thousand short tons | | |
| **1973** | | **86,967** | **6,998** | **10,370** | **104,335** |
| **1974** | | **83,509** | **6,209** | **6,605** | **96,323** |
| **1975** | | **110,724** | **8,797** | **8,529** | **128,050** |
| **1976** | | **117,436** | **9,902** | **7,100** | **134,438** |
| **1977** | | **133,219** | **12,816** | **11,063** | **157,098** |
| **1978** | January | 105,248 | 8,202 | 8,985 | 122,435 |
| | February | 84,555 | 5,144 | 7,358 | 97,057 |
| | March | 77,016 | 3,817 | 6,570 | 87,403 |
| | April | 87,980 | 5,667 | 6,731 | 100,378 |
| | May | 100,628 | 7,207 | 6,695 | 114,530 |
| | June | 110,752 | 8,378 | 7,564 | 126,694 |
| | July | 109,699 | 6,701 | 6,927 | 123,327 |
| | August | 112,266 | 6,406 | 7,671 | 126,343 |
| | September | 115,162 | 6,327 | 7,918 | 129,407 |
| | October | 121,597 | 7,413 | 8,269 | 137,279 |
| | November | 129,379 | 8,633 | 8,804 | 146,816 |
| | December | 128,225 | 8,278 | 9,048 | 145,551 |
| **1979** | January | 119,909 | 7,568 | 8,830 | 136,307 |
| | February | 114,394 | 6,650 | 7,885 | 128,929 |
| | March | 118,533 | 7,441 | 7,941 | 133,916 |
| | April | 125,774 | 8,401 | 8,070 | 142,245 |
| | May | 133,781 | 8,977 | 8,248 | 151,006 |
| | June | 136,504 | 9,582 | 8,728 | 154,814 |
| | July | 131,092 | 8,239 | 8,864 | 148,195 |
| | August | 134,229 | 8,692 | 9,509 | 152,430 |
| | September | 139,128 | 8,980 | 9,851 | 157,958 |
| | October | 149,938 | 9,558 | 9,886 | 169,382 |
| | November | 158,239 | 9,985 | 10,199 | 178,422 |
| | December | 159,699 | 10,155 | 9,763 | 179,617 |

Totals may not equal sum of components due to independent rounding.
[1]Stocks held by utilities, coke plants, and general industry at end of period. Data on stocks have been revised and finalized for 1978 and previous years.
[2]Bituminous coal and anthracite only. Lignite is not used at coke plants.
*Sources:* • 1973 through September 1977: Bureau of Mines: *Minerals Yearbook* and *Mineral Industry Surveys.*
• October 1977 forward: Energy Information Administration (EIA), "Monthly Power Plant Report" (FPC Form 4), "Monthly Fuel Consumption Report—Manufacturing Plants" (Form EIA-3), "Coke and Coal Chemicals—Monthly/Annual" (Forms EIA-5/5A), "Bituminous Coal and Lignite—Quarterly Distribution Report" (Form EIA-6), and "Monthly Coal Report, Retail Dealers and Upper Lakes Docks" (Form EIA-2).

## Electric Utilities

December 1979 production of electricity by utilities was 188.9 billion kilowatt-hours, 1.5 percent below the December 1978 production level. Coal-fired production totaled 96.2 billion kilowatt-hours, natural gas-fired production totaled 23.5 billion kilowatt-hours, and hydroelectric production totaled 22.7 billion kilowatt-hours. These figures reflect increases of 8.3, 11.1, and 2.9 percent, respectively, above the December 1978 output levels. Petroleum-fired production totaled 25.2 billion kilowatt-hours, and nuclear production totaled 20.8 billion kilowatt-hours, 25.9 and 18.0 percent, respectively, below the December 1978 levels.

Sales of electricity to all ultimate consumers in the United States in December 1979 totaled 172.9 billion kilowatt-hours, an increase of 6.7 percent from sales of the month before and 3.2 percent above December 1978 sales. Sales to residential consumers during December 1979 were 59.7 billion kilowatt-hours, 5.9 percent above sales for the corresponding month in 1978. Commercial sales were 38.3 billion kilowatt-hours, 2.9 percent more than the amount for December 1978. Sales to industrial consumers totaled 68.7 billion kilowatt-hours in December 1979, about 1.6 percent over the December 1978 figure. In December 1979 other sales totaled 6.2 billion kilowatt-hours, 1.0 percent below the December 1978 level.

Electric utility petroleum consumption during December 1979 was 43.7 million barrels, a 25.3 percent drop from the December 1978 level. Coal consumption for December 1979 was 47.1 million tons, 7.8 percent above the December 1978 rate. During December 1979, consumption of natural gas by electric utilities was 249.1 billion cubic feet, 13.2 percent above the December 1978 consumption level.

On December 31, 1979, utility stocks of anthracite, bituminous and lignite totaled 159.7 million tons. Stockpiles were 24.5 percent above the level of December 1978.

Petroleum stocks on December 31, 1979, totaled 131.7 million barrels, 10.9 percent above the levels for the same month of 1978.

# Electric Utilities[1]

## Net Electricity Production By Primary Energy Source

| | | Coal[2] | Petroleum[3] | Natural Gas | Nuclear | Hydro | Other[4] | Total |
|---|---|---|---|---|---|---|---|---|
| | | | | Million kilowatt-hours | | | | |
| **1973** | **TOTAL** | **847,651** | **314,343** | **340,858** | **83,479** | **272,083** | **2,294** | **1,860,710** |
| **1974** | **TOTAL** | **828,433** | **300,931** | **320,065** | **113,976** | **301,032** | **2,703** | **1,867,140** |
| **1975** | **TOTAL** | **852,786** | **289,095** | **299,778** | **172,505** | **300,047** | **3,437** | **1,917,649** |
| **1976** | **TOTAL** | **944,391** | **319,988** | **294,624** | **191,104** | **283,707** | **3,883** | **2,037,696** |
| **1977** | **TOTAL** | **985,219** | **358,179** | **305,505** | **250,883** | **220,475** | **4,063** | **2,124,323** |
| **1978** | January | R85,006 | R39,264 | 22,310 | 25,833 | R25,066 | 357 | R197,835 |
| | February | R70,570 | R38,213 | 20,370 | 21,833 | R22,211 | 309 | R173,504 |
| | March | R66,623 | R36,958 | 22,269 | 22,449 | 24,630 | 264 | R173,193 |
| | April | R70,327 | 24,978 | 21,339 | 17,580 | 25,306 | 208 | R159,738 |
| | May | R76,432 | 24,368 | R25,076 | 20,416 | 28,757 | 187 | R175,236 |
| | June | 84,033 | R26,130 | 30,618 | 22,185 | 25,121 | 225 | R188,312 |
| | July | 89,606 | 29,117 | R34,248 | 25,007 | 24,453 | 250 | R202,682 |
| | August | R93,430 | R32,302 | R32,583 | 25,599 | 22,185 | 318 | R206,418 |
| | September | 87,041 | 26,640 | R28,206 | 22,189 | 21,177 | 318 | R185,572 |
| | October | R82,083 | 25,753 | R25,233 | 22,997 | 19,479 | 257 | R175,802 |
| | November | R81,727 | 27,310 | R22,000 | 24,901 | 19,953 | 282 | 176,172 |
| | December | R88,863 | R34,027 | R21,138 | 25,415 | 22,082 | 341 | R191,865 |
| | **TOTAL** | **R975,742** | **R365,060** | **R305,391** | **276,403** | **R280,419** | **R3,315** | **R2,206,331** |
| **1979** | January | 94,975 | 39,474 | 22,093 | 27,792 | 25,054 | 326 | 209,714 |
| | February | 84,745 | 32,274 | 21,846 | 25,911 | 21,275 | 285 | 186,337 |
| | March | 85,219 | 22,075 | 24,918 | 24,335 | 25,921 | 382 | 182,850 |
| | April | 80,451 | 20,600 | 24,761 | 18,418 | 25,389 | 342 | 169,960 |
| | May | 86,155 | 21,471 | 26,135 | 15,025 | 28,939 | 350 | 178,074 |
| | June | R90,824 | R24,370 | 30,107 | 16,065 | 24,990 | 347 | R186,703 |
| | July | R97,887 | R25,750 | 34,673 | 20,825 | 22,761 | 364 | R202,259 |
| | August | R97,913 | 26,123 | 34,947 | 24,204 | 21,260 | 405 | R204,852 |
| | September | R85,658 | R22,511 | 31,432 | 21,804 | 18,978 | 354 | R180,737 |
| | October | R87,465 | 20,279 | 30,476 | 20,934 | 20,167 | 389 | R179,710 |
| | November | R87,453 | R23,382 | R24,656 | 19,255 | R22,367 | 387 | R177,500 |
| | December | 96,234 | 25,221 | 23,474 | 20,828 | 22,732 | 456 | 188,946 |
| | **TOTAL** | **1,074,980** | **303,530** | **329,518** | **255,396** | **279,832** | **4,387** | **2,247,642** |

Totals may not equal sum of components due to independent rounding.
[1]Monthly data for 1978 have been revised and finalized.
[2]Includes Bituminous, Lignite, and Anthracite.
[3]Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
[4]Includes geothermal, wood and waste.
R = Revised data.
*Source:* • Federal Power Commission Form 4, "Monthly Power Plant Report".

# Electric Utilities

## Electrical Sales[1]

| | | Residential | Commercial | Industrial | Other[2] | Total |
|---|---|---|---|---|---|---|
| | | | | Million kilowatt-hours | | |
| **1973** | **TOTAL** | **579,231** | **388,266** | **686,085** | **59,326** | **1,712,909** |
| **1974** | **TOTAL** | **578,184** | **384,826** | **684,875** | **58,039** | **1,705,924** |
| **1975** | **TOTAL** | **584,712** | **401,674** | **675,271** | **68,153** | **1,729,810** |
| **1976** | **TOTAL** | **602,863** | **R423,639** | **R739,965** | **R69,557** | **R1,836,024** |
| **1977** | **TOTAL** | **R641,134** | **R444,931** | **R772,291** | **R70,489** | **R1,928,845** |
| **1978** | January | 65,455 | 38,125 | 64,765 | 6,581 | 174,926 |
| | February | 64,140 | 37,465 | 60,823 | 6,274 | 168,703 |
| | March | 58,391 | 36,282 | 61,506 | 6,032 | 162,212 |
| | April | 47,118 | 33,625 | 63,103 | 5,355 | 149,201 |
| | May | 43,748 | 33,995 | 66,618 | 5,586 | 149,947 |
| | June | 50,511 | 39,080 | 68,563 | 5,826 | 163,981 |
| | July | 61,327 | 42,839 | 67,081 | 6,359 | 177,607 |
| | August | 63,434 | 43,694 | 69,402 | 6,136 | 182,666 |
| | September | 61,584 | 42,935 | 70,067 | 6,428 | 181,015 |
| | October | 51,108 | 38,354 | 71,259 | 6,001 | 166,722 |
| | November | 47,220 | 35,864 | 69,701 | 6,340 | 159,125 |
| | December | 56,391 | 37,244 | 67,577 | 6,268 | 167,479 |
| | **TOTAL** | **670,427** | **459,502** | **800,465** | **73,186** | **2,003,584** |
| **1979** | January | 69,912 | 40,200 | 67,956 | 6,689 | 184,757 |
| | February | 67,470 | 39,670 | 66,847 | 6,192 | 180,179 |
| | March | 58,806 | 37,938 | 68,770 | 6,002 | 171,515 |
| | April | 49,647 | 35,731 | 68,777 | 5,589 | 159,744 |
| | May | 45,378 | 36,259 | 70,421 | 5,630 | 157,688 |
| | June | 49,109 | 39,474 | 70,968 | 5,705 | 165,256 |
| | July | 58,054 | 42,528 | 69,938 | 5,975 | 176,495 |
| | August | 64,168 | 43,915 | 71,058 | 6,377 | 185,519 |
| | September | 59,251 | 42,416 | 70,075 | 6,479 | 178,220 |
| | October | 49,430 | 38,750 | 71,444 | 6,098 | 165,721 |
| | November† | 49,480 | 36,656 | 69,787 | 6,173 | 162,096 |
| | December† | 59,693 | 38,342 | 68,670 | 6,208 | 172,913 |
| | **TOTAL†** | **680,398** | **471,879** | **834,711** | **73,117** | **2,060,103** |

†Preliminary Data.
Totals may not equal sum of components due to independent rounding.
[1]Electricity sales to all ultimate consumers.
[2]Includes street lighting and transportation uses.
*Source:* • Federal Power Commission Form 5, "Monthly Statement of Electric Operating Revenue and Income."

# Electric Utilities[1]

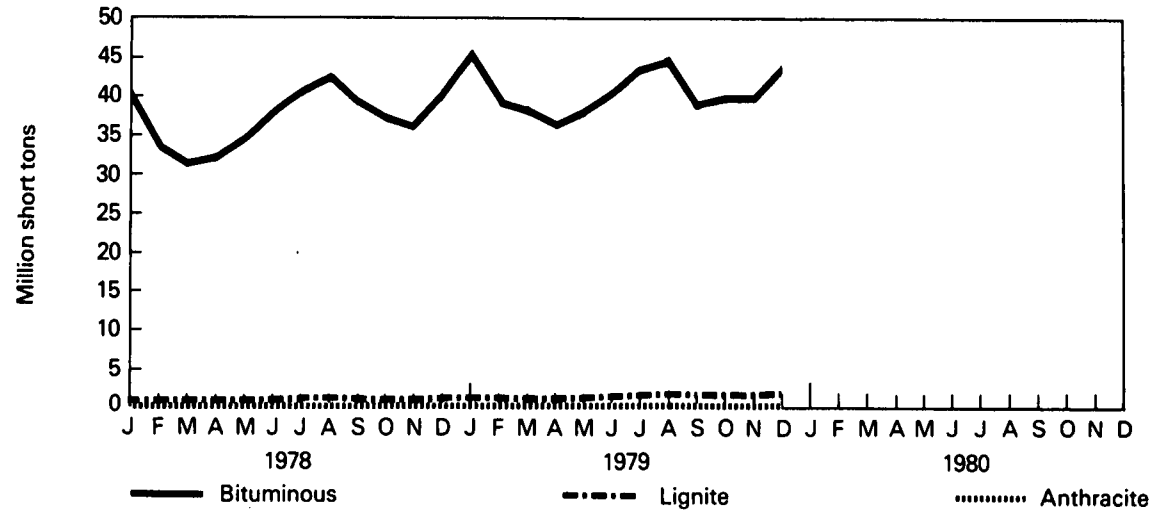
## Primary Energy Resources Consumed to Produce Electricity

| | | Coal | | | | Petroleum | | | Natural Gas |
|---|---|---|---|---|---|---|---|---|---|
| | | Anthracite | Bituminous | Lignite | Total | Steam | Gas Turb./ Int. Comb. | Coke | |
| | | Thousand short tons | | | | Thousand barrels | | Thousand short tons | Million cubic feet |
| **1973** | **TOTAL** | **1,443** | **376,975** | **10,794** | **389,212** | **513,190** | **47,058** | **507** | **3,660,172** |
| **1974** | **TOTAL** | **1,498** | **378,643** | **11,670** | **391,811** | **483,146** | **53,128** | **625** | **3,443,428** |
| **1975** | **TOTAL** | **1,480** | **388,523** | **15,960** | **405,962** | **467,221** | **38,907** | **70** | **3,157,669** |
| **1976** | **TOTAL** | **1,350** | **425,205** | **21,817** | **448,371** | **514,077** | **41,843** | **68** | **3,080,868** |
| **1977** | **TOTAL** | **1,425** | **451,051** | **24,650** | **477,126** | **574,869** | **48,837** | **98** | **3,191,200** |
| **1978** | January | 101 | 40,506 | 2,101 | R42,709 | 61,271 | R8,257 | 10 | R229,188 |
| | February | 88 | 33,556 | 2,189 | R35,833 | 59,636 | 7,709 | 55 | R211,170 |
| | March | 100 | R31,276 | 2,629 | R34,005 | R58,724 | R5,476 | 64 | R232,199 |
| | April | 83 | R32,129 | 2,406 | R34,618 | 40,877 | R2,152 | 39 | R223,188 |
| | May | 73 | 34,902 | 2,224 | 37,199 | 40,244 | R2,294 | 28 | R260,802 |
| | June | 91 | 38,250 | 2,453 | 40,794 | 42,729 | 3,570 | 31 | R321,423 |
| | July | 85 | 40,906 | 3,127 | 44,118 | R47,546 | R3,570 | 32 | R362,199 |
| | August | 100 | R42,643 | 3,297 | R46,040 | 52,637 | R3,564 | 31 | R340,299 |
| | September | 86 | 39,835 | 2,725 | 42,646 | 43,114 | R3,301 | 28 | R296,982 |
| | October | 82 | 37,197 | 2,574 | 39,853 | 42,253 | R1,824 | 25 | R262,880 |
| | November | 88 | 36,982 | 2,681 | 39,751 | 44,516 | 2,161 | 27 | R228,027 |
| | December | 87 | 40,581 | 3,001 | 43,669 | 54,771 | 3,643 | 30 | R220,005 |
| | **TOTAL** | **1,064** | **R448,763** | **31,407** | **R481,235** | **R588,319** | **R47,520** | **398** | **R3,188,363** |
| **1979** | January | 89 | 45,536 | 3,021 | 48,646 | 62,226 | 6,244 | 33 | 228,479 |
| | February | 75 | 39,010 | 2,806 | 41,891 | 51,655 | 4,959 | 32 | 226,896 |
| | March | 65 | 38,863 | 2,852 | 41,779 | 36,371 | 1,871 | 22 | 260,411 |
| | April | 66 | 36,360 | 2,551 | 38,977 | 33,801 | 1,682 | 15 | 260,974 |
| | May | 106 | 38,670 | 2,757 | 41,532 | 35,285 | 2,053 | 23 | 277,313 |
| | June | 103 | R40,886 | 3,023 | R44,012 | R39,262 | 2,318 | 25 | 320,195 |
| | July | 96 | R44,394 | 3,730 | R48,220 | 41,895 | 2,413 | 23 | 369,316 |
| | August | 97 | 44,554 | 3,899 | 48,550 | 42,478 | 2,416 | 23 | 375,361 |
| | September | 86 | R38,918 | 3,162 | R42,165 | R36,771 | 1,747 | 17 | 338,258 |
| | October | 75 | R39,637 | 3,261 | R42,973 | R33,445 | 1,132 | 16 | 323,076 |
| | November | 92 | R39,572 | 3,317 | R42,981 | R37,822 | R1,954 | 18 | R260,906 |
| | December | 96 | 43,481 | 3,499 | 47,076 | 41,746 | 1,906 | 20 | 249,125 |
| | **TOTAL** | **1,046** | **489,881** | **37,876** | **528,803** | **492,758** | **30,695** | **268** | **3,490,312** |

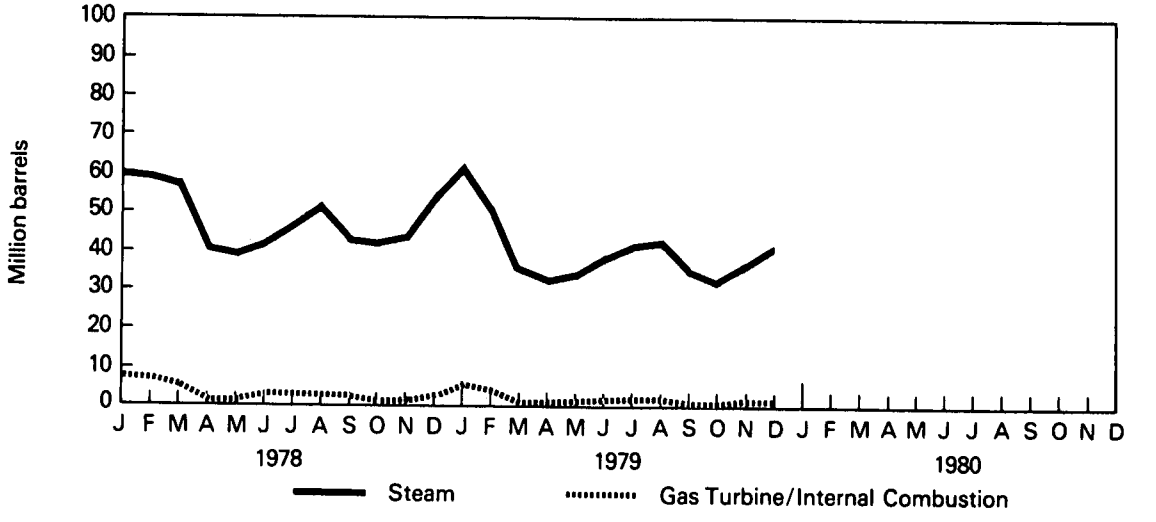
Totals may not equal sum of components due to independent rounding.
[1]Monthly data for 1978 have been revised and finalized.
R= Revised data.
*Source:* • Federal Power Commission Form 4, "Monthly Power Plant Report."

# Electric Utilities

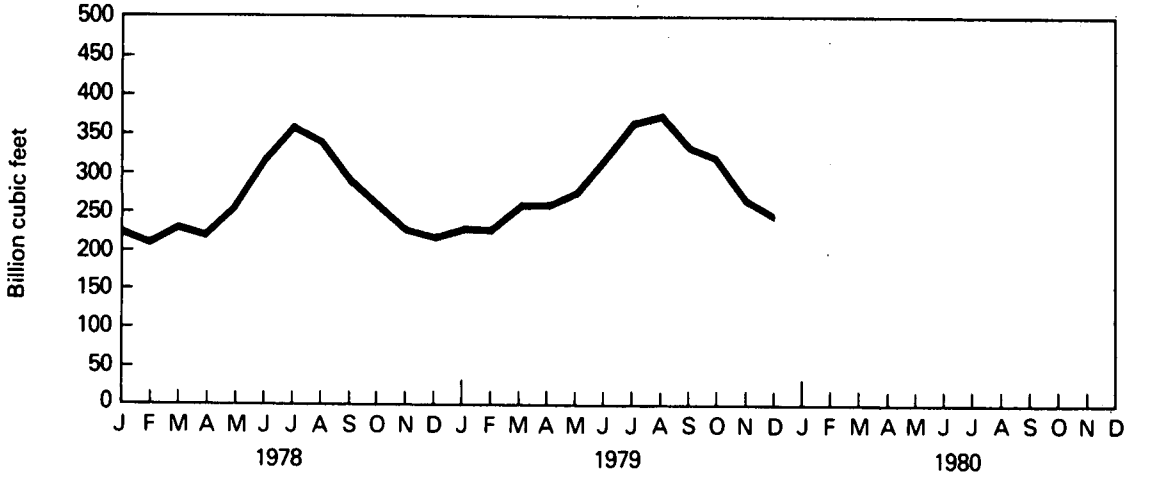
**Coal Consumption**




**Petroleum Consumption**




**Natural Gas Consumption**



# Electric Utilities[1]

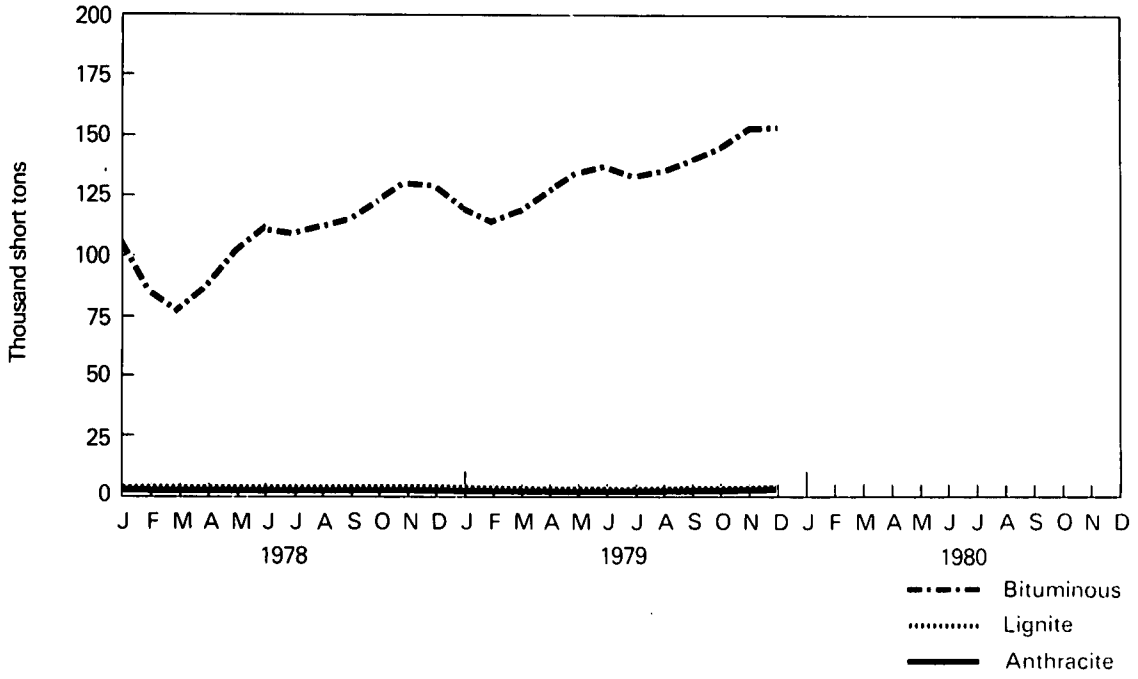
## End-of-Month Coal and Petroleum Stocks

| | | Coal | | | | Petroleum | | |
|---|---|---|---|---|---|---|---|---|
| | | Anthracite | Bituminous | Lignite | Total | Steam | Gas Turb./ Int. Comb. | Coke |
| | | Thousand short tons | | | | Thousand barrels | | Thousand short tons |
| **1973** | | **‡1,066** | **‡84,941** | **‡961** | **‡86,967** | **‡79,121** | **‡10,095** | **‡312** |
| **1974** | | **‡930** | **‡81,712** | **‡867** | **‡83,509** | **‡97,718** | **‡15,199** | **‡35** |
| **1975** | | **‡982** | **‡107,927** | **‡1,815** | **‡110,724** | **‡108,825** | **‡16,432** | **‡31** |
| **1976** | | **‡1,000** | **‡114,130** | **‡2,306** | **‡117,436** | **‡106,993** | **‡14,703** | **‡32** |
| **1977** | | **‡2,321** | **‡128,210** | **‡2,688** | **‡133,219** | **‡124,750** | **‡19,281** | **‡44** |
| **1978** | January | 2,280 | R100,550 | 2,418 | R105,248 | R114,175 | R16,240 | 40 |
| | February | 2,112 | R80,094 | 2,349 | R84,555 | 111,158 | R17,044 | 197 |
| | March | 2,091 | 72,369 | 2,556 | 77,016 | R112,328 | R17,270 | 182 |
| | April | 2,083 | R83,285 | 2,612 | R87,980 | R116,086 | 17,386 | 164 |
| | May | 2,145 | R95,701 | 2,782 | R100,628 | R118,941 | R16,973 | 167 |
| | June | 2,215 | R105,613 | 2,923 | R110,752 | R120,187 | 17,581 | 167 |
| | July | 2,241 | R104,609 | 2,849 | R109,699 | R121,510 | R17,559 | 176 |
| | August | 2,208 | R106,918 | 3,140 | R112,266 | R119,359 | R17,380 | 173 |
| | September | 2,224 | R109,751 | 3,187 | R115,162 | R121,116 | 17,538 | 181 |
| | October | 2,220 | R115,946 | 3,431 | R121,597 | R117,682 | 17,355 | 189 |
| | November | 2,199 | R124,061 | 3,118 | R129,379 | R112,220 | R17,231 | 199 |
| | December | 2,178 | R123,020 | 3,027 | R128,225 | R102,402 | R16,386 | 198 |
| **1979** | January | 2,154 | 114,941 | 2,814 | 119,909 | 89,583 | 15,635 | 181 |
| | February | 2,136 | 109,532 | 2,726 | 114,394 | 82,078 | 15,541 | 166 |
| | March | 2,170 | 113,660 | 2,704 | 118,533 | 96,034 | 16,386 | 170 |
| | April | 2,220 | 120,874 | 2,680 | 125,774 | 99,501 | 16,835 | 170 |
| | May | 2,231 | 128,950 | 2,600 | 133,781 | 106,018 | 16,975 | 159 |
| | June | 2,233 | R131,775 | 2,495 | R136,504 | 104,514 | 17,180 | 150 |
| | July | 2,290 | R126,324 | 2,478 | R131,092 | 104,170 | 17,579 | 160 |
| | August | 2,328 | R128,732 | 3,170 | R134,229 | 103,965 | 17,910 | 163 |
| | September | 2,385 | R133,604 | 3,139 | R139,128 | 104,857 | 18,733 | 164 |
| | October | 2,452 | R144,024 | 3,462 | R149,938 | R109,590 | 19,415 | 170 |
| | November | 2,496 | R152,350 | 3,393 | R158,239 | R110,758 | R19,717 | 170 |
| | December | 3,274 | 152,967 | 3,459 | 159,699 | 111,122 | 20,604 | 183 |

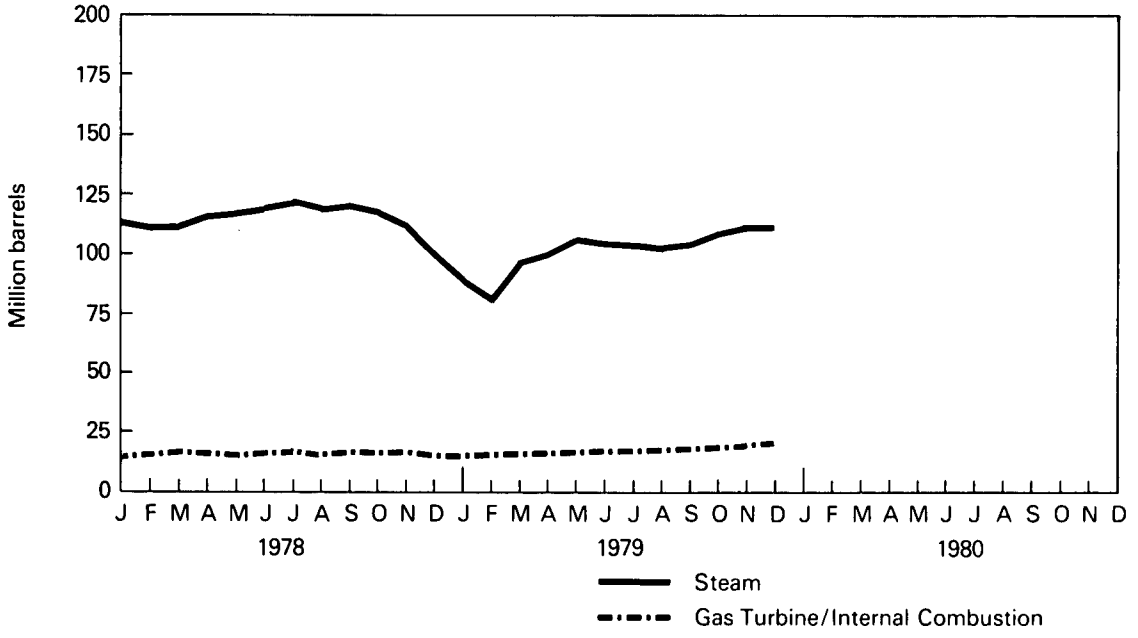
Totals may not equal sum of components due to independent rounding.
‡Total as of December 31.
[1]Monthly data for 1978 have been revised and finalized.
R = Revised data.
*Source:* • Federal Power Commission Form 4, "Monthly Power Plant Report."

# Electric Utilities

**Coal Stocks (Bituminous, Lignite, and Anthracite)**




**Petroleum Stocks**



# Part 8

# Nuclear Power

## Nuclear Power

During January, the 71 operational nuclear powerplants generated 20.0 billion net kilowatt-hours* of electricity, approximately 10.4 percent of total net domestic electricity for the month. Nuclear generation for January 1980 represented a decrease of 3.7 percent and 27.9 percent, respectively, from December 1979 and January 1979 generations.

The total of 181 domestic nuclear powerplants planned or operating in January 1980 reflects a decrease of 5 from December 1979 and a decrease of 18 from January 1979.

*Preliminary data.

# Nuclear Power

## Domestic Nuclear Powerplant Operations

| | | Maximum Dependable Capacity[1] All Plants[2] | Capacity Factor[3] | Electricity Generation[4] | Nuclear Portion of Domestic Electricity Generation |
|---|---|---|---|---|---|
| | | Million net kilowatts | Percent | Million net kilowatt-hours | Percent |
| **1973** | **AVERAGE** | **13.850** | **63.2** | **83,479** | **4.5** |
| **1974** | **AVERAGE** | **29.921** | **43.5** | **113,976** | **6.1** |
| **1975** | **AVERAGE** | **35.671** | **55.2** | **172,505** | **9.0** |
| **1976** | **AVERAGE** | **40.642** | **53.5** | **191,104** | **9.4** |
| **1977** | **AVERAGE** | **45.554** | **62.9** | **250,883** | **11.8** |
| **1978** | January | 47.167 | 73.6 | 25,833 | 13.1 |
| | February | 48.080 | 67.6 | 21,833 | 12.6 |
| | March | 48.062 | 62.8 | 22,449 | 13.0 |
| | April | 48.926 | 50.0 | 17,580 | 11.0 |
| | May | 48.924 | 56.1 | 20,416 | 11.6 |
| | June | 49.714 | 62.0 | 22,185 | 11.8 |
| | July | 49.719 | 67.6 | 25,007 | 12.3 |
| | August | 49.815 | 69.1 | 25,599 | 12.4 |
| | September | 49.815 | 61.9 | 22,189 | 12.0 |
| | October | 50.776 | 60.9 | 22,997 | 13.1 |
| | November | 50.776 | 68.1 | 24,901 | 14.1 |
| | December | 50.774 | 67.3 | 25,415 | 13.2 |
| | **AVERAGE** | **49.385** | **63.9** | **R276,404** | **12.5** |
| **1979** | January | 50.771 | 73.6 | 27,792 | 13.3 |
| | February | 50.720 | 76.0 | 25,911 | 13.9 |
| | March | 50.720 | 64.5 | 24,335 | 13.3 |
| | April | 50.705 | 50.5 | 18,418 | 10.8 |
| | May | 50.705 | 39.8 | 15,025 | 8.4 |
| | June | 50.705 | 44.0 | 16,065 | 8.6 |
| | July | 50.759 | 55.1 | 20,825 | 10.3 |
| | August | 50.732 | 64.1 | 24,204 | 11.8 |
| | September | 50.781 | 59.6 | 21,804 | 12.1 |
| | October | 50.814 | 55.7 | R20,934 | R11.6 |
| | November | 49.917 | 53.6 | 19,255 | R10.8 |
| | December | R49.937 | 56.1 | 20,828 | R11.0 |
| | **AVERAGE** | **50.604** | **57.6** | **R255,396** | **R11.5** |
| **1980** | January† | 49.937 | 54.0 | 20,046 | 10.4 |

[1]See Explanatory Note 11 and Definitions.
[2]Includes all units authorized to generate commercial electricity, including units in start-up testing (see definitions) and those owned by the Government.
[3]Average percentage of Maximum Dependable Capacity utilized yearly or monthly.
[4]Annual figures for 1973–1977 and monthly figures for 1978–1979 represent totals rather than averages.
†Preliminary data.
R = Revised data.
*Sources:* • Capacity data for units in commercial operation or start-up testing—Nuclear Regulatory Commission.
• Average power data for January 1980 computed from *Nucleonics Week* magazine.
• Nuclear Regulatory Commission Report NUREG 0020, "Operating Units Status Report."
• Remaining data from Federal Power Commission Form 4, "Monthly Power Plant Report."

# Nuclear Power

## Status of Nuclear Reactor Units[1]

| | | In Operation or Start-up Testing[2] | Construction Permits Granted | Construction Permits Pending | Reactor Units Ordered | Reactor Units Announced | Total Reactor Units | Total Design Capacity (MWe) |
|---|---|---|---|---|---|---|---|---|
| **1973** | | **40** | **51** | **58** | **48** | **20** | **217** | **212** |
| **1974** | | **53** | **58** | **80** | **28** | **16** | **235** | **234** |
| **1975** | | **56** | **69** | **73** | **19** | **19** | **236** | **236** |
| **1976** | | **62** | **72** | **66** | **16** | **19** | **235** | **236** |
| **1977** | | **67** | **80** | **52** | **13** | **9** | **221** | **220** |
| **1978** | January | 68 | 86 | 44 | 13 | 9 | 220 | 219 |
| | February | 69 | 86 | 43 | 13 | 9 | 220 | 219 |
| | March | 69 | 86 | 45 | 11 | 9 | 220 | 219 |
| | April | 69 | 90 | 41 | 11 | 5 | 216 | 214 |
| | May | 69 | 90 | 39 | 10 | 6 | 214 | 212 |
| | June | 70 | 89 | 39 | 9 | 7 | 214 | 212 |
| | July | 70 | 89 | 37 | 10 | 7 | R213 | 211 |
| | August | 70 | 89 | 37 | 10 | 6 | 212 | 210 |
| | September | 70 | 89 | 37 | 9 | 6 | R211 | 209 |
| | October | 70 | 89 | 37 | 9 | 6 | 211 | 209 |
| | November | 71 | 90 | 34 | 9 | 6 | 210 | 208 |
| | December | 71 | 90 | 32 | 9 | 4 | 206 | 204 |
| **1979** | January | 71 | 92 | 30 | 5 | 1 | 199 | 195 |
| | February | 71 | 92 | 28 | 5 | 1 | 197 | 193 |
| | March | 71 | 92 | 28 | 5 | 1 | 197 | 193 |
| | April | 71 | 92 | 27 | 5 | 0 | 195 | 190 |
| | May | 71 | 92 | 27 | 5 | 0 | 195 | 190 |
| | June | 71 | 92 | 27 | 5 | 0 | 195 | 190 |
| | July | 71 | 91 | 25 | 5 | 0 | 192 | 187 |
| | August | 71 | 91 | 25 | 5 | 0 | 192 | 187 |
| | September | 71 | 91 | 25 | 3 | 0 | 190 | 185 |
| | October | 71 | 91 | 25 | 3 | 0 | 190 | 185 |
| | November | 71 | 91 | 23 | 3 | 0 | 188 | 182 |
| | December | 71 | 91 | 21 | 3 | 0 | 186 | 180 |
| **1980** | January | 71 | 90 | 17 | 3 | 0 | 181 | 174 |

[1]Monthly data are recorded the last day of the month. Annual data are recorded as of December 31 of each year.
[2]Includes Humboldt Bay shut-down for seismic modifications, and Three Mile Island 2 which was shut down due to an accident in March of 1979. Also includes two dual-purpose Department of Energy owned reactors, both operating. Does not include the Indian Point reactor which is in indefinite shut-down status.
R = Revised data.
*Sources:* • Compiled by the Energy Information Administration from various sources, but primarily from the Nuclear Regulatory Commission (NRC), Report NUREG 0380, "Program Summary Report."

# Price

## Crude Oil

During December 1979, the composite refiner acquisition cost of crude oil was $23.63 per barrel, $1.59 per barrel above the previous month's price. The imported price increased $1.89 per barrel from the November level to $28.91 per barrel in December. This price was 93.5 percent above the December 1978 level. The domestic average was $18.84, an increase of $1.19 per barrel above the November average.

The average price of domestic crude oil purchased at the wellhead was $16.98 per barrel in December 1979. The Alaskan North Slope price of $13.59 per barrel was 0.8 percent above the November 1979 figure. Actual stripper price of $35.11 per barrel was a 14.6 percent increase over the November 1979 price, and Naval Petroleum Reserve crude oil price of $29.08 per barrel increased 9.8 percent over the November 1979 level. The upper tier price of $13.88 per barrel increased by 1.5 percent over the previous month's figure, and the lower tier price of $6.17 per barrel increased 1.3 percent over the November 1979 price.

### Motor Gasoline

The national average retail price for all grades and all types of motor gasoline was 104.6 cents per gallon in December. Leaded regular gasoline at full serve stations sold for an average of 103.5 cents per gallon in December, 2.8 cents higher than the price in November. The price for unleaded regular gasoline at full serve stations was 108.2 cents per gallon in December, 2.8 cents higher than in November. The differential between unleaded regular and leaded regular remained stable at 4.7 cents per gallon.

### Heating Oil

The national average price of heating oil sold to residential customers rose 2.1 cents in December to 85.8 cents per gallon. The resulting figure was a 63.1 percent increase from the price of December 1978. The average residential distributor margin in December was 15.5 cents per gallon, 33.6 percent above the margin of December 1978. Refiners' national average selling price to resellers and retailers was 70.8 cents per gallon, 76.6 percent above the December 1978 average.

### Residual Fuel Oil

The average price, excluding taxes, for No. 6 residual fuel oil sold to utilities, industry, and other ultimate consumers in December 1979 was $24.44 per barrel, $1.60 above the previous month's price, and 77.7 percent over the December 1978 average. The average price, excluding taxes, for No. 6 residual fuel oil sold to resellers, bulk plants, jobbers, and other wholesale accounts was $23.55 per barrel, $1.55 above the November 1979 average, and a 87.4 percent increase over the December 1978 average.

### Aviation Fuel

The average price, excluding taxes, for kerosene-type jet fuel sold to commercial airlines, Department of Defense, and other ultimate consumers in December 1979 was 72.3 cents per gallon, or 2.6 cents over the previous month's average and a 83.0 percent increase over the December 1978 average.

### Liquefied Petroleum Gases

The average wholesale price for propane during December 1979, excluding taxes, was 40.4 cents per gallon, 2.8 cents above the previous month's level. This was 82.8 percent above the December 1978 level.

In December 1979, the average wholesale price for butane, excluding taxes, was 65.8 cents per gallon, 8.8 cents above the previous month's price. This was 189.9 percent above the December 1978 average.

# Price

## Domestic Prices and Percentages of Crude Oil Purchased at the Wellhead[1]

| | | Lower Tier[2] | | Upper Tier[2] | | Actual Stripper[3] | | Alaskan North Slope[4] | | Naval Petroleum Reserve[5] | | Actual Domestic Average[6] | Imputed Domestic Average[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Dollars per barrel | | | | | | | | | | | |
| | | Price | Percent | Price | Percent | Price | Percent | Price | Percent | Price | Percent | Price | Price |
| **1976** | **AVERAGE** | **5.13** | **54.4** | **11.71** | **31.5** | **12.16** | **14.1** | **NA** | **NA** | **NA** | **NA** | **8.19** | **8.06** |
| **1977** | January | 5.17 | 50.6 | 11.44 | 36.7 | 13.27 | 12.7 | NA | NA | NA | NA | 8.50 | 8.28 |
| | February | 5.18 | 49.5 | 11.39 | 37.2 | 13.32 | 13.3 | NA | NA | NA | NA | 8.57 | 8.33 |
| | March | 5.15 | 49.2 | 11.03 | 37.2 | 13.31 | 13.6 | NA | NA | NA | NA | 8.45 | 8.19 |
| | April | 5.15 | 49.5 | 10.97 | 36.9 | 13.28 | 13.6 | NA | NA | NA | NA | 8.40 | 8.14 |
| | May | 5.18 | 48.4 | 10.98 | 37.6 | 13.26 | 14.0 | NA | NA | NA | NA | 8.49 | 8.23 |
| | June | 5.16 | 48.8 | 10.92 | 37.0 | 13.28 | 14.2 | NA | NA | NA | NA | 8.44 | 8.17 |
| | July | 5.16 | 46.75 | 11.00 | 36.59 | 13.31 | 13.30 | 6.84 | 2.58 | 12.21 | 0.75 | 8.48 | 8.21 |
| | August | 5.18 | 43.31 | 10.93 | 36.65 | 13.95 | 13.32 | 6.91 | 5.79 | 12.29 | 0.91 | 8.62 | 8.25 |
| | September | 5.20 | 42.78 | 11.20 | 34.07 | 14.01 | 13.14 | 6.98 | 9.06 | 12.33 | 0.91 | 8.63 | 8.26 |
| | October | 5.23 | 42.23 | 11.42 | 34.58 | 14.01 | 12.92 | 6.66 | 9.09 | 12.38 | 1.15 | 8.72 | 8.36 |
| | November | 5.24 | 41.41 | 11.63 | 34.67 | 13.98 | 13.00 | 5.73 | 9.84 | 12.40 | 1.05 | 8.72 | 8.35 |
| | December | 5.25 | 40.42 | 11.76 | 34.61 | 13.98 | 13.00 | 5.73 | 10.92 | 12.36 | 1.03 | 8.77 | 8.40 |
| | **AVERAGE** | **5.19** | **45.92** | **11.22** | **36.11** | **13.59** | **13.32** | **6.35** | **4.14** | **12.34** | **0.51** | **8.57** | **8.27** |
| **1978** | January | 5.28 | 41.73 | 11.78 | 34.19 | 13.89 | 12.69 | 5.30 | 10.17 | 12.38 | 1.19 | 8.68 | 8.34 |
| | February | 5.29 | 40.78 | 11.81 | 34.35 | 13.90 | 13.68 | 5.68 | 9.94 | 12.46 | 1.23 | 8.84 | 8.48 |
| | March | 5.34 | 39.24 | 11.87 | 34.06 | 13.97 | 13.98 | 5.00 | 11.76 | 12.60 | 0.92 | 8.80 | 8.41 |
| | April | 5.35 | 37.94 | 11.94 | 34.04 | 13.95 | 13.72 | 5.15 | 13.26 | 12.67 | 1.02 | 8.82 | 8.44 |
| | May | 5.38 | 38.16 | 11.98 | 34.03 | 13.93 | 13.76 | 4.87 | 13.05 | 12.70 | 0.97 | 8.81 | 8.43 |
| | June | 5.46 | 36.79 | 12.08 | 35.01 | 13.95 | 13.89 | 5.63 | 13.45 | 13.08 | 0.84 | 9.05 | 8.68 |
| | July | 5.46 | 37.61 | 12.16 | 34.39 | 13.95 | 13.55 | 5.26 | 13.46 | 13.07 | 0.97 | 8.96 | 8.62 |
| | August | 5.50 | 36.49 | 12.22 | 34.45 | 13.93 | 14.42 | 5.09 | 13.66 | 13.04 | 0.95 | 9.05 | 8.67 |
| | September | 5.55 | 35.92 | 12.35 | 34.64 | 13.96 | 14.44 | 5.12 | 13.79 | 13.17 | 1.18 | 9.15 | 8.78 |
| | October | 5.60 | 36.27 | 12.42 | 34.38 | 13.97 | 14.15 | 5.21 | 13.95 | 13.08 | 1.22 | 9.17 | 8.81 |
| | November | 5.65 | 36.22 | 12.53 | 34.56 | 13.94 | 14.02 | 5.12 | 14.08 | 13.00 | 1.09 | 9.20 | 8.85 |
| | December | 5.68 | 33.65 | 12.59 | 34.74 | 14.08 | 15.88 | 5.40 | 14.42 | 12.92 | 1.28 | 9.47 | 9.07 |
| | **AVERAGE** | **5.46** | **37.54** | **12.15** | **34.41** | **13.95** | **14.03** | **5.22** | **12.96** | **12.85** | **1.08** | **9.00** | **8.63** |
| **1979** | January | 5.75 | 35.51 | 12.66 | 34.25 | 14.55 | 14.14 | 5.79 | 14.88 | 13.10 | 1.20 | 9.46 | 9.04 |
| | February | 5.76 | 35.20 | 12.78 | 34.97 | 14.88 | 15.08 | 5.87 | 13.71 | 13.94 | 1.01 | 9.69 | 9.21 |
| | March | 5.82 | 34.59 | 12.84 | 34.56 | 14.88 | 14.95 | 6.66 | 14.58 | 13.97 | 1.29 | 9.83 | 9.37 |
| | April | 5.85 | 33.98 | 12.94 | 34.93 | 16.71 | 15.27 | 7.45 | 14.52 | 14.56 | 1.28 | 10.33 | 9.60 |
| | May | 5.91 | 33.53 | 13.02 | 34.78 | 17.53 | 15.62 | 8.47 | 14.71 | 15.85 | 1.32 | 10.71 | 9.86 |
| | June | 6.07 | 29.32 | 13.14 | 38.22 | 20.24 | 15.97 | 8.97 | 13.64 | 16.02 | 1.34 | 11.70 | 10.48 |
| | July | 6.00 | 26.96 | 12.79 | 37.49 | 24.76 | 16.01 | 13.35 | 15.86 | 20.13 | 1.38 | 13.39 | 11.31 |
| | August | 6.09 | 26.03 | R13.33 | 36.72 | R25.71 | 16.93 | 14.14 | 15.82 | 20.77 | 1.33 | 14.00 | 11.88 |
| | September | 6.09 | 23.52 | 13.53 | 33.89 | 27.09 | 16.55 | 13.09 | 16.08 | 20.85 | 1.57 | 14.57 | NA |
| | October | 6.12 | 23.46 | 13.56 | 32.58 | 29.42 | 16.20 | 13.12 | 16.27 | 21.01 | 1.57 | 15.11 | NA |
| | November | 6.09 | 23.11 | 13.68 | 32.76 | 30.64 | 15.35 | 13.48 | 17.49 | 26.48 | 1.61 | 15.52 | NA |
| | December | 6.17 | 22.23 | 13.88 | 33.37 | 35.11 | 15.93 | 13.59 | 16.31 | 29.08 | 1.58 | 16.98 | NA |
| | **AVERAGE** | **5.94** | **28.89** | **13.22** | **34.86** | **22.92** | **15.67** | **10.57** | **15.34** | **19.40** | **1.38** | **12.64** | **NA** |

[1]See Explanatory Note 12.
[2]See Definitions.
[3]Stripper oil was exempt from price controls beginning September 1, 1976. From February through August 1976 stripper oil was subject to upper tier price ceilings. Annual average is for 12 months (January through December 1976).
[4]Alaskan North Slope (ANS) crude oil prices are treated as Upper Tier for determining the applicable wellhead ceiling price. ANS is included in both the Actual Domestic Average and the Imputed Domestic Average price determinations.
[5]The Naval Petroleum Reserves (NPR) are exempt from pricing regulations but have been reported here as Upper Tier prior to July 1977. NPR is included in the Actual Domestic Average price determinations, but not in the Imputed Domestic Average.
[6]See Explanatory Note 13.
†Preliminary data.
NA = Not available.
Note: The percentages of crude oil shown above after May 1979 do not add to 100 percent. In June 1979 new pricing categories of oil were adopted: incremental tertiary, newly discovered and marginal property. The categories were further expanded in September 1979 to include heavy crude, decontrolled oil, and tertiary incentive (10 CFR 212). In December 1979 the percentage of domestic production included in the six above categories was about 4 percent.
*Sources:* • January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report."
• Economic Regulatory Administration Form 182, "Domestic Crude Oil First Purchase Report".

# Price

## FOB Cost of Crude Oil Imports from Selected Countries[1]

| | | Algeria | Canada | Indonesia | Iran | Libya | Mexico | Nigeria | Saudi Arabia | United Arab Emirates | United Kingdom | Venezuela |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Dollars per barrel | | | | | |
| **1976** | **AVERAGE** | **13.05** | **NA** | **12.76** | **11.61** | **12.55** | **NA** | **13.08** | **11.69** | **11.94** | **NA** | **11.32** |
| **1977** | January | 14.03 | NA | 13.41 | 12.03 | 13.64 | 13.39 | 14.11 | 11.92 | 12.53 | NA | 13.39 |
| | February | 14.31 | NA | 13.43 | 12.36 | 13.89 | 13.42 | 14.24 | 12.04 | 12.33 | NA | 13.30 |
| | March | 14.29 | NA | 13.58 | 12.79 | 13.87 | 13.40 | 14.32 | 12.24 | 12.51 | NA | 12.98 |
| | April | 14.34 | NA | 13.55 | 12.79 | 13.98 | 13.38 | 14.51 | 12.23 | 12.53 | NA | 12.62 |
| | May | 14.31 | NA | 13.57 | 12.78 | 13.93 | 13.42 | 14.56 | 12.23 | 12.56 | NA | 12.60 |
| | June | 14.35 | NA | 13.55 | 12.68 | 13.94 | 13.41 | 14.55 | 12.21 | 12.44 | NA | 12.53 |
| | July | 14.43 | NA | 13.61 | 12.78 | 13.99 | 13.42 | 14.52 | 12.40 | 12.70 | NA | 12.48 |
| | August | 14.48 | NA | 13.63 | 12.80 | 13.95 | 13.45 | 14.54 | 12.56 | 13.15 | NA | 12.37 |
| | September | 14.43 | NA | 13.64 | 12.73 | 13.99 | 13.43 | 14.56 | 12.72 | 13.20 | NA | 12.55 |
| | October | 14.43 | NA | 13.65 | 12.79 | 13.93 | 13.42 | 14.48 | 12.70 | 13.22 | NA | 12.72 |
| | November | 14.37 | NA | 13.65 | 12.75 | 13.88 | 13.41 | 14.53 | 12.73 | 13.33 | NA | 12.71 |
| | December | 14.44 | NA | 13.61 | 12.71 | 13.85 | 13.41 | 14.45 | 12.77 | 13.27 | NA | 12.56 |
| **1978** | January | 14.29 | NA | 13.67 | 12.62 | 13.77 | 13.45 | 14.18 | 12.70 | 13.23 | NA | 12.73 |
| | February | 14.21 | NA | 13.62 | 12.68 | 13.91 | 13.43 | 14.18 | 12.78 | 13.18 | NA | 12.61 |
| | March | 14.19 | NA | 13.62 | 12.68 | 13.75 | 13.44 | 14.13 | 12.80 | 13.20 | 13.80 | 12.86 |
| | April | 14.09 | NA | 13.61 | 12.68 | 13.62 | 13.42 | 13.91 | 12.74 | 13.23 | 13.65 | 12.54 |
| | May | 13.99 | NA | 13.51 | 12.65 | 13.59 | 13.42 | 13.90 | 12.71 | 13.05 | 13.64 | 12.13 |
| | June | 14.06 | NA | 13.63 | 12.58 | 13.59 | 13.32 | 13.90 | 12.67 | 13.28 | 13.65 | 12.32 |
| | July | 14.06 | NA | 13.63 | 12.70 | 13.67 | 13.13 | 13.89 | 12.65 | 13.26 | 13.72 | 12.66 |
| | August | 14.05 | NA | 13.63 | 12.63 | 13.66 | 13.17 | 13.86 | 12.66 | 13.27 | 13.80 | 12.23 |
| | September | 14.05 | NA | 13.69 | 12.63 | 13.66 | 13.13 | 13.97 | 12.76 | 13.27 | 13.74 | 12.38 |
| | October | 14.08 | NA | 13.63 | 12.64 | 13.73 | 13.15 | 14.08 | 12.59 | 13.24 | 14.14 | 12.32 |
| | November | 14.13 | NA | 13.79 | 12.62 | 13.97 | 13.17 | 14.12 | 12.63 | 13.29 | 13.85 | 12.46 |
| | December | 14.16 | NA | 13.65 | 12.67 | 14.07 | 13.13 | 14.29 | 12.77 | 13.39 | 14.06 | 12.42 |
| **1979** | January | 14.87 | NA | 14.06 | 12.55 | 14.60 | 13.94 | 14.84 | 13.26 | 13.98 | 15.41 | 13.69 |
| | February | 14.89 | NA | 14.18 | 12.56 | 15.15 | 14.17 | 14.98 | 13.47 | 14.28 | 15.33 | 13.26 |
| | March | 15.54 | NA | 14.42 | 19.04 | 16.46 | 14.14 | 15.07 | 13.61 | 15.72 | 16.13 | 13.88 |
| | April | 16.80 | NA | 15.98 | 17.96 | 17.40 | 17.02 | 18.18 | 14.77 | 16.24 | 17.40 | 14.58 |
| | May | 19.14 | NA | 16.84 | 17.27 | 19.13 | 18.56 | 20.02 | 14.62 | 17.38 | 18.39 | 15.76 |
| | June | 21.04 | NA | 18.59 | 19.95 | 20.87 | 17.43 | 22.11 | 17.98 | 18.91 | 20.88 | 16.01 |
| | July | 22.42 | NA | 20.95 | 21.99 | 23.88 | 22.29 | 24.46 | 18.54 | 21.33 | 23.14 | 18.22 |
| | August | 23.44 | NA | 21.65 | 21.40 | 24.93 | 22.56 | 25.43 | 18.32 | 21.45 | 23.88 | 18.66 |
| | September | 23.60 | NA | 22.11 | 27.27 | 25.17 | 22.32 | 25.77 | 18.72 | 22.93 | 22.93 | 18.14 |
| | October | 24.40 | NA | 24.39 | 31.80 | 27.39 | 24.43 | 26.33 | 21.44 | 21.85 | NA | 22.36 |

[1]The FOB cost excludes all costs related to insurance and transportation. See Explanatory Note 14.
NA = Not available.
*Sources:* 1976 through January 1979: FEA Form 701-M-0, "Transfer Pricing Report."
• February 1979 forward: Economic Regulatory Administration Form 51, "Transfer Pricing Report."

# Price

## Landed Cost of Crude Oil Imports from Selected Countries[1]

| | | Algeria | Canada | Indonesia | Iran | Libya | Mexico | Nigeria | Saudi Arabia | United Arab Emirates | United Kingdom | Venezuela |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Dollars per barrel | | | | | |
| **1975** | **AVERAGE** | **12.72** | **12.72** | **13.79** | **12.21** | **12.35** | **NA** | **12.62** | **12.30** | **12.87** | **NA** | **11.65** |
| **1976** | **AVERAGE** | **13.81** | **13.57** | **13.82** | **12.82** | **13.58** | **NA** | **13.80** | **13.04** | **13.30** | **NA** | **11.80** |
| **1977** | January | 14.80 | 13.92 | 14.42 | 13.16 | 14.64 | 13.78 | 14.97 | 13.22 | 13.56 | NA | 13.29 |
| | February | 15.18 | 13.74 | 14.57 | 13.56 | 15.12 | 13.92 | 15.12 | 13.32 | 13.46 | NA | 13.76 |
| | March | 15.08 | 14.34 | 14.64 | 13.94 | 14.88 | 13.77 | 15.13 | 13.50 | 13.80 | NA | 13.41 |
| | April | 15.21 | 14.02 | 14.70 | 13.95 | 15.12 | 13.66 | 15.37 | 13.41 | 13.78 | NA | 13.19 |
| | May | 15.20 | 14.94 | 14.59 | 13.94 | 14.91 | 13.80 | 15.40 | 13.49 | 13.85 | NA | 13.10 |
| | June | 15.34 | 14.49 | 14.63 | 13.81 | 14.92 | 13.81 | 15.37 | 13.39 | 13.72 | NA | 13.06 |
| | July | 15.29 | 13.91 | 14.75 | 13.84 | 14.88 | 13.87 | 15.39 | 13.64 | 14.20 | NA | 13.02 |
| | August | 15.24 | 14.24 | 14.65 | 13.99 | 14.70 | 13.84 | 15.25 | 13.72 | 14.36 | NA | 12.82 |
| | September | 15.29 | 14.14 | 14.62 | 13.77 | 14.99 | 13.72 | 15.34 | 14.01 | 14.41 | NA | 13.08 |
| | October | 15.41 | 14.00 | 14.67 | 13.83 | 14.81 | 13.71 | 15.31 | 13.85 | 14.56 | NA | 13.16 |
| | November | 15.05 | 14.52 | 14.73 | 13.88 | 14.73 | 13.79 | 15.23 | 13.94 | 14.19 | NA | 13.11 |
| | December | 15.25 | 14.27 | 14.58 | 13.95 | 14.81 | 13.69 | 15.21 | 13.99 | 14.48 | NA | 12.99 |
| | **AVERAGE** | **15.20** | **14.21** | **14.63** | **13.80** | **14.87** | **13.75** | **15.25** | **13.61** | **14.04** | **NA** | **13.13** |
| **1978** | January | 15.01 | 14.37 | 14.60 | 13.91 | 14.63 | 13.83 | 14.88 | 13.93 | 14.40 | NA | 13.00 |
| | February | 14.91 | 14.31 | 14.53 | 13.75 | 14.85 | 13.67 | 14.90 | 13.96 | 14.07 | NA | 12.93 |
| | March | 14.74 | 13.56 | 14.56 | 14.06 | 14.62 | 13.66 | 14.89 | 14.07 | 14.44 | 14.75 | 13.22 |
| | April | 14.91 | 13.87 | 14.61 | 13.90 | 14.43 | 13.63 | 14.63 | 13.85 | 14.42 | 14.26 | 12.89 |
| | May | 14.70 | 14.39 | 14.50 | 13.94 | 14.56 | 13.65 | 14.72 | 13.86 | 14.20 | 14.35 | 12.49 |
| | June | 14.80 | 15.07 | 14.58 | 13.92 | 14.45 | 13.51 | 14.61 | 13.86 | 14.48 | 14.19 | 12.72 |
| | July | 14.83 | 14.64 | 14.73 | 13.93 | 14.65 | 13.35 | 14.64 | 13.81 | 14.29 | 13.81 | 12.41 |
| | August | 14.83 | 14.78 | 14.66 | 13.76 | 14.64 | 13.52 | 14.59 | 13.84 | 14.49 | 14.48 | 12.70 |
| | September | 14.74 | 13.92 | 14.73 | 13.83 | 14.62 | 13.45 | 14.78 | 14.03 | 14.36 | 14.53 | 12.94 |
| | October | 14.90 | 14.73 | 14.68 | 13.89 | 14.81 | 13.39 | 15.03 | 13.89 | 14.61 | 14.85 | 12.78 |
| | November | 15.30 | 14.72 | 14.85 | 13.89 | 15.04 | 13.61 | 15.06 | 14.02 | 14.38 | 14.81 | 13.08 |
| | December | 15.27 | 14.96 | 14.80 | 13.80 | 15.23 | 13.50 | 15.30 | 14.00 | 14.66 | 15.00 | 13.02 |
| | **AVERAGE** | **14.91** | **14.50** | **14.64** | **13.88** | **14.72** | **13.54** | **14.86** | **13.92** | **14.39** | **NA** | **12.83** |
| **1979** | January | 15.88 | 16.19 | 15.29 | 13.76 | 15.81 | 14.51 | 15.88 | 14.73 | 15.53 | 16.29 | 14.16 |
| | February | 16.18 | 16.68 | 15.62 | 14.25 | 16.49 | 14.76 | 16.13 | 14.88 | 16.05 | 16.07 | 14.17 |
| | March | 16.61 | 17.18 | 15.68 | 19.54 | 17.56 | 14.81 | 16.20 | 15.28 | 17.10 | 15.91 | 14.61 |
| | April | 17.93 | 17.39 | 17.31 | 19.06 | 18.59 | 17.40 | 19.11 | 16.18 | 17.70 | 18.23 | 15.19 |
| | May | 20.22 | 20.22 | 17.92 | 18.56 | 20.16 | 18.82 | 21.06 | 16.29 | 18.65 | 19.26 | 16.74 |
| | June | 22.52 | NA | 18.59 | 19.95 | 20.87 | 17.42 | 22.11 | 17.98 | 18.91 | 20.88 | 16.01 |
| | July | 23.54 | NA | 22.50 | 23.35 | 25.48 | 22.74 | 25.79 | 20.06 | 22.84 | 23.96 | 18.95 |
| | August | 24.85 | NA | 23.10 | 22.64 | 26.27 | 23.12 | 26.72 | 19.85 | 23.12 | 25.05 | 19.42 |
| | September | 25.09 | NA | 23.72 | 28.36 | 26.54 | 23.23 | 27.03 | 20.36 | 24.59 | 24.18 | 18.99 |
| | October | 25.59 | NA | 26.36 | 33.17 | 28.56 | 24.98 | 27.41 | 22.99 | 23.98 | NA | 23.05 |

[1]See Explanatory Note 15.
NA = Not available.
*Sources:* • 1975 through January 1979: FEA Form F701-M-0, "Transfer Pricing Report." Data provided by the Economic Regulatory Administration.
• February 1979 forward: ERA 51, "Transfer Pricing Report."

# Price

## Crude Oil Refiner Acquisition Cost[1]

| | | Domestic | Imported | Composite |
|---|---|---|---|---|
| | | | Dollars per barrel | |
| **1976** | **AVERAGE** | **8.84** | **13.48** | **10.89** |
| **1977** | January | 9.23 | 14.11 | 11.64 |
| | February | 9.24 | 14.50 | 11.80 |
| | March | 9.32 | 14.54 | 11.88 |
| | April | 9.21 | 14.36 | 11.75 |
| | May | 9.21 | 14.62 | 11.87 |
| | June | 9.34 | 14.63 | 11.98 |
| | July | 9.32 | 14.44 | 11.90 |
| | August | 9.54 | 14.68 | 12.01 |
| | September | 9.75 | 14.50 | 12.01 |
| | October | 9.95 | 14.56 | 12.12 |
| | November | 10.17 | 14.61 | 12.18 |
| | December | 10.15 | 14.76 | 12.27 |
| | **AVERAGE** | **9.55** | **14.53** | **11.96** |
| **1978** | January | 10.14 | 14.52 | 12.13 |
| | February | 10.25 | 14.41 | 12.19 |
| | March | 10.46 | 14.57 | 12.23 |
| | April | 10.55 | 14.40 | 12.20 |
| | May | 10.60 | 14.51 | 12.35 |
| | June | 10.72 | 14.54 | 12.48 |
| | July | 10.58 | 14.49 | 12.45 |
| | August | 10.65 | 14.46 | 12.46 |
| | September | 10.65 | 14.53 | 12.57 |
| | October | 10.78 | 14.63 | 12.62 |
| | November | 10.87 | 14.74 | 12.76 |
| | December | 11.00 | 14.94 | 12.93 |
| | **AVERAGE** | **10.61** | **14.57** | **12.46** |
| **1979** | January | 11.02 | 15.50 | 13.11 |
| | February | 11.34 | 15.88 | 13.42 |
| | March | 11.45 | 16.41 | 13.70 |
| | April | 12.06 | 17.58 | 14.52 |
| | May | 12.41 | 19.00 | 15.40 |
| | June | 13.24 | 21.03 | 17.00 |
| | July | 14.61 | 23.09 | 18.58 |
| | August | 15.73 | 23.98 | 19.75 |
| | September | 16.05 | 25.06 | 20.14 |
| | October | 16.93 | 25.05 | 20.68 |
| | November | 17.65 | 27.02 | 22.04 |
| | December | 18.84 | 28.91 | 23.63 |
| | **AVERAGE** | **14.27** | **23.89** | **17.72** |

[1]See Explanatory Note 16.
Note: Crude oil costs and volumes reported on the ERA 49 exclude unfinished oils but include Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on the P-110-M-1 include unfinished oils but exclude SPR. Imported averages derived from the Economic Regulatory Administration (ERA) Form 49 exclude crude oil purchased as Strategic Petroleum Reserves (SPR), whereas, the composite averages derived from the ERA 49 include SPR.
*Sources:* • January 1976: Form FEO 96, "Monthly Cost Allocation Report."
- February 1976 through June 1978: FEA Form P110-M-1, "Refiners' Monthly Cost Allocation Report."
- July 1978 forward: Economic Regulatory Administration Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."

# Price

## Unrecouped Costs for Refined Products for 29 Largest Refiners[1]

| | | Distillate[2] | Motor Gasoline | Aviation Jet Fuel[3] | Other Products | Total |
|---|---|---|---|---|---|---|
| | | | | Million dollars | | |
| **1977** | January | NA | 901 | 166 | 325 | 1,392 |
| | February | NA | 1,038 | 187 | 303 | 1,528 |
| | March | NA | 956 | 180 | 287 | 1,423 |
| | April | NA | 1,029 | 194 | 343 | 1,566 |
| | May | NA | 967 | 224 | 351 | 1,542 |
| | June | NA | 957 | 234 | 344 | 1,535 |
| | July | NA | 869 | 210 | 391 | 1,470 |
| | August | NA | 764 | 279 | 455 | 1,498 |
| | September | NA | 784 | 186 | 500 | 1,470 |
| | October | NA | 879 | 248 | 511 | 1,638 |
| | November | NA | 904 | 218 | 538 | 1,660 |
| | December | NA | 818 | 185 | 470 | 1,473 |
| **1978** | January | NA | 1,055 | 191 | 420 | 1,666 |
| | February | NA | 1,265 | 198 | 435 | 1,898 |
| | March | NA | 1,065 | 175 | 378 | 1,618 |
| | April | NA | 1,013 | 170 | 400 | 1,583 |
| | May | NA | 849 | 186 | 500 | 1,535 |
| | June | NA | 718 | 180 | 562 | 1,460 |
| | July | NA | 713 | 136 | 449 | 1,298 |
| | August | NA | 353 | 74 | 461 | 888 |
| | September | NA | 554 | 155 | 491 | 1,200 |
| | October | NA | 627 | 131 | 701 | 1,459 |
| | November | NA | 709 | 102 | 540 | 1,351 |
| | December | NA | 532 | 94 | 791 | 1,417 |
| **1979** | January | NA | 836 | 64 | 799 | 1,699 |
| | February | NA | 1,110 | 36 | 842 | 1,988 |
| | March | NA | 1,551 | NA | 837 | 2,388 |
| | April | NA | 2,067 | NA | 1,649 | 3,716 |
| | May | NA | 2,245 | NA | 1,848 | 4,093 |
| | June | NA | 2,737 | NA | 1,754 | 4,491 |
| | July | NA | 2,989 | NA | 2,087 | 5,076 |
| | August | NA | 2,865 | NA | 2,331 | 5,196 |
| | September | NA | 3,176 | NA | 2,384 | 5,560 |
| | October | NA | 3,158 | NA | 2,303 | 5,461 |
| | November | NA | 3,520 | NA | 2,312 | 5,832 |
| | December† | NA | 3,738 | NA | 1,182 | 4,920 |

[1]Beginning with February 1977, data for only 29 refiners are included in this table due to the merger between Skelly Oil Company and Getty Oil Company.
[2]Includes No. 2 heating oil and No. 2 diesel fuel only. After May 1976, reporting of the distillate bank is no longer required due to decontrol of middle distillates. Aviation jet fuel was decontrolled on February 26, 1979.
[3]After February 1979, reporting of aviation jet fuel bank is no longer required due to the decontrol of kerosene-base jet fuel and aviation gasoline.
†Preliminary data.
NA = Not available.
*Sources:* • January 1977 through June 1978: FEA Form P110-M-1, "Refiners' Monthly Cost Allocation Report."
• July 1978 forward: EIA Form 14, "Refiners' Monthly Cost Allocation Report." Data provided by the Economic Regulatory Administration.

# Price

## Crude Oil Entitlements and Supply Ratio

| | | Entitlement Price[1] Dollars | National Old Oil (or Domestic Crude Oil) Supply Ratio[1] | Entitlement Benefit[1] Dollars |
|---|---|---|---|---|
| **1977** | January | 8.30 | 0.266 | 2.21 |
| | February | 8.53 | 0.267 | 2.28 |
| | March | 8.71 | 0.273 | 2.38 |
| | April | 8.69 | 0.285 | 2.48 |
| | May | 8.77 | 0.280 | 2.46 |
| | June | 8.65 | 0.273 | 2.36 |
| | July | 8.68 | 0.258 | 2.24 |
| | August | 8.75 | 0.266 | 2.33 |
| | September | 8.75 | 0.250 | 2.19 |
| | October | 8.78 | 0.250 | 2.20 |
| | November | 8.61 | 0.239 | 2.06 |
| | December | 8.65 | 0.233 | 2.02 |
| **1978** | January | 8.61 | 0.240 | 2.07 |
| | February | 8.48 | 0.230 | 1.95 |
| | March | 8.47 | 0.225 | 1.91 |
| | April | 8.35 | 0.218 | 1.82 |
| | May | 8.26 | 0.197 | 1.63 |
| | June | 8.19 | 0.191 | 1.56 |
| | July | 8.16 | 0.184 | 1.50 |
| | August | 8.06 | 0.165 | 1.33 |
| | September | 8.13 | 0.174 | 1.41 |
| | October | 8.11 | 0.178 | 1.44 |
| | November | 8.16 | 0.166 | 1.35 |
| | December | 8.20 | 0.155 | 1.27 |
| **1979** | January | 8.74 | 0.178 | 1.56 |
| | February | 9.03 | 0.185 | 1.67 |
| | March | 9.50 | 0.189 | 1.80 |
| | April | 10.53 | 0.196 | 2.06 |
| | May | 11.74 | 0.208 | 2.44 |
| | June | 13.70 | 0.220 | 3.01 |
| | July | 16.01 | 0.221 | 3.54 |
| | August | 17.26 | 0.218 | 3.78 |
| | September | 17.97 | 0.218 | 3.92 |
| | October | 18.27 | 0.219 | 4.00 |
| | November | 20.12 | 0.218 | 4.39 |
| | December | 21.91 | 0.215 | 4.71 |

[1]See Definitions.
*Source:* • Economic Regulatory Administration Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."

# Price

## National Average Retail Dealer Motor Gasoline Selling Prices

| | | Leaded Regular | | Unleaded Regular | | Leaded Premium | | Unleaded Premium | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Full Serve | Self Serve | Full Serve | Self Serve | Full Serve | Self Serve | Full Serve | Self Serve | Average for All Grades |
| | | Cents per gallon, including tax | | | | | | | | |
| **1976** | **AVERAGE** | **58.7** | **55.4** | **62.5** | **NA** | **63.8** | **60.7** | **NA** | **NA** | **NA** |
| **1977** | January | 59.9 | 56.2 | 64.0 | NA | 65.2 | 61.7 | 68.4 | NA | NA |
| | February | 60.7 | 57.1 | 65.0 | NA | 66.1 | 62.7 | 67.2 | NA | NA |
| | March | 61.3 | 57.7 | 65.4 | NA | 66.8 | 63.3 | 70.7 | NA | NA |
| | April | 62.2 | 58.4 | 66.1 | NA | 67.6 | 64.1 | 71.7 | NA | NA |
| | May | 62.9 | 58.9 | 66.7 | NA | 68.4 | 64.8 | 71.2 | NA | NA |
| | June | 63.4 | 59.3 | 67.2 | NA | 68.9 | 65.2 | 71.7 | NA | NA |
| | July | 63.4 | 59.2 | 67.3 | NA | 68.9 | 65.2 | 71.4 | NA | NA |
| | August | 63.4 | 58.8 | 67.0 | 63.7 | 68.9 | 65.8 | 71.4 | NA | NA |
| | September | 63.3 | 58.5 | 67.0 | 63.7 | 68.9 | 65.8 | 71.3 | NA | NA |
| | October | 63.2 | 58.2 | 67.0 | 63.6 | 68.9 | 65.7 | 71.3 | NA | NA |
| | November | 63.1 | 58.1 | 67.0 | 63.4 | 68.9 | 65.6 | 71.3 | NA | NA |
| | December | 63.3 | 58.2 | 67.2 | 63.6 | 69.1 | 65.8 | 70.6 | NA | NA |
| | **AVERAGE** | **62.6** | **58.2** | **66.4** | **63.6** | **68.1** | **64.7** | **71.0** | **NA** | **NA** |
| **1978** | January | 61.7 | 57.2 | 65.8 | 61.6 | 67.7 | 63.5 | 69.6 | 66.0 | 63.1 |
| | February | 61.6 | 57.1 | 65.7 | 61.8 | 67.7 | 64.0 | NA | 66.1 | 63.0 |
| | March | 61.7 | 57.0 | 65.8 | 61.8 | 68.0 | 63.9 | 69.7 | 66.0 | 63.0 |
| | April | 61.9 | 57.2 | 66.1 | 62.0 | 68.3 | 64.3 | 70.4 | NA | 63.2 |
| | May | 62.5 | 58.2 | 66.9 | 62.9 | 69.0 | 65.3 | NA | NA | 64.0 |
| | June | 63.4 | 59.0 | 67.8 | 64.0 | 70.0 | 66.2 | NA | NA | 64.8 |
| | July | 64.6 | 60.6 | 68.8 | 65.6 | 71.1 | 68.2 | 73.5 | 70.3 | 66.1 |
| | August | 65.4 | 61.2 | 69.8 | 66.2 | 72.0 | 68.8 | 74.4 | 71.3 | 66.8 |
| | September | 65.8 | 61.7 | 70.2 | 66.9 | 72.4 | 69.2 | 75.2 | 71.3 | 67.2 |
| | October | 65.9 | 61.5 | 70.2 | 66.7 | 72.5 | 69.3 | 74.8 | 71.8 | 67.2 |
| | November | 66.7 | 62.3 | 71.1 | 67.7 | 73.3 | 70.1 | 76.3 | 73.9 | 68.2 |
| | December | 67.5 | 63.4 | 71.7 | 68.7 | 73.7 | 71.0 | 77.1 | 74.7 | 68.9 |
| | **AVERAGE** | **63.9** | **59.8** | **68.4** | **64.9** | **69.4** | **67.1** | **72.8** | **69.7** | **65.5** |
| **1979** | January | 68.4 | 64.0 | 72.9 | 69.3 | 74.8 | 71.3 | 78.6 | 75.1 | 69.8 |
| | February | 69.9 | 65.4 | 74.5 | 70.4 | 76.2 | 72.8 | 80.8 | 77.0 | 71.0 |
| | March | 72.6 | 68.7 | 77.4 | 73.9 | 78.9 | 76.0 | 83.7 | 78.8 | 74.0 |
| | April | 76.8 | 73.7 | 81.6 | 78.5 | 83.5 | 81.7 | 86.2 | 82.5 | 78.4 |
| | May | 81.2 | 78.6 | 85.8 | 83.2 | 88.0 | 86.4 | 89.9 | 86.3 | 82.9 |
| | June | 86.3 | 83.8 | 90.9 | 88.3 | 92.9 | 91.8 | 94.5 | 91.3 | 87.9 |
| | July | 91.3 | 88.4 | 95.6 | 92.6 | 96.9 | 95.2 | 100.4 | 97.8 | 92.6 |
| | August | 95.6 | 92.0 | 100.1 | 96.5 | 101.8 | 99.1 | 105.6 | 101.6 | 96.7 |
| | September | 98.2 | 94.3 | 103.2 | 99.3 | 105.4 | 102.2 | 108.9 | 104.4 | 99.4 |
| | October | 99.5 | 95.1 | 104.3 | 100.0 | 106.5 | 102.9 | 110.1 | 106.1 | 100.5 |
| | November | 100.7 | R97.0 | R105.4 | R101.7 | R107.0 | R104.6 | R111.0 | R107.6 | R101.8 |
| | Decembert | 103.5 | 99.5 | 108.2 | 104.5 | 109.9 | 107.5 | 114.0 | 109.9 | 104.6 |
| | **AVERAGE** | **86.5** | **83.0** | **92.2** | **88.6** | **91.1** | **88.2** | **97.1** | **93.1** | **88.3** |

†Preliminary data.
R = Revised data.
NA = Not available.
Note: "Average for all grades" excludes mini-serve for January 1978 through June 1978. Mini-serve is included from July 1978 forward. No. 2 diesel fuel is included in the "Average for All Grades" beginning July 1979.
*Sources:* • January 1976 through December 1977: Lundberg Survey, Inc.
• January 1978 through June 1978: EIA 8, "Retail Motor Fuels Service Station Survey".
• July 1978 forward: EIA 79, "Monthly Motor Gasoline Service Station Survey".

# Price

## Average Retail Dealer Motor Gasoline Selling Prices for Major[1] and Nonmajor Brands—October, November, and December 1979

| | Full Serve | | | Self Serve | | | Full Serve | | | Self Serve | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Oct. | Nov. | Dec.† | Oct. | Nov. | Dec.† | Oct. | Nov. | Dec.† | Oct. | Nov. | Dec.† |
| | Leaded Regular | | | | | | Unleaded Regular | | | | | |
| | Cents per gallon, including tax | | | | | | | | | | | |
| Major | 100.2 | R101.3 | 104.1 | 96.2 | R97.3 | 99.7 | 105.0 | R105.9 | 108.6 | 101.2 | R101.9 | 104.8 |
| Nonmajor | 97.8 | R98.9 | 101.6 | 94.0 | R96.6 | 99.4 | 101.7 | R103.1 | 106.2 | 98.7 | R101.5 | 104.1 |
| | Leaded Premium | | | | | | Unleaded Premium | | | | | |
| Major | 107.1 | R107.5 | 110.5 | 104.4 | R105.7 | 108.0 | 110.0 | R111.0 | 114.0 | 106.0 | 107.6 | 109.9 |
| Nonmajor | 104.2 | R104.5 | 106.5 | 101.2 | 103.6 | 106.8 | NA | NA | NA | NA | NA | NA |

## Average Retail Dealer Motor Gasoline Selling Prices by Department of Energy (DOE) Regions[2]—October, November, and December 1979

| DOE Region | Full Serve | | | Self Serve | | | Full Serve | | | Self Serve | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Oct. | Nov. | Dec.† | Oct. | Nov. | Dec.† | Oct. | Nov. | Dec.† | Oct. | Nov. | Dec.† |
| | Leaded Regular | | | | | | Unleaded Regular | | | | | |
| | Cents per gallon, including tax | | | | | | | | | | | |
| 1 | 99.0 | 100.4 | 103.4 | 97.0 | R98.5 | 102.1 | 103.2 | 104.2 | 107.5 | 101.1 | R102.5 | 106.2 |
| 2 | 100.4 | 101.7 | 104.3 | 98.6 | R100.1 | 101.7 | 104.4 | 105.5 | 108.1 | 103.6 | R104.8 | 106.7 |
| 3 | 98.6 | R99.9 | 102.1 | 95.5 | 97.7 | 99.7 | 102.5 | R103.7 | 106.0 | 99.7 | 101.6 | 104.0 |
| 4 | 97.2 | R99.1 | 102.0 | 93.5 | 95.2 | 98.0 | 101.6 | 103.3 | 106.3 | 98.1 | R99.6 | 102.4 |
| 5 | 101.5 | R102.5 | 105.8 | 96.7 | R98.6 | 101.0 | 106.6 | R107.8 | 111.3 | 101.6 | 103.3 | 105.9 |
| 6 | 94.9 | R96.4 | 100.1 | 90.8 | R92.7 | 95.6 | 98.8 | R100.3 | 103.5 | 95.1 | R96.7 | 99.6 |
| 7 | 99.0 | R100.8 | 103.8 | 95.4 | R97.5 | 100.1 | 103.2 | R105.5 | 108.1 | 99.9 | 101.8 | 104.7 |
| 8 | 99.3 | R101.2 | 103.8 | 94.4 | 96.9 | 99.2 | 103.5 | 105.2 | 107.9 | 98.7 | R100.9 | 103.5 |
| 9 | 103.1 | R102.8 | 105.5 | 99.3 | R100.5 | 102.7 | 109.2 | R109.4 | 111.7 | 104.2 | R105.8 | 108.3 |
| 10 | 101.0 | R101.0 | 103.2 | 99.4 | R100.0 | 102.0 | 106.1 | R106.5 | 108.3 | 104.4 | R104.8 | 106.5 |
| | Leaded Premium | | | | | | Unleaded Premium | | | | | |
| 1 | 104.6 | R105.6 | 108.0 | 101.7 | R103.6 | NA | 108.1 | R108.8 | 111.5 | 107.8 | R109.0 | 110.6 |
| 2 | 105.8 | R106.9 | 109.6 | 103.2 | R104.2 | NA | 110.8 | R112.4 | 115.1 | 110.7 | R109.8 | NA |
| 3 | 103.9 | R105.2 | 107.6 | 101.6 | R102.7 | 104.6 | 108.4 | R110.5 | 113.2 | 106.3 | 108.8 | 111.6 |
| 4 | 102.9 | 104.4 | 107.4 | 99.3 | R100.9 | 103.3 | 107.6 | R109.8 | 111.5 | 104.8 | R106.0 | 107.9 |
| 5 | 108.0 | R106.6 | 110.4 | 103.9 | R104.4 | 107.4 | 113.1 | R113.5 | 117.6 | 109.4 | R110.5 | 114.4 |
| 6 | 100.5 | R102.0 | 106.6 | 96.1 | R97.7 | 101.6 | 104.4 | R105.6 | 106.6 | 99.5 | R100.6 | 104.2 |
| 7 | 103.2 | R106.4 | 109.3 | 99.8 | 102.0 | 104.2 | 108.3 | R110.4 | 113.0 | 105.9 | R107.7 | 109.5 |
| 8 | 104.3 | R105.7 | 108.4 | 99.8 | R101.6 | 104.1 | 109.2 | R111.0 | 115.3 | 106.4 | 107.9 | 112.7 |
| 9 | 110.9 | R110.6 | 113.3 | 106.8 | R107.9 | 110.7 | NA | NA | NA | NA | NA | NA |
| 10 | 107.8 | 108.5 | 110.3 | 106.0 | R107.2 | 110.2 | NA | NA | NA | NA | NA | NA |

[1]See Explanatory Note 17.
[2]DOE regions are defined in Explanatory Note 18.
†Preliminary data.
R = Revised data.
NA = Not available.
*Source:* • EIA 79, "Monthly Motor Gasoline Service Station Survey."

# Price

## Aviation and Diesel Fuels

| | | Aviation | | | | | Diesel | |
|---|---|---|---|---|---|---|---|---|
| | | Aviation Gasoline | | Naphtha-Type[1] | Kerosene-Type | | No. 2 Diesel | |
| | | Wholesale[2] | Retail[2] | Retail[2] | Wholesale[2] | Retail[2] | Wholesale[3] | Retail[3] |
| | | Cents per gallon, excluding tax | | | | | | |
| **1976** | **AVERAGE** | **42.4** | **43.1** | **31.5** | **32.5** | **31.2** | **31.9** | **34.7** |
| **1977** | January | 43.4 | 44.1 | 33.4 | 34.6 | 33.2 | 34.3 | 36.6 |
| | February | 44.7 | 45.0 | 34.0 | 37.1 | 34.1 | 35.3 | 38.2 |
| | March | 45.0 | 45.7 | 34.5 | 35.9 | 34.6 | 35.9 | 39.0 |
| | April | 46.0 | 47.2 | 34.3 | 35.9 | 34.9 | 36.1 | 39.6 |
| | May | 46.6 | 47.8 | 34.3 | 36.3 | 35.1 | 36.5 | 39.6 |
| | June | 46.7 | 47.6 | 35.1 | 36.8 | 35.7 | 36.3 | 39.6 |
| | July | 47.0 | 48.7 | 35.6 | 37.1 | 35.8 | 36.2 | 39.6 |
| | August | 47.9 | 50.1 | 35.5 | 36.6 | 36.0 | 36.2 | 39.5 |
| | September | 47.9 | 49.1 | 35.6 | 37.1 | 37.0 | 36.2 | 40.2 |
| | October | 48.1 | 49.0 | 35.7 | 37.3 | 37.3 | 36.5 | 40.3 |
| | November | 48.3 | 47.8 | 35.8 | 37.9 | 37.5 | 36.7 | 40.1 |
| | December | 47.8 | 48.1 | 36.2 | 37.2 | 37.8 | 36.6 | 39.9 |
| | **AVERAGE** | **46.7** | **47.7** | **35.0** | **36.7** | **35.8** | **36.1** | **39.3** |
| **1978** | January | 47.8 | 49.1 | 36.9 | 37.9 | 38.5 | 36.6 | 39.5 |
| | February | 48.3 | 48.4 | 36.5 | 38.3 | 38.2 | 36.6 | 39.8 |
| | March | 49.1 | 49.4 | 36.9 | 37.8 | 38.4 | 36.7 | 39.7 |
| | April | 49.5 | 51.5 | 36.8 | 38.1 | 38.5 | 36.5 | 39.6 |
| | May | 50.1 | 50.0 | 37.3 | 38.3 | 38.6 | 36.6 | 39.9 |
| | June | 50.4 | 52.8 | 37.2 | 38.9 | 38.9 | 36.7 | 40.1 |
| | July | 51.4 | 52.4 | 37.6 | 39.0 | 38.9 | 36.4 | 40.0 |
| | August | 52.0 | 54.0 | 37.5 | 38.9 | 39.3 | 36.6 | 40.0 |
| | September | 52.6 | 54.0 | 37.8 | 39.2 | 39.3 | 37.1 | 39.8 |
| | October | 52.5 | 56.1 | 38.5 | 39.7 | 39.3 | 37.7 | 40.9 |
| | November | 53.4 | 51.4 | 38.5 | 40.2 | 39.4 | 38.6 | 41.7 |
| | December | 53.2 | 54.3 | 38.4 | 40.6 | 39.5 | 39.1 | 42.0 |
| | **AVERAGE** | **51.0** | **52.1** | **37.5** | **38.9** | **38.9** | **37.1** | **40.2** |
| **1979** | January | 54.1 | 53.9 | 38.6 | 42.2 | 40.1 | 39.7 | 43.0 |
| | February | 54.6 | 55.1 | 39.1 | 44.3 | 40.2 | 41.8 | 46.1 |
| | March | 56.6 | 56.8 | 40.7 | 54.8 | 41.3 | 44.5 | 47.9 |
| | April | 58.2 | 59.1 | 43.2 | 60.1 | 45.4 | 47.7 | 50.6 |
| | May | 60.6 | 61.2 | 44.1 | 58.1 | 48.4 | 53.4 | 56.1 |
| | June | 64.8 | 66.8 | 49.5 | 59.9 | 50.9 | 58.7 | 65.0 |
| | July | 70.0 | 71.8 | 50.4 | 67.1 | 58.2 | 62.4 | 68.9 |
| | August | 74.2 | 75.6 | 55.0 | 71.4 | 60.8 | 66.0 | 72.3 |
| | September | 78.2 | 79.0 | 60.2 | 73.1 | 65.9 | 69.0 | 71.8 |
| | October | 79.8 | 80.4 | 64.6 | 80.6 | 68.4 | 71.1 | 74.8 |
| | November | 81.3 | 80.6 | 66.4 | R83.4 | 69.7 | R70.3 | R72.1 |
| | Decembert | 84.1 | 83.7 | 73.3 | 83.2 | 72.3 | 72.5 | 80.7 |
| | **AVERAGE** | **68.5** | **69.5** | **52.3** | **66.5** | **55.1** | **58.2** | **62.4** |

[1]Nearly all naphtha-type fuels are sold directly to the Defense Fuel Supply Center. Consequently, wholesale prices are not applicable.
[2]Wholesale refers to the price of aviation fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and aviation fuel distributors. Retail refers to the price of aviation fuel sold to ultimate consumers, including commercial airline and military accounts.
[3]Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded jobbers, unbranded jobbers, and commercial accounts. Retail refers to the price at which company-owned and -operated retail dealers sell to consumers.
†Preliminary data.
R = Revised data.
*Source:* • FEA Form P302–M–1, "Petroleum Industry Monthly Report for Product Prices."

# Price

## National Average Heating Oil Prices[1]

| | | Refiners' Average Selling Price to Resellers and Retailers | Average Selling Price to Residential Customers[2] | Average Purchase Price Paid by Distributors for Residential Heating Oil[2] | Average Distributor Margin on Residential Heating Oil[2] |
|---|---|---|---|---|---|
| | | Cents per gallon | | | |
| **1976** | **AVERAGE** | **31.4** | **40.6** | **32.6** | **NA** |
| **1977** | January | 34.7 | 44.4 | 35.8 | 9.3 |
| | February | 35.4 | 45.3 | 36.7 | 9.4 |
| | March | 35.9 | 45.8 | 37.0 | 9.5 |
| | April | 35.8 | 45.9 | 37.1 | 9.6 |
| | May | 35.7 | 45.7 | 37.1 | 9.5 |
| | June | 35.7 | 45.7 | 37.1 | 9.3 |
| | July | 35.8 | 45.8 | 37.2 | 9.3 |
| | August | 35.7 | 46.0 | 37.3 | 9.2 |
| | September | 35.5 | 46.2 | 37.4 | 9.4 |
| | October | 36.0 | 46.7 | 37.5 | 9.8 |
| | November | 36.3 | 47.6 | 37.3 | 10.2 |
| | December | 36.6 | 47.9 | 37.2 | 10.4 |
| | **AVERAGE** | **35.7** | **46.0** | **36.9** | **NA** |
| **1978** | January | 36.8 | 48.5 | 38.1 | 10.5 |
| | February | 36.4 | 48.6 | 37.8 | 11.0 |
| | March | 36.2 | 48.6 | 37.6 | 11.1 |
| | April | 36.0 | 48.6 | 37.6 | 11.1 |
| | May | 36.2 | 48.3 | 37.6 | 11.0 |
| | June | 35.8 | 48.2 | 37.7 | 10.7 |
| | July | 35.9 | 48.2 | 37.7 | 10.7 |
| | August | 36.1 | 48.2 | 37.9 | 10.5 |
| | September | 36.9 | 49.0 | 38.6 | 10.6 |
| | October | 38.1 | 50.2 | 39.6 | 10.8 |
| | November | 39.4 | 51.5 | 40.5 | 11.2 |
| | December | 40.1 | 52.6 | 41.3 | 11.6 |
| | **AVERAGE** | **37.2** | **49.4** | **38.7** | **11.0** |
| **1979** | January | 40.9 | 53.7 | 42.1 | 11.8 |
| | February | 43.1 | 56.3 | 44.5 | 12.0 |
| | March | 45.8 | 58.8 | 47.0 | 12.0 |
| | April | 48.3 | 61.1 | 49.3 | 12.1 |
| | May | 53.2 | 64.2 | 52.6 | 12.1 |
| | June | 58.8 | 69.1 | 56.9 | 12.7 |
| | July | 62.5 | 73.8 | 61.1 | 13.0 |
| | August | 65.7 | 78.4 | 64.6 | 13.0 |
| | September | 69.0 | 81.0 | 67.8 | 13.7 |
| | October | 68.6 | 82.3 | 68.1 | 14.8 |
| | November | R70.0 | 83.7 | R69.0 | R15.1 |
| | Decembert | 70.8 | 85.8 | 70.8 | 15.5 |
| | **AVERAGE** | **55.6** | **65.4** | **52.8** | **12.8** |

[1]See Explanatory Note 19.
[2]Average selling prices, purchase prices, and dealer margins represent sales for residential heating oil only.
†Preliminary data.
R = Revised data.
NA = Not available.
*Source:* • FEA Form P112–M–1/EIA–9, "No. 2 Heating Oil Supply/Price Monitoring Report."

# Price

## Residential Heating Oil Prices by Region

| | | Census Region | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | New England | Mid-Atlantic | South Atlantic | East North Central | East South Central | West North Central | West South Central | Mountain | Pacific |
| | | Cents per gallon | | | | | | | | |
| 1977 | January | 45.8 | 44.9 | 44.2 | 43.2 | 43.1 | 43.0 | 36.9 | 43.4 | 44.6 |
| | February | 46.6 | 45.8 | 45.7 | 43.9 | 43.4 | 44.0 | 38.8 | 44.2 | 45.2 |
| | March | 47.1 | 46.3 | 45.5 | 44.4 | 43.8 | 44.6 | 40.2 | 44.7 | 45.9 |
| | April | 47.2 | 46.5 | 45.5 | 44.8 | 43.3 | 44.2 | 40.8 | 44.8 | 46.4 |
| | May | 47.0 | 46.4 | 45.6 | 44.7 | 43.7 | 43.7 | 40.7 | 44.8 | 46.5 |
| | June | 47.1 | 46.4 | 45.7 | 44.7 | 44.0 | 43.3 | 41.2 | 45.8 | 46.8 |
| | July | 47.1 | 46.4 | 45.7 | 44.7 | 44.2 | 44.2 | 41.2 | 44.2 | 47.9 |
| | August | 47.4 | 46.6 | 45.6 | 44.7 | 43.7 | 44.5 | 41.0 | 44.9 | 48.2 |
| | September | 47.7 | 46.7 | 45.8 | 45.0 | 44.2 | 44.9 | 41.1 | 44.9 | 47.2 |
| | October | 48.0 | 47.3 | 46.4 | 45.3 | 43.9 | 45.4 | 41.1 | 45.4 | 47.4 |
| | | DOE Region[1] | | | | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | November | 48.5 | 48.1 | 47.0 | 46.1 | 45.7 | NA | 44.2 | 45.4 | 44.9 | 47.4 |
| | December | 48.9 | 48.6 | 47.5 | 46.6 | 46.1 | NA | 44.5 | 45.7 | 44.5 | 47.3 |
| 1978 | January | 49.4 | 49.2 | 48.1 | 47.5 | 46.4 | NA | 44.5 | 45.2 | 44.7 | 47.4 |
| | February | 49.5 | 49.3 | 48.4 | 47.6 | 46.4 | NA | 45.2 | 45.5 | 45.6 | 47.5 |
| | March | 49.4 | 49.3 | 48.4 | 47.7 | 46.5 | NA | 44.4 | 45.0 | 47.0 | 47.8 |
| | April | 49.3 | 49.2 | 48.2 | 47.1 | 46.4 | NA | 44.6 | 45.0 | 45.1 | 47.6 |
| | May | 49.3 | 49.1 | 47.7 | 46.7 | 46.3 | NA | 44.7 | 45.0 | 44.4 | 47.4 |
| | June | 49.2 | 49.1 | 47.8 | 46.8 | 46.0 | NA | 44.8 | 45.4 | 43.9 | 47.7 |
| | July | 49.1 | 49.0 | 47.6 | 46.7 | 46.4 | NA | 45.0 | 45.8 | 43.5 | 48.1 |
| | August | 49.1 | 49.0 | 47.6 | 47.4 | 46.3 | NA | 45.1 | 45.5 | 44.8 | 47.3 |
| | September | 50.0 | 49.7 | 48.5 | 46.6 | 46.8 | NA | 45.6 | 46.3 | 45.0 | 47.7 |
| | October | 51.2 | 51.0 | 50.0 | 48.1 | 47.6 | NA | 45.9 | 46.3 | 45.9 | 48.3 |
| | November | 52.8 | 52.3 | 51.3 | 49.5 | 49.2 | NA | 47.6 | 47.9 | 45.8 | 49.1 |
| | December | 54.0 | 53.4 | 52.3 | 50.4 | 50.2 | NA | 48.2 | 48.7 | 46.7 | 49.9 |
| 1979 | January | 55.1 | 54.5 | 53.3 | 51.6 | 51.5 | NA | 49.6 | 50.4 | 47.6 | 50.8 |
| | February | 57.7 | 57.3 | 55.5 | 53.2 | 53.7 | NA | 51.3 | 51.4 | 49.4 | 52.9 |
| | March | 60.6 | 59.8 | 57.5 | 54.3 | 56.3 | NA | 54.7 | 55.3 | 50.8 | 55.3 |
| | April | 62.8 | 61.9 | 60.0 | 57.3 | 58.8 | NA | 58.2 | 58.4 | 53.8 | 57.8 |
| | May | 65.9 | 64.8 | 63.4 | 61.2 | 62.8 | NA | 62.0 | 62.7 | 56.2 | 60.8 |
| | June | 70.5 | 69.7 | 68.4 | 66.2 | 68.5 | NA | 68.9 | 67.8 | 62.2 | 66.4 |
| | July | 75.9 | 73.9 | 72.9 | 70.9 | 73.2 | NA | 72.0 | 72.5 | 68.4 | 72.3 |
| | August | 80.1 | 78.6 | 77.7 | 74.8 | 78.5 | NA | 76.4 | 77.1 | 71.7 | 77.2 |
| | September | 83.3 | 81.4 | 80.0 | 79.4 | 81.5 | NA | 79.5 | 80.1 | 76.8 | 81.4 |
| | October | 84.1 | 82.5 | 81.7 | 79.1 | 82.6 | NA | 80.2 | 81.3 | 81.2 | 82.6 |
| | November | R85.1 | R83.7 | 82.4 | R80.5 | 83.9 | NA | R82.2 | R84.0 | R80.4 | R82.3 |
| | December† | 87.2 | 85.7 | 85.0 | 83.0 | 86.1 | NA | 85.3 | 86.7 | 84.7 | 85.1 |

[1]DOE regions are defined in Explanatory Note 18.
†Preliminary data.
R = Revised data.
NA = Not available. Data for Region 6 are based on a sample of less than four reporting firms.
Note: Average regional distributor purchase prices for heating oil for the period January 1975 through December 1976 are published on page 67 of the April 1978 issue of the *Monthly Energy Review.*
*Source:* • FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

# Price

## Average No. 6 Residual Fuel Oil Prices

| | | 0.0 to 0.3 percent sulfur | | 0.31 to 1.0 percent sulfur | | Greater than 1.0 percent sulfur | | Average | |
|---|---|---|---|---|---|---|---|---|---|
| | | Wholesale | Retail | Wholesale | Retail | Wholesale | Retail | Wholesale | Retail |
| | | Dollars per barrel, excluding taxes | | | | | | | |
| **1976** | **AVERAGE** | **12.20** | **12.54** | **10.83** | **11.79** | **9.98** | **10.43** | **10.72** | **11.49** |
| **1977** | January | 14.06 | 14.34 | 12.79 | 13.68 | 11.51 | 12.32 | 12.45 | 13.32 |
| | February | 14.00 | 14.60 | 12.91 | 14.06 | 12.04 | 12.74 | 12.69 | 13.71 |
| | March | 14.00 | 14.58 | 13.47 | 14.51 | 11.62 | 12.70 | 12.68 | 13.84 |
| | April | 12.88 | 14.63 | 13.05 | 14.10 | 11.27 | 12.50 | 12.04 | 13.61 |
| | May | 13.56 | 14.48 | 11.90 | 13.73 | 11.05 | 12.15 | 11.64 | 13.42 |
| | June | 13.12 | 14.28 | 11.88 | 13.27 | 11.10 | 11.93 | 11.72 | 13.02 |
| | July | 13.31 | 14.38 | 11.73 | 13.12 | 11.02 | 12.06 | 11.62 | 13.01 |
| | August | 13.32 | 14.15 | 11.83 | 13.08 | 11.89 | 12.01 | 12.06 | 13.00 |
| | September | 13.35 | 14.33 | 11.79 | 13.11 | 11.78 | 12.19 | 12.03 | 12.94 |
| | October | 13.38 | 14.30 | 11.69 | 13.15 | 11.71 | 12.33 | 12.10 | 13.15 |
| | November | 12.85 | 14.24 | 11.66 | 12.93 | 11.44 | 12.15 | 11.76 | 12.96 |
| | December | 12.87 | 13.95 | 11.38 | 12.60 | 10.77 | 11.95 | 11.28 | 12.70 |
| | **AVERAGE** | **13.45** | **14.36** | **12.09** | **13.45** | **11.31** | **12.27** | **11.96** | **13.23** |
| **1978** | January | 12.72 | 14.19 | 11.56 | 12.70 | 10.71 | 12.00 | 11.33 | 12.79 |
| | February | 12.20 | 14.05 | 11.64 | 12.42 | 10.58 | 11.75 | 11.25 | 12.53 |
| | March | 12.73 | 13.99 | 11.94 | 12.75 | 10.48 | 11.70 | 11.36 | 12.63 |
| | April | 12.72 | 14.51 | 12.26 | 12.95 | 10.84 | 11.85 | 11.57 | 12.87 |
| | May | 12.67 | 14.21 | 12.01 | 12.88 | 10.79 | 11.74 | 11.70 | 12.79 |
| | June | 12.37 | 13.99 | 11.83 | 12.58 | 10.82 | 11.60 | 11.41 | 12.50 |
| | July | 11.26 | 13.93 | 11.29 | 12.01 | 10.51 | 11.48 | 10.86 | 12.21 |
| | August | 11.41 | 14.09 | 11.24 | 11.97 | 10.46 | 11.54 | 10.70 | 12.34 |
| | September | 12.29 | 14.18 | 11.46 | 12.30 | 10.69 | 11.39 | 11.26 | 12.43 |
| | October | 13.43 | 14.63 | 12.06 | 13.00 | 10.83 | 11.82 | 11.76 | 13.01 |
| | November | 14.12 | 15.55 | 13.26 | 13.77 | 10.87 | 11.54 | 12.36 | 13.34 |
| | December | 14.66 | 15.98 | 13.19 | 14.13 | 11.04 | 11.82 | 12.57 | 13.75 |
| | **AVERAGE** | **12.77** | **14.47** | **11.95** | **12.78** | **10.73** | **11.70** | **11.51** | **12.75** |
| **1979** | January | 15.16 | 16.12 | 13.68 | 14.79 | 11.00 | 11.92 | 12.78 | 14.13 |
| | February | 16.12 | 17.28 | 15.01 | 15.30 | 11.31 | 12.28 | 13.72 | 14.68 |
| | March | 16.08 | 18.05 | 15.90 | 16.94 | 13.48 | 14.00 | 14.82 | 15.95 |
| | April | 17.79 | 19.09 | 16.34 | 17.44 | 13.70 | 14.59 | 15.51 | 16.61 |
| | May | 18.04 | 19.45 | 15.74 | 17.89 | 14.69 | 15.37 | 15.71 | 17.18 |
| | June | 20.92 | 19.79 | 18.08 | 18.51 | 15.95 | 16.40 | 17.81 | 17.97 |
| | July | 21.85 | 23.07 | 21.25 | 20.47 | 16.51 | 17.86 | 19.18 | 19.89 |
| | August | 21.05 | 22.63 | 19.49 | 21.28 | 17.51 | 18.32 | 19.00 | 20.33 |
| | September | 21.81 | 22.92 | 21.01 | 21.66 | 17.54 | 18.94 | 19.62 | 20.90 |
| | October | R23.80 | 23.29 | 22.99 | 22.33 | 18.31 | 19.53 | 20.88 | 21.59 |
| | November | R26.68 | 25.54 | 24.07 | 24.31 | 19.31 | 19.51 | 22.00 | 22.84 |
| | Decembert | 27.09 | 27.78 | 25.83 | 25.01 | 20.67 | 21.05 | 23.55 | 24.44 |
| | **AVERAGE** | **19.87** | **21.21** | **18.33** | **19.33** | **15.89** | **16.44** | **17.66** | **18.67** |

†Preliminary data.
R = Revised data.
Note: Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, commercial, and residential accounts.
*Source:* • FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

# Price

## Wholesale[1] Propane and Butane

| | | Propane | Butane |
|---|---|---|---|
| | | Cents per gallon, excluding taxes | |
| **1976** | **AVERAGE** | **20.6** | **21.9** |
| **1977** | January | 22.9 | 23.0 |
| | February | 24.0 | 24.3 |
| | March | 23.7 | 24.9 |
| | April | 23.6 | 24.2 |
| | May | 24.5 | 25.8 |
| | June | 24.5 | 25.6 |
| | July | 24.9 | 26.2 |
| | August | 25.5 | 26.1 |
| | September | 25.9 | 27.4 |
| | October | 26.8 | 26.3 |
| | November | 26.5 | 25.8 |
| | December | 26.7 | 25.8 |
| | **AVERAGE** | **25.0** | **25.4** |
| **1977** | January | 27.0 | 25.9 |
| | February | 26.5 | 25.1 |
| | March | 25.6 | 24.9 |
| | April | 24.4 | 23.9 |
| | May | 23.7 | 22.8 |
| | June | 23.3 | 22.9 |
| | July | 23.0 | 22.1 |
| | August | 22.7 | 21.8 |
| | September | 22.6 | 21.8 |
| | October | 22.5 | 20.9 |
| | November | 22.1 | 22.0 |
| | December | 22.1 | 22.7 |
| | **AVERAGE** | **24.0** | **23.0** |
| **1979** | January | 22.4 | 24.9 |
| | February | 21.8 | 28.5 |
| | March | 21.2 | 32.5 |
| | April | 22.0 | 35.4 |
| | May | 24.2 | 39.5 |
| | June | 27.9 | 46.9 |
| | July | 29.3 | 51.1 |
| | August | 30.8 | 48.0 |
| | September | 33.3 | 51.9 |
| | October | 35.2 | 56.1 |
| | November | R37.6 | 57.0 |
| | December† | 40.4 | 65.8 |
| | **AVERAGE** | **29.5** | **45.8** |

[1]Wholesale refers to the price at which refiners, resellers, retailers, and gas plants sell to one another, including sales to agricultural and industrial accounts. Excludes butane/propane mixtures.
†Preliminary data.
R = Revised data.
*Source:* • FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

# Price

## Average Wellhead Value of Natural Gas Production

| | | Cents per thousand cubic feet |
|---|---|---|
| **1973** | **AVERAGE** | **21.6** |
| **1974** | **AVERAGE** | **30.4** |
| **1975** | **AVERAGE** | **44.5** |
| **1976** | **AVERAGE** | **58.0** |
| **1977** | January | 67.1 |
| | February | 71.0 |
| | March | 74.9 |
| | April | 77.2 |
| | May | 76.7 |
| | June | 82.3 |
| | July | 83.1 |
| | August | 82.3 |
| | September | 83.3 |
| | October | 84.0 |
| | November | 83.2 |
| | December | 84.4 |
| | **AVERAGE** | **79.0** |
| **1978** | January | 87.3 |
| | February | 87.9 |
| | March | 89.1 |
| | April | 88.0 |
| | May | 90.8 |
| | June | 90.7 |
| | July | 88.9 |
| | August | 91.2 |
| | September | 92.1 |
| | October | 92.0 |
| | November | 92.5 |
| | December | 96.1 |
| | **AVERAGE** | **90.5** |
| **1979** | January | 99.5 |
| | February | 101.8 |
| | March | 106.3 |
| | April | 107.0 |
| | May | 111.6 |
| | June | 112.9 |
| | July | 116.4 |
| | August | 119.0 |
| | September | 120.6 |
| | October | 124.0 |
| | November | 125.6 |
| | December | 128.9 |
| | **AVERAGE** | **114.4** |

## Average Retail Prices for Natural Gas Sold to Residential Customers for Heating Use

| | | Cents per thousand cubic feet |
|---|---|---|
| **1973** | **AVERAGE** | **108.2** |
| **1974** | **AVERAGE** | **125.3** |
| **1975** | **AVERAGE** | **154.2** |
| **1976** | **AVERAGE** | **184.6** |
| **1977** | January | 213.8 |
| | February | 217.0 |
| | March | 219.9 |
| | April | 223.7 |
| | May | 227.0 |
| | June | 227.3 |
| | July | 229.9 |
| | August | 230.1 |
| | September | 230.4 |
| | October | 235.1 |
| | November | 238.4 |
| | December | 237.3 |
| **1978** | January | 241.6 |
| | February | 243.0 |
| | March | 247.0 |
| | April | 248.7 |
| | May | 255.2 |
| | June | 254.2 |
| | July | NA |
| | August | NA |
| | September | NA |
| | October | NA |
| | November | 281.9 |
| | December | 286.2 |
| **1979** | January | 293.7 |
| | February | 296.5 |
| | March | 301.5 |
| | April | 300.5 |
| | May | 315.8 |
| | June | 320.9 |
| | July | 329.4 |
| | August | 331.7 |
| | September | 342.4 |
| | October | 353.8 |
| | November | 348.6 |

NA = Not available.

*Sources:* • Annual data for wellhead values from the appropriate agencies of the individual producing states; monthly data are estimated primarily on the basis of values reported by state agencies in New Mexico, Oklahoma, and Texas.
• Average retail prices, Bureau of Labor Statistics.

# Price

## Natural Gas Prices Reported by Major Interstate Pipeline Companies

| | | Purchases | | | Sales | | |
|---|---|---|---|---|---|---|---|
| | | From Domestic Producers | From Canadian and Foreign Sources | Total Purchases | To Industrial Users[1] | To Resellers[2] | Total Sales |
| | | Cents per thousand cubic feet | | | | | |
| **1976** | **AVERAGE** | **47.9** | **172.7** | **58.4** | **97.2** | **100.3** | **100.5** |
| **1977** | January | 59.4 | 201.8 | 71.6 | 143.2 | 124.3 | 125.4 |
| | February | 63.4 | 199.7 | 76.4 | 130.6 | 130.4 | 131.0 |
| | March | 69.8 | 200.4 | 83.4 | 129.3 | 132.1 | 132.5 |
| | April | 65.3 | 190.7 | 76.5 | 128.1 | 131.0 | 131.1 |
| | May | 69.1 | 191.3 | 80.5 | 128.1 | 133.9 | 133.5 |
| | June | 69.2 | 188.6 | 79.6 | 125.3 | 135.1 | 134.2 |
| | July | 72.1 | 187.7 | 81.8 | 134.3 | 135.9 | 135.7 |
| | August | 71.1 | 185.5 | 81.5 | 133.5 | 134.0 | 133.9 |
| | September | 71.8 | 194.7 | 84.0 | 131.8 | 135.7 | 135.4 |
| | October | 74.2 | 211.9 | 87.4 | 133.9 | 135.6 | 135.6 |
| | November | 74.8 | 214.2 | 87.7 | 134.4 | 141.6 | 141.4 |
| | December | 73.9 | 216.5 | 86.7 | 138.3 | 132.1 | 133.0 |
| | **AVERAGE** | **69.5** | **199.0** | **81.4** | **131.9** | **132.2** | **132.5** |
| **1978** | January | 74.0 | 211.2 | 86.4 | 150.4 | 138.2 | 139.2 |
| | February | 76.3 | 211.3 | 89.2 | 158.2 | 141.5 | 142.8 |
| | March | 79.3 | 212.5 | 91.1 | 149.7 | 144.7 | 145.5 |
| | April | 80.7 | 222.0 | 92.9 | 149.9 | 147.7 | 148.2 |
| | May | 81.2 | 218.5 | 92.5 | 149.0 | 149.7 | 150.0 |
| | June | 82.6 | 220.5 | 93.5 | 148.3 | 153.0 | 152.7 |
| | July | 83.8 | 222.6 | 95.0 | 149.5 | 155.7 | 155.0 |
| | August | 84.2 | 222.5 | 95.6 | 148.9 | 154.9 | 154.0 |
| | September | 87.7 | 216.8 | 97.9 | 152.0 | 155.3 | 155.0 |
| | October | 90.6 | 225.3 | 101.3 | 158.5 | 157.4 | 157.7 |
| | November | 89.7 | 219.3 | 101.8 | 171.0 | 160.9 | 162.0 |
| | December | 95.8 | 215.1 | 107.6 | 169.9 | 159.8 | 161.0 |
| | **AVERAGE** | **84.1** | **218.2** | **95.8** | **154.1** | **150.7** | **151.4** |
| **1979** | January | 99.5 | 215.7 | 110.4 | 192.1 | 161.0 | 163.1 |
| | February | 101.7 | 219.0 | 114.0 | 195.4 | 164.5 | 166.7 |
| | March | 106.1 | 224.8 | 118.4 | 186.8 | 171.5 | 173.2 |
| | April | 116.7 | 222.1 | 127.9 | 190.7 | 167.6 | 170.2 |
| | May | 118.3 | 228.6 | 129.5 | 202.5 | 188.8 | 190.5 |
| | June | 118.3 | 233.4 | 130.9 | 180.5 | 184.4 | 184.2 |
| | July | 119.2 | 232.1 | 131.9 | 198.8 | 190.3 | 191.4 |
| | August | 125.6 | 263.6 | 138.6 | 205.4 | 192.5 | 193.8 |
| | September | 130.5 | 274.1 | 145.8 | 212.4 | 209.4 | 209.8 |
| | October | 135.6 | 284.2 | 151.7 | 218.9 | 216.2 | 216.5 |
| | November | 141.1 | 340.6 | 161.4 | 219.1 | 218.2 | 218.4 |
| | **AVERAGE** | **119.4** | **249.8** | **132.9** | **201.0** | **185.4** | **187.0** |

[1]Represents direct sales by pipeline companies to industrial users. Does not include sales to industrial users by resellers.
[2]Includes the cost of gas to the distributing utility at entrance of distribution system or point of receipt.
*Source:* • Federal Power Commission Form 11, "Natural Gas Pipeline Company Monthly Statement."

# Price

## Utility Fossil Fuels
## Average Delivered Prices of Coal at Utilities

| | | Contract | Spot |
|---|---|---|---|
| | | Dollars per short ton | |
| **1976** | **AVERAGE** | **17.90** | **21.33** |
| **1977** | January | 17.87 | 21.93 |
| | February | 18.28 | 22.71 |
| | March | 18.75 | 23.27 |
| | April | 18.82 | 22.41 |
| | May | 18.97 | 23.73 |
| | June | 19.03 | 24.62 |
| | July | 19.35 | 25.13 |
| | August | 18.95 | 24.73 |
| | September | 19.75 | 26.14 |
| | October | 20.31 | 26.83 |
| | November | 20.51 | 27.01 |
| | December | 20.49 | 28.01 |
| | **AVERAGE** | **19.25** | **24.99** |
| **1978** | January | 16.94 | 30.27 |
| | February | 16.50 | 30.50 |
| | March | 18.59 | 31.52 |
| | April | 21.43 | 30.42 |
| | May | 22.23 | 29.62 |
| | June | 22.88 | 28.95 |
| | July | 22.08 | 28.94 |
| | August | 22.12 | 28.95 |
| | September | 22.66 | 29.06 |
| | October | 23.53 | 28.96 |
| | November | 24.03 | 29.29 |
| | December | 23.99 | 21.41 |
| | **AVERAGE** | **21.41** | **29.63** |
| **1979** | January | 24.40 | 27.82 |
| | February | 24.08 | 26.71 |
| | March | 24.82 | 27.64 |
| | April | 25.52 | 28.55 |
| | May | 26.40 | 27.64 |
| | June | 25.91 | 28.42 |
| | July | 25.13 | 28.36 |
| | August | 25.79 | 28.50 |
| | September | 26.45 | 28.85 |
| | October | 26.65 | 30.66 |
| | November | 26.72 | 30.31 |

*Source:* • Federal Power Commission Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

# Price

## Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants

| All Fossil Fuels[1] | 1978 | | 1979 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Region | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV |
| | | | | | | | Cents per million Btu | | | | | | |
| New England | 192.9 | 207.5 | 206.8 | 223.3 | 249.2 | 244.9 | 267.4 | 283.6 | 302.9 | 313.0 | 319.2 | 326.1 | 338.0 |
| Middle Atlantic | 159.6 | 163.5 | 170.2 | 180.5 | 174.4 | 168.2 | 176.7 | 184.3 | 212.0 | 204.7 | 202.5 | 196.8 | 215.2 |
| East North Central | 132.5 | 137.0 | 142.5 | 146.9 | 143.5 | 140.7 | 145.1 | 144.0 | 150.9 | 146.9 | 150.3 | 151.6 | 154.9 |
| West North Central | 100.7 | 105.9 | 121.6 | 124.3 | 106.9 | 107.3 | 110.9 | 114.4 | 110.3 | 112.1 | 107.5 | 108.0 | 110.0 |
| South Atlantic | 147.8 | 154.6 | 158.9 | 163.3 | 168.3 | 168.2 | 172.7 | 185.0 | 197.7 | 187.9 | 189.3 | 189.5 | 144.8 |
| East South Central | 125.4 | 128.3 | 129.7 | 128.1 | 131.7 | 132.4 | 137.5 | 136.9 | 144.0 | 143.3 | 142.8 | 142.4 | 146.5 |
| West South Central | 129.4 | 131.7 | 144.4 | 143.6 | 139.6 | 141.7 | 155.7 | 158.7 | 156.5 | 154.0 | 149.1 | 152.5 | 152.1 |
| Mountain | 82.3 | 82.8 | 89.3 | 91.4 | 92.3 | 99.7 | 120.3 | 101.6 | 100.8 | 100.8 | 102.2 | 105.2 | 101.2 |
| Pacific | 245.2 | 245.8 | 245.9 | 243.1 | 234.3 | 240.8 | 242.2 | 250.9 | 263.6 | 274.1 | 280.9 | 283.5 | 316.8 |
| **NATIONAL AVG.** | **138.8** | **142.9** | **150.4** | **154.3** | **152.3** | **151.4** | **158.0** | **161.2** | **168.7** | **167.1** | **167.9** | **167.3** | **171.5** |
| **Coal** | | | | | | | | | | | | | |
| New England | 147.0 | 146.8 | 147.1 | 150.3 | 149.9 | 150.9 | 152.7 | 155.2 | 155.5 | 155.7 | 156.9 | 156.7 | 155.8 |
| Middle Atlantic | 120.6 | 120.3 | 121.2 | 122.6 | 123.7 | 121.9 | 120.4 | 122.8 | 129.6 | 123.8 | 127.7 | 126.6 | 126.3 |
| East North Central | 123.9 | 123.8 | 124.3 | 123.7 | 126.7 | 129.0 | 131.4 | 130.6 | 137.0 | 134.3 | 138.4 | 140.9 | 139.1 |
| West North Central | 95.2 | 95.1 | 96.0 | 95.3 | 95.6 | 98.5 | 100.6 | 106.9 | 103.6 | 98.5 | 100.5 | 102.2 | 102.8 |
| South Atlantic | 134.1 | 138.8 | 136.6 | 136.4 | 136.0 | 137.8 | 139.0 | 138.0 | 142.9 | 142.7 | 144.1 | 145.1 | 145.9 |
| East South Central | 120.8 | 122.6 | 122.6 | 121.3 | 125.8 | 129.6 | 132.7 | 131.8 | 134.7 | 134.2 | 136.4 | 136.3 | 141.1 |
| West South Central | 73.4 | 81.4 | 88.2 | 89.3 | 92.9 | 94.9 | 89.9 | 99.8 | 99.0 | 100.2 | 98.0 | 104.4 | 113.6 |
| Mountain | 60.2 | 58.7 | 62.6 | 62.9 | 65.0 | 74.0 | 97.8 | 69.3 | 65.4 | 66.8 | 69.5 | 77.0 | 73.7 |
| Pacific | 78.2 | 78.6 | 84.3 | 82.9 | 83.4 | 82.7 | 83.0 | 84.6 | 84.2 | 82.0 | 90.2 | 81.7 | 82.1 |
| **NATIONAL AVG.** | **115.6** | **115.9** | **115.8** | **114.6** | **116.8** | **120.1** | **123.4** | **121.8** | **122.2** | **122.5** | **125.3** | **127.4** | **127.7** |
| **Residual Fuel Oil[1]** | | | | | | | | | | | | | |
| New England | 195.6 | 211.3 | 210.6 | 227.8 | 255.8 | 250.8 | 272.7 | 293.2 | 309.1 | 321.0 | 331.5 | 337.8 | 349.2 |
| Middle Atlantic | 224.2 | 226.0 | 232.2 | 243.4 | 266.4 | 273.7 | 279.9 | 305.0 | 325.2 | 338.1 | 347.3 | 357.7 | 385.3 |
| East North Central | 260.6 | 261.5 | 282.2 | 295.9 | 302.5 | 307.2 | 320.0 | 321.8 | 352.6 | 383.2 | 385.4 | 391.9 | 415.4 |
| West North Central | 217.6 | 212.6 | 233.9 | 265.4 | 246.4 | 277.0 | 384.5 | 244.7 | 373.0 | 479.0 | 451.0 | 391.6 | 406.4 |
| South Atlantic | 211.7 | 215.3 | 224.7 | 233.0 | 255.7 | 266.4 | 270.7 | 288.1 | 312.8 | 320.6 | 325.3 | 347.1 | 353.1 |
| East South Central | 168.8 | 177.4 | 174.7 | 198.3 | 211.6 | 212.1 | 231.8 | 218.9 | 240.2 | 266.3 | 281.0 | 291.0 | 289.0 |
| West South Central | 189.8 | 207.0 | 306.8 | 227.3 | 255.1 | 232.4 | 242.8 | 247.1 | 305.8 | 298.6 | 318.1 | 330.6 | 339.5 |
| Mountain | 252.0 | 228.2 | 237.3 | 233.6 | 246.4 | 276.5 | 284.3 | 287.8 | 337.2 | 350.0 | 383.2 | 405.9 | 405.0 |
| Pacific | 270.1 | 266.4 | 262.9 | 267.9 | 265.2 | 283.1 | 277.8 | 283.3 | 307.4 | 323.1 | 339.3 | 352.6 | 367.5 |
| **NATIONAL AVG.** | **225.6** | **228.7** | **231.8** | **245.6** | **261.4** | **268.0** | **277.7** | **289.3** | **314.7** | **328.0** | **337.8** | **351.4** | **367.1** |
| **Natural Gas[2]** | | | | | | | | | | | | | |
| New England | 187.6 | 193.7 | 208.4 | 219.1 | 224.0 | 233.9 | 250.1 | 263.1 | 261.9 | 277.5 | 295.4 | 308.0 | 317.3 |
| Middle Atlantic | 190.8 | 180.7 | 179.2 | 183.0 | 179.3 | 190.1 | 192.5 | 210.0 | 226.7 | 241.7 | 263.9 | 269.2 | 245.2 |
| East North Central | 201.6 | 209.8 | 217.2 | 241.7 | 242.3 | 244.3 | 247.1 | 231.2 | 222.9 | 258.3 | 278.9 | 253.3 | 261.0 |
| West North Central | 128.1 | 135.2 | 143.0 | 145.5 | 137.6 | 143.8 | 147.1 | 146.1 | 148.8 | 152.1 | 152.6 | 154.0 | 154.7 |
| South Atlantic | 109.2 | 105.1 | 94.1 | 103.0 | 118.5 | 119.7 | 123.5 | 126.5 | 155.5 | 155.3 | 160.0 | 158.1 | 138.5 |
| East South Central | 164.5 | 187.3 | 175.6 | 177.9 | 169.1 | 172.3 | 195.0 | 185.6 | 182.0 | 192.2 | 188.3 | 198.2 | 193.5 |
| West South Central | 134.8 | 133.9 | 146.2 | 147.6 | 142.5 | 149.2 | 169.2 | 168.5 | 161.3 | 160.4 | 157.1 | 161.3 | 152.9 |
| Mountain | 160.3 | 177.0 | 178.1 | 174.9 | 196.9 | 182.3 | 193.0 | 198.3 | 205.1 | 216.3 | 212.4 | 225.3 | 232.5 |
| Pacific | 222.1 | 227.7 | 231.0 | 224.9 | 222.0 | 221.6 | 225.8 | 238.7 | 245.3 | 246.3 | 248.9 | 255.6 | 283.5 |
| **NATIONAL AVG.** | **141.1** | **139.4** | **150.2** | **159.1** | **162.8** | **164.4** | **177.2** | **179.5** | **178.9** | **180.9** | **183.5** | **189.1** | **180.3** |

[1]See Explanatory Note 20.
[2]Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.
*Source:* • Federal Power Commission Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

# Price

## Average Retail Electricity Prices[1]

| | | Residential | Commercial | Industrial | Other | Total[2] |
|---|---|---|---|---|---|---|
| | | | | Cents per kilowatt-hour | | |
| **1973** | **AVERAGE** | **2.54** | **2.41** | **1.25** | **2.10** | **1.96** |
| **1974** | **AVERAGE** | **3.10** | **3.04** | **1.69** | **2.75** | **2.49** |
| **1975** | **AVERAGE** | **3.51** | **3.45** | **2.07** | **3.08** | **2.92** |
| **1976** | **AVERAGE** | **3.73** | **3.69** | **2.21** | **3.27** | **3.09** |
| **1977** | January | 3.62 | 3.78 | 2.35 | 3.36 | 3.20 |
| | February | 3.69 | 3.86 | 2.40 | 3.45 | 3.25 |
| | March | 3.95 | 4.00 | 2.44 | 3.40 | 3.33 |
| | April | 4.07 | 4.04 | 2.43 | 3.46 | 3.34 |
| | May | 4.19 | 4.09 | 2.45 | 3.64 | 3.38 |
| | June | 4.17 | 4.11 | 2.48 | 3.59 | 3.43 |
| | July | 4.20 | 4.12 | 2.58 | 3.59 | 3.56 |
| | August | 4.35 | 4.37 | 2.64 | 3.69 | 3.69 |
| | September | 4.26 | 4.21 | 2.60 | 3.59 | 3.58 |
| | October | 4.25 | 4.27 | 2.57 | 3.47 | 3.53 |
| | November | 4.18 | 4.22 | 2.55 | 3.56 | 3.47 |
| | December | 3.97 | 4.11 | 2.52 | 3.34 | 3.41 |
| | **AVERAGE** | **4.05** | **4.09** | **2.50** | **3.51** | **3.42** |
| **1978** | January | 3.90 | 4.11 | 2.60 | 3.47 | 3.46 |
| | February | 3.94 | 4.16 | 2.73 | 3.47 | 3.54 |
| | March | 4.14 | 4.34 | 2.86 | 3.68 | 3.69 |
| | April | 4.34 | 4.41 | 2.82 | 3.75 | 3.70 |
| | May | 4.46 | 4.42 | 2.77 | 3.89 | 3.69 |
| | June | 4.53 | 4.48 | 2.81 | 3.76 | 3.78 |
| | July | 4.50 | 4.40 | 2.84 | 3.69 | 3.82 |
| | August | 4.51 | 4.40 | 2.81 | 3.72 | 3.80 |
| | September | 4.48 | 4.41 | 2.79 | 3.72 | 3.78 |
| | October | 4.48 | 4.46 | R2.79 | 3.53 | R3.74 |
| | November | 4.39 | 4.38 | 2.78 | 3.55 | 3.66 |
| | December | 4.20 | 4.31 | 2.76 | 3.54 | 3.63 |
| | **AVERAGE** | **4.31** | **4.36** | **2.77** | **3.62** | **3.69** |
| **1979** | January | 4.08 | 4.29 | 2.82 | 3.58 | 3.65 |
| | February | 4.09 | 4.30 | 2.86 | 3.69 | 3.66 |
| | March | 4.28 | 4.44 | 2.89 | 3.87 | 3.75 |
| | April | 4.51 | 4.54 | 2.90 | 3.88 | 3.81 |
| | May | 4.68 | 4.65 | 2.96 | 3.98 | 3.89 |
| | June | 4.88 | 4.73 | 3.02 | 4.05 | 4.02 |
| | July | 4.91 | 4.76 | 3.11 | 4.20 | 4.14 |
| | August | 4.94 | 4.79 | 3.11 | 3.89 | 4.17 |
| | September | 4.95 | 4.84 | 3.14 | 4.08 | 4.18 |
| | October | 4.94 | 4.89 | 3.14 | 3.89 | 4.13 |
| | November | 4.83 | 4.92 | 3.16 | 4.09 | 4.12 |
| | December | *4.64* | *4.85* | *3.14* | *4.08* | *4.09* |
| | **AVERAGE** | **4.64** | **4.67** | **3.02** | **3.96** | **3.97** |

Estimated data in italics. These are likely to be revised next month.
[1]Prices are for Classes A and B privately owned electric utilities.
[2]Average price for total sales to ultimate consumers.
R = Revised data.
*Source:* • Federal Power Commission, Form 5, "Monthly Statement of Electric Operating Revenue and Income."

# International

## Crude Oil Production

World crude oil production during December 1979 was 62.3 million barrels per day, down 520,000 barrels per day from November 1979. OPEC's production was off 340,000 barrels per day from November, as production in Kuwait and Iran declined 195,000 and 170,000 barrels per day, respectively. Most other nations maintained production near their November 1979 levels.

## Petroleum Consumption

Preliminary data show petroleum consumption by International Energy Agency (IEA) member nations was 36.1 million barrels per day in November 1979. This initial estimate indicates that IEA consumption during November 1979 was down 1.5 million barrels per day from November of the previous year. The bulk of this decline was in the United States where the daily consumption rate was down approximately one million barrels.

## Nuclear Energy Production

A total of 18 non-communist countries produced electricity commercially from nuclear power. As of January 1980, these countries had a total of 191 reactor units, including 71 in the United States. The reactors had a total capacity of 114 million kilowatts, including 50 million kilowatts for those in the United States.

During January 1980 nuclear electricity generation from these 18 nations totaled 55.1 billion gross kilowatt-hours, an increase of 5.3 percent from December 1979 and a decrease of 3.2 percent from the January 1979 total. Nuclear electricity generated in the United States during January 1980 was 21.1 billion kilowatt-hours, 3.7 percent lower than in December 1979 and 27.6 percent below the January 1979 total. Generation by the remaining 17 nations was 34.0 billion kilowatt-hours in January 1980, up 11.9 percent from the December 1979 level and 22.4 percent above the January 1979 total.

# International

## Crude Oil Production for Major Petroleum Exporting Countries

| | | Algeria | Iraq | Kuwait[1] | Libya | Qatar | Saudi Arabia[1] | United Arab Emirates | Arab OPEC | Indonesia | Iran |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Thousand barrels per day | | | | | | | | | |
| **1973** | **AVERAGE** | **1,070** | **2,018** | **3,020** | **2,175** | **570** | **7,596** | **1,533** | **17,982** | **1,339** | **5,860** |
| **1974** | **AVERAGE** | **960** | **1,971** | **2,546** | **1,521** | **518** | **8,480** | **1,679** | **17,675** | **1,375** | **6,022** |
| **1975** | **AVERAGE** | **960** | **2,262** | **2,084** | **1,480** | **438** | **7,075** | **1,664** | **15,963** | **1,307** | **5,350** |
| **1976** | **AVERAGE** | **980** | **2,415** | **2,145** | **1,933** | **497** | **8,577** | **1,936** | **18,483** | **1,504** | **5,863** |
| **1977** | **AVERAGE** | **1,095** | **2,495** | **1,970** | **2,065** | **445** | **9,200** | **2,000** | **19,270** | **1,684** | **5,665** |
| **1978** | January | 1,100 | 2,130 | 1,720 | 1,790 | 450 | 7,790 | 1,740 | 16,720 | 1,700 | 5,290 |
| | February | 1,100 | 2,430 | 1,720 | 1,800 | 480 | 8,380 | 1,880 | 17,790 | 1,700 | 5,530 |
| | March | 1,100 | 2,230 | 2,130 | 1,880 | 420 | 7,690 | 1,850 | 17,300 | 1,710 | 5,600 |
| | April | 1,100 | 2,430 | 1,990 | 1,870 | 510 | 8,050 | 1,750 | 17,700 | 1,680 | 5,610 |
| | May | 1,100 | 2,130 | 1,813 | 1,930 | 380 | 7,250 | 1,870 | 16,473 | 1,700 | 5,720 |
| | June | 1,100 | 2,230 | 1,925 | 2,000 | 450 | 7,590 | 1,840 | 17,135 | 1,620 | 5,630 |
| | July | 1,100 | 2,100 | 1,952 | 2,040 | 490 | 7,410 | 1,830 | 16,922 | 1,580 | 5,800 |
| | August | 1,100 | 2,300 | 2,360 | 2,030 | 540 | 7,180 | 1,830 | 17,340 | 1,620 | 5,810 |
| | September | 1,100 | 3,000 | 2,591 | 2,020 | 500 | 8,380 | 1,830 | 19,421 | 1,590 | 6,050 |
| | October | 1,100 | 2,700 | 2,110 | 2,070 | 510 | 9,310 | 1,840 | 19,640 | 1,590 | 5,490 |
| | November | 1,100 | 3,300 | 2,650 | 2,100 | 470 | 10,250 | 1,840 | 20,710 | 1,590 | 3,490 |
| | December | 1,100 | 3,000 | 2,199 | 2,090 | 580 | 10,400 | 1,830 | 21,199 | 1,600 | 2,370 |
| | **AVERAGE** | **1,100** | **2,515** | **2,095** | **1,975** | **480** | **8,295** | **1,831** | **18,291** | **1,635** | **5,200** |
| **1979** | January | 1,100 | 3,500 | 2,615 | 2,175 | 550 | 9,790 | 1,835 | 21,565 | 1,605 | 410 |
| | February | 1,100 | 3,500 | 2,705 | 2,160 | 555 | 9,780 | 1,830 | 21,630 | 1,620 | 760 |
| | March | 1,100 | 3,500 | 2,590 | 2,080 | 370 | 9,780 | 1,825 | 21,245 | 1,630 | 2,190 |
| | April | 1,100 | 3,500 | 2,545 | 2,070 | 550 | 8,790 | 1,750 | 20,305 | 1,610 | 3,800 |
| | May | 1,100 | 3,500 | 2,585 | 2,050 | 540 | 8,780 | 1,855 | 20,410 | 1,570 | 4,100 |
| | June | 1,100 | 3,500 | 2,585 | 2,020 | 455 | 8,780 | 1,865 | 20,305 | 1,615 | 3,950 |
| | July | 900 | 3,300 | 2,550 | 2,080 | 520 | 9,780 | 1,830 | 20,960 | 1,605 | 3,750 |
| | August | 900 | 3,300 | 2,525 | 1,990 | 535 | 9,770 | 1,830 | 20,850 | 1,600 | 3,600 |
| | September | 900 | 3,300 | 2,375 | 2,030 | 455 | 9,780 | 1,835 | 20,675 | 1,580 | 3,600 |
| | October | 900 | 3,300 | 2,375 | R2,040 | 490 | 9,725 | 1,780 | R20,610 | 1,575 | 3,930 |
| | November† | 900 | R3,300 | 2,445 | 2,095 | 525 | 9,795 | 1,865 | R20,925 | 1,575 | R3,170 |
| | December† | 900 | 3,300 | 2,250 | 2,100 | 545 | 9,775 | 1,870 | 20,740 | 1,570 | 3,000 |
| | **AVERAGE†** | **1,000** | **3,400** | **2,510** | **2,075** | **505** | **9,525** | **1,830** | **20,850** | **1,595** | **3,020** |

†Preliminary data.
R = Revised data.
[1]Includes about one-half of the former Kuwait-Saudi Arabia Neutral Zone. Production in December 1979 amounted to approximately 594,000 barrels per day.
Additional footnotes on following page.

# International

## Crude Oil Production for Major Petroleum Exporting Countries (continued)

| | | Nigeria | Venezuela | Total OPEC[2] | Canada | Mexico | United Kingdom | United States | China | USSR | Other[3] | World |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Thousand barrels per day | | | | | | |
| **1973** | **AVERAGE** | **2,054** | **3,366** | **30,961** | **1,800** | **450** | **8** | **9,208** | **1,090** | **8,420** | **3,843** | **55,780** |
| **1974** | **AVERAGE** | **2,255** | **2,976** | **30,683** | **1,695** | **580** | **9** | **8,775** | **1,310** | **9,020** | **3,799** | **55,870** |
| **1975** | **AVERAGE** | **1,783** | **2,346** | **27,134** | **1,420** | **720** | **20** | **8,375** | **1,490** | **9,630** | **4,201** | **52,990** |
| **1976** | **AVERAGE** | **2,067** | **2,294** | **30,641** | **1,300** | **800** | **245** | **8,132** | **1,670** | **10,170** | **4,372** | **57,330** |
| **1977** | **AVERAGE** | **2,085** | **2,240** | **31,350** | **1,320** | **980** | **770** | **8,245** | **1,805** | **10,700** | **4,490** | **59,660** |
| **1978** | January | 1,640 | 1,780 | 27,530 | 1,240 | 1,100 | 880 | 8,360 | 1,990 | 10,900 | 4,420 | 56,420 |
| | February | 1,570 | 1,620 | 28,600 | 1,310 | 1,100 | 950 | 8,377 | 1,990 | 11,000 | 4,493 | 57,820 |
| | March | 1,520 | 2,060 | 28,600 | 1,320 | 1,100 | 870 | 8,720 | 1,990 | 11,070 | 4,620 | 58,290 |
| | April | 1,690 | 2,230 | 29,330 | 1,100 | 1,140 | 980 | 8,818 | 1,990 | 11,100 | 4,562 | 59,020 |
| | May | 1,720 | 2,220 | 28,253 | 1,160 | 1,150 | 1,110 | 8,825 | 1,990 | 11,140 | 4,392 | 58,020 |
| | June | 1,890 | 2,320 | 29,015 | 1,500 | 1,170 | 1,110 | 8,832 | 1,990 | 11,120 | 4,573 | 59,310 |
| | July | 1,910 | 2,290 | 28,952 | 1,180 | 1,200 | 1,090 | 8,756 | 1,909 | 11,230 | 4,642 | 59,040 |
| | August | 2,060 | 2,100 | 29,330 | 1,310 | 1,240 | 1,100 | 8,758 | 1,990 | 11,280 | 4,832 | 59,840 |
| | September | 2,120 | 2,270 | 31,881 | 1,200 | 1,280 | 1,090 | 8,800 | 1,990 | 11,340 | 4,219 | 61,800 |
| | October | 2,110 | 2,260 | 31,520 | 1,390 | 1,300 | 1,160 | 8,820 | 2,010 | 11,440 | 4,650 | 62,290 |
| | November | 2,280 | 2,320 | 30,840 | 1,520 | 1,320 | 1,280 | 8,741 | 2,010 | 11,490 | 5,719 | 62,920 |
| | December | 2,380 | 2,320 | 30,299 | 1,540 | 1,370 | 1,350 | 8,662 | 2,010 | 11,470 | 4,949 | 61,650 |
| | **AVERAGE** | **1,910** | **2,165** | **29,616** | **1,315** | **1,215** | **1,080** | **8,707** | **2,005** | **11,220** | **4,772** | **59,930** |
| **1979** | January | 2,440 | 2,270 | 28,745 | 1,455 | 1,390 | 1,460 | 8,457 | R2,120 | 11,370 | R4,603 | 59,600 |
| | February | 2,430 | 2,350 | 29,245 | 1,580 | 1,395 | 1,500 | 8,498 | R2,120 | 11,370 | R4,482 | 60,190 |
| | March | 2,440 | 2,430 | 30,380 | 1,410 | 1,305 | 1,330 | 8,585 | R2,120 | 11,370 | R5,090 | 61,590 |
| | April | 2,420 | 2,390 | 30,960 | 1,515 | 1,395 | 1,455 | 8,533 | R2,120 | 11,510 | R4,742 | 62,230 |
| | May | 2,400 | 2,390 | 31,310 | 1,470 | 1,400 | 1,640 | 8,585 | R2,120 | 11,110 | R4,555 | 62,190 |
| | June | 2,420 | 2,250 | 30,980 | 1,470 | 1,435 | 1,740 | 8,409 | R2,120 | 11,460 | R4,626 | 62,240 |
| | July | 2,380 | 2,330 | 31,380 | 1,525 | 1,435 | 1,705 | 8,355 | R2,120 | 11,400 | R5,490 | 63,410 |
| | August | 2,185 | 2,330 | 30,995 | 1,455 | 1,455 | 1,635 | 8,699 | R2,120 | 11,560 | R5,131 | 63,050 |
| | September | 2,115 | 2,370 | 30,760 | 1,495 | 1,470 | 1,670 | 8,466 | R2,120 | 11,460 | R4,989 | 62,430 |
| | October | 2,135 | 2,375 | R31,045 | R1,550 | 1,510 | 1,610 | R8,568 | R2,120 | 11,630 | R5,012 | R63,045 |
| | Novembert | 2,150 | 2,395 | R30,635 | 1,530 | 1,615 | 1,515 | 8,530 | R2,120 | R11,700 | R5,215 | R62,860 |
| | Decembert | 2,150 | 2,415 | 30,295 | 1,550 | 1,655 | 1,540 | 8,480 | 2,120 | 11,700 | 5,000 | 62,340 |
| | **AVERAGEt** | **2,305** | **2,360** | **30,560** | **1,500** | **1,455** | **1,565** | **8,515** | **2,120** | **11,470** | **4,910** | **62,100** |

[2]OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates; Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon.
[3]Other is a calculated total derived from the difference between world production and the nations represented above.
tPreliminary data.
R = Revised data.
Note: Monthly data may not average to annual data.
*Sources:* • 1973–1976 annual data for OPEC nations: *OPEC Annual Statistical Bulletin.*
• 1973–1979 United States data: See sources on page 28.
• All other monthly and annual data (except 1979 annual average): Central Intelligence Agency, *International Energy Statistical Review;* 1979 annual averages are EIA estimates.

# International

## Petroleum Consumption for Major Free World Industrialized Countries[1]

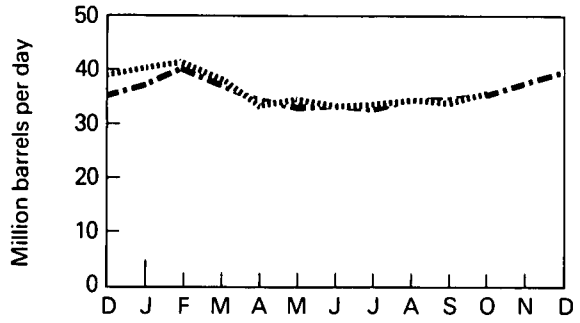
| | | Canada | France[2] | Italy | Japan | United Kingdom | United States | West Germany | Total IEA[3] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Thousand barrels per day | | | | |
| **1973** | **AVERAGE** | **1,597** | **2,219** | **1,525** | **5,000** | **1,958** | **17,308** | **2,693** | **34,050** |
| **1974** | **AVERAGE** | **1,630** | **2,094** | **1,521** | **4,872** | **1,829** | **16,653** | **2,408** | **32,850** |
| **1975** | **AVERAGE** | **1,595** | **1,925** | **1,468** | **4,568** | **1,633** | **16,322** | **2,319** | **31,700** |
| **1976** | **AVERAGE** | **1,647** | **2,075** | **1,503** | **4,786** | **1,601** | **17,461** | **2,507** | **33,660** |
| **1977** | **AVERAGE** | **1,661** | **1,973** | **1,476** | **5,015** | **1,655** | **18,431** | **2,478** | **34,810** |
| **1978** | January | 1,777 | 2,645 | 1,763 | 5,301 | 1,824 | 19,752 | 2,461 | 37,100 |
| | February | 1,956 | 2,598 | 1,906 | 5,981 | 1,899 | 20,900 | 3,014 | 40,500 |
| | March | 1,681 | 2,236 | 1,589 | 5,595 | 1,840 | 19,652 | 2,610 | 37,400 |
| | April | 1,561 | 2,044 | 1,339 | 4,849 | 1,791 | 17,747 | 2,577 | 34,000 |
| | May | 1,522 | 2,131 | 1,300 | 4,437 | 1,618 | 18,230 | 2,341 | 33,300 |
| | June | 1,622 | 1,687 | 1,354 | 4,502 | 1,499 | 18,260 | 2,611 | 33,800 |
| | July | 1,549 | 1,364 | 1,338 | 4,704 | 1,401 | 17,633 | 2,693 | 32,800 |
| | August | 1,680 | 1,325 | 1,197 | 4,857 | 1,447 | 18,639 | 2,338 | 34,200 |
| | September | 1,595 | 1,665 | 1,566 | 4,827 | 1,557 | 17,954 | 2,561 | 34,300 |
| | October | 1,749 | 1,997 | 1,573 | 4,847 | 1,676 | 18,417 | 2,633 | 35,200 |
| | November | 1,882 | 2,472 | 1,828 | 5,423 | 1,802 | 19,156 | 2,772 | 37,600 |
| | December | 1,915 | 2,800 | 1,889 | 6,125 | 1,846 | 19,944 | 2,578 | 39,200 |
| | **AVERAGE** | **1,701** | **2,077** | **1,551** | **5,115** | **1,683** | **18,847** | **2,596** | **35,750** |
| **1979** | January | 1,881 | R2,755 | 1,950 | 5,579 | 1,883 | 20,640 | 2,893 | 39,900 |
| | February | 2,019 | R2,710 | 1,912 | 6,006 | 2,067 | 21,152 | 2,708 | 41,000 |
| | March | 1,654 | R2,288 | 1,601 | 5,706 | 1,949 | 19,180 | 2,592 | 37,300 |
| | April | 1,605 | R2,130 | 1,447 | 5,009 | 1,703 | 17,311 | 2,590 | 33,900 |
| | May | 1,650 | R2,004 | 1,402 | 4,755 | 1,648 | 17,701 | 2,641 | 34,100 |
| | June | R1,737 | 1,652 | 1,312 | 4,709 | 1,517 | 17,675 | 2,613 | 33,600 |
| | July | R1,700 | R1,591 | R1,314 | 4,689 | 1,435 | 16,906 | R2,628 | 33,000 |
| | August | R1,775 | R1,522 | R1,311 | 4,894 | 1,488 | 18,081 | R2,619 | 34,300 |
| | September | R1,619 | R1,704 | R1,598 | R4,807 | R1,520 | 17,273 | R2,597 | 33,700 |
| | October† | 1,885 | R1,993 | R1,752 | R4,800 | 1,642 | R18,124 | 2,846 | 35,300 |
| | November† | 1,882 | 2,450 | 1,873 | 5,400 | NA | 18,075 | 2,763 | 36,100 |

[1]These data represent inland consumption, i.e., sales of petroleum products excluding refinery fuel, refinery losses, and ocean bunkers except for the United States, where it represents domestic products supplied.
[2]Not a member of IEA.
[3]The 20 signatory nations of the International Energy Agency (IEA) are: Australia, Austria, Belgium, Canada, Denmark, West Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. In 1979 Australia joined IEA. In an effort to maintain comparability within this time series, consumption data for Australia have been incorporated into the IEA total for all years.
†Preliminary data
R = Revised data.
NA = Not available.
*Sources:* • Central Intelligence Agency, "International Energy Statistical Review," 13 February 1980 (except United States).
• 1973–1979 United States data: See sources on page 30.
• IEA total for latest month is an EIA estimate.

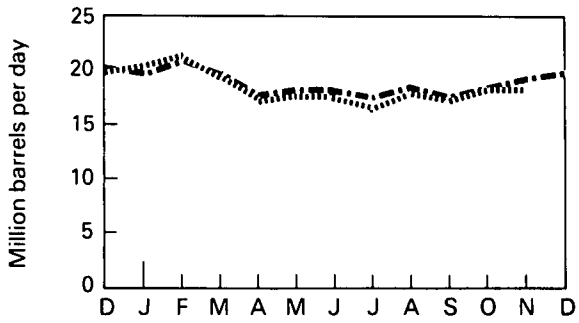
# International

## Petroleum Consumption

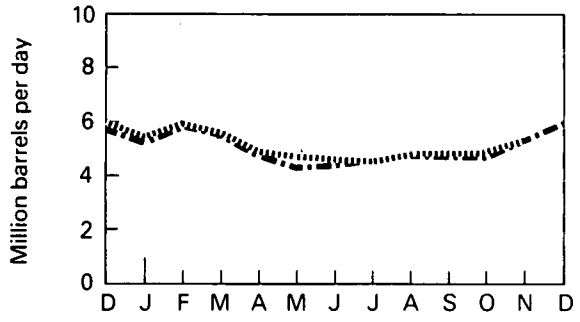
Total IEA



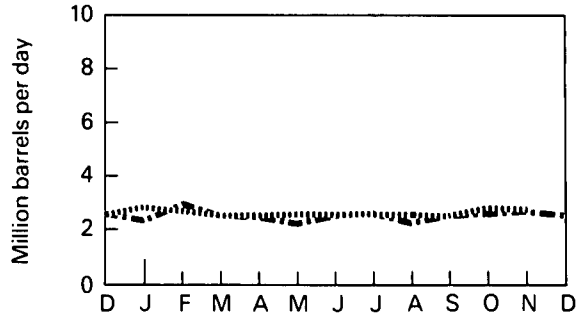

United States



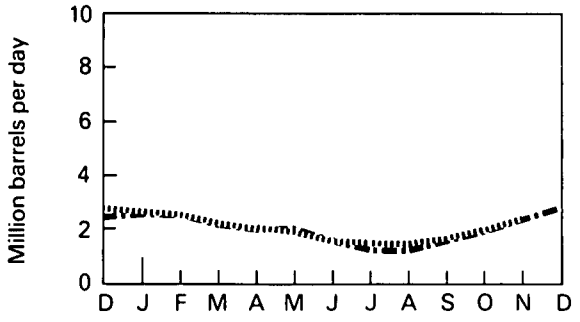

Japan*



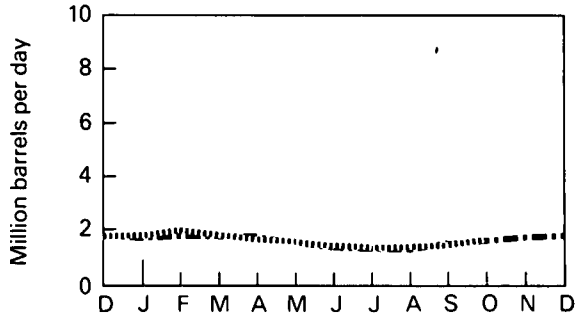

West Germany



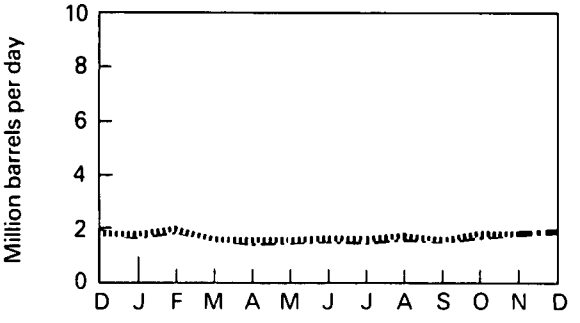

France**



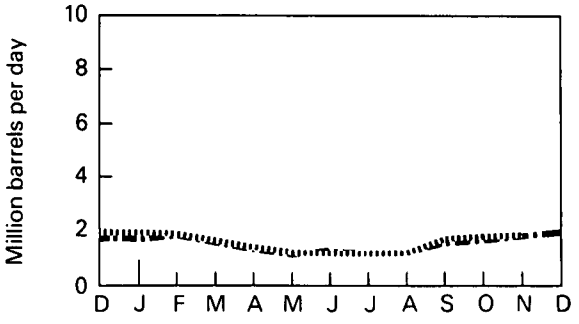

United Kingdom




Canada




Italy***




*Excludes liquefied petroleum gases and condensates.
**Not a member of IEA.

***Principal products only.

1978
1979

# International

## Nuclear Power Generation by Non-Communist Countries[1,2]

| | | Argentina | Belgium | Canada | Finland | France | India | Italy | Japan | Nether-lands | Pakistan |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Million gross kilowatt-hours | | | | | |
| **1973** | **TOTAL** | **0** | **0** | **18,273** | **0** | **11,217** | **1,936** | **3,142** | **9,439** | **1,038** | **458** |
| **1974** | **TOTAL** | **1,035** | **121** | **15,410** | **0** | **14,703** | **2,475** | **3,410** | **18,097** | **3,349** | **584** |
| **1975** | **TOTAL** | **2,517** | **6,763** | **13,243** | **0** | **18,296** | **2,514** | **3,801** | **16,696** | **3,335** | **546** |
| **1976** | **TOTAL** | **2,572** | **10,011** | **18,016** | **0** | **15,764** | **3,194** | **3,797** | **36,689** | **3,872** | **487** |
| **1977** | **TOTAL** | **1,637** | **11,855** | **26,759** | **2,675** | **17,940** | **2,779** | **3,384** | **27,260** | **3,710** | **338** |
| **1978** | January | 266 | 869 | 3,418 | 314 | 2,508 | 73 | 313 | 2,910 | 389 | 0 |
| | February | 241 | 344 | 2,840 | 141 | 2,529 | 77 | 266 | 2,287 | 337 | 32 |
| | March | 138 | 708 | 2,047 | 18 | 2,474 | 164 | 342 | 3,155 | 369 | 46 |
| | April | 261 | 1,103 | 2,809 | 308 | 2,659 | 169 | 394 | 3,165 | 375 | 31 |
| | May | 270 | 1,287 | 2,469 | 309 | 2,113 | 223 | 370 | 4,506 | 380 | 17 |
| | June | 163 | 1,199 | 2,696 | 236 | 1,882 | 184 | 359 | 4,695 | 368 | 33 |
| | July | 262 | 1,192 | 3,364 | 314 | 2,074 | 135 | 375 | 5,699 | 373 | 7 |
| | August | 271 | 1,277 | 2,427 | 310 | 2,401 | 140 | 471 | 5,705 | 375 | 0 |
| | September | 265 | 1,239 | 2,416 | 304 | 2,726 | 226 | 297 | 4,634 | 362 | 0 |
| | October | 271 | 1,237 | 2,759 | 318 | 3,083 | 298 | 382 | 4,311 | 147 | 25 |
| | November | 259 | 880 | 2,692 | 291 | 2,986 | 306 | 406 | 4,476 | 198 | 15 |
| | December | 229 | 1,158 | 2,988 | 318 | 3,112 | 268 | 454 | 5,318 | 387 | 23 |
| | **TOTAL** | **2,896** | **12,490** | **32,925** | **3,179** | **30,547** | **2,264** | **4,429** | **50,861** | **4,060** | **229** |
| **1979** | January | 266 | 838 | 3,816 | 320 | 3,831 | 356 | 401 | 5,471 | 390 | 23 |
| | February | 175 | 559 | 2,945 | 721 | 3,465 | 248 | 277 | 4,967 | 353 | 12 |
| | March | 181 | 786 | 2,909 | 467 | 3,192 | 215 | 241 | 4,160 | 383 | 0 |
| | April | 261 | 1,047 | 3,104 | 623 | 3,151 | 218 | 290 | 3,756 | 223 | 0 |
| | May | 254 | 1,293 | 2,717 | 520 | 3,294 | 239 | 200 | 3,864 | 343 | 0 |
| | June | 229 | 1,161 | 3,194 | 394 | 2,963 | 285 | 132 | 4,570 | 365 | 0 |
| | July | 168 | 992 | 3,848 | 491 | 2,604 | 166 | 0 | 5,862 | 373 | 0 |
| | August | 275 | 558 | 2,820 | 391 | 2,341 | 125 | 122 | 6,724 | 254 | 0 |
| | September | 142 | 792 | 2,956 | 709 | 3,094 | 248 | 169 | 5,238 | 362 | 0 |
| | October | 247 | 1,119 | 3,316 | 780 | 3,808 | 314 | 203 | 6,186 | 267 | 0 |
| | November | 255 | 964 | 2,909 | 561 | 3,563 | 304 | 227 | 5,353 | 37 | 0 |
| | December | 239 | 1,263 | 3,849 | 692 | 4,613 | 209 | 365 | 5,852 | 140 | 0 |
| | **TOTAL** | **2,692** | **11,370** | **38,383** | **6,671** | **39,920** | **2,927** | **2,627** | **62,003** | **3,489** | **35** |
| **1980** | January | 264 | 1,180 | 3,582 | 822 | 5,519 | 215 | 156 | 8,013 | 381 | 0 |

Totals may not equal sum of components due to independent rounding.
[1]Figures are for gross electrical generation as opposed to net electrical generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves.
[2]In some cases, monthly figures are adjusted to reflect amended cumulative totals from *Nucleonics Week.*
*Source:* • *Nucleonics Week.*

# International

## Nuclear Power Generation by Non-Communist Countries[1,2] (continued)

| | | South Korea | Spain | Sweden | Switzer-land | Taiwan | United Kingdom | West Germany | Non-Communist World Excluding U.S. | United States | Total Non-Communist World |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Million gross kilowatt-hours | | | | | |
| **1973** | **TOTAL** | **0** | **6,545** | **2,111** | **6,192** | **0** | **27,996** | **12,561** | **100,908** | **87,440** | **188,348** |
| **1974** | **TOTAL** | **0** | **7,223** | **1,647** | **7,037** | **0** | **34.020** | **11,154** | **120,265** | **119,919** | **240,184** |
| **1975** | **TOTAL** | **0** | **7,544** | **12,021** | **7,721** | **0** | **30,508** | **21,672** | **147,177** | **181,808** | **328,985** |
| **1976** | **TOTAL** | **0** | **7,555** | **15,992** | **7,900** | **0** | **36,799** | **24,524** | **187,172** | **201,570** | **388,742** |
| **1977** | **TOTAL** | **71** | **6,525** | **19,890** | **8,070** | **99** | **38,043** | **35,807** | **206,842** | **262,644** | **469,486** |
| **1978** | January | 223 | 685 | 2,618 | 797 | 173 | 3,383 | 3,095 | 22,034 | R27,361 | R49,395 |
| | February | 223 | 633 | 2,265 | 722 | 54 | 3,513 | 3,348 | 19,852 | R23,229 | R43,081 |
| | March | 223 | 663 | 2,530 | 791 | 136 | 4,132 | 3,871 | 21,807 | R23,793 | R45,600 |
| | April | 223 | 627 | 1,989 | 731 | 151 | 3,236 | 2,666 | 20,897 | R18,409 | R39,306 |
| | May | 223 | 113 | 1,543 | 736 | 205 | 2,361 | 3,134 | 20,259 | R21,262 | R41,521 |
| | June | 223 | 504 | 1,668 | 509 | 171 | 3,099 | 2,230 | 20,219 | R23,329 | R43,548 |
| | July | 223 | 761 | 1,143 | 531 | 299 | 2,455 | 2,090 | 21,297 | R26,319 | R47,616 |
| | August | 245 | 731 | 996 | 421 | 340 | 2,556 | 2,669 | 21,335 | R27,374 | R48,709 |
| | September | 282 | 708 | 1,796 | 734 | 316 | 2,692 | 2,194 | 21,191 | R23,464 | R44,655 |
| | October | 237 | 742 | 2,316 | 799 | 211 | 2,617 | 2,097 | 21,850 | R24,417 | R46,267 |
| | November | 0 | 734 | 2,307 | 772 | 171 | 2,891 | 2,368 | 21,752 | R26,343 | R48,095 |
| | December | 0 | 748 | 2,608 | 805 | 443 | 3,707 | 2,717 | 25,283 | R27,364 | R52,647 |
| | **TOTAL** | **2,324** | **7,649** | **23,781** | **8,349** | **2,670** | **36,642** | **32,478** | **257,772** | **R292,664** | **R550,436** |
| **1979** | January | 272 | 549 | 2,326 | 804 | 445 | 3,787 | 3,866 | 27,761 | R29,164 | R56,925 |
| | February | 354 | 622 | 1,973 | 725 | 306 | 3,811 | 3,045 | 24,558 | R27,307 | R51,865 |
| | March | 324 | 706 | 2,679 | 796 | 521 | 3,969 | 3,300 | 24,829 | R25,517 | R50,346 |
| | April | 262 | 637 | 1,449 | 774 | 565 | 3,210 | 4,674 | 24,244 | R19,320 | R43,564 |
| | May | 250 | 216 | 1,268 | 714 | 482 | 2,265 | 3,243 | 21,162 | R15,808 | R36,970 |
| | June | 300 | 360 | 1,003 | 827 | 645 | 3,150 | 3,048 | 22,626 | R17,087 | R39,713 |
| | July | 337 | 444 | 1,008 | 981 | 691 | 2,731 | 3,094 | 23,790 | R22,481 | R46,271 |
| | August | 384 | 663 | 1,099 | 826 | 646 | 2,409 | 2,667 | 22,304 | R25,732 | R48,036 |
| | September | 386 | 425 | 1,370 | 1,234 | 644 | 3,116 | 2,441 | 23,326 | R23,352 | R46,678 |
| | October | 282 | 676 | 2,048 | 1,288 | 509 | 2,771 | 3,456 | 27,270 | R22,497 | R49,767 |
| | November | 0 | 719 | 2,302 | 1,418 | 316 | 3,279 | 3,642 | 25,849 | R20,520 | R46,369 |
| | December | 0 | 683 | 2,515 | 1,461 | 559 | 4,070 | 3,874 | 30,384 | R21,933 | R52,317 |
| | **TOTAL** | **3,152** | **6,700** | **21,039** | **11,848** | **6,329** | **38,568** | **40,350** | **298,103** | **R270,718** | **R568,821** |
| **1980** | January | 110 | 719 | 2,512 | 1,505 | 859 | 3,704 | 4,450 | 33,991 | 21,111 | 55,102 |

Totals may not equal sum of components due to independent rounding.
[1]Figures are for gross electrical generation, as opposed to net electrical generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves.
[2]In some cases monthly figures are adjusted to reflect amended cumulative totals from *Nucleonics Week*.
R = Revised data.
*Source:* • *Nucleonics Week.*

# Definitions

**Anthracite**

A hard, black, lustrous coal containing a high percentage of fixed carbon and a low percentage of volatile matter. Often referred to as hard coal. Includes metaanthracite and semianthracite. Conforms to ASTM Specification D388, for anthracite.

**Average Retail Selling Price, Motor Gasoline**

The average price of sales of motor gasoline to retail customers at service stations.

**Base Production Control Level**

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold from a particular property in the corresponding month of 1972. If domestic crude oil was not produced and sold from that property in every month of 1972, the total number of barrels of domestic crude oil produced and sold from that property in 1972, is then divided by 12.

2. Effective February 1, 1976: the total number of barrels of crude oil produced and sold from the property during calendar year 1975, divided by 365, and multiplied by the number of days in the particular month during 1975. A producer may elect to use the total number of barrels of crude oil produced and sold from the property during calendar year 1972, divided by 366, and multiplied by the number of days in the particular month during 1972.

**Bituminous Coal**

A coal which is high in carbonaceous matter, having a volatility greater than anthracite coal and a calorific value greater than lignite. Often referred to in the United States as soft coal. Includes subbituminous coal and conforms to ASTM Specification D388 for bituminous and subbituminous coal.

**Ceiling Price**

The maximum permissible selling price, prior to February 1, 1976, for a particular grade of domestic crude oil in a particular field is the May 15, 1973, posted price, plus $1.35 per barrel.

**Coke**

Bituminous coal from which constituents have been driven off by heat so that the fixed carbon and the ash are fused together. It is primarily used in blast furnaces for smelting ores, especially iron ore.

**Crude Oil**

A mixture of hydrocarbons that is in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Statistically, crude oil reported at refineries, in pipelines, at pipeline terminals, and on leases may include lease condensate.

**Crude Oil Domestic Production**

Domestic crude oil production is measured at the wellhead and includes lease condensate, which is a natural gas liquid recovered from lease separators or field facilities.

**Crude Oil Entitlement Value**

The average value a refiner receives from the entitlement program for each incremental barrel of imported crude oil. It is calculated by multiplying the entitlement price by the National Old Oil Supply Ratio for November 1974 through January 1976, and by the National Domestic Crude Oil Supply Ratio for February 1976 forward.

**Crude Oil Imports**

The volume of crude oil imported into the 50 States and the District of Columbia, including imports from U.S. territories, but excluding imports of crude oil into the Hawaiian Foreign Trade Zone.

**Crude Oil Refinery Input**

Total crude oil (including lease condensate) input to crude oil distillation units and other units for processing.

**Crude Oil Stocks**

Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

**Distillate Fuel Oil**

A light fuel oil distilled off during the refining process. Included are products known as No. 1 and No. 2 heating oils, diesel fuels, and No. 4 fuel oil, which conform to either ASTM Specification D396 or D975. These products are used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel), and electric power generation.

**Electricity Production**

Production at electric utilities only. Does not include industrial electricity generation.

**Entitlement Position**

The monthly entitlement position of a refiner indicates whether he bought or sold entitlements in that month. An entitlement is the right to process "deemed old oil," which is the sum of a refiner's receipts of "old" oil and a fraction of his receipts of "upper tier" crude oil. This fraction is set monthly by the Economic Regulatory Administration (ERA). A refiner must purchase entitlements for the amount of his "deemed old oil" receipts in excess of the national domestic crude oil supply ratio (NDCOSR). The NDCOSR, as calculated by ERA, reflects the differences in costs to refiners of "old" oil, "upper tier" crude oil, and imported crude oil.

**Entitlement Price**

The price of an entitlement, fixed by ERA, is the exact differential as reported for the month between the weighted average delivered cost per barrel to refiners of both imported crude oil and stripper crude oil, and the weighted average delivered cost per barrel to refiners of "old oil".

**Exploratory Well**

A well drilled to 1.) find and produce oil or gas in an unproved area; 2.) find a new reservoir in a field previously found to be productive of oil or gas in another reservoir; or 3.) extend the limit of a known oil or gas reservoir.

**Full Serve**

Motor vehicle services are provided by an attendant, such as: pumping gas, washing windows, checking under the hood, checking tire pressure, etc.

**Jet Fuel**

Includes both naphtha-type and kerosene-type jet fuel meeting standards for use in aircraft turbine engines or meeting ASTM Specification D1655. Although most jet fuel is used in aircraft, some is used for other purposes, such as fuel for gas turbines to produce electricity.

**Landed Cost**

The cost of imported crude oil equal to actual cost of the crude oil at point of origin plus transportation cost to the United States.

**Line Miles of Seismic Exploration**

The distance along the earth's surface that is covered by seismic traverses.

**Lignite**

A brownish-black coal of low rank with high inherent moisture and volatile matter. It is also referred to as brown coal. It conforms to ASTM Specification D388 for lignite and is used almost exclusively for electric power generation.

**Lower Tier Crude Oil**

The total number of barrels of crude oil produced and sold from a property in a specific month up to the amount of base period production. Base period production equals the lesser of 1972 or 1975 production, with a downward adjustment to take account of depletion of the oil field (see **Base Production Control Level**).

**Lower Tier Ceiling Price Determination**

The lower tier ceiling price for a particular grade of domestic crude oil in a particular field is the sum of (1) the highest posted price at 6 A.M., local time, May 15, 1973, for transactions in that grade of crude oil in that field; or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; and (2) the amount mandated in the Monthly Price Adjustment Schedules published by ERA in the **Federal Energy Guidelines** (Part 212.77–13847 Appendix).

**Major Brand**

Lundberg Survey, Inc., defines major brand as an integrated company that produces, refines, transports, and markets in Interstate Commerce under its own brand(s) in 10 or more states.

**Maximum Dependable Capacity**

Represents the dependable main-unit net capacity of domestic reactors and generally varies throughout the year because the unit efficiency varies with seasonal cooling water temperature variations. Usually maximum dependable capacity is the highest net dependable output of the turbine generator during the most restrictive seasonal conditions (usually summer).

**Motor Gasoline**

A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark ignition engines. Included are leaded and unleaded products and all refinery products listed in ASTM Specification D439.

**Motor Gasoline Production**

Total production of motor gasoline by refineries, measured at the refinery outlet. Relatively small quantities of motor gasoline are produced at natural gas processing plants, but these quantities are not included.

**Motor Gasoline, Regular Grade**

Motor gasoline that has an antiknock designation of 2 for unleaded gasoline and 3 for leaded gasoline.

**Motor Gasoline, Premium Grade**

Volatile hydrocarbon mixture suitable for operation of an internal combustion engine and customarily marketed as "ethyl," "super," or equivalent classification.

**National Domestic Crude Oil Supply Ratio**

Old oil receipts adjusted for upper tier receipts, small refiner bias, and other minor adjustments, divided by crude runs to stills adjusted for residual fuel entitlements.

**Natural Gas**

A mixture of hydrocarbon compounds and small quantities of various non-hydrocarbons existing in

gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions.

**Natural Gas Liquids**

Products obtained from lease separators, field facilities, and natural gas processing plants. Natural gas liquids include natural gas plant liquids and lease condensate.

**Natural Gas Plant Liquids**

Products obtained from processing natural gas at natural gas processing plants, including natural gasoline plants, cycling plants and fractionators. Products obtained include ethane, liquefied petroleum gases (propanes, butanes, and propane-butane mixtures), isopentane, natural gasoline, plant condensate and other minor quantities of finished products such as motor gasoline, special naphthas, jet fuel, kerosene and distillate fuel oil.

**Natural Gas Production (Dry)**

Derived by subtracting extraction loss from marketed production. It represents the amount of domestic natural gas production that is available to be marketed and consumed as a gas.

**New Crude Oil**

(See **Upper Tier Crude Oil**).

**Old Crude Oil**

1. Prior to February 1, 1976: the total number of barrels of crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month and less the total number of barrels of released crude oil for that property in that month.

2. Effective February 1, 1976: the total number of barrels of crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month.

**Petroleum**

A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oil, refined petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

**Petroleum Coke**

A solid residue; the final product of the condensation process in cracking. It consists of aromatic hydrocarbons very poor in hydrogen. Calcination of petroleum coke can yield almost pure carbon or artifical graphite suitable for production of carbon or graphite electrodes, structural graphite, motor brushes, dry cells and similar productions.

**Petroleum Products**

Products obtained from the processing of crude oil, unfinished oils, natural gas liquids and other miscellaneous hydrocarbon compounds. Includes aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt, road oil, still gas and other miscellaneous products.

**Primary Stocks of Petroleum Products**

Stocks held at refineries, bulk terminals, and pipelines. They do not include stocks held in secondary storage facilities, such as those held by jobbers, dealers, independent marketers, and consumers.

**Product Supplied—Specific Petroleum Products**

A calculated value, computed as domestic production plus net imports (imports less exports), less the net increase in primary stocks. It, therefore, represents the total disappearance of products from primary supplies. (See definition for **Product Supplied—Total Petroleum Products**).

**Product Supplied—Total Petroleum Products**

Total domestic products supplied is calculated as inputs to refineries, plus estimated refinery gain, plus hydrogen input, plus natural gas plant liquids production, plus direct use of crude as fuel, plus product imports, less product exports, less the net increase in product stocks (See definition for **Product Supplied—Specific Petroleum Products**).

**Property**

Prior to August 26, 1976, a property was defined as the right to produce domestic crude oil, which arises from a lease or from a fee interest. This definition was interpreted to apply only to a surface lease. In August 1976 the definition of a property was changed so that a producer may treat as a separate property each separate and distinct producing reservoir subject to the same right to produce crude oil, provided that such reservoir is recognized by the appropriate governmental regulatory authority as a producing formation that is separate and distinct from, and not in communication with any other producing formation. Although this new definition was not implemented until August 25, 1976, it was made effective retroactively to February 1, 1976. (F.R. 36171, August 26, 1976.)

**Refiner Acquisition Cost**

The cost to the refiner, including transportation and fees, of crude oil. The composite cost is the average of domestic and imported crude oil costs, and represents the amount of crude oil cost which refiners may pass on to their customers.

**Released Crude Oil**

An amount of crude oil produced from a property in a particular month prior to February 1, 1976, which is equal to the total number of barrels of new crude oil produced and sold from that property in that month. The amount of released crude oil for a property in a particular month shall not exceed the base production control level for that property in that month.

**Residual Fuel Oil**

The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations. Included are products known as No. 5 and No. 6 fuel oil that conform to ASTM Specification D396, heavy diesel oil, Navy Special Oil, Bunker C oil, and acid sludge and pitch used as refinery fuels. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

**Rotary Rig**

A machine, used for drilling wells, that employs a rotating tube attached to a bit for boring holes through rock.

**Self Serve**

Motor vehicle services are not provided by attendants.

**Strategic Petroleum Reserves**

A plan developed to reduce the impact of interruption of imports of petroleum. Congress enacted legislation to establish a Strategic Petroleum Reserve in Title I, Part B of the Energy Policy and Conservation Act of 1975, Public Law 94–163.

**Startup Test Phase of Nuclear Powerplant**

A nuclear powerplant that has been licensed by the Nuclear Regulatory Commission to operate, but that is in the initial testing phase during which production of electricity may not be continuous. In general, when the electric utility is satisfied with the plant's performance, it formally accepts the plant from the manufacturer, and places it in "commercial operation" status. A request is then submitted to the appropriate utility rate commission to include the powerplant in the rate base calculation.

**Stripper Well Property**

A property whose average daily production of crude oil per well (excluding condensate recovered in nonassociated natural gas production) did not exceed 10 barrels per day during any preceding consecutive 12-month period beginning after December 31, 1972.

**Synthetic Natural Gas (SNG)**

A product resulting from the manufacture, conversion, or reforming of petroleum hydrocarbons which may be easily substituted for or interchanged with pipeline quality natural gas.

**Unaccounted for Crude Oil**

Represents the arithmetic difference between the indicated demand for crude oil and the total disposition of crude oil. Indicated demand is the sum of crude oil production and imports less changes in crude oil stocks. Total disposition of crude oil is the sum of refinery imports, exports of crude oil, oil burned as fuel, and losses of oil.

**Unrecouped Costs**

Costs which have not been recovered in the current month's product prices but which have been "banked" for later use.

**Upper Tier Crude Oil**

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the base production control level for that month and less the current cumulative deficiency.

2. February 1, 1976 through August 31, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the property's base production control level for that month and less the current cumulative deficiency since February 1, 1976. Includes new crude oil and crude oil produced from a stripper well property.

3. Since September 1, 1976: upper tier crude oil excludes crude oil produced from a stripper well property.

**Upper Tier Ceiling Price Determination**

The upper tier ceiling price for a particular grade of domestic crude oil in a particular field is (1) the highest posted price on September 30, 1975, for transactions in that grade of crude oil in that field in September 1975, or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; less (2) the amount mandated in the Monthly Price Adjustment Schedules published by ERA in the *Federal Energy Guidelines* (Part 212.77–13847 Appendix).

**Well**

A hole drilled for the process of finding or producing crude oil or natural gas or providing services related to the production of crude oil or natural gas. Wells are classified as oil wells, gas wells, dry holes, stratigraphic tests, or service wells.

# Explanatory Notes

1. Domestic production of energy includes production of coal (anthracite, bituminous, and lignite), crude oil and lease condensate, natural gas plant liquids, natural gas (dry), electric utility and industrial production of hydropower, and electricity generated from nuclear power, geothermal power, and wood and waste. The volumetric data were converted to approximate heat contents (Btu values) of these energy sources using conversion factors listed in the Units of Measure.

2. Domestic consumption of energy includes consumption of coal (anthracite, bituminous, and lignite), natural gas (dry), refined petroleum products supplied, electric utility and industrial production of hydropower, net imports of electricity produced from hydropower, net imports of coke made from coal, and electricity generated from nuclear power, geothermal power, and wood and waste. Approximate heat contents (Btu values) were derived using conversion factors listed in the Units of Measure.

3. U.S. energy imports include imports of bituminous coal, crude oil (including crude oil imported for the Strategic Petroleum Reserve), refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.

4. U.S. energy exports include bituminous coal and anthracite, crude oil, refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.

5. The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. The Transportation Sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. The Electric Utilities Sector is made up of privately- and publicly-owned establishments which generate electricity primarily for resale.

6. Degree-days relate energy consumption to outdoor air temperature. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65° F by convention. Heating degree-days are deviations of the mean daily temperature below 65° F. For example, if a weather station recorded a mean daily temperature of 78° F, cooling degree-days for that station would be 13 (and heating degree-days, 0). A weather station recording a mean daily temperature of 40° F would report 25 heating degree-days (and 0 cooling degree-days).

There are two degree-day data bases maintained by the National Oceanic and Atmospheric Administration. Weekly degree-day information is based on mean daily temperatures recorded at about 200 major weather stations around the country. Monthly data are based on readings at more than 8,000 weather stations. The temperature information recorded at these weather stations is used to calculate statewide degree-day averages based on population. The State figures are then aggregated into Petroleum Administration for Defense (PAD) Districts and into the national average, also using a population weighting method.

Weekly weather reports are available much sooner than the monthly reports, and therefore the degree-day information published in the *Monthly Energy Review* is normally derived from the weekly source.

7. Domestic products supplied figures for natural gas liquids (NGL) as reported by the Bureau of Mines and reproduced in this publication do not include amounts utilized by refineries for blending purposes in the production of finished products, principally gasoline. Use of NGL at refineries is reported in a separate column. The production series cited in this publication shows both NGL produced at processing plants and liquefied gases produced at refineries (LRG). NGL produced at refineries is extracted from crude oil and hence, to avoid double counting, should not be included in calculations of total U.S. production of petroleum liquids. The stock series shown in this volume includes natural gas liquids held as stocks at both natural gas processing plants and at refineries and LRG held at refineries.

8. Domestic consumption of natural gas includes the quantities sold to consumers plus the gas used for plant and pipeline fuel, after the natural gas liquids have been extracted. All monthly consumption data are estimated. Marketed production of natural gas includes gross withdrawals from the ground less the quantities used for repressuring and the amount vented and flared, before the natural gas liquids have been extracted. Dry production of natural gas is the quantity remaining after the natural gas liquids have been extracted.

9. The Federal Energy Administration and Federal Power Commission began the coordinated collection and compilation of monthly underground storage information from all underground storage operators in the United States in October 1975. Initial storage information reported was for the month of September 1975. Comparable monthly information for total U.S. storage operations is not available for prior periods.

The total gas in storage is the total volume of gas (base gas plus working gas) in storage reservoirs as of the end of the month. Base gas is the volume of gas, including all native gas in place at the time of conversion to storage, needed as a permanent inventory to maintain adequate reservoir pressures and deliverability rates throughout the withdrawal season. Base gas includes the volumes which will not be recoverable upon termination of storage operations. Working gas is the volume of gas above the designated base gas level available for withdrawal.

10. Bituminous coal and lignite production is calculated from the number of railroad cars loaded at mines, based on the assumption that approximately 60 percent of the coal produced is transported by rail. Production data are estimated by EIA from Association of American Railroads reports of carloadings.

Bituminous coal and lignite consumption is calculated by Energy Information Administration (EIA) from information provided by the Federal Energy Regulatory Commission, Department of Commerce, and reports from selected manufacturing industries and retailers.

Domestic consumption data in this series, therefore, approximate actual consumption. This is in contrast to domestic demand reported for petroleum products, which is calculated value representing total disappearance from primary supplies.

The data sources used to compute the monthly coal consumption estimates for 1978 through 9 months 1979 for the "Other Industrial" (i.e. Industrial except coke plants) sector are:

(a) Form EIA–3, "Monthly Fuel Consumption Report—Manufacturing Plants."
(b) Form EIA–6, "Bituminous Coal and Lignite Distribution Report."

The basic assumption used in deriving a quarterly estimate for coal consumption is that consumption is equal to beginning stocks plus receipts minus ending stocks. In terms of an equation, consumption can be expressed as

$$C = S_B + R - S_E, \quad (1)$$

where

$S_B$ = beginning stocks
$R$ = receipts
$S_E$ = ending stocks.

The change in stocks ($S_B - S_E$) can be denoted by $\Delta S$. From equation (1), consumption is

$$C = \Delta S + R. \quad (2)$$

The Form EIA–6 provides complete coverage of the "Other Industrial" sector. The quarterly receipts are obtained from this form.

The Form EIA–3 does not provide total coverage of the "Other Industrial" sector, however it does contain stock change information. The impact of the stock change in the portion of the sector that is not covered by the Form EIA–3 is not substantial.

Given the estimated quarterly consumption for the "Other Industrial" sector (C), the monthly consumption for the sector ($C_M$) can be estimated for each month in the quarter as

$$C_M = (C_{M3}/C_3) \bullet C \quad (3)$$

where

$C_{M3}$ = the monthly consumption in the "Other Industrial" sector as reported on Form EIA–3.
$C_3$ = the quarterly consumption in the "Other Industrial" sector as reported on Form EIA–3.

Equation (3) insures that a) the monthly consumption estimates ($C_M$) sum to C over the quarter and b) the estimated seasonality for the $C_M$'s is the same as that for the $C_{M3}$'s.

11. The units used to describe power generation at nuclear plants are based on the watt, which is a unit of power. (Power is energy produced per unit of time.) As with fossil-fueled plants, nuclear plants have three design power ratings. The normal rating (expressed in thermal megawatts) is the rate of heat production by the reactor core. The gross electrical rating (expressed in electrical megawatts, MWe) is the generator capacity at the stated thermal rating of the plant. The net electrical rating (also expressed in MWe) is the power available as input to the electrical grid after subtracting the power needed to operate the plant. (A typical nuclear plant needs 5 percent of its generated electricity for its own operation.)

The electrical energy produced by a plant is expressed in kilowatt-hours (kWh). This enables a more direct comparison to design capacity and to previous months' performances.

12. Prior to February 1976, the domestic crude oil wellhead price represented an estimate of the average of posted prices; after February 1976, the wellhead price represents an average of first sale prices. For the 2-year period January 1974 through January 1976, the old oil price at the wellhead was originally estimated to be $5.25 per barrel based on representative postings. This estimate was revised in July 1976 after a survey of crude oil purchasers was implemented and more complete data became available. Estimates of the average old oil price given in the table for months prior to February 1976 are based on prices for old oil reported on new leases, and were not derived from a statistically valid sample of old oil leases.

13. The actual domestic average price represents the average price at which all domestic crude oil, except that from Naval Petroleum Reserves, is purchased. The imputed domestic average price is the average price used to establish ceiling prices for domestic crude oil in accordance with the provisions of the Energy Conservation and Production Act. It is calculated as the weighted average of lower tier, upper tier, and an imputed stripper crude oil price. The imputed stripper crude oil price is equal to $11.63 per barrel plus the difference between the composite price of crude oil in August 1976 (excluding stripper oil) and the composite price of crude oil in the month of measurement (excluding stripper oil).

14. FOB literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

15. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries which export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

16. The refiner acquisition cost of domestic crude oil is the price paid by refiners for domestic crude oil and natural gas plant liquids and includes transportation costs from the wellhead to the refinery. The refiner acquisition cost of imported crude oil is the average landed cost of imported crude oil to the refiner and represents the amount which may be passed on to the consumer. It incorporates transportation costs and fees (including the supplemental import fees) and any other costs incurred in purchasing and shipping crude oil to the United States.

17. The major brand category includes those stations using the primary brand of a major refiner. Primary brands are the brand names or logos that are associated most commonly with the 15 integrated major refiners as defined in the Emergency Petroleum Allocation Act of 1973. These refiners are: Amoco, Atlantic Richfield, Chevron, Cities Service, Continental, Exxon, Getty, Gulf, Marathon, Mobil, Phillips, Shell, Sun, Texaco, and Union Oil of California. The nonmajor brand category includes all the other stations in the survey. Stations using secondary brands of major refiners are included in the nonmajor brand category, as these stations typically price their gasoline to compete with independent refiner and market-brand stations.

Stations owned and operated directly be refiners are not included in this survey.

18. The U.S. Department of Energy Regions are defined as follows:

Region 1—Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island;
Region 2 —New York, New Jersey, Puerto Rico, Virgin Islands;
Region 3 —Pennsylvania, Maryland, West Virginia, Virginia, District of Columbia, Delaware;
Region 4 —Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, Canal Zone;
Region 5 —Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio;
Region 6 —Texas, New Mexico, Oklahoma, Arkansas, Louisiana;
Region 7 —Kansas, Missouri, Iowa, Nebraska;
Region 8 —Montana, North Dakota, South Dakota, Wyoming, Utah, Colorado;
Region 9 —California, Nevada, Arizona, Hawaii, Trust Territory of the Pacific Islands, American Samoa, Guam;
Region 10—Washington, Oregon, Idaho, Alaska.

19. The survey and method used to derive data for March 1976 forward differ from those used for prior months. Data for January 1974 through February 1976 are derived from a survey of distributors, and prices and margins are computed as unweighted averages. The average distributor purchase price and average dealer margin for March 1976 forward are for distributors only, whereas the average selling price includes both refiners and distributors. Data for March 1976 forward are computed as sales weighted averages.

20. The weighted average for all fossil fuels includes peaking fuels and distillate fuel oil delivered to utilities for the total United States, whereas the regional and total United States breakdown for residual fuel oil prices represents all heavy fuel oil prices.

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# Conversion Factors

## Thermal Conversion Factors

| Approximate Heat Content of Various Fuels | | 1973 | 1974 | 1975 | 1976 | 1977 | 1978–79–80 |
|---|---|---|---|---|---|---|---|
| Anthracite | | | | | | | |
| Production | Btu/short ton | 23,170,000 | 22,560,000 | 23,390,000 | 22,770,000 | 23,180,000 | 23,520,000 |
| Imports and Exports | Btu/short ton | 25,400,000 | 25,400,000 | 25,400,000 | 25,400,000 | 25,400,000 | 25,400,000 |
| Consumption, average | Btu/short ton | 22,710,000 | 21,950,000 | 21,740,000 | 22,150,000 | 22,710,000 | 22,970,000 |
| Electric utility consumption | Btu/short ton | 17,920,000 | 17,200,000 | 17,060,000 | 17,530,000 | 17,240,000 | 17,100,000 |
| Non-utility consumption | Btu/short ton | 24,340,000 | 23,750,000 | 23,650,000 | 23,840,000 | 24,990,000 | 25,170,000 |
| Bituminous coal and lignite | | | | | | | |
| Production | Btu/short ton | 24,010,000 | 23,730,000 | 23,200,000 | 23,150,000 | 22,700,000 | 22,430,000 |
| Imports | Btu/short ton | 25,000,000 | 25,000,000 | 25,000,000 | 25,000,000 | 25,000,000 | 25,000,000 |
| Exports | Btu/short ton | 27,000,000 | 27,000,000 | 27,000,000 | 27,000,000 | 27,000,000 | 27,000,000 |
| Consumption, average | Btu/short ton | 23,650,000 | 23,070,000 | 22,800,000 | 22,750,000 | 22,330,000 | 22,140,000 |
| Electric utility consumption | Btu/short ton | 22,260,000 | 21,800,000 | 21,660,000 | 21,690,000 | 21,480,000 | 21,280,000 |
| Non-utility consumption | Btu/short ton | 26,840,000 | 26,120,000 | 25,810,000 | 25,870,000 | 25,130,000 | 25,070,000 |
| Coal Coke | Btu/short ton | 26,000,000 | 26,000,000 | 26,000,000 | 26,000,000 | 26,000,000 | 26,000,000 |
| Crude petroleum[1] | | | | | | | |
| Production | Btu/barrel | 5,800,000 | 5,800,000 | 5,800,000 | 5,800,000 | 5,800,000 | 5,800,000 |
| Imports | Btu/barrel | 5,817,000 | 5,827,000 | 5,821,000 | 5,808,000 | 5,810,000 | 5,802,000 |
| Exports | Btu/barrel | 5,800,000 | 5,800,000 | 5,800,000 | 5,800,000 | 5,800,000 | 5,800,000 |
| Crude petroleum and products | | | | | | | |
| Imports, average | Btu/barrel | 5,897,000 | 5,884,000 | 5,858,000 | 5,856,000 | 5,834,000 | 5,839,000 |
| Exports, average | Btu/barrel | 5,752,000 | 5,774,000 | 5,748,000 | 5,745,000 | 5,797,000 | 5,808,000 |
| Petroleum products | | | | | | | |
| Consumption, average | Btu/barrel | 5,515,000 | 5,504,000 | 5,494,000 | 5,504,000 | 5,526,000 | 5,519,000 |
| Residential and Commercial | Btu/barrel | 5,498,000 | 5,494,000 | 5,496,000 | 5,517,000 | 5,522,000 | 5,530,000 |
| Industrial | Btu/barrel | 5,515,000 | 5,473,000 | 5,443,000 | 5,457,000 | 5,519,000 | 5,487,000 |
| Transportation | Btu/barrel | 5,395,000 | 5,394,000 | 5,392,000 | 5,397,000 | 5,402,000 | 5,410,000 |
| Electric Utility | Btu/barrel | 6,223,000 | 6,215,000 | 6,229,000 | 6,235,000 | 6,231,000 | 6,227,000 |
| Imports | Btu/barrel | 5,983,000 | 5,959,000 | 5,935,000 | 5,980,000 | 5,908,000 | 5,955,000 |
| Exports | Btu/barrel | 5,752,000 | 5,773,000 | 5,747,000 | 5,743,000 | 5,796,000 | 5,814,000 |
| Natural gas plant liquid production | Btu/barrel | 4,049,000 | 4,011,000 | 3,984,000 | 3,964,000 | 3,941,000 | 3,925,000 |
| Natural gas, dry | | | | | | | |
| Production and consumption | Btu/cubic foot | 1,021 | 1,024 | 1,021 | 1,020 | 1,021 | 1,019 |
| Electric utility consumption | Btu/cubic foot | 1,024 | 1,022 | 1,026 | 1,023 | 1,029 | 1,034 |
| Non-utility consumption | Btu/cubic foot | 1,020 | 1,024 | 1,020 | 1,019 | 1,019 | 1,016 |
| Imports | Btu/cubic foot | 1,026 | 1,027 | 1,026 | 1,025 | 1,026 | 1,030 |
| Exports | Btu/cubic foot | 1,023 | 1,016 | 1,014 | 1,013 | 1,013 | 1,013 |
| Hydropower[2] | Btu/kWh | 10,389 | 10,442 | 10,406 | 10,373 | 10,435 | 10,435 |
| Nuclear power[2] | Btu/kWh | 10,903 | 11,161 | 11,013 | 11,047 | 10,769 | 10,769 |
| Geothermal power[2] | Btu/kWh | 21,674 | 21,674 | 21,611 | 21,611 | 21,611 | 21,611 |
| Electricity consumption | Btu/kWh | 3,412 | 3,412 | 3,412 | 3,412 | 3,412 | 3,412 |

| Refined Petroleum Products: | Btu/barrel |
|---|---|
| Asphalt | 6,636,000 |
| Aviation gasoline | 5,048,000 |
| Butane | 4,326,000 |
| Butane-propane mixture[3] | 4,130,000 |
| Distillate fuel oil | 5,825,000 |
| Ethane | 3,082,000 |
| Isobutane | 3,974,000 |
| Jet fuel—kerosene type | 5,670,000 |
| Jet fuel—naphtha type | 5,355,000 |
| Kerosene | 5,670,000 |
| Lubricants | 6,065,000 |
| Motor gasoline | 5,253,000 |
| Natural gasoline | 4,620,000 |
| Petrochemical feedstocks | |
| Naphtha 400° | 5,248,000 |
| Other oils over 400° | 5,825,000 |
| Still gas | 6,000,000 |
| Petroleum coke | 6,024,000 |
| Plant condensate | 5,418,000 |
| Propane | 3,836,000 |
| Residual fuel oil | 6,287,000 |
| Road oil | 6,636,000 |
| Special naphtha | 5,248,000 |
| Still gas | 6,000,000 |
| Unfinished oils | 5,825,000 |
| Wax | 5,537,000 |
| Miscellaneous | 5,796,000 |

## Units of Measure

Weight

1 metric ton **contains** 1,000 kilograms or 2,204.62 pounds
1 long ton **contains** 2,240 pounds
1 short ton **contains** 2,000 pounds

Conversion Factors for Crude Oil (Average Gravity)

1 barrel **contains** 42 gallons
1 barrel **contains** 0.136 metric tons (0.150 short tons)
1 metric ton **contains** 7.33 barrels
1 short ton **contains** 6.65 barrels

Conversion Factors for Uranium

1 short ton ($U_3O_8$) **contains** 0.769 metric tons of uranium
1 short ton ($UF_6$) **contains** 0.613 metric tons of uranium
1 metric ton ($UF_6$) **contains** 0.676 metric tons of uranium

[1]Includes lease condensate
[2]There is no generally accepted practice for measuring hydropower thermal conversion rates. The hydropower factors on this page are the prevailing heat rate factors at fossil fuel steam electric powerplants. By using the heat rate factor, it is possible to evaluate fossil fuel requirements for replacing hydropower production during periods of drought. Furthermore, it allows for better comparisons with certain other countries such as Norway where hydropower is the principal means for producing electricity. Similarly, the nuclear power and geothermal power conversion factors represent the thermal conversion equivalent of the uranium and geothermal steam consumed at powerplants. The heat content of a kilowatt-hour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatt-hour. It is not possible to determine the hydroelectric powerplant efficiency by using these factors. The efficiency factor for hydroelectric powerplants is derived by multiplying generation efficiency by turbine efficiency. The average hydroelectric powerplant efficiency in the United States is 86 percent while average generation efficiency is 97 percent and average turbine efficiency is 89 percent.
[3] 60 percent butane and 40 percent propane.

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