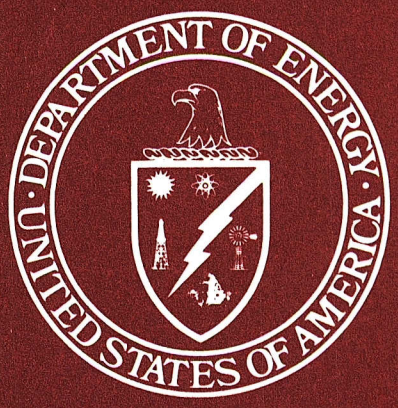
DOE/EIA-0035(81/09)

Monthly Energy Review

September 1981



First Half 1981 Summary

U.S. Department of Energy
Energy Information Administration

The *Monthly Energy Review* is prepared in the Statistics Branch of the Office of Energy Markets and End Use, Energy Information Administration, U.S. Department of Energy, under the direct supervision of Sam O. Wood, Jr.

Production Manager:	Nancy Masterson
Production Assistants:	Diane D. Perritt Maria F. McGuinness
Editorial Review:	Staff, Publication Services
Executive Summary:	Nancy Masterson
and	Roberta Searles
Consumption	Dianne R. Dunn
Petroleum:	Henry Clarius Leonard L. Fanelli
Natural Gas:	Gordon W. Koelling
Resource Development:	Daniel C. Adkins
Coal:	Leonard Westerstrom
Electric Utilities:	Vicki Moorhead Tom F. Woods
Nuclear:	Hal Steinberg
Price:	
Petroleum	Annie P. Whatley Charles Riner
Natural Gas	Gordon W. Koelling Kenneth M. McClevey Tom F. Woods
Electricity	Dean Fennell Tom F. Woods
International:	Wayne Dameron Hal Steinberg

This publication is available on an annual subscription basis from the Superintendent of Documents, U.S. Government Printing Office. An order form is enclosed for your convenience. Send order form and payment to:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Order Desk (202) 783-3238

Annual Subscription—
Domestic—$28.00/year–$41.00/year 1st class
Foreign—$35.00/year

Single Copy—
Domestic—$3.00/copy
Foreign—$3.75/copy

For questions on energy statistics or information on availability of other EIA publications, contact:

U.S. Department of Energy
Energy Information Administration
National Energy Information Center, EI–20
Forrestal Building
Washington, D. C. 20585
(202) 252-8800

Released for printing: September 21, 1981

Contents

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

The *Monthly Energy Review* presents current data and trends for production, consumption, stocks, imports, exports, and prices for the principal energy commodities in the United States. Also included are data on international production of crude oil, consumption of petroleum products and production of electricity from nuclear powered facilities. This report is published to keep the public and other interested parties fully informed with respect to current energy production, consumption, stocks, and prices.

Publication of this report is in keeping with responsibilities given the Energy Information Administration in Public Law 95–91 (Section 205 (a)(2)) that states:

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

From time-to-time an article that addresses some facet of energy is included in this publication. Feature articles that have appeared in previous issues are as follows:

INFORMATION SERVICES OF THE ENERGY INFORMATION ADMINISTRATION

BY

THOMAS P. McCARLEY

NATIONAL ENERGY INFORMATION CENTER

The Energy Information Administration (EIA) was created by the Department of Energy Organization Act as a part of the Department of Energy with the responsibility to collect, validate, and distribute energy information for decisionmaking purposes independently of those who determine policy. To fulfill this responsibility, the EIA provides a broad information program with a variety of services:

- Gathers, validates, and analyzes energy data.
- Prepares and distributes statistical EIA publications. Some of these are designed to provide information to a wide audience, while others are more technical and of interest to a relatively small audience of energy professionals.
- Provides energy information through an inquiry service which was established to answer questions about energy statistics from Government, industry, academia, and the public.
- Offers energy information services, such as bibliographic data files, data tapes, microfiche, and directories, to encourage and facilitate the use of energy information and information services, and offers training in the use of data publications.

This article describes EIA publications and information services.

Publications—Analytical and Data

The EIA publishes national and international energy statistics on all major fuels, including data on production, consumption, price, stocks, imports, and exports. These resulting publications represent approximately 350 separate titles, issued since 1977, including both specialized and general periodicals and one-time statistical and analytical reports. In 1980, EIA published 148 separate titles including 64 one-time specialized reports. Most EIA publications are available on a subscription or single-copy basis through the Government Printing Office and its bookstores across the country.

Energy analysis publications concentrate on investigations of a limited energy topic, such as energy expenditures by elderly households or the impact of rail transportation costs on coal production. The analysis publications are divided into two groups: Analysis Reports, which are systematic studies that present conclusions about energy system prices, quantities, and possible social, economic, and environmental impacts; and Technical Reports, which compare alternative forecasts and discuss methodology, assumptions, and results. During 1980, the EIA continued to publish analyses of the impact of various Government policies such as energy taxes, and regulations on energy production, distribution, and consumption.

The EIA projections of the future energy situation cover world and national energy supply and demand in the short term (1981–1982), the midterm (1985–1995), and the long term (2000–2020). Computer models, combined with analytical judgment, are used to generate these projections. The EIA documents the data and methodologies used in these models and makes them available to the public. Principal among these analytical publications are the *Short-Term Energy Outlook* and Volume Three of the *EIA Annual Report to Congress.*

Another category of EIA publication is special contractor reports. These reports, both data and analyses, cover various topics such as price controls and model documentation, and are sponsored by the EIA, but do not necessarily reflect EIA's views. Examples of some EIA one-time publications include: *The Use of Federal Lands for Energy Development, An Analysis of Petroleum Company Investments in Non-Petroleum Energy Sources,* and *Evaluation of Effects of Alternative Western Freight Rates for Coal.*

Data reports often contain historical tables along with timely statistics on a particular subject such as petroleum. EIA's most popular data publication is the *Monthly Energy Review* (MER). It provides a

summary of supply, demand, and price for all fuels. The MER is of general interest and is used often as a reference tool. Data for the *MER* are derived from numerous other EIA fuel specific periodicals such as *Cost and Quality of Fuels to Electric Utility Plants, Monthly Petroleum Statistics Report, Monthly Petroleum Product Price Report, Weekly Coal Production Report, Electric Power Monthly,* and *Natural and Synthetic Gas*. For these specialized periodicals, EIA gathers very specific subject data, publishes them in detail, revises and updates them as statistics change or are finalized.

National Energy Information Center Services

Each month, the EIA's National Energy Information Center (NEIC) answers over 3,500 inquiries from citizens, commercial establishments, industry, academia, and various parts of the Government. These inquiries come into NEIC in various ways—people ask questions over the telephone, they come into the NEIC Public Access Room, and they send letters, often through their Representatives in Congress. To answer these questions, EIA specialists rely on over 350 energy publications and directories in the NEIC Public Information Center, Room 1F-048 of the Forrestal Building, in Washington, D.C.

The Federal Energy Data Index (FEDEX)

The EIA has developed a bibliographic retrieval system that helps researchers easily locate the energy publications that address specific subject areas. This system is called the Federal Energy Data Index and is commonly known as FEDEX. The FEDEX system can access references to data in EIA publications down to the table and graph level. FEDEX currently has 2,930 different data citations, or references; the system includes the indexes to 389 publication titles and 2,541 references to graphs and tables. As new EIA publications are created or ongoing ones are updated, FEDEX entries are revised. The content of the entire data base is revised each quarter. Future plans are for updates to be made on a monthly basis.

FEDEX can be accessed by DOE employees, DOE contractors, and other Federal agencies through the DOE/RECON system which is provided by the Technical Information Center (TIC) of Oak Ridge, Tennessee (Technical Services Branch, U.S. Department of Energy, P.O. Box 62, Oak Ridge, Tennessee 37830). Bibliographic Retrieval Services, Inc. (BRS)—a commercial data-base vendor provides the BRS/USERLINE system to data users outside of Government (Corporation Park, Building 702, Scotia, New York 12303). Anyone may subscribe to the BRS/USERLINE system. FEDEX is also available to all commercial data-base vendors through the National Technical Information Service (NTIS), Springfield, Virginia. In addition to searching FEDEX on-line, individual searches are available from the National Energy Information Center Affiliate of the University of New Mexico by calling (505) 846-2375. For the researcher or inquirer who wants to learn more about how to use FEDEX, there are user manuals available from BRS and TIC. EIA also provides training on the DOE/RECON and the BRS/USERLINE systems.

The FEDEX system generates two EIA publications to aid those who do not have access to an on-line computer file. The *EIA Publications Directory: A User's Guide* contains an abstract of each EIA publication since EIA's inception in 1977. The *EIA Data Index: An Abstract Journal,* published semiannually, contains abstracts of all graphs and tables in all EIA publications. Both of these publications are arranged by broad subject category such as petroleum, and indexed by specific subject terms such as domestic supply. The *EIA Publications Directory* is issued as an annual compilation and is updated on a quarterly basis.

Public Use Energy Data Base

EIA has developed a broad base of energy data and energy-related data, the Public Use Energy Data Base. It is intended to be used as an aid in the analyses of energy issues by providing a quick means of locating and accessing EIA and non-EIA data.

The information in this data base is organized in six sections: petroleum, natural gas, coal, electricity generation (utilities), energy indicators, and economic variables. The first four sections contain series that measure domestic resources, reserves, production, imports, exports, changes in stock levels, sales, and prices at various levels in the supply chain. Variables associated with end-use consumption are contained in the sections on energy indicators, such as average miles per gallon traveled, and economic variables, such as price or quantity.

Depending on the time series, the data are available monthly, quarterly, and/or annually. Coverage of the monthly data begins in January 1977, the quarterly data begins in the first quarter of 1975, and the annual data starts in 1949. The Public Use Energy Data Base is available on computer tape and

is updated quarterly. Annual subscriptions to the tape are available from the National Technical Information Service.

EIA User Services

The EIA's National Energy Information Center provides training sessions throughout the year in Washington, D.C., and in Albuquerque, New Mexico. These sessions cover EIA information services, using EIA publications, and FEDEX searching. The 2-day course instructs participants in the use and range of EIA publications in all fuel areas, the structure of the FEDEX data base, along with FEDEX searching strategies and file contents. The course provides the participant with hands-on experience in performing on-line information searches. Information on registering for the course is available from the National Energy Information Center.

Many researchers are interested in EIA data collection forms. Single copies of data collection forms are available through NEIC. The EIA also publishes a quarterly *Data Collection Forms Directory*, which has abstracts of all information-collection forms used by EIA and indicates EIA publication(s) in which the data gathered on each form are presented.

The most popular general EIA publication, the quarterly *Energy Information Directory*, identifies energy information sources in the Department of Energy and in other Federal and State agencies. It gives a brief description of each office and a key word index.

NEIC publishes the monthly *EIA Publications: New Releases*, a quick reference listing and description of the most recent titles released by EIA. This flyer is available on free subscription through NEIC.

All EIA publications and data collection forms are currently available on microfiche. The microfiche copies are distributed to Government Depository Libraries throughout the Nation which elect to receive this material through the Government Printing Office (GPO). In addition, many EIA publications can be purchased from NTIS. There is generally a 2-month delay from the time a report is published until it is available in microfiche at NTIS. Data tapes for some EIA publications are also available through NTIS.

EIA also publishes Energy Fact Sheets, one-page flyers that focus on one aspect of a particular fuel or new energy trend based on information from EIA publications. Eighteen are now in print, and more are planned. Other publications of general interest include "Coal at a Glance," a quick reference brochure-type publication, *Coal Data: A Reference*, a more detailed collection of general coal information, and the "Weekly Oil Update." The "Weekly Oil Update" is a one-page flyer summarizing the pertinent facts and trends in the petroleum situation world-wide with concentration on the United States. The "Weekly Oil Update" along with the other EIA publications are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or call (202) 783-3238.

For those interested in further information on services described in this article, write or call the National Energy Information Center, U.S. Department of Energy, Forrestal Building, IF-048, 1000 Independence Avenue, S.W., Washington, D.C. 20585. The telephone number is (202) 252-8800; for those living west of the Mississippi River, the number is (505) 846-2375. EIA's goal is to provide the public with the timeliest energy data and information possible through training courses on both the east and west coasts, an energy hot line [(202) 252-8800], a public access room, microfiche, data tapes, and a wide variety of energy publications including flyers and directories.

Part 1 Executive Summary

Overview

Introduction

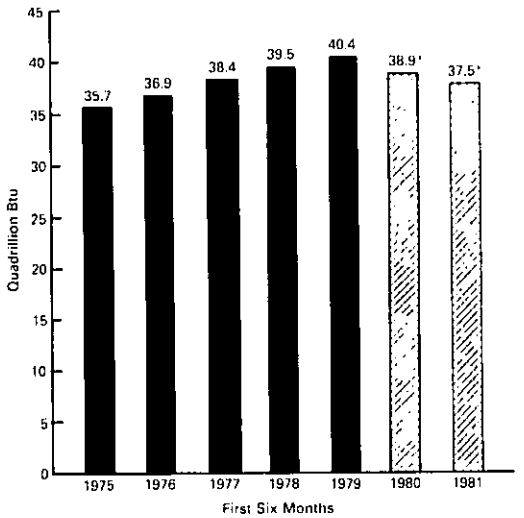
This issue of the *Monthly Energy Review* contains energy summary data for the first 6 months of 1981. Domestic energy consumption for the first 6 months of this year decreased compared to the same period of the previous year. Despite a concurrent decline in domestic energy production, the portion of domestic energy consumption supplied by imports decreased for the fourth year in a row. The level of U.S. net imports of energy also decreased for the fourth successive year.

Consumption

Total U.S. consumption of energy during the first half of 1981 dropped by 3.0 percent* from the level during the comparable 1980 period to 37.5 quadrillion Btu (see Figure 1 and page 3). Petroleum consumption dropped 6.7 percent and natural gas use decreased 3.6 percent. Coal consumption was 5.4 percent higher than the January through June 1980 total. The increase in coal consumption was due primarily to electric utilities' shifting from petroleum to coal in the production of electricity. Energy from other sources (hydroelectric, nuclear, and geothermal power, electricity produced from wood and waste, and net imports of electricity and coal coke) decreased 0.2 percent from the level of the first half of 1980.

*All percentage increases/decreases are on a daily rate basis to remove impact of 1980 leap year.

Figure 1. Domestic Energy Consumption



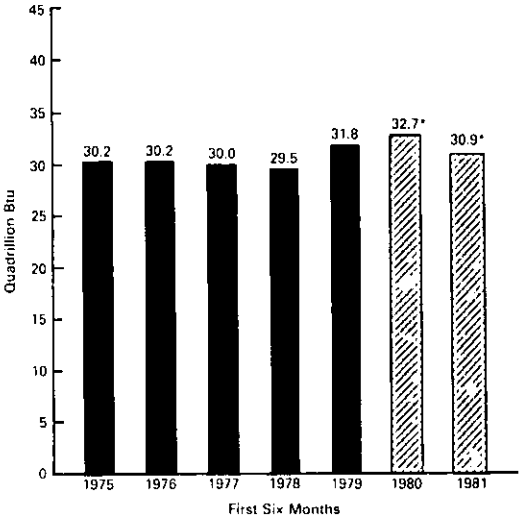
*Preliminary data.

Production and Resource Development

During the first 6 months of 1981, domestic energy production totaled 30.9 quadrillion Btu, 5.2 percent below the same period in 1980 (see Figure 2 and page 3). This decline is attributed principally to a 15.4 percent decrease in coal production during the strike-dominated first half of 1981. Coal provided 25.8 percent of the total U.S. energy production during the first 6 months of 1981, down from a 28.9 percent share during the first half of 1980. Smaller decreases in the production of natural gas (1.3 percent), petroleum (0.9 percent), and all other forms of energy combined (0.3 percent) further contributed to the overall decline. Net production of electricity by utilities was 1.2 percent above the first half of 1980 rate. Nuclear electricity production was up 12.2 percent. Nuclear power accounted for 11.4 percent of U.S. electricity generation, up from a 10.3 percent share during the comparable 1980 period (page 66).

Exploration for petroleum and natural gas increased to record levels during the first half of 1981 (page 56). In June 1981, 3,926 drilling rigs were in operation, the highest U.S. rig count to that date. This was a 37.8 percent increase over the June 1980 level. The 6,922 total well completions reported for June 1981 was an all-time monthly high and was 39.5 percent above the June 1980 level. During the first 6 months of 1981, 34,051 wells were completed, 28.2 percent above the first half of 1980 level. The total footage of wells completed amounted to 157.5 million feet, 24.7 percent higher than the January through June 1980 total.

Figure 2. Domestic Energy Production



*Preliminary data

Imports

Net U.S. energy imports (total imports less exports) declined for the fourth consecutive year (see Figure 3 and page 3). Net energy imports totaled 5.1 quadrillion Btu during the first half of 1981, 24.6 percent below the comparable 1980 level. This decrease is attributed primarily to a 21.4 percent decline in net imports of natural gas, a 20.2 percent drop in net imports of oil (crude and refined petroleum products), and a 9.2 percent increase in coal exports. The cost of net energy imports during the first half of 1981 was about $39.0 billion, down 3.1 percent from the first half 1980 cost of $40.3 billion. Net energy imports were equivalent to 13.5 percent of U.S. energy consumed during the first half of 1981, down from 17.4 percent during the first 6 months of 1980. Figure 4 displays the trend in the percent of domestic energy consumption met by net energy imports for the first 6 months of 1975 through 1981.

Total U.S. direct petroleum imports from Organization of Petroleum Exporting Countries (OPEC) nations for the first half of 1981 were 25.5 percent below imports during the same period in 1980 (page 36). Most of this decline was due to a 22.8 percent decrease in imports from Saudi Arabia resulting in a reduction of about 309,000 barrels per day. Declines in imports from the United Arab Emirates of 71.6 percent (164,000 barrels per day) and from "Other OPEC" nations, primarily Iraq, of 52.5 percent (84,000 barrels per day) also contributed to the overall reduction in imports. Imports from all non-OPEC nations also declined during the first 6 months of 1981, dropping by 7.8 percent from the comparable 1980 period (page 37).

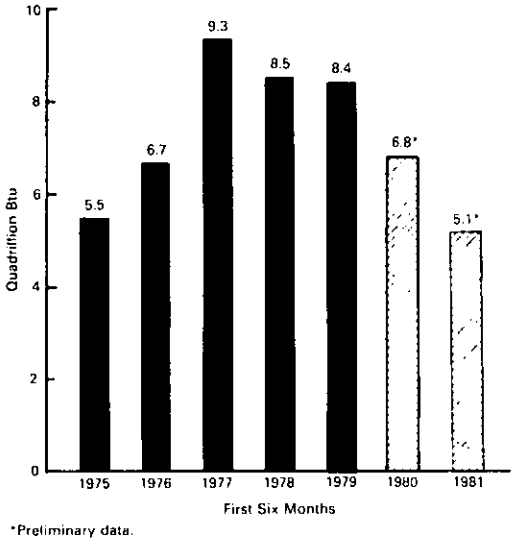
Stocks

Primary crude oil stocks totaled 385.7 million barrels at the end of June 1981, 0.9 percent higher than the June 30, 1980, level (page 32). Coal stocks held by electric utilities as of June 30, 1981, totaled 144.5 million tons, down 19.2 percent from the June 1980 level (page 63). Working gas (gas available for withdrawal) in underground natural gas storage at the end of June 1981 totaled 2.3 trillion cubic feet, 0.9 percent lower than the level a year earlier (page 54).

Prices of Selected Commodities

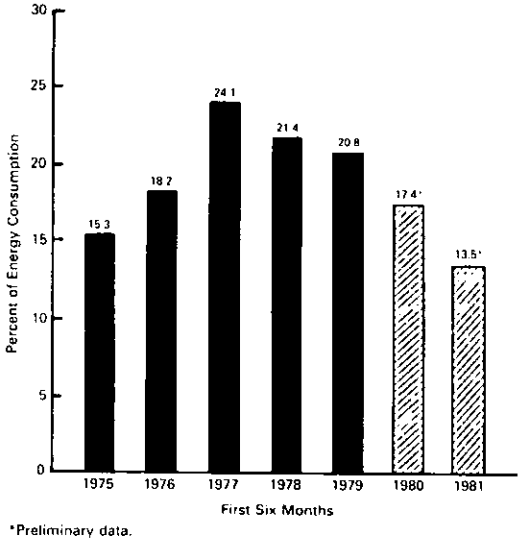
Prices paid by refiners for domestic crude oil increased during February and March 1981 after the decontrol of crude oil on January 28, 1981, but then tapered down in April and May (page 78). The composite price of imported and domestic crude oil purchased by refiners averaged $36.13 per barrel in May 1981, up $1.27 (3.6 percent) from the average price in January 1981. The imported crude oil price averaged $37.86 per barrel and the domestic crude oil price averaged $35.20 per barrel in May 1981.

Figure 3. U.S. Net Imports of Energy



*Preliminary data.

Figure 4. Percent of Domestic Energy Consumption met by Net Energy Imports

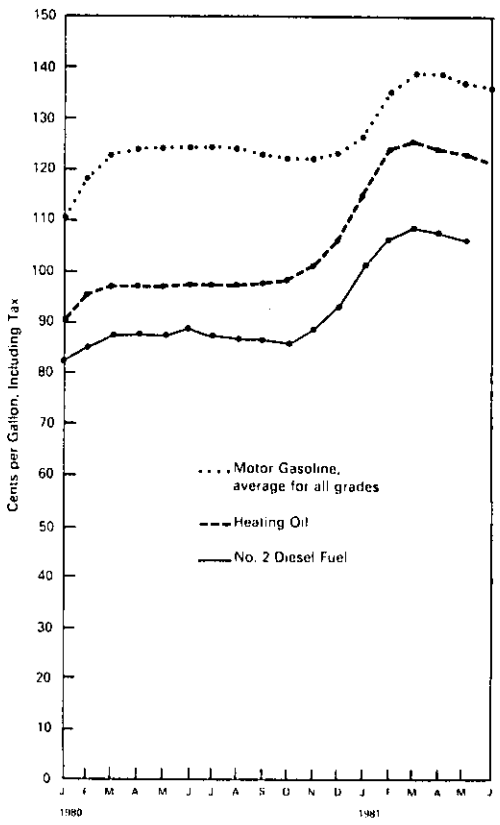


*Preliminary data.

Coal purchased by electric utilities in May 1981 cost 146.7 cents per million Btu,10.1 percent above the May 1980 price (page 88). Residential purchases of natural gas rose 16.0 percent between May 1980 and May 1981 (page 87).

Average retail prices of petroleum products climbed between January 1980 and March 1981, then began declining in April 1981 (see Figure 5). The average price of motor gasoline (all grades) rose 9.3 percent from 124.6 cents per gallon in June 1980 to 136.2 cents per gallon in June 1981. The average retail price of home heating oil in June 1981 of 121.1 cents per gallon was 23.2 cents per gallon higher (23.7 percent) than the rate a year earlier. The average retail price of diesel fuel was 106.8 cents per gallon in May 1981, a 19.0 cent increase from the May 1980 price (page 79).

Figure 5. Average Retail Prices of Selected Petroleum Products



ENERGY SUMMARY (Quadrillion (10^{15}) Btu)

	June			Cumulative January through June				
	1981	1980	Percent Change	1981	1981 Daily Rate	1980	1980 Daily Rate	Percent Change*
Total Production	**5.224**	**5.335**	**−2.1**	**30.872**	**0.171**	**32.730**	**0.180**	**−5.2**
Petroleum[1]	1.696	1.672	+1.4	10.137	0.056	10.288	0.057	−0.9
Natural Gas	1.593	1.552	+2.6	9.906	0.055	10.091	0.055	−1.3
Coal	1.419	1.612	−12.0	7.953	0.044	9.448	0.052	−15.4
Other[2]	0.516	0.499	+3.6	2.877	0.016	2.903	0.016	−0.3
Total Consumption	**5.822**	**5.709**	**+2.0**	**37.547**	**0.207**	**38.908**	**0.214**	**−3.0**
Petroleum[3]	2.611	2.672	−2.3	16.061	0.089	17.314	0.095	−6.7
Natural Gas	1.317	1.279	+3.0	10.515	0.058	10.972	0.060	−3.6
Coal	1.365	1.245	+9.6	7.998	0.044	7.629	0.042	+5.4
Other[4]	0.529	0.512	+3.4	2.972	0.016	2.993	0.016	−0.2
Net Imports	**0.756**	**0.923**	**−18.1**	**5.080**	**0.028**	**6.778**	**0.037**	**−24.6**
Petroleum[5]	0.845	1.087	−22.3	5.705	0.032	7.188	0.039	−20.2
Natural Gas	0.060	0.060	+0.1	0.421	0.002	0.538	0.003	−21.4
Coal	(0.162)	(0.237)	(−31.6)	(1.141)	(0.006)	(1.037)	(0.006)	(+10.6)
Other[6]	0.013	0.013	+2.0	0.096	0.001	0.090	0.000	+6.2

Totals may not equal sum of components due to independent rounding.
Parentheses indicate exports are greater than imports.
* Based on daily rates in order to remove the influence of leap year.
[1] Includes crude oil, lease condensate, and natural gas plant liquids.
[2] Includes hydroelectric, nuclear, and geothermal power and electricity produced from wood and waste.
[3] Includes refined petroleum products and natural gas plant liquids.
[4] Includes hydroelectric, nuclear, and geothermal power, electricity produced from wood and waste, and net imports of electricity and coal coke.
[5] Includes crude oil, lease condensate, refined petroleum products, unfinished oils, natural gasoline, plant condensate, and imports of crude oil for the Strategic Petroleum Reserve.
[6] Includes net imports of electricity and coal coke.

Executive Summary

Energy Summary

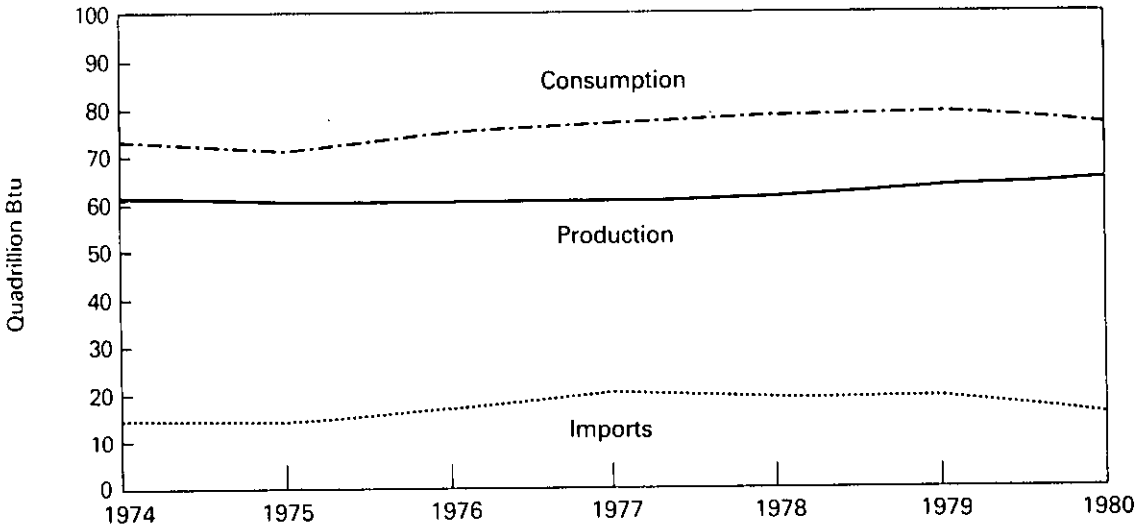
		Energy Production[1]	Energy Consumption[2]	Energy Imports[3]	Energy Exports[4]
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**62.433**	**74.609**	**14.732**	**2.073**
1974	**TOTAL**	**61.229**	**72.759**	**14.417**	**2.241**
1975	**TOTAL**	**60.059**	**70.707**	**14.113**	**2.389**
1976	**TOTAL**	**60.091**	**74.510**	**16.838**	**2.213**
1977	**TOTAL**	**60.293**	**76.332**	**20.092**	**2.097**
1978	**TOTAL**	**61.204**	**78.150**	**19.262**	**1.952**
1979	**TOTAL**	**63.907**	**78.968**	**19.622**	**2.900**
1980	January	5.598	7.423	1.652	0.227
	February	5.246	7.018	1.459	0.208
	March	5.634	6.906	1.489	0.266
	April	5.396	6.021	1.320	0.295
	May	5.521	5.831	1.277	0.346
	June	5.335	5.709	1.288	0.365
	July	5.185	5.957	1.174	0.328
	August	5.276	5.847	1.188	0.319
	September	5.240	5.798	1.160	0.335
	October	5.431	6.168	1.237	0.376
	November	5.275	6.288	1.227	0.347
	December	5.612	7.235	1.359	0.343
	TOTAL	**64.748**	**76.201**	**15.830**	**3.756**
1981	January	5.449	R7.399	1.323	0.263
	February	5.200	R6.321	1.181	0.279
	March	5.660	R6.413	1.158	0.373
	April	4.628	5.808	1.086	0.328
	May	R4.713	R5.783	1.097	0.278
	June	5.224	5.822	1.005	0.249
	TOTAL (Year-to-date)	**30.872**	**37.547**	**6.850**	**1.770**

Geographic coverage: the 50 United States and District of Columbia.
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.

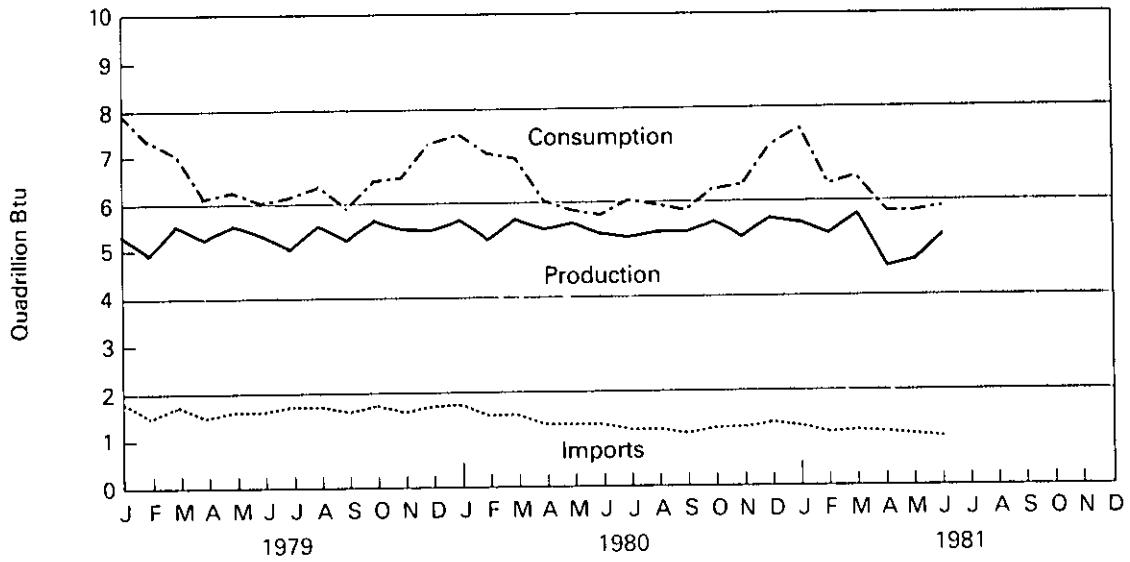
Executive Summary

Energy Summary

Yearly



Monthly



Executive Summary

Production of Energy by Type

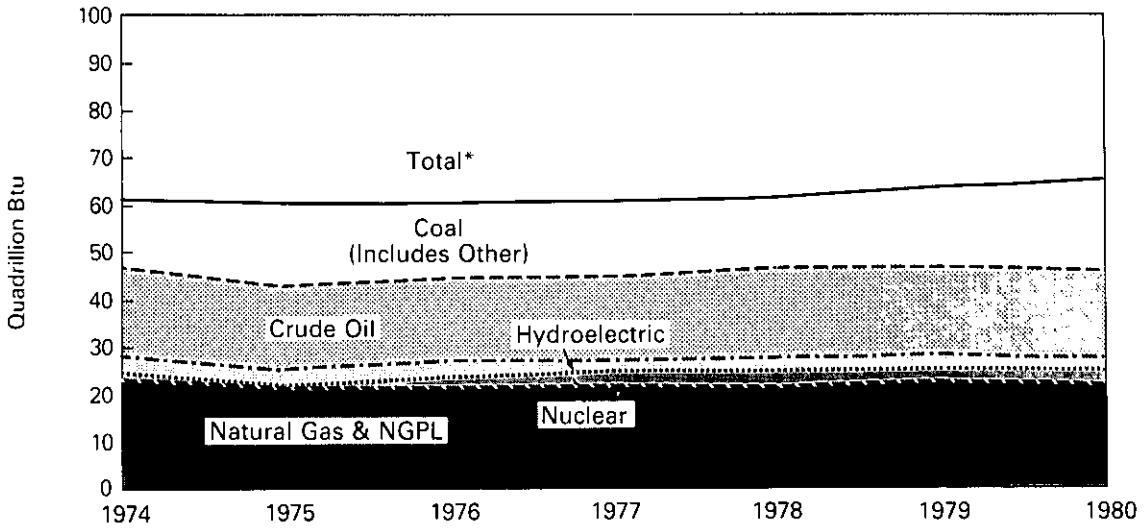
		Coal[1]	Crude Oil[2]	NGPL[3]	Natural Gas (Dry)	Hydro-electric Power[4]	Nuclear Electric Power	Other[5]	Total Energy Produced	Yearly Cumulative Energy Produced
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**14.366**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**62.433**	
1974	**TOTAL**	**14.468**	**18.575**	**2.471**	**21.210**	**3.177**	**1.272**	**0.056**	**61.229**	
1975	**TOTAL**	**15.189**	**17.729**	**2.374**	**19.640**	**3.155**	**1.900**	**0.072**	**60.059**	
1976	**TOTAL**	**15.853**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**60.091**	
1977	**TOTAL**	**15.829**	**17.454**	**2.327**	**19.565**	**2.333**	**2.702**	**0.082**	**60.293**	
1978	**TOTAL**	**15.037**	**18.434**	**2.245**	**19.485**	**2.958**	**2.977**	**0.068**	**61.204**	
1979	**TOTAL**	**17.651**	**18.104**	**2.286**	**20.076**	**2.954**	**2.748**	**0.089**	**63.907**	
1980	January	1.573	1.555	0.202	1.782	0.267	0.213	0.008	5.598	5.598
	February	1.481	1.463	0.189	1.672	0.226	0.208	0.008	5.246	10.845
	March	1.603	1.566	0.192	1.791	0.257	0.216	0.008	5.634	16.478
	April	1.574	1.512	0.193	1.635	0.272	0.202	0.008	5.396	21.874
	May	1.605	1.553	0.191	1.659	0.305	0.198	0.010	5.521	27.395
	June	1.612	1.487	0.185	1.552	0.292	0.197	0.009	5.335	32.730
	July	1.385	1.538	0.186	1.582	0.258	0.226	0.010	5.185	37.915
	August	1.546	1.514	0.186	1.542	0.216	0.262	0.011	5.276	43.191
	September	1.555	1.500	0.179	1.547	0.195	0.254	0.010	5.240	48.430
	October	1.634	1.535	0.184	1.615	0.189	0.264	0.011	5.431	53.861
	November	1.551	1.479	0.186	1.619	0.203	0.226	0.011	5.275	59.137
	December	1.630	1.548	0.191	1.759	0.235	0.238	0.011	5.612	64.748
	TOTAL	**18.749**	**18.250**	**2.263**	**19.754**	**2.913**	**2.704**	**0.114**	**64.748**	
1981	January	1.482	1.537	0.196	1.735	0.236	0.252	0.011	5.449	5.449
	February	1.593	1.398	0.182	1.561	0.223	0.233	0.010	5.200	10.648
	March	1.750	1.542	0.191	1.711	0.218	0.237	0.011	5.660	16.308
	April	0.874	1.473	0.186	1.643	0.219	0.222	0.010	4.628	20.936
	May	0.836	1.538	0.198	R1.663	0.255	0.212	0.010	R4.713	R25.649
	June	1.419	1.498	0.198	1.593	0.278	0.228	0.010	5.224	30.872
	TOTAL (Year-to-date)	**7.953**	**8.987**	**1.150**	**9.906**	**1.430**	**1.384**	**0.063**	**30.872**	

Geographic coverage: the 50 United States and District of Columbia.
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.

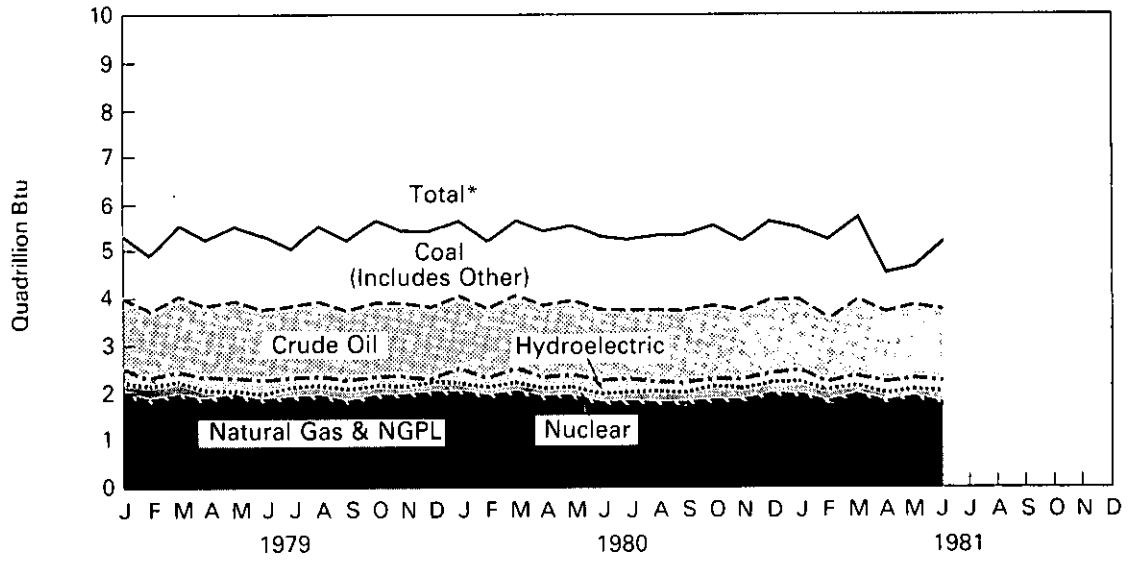
Executive Summary

Production of Energy by Type

Yearly



Monthly



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

Executive Summary

Consumption of Energy by Type

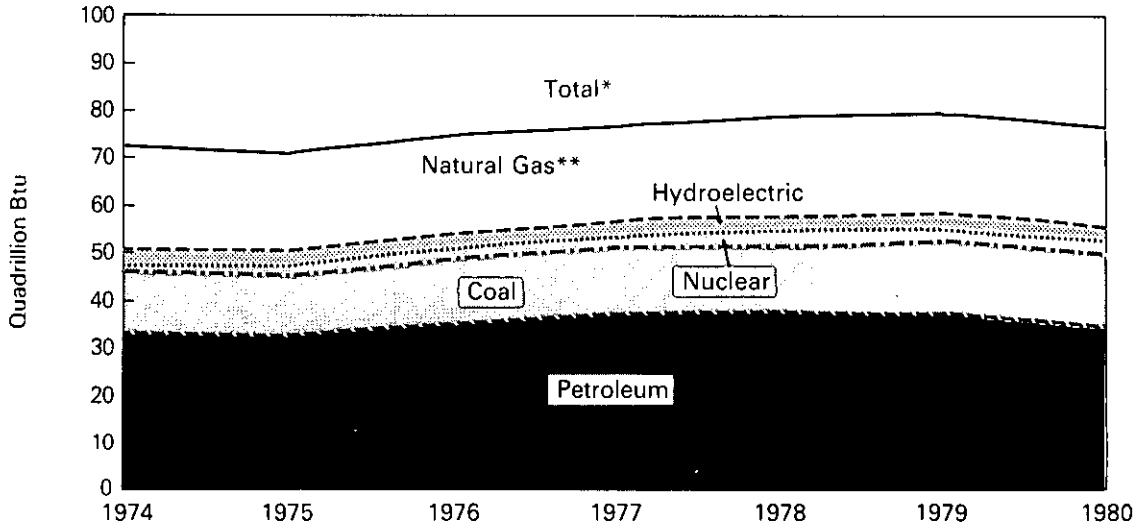
		Coal[1]	Natural Gas (Dry)	Petroleum	Hydroelectric Power[2]	Nuclear Electric Power	Net Imports of Coal Coke[3]	Other[4]	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**13.300**	**22.512**	**34.840**	**3.010**	**0.910**	**(0.008)**	**0.046**	**74.609**	
1974	**TOTAL**	**12.876**	**21.732**	**33.455**	**3.309**	**1.272**	**0.059**	**0.056**	**72.759**	
1975	**TOTAL**	**12.823**	**19.948**	**32.731**	**3.219**	**1.900**	**0.014**	**0.072**	**70.707**	
1976	**TOTAL**	**13.733**	**20.345**	**35.175**	**3.066**	**2.111**	**0.000**	**0.081**	**74.510**	
1977	**TOTAL**	**13.965**	**19.931**	**37.122**	**2.515**	**2.702**	**0.015**	**0.082**	**76.332**	
1978	**TOTAL**	**13.846**	**20.000**	**37.965**	**3.164**	**2.977**	**0.131**	**0.068**	**78.150**	
1979	**TOTAL**	**15.109**	**20.666**	**37.123**	**3.166**	**2.748**	**0.066**	**0.089**	**78.968**	
1980	January	1.410	2.327	3.177	0.285	0.213	0.003	0.008	7.423	7.423
	February	1.325	2.238	2.998	0.242	0.208	(0.001)	0.008	7.018	14.441
	March	1.307	2.143	2.961	0.275	0.216	(0.003)	0.008	6.906	21.347
	April	1.169	1.601	2.756	0.289	0.202	(0.005)	0.008	6.021	27.368
	May	1.173	1.383	2.749	0.323	0.198	(0.006)	0.010	5.831	33.199
	June	1.245	1.279	2.672	0.309	0.197	(0.004)	0.009	5.709	38.908
	July	1.401	1.328	2.719	0.276	0.226	(0.004)	0.010	5.957	44.865
	August	1.393	1.272	2.679	0.234	0.262	(0.003)	0.011	5.847	50.712
	September	1.272	1.326	2.727	0.213	0.254	(0.004)	0.010	5.798	56.510
	October	1.238	1.574	2.880	0.207	0.264	(0.006)	0.011	6.168	62.678
	November	1.261	1.820	2.752	0.220	0.226	(0.002)	0.011	6.288	68.966
	December	1.407	2.201	3.126	0.253	0.238	(0.001)	0.011	7.235	76.201
	TOTAL	**15.603**	**20.495**	**34.196**	**3.125**	**2.704**	**(0.037)**	**0.114**	**76.201**	
1981	January	R1.491	2.303	3.088	0.254	0.252	0.000	0.011	R7.399	R7.399
	February	R1.321	1.939	2.580	0.239	0.233	(0.001)	0.010	R6.321	R13.721
	March	R1.334	1.946	2.652	0.236	0.237	(0.003)	0.011	R6.413	R20.133
	April	1.226	1.544	2.570	0.237	0.222	(0.001)	0.010	5.808	R25.942
	May	1.261	R1.466	2.560	0.273	0.212	0.000	0.010	R5.783	R31.725
	June	1.365	1.317	2.611	0.296	0.228	(0.004)	0.010	5.822	37.547
	TOTAL (Year-to-date)	**7.998**	**10.515**	**16.061**	**1.535**	**1.384**	**(0.010)**	**0.063**	**37.547**	

Geographic coverage: the 50 United States and District of Columbia.
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]Parentheses 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.

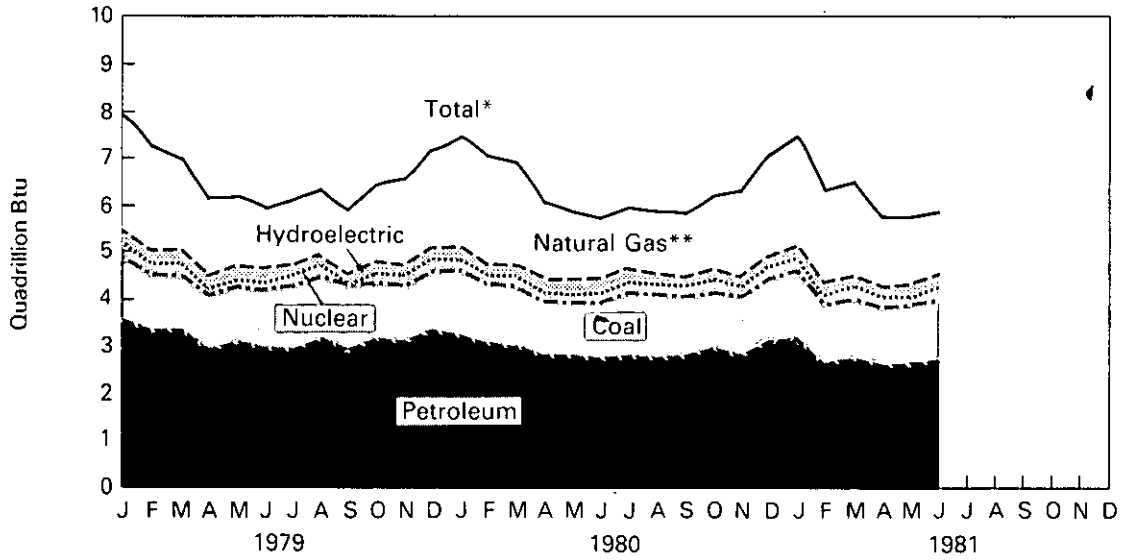
Executive Summary

Consumption of Energy by Type

Yearly



Monthly



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

Executive Summary

Net Imports of Energy by Type[1]

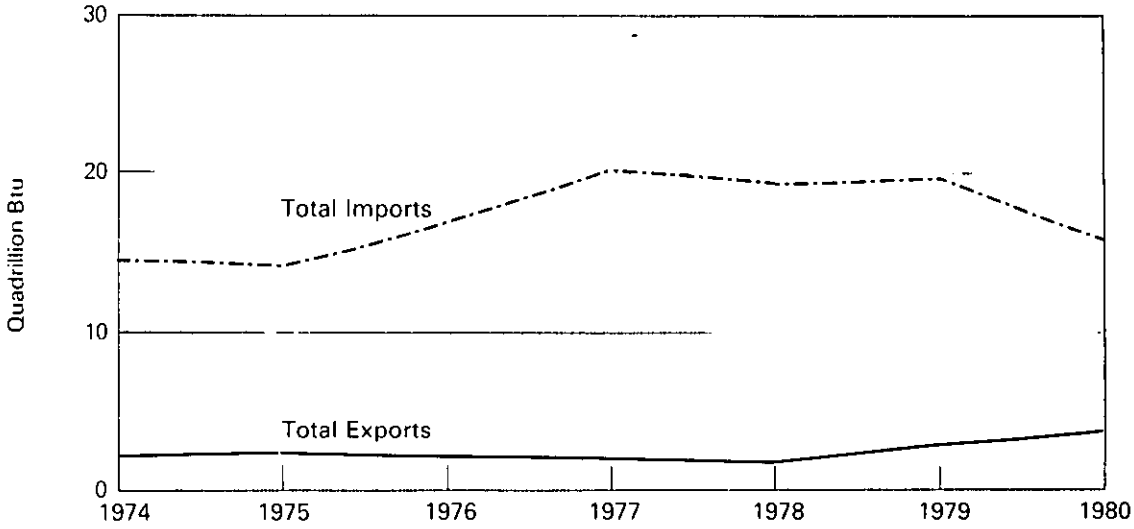
		Coal[2]	Crude Oil[3]	Refined Petroleum Products[4]	Natural Gas (Dry)	Electricity[5]	Coal Coke	Net Imports	Yearly Cumulative Net Imports of Energy
		Quadrillion (10^{15}) Btu							
1973	**TOTAL**	**(1.443)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.659**	
1974	**TOTAL**	**(1.585)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.059**	**12.175**	
1975	**TOTAL**	**(1.766)**	**8.708**	**3.800**	**0.904**	**0.064**	**0.014**	**11.725**	
1976	**TOTAL**	**(1.590)**	**11.221**	**3.982**	**0.922**	**0.089**	**0.000**	**14.625**	
1977	**TOTAL**	**(1.424)**	**13.921**	**4.321**	**0.981**	**0.182**	**0.015**	**17.995**	
1978	**TOTAL**	**(1.024)**	**13.125**	**3.932**	**0.941**	**0.206**	**0.131**	**17.310**	
1979	**TOTAL**	**(1.730)**	**13.328**	**3.603**	**1.243**	**0.212**	**0.066**	**16.722**	
1980	January	(0.117)	1.089	0.316	0.116	0.018	0.003	1.426	1.426
	February	(0.104)	0.948	0.284	0.107	0.017	(0.001)	1.251	2.676
	March	(0.150)	0.984	0.266	0.108	0.018	(0.003)	1.223	3.900
	April	(0.202)	0.931	0.207	0.077	0.017	(0.005)	1.024	4.924
	May	(0.227)	0.858	0.218	0.070	0.018	(0.006)	0.931	5.855
	June	(0.237)	0.892	0.196	0.060	0.017	(0.004)	0.923	6.778
	July	(0.221)	0.794	0.199	0.060	0.018	(0.004)	0.845	7.624
	August	(0.246)	0.837	0.205	0.059	0.018	(0.003)	0.870	8.494
	September	(0.226)	0.765	0.216	0.057	0.017	(0.004)	0.825	9.319
	October	(0.251)	0.791	0.236	0.073	0.018	(0.006)	0.860	10.179
	November	(0.242)	0.763	0.256	0.088	0.017	(0.002)	0.879	11.058
	December	(0.220)	0.847	0.276	0.097	0.018	(0.001)	1.016	12.074
	TOTAL	**(2.444)**	**10.498**	**2.873**	**0.972**	**0.212**	**(0.037)**	**12.074**	
1981	January	(0.155)	0.821	0.292	0.084	0.018	0.000	1.060	1.060
	February	(0.180)	0.750	0.237	0.079	0.016	(0.001)	0.901	1.961
	March	(0.260)	0.769	0.189	0.072	0.018	(0.003)	0.785	2.747
	April	(0.221)	0.740	0.155	0.067	0.017	(0.001)	0.758	3.504
	May	(0.162)	0.705	0.200	0.058	0.018	0.000	0.820	4.324
	June	(0.162)	0.673	0.172	0.060	0.017	(0.004)	0.756	5.080
	TOTAL (Year-to-date)	**(1.141)**	**4.459**	**1.246**	**0.421**	**0.105**	**(0.010)**	**5.080**	

Geographic coverage: the 50 United States and District of Columbia.
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 of 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 1979 are used in estimating 1980 and 1981 data until actual annual data become available for those years.
R = Revised data.
Source: •Energy Information Administration calculations based on data reported elsewhere in this publication.

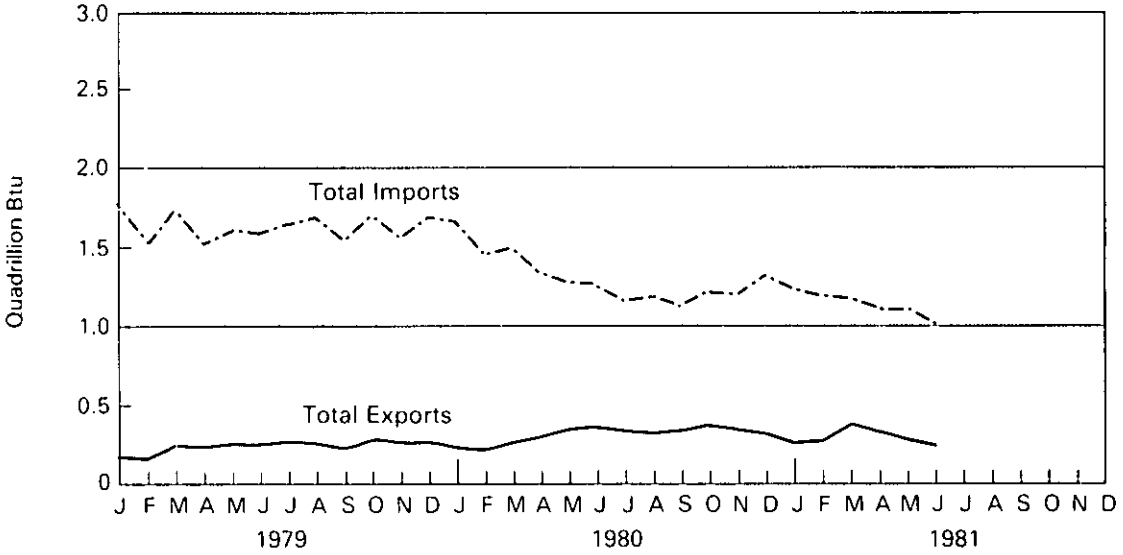
Executive Summary

Energy Imports and Exports

Yearly



Monthly



Executive Summary

Merchandise Trade Value

		Exports			Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total
		Million dollars								
1973	**TOTAL**	**1,671**	**69,202**	**70,873**	**8,173**	**61,659**	**69,832**	**-6,502**	**+7,543**	**+1,041**
1974	**TOTAL**	**3,444**	**94,553**	**97,997**	**25,454**	**75,194**	**100,648**	**-22,010**	**+19,360**	**-2,650**
1975	**TOTAL**	**4,470**	**103,119**	**107,589**	**26,476**	**70,094**	**96,570**	**-22,006**	**+33,025**	**+11,019**
1976	**TOTAL**	**4,226**	**110,924**	**115,150**	**33,996**	**87,013**	**121,009**	**-29,770**	**+23,911**	**-5,859**
1977	**TOTAL**	**4,184**	**116,966**	**121,150**	**44,537**	**103,148**	**147,685**	**-40,353**	**+13,818**	**-26,535**
1978	**TOTAL**	**3,881**	**139,696**	**143,577**	**42,096**	**129,882**	**171,978**	**-38,215**	**+9,814**	**-28,401**
1979	**TOTAL**	**5,621**	**176,030**	**181,651**	**59,998**	**146,258**	**206,256**	**-54,377**	**+29,772**	**-24,605**
1980	January	619	16,801	17,419	7,118	14,024	21,142	-6,499	+2,776	-3,723
	February	584	16,400	16,984	8,152	13,626	21,779	-7,568	+2,774	-4,794
	March	636	17,629	18,265	7,564	13,384	20,947	-6,928	+4,246	-2,682
	April	607	17,960	18,567	6,797	12,969	19,766	-6,190	+4,992	-1,198
	May	660	16,987	17,647	7,150	13,437	20,587	-6,490	+3,549	-2,941
	June	656	17,784	18,440	7,276	13,077	20,353	-6,620	+4,708	-1,912
	July	695	17,572	18,267	5,986	13,153	19,139	-5,291	+4,419	-872
	August	702	18,385	19,087	6,461	13,252	19,713	-5,759	+5,133	-626
	September	710	18,119	18,828	6,278	13,662	19,941	-5,568	+4,456	-1,112
	October	662	18,552	19,214	6,601	13,747	20,347	-5,939	+4,805	-1,134
	November	709	18,006	18,715	6,128	13,732	19,860	-5,419	+4,274	-1,145
	December	706	18,545	19,251	7,413	14,023	21,436	-6,707	+4,522	-2,185
	TOTAL	**7,982**	**212,644**	**220,626**	**82,924**	**161,947**	**244,871**	**-74,942**	**+50,698**	**-24,244**
1981	January	806	18,019	18,825	8,014	15,180	23,194	-7,208	+2,838	-4,370
	February	977	18,787	19,764	7,943	13,978	21,922	-6,966	+4,808	-2,158
	March	951	20,484	21,434	6,476	14,473	20,949	-5,525	+6,010	+485
	April	691	19,127	19,818	7,836	14,454	22,289	-7,145	+4,674	-2,471
	May	566	18,304	18,869	6,078	15,232	21,310	-5,512	+3,071	-2,441
	June	575	19,295	19,870	7,256	14,719	21,975	-6,681	+4,576	-2,105
	July	869	18,395	19,264	5,692	14,115	19,807	-4,823	+4,281	-542
	TOTAL (Year-to-date)	**5,435**	**132,409**	**137,844**	**49,295**	**102,151**	**151,446**	**-43,860**	**+30,258**	**-13,602**

Notes: The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory which includes the 50 States, the District of Columbia, and Puerto Rico. The statistics exclude imports into Guam, American Samoa, and other U.S. possessions; and shipments between the United States and Puerto Rico, between the United States and U.S. possessions, and between any of these outlying areas. Also, U.S. Virgin Island trade with foreign countries is included in all import data and total export data beginning with January 1980 and is included in energy export data beginning with January 1981. Data presented are on a free alongside ship(f.a.s.) basis except for 1973 imports which are on a customs value basis (i.e., generally at prices in principal foreign markets). Monthly data are adjusted for seasonal and working-day variation; annual data are unadjusted. Statistics include nonmonetary gold. Statistics exclude Department of Defense (DOD) Military Program Grant-Aid shipments. "All Other" and "Total" columns include foreign exports (i.e., reexports). The "Energy" columns include mineral fuels, lubricants, and related material. "Imports" represent general imports (i.e., entries for immediate consumption, entries into Customs bonded warehouses, and entries for the Strategic Petroleum Reserve). "Trade Balance" is exports minus imports: positive indicates surplus trade value and negative indicates deficit trade value. The "All Other" columns are calculated by subtracting "energy" from "total". Totals may not equal sum of components due to independent rounding.

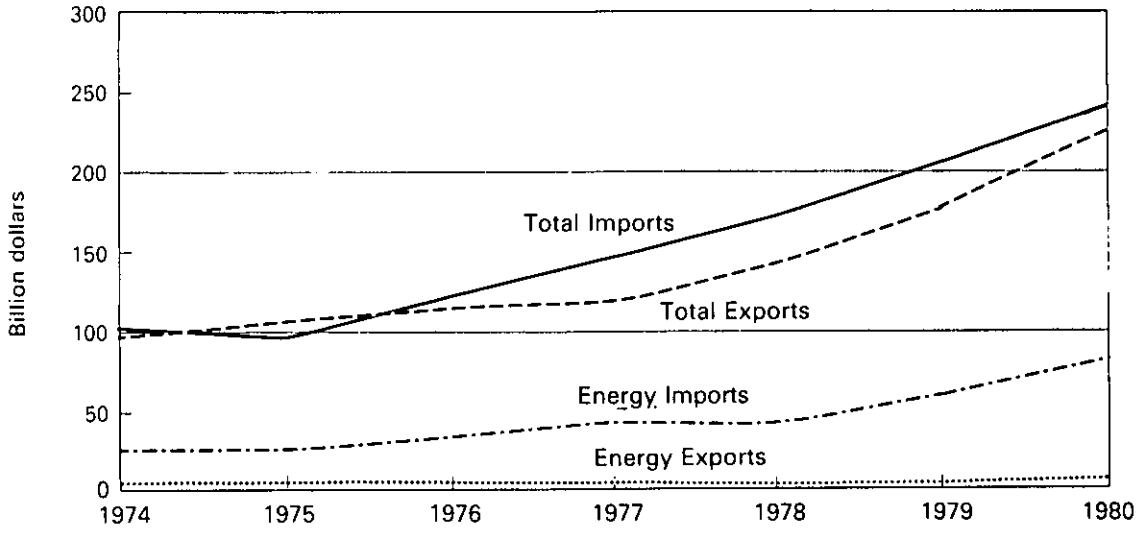
Sources: • 1973 through 1978–U.S. Department of Commerce, International Trade Administration, *Overseas Business Reports,* "United States Foreign Trade Annual 1973-1979;"

• 1979 forward–U.S. Department of Commerce, Bureau of the Census, "Summary of U.S. Export and Import Merchandise Trade," December 1980 issue for 1979 data and most recent monthly issue for 1980 and 1981.

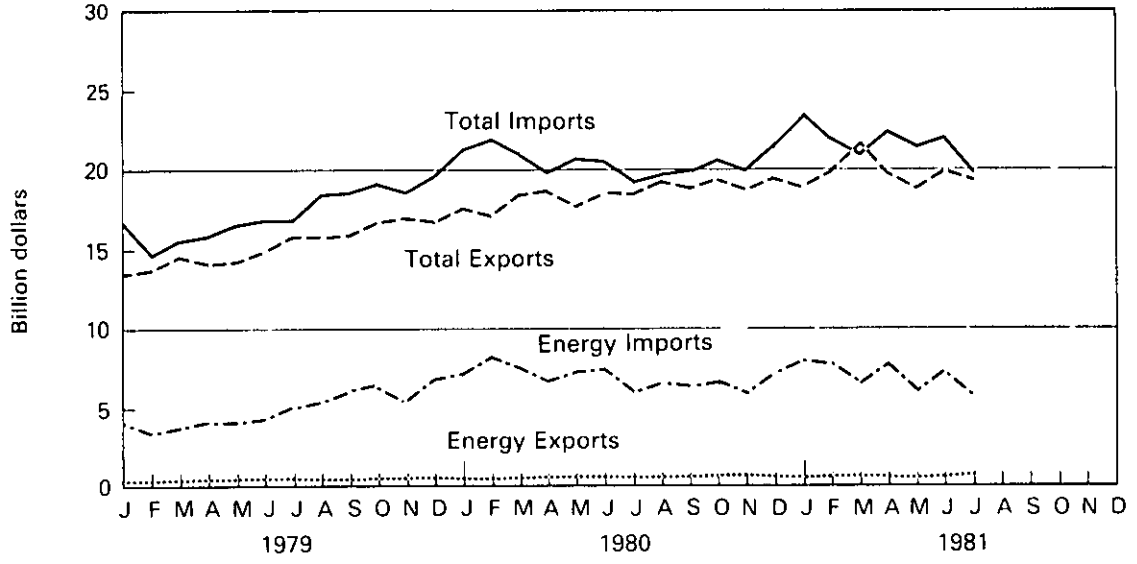
Executive Summary

Merchandise Trade Value

Yearly



Monthly



Executive Summary

Cooling Degree-Days[1]

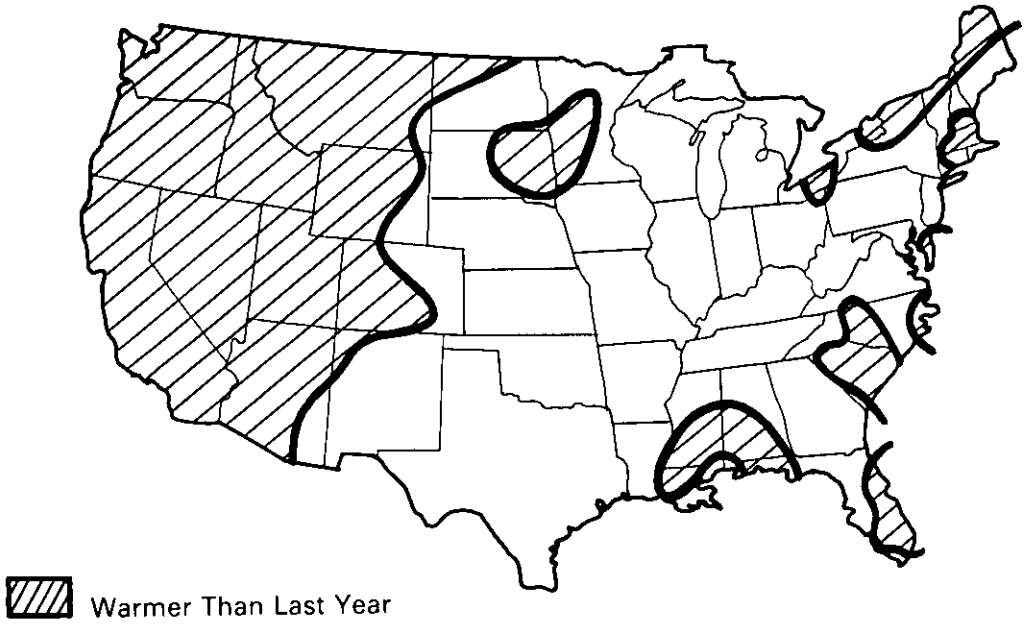
Petroleum Administration For Defense (PAD) Districts	July 27 through August 30					Cumulative January 1 through August 30				
	1981	1980[2]		Normal (1941–70)[2]		1981	1980[2]		Normal (1941–70)[2]	
PAD District I	341	358	(−5.0)	288	(18.4)	1,112	1,090	(2.0)	962	(15.6)
New England Conn., Maine, Mass., N.H., R.I., Vt.	216	303	(−28.6)	217	(−0.2)	659	674	(−2.3)	522	(26.2)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	301	230	(30.7)	180	(66.9)	865	763	(13.4)	666	(29.9)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W. Va.	455	576	(−21.0)	481	(−5.3)	1,682	1,763	(−4.6)	1,599	(5.2)
PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.	253	401	(−36.9)	305	(−17.0)	823	1,005	(−18.0)	815	(1.0)
PAD District III Ala., Ark., La., Miss., N. Mex., Tex.	610	700	(−12.9)	605	(0.7)	2,029	2,199	(−7.7)	1,928	(5.3)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	322	274	(17.5)	263	(22.4)	757	698	(8.5)	605	(25.2)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	299	270	(10.8)	233	(28.5)	894	628	(42.4)	610	(46.6)
U.S. AVERAGE[3]	**338**	**398**	**(−15.1)**	**323**	**(4.8)**	**1,088**	**1,119**	**(−2.8)**	**971**	**(12.1)**

[1]See Explanatory Note 6 for explanation of degree-days.
[2]Percentage change in parentheses.
[3]Excludes Alaska and Hawaii.

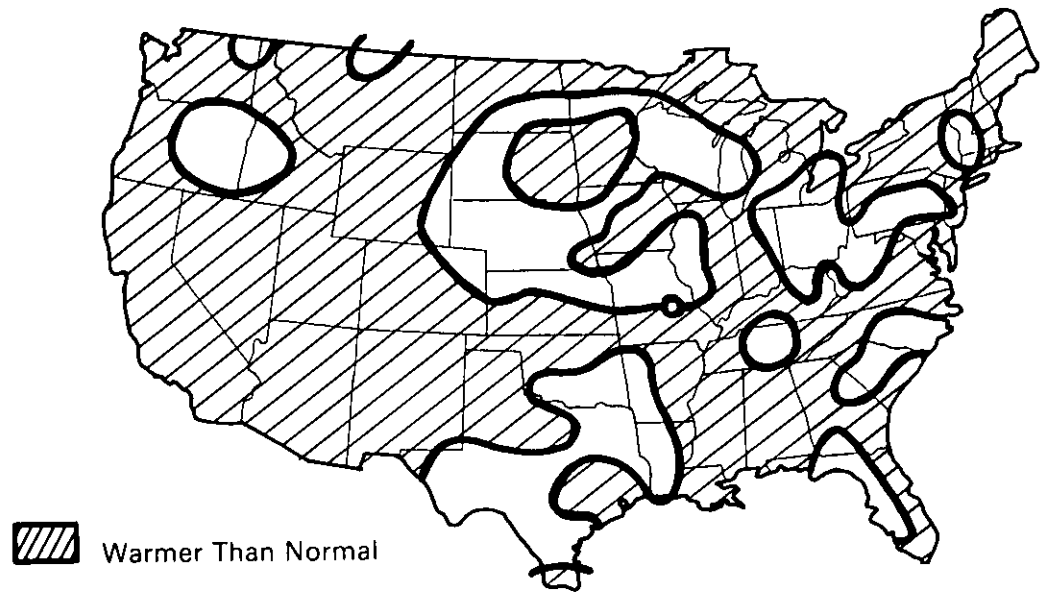
Executive Summary

Cooling Degree-Days
Cooling Degree-Days Accumulated from January 1 through August 30

Departure from Last Year



Departure from Normal



Source: • Department of Commerce — NOAA.

Executive Summary

Energy Indicators—

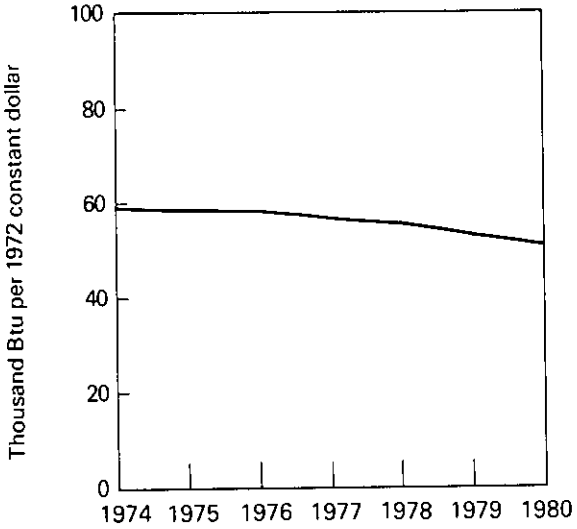
		Energy Consumption per GNP Dollar				U.S. Dependence on Petroleum Imports[3]			
				Gross National Product (Annual rate)		Direct Imports			
		Energy Consumption per GNP Dollar[1]	Yearly Rate of Energy Consumption	Current Dollars	1972 Dollars[2]	From Arab/OPEC Countries	From OPEC Countries	Total All Countries	Domestic Petroleum Products Supplied
ANNUAL RATE			Quadrillion Btu	Trillion Dollars			Million barrels per day		
1973	**AVERAGE**	**59.4**	**74.609**	**1.326**	**1.255**	**0.92**	**2.99**	**6.26**	**17.31**
1974	**AVERAGE**	**58.3**	**72.759**	**1.434**	**1.248**	**0.75**	**3.28**	**6.11**	**16.65**
1975	**AVERAGE**	**57.3**	**70.707**	**1.549**	**1.234**	**1.38**	**3.60**	**6.06**	**16.32**
1976	**AVERAGE**	**57.3**	**74.510**	**1.718**	**1.300**	**2.42**	**5.07**	**7.31**	**17.46**
1977	**AVERAGE**	**55.6**	**76.332**	**1.918**	**1.372**	**3.19**	**6.19**	**8.81**	**18.43**
1978	**AVERAGE**	**54.4**	**78.150**	**2.156**	**1.437**	**2.96**	**5.75**	**8.36**	**18.85**
1979	**AVERAGE**	**53.2**	**78.968**	**2.414**	**1.483**	**3.06**	**5.64**	**8.46**	**18.51**
1980	1st Qtr	57.2	85.857	2.572	1.502	3.00	4.97	7.90	18.27
	2nd Qtr	48.3	70.630	2.565	1.463	2.59	4.28	6.81	16.36
	3rd Qtr	47.6	70.025	2.637	1.472	2.26	3.74	6.11	16.07
	4th Qtr	52.7	78.336	2.731	1.486	2.33	4.03	6.52	17.33
	AVERAGE	**51.5**	**76.201**	**2.626**	**1.481**	**2.54**	**4.25**	**6.83**	**17.01**
1981	1st Qtr	R53.9	R81.651	R2.853	R1.516	2.04	3.78	6.40	16.83
	2nd Qtr	46.3	69.847	2.881	1.509	1.80	3.11	5.52	15.48

Geographic coverage: the 50 United States and District of Columbia.
[1]Thousand Btu per 1972 constant dollar.
[2]Current dollars are converted to 1972 constant dollars by the formula:
Constant 1972 dollars = 100(Current dollars in year N/GNP implicit price deflator in year N)
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.
Note: This page is updated every quarter, during the months of March, June, September, and December. In other months, data appearing elsewhere in this publication are more current.

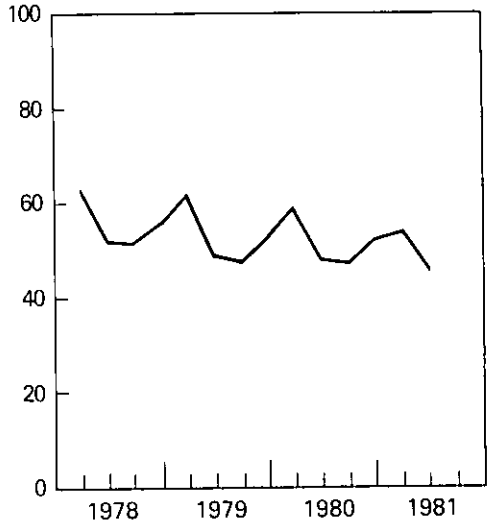
Executive Summary

Energy Consumption per GNP Dollar

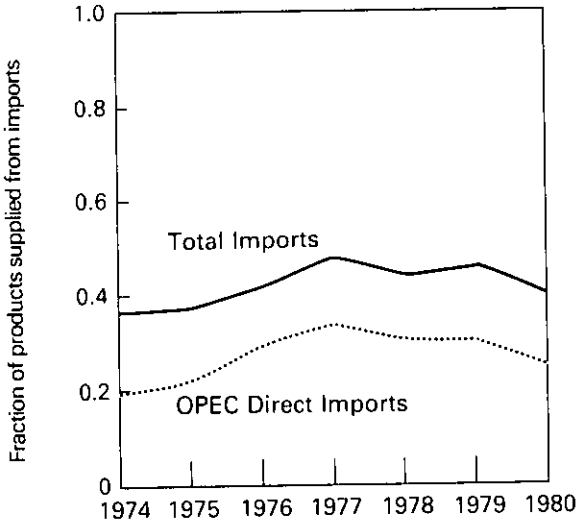
Yearly



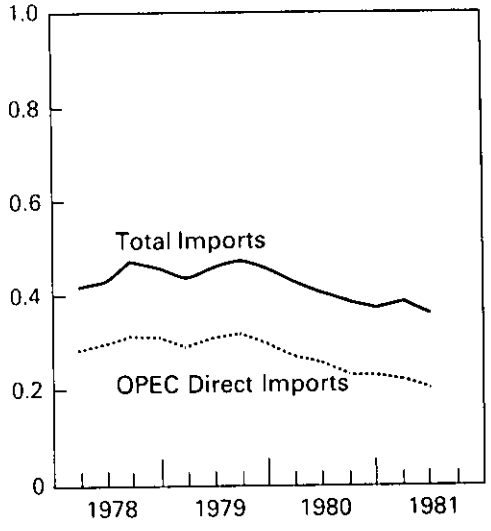
Quarterly



Yearly



Quarterly

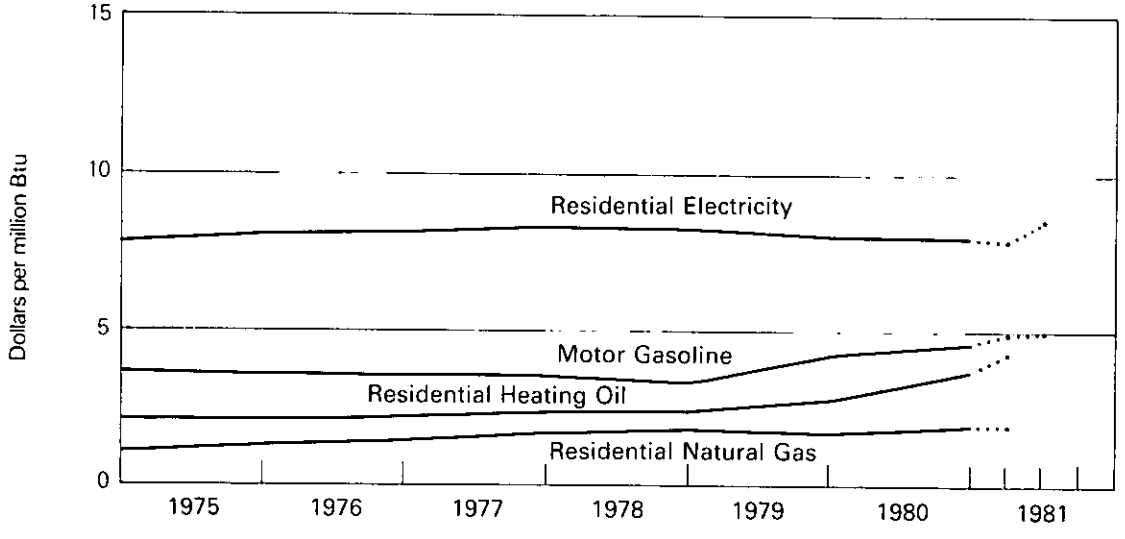


Executive Summary

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**	**NA**	**NA**	**NA**	**NA**	**121.2**	**1.19**	**2.39**	**7.00**
1974	**AVERAGE**	**45.1**	**3.61**	**29.4**	**2.12**	**121.4**	**1.19**	**2.63**	**7.71**
1975	**AVERAGE**	**44.1**	**3.53**	**29.3**	**2.11**	**132.8**	**1.30**	**2.73**	**8.00**
1976	**AVERAGE**	**43.4**	**3.47**	**29.8**	**2.15**	**145.4**	**1.43**	**2.74**	**8.03**
1977	**AVERAGE**	**42.9**	**3.43**	**31.8**	**2.29**	**162.2**	**1.59**	**2.80**	**8.21**
1978	**AVERAGE**	**40.1**	**3.21**	**31.7**	**2.29**	**164.4**	**1.62**	**2.76**	**8.09**
1979	**AVERAGE**	**49.4**	**3.95**	**37.8**	**2.73**	**171.5**	**1.68**	**2.67**	**7.83**
1980	1st Qtr	60.9	4.87	49.8	3.59	190.9	1.88	2.53	7.42
	2nd Qtr	62.1	4.97	49.8	3.59	197.2	1.94	2.75	8.06
	3rd Qtr	60.6	4.85	49.2	3.55	207.6	2.04	2.86	8.38
	4th Qtr	58.2	4.65	50.7	3.66	198.9	1.95	2.73	8.00
	AVERAGE	**60.5**	**4.84**	**49.7**	**3.58**	**198.8**	**1.95**	**2.72**	**7.97**
1981	1st Qtr	62.1	4.97	57.0	4.11	196.0	1.93	2.65	7.77
	2nd Qtr	62.1	4.97	NA	NA	NA	NA	2.91	8.53

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



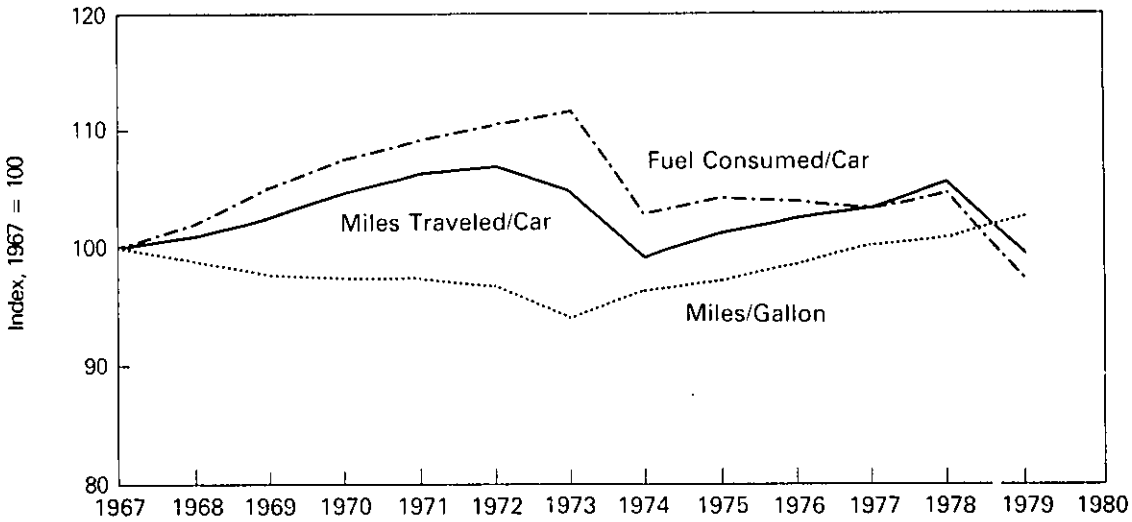
Geographic coverage: the 50 United States and District of Columbia.
NA = Not available.
Note: This page is updated every quarter, during the months of March, June, September, and December. In other months, data appearing elsewhere in this publication are more current.
Sources: • Motor Gasoline—Bureau of Labor Statistics.
• 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 1979 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;" 1980 and 1981 quarterly numbers and 1980 annual numbers, Bureau of Labor Statistics.
• Electricity—1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: FERC Form 5, "Electric UtilityCompany Monthly Statement."
• 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
1979	664	97.1	9,485	99.5	14.29	102.6

U.S. Passenger Car Efficiency Index



Geographic coverage: the 50 United States and District of Columbia.
Source: • U.S. Department of Transportation, Federal Highway Administration, Federal Highway Statistics Division, "Highway Statistics",Table VM-1.

Energy Consumption

Total U.S. energy consumption in June 1981 rose to 5.8 quadrillion Btu, 2.0 percent above June 1980.

The Residential and Commercial Sector consumption was 2.0 quadrillion Btu in June 1981, 4.3 percent higher than May 1981 and 3.6 percent higher than the amount consumed during June 1980. The Residential and Commercial Sector consumed 33.5 percent of the total consumption for June 1981, up from the sector's 33.0 percent share in June 1980.

The Industrial Sector consumption was 2.3 quadrillion Btu in June 1981, down 4.3 percent from May 1981 and up 0.8 percent from the consumption level in June 1980. The Industrial Sector consumed 39.9 percent of the June 1981 total, as compared to the 40.4 percent share in June 1980.

The Transportation Sector consumption was 1.5 quadrillion Btu in June 1981, up 3.9 percent from May 1981 and down 1.8 percent from the consumption level in June 1980. This sector consumed 26.5 percent of the June 1981 total, as compared to the 26.6 percent share in June 1980.

The Electric Utilities consumption was an estimated 2.2 quadrillion Btu of energy in June 1981, 12.0 percent higher than in the previous month, and 6.4 percent higher than the energy consumed in June 1980. Coal contributed 48.6 percent of the energy consumed by Electric Utilities in June 1981, while natural gas contributed 18.2 percent, hydroelectric power 13.4 percent, nuclear power 10.4 percent, petroleum 8.9 percent, and geothermal, wood and waste 0.5 percent.

Consumption

Energy Consumption Summary for June 1981
Quadrillion (10^{15}) Btu

Primary Energy Source	Sector				TOTAL
	Residential and Commercial	Industrial	Transportation	Electric Utilities	
Coal	0.011	0.288	0.000	1.065	1.365
Natural Gas (dry)	0.302	0.577	0.039	0.399	1.317
Petroleum	0.342	0.570	1.503	0.196	2.611
Hydroelectric	0.000	0.003	0.000	0.293	0.296
Nuclear	0.000	0.000	0.000	0.228	0.228
Net Coke Imports	0.000	(0.004)	0.000	0.000	(0.004)
Other	0.000	0.000	0.000	0.010	0.010
TOTAL PRIMARY ENERGY	**0.655**	**1.434**	**1.542**	**2.190**	**5.822**
Electricity Sales	0.355	0.244	0.001	(0.600)	
Net Energy Consumption	1.010	1.678	1.543		4.233
Electrical Energy Losses	0.940	0.647	0.002	(1.589)	1.589
TOTAL ENERGY CONSUMED	**1.950**	**2.325**	**1.545**		**5.822**

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 at the end of this section.

Consumption

Consumption of Energy by End-Use Sector[1]

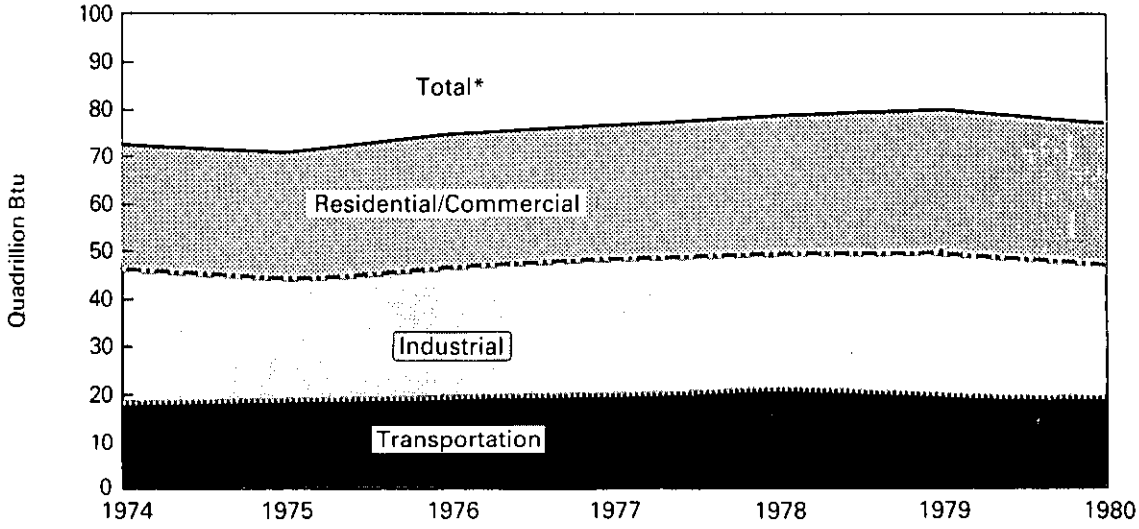
		Residential and Commercial	Industrial	Transportation	Total Energy Consumed
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**26.615**	**29.472**	**18.519**	**74.609**
1974	**TOTAL**	**25.981**	**28.748**	**18.026**	**72.759**
1975	**TOTAL**	**26.015**	**26.510**	**18.177**	**70.707**
1976	**TOTAL**	**27.217**	**28.226**	**19.063**	**74.510**
1977	**TOTAL**	**27.568**	**29.026**	**19.735**	**76.332**
1978	**TOTAL**	**28.217**	**29.317**	**20.613**	**78.150**
1979	**TOTAL**	**27.144**	**31.396**	**20.425**	**78.968**
1980	January	2.859	2.892	1.676	7.423
	February	2.818	2.592	1.611	7.018
	March	2.637	2.636	1.635	6.906
	April	2.101	2.347	1.581	6.021
	May	1.856	2.407	1.573	5.831
	June	1.883	2.306	1.517	5.709
	July	2.099	2.268	1.577	5.957
	August	2.076	2.216	1.543	5.847
	September	1.936	2.338	1.515	5.798
	October	1.925	2.629	1.613	6.168
	November	2.104	2.679	1.505	6.288
	December	2.713	2.818	1.702	7.235
	TOTAL	**27.007**	**30.129**	**19.047**	**76.201**
1981	January	3.116	R2.581	1.700	R7.399
	February	2.683	R2.179	1.460	R6.321
	March	2.432	R2.429	1.551	R6.413
	April	1.991	2.348	1.473	5.808
	May	1.870	R2.429	1.487	R5.783
	June	1.950	2.325	1.545	5.822
	TOTAL (Year-to-date)	**14.041**	**14.292**	**9.217**	**37.547**

Geographic coverage: the 50 United States and District of Columbia.
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 at the end of this section.
R=Revised data.
Source: •See Notes and Sources at the end of this section.

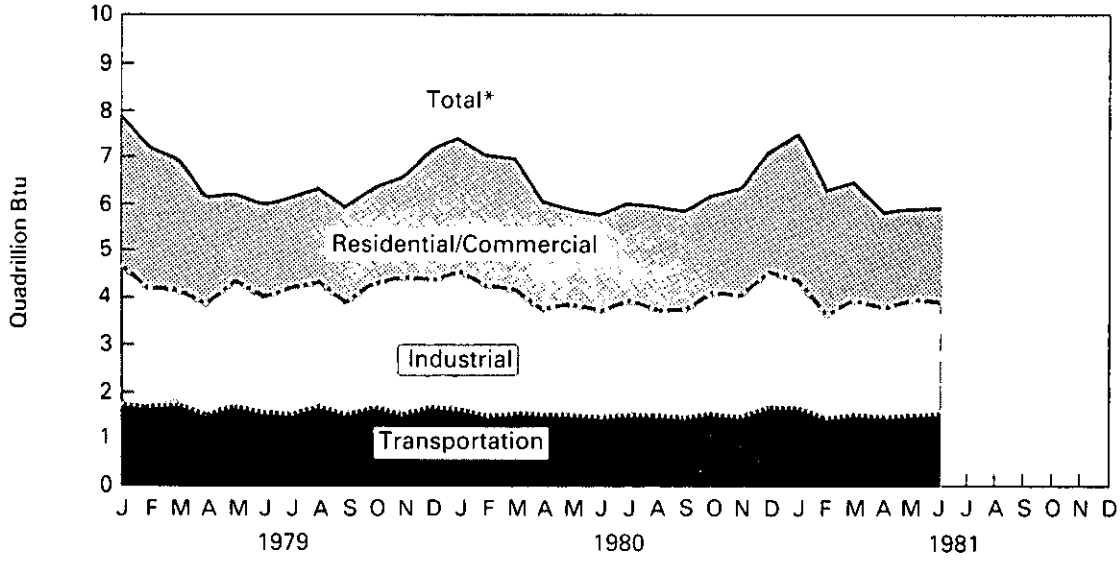
Consumption

Consumption of Energy by End-Use Sector

Yearly



Monthly



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

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**	**0.291**	**7.626**	**6.741**	**3.495**	**8.462**	**26.615**	
1974	**TOTAL**	**0.292**	**7.518**	**6.141**	**3.475**	**8.556**	**25.981**	
1975	**TOTAL**	**0.238**	**7.581**	**5.792**	**3.588**	**8.816**	**26.015**	
1976	**TOTAL**	**0.227**	**7.866**	**6.302**	**3.729**	**9.093**	**27.217**	
1977	**TOTAL**	**0.225**	**7.461**	**6.245**	**3.936**	**9.701**	**27.568**	
1978	**TOTAL**	**0.239**	**7.624**	**6.268**	**4.100**	**9.986**	**28.217**	
1979	**TOTAL**	**0.210**	**7.891**	**4.725**	**4.184**	**10.133**	**27.144**	
1980	January	0.022	1.114	0.382	0.381	0.958	2.859	2.859
	February	0.019	1.192	0.357	0.375	0.874	2.818	5.676
	March	0.014	1.054	0.335	0.358	0.876	2.637	8.314
	April	0.015	0.717	0.291	0.319	0.758	2.101	10.415
	May	0.009	0.450	0.312	0.298	0.787	1.856	12.271
	June	0.007	0.329	0.325	0.334	0.888	1.883	14.154
	July	0.009	0.259	0.337	0.410	1.085	2.099	16.254
	August	0.008	0.240	0.332	0.439	1.056	2.076	18.329
	September	0.011	0.252	0.351	0.410	0.912	1.936	20.265
	October	0.015	0.370	0.374	0.343	0.824	1.925	22.191
	November	0.016	0.640	0.326	0.322	0.800	2.104	24.294
	December	0.020	1.026	0.379	0.364	0.923	2.713	27.007
	TOTAL	**0.166**	**7.645**	**4.102**	**4.354**	**10.742**	**27.007**	
1981	January	0.022	1.291	0.390	0.413	1.001	3.116	3.116
	February	0.014	1.139	0.307	0.379	0.843	2.683	5.799
	March	0.012	0.928	0.299	0.344	0.848	2.432	8.230
	April	0.016	0.605	0.294	0.315	0.761	1.991	10.221
	May	0.013	0.429	0.313	0.313	R0.803	1.870	12.091
	June	0.011	0.302	0.342	0.355	0.940	1.950	14.041
	TOTAL (Year-to-date)	**0.088**	**4.694**	**1.945**	**2.118**	**5.195**	**14.041**	

Geographic coverage: the 50 United States and District of Columbia.
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 at the end of this section.
[2]Proportion of total electrical energy losses incurred in the generation and transmission of electricity plus plant use and unaccounted for that are attributed to this sector.
R=Revised data.
Source: • See Notes and Sources at the end of this section.

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 Con-sumed	Yearly Cumulative Energy Consumed
						Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**4.349**	**10.395**	**6.683**	**0.035**	**(0.008)**	**2.341**	**5.678**	**29.472**	
1974	**TOTAL**	**4.048**	**10.010**	**6.506**	**0.033**	**0.059**	**2.337**	**5.755**	**28.748**	
1975	**TOTAL**	**3.797**	**8.533**	**6.160**	**0.032**	**0.014**	**2.304**	**5.669**	**26.510**	
1976	**TOTAL**	**3.786**	**8.769**	**6.951**	**0.033**	**0.000**	**2.525**	**6.163**	**28.226**	
1977	**TOTAL**	**3.498**	**8.643**	**7.692**	**0.033**	**0.015**	**2.635**	**6.510**	**29.026**	
1978	**TOTAL**	**3.372**	**8.540**	**7.840**	**0.032**	**0.131**	**2.732**	**6.671**	**29.317**	
1979	**TOTAL**	**3.636**	**8.554**	**9.263**	**0.034**	**0.066**	**2.873**	**6.970**	**31.396**	
1980	January	0.319	0.858	0.899	0.003	0.003	0.230	0.579	2.892	2.892
	February	0.296	0.708	0.807	0.003	(0.001)	0.234	0.545	2.592	5.484
	March	0.302	0.733	0.791	0.003	(0.003)	0.236	0.576	2.636	8.121
	April	0.295	0.572	0.699	0.003	(0.005)	0.232	0.551	2.347	10.468
	May	0.286	0.602	0.685	0.003	(0.006)	0.229	0.606	2.407	12.874
	June	0.260	0.565	0.649	0.003	(0.004)	0.228	0.605	2.306	15.180
	July	0.237	0.597	0.620	0.003	(0.004)	0.224	0.592	2.268	17.448
	August	0.239	0.577	0.618	0.002	(0.003)	0.230	0.554	2.216	19.664
	September	0.233	0.667	0.676	0.002	(0.004)	0.237	0.527	2.338	22.002
	October	0.262	0.847	0.717	0.002	(0.006)	0.237	0.570	2.629	24.631
	November	0.272	0.863	0.739	0.002	(0.002)	0.231	0.574	2.679	27.310
	December	0.296	0.861	0.834	0.002	(0.001)	0.234	0.592	2.818	30.129
	TOTAL	**3.297**	**8.451**	**8.734**	**0.033**	**(0.037)**	**2.781**	**6.870**	**30.129**	
1981	January	R0.310	0.706	0.779	0.003	0.000	0.229	0.556	R2.581	R2.581
	February	R0.286	0.512	0.637	0.003	(0.001)	0.230	0.512	R2.179	R4.760
	March	R0.291	0.679	0.648	0.003	(0.003)	0.234	0.576	R2.429	R7.190
	April	0.284	0.597	0.671	0.003	(0.001)	0.232	0.562	2.348	R9.538
	May	0.293	R0.669	0.626	0.003	0.000	0.235	0.602	R2.429	R11.967
	June	0.288	0.577	0.570	0.003	(0.004)	0.244	0.647	2.325	14.292
	TOTAL (Year-to-date)	**1.752**	**3.740**	**3.932**	**0.018**	**(0.010)**	**1.404**	**3.455**	**14.292**	

Geographic coverage: the 50 United States and District of Columbia.
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 at the end of this section.
[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 plus plant use and unaccounted for that are attributed to this sector.
R = Revised data.
Source: •See Notes and Sources at the end of this section.

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**	**17.745**	**0.009**	**0.020**	**18.519**	
1974	**TOTAL**	**0.002**	**0.685**	**17.309**	**0.009**	**0.021**	**18.026**	
1975	**TOTAL**	**0.001**	**0.595**	**17.547**	**0.010**	**0.024**	**18.177**	
1976	**TOTAL**	**(3)**	**0.559**	**18.469**	**0.010**	**0.025**	**19.063**	
1977	**TOTAL**	**(3)**	**0.543**	**19.157**	**0.010**	**0.024**	**19.735**	
1978	**TOTAL**	**(3)**	**0.539**	**20.044**	**0.009**	**0.021**	**20.613**	
1979	**TOTAL**	**(3)**	**0.612**	**19.778**	**0.010**	**0.024**	**20.425**	
1980	January	(3)	0.069	1.604	0.001	0.002	1.676	1.676
	February	(3)	0.066	1.542	0.001	0.002	1.611	3.286
	March	(3)	0.063	1.569	0.001	0.002	1.635	4.922
	April	(3)	0.047	1.531	0.001	0.002	1.581	6.502
	May	(3)	0.041	1.529	0.001	0.002	1.573	8.075
	June	(3)	0.038	1.476	0.001	0.002	1.517	9.592
	July	(3)	0.039	1.534	0.001	0.002	1.577	11.168
	August	(3)	0.038	1.503	0.001	0.002	1.543	12.712
	September	(3)	0.039	1.473	0.001	0.002	1.515	14.227
	October	(3)	0.047	1.563	0.001	0.002	1.613	15.840
	November	(3)	0.054	1.448	0.001	0.002	1.505	17.345
	December	(3)	0.065	1.634	0.001	0.002	1.702	19.047
	TOTAL	**(3)**	**0.607**	**18.404**	**0.011**	**0.025**	**19.047**	
1981	January	(3)	0.068	1.629	0.001	0.002	1.700	1.700
	February	(3)	0.057	1.400	0.001	0.002	1.460	3.160
	March	(3)	0.058	1.491	0.001	0.002	1.551	4.712
	April	(3)	0.046	1.425	0.001	0.002	1.473	6.185
	May	(3)	0.043	1.441	0.001	0.002	1.487	7.672
	June	(3)	0.039	1.503	0.001	0.002	1.545	9.217
	TOTAL (Year-to-date)	**(3)**	**0.311**	**8.887**	**0.005**	**0.013**	**9.217**	

Geographic coverage: the 50 United States and District of Columbia.
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 at the end of this section.
[2]Proportion of total electrical energy losses incurred in the generation and transmission of electricity plus plant use and unaccounted for 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 at the end of this section.

Consumption

Consumption of Energy by the Electric Utilities

		Coal[1]	Natural Gas (Dry)	Petro-leum[2]	Hydro-electric power[3]	Nuclear Electric Power	Other[4]	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**8.658**	**3.748**	**3.671**	**2.975**	**0.910**	**0.046**	**20.008**	
1974	**TOTAL**	**8.535**	**3.519**	**3.499**	**3.276**	**1.272**	**0.056**	**20.156**	
1975	**TOTAL**	**8.786**	**3.240**	**3.231**	**3.187**	**1.900**	**0.072**	**20.416**	
1976	**TOTAL**	**9.720**	**3.152**	**3.454**	**3.032**	**2.111**	**0.081**	**21.549**	
1977	**TOTAL**	**10.243**	**3.284**	**4.028**	**2.482**	**2.702**	**0.082**	**22.821**	
1978	**TOTAL**	**10.236**	**3.297**	**3.813**	**3.132**	**2.977**	**0.068**	**23.523**	
1979	**TOTAL**	**11.264**	**3.609**	**3.357**	**3.132**	**2.748**	**0.089**	**24.199**	
1980	January	1.073	0.285	0.292	0.282	0.213	0.008	2.152	2.152
	February	1.012	0.272	0.292	0.240	0.208	0.008	2.031	4.184
	March	0.995	0.292	0.266	0.272	0.216	0.008	2.049	6.233
	April	0.867	0.264	0.235	0.286	0.202	0.008	1.863	8.096
	May	0.883	0.290	0.223	0.319	0.198	0.010	1.924	10.019
	June	0.976	0.347	0.223	0.306	0.197	0.009	2.059	12.078
	July	1.143	0.433	0.228	0.273	0.226	0.010	2.313	14.391
	August	1.134	0.418	0.226	0.231	0.262	0.011	2.282	16.673
	September	1.021	0.368	0.228	0.210	0.254	0.010	2.091	18.764
	October	0.961	0.310	0.226	0.204	0.264	0.011	1.976	20.740
	November	0.974	0.263	0.239	0.218	0.226	0.011	1.930	22.670
	December	1.090	0.249	0.279	0.251	0.238	0.011	2.117	24.787
	TOTAL	**12.127**	**3.792**	**2.956**	**3.092**	**2.704**	**0.114**	**24.787**	
1981	January	1.158	0.239	0.291	0.251	0.252	0.011	2.202	2.202
	February	1.021	0.231	0.236	0.237	0.233	0.010	1.967	4.169
	March	1.031	0.281	0.213	0.233	0.237	0.011	2.006	6.175
	April	0.930	0.296	0.180	0.234	0.222	0.010	1.873	8.048
	May	0.959	0.324	R0.181	0.269	0.212	0.010	1.955	10.003
	June	1.065	0.399	0.196	0.293	0.228	0.010	2.190	12.193
	TOTAL (Year-to-date)	**6.164**	**1.769**	**1.297**	**1.516**	**1.384**	**0.063**	**12.193**	

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes bituminous coal, lignite, and anthracite.
[2]Based on deliveries to utilities.
[3]Includes net imports of electricity.
[4]Includes geothermal power and electricity produced from wood and waste.
R = Revised data.
Source: •See Notes and Sources at the end of this section.

Notes and Sources for the Consumption Section

1. See Explanatory Note 5 in the Explanatory Notes Section located at the end of this publication for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.
2. **Coal**: Coal is anthracite, bituminous coal, 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 forward: 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 forward: DOE, EIA, *Energy Data Reports,* "Weekly Coal Report."
   - Electric Utilities consumption of coal sources: same as Note 6 below.

   Physical unit data are converted into Btu by applying conversion factors shown on inside back cover.
3. **Natural Gas**: Total natural gas consumption is estimated monthly based on a supply disposition balance calculation. Residential and Commercial Sector monthly consumption is estimated by allocating the EIA annual Residential and Commercial Sectors consumption to the months in proportion to the American Gas Association (AGA) monthly sales to the Residential and Commercial Sectors. For incomplete years, the AGA monthly sales data are used temporarily. Monthly Transportation Sector consumption (which is natural gas for pipeline use) for complete years is estimated by allocating the EIA annual Transportation total to the months based on each month's total natural gas consumption as a share of the annual total natural gas consumption. For incomplete years, each month's Transportation total is estimated by applying the percentage of total natural gas accounted for by the Transportation Sector in the same month a year ago to the current month's total natural gas consumption. The Electric Utility consumption of natural gas is available monthly from Form 4, "Monthly Power Plant Report." Each month's Industrial Sector consumption is estimated by subtracting the Residential and Commercial, Transportation, and Electric Utilities Sectors consumption from the total natural gas consumption.
   Sources:
   - 1973 through 1975: DOI, BOM, *Minerals Yearbook,* "Natural Gas" chapter.
   - 1976 forward: DOE, *Energy Data Reports,* "Natural Gas Monthly Production and Consumption."
   - Electric Utilities consumption: 1973 through 1976, FPC, Form 4, "Monthly Power Plant Report." 1977 forward: DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."
   - American Gas Association, "Monthly Gas Utility Statistical Report."

   Physical unit data are converted into Btu by applying conversion factors shown on inside back cover.
4. **Petroleum**: 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 1979: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Annual."
   - 1980 forward: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Monthly,"
     DOE, EIA, "Monthly Petroleum Statistics Report," and
     DOE, EIA, estimates for current months where above sources are not yet available.

   Each product's total is allocated to end-use sectors as follows:
   - Aviation gasoline—All to the Transportation Sector.
   - Asphalt and road oil—All to the Commercial Sector for use by government in road maintenance.
   - Distillate fuel—Allocated to the major end-use sectors in proportion to the sales of distillate fuel sold to each sector as reported for 1973 through 1975 in the DOI, BOM, *Mineral Industry Surveys,* "Fuel Oil Sales, Annual," for 1976 through 1978 in the DOE, EIA, *Energy Data Reports,* "Fuel Oil Sales, Annual," and for 1979, "Deliveries of Fuel Oil and Kerosene." In summary, the sectors' proportions are created from sales (deliveries) groupings as follows:
     —Residential and Commercial is sales (deliveries) for heating, or in 1979, the sum of sales (deliveries) for residential use and commercial use.
     —Industrial is sales (deliveries) for industrial use, oil company use, and for miscellaneous use except for that part of the miscellaneous use which is diesel used on the highway and is part of the Transportation Sector;
     —Transportation is sales (deliveries) for vessel bunkering, military, railroads, and diesel used on the highway; and
     —Electric Utility is the sales (deliveries) to the electric utilities.
     The 1979 shares are used as estimates for succeeding periods until sales after 1979 are developed.
   - 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.
   - Kerosene—Allocated to the major end-use sectors in proportion to the sales of kerosene sold to the Residential and Commercial Sector and the Industrial Sector as reported for 1973 through 1975 in the DOI, BOM, *Mineral Industry Surveys,* "Fuel Oil Sales, Annual," for 1976 through 1978 in the DOE, EIA, *Energy Data Reports,* "Fuel Oil Sales, Annual," and for 1979, "Deliveries of Fuel Oil and Kerosene":
     —Residential and Commercial is sales (deliveries) for heating.
     —Industrial is sales (deliveries) for "All Other Uses," or, in 1979, "Other."
     The 1979 shares are used as estimates for succeeding periods until sales after 1979 are developed.
   - Liquefied petroleum gases (LPG)—Allocated to the major end-use sectors in proportion to the sales of LPG sold to each sector as reported for 1973 through 1975 in the DOI, BOM, *Mineral Industry Surveys,* "Fuel Oil Sales, Annual," and for 1976 through 1979 in the DOE, EIA, *Energy Data Reports,* "Fuel Oil Sales, Annual." In summary, the sectors' proportions are created from sales groupings as follows:
     —Residential and Commercial is sales for residential and commercial use;
     —Industrial is sales for industrial use, for miscellaneous uses, to utility gas companies, to chemical plants, and 84 percent of LPG sold for use as internal combustion engine fuel use; and
     —Transportation is the remaining 16 percent of LPG sold for use as internal combustion fuel use.
     The 1979 shares are used as estimates for the succeeding periods until sales after 1979 are developed.
   - Lubricants—Allocated to the Industrial Sector and Transportation Sector 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." The 1973 shares are applied to 1973 and 1974; the 1975 shares are applied to 1975 and 1976; and the 1977 shares are applied from 1977 forward.
   - Motor gasoline—The DOE motor gasoline consumption data are allocated to end-use according to shares derived from the U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Tables MF-21, MF-24 and MF-25. In summary, the sectors' proportions are created from sales groupings as follows:
     —Residential and Commercial is sales for construction use, for miscellaneous use, for public non-highway use, and for unclassified use;

Notes and Sources for the Consumption Section (continued)

—Industrial is sales for agriculture and industrial and commercial use as classified in the *Highway Statistics*; and
—Transportation is sales for highway use (minus the sales of special fuels which is primarily diesel fuel and is accounted for in the Transportation Sector of distillate fuel) and sales for marine use.

- Petroleum coke consumed by the Electric Utilities—FPC, Form 4, "Monthly Power Plant Report." All other petroleum coke is allocated to the Industrial Sector.
- Residual fuel—Allocated to the major end-use sectors in proportion to the sales of residual fuel sold to each sector as reported for 1973 through 1975 in the DOI, BOM, *Mineral Industry Surveys*, "Fuel Oil Sales, Annual," for 1976 through 1978 in the DOE, EIA, *Energy Data Reports*, "Fuel Oil Sales, Annual," and, for 1979, "Deliveries of Fuel Oil and Kerosene." In summary, the sectors' proportions are created from sales (deliveries) groupings as follows:
  —No allocation for Residential Sector;
  —Commercial Sector is sales (deliveries) for heating and, in 1979, sales (deliveries) for commercial use.
  —Industrial Sector is the sum of sales (deliveries) for industrial use, oil company use, and miscellaneous uses;
  —Transportation Sector is the sum of sales (deliveries) for vessel bunkering, military, and railroads; and
  —Electric Utility is the sales (deliveries) to the electric utilities.
  The 1979 shares are used as estimates for succeeding periods until sales after 1979 are developed.
- All other products are allocated to the Industrial Sector.

Physical unit data are converted into Btu by applying the conversion factors shown on the inside back cover.

5. **Hydroelectric**: Includes electricity generated by hydropower at electric utilities, small amounts in the Industrial Sector, and net imports of electricity, which are assumed to be generated by hydropower and are included in the hydroelectricity in the Electric Utility Sector.

Sources for Electric Utility Sector:

- 1973 through 1976, FPC, Form 4, "Monthly Power Plant Report."
- 1977 forward: DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."

Sources for Industrial Sector:

- 1973 through 1978: FPC Forms 4 and 12-C.
- 1979: FPC Form 4 and EIA estimates.
- 1980 forward: EIA estimates.

Note: For 1977 forward, monthly data are not available from above sources and were estimated by seasonalizing the annual numbers in proportion to each month's hydroelectricity generation in the Electric Utility Sector.

Sources for Imports and Exports of Electricity: Annual Data from 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. 1979 estimates are used for succeeding periods until later estimates are developed.

6. **Nuclear**: *Sources:* • 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
• 1977 forward: DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."

7. **Net Coke Imports**: Net coke imports is coke made from coal.
Sources: • 1973 through 1975, DOI, BOM, *Minerals Yearbook,* "Coke and Coal Chemicals, Annual."
• 1976 forward: DOE, EIA, *Energy Data Reports,* "Coke and Coal Chemicals, Monthly."

8. **Other Energy**: "Other" is electricity produced from geothermal power and from wood and waste. *Sources:* same as Note 6 above, for Nuclear.

9. **Electricity Sales:** The total energy consumed by electric utilities to generate and transmit electricity to the end-users, including all losses, is allocated to the major end-users in proportion to the sales of electricity to the end-use sectors. "Other" sales, largely for use in government buildings, is allocated to the Residential and Commercial Sector, and about 4.2 percent of "Other" is for railroad usage and is counted in the Transportation Sector.

Source of sales data: 1973 through February 1980: FPC, Form 5, "Monthly Statement of Electric Operating Revenue and Income."
March 1980 forward: FERC Form 5, "Electric Utility Company Monthly Statement."

10. **Electrical Energy Losses**: 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., utilities energy disposition), the electricity losses are allocated to the final end-use sectors in proportion to their direct kilowatt-hour usage, i.e., sales.

Part 3

Petroleum

Crude Oil and Refined Petroleum Products*

Domestic crude oil production during July 1981 averaged 8.6 million barrels per day. This production rate was 1.1 percent above the rate in July 1980 and 0.4 percent higher than in June 1981.

Total petroleum imports averaged 5.2 million barrels per day in July 1981, 14.2 percent less than the July 1980 rate and 5.0 percent higher than in June 1981.

In July 1981, 15.9 million barrels per day of petroleum products were supplied for domestic use. Motor gasoline accounted for 42.7 percent of the total, distillate fuel oil 14.7 percent, and residual fuel oil 12.8 percent.

Motor gasoline supplied during July 1981 averaged 6.8 million barrels per day, 1.2 percent lower than in June 1981.

In July 1981, 2.3 million barrels of distillate fuel oil were supplied per day, 3.5 percent lower than the June 1981 rate. Distillate fuel oil stocks were 183.4 million barrels at the end of July 1981, 1.0 percent higher than the previous month's level.

Residual fuel oil supplied in July 1981 averaged 2.0 million barrels per day, 1.0 percent higher than in June 1981. Residual fuel oil stocks measured 66.3 million barrels at the end of July 1981, 5.5 percent lower than the previous month's level.

*Estimates for the most recent month are based on EIA weekly data (except crude production) and will be revised to conform with data from the EIA Petroleum Reporting System as available. For the most recent months, crude production is an EIA estimate. The above import data excludes imports into the Strategic Petroleum Reserve.

Petroleum

Crude Oil

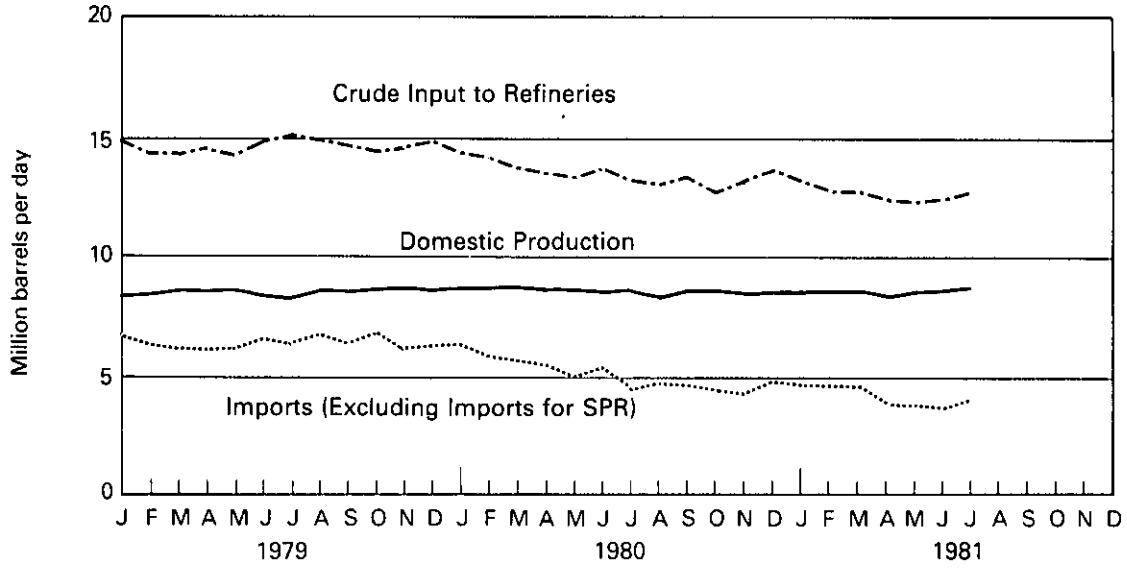
		Crude Input to Refineries	Total Domestic Production[1,2]	Alaskan Production	Crude Oil Imports[3]	Strategic Petroleum Reserve (SPR) Imports	Crude Oil Exports	Primary Crude Oil Stocks[1,3]	Strategic Petroleum Reserve (SPR) Stocks
		Thousand barrels per day						Thousand barrels	
1973	**AVERAGE**	**12,431**	**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**	**20**	**50**	**‡339,857**	**‡7,540**
1978	**AVERAGE**	**14,739**	**8,707**	**1,229**	**6,195**	**162**	**158**	**‡309,421**	**‡66,860**
1979	**AVERAGE**	**14,648**	**8,552**	**1,401**	**6,452**	**67**	**235**	**‡339,074**	**‡91,191**
1980	January	14,298	8,648	1,634	6,359	0	311	353,611	91,191
	February	14,189	8,696	1,630	5,936	0	310	361,648	91,191
	March	13,709	8,712	1,647	5,785	0	323	361,742	91,191
	April	13,484	8,688	1,649	5,555	0	216	379,352	91,191
	May	13,326	8,640	1,628	5,071	0	308	383,902	91,191
	June	13,705	8,547	1,626	5,480	0	365	382,035	91,191
	July	13,251	8,555	1,612	4,645	0	238	379,280	91,191
	August	13,011	8,422	1,612	4,723	0	78	387,605	91,191
	September	13,312	8,619	1,610	4,653	54	322	375,989	92,824
	October	12,777	8,536	1,588	4,570	131	309	378,488	96,645
	November	13,119	8,499	1,561	4,524	142	289	372,811	102,320
	December	13,648	8,609	1,602	4,848	198	343	357,702	107,800
	AVERAGE	**13,483**	**8,597**	**1,617**	**5,177**	**44**	**284**		
1981	January†	13,234	8,550	1,611	4,790	106	339	374,825	112,490
	February†	12,851	8,611	1,628	4,731	80	198	385,098	116,057
	March†	12,399	8,576	1,628	4,341	140	210	396,008	120,860
	April†	12,097	8,466	1,614	4,172	272	198	403,918	134,170
	May†	12,307	8,552	1,582	3,842	386	312	396,851	150,068
	June†	R12,463	8,610	1,634	R3,668	318	123	R385,663	163,081
	July†	*12,649*	*8,646*	*1,609*	*4,007*	*172*	NA	*398,988*	*172,992*
	AVERAGE	**12,570**	**8,573**	**1,615**	**4,217**	**212**	**NA**		

Geographic coverage: the 50 United States and District of Columbia.
[1]Includes lease condensate.
[2]Includes Alaskan production.
[3]Excludes SPR. Strategic Petroleum Reserve storage began in October 1977.
Estimated data in italics. These are likely to be revised.
‡Total as of December 31.
†Preliminary data. R=Revised data. NA=Not available.
Sources: •See Sources on the last page of this section.

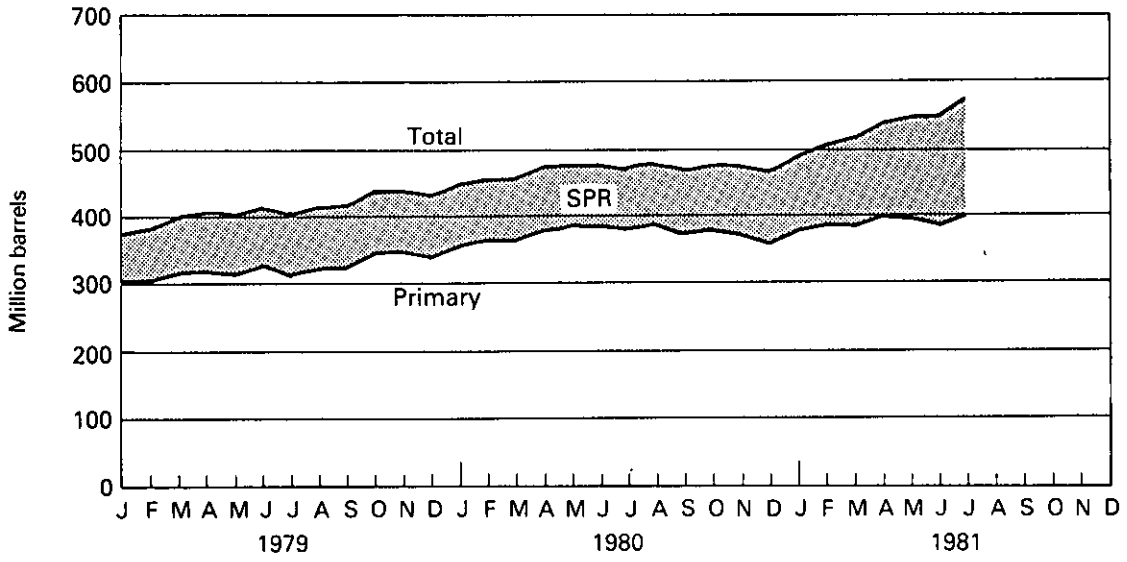
Petroleum

Crude Oil

Production, Refinery Input and Imports



Stocks



Petroleum

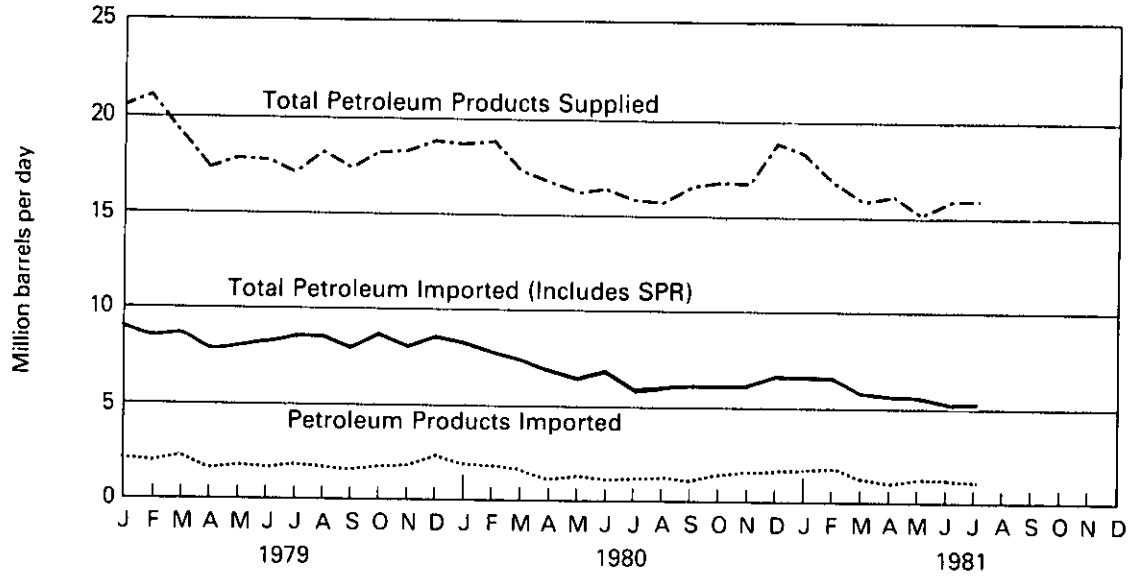
		Total Petroleum Products[1]			Total Crude Oil and Petroleum Products Trade				
		Products Supplied[1]	Product Imports[2]	Product Exports	Total Imports (Excluding SPR)	SPR Imports[3]	Total Imports (Including SPR)[3]	Total Exports	Net Imports
		Thousand barrels per day			Thousand barrels per day				
1973	**AVERAGE**	**17,308**	**3,012**	**229**	**6,256**			**231**	**6,025**
1974	**AVERAGE**	**16,653**	**2,635**	**218**	**6,112**			**221**	**5,892**
1975	**AVERAGE**	**16,322**	**1,951**	**204**	**6,056**			**209**	**5,846**
1976	**AVERAGE**	**17,461**	**2,026**	**215**	**7,313**			**223**	**7,090**
1977	**AVERAGE**	**18,431**	**2,193**	**193**	**8,787**	**20**	**8,807**	**243**	**8,565**
1978	**AVERAGE**	**18,847**	**2,008**	**204**	**8,202**	**162**	**8,363**	**362**	**8,002**
1979	**AVERAGE**	**18,513**	**1,937**	**236**	**8,389**	**67**	**8,456**	**471**	**7,985**
1980	January	18,656	1,983	228	8,342	0	8,342	539	7,803
	February	18,815	1,911	227	7,847	0	7,847	536	7,311
	March	17,385	1,724	243	7,509	0	7,509	566	6,943
	April	16,724	1,430	241	6,985	0	6,985	457	6,528
	May	16,143	1,478	266	6,549	0	6,549	573	5,975
	June	16,214	1,413	288	6,893	0	6,893	654	6,239
	July	15,962	1,401	292	6,046	0	6,046	530	5,516
	August	15,727	1,379	241	6,102	0	6,102	319	5,784
	September	16,548	1,475	235	6,129	54	6,183	557	5,626
	October	16,911	1,603	288	6,173	131	6,303	598	5,706
	November	16,694	1,729	260	6,252	142	6,395	549	5,846
	December	18,354	1,812	279	6,660	198	6,858	622	6,236
	AVERAGE	**17,006**	**1,611**	**258**	**6,787**	**44**	**6,831**	**542**	**6,290**
1981	January†	18,132	1,827	202	6,617	106	6,723	540	6,183
	February†	16,773	1,814	354	6,540	80	6,620	552	6,068
	March†	15,569	1,404	351	5,746	140	5,885	561	5,324
	April†	15,593	1,253	358	5,425	272	5,697	556	5,141
	May†	15,034	1,377	266	5,220	386	5,605	578	5,027
	June†	R15,840	R1,270	282	R4,939	318	5,257	405	4,852
	July†	*15,866*	*1,179*	NA	*5,186*	*172*	*5,358*	NA	NA
	AVERAGE	**16,110**	**1,443**	**NA**	**5,660**	**212**	**5,872**	**NA**	**NA**

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]See Definitions.
[2]Includes plant condensate, natural gasoline and unfinished oils.
[3]Strategic Petroleum Reserve storage began in October 1977.
Estimated data in italics. These are likely to be revised.
†Preliminary data. R = Revised data. NA = Not available.
Sources: •See Sources on the last page of this section.

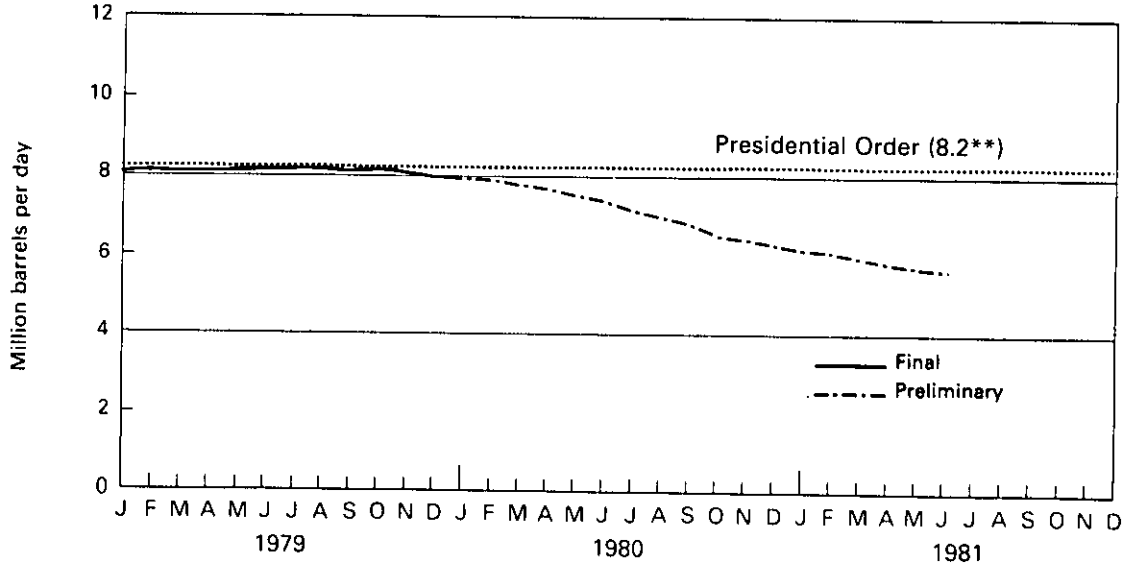
Petroleum

Products Supplied and Imports

Products Supplied and Imports



Net Imports* of Crude Oil and Refined Products (Average for the Latest 12 Months)



* Includes SPR.

** In his January 1980 State of the Union address, President Carter announced his revised net import ceiling of 8.2 million barrels per day for 1980. The figure was previously 8.5 million barrels per day.

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**	**213**	**223**	**164**	**459**	**486**	**71**	**1,135**	**106**	**2,993**	**915**
1974 AVERAGE	**190**	**300**	**469**	**4**	**713**	**461**	**74**	**979**	**88**	**3,280**	**752**
1975 AVERAGE	**282**	**390**	**280**	**232**	**762**	**715**	**117**	**702**	**122**	**3,601**	**1,383**
1976 AVERAGE	**432**	**539**	**298**	**453**	**1,025**	**1,230**	**254**	**700**	**134**	**5,066**	**2,424**
1977 AVERAGE	**559**	**541**	**535**	**723**	**1,143**	**1,380**	**335**	**690**	**287**	**6,193**	**3,185**
1978 AVERAGE	**649**	**573**	**555**	**654**	**919**	**1,144**	**385**	**645**	**226**	**5,751**	**2,963**
1979 AVERAGE	**636**	**420**	**304**	**658**	**1,080**	**1,356**	**281**	**690**	**212**	**5,637**	**3,056**
1980											
January	484	433	80	617	1,054	1,562	202	583	179	5,195	3,001
February	639	317	9	603	1,013	1,399	304	543	140	4,967	3,016
March	472	405	0	654	924	1,390	370	352	175	4,742	2,979
April	556	374	0	683	722	1,294	150	339	228	4,346	2,866
May	441	360	0	468	955	1,149	172	405	132	4,083	2,314
June	497	331	0	561	998	1,327	178	409	105	4,408	2,598
July	537	308	0	492	721	1,179	158	411	55	3,861	2,378
August	432	289	0	431	770	1,136	142	397	98	3,695	2,205
September	375	299	0	505	735	1,112	107	425	111	3,670	2,185
October	463	348	0	476	716	1,043	182	482	52	3,762	2,178
November	493	348	0	500	599	1,201	105	595	78	3,920	2,339
December	417	280	0	641	958	1,300	83	610	101	4,391	2,460
AVERAGE	**483**	**341**	**8**	**552**	**847**	**1,257**	**179**	**463**	**121**	**4,251**	**2,541**
1981											
January†	324	407	0	485	908	1,285	93	550	27	4,079	2,187
February†	381	396	0	462	867	1,116	93	460	96	3,871	2,057
March†	352	324	0	464	771	1,027	47	353	54	3,393	1,890
April†	263	314	0	488	826	1,043	85	239	42	3,299	1,895
May†	384	277	0	443	664	929	17	311	124	3,150	1,783
June†	366	324	0	380	534	865	60	232	118	2,878	1,712
AVERAGE	**345**	**340**	**0**	**454**	**761**	**1,044**	**65**	**357**	**76**	**3,442**	**1,920**

Geographic coverage: the 50 United States and District of Columbia.
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.
Sources: • See Sources on the last page of this section.

Petroleum

Petroleum Imports from Non-OPEC Sources

	Bahamas	Canada	Mexico	Netherlands Antilles	Puerto Rico	Trinidad and Tobago	Virgin Islands	Other[1]	Total
				Thousand barrels per day					
1973									
AVERAGE	**174**	**1,325**	**16**	**585**	**99**	**255**	**329**	**480**	**3,263**
1974									
AVERAGE	**164**	**1,070**	**8**	**511**	**90**	**251**	**391**	**347**	**2,832**
1975									
AVERAGE	**152**	**846**	**71**	**332**	**90**	**242**	**406**	**314**	**2,454**
1976									
AVERAGE	**118**	**599**	**87**	**275**	**88**	**274**	**422**	**382**	**2,247**
1977									
AVERAGE	**171**	**517**	**179**	**211**	**105**	**289**	**466**	**676**	**2,614**
1978									
AVERAGE	**160**	**467**	**318**	**229**	**94**	**253**	**429**	**663**	**2,613**
1979									
AVERAGE	**147**	**538**	**439**	**231**	**92**	**190**	**431**	**751**	**2,819**
1980									
January	175	569	545	289	56	239	467	806	3,147
February	111	540	463	205	95	192	522	752	2,880
March	124	460	460	184	81	189	443	827	2,767
April	56	411	546	231	63	143	418	771	2,639
May	77	419	576	184	88	221	303	597	2,466
June	77	408	627	196	91	160	315	611	2,485
July	43	378	434	242	90	180	365	454	2,185
August	62	319	646	255	85	159	254	627	2,407
September	58	403	549	213	52	205	343	690	2,513
October	70	473	604	238	107	114	359	577	2,542
November	22	470	458	267	108	157	391	602	2,475
December	54	502	445	212	109	149	423	573	2,467
AVERAGE	**78**	**446**	**530**	**226**	**85**	**176**	**383**	**656**	**2,580**
1981									
January†	39	516	388	197	89	150	494	770	2,644
February†	84	488	420	227	46	163	481	840	2,749
March†	66	412	460	227	45	93	370	819	2,492
April†	60	375	420	195	40	139	365	802	2,398
May†	112	355	474	213	58	99	344	800	2,455
June†	44	323	496	196	67	124	262	865	2,379
AVERAGE	**67**	**411**	**443**	**209**	**58**	**127**	**385**	**815**	**2,517**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
Beginning in October 1977 Strategic Petroleum Reserve imports are included.
[1]Includes Non-OPEC Arab, Western Europe, Angola, U.S.S.R., Rumania, other Western Hemisphere and other Eastern Hemisphere.
†Preliminary data.
Sources: •See Sources on the last page of this section.

Petroleum

Motor Gasoline

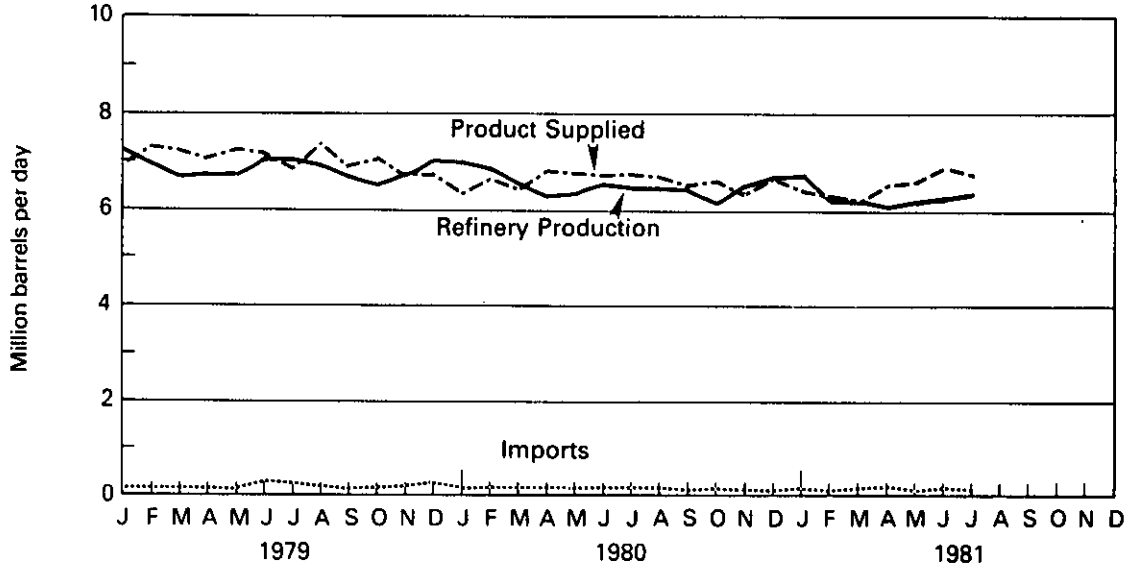
	Product Supplied[1]				Imports[1,2]			Stocks[1,2,3]	
	Total	Unleaded	Unleaded Percent of Total	Refinery Production[1,3]	Total Motor Gasoline	Finished Motor Gasoline	Exports	Total Motor Gasoline	Finished Motor Gasoline
	Thousand barrels per day							Thousand barrels	
1973 AVERAGE	**6,674**	**NA**	**NA**	**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 AVERAGE	**7,412**	**2,521**	**34.0**	**7,167**	**190**		**1**	**‡237,956**	
1979 AVERAGE	**7,034**	**2,798**	**39.8**	**6,837**	**181**		**(s)**	**‡237,082**	
1980									
January	6,335	2,718	42.9	6,977	141		1	262,134	
February	6,594	2,969	45.0	6,851	153		(s)	274,422	
March	6,411	3,032	47.3	6,512	154		(s)	282,688	
April	6,799	3,021	44.4	6,268	152		1	271,729	
May	6,726	2,980	44.3	6,294	132		1	262,938	
June	6,661	3,099	46.5	6,552	148		1	264,583	
July	6,735	3,131	46.5	6,446	149		3	260,711	
August	6,646	3,135	47.2	6,437	141		1	259,013	
September	6,511	3,054	46.9	6,369	106		7	258,135	
October	6,662	3,110	46.7	6,124	152		1	246,422	
November	6,237	3,123	50.1	6,456	126		(s)	257,059	
December	6,628	3,421	51.6	6,632	121		1	261,327	
AVERAGE	**6,579**	**3,067**	**46.6**	**6,492**	**140**		**1**		
1981									
January†	6,401	3,102	48.5	6,672	148	137	(s)	277,724	226,946
February†	6,306	3,115	49.4	6,244	117	111	1	284,182	228,672
March†	6,247	3,098	49.6	6,150	189	163	(s)	284,427	231,063
April†	6,479	3,256	50.3	6,058	195	174	(s)	273,538	223,925
May†	6,375	3,052	47.9	6,132	159	146	1	266,623	221,036
June†	R6,853	3,351	48.9	R6,230	R195	161	1	R253,895	R207,304
July†	*6,770*	NA	NA	*6,365*	*151*	NA	NA	*233,631*	NA
AVERAGE	**6,491**	**NA**	**NA**	**6,266**	**165**	**NA**	**NA**		

Geographic coverage: the 50 United States and District of Columbia.
[1]Beginning in January 1981, EIA modified its monthly petroleum surveys. Non-refinery blenders were added to the reporting universe and gasohol included as a motor gasoline component. On the new basis motor gasoline production and product supplied during the last half of 1980 would have averaged 289,000 barrels per day higher than shown.
[2]Total motor gasoline includes finished motor gasoline and blending components.
[3]See Definitions.
Estimated data in italics. These are likely to be revised.
‡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: •See Sources on the last page of this section.

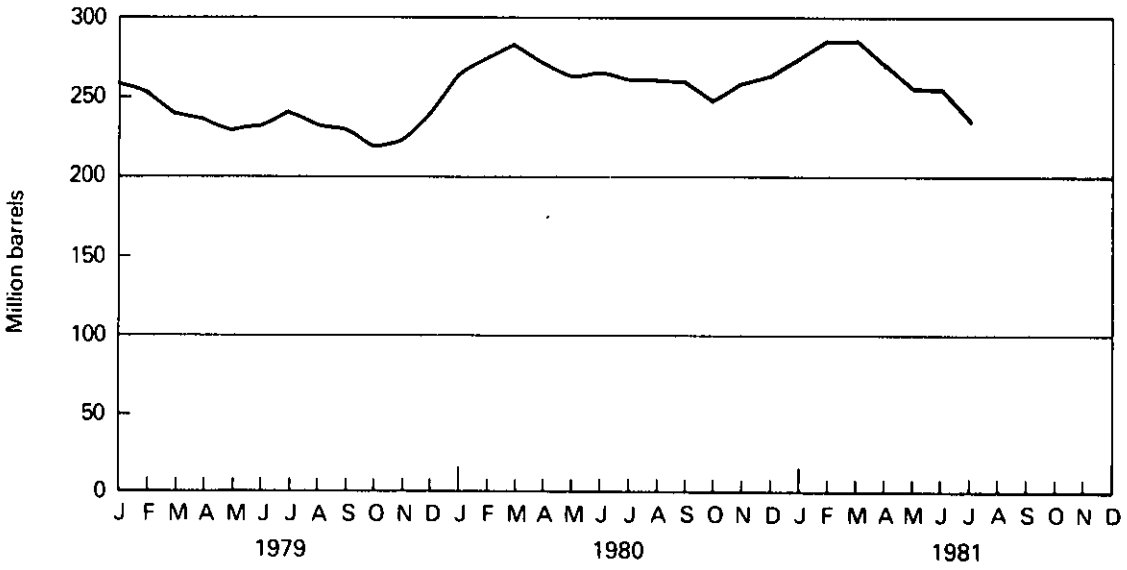
Petroleum

Motor Gasoline

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Jet Fuel

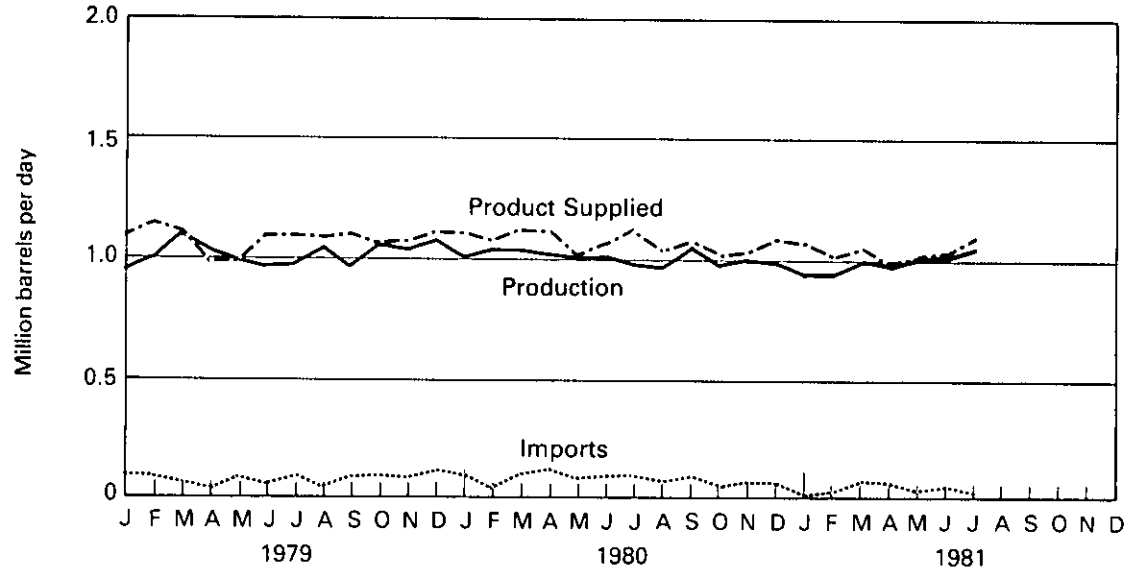
		Product Supplied	Refinery Production	Imports	Exports	Stocks
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**1,059**	**859**	**212**	**4**	**‡28,544**
1974	**AVERAGE**	**993**	**836**	**163**	**3**	**‡29,435**
1975	**AVERAGE**	**1,001**	**871**	**133**	**2**	**‡30,380**
1976	**AVERAGE**	**987**	**918**	**76**	**2**	**‡32,085**
1977	**AVERAGE**	**1,039**	**973**	**75**	**2**	**‡34,548**
1978	**AVERAGE**	**1,057**	**970**	**86**	**1**	**‡33,665**
1979	**AVERAGE**	**1,076**	**1,012**	**78**	**1**	**‡38,520**
1980	January	1,101	1,004	95	1	38,412
	February	1,072	1,026	43	2	38,258
	March	1,116	1,031	99	2	38,661
	April	1,105	1,023	107	3	39,339
	May	1,015	1,001	79	2	41,310
	June	1,057	1,004	86	1	42,283
	July	1,110	974	93	2	40,902
	August	1,043	959	67	1	40,331
	September	1,056	1,041	77	1	42,159
	October	1,037	977	93	1	43,177
	November	1,029	988	66	1	43,921
	December	1,083	962	60	1	42,031
	AVERAGE	**1,069**	**999**	**81**	**1**	
1981	January†	1,058	949	12	1	39,199
	February†	1,014	943	38	1	38,247
	March†	1,041	989	68	(s)	38,744
	April†	932	958	47	1	40,914
	May†	927	1,007	41	1	44,651
	June†	R1,056	R999	R64	(s)	R44,862
	July†	*1,085*	*1,049*	*19*	NA	*43,624*
	AVERAGE	**1,016**	**986**	**41**	**NA**	

Geographic coverage: the 50 United States and District of Columbia.
Estimated data in italics. These are likely to be revised.
‡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: •See Sources on the last page of this section.

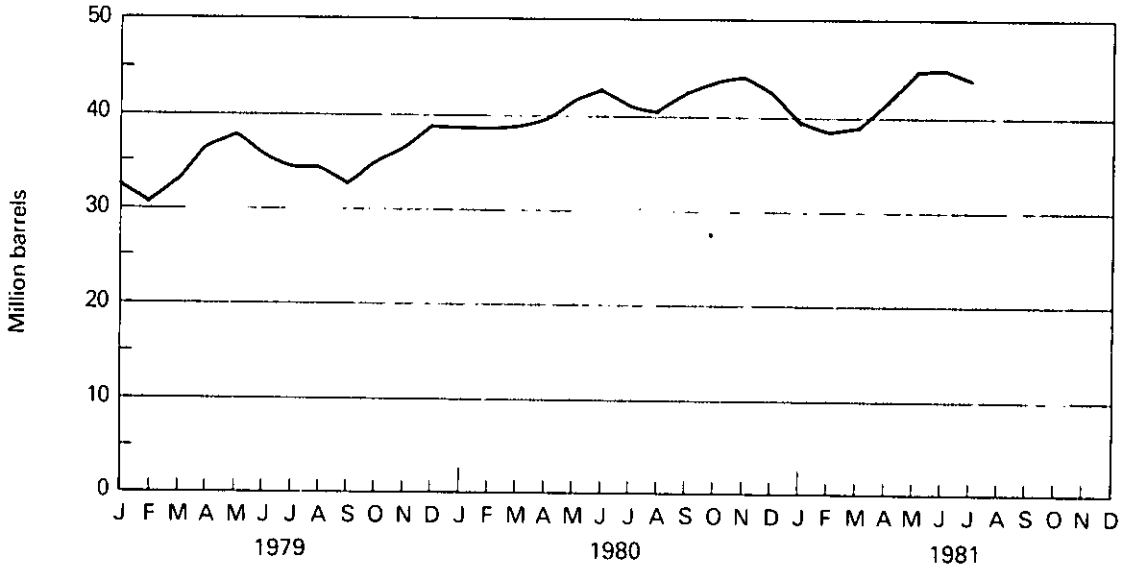
Petroleum

Jet Fuel

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Distillate Fuel Oil

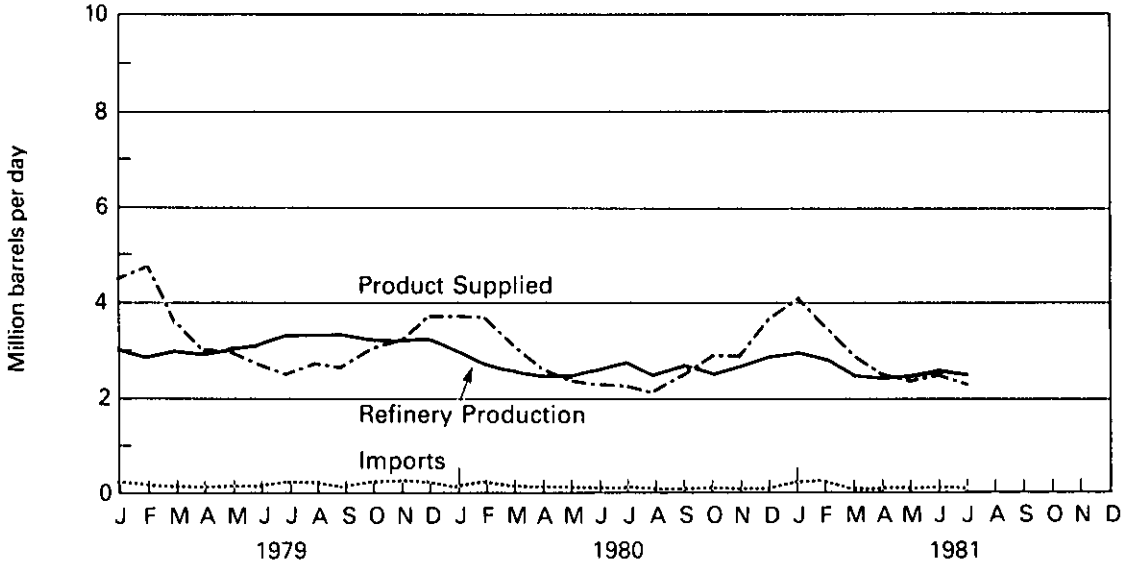
		Product Supplied[1]	Refinery Production[1,2]	Imports	Exports	Stocks[2]
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**3,092**	**2,820**	**392**	**9**	**‡196,421**
1974	**AVERAGE**	**2,948**	**2,668**	**289**	**2**	**‡200,029**
1975	**AVERAGE**	**2,851**	**2,653**	**155**	**1**	**‡208,787**
1976	**AVERAGE**	**3,133**	**2,924**	**146**	**1**	**‡185,948**
1977	**AVERAGE**	**3,352**	**3,277**	**250**	**1**	**‡250,260**
1978	**AVERAGE**	**3,432**	**3,167**	**173**	**3**	**‡216,439**
1979	**AVERAGE**	**3,311**	**3,152**	**193**	**3**	**‡228,712**
1980	January	3,732	3,023	179	7	212,126
	February	3,706	2,778	221	8	191,464
	March	3,171	2,564	179	19	177,659
	April	2,630	2,462	147	2	177,006
	May	2,402	2,471	126	1	183,072
	June	2,331	2,645	108	(s)	195,790
	July	2,225	2,688	117	3	213,756
	August	2,136	2,462	77	(s)	226,305
	September	2,590	2,687	101	(s)	232,310
	October	2,918	2,589	115	(s)	225,711
	November	2,916	2,699	133	(s)	223,261
	December	3,646	2,892	166	(s)	205,113
	AVERAGE	**2,865**	**2,663**	**139**	**3**	
1981	January†	4,074	2,997	227	(s)	180,237
	February†	3,431	2,813	325	17	171,878
	March†	2,893	2,485	140	(s)	163,853
	April†	2,512	2,415	113	3	164,550
	May†	2,377	2,453	161	(s)	172,235
	June†	R2,416	R2,524	R195	(s)	R181,594
	July†	*2,331*	*2,530*	*101*	NA	*183,378*
	AVERAGE	**2,858**	**2,601**	**178**	**NA**	

Geographic coverage: the 50 United States and District of Columbia.
[1]Beginning in January 1981, EIA modified its monthly petroleum surveys. On the new basis distillate fuel oil production and product supplied in 1980 would have been an average of 105,000 barrels per day higher than shown.
[2]See Definitions.
Estimated data in italics. These are likely to be revised.
‡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: •See Sources on the last page of this section.

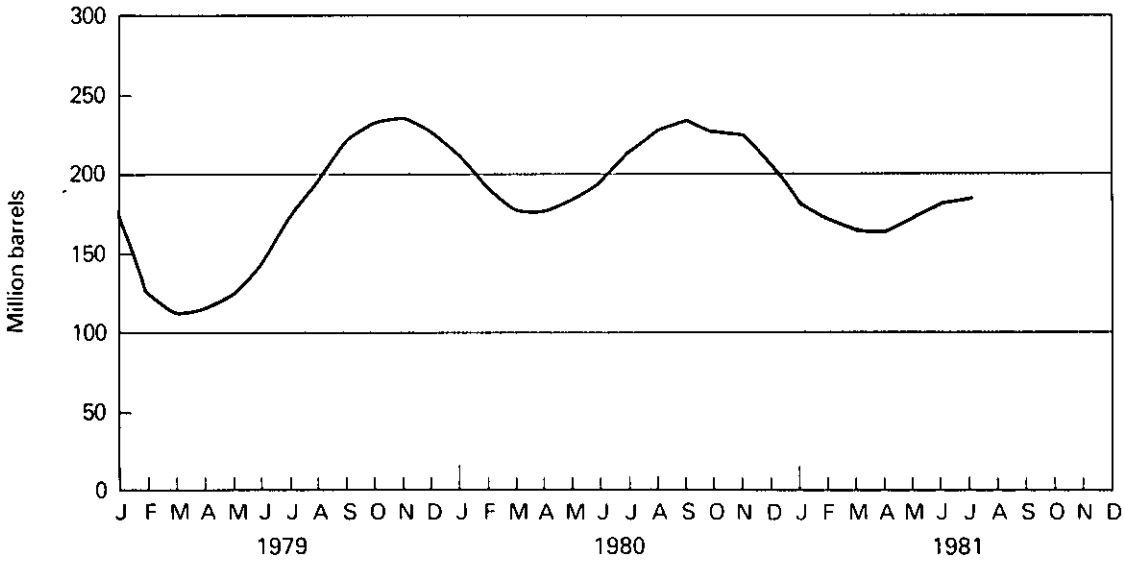
Petroleum

Distillate Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Residual Fuel Oil

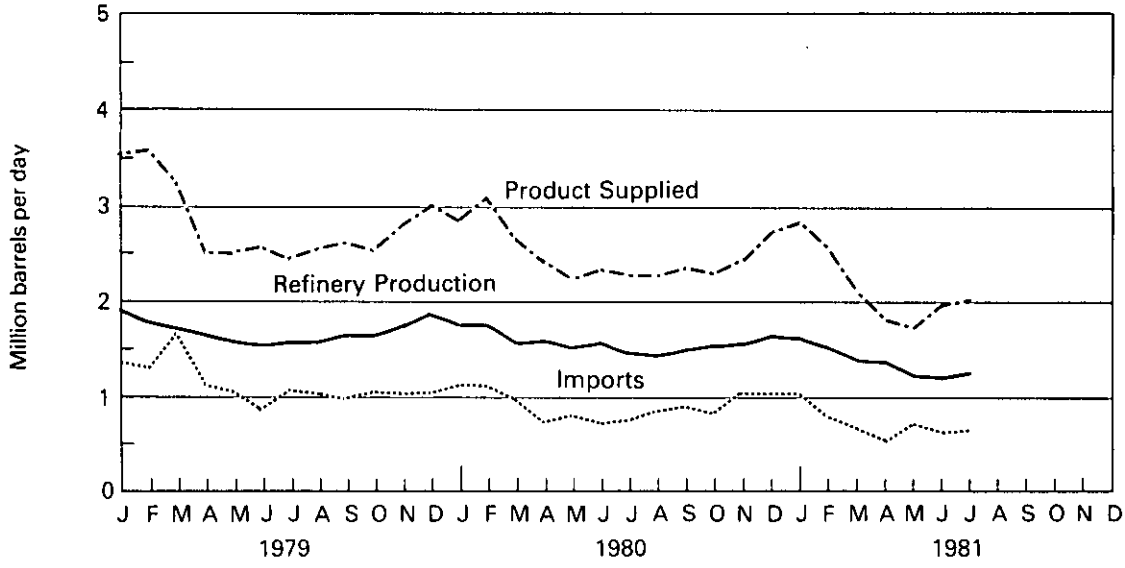
		Product Supplied[1]	Refinery Production[1]	Imports	Exports	Stocks
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**2,822**	**971**	**1,853**	**23**	**‡53,480**
1974	**AVERAGE**	**2,639**	**1,070**	**1,587**	**14**	**‡59,694**
1975	**AVERAGE**	**2,462**	**1,235**	**1,223**	**15**	**‡74,126**
1976	**AVERAGE**	**2,801**	**1,377**	**1,413**	**12**	**‡72,344**
1977	**AVERAGE**	**3,071**	**1,754**	**1,359**	**6**	**‡89,993**
1978	**AVERAGE**	**3,023**	**1,667**	**1,355**	**13**	**‡90,194**
1979	**AVERAGE**	**2,826**	**1,687**	**1,151**	**9**	**‡95,598**
1980	January	2,865	1,766	1,132	5	97,153
	February	3,099	1,770	1,119	17	90,959
	March	2,650	1,581	971	2	88,269
	April	2,434	1,591	769	[2]40	85,219
	May	2,234	1,507	812	20	87,639
	June	2,324	1,575	749	14	87,657
	July	2,287	1,480	787	60	85,605
	August	2,287	1,444	875	2	86,949
	September	2,360	1,497	906	21	87,876
	October	2,224	1,513	871	70	90,989
	November	2,430	1,577	1,024	88	93,814
	December	2,747	1,661	1,025	62	90,344
	AVERAGE	**2,493**	**1,577**	**920**	**33**	
1981	January†	2,836	1,609	1,015	65	82,863
	February†	2,578	1,562	956	125	78,214
	March†	2,097	1,427	699	145	75,068
	April†	1,828	1,329	578	151	73,328
	May†	1,775	1,222	732	25	78,551
	June†	R2,007	R1,247	R540	76	R70,112
	July†	*2,027*	*1,286*	*666*	NA	*66,280*
	AVERAGE	**2,160**	**1,382**	**740**	**NA**	

Geographic coverage: the 50 United States and District of Columbia.
[1]Beginning in January 1981, EIA modified its monthly petroleum surveys. On the new basis residual fuel oil production and product supplied in 1980 would have been an average of 54,000 barrels per day higher than shown.
[2]Beginning in April 1980, residual fuel oil exports increased due to shipments of high sulfur fuel to the Carribean to be desulfurized and returned to the United States. In July 1980, additional exports of high sulfur fuel oil began to be shipped to Asia.
Estimated data in italics. These are likely to be revised.
‡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: •See Sources on the last page of this section.

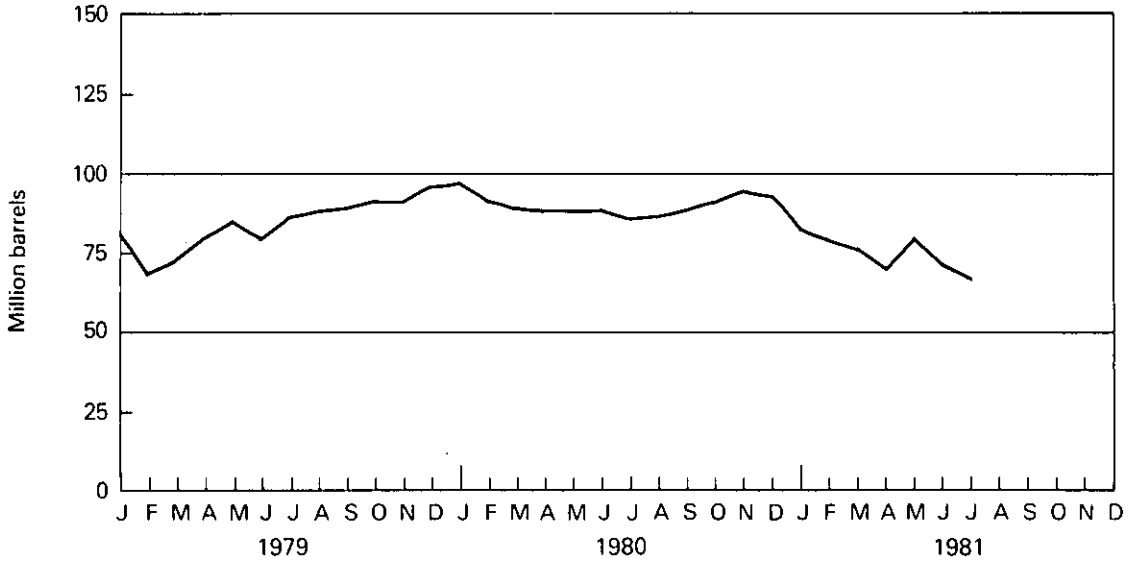
Petroleum

Residual Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Natural Gas Plant Liquids, Including Liquefied Refinery Gases

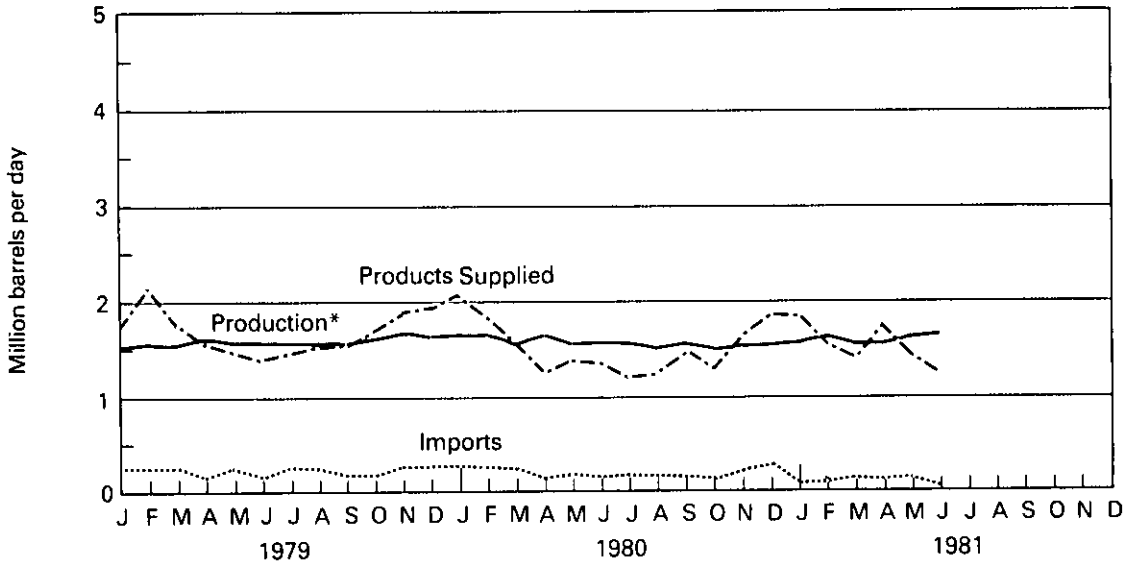
		Products Supplied[1]	Production[1]		Used at Refineries[1]	Imports	Stocks[1]
			At processing plants	At refineries			
		Thousand barrels per day					Thousand barrels
1973	**AVERAGE**	**1,454**	**1,738**	**375**	**815**	**239**	**‡106,659**
1974	**AVERAGE**	**1,422**	**1,688**	**338**	**746**	**212**	**‡120,175**
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	**AVERAGE**	**1,416**	**1,567**	**355**	**639**	**139**	**[2]‡140,052**
1979	**AVERAGE**	**1,695**	**1,584**	**340**	**504**	**230**	**‡125,289**
1980	January	2,021	1,647	338	698	282	110,378
	February	1,843	1,651	354	572	265	105,389
	March	1,573	1,569	342	518	224	106,070
	April	1,212	1,626	328	507	149	117,006
	May	1,376	1,555	325	428	187	124,615
	June	1,385	1,559	335	386	R193	133,516
	July	1,218	1,513	325	455	178	143,618
	August	1,244	1,514	323	417	166	153,716
	September	1,463	1,510	314	463	168	155,181
	October	1,612	1,498	300	501	262	152,763
	November	1,697	1,568	324	528	240	149,277
	December	1,863	1,558	346	545	299	142,251
	AVERAGE	**1,542**	**1,564**	**329**	**502**	**218**	
1981	January†	1,809	1,596	332	620	200	132,285
	February†	1,580	1,641	384	556	205	134,358
	March†	1,363	1,556	312	480	146	139,039
	April†	1,775	1,569	319	461	132	131,754
	May†	1,443	1,616	323	445	152	137,479
	June†	1,228	1,666	328	473	71	147,729
	AVERAGE	**1,532**	**1,607**	**332**	**505**	**151**	

Geographic coverage: the 50 United States and District of Columbia.
[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 totaled 147,548 thousand barrels.
‡Total as of December 31.
†Preliminary data. R = Revised data.
Sources: • 1973 through December 1980 are shown on last page of this section.
• January 1981 through June 1981: EIA "Monthly Petroleum Statistics Report."
• Sources for the *Energy Data Reports* are shown on the last page of this section.

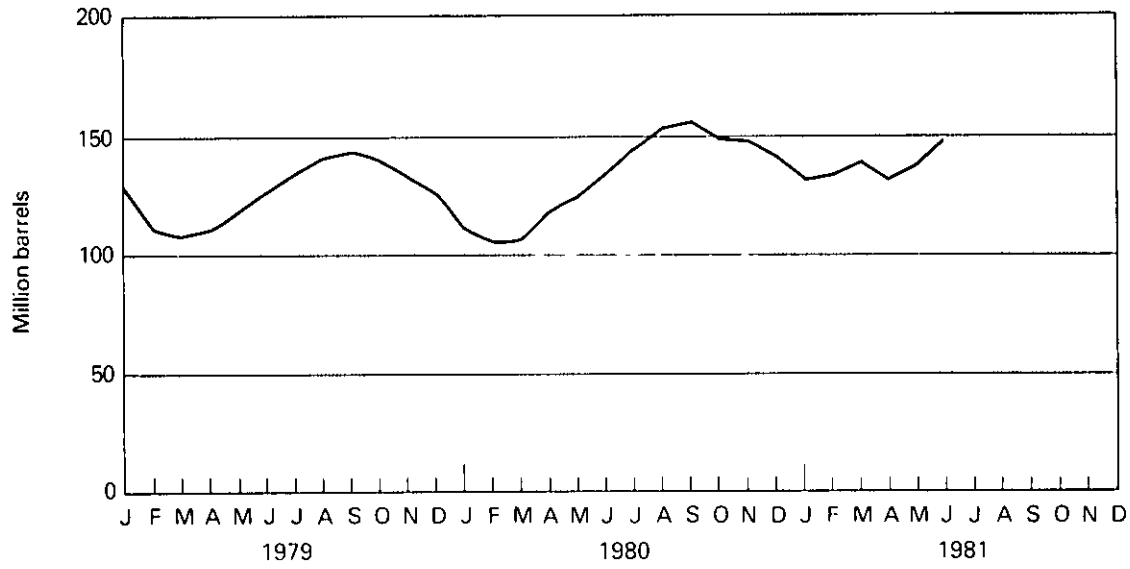
Petroleum

Natural Gas Plant Liquids

Products Supplied, Production and Imports



Stocks



*At processing plants.

Petroleum

Petroleum Primary Supply Balance

	1980				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
	Thousand barrels per day				
Primary Supply					
Crude oil and lease condensate production	8,685	8,625	8,531	8,548	8,597
Natural gas plant liquids production	1,622	1,580	1,513	1,541	1,564
Other hydrocarbon supply	56	49	44	42	48
Crude oil imported[1]	6,029	5,366	4,692	4,806	5,220
Petroleum products imported[2]	1,872	1,440	1,418	1,714	1,611
Total new primary supply	18,263	17,059	16,197	16,652	17,040
Processing gain	629	567	593	591	595
Stock change—all oils[3]	-1	+753	+393	-557	+146
Total net primary supply	18,893	16,873	16,398	17,800	17,489
Unaccounted for crude oil[4]	-57	+61	+158	+131	+73
Disposition					
Crude oil and petroleum products exported	547	562	468	590	542
Crude oil losses	15	14	14	14	14
Total products supplied[5]	18,274	16,358	16,074	17,327	17,006
Total disposition	18,836	16,934	16,556	17,931	17,562

	1981	
	1st Qtr.†	2nd Qtr.†
Primary Supply		
Crude oil and lease condensate production	8,578	8,543
Natural gas plant liquids production	1,597	1,617
Other hydrocarbon supply	39	57
Crude oil imported[1]	4,726	4,219
Petroleum products imported[2]	1,677	1,301
Total new primary supply	16,618	15,737
Processing gain	578	497
Stock change—all oils[3]	-7	+350
Total net primary supply	17,203	15,884
Unaccounted for crude oil[4]	+188	+126
Disposition		
Crude oil and petroleum products exported	551	514
Crude oil losses	14	13
Total products supplied[5]	16,826	15,484
Total disposition	17,391	16,011

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes crude 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.
†Preliminary data.
Sources: • 1979: Energy Information Administration (EIA) *Energy Data Report,* "Petroleum Statement, Annual."
• January 1980 through December 1980: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Monthly."
• January 1981 through June 1981: EIA, "Monthly Petroleum Statistics Report".
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are shown on the last page of this section.

Sources for the Petroleum Section

- 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual" (except unleaded gasoline) and "PAD Districts Supply/Demand, Annual."
- Unleaded gasoline: — Energy Information Administration (EIA) "Monthly Petroleum Statistics Report."
- 1977 through 1979: EIA *Energy Data Reports,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual".
- 1980: EIA *Energy Data Reports,* "Petroleum Statement, Monthly" and "PAD Districts Supply/Demand, Monthly."
- January 1981 through June 1981: EIA "Monthly Petroleum Statistics Report".
- Data for the most recent month are estimates based on EIA weekly data (except domestic production).
- Domestic production for the most recent month is an EIA estimate based on historical data from State Conservation Agencies and the U.S. Geological Survey.
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: EIA Forms EIA-64 (Natural Gas Liquids Operations Report), EIA-87 (Refinery Report), EIA-88 (Bulk Terminals Report), EIA-89 (Pipeline Report) and EIA-90 (Crude Oil Stock Report); Economic Regulatory Administration (ERA) Forms ERA-60 (Imports) and FEA P133 (Imports from Puerto Rico); Bureau of the Census IM 145 (Imports), EM 522 (Exports), and EM 594 (Exports); U.S. Geological Survey (Crude Production) and State Conservation Agencies(Crude Production).

Natural Gas

Consumption of natural gas in the United States during July 1981 was an estimated 1.3 trillion cubic feet (Tcf). This was 3.9 percent higher than in June 1981 and 3.0 percent greater than in July 1980. Estimated consumption during the first 7 months of 1981 totaled 11.6 Tcf, 3.4 percent less than during the January through July 1980 period.

Production of dry natural gas in July 1981 was an estimated 1.6 Tcf, 2.6 percent higher than in June 1981 and 3.3 percent greater than in July 1980. Output during the January through July 1981 period totaled 11.3 Tcf, 1.1 percent less than during the comparable 1980 period.

Imports of natural gas in July 1981 were an estimated 64 billion cubic feet (Bcf), 4.9 percent greater than in the previous July. During the first 7 months of 1981, imports of natural gas totaled an estimated 494 Bcf, 18.2 percent lower than during the comparable 1980 period. Receipts of foreign gas during July 1981 included Algerian liquefied natural gas (LNG) equivalent to approximately 5 Bcf.

Domestic producer sales to major interstate pipelines in May 1981 totaled 909 Bcf, 5.8 percent above sales for the previous May. Total sales during the first 5 months of 1981 were 4.6 Tcf, approximately the same as sales during the comparable 1980 period.

Stocks of working gas* in underground natural gas storage reservoirs at the end of July 1981 totaled 2.6 Tcf, slightly below stocks available a year earlier. Net storage injections during July 1981 were 295 Bcf, 3.9 percent higher than during the previous July.

*Gas available for withdrawal.

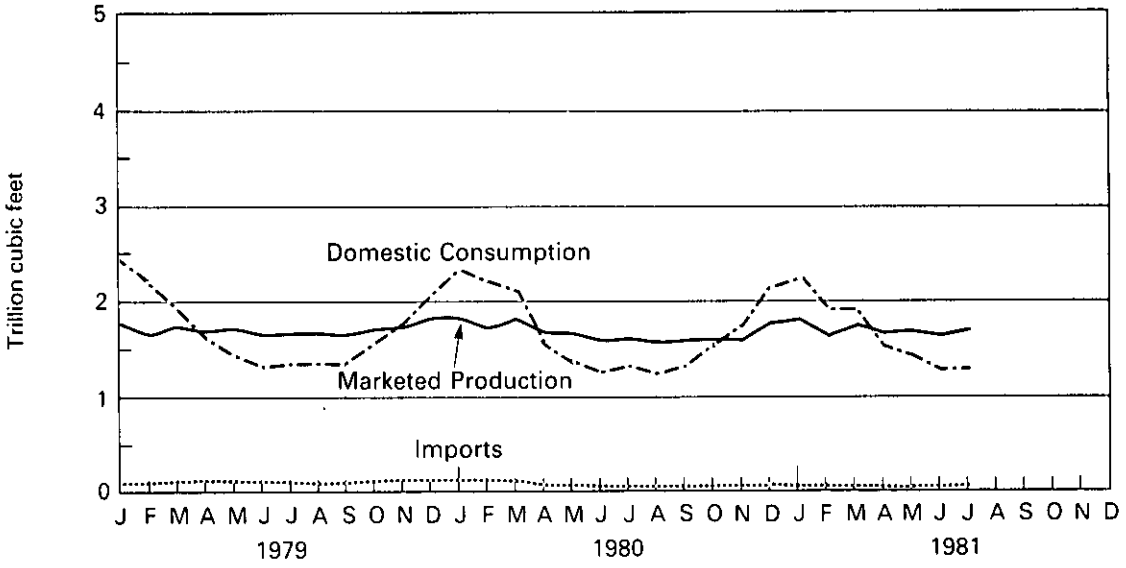
Natural Gas

		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	**TOTAL**	**19,627**	**19,974**	**19,122**	**9,911**	**966**	**53**
1979	**TOTAL**	**20,241**	**20,471**	**19,663**	**10,496**	**1,253**	**56**
1980	January	2,279	1,817	1,745	981	118	6
	February	2,192	1,705	1,638	898	108	5
	March	2,099	1,827	1,754	960	109	5
	April	1,568	1,667	1,601	897	77	3
	May	1,355	1,692	1,625	859	70	3
	June	1,253	1,583	1,520	794	61	3
	July	1,301	1,613	1,549	825	61	3
	August	1,246	1,572	1,510	828	60	3
	September	1,299	1,577	1,515	800	60	5
	October	1,542	1,647	1,582	894	75	5
	November	1,783	1,651	1,586	906	88	3
	December	2,156	1,794	1,723	963	98	5
	TOTAL	**20,073**	**20,145**	**19,348**	**10,605**	**985**	**49**
1981	January	2,256	1,769	1,699	965	86	5
	February	1,899	1,592	1,529	873	79	3
	March	1,906	1,745	1,676	945	73	4
	April	1,512	1,675	1,609	905	68	3
	May	R1,436	R1,695	R1,629	909	61	5
	June	1,290	*1,630*	*1,560*	NA	R63	5
	July	1,340	*1,670*	*1,600*	NA	*64*	3
	TOTAL (Year-to-date)	**11,639**	**11,776**	**11,302**	**NA**	**494**	**28**

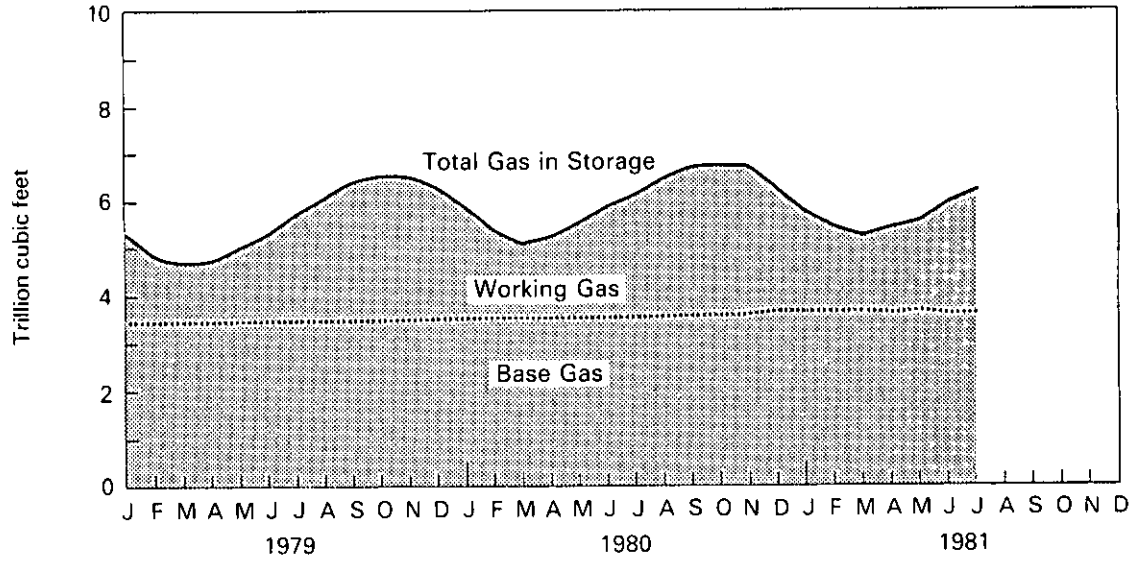
Geographic coverage: the 50 United States and District of Columbia.
Estimated data in italics. These are likely to be revised.
R = Revised data. NA = Not available.
Sources: • Domestic Consumption—1973 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Natural Gas" chapter; 1976 through 1979: Energy Information Administration (EIA) *Energy Data Report*, "Natural Gas Production and Consumption"; January 1980 forward: EIA estimates based on a supply/disposition balance calculation.
• Production —State reports to the Interstate Oil Compact Commission, data from the United States Geological Survey 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 1980: FPC Form 14, "Imports and Exports of Natural Gas"; January 1981 forward: EIA estimates based on import data from FPC Form 11.
• Exports —1973 through 1980: FPC Form 14; January 1981 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	**TOTAL**	**‡5,358**	**‡3,150**	**‡2,208**	**NA**	**NA**	**NA**
1976	**TOTAL**	**‡5,231**	**‡3,310**	**‡1,922**	**1,952**	**2,074**	**(122)**
1977	**TOTAL**	**‡5,844**	**‡3,377**	**‡2,466**	**2,390**	**1,767**	**623**
1978	**TOTAL**	**‡5,999**	**‡3,459**	**‡2,540**	**2,330**	**2,176**	**154**
1979	**TOTAL**	**‡6,297**	**‡3,537**	**‡2,761**	**2,384**	**2,041**	**343**
1980	January	5,865	3,535	2,330	21	465	(444)
	February	5,397	3,536	1,861	24	493	(469)
	March	5,131	3,542	1,589	41	307	(266)
	April	5,227	3,547	1,680	174	78	96
	May	5,538	3,553	1,985	319	8	311
	June	5,841	3,560	2,281	316	13	303
	July	6,127	3,564	2,563	302	18	284
	August	6,444	3,594	2,850	328	30	298
	September	6,692	3,596	3,096	260	11	249
	October	6,782	3,598	3,184	141	53	88
	November	6,639	3,620	3,019	66	203	(137)
	December	6,272	3,629	2,643	34	402	(368)
1981	January	5,763	3,629	2,134	28	537	(509)
	February	5,440	3,628	1,812	62	385	(323)
	March	5,248	3,630	1,618	50	243	(193)
	April	5,380	3,631	1,749	191	59	132
	May	5,598	3,634	1,964	243	25	218
	June	5,895	3,634	2,261	323	31	292
	July	6,200	3,649	2,551	324	29	295

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 9.
[2]Net Storage Injections = storage injections minus storage withdrawals. Parentheses indicate withdrawals greater than injections.
‡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 July rotary rig count of 3,998 was the highest in U.S. drilling history. This was a 35.4 percent increase over the July 1980 count of 2,953 rotary rigs.

Well completions reported in July 1981 totaled 5,604. This is a 25.7 percent increase from the number reported during July 1980.

Oil well completions reported in July 1981 (2,790 reported) were up 34.2 percent from July 1980 (2,079 reported). In July 1981, 1,116 gas well completions were reported, 7.1 percent above the July 1980 level. Dry hole completions reported in July 1981 increased 27.0 percent (1,698 as compared to 1,337 during the previous July). Total reported footage drilled increased 17.5 percent in July 1981 (25.5 million feet as compared to 21.7 million feet the year before).

The total seismic crew count for July 1981 surpassed the previous U.S. record established in late 1952. There were 43 crews engaged in seismic exploratory work offshore in July 1981. This was a 2.4 percent increase from the July 1980 level. July 1981 onshore seismic activity attained a recent high of 668 crews, 30.0 percent higher than activity during July 1980.

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	**AVERAGE**	**2,259**	**TOTAL**	**17,775**	**13,064**	**16,218**	**47,057**	**227,110**
1979	**AVERAGE**	**2,177**	**TOTAL**	**19,383**	**14,681**	**15,752**	**49,816**	**238,659**
1980	January	2,571		1,436	782	1,240	3,458	16,475
	February	2,613		1,635	1,000	1,297	3,932	18,891
	March	2,658		2,390	1,834	1,542	5,766	27,691
	April	2,682		1,841	1,121	1,158	4,120	18,855
	May	2,797		2,059	1,070	1,191	4,320	19,899
	June	2,850		2,228	1,282	1,451	4,961	24,479
	July	2,953		R2,079	R1,042	R1,337	R4,458	R21,734
	August	3,045		2,340	1,270	1,537	5,147	24,037
	September	3,099		2,636	1,721	1,761	6,118	28,168
	October	3,148		2,409	1,191	1,692	5,292	24,554
	November	3,220		2,239	1,498	1,598	5,335	25,273
	December	3,286		3,675	1,903	2,237	7,815	33,806
	AVERAGE	**2,910**	**TOTAL**	**27,026**	**15,730**	**18,089**	**60,845**	**284,461**
1981	January	3,386		1,789	971	1,360	4,120	20,195
	February	3,502		2,462	1,045	1,609	5,116	22,763
	March	3,595		3,102	1,424	1,878	6,404	30,144
	April	3,728		2,905	1,600	1,546	6,051	27,836
	May	3,816		2,604	1,159	1,675	5,438	24,842
	June	R3,926		3,497	1,320	2,105	6,922	31,689
	July	3,998		2,790	1,116	1,698	5,604	25,542
	AVERAGE	**3,707**	**TOTAL**	**19,135**	**8,609**	**11,847**	**39,591**	**182,498**

Geographic coverage: the 50 United States and District of Columbia.
[1]These data are for well completions reported to the American Petroleum Institute during the reporting period. 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.
R = Revised data.
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	**AVERAGE**	**25**	**327**	**352**	**174,607**	**135,899**	**310,506**
1979	**AVERAGE**	**30**	**370**	**400**	**193,212**	**163,929**	**357,141**
1980	January	29	439	468			
	February	29	440	469			
	March	29	448	477			
	April	31	465	496			
	May	34	468	502			
	June	39	496	535			
	July	42	514	556			
	August	44	521	565			
	September	44	523	567			
	October	41	530	571			
	November	41	531	572			
	December	40	540	580			
	AVERAGE	**37**	**493**	**530**	**202,694**	**184,088**	**386,782**
1981	January	38	553	591			
	February	41	561	602			
	March	40	570	610			
	April	40	605	645			
	May	42	619	661			
	June	44	652	696			
	July	43	668	711			
	AVERAGE	**41**	**604**	**645**			

Geographic coverage: the 50 United States and District of Columbia.
[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 July 1981 was 73.2 million tons, 19.4 percent more than the 61.3 million tons produced in July 1980. Coal production during the first 7 months of 1981 totaled 425.1 million tons, down 11.3 percent from the 479.4 million tons produced in the first 7 months of 1980.

Electric utility coal consumption in June 1981 totaled 50.0 million tons, 9.1 percent more than consumption in June 1980.

Electric utility coal stocks of 144.5 million tons at the end of June 1981 were 34.4 million tons below the level 1 year earlier.

Imports of coal in June 1981 totaled 138 thousand tons. Exports of coal in June 1981 totaled 6.2 million tons, 2.7 million tons less than the amount exported during June 1980. Coal exports were principally to Japan (27.3 percent), and Canada (16.7 percent).

Coal

Bituminous Coal, Lignite, and Anthracite

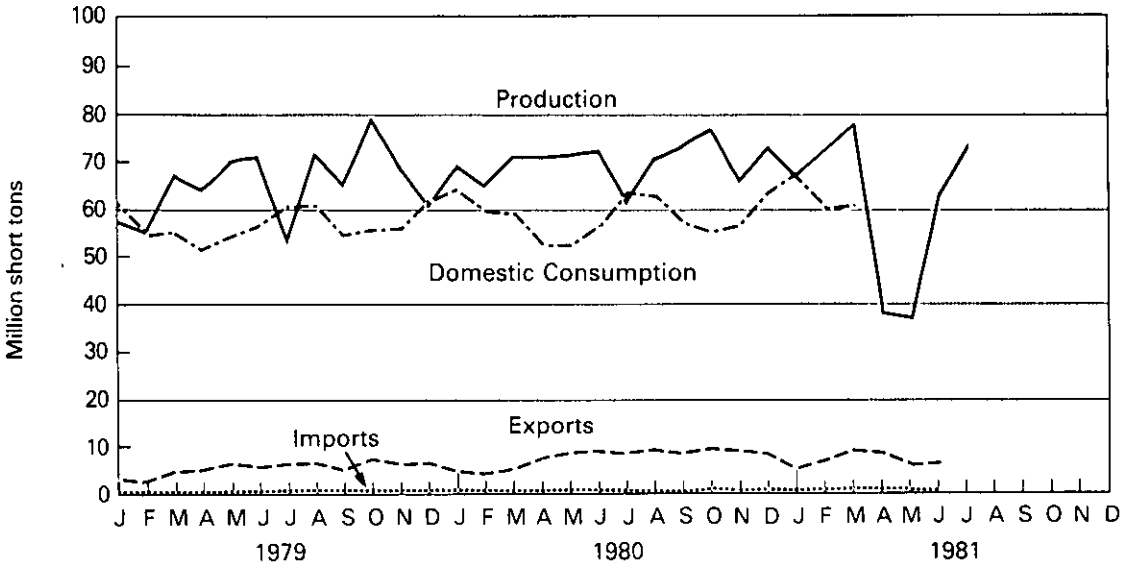
		Production	Domestic Consumption	Imports[1]	Exports[2,3]	Stocks[4]
			Thousand short tons			
1973	**TOTAL**	**598,568**	**562,584**	**127**	**53,587**	**104,335**
1974	**TOTAL**	**610,023**	**558,402**	**2,080**	**60,661**	**96,323**
1975	**TOTAL**	**654,641**	**562,641**	**940**	**66,309**	**128,050**
1976	**TOTAL**	**684,913**	**603,790**	**1,203**	**60,021**	**134,438**
1977	**TOTAL**	**697,205**	**625,291**	**1,647**	**54,312**	**157,098**
1978	**TOTAL**	**670,164**	**625,225**	**2,953**	**40,714**	**145,551**
1979	**TOTAL**	**781,134**	**680,524**	**2,059**	**66,042**	**181,646**
1980	January	69,594	63,521	121	4,460	179,450
	February	65,546	59,678	193	4,041	176,808
	March	70,953	58,851	93	5,633	176,685
	April	69,658	52,635	63	7,563	185,367
	May	71,043	52,834	207	8,597	193,920
	June	71,338	56,098	104	8,899	199,299
	July	61,285	63,122	32	8,247	R187,913
	August	68,399	62,752	166	9,270	190,689
	September	68,822	57,306	2	8,364	194,467
	October	72,290	55,774	139	9,454	201,975
	November	68,655	56,800	3	8,987	204,436
	December	72,117	63,362	70	8,228	204,028
	TOTAL	**829,700**	**702,733**	**1,194**	**91,742**	
1981	January	65,588	R67,147	35	5,795	R198,603
	February	70,478	R59,511	104	6,771	R197,962
	March	77,453	R60,072	77	9,710	R206,850
	April	38,644	NA	63	8,271	NA
	May	37,017	NA	96	6,086	NA
	June	62,775	NA	138	6,158	NA
	July	73,183	NA	NA	NA	NA
	TOTAL (Year-to-date)	**425,138**	**NA**	**NA**	**NA**	**NA**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
See Explanatory Note 10 for methodology used to calculate domestic consumption from 1978 forward.
[1]Bituminous coal is the only type of coal imported during the years shown above.
[2]Includes exports of lignite beginning in 1978. Lignite prior to 1978 was combined with lignite briquets. Exports of lignite totaled 22,821 short tons in 1978; 26,389 short tons in 1979; and 65,064 short tons in 1980.
[3]Excludes shipments of anthracite to U.S. Armed Forces overseas (340,000 short tons in 1980).
[4]Stocks held by electric utilities, coke plants, and the other Industrial Sector at the end of period. Excludes stocks at retail dealers (which are consumed by the Residential and Commercial Sector).
NA = Not available. R = Revised data.
Sources: • See Sources on the last page of this section.

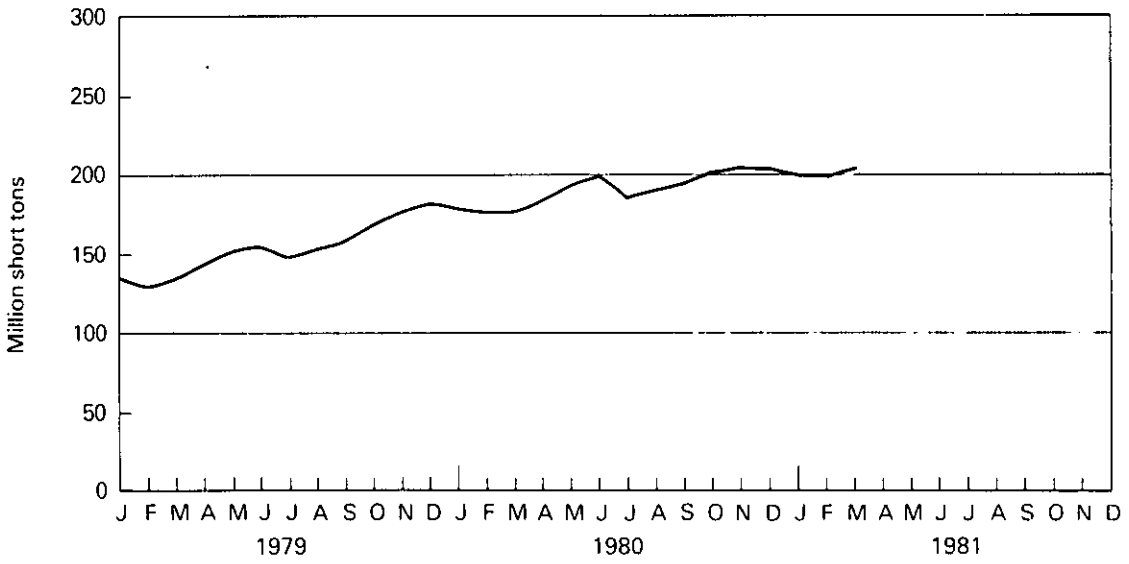
Coal

Bituminous Coal, Lignite, and Anthracite

Production, Consumption, Imports, and Exports



Stocks



Coal

Consumption—Bituminous Coal, Lignite, and Anthracite

			Industrial			
		Electric Utilities	Coke Plants[1]	Other Industrial[2] Including Transportation	Residential and Commercial	Total
			Thousand short tons			
1973	**TOTAL**	**389,212**	**94,101**	**68,154**	**11,117**	**562,584**
1974	**TOTAL**	**391,811**	**90,191**	**64,983**	**11,417**	**558,402**
1975	**TOTAL**	**405,962**	**83,598**	**63,670**	**9,410**	**562,641**
1976	**TOTAL**	**448,371**	**84,704**	**61,799**	**8,916**	**603,790**
1977	**TOTAL**	**477,126**	**77,739**	**61,472**	**8,954**	**625,291**
1978	**TOTAL**	**481,235**	**71,394**	**63,085**	**9,511**	**625,225**
1979	**TOTAL**	**527,051**	**77,368**	**67,717**	**8,388**	**680,524**
1980	January	50,371	6,342	5,944	864	63,521
	February	47,512	6,010	5,400	756	59,678
	March	46,685	6,428	5,199	539	58,851
	April	40,692	6,247	5,118	578	52,635
	May	41,464	6,127	4,894	349	52,834
	June	45,821	5,326	4,675	276	56,098
	July	53,655	4,903	4,222	342	63,122
	August	53,214	4,878	4,337	323	62,752
	September	47,913	4,794	4,170	429	57,306
	October	45,092	5,107	4,990	585	55,774
	November	45,698	5,152	5,331	619	56,800
	December	51,157	5,346	6,067	792	63,362
	TOTAL	**569,274**	**66,660**	**60,347**	**6,452**	**702,733**
1981	January	54,357	R5,466	6,469	855	R67,147
	February	47,914	R5,158	5,874	565	R59,511
	March	48,398	R5,550	5,654	470	R60,072
	April	43,677	NA	NA	NA	NA
	May	44,999	NA	NA	NA	NA
	June	49,988	NA	NA	NA	NA
	TOTAL (Year-to-date)	**289,333**	**NA**	**NA**	**NA**	**NA**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Bituminous coal and anthracite only. Lignite is not used at coke plants.
[2]See Explanatory Note 10.
NA = Not available. R = Revised data.
Sources: • See Sources on the last page of this section.

Coal

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

		Industrial		
	Electric Utilities	Coke Plants[2]	Other Industrial	Total[3]
	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	**128,225**	**8,278**	**9,048**	**145,551**
1979	**159,714**	**10,155**	**11,777**	**181,646**
1980 January	158,717	9,634	11,099	179,450
February	157,124	9,263	10,421	176,808
March	157,625	9,317	9,743	176,685
April	165,817	9,579	9,971	185,367
May	174,029	9,692	10,199	193,920
June	178,959	9,913	10,427	199,299
July	R168,806	8,427	10,680	R187,913
August	171,891	7,866	10,932	190,689
September	175,067	8,213	11,187	194,467
October	182,045	8,488	11,442	201,975
November	184,133	8,606	11,697	204,436
December	183,010	9,067	11,951	204,028
1981 January	176,975	R9,634	11,994	R198,603
February	175,715	R10,211	12,036	R197,962
March	183,983	R10,788	12,079	R206,850
April	168,894	NA	NA	NA
May	152,103	NA	NA	NA
June	144,520	NA	NA	NA

Geographic coverage: the 50 United States and District of Columbia.
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.
[2]Bituminous coal and anthracite only. Lignite is not used at coke plants.
[3]Total excludes stocks at retail dealers (which are consumed by the Residential and Commercial Sectors).
NA = Not available. R = Revised data.
Sources: • See Sources on the last page of this section.

Sources for the Coal Section

•**Production:** 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys;* October 1977 forward: Energy Information Administration (EIA) "Weekly Coal Report," "Coal Distribution Report," (Form EIA-6), and selected State agencies.
•**Consumption and Stocks:** 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys;*
—Electric Utilities—October 1977 forward: EIA "Monthly Power Plant Report" (FPC Form 4).
—Other Industrial—October 1977 through December 1979: EIA "Monthly Fuel Consumption Report - Manufacturing Plants" (Form EIA-3); January 1980 forward: EIA "Quarterly Fuel Consumption Report - Manufacturing Plants" (Form EIA-3) and EIA "Coal Distribution Report" (Form EIA-6).
—Coke Plants—October 1977 through December 1980: "Coke and Coal Chemicals - Monthly/Annual" (Form EIA-5/5A); January 1981 forward: "Coke and Coal Chemicals - Quarterly/Annual" (Form EIA-5/5A).
—Residential and Commercial—October 1977 through December 1979: "Monthly Coal Report, Retail Dealers and Upper Lake Docks" (Form EIA-2); January 1980 forward: "Coal Distribution Report" (Form EIA-6).
•**Imports/Exports:** 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys;* October 1977 forward: Bureau of the Census, Monthly Reports IM 145 (Imports) and EM 522 (Exports).

Electric Utilities

June 1981 production of electricity by utilities was 202.7 billion kilowatt-hours, 7.0 percent above the June 1980 production level. Coal-fired production totaled 99.8 billion kilowatt-hours, petroleum-fired production totaled 19.0 billion kilowatt-hours, natural gas-fired production totaled 35.9 billion kilowatt-hours, and nuclear production totaled 21.2 billion kilowatt-hours. These figures reflect increases of 6.5, 5.3, 14.7, and 15.5 percent, respectively, above the June 1980 output levels. Hydroelectric production totaled 26.4 billion kilowatt-hours, 4.6 percent below June 1980 output levels.

Sales of electricity to all ultimate consumers in the United States in June 1981 totaled 176.0 billion kilowatt-hours, an increase of 9.5 percent from sales of the month before and 6.7 percent above June 1980 sales. Sales to residential consumers during June 1981 were 55.0 billion kilowatt-hours, 5.2 percent above sales for the corresponding month in 1980. Commercial sales were 43.1 billion kilowatt-hours, 7.5 percent more than the amount for June 1980. Sales to industrial consumers totaled 71.6 billion kilowatt-hours in June 1981, about 7.3 percent more than the June 1980 figure. In June 1981 other sales totaled 6.2 billion kilowatt-hours, 8.7 percent above the June 1980 level.

Electric utility petroleum consumption (excluding petroleum coke) during June 1981 was 32.4 million barrels, a 5.6 percent increase above the June 1980 level. Coal consumption for June 1981 was 50.0 million tons, 9.1 percent above the June 1980 rate. During June 1981, consumption of natural gas by electric utilities was 387.0 billion cubic feet, 14.9 percent above the June 1980 consumption level.

On June 30, 1981, utility stocks of anthracite, bituminous coal, and lignite totaled 144.5 million tons. Stockpiles were 19.2 percent below the levels of June 1980.

Petroleum stocks (excluding petroleum coke) on June 30, 1981, totaled 127.3 million barrels, 11.2 percent below the levels for the same month of 1980.

Electric Utilities

Net Electricity Production by Primary Energy Source

		Coal[1]	Petroleum[2]	Natural Gas	Nuclear	Hydro	Other[3]	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	**TOTAL**	**975,742**	**365,060**	**305,391**	**276,403**	**280,419**	**3,315**	**2,206,331**
1979	**TOTAL**	**1,075,037**	**303,525**	**329,485**	**255,155**	**279,783**	**4,387**	**2,247,372**
1980	January	103,258	24,986	26,349	19,746	25,278	388	200,005
	February	98,151	24,781	24,755	19,277	21,378	373	188,715
	March	95,386	20,415	26,891	20,039	24,332	401	187,464
	April	83,562	16,025	24,181	18,794	25,748	410	168,720
	May	84,884	16,545	26,587	18,385	28,865	468	175,734
	June	93,692	18,020	31,295	18,322	27,656	445	189,430
	July	108,457	23,289	39,063	21,024	24,469	475	216,776
	August	107,580	24,885	37,647	24,333	20,431	517	215,393
	September	97,557	17,815	33,580	23,572	18,491	469	191,485
	October	91,196	15,858	28,592	24,510	17,866	533	178,555
	November	93,501	19,989	24,338	20,984	19,217	520	178,550
	December	104,339	23,386	22,961	22,130	22,290	506	195,613
	TOTAL	**1,161,562**	**245,994**	**346,240**	**251,116**	**276,021**	**5,506**	**2,286,439**
1981	January	111,148	25,724	22,081	23,368	22,355	540	205,217
	February	97,653	17,444	21,339	21,595	21,134	483	179,648
	March	99,482	16,962	25,900	22,004	20,572	541	185,461
	April	88,109	15,106	27,309	20,646	20,723	500	172,393
	May	88,941	14,508	29,920	19,723	24,081	483	177,656
	June	99,828	18,972	35,885	21,166	26,370	473	202,694
	TOTAL (Year-to-date)	**585,161**	**108,716**	**162,434**	**128,502**	**135,235**	**3,019**	**1,123,069**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
[3]Includes geothermal, wood and waste.
Source: •Federal Power Commission Form 4, "Monthly Power Plant Report".

Electric Utilities

Electricity 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**	**423,639**	**739,965**	**69,557**	**1,836,024**
1977	**TOTAL**	**641,134**	**444,931**	**772,291**	**70,487**	**1,928,845**
1978	**TOTAL**	**671,094**	**459,908**	**800,656**	**73,152**	**2,004,814**
1979	**TOTAL**	**682,819**	**473,307**	**841,903**	**73,070**	**2,071,101**
1980	January	65,841	39,578	67,532	6,634	179,585
	February	64,514	39,528	68,508	6,171	178,720
	March	60,497	38,762	69,086	6,028	174,373
	April	51,749	36,453	67,908	5,591	161,702
	May	45,699	36,110	67,235	5,807	154,851
	June	52,267	40,129	66,739	5,737	164,872
	July	68,611	45,525	65,531	6,215	185,882
	August	74,893	47,679	67,377	6,255	196,205
	September	67,969	46,028	69,570	6,572	190,139
	October	54,012	40,478	69,414	6,174	170,078
	November	50,539	37,954	67,613	6,068	162,174
	December	60,775	39,846	68,517	6,469	175,607
	TOTAL	**717,366**	**488,070**	**815,030**	**73,721**	**2,094,188**
1981	January	72,240	42,120	67,087	6,830	188,277
	February	64,588	40,244	67,394	6,387	178,613
	March	56,238	38,586	68,599	6,366	169,789
	April	49,624	36,975	68,136	5,953	160,688
	May	47,281	38,409	68,761	6,191	160,642
	June	54,997	43,130	71,615	6,237	175,979
	TOTAL (Year-to-date)	**344,968**	**239,464**	**411,592**	**37,964**	**1,033,988**

Geographic coverage: the 50 United States and District of Columbia.
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: •1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: Federal Energy Regulatory Commission Form 5, "Electric Utility Company Monthly Statement."

Electric Utilities

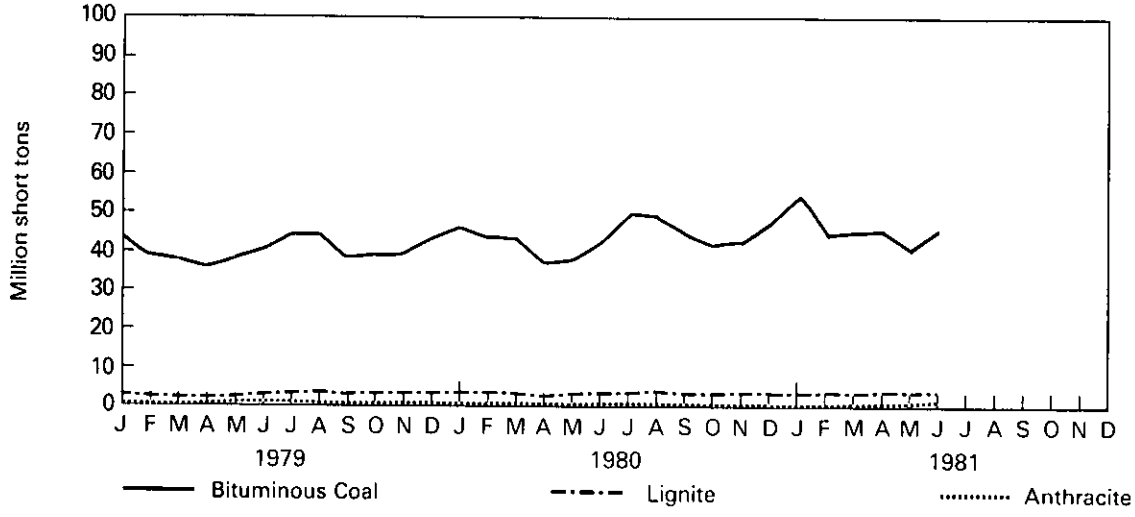
Primary Energy Consumed to Produce Electricity

		Coal				Petroleum				Natural Gas
		Anthracite	Bituminous Coal	Lignite	Total	Steam	Gas Turb./ Int. Comb.	Total Liquids	Petroleum 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**	**560,248**	**507**	**3,660,172**
1974	**TOTAL**	**1,498**	**378,643**	**11,670**	**391,811**	**483,146**	**53,128**	**536,274**	**625**	**3,443,428**
1975	**TOTAL**	**1,480**	**388,523**	**15,960**	**405,962**	**467,221**	**38,907**	**506,128**	**70**	**3,157,669**
1976	**TOTAL**	**1,350**	**425,205**	**21,817**	**448,371**	**514,077**	**41,843**	**555,920**	**68**	**3,080,868**
1977	**TOTAL**	**1,425**	**451,051**	**24,650**	**477,126**	**574,869**	**48,837**	**623,706**	**98**	**3,191,200**
1978	**TOTAL**	**1,064**	**448,763**	**31,407**	**481,235**	**588,319**	**47,520**	**635,839**	**398**	**3,188,363**
1979	**TOTAL**	**1,046**	**488,129**	**37,876**	**527,051**	**492,606**	**30,691**	**523,297**	**268**	**3,490,523**
1980	January	74	46,518	3,779	50,371	40,695	2,197	42,892	54	276,743
	February	72	43,969	3,471	47,512	40,231	1,919	42,150	21	263,771
	March	83	43,244	3,357	46,685	33,406	1,379	34,785	13	283,945
	April	71	37,971	2,651	40,692	26,867	673	27,540	7	256,606
	May	86	38,116	3,262	41,464	26,991	840	27,831	11	281,886
	June	89	42,073	3,658	45,821	29,551	1,138	30,689	11	336,894
	July	93	49,815	3,746	53,655	37,297	2,791	40,088	11	420,339
	August	80	49,077	4,057	53,214	40,019	2,833	42,852	15	405,343
	September	84	44,487	3,342	47,913	29,367	1,286	30,653	11	357,286
	October	73	41,819	3,200	45,092	26,269	689	26,958	8	301,266
	November	56	42,379	3,263	45,698	32,782	1,320	34,102	7	255,559
	December	89	47,212	3,856	51,157	38,387	1,285	39,672	9	241,957
	TOTAL	**951**	**526,680**	**41,642**	**569,274**	**401,863**	**18,351**	**420,214**	**179**	**3,681,595**
1981	January	81	50,304	3,972	54,357	41,556	2,027	43,583	10	231,606
	February	58	44,583	3,272	47,914	28,948	1,049	29,997	9	224,003
	March	75	45,168	3,155	48,398	28,492	784	29,276	9	272,348
	April	73	40,535	3,069	43,677	25,028	557	25,585	7	287,679
	May	91	41,405	3,503	44,999	23,958	967	24,925	14	314,767
	June	105	46,500	3,383	49,988	30,673	1,741	32,413	13	386,972
	TOTAL (Year-to-date)	**484**	**268,495**	**20,354**	**289,333**	**178,655**	**7,125**	**185,780**	**63**	**1,717,376**

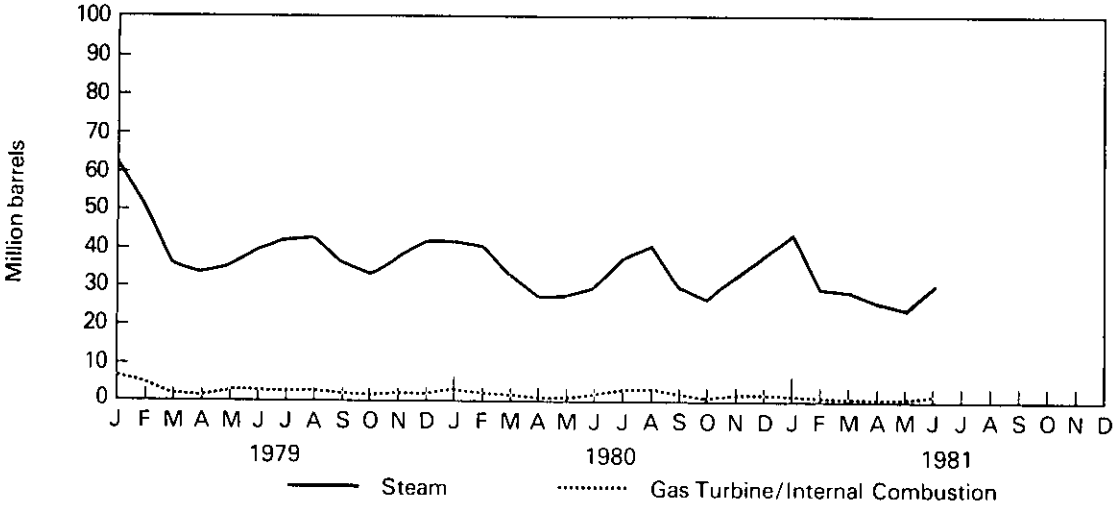
Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
Source: •Federal Power Commission, Form 4, "Monthly Power plant Report."

Electric Utilities

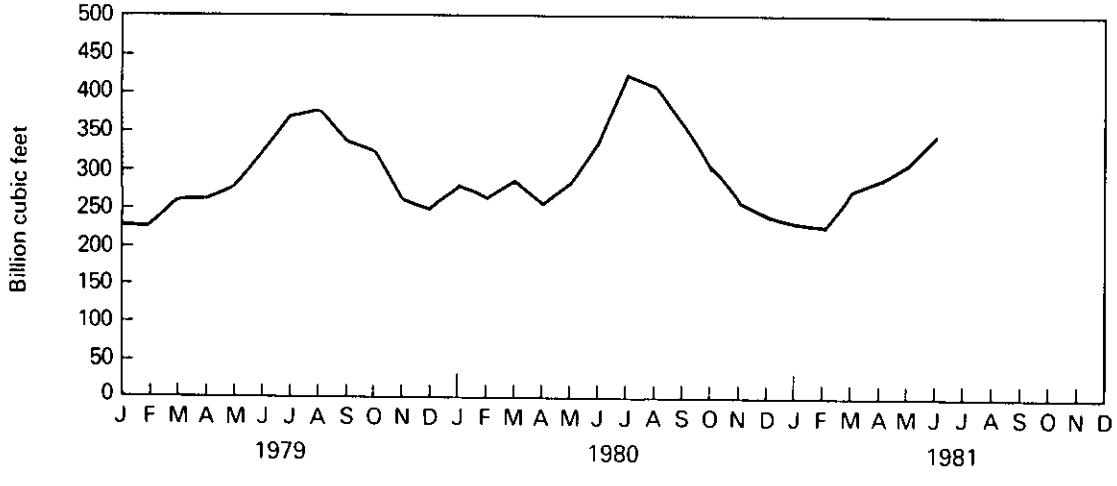
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities

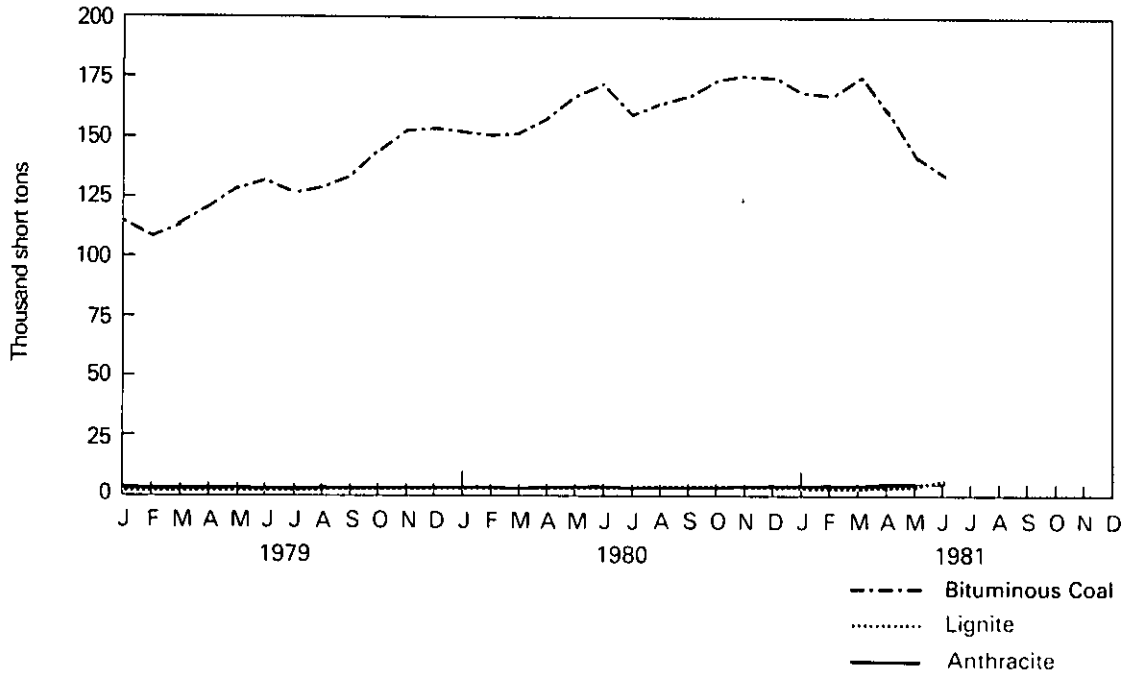
End-of-Month Coal and Petroleum Stocks

		Coal				Petroleum			
		Anthracite	Bituminous Coal	Lignite	Total	Steam	Gas Turb./ Int. Comb.	Total Liquids	Petroleum Coke
		Thousand short tons				Thousand barrels			Thousand short tons
1973		**‡1,066**	**‡84,941**	**‡961**	**‡86,967**	**‡79,121**	**‡10,095**	**‡89,216**	**‡312**
1974		**‡930**	**‡81,712**	**‡867**	**‡83,509**	**‡97,718**	**‡15,199**	**‡112,917**	**‡35**
1975		**‡982**	**‡107,927**	**‡1,815**	**‡110,724**	**‡108,825**	**‡16,432**	**‡125,257**	**‡31**
1976		**‡1,000**	**‡114,130**	**‡2,306**	**‡117,436**	**‡106,993**	**‡14,703**	**‡121,696**	**‡32**
1977		**‡2,321**	**‡128,210**	**‡2,688**	**‡133,219**	**‡124,750**	**‡19,281**	**‡144,031**	**‡44**
1978		**‡2,178**	**‡123,020**	**‡3,027**	**‡128,225**	**‡102,402**	**‡16,386**	**‡118,788**	**‡198**
1979		**‡3,274**	**‡152,981**	**‡3,459**	**‡159,714**	**‡111,121**	**‡20,301**	**‡131,422**	**‡183**
1980	January	3,371	151,891	3,455	158,717	114,313	19,597	133,909	175
	February	3,451	150,151	3,522	157,124	111,353	19,055	130,409	168
	March	3,488	151,022	3,116	157,625	116,246	18,934	135,180	154
	April	3,533	158,441	3,843	165,817	118,824	19,201	138,025	103
	May	3,725	166,325	3,980	174,029	123,043	19,485	142,529	69
	June	3,838	171,042	4,079	178,959	124,177	19,273	143,450	65
	July	3,955	161,159	3,691	168,806	121,596	18,680	140,276	65
	August	4,098	163,756	4,036	171,891	118,514	18,150	136,664	63
	September	4,291	166,515	4,262	175,067	122,240	18,064	140,304	61
	October	4,481	173,411	4,153	182,045	124,046	18,398	142,445	60
	November	4,661	175,489	3,983	184,133	119,863	18,051	137,915	53
	December	4,741	174,154	4,115	183,010	117,227	18,147	135,374	52
1981	January	4,824	167,884	4,267	176,975	109,915	18,280	128,195	51
	February	4,859	166,552	4,304	175,715	112,439	17,397	129,836	52
	March	4,951	174,554	4,478	183,983	111,105	17,502	128,607	52
	April	5,035	159,318	4,541	168,894	108,848	17,205	126,053	52
	May	5,008	142,188	4,907	152,103	111,758	17,068	128,826	52
	June	5,081	134,321	5,119	144,520	109,313	18,027	127,341	49

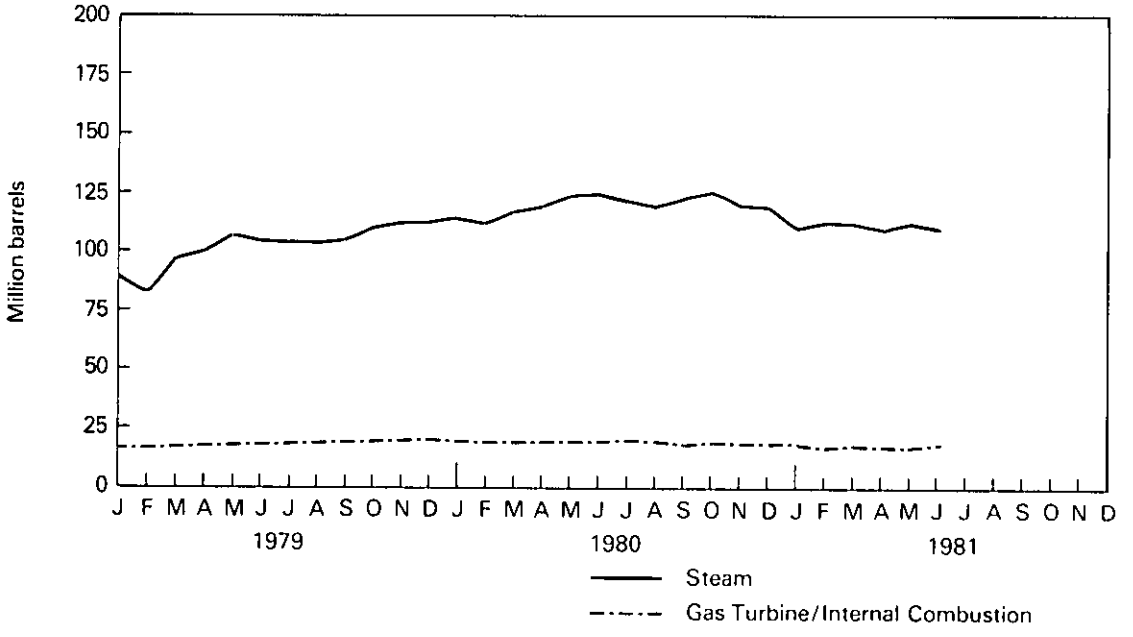
Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
‡Total as of December 31.
Source: •Federal Power Commission, Form 4, "Monthly Power plant Report."

Electric Utilities

Coal Stocks (Bituminous Coal, Lignite, and Anthracite)



Petroleum Stocks



Nuclear

During June 1981, operating domestic power reactors generated a total of 21.2 billion net kilowatt-hours of electricity, 7.3 percent above May 1981 output, and 15.5 percent above the output for June 1980. Nuclear power accounted for 10.4 percent of U.S. electricity generation in June 1981.

In June, the Nuclear Regulatory Commission (NRC) granted a low-power license to Sequoyah-2. This reactor unit has a design electrical rating (DER) of 1,140 megawatts (MWe). This action by the NRC brought to 76, the number of domestic nuclear units with either low-power or operating licenses. The combined net generating capacity for these 76 units was 56,981 MWe. Two units (Three Mile Island-2 and Dresden-1) remained in indefinite shutdown. Sixteen other units (Arkansas Nuclear-2, Browns Ferry-1, Brunswick-1, Cook-1, Fort St. Vrain, Hanford-N, LaCrosse, Maine Yankee, Millstone-1, Nine Mile Point-1, Peach Bottom-3, Surry-1, Three Mile Island-1, Trojan, Turkey Point-3 and Yankee Rowe) generated no electricity or operated substantially below capacity in June. Two units (McGuire-1 and Sequoyah-2) were in low power testing in June, while Farley-2, Salem-2 and Sequoyah-1 were in power ascension.

The "ZT-40" fusion device at the National Laboratory, Los Alamos, confined a plasma (hot ionized gas) at nearly two million degrees Kelvin for 0.008 seconds. These experimental results represent a significant milestone in the quest for practical fusion power.

Nuclear

Nuclear Powerplant Operations

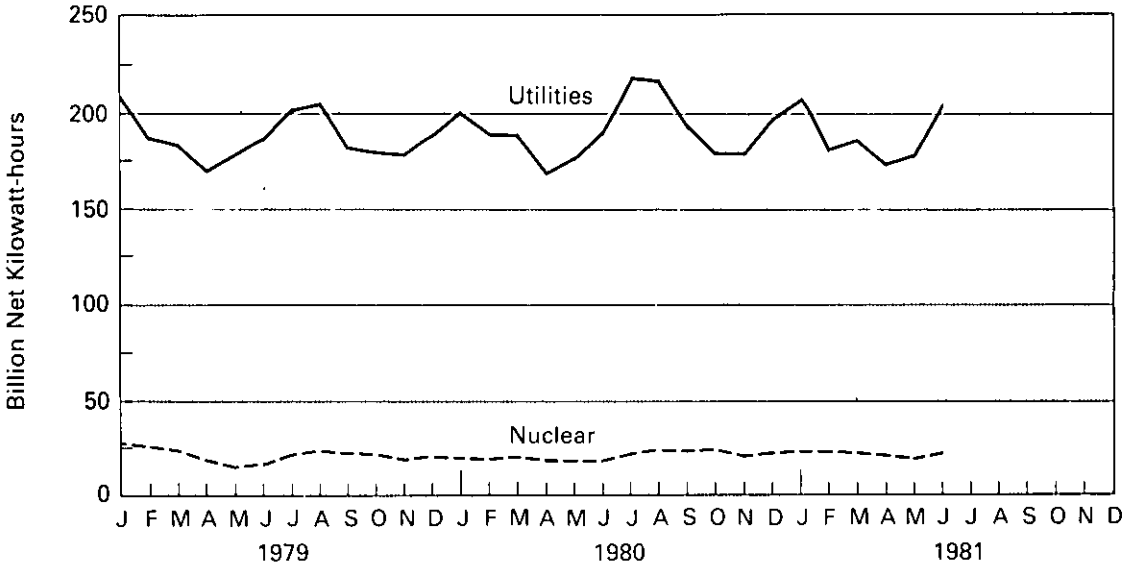
		Reactors Licensed For Commercial Operation[1]	Nuclear-Based Electricity Generation[2]	Nuclear Portion of Domestic Electricity Generation	Maximum Dependable Capacity[3]	Capacity Factor[4]
			Million net kilowatt-hours	Percent	Million net kilowatts	Percent
1973	**AVERAGE**	**40**	**83,479**	**4.5**	**13.850**	**63.2**
1974	**AVERAGE**	**53**	**113,976**	**6.1**	**29.921**	**43.5**
1975	**AVERAGE**	**56**	**172,505**	**9.0**	**35.671**	**55.2**
1976	**AVERAGE**	**62**	**191,104**	**9.4**	**40.642**	**53.5**
1977	**AVERAGE**	**67**	**250,883**	**11.8**	**45.554**	**62.9**
1978	**AVERAGE**	**71**	**276,403**	**12.5**	**49.385**	**63.9**
1979	**AVERAGE**	**71**	**255,155**	**11.4**	**50.604**	**57.6**
1980	January	71	19,746	9.9	49.945	53.1
	February	72	19,277	10.2	51.055	54.3
	March	72	20,039	10.7	51.031	52.8
	April	74	18,794	11.1	53.040	49.3
	May	74	18,385	10.5	53.040	46.6
	June	74	18,322	9.7	53.040	48.0
	July	74	21,024	9.7	54.064	52.3
	August	74	24,333	11.3	53.957	60.6
	September	74	23,572	12.3	53.855	60.8
	October	75	24,510	13.7	54.724	60.1
	November	75	20,984	11.8	54.737	53.2
	December	75	22,130	11.3	54.749	54.3
	AVERAGE	**74**	**251,116**	**11.0**	**53.103**	**53.8**
1981	January	75	23,368	11.4	55.853	56.2
	February	75	21,595	12.0	55.830	57.6
	March	75	22,004	11.9	55.818	53.0
	April	75	20,646	12.0	55.817	51.4
	May	75	19,723	11.1	55.841	47.5
	June	76	21,166	10.4	56.981	51.6
	AVERAGE	**75**	**128,502**	**11.4**	**56.023**	**52.9**

Geographic coverage: the 50 United States and District of Columbia.
[1]See next table (Reactor Status Table) for explanation and sources.
[2]Electricity generation entries represent yearly or monthly totals rather than averages.
[3]See Explanatory Note 11.
[4]Average percentage of the net Maximum Dependable Capacity utilized yearly or monthly.
Sources: • Capacity data for units in commercial operation or start-up testing—Nuclear Regulatory Commission Report NUREG 0020, 'Operating Units Status Report.'
• Generation Data—Federal Power Commission Form 4, 'Monthly Power Plant Report.'

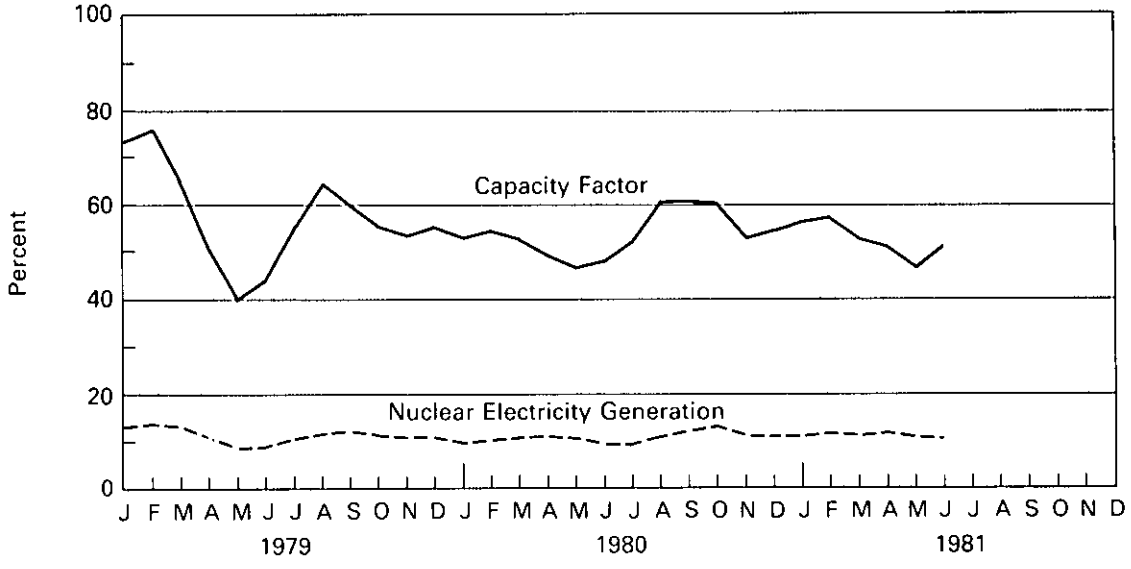
Nuclear

Nuclear Powerplant Operations

Electricity Generated by Utilities and by Nuclear Powerplants



Nuclear Portion of Electricity Generation and Capacity Factor*



Percentage of Maximum Dependable Capacity utilized.

Nuclear

Status of Nuclear Reactor Units[1]

		Reactors Licensed For Commercial Operations[2]	Construction Permits Granted	Construction Permits Pending[3]	Reactor Units on Order	Reactor Units Announced	Total Reactor Units	Total Design Capacity (Million Net[4] Kilowatts)
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		**71**	**90**	**32**	**9**	**4**	**206**	**204**
1979		**71**	**91**	**21**	**3**	**0**	**186**	**180**
1980	January	71	90	17	3	0	181	174
	February	72	89	16	3	0	180	173
	March	72	87	14	3	0	176	169
	April	74	85	14	3	0	176	169
	May	74	85	14	3	0	176	169
	June	74	85	14	3	0	176	169
	July	74	85	14	3	0	176	169
	August	74	85	14	3	0	176	169
	September	74	85	14	3	0	176	169
	October	75	84	14	3	0	176	169
	November	75	82	14	3	0	174	167
	December	75	82	12	3	0	172	164
1981	January	75	81	12	3	0	171	164
	February	75	81	12	3	0	171	164
	March	75	81	12	3	0	171	164
	April	75	81	12	3	0	171	164
	May	75	81	12	3	0	171	164
	June	76	80	12	3	0	171	164

Geographic coverage: the 50 United States and District of Columbia.
[1]Monthly data are the status as of the last day of the month. Annual data are the status as of December 31 of each year.
[2]These figures include reactors in fuel-loading, power-testing, and power-ascension phases as well as reactors that have been licensed but which are shut down for indefinite periods, including: Dresden-1, which is undergoing major modifications and Three Mile Island-2 (TMI-2), shut down due to an accident in March 1979. Although its operating license has not been revoked, authority to operate the damaged TMI-2 reactor unit was suspended by the NRC in July 1979. Also includes two Department of Energy, dual-purpose reactors (Shippingport and Hanford) which are licensed to generate electricity on a commercial basis. Not included in the above table is the Experimental Breeder Reactor-2 (EBR-2) which, while it generates electricity, does not distribute it to the grid.
[3]Although New Haven-1, -2 and Jamesport-1, -2 still remain on the NRC docket as reactor units for which construction permits are pending, these 4 units were dropped from the above table (in November 1979 and March 1980, respectively) when applications for their construction were rejected by New York State. Although Duke Power Co. has announced an "indefinite delay" of two Cherokee units (now carried as reactors for which "Construction Permits (are) Granted,") these units will be retained, as is, in the above table until such time as a firm change in their status occurs.
[4]See Explanatory Note 11.
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

The average price of domestic crude oil purchased at the wellhead was $32.71 per barrel in May 1981. This was 3.9 percent below the previous month's level, and 55.7 percent above the level in May 1980. Due to the January 1981 decontrol order, prices will no longer be available by regulatory price category.

During May 1981, the composite refiner acquisition cost of crude oil was $36.13 per barrel, $0.56 per barrel (1.5 percent) below the previous month's price of $36.69. The imported price decreased $0.75 per barrel from the April 1981 level to $37.86 per barrel in May. This price was 1.9 percent below the previous month's level and 10.3 percent above the May 1980 level. The domestic price in May 1981 was $35.20, a decrease of $0.47 per barrel (1.3 percent) below the April average.

Residual Fuel Oil

The average price, excluding taxes, for No. 6 residual fuel oil sold to utilities, industry, and other ultimate consumers in May 1981 was $34.11 per barrel, $0.59 per barrel (1.7 percent) below the previous month's price and 43.6 percent over the May 1980 average. The average price, excluding taxes, for No. 6 residual fuel oil sold to resellers, bulk plants, jobbers, and other wholesale accounts in May 1981 was $30.43 per barrel, $0.13 per barrel (0.4 percent) below the April 1981 average and a 50.5 percent increase over the May 1980 average.

Heating Oil

The national average price of heating oil sold to residential customers decreased 1.6 cents from the May 1981 level to 121.1 cents per gallon in June. This was a 1.3 percent decrease below the selling price in May 1981 but a 23.7 percent increase over the June 1980 price. The average distributor margin on residential heating oil in June was 17.1 cents per gallon, 8.2 percent above the margin of June 1980. Refiners' national average selling price to resellers and retailers was 99.8 cents per gallon in June 1981, 24.4 percent above the June 1980 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 May 1981 was 106.2 cents per gallon, 0.2 percent below the previous month's average and a 21.2 percent increase over the May 1980 average.

Motor Gasoline

The national average retail price for all grades and all types of motor gasoline was 135.3 cents per gallon in July 1981. Leaded regular gasoline at all types of stations sold for an average of 131.5 cents per gallon in July, 0.9 cents lower (0.7 percent) than the price in June. The price for unleaded regular gasoline at all types of stations was 138.2 cents per gallon in July, 0.9 cents lower (0.6 percent) than the price in June.

Liquefied Petroleum Gases

The average wholesale price for propane during May 1981, excluding taxes, was 48.6 cents per gallon, a 1.4 percent decrease from the previous month's level, but 16.5 percent above the May 1980 level.

In May 1981, the average wholesale price for butane, excluding taxes, was 56.8 cents per gallon, 5.5 percent below the previous month's price and 10.8 percent below the May 1980 average.

Price

Price

Petroleum Price Summary

		Actual Domestic Average Wellhead Price[1]	Refiner Acquisition Cost of Crude Oil[2]			No. 6 Residual Oil Price Average[3]	
			Domestic	Imported	Composite	Wholesale[4]	Retail[4]
		Dollars per barrel					
1976	**AVERAGE**	**8.19**	**8.84**	**13.48**	**10.89**	**10.72**	**11.49**
1977	**AVERAGE**	**8.57**	**9.55**	**14.53**	**11.96**	**11.96**	**13.23**
1978	**AVERAGE**	**9.00**	**10.61**	**14.57**	**12.46**	**11.51**	**12.75**
1979	**AVERAGE**	**12.64**	**14.27**	**21.67**	**17.72**	**17.66**	**18.67**
1980	January	17.86	19.78	30.75	24.81	24.41	26.21
	February	18.81	21.22	32.40	26.11	23.34	26.48
	March	19.34	22.07	33.42	26.88	21.11	25.33
	April	20.29	22.89	33.54	27.09	19.09	22.87
	May	21.01	23.63	34.33	27.85	20.22	23.75
	June	21.53	24.48	34.48	28.80	20.44	24.09
	July	22.26	25.05	34.51	28.73	21.28	23.86
	August	22.63	24.98	34.44	28.70	22.25	25.00
	September	22.59	25.37	34.46	28.96	22.47	25.31
	October	23.23	26.21	34.63	29.56	24.06	26.68
	November	23.92	26.51	35.09	29.79	28.12	30.10
	December	25.80	28.55	35.63	31.39	29.76	32.33
	AVERAGE	**21.19**	**24.23**	**33.89**	**28.07**	**23.14**	**26.09**
1981	January	28.85	32.71	38.85	34.86	31.14	33.65
	February	34.14	36.27	39.00	37.28	31.81	36.04
	March	R34.70	36.97	38.31	37.48	31.78	36.11
	April	R34.05	†35.67	†38.61	†36.69	R30.56	R34.70
	May	32.71	†35.20	†37.86	†36.13	†30.43	†34.11
	June	NA	NA	NA	NA	NA	NA
	July	NA	NA	NA	NA	NA	NA
	AVERAGE	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Geographic coverage: Actual domestic average wellhead prices and No. 6 residual oil prices— the 50 United States and District of Columbia. Refiner acquisition cost of crude oil— the 50 United States, District of Columbia, Puerto Rico, Guam, and the Virgin Islands.
[1]See Explanatory Note 12.
[2]See Explanatory Note 13.
[3]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.
[4]Excludes tax.
†Preliminary data. R=Revised data. NA=Not available.
Sources: •Actual domestic average, January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report." February 1976 forward: ERA Form 182, "Domestic Crude Oil First Purchase Report."
•Refiner acquisition cost, 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 through December 1980: ERA Form 49,"Domestic Crude Oil Entitlements Program Refiners Monthly Report." January 1981 forward: Form EIA-14, "Refiners' Monthly Cost Report."
•No.6 residual oil price, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

Price

Petroleum Price Summary (continued)

		No. 2 Diesel Price Average[1]		No. 2 Heating Oil Price Average		Gasoline Price Average All Grades[2]	Propane Price Average[3]	Butane Price Average[3]
		Wholesale[4]	Retail[4]	Wholesale	Retail	Retail	Wholesale[4]	Wholesale[4]
		Cents per gallon						
1976	**AVERAGE**	**31.9**	**34.7**	**32.6**	**40.6**	**NA**	**20.6**	**21.9**
1977	**AVERAGE**	**36.1**	**39.3**	**36.9**	**46.0**	**NA**	**25.0**	**25.4**
1978	**AVERAGE**	**37.1**	**40.2**	**38.7**	**49.4**	**65.2**	**24.0**	**23.0**
1979	**AVERAGE**	**58.2**	**62.4**	**53.0**	**65.6**	**88.2**	**29.5**	**45.8**
1980	January	76.0	82.2	75.2	90.8	111.0	41.8	73.3
	February	78.3	85.0	79.0	95.3	118.6	42.7	70.1
	March	79.8	87.8	80.4	97.1	123.0	41.0	66.8
	April	80.4	88.0	81.0	97.4	124.2	41.2	63.1
	May	80.5	87.8	81.4	97.2	124.4	41.7	63.7
	June	81.7	88.6	82.5	97.9	124.6	41.2	58.2
	July	81.9	87.6	83.0	97.9	124.7	40.8	53.8
	August	81.6	86.9	82.9	97.9	124.3	40.6	53.1
	September	80.3	86.6	83.0	98.1	123.1	41.4	51.2
	October	81.5	85.9	83.7	98.7	122.3	43.2	54.3
	November	83.6	88.9	86.1	101.1	122.2	45.1	65.5
	December	87.5	92.4	91.3	106.5	123.1	46.5	72.7
	AVERAGE	**81.2**	**87.3**	**82.2**	**97.8**	**122.1**	**42.4**	**62.9**
1981	January	92.5	100.9	98.6	114.4	126.9	46.5	66.1
	February	99.5	106.1	106.0	123.4	135.3	48.2	63.0
	March	101.7	108.8	106.3	125.5	138.8	48.3	62.1
	April	R101.3	R107.7	105.2	123.9	138.1	49.3	60.1
	May	†101.1	†106.8	R104.0	R122.7	137.0	†48.6	†56.8
	June	NA	NA	†103.0	†121.1	136.2	NA	NA
	July	NA	NA	NA	NA	135.3	NA	NA
	AVERAGE	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Geographic coverage: the 50 United States and District of Columbia.
Note: The average year-to-date gasoline price for the current year is not yet available from the Bureau of Labor Statistics.
[1]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 customers.
[2]See Explanatory Note 16.
[3]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.
[4]Excludes tax.
†Preliminary data. R = Revised data. NA = Not available.
Sources: •No. 2 diesel price, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."
•No. 2 heating oil price, FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report" for 1976 through October 1980. EIA-9A "No. 2 Distillate Price Monitoring Report" for November 1980 forward.
•Gasoline price, Bureau of Labor Statistics.
•Propane and Butane prices, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

Price

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

		Algeria	Indonesia	Iran	Libya	Mexico	Nigeria	Saudi Arabia	United Arab Emirates	United Kingdom	Venezuela
						Dollars per barrel					
1976	**AVERAGE**	**13.05**	**12.76**	**11.61**	**12.55**	**NA**	**13.08**	**11.69**	**11.94**	**NA**	**11.32**
1977	**AVERAGE**	**14.36**	**13.57**	**12.67**	**13.90**	**13.42**	**14.44**	**12.37**	**12.83**	**NA**	**12.68**
1978	**AVERAGE**	**14.10**	**13.64**	**12.65**	**13.75**	**13.24**	**14.04**	**12.70**	**13.24**	**13.82**	**12.45**
1979	**AVERAGE**	**20.65**	**19.35**	**23.71**	**22.43**	**20.29**	**21.80**	**17.63**	**19.58**	**21.20**	**17.37**
1980	January	33.67	29.67	29.28	35.72	29.43	31.57	26.25	29.85	30.77	25.34
	February	34.03	31.11	NA	35.71	31.77	33.39	26.62	30.95	32.66	24.82
	March	36.74	31.54	NA	35.88	30.56	35.59	26.85	29.34	34.34	24.03
	April	36.93	32.22	NA	35.30	30.24	36.11	27.78	30.38	34.15	23.85
	May	37.10	32.40	NA	36.13	30.68	36.50	28.50	32.67	34.10	24.82
	June	37.61	32.90	NA	36.83	30.76	36.99	28.95	33.34	36.28	25.56
	July	38.40	33.19	NA	37.26	31.84	37.17	28.47	NA	36.26	24.34
	August	37.53	33.01	NA	37.01	31.87	36.69	29.74	NA	34.83	25.30
	September	37.21	33.13	NA	36.94	31.21	36.38	30.34	NA	35.18	24.21
	October	37.60	32.31	NA	37.15	31.27	36.82	30.19	NA	35.66	22.71
	November	37.05	32.94	NA	36.90	31.59	36.87	31.43	NA	35.47	26.83
	December	37.37	33.21	NA	37.58	32.33	36.79	32.01	NA	35.00	26.66
	AVERAGE	**36.57**	**32.37**	**NA**	**36.41**	**31.11**	**35.82**	**28.53**	**NA**	**34.58**	**24.78**
1981	January	39.37	36.54	NA	40.52	35.88	40.11	32.39	NA	38.34	32.87
	February	40.13	36.13	NA	40.73	36.57	40.03	32.60	NA	39.41	30.36
	March	40.30	36.40	NA	40.25	35.60	39.85	32.73	NA	39.50	31.24
	April	39.70	36.38	NA	40.04	33.81	39.92	32.41	NA	38.85	29.93
	May	R39.57	R36.09	NA	R38.91	R34.45	R39.11	R32.13	NA	R37.16	R28.39
	June†	39.60	36.80	NA	40.13	30.80	38.66	32.22	NA	36.43	30.50

Note: Prices shown for 1980 are for the month of loading; whereas prior to 1980 the prices are for the month of reporting.
[1]The FOB cost excludes all costs related to insurance and transportation. See Explanatory Note 14.
NA = Not available.
†Preliminary data. R = Revised data.
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	**AVERAGE**	**15.20**	**14.21**	**14.63**	**13.80**	**14.87**	**13.75**	**15.25**	**13.61**	**14.04**	**NA**	**13.13**
1978	**AVERAGE**	**14.91**	**14.50**	**14.64**	**13.88**	**14.72**	**13.54**	**14.86**	**13.92**	**14.39**	**NA**	**12.83**
1979	**AVERAGE**	**21.90**	**20.43**	**20.69**	**25.02**	**23.68**	**20.86**	**22.96**	**19.15**	**21.90**	**22.16**	**18.18**
1980	January	35.32	27.73	31.03	30.37	37.10	30.18	33.03	27.85	32.35	32.14	26.25
	February	35.28	28.60	32.95	NA	36.98	32.38	35.25	28.15	32.71	34.07	25.91
	March	38.54	30.75	33.04	NA	37.18	31.17	36.93	28.26	30.96	35.73	24.97
	April	38.52	30.31	33.81	NA	36.57	30.77	37.41	29.14	32.29	35.34	25.10
	May	38.54	31.16	33.73	NA	37.36	31.22	37.53	30.30	34.06	35.82	25.93
	June	38.71	31.26	34.51	NA	38.09	31.43	38.15	30.16	34.96	37.41	26.42
	July	39.60	31.31	34.81	NA	38.39	32.60	38.23	30.04	NA	37.25	25.47
	August	38.60	31.44	34.81	NA	38.38	32.62	37.77	31.24	NA	36.20	26.37
	September	38.28	30.97	34.64	NA	38.30	31.93	37.60	31.86	NA	36.35	25.47
	October	38.77	29.22	33.65	NA	38.53	31.96	37.75	31.73	NA	36.82	23.92
	November	38.41	28.81	34.55	NA	38.22	32.42	37.97	32.86	NA	36.62	27.75
	December	38.63	32.72	34.64	NA	39.04	33.76	38.11	33.40	NA	36.31	27.66
	AVERAGE	**37.90**	**30.47**	**33.92**	**NA**	**37.72**	**31.80**	**37.05**	**30.02**	**NA**	**35.88**	**25.86**
1981	January	41.25	34.26	38.08	NA	41.81	36.81	41.55	34.06	NA	39.90	33.80
	February	41.90	33.73	37.86	NA	42.19	37.23	41.46	34.38	NA	40.69	31.20
	March	41.62	33.88	38.11	NA	41.60	36.42	40.98	34.42	NA	40.72	32.09
	April	40.96	33.74	37.95	NA	41.58	34.42	41.04	34.16	NA	40.02	30.97
	May	R40.81	R32.70	R37.72	NA	R40.46	R34.83	R40.10	R33.73	NA	R38.31	R29.39
	June†	40.81	32.67	38.65	NA	41.72	31.55	39.88	33.88	NA	37.26	31.46

Note: Prices shown for 1980 are for the month of loading; whereas prior to 1980 prices are for the month of reporting.
[1]See Explanatory Note 15.
†Preliminary data. NA = Not available. R = Revised data.
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

U.S. City Average Retail Prices for Motor Gasoline[1]

		Leaded Regular	Unleaded Regular	Leaded Premium	Average for All Grades
		Cents per gallon, including tax			
1974	**AVERAGE**	**53.2**	**NA**	**56.9**	**NA**
1975	**AVERAGE**	**56.7**	**NA**	**60.9**	**NA**
1976	**AVERAGE**	**59.0**	**61.4**	**63.6**	**NA**
1977	**AVERAGE**	**62.2**	**65.6**	**67.4**	**NA**
1978	**AVERAGE**	**62.6**	**67.0**	**69.4**	**65.2**
1979	**AVERAGE**	**85.7**	**90.3**	**92.2**	**88.2**
1980	January	108.6	113.1	114.9	111.0
	February	115.9	120.7	123.3	118.6
	March	120.2	125.2	127.7	123.0
	April	121.2	126.4	129.2	124.2
	May	121.5	126.6	129.5	124.4
	June	121.7	126.9	130.0	124.6
	July	121.6	127.1	130.7	124.7
	August	121.0	126.7	131.0	124.3
	September	119.7	125.7	130.4	123.1
	October	118.8	125.0	130.1	122.3
	November	118.8	125.0	129.9	122.2
	December	119.7	125.8	131.0	123.1
	AVERAGE	**119.1**	**124.5**	**128.1**	**122.1**
1981	January	123.8	129.8	133.8	126.9
	February	132.1	138.2	141.0	135.3
	March	135.2	141.7	144.9	138.8
	April	134.4	141.2	145.1	138.1
	May	133.3	140.0	144.7	137.0
	June	132.4	139.1	144.6	136.2
	July	131.5	138.2	144.6	135.3

Geographic coverage: 1974 through 1977—56 urban areas; 1978 forward—85 urban areas.
[1]See Explanatory Note 16.
Source: Bureau of Labor Statistics.

Price

Aviation Fuel

		Aviation Gasoline		Naphtha-Type[1]	Kerosene-Type	
		Wholesale[2]	Retail[2]	Retail[2]	Wholesale[2]	Retail[2]
		Cents per gallon, excluding tax				
1976	**AVERAGE**	**42.4**	**43.1**	**31.5**	**32.5**	**31.2**
1977	**AVERAGE**	**46.7**	**47.7**	**35.0**	**36.7**	**35.8**
1978	**AVERAGE**	**51.0**	**52.1**	**37.5**	**38.9**	**38.9**
1979	**AVERAGE**	**68.5**	**69.5**	**52.3**	**66.5**	**55.1**
1980	January	90.6	90.0	76.0	83.4	77.0
	February	98.5	97.8	80.1	86.2	83.0
	March	102.9	107.0	84.1	86.6	86.3
	April	104.8	109.6	83.2	88.4	87.4
	May	106.2	109.7	89.1	89.0	87.6
	June	107.7	111.4	90.0	86.1	88.6
	July	109.3	113.4	91.4	88.3	89.7
	August	110.2	112.9	90.6	86.2	90.7
	September	110.8	113.3	92.9	86.4	88.8
	October	110.8	113.0	91.1	87.6	88.7
	November	112.4	113.0	92.5	89.9	91.0
	December	115.1	117.2	94.1	91.4	91.6
	AVERAGE	**107.2**	**109.4**	**88.2**	**87.5**	**87.4**
1981	January	118.9	121.6	99.2	97.1	95.7
	February	121.3	128.1	102.7	103.6	101.6
	March	127.2	131.1	106.9	104.8	106.3
	April	117.5	131.3	109.0	R103.8	R106.4
	May†	120.7	133.5	108.8	104.4	106.2
	AVERAGE	**120.0**	**129.1**	**105.8**	**102.9**	**103.1**

Geographic coverage: the 50 United States and District of Columbia.
[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.
†Preliminary data. R = Revised data.
Source: • FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

Price

National Average Heating Oil Prices[1]

		Refiners' Average Selling Price to Resellers and Retailers	Average Purchase Price Paid by Distributors for Heating Oil[2]	Average Distributor Margin on Residential Heating Oil[2]	Average Selling Price to Residential Customers[2]
		Cents per gallon			
1976	**AVERAGE**	**31.4**	**32.6**	**NA**	**40.6**
1977	**AVERAGE**	**35.7**	**36.9**	**NA**	**46.0**
1978	**AVERAGE**	**37.2**	**38.7**	**11.0**	**49.4**
1979	**AVERAGE**	**55.9**	**53.0**	**12.8**	**65.6**
1980	January	75.0	75.2	16.2	90.8
	February	77.8	79.0	16.7	95.3
	March	78.8	80.4	17.1	97.1
	April	78.8	81.0	17.0	97.4
	May	79.3	81.4	16.3	97.2
	June	80.2	82.5	15.8	97.9
	July	79.2	83.0	15.3	97.9
	August	79.3	82.9	15.2	97.9
	September	79.3	83.0	15.4	98.1
	October	80.7	83.7	15.3	98.7
	November	84.0	86.1	13.8	101.1
	December	88.6	91.3	14.1	106.5
	AVERAGE	**80.0**	**82.2**	**15.8**	**97.8**
1981	January	94.9	98.6	15.1	114.4
	February	102.5	106.0	16.1	123.4
	March	102.8	106.3	17.6	125.5
	April	100.9	105.2	17.7	123.9
	May	R100.7	R104.0	R17.6	R122.7
	June†	99.8	103.0	17.1	121.1

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 17.
[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" for 1976 through October 1980. EIA-9A, "No. 2 Distillate Price Monitoring Report, for 1976 through October 1980." EIA-9A, "No. 2 Distillate Price Monitoring Report" for November 1980 forward.

Price

Residential Heating Oil Prices by Region

		DOE Region[1]									
		Cents per gallon									
		1	2	3	4	5	6	7	8	9	10
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	85.1	83.7	82.4	80.5	83.9	NA	82.2	84.0	80.4	82.3
	December	87.2	85.7	85.1	82.9	86.1	NA	85.3	86.3	82.6	84.6
1980	January	91.8	91.0	90.2	88.6	90.4	NA	90.0	90.2	89.6	91.0
	February	96.7	95.3	94.7	93.0	93.5	NA	93.6	93.5	95.8	95.7
	March	98.7	97.2	96.5	94.8	94.3	NA	95.1	95.9	93.9	97.6
	April	99.2	97.3	96.6	94.1	94.5	NA	95.3	99.5	94.7	99.0
	May	98.7	97.3	96.4	94.2	95.8	NA	95.2	97.7	95.5	98.6
	June	99.8	97.9	96.8	95.1	95.8	NA	95.3	98.4	96.0	99.8
	July	100.3	98.1	96.6	94.2	96.2	NA	93.1	97.0	96.7	100.2
	August	100.2	97.9	96.8	94.8	95.7	NA	95.4	92.1	99.7	100.4
	September	100.5	98.2	97.0	94.7	95.7	NA	93.7	93.0	97.2	100.6
	October	101.1	98.8	97.4	95.6	95.9	NA	94.7	94.1	98.6	100.4
	November	102.5	103.0	99.9	101.5	98.8	NA	95.2	98.5	101.0	103.1
	December	108.2	108.5	105.3	106.6	103.4	NA	99.6	101.8	NA	105.6
1981	January	116.2	117.1	113.2	114.0	110.4	NA	106.3	108.6	NA	107.5
	February	125.8	126.6	123.0	124.4	117.8	NA	114.2	113.1	NA	113.7
	March	127.6	128.4	125.0	125.3	119.3	NA	115.4	119.3	111.5	116.5
	April	126.8	126.6	122.7	124.8	118.3	NA	114.7	118.4	NA	117.5
	May	125.5	125.6	122.1	118.8	117.3	NA	114.5	115.1	114.1	115.6
	June†	124.5	123.3	121.1	116.0	116.5	NA	115.1	116.3	NA	117.1

[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.
Source: • FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report"for 1979 through October 1980. EIA-9A,"No. 2 Distillate Price Monitoring Report" for November 1980 forward.

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	**AVERAGE**	**13.45**	**14.36**	**12.09**	**13.45**	**11.31**	**12.27**	**11.96**	**13.23**
1978	**AVERAGE**	**12.77**	**14.47**	**11.95**	**12.78**	**10.73**	**11.70**	**11.51**	**12.75**
1979	**AVERAGE**	**19.87**	**21.21**	**18.33**	**19.33**	**15.89**	**16.44**	**17.66**	**18.67**
1980	January	29.11	30.35	26.15	28.12	21.56	21.98	24.41	26.21
	February	27.07	30.32	25.82	28.15	20.21	22.22	23.34	26.48
	March	26.88	30.20	23.73	27.29	17.81	20.34	21.11	25.33
	April	25.16	28.69	20.38	24.78	16.41	18.36	19.09	22.87
	May	25.48	31.73	22.72	25.77	17.72	18.04	20.22	23.75
	June	23.14	31.37	22.35	25.44	17.72	19.27	20.44	24.09
	July	24.89	28.51	23.44	25.55	19.20	20.58	21.28	23.86
	August	23.20	30.93	24.98	26.11	20.42	21.45	22.25	25.00
	September	24.27	33.12	23.46	26.31	20.62	21.71	22.47	25.31
	October	25.72	31.88	25.86	28.00	22.30	23.29	24.06	26.68
	November	29.52	33.70	29.40	30.89	27.08	27.50	28.12	30.10
	December	31.69	35.76	31.29	32.61	28.39	30.03	29.76	32.33
	AVERAGE	**26.41**	**31.13**	**24.91**	**27.59**	**20.77**	**22.11**	**23.14**	**26.09**
1981	January	34.27	37.23	32.12	33.96	29.12	31.35	31.14	33.65
	February	38.04	41.60	34.96	37.32	28.96	32.02	31.81	36.04
	March	37.78	41.19	34.47	38.01	29.55	31.95	31.78	36.11
	April	35.66	41.71	33.10	R35.94	R28.35	30.56	R30.56	R34.70
	May†	33.60	41.09	32.94	35.94	28.44	30.64	30.43	34.11
	AVERAGE	**35.98**	**40.29**	**33.41**	**36.06**	**29.01**	**31.34**	**31.23**	**34.90**

Geographic coverage: the 50 United States and District of Columbia.
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.
† Preliminary data. R = Revised data.
Source: • FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

Price

Natural Gas

		Average Wellhead Value	Delivered to Electric Plant[1]	Average Residental Heating
			Cents per thousand cubic feet	
1973	**AVERAGE**	**21.6**	**35.0**	**108.2**
1974	**AVERAGE**	**30.4**	**49.0**	**125.3**
1975	**AVERAGE**	**44.5**	**76.9**	**154.2**
1976	**AVERAGE**	**58.0**	**105.9**	**184.6**
1977	**AVERAGE**	**79.0**	**133.4**	**226.4**
1978	**AVERAGE**	**90.5**	**147.9**	**262.6**
1979	**AVERAGE**	**117.8**	**180.3**	**323.1**
1980	January	134.4	201.1	354.9
	February	139.5	210.5	357.9
	March	141.3	214.7	368.1
	April	143.4	210.4	367.8
	May	145.2	218.1	393.9
	June	145.8	216.4	394.8
	July	152.8	237.3	410.6
	August	152.8	245.6	413.1
	September	157.4	245.6	417.0
	October	159.4	253.4	420.6
	November	163.3	238.4	396.1
	December	162.2	232.7	403.3
	AVERAGE	**149.6**	**212.8**	**391.5**
1981	January	167.6	258.8	406.9
	February	171.3	268.9	409.3
	March	172.1	273.0	417.4
	April	171.2	282.5	421.7
	May	177.4	293.2	457.1

Geographic coverage: the 50 United States and District of Columbia.
[1]Includes all electric utility generating plants with a combined capacity for 25 megawatts or greater. Small quantities of coke oven gas, refinery gas and blast furnace gas are included.
Sources: • Annual data for wellhead values are from the appropriate agencies of the individual producing States and the U.S. Geological Survey; monthly data are estimated primarily on the basis of values reported by State agencies in New Mexico, Oklahoma, and Texas.
• Electric Plant data are from Federal Power Commission Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."
• Average residential heating prices, Bureau of Labor Statistics.

Price

Electricity

		Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants				Average Retail Electricity Prices[1]				
		Coal	Residual Oil[2]	Natural Gas[3]	All Fossil Fuels[2]	Residential	Commercial	Industrial	Other	Total[4]
		Cents per million Btu				Cents per kilowatt-hour				
1973	**AVERAGE**	**40.5**	**78.8**	**33.8**	**47.5**	**2.54**	**2.41**	**1.25**	**2.10**	**1.96**
1974	**AVERAGE**	**71.0**	**191.0**	**48.1**	**90.9**	**3.10**	**3.04**	**1.69**	**2.75**	**2.49**
1975	**AVERAGE**	**81.4**	**201.4**	**75.4**	**103.0**	**3.51**	**3.45**	**2.07**	**3.08**	**2.92**
1976	**AVERAGE**	**84.8**	**195.9**	**103.4**	**110.4**	**3.73**	**3.69**	**2.21**	**3.27**	**3.09**
1977	**AVERAGE**	**94.7**	**220.4**	**130.0**	**127.7**	**4.05**	**4.09**	**2.50**	**3.51**	**3.42**
1978	**AVERAGE**	**111.6**	**212.3**	**143.8**	**139.3**	**4.31**	**4.36**	**2.79**	**3.62**	**3.69**
1979	**AVERAGE**	**122.4**	**299.7**	**175.4**	**162.1**	**4.64**	**4.68**	**3.05**	**3.96**	**3.99**
1980	January	128.7	423.5	194.8	187.3	4.69	4.90	3.32	4.19	4.21
	February	129.9	429.7	203.9	189.8	4.74	4.97	3.32	4.63	4.25
	March	130.1	411.0	207.9	184.8	4.92	5.17	3.45	4.69	4.40
	April	133.8	394.9	204.0	178.2	5.14	5.28	3.49	4.71	4.48
	May	133.3	403.1	212.0	180.3	5.41	5.44	3.59	4.97	4.63
	June	135.1	392.7	209.3	178.8	5.60	5.61	3.79	4.58	4.85
	July	137.4	394.5	228.5	199.0	5.66	5.65	3.93	4.93	5.03
	August	139.5	404.9	237.2	196.2	5.72	5.64	3.94	4.81	5.07
	September	138.9	411.3	238.7	193.5	5.71	5.73	3.88	4.95	5.03
	October	138.1	452.2	245.7	192.2	5.68	5.84	3.84	4.88	4.95
	November	139.3	496.0	231.3	200.0	5.61	5.71	3.85	5.06	4.89
	December	137.8	521.9	226.3	206.6	5.49	5.69	3.88	4.82	4.90
	AVERAGE	**135.2**	**427.9**	**212.9**	**189.3**	**5.36**	**5.48**	**3.69**	**4.76**	**4.73**
1981	January	142.3	540.2	254.1	221.3	5.44	5.73	3.94	4.92	4.96
	February	146.3	572.9	260.5	218.4	5.52	5.83	3.95	5.01	4.99
	March	148.4	583.9	263.8	215.2	5.76	6.01	4.04	5.33	5.12
	April	146.9	568.4	273.5	242.1	5.99	6.14	4.07	5.20	5.20
	May	146.7	552.8	282.7	250.8	6.27	6.30	4.17	5.49	5.37
	June	NA	NA	NA	NA	6.48	6.48	4.36	5.38	5.59

Geographic coverage: Fossil Fuels — the lower 48 States and District of Columbia. Electricity — the 50 United States and District of Columbia.
[1]Prices are for selected Classes A and B privately-owned electric utilities.
[2]See Explanatory Note 19.
[3]Includes small quantities of coke oven gas, refinery gas and blast furnace gas.
[4]Average price for total sales to ultimate consumers.
NA = Not available.
Sources: • Cost of Fossil Fuels, Federal Power Commission, Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." • Retail Price, January 1973 thru February 1980: Federal Power Commission, Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: Federal Energy Regulatory Commission, Form 5, "Electric Utility Company Monthly Statement."

International

Crude Oil Production

World crude oil production during May 1981 was 56.7 million barrels per day, down 0.6 million barrels per day from the April 1981 level.

OPEC output during May decreased 0.8 million barrels per day from the previous month, averaging 23.5 million barrels per day. This level of output represents a significant decrease by OPEC member nations from the rate maintained at the outbreak of the Iran-Iraq hostilities. Average production from Arab members of OPEC was 16.5 million barrels per day in May 1981, down 0.3 million barrels per day from the April 1981 level. Kuwait remained at its abnormally low output established the previous month of only 1.0 million barrels per day. Nigeria continued reducing production during May 1981, averaging 1.3 million barrels per day. This represents a decrease of 0.3 million barrels per day from April 1981. Also, both Libya and Qatar were down 0.1 million barrels per day in May 1981, averaging 1.5 and 0.4 million barrels per day, respectively. Other members of OPEC did not change production levels significantly in May 1981.

Production by non-OPEC nations as a group increased 0.1 million barrels per day in May 1981. The United States increased production by 0.1 million barrels per day to 8.6 million barrels per day; other non-OPEC nations remained at about the same level as that of the previous month.

Petroleum Consumption

Petroleum consumption by International Energy Agency (IEA) member nations was 34.3 million barrels per day during February 1981 (latest data available). This preliminary figure was a decrease of 2.8 million barrels per day from the rate of 37.1 million barrels per day in February 1980. The decrease for the United States for the same period was 2.0 million barrels per day.

Preliminary consumption data for May 1981 were available for France, Italy, the United Kingdom, and the United States. All four had significant decreases from consumption levels occurring during the same month one year ago.

Nuclear Electricity Production

In June 1981, the non-Communist world generated 56.9 billion gross kilowatt-hours (kWh) of nuclear-based electricity, a decrease of 0.6 percent with respect to May 1981 output, but 29.2 percent above June 1980 generation. United States nuclear electricity production during June 1981 was 22.5 billion gross kWh, about 40 percent of the non-Communist world generation for that month. Total gross nuclear generating capacity for the 18 non-Communist nations was 141.5 million kilowatts, of which about 42 percent was in the United States.

Four foreign reactors went into commercial operation in June: 3 French units (Blayais-1, St. Laurent-Des-Eaux-B1, and Tricastin-4) and 1 unit in Spain (Almarez-1). These 4 new entries bring to 220 the number of non-Communist power reactor units with operating licenses. So far during 1981, 6 French units have come "on-line," corresponding to an increase in generating capacity of about 37 percent over the combined capacity of the 22 French units in operation at the end of 1980.

On June 7, 1981, the nearly completed 70 MW Osirak reactor near Bagdad, Iraq, was essentially destroyed in a brief air raid. Since the reactor had not yet been charged with nuclear fuel, no radiation hazard was associated with this incident.

International

Crude Oil Production for Major Petroleum Exporting Countries

		Algeria	Iraq	Kuwait[1]	Libya	Qatar	Saudi Arabia[1]	United Arab Emirates	Arab Members of OPEC[2]	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**	**1,020**	**2,415**	**2,145**	**1,933**	**497**	**8,577**	**1,936**	**18,523**	**1,504**	**5,863**
1977	**AVERAGE**	**1,100**	**2,350**	**1,980**	**2,065**	**445**	**9,210**	**2,000**	**19,150**	**1,685**	**5,665**
1978	**AVERAGE**	**1,160**	**2,560**	**2,135**	**1,985**	**485**	**8,300**	**1,830**	**18,455**	**1,635**	**5,240**
1979	**AVERAGE**	**1,154**	**3,477**	**2,500**	**2,092**	**508**	**9,532**	**1,831**	**21,094**	**1,591**	**3,168**
1980	January	1,150	3,400	2,140	2,100	495	9,785	1,740	20,810	1,565	2,295
	February	1,150	3,400	2,335	2,100	460	9,780	1,740	20,965	1,550	2,500
	March	1,150	3,400	2,090	2,000	500	9,790	1,695	20,625	1,575	2,350
	April	1,000	3,300	1,570	1,750	500	9,765	1,705	19,590	1,580	2,200
	May	1,000	3,300	1,525	1,750	480	9,775	1,765	19,595	1,550	1,700
	June	1,000	3,300	1,575	1,700	440	9,775	1,750	19,540	1,545	1,500
	July	1,000	3,100	1,365	1,680	460	9,765	1,710	19,080	1,565	1,700
	August	1,000	3,100	1,465	1,690	465	9,765	1,665	19,150	1,565	1,600
	September	1,000	3,000	1,290	1,680	460	9,740	1,670	18,840	1,565	1,400
	October	1,000	150	1,385	1,665	440	10,255	1,675	16,540	1,585	600
	November	1,000	350	1,505	1,680	475	10,265	1,695	16,930	1,630	800
	December	1,000	450	1,779	1,680	483	10,260	1,706	17,360	1,617	1,360
	AVERAGE	**1,012**	**2,514**	**1,656**	**1,787**	**472**	**9,900**	**1,709**	**19,050**	**1,577**	**1,662**
1981	January	950	600	1,765	1,600	505	10,265	1,620	17,305	1,630	1,600
	February	950	700	1,565	1,650	480	10,265	1,605	17,215	1,620	1,700
	March	950	1,000	1,560	1,600	505	10,110	1,610	17,335	1,635	1,700
	April	900	1,000	995	1,600	515	10,195	1,570	16,775	1,630	1,600
	May	900	1,000	990	1,500	435	10,140	1,550	16,515	1,600	1,500

Note: Data for 1980 and 1981 are preliminary.
[1]Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In May 1981 total production in this region amounted to approximately 279,000 barrels per day.
[2]Arab members of OPEC include Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.
Additional footnotes on following page.

International

Crude Oil Production for Major Petroleum Exporting Countries (continued)

		Nigeria	Venezuela	Total OPEC[3]	Canada	Mexico	United Kingdom	United States	China	USSR	Other[4]	World
		Thousand barrels per day										
1973	**AVERAGE**	**2,054**	**3,366**	**30,961**	**1,800**	**450**	**8**	**9,208**	**1,140**	**8,420**	**3,843**	**55,830**
1974	**AVERAGE**	**2,255**	**2,976**	**30,683**	**1,695**	**580**	**9**	**8,774**	**1,310**	**9,020**	**3,805**	**55,875**
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**	**30,711**	**1,300**	**800**	**245**	**8,132**	**1,735**	**10,170**	**4,302**	**57,395**
1977	**AVERAGE**	**2,085**	**2,240**	**31,230**	**1,320**	**980**	**770**	**8,245**	**1,875**	**10,700**	**4,490**	**59,610**
1978	**AVERAGE**	**1,895**	**2,165**	**29,800**	**1,315**	**1,215**	**1,080**	**8,707**	**2,080**	**11,215**	**4,698**	**60,190**
1979	**AVERAGE**	**2,302**	**2,356**	**30,928**	**1,495**	**1,460**	**1,570**	**8,552**	**2,120**	**11,470**	**4,824**	**62,400**
1980	January	2,155	2,280	29,535	1,515	1,720	1,600	8,648	2,115	11,560	5,042	61,735
	February	2,160	2,200	29,805	1,475	1,725	1,660	8,696	2,115	11,550	5,189	62,215
	March	2,155	1,995	29,100	1,475	1,830	1,670	8,712	2,115	11,640	5,203	61,745
	April	2,100	2,045	27,965	1,390	1,885	1,510	8,688	2,120	11,630	5,352	60,540
	May	2,200	2,150	27,645	1,470	1,910	1,600	8,640	2,120	11,700	5,175	60,260
	June	2,110	2,050	27,175	1,535	1,905	1,625	8,547	2,120	11,630	5,203	59,740
	July	2,095	2,170	27,030	1,520	2,015	1,585	8,555	2,125	11,800	4,945	59,575
	August	2,050	2,210	27,010	1,440	2,000	1,535	8,422	2,130	11,800	5,158	59,495
	September	1,600	2,190	25,955	1,420	2,125	1,540	8,619	2,110	11,800	5,056	58,625
	October	1,879	2,225	23,255	1,311	2,182	1,572	8,536	2,076	11,800	5,228	55,960
	November	2,062	2,230	24,065	1,467	1,901	1,731	8,499	2,088	11,824	5,095	56,670
	December	2,026	2,330	25,050	1,300	2,027	1,795	8,609	2,083	11,893	5,303	58,060
	AVERAGE	**2,055**	**2,167**	**26,890**	**1,424**	**1,937**	**1,622**	**8,597**	**2,114**	**11,720**	**5,151**	**59,455**
1981	January	1,900	2,220	25,025	1,260	2,220	1,765	8,550	2,025	11,900	5,250	57,995
	February	1,960	2,195	25,075	1,300	2,120	1,820	8,611	2,025	11,900	5,244	58,095
	March	1,875	2,240	25,190	1,200	2,365	1,885	8,576	2,025	11,900	5,269	58,410
	April	1,625	2,200	R24,215	1,190	2,540	R1,750	8,466	R2,010	R11,800	R5,354	R57,325
	May	1,295	2,200	23,455	1,195	2,545	1,770	8,552	2,025	11,800	5,368	56,710

United States geographic coverage: the 50 United States and District of Columbia.
[3]OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates, Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon.
[4]Other is a calculated total derived from the difference between world production and the nations represented above.
R = Revised data.
Note: Monthly data may not average to annual data due to independent rounding and/or unpublished monthly revisions by the data source. Data for 1980 and 1981 are preliminary.
Sources:
- 1973-1978 annual data (except U.S.): Central Intelligence Agency, *International Energy Statistical Review.*
- 1979 annual data (except U.S. and OPEC nations): Central Intelligence Agency, *International Energy Statistical Review.*
- 1979 annual data for OPEC nations: *OPEC Annual Statistical Bulletin 1979.*
- 1979 monthly data (except U.S.) are EIA estimates based on CIA revisions to annual data.
- 1973-1980 United States data: See sources on the last page of the Petroleum Section.
- 1980 and 1981 monthly and 1980 annual data (except U.S. and World total): Central Intelligence Agency, *International Energy Statistical Review.*

International

Petroleum Consumption for Major Non-Communist Industrialized Countries[1]

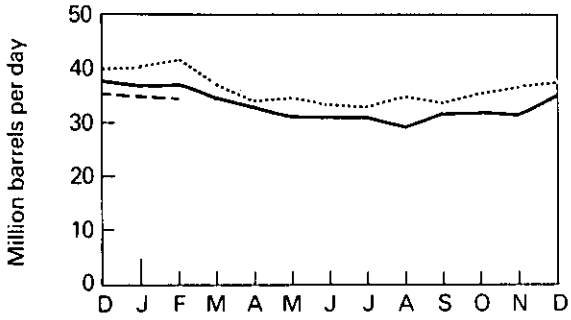
		Canada	France[2]	Italy	Japan	United Kingdom	United States	West Germany	Other IEA[3]	Total IEA[4]
						Thousand barrels per day				
1973	**AVERAGE**	**1,597**	**2,219**	**1,525**	**5,000**	**1,958**	**17,308**	**2,693**	**4,069**	**34,150**
1974	**AVERAGE**	**1,630**	**2,094**	**1,521**	**4,872**	**1,829**	**16,653**	**2,408**	**4,047**	**32,960**
1975	**AVERAGE**	**1,595**	**1,925**	**1,468**	**4,568**	**1,633**	**16,322**	**2,319**	**3,905**	**31,810**
1976	**AVERAGE**	**1,647**	**2,075**	**1,503**	**4,786**	**1,601**	**17,461**	**2,507**	**4,265**	**33,770**
1977	**AVERAGE**	**1,661**	**1,973**	**1,476**	**5,015**	**1,655**	**18,431**	**2,478**	**4,214**	**34,930**
1978	**AVERAGE**	**1,701**	**2,077**	**1,551**	**5,115**	**1,683**	**18,847**	**2,596**	**4,387**	**35,880**
1979	**AVERAGE**	**1,766**	**2,107**	**1,607**	**5,173**	**1,690**	**18,513**	**2,664**	**4,487**	**35,900**
1980	January	1,820	2,465	1,778	5,255	1,769	18,656	2,690	4,532	36,500
	February	1,930	2,444	1,864	5,722	1,621	18,815	2,410	4,738	37,100
	March	1,720	1,982	1,657	5,433	1,585	17,385	2,430	4,390	34,600
	April	1,600	2,110	1,541	4,626	1,472	16,724	2,680	4,257	32,900
	May	1,590	1,853	1,448	4,376	1,348	16,143	2,230	3,965	31,100
	June	1,660	1,848	1,511	4,224	1,286	16,214	2,220	3,985	31,100
	July	1,680	1,450	1,537	4,250	1,217	15,962	2,420	4,034	31,100
	August	1,650	1,220	1,310	3,910	1,120	15,727	2,150	3,833	29,700
	September	1,710	1,740	1,650	4,120	1,270	16,548	2,540	4,162	32,000
	October	1,770	2,050	1,670	4,250	1,430	16,911	2,230	3,939	32,200
	November	1,720	2,040	1,530	4,550	1,440	16,694	2,110	3,956	32,000
	December	1,940	2,410	1,740	5,350	1,480	18,354	2,190	4,446	35,500
	AVERAGE	**1,730**	**1,965**	**1,602**	**4,680**	**1,420**	**17,006**	**2,360**	**4,402**	**33,000**
1981	January	1,760	2,310	1,710	4,980	1,400	18,132	2,230	4,588	34,800
	February	1,770	2,170	2,010	5,350	1,460	16,773	2,510	4,427	34,300
	March	NA	1,790	1,700	5,010	1,430	15,569	2,100	NA	NA
	April	NA	1,500	1,600	4,200	1,290	15,593	NA	NA	NA
	May	NA	R1,670	1,290	NA	480	15,034	NA	NA	NA

United States geographic coverage: the 50 United States and District of Columbia.
[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 the International Energy Agency (IEA).
[3]Other is a calculated total derived from the difference between total IEA consumption and the IEA nations represented above.
[4]The 21 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, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Australia and Portugal joined the IEA as new members in 1979 and 1980, respectively. In an effort to maintain comparability within this time series, consumption data for these two countries have been incorporated into the IEA total for all years. Data for 1979 and 1980 are rounded to the nearest hundred thousand barrels per day.
NA = Not available. R = Revised data.
Note: Data for 1980 and 1981 are preliminary.
Sources: • Central Intelligence Agency, "International Energy Statistical Review," 25 August 1981 (except United States).
• 1973-1981 United States data: See sources on last page of the Petroleum Section.
• IEA totals for latest months are EIA estimates.

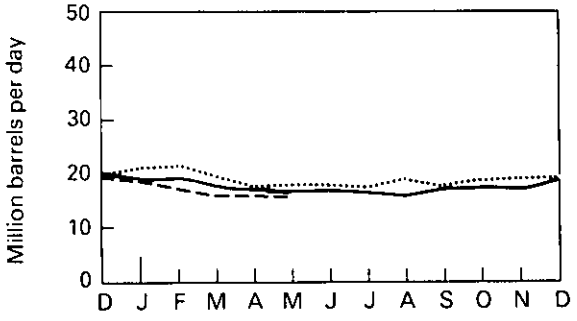
International

Petroleum Consumption

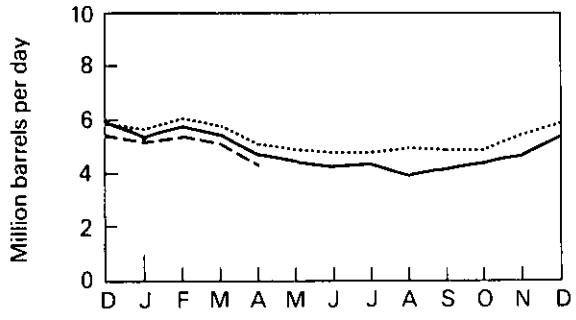
Total IEA



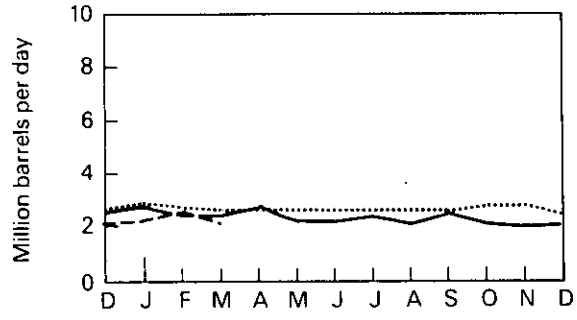
United States



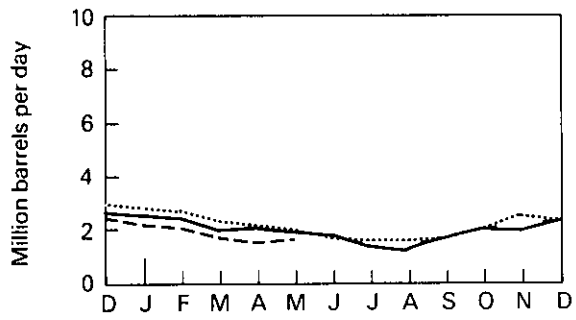
Japan*



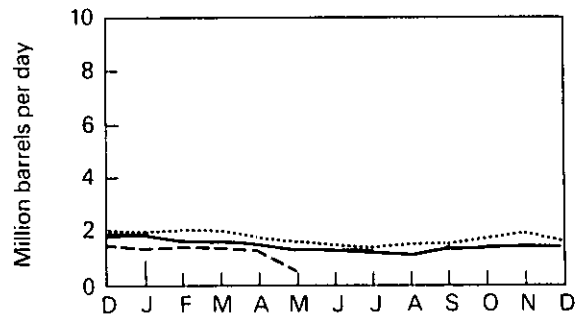
West Germany



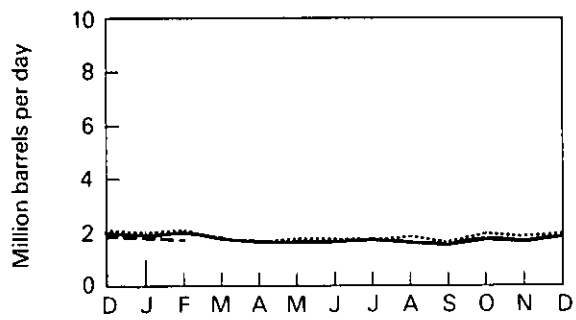
France**



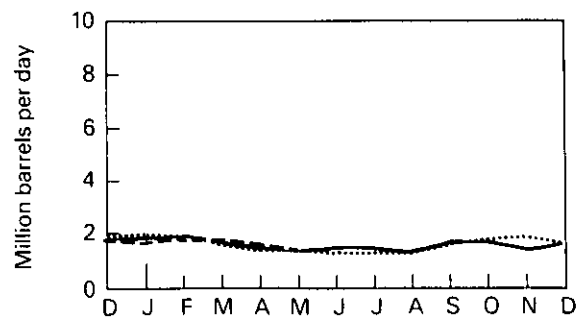
United Kingdom



Canada



Italy***



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

***Principal products only.

..... 1979
——— 1980
- - - - - 1981

International

Nuclear Electricity Generation by Non-Communist Countries[1]

		Argentina	Belgium	Canada	Finland	France	India	Italy	Japan	Nether-lands	Pakistan
						Billion gross kilowatt-hours					
1973	**TOTAL**	**0**	**0**	**18.3**	**0**	**11.6**	**1.9**	**3.1**	**9.4**	**1.1**	**0.5**
1974	**TOTAL**	**1.0**	**0.1**	**15.4**	**0**	**14.7**	**2.4**	**3.4**	**18.1**	**3.3**	**0.6**
1975	**TOTAL**	**2.5**	**6.8**	**13.2**	**0**	**18.3**	**2.5**	**3.8**	**22.2**	**3.3**	**0.5**
1976	**TOTAL**	**2.6**	**10.0**	**18.0**	**0**	**15.8**	**3.2**	**3.8**	**36.8**	**3.9**	**0.5**
1977	**TOTAL**	**1.6**	**11.9**	**26.8**	**2.7**	**17.9**	**2.8**	**3.4**	**28.1**	**3.7**	**0.3**
1978	**TOTAL**	**2.9**	**12.5**	**32.9**	**3.3**	**30.5**	**2.3**	**4.4**	**53.2**	**4.1**	**0.2**
1979	**TOTAL**	**2.7**	**11.4**	**38.4**	**6.7**	**39.9**	**3.2**	**2.6**	**62.0**	**3.5**	**(s)**
1980	January	0.3	1.2	3.6	0.8	5.5	0.2	0.2	8.0	0.4	0
	February	0.1	1.0	3.5	0.8	5.3	0.1	0.4	7.4	0.4	0
	March	0	1.0	3.7	0.8	5.1	0.2	0.5	8.0	0.4	0
	April	0.1	0.5	3.2	0.8	5.0	0.3	0.4	5.6	0.3	0
	May	0.2	0.7	2.5	0.3	4.2	0.3	0.3	6.0	0.3	0
	June	0.2	1.1	3.1	0	4.1	0.2	0.1	6.7	0.3	0
	July	0.2	1.3	3.6	0.4	4.8	0.2	0.1	7.8	0.4	(s)
	August	0.3	1.3	3.9	0.4	3.2	0.3	0.1	8.6	0.4	(s)
	September	0.3	1.1	3.1	0.4	4.5	0.3	0.1	7.0	0.4	(s)
	October	0.3	0.9	3.3	0.5	5.1	0.2	0	6.0	0.3	0
	November	0.3	1.1	3.4	0.6	5.8	0.3	0	5.4	0.3	(s)
	December	0.3	1.2	3.5	1.2	8.5	0.2	0	6.3	0.3	(s)
	TOTAL	**2.3**	**12.5**	**40.4**	**7.0**	**61.2**	**2.9**	**2.2**	**82.8**	**4.2**	**0.1**
1981	January	0.3	1.2	3.2	1.3	9.3	0.2	0.2	8.2	0.1	(s)
	February	0.2	1.0	3.5	0.9	8.6	0.2	0.3	7.1	(s)	(s)
	March	0.3	0.6	3.9	1.4	8.8	0.3	0.1	7.8	0.3	0
	April	0.2	0.7	3.3	1.5	8.3	0.3	0.6	7.9	0.4	0
	May	0.2	1.2	3.4	1.0	8.9	0.4	0.3	8.0	0.4	(s)
	June	0.2	1.2	3.6	0.7	8.3	0.3	0.1	6.7	0.4	(s)
	TOTAL (Year-to-date)	**1.4**	**5.8**	**21.0**	**6.8**	**52.2**	**1.6**	**1.5**	**45.8**	**1.5**	**0.1**

Note: 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.
s = Less than 0.05 billion gross kilowatt-hours.
Source: • *Nucleonics Week.*

International

Nuclear Electricity Generation by Non-Communist Countries[1] (continued)

		South Korea	Spain	Sweden	Switzer-land	Taiwan	United Kingdom[2]	West Germany	Non-Communist World Excluding U.S.	United States	Total Non-Communist World
						Billion gross kilowatt-hours					
1973	**TOTAL**	**0**	**6.5**	**2.1**	**6.2**	**0**	**28.0**	**11.9**	**100.7**	**88.0**	**188.7**
1974	**TOTAL**	**0**	**7.2**	**1.6**	**7.0**	**0**	**34.0**	**12.0**	**121.1**	**104.5**	**225.6**
1975	**TOTAL**	**0**	**7.5**	**12.0**	**7.7**	**0**	**30.5**	**21.7**	**152.7**	**181.8**	**334.5**
1976	**TOTAL**	**0**	**7.6**	**16.0**	**7.9**	**0**	**36.8**	**24.5**	**187.3**	**201.6**	**388.9**
1977	**TOTAL**	**0.1**	**6.5**	**19.9**	**8.1**	**0.1**	**38.1**	**35.8**	**207.8**	**263.2**	**470.9**
1978	**TOTAL**	**2.3**	**7.6**	**23.8**	**8.3**	**2.7**	**36.7**	**35.9**	**263.6**	**292.7**	**556.3**
1979	**TOTAL**	**3.2**	**6.7**	**21.0**	**11.8**	**6.3**	**38.5**	**42.2**	**300.1**	**270.7**	**570.8**
1980	January	0.1	0.7	2.5	1.5	0.9	3.7	4.7	34.2	21.1	55.3
	February	(s)	0.3	2.4	1.2	0.7	3.4	4.2	31.3	21.0	52.2
	March	0.4	0.4	2.3	1.3	0.8	4.2	3.4	32.4	21.0	53.4
	April	0.4	0.4	1.9	1.4	0.7	2.7	3.6	27.3	19.8	47.1
	May	0.4	0.4	1.6	1.4	0.4	2.6	3.5	25.1	19.6	44.7
	June	0.1	0.3	1.6	0.6	0.5	2.8	2.9	24.7	19.4	44.1
	July	0.4	0.3	1.3	0.6	0.8	2.0	3.0	27.2	22.4	49.6
	August	0.3	0.4	1.3	0.7	0.8	2.6	2.7	27.2	25.7	52.9
	September	0.4	0.4	2.1	1.3	0.8	3.1	3.2	28.4	24.8	53.2
	October	0.4	0.4	2.7	1.4	0.8	2.7	3.1	28.2	25.7	53.9
	November	0.4	0.5	3.4	1.4	0.6	3.2	4.1	30.8	22.0	52.8
	December	0.3	0.7	3.6	1.5	0.5	4.2	5.3	37.5	22.9	60.5
	TOTAL	**3.5**	**5.2**	**26.7**	**14.3**	**8.2**	**37.2**	**43.7**	**354.4**	**265.3**	**619.7**
1981	January	0.3	0.8	3.5	1.5	0.8	3.8	5.0	39.7	25.7	65.4
	February	0	0.6	3.6	1.4	0.7	3.4	4.6	36.2	22.6	58.8
	March	0	0.7	3.7	1.5	0.8	4.2	4.9	39.1	23.1	62.2
	April	0	0.6	3.3	1.4	0.8	2.8	4.4	36.5	21.7	58.2
	May	0.2	0.6	2.8	1.4	0.8	2.5	4.3	36.4	20.9	57.3
	June	0.4	0.7	2.8	0.7	0.8	3.3	4.1	34.4	22.5	56.9
	TOTAL (Year-to-date)	**0.8**	**4.0**	**19.7**	**7.9**	**4.8**	**20.1**	**27.3**	**222.3**	**136.5**	**358.8**

United States geographic coverage: the 50 United States and District of Columbia.
Note: Totals may not equal sum of components due to independent rounding.
[1]Figures are for gross electricity generation, as opposed to net electricity generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves.
[2]The United Kingdom assesses generation at 4- or 5-week intervals, rather than by calendar month.
s = Less than 0.05 billion gross kilowatt-hours.
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.

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.

Coke (Coal)

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 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.

Distillate Fuel Oil Production

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

Electricity Production

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

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.

Imports

Receipts into the 50 States and the District of Columbia of foreign goods (including receipts of goods from U.S. territories and U.S. Foreign Trade Zones) which are classified by customs officials as "imports for consumption" or "withdrawals from bonded warehouse for consumption," including withdrawals from bonded warehouse for military offshore use and for bunkering of vessels or aircraft engaged in international commerce. Included are imports for the Strategic Petroleum Reserve. Excluded are receipts into bonded warehouse and into U.S. territories and U.S. Foreign Trade Zones.

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 turbines to produce electricity.

Landed Cost

Includes the purchase price at the foreign port (or U.S. land border), transportation and insurance costs, wharfage and demurrage, brokerage fees, import fees and duties, license (ticket) fees, and transportation costs to the refinery. Averages computed based on major importers which account for an estimated 90 to 95 percent of total crude oil imports. Coverage includes United States and its territories.

Lease Condensate

A natural gas liquid recovered from gas well gas (including gas produced from crude oil reservoirs) in lease separators and, in some instances, field facilities. It consists primarily of pentanes and heavier hydrocarbons. Generally, it is blended with crude oil for refining.

Line Miles of Seismic Exploration

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

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.

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, Net

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.

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

Those portions of reservoir gas which are liquefied at the surface in lease separators, field facilities, or natural gas processing plants. Natural gas liquids include natural gas plant liquids and lease condensate.

Natural Gas Plant Liquids

Those portions of natural gas that are liquefied at natural gas processing plants, including natural gasoline plants, fractionating, and cycling plants, and, in some instances, field facilities. Products obtained include ethane, liquefied petroleum gases (propane, butanes, propane-butane mixtures, ethane-propane mixtures), isopentane, natural gasoline, unfractionated streams, 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.

Petroleum

A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, 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 artificial 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.

Refined Petroleum Product Supplied

Total refined petroleum product supplied is the sum of each refined petroleum product supplied. For each product the amount supplied is derived by summing production, imports, and net withdrawals from primary stocks and subtracting exports.

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.

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 Fuel Oil, Bunker C fuel 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 Reserve

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.

Stocks (Refined Petroleum Product)

Stocks held at refineries, bulk terminals, and pipelines (including pipeline fill) where the storage capacity exceeds 50,000 barrels. Stocks held at natural gas processing plants are not included as well as stocks held in secondary storage facilities, such as those held by jobbers; dealers, independent marketers, and consumers.

Synthetic Natural Gas (SNG)

A product resulting from the manufacture, conversion, or reforming of 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 input, exports of crude oil, crude oil burned as fuel, and crude oil losses.

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 Thermal Conversion Factors.

2. Domestic consumption of energy includes consumption of coal (anthracite, bituminous coal, 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 Thermal Conversion Factors.

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 are relative measurements of 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) 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). LRG 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.

Preliminary monthly estimates for 1980 production, stocks, and products supplied are obtained by multiplying the reported data for the most recent month available by an appropriate ratio derived from data for the prior 3 years. For example, if an estimate were required for June 1980 and the most recent monthly data available were for April, the preliminary estimate would be obtained by multiplying the April 1980 data by the average of the June to April ratios for the years 1977 through 1979.

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 from 1978 forward 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 ΔS. 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, a unit of power. (Power is energy produced per unit of time.) Nuclear power plants may have more than one type of power rating, including:

(a). Design Capacity or Design Electrical Rating (DER)—The nominal net, electrical output of the unit specified by the utility and used for the purpose of plant design.
(b). Maximum Dependable Capacity (MDC), GROSS—The gross electrical output as measured at the output terminals of the turbine generator during the most restrictive seasonal conditions (usually summer).
(c). Maximum Dependable Capacity, NET—The gross maximum dependable capacity less the nominal station service load. (The nominal station service load for a nuclear plant is about 5 percent of its gross generation.)
(d). Thermal Capacity—The rate of heat production by the reactor core. The Nuclear Regulatory Commission authorizes a maximum thermal power rating for U.S. reactors.

12. The actual domestic average price represents the average price at which all domestic crude oil is purchased. 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.

13. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on Form EIA-14, the "Refiners' Monthly Cost Report." These prices were previously published from data collected on Form ERA-49, the "Domestic Crude Oil Entitlements Program Refiners Monthly Report." The Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. Also, the respondents for the two forms are essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken in comparing the data collected on the two forms.

The costs previously published for January 1981, viz., $30.87 per barrel for domestic crude, $37.59 per barrel for imported, and $33.40 per barrel for the composite, were from data collected on Form ERA-49. The revised costs are from data collected on Form EIA-14. The January prices are being replaced because the Form ERA-49 data were based on only the 27 days of controlled activity, and because there was considerable recertification of oil which occurred in January.

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1331. Imported crude oil is either that oil reported on Form ERA-51, the "Transfer Pricing Report," or any crude oil which is not domestic oil.

Crude oil costs and volumes reported on Form ERA-49 excluded unfinished oils but included Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on the FEA Form P110-M-1 included unfinished oils but excluded SPR. Imported averages derived from Form ERA-49 exclude oil purchased for SPR, whereas the composite averages derived from Form ERA-49 include SPR. None of the prices derived from Form EIA-14 include either unfinished oils or SPR.

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 motor gasoline prices are calculated monthly by the BLS in conjunction with the construction of the Consumer Price Index (CPI). For the period 1974 through 1978 prices were collected in 56 urban areas. For the period 1978 forward, prices are collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers — about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self- serve).

17. 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.

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. Residual fuel oil prices include fuel oil No. 4, No. 5, No. 6, crude oil and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (fuel oil No. 2, kerosene, and jet fuel) prices.

DOE F 1340.1
(2-80)

U.S. DEPARTMENT OF ENERGY
GPO SUBSCRIPTION ORDER FORM

A

(For use in ordering EIA Publications only -- Read Ordering Information Section before completing form.)

SEND ORDER FORM TO: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402

Enclosed is $ _____ ☐ Check

☐ Money order, or charge to my Deposit Account No.

☐☐☐☐☐☐☐ - ☐

Order No. _____

Credit Card Orders Only

Total charges $ _____ Fill in the boxes below

Credit Card No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Expiration Date Month/Year ☐☐☐☐ ☐ VISA ☐ Master Charge

PLEASE PRINT OR TYPE **NAME AND ADDRESS**

NAME – FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY STATE ZIP CODE

(OR COUNTRY)

PRINT OR TYPE TITLES OF ITEMS YOU WISH TO RECEIVE ON A SUBSCRIPTION BASIS:

FOR OFFICE USE ONLY		
	QUANTITY	CHARGES
ENCLOSED		
TO BE MAILED		
SUBSCRIPTIONS		
POSTAGE		
FOREIGN HANDLING		
MMOB		
OPNR		
UPNS		
DISCOUNT		
REFUND		

GPO 869 026

Conversion Factors

Thermal Conversion Factors

Approximate Heat Content of Various Fuels		1973	1974	1975	1976	1977	1978	1979	1980–81
Anthracite									
Production	Thousand Btu/short ton	23,170	22,560	23,390	22,770	23,180	23,520	23,590	23,590
Imports and Exports	Thousand Btu/short ton	25,400	25,400	25,400	25,400	25,400	25,400	25,400	25,400
Consumption, average	Thousand Btu/short ton	22,710	21,950	21,740	22,150	22,710	22,970	22,700	22,700
Electric utility consumption	Thousand Btu/short ton	17,920	17,200	17,060	17,530	17,240	17,100	17,450	17,380
Non-utility consumption	Thousand Btu/short ton	24,340	23,750	23,650	23,840	24,990	25,170	25,200	24,690
Bituminous coal and lignite									
Production	Thousand Btu/short ton	24,010	23,730	23,200	23,150	22,700	22,430	22,590	22,590
Imports	Thousand Btu/short ton	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Exports	Thousand Btu/short ton	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000
Consumption, average	Thousand Btu/short ton	23,650	23,070	22,800	22,750	22,330	22,140	22,200	22,200
Electric utility consumption	Thousand Btu/short ton	22,260	21,800	21,660	21,690	21,480	21,280	21,380	21,310
Non-utility consumption	Thousand Btu/short ton	26,840	26,120	25,810	25,870	25,130	25,070	25,060	25,970
Coal Coke	Thousand Btu/short ton	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000
Crude petroleum[1]									
Production	Thousand Btu/barrel	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Imports	Thousand Btu/barrel	5,817	5,827	5,821	5,808	5,810	5,802	5,810	5,810
Exports	Thousand Btu/barrel	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Crude petroleum and products									
Imports, average	Thousand Btu/barrel	5,897	5,884	5,858	5,856	5,834	5,839	5,810	5,810
Exports, average	Thousand Btu/barrel	5,752	5,774	5,748	5,745	5,797	5,808	5,832	5,832
Petroleum products									
Consumption, average	Thousand Btu/barrel	5,515	5,504	5,494	5,504	5,518	5,519	5,494	5,494
Residential and Commercial	Thousand Btu/barrel	5,686	5,681	5,655	5,661	5,664	5,682	5,661	5,633
Industrial	Thousand Btu/barrel	5,325	5,304	5,304	5,336	5,368	5,369	5,338	5,380
Transportation	Thousand Btu/barrel	5,398	5,396	5,395	5,400	5,404	5,412	5,415	5,409
Electric Utility	Thousand Btu/barrel	6,223	6,215	6,229	6,235	6,231	6,227	6,245	6,246
Imports	Thousand Btu/barrel	5,983	5,959	5,935	5,980	5,908	5,955	5,811	5,811
Exports	Thousand Btu/barrel	5,752	5,773	5,747	5,743	5,796	5,814	5,864	5,864
LPG Consumption Average[2]	Thousand Btu/barrel	3,746	3,730	3,715	3,711	3,677	3,669	3,680	3,680
Natural gas plant liquid production	Thousand Btu/barrel	4,049	4,011	3,984	3,964	3,941	3,925	3,955	3,955
Natural gas, dry									
Production and consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,021
Electric utility consumption	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034	1,034	1,030
Non-utility consumption	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019	1,016	1,018	1,019
Imports	Btu/cubic foot	1,026	1,027	1,026	1,025	1,026	1,030	1,037	1,037
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013	1,013	1,013
Natural gas, wet									
Production	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092	1,092
Hydropower[3]	Btu/kWh	10,389	10,442	10,406	10,373	10,435	10,435	10,435	10,435
Nuclear power[3]	Btu/kWh	10,903	11,161	11,013	11,047	10,769	10,769	10,769	10,769
Geothermal power[3]	Btu/kWh	21,674	21,674	21,611	21,611	21,611	21,611	21,611	21,611
Electricity consumption	Btu/kWh	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412

Refined Petroleum Products:	Thousand Btu/barrel
Asphalt	6,636
Aviation gasoline	5,048
Butane	4,326
Butane-propane mixture[4]	4,130
Distillate fuel oil	5,825
Ethane	3,082
Ethane-propane mixture[5]	3,308
Isobutane	3,974
Jet fuel—kerosene type	5,670
Jet fuel—naphtha type	5,355
Kerosene	5,670
Lubricants	6,065
Motor gasoline	5,253
Natural gasoline	4,620
Petrochemical feedstocks	
Naphtha 400°	5,248
Other oils over 400°	5,825
Still gas	6,000
Petroleum coke	6,024
Plant condensate	5,418
Propane	3,836
Residual fuel oil	6,287
Road oil	6,636
Special naphtha	5,248
Still gas	6,000
Unfinished oils	5,825
Wax	5,537
Miscellaneous	5,796

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] LPG Consumption Average is the annual weighted average of the LPG product supplied components: ethane, ethylene, propane, propylene, butane, butylene, butane-propane mixture, ethane-propane mixture, and isobutane.
[3] 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.
[4] 60 percent butane and 40 percent propane.
[5] 70 percent ethane and 30 percent propane.

U.S. DEPARTMENT OF ENERGY
ENERGY INFORMATION ADMINISTRATION
OFFICE OF ENERGY INFORMATION SERVICES
1000 INDEPENDENCE AVENUE, S.W.
WASHINGTON, D.C. 20585

FIRST CLASS MAIL

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300