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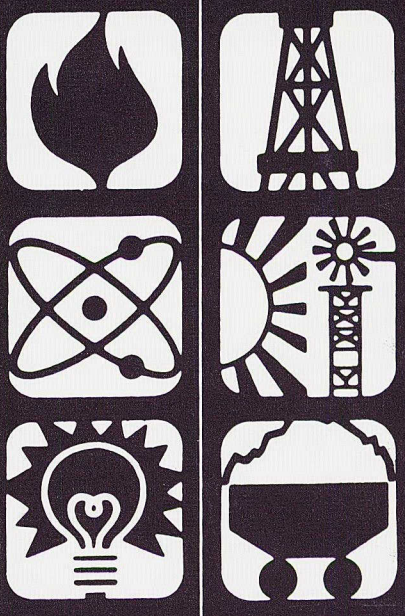
Monthly Energy Review

Energy Information Administration
Washington, D.C.

April 1983



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Energy Information Administration
Office of Energy Markets
and End Use
U.S. Department of Energy
Washington, D.C. 20585

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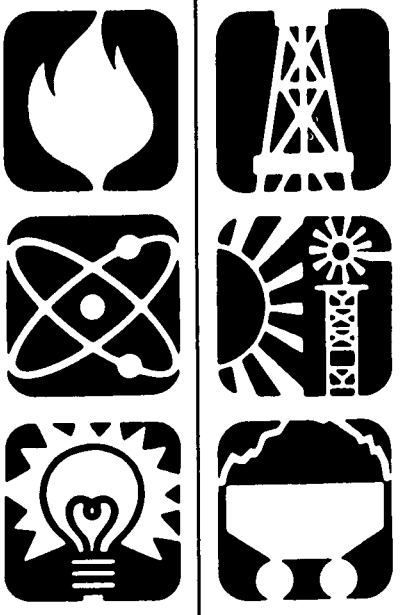

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Contents

The *Monthly Energy Review* presents current data 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, petroleum stocks, and production of electricity from nuclear powered facilities.

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. . .

Occasionally feature articles on energy-related subjects and highlights from recently published Department of Energy reports are included in this publication. The following articles and highlights have appeared in previous issues:

Energy Consumption . . . . . March 1975
Nuclear Power . . . . . April 1975
The Price of Crude Oil . . . . . June 1975
U.S. Coal Resources and Reserves . . . . . July 1975
Propane, A National Energy Resource . . . . . September 1975
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Curtailments of Natural Gas Service . . . . . January 1976
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Motor Gasoline Supply and Demand . . . . . July 1977
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The Energy Requirements of U.S. Agriculture . . . . . July 1979
Three Mile Island— Possible Regulatory Responses and Their Impacts on the Nation's Short-Term Electric Utility Fuel Outlook . . . . . October 1979
Reduction in Natural Gas Requirements Due to Fuel Switching . . . . . December 1979
The Solar Collector Industry and Solar Energy . . . . . February 1980
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The Energy Information Administration's Oil and Gas Reserves Program— The First Year's Report . . . . . June 1980
Energy From Urban Waste . . . . . August 1980
Natural Gas Liquids: Revisions to 1979 Data . . . . . October 1980
EIA Weekly Petroleum Data: Data Collection and Methods of Estimation . . . . . November 1980
The Department of Energy Disclosure Policy for Individually Identifiable Information Maintained by the Energy Information Administration . . . . . December 1980
Changes in 1981 Petroleum Data Series . . . . . May 1981
Information Services of the Energy Information Administration . . . . . September 1981
An Overview of Natural Gas Markets . . . . . December 1981
The Interstate and Intrastate Natural Gas Markets . . . . . January 1982
Natural Gas Drilling and Production Under the Natural Gas Policy Act . . . . . February 1982
Highlights: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1981 Annual Report* . . . . . September 1982
Impacts of Financial Constraints on the Electric Utility Industry . . . . . October 1982
Highlights: *Energy Company Development Patterns in the Postembargo Era, Volume One* . . . . . November 1982
Highlights: *Residential Energy Consumption Survey: Consumption and Expenditures* . . . . . January 1983
Highlights: *Residential Energy Consumption Survey: Housing Characteristics* . . . . . February 1983

The Effect of Weather on Energy Use

by
Colleen Cornett[1] and Frank Capece[2]

Energy Information Administration

Overview

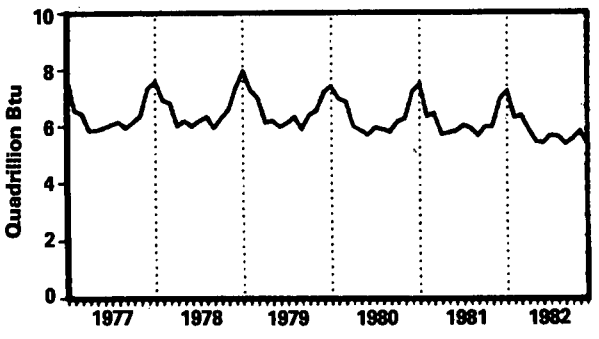
Energy use depends on several factors. Disposable personal income, prices, and industrial activity affect the longer-term changes in energy demand but have less influence on the regular changes in demand within each year. Weather is the predominant influence on seasonal patterns of energy use. Total energy use from 1977 to 1982 exhibited very regular seasonal fluctuations, with a sharp peak during the winter months[3] and a trough during the summer months (see Figure 1). This article analyzes the role of weather in determining the seasonality of energy consumption and examines the annual consumption patterns of several major fuels. It does not analyze other influences on energy demand such as income, price, and conservation.

Degree-Days

Common units for measuring weather are heating and cooling degree-days. A degree-day indicates the temperature variation from 65° F (calculated as the simple average of the daily minimum and maximum temperatures) on a given day. For example, a daily average temperature of 66° F minus the benchmark level of 65° F amounts to 1 cooling degree-day and 0 heating degree-days. A daily average temperature of 60° F represents 5 heating degree-days and 0 cooling degree-days. Degree-day data from weather stations around the country are population-weighted to make the data a more precise indicator of the amount of energy required for space heating and cooling. Since this weather measure is regional but not fuel-specific, heating and cooling degree-days are only a general indicator of energy demand. For example, a colder-than-normal winter in New England would have different implications for heating oil demand than a cold winter in the Midwest because of the different regional demands for fuel.

[1,2] Short Term Information Division, Office of Energy Markets and End Use.
[3] Winter is defined as December, January, and February.

Figure 1. Monthly Total Energy Use, 1977-1982



Source: Energy Information Administration, Monthly Energy Data System, March 1983.

Weather Effects

One test of the importance of weather in determining the demand for energy is to analyze the relationship between monthly fuel use and the number of heating and cooling degree-days registered in the month (see Table 1). The high R-squared

Table 1. Relationship[a] of Seasonal Energy Use and Weather[b]

Fuel	Corrected R-Squared Value		
	With HDD	With CDD	With HDD & CDD
Total Energy	0.77	0.28	0.83
Natural Gas	0.96	0.51	0.96
Distillate Fuel Oil	0.76	0.44	0.76
Residual Fuel Oil	0.28	0.10	0.30
Motor Gasoline	0.13	0.08	0.11
Coal	0.01	0.06	0.28
Electricity	0.01	0.33	0.75

[a] Relationship calculated using ordinary least squares for the general equation: energy (t) = b_0 + b_1[HDD(t)]. More technical analyses, such as using the X-11 (Bureau of the Census) seasonal adjustment procedure, could also be conducted.
[b] Heating degree-days (HDD) and cooling degree-days (CDD) from January 1977 through September 1982.
Source: Energy data—Energy Information Administration, Monthly Energy Data System, March 1983. Weather data—Department of Commerce, National Oceanic and Atmospheric Administration.

value[4] for total energy means that over 80 percent of the monthly fluctuations in total energy demand can be explained by weather.[5] Because the peak energy demand occurs in the winter, heating degree-days would be expected to be a more significant variable; this is proven by the much higher correlations obtained when heating degree-days alone are used, compared to those obtained when cooling degree-days alone are used. The following describes the influence of weather variations on consumption of five fuels.

Natural Gas. Monthly fluctuations in natural gas demand, which accounts for about one-fourth of total energy demand, are almost completely explained by variations in heating degree-days (R-squared = 0.96). In 1982, about 80 percent of natural gas demand was for nonutility uses; the seasonal fluctuations were driven almost entirely by consumption in the residential and commercial sector. Natural gas use in this sector during January 1982, the peak demand month, was over five times higher than the level of use in August 1982. About 75 percent of natural gas use by the residential and commercial sector is for space heating, a service demand directly related to heating degree-days.

Distillate Fuel Oil. Of the petroleum products considered, distillate fuel oil consumption is most highly correlated with weather data (R-squared = 0.76); it exhibits a pronounced annual peak in January or February. About half of the distillate fuel oil is used as diesel fuel in the transportation sector, a demand that has a subtle peak in the summer. This minor seasonal trend is overwhelmed by the use of distillate fuel oil for heating in the winter months, and is reflected by the strong correlation between heating degree-days and consumption of this fuel.

Residual Fuel Oil. Residual fuel oil consumption also peaks in the winter, with minor inflections during the summer. Electric utility use of residual fuel oil, which fell from nearly half of total residual fuel oil demand in 1977 to only one-third in 1982, has two seasonal peaks, one in winter and one in summer. Nonutility use, a winter-peaking demand, also declined over the 1977-1982 period, although not as dramatically. The low relationship between residual fuel oil demand and weather (R-squared = 0.30) is probably due both to the overwhelming effect of the long-term downward trend and to the differences in the seasonal patterns of demand within the residual fuel oil category.

Motor Gasoline. Accounting for nearly half of total petroleum product supplied, motor gasoline consumption peaks several times each year, during vacation and holiday periods. Consequently, the demand for motor gasoline is not well explained by weather patterns. The very low R-squared value of 0.11 means that there is no reason to believe that an increase in cooling degree-days (a hotter summer) or an increase in heating degree-days (a colder winter) would lead to any appreciable change in motor gasoline demand. Demand for motor gasoline is primarily a function of automobile travel, which peaks during the summer and in December, regardless of weather.

Coal and Electricity. Coal consumption and electricity generation would be expected to have similar seasonal trends because electric utilities account for over 80 percent of coal consumption. Demand for these two sources of energy peaks twice each year, during winter and summer. Over the 1977-1982 period, the summer peak demand for electricity (to provide air conditioning) slightly exceeded the winter peak for space heating. Weather explains 75 percent of the monthly fluctuations in electricity generation and 28 percent of changes in coal consumption. With a demand that peaks twice each year, both heating and cooling degree-days are necessary in the equation: neither variable alone can explain the variation. The explanatory power of weather is much lower for coal because stocks of coal are held at utilities; advanced purchases in anticipation of weather changes are possible. Electricity, however, cannot readily be stored in large quantities; it must be generated at the exact time that weather influences demand. Another reason for the low correlation between weather and coal consumption is that most coal is used for base-load generation, which is more stable than total electricity generation.

[4] R-squared values are statistical measurements of the influence of one variable's change on another variable's change. An R-squared value equal to 1 indicates that the change in one variable can fully explain the change in another variable.

[5] This percentage may be lower if other variables are included in the estimating equation.

Recent Trends

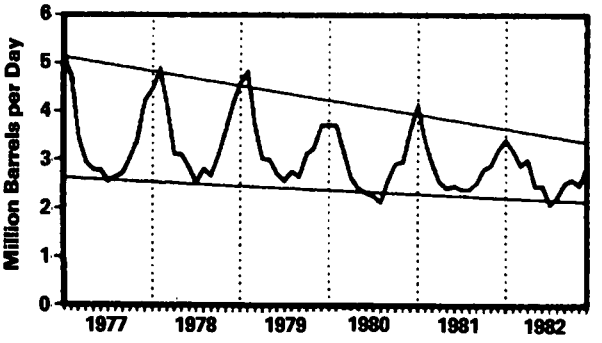
One interesting exercise is to compare the seasonal trends of different energy sources. Annual consumption of total energy, natural gas, and petroleum products fell from 1979 to 1982, but differences in the seasonal component of these declines are evident. The ratio of the monthly maximum to minimum[6] consumption in each year can be used to approximate the size of the seasonal fluctuations (see Table 2).

Total energy use exhibited a fairly constant ratio from 1977 to 1982: peak consumption declined 6.4 percent and base consumption declined 8.2 percent. Peak distillate fuel oil demand fell 33 percent from 1977 to 1982, compared to a drop of only 18 percent in base demand (see Figure 2). This squeezing of the seasonal fluctuations implies that conservation efforts significantly reduced peak demand. In the case of residual fuel oil, the yearly lows for the 1978-1982 period actually declined slightly faster than the peaks (see Figure 3). Consumption of both electricity and coal increased from 1978 to 1981; these energy sources had relatively constant maximum/minimum ratios over this period, showing much less change in the magnitude of the seasonal swings within each year.

To obtain a better picture of trends in energy use for the 1977-1982 period, energy use per heating degree-day during the winter was calculated to adjust the peaks in consumption for weather variations. Energy use per heating degree-day during the 3 winter months increased (or remained

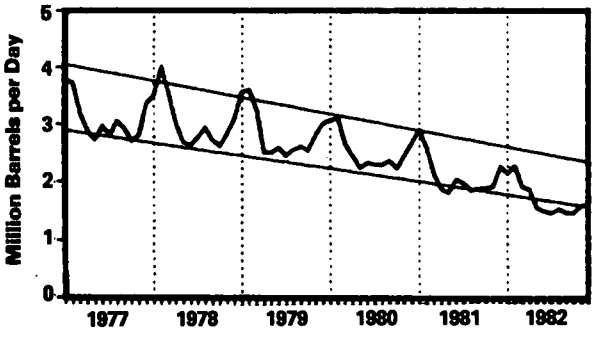
[6] Calculated by dividing the highest by the lowest level of monthly consumption in each year.

Figure 2. Monthly Distillate Fuel Oil Consumption, 1977-1982



Source: 1977-1979: Energy Information Administration (EIA), *Energy Data Reports*, "Crude Petroleum, Petroleum Products, and Natural Gas Liquids (Final Summary)," Table 1.
1980-1982: EIA, *Petroleum Supply Monthly*, October 1982 and February 1983.

Figure 3. Monthly Residual Fuel Oil Consumption, 1977-1982



Source: 1977-1979: Energy Information Administration (EIA), *Energy Data Reports*, "Crude Petroleum, Petroleum Products, and Natural Gas Liquids (Final Summary)," Table 1.
1980-1982: EIA, *Petroleum Supply Monthly*, October 1982 and February 1983.

Table 2. Maximum/Minimum Monthly Energy Use, 1977-1982

Year	Total Energy Quadrillion Btu	Natural Gas Trillion cubic feet	Distillate Fuel Oil Million barrels per day	Residual Fuel Oil Million barrels per day	Motor Gasoline Million barrels per day	Coal Million short tons	Electricity Generation Billion kilowatt-hours
1977 Max/Min	7.71/5.85	2.41/1.33	5.10/2.55	3.76/2.71	7.59/6.47	56.88/46.77	198.9/156.9
1978 Max/Min	7.58/5.95	2.38/1.24	4.85/2.52	3.97/2.62	7.91/6.68	58.20/43.29	206.4/159.7
1979 Max/Min	7.93/5.90	2.43/1.31	4.81/2.56	3.60/2.45	7.33/6.73	61.26/51.60	209.7/170.0
1980 Max/Min	7.41/5.70	2.24/1.26	3.71/2.14	3.11/2.23	6.80/6.23	63.52/52.64	216.8/168.7
1981 Max/Min	7.46/5.65	2.28/1.27	4.11/2.38	2.90/1.82	7.03/6.30	67.58/54.65	220.4/172.5
1982 Max/Min	7.22/5.37	2.37/1.12	3.41/2.08	2.26/1.47	6.89/5.92	69.18/53.27	210.5/172.6

Source: Energy Information Administration, Monthly Energy Data System, March 1983.

relatively constant in the case of distillate and residual fuel oil) from the winter of 1977-1978 through the winter of 1979-1980 (see Table 3). The winter of 1979-1980 was the mildest of the 5 years examined, but it was the peak of energy use per heating degree-day; this upward trend indicates that the level of energy consumption is influenced by factors other than weather. The ratio in 1979-1980 increased because the drop in total winter energy use (4.4 percent) was much lower than the 14-percent decline in heating degree-days. The milder winter did result in energy savings but not to the extent that would be predicted if weather variation were the only influence on energy use.

After 1980, the cumulative effects of higher energy prices resulted in a decrease in energy use per heating degree-day. By the winter of 1981-1982, total energy use per heating degree-day was 13 percent below the 1979-1980 level, and distillate fuel oil use per heating degree-day was down by 20 percent. These decreases reflect conservation, since energy use per heating degree-day did not increase for any of the energy groups from winter 1979-1980 to winter 1981-1982.

Impacts on Energy Stocks

Moderations in the seasonal fluctuations in energy demand have significant implications for energy stock levels and inventory changes. Firms maintain inventories to provide flexibility in satisfying customers' fluctuating demands while trying to maximize the efficiency of their refinery production. For example, by building inventories of winter heating oil in anticipation of seasonal demand, a firm can schedule a more constant level of refinery runs and can reduce its need to invest in peak-load production capacity to meet the seasonal demand. As the seasonal fluctuations in demand moderate, the need to build these inventories is reduced. The seasonal patterns would still exist in some stocks, such as distillate fuel oil, but the swings would be less pronounced. Patterns in distillate fuel oil inventories in recent years suggest that such a change has already occurred.

An additional factor in the dampening of seasonal stock patterns is the increased ability of refineries to adjust refinery yields to meet changing demand. Refineries do not produce one product from a barrel of crude oil, but rather a slate of products. The increased ability of refiners to alter the mix of products resulting from a barrel of crude oil is due to several factors. The drop in demand for petroleum products caused the closing of a number of small, older refineries, which typically had less refining flexibility. Refinery capacity dropped from 18.7 million barrels per day in August 1981 to 17.1 million barrels per day in November 1982. However, even with this lower total capacity, refiners had substantial unused capacity; capacity utilization averaged less than 70 percent in 1982. The combination of relatively more flexible refineries with a considerable amount of unused capacity affected refinery yields. For example, in the fall of 1982, refineries were able to increase the yield of distillate fuel oil from a barrel of crude oil to historically high levels to meet demand. If refiners continue this approach, the seasonal pattern of petroleum product stocks will become even less pronounced.

Table 3. Index of Winter* Energy Use per Heating Degree-Day, 1978-1982 (1977-1978 = 1.00)

Year	Heating Degree-Days	Total Energy	Natural Gas	Distillate Fuel Oil	Residual Fuel Oil	Motor Gasoline	Coal	Electricity Generation
1977-1978	2,954	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1978-1979	2,957	1.03	1.01	1.00	0.94	1.03	1.13	1.06
1979-1980	2,544	1.15	1.13	0.96	0.98	1.09	1.39	1.21
1980-1981	2,583	1.10	1.09	0.94	0.86	1.06	1.42	1.20
1981-1982	2,772	1.00	1.03	0.77	0.65	0.95	1.34	1.12

* December, January, and February.
Source: Energy data—Energy Information Administration, Monthly Energy Data System, March 1983. Weather data—Department of Commerce National Oceanic and Atmospheric Administration.

Part 1 Executive Summary

Overview

Production

Energy production for January 1983 totaled 5.2 quadrillion Btu, a 5.4-percent decrease from the January 1982 level of production. Decreases in production occurred for natural gas and coal. Natural gas production was down 11.6 percent* and coal production was down 8.8 percent. Petroleum production increased 0.5 percent. All other forms of energy production combined were up 3.7 percent.

Consumption

Energy consumption in January 1983 totaled 6.5 quadrillion Btu, a 9.4-percent decrease compared to the level of consumption for January 1982. Decreases occurred in the consumption rates of natural gas (16.9 percent), petroleum (7.1 percent), and coal (6.4 percent), accounting for the overall decline in energy consumption during January. The consumption rate of all other forms of energy increased 3.3 percent.

Imports

Net imports of energy for January 1983 totaled 0.6 quadrillion Btu, 15.9 percent below the level of 1 year earlier. Net imports of petroleum decreased 23.0 percent, and net imports of electricity and coal coke combined decreased 3.6 percent. Natural gas net imports increased 17.3 percent. Net exports of coal were down 28.0 percent.

*All percentage increases/decreases are calculated using daily rates prior to rounding.

Energy Summary
(Quadrillion (10^{15}) Btu)

	January				
	1983	1983 Daily Rate	1982	1982 Daily Rate	Percent Change[1]
Total Production	**5.199**	**0.168**	**5.498**	**0.177**	**-5.4**
Petroleum[2]	1.756	0.057	1.747	0.056	+0.5
Natural Gas	1.488	0.048	1.684	0.054	-11.6
Coal	1.363	0.044	1.495	0.048	-8.8
Other[3]	0.592	0.019	0.571	0.018	+3.7
Total Consumption	**6.532**	**0.211**	**7.210**	**0.233**	**-9.4**
Petroleum[4]	2.494	0.080	2.684	0.087	-7.1
Natural Gas	2.018	0.065	2.430	0.078	-16.9
Coal	1.403	0.045	1.498	0.048	-6.4
Other[5]	0.618	0.020	0.598	0.019	+3.3
Net Imports	**0.633**	**0.020**	**0.753**	**0.024**	**-15.9**
Petroleum[6]	0.605	0.020	0.786	0.025	-23.0
Natural Gas	0.117	0.004	0.099	0.003	+17.3
Coal[7]	(0.115)	(0.004)	(0.160)	(0.005)	(-28.0)
Other[8]	0.026	0.001	0.027	0.001	-3.6

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

Executive Summary

Energy Summary[1]

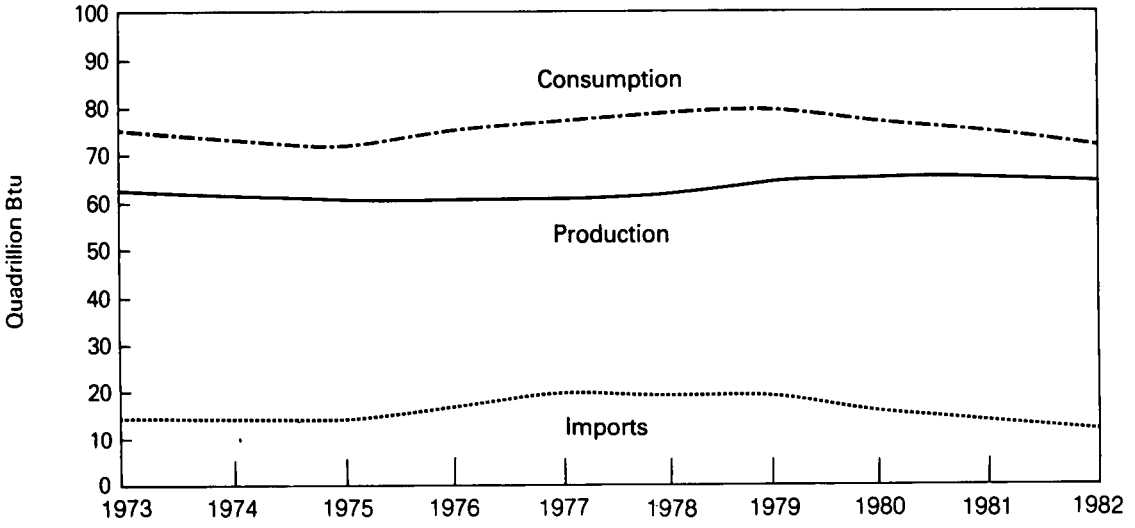
		Energy Production[2]	Energy Consumption[2]	Energy Imports[2]	Energy Exports
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**62.433**	**74.609**	**14.732**	**2.073**
1974	**TOTAL**	**61.229**	**72.759**	**14.417**	**2.241**
1975	**TOTAL**	**60.059**	**70.707**	**14.113**	**2.389**
1976	**TOTAL**	**60.091**	**74.510**	**16.838**	**2.213**
1977	**TOTAL**	**60.293**	**76.332**	**20.092**	**2.097**
1978	**TOTAL**	**61.231**	**78.175**	**19.261**	**1.952**
1979	**TOTAL**	**63.851**	**78.910**	**19.620**	**2.900**
1980	**TOTAL**	**64.812**	**75.988**	**15.972**	**3.726**
1981	January	5.448	7.459	1.346	0.261
	February	5.187	6.330	1.210	0.278
	March	5.678	6.440	1.193	0.370
	April	4.595	5.709	1.084	0.325
	May	4.729	5.764	1.131	0.274
	June	5.199	5.816	1.041	0.246
	July	5.544	6.023	1.140	0.393
	August	5.718	5.924	1.132	0.420
	September	5.538	5.650	1.201	0.412
	October	5.688	5.971	1.179	0.466
	November	5.420	5.975	1.109	0.440
	December	5.687	6.922	1.172	0.431
	TOTAL	**64.432**	**73.984**	**13.939**	**4.318**
1982	January	R5.498	R7.210	1.074	0.321
	February	R5.215	6.286	0.881	0.376
	March	R5.803	6.364	0.919	0.442
	April	R5.412	5.860	0.849	0.428
	May	R5.380	R5.436	0.959	0.420
	June	R5.319	5.400	1.003	0.413
	July	R5.146	R5.660	1.132	0.385
	August	R5.360	R5.635	R1.022	0.356
	September	R5.097	5.367	1.026	0.376
	October	R5.214	R5.534	1.044	0.438
	November	R5.065	R5.806	1.111	0.350
	December	R5.191	R6.285	0.958	0.321
	TOTAL	**R63.700**	**R70.842**	**R11.977**	**4.626**
1983	January	5.199	6.532	0.935	0.302

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]For definitions, see Notes on the last page of this section.
[2]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.
R=Revised data.
Source: • Energy Information Administration calculations based on data appearing elsewhere in this publication.

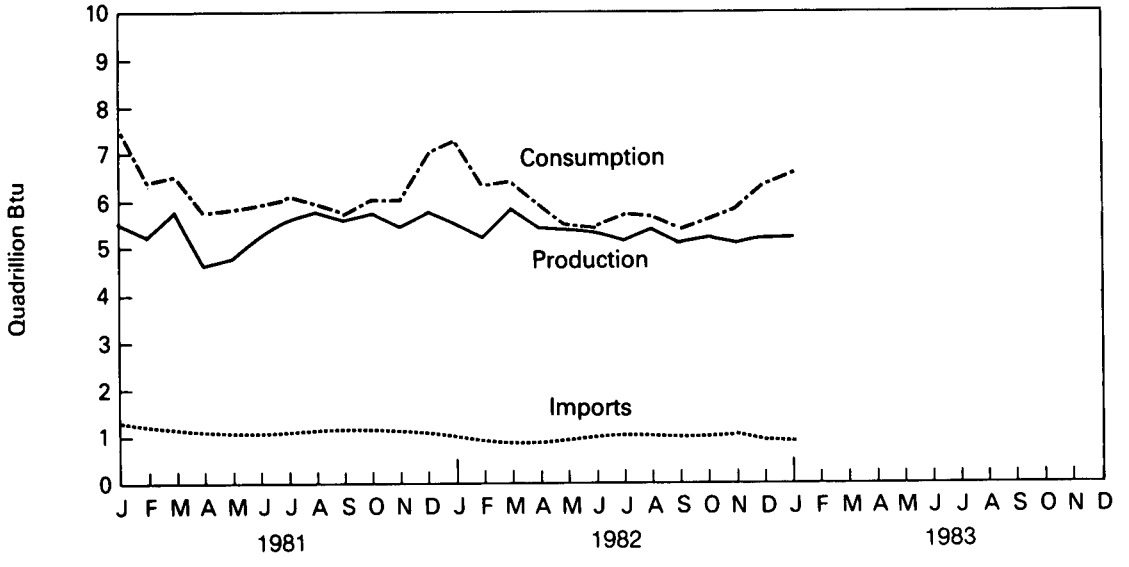
Executive Summary

Energy Summary

Yearly



Monthly



Executive Summary

Production of Energy by Type

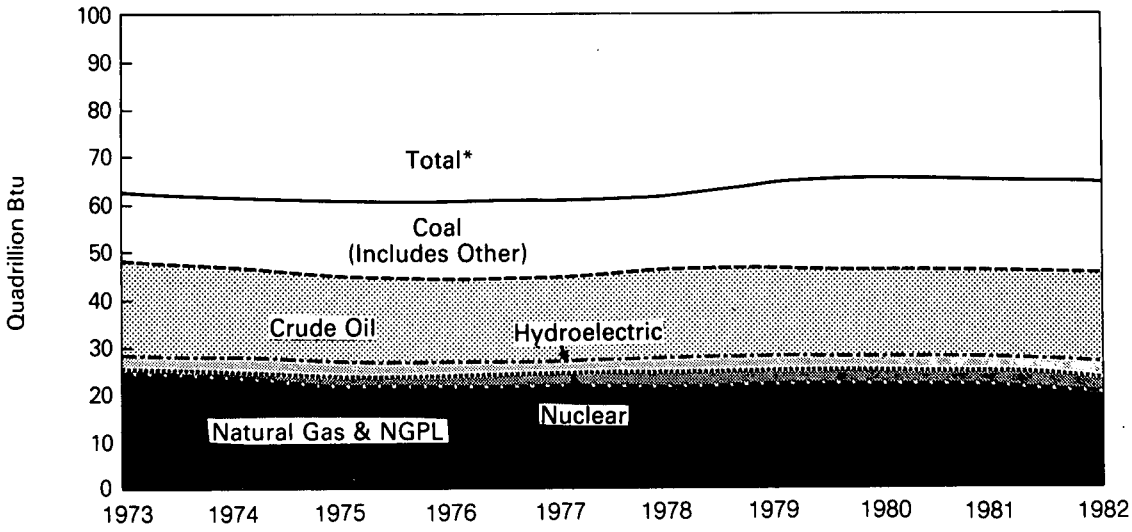
		Coal[1]	Crude Oil[2]	NGPL[3]	Natural Gas (Dry)	Hydro-electric Power[4]	Nuclear Electric Power	Other[5]	Total Energy Produced	Yearly Cumulative Energy Produced
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**14.366**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**62.433**	
1974	**TOTAL**	**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**	**2.937**	**3.024**	**0.068**	**61.231**	
1979	**TOTAL**	**17.651**	**18.104**	**2.286**	**20.076**	**2.931**	**2.715**	**0.089**	**63.851**	
1980	**TOTAL**	**18.640**	**18.249**	**2.254**	**19.916**	**2.900**	**2.739**	**0.114**	**64.812**	
1981	January	1.476	1.535	0.201	1.730	0.235	0.259	0.011	5.448	5.448
	February	1.588	1.397	0.182	1.553	0.222	0.236	0.010	5.187	10.635
	March	1.752	1.549	0.198	1.711	0.217	0.240	0.011	5.678	16.313
	April	0.812	1.489	0.188	1.651	0.218	0.225	0.010	4.595	20.908
	May	0.853	1.529	0.194	1.675	0.254	0.215	0.010	4.729	25.637
	June	1.378	1.501	0.188	1.614	0.277	0.231	0.010	5.199	30.837
	July	1.659	1.528	0.189	1.642	0.264	0.252	0.011	5.544	36.381
	August	1.764	1.543	0.197	1.683	0.227	0.294	0.011	5.718	42.100
	September	1.829	1.497	0.190	1.557	0.187	0.266	0.011	5.538	47.638
	October	1.908	1.540	0.195	1.620	0.190	0.224	0.011	5.688	53.326
	November	1.715	1.494	0.192	1.562	0.199	0.249	0.010	5.420	58.746
	December	1.709	1.544	0.194	1.696	0.251	0.284	0.010	5.687	64.432
	TOTAL	**18.443**	**18.146**	**2.307**	**19.694**	**2.741**	**2.974**	**0.127**	**64.432**	
1982	January	R1.495	1.559	0.189	1.684	R0.282	0.280	0.009	R5.498	R5.498
	February	R1.583	1.411	0.168	1.545	0.280	0.220	0.008	R5.215	R10.712
	March	R1.867	1.546	0.191	1.630	0.313	0.248	0.007	R5.803	R16.515
	April	R1.644	1.505	0.187	1.538	0.293	0.238	0.007	R5.412	R21.927
	May	R1.589	1.557	0.185	1.510	R0.294	0.236	0.008	R5.380	R27.307
	June	R1.602	1.510	0.177	1.464	0.294	0.262	0.010	R5.319	R32.625
	July	R1.347	1.555	0.185	1.484	R0.286	0.278	0.010	R5.146	R37.771
	August	R1.622	1.564	0.188	1.452	0.251	0.273	0.010	R5.360	R43.132
	September	R1.512	1.520	0.178	1.392	0.209	0.277	0.010	R5.097	R48.229
	October	R1.577	1.560	0.188	1.418	0.207	0.254	0.011	R5.214	R53.443
	November	R1.419	1.512	0.193	1.433	0.244	0.253	0.011	R5.065	R58.508
	December	R1.400	1.557	0.200	R1.470	0.291	0.266	0.009	R5.191	R63.700
	TOTAL	**R18.657**	**18.357**	**2.229**	**R18.019**	**R3.245**	**3.084**	**0.108**	**R63.700**	
1983	January	1.363	1.552	0.203	1.488	0.308	0.274	0.011	5.199	5.199

Geographic coverage: the 50 United States and the 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.

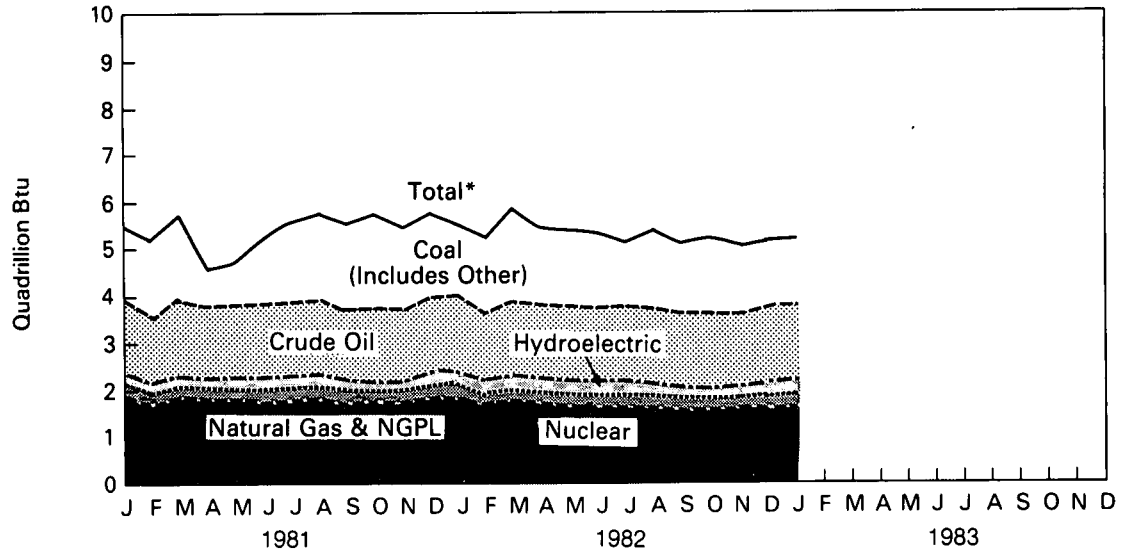
Executive Summary

Production of Energy by Type

Yearly



Monthly



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

Executive Summary

Consumption of Energy by Type

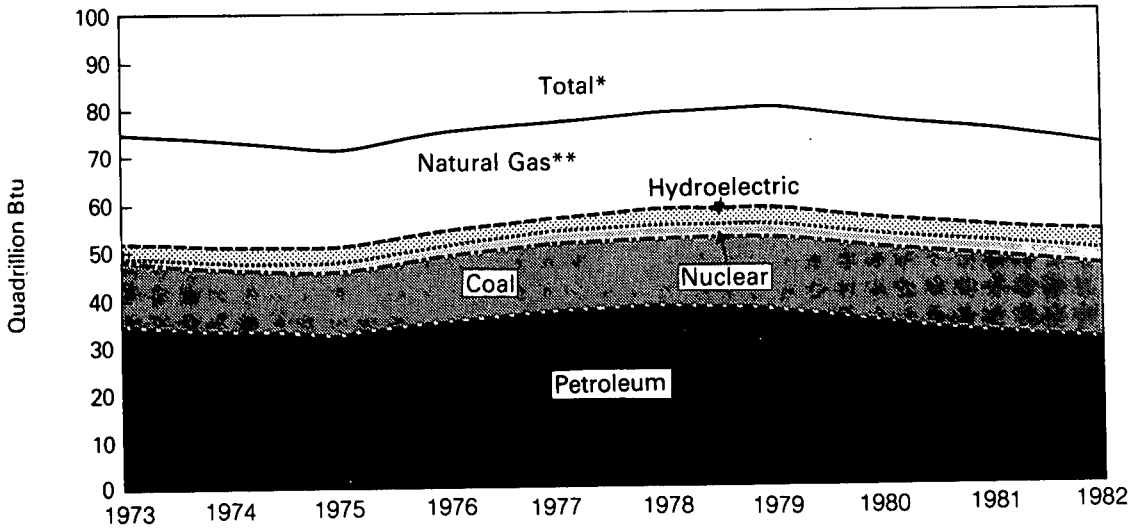
		Coal[1]	Natural Gas (Dry)	Petroleum	Hydroelectric Power[2]	Nuclear Electric Power	Net Imports of Coal Coke[3]	Other[4]	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**13.300**	**22.512**	**34.840**	**3.010**	**0.910**	**(0.008)**	**0.046**	**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**	**13.964**	**19.931**	**37.122**	**2.515**	**2.702**	**0.015**	**0.082**	**76.332**	
1978	**TOTAL**	**13.846**	**20.000**	**37.965**	**3.141**	**3.024**	**0.131**	**0.068**	**78.175**	
1979	**TOTAL**	**15.109**	**20.666**	**37.123**	**3.141**	**2.715**	**0.066**	**0.089**	**78.910**	
1980	**TOTAL**	**15.461**	**20.391**	**34.202**	**3.118**	**2.739**	**(0.037)**	**0.114**	**75.988**	
1981	January	1.473	2.341	3.113	0.263	0.259	0.000	0.011	7.459	7.459
	February	1.302	1.945	2.592	0.247	0.236	(0.001)	0.010	6.330	13.790
	March	1.310	1.951	2.686	0.244	0.240	(0.003)	0.011	6.440	20.230
	April	1.191	1.529	2.509	0.245	0.225	(0.001)	0.010	5.709	25.939
	May	1.200	1.465	2.593	0.281	0.215	0.000	0.010	5.764	31.702
	June	1.301	1.344	2.631	0.304	0.231	(0.004)	0.010	5.816	37.519
	July	1.469	1.351	2.649	0.292	0.252	0.000	0.011	6.023	43.542
	August	1.437	1.349	2.578	0.255	0.294	0.000	0.011	5.924	49.465
	September	1.302	1.300	2.559	0.214	0.266	(0.002)	0.011	5.650	55.116
	October	1.290	1.559	2.672	0.218	0.224	(0.003)	0.011	5.971	61.087
	November	1.280	1.663	2.548	0.226	0.249	0.000	0.010	5.975	67.062
	December	1.418	2.133	2.803	0.278	0.284	(0.003)	0.010	6.922	73.984
	TOTAL	**15.973**	**19.930**	**31.931**	**3.066**	**2.974**	**(0.017)**	**0.127**	**73.984**	
1982	January	R1.498	2.430	2.684	0.310	0.280	0.000	0.009	R7.210	R7.210
	February	1.303	2.020	2.432	0.305	0.220	(0.001)	0.008	6.286	R13.496
	March	1.270	1.872	2.628	0.341	0.248	(0.002)	0.007	6.364	R19.860
	April	1.161	1.512	2.623	0.320	0.238	(0.001)	0.007	5.860	R25.719
	May	1.196	1.170	2.507	R0.322	0.236	(0.003)	0.008	R5.436	R31.155
	June	1.220	1.151	2.440	R0.320	0.262	(0.004)	0.010	5.400	R36.555
	July	R1.392	1.174	2.495	R0.314	0.278	(0.003)	0.010	R5.660	R42.214
	August	R1.386	1.184	2.506	0.278	0.273	(0.001)	0.010	R5.635	R47.850
	September	R1.238	1.172	2.439	0.236	0.277	(0.003)	0.010	5.367	R53.217
	October	R1.200	1.334	2.503	0.235	0.254	(0.001)	0.011	R5.534	R58.751
	November	R1.239	1.576	2.457	0.271	0.253	(0.002)	0.011	R5.806	R64.557
	December	R1.313	R1.760	2.619	R0.319	0.266	(0.001)	0.009	R6.285	R70.842
	TOTAL	**R15.414**	**R18.356**	**30.332**	**R3.571**	**3.084**	**(0.023)**	**0.108**	**R70.842**	
1983	January	1.403	2.018	2.494	0.335	0.274	(0.001)	0.011	6.532	6.532

Geographic coverage: the 50 United States and the 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.

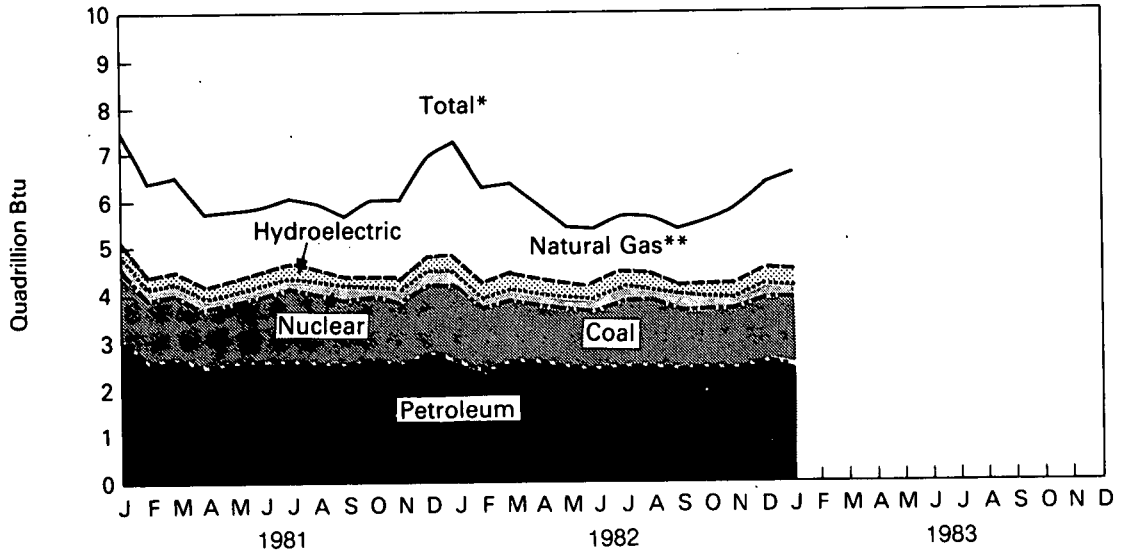
Executive Summary

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[1] of Energy by Type

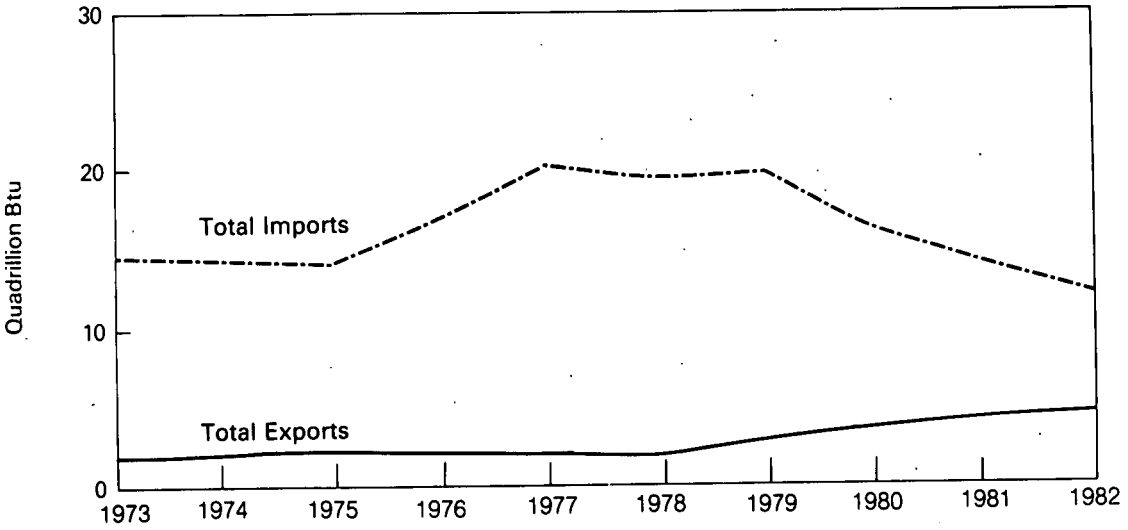
		Coal[2]	Crude Oil[3]	Refined Petroleum Products[4]	Natural Gas (Dry)	Electricity	Coal Coke	Total Net Imports	Yearly Cumulative Net Imports of Energy
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**(1.443)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.659**	
1974	**TOTAL**	**(1.585)**	**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**	**0.204**	**0.131**	**17.309**	
1979	**TOTAL**	**(1.730)**	**13.328**	**3.603**	**1.243**	**0.211**	**0.066**	**16.720**	
1980	**TOTAL**	**(2.390)**	**10.586**	**2.912**	**0.957**	**0.217**	**(0.037)**	**12.246**	
1981	January	(0.151)	0.829	0.293	0.087	0.028	0.000	1.085	1.085
	February	(0.175)	0.762	0.240	0.081	0.025	(0.001)	0.932	2.018
	March	(0.252)	0.778	0.196	0.076	0.028	(0.003)	0.823	2.840
	April	(0.215)	0.723	0.161	0.065	0.027	(0.001)	0.759	3.599
	May	(0.157)	0.717	0.210	0.059	0.028	0.000	0.857	4.456
	June	(0.158)	0.687	0.181	0.061	0.027	(0.004)	0.794	5.250
	July	(0.281)	0.728	0.210	0.062	0.028	0.000	0.747	5.997
	August	(0.292)	0.717	0.199	0.060	0.028	0.000	0.712	6.709
	September	(0.310)	0.794	0.219	0.062	0.027	(0.002)	0.790	7.498
	October	(0.321)	0.749	0.184	0.075	0.028	(0.003)	0.713	8.211
	November	(0.308)	0.658	0.214	0.078	0.027	0.000	0.668	8.879
	December	(0.299)	0.712	0.215	0.089	0.028	(0.003)	0.741	9.621
	TOTAL	**(2.918)**	**8.854**	**2.522**	**0.855**	**0.325**	**(0.017)**	**9.621**	
1982	January	(0.160)	0.615	0.171	0.099	0.028	0.000	0.753	0.753
	February	(0.234)	0.431	0.194	0.090	0.025	(0.001)	0.505	1.258
	March	(0.273)	0.457	0.180	0.086	0.028	(0.002)	0.477	1.735
	April	(0.283)	0.461	0.143	0.074	0.027	(0.001)	0.421	2.156
	May	(0.262)	0.551	0.160	0.066	0.028	(0.003)	0.540	2.695
	June	(0.279)	0.644	0.139	0.064	0.027	(0.004)	0.590	3.285
	July	(0.239)	0.724	0.174	0.063	0.028	(0.003)	0.747	4.032
	August	R(0.190)	0.634	0.134	0.061	0.028	(0.001)	R0.666	R4.698
	September	(0.225)	0.597	0.192	0.063	0.027	(0.003)	0.650	R5.348
	October	(0.259)	0.607	0.160	0.072	0.028	(0.001)	0.606	R5.954
	November	(0.202)	0.629	0.225	0.085	0.027	(0.002)	0.762	R6.715
	December	(0.157)	0.499	0.161	0.106	0.028	(0.001)	0.636	R7.351
	TOTAL	**R(2.763)**	**6.848**	**2.033**	**0.930**	**0.326**	**(0.023)**	**R7.351**	
1983	January	(0.115)	0.509	0.097	0.117	0.028	(0.001)	0.633	0.633

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Net imports equals 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.
R=Revised data.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

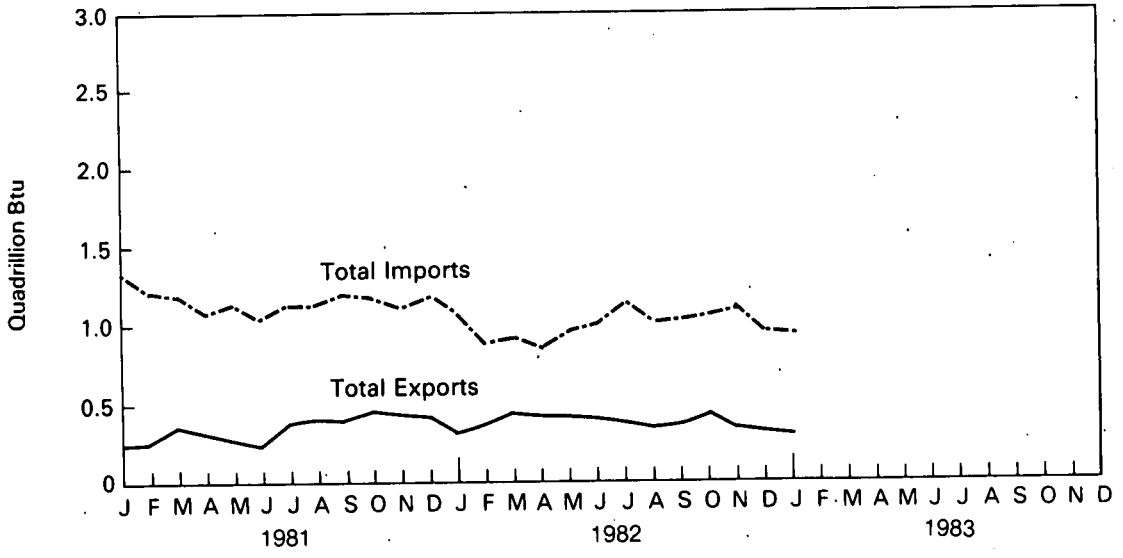
Executive Summary

Energy Imports and Exports

Yearly



Monthly



Executive Summary

Merchandise Trade Value

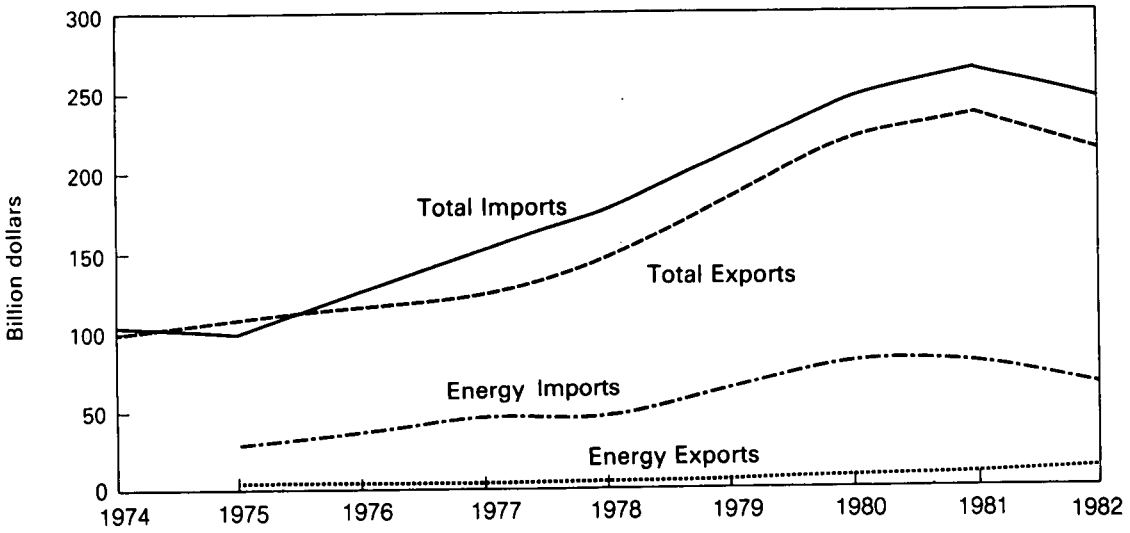
		Exports			Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total
					Million dollars					
1974	**TOTAL**	**NA**	**NA**	**98,092**	**NA**	**NA**	**102,559**	**NA**	**NA**	**-4,467**
1975	**TOTAL**	**4,470**	**103,182**	**107,652**	**28,325**	**70,178**	**98,503**	**-23,855**	**+33,004**	**+9,149**
1976	**TOTAL**	**4,226**	**110,997**	**115,223**	**36,384**	**87,093**	**123,477**	**-32,158**	**+23,904**	**-8,254**
1977	**TOTAL**	**4,184**	**117,048**	**121,232**	**47,153**	**103,237**	**150,390**	**-42,969**	**+13,811**	**-29,158**
1978	**TOTAL**	**3,882**	**139,799**	**143,681**	**44,763**	**129,994**	**174,757**	**-40,881**	**+9,805**	**-31,076**
1979	**TOTAL**	**5,675**	**176,185**	**181,860**	**63,077**	**146,381**	**209,458**	**-57,402**	**+29,804**	**-27,599**
1980	**TOTAL**	**7,982**	**212,644**	**220,626**	**82,924**	**161,947**	**244,871**	**-74,942**	**+50,697**	**-24,244**
1981	January	756	18,146	18,902	8,007	14,609	22,616	-7,251	+3,537	-3,714
	February	999	18,789	19,788	7,939	13,977	21,916	-6,940	+4,812	-2,127
	March	939	20,339	21,278	6,471	14,558	21,029	-5,532	+5,781	+249
	April	738	19,048	19,786	7,831	14,418	22,249	-7,093	+4,630	-2,463
	May	593	18,306	18,899	6,075	15,157	21,232	-5,482	+3,149	-2,333
	June	565	19,185	19,750	7,252	14,753	22,005	-6,687	+4,432	-2,255
	July	847	18,442	19,289	5,687	14,427	20,114	-4,840	+4,015	-825
	August	884	18,147	19,031	6,876	16,366	23,242	-5,992	+1,781	-4,212
	September	939	18,612	19,551	6,555	14,719	21,274	-5,616	+3,893	-1,724
	October	991	18,172	19,163	6,638	16,439	23,077	-5,648	+1,733	-3,914
	November	997	18,156	19,153	6,608	15,900	22,508	-5,611	+2,256	-3,356
	December	1,067	17,818	18,885	5,422	14,324	19,746	-4,355	+3,494	-861
	TOTAL	**10,279**	**223,398**	**233,677**	**81,360**	**179,622**	**260,982**	**-71,081**	**+43,776**	**-27,305**
1982	January	R1,205	R17,379	R18,584	7,439	R15,134	R22,573	R-6,234	R+2,245	R-3,989
	February	R1,361	R17,253	R18,614	5,107	R14,463	R19,570	R-3,746	R+2,790	R-956
	March	R1,256	R17,206	R18,462	5,009	R15,010	R20,019	R-3,753	R+2,196	R-1,557
	April	R1,201	R16,804	R18,005	4,312	R13,402	R17,714	R-3,111	R+3,402	R+291
	May	R1,065	R17,059	R18,124	4,167	R16,310	R20,477	R-3,102	R+749	R-2,353
	June	R1,035	R17,788	R18,823	5,427	R15,760	R21,187	R-4,392	R+2,028	R-2,364
	July	R974	R17,086	R18,060	5,943	R13,906	R19,849	R-4,969	R+3,180	R-1,790
	August	R961	R16,502	R17,463	6,353	R16,577	R22,930	R-5,392	R-75	R-5,467
	September	R998	R16,322	R17,320	5,201	R15,380	R20,581	R-4,203	R+942	R-3,261
	October	R1,072	R15,599	R16,671	5,947	R15,059	R21,006	R-4,875	R+540	R-4,335
	November	R847	R15,005	R15,852	5,037	R13,855	R18,892	R-4,190	R+1,150	R-3,041
	December	R855	R15,492	R16,347	5,468	R13,686	R19,154	R-4,613	R+1,806	R-2,808
	TOTAL	**12,729**	**199,464**	**212,193**	**65,409**	**178,543**	**243,952**	**-52,680**	**+20,921**	**-31,759**
1983	January	1,132	16,261	17,393	R5,142	14,879	R20,021	R-4,010	+1,382	R-2,628
	February	878	15,448	16,326	3,704	15,311	19,015	-2,826	+137	-2,689

Annual totals are unadjusted and may not equal the sum of monthly totals, which are adjusted for seasonal and working-day variation, if present and identifiable.
R=Revised data. NA=Not available.
Note: The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory (which is comprised of the 50 United States, the District of Columbia, and Puerto Rico) and the Virgin Islands.
Notes and Sources: • See the last page of this section.

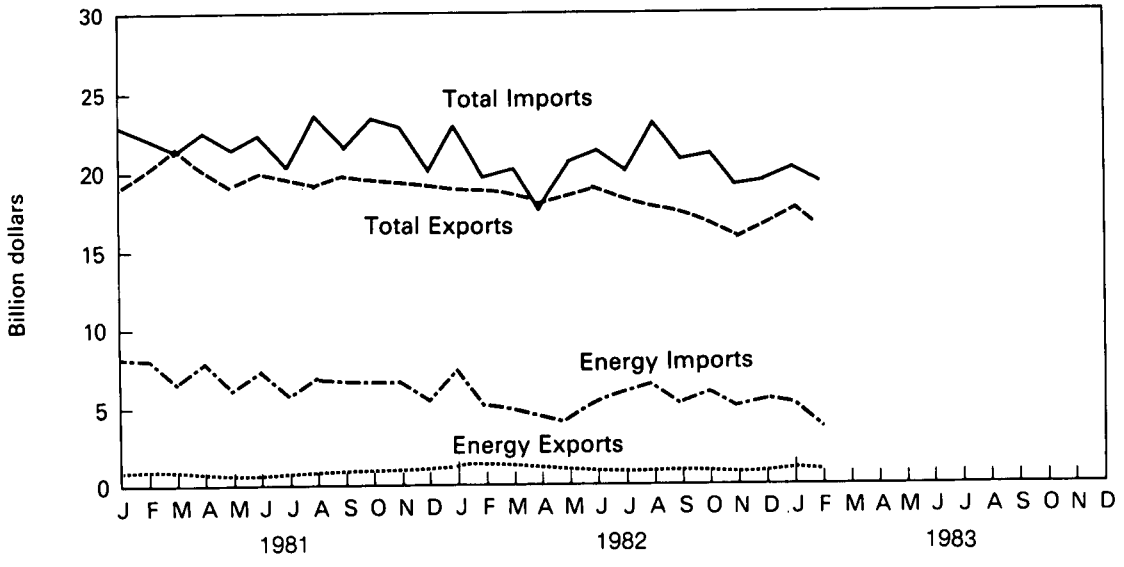
Executive Summary

Merchandise Trade Value

Yearly



Monthly



Executive Summary

Population Weighted Heating Degree-Days[1]

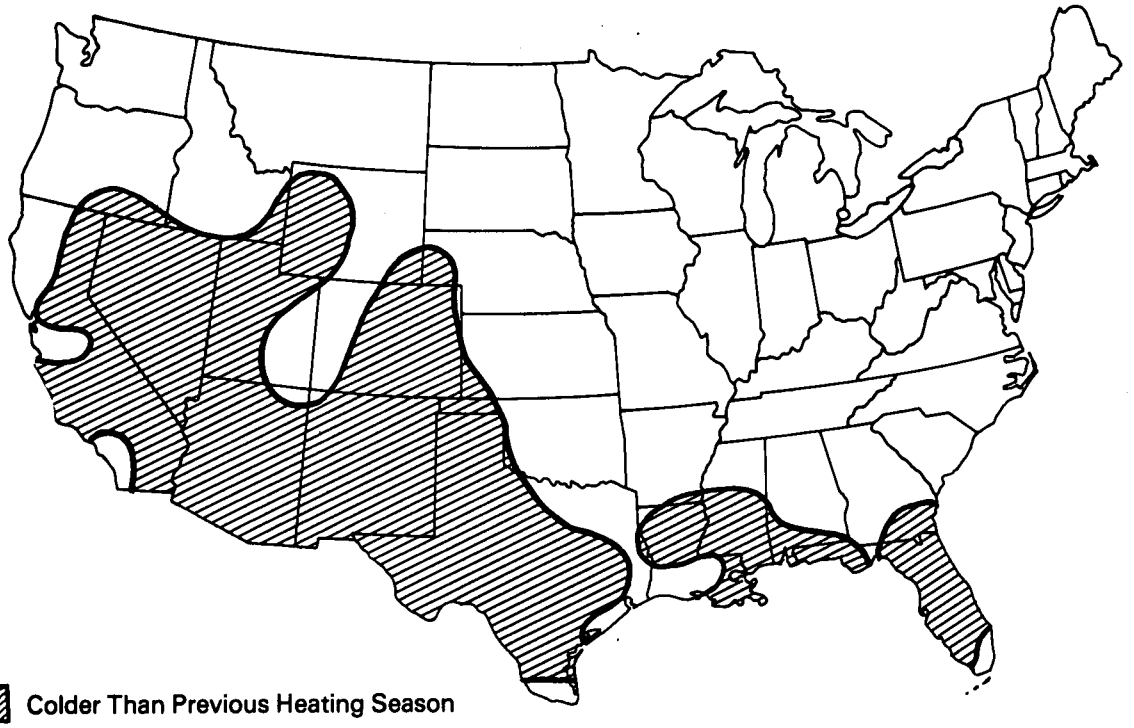
Petroleum Administration For Defense (PAD) Districts	February 28 through March 27					Cumulative July 1 through March 27				
	1983	1982[2]		Normal (1941-70)[2]		1982-83	1981-82		Normal (1941-70)[2]	
PAD District I	515	572	(-9.9)	607	(-15.1)	3,502	4,098	(-14.6)	3,892	(-10.0)
New England Conn., Maine, Mass., N.H., R.I., Vt.	713	819	(-13.0)	837	(-14.8)	4,746	5,525	(-14.1)	5,275	(-10.0)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	626	730	(-14.2)	746	(-16.0)	4,186	4,988	(-16.1)	4693	(-10.8)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W.Va.	295	272	(8.6)	339	(-12.8)	2,137	2,397	(-10.8)	2,323	(-8.0)
PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N.Dak., Ohio, Okla., S.Dak., Tenn., Wisc.	666	774	(-14.0)	795	(-16.2)	4,636	5,651	(-18.0)	5,258	(-11.8)
PAD District III Ala., Ark., La., Miss., N.Mex., Tex.	284	213	(33.5)	293	(-2.9)	2,144	2,084	(2.9)	2,143	(0.0)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	701	688	(1.9)	802	(-12.5)	5,103	5,021	(1.6)	5,375	(-5.1)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	275	307	(-10.3)	346	(-20.5)	2,002	2,049	(-2.3)	2,353	(-14.9)
U.S. AVERAGE[3]	**501**	**551**	**(-9.1)**	**591**	**(-15.2)**	**3,497**	**4,035**	**(-13.3)**	**3,899**	**(-10.3)**

[1] See Note on the last page of this section for explanation of degree-days.
[2] Percentage change in parentheses.
[3] Excludes Alaska, Hawaii, and the District of Columbia.

Executive Summary

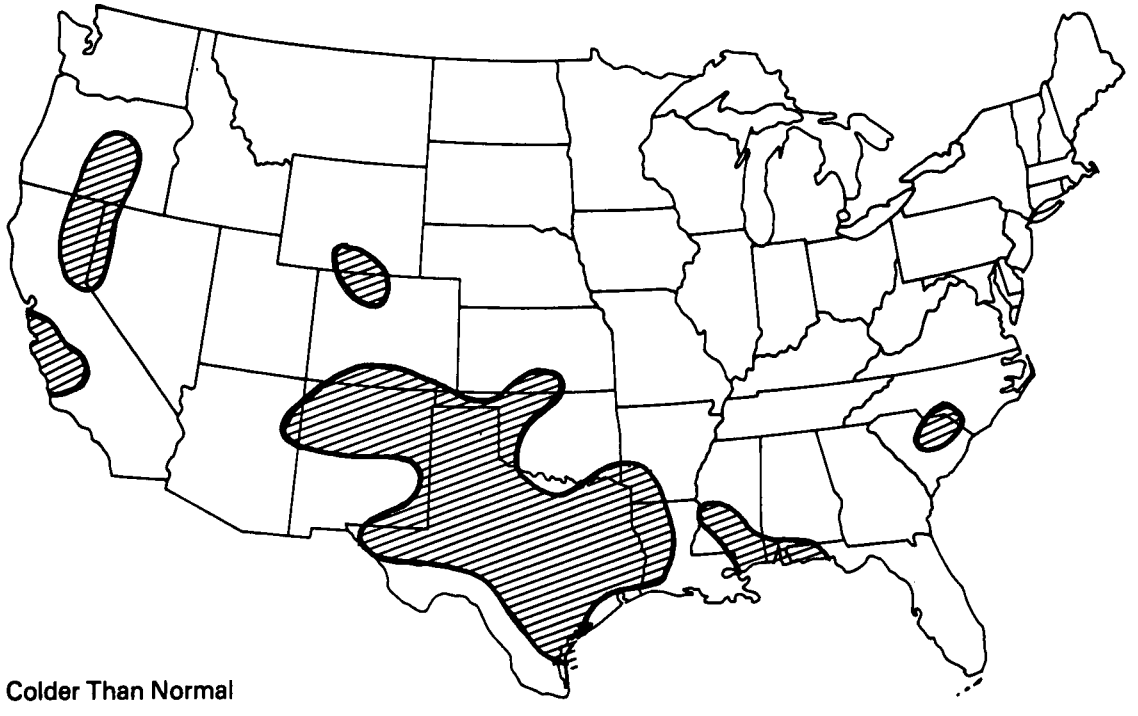
Heating Degree-Days Accumulated from July 1, 1982, through March 27, 1983

Departure from Previous Heating Season



Colder Than Previous Heating Season

Departure from Normal



Colder Than Normal

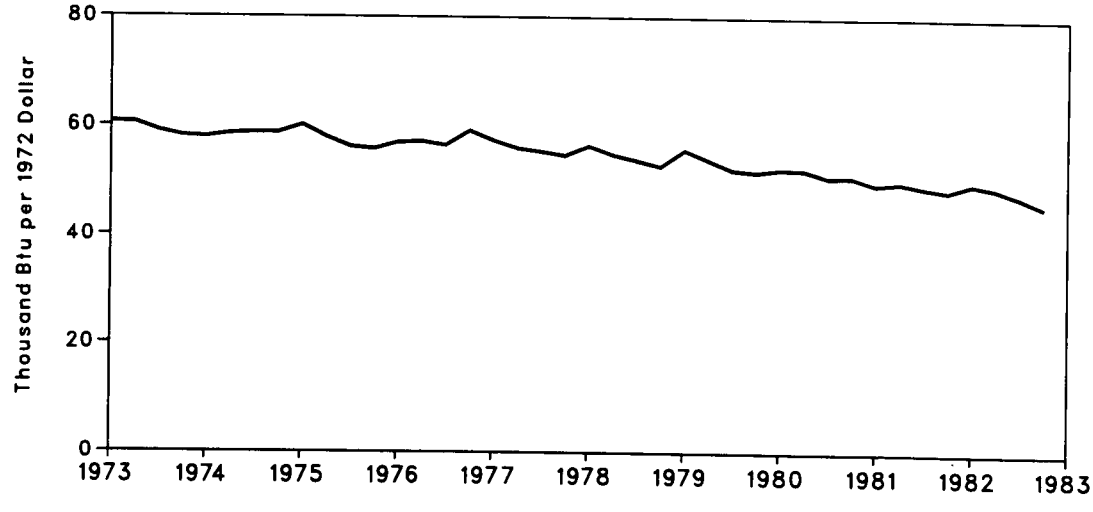
Source: • Department of Commerce—National Oceanic and Atmospheric Administration.

Executive Summary

Energy Indicator—Energy Consumption per GNP Dollar (Seasonally Adjusted)

		Annual Rate of Energy Consumption	Gross National Product Current Dollars	Gross National Product 1972 Dollars[1]	Energy Consumption per GNP Dollar
		Quadrillion Btu	Trillion Dollars		Thousand Btu per 1972 Dollar
1973		**74.609**	**1.326**	**1.254**	**59.5**
1974		**72.759**	**1.434**	**1.246**	**58.4**
1975		**70.707**	**1.549**	**1.232**	**57.4**
1976		**74.510**	**1.718**	**1.298**	**57.4**
1977		**76.332**	**1.918**	**1.370**	**55.7**
1978		**78.175**	**2.164**	**1.439**	**54.3**
1979		**78.910**	**2.418**	**1.479**	**53.4**
1980		**75.988**	**2.633**	**1.474**	**51.6**
1981	1st Qtr[2]	74.594	2.865	1.508	49.5
	2nd Qtr[2]	74.977	2.902	1.502	49.9
	3rd Qtr[2]	74.313	2.981	1.510	49.1
	4th Qtr[2]	72.171	3.003	1.490	48.5
	YEAR	**73.984**	**2.938**	**1.503**	**49.2**
1982	1st Qtr[2]	R73.284	2.996	1.471	R49.8
	2nd Qtr[2]	R72.410	3.045	1.478	49.0
	3rd Qtr[2]	R70.393	3.088	1.481	R47.5
	4th Qtr[2]	R67.485	R3.108	R1.477	R45.7
	YEAR	**R70.842**	**R3.059**	**R1.477**	**R48.0**

Energy Consumption per GNP Dollar (Seasonally Adjusted)



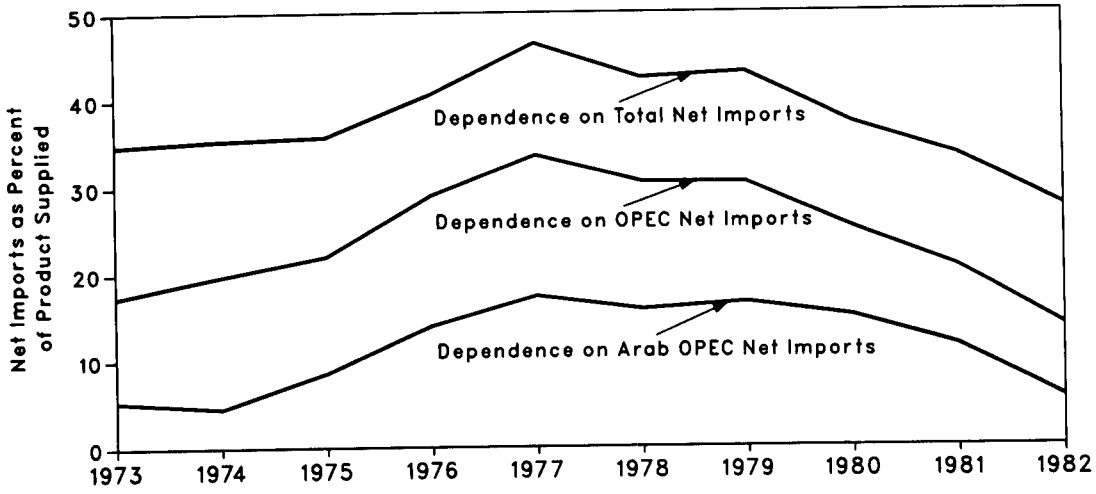
Geographic coverage: the 50 United States and the District of Columbia.
Yearly data may not equal sum of quarters due to seasonality adjustments and independent rounding.
[1]Current dollars are converted to 1972 dollars by the Department of Commerce, Bureau of Economic Analysis.
[2]Quarterly data are seasonally adjusted and shown at annual rates.
R=Revised data.
Sources: GNP data from U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business.*

Executive Summary

Energy Indicator—U.S. Dependence on Petroleum Net Imports[1]

		Net Imports[2]			Domestic Petroleum Products Supplied	Net Imports as Percent of U.S. Petroleum Products Supplied		
		from Arab OPEC[3] Countries	from All OPEC[4] Countries	from All Countries		from Arab OPEC[3] Countries	from All OPEC[4] Countries	from All Countries
ANNUAL RATE		Thousand Barrels per Day				Percent		
1973	AVERAGE	915	2,991	6,025	17,308	5.3	17.3	34.8
1974	AVERAGE	751	3,277	5,891	16,653	4.5	19.7	35.4
1975	AVERAGE	1,382	3,598	5,847	16,322	8.5	22.0	35.8
1976	AVERAGE	2,423	5,063	7,090	17,461	13.9	29.0	40.6
1977	AVERAGE	3,184	6,190	8,564	18,431	17.3	33.6	46.5
1978	AVERAGE	2,962	5,747	8,001	18,847	15.7	30.5	42.5
1979	AVERAGE	3,054	5,632	7,985	18,513	16.5	30.4	43.1
1980	AVERAGE	2,549	4,293	6,365	17,056	14.9	25.2	37.3
1981	1st Qtr	2,060	3,804	5,964	17,113	12.0	22.2	34.9
	2nd Qtr	1,786	3,117	5,099	15,597	11.5	20.0	32.7
	3rd Qtr	1,857	3,181	5,400	15,532	12.0	20.5	34.8
	4th Qtr	1,679	3,167	5,151	16,008	10.5	19.8	32.2
	AVERAGE	1,845	3,315	5,401	16,058	11.5	20.6	33.6
1982	1st Qtr	1,094	2,361	3,959	15,792	6.9	15.0	25.1
	2nd Qtr	799	1,894	4,002	15,270	5.2	12.4	26.2
	3rd Qtr	797	2,196	4,630	14,842	5.4	14.8	31.2
	4th Qtr	666	1,966	4,307	15,121	4.4	13.0	28.5
	AVERAGE	837	2,103	4,226	15,253	5.5	13.8	27.7

U.S. Dependence on Petroleum Net Imports



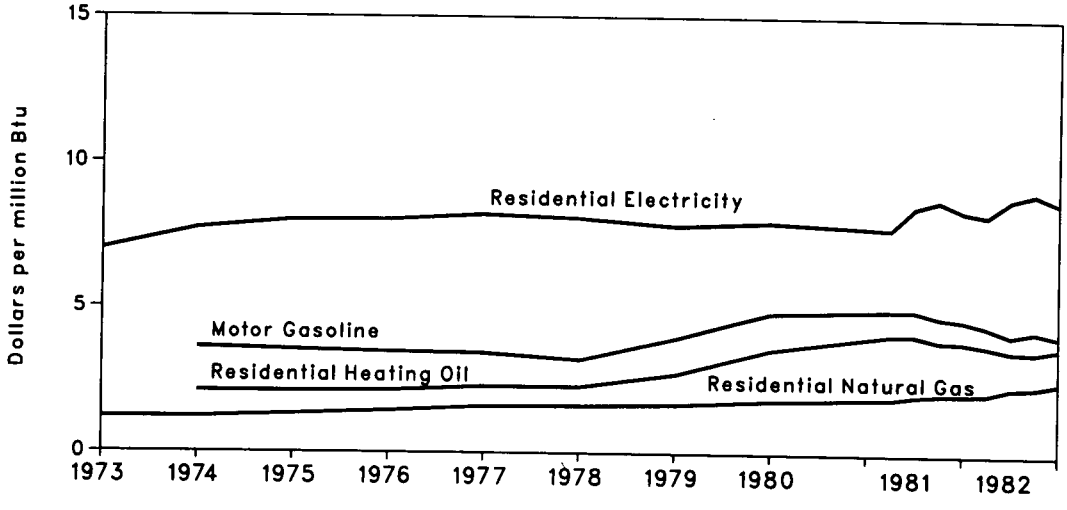
Geographic coverage: the 50 United States and the District of Columbia.
[1]Beginning in October 1977, Strategic Petroleum Reserves are included.
[2]Net imports equals imports minus exports. Imports from OPEC countries exclude indirect imports which are refined products imported primarily from Caribbean and West European areas and refined from crude oil produced in OPEC countries.
[3]Includes Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.
[4]Includes Arab OPEC countries plus Ecuador, Gabon, Indonesia, Iran, Nigeria, and Venezuela.
Sources: See last page of this section.

Executive Summary

Energy Indicator—Cost of Fuels to End Users in Constant (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	**AVERAGE**	**60.5**	**4.84**	**49.7**	**3.58**	**186.9**	**1.83**	**2.72**	**7.97**
1981	1st Qtr	62.1	4.97	57.0	4.11	197.5	1.93	2.65	7.77
	2nd Qtr	62.1	4.97	57.2	4.12	209.1	2.04	2.91	8.53
	3rd Qtr	59.3	4.74	54.4	3.92	215.0	2.10	2.99	8.76
	4th Qtr	57.9	4.63	54.0	3.89	216.3	2.11	2.87	8.41
	AVERAGE	**60.4**	**4.83**	**55.7**	**4.01**	**209.7**	**2.05**	**2.85**	**8.35**
1982	1st Qtr	55.3	4.42	52.2	3.76	218.3	2.13	2.82	8.26
	2nd Qtr	51.7	4.13	49.8	3.59	239.0	2.33	3.01	8.82
	3rd Qtr	53.5	4.28	49.4	3.56	242.2	2.37	3.08	9.03
	4th Qtr	51.3	4.10	R51.3	R3.70	257.8	2.52	2.97	8.70
	AVERAGE	**53.0**	**4.24**	**51.4**	**3.71**	**239.7**	**2.34**	**2.97**	**8.70**

Average Cost of Fuels to End Users in Constant (1972) Dollars



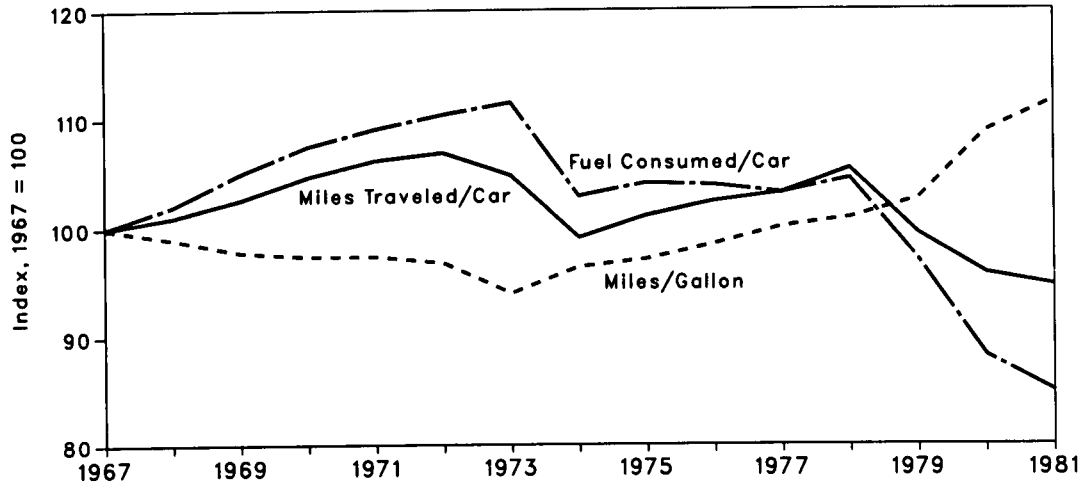
Geographic coverage: the 50 United States and the District of Columbia.
R=Revised data. NA=Not available.
Sources: • See the last page of this section.

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
1980	603	88.2	9,135	95.8	15.15	108.8
1981	581	84.9	9,026	94.7	15.54	111.6

U.S. Passenger Car Efficiency Index



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

Notes and Sources for the Executive Summary Section

Notes

1. **Domestic Production:** Domestic production of energy includes production of coal (anthracite, bituminous coal, 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 on the inside back cover of this publication.
2. **Domestic Consumption:** 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 on the inside back cover of this publication.
3. **U.S. Energy Imports:** 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:** U.S. energy exports include bituminous coal, crude oil, refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.
5. **Merchandise Trade Value:** 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 United States, the District of Columbia, and Puerto Rico) and the Virgin Islands. The statistics exclude imports into Guam, American Samoa, and other U.S. possessions, as well as shipments between the United States and Puerto Rico and the Virgin Islands, between the United States and other U.S. possessions, and between any of these outlying areas. From January 1981 forward, import data presented are on a customs value basis. All other values are on a free alongside ship (f.a.s.) basis. Monthly data are adjusted for seasonal and working-day variation; if present and identifiable, annual data are unadjusted, and annual totals may not equal sum of monthly totals. Statistics include nonmonetary gold. Statistics exclude Department of Defense 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; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. The "All Other" columns are calculated by subtracting "Energy" from "Total."
6. **Degree-Days:** 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. The population weights reflect resident state population data estimated as of July 1, 1981, by the U.S. Department of Commerce, Bureau of the Census.

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.

Sources

Merchandise Trade Value: • 1974 through 1980: U.S. Department of Commerce, Bureau of the Census, "Highlights of U.S. Export and Import Trade," FT990 (January 1982), Appendix for total imports and exports. Energy imports and exports from U.S. Department of Commerce, Bureau of the Census, "Summary of U.S. Export and Import Merchandise Trade," December issues, plus Bureau of the Census reports EA691 "Exports from the Virgin Islands to Foreign Countries," and IA245V "U.S. Imports for Consumption and General Imports into the Virgin Islands."
• 1981 forward: U.S. Department of Commerce, Bureau of the Census, "Summary of U.S. Export and Import Merchandise Trade," most recent monthly issue.
Gross National Product: • U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business.*
U.S. Dependence on Petroleum Net Imports: • Imports and products supplied—Part 3 of this publication.
• Exports—1973 through 1976: Bureau of Mines, *Mineral Industry Surveys*; 1977 through 1981: Energy Information Administration (EIA), *Energy Data Reports*, "Petroleum Statement, Annual;" 1982 forward: EIA, *Petroleum Statement, Monthly.*
Cost of Fuels to End Users in Constant (1972) Dollars: • Motor gasoline—Bureau of Labor Statistics.
• Heating oil—Energy Information Administration (EIA), 1974 and 1975: Form CLC-92, "No. 2 Heating Oil Monthly Price Adjustment Report"; 1976 forward: FEA Form P112-M-1 and EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."
• Natural gas—1973 through 1979: Bureau of Mines Form 6-1340-A, "Supply and Disposition of Natural Gas (non-producing distributors report)" and Form 6-1341-A, "Supply and Disposition of Natural Gas." 1980: Energy Information Administration Form EIA-176, "Supply and Disposition of Natural Gas." 1981 forward: Bureau of Labor Statistics (BLS).
• Electricity-1973 through 1976: Federal Power Commission (FPC), Form 5, "Monthly Statement of Electric Operating Revenue and Income"; 1977 through February 1980: EIA, FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 through December 1982: EIA, FERC Form 5, "Electric Utility Company Monthly Statement"; January 1983 forward: EIA, EIA Form 826, "Electric Utility Company Monthly Statement."
• Deflator (The Consumer Price Index)—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business.*
U.S. Passenger Car Efficiency: • Indexes prepared from statistics published by the 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 January 1983 dropped to 6.5 quadrillion Btu, 9.4 percent below the 1982 level.

Residential and commercial sector consumption was 2.8 quadrillion Btu in January 1983, down 13.2 percent from the January 1982 level. The residential and commercial sector consumed 43.3 percent of total consumption for January 1983, down from the sector's 45.2-percent share in January 1982.

Industrial sector consumption was 2.3 quadrillion Btu in January 1983, down 7.3 percent from the 1982 level. This sector consumed 34.8 percent of the total energy consumed in January 1983, up from 34.0 percent in January 1982.

Transportation sector consumption was 1.4 quadrillion Btu in January 1983, down 4.5 percent from the 1982 level. This sector consumed 21.8 percent of the January 1983 total, compared to the sector's 20.7-percent share in January 1982.

Electric utilities consumption was an estimated 2.1 quadrillion Btu in January 1983, 7.4 percent lower than in January 1982. Coal contributed 53.7 percent of the energy consumed by electric utilities in January 1983, while hydroelectric power contributed 15.9 percent; nuclear power, 13.1 percent; natural gas, 10.3 percent; petroleum, 6.5 percent; and geothermal and wood and waste, 0.5 percent.

Energy Consumption Summary for January 1983

(Quadrillion (10^{15}) Btu)

Primary Energy Source	Sector				
	Residential and Commercial	Industrial	Transportation	Electric Utilities	TOTAL
Coal	0.023	0.251	0.000	1.125	1.403
Natural Gas (dry)	1.080	0.654	0.067	0.215	2.018
Petroleum	0.310	0.689	1.356	0.137	2.494
Hydroelectric	0.000	0.003	0.000	0.332	0.335
Nuclear	0.000	0.000	0.000	0.274	0.274
Net Coke Imports	0.000	(0.001)	0.000	0.000	(0.001)
Other	0.000	0.000	0.000	0.011	0.011
TOTAL PRIMARY ENERGY	**1.414**	**1.596**	**1.423**	**2.094**	**6.532**
Electricity Sales	0.413	0.198	0.001	(0.611)	
Net Energy Consumption	1.826	1.793	1.424		5.409
Electrical Energy Losses	1.001	0.480	0.002	(1.483)	1.483
TOTAL ENERGY CONSUMED	**2.828**	**2.273**	**1.426**		**6.532**

Totals may not equal sum of components due to independent rounding and, in the case of coal, the use of preliminary conversion factors.
Notes and sources for this table and all other tables in this section are provided on the last four pages of this section.

Consumption

Consumption of Energy by End-Use Sector

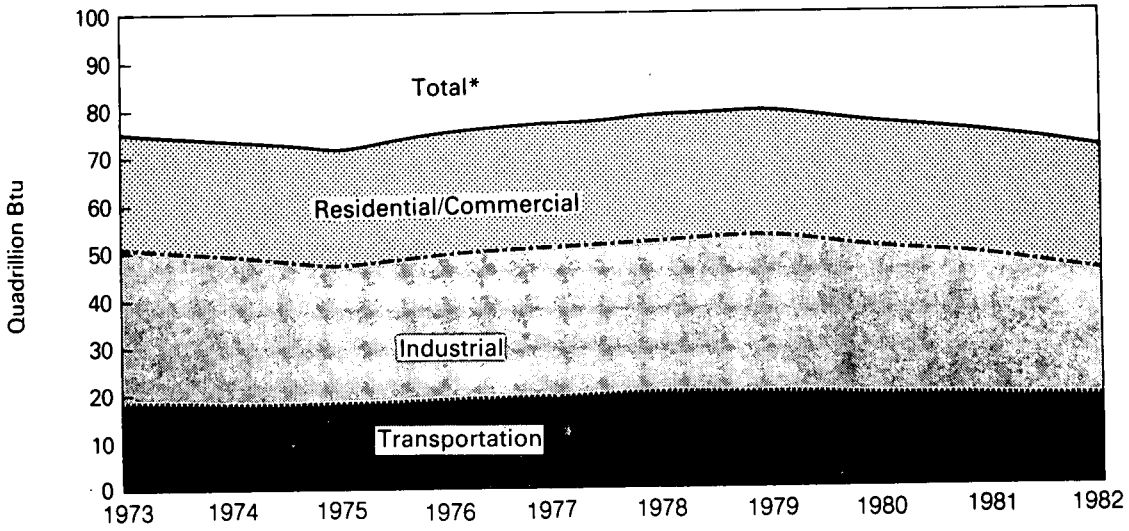
		Residential and Commercial	Industrial	Transportation	Total Energy Consumed
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**24.179**	**31.846**	**18.577**	**74.609**
1974	**TOTAL**	**23.761**	**30.900**	**18.091**	**72.759**
1975	**TOTAL**	**23.928**	**28.569**	**18.209**	**70.707**
1976	**TOTAL**	**25.041**	**30.393**	**19.068**	**74.510**
1977	**TOTAL**	**25.392**	**31.149**	**19.785**	**76.332**
1978	**TOTAL**	**26.108**	**31.493**	**20.574**	**78.175**
1979	**TOTAL**	**25.796**	**32.652**	**20.457**	**78.910**
1980	**TOTAL**	**25.666**	**30.638**	**19.683**	**75.988**
1981	January	3.154	2.647	1.657	7.459
	February	2.640	2.221	1.471	6.330
	March	2.316	2.511	1.614	6.440
	April	1.833	2.279	1.599	5.709
	May	1.705	2.425	1.633	5.764
	June	1.758	2.392	1.662	5.816
	July	1.900	2.419	1.700	6.023
	August	1.845	2.422	1.654	5.924
	September	1.656	2.393	1.603	5.650
	October	1.809	2.523	1.640	5.971
	November	1.988	2.418	1.571	5.975
	December	2.608	2.634	1.677	6.922
	TOTAL	**25.213**	**29.285**	**19.481**	**73.984**
1982	January	R3.259	R2.452	1.493	R7.210
	February	2.808	2.054	1.422	6.286
	March	2.427	2.293	1.641	6.364
	April	2.050	2.098	1.711	5.860
	May	R1.704	2.082	1.645	R5.436
	June	R1.684	2.102	1.607	5.400
	July	R1.892	R2.132	1.624	R5.660
	August	R1.872	R2.136	1.617	R5.635
	September	1.712	2.082	1.565	5.367
	October	R1.760	R2.194	1.575	R5.534
	November	R2.025	R2.206	1.568	R5.806
	December	R2.486	R2.193	R1.597	R6.285
	TOTAL	**R25.678**	**R26.025**	**R19.065**	**R70.842**
1983	January	2.828	2.273	1.426	6.532

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding and the use of preliminary conversion factors after 1981.
R=Revised data.
Notes and Sources: • See the last four pages of this section.

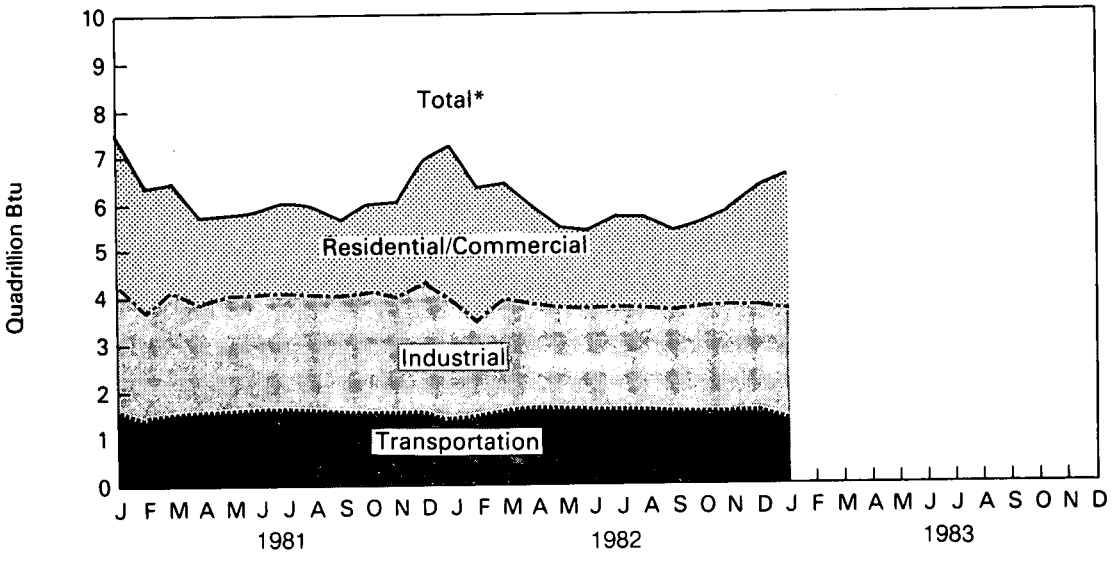
Consumption

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

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**0.291**	**7.626**	**4.391**	**3.495**	**8.377**	**24.179**	
1974	**TOTAL**	**0.292**	**7.518**	**3.996**	**3.475**	**8.480**	**23.761**	
1975	**TOTAL**	**0.238**	**7.581**	**3.805**	**3.604**	**8.700**	**23.928**	
1976	**TOTAL**	**0.227**	**7.866**	**4.181**	**3.747**	**9.020**	**25.041**	
1977	**TOTAL**	**0.225**	**7.461**	**4.206**	**3.955**	**9.545**	**25.392**	
1978	**TOTAL**	**0.239**	**7.624**	**4.070**	**4.116**	**10.060**	**26.108**	
1979	**TOTAL**	**0.210**	**7.891**	**3.448**	**4.184**	**10.064**	**25.796**	
1980	**TOTAL**	**0.160**	**7.539**	**3.035**	**4.355**	**10.578**	**25.666**	
1981	January	0.022	1.268	0.437	0.425	1.002	3.154	3.154
	February	0.018	1.122	0.293	0.391	0.816	2.640	5.794
	March	0.012	0.911	0.202	0.355	0.836	2.316	8.110
	April	0.014	0.590	0.148	0.325	0.756	1.833	9.943
	May	0.012	0.421	0.155	0.321	0.796	1.705	11.648
	June	0.008	0.291	0.148	0.365	0.947	1.758	13.406
	July	0.011	0.241	0.138	0.429	1.081	1.900	15.306
	August	0.011	0.236	0.149	0.431	1.019	1.845	17.152
	September	0.015	0.246	0.153	0.392	0.850	1.656	18.808
	October	0.016	0.390	0.249	0.348	0.807	1.809	20.617
	November	0.021	0.583	0.257	0.336	0.790	1.988	22.605
	December	0.026	0.942	0.306	0.380	0.954	2.608	25.213
	TOTAL	**0.186**	**7.242**	**2.635**	**4.497**	**10.653**	**25.213**	
1982	January	0.024	1.358	0.361	R0.439	R1.077	R3.259	R3.259
	February	0.017	1.235	0.278	0.409	0.869	2.808	R6.067
	March	0.014	0.955	0.202	0.373	0.884	2.427	R8.493
	April	0.017	0.715	0.174	0.346	0.797	2.050	R10.543
	May	0.011	0.385	0.161	0.327	R0.819	R1.704	R12.248
	June	0.009	0.284	0.147	0.358	0.888	R1.684	R13.932
	July	0.016	0.250	0.132	0.412	R1.082	R1.892	R15.824
	August	0.017	0.239	0.144	0.431	R1.042	R1.872	R17.696
	September	0.016	0.248	0.154	0.403	0.891	1.712	R19.408
	October	R0.016	0.345	0.232	0.349	R0.817	R1.760	R21.168
	November	R0.021	0.607	0.233	0.340	0.824	R2.025	R23.192
	December	R0.025	0.875	0.271	0.381	0.933	R2.486	R25.678
	TOTAL	**R0.203**	**7.498**	**2.489**	**R4.565**	**R10.922**	**R25.678**	
1983	January	0.023	1.080	0.310	0.413	1.001	2.828	2.828

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
R=Revised data.
Notes and Sources: • See the last four pages of this section.

Consumption

Consumption of Energy by the Industrial Sector

		Coal	Natural Gas (Dry)	Petro-leum	Hydro-electric	Net Coke Imports	Electricity Sales	Electrical Energy Losses	Total Energy Consumed	Yearly Cumulative Energy Consumed
						Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**4.349**	**10.388**	**9.132**	**0.035**	**(0.008)**	**2.341**	**5.610**	**31.846**	
1974	**TOTAL**	**4.048**	**10.003**	**8.720**	**0.033**	**0.059**	**2.337**	**5.700**	**30.900**	
1975	**TOTAL**	**3.797**	**8.532**	**8.182**	**0.032**	**0.014**	**2.346**	**5.665**	**28.569**	
1976	**TOTAL**	**3.786**	**8.761**	**9.043**	**0.033**	**0.000**	**2.573**	**6.197**	**30.393**	
1977	**TOTAL**	**3.498**	**8.636**	**9.809**	**0.033**	**0.015**	**2.682**	**6.476**	**31.149**	
1978	**TOTAL**	**3.372**	**8.539**	**9.905**	**0.032**	**0.131**	**2.761**	**6.755**	**31.493**	
1979	**TOTAL**	**3.636**	**8.549**	**10.582**	**0.034**	**0.066**	**2.873**	**6.912**	**32.652**	
1980	**TOTAL**	**3.181**	**8.394**	**9.535**	**0.033**	**(0.037)**	**2.781**	**6.751**	**30.638**	
1981	January	0.299	0.754	0.823	0.003	0.000	0.229	0.539	2.647	2.647
	February	0.277	0.525	0.707	0.003	(0.001)	0.230	0.480	2.221	4.868
	March	0.279	0.691	0.754	0.003	(0.003)	0.234	0.552	2.511	7.379
	April	0.260	0.589	0.654	0.003	(0.001)	0.232	0.542	2.279	9.659
	May	0.239	0.668	0.700	0.003	0.000	0.234	0.580	2.425	12.084
	June	0.232	0.616	0.665	0.003	(0.004)	0.244	0.635	2.392	14.476
	July	0.270	0.641	0.644	0.003	0.000	0.245	0.616	2.419	16.894
	August	0.273	0.668	0.651	0.002	0.000	0.246	0.581	2.422	19.316
	September	0.266	0.676	0.684	0.002	(0.002)	0.242	0.525	2.393	21.709
	October	0.268	0.806	0.666	0.002	(0.003)	0.236	0.548	2.523	24.232
	November	0.270	0.756	0.634	0.002	0.000	0.226	0.530	2.418	26.650
	December	0.271	0.871	0.725	0.002	(0.003)	0.219	0.549	2.634	29.285
	TOTAL	**3.205**	**8.260**	**8.308**	**0.033**	**(0.017)**	**2.817**	**6.677**	**29.285**	
1982	January	0.273	R0.743	0.692	0.003	0.000	0.215	R0.527	R2.452	R2.452
	February	0.255	0.489	0.640	0.003	(0.001)	0.214	R0.455	2.054	R4.506
	March	0.245	0.599	0.706	0.003	(0.002)	0.220	0.522	2.293	R6.799
	April	0.227	0.491	0.672	0.003	(0.001)	0.214	0.492	2.098	R8.897
	May	0.219	0.479	0.636	0.003	(0.003)	0.213	R0.534	2.082	R10.980
	June	0.204	0.524	0.618	0.003	(0.004)	0.217	R0.539	2.102	R13.081
	July	0.199	0.521	0.637	0.003	(0.003)	0.214	0.562	R2.132	R15.213
	August	0.201	0.534	0.662	0.002	(0.001)	0.216	R0.523	R2.136	R17.349
	September	0.193	0.582	0.652	0.002	(0.003)	0.205	0.453	2.082	R19.432
	October	R0.201	R0.662	0.637	0.002	(0.001)	0.208	0.486	R2.194	R21.625
	November	R0.204	0.682	0.610	0.002	(0.002)	0.207	0.502	R2.206	R23.832
	December	R0.207	R0.603	0.693	0.002	(0.001)	0.199	0.489	R2.193	R26.025
	TOTAL	**R2.627**	**R6.909**	**7.854**	**0.033**	**(0.023)**	**2.542**	**R6.084**	**R26.025**	
1983	January	0.251	0.654	0.689	0.003	(0.001)	0.198	0.480	2.273	2.273

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
R=Revised data.
Notes and Sources: • See the last four pages of this section.

Consumption

Consumption of Energy by the Transportation Sector

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses	Total Energy Consumed	Yearly Cumulative Energy Consumed
				Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**0.003**	**0.743**	**17.803**	**0.009**	**0.020**	**18.577**	
1974	**TOTAL**	**0.002**	**0.685**	**17.374**	**0.009**	**0.022**	**18.091**	
1975	**TOTAL**	**0.001**	**0.595**	**17.579**	**0.010**	**0.025**	**18.209**	
1976	**TOTAL**	**(1)**	**0.559**	**18.473**	**0.010**	**0.025**	**19.068**	
1977	**TOTAL**	**(1)**	**0.543**	**19.207**	**0.010**	**0.025**	**19.785**	
1978	**TOTAL**	**(1)**	**0.539**	**20.004**	**0.009**	**0.022**	**20.574**	
1979	**TOTAL**	**(1)**	**0.612**	**19.810**	**0.010**	**0.025**	**20.457**	
1980	**TOTAL**	**(1)**	**0.648**	**18.999**	**0.011**	**0.026**	**19.683**	
1981	January	(1)	0.077	1.577	0.001	0.002	1.657	1.657
	February	(1)	0.065	1.403	0.001	0.002	1.471	3.128
	March	(1)	0.065	1.547	0.001	0.002	1.614	4.742
	April	(1)	0.050	1.546	0.001	0.002	1.599	6.342
	May	(1)	0.048	1.582	0.001	0.002	1.633	7.974
	June	(1)	0.044	1.614	0.001	0.002	1.662	9.636
	July	(1)	0.045	1.652	0.001	0.002	1.700	11.337
	August	(1)	0.044	1.607	0.001	0.002	1.654	12.991
	September	(1)	0.043	1.557	0.001	0.002	1.603	14.593
	October	(1)	0.051	1.586	0.001	0.002	1.640	16.233
	November	(1)	0.055	1.512	0.001	0.002	1.571	17.804
	December	(1)	0.071	1.603	0.001	0.002	1.677	19.481
	TOTAL	**(1)**	**0.658**	**18.786**	**0.011**	**0.026**	**19.481**	
1982	January	(1)	0.080	1.410	0.001	0.003	1.493	1.493
	February	(1)	0.067	1.352	0.001	0.002	1.422	2.915
	March	(1)	0.062	1.576	0.001	0.002	1.641	4.556
	April	(1)	0.050	1.658	0.001	0.002	1.711	6.267
	May	(1)	0.039	1.603	0.001	0.002	1.645	7.912
	June	(1)	0.038	1.566	0.001	0.002	1.607	9.519
	July	(1)	0.039	1.582	0.001	0.002	1.624	R11.142
	August	(1)	0.039	1.575	0.001	0.002	1.617	R12.759
	September	(1)	0.039	1.523	0.001	0.002	1.565	14.325
	October	(1)	0.044	1.528	0.001	0.002	1.575	15.900
	November	(1)	0.052	1.513	0.001	0.002	1.568	17.468
	December	(1)	R0.058	1.535	0.001	0.002	R1.597	R19.065
	TOTAL	**(1)**	**R0.607**	**18.421**	**0.011**	**0.027**	**R19.065**	
1983	January	(1)	0.067	1.356	0.001	0.002	1.426	1.426

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Since 1976, the amount of coal consumed by the transportation sector has been negligible.
R=Revised data.
Notes and Sources: • See the last four pages of this section.

Consumption

Energy Input at Electric Utilities

		Coal	Natural Gas (Dry)	Petroleum[1]	Hydroelectric power[2]	Nuclear Electric Power	Other[3]	Total Energy Input	Yearly Cumulative Energy Input
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**8.658**	**3.748**	**3.515**	**2.975**	**0.910**	**0.046**	**19.852**	
1974	**TOTAL**	**8.535**	**3.519**	**3.365**	**3.276**	**1.272**	**0.056**	**20.023**	
1975	**TOTAL**	**8.786**	**3.240**	**3.166**	**3.187**	**1.900**	**0.072**	**20.350**	
1976	**TOTAL**	**9.720**	**3.152**	**3.477**	**3.032**	**2.111**	**0.081**	**21.573**	
1977	**TOTAL**	**10.243**	**3.284**	**3.901**	**2.482**	**2.702**	**0.082**	**22.694**	
1978	**TOTAL**	**10.236**	**3.297**	**3.987**	**3.110**	**3.024**	**0.068**	**23.722**	
1979	**TOTAL**	**11.264**	**3.609**	**3.283**	**3.107**	**2.715**	**0.089**	**24.068**	
1980	**TOTAL**	**12.122**	**3.807**	**2.634**	**3.085**	**2.739**	**0.114**	**24.501**	
1981	January	1.153	0.239	0.275	0.260	0.259	0.011	2.198	2.198
	February	1.010	0.232	0.188	0.244	0.236	0.010	1.919	4.117
	March	1.020	0.283	0.184	0.241	0.240	0.011	1.979	6.097
	April	0.921	0.299	0.160	0.242	0.225	0.010	1.858	7.955
	May	0.949	0.327	0.156	0.278	0.215	0.010	1.935	9.890
	June	1.056	0.394	0.203	0.301	0.231	0.010	2.194	12.084
	July	1.184	0.425	0.214	0.289	0.252	0.011	2.374	14.458
	August	1.149	0.403	0.171	0.252	0.294	0.011	2.279	16.737
	September	1.022	0.336	0.165	0.212	0.266	0.011	2.012	18.750
	October	1.008	0.312	0.171	0.216	0.224	0.011	1.941	20.691
	November	0.991	0.268	0.146	0.224	0.249	0.010	1.886	22.577
	December	1.120	0.248	0.169	0.276	0.284	0.010	2.105	24.682
	TOTAL	**12.583**	**3.764**	**2.202**	**3.033**	**2.974**	**0.127**	**24.682**	
1982	January	R1.198	0.246	0.221	0.307	0.280	0.009	R2.261	R2.261
	February	1.031	0.228	0.162	0.302	0.220	0.008	1.950	R4.211
	March	1.010	0.255	0.144	0.338	0.248	0.007	2.001	R6.213
	April	0.917	0.255	0.120	0.317	0.238	0.007	1.853	R8.065
	May	0.962	0.267	0.106	R0.318	0.236	0.008	R1.897	R9.962
	June	1.000	0.306	0.111	R0.317	0.262	0.010	R2.005	R11.967
	July	R1.165	0.365	0.144	R0.311	0.278	0.010	R2.273	R14.240
	August	R1.156	0.374	0.125	0.276	0.273	0.010	R2.214	R16.453
	September	1.021	0.303	0.110	0.233	0.277	0.010	1.954	R18.407
	October	0.977	R0.282	0.106	0.233	0.254	0.011	R1.862	R20.270
	November	1.008	0.234	0.100	0.269	0.253	0.011	1.875	R22.145
	December	1.073	0.222	0.120	0.316	0.266	0.009	2.006	R24.151
	TOTAL	**R12.517**	**R3.335**	**R1.568**	**R3.538**	**3.084**	**0.108**	**R24.151**	
1983	January	1.125	0.215	0.137	0.332	0.274	0.011	2.094	2.094

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes petroleum products reported as "oil consumed in steam plants" through 1979 and "heavy oil" from 1980 forward, which are assumed to be residual fuel oil; petroleum products reported as "oil consumed in gas turbine and internal combustion engine plants" through 1979 and "light oil" from 1980 forward, which are assumed to be distillate fuel oil and kerosene; and petroleum coke.
[2]Includes net imports of electricity.
[3]Includes geothermal power and electricity produced from wood and waste.
R=Revised data.
Notes and Sources: • See the last four pages of this section.

Notes and Sources for the Consumption Section

1. **End-Use Sectors:** Energy use is assigned to the major end-use sectors according to the following guidelines as closely as possible:
   - Residential and commercial sector—Energy consumed by private household establishments primarily for space heating, water heating, air conditioning, cooking, and clothes drying; by non-manufacturing business establishments, including motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; by health, social, and educational institutions; and by federal, state, and local governments.
   - Industrial sector—Energy consumed by manufacturing, construction, mining, agriculture, fishing, and forestry establishments.
   - Transportation sector—Energy consumed to move people and commodities in both the public and private sectors, including military, railroad, vessel bunkering, and marine uses, as well as the pipeline transmission of natural gas.
   - Electric utility sector—Energy consumed by privately- and publicly-owned establishments which generate electricity primarily for resale.

2. **Conversion Factors:** See the inside back cover of this publication for factors applied in converting physical unit data into British thermal units (Btu).

3. **Coal:** Coal is anthracite, bituminous coal, and lignite.
   Sources:
   - 1973 through September 1977: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook* and *Minerals Industry Surveys.*
   - Electric Utilities—October 1977 forward: Energy Information Administration (EIA), EIA Form 759 (formerly FPC Form 4), "Monthly Power Plant Report."
   - Other Industrial—October 1977 through December 1979: EIA, EIA Form 3, "Monthly Fuel Consumption Report - Manufacturing Plants"; January 1980 forward: EIA, EIA Form 3, "Quarterly Fuel Consumption Report - Manufacturing Plants" and EIA Form 6, "Coal Distribution Report."
   - Coke Plants—October 1977 through December 1980: EIA, EIA Form 5/5A, "Coke and Coal Chemicals - Monthly/Annual"; January 1981 forward: EIA, EIA Form 5/5A, "Coke and Coal Chemicals - Quarterly/Annual."
   - Residential and Commercial—October 1977 through December 1979: EIA, EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks"; January 1980 forward: EIA, EIA Form 6, "Coal Distribution Report."

4. **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 sector consumption to the months in proportion to the American Gas Association (AGA) monthly sales to the residential and commercial sector. For current incomplete years, the AGA monthly sales data are used temporarily. Monthly transportation 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 the current incomplete year, 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. Electric utilities consumption of natural gas is available monthly from EIA Form 759 (formerly FPC 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 through 1978: EIA, *Energy Data Reports,* "Natural Gas, Annual."
   - 1979: EIA, *Natural Gas Production and Consumption 1979.*
   - 1980 and 1981: EIA, *Natural Gas Annual.*
   - 1982 forward: EIA, *Natural Gas Monthly.*
   - Electric utilities consumption—1973 through 1976: FPC Form 4, "Monthly Power Plant Report."
     1977 through 1981: Federal Energy Regulatory Commission (FERC), FPC Form 4, "Monthly Power Plant Report."
     1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report."
   - American Gas Association, "Monthly Gas Utility Statistical Report."

5. **Petroleum:** Petroleum consumption by end-use is the sum of all individual petroleum products estimated to be consumed in each end-use sector. First, total consumption by product is determined. Petroleum consumption in this section of the *Monthly Energy Review* is the series called "petroleum products supplied" in the Part 3. Petroleum section.
   Sources for petroleum products supplied by individual products are:
   - 1973 through 1975: DOI, BOM, *Mineral Industry Surveys,* "Petroleum Statement, Annual."
   - 1976 through 1980: EIA, *Energy Data Reports,* "Petroleum Statement, Annual."
   - 1981: EIA, *Petroleum Supply Annual.*
   - 1982 forward: EIA, *Petroleum Supply Monthly.*

Specific petroleum products' end-use allocation procedures follow:
   - **Aviation Gasoline**—All product supplied is assigned to the transportation sector.
   - **Asphalt**—All product supplied is assigned to the industrial sector.
   - **Distillate Fuel**
     — ***Electric Utility Sector, All Periods.***
     Monthly and annual consumption in 1973 through 1979 is assumed to be the amount of oil (minus small amounts of kerosene and kerosene-type jet fuel deliveries) reported as consumed in internal combustion and gas turbine engine plants. From January 1980, electric utility consumption of distillate fuel is assumed to be the petroleum products reported as "light oil" (minus kerosene deliveries) consumed at utilities. Sources: 1973 through September 1977—FPC Form 4, "Monthly Power Plant Report;" October 1977 through 1981—FERC, FPC Form 4, "Monthly Power Plant Report;" 1982 forward—EIA, Form EIA-759, "Monthly Power Plant Report."

Notes and Sources for the Consumption Section (continued)

— ***Non-Utility Sectors, Annual Estimates.***
The aggregate non-utility use of distillate fuel is total distillate fuel supplied minus the electric utility consumption. The non-utility annual totals are allocated into the individual non-utility sectors in proportion to the amount of distillate fuel delivered to end-users, grouped into sectors from EIA's "Deliveries of Fuel Oil and Kerosene" reports (based primarily on data collected by Form EIA-172) as follows:
- Residential sector deliveries are taken directly from the "Deliveries" report for 1979 through 1981. Deliveries for 1981 are used as estimates for 1982. Prior to 1979, each year's subtotal of the heating plus industrial category deliveries is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;
- Commercial sector deliveries are taken directly from the "Deliveries" report for 1979 through 1981. Deliveries for 1981 are used as estimates for 1982. Prior to 1979, each year's subtotal of the heating plus industrial category deliveries is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;
- Industrial sector deliveries for 1979 through 1981 are the sum of deliveries for industrial, farm, oil company, off-highway, diesel, and all other uses. Deliveries for 1981 are used as estimates for 1982. Prior to 1979, each year's subtotal of the heating plus industrial category deliveries is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares, and this estimated industrial portion is added to oil company, off-highway diesel, and all other uses; and
- Transportation sector deliveries are the sum of deliveries for railroad, vessel bunkering, on-highway diesel, and military uses for all years. Deliveries for 1981 are used as estimates for 1982.

— ***Non-Utility Sectors, Monthly Estimates Through 1981.***
- Residential and commercial sector monthly consumption is estimated by allocating the annual sector estimates to months in proportion to each month's share of the year's sales of No. 2 heating oil as reported in the "Monthly Report of Heating Oil Sales" by the Ethyl Corporation from 1973 through 1980 and the American Petroleum Institute since January 1981.
- The transportation sector highway use portion is allocated into the months in proportion to each month's share of the year's total sales for highway use as reported by the Federal Highway Administration's Table MF-25, "Private and Commercial Highway Use of Special Fuels by Months." The remaining transportation use of distillate fuel (i.e., for railroads, vessel bunkering, and military use) is evenly distributed over the months, adjusted for the number of days per month.
- Industrial sector monthly estimates are made by subtracting the residential and commercial, transportation, and electric utility sector estimates from each month's total distillate fuel supplied.

— ***Non-Utility Sectors, 1982 Forward.***
Each month's non-utility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the non-utility subtotal in the same month in 1981.

- **Jet Fuel**—Small amounts in 1975 through 1977 are used by the industrial sector, and small amounts in all periods are consumed by the electric utility sector. All remaining jet fuel is consumed by the transportation sector.

- **Kerosene**—Total product supplied monthly is allocated to the major end-use sectors in proportion to annual deliveries grouped into end-use sectors from EIA's "Deliveries of Fuel Oil and Kerosene" reports (based primarily on data collected by Form EIA-172) as follows:
  — Residential sector deliveries are taken directly from the "Deliveries" report for 1979 through 1981. Deliveries for 1981 are used as estimates for 1982 forward. Prior to 1979, each year's category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares;
  — Commercial sector deliveries are taken directly from the "Deliveries" report for 1979 through 1981. Deliveries for 1981 are used as estimates for 1982 forward. Prior to 1979, each year's category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares; and
  — Industrial sector deliveries are taken directly from the "Deliveries" report for 1979 through 1981. Deliveries for 1981 are used as estimates for 1982 forward. Prior to 1979, each year's category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares, and this estimated industrial (including farm) portion is added to all other uses.

- **Liquefied Petroleum Gases (LPG)**
  — 1973 through 1981: the annual shares of LPG's total consumption that are estimated to be consumed by each end-use sector are applied to each month's total LPG consumption to create monthly end-use consumption estimates. The annual end-use shares are calculated in the following manner:
    - Sales of LPG to the residential and commercial sector are converted from thousand gallons per year to thousand barrels per year and are assumed to equal the annual consumption of LPG by the sector;
    - Sixteen percent of LPG sales for internal combustion engine use is estimated to be for transportation end-use; this estimated portion is converted from thousand gallons per year to thousand barrels per year and assumed to equal the annual consumption of LPG by the transportation sector; and
    - LPG consumed annually by the industrial sector is estimated as the difference between LPG's total supplied and the estimated consumption by the sum of the residential and commercial sector and the transportation sector.

    The source of the sales data is EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports, based primarily on data collected by Form EIA-174.
  — 1982 forward: The 1981 annual end-use shares are applied for succeeding periods to estimate the amount of the total LPG supplied which is consumed by each major end-use sector.

- **Lubricants**—Total product supplied is allocated to the industrial and transportation sectors for all months according to proportions developed from annual sales of lubricants to those two 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 to 1977 forward.

Notes and Sources for the Consumption Section (continued)

- **Motor Gasoline**—Total product supplied monthly is allocated to the major end-use sectors in proportion to aggregations of annual sales categories formed from the U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Tables MF-21, MF-24, and MF-25, as follows:
  - — Commercial sales are the sum of sales for public non-highway use, miscellaneous use, and unclassified use;
  - — Industrial sales are the sum of sales for agriculture, construction and industrial and commercial use as classified in the *Highway Statistics;* and
  - — Transportation sales are the sum of sales for highway use (minus the sales of special fuels which are primarily diesel fuel and accounted for in the transportation sector of distillate fuel) and sales for marine use.

- **Petroleum Coke**—The portion consumed by the electric utility sector is from EIA Form 759, "Monthly Power Plant Report" (formerly FPC Form 4). The remaining portion is assigned to the industrial sector.

- **Residual Fuel**
  - — ***Electric Utility Sector, All Periods.***
    Monthly and annual consumption 1973 through 1979 is assumed to be the amount of oil reported as consumed in steam electric plants. From January 1980, electric utility consumption of residual fuel is assumed to be the petroleum products reported as "heavy oil" consumed at utilities. Sources: 1973 through September 1977—FPC Form 4, "Monthly Power Plant Report;" October 1977 through 1981—FERC, FPC Form 4, "Monthly Power Plant Report;" 1982 forward—EIA, Form EIA-759, "Monthly Power Plant Report."
  - — ***Non-Utility Sectors, Annual Estimates.***
    The aggregate non-utility use of residual fuel is total residual fuel supplied minus the electric utility consumption. The non-utility annual totals are allocated into the individual non-utility sectors in proportion to the amount of residual fuel delivered to end-users, grouped into sectors from EIA's "Deliveries of Fuel Oil and Kerosene" reports (based primarily on data collected by Form EIA-172) as follows:
    - Commercial sector deliveries are taken directly from the "Deliveries" report for 1979 through 1981. Deliveries for 1981 are used as estimates for 1982. Prior to 1979, each year's subtotal of the heating plus industrial category deliveries is split into commercial and industrial in proportion to the 1979 shares;
    - Industrial sector deliveries for 1979 through 1981 are the sum of deliveries for industrial, oil company, and all other uses. Deliveries for 1981 are used as estimates for 1982. Prior to 1979, each year's subtotal of the heating plus industrial category deliveries is split into commercial and industrial in proportion to the 1979 shares; and this estimated industrial portion is added to oil company and all other uses; and
    - Transportation sector deliveries are the sum of deliveries for railroad, vessel bunkering, and military uses for all years. Deliveries for 1981 are used as estimates for 1982.
  - — ***Non-Utility Sectors, Monthly Estimates Through 1981.***
    - Commercial sector monthly consumption is estimated by allocating the annual commercial sector estimates to months in proportion to each month's share of the year's sales of No. 2 heating oil as reported in the "Monthly Report of Heating Oil Sales" by the Ethyl Corporation for 1973 through 1980 and the "American Petroleum Institute" since January 1981.
    - Transportation sector monthly estimates are made by evenly distributing the annual sector estimate over the months, adjusted for the number of days per month.
    - Industrial sector monthly estimates are made by subtracting the commercial, transportation, and electric utility sector estimates from each month's total residual fuel supplied.
  - — ***Non-Utility Sectors, 1982 Forward.***
    Each month's non-utility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the non-utility subtotal in the same month in 1981.

- **Road Oil**—All product supplied is assigned to the industrial sector.

- **All Other Petroleum Products**—The product supplied of all remaining petroleum products is assigned to the industrial sector.

6. **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 utilities sector.

Sources for electric utilities sector:
- 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
- 1977 through 1981: FERC, FPC Form 4, "Monthly Power Plant Report."
- 1982 forward: EIA, EIA Form 759, "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:
- 1973 through 1980 annual: DOE, Economic Regulatory Administration, "Report on Electric Energy Exchanges with Canada and Mexico."
- 1981 annual: DOE, Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).
- 1981 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.
- 1982 forward: EIA estimates.

Notes and Sources for the Consumption Section (continued)

7. **Nuclear:**
Sources:
- 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
- 1977 through 1981: FERC, FPC Form 4, "Monthly Power Plant Report."
- 1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report."

8. **Net Coke Imports:** This is coke made from coal. Net imports means imports minus exports, and the parentheses indicate that exports are greater than imports.
Sources:
- 1973 through 1975: DOI, BOM, *Minerals Yearbook,* "Coke and Coal Chemicals," chapter.
- 1976 through 1980: EIA, *Energy Data Report,* "Coke and Coal Chemicals," annual.
- 1981 forward: EIA, *Energy Data Report,* "Coke Plant Report," quarterly/annual.

9. **Other Energy:** "Other" is electricity produced from geothermal power and from wood and waste.
Sources: same as Note 7 above, for Nuclear.

10. **Electricity Sales:** From the sources cited below the following sales categories are available: residential, commercial, industrial, and other. For the end-use estimates in this section, the "other" category (which is primarily sales for use in government buildings) is added to the commercial sector except for approximately 4 percent which represents the transportation sector use of electricity. Sales of electricity are converted into Btu at the rate of 3,412 Btu per kilowatt-hour.
Sources of sales data:
- 1973 through 1976: FPC, Form 5, "Monthly Statement of Electric Operating Revenue and Income."
- 1977 through February 1980: EIA, FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income."
- March 1980 through December 1982: EIA, FERC Form 5, "Electric Utility Company Monthly Statement."
- January 1983 forward: EIA, EIA Form 826, "Electric Utility Company Monthly Statement."

11. **Electrical Energy Losses:** Total electrical energy losses (i.e., incurred in the generation and transmission of electricity plus plant use and unaccounted for) are estimated as the difference between total energy input at utilities and electricity sold to the end-users. Total losses are disaggregated to the end-use sectors in proportion to each sector's share of total electricity sales. In general, about 65 percent of total energy input at utilities is lost in the form of heat, and an additional 3 percent is lost in the transmission and distribution of the electricity to the end-user.

Crude Oil and Refined Petroleum Products*

Domestic crude oil production during February 1983 was estimated to be 8.7 million barrels per day, 0.3 percent above the rate in January 1983 but 0.4 percent below the rate in February 1982.

Total petroleum imports averaged 3.3 million barrels per day in February 1983, 24.1 percent lower than the January 1983 rate and 29.2 percent lower than the February 1982 rate.

In February 1983, 14.9 million barrels per day of petroleum products were supplied for domestic use, 0.9 percent above the level in January 1983 but 6.6 percent below the level of the previous February. Motor gasoline accounted for 40.6 percent of the total; distillate fuel oil, 19.3 percent; and residual fuel oil, 11.0 percent.

Motor gasoline supplied during February 1983 averaged 6.1 million barrels per day, 1.2 percent above the rate in January 1983 but 0.3 percent below the level during the previous February. Stocks of motor gasoline totaled 252 million barrels at the end of February 1983, 1 million barrels above the inventories reported at the end of January 1983.

In February 1983, 2.9 million barrels of distillate fuel oil were supplied per day, 4.1 percent higher than the January 1983 rate but 9.9 percent lower than the February 1982 level. Distillate fuel oil stocks were 146 million barrels at the end of February 1983, 22 million barrels lower than at the end of the previous month.

Residual fuel oil supplied in February 1983 averaged 1.6 million barrels per day, 4.2 percent higher than in January 1983 but 27.5 percent lower than the February 1982 rate. Residual fuel oil stocks measured 50 million barrels at the end of February 1983, 11 million barrels below the stock level at the end of January 1983.

*Estimates for the most current month are based on Energy Information Administration (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 month, crude production is an EIA estimate based on historical and provisional data through November 1982. The total import data above include imports into the Strategic Petroleum Reserve.

Petroleum

Crude Oil[1] and Petroleum Products Overview

		Field Production			Stock Withdrawal[2]			Ending Stocks
		Total Domestic[3]	Crude Oil	Natural Gas Plant Production	Crude Oil[4]	Petroleum Products	Petroleum Products Supplied	Crude Oil[4] and Petroleum Products
		Thousand barrels per day						Million barrels
1973	**AVERAGE**	**10,975**	**9,208**	**1,738**	**11**	**-146**	**17,308**	**‡1,008**
1974	**AVERAGE**	**10,498**	**8,774**	**1,688**	**-62**	**-117**	**16,653**	**‡1,074**
1975	**AVERAGE**	**10,045**	**8,375**	**1,633**	**-17**	**-145**	**16,322**	**‡1,133**
1976	**AVERAGE**	**9,774**	**8,132**	**1,603**	**-39**	**96**	**17,461**	**‡1,112**
1977	**AVERAGE**	**9,913**	**8,245**	**1,618**	**-170**	**-378**	**18,431**	**‡1,312**
1978	**AVERAGE**	**10,328**	**8,707**	**1,567**	**-78**	**172**	**18,847**	**‡1,278**
1979	**AVERAGE**	**10,179**	**8,552**	**1,584**	**-148**	**-25**	**18,513**	**‡1,341**
1980	**AVERAGE**	**10,214**	**8,597**	**1,573**	**-98**	**-42**	**17,056**	**‡1,392**
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	**10,230**	**8,572**	**1,609**	**-290**	**130**	**16,058**	
1982	January	10,257	8,669	1,548	-236	1,129	15,890	1,461
	February	10,261	8,690	1,524	-216	1,268	15,941	1,431
	March	10,212	8,597	1,570	-65	1,049	15,560	1,401
	April	10,296	8,652	1,588	107	1,594	16,048	1,350
	May	10,223	8,660	1,520	49	-34	14,845	1,349
	June	10,242	8,681	1,505	86	-515	14,931	1,362
	July	10,228	8,649	1,521	-155	-865	14,771	1,394
	August	10,301	8,701	1,543	-440	4	14,838	1,407
	September	10,306	8,733	1,513	252	-489	14,921	1,415
	October	10,283	8,676	1,540	-564	-55	14,820	1,434
	November	10,377	8,690	1,634	-357	-357	15,031	1,455
	December	10,348	8,660	1,638	143	703	15,508	1,429
	AVERAGE	**10,278**	**8,671**	**1,554**	**-117**	**280**	**15,253**	
1983	January	10,356	8,634	1,668	R-567	R865	R14,765	R1,453
	February†	NA	*8,659*	NA	*-514*	*1,204*	*14,892*	*1,427*
	AVERAGE	**NA**	**8,646**	**NA**	**-542**	**1,026**	**14,825**	

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes lease condensate.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3]Includes crude oil, natural gas plant production, other hydrocarbons, and alcohol.
[4]Includes stocks located in the Strategic Petroleum Reserve.
‡Ending stocks for 1973–1980 are totals as of December 31.
†Italics denote preliminary data. R=Revised data. NA=Not available.
Notes: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.
New basis stocks for December 31, 1982 = 1,462.
Sources: • See Notes and Sources on the last page of this section.

Petroleum

Crude Oil[1] and Petroleum Products Overview (continued)

		Imports			Exports			
		Total	Crude Oil[2]	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports[3]
		Thousand barrels per day						
1973	**AVERAGE**	**6,256**	**3,244**	**3,012**	**231**	**2**	**229**	**6,025**
1974	**AVERAGE**	**6,112**	**3,477**	**2,635**	**221**	**3**	**218**	**5,892**
1975	**AVERAGE**	**6,056**	**4,105**	**1,951**	**209**	**6**	**204**	**5,846**
1976	**AVERAGE**	**7,313**	**5,287**	**2,026**	**223**	**8**	**215**	**7,090**
1977	**AVERAGE**	**8,807**	**6,615**	**2,193**	**243**	**50**	**193**	**8,565**
1978	**AVERAGE**	**8,363**	**6,356**	**2,008**	**362**	**158**	**204**	**8,002**
1979	**AVERAGE**	**8,456**	**6,519**	**1,937**	**471**	**235**	**236**	**7,985**
1980	**AVERAGE**	**6,909**	**5,263**	**1,646**	**544**	**287**	**258**	**6,365**
1981	January	6,827	4,932	1,895	558	339	219	6,270
	February	6,772	4,873	1,899	569	198	371	6,203
	March	6,028	4,521	1,507	586	210	376	5,442
	April	5,668	4,338	1,330	570	198	372	5,098
	May	5,775	4,287	1,489	595	312	283	5,180
	June	5,435	4,061	1,375	420	123	297	5,015
	July	5,816	4,296	1,521	571	257	314	5,245
	August	5,767	4,179	1,588	644	204	440	5,123
	September	6,365	4,740	1,624	519	194	325	5,845
	October	5,959	4,380	1,579	738	226	512	5,221
	November	5,741	4,046	1,695	701	278	423	5,041
	December	5,843	4,137	1,706	656	189	467	5,187
	AVERAGE	**5,996**	**4,396**	**1,599**	**595**	**228**	**367**	**5,401**
1982	January	5,232	3,648	1,585	829	238	591	4,404
	February	4,691	2,949	1,742	804	304	499	3,887
	March	4,461	2,856	1,606	882	321	561	3,579
	April	4,286	2,813	1,474	786	174	611	3,501
	May	4,784	3,314	1,471	803	262	542	3,981
	June	5,227	3,782	1,445	703	94	609	4,524
	July	5,763	4,245	1,518	741	229	512	5,022
	August	5,156	3,820	1,336	858	304	554	4,298
	September	5,359	3,603	1,757	791	184	606	4,569
	October	5,230	3,636	1,594	932	270	662	4,298
	November	5,726	3,863	1,864	786	262	524	4,940
	December	4,562	2,956	1,606	860	193	667	3,702
	AVERAGE	**5,041**	**3,461**	**1,581**	**815**	**236**	**579**	**4,226**
1983	January	R4,372	R2,938	R1,434	973	117	856	3,399
	February†	*3,319*	*2,173*	*1,146*	NA	NA	NA	NA
	AVERAGE	**3,872**	**2,575**	**1,297**	**NA**	**NA**	**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]Includes lease condensate.
[2]Includes crude oil for storage in the Strategic Petroleum Reserve.
[3]Net Imports equals Imports minus Exports.
†Italics denote preliminary data. R=Revised data. NA=Not available.
Sources: • See Notes and Sources on the last page of this section.

Petroleum

Crude Oil[1] Supply and Disposition

		Supply							
		Field Production		Imports			Stock Withdrawal[2]		Unaccounted for Crude Oil
		Total Domestic	Alaskan	Total	SPR[3]	Other	SPR[3]	Other	
		Thousand barrels per day							
1973	**AVERAGE**	**9,208**	**198**	**3,244**		**3,244**		**11**	**3**
1974	**AVERAGE**	**8,774**	**193**	**3,477**		**3,477**		**-62**	**-25**
1975	**AVERAGE**	**8,375**	**191**	**4,105**		**4,105**		**-17**	**17**
1976	**AVERAGE**	**8,132**	**173**	**5,287**		**5,287**		**-39**	**77**
1977	**AVERAGE**	**8,245**	**464**	**6,615**	**21**	**6,594**	**-20**	**-150**	**-6**
1978	**AVERAGE**	**8,707**	**1,229**	**6,356**	**162**	**6,195**	**-163**	**84**	**-57**
1979	**AVERAGE**	**8,552**	**1,401**	**6,519**	**67**	**6,452**	**-67**	**-81**	**-11**
1980	**AVERAGE**	**8,597**	**1,617**	**5,263**	**44**	**5,219**	**-45**	**-52**	**34**
1981	January	8,540	1,606	4,932	106	4,826	-151	201	113
	February	8,604	1,619	4,873	80	4,793	-127	-150	-41
	March	8,613	1,618	4,521	140	4,382	-155	-477	154
	April	8,557	1,608	4,338	272	4,066	-444	-151	51
	May	8,501	1,580	4,287	386	3,901	-513	122	286
	June	8,629	1,632	4,061	318	3,743	-434	299	49
	July	8,500	1,605	4,296	175	4,121	-324	-36	147
	August	8,583	1,602	4,179	257	3,922	-372	769	16
	September	8,604	1,607	4,740	435	4,305	-486	201	-295
	October	8,563	1,596	4,380	453	3,927	-501	-259	166
	November	8,586	1,614	4,046	271	3,774	-259	-66	279
	December	8,585	1,623	4,137	165	3,971	-252	82	52
	AVERAGE	**8,572**	**1,609**	**4,396**	**256**	**4,141**	**-336**	**46**	**83**
1982	January	8,669	1,712	3,648	170	3,478	-159	-77	-138
	February	8,690	1,715	2,949	159	2,790	-213	-3	199
	March	8,597	1,702	2,856	185	2,671	-235	170	278
	April	8,652	1,687	2,813	190	2,623	-233	341	56
	May	8,660	1,725	3,314	204	3,110	-176	225	105
	June	8,681	1,675	3,782	105	3,678	-105	191	110
	July	8,649	1,715	4,245	97	4,147	-97	-58	1
	August	8,701	1,699	3,820	208	3,611	-208	-233	140
	September	8,733	1,707	3,603	139	3,463	-143	395	-218
	October	8,676	1,677	3,636	216	3,420	-216	-348	324
	November	8,690	1,667	3,863	180	3,683	-179	-177	-141
	December	8,660	1,663	2,956	124	2,832	-125	267	NA
	AVERAGE	**8,671**	**1,695**	**3,461**	**165**	**3,296**	**-174**	**57**	**NA**
1983	January	8,634	1,698	R2,938	R219	R2,720	R-219	R-348	238
	February†	*8,659*	*1,725*	*2,173*	*237*	*1,936*	*-230*	*-285*	NA
	AVERAGE	**8,646**	**1,711**	**2,575**	**228**	**2,348**	**-224**	**-318**	**NA**

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes lease condensate.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3]Strategic Petroleum Reserve.
Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.
†Italics denote preliminary data. R=Revised data.
Sources: • See Notes and Sources on the last page of this section.

Petroleum

Crude Oil[1] Supply and Disposition (continued)

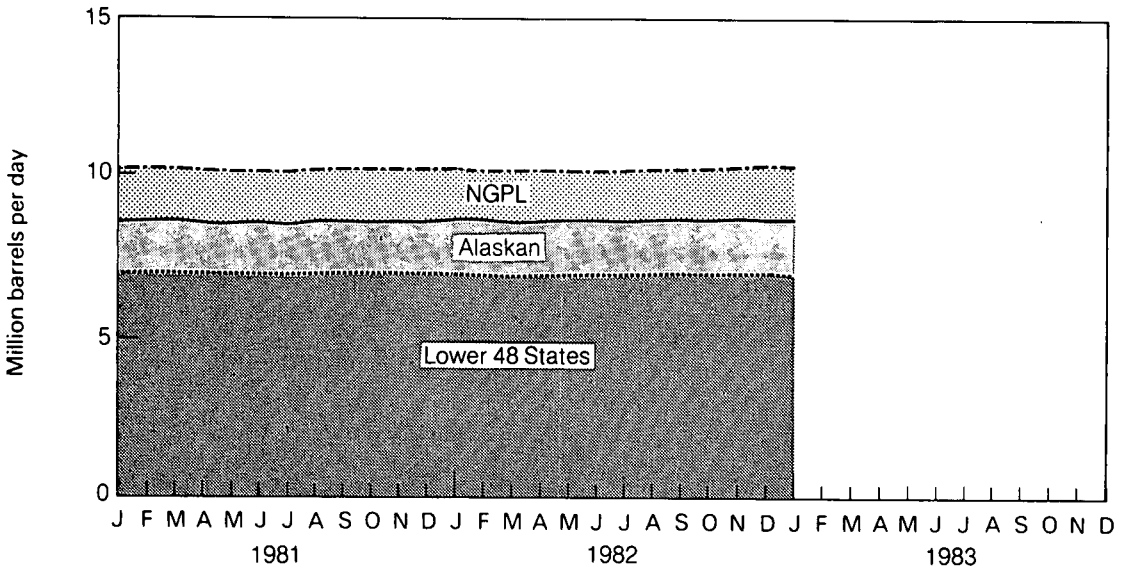
		Supply		Disposition			Ending Stocks		
		Crude Used Directly[2]	Crude Losses	Refinery Inputs	Exports	Product Supplied[2]	Total	SPR[3]	Other Primary
		Thousand barrels per day					Million barrels		
1973	**AVERAGE**	**-19**	**13**	**12,431**	**2**	**NA**	**‡242**		**‡242**
1974	**AVERAGE**	**-15**	**13**	**12,133**	**3**	**NA**	**‡265**		**‡265**
1975	**AVERAGE**	**-17**	**13**	**12,442**	**6**	**NA**	**‡271**		**‡271**
1976	**AVERAGE**	**-18**	**15**	**13,416**	**8**	**NA**	**‡285**		**‡285**
1977	**AVERAGE**	**-14**	**16**	**14,602**	**50**	**NA**	**‡348**	**‡7**	**‡340**
1978	**AVERAGE**	**-14**	**16**	**14,739**	**158**	**NA**	**‡376**	**‡67**	**‡309**
1979	**AVERAGE**	**-13**	**16**	**14,648**	**235**	**NA**	**‡430**	**‡91**	**‡339**
1980	**AVERAGE**	**-13**	**15**	**13,481**	**287**	**NA**	**466**	**108**	**358**
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	**-58**	**5**	**12,470**	**228**	**NA**			
1982	January	-63	3	11,638	238	NA	606	235	371
	February	-64	2	11,252	304	NA	612	241	371
	March	-63	5	11,277	321	NA	614	249	366
	April	-65	3	11,386	174	NA	611	256	355
	May	-62	3	11,801	262	NA	609	261	348
	June	-60	7	12,498	94	NA	607	264	343
	July	-60	3	12,447	229	NA	612	267	345
	August	-57	2	11,858	304	NA	625	274	352
	September	-56	3	12,126	184	NA	618	278	340
	October	-51	2	11,750	270	NA	635	285	351
	November	-51	1	11,741	262	NA	646	290	356
	December	-53	1	11,514	193	NA	642	294	348
	AVERAGE	**-58**	**4**	**11,776**	**236**	**NA**			
1983	January	NA	2	R11,070	117	54	R661	R301	R361
	February†	NA	NA	*10,868*	NA	NA	*672*	*306*	*366*
	AVERAGE	**NA**	**NA**	**10,974**	**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]Includes lease condensate.
[2]Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.
[3]Strategic Petroleum Reserve.
‡Ending stocks for 1973-1980 are totals as of December 31.
†Italics denote preliminary data. R=Revised data. NA=Not available.
Note: New basis stocks for December 31, 1982 = 644 (Total) and 349 (Other Primary).
Sources: • See Notes and Sources on the last page of this section.

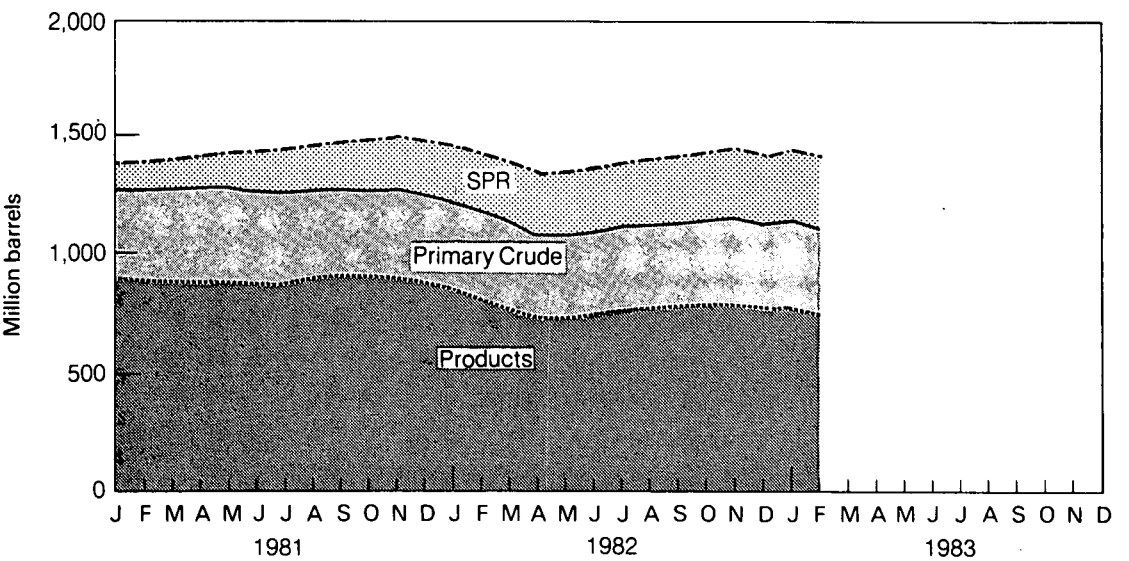
Petroleum

Overview

Production of Crude Oil and Natural Gas Plant Liquids



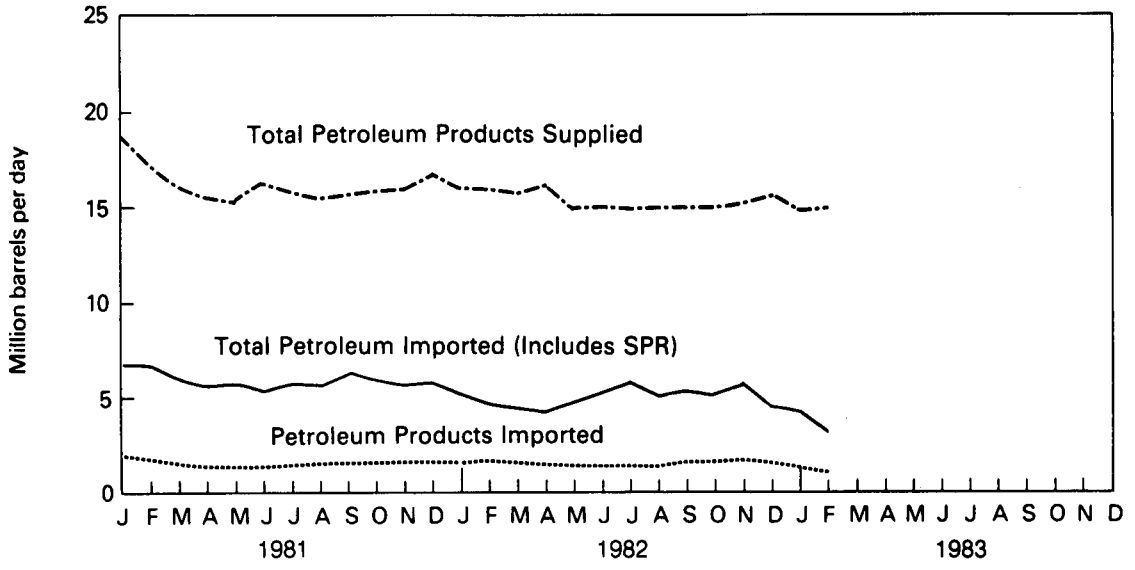
Stocks



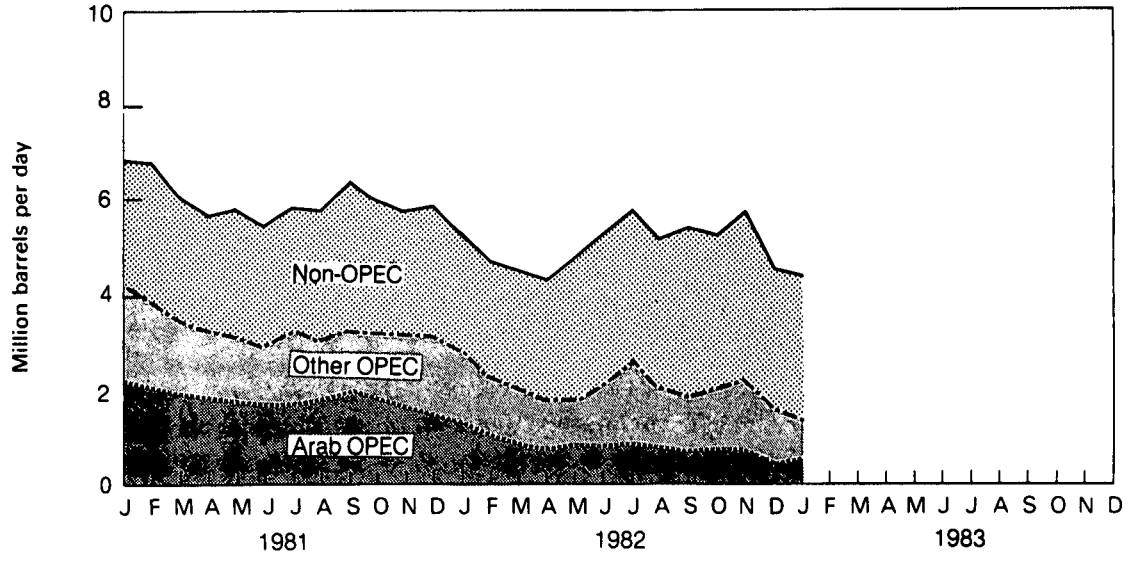
Petroleum

Overview

Products Supplied and Imports



Petroleum Imports by Source



Petroleum

Crude Oil and Petroleum Product Imports from OPEC Sources[1]

		Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC[2]	Total OPEC	Total Arab OPEC[3]
						Thousand barrels per day						
1973	**AVERAGE**	**136**	**164**	**486**	**71**	**213**	**223**	**459**	**1,135**	**106**	**2,993**	**915**
1974	**AVERAGE**	**190**	**4**	**461**	**74**	**300**	**469**	**713**	**979**	**88**	**3,280**	**752**
1975	**AVERAGE**	**282**	**232**	**715**	**117**	**390**	**280**	**762**	**702**	**122**	**3,601**	**1,383**
1976	**AVERAGE**	**432**	**453**	**1,230**	**254**	**539**	**298**	**1,025**	**700**	**134**	**5,066**	**2,424**
1977	**AVERAGE**	**559**	**723**	**1,380**	**335**	**541**	**535**	**1,143**	**690**	**287**	**6,193**	**3,185**
1978	**AVERAGE**	**649**	**654**	**1,144**	**385**	**573**	**555**	**919**	**645**	**226**	**5,751**	**2,963**
1979	**AVERAGE**	**636**	**658**	**1,356**	**281**	**420**	**304**	**1,080**	**690**	**212**	**5,637**	**3,056**
1980	**AVERAGE**	**488**	**554**	**1,261**	**172**	**348**	**9**	**857**	**481**	**130**	**4,300**	**2,551**
1981	January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
	February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
	March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
	April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
	May	393	443	933	17	297	0	664	331	124	3,203	1,796
	June	356	380	865	60	367	0	528	248	118	2,922	1,703
	July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
	August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
	September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
	October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
	November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
	December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
	AVERAGE	**311**	**319**	**1,129**	**81**	**366**	**0**	**620**	**406**	**90**	**3,323**	**1,848**
1982	January	254	161	877	87	273	0	662	376	128	2,818	1,378
	February	139	92	692	79	236	0	579	347	102	2,267	1,044
	March	91	37	555	155	200	0	503	399	91	2,032	860
	April	85	0	479	122	215	0	427	411	79	1,818	707
	May	179	0	601	116	236	0	211	414	54	1,811	897
	June	93	0	593	94	215	72	537	361	110	2,075	799
	July	122	0	644	123	327	69	910	349	95	2,640	927
	August	170	0	489	133	272	27	542	288	134	2,057	807
	September	162	0	432	57	191	21	479	514	52	1,907	659
	October	249	7	494	61	227	108	291	496	96	2,029	810
	November	247	13	489	47	283	34	480	539	115	2,246	795
	December	141	0	237	12	265	88	447	399	73	1,661	407
	AVERAGE	**161**	**26**	**548**	**91**	**245**	**35**	**505**	**408**	**94**	**2,113**	**840**
1983	January	204	0	282	47	255	43	186	324	43	1,384	533

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.
[2]Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.
[3]Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.
Sources: • See Notes and Sources on the last page of this section.

Petroleum

Crude Oil and Petroleum Product Imports from Non-OPEC Sources[1]

		Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico[2]	Virgin Islands[2]	Other	Total
						Thousand barrels per day					
1973	**AVERAGE**	**174**	**1,325**	**16**	**585**	**255**	**15**	**99**	**329**	**465**	**3,263**
1974	**AVERAGE**	**164**	**1,070**	**8**	**511**	**251**	**8**	**90**	**391**	**340**	**2,832**
1975	**AVERAGE**	**152**	**846**	**71**	**332**	**242**	**14**	**90**	**406**	**300**	**2,454**
1976	**AVERAGE**	**118**	**599**	**87**	**275**	**274**	**31**	**88**	**422**	**353**	**2,247**
1977	**AVERAGE**	**171**	**517**	**179**	**211**	**289**	**126**	**105**	**466**	**550**	**2,614**
1978	**AVERAGE**	**160**	**467**	**318**	**229**	**253**	**180**	**94**	**429**	**484**	**2,613**
1979	**AVERAGE**	**147**	**538**	**439**	**231**	**190**	**202**	**92**	**431**	**548**	**2,819**
1980	**AVERAGE**	**78**	**455**	**533**	**225**	**176**	**176**	**88**	**388**	**491**	**2,609**
1981	January	39	543	401	198	150	233	89	494	552	2,701
	February	84	546	437	227	163	271	46	481	626	2,881
	March	74	472	488	227	93	263	45	370	571	2,603
	April	68	412	418	198	139	402	40	365	380	2,423
	May	122	365	522	213	105	368	58	344	474	2,573
	June	51	353	538	196	124	397	67	262	525	2,513
	July	77	382	384	212	178	553	50	206	541	2,583
	August	69	378	489	255	123	592	68	184	539	2,698
	September	111	423	708	163	169	528	72	265	661	3,100
	October	63	449	669	161	121	351	60	303	562	2,739
	November	63	547	628	168	108	253	76	294	421	2,557
	December	70	501	587	148	125	280	73	367	563	2,714
	AVERAGE	**74**	**447**	**522**	**197**	**133**	**375**	**62**	**327**	**534**	**2,672**
1982	January	28	509	426	179	106	346	62	334	425	2,415
	February	50	533	489	221	120	132	38	354	487	2,424
	March	43	435	503	189	118	293	62	307	479	2,429
	April	67	357	467	180	166	247	36	266	682	2,468
	May	76	416	767	152	95	516	47	302	603	2,974
	June	32	462	797	141	129	539	58	322	673	3,153
	July	30	527	783	158	111	433	38	369	674	3,122
	August	68	435	854	145	106	520	24	320	627	3,099
	September	92	484	897	195	89	631	51	270	744	3,453
	October	45	456	682	148	109	666	52	262	783	3,202
	November	48	547	860	203	90	623	81	334	694	3,480
	December	89	561	675	174	102	438	48	336	480	2,901
	AVERAGE	**56**	**477**	**684**	**173**	**112**	**451**	**50**	**315**	**613**	**2,928**
1983	January	68	536	849	218	73	315	40	299	588	2,988

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.
[2]U.S. possessions.
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.
Sources: • See Notes and Sources on the last page of this section.

Petroleum

Finished Motor Gasoline Supply and Disposition

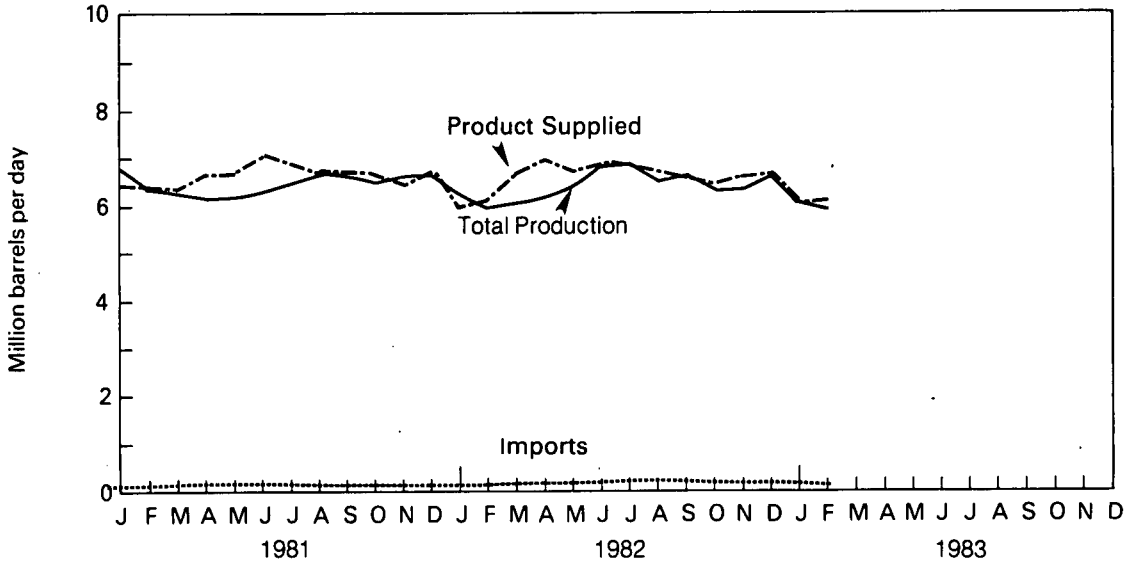
		Supply			Disposition				Ending Stocks	
						Product Supplied				
		Total Production	Imports[1]	Stock Withdrawal[1,2]	Exports	Total	Unleaded[3]	Unleaded Percent of Total	Total Motor Gasoline[4]	Finished Motor Gasoline
		Thousand barrels per day							Million barrels	
1973	**AVERAGE**	**6,535**	**134**	**9**	**4**	**6,674**			**209**	
1974	**AVERAGE**	**6,360**	**204**	**-24**	**2**	**6,537**			**218**	
1975	**AVERAGE**	**6,520**	**184**	**-28**	**2**	**6,675**			**235**	
1976	**AVERAGE**	**6,841**	**131**	**10**	**3**	**6,978**			**231**	
1977	**AVERAGE**	**7,033**	**217**	**-72**	**2**	**7,177**	**1,976**	**27.5**	**258**	
1978	**AVERAGE**	**7,169**	**190**	**54**	**1**	**7,412**	**2,521**	**34.0**	**238**	
1979	**AVERAGE**	**6,852**	**181**	**2**	**(s)**	**7,034**	**2,798**	**39.8**	**237**	
1980	**AVERAGE**	**6,506**	**140**	**-66**	**1**	**6,579**	**3,067**	**46.6**	**261**	
1981	January	6,715	138	-421	(s)	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	(s)	6,303	3,097	49.1	285	232
	April	6,114	186	303	(s)	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	(s)	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
	AVERAGE	**6,405**	**157**	**28**	**2**	**6,588**	**3,264**	**49.5**		
1982	January	6,181	114	-358	18	5,920	3,033	51.2	262	214
	February	5,917	133	28	8	6,070	3,145	51.8	262	213
	March	6,004	183	469	44	6,612	3,396	51.4	248	199
	April	6,104	177	641	33	6,890	3,494	50.7	223	180
	May	6,322	163	188	23	6,650	3,415	51.3	215	174
	June	6,767	195	-136	14	6,812	3,561	52.3	220	178
	July	6,788	200	-165	24	6,799	3,574	52.6	226	183
	August	6,447	284	-60	16	6,655	3,520	52.9	226	185
	September	6,530	215	-217	22	6,507	3,385	52.0	234	191
	October	6,253	177	-25	15	6,391	3,360	52.6	234	192
	November	6,273	206	91	11	6,559	3,448	52.6	230	189
	December	6,540	178	-164	7	6,548	3,486	53.2	235	194
	AVERAGE	**6,347**	**186**	**24**	**20**	**6,537**	**3,403**	**52.1**		
1983	January	R6,020	R148	-186	0	R5,981	3,352	56.0	R251	R208
	February†	*5,873*	*131*	*56*	NA	*6,050*	NA	NA	*252*	*209*
	AVERAGE	**5,950**	**140**	**-71**	**NA**	**6,014**	**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]Beginning in 1981, excludes blending components.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3]Includes gasohol.
[4]Includes motor gasoline blending components. Ending stocks for 1973–1980 are totals as of December 31.
†Italics denote preliminary data. R=Revised data. NA=Not available. (s)=Less than 500 barrels per day.
Notes: Beginning in 1981, survey forms were modified. See Note 2 on the last page of this section.
Annual stock changes for 1975, 1981, and 1983 were calculated using expanded stock coverage.
New basis stocks for December 31, 1982 = 244 (Total) and 202 (Finished).
Sources: • See Notes and Sources on the last page of this section.

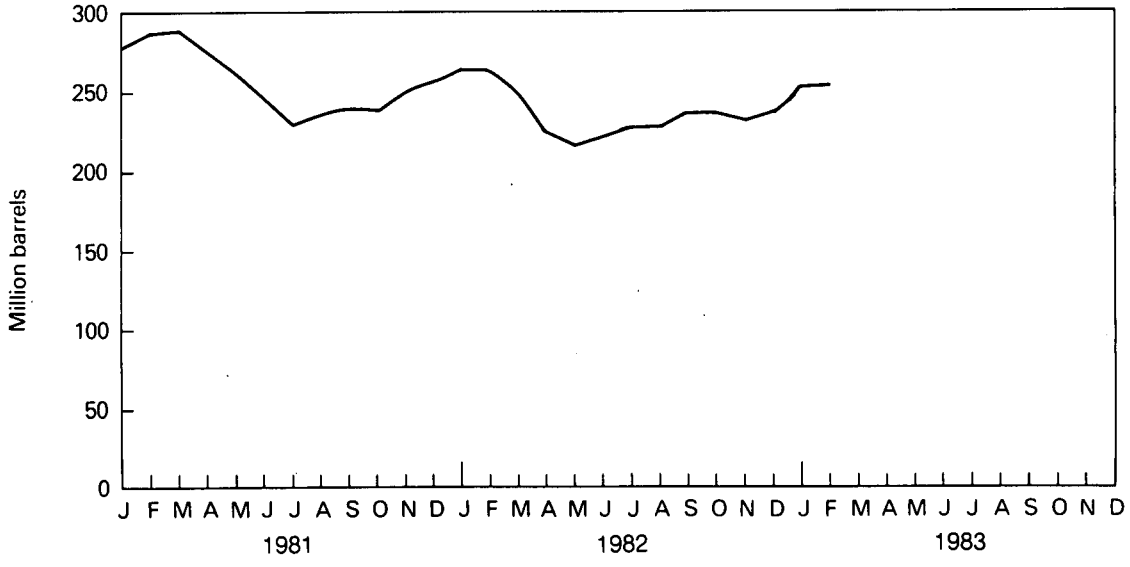
Petroleum

Motor Gasoline

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Distillate Fuel Oil Supply and Disposition

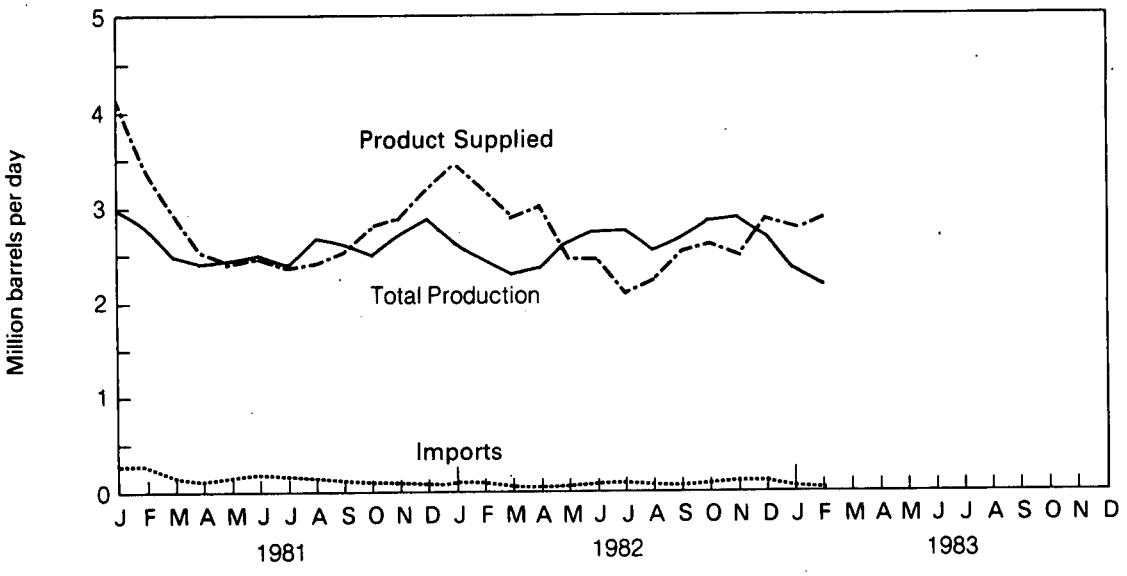
		Supply				Disposition		Ending Stocks
		Total Production	Imports	Stock Withdrawal[1]	Crude Used Directly[2]	Exports	Product Supplied[2]	
		Thousand barrels per day						Million barrels
1973	**AVERAGE**	**2,822**	**392**	**-115**	**2**	**9**	**3,092**	**‡196**
1974	**AVERAGE**	**2,669**	**289**	**-9**	**2**	**2**	**2,948**	**‡200**
1975	**AVERAGE**	**2,654**	**155**	**40**	**2**	**1**	**2,851**	**‡209**
1976	**AVERAGE**	**2,924**	**146**	**62**	**1**	**1**	**3,133**	**‡186**
1977	**AVERAGE**	**3,278**	**250**	**-176**	**1**	**1**	**3,352**	**‡250**
1978	**AVERAGE**	**3,167**	**173**	**93**	**1**	**3**	**3,432**	**‡216**
1979	**AVERAGE**	**3,153**	**193**	**-34**	**1**	**3**	**3,311**	**‡229**
1980	**AVERAGE**	**2,662**	**142**	**64**	**1**	**3**	**2,866**	**‡205**
1981	January	2,989	273	836	11	(s)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(s)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(s)	2,411	172
	June	2,501	225	-270	9	(s)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(s)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	**2,613**	**173**	**38**	**10**	**5**	**2,829**	
1982	January	2,615	96	780	10	90	3,410	166
	February	2,447	130	689	11	90	3,187	147
	March	2,294	48	612	10	84	2,881	128
	April	2,357	59	631	13	64	2,996	109
	May	2,618	74	-184	10	75	2,444	114
	June	2,731	100	-335	10	55	2,450	125
	July	2,734	124	-761	11	24	2,084	148
	August	2,526	79	-346	10	40	2,228	159
	September	2,658	59	-77	12	139	2,514	161
	October	2,837	97	-290	8	66	2,586	170
	November	2,863	141	-514	8	24	2,475	186
	December	2,655	109	226	10	143	2,856	179
	AVERAGE	**2,612**	**93**	**32**	**10**	**74**	**2,672**	
1983	January	R2,314	R58	R561	NA	173	R2,760	R168
	February†	*2,158*	*40*	*744*	NA	NA	*2,872*	*146*
	AVERAGE	**2,240**	**49**	**648**	**NA**	**NA**	**2,813**	

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[2]Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly.
‡Ending stocks for 1973-1980 are totals as of December 31.
†Italics denote preliminary data. R=Revised data. NA=Not available. (s)=Less than 500 barrels per day.
Notes: Beginning in 1981, survey forms were modified. See Note 3 on the last page of this section.
Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.
New basis stocks for December 31, 1982 = 186.
Sources: • See Notes and Sources on the last page of this section.

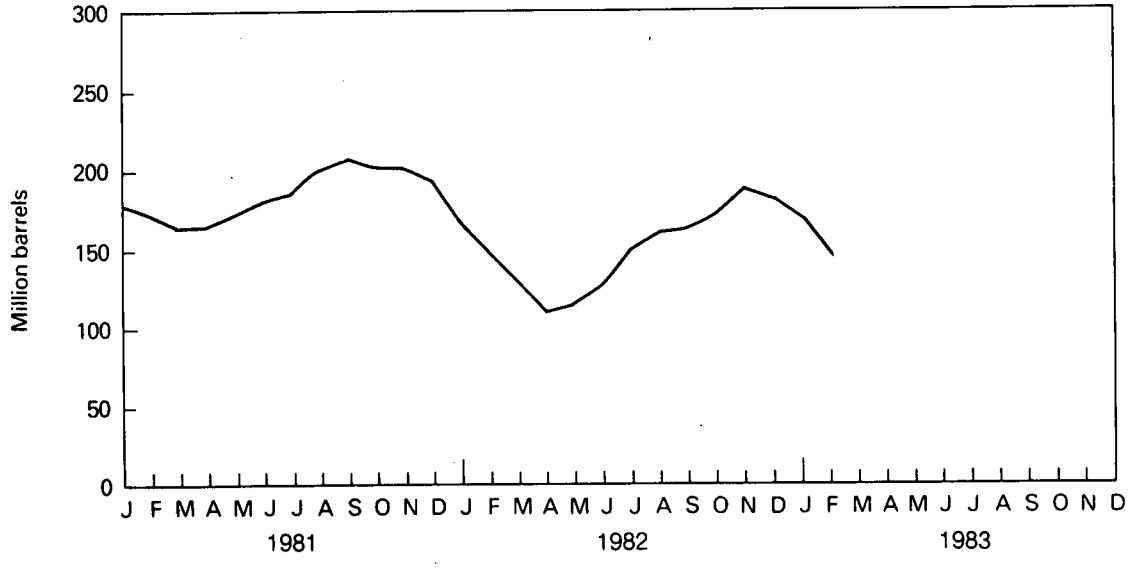
Petroleum

Distillate Fuel Oil

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Residual Fuel Oil Supply and Disposition

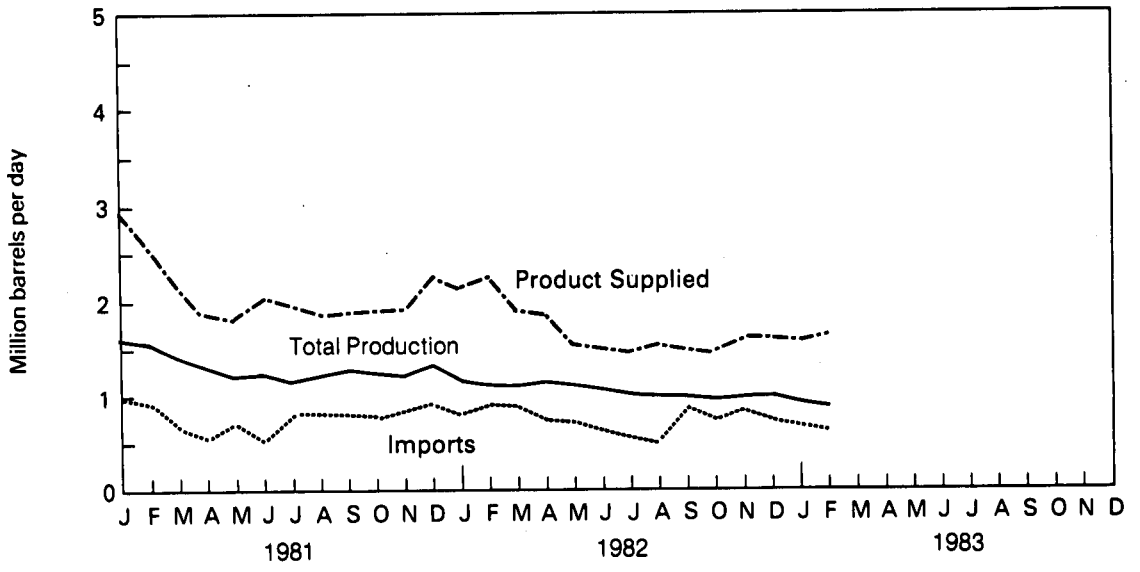
		Supply				Disposition		Ending Stocks
		Total Production	Imports	Stock Withdrawal[1]	Crude Used Directly[2]	Exports	Product Supplied[2]	
		Thousand barrels per day						Million barrels
1973	**AVERAGE**	**971**	**1,853**	**5**	**17**	**23**	**2,822**	**‡53**
1974	**AVERAGE**	**1,070**	**1,587**	**-17**	**13**	**14**	**2,639**	**‡60**
1975	**AVERAGE**	**1,235**	**1,223**	**2**	**15**	**15**	**2,462**	**‡74**
1976	**AVERAGE**	**1,377**	**1,413**	**5**	**17**	**12**	**2,801**	**‡72**
1977	**AVERAGE**	**1,754**	**1,359**	**-48**	**13**	**6**	**3,071**	**‡90**
1978	**AVERAGE**	**1,667**	**1,355**	**-1**	**13**	**13**	**3,023**	**‡90**
1979	**AVERAGE**	**1,687**	**1,151**	**-15**	**12**	**9**	**2,826**	**‡96**
1980	**AVERAGE**	**1,580**	**939**	**10**	**12**	**33**	**2,508**	**‡92**
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	**1,321**	**800**	**37**	**48**	**118**	**2,088**	
1982	January	1,183	821	328	53	235	2,150	68
	February	1,136	928	358	53	213	2,261	58
	March	1,121	910	26	53	197	1,912	57
	April	1,162	762	124	52	234	1,867	54
	May	1,127	738	-175	52	191	1,551	59
	June	1,077	643	-49	50	217	1,504	61
	July	1,029	576	51	49	239	1,466	59
	August	1,007	519	200	47	235	1,538	53
	September	1,007	871	-302	44	148	1,472	62
	October	954	758	-56	43	234	1,466	64
	November	989	843	-95	43	182	1,597	66
	December	990	747	8	43	186	1,602	66
	AVERAGE	**1,065**	**758**	**33**	**48**	**209**	**1,695**	
1983	January	R935	R691	R243	NA	294	R1,574	R61
	February†	*896*	*632*	*297*	NA	NA	*1,640*	*50*
	AVERAGE	**916**	**663**	**269**	**NA**	**NA**	**1,605**	

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[2]Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly.
‡Ending stocks for 1973–1980 are totals as of December 31.
†Italics denote preliminary data. R=Revised data. NA=Not available.
Notes: Beginning in 1981, survey forms were modified. See Note 3 on the last page of this section.
Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.
New basis stocks for December 31, 1982 = 68.
Sources: • See Notes and Sources on the last page of this section.

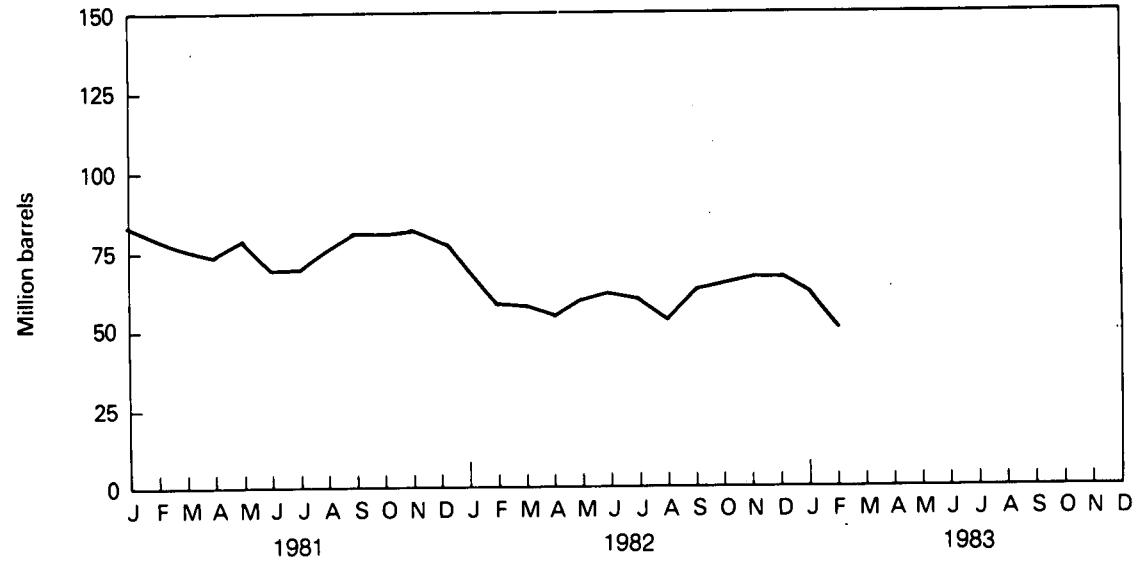
Petroleum

Residual Fuel Oil

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Liquefied Petroleum Gases Supply and Disposition

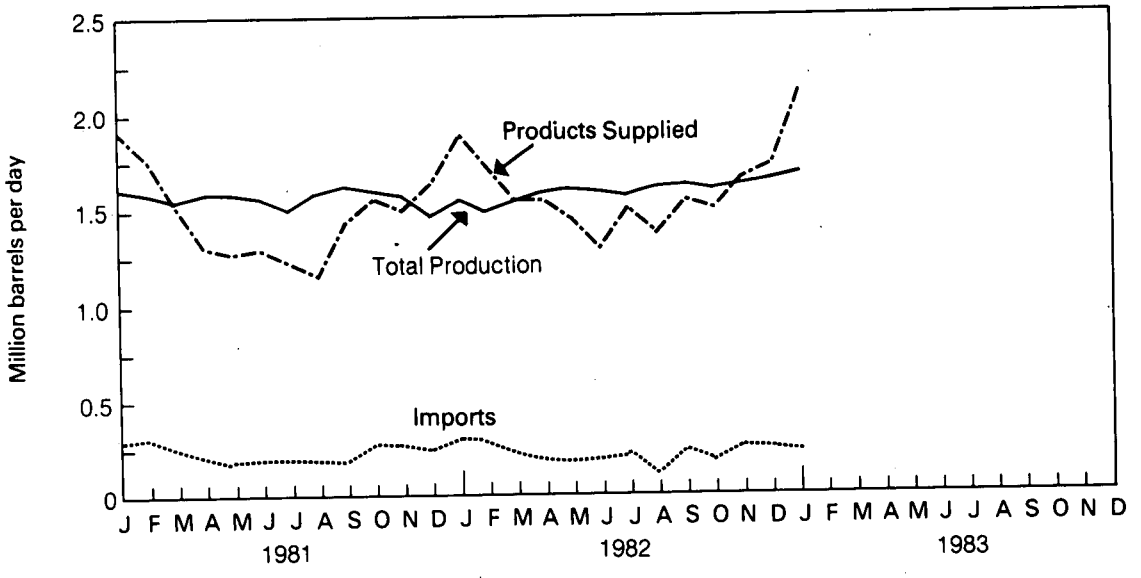
		Supply			Disposition			Ending Stocks
		Total Production	Imports	Stock Withdrawal[1]	Refinery Inputs	Exports	Product Supplied	
		Thousand barrels per day						Million barrels
1973	**AVERAGE**	**1,600**	**132**	**-35**	**220**	**27**	**1,449**	**‡99**
1974	**AVERAGE**	**1,565**	**123**	**-38**	**220**	**25**	**1,406**	**‡113**
1975	**AVERAGE**	**1,527**	**112**	**-35**	**246**	**26**	**1,333**	**‡125**
1976	**AVERAGE**	**1,535**	**130**	**24**	**260**	**25**	**1,404**	**‡116**
1977	**AVERAGE**	**1,566**	**161**	**-55**	**233**	**18**	**1,422**	**‡136**
1978	**AVERAGE**	**1,537**	**123**	**12**	**239**	**20**	**1,413**	**‡132**
1979	**AVERAGE**	**1,556**	**217**	**70**	**236**	**15**	**1,592**	**‡111**
1980	**AVERAGE**	**1,535**	**216**	**-27**	**233**	**21**	**1,469**	**‡120**
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	**1,571**	**244**	**-18**	**289**	**42**	**1,466**	
1982	January	1,546	314	480	398	67	1,873	122
	February	1,476	291	310	327	51	1,699	114
	March	1,523	223	145	289	74	1,528	109
	April	1,566	188	107	257	77	1,527	106
	May	1,583	186	-61	235	43	1,431	108
	June	1,571	192	-109	262	106	1,286	111
	July	1,556	227	-5	253	37	1,487	111
	August	1,591	125	-44	254	61	1,357	112
	September	1,606	247	33	273	85	1,528	111
	October	1,582	194	92	306	81	1,481	109
	November	1,603	267	172	370	37	1,634	103
	December	1,626	258	270	395	56	1,702	95
	AVERAGE	**1,570**	**225**	**115**	**301**	**65**	**1,544**	
1983	January	1,662	240	618	313	118	2,088	84

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]A negative number indicates an increase in stocks and a positive number indicates a decrease.
‡Ending stocks for 1973–1980 are totals as of December 31.
Notes: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.
New basis stocks for December 31, 1982 = 103.
Sources: • See Notes and Sources on the last page of this section.

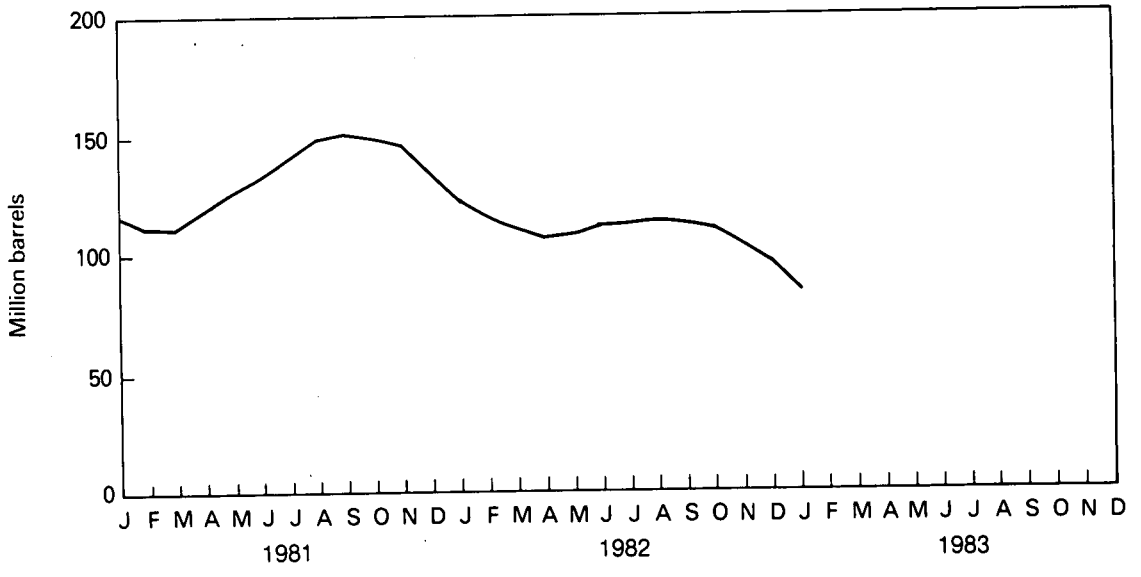
Petroleum

Liquefied Petroleum Gases

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Other Petroleum Products[1] Supply and Disposition

		Supply			Disposition			Ending Stocks
		Total Production	Imports	Stock Withdrawal[2]	Refinery Inputs	Exports	Product Supplied	
		Thousand barrels per day						Million barrels
1973	**AVERAGE**	**3,693**	**502**	**-9**	**750**	**166**	**3,270**	**‡208**
1974	**AVERAGE**	**3,558**	**432**	**-28**	**665**	**174**	**3,123**	**‡218**
1975	**AVERAGE**	**3,424**	**277**	**-2**	**537**	**160**	**3,002**	**‡219**
1976	**AVERAGE**	**3,643**	**206**	**-5**	**524**	**175**	**3,145**	**‡220**
1977	**AVERAGE**	**3,912**	**205**	**-27**	**514**	**165**	**3,410**	**‡230**
1978	**AVERAGE**	**4,046**	**166**	**14**	**492**	**167**	**3,568**	**‡225**
1979	**AVERAGE**	**4,153**	**195**	**-37**	**352**	**209**	**3,749**	**‡238**
1980	**AVERAGE**	**3,956**	**210**	**-23**	**311**	**198**	**3,634**	**‡247**
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	286	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	**3,739**	**226**	**46**	**723**	**199**	**3,088**	
1982	January	3,181	240	-102	602	180	2,536	284
	February	3,364	260	-116	646	138	2,724	287
	March	3,485	241	-204	734	161	2,627	294
	April	3,394	287	91	801	204	2,767	291
	May	3,296	309	198	823	210	2,769	285
	June	3,481	315	115	815	216	2,879	281
	July	3,578	391	15	862	187	2,935	281
	August	3,519	329	256	841	202	3,060	273
	September	3,442	365	74	767	213	2,901	271
	October	3,472	367	223	901	266	2,896	264
	November	3,464	406	-12	824	269	2,766	264
	December	3,285	314	363	886	275	2,801	253
	AVERAGE	**3,413**	**319**	**77**	**793**	**211**	**2,805**	
1983	January	3,222	297	-371	570	271	2,307	271

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and ethane.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
‡Ending stocks for 1973–1980 are totals as of December 31.
Notes: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.
New basis stocks for December 31, 1982 = 259.
Sources: • See Notes and Sources on the last page of this section.

Notes and Sources for the Petroleum Section

Notes

1. Research conducted by the Energy Information Administration (EIA) in the latter half of 1980 indicated changes had taken place in the petroleum industry that were not being adequately reflected in the EIA survey forms. First, the flows of unfinished oils and the redesignation of finished products were not being accurately described on the EIA survey forms. Second, a substantial amount of motor gasoline was being produced at non-refinery "downstream blending stations" but was not being reported. Although empirical information is not available to precisely measure the historical effects, estimates of the magnitude of the differences in the major series affected are shown in the EIA, *Petroleum Supply Monthly.* Beginning in January 1981, the EIA modified its survey forms, changed definitions of gasoline (motor and aviation), and added the non-refinery blenders previously not reported.
2. **Motor Gasoline:** Beginning in January 1981, the EIA expanded its universe to include non-refinery blenders; redefined motor gasoline into three categories (finished leaded, finished unleaded, and gasohol); and separated blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to more accurately describe refinery operations. For further details see the EIA, *Petroleum Supply Monthly.*
3. **Distillate and Residual Fuel Oils:** Previous to January 1981, the refinery input of unfinished oils number typically exceeded the number for available supply of unfinished oils. This was assumed to be due to the redesignation of distillate and residual fuel oils received as such, but used as an unfinished oil input by the receiving refinery. This imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of this difference was subtracted from distillate and one-third from residual. Beginning in January 1981, the EIA modified its survey forms to account for redesignated product and discontinued the above-mentioned adjustment. For further details see the EIA, *Petroleum Supply Monthly.*

Sources

- 1973 through 1976: Bureau of Mines, *Mineral Industry Surveys,* "Petroleum Statement, Annual" (except unleaded gasoline) and "PAD Districts Supply/Demand, Annual."
- Unleaded gasoline—1977 through 1980: Energy Information Administration (EIA), *Monthly Petroleum Statistics Report.*
- 1977 through 1981: EIA, *Energy Data Reports,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
- January 1982 through January 1983: EIA, *Petroleum Supply Monthly.*
- 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,* the *Petroleum Supply Monthly,* 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

Total dry natural gas production, including nonhydrocarbon gases, in the United States during February 1983 was an estimated 1.3 trillion cubic feet (Tcf). This was 11.4 percent lower than in February 1982.

Consumption of natural and supplemental gas in February 1983 was an estimated 1.7 Tcf, 13.1 percent lower than in February 1982.

Imports of natural gas in February 1983 were an estimated 102 billion cubic feet (Bcf), 8.5 percent higher than in the previous February. Receipts of foreign gas during February 1983 included Algerian liquefied natural gas (LNG) equivalent to approximately 13 Bcf, about five times the quantity received in the previous February.

Domestic producer sales to major interstate pipelines in December 1982 (latest data available) totaled 834 Bcf, 20.9 percent lower than during the previous December. Total sales during 1982 were 10.1 Tcf, 7.9 percent lower than during 1981.

Stocks of working gas* in underground natural gas storage reservoirs at the end of February 1983 totaled 2.4 Tcf. This was 31.7 percent above stocks available a year earlier. Net withdrawals from storage during February 1983 were 299 Bcf, 24.5 percent lower than during the previous February.

*Gas available for withdrawal.

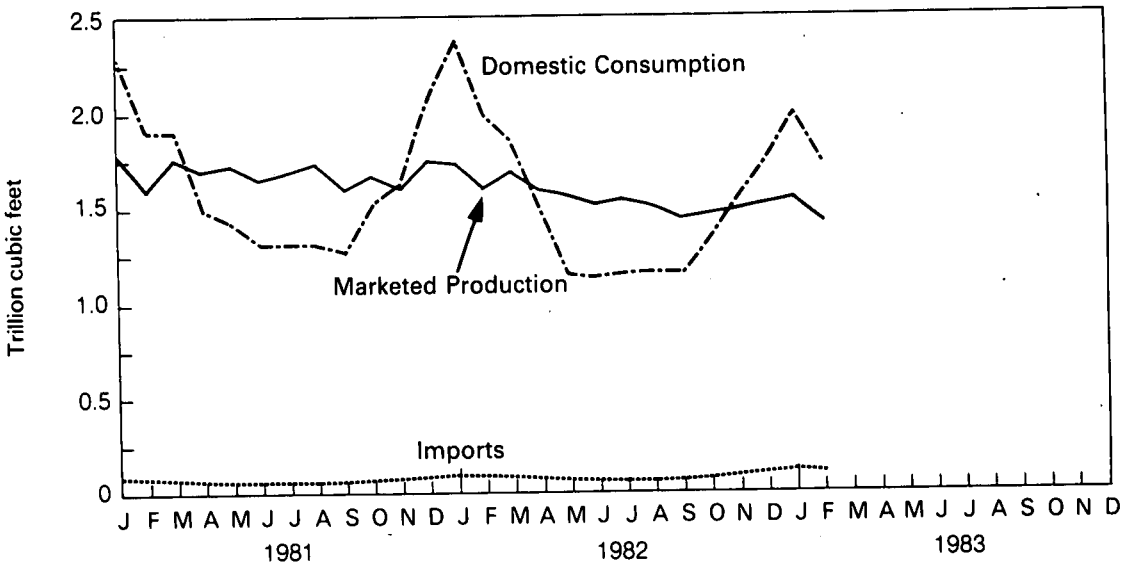
Natural Gas

		Production			Supplemental Gaseous Fuels	Total Domestic Consumption[3]	Imports	Exports	Domestic Producer Sales to Major Interstate Pipelines
		Total Marketed[1]	Total Dry[2]	Nonhydro-carbon Gases Removed					
		Billion cubic feet							
1973	**TOTAL**	**22,648**	**21,731**	**NA**	**NA**	**22,049**	**1,033**	**77**	**12,067**
1974	**TOTAL**	**21,601**	**20,713**	**NA**	**NA**	**21,223**	**959**	**77**	**11,462**
1975	**TOTAL**	**20,109**	**19,236**	**NA**	**NA**	**19,538**	**953**	**73**	**10,652**
1976	**TOTAL**	**19,952**	**19,098**	**NA**	**NA**	**19,946**	**964**	**65**	**10,140**
1977	**TOTAL**	**20,025**	**19,163**	**NA**	**NA**	**19,521**	**1,011**	**56**	**9,883**
1978	**TOTAL**	**19,974**	**19,122**	**NA**	**NA**	**19,627**	**966**	**53**	**9,911**
1979	**TOTAL**	**20,471**	**19,663**	**NA**	**NA**	**20,241**	**1,253**	**56**	**10,496**
1980	**TOTAL**	**20,379**	**19,602**	**195**	**155**	**19,877**	**985**	**49**	**10,578**
1981	January	1,772	1,704	20	20	2,279	91	5	962
	February	1,591	1,530	17	17	1,894	85	5	869
	March	1,753	1,686	18	17	1,900	80	5	942
	April	1,692	1,627	17	14	1,489	69	5	900
	May	1,716	1,650	18	13	1,426	62	4	909
	June	1,653	1,590	19	12	1,309	65	5	877
	July	1,683	1,618	20	12	1,315	66	5	889
	August	1,724	1,658	18	12	1,314	64	5	864
	September	1,595	1,534	18	12	1,266	67	6	869
	October	1,660	1,596	17	14	1,518	79	5	889
	November	1,600	1,539	17	15	1,619	82	5	904
	December	1,738	1,671	19	19	2,077	93	5	1,055
	TOTAL	**20,178**	**19,403**	**217**	**176**	**19,404**	**904**	**59**	**10,929**
1982	January	1,725	1,659	18	21	2,366	104	6	969
	February	1,583	1,522	18	18	1,967	94	5	901
	March	1,670	1,606	18	16	1,823	90	5	909
	April	1,575	1,515	17	13	1,472	77	4	853
	May	1,547	1,488	16	11	1,139	69	4	R889
	June	1,500	1,442	15	10	1,121	67	4	814
	July	1,520	1,462	15	11	1,143	67	5	R787
	August	1,488	1,431	17	11	1,153	64	4	793
	September	1,426	1,371	15	11	1,141	67	5	753
	October	1,453	1,397	15	12	1,299	76	5	765
	November	1,468	1,412	17	14	1,535	88	4	R801
	December	R1,506	R1,448	R18	R15	R1,714	109	4	834
	TOTAL	**R18,462**	**R17,753**	**R199**	**R163**	**R17,873**	**972**	**55**	**10,068**
1983	January	*R1,525*	*R1,466*	17	18	R1,965	R120	5	NA
	February	*1,402*	*1,348*	15	15	1,709	102	5	NA

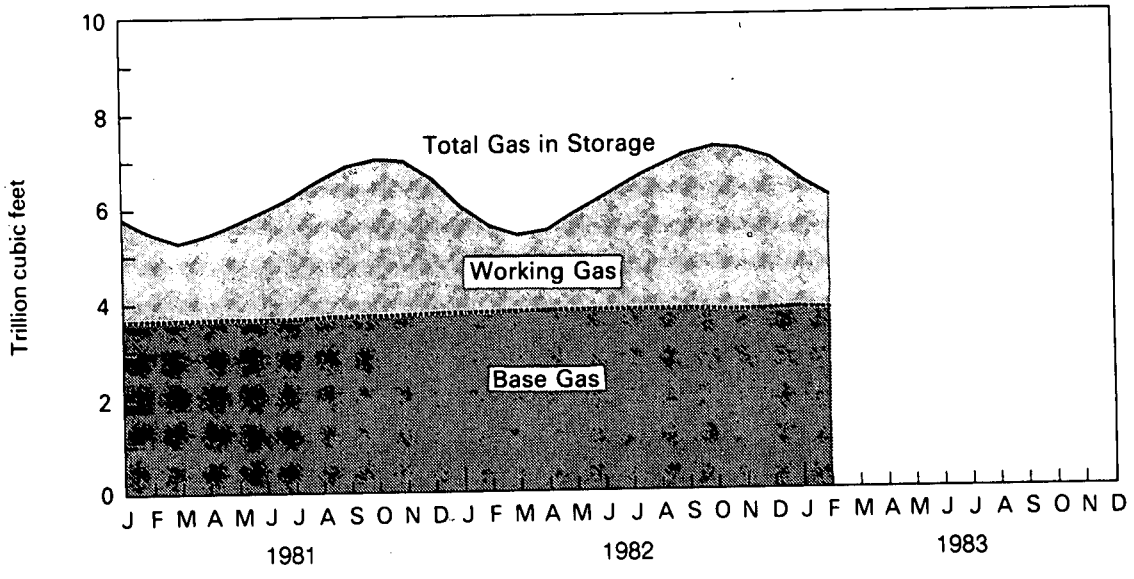
Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes nonhydrocarbon gases removed such as carbon dioxide, hydrogen sulfide, helium, and nitrogen. See Note 1 on the last page of this section.
[2]Total net dry marketed production is the volume of total marketed production, including nonhydrocarbon gases, remaining after the extraction of natural gas plant liquids, such as ethane, propane, butanes, etc. See Note 1 on the last page of this section.
[3]Includes supplemental gaseous fuels such as synthetic natural gas, propane-air, and refinery (still) gas normally mixed with natural gas prior to consumption. See Note 1 on the last page of this section.
R=Revised data. NA=Not available.
Note: Estimated data are in italics and are likely to be revised.
Sources: • See the last page of this section.

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			
1973	**TOTAL**	**‡4,898**	**‡2,864**	**‡2,034**	**NA**	**NA**	**NA**
1974	**TOTAL**	**‡4,962**	**‡2,912**	**‡2,050**	**NA**	**NA**	**NA**
1975	**TOTAL**	**‡5,374**	**‡3,162**	**‡2,212**	**NA**	**NA**	**NA**
1976	**TOTAL**	**‡5,250**	**‡3,323**	**‡1,926**	**1,960**	**2,114**	**(154)**
1977	**TOTAL**	**‡5,866**	**‡3,391**	**‡2,475**	**2,401**	**1,773**	**628**
1978	**TOTAL**	**‡6,020**	**‡3,473**	**‡2,547**	**2,338**	**2,186**	**151**
1979	**TOTAL**	**‡6,306**	**‡3,553**	**‡2,753**	**2,370**	**2,044**	**327**
1980	**TOTAL**	**‡6,297**	**‡3,642**	**‡2,655**	**1,898**	**1,911**	**(13)**
1981	January	5,795	3,642	2,152	37	558	(521)
	February	5,472	3,648	1,824	59	376	(317)
	March	5,285	3,654	1,631	55	234	(179)
	April	5,434	3,670	1,764	208	55	153
	May	5,660	3,684	1,977	255	26	228
	June	5,933	3,681	2,252	314	27	287
	July	6,205	3,649	2,556	335	26	309
	August	6,595	3,713	2,882	361	15	346
	September	6,872	3,720	3,152	287	9	277
	October	6,974	3,726	3,247	155	50	104
	November	6,931	3,731	3,200	80	124	(44)
	December	6,568	3,752	2,815	34	387	(353)
1982	January	5,932	3,751	2,181	24	673	(648)
	February	5,536	3,750	1,786	50	446	(396)
	March	5,369	3,766	1,603	88	264	(177)
	April	5,452	3,777	1,675	180	107	73
	May	5,813	3,780	2,033	380	11	369
	June	6,146	3,777	2,368	350	11	339
	July	6,485	3,779	2,706	351	12	339
	August	6,781	3,780	3,001	328	33	295
	September	7,032	3,782	3,251	271	19	251
	October	7,147	3,785	3,362	188	59	128
	November	7,079	3,770	3,309	81	160	(80)
	December	6,877	3,805	3,072	87	289	(202)
1983	January	6,460	3,808	2,651	22	443	(420)
	February	6,165	3,813	2,352	37	336	(299)

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]See Note 2 on the last page of this section.
[2]Net storage injections are storage injections minus storage withdrawals. Parentheses indicate withdrawals greater than injections.
‡Total as of December 31. NA=Not available.
Sources: • See the last page of this section.

Notes and Sources for the Natural Gas Section

Notes

1. Domestic consumption of natural gas includes quantities of gas delivered to consumers plus gas used for lease, plant, and pipeline fuel after natural gas liquids have been extracted. Delivered quantities include sizable amounts of supplemental gaseous fuels (synthetic natural gas, etc.) that are not quantified for 1979 and previous years. Beginning with January 1980, the amounts of supplemental gaseous fuels included in domestic consumption are provided.

Marketed production for 1979 and previous years represents gross withdrawals (full well-stream volume excluding lease condensate separated at the lease) less gas used for repressuring and quantities vented and flared. This definition includes the nonhydrocarbon gases subsequently removed. Beginning with January 1980 data, the marketed production series was expanded into two series. They both represent gross withdrawals less gas used for repressuring and quantities vented or flared. However, one series includes the nonhydrocarbon gases subsequently removed, and the other series excludes the nonhydrocarbon gases removed. For the purpose of maintaining a continuous series, those data that include the nonhydrocarbon gases subsequently removed are displayed as "Total Marketed" in this publication and the quantities of nonhydrocarbons subsequently removed are shown separately. Also, for the purpose of maintaining a continuous series the "Total Dry" displayed in this publication represents total marketed production including nonhydrocarbon gases subsequently removed less extraction loss due to removal of natural gas plant liquids.

2. 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 that 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.

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"; 1980 and 1981: EIA, *Natural Gas Annual;* January 1982 forward: EIA estimates based on a supply/disposition balance calculation.

Domestic Production: 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"; 1980 and 1981: EIA, *Natural Gas Annual:* January 1982 forward: State reports to the Interstate Oil Compact Commission, data from the U.S. Minerals Management Service, and EIA estimates for States that do not report monthly data on a regular or timely basis.

Domestic Producer Sales: EIA, FERC Form 11, "Natural Gas Pipeline Company Monthly Statement."

Imports: 1973 through 1981: EIA, FPC Form 14, "Imports and Exports of Natural Gas"; January 1982 forward: EIA estimates based on import data from FERC Form 11.

Exports: 1973 through 1981: EIA, FPC Form 14; January 1982 forward: EIA estimates based primarily on historical data reported on FPC Form 14.

Underground Storage: 1973 and 1974: American Gas Association, *Gas Facts;* 1975 through 1979: EIA, EIA Form 191 and FPC Form 8, "Underground Gas Storage Report"; 1980 forward: EIA, EIA Form 191, FPC Form 8, and *Natural Gas Annual.*

Part 5 Oil and Gas Resource Development

Oil and Gas Resource Development

The February 1983 rotary rig count of 2,192 was 47.3 percent lower than the February 1982 count of 4,160. The 216 rigs operating offshore were 19.8 percent fewer than those working in February 1982.

The February 1983 reported total wells drilled were 6,312, a 5.8-percent decrease from the 6,700 reported for February 1982. Oil well completions reported during February 1983 were 2,899, a 4.5-percent decrease from the comparable 1982 figure of 3,036. Gas well completions of 1,190 were reported for February 1983, a 16.8-percent decrease from 1982's comparable figure of 1,430. Total reported footage for February 1983 of 27.8 million feet decreased 13.2 percent from the February 1982 figure of 32.0 million feet.

The 451 crews engaged in seismic exploration during February of 1983 were 33.5 percent fewer than during February 1982. The 404 crews active onshore during February 1983 were 35.4 percent fewer than in February 1982. The 47 offshore crews working during February 1983 were 11.3 percent fewer than those in February 1982.

Oil and Gas Resource Development

		Rotary Rigs in Operation[1]		Exploratory and Development Wells Drilled[2]				Total Footage of Wells Drilled[2]
		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**	**1,472**	**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**	**1,658**	**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	**AVERAGE**	**2,909**	**TOTAL**	**27,026**	**15,730**	**18,089**	**60,845**	**284,461**
1981	January	3,386		1,794	964	1,339	4,097	19,907
	February	3,502		2,459	1,046	1,610	5,115	22,726
	March	3,595		3,099	1,423	1,883	6,405	30,166
	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	3,926		3,497	1,320	2,105	6,922	31,689
	July	3,998		2,790	1,116	1,698	5,604	25,542
	August	4,131		3,140	1,260	1,874	6,274	28,933
	September	4,242		3,414	1,978	2,014	7,406	33,630
	October	4,352		3,772	1,879	2,099	7,750	35,520
	November	4,436		3,591	1,584	2,069	7,244	32,263
	December	4,520		4,619	2,586	3,078	10,283	48,594
	AVERAGE	**3,970**	**TOTAL**	**37,671**	**17,894**	**22,973**	**78,538**	**361,407**
1982	January	4,436		2,798	954	2,132	5,884	28,167
	February	4,160		R3,036	R1,430	R2,234	R6,700	R31,985
	March	3,816		3,750	1,487	2,499	7,736	38,093
	April	3,460		3,683	1,546	2,289	7,518	36,489
	May	3,178		3,459	1,948	2,215	7,622	37,049
	June	2,908		3,899	1,892	2,524	8,315	39,008
	July	2,746		3,286	1,705	1,929	6,920	31,202
	August	2,620		2,848	1,575	1,903	6,326	28,556
	September	2,482		3,360	1,592	2,331	7,283	32,538
	October	2,402		2,838	1,220	2,136	6,194	27,447
	November	2,500		3,282	1,662	2,020	6,964	31,141
	December	2,696		4,090	1,966	2,361	8,417	34,737
	AVERAGE	**3,105**	**TOTAL**	**R40,298**	**R18,953**	**R26,549**	**R85,800**	**R396,017**
1983	January	2,622		2,381	892	1,651	4,924	20,998
	February	2,192		2,899	1,190	2,223	6,312	27,758

Geographic coverage: the 50 United States and the District of Columbia.
[1]These data are for operating rotary rigs reported by the Hughes Tool Company during the reporting period. Monthly figures are averages of a 4- or 5-week reporting period and are not calendar months.
[2]These data are for wells drilled reported to the American Petroleum Institute (API) during the reporting period. They exclude service wells and stratigraphic and core tests. 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: 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	**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			
	August	46	689	735			
	September	47	697	744			
	October	52	689	741			
	November	52	681	733			
	December	47	656	703			
	AVERAGE	**44**	**637**	**681**	**338,201**	**256,201**	**594,402**
1982	January	53	642	695			
	February	53	625	678			
	March	52	597	649			
	April	55	571	626			
	May	61	551	612			
	June	69	546	615			
	July	66	527	593			
	August	62	500	562			
	September	59	476	535			
	October	51	465	516			
	November	50	452	502			
	December	49	428	477			
	AVERAGE	**57**	**531**	**588**			
1983	January	49	407	456			
	February	47	404	451			

Geographic coverage: the 50 United States and the District of Columbia.
Totals and averages may not equal sum of components due to independent rounding.
[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 February 1983 was 59.3 million short tons, 16.2 percent less than the 70.7 million short tons produced in February 1982.

Electric utility coal consumption in January 1983 totaled 53.4 million short tons, 6.1 percent less than consumption in January 1982.

Electric utility coal stocks of 177.8 million short tons at the end of January 1983 were 19.4 million short tons (12.2 percent) above the level 1 year earlier.

Imports of coal in January 1983 totaled 78 thousand short tons, 9.9 percent above the amount imported in January 1982. Exports of coal in January 1983 totaled 4.5 million short tons, 27.6 percent less than the amount exported during January 1982. Coal exports in January 1983 were principally to Europe (58.9 percent) and Japan (34.7 percent).

Coal

Bituminous Coal, Lignite, and Anthracite

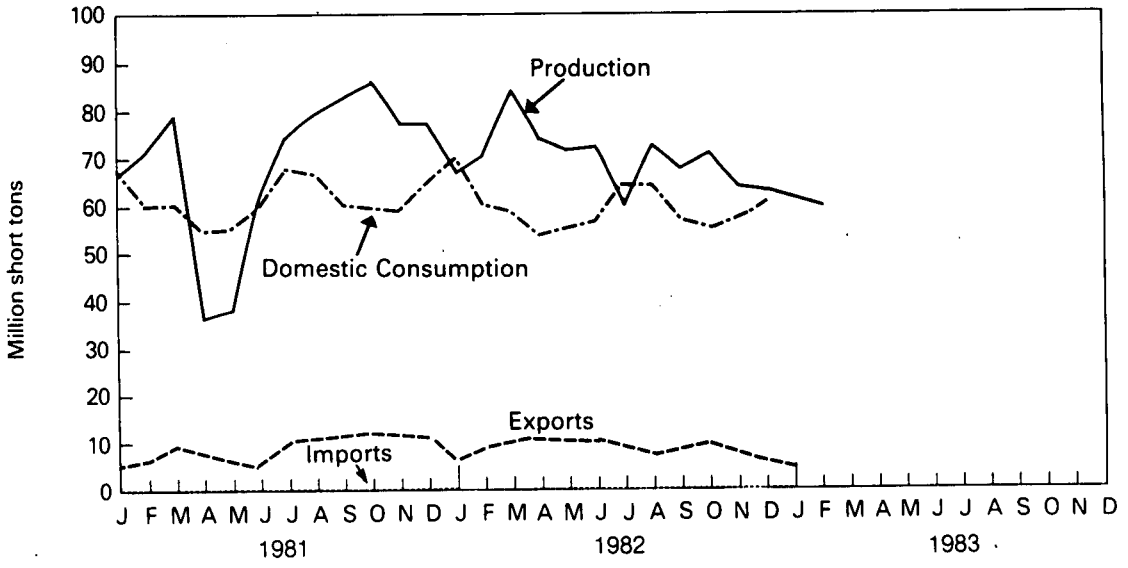
		Production	Domestic Consumption	Imports[1]	Exports[2]	Stocks[3]
			Thousand short tons			
1973	**TOTAL**	**598,568**	**562,584**	**127**	**53,587**	**104,335**
1974	**TOTAL**	**610,023**	**558,402**	**2,080**	**60,661**	**96,323**
1975	**TOTAL**	**654,641**	**562,641**	**940**	**66,309**	**128,050**
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	**TOTAL**	**829,700**	**702,730**	**1,194**	**91,742**	**204,028**
1981	January	65,927	67,580	35	5,795	198,603
	February	70,918	59,735	104	6,771	197,962
	March	78,266	60,069	77	9,710	207,340
	April	36,253	54,649	63	8,271	187,143
	May	38,100	55,025	96	6,086	168,126
	June	61,555	59,685	138	6,158	158,274
	July	74,076	67,394	13	10,762	154,423
	August	78,782	65,896	150	11,315	157,141
	September	81,720	59,722	69	11,900	164,970
	October	85,241	59,161	94	12,360	175,384
	November	76,577	58,695	76	11,849	183,044
	December	76,360	65,017	127	11,564	185,274
	TOTAL	**823,775**	**732,627**	**1,043**	**112,541**	
1982	January†	R66,796	R68,718	71	6,177	R173,931
	February†	R70,725	59,751	30	8,964	173,193
	March†	R83,391	58,243	12	10,423	179,171
	April†	R73,429	53,267	10	10,831	186,458
	May†	R70,985	54,839	109	10,110	192,926
	June†	R71,550	55,944	9	10,680	198,376
	July†	R60,181	R63,859	69	9,182	R189,997
	August†	R72,461	R63,560	R131	7,385	190,310
	September†	R67,543	R56,765	71	8,683	R189,967
	October†	R70,446	55,032	66	9,972	195,107
	November†	R63,381	56,833	87	7,807	196,700
	December†	R62,521	60,221	76	R6,064	195,254
	TOTAL	**R833,409**	**707,032**	**R742**	**106,277**	
1983	January†	60,896	NA	78	4,470	NA
	February†	59,282	NA	NA	NA	NA

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
See Note on the last page of this section for methodology used to calculate production, consumption, and stocks.
[1]Bituminous coal was the only type of coal imported during the years shown above.
[2]Excludes shipments of anthracite to U.S. Armed Forces overseas (335,000 short tons in 1982).
[3]Stocks held by electric utilities, coke plants, and general industry at the end of period. Excludes stocks at retail dealers that are consumed by the residential and commercial sector.
†Preliminary data. R=Revised data. NA=Not available.
Sources: • See the last page of this section.

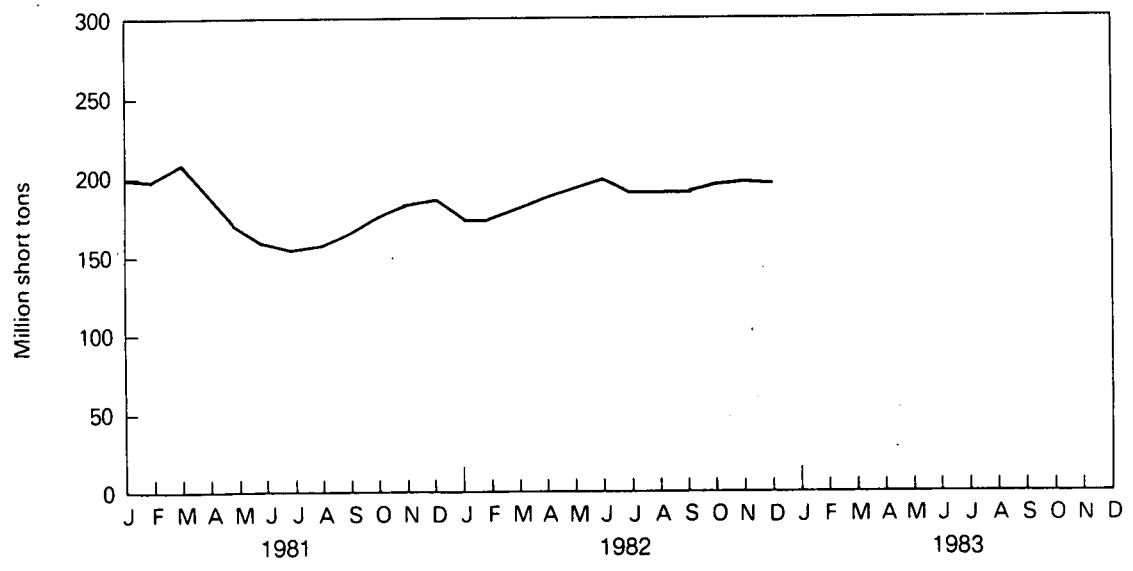
Coal

Bituminous Coal, Lignite, and Anthracite

Production, Consumption, Imports, and Exports



Stocks



Coal

Consumption—Bituminous Coal, Lignite, and Anthracite

		Electric Utilities	Industrial		Residential and Commercial	Total
			Coke Plants[1]	Other Industrial[2] Including Transportation		
		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	**TOTAL**	**569,274**	**66,657**	**60,347**	**6,451**	**702,730**
1981	January	54,688	5,465	6,532	895	67,580
	February	47,914	5,177	5,932	712	59,735
	March	48,398	5,532	5,665	474	60,069
	April	43,677	4,862	5,548	562	54,649
	May	44,999	4,259	5,297	470	55,025
	June	50,080	4,460	4,845	300	59,685
	July	56,144	5,449	5,371	430	67,394
	August	54,483	5,434	5,520	459	65,896
	September	48,483	5,340	5,312	587	59,722
	October	47,800	5,158	5,577	626	59,161
	November	47,014	5,037	5,793	851	58,695
	December	53,116	4,842	6,003	1,056	65,017
	TOTAL	**596,797**	**61,014**	**67,395**	**7,421**	**732,627**
1982	January†	R56,825	4,444	6,474	975	R68,718
	February†	48,878	4,340	5,858	675	59,751
	March†	47,884	4,173	5,641	545	58,243
	April†	43,490	3,708	5,382	687	53,267
	May†	45,622	3,622	5,143	452	54,839
	June†	47,424	3,481	4,691	348	55,944
	July†	R55,248	3,121	4,862	628	R63,859
	August†	R54,838	3,058	4,994	670	R63,560
	September†	R48,414	2,924	4,790	637	R57,765
	October†	46,330	2,757	5,285	660	55,032
	November†	47,799	2,693	5,496	845	56,833
	December†	50,914	2,587	5,702	1,018	60,221
	TOTAL	**R593,666**	**40,908**	**64,318**	**8,140**	**707,032**
1983	January†	53,351	NA	NA	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]Bituminous coal and anthracite only. Lignite is not used at coke plants.
[2]See Note on the last page of this section.
†Preliminary data. R=Revised data. NA=Not available.
Sources: • See the last page of this section.

Coal

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

		Electric Utilities	Industrial		Total[3]
			Coke Plants[2]	Other Industrial	
		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		**183,010**	**9,067**	**11,951**	**204,028**
1981	January	176,975	9,634	11,994	198,603
	February	175,715	10,211	12,036	197,962
	March	183,983	10,788	12,569	207,340
	April	169,221	6,952	10,970	187,143
	May	153,415	4,850	9,861	168,126
	June	144,520	4,500	9,254	158,274
	July	140,124	5,074	9,225	154,423
	August	142,318	5,648	9,175	157,141
	September	149,526	6,163	9,281	164,970
	October	159,676	6,308	9,400	175,384
	November	167,002	6,392	9,650	183,044
	December	168,893	6,475	9,906	185,274
1982	January†	R158,469	6,207	9,255	R173,931
	February†	158,136	5,909	9,148	173,193
	March†	164,518	5,612	9,041	179,171
	April†	171,390	5,931	9,137	186,458
	May†	177,461	6,231	9,234	192,926
	June†	182,513	6,532	9,330	198,376
	July†	R174,503	6,166	9,328	R189,997
	August†	175,194	5,800	9,316	190,310
	September†	R175,225	5,434	9,308	R189,967
	October†	R180,571	5,171	9,365	195,107
	November†	R182,368	4,908	9,424	196,700
	December†	R181,132	4,642	9,479	195,254
1983	January†	177,832	NA	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]Stocks held by electric 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 that are consumed by the residential and commercial sector.
†Preliminary data. R=Revised data. NA=Not available.
Sources: • See the last page of this section.

Notes and Sources for the Coal Section

Note

Preliminary estimates of monthly coal production are based on the number of railcars loaded at mines as reported weekly to the Association of American Railroads and the average coal tonnage carried per railcar as reported quarterly to the Interstate Commerce Commission by Class 1 railroads. The amount of coal production shipped by rail (estimated for each railroad by multiplying the number of railcars of coal loaded by the average coal tonnage carried per railcar) is multiplied by the ratio of total production as reported on Form EIA-6, "Coal Distribution Report," to production shipped by rail for the corresponding quarter of the previous year to arrive at the monthly coal production estimate. Final monthly and annual coal production data are derived from the Form EIA-6 and State coal production reports.

Domestic coal consumption data in this series approximate actual consumption. Coal consumption at electric utility plants is derived directly from Form EIA-759, "Monthly Power Plant Report." Prior to 1980, monthly coal consumption at coke plants was derived directly from Form EIA-5, "Coke and Coal Chemicals Monthly." For 1980 and subsequent years, monthly coal consumption at coke plants is derived from the quarterly coal consumption reported on Form EIA-5, "Coke Plant Report—Quarterly." These quarterly coal consumption figures are converted to monthly coal consumption figures using the ratios of monthly to quarterly consumption in 1979, the last year that coke plant data was collected monthly on Form EIA-5. These ratios by month (January-December) are: 0.3377, 0.3200, 0.3423; 0.3529, 0.3462, 0.3009; 0.3364, 0.3347, 0.3289; and 0.3273, 0.3301, 0.3426.

Prior to 1978, coal consumption for the "Other Industrial" sector (i.e. industrial users minus coke plants) was derived by using monthly data reported on Form EIA-3, "Monthly Fuel Consumption Report—Manufacturing Plants" to modify baseline coal consumption figures from the most recent Census of Manufacturers or Annual Survey of Manufacturers, Bureau of the Census, U.S. Department of Commerce. For 1978 and subsequent years, the data sources used to compute monthly coal consumption for the "Other Industrial" sector are:

(a) Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants."
(b) Form EIA-6, "Coal Distribution Report." (Quarterly)

The basic assumption used in deriving a quarterly estimate for coal consumption for the "Other Industrial" sector 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

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

Form EIA-6 provides complete coverage of the "Other Industrial" sector. The quarterly receipts (R) are equated to the coal distribution to the "Other Industrial" sector as reported on Form EIA-6. Form EIA-3 provides almost total coverage of the stock change for the "Other Industrial" sector and hence ΔS is equated to this figure.

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

$$C_m = (C_{m3}/C_3) \times C \quad (3)$$

where C_{m3}/C_3 is the ratio of monthly to quarterly coal consumption as reported on Form EIA-3. For the 1978 coal consumption figures, the ratios used are based on 1978 EIA-3 data. For 1979 and subsequent years, the ratios used are based on the 1979 EIA-3 data. These 1979 ratios by month (January-December) are: 0.3593, 0.3264, 0.3143; 0.3485, 0.3332, 0.3183; 0.3317, 0.3407, 0.3276; and 0.3045, 0.3253, 0.3702.

For 1980 and subsequent years, quarterly coal consumption in the residential and commercial sector is equated to the quarterly coal distribution to that sector as reported on Form EIA-6, "Coal Distribution Report." These quarterly coal consumption figures are converted to monthly coal consumption figures using the ratios of monthly to quarterly coal deliveries to this sector in 1979 as reported on Form EIA-2, "Monthly Coal Report—Retail Dealers and Upper Lake Docks." These 1979 ratios by month (January-December) are: 0.4002, 0.3502, 0.2496; 0.4805, 0.2901, 0.2294; 0.3126, 0.2952, 0.3922; and 0.2931, 0.3101, 0.3968.

Prior to 1980, monthly coal consumption for the residential and commercial sector was derived by using monthly data reported on Form EIA-2 to modify baseline coal consumption figures developed by the Bureau of Mines, U.S. Department of the Interior.

Sources

Production: 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys;* October 1977 forward: Energy Information Administration (EIA), "Weekly Coal Production Report" from selected State agencies and EIA Form 6, "Coal Distribution Report."
Consumption and Stocks: 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys;*
- Electric Utilities—October 1977 forward: EIA, EIA Form 759 (formerly FPC Form 4), "Monthly Power Plant Report."
- Other Industrial—October 1977 through December 1979: EIA, EIA Form 3, "Monthly Fuel Consumption Report - Manufacturing Plants"; January 1980 forward: EIA, EIA Form 3, "Quarterly Fuel Consumption Report - Manufacturing Plants" and EIA Form 6, "Coal Distribution Report."
- Coke Plants—October 1977 through December 1980: EIA, EIA Form 5/5A, "Coke and Coal Chemicals - Monthly/Annual"; January 1981 forward: EIA, EIA Form 5/5A, "Coke and Coal Chemicals - Quarterly/Annual."
- Residential and Commercial—October 1977 through December 1979: EIA, EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks"; January 1980 forward: EIA, EIA Form 6, "Coal Distribution Report."

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).

Part 7 Electric Utilities

Electric Utilities

January 1983 production of electricity by utilities was 195.7 billion kilowatt-hours, 6.6 percent lower than the January 1982 production level. Coal-fired production totaled 108.2 billion kilowatt-hours, 4.4 percent lower than the January 1982 level. Hydroelectric production totaled 29.3 billion kilowatt-hours, 9.0 percent above the January 1982 level. Nuclear production was 25.1 billion kilowatt-hours in January 1983, 2.3 percent below the January 1982 level. Natural gas-fired production was 19.7 billion kilowatt-hours, 12.8 percent below the level 1 year earlier. Petroleum-fired production totaled 12.9 billion kilowatt-hours, 37.7 percent below the January 1982 level.

Sales of electricity to all ultimate consumers in the United States in January 1983 were 179.1 billion kilowatt-hours, 6.6 percent below January 1982 sales. Sales to residential consumers during January 1983 were 69.9 billion kilowatt-hours, 8.2 percent below the level of sales for the same month in 1982. Commercial sales were 44.0 billion kilowatt-hours, 1.9 percent less than the amount sold to commercial consumers in January 1982.

Sales to industrial consumers totaled 57.9 billion kilowatt-hours in January 1983, 7.9 percent less than the 1982 figure. In January 1983, other sales totaled 7.3 billion kilowatt-hours, 8.1 percent below the January 1982 level.

Electric utility petroleum consumption (excluding petroleum coke) during January 1983 was 21.9 million barrels, a 38.3-percent drop from the January 1982 level. Coal consumption for January 1983 was 53.4 million short tons, 6.1 percent below the January 1982 rate. During January 1983, consumption of natural gas by electric utilities was 208.3 billion cubic feet, 12.3 percent below the January 1982 consumption level.

On January 31, 1983, utility stocks of anthracite, bituminous coal, and lignite totaled 177.8 million short tons. Stockpiles were 12.2 percent above the level of January 1982. Petroleum stocks (excluding petroleum coke) on January 31, 1983, totaled 119.2 million barrels, 1.3 percent below the level on the same date in 1982.

Electric Utilities[1]

Net Electricity Generation by Primary Energy Source

		Coal[2]	Petroleum[3]	Natural Gas	Nuclear	Hydro	Other[4]	Total
				Million kilowatt-hours				
1973	**TOTAL**	**847,651**	**314,343**	**340,858**	**83,479**	**272,083**	**2,294**	**1,860,710**
1974	**TOTAL**	**828,433**	**300,931**	**320,065**	**113,976**	**301,032**	**2,703**	**1,867,140**
1975	**TOTAL**	**852,786**	**289,095**	**299,778**	**172,505**	**300,047**	**3,437**	**1,917,649**
1976	**TOTAL**	**944,391**	**319,988**	**294,624**	**191,104**	**283,707**	**3,883**	**2,037,696**
1977	**TOTAL**	**985,219**	**358,179**	**305,505**	**250,883**	**220,475**	**4,063**	**2,124,323**
1978	**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	**TOTAL**	**1,161,562**	**245,994**	**346,240**	**251,116**	**276,021**	**5,506**	**2,286,439**
1981	January	111,765	25,963	22,081	23,779	22,338	540	206,467
	February	97,653	17,444	21,339	21,595	21,099	483	179,613
	March	99,482	16,957	25,997	22,004	20,572	541	185,553
	April	88,109	15,106	27,460	20,646	20,723	500	172,545
	May	88,941	14,508	30,070	19,723	24,081	483	177,806
	June	99,837	18,972	35,885	21,166	26,370	473	202,702
	July	112,854	20,072	38,712	23,080	25,133	523	220,373
	August	108,403	16,001	36,918	26,946	21,615	520	210,403
	September	97,664	15,566	30,850	24,398	17,822	538	186,838
	October	97,046	16,213	28,917	20,556	18,088	531	181,352
	November	94,841	13,847	24,670	22,783	18,963	465	175,570
	December	106,608	15,772	22,877	25,997	23,879	457	195,590
	TOTAL	**1,203,203**	**206,421**	**345,777**	**272,674**	**260,684**	**6,054**	**2,294,812**
1982	January	R113,124	R20,674	R22,621	25,678	R26,896	411	R209,403
	February	96,906	R15,217	20,920	20,188	R26,690	380	R180,299
	March	97,625	R13,495	23,598	R22,755	R29,885	330	R187,687
	April	R88,116	11,192	R23,231	21,785	27,928	328	R172,580
	May	R92,997	R9,868	R24,291	21,639	R27,971	381	R177,147
	June	R95,314	R10,419	R27,959	24,026	R27,953	458	R186,128
	July	R110,617	R13,380	R33,340	25,467	R27,294	485	R210,584
	August	R110,124	R11,753	34,418	24,986	R23,894	480	205,656
	September	R96,896	10,363	R27,649	25,391	19,896	468	180,662
	October	R93,769	R9,885	R25,804	23,248	R19,750	509	R172,966
	November	95,547	9,313	21,466	23,235	23,297	520	173,377
	December	100,970	11,238	19,963	24,376	R27,760	415	R184,722
	TOTAL	**R1,192,004**	**R146,797**	**R305,260**	**R282,773**	**R309,213**	**R5,164**	**R2,241,211**
1983	January	108,164	12,881	19,720	25,090	29,318	506	195,680

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Monthly data for 1982 have been revised and finalized.
[2]Includes bituminous coal, lignite, and anthracite.
[3]Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
[4]Includes geothermal and wood and waste.
R=Revised data.
Source: •1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; 1982 forward: Energy Information Administration Form 759, "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**	**59,328**	**1,712,910**
1974	**TOTAL**	**578,184**	**384,826**	**684,875**	**58,039**	**1,705,924**
1975	**TOTAL**	**588,140**	**403,049**	**687,680**	**68,222**	**1,747,091**
1976	**TOTAL**	**606,452**	**425,094**	**754,069**	**69,631**	**1,855,246**
1977	**TOTAL**	**645,239**	**446,514**	**786,037**	**70,571**	**1,948,361**
1978	**TOTAL**	**674,466**	**461,163**	**809,078**	**73,215**	**2,017,922**
1979	**TOTAL**	**682,819**	**473,307**	**841,903**	**73,070**	**2,071,099**
1980	**TOTAL**	**717,495**	**488,156**	**815,067**	**73,732**	**2,094,449**
1981	January	74,087	43,229	67,076	7,557	191,949
	February	66,359	41,345	67,411	7,092	182,207
	March	57,660	39,541	68,590	7,035	172,826
	April	50,914	37,910	68,138	6,562	163,525
	May	48,348	39,331	68,714	6,780	163,173
	June	56,165	44,244	71,641	6,777	178,827
	July	69,990	48,989	71,712	7,124	197,814
	August	70,299	49,003	72,010	7,147	198,459
	September	61,098	46,977	71,011	7,164	186,250
	October	52,989	42,183	69,154	7,024	171,350
	November	51,965	39,747	66,161	7,143	165,016
	December	62,391	41,839	64,124	7,351	175,705
	TOTAL	**722,265**	**514,338**	**825,742**	**84,756**	**2,147,101**
1982	January	R76,193	R44,866	R62,928	R7,894	R191,881
	February	69,128	43,459	62,778	7,441	182,805
	March	60,498	41,710	64,496	7,255	173,959
	April	54,918	40,036	62,723	6,836	164,512
	May	49,092	40,021	62,480	6,976	158,569
	June	54,083	44,206	63,684	6,766	168,739
	July	65,704	48,211	62,617	7,035	183,567
	August	69,906	49,720	63,306	6,808	189,740
	September	63,053	48,068	59,980	7,194	178,296
	October	52,638	42,864	60,830	7,084	163,416
	November	52,136	40,572	60,651	7,122	160,479
	December	62,102	42,584	58,464	7,128	170,278
	TOTAL	**R729,451**	**R526,317**	**R744,937**	**R85,539**	**R2,086,241**
1983	January†	69,929	44,011	57,931	7,251	179,122

Geographic coverage: the 50 United States and the 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.
†Preliminary data.
R=Revised data. For further explanation of factors used in revising data, see the Technical Notes section of the Energy Information Administration, *Electric Power Monthly.*
Source: •1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 through December 1982: FERC Form 5, "Electric Utility Company Monthly Statement"; January 1983 forward: EIA Form 826, "Electric Utility Company Monthly Statement."

Electric Utilities[1]

Primary Energy Consumed to Produce Electricity

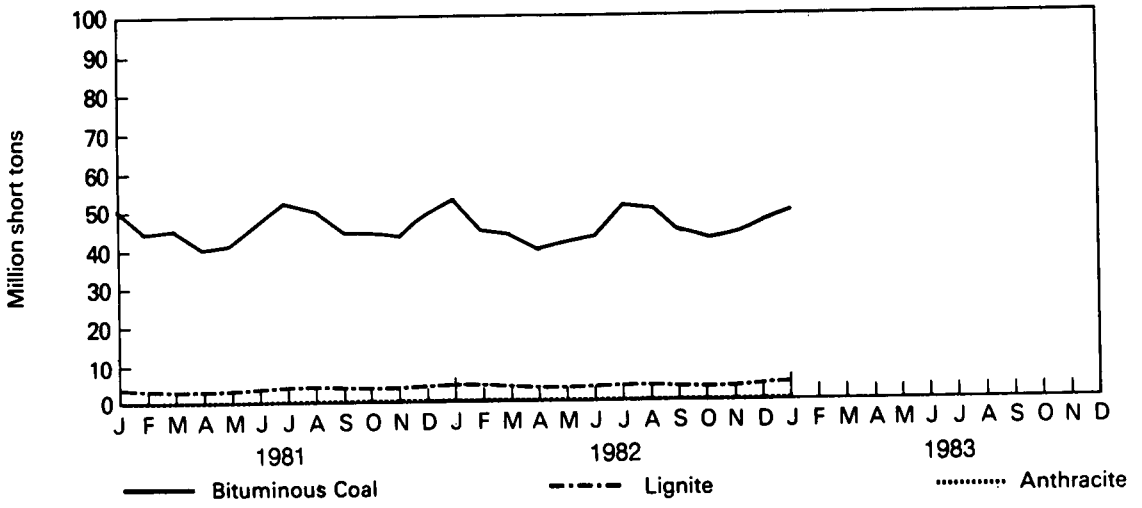
		Coal				Petroleum				Natural Gas
		Anthracite	Bituminous Coal	Lignite	Total	Heavy[2]	Light[3]	Total Liquids	Petroleum Coke	
		Thousand short tons				Thousand barrels			Thousand short tons	Million cubic feet
1973	**TOTAL**	**1,443**	**376,975**	**10,794**	**389,212**	**513,190**	**47,058**	**560,248**	**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**	**623,705**	**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	**TOTAL**	**951**	**526,680**	**41,642**	**569,274**	**391,163**	**29,051**	**420,214**	**179**	**3,681,595**
1981	January	81	50,635	3,972	54,688	40,885	3,047	43,931	10	231,606
	February	58	44,583	3,272	47,914	27,755	2,242	29,997	9	224,003
	March	75	45,168	3,155	48,398	27,862	1,405	29,267	9	273,431
	April	73	40,535	3,069	43,677	24,229	1,356	25,585	7	289,053
	May	91	41,405	3,503	44,999	23,130	1,795	24,925	14	316,310
	June	105	46,503	3,471	50,080	29,699	2,705	32,404	13	380,775
	July	102	51,705	4,337	56,144	31,628	2,615	34,243	11	410,666
	August	133	50,010	4,339	54,483	25,760	1,422	27,182	13	389,564
	September	98	44,557	3,828	48,483	25,137	1,145	26,282	13	324,828
	October	115	44,161	3,524	47,800	26,078	1,123	27,201	15	301,670
	November	141	43,032	3,841	47,014	22,042	1,139	23,181	12	258,811
	December	148	48,487	4,481	53,116	25,593	1,319	26,912	12	239,436
	TOTAL	**1,221**	**550,784**	**44,792**	**596,797**	**329,798**	**21,313**	**351,111**	**139**	**3,640,154**
1982	January	89	R52,014	4,723	R56,825	R32,269	R3,131	R35,399	10	R237,675
	February	83	44,478	4,317	48,878	24,351	R1,421	R25,772	9	R220,032
	March	73	43,751	4,060	47,884	R21,617	R1,304	R22,921	4	246,550
	April	88	39,888	3,515	43,490	17,913	R1,132	R19,045	11	R246,344
	May	98	41,845	3,678	45,622	R15,939	R991	R16,930	12	R257,848
	June	94	43,340	3,990	47,424	16,539	1,053	17,592	13	R295,557
	July	108	R50,769	4,371	R55,248	R21,550	R1,360	R22,910	11	R352,818
	August	95	R50,283	4,460	R54,838	18,873	R1,053	R19,926	13	R361,351
	September	67	R44,431	3,916	R48,414	16,544	R921	17,464	9	293,232
	October	81	42,598	3,650	46,330	15,990	870	16,860	17	R273,003
	November	100	43,756	3,943	47,799	14,908	1,007	15,916	18	R226,477
	December	99	46,192	4,622	50,914	17,940	R1,094	19,035	22	R214,630
	TOTAL	**1,075**	**R543,346**	**49,245**	**R593,666**	**R234,434**	**R15,337**	**R249,711**	**149**	**R3,225,518**
1983	January	73	48,695	4,583	53,351	20,728	1,122	21,850	17	208,337

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Monthly data for 1982 have been revised and finalized.
[2]Prior to 1980, based on oil used in steam plants. Since January 1980, heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils.
[3]Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since January 1980, light oil includes Grade No. 2 heating oil, kerosene, and jet fuel.
R=Revised data.
Source: •1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

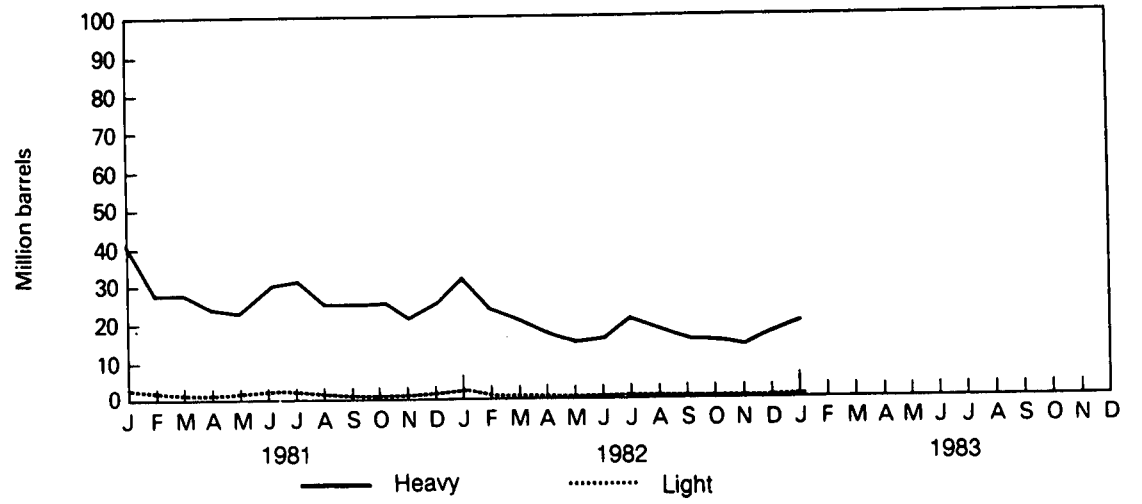
Electric Utilities

Primary Energy Consumed to Produce Electricity

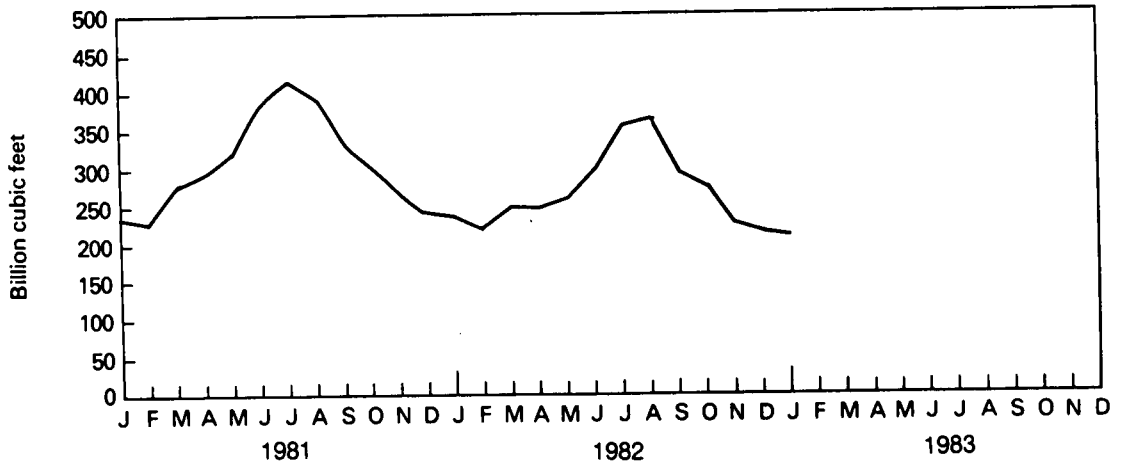
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities[1]

End-of-Month Coal and Petroleum Stocks

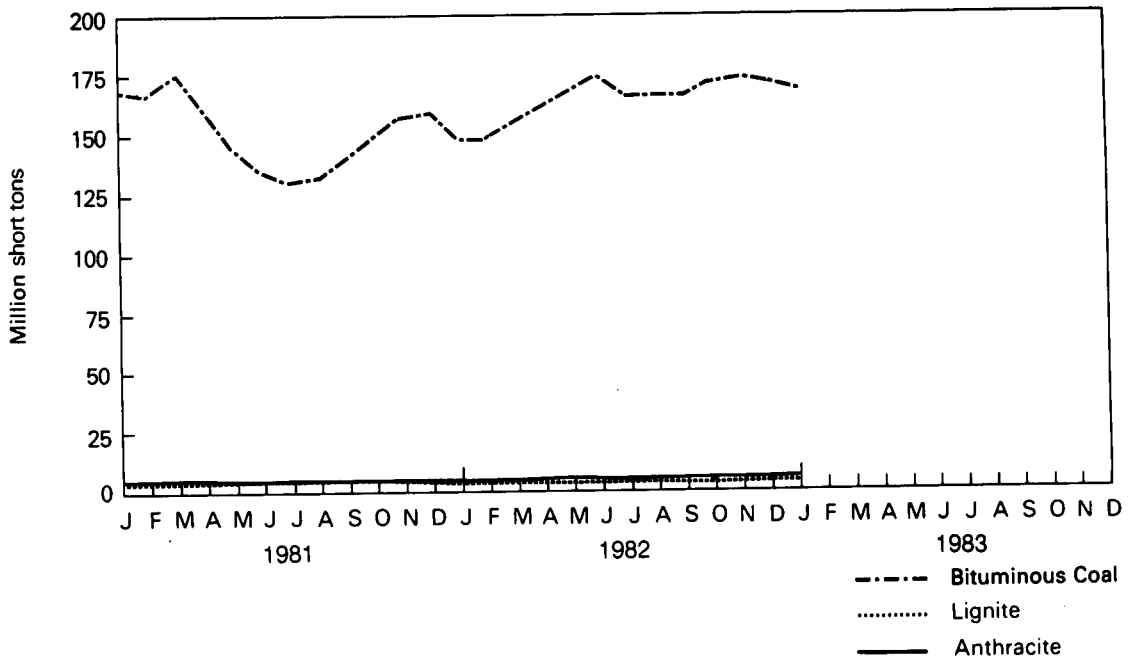
		Coal				Petroleum			
		Anthracite	Bituminous Coal	Lignite	Total	Heavy[2]	Light[3]	Total Liquids	Petroleum Coke
		Thousand short tons				Thousand barrels			Thousand short tons
1973		‡1,066	‡84,941	‡961	‡86,967	‡79,121	‡10,095	‡89,216	‡312
1974		‡930	‡81,712	‡867	‡83,509	‡97,718	‡15,199	‡112,917	‡35
1975		‡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		‡4,741	‡174,154	‡4,115	‡183,010	‡105,351	‡30,023	‡135,374	‡52
1981	January	4,824	167,884	4,267	176,975	99,196	29,535	128,732	51
	February	4,859	166,552	4,304	175,715	101,867	28,328	130,195	52
	March	4,951	174,554	4,478	183,983	100,178	28,732	128,911	52
	April	5,035	159,645	4,541	169,221	97,629	29,024	126,652	R51
	May	5,008	143,500	4,907	153,415	101,574	27,671	129,245	52
	June	5,081	134,321	5,119	144,520	99,398	28,547	127,945	49
	July	5,269	129,684	5,171	140,124	99,603	27,729	127,332	48
	August	5,337	132,072	4,909	142,318	103,104	27,714	130,817	47
	September	5,428	138,808	5,290	149,526	102,104	27,403	129,506	46
	October	5,512	148,952	5,213	159,676	100,008	27,055	127,063	44
	November	5,548	156,360	5,094	167,002	100,301	26,715	127,016	43
	December	5,537	158,258	5,098	168,893	102,042	26,094	128,136	42
1982	January	R5,437	R148,404	4,628	R158,469	R94,609	R26,612	R120,771	39
	February	5,401	148,118	4,617	158,136	R92,622	R25,418	R118,040	40
	March	5,488	154,724	4,305	164,518	R97,706	R25,136	R122,842	43
	April	5,542	161,720	4,128	171,390	R95,984	R24,636	R120,620	42
	May	5,569	167,805	4,088	177,461	R96,607	R24,796	R121,403	41
	June	5,603	172,819	4,092	182,513	R97,959	R24,647	R122,606	43
	July	5,658	R164,688	4,157	R174,503	R96,085	R25,008	R121,093	43
	August	5,791	165,182	4,221	175,194	R96,345	R24,193	R120,538	42
	September	5,896	R165,065	4,264	R175,225	R98,160	R24,225	R122,385	47
	October	5,992	R170,281	R4,298	R180,571	R96,920	R23,595	R120,515	36
	November	6,060	R171,832	4,476	R182,368	R96,618	R23,553	R120,171	42
	December	6,080	R170,480	4,573	R181,132	95,515	R23,369	R118,884	41
1983	January	6,107	167,515	4,210	177,832	95,254	23,942	119,196	54

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Monthly data for 1982 have been revised and finalized.
[2]Prior to 1980, based on oil used in steam plants. Since January 1980, heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils.
[3]Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since January 1980, light oil includes Grade No. 2 heating oil, kerosene, and jet fuel.
‡Total as of December 31. R=Revised data.
Source: •1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; 1982 forward: Energy Informatio Administration Form 759, "Monthly Power Plant Report."

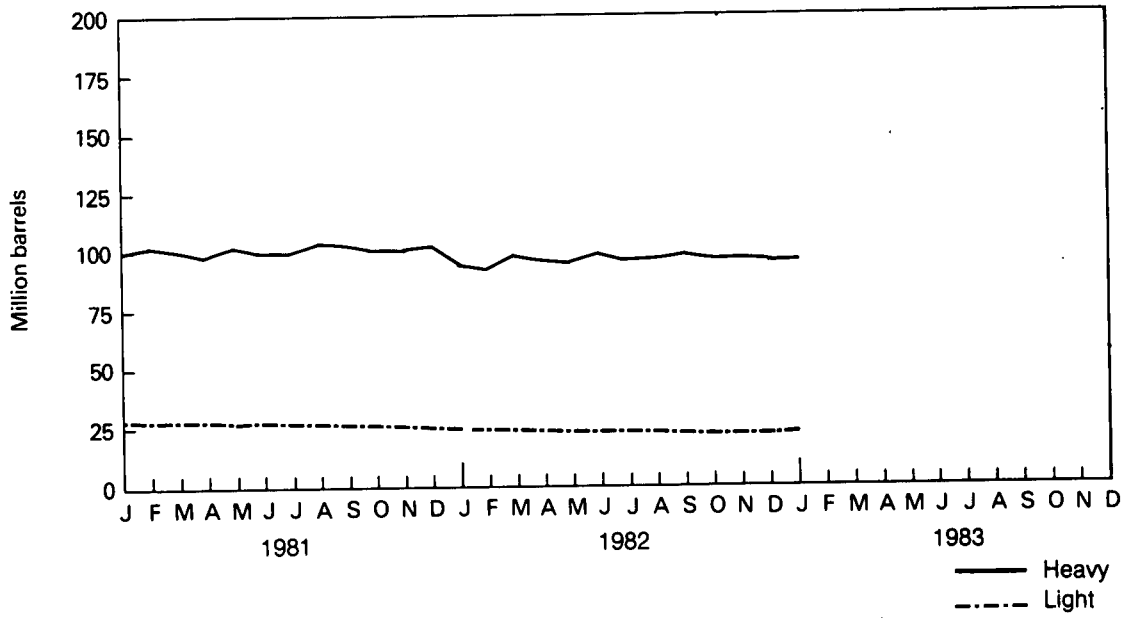
Electric Utilities

End-of-Month Coal and Petroleum Stocks

Coal Stocks (Bituminous Coal, Lignite, and Anthracite)



Petroleum Stocks



Nuclear

During January 1983, U.S. nuclear powerplants generated a total of 25.1 billion net kilowatt-hours (kWh) of electricity, equivalent to a daily output of 809.4 million net kWh. This was 2.9 percent above the average daily generation for December 1982, but 2.3 percent below the comparable output for January 1982. Nuclear power supplied 12.8 percent of the electricity generated by domestic utilities in January 1983.

During 1982, the total U.S. production of electricity generated by nuclear powerplants was 282.8 billion net kWh. This was 10 billion kWh greater than production in 1981, constituting a 3.7-percent increase. In 1982, nuclear powerplants supplied 12.6 percent of domestic electricity consumed, compared to 11.9 percent in 1981.

At the close of 1982, light water reactors supplied 98 percent of U.S. nuclear powerplant capacity, with pressurized water reactors providing 65 percent and boiling water reactors accounting for 33 percent.

On January 21, 1983, Duke Power's 1,180-net megawatt McGuire-1, a pressurized water reactor, was taken offline for modifications to its steam generators.

As of January 31, 1983, there were 79 licensed U.S. power reactors with a combined capacity of 60.2 million net kilowatts. Of these 79 units, 2 were in fuel loading or low-power testing (Grand Gulf-1 and San Onofre-3), 4 were in power ascension (LaSalle-1, San Onofre-2, Summer-1, and Susquehanna-1), and 15 generated no electricity or operated substantially below capacity in January (Arkansas-1, Arkansas-2, Browns Ferry-2, Brunswick-1, Cook-2, Dresden-2, Fort Calhoun, Hatch-1, Indian Point-3, Nine Mile Point-1, North Anna-1, Salem-1, San Onofre-1, Three Mile Island-1, and Turkey Point-4).

As of January 31, the number of nuclear powerplants in all stages of planning, construction, or operation stood at 144 units, with an aggregate design capacity of 135 million net kilowatts.

Correction: The January, February, and March 1983 issues of the *Monthly Energy Review* incorrectly expressed average daily electricity generation in terms of thousand net kWh. The units should have been million net kWh.

Nuclear

Nuclear Powerplant Operations[1]

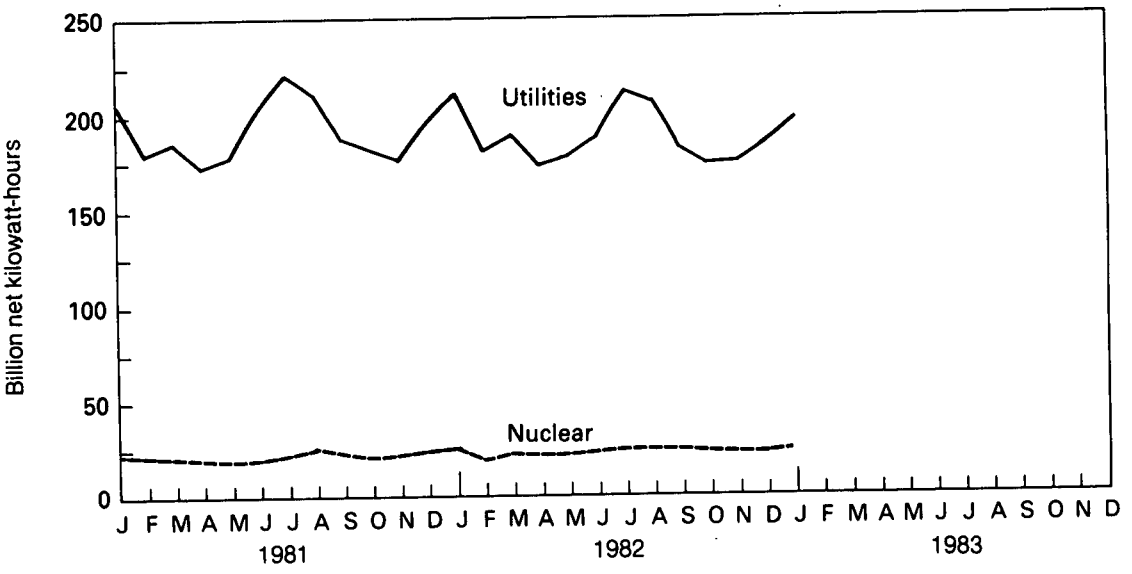
		Reactors Licensed For Operation[2]	Nuclear-Based Electricity Generation	Nuclear Portion of Domestic Electricity Generation	Maximum Dependable Capacity[3]	Capacity Factor[4]
			Million net kilowatt-hours	Percent	Million net kilowatts	Percent
1973		**40**	**83,479**	**4.5**	**19.843**	**63.2**
1974		**55**	**113,976**	**6.1**	**35.732**	**43.5**
1975		**58**	**172,505**	**9.0**	**35.794**	**55.2**
1976		**65**	**191,104**	**9.4**	**44.609**	**53.5**
1977		**68**	**250,883**	**11.8**	**47.155**	**62.9**
1978		**72**	**276,403**	**12.5**	**50.824**	**63.9**
1979		**71**	**255,155**	**11.4**	**50.944**	**57.6**
1980		**72**	**251,116**	**11.0**	**R52.597**	**55.1**
1981	January	73	23,779	11.5	54.374	58.8
	February	73	21,595	12.0	54.372	59.1
	March	73	22,004	11.9	54.429	54.3
	April	73	20,646	12.0	54.095	53.1
	May	73	19,723	11.1	54.074	49.0
	June	74	21,166	10.4	55.214	53.2
	July	74	23,080	10.5	54.998	56.4
	August	74	26,946	12.8	54.820	66.1
	September	75	24,398	13.1	56.974	60.5
	October	75	20,556	11.3	56.412	48.9
	November	74	22,783	13.0	55.328	57.2
	December	74	25,997	13.3	55.524	62.9
	ANNUAL	**74**	**272,674**	**11.9**	**R55.524**	**56.6**
1982	January	74	25,678	12.3	55.471	62.2
	February	75	20,188	11.2	56.608	53.1
	March	75	R22,755	12.1	56.609	54.0
	April	76	21,785	12.6	57.415	52.8
	May	76	21,639	12.2	57.428	50.6
	June	77	24,026	12.9	58.560	57.0
	July	78	25,467	12.1	59.601	57.4
	August	79	24,986	12.1	60.521	55.5
	September	79	25,391	14.1	60.501	58.3
	October	78	23,248	13.4	59.921	52.1
	November	79	23,235	13.4	61.523	52.5
	December	79	24,376	13.2	59.678	54.9
	ANNUAL	**79**	**R282,773**	**12.6**	**R59.678**	**55.0**
1983	January	79	25,090	12.8	60.180	56.0

Geographic coverage: the 50 United States and the 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]See Note 1 on the last page of this section.
[3]In this table, when possible, net maximum dependable capacity (MDC) is used. When a reactor has not been operating long enough to permit determination of an MDC, the net design electrical rating (DER) is used. Starting in January 1980, the derated capacity is used for units that have had a "power limit" imposed by the Nuclear Regulatory Commission or by the operating utility. For the definition of MDC and DER, see Note 2 on the last page of this section.
[4]Average percentage of the net maximum dependable capacity (MDC) utilized yearly or monthly. For the definition of MDC, see Note 2 on the last page of this section.
R=Revised data.
Sources: • See the last page of this section.

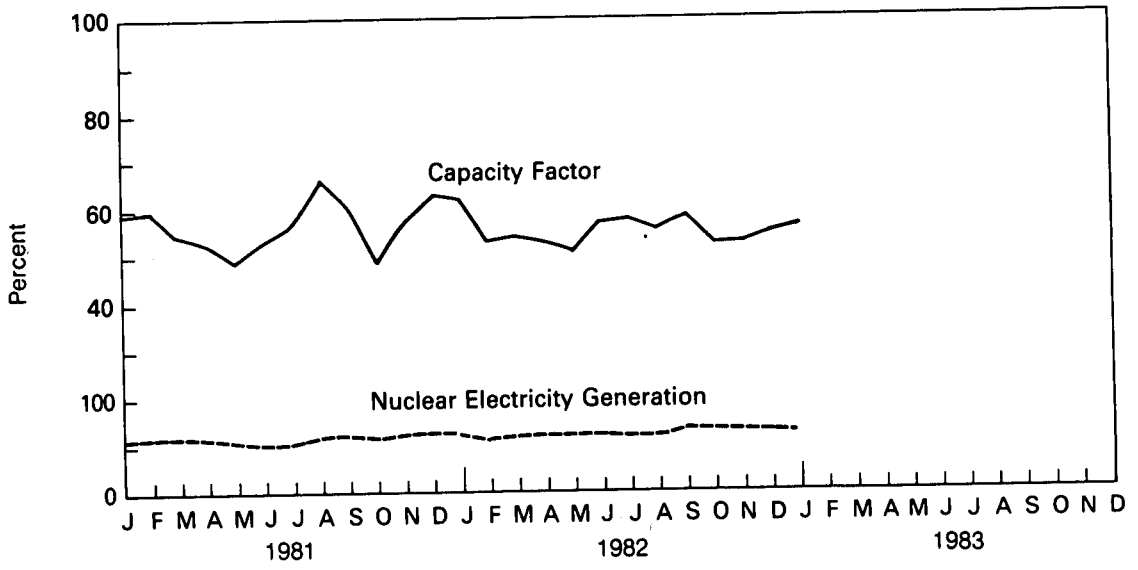
Nuclear

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 Operation[2]	Construction Permits Granted	Construction Permits Pending	Reactor Units on Order	Reactor Units Announced	Total Reactor Units	Total Design Capacity[3] (Million Net Kilowatts)
1973		**40**	**51**	**58**	**48**	**20**	**217**	**212**
1974		**55**	**58**	**80**	**28**	**16**	**235**	**234**
1975		**58**	**69**	**73**	**19**	**19**	**236**	**236**
1976		**65**	**72**	**66**	**16**	**19**	**235**	**236**
1977		**68**	**80**	**52**	**13**	**9**	**221**	**220**
1978		**72**	**90**	**32**	**9**	**4**	**206**	**204**
1979		**71**	**91**	**21**	**3**	**0**	**186**	**180**
1980		**72**	**82**	**12**	**3**	**0**	**169**	**163**
1981	January	73	81	12	3	0	169	163
	February	73	81	12	3	0	169	163
	March	73	81	12	3	0	169	163
	April	73	81	12	3	0	169	163
	May	73	81	12	3	0	169	163
	June	74	80	12	3	0	169	163
	July	74	80	12	3	0	169	163
	August	74	79	12	3	0	169	163
	September	75	78	11	3	0	168	162
	October	75	77	11	3	0	167	161
	November	74	78	11	3	0	166	160
	December	74	75	11	3	0	166	160
1982	January	74	73	11	3	0	163	157
	February	75	72	6	2	0	161	154
	March	75	72	6	2	0	155	147
	April	76	71	6	2	0	155	147
	May	76	71	6	2	0	155	147
	June	77	70	6	2	0	155	147
	July	78	67	6	2	0	155	147
	August	79	64	5	2	0	153	145
	September	79	64	3	2	0	150	141
	October	78	64	3	2	0	148	138
	November	79	60	3	2	0	147	138
	December	79	60	3	2	0	144	135
1983	January	79	60	3	2	0	144	135
							144	135

Geographic coverage: the 50 United States and the 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]See Note 1 on the last page of this section.
[3]Net design electrical rating is used because many of the units in this table have not been operating long enough for a maximum dependable capacity to be determined. See Note 2 on the last page of this section.
Sources: • See the last page of this section.

Notes and Sources for the Nuclear Section

Notes

1. **Reactors Licensed for Operation:** This column includes units that have received Full Power and/or Low Power Licenses from the Nuclear Regulatory Commission (NRC) with two exceptions. Hanford, an 850-net megawatt (MWe) reactor operated by the Department of Energy, is not licensed by the NRC, but it is included because it distributes commercial electricity. The Experimental Breeder Reactor-2, although it is licensed by the NRC and does generate electricity, is not included because it does not distribute the electricity commercially. Three units which had been inoperative for at least nine months prior to January 1980 are deleted from subsequent entries in the tables: Humboldt Bay (capacity=65 MWe), which requires major seismic modifications; Dresden-1 (capacity=200 MWe), which also needs major modifications; and Three Mile Island-2 (capacity=906 MWe), whose core was severely damaged by a loss-of-coolant accident in March 1979. Shippingport (capacity=60 MWe), which was a second reactor operated by the Department of Energy, was officially retired from service on October 1, 1982, and is deleted from subsequent entries in the tables.
2. **Capacity:** Nuclear powerplants may have more than one type of capacity rating, including:
   (a) Gross Maximum Dependable Capacity (MDC)—The gross electrical output measured at the output terminals of the turbine generator(s) during the most restrictive seasonal conditions (usually summer).
   (b) Net Maximum Dependable Capacity (MDC)—The gross MDC less the station service load. The typical station service load for a nuclear plant is about 5 percent of its gross generation.
   (c) Net Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of the unit, specified by the utility and used for plant design.

Sources

Reactors Licensed for Operation: •Nuclear Regulatory Commission Report NUREG-0020, "Licensed Operating Reactors."
Electricity Generation: •1973 through September 1977—Federal Power Commission, Form 4, "Monthly Power Plant Report." •October 1977 through 1981—Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report." •1982 forward—Energy Information Administration, Form EIA-759, "Monthly Power Plant Report."
Maximum Dependable Capacity: •Nuclear Regulatory Commission Report NUREG-0020, "Licensed Operating Reactors."
Capacity Factor: •Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternate Fuels.
Reactor Construction and Planning Data: •1973 through June 1982—Compiled from various sources, primarily the Department of Energy, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones," Nuclear Regulatory Commission Report NUREG-0020,"Licensed Operating Reactors," and from the Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternate Fuels. •July 1982 forward—Nuclear Regulatory Commission Report NUREG-0871, "Summary Information Report," Nuclear Regulatory Commission Report NUREG-0020, "Licensed Operating Reactors," and various trade journals.
Total Design Capacity: •Nuclear Regulatory Commission Report NUREG-0020, "Licensed Operating Reactors" and Nuclear Regulatory Commission Report NUREG-0871, "Summary Information Report."

Price

Crude Oil

The average price of domestic crude oil purchased at the wellhead was $27.22 per barrel in January 1983. This was 3.2 percent below the previous month's level and 11.8 percent below the level in January 1982.

During January 1983, the composite refiner acquisition cost of crude oil was $30.74 per barrel, $0.55 per barrel (1.8 percent) below the previous month's price of $31.29. The price of imported crude oil decreased $1.43 per barrel from the December 1982 level to $31.42 per barrel in January. This price was 11.6 percent below the January 1982 level. The price of domestic crude oil in January 1983 was $30.55, a decrease of $0.25 per barrel from the December 1982 average.

Residual Fuel Oil

The average price, excluding taxes, of No. 6 residual fuel oil sold to utilities, industry, and other ultimate consumers in December 1982 was $28.47 per barrel, $1.37 per barrel (4.6 percent) below the previous month's price and 7.9 percent below the December 1981 average. The average price, excluding taxes, of No. 6 residual fuel oil sold to resellers, bulk plants, jobbers, and other wholesale accounts in December 1982 was $26.81 per barrel, $1.50 per barrel (5.3 percent) below the November 1982 average and 1.7 percent below the December 1981 average.

Heating Oil

The national average price of heating oil sold to residential customers in December 1982 was 119.6 cents per gallon. This was 1.6 percent below the selling price in November 1982 and 2.0 percent below the December 1981 price. The average distributor margin on residential heating oil in December was 22.9 cents per gallon, 25.1 percent above the margin during December 1981. The refiners' national average selling price to resellers and retailers was 89.9 cents per gallon in December 1982, 10.6 percent below the December 1981 average.

Aviation Fuel

The average price, excluding taxes, of kerosene-type jet fuel sold to commercial airlines, Department of Defense, and other ultimate consumers in December 1982 was 95.6 cents per gallon, a decrease of 0.8 percent from the previous month's average and a 6.5-percent decrease from the December 1981 average.

Motor Gasoline

The national average retail price of all grades and all types of motor gasoline was 117.0 cents per gallon in February 1983. Leaded regular gasoline at all types of stations sold for an average of 109.9 cents per gallon in February, 4.7 cents (4.1 percent) lower than the price in January 1983. The price of unleaded regular gasoline at all types of stations was 118.7 cents per gallon in February, 4.1 cents (3.3 percent) lower than the price in January.

Liquefied Petroleum Gases

The average wholesale price of propane during December 1982, excluding taxes, was 49.5 cents per gallon, 7.0 percent below the previous month's level but 8.8 percent above the December 1981 level.

In December 1982, the average wholesale price of butane, excluding taxes, was 72.6 cents per gallon, 4.6 percent below the previous month's price but 31.0 percent above the December 1981 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	**AVERAGE**	**21.59**	**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	34.70	36.97	38.31	37.48	31.78	36.11
	April	34.05	35.58	38.41	36.58	30.56	34.70
	May	32.71	35.21	37.84	36.11	30.41	34.11
	June	31.71	34.20	37.03	35.03	25.95	31.03
	July	31.13	33.76	36.58	34.70	26.52	30.57
	August	31.13	33.79	35.82	34.46	27.01	30.52
	September	31.13	33.47	35.44	34.11	26.20	30.33
	October	31.00	33.48	35.43	34.07	26.78	30.32
	November	30.98	33.49	36.21	34.33	27.99	30.16
	December	30.72	33.51	35.95	34.33	27.26	30.90
	AVERAGE	**31.77**	**34.33**	**37.05**	**35.24**	**28.86**	**32.50**
1982	January	30.87	33.39	35.54	33.95	27.07	29.83
	February	29.76	32.71	35.48	33.40	26.29	30.02
	March	28.31	31.08	34.07	31.81	25.73	29.50
	April	27.65	30.27	32.82	30.83	25.46	28.21
	May	27.67	30.37	32.78	31.02	26.52	28.93
	June	28.11	30.79	33.79	31.74	26.62	29.59
	July	28.33	30.92	33.44	31.74	25.97	29.33
	August	28.18	30.85	32.95	31.45	26.34	28.44
	September	27.99	30.76	33.03	31.40	26.49	28.43
	October	28.74	31.38	33.28	31.98	27.52	29.28
	November	28.70	R31.57	R33.09	R32.07	28.31	29.84
	December	R28.12	R30.80	R32.85	R31.29	R26.81	R28.47
	AVERAGE	**28.52**	**31.22**	**33.55**	**31.87**	**R26.55**	**R29.08**
1983	January†	27.22	30.55	31.42	30.74	NA	NA
	February	NA	NA	NA	NA	NA	NA

Geographic coverage: the 50 United States and the District of Columbia, except for the refiner acquisition cost of crude oil, which is the 50 United States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.
[1]See Note 1 on the last two pages of this section.
[2]See Note 2 on the last two pages of this section.
[3]Wholesale refers to the price of residual fuel oil 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.
See additional footnotes on the following page.

Price

Petroleum Price Summary (continued)

		No. 2 Diesel Price Average[5]		No. 2 Heating Oil Price Average		Gasoline Price Average All Types[6]	Propane Price Average[7]	Butane Price Average[7]
		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	**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	101.3	107.7	105.2	123.9	138.1	49.3	60.1
	May	100.8	106.8	104.0	122.7	137.0	48.6	56.8
	June	99.5	106.6	103.0	120.9	136.2	46.0	52.7
	July	98.8	103.8	102.7	121.0	135.3	46.0	56.5
	August	97.8	105.9	102.2	119.4	134.8	47.2	60.6
	September	97.6	104.8	101.6	119.7	135.8	47.7	64.6
	October	97.4	105.3	101.1	118.8	135.3	47.3	64.7
	November	98.3	105.2	102.3	120.8	135.1	47.5	61.6
	December	98.3	105.1	102.6	122.0	134.8	45.5	55.4
	AVERAGE	**98.5**	**106.2**	**102.6**	**120.5**	**135.3**	**47.2**	**60.4**
1982	January	98.0	105.3	101.5	122.0	134.1	43.1	51.8
	February	94.8	103.2	98.3	120.7	131.8	38.3	48.9
	March	90.2	98.0	91.3	115.3	126.8	35.7	49.6
	April	86.6	96.1	90.0	113.2	121.0	34.9	56.1
	May	89.1	97.6	95.1	114.3	122.4	35.4	65.6
	June	93.5	102.2	98.5	116.2	129.6	36.9	67.9
	July	93.4	101.1	98.6	115.8	131.8	39.7	69.7
	August	92.3	99.3	96.7	115.9	131.0	43.8	72.2
	September	92.4	99.8	97.7	115.2	129.5	49.5	77.4
	October	95.7	102.1	102.0	119.6	128.0	51.0	75.7
	November	97.3	104.5	101.5	121.6	126.8	53.2	76.1
	December	91.2	R100.3	95.9	R119.6	124.4	49.5	R72.6
	AVERAGE	**92.7**	**100.5**	**97.4**	**118.6**	**128.1**	**43.3**	**64.8**
1983	January	NA	NA	NA	NA	121.3	NA	NA
	February	NA	NA	NA	NA	117.0	NA	NA

Footnotes continued.
[5]Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded and unbranded jobbers and commercial accounts. Retail refers to the price at which company-owned and operated retail dealers sell to customers.
[6]Beginning with September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. In the average for all types category, gasohol is now included and unleaded premium is weighted more heavily. See Note 5 on the last two pages of this section for additional information on motor gasoline prices.
[7]Wholesale refers to the price at which refiners, resellers, retailers, and gas plants sell to one another, including sales to agricultural and industrial accounts. Excludes butane/propane mixtures.
†Preliminary data. R=Revised data. NA=Not available.
Sources: • See the last two pages of this section.

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	**AVERAGE**	**36.57**	**32.37**	**(2)**	**36.41**	**31.11**	**35.82**	**28.53**	**NA**	**34.58**	**24.78**
1981	January	39.37	36.54	(2)	40.52	35.88	40.11	32.39	NA	38.34	32.87
	February	40.13	36.13	(2)	40.73	36.57	40.03	32.60	NA	39.41	30.36
	March	40.30	36.40	(2)	40.25	35.60	39.85	32.73	NA	39.50	31.24
	April	39.70	36.38	(2)	40.04	33.81	39.92	32.41	NA	38.85	29.93
	May	39.57	36.09	(2)	38.91	34.45	39.11	32.13	NA	37.16	28.39
	June	39.20	36.95	(2)	39.85	30.30	38.44	32.42	NA	35.84	30.50
	July	38.06	35.47	(2)	38.70	32.72	39.25	32.07	NA	34.89	29.25
	August	39.34	35.61	(2)	39.45	31.23	39.55	31.95	NA	34.38	27.08
	September	39.60	35.82	(2)	36.74	30.37	36.04	32.09	NA	34.44	28.14
	October	36.90	35.08	(2)	36.36	30.83	35.45	33.56	NA	34.87	27.27
	November	36.55	35.53	(2)	37.15	31.80	36.41	33.49	NA	35.97	28.39
	December	37.35	36.08	(2)	36.78	31.29	36.49	33.70	NA	36.46	28.02
	AVERAGE	**39.09**	**35.93**	**(2)**	**39.44**	**33.13**	**38.53**	**32.48**	**NA**	**36.08**	**28.86**
1982	January	36.96	35.53	(2)	35.69	29.67	36.23	33.40	NA	36.20	29.07
	February	35.56	35.59	(2)	34.64	30.92	35.92	33.50	NA	34.00	28.94
	March	31.50	35.74	(2)	34.21	27.86	34.94	33.77	NA	30.78	22.89
	April	30.54	35.69	(2)	(2)	26.96	33.80	33.49	NA	32.49	21.89
	May	33.32	34.82	31.11	(2)	28.53	35.22	32.97	NA	32.43	22.31
	June	34.72	35.95	NA	(2)	28.18	35.18	33.80	NA	33.67	22.25
	July	34.35	35.22	31.44	(2)	28.32	35.15	33.26	NA	33.66	23.50
	August	33.03	35.63	31.17	(2)	27.67	35.13	32.63	NA	33.17	20.71
	September	34.20	35.24	NA	(2)	27.95	34.70	32.98	NA	33.30	23.58
	October	34.26	35.25	NA	(2)	27.82	35.05	33.54	NA	33.93	22.93
	November	34.44	34.99	29.80	(2)	27.63	35.02	33.59	NA	34.08	23.74
	December	R34.86	R34.73	R29.09	(2)	27.63	R33.18	R34.04	NA	R33.21	R26.21
	AVERAGE	**34.23**	**35.27**	**30.93**	**35.12**	**28.07**	**35.13**	**33.50**	**NA**	**33.46**	**23.77**
1983	January†	32.48	34.71	NA	(2)	27.19	NA	NA	NA	32.52	21.61

[1]The Free on Board (FOB) cost excludes all costs related to insurance and transportation. See Note 3 on the last two pages of this section.
[2]No crude oil was imported.
Note: Prices shown through December 1980 are for the month of reporting; prices since then are for the month of loading.
†Preliminary data. R=Revised data. NA=Not available.
Sources: • See the last two pages of this section.

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	**AVERAGE**	**37.90**	**30.47**	**33.92**	**(2)**	**37.72**	**31.80**	**37.05**	**30.02**	**NA**	**35.88**	**25.86**
1981	January	41.25	34.26	38.08	(2)	41.81	36.81	41.55	34.06	NA	39.90	33.80
	February	41.90	33.73	37.86	(2)	42.19	37.23	41.46	34.38	NA	40.69	31.20
	March	41.62	33.88	38.11	(2)	41.60	36.42	40.98	34.42	NA	40.72	32.09
	April	40.96	33.74	37.95	(2)	41.58	34.42	41.04	34.16	NA	40.02	30.97
	May	40.81	32.70	37.72	(2)	40.46	34.83	40.10	33.73	NA	38.31	29.39
	June	40.31	32.67	38.73	(2)	41.44	31.03	39.60	34.29	NA	37.04	31.46
	July	39.59	31.19	37.20	(2)	40.27	33.18	40.05	33.72	NA	35.87	29.22
	August	40.65	30.44	37.07	(2)	40.30	31.77	40.85	33.23	NA	35.40	28.11
	September	41.62	30.83	37.52	(2)	37.73	30.84	37.20	33.66	NA	35.26	29.12
	October	37.52	31.17	36.39	(2)	38.15	31.34	36.64	34.88	NA	36.00	28.27
	November	37.43	31.04	36.84	(2)	38.50	32.42	37.59	34.91	NA	36.87	29.27
	December	38.14	31.37	37.31	(2)	38.89	31.85	37.52	35.37	NA	37.44	29.00
	AVERAGE	**40.49**	**32.16**	**37.57**	**(2)**	**40.92**	**33.78**	**39.70**	**34.19**	**NA**	**37.24**	**29.87**
1982	January	38.19	31.05	36.88	(2)	36.91	30.21	37.37	34.44	NA	36.78	29.82
	February	37.09	28.80	36.81	(2)	35.28	31.47	37.06	34.51	NA	35.04	30.09
	March	32.25	26.71	37.17	(2)	34.80	28.69	35.81	34.92	NA	31.35	23.92
	April	31.66	24.86	36.87	(2)	(2)	27.58	34.82	34.80	NA	33.19	23.09
	May	34.24	24.90	36.50	32.01	(2)	29.18	36.06	34.28	NA	33.22	23.44
	June	35.41	24.63	37.35	NA	(2)	28.76	36.15	35.20	NA	34.41	23.43
	July	35.26	26.62	37.04	32.08	(2)	28.95	36.19	35.04	NA	34.67	24.61
	August	33.87	26.40	36.81	31.84	(2)	28.19	36.16	34.28	NA	33.88	21.90
	September	34.88	26.52	36.65	NA	(2)	28.50	35.56	34.45	NA	34.01	24.53
	October	35.41	26.91	36.83	33.28	(2)	28.22	35.98	35.21	NA	34.56	23.90
	November	35.82	26.78	36.49	32.66	(2)	28.17	36.04	35.41	NA	34.74	24.91
	December	R35.70	R27.35	R36.19	R32.73	(2)	R28.19	R34.54	36.43	NA	R34.05	R27.09
	AVERAGE	**35.28**	**26.92**	**36.75**	**32.40**	**36.05**	**28.64**	**36.17**	**35.00**	**NA**	**34.28**	**24.82**
1982	January†	33.20	27.91	36.12	NA	(2)	27.69	NA	NA	NA	33.30	23.04

[1]See Note 4 on the last two pages of this section.
[2]No crude oil was imported.
Note: Prices shown through December 1980 are for the month of reporting; prices since then are for the month of loading.
†Preliminary data. R=Revised data. NA=Not available.
Sources: • See the last two pages of this section.

Price

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

		Leaded Regular	Unleaded Regular	Leaded Premium	Average for All Types
		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	**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
	August	131.0	137.6	144.4	134.8
	September[2]	130.5	137.6	145.6	135.8
	October	129.9	137.1	145.7	135.3
	November	129.7	136.9	146.2	135.1
	December	129.3	136.5	146.0	134.8
	AVERAGE	**131.1**	**137.8**	**143.9**	**135.3**
1982	January	128.5	135.8	145.6	134.1
	February	126.0	133.4	143.8	131.8
	March	120.6	128.4	140.7	126.8
	April	114.8	122.5	136.8	121.0
	May	116.6	123.7	137.9	122.4
	June	124.2	130.9	140.8	129.6
	July	126.3	133.1	145.0	131.8
	August	125.4	132.3	145.8	131.0
	September	123.6	130.8	144.1	129.5
	October	121.9	129.5	141.3	128.0
	November	120.7	128.3	141.2	126.8
	December	118.1	126.0	137.1	124.4
	AVERAGE	**122.2**	**129.6**	**141.7**	**128.1**
1983	January	114.6	122.8	135.3	121.3
	February	109.9	118.7	131.8	117.0

Geographic coverage: 1974 through 1977—56 urban areas; 1978 forward—85 urban areas.
[1]See Note 5 on the last two pages of this section.
[2]Beginning with September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. In the average for all types category, gasohol is now included and unleaded premium is weighted more heavily.
NA=Not available.
Sources: • See the last two pages of this section.

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	**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	103.8	106.4
	May	120.7	133.5	109.1	104.4	106.2
	June	116.5	132.1	107.6	102.3	104.8
	July	120.1	133.4	106.3	100.5	103.8
	August	120.0	132.5	105.7	101.4	103.3
	September	121.0	133.5	105.6	103.0	103.3
	October	117.2	134.5	104.8	99.9	101.1
	November	114.4	133.2	104.5	101.9	102.6
	December	116.8	131.9	103.8	101.9	102.2
	AVERAGE	**118.8**	**131.5**	**105.7**	**102.0**	**103.1**
1982	January	122.4	133.2	101.7	101.3	101.6
	February	122.0	134.0	101.3	100.0	101.0
	March	117.0	134.8	98.4	97.6	99.6
	April	113.4	132.7	96.0	93.0	96.8
	May	109.6	132.7	94.1	91.7	95.5
	June	114.7	132.5	98.4	94.1	95.3
	July	120.4	134.4	98.7	94.3	95.3
	August	117.7	132.6	97.3	95.0	95.4
	September	115.7	130.0	98.2	95.5	95.1
	October	116.6	131.5	98.5	98.4	95.8
	November	118.4	131.7	96.4	98.2	96.4
	December	119.6	R130.3	94.0	R93.7	95.6
	AVERAGE	**116.7**	**132.4**	**97.7**	**96.1**	**96.9**

Geographic coverage: the 50 United States and the 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.
R=Revised data.
Sources: • See the last two pages of this section.

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	**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	100.7	104.0	17.6	122.7
	June	99.3	103.0	16.9	120.9
	July	98.5	102.7	17.1	121.0
	August	98.2	102.2	16.2	119.4
	September	97.8	101.6	17.2	119.7
	October	98.0	101.1	16.6	118.8
	November	100.0	102.3	17.6	120.8
	December	100.6	102.6	18.3	122.0
	AVERAGE	**99.3**	**102.6**	**16.8**	**120.5**
1982	January	99.1	101.5	19.3	122.0
	February	94.7	98.3	21.3	120.7
	March	87.4	91.3	22.6	115.3
	April	86.0	90.0	22.0	113.2
	May	91.2	95.1	18.4	114.3
	June	95.4	98.5	16.9	116.2
	July	93.8	98.6	16.3	115.8
	August	92.5	96.7	18.2	115.9
	September	93.3	97.7	16.3	115.2
	October	98.8	102.0	16.7	119.6
	November	99.2	101.5	19.0	121.6
	December	R89.9	95.9	22.9	R119.6
	AVERAGE	**93.2**	**97.4**	**20.2**	**118.6**

Geographic coverage: the 50 United States and the District of Columbia.
[1]See Note 6 on the last two pages of this section.
[2]Average selling prices purchase prices, and dealer margins represent sales for residential heating oil only.
R = Revised data.
Sources: • See the last two pages of this section.

Price

Residential Heating Oil Prices by Region

		Standard Federal Region[1]									
		Cents per gallon									
		1	2	3	4	5	6	7	8	9	10
1980	January	91.8	91.0	90.2	88.6	90.4	(2)	90.0	90.2	89.6	91.0
	February	96.7	95.3	94.7	93.0	93.5	(2)	93.6	93.5	95.8	95.7
	March	98.7	97.2	96.5	94.8	94.3	(2)	95.1	95.9	93.9	97.6
	April	99.2	97.3	96.6	94.1	94.5	(2)	95.3	99.5	94.7	99.0
	May	98.7	97.3	96.4	94.2	95.8	(2)	95.2	97.7	95.5	98.6
	June	99.8	97.9	96.8	95.1	95.8	(2)	95.3	98.4	96.0	99.8
	July	100.3	98.1	96.6	94.2	96.2	(2)	93.1	97.0	96.7	100.2
	August	100.2	97.9	96.8	94.8	95.7	(2)	95.4	92.1	99.7	100.4
	September	100.5	98.2	97.0	94.7	95.7	(2)	93.7	93.0	97.2	100.6
	October	101.1	98.8	97.4	95.6	95.9	(2)	94.7	94.1	98.6	100.4
	November	102.5	103.0	99.9	101.5	98.8	(2)	95.2	98.5	101.0	103.1
	December	108.2	108.5	105.3	106.6	103.4	(2)	99.6	101.8	(2)	105.6
1981	January	116.2	117.1	113.2	114.0	110.4	(2)	106.3	108.6	(2)	107.5
	February	125.8	126.6	123.0	124.4	117.8	(2)	114.2	113.1	(2)	113.7
	March	127.6	128.4	125.0	125.3	119.3	(2)	115.4	119.3	111.5	116.5
	April	126.8	126.6	122.7	124.8	118.3	(2)	114.7	118.4	(2)	117.5
	May	125.5	125.6	122.1	118.8	117.3	(2)	114.5	115.1	114.1	115.6
	June	124.1	123.6	121.1	115.9	116.5	(2)	112.5	116.0	(2)	117.1
	July	123.3	122.9	120.6	120.2	116.0	(2)	115.9	116.2	(2)	118.3
	August	122.7	122.2	117.9	117.4	115.1	(2)	112.1	116.9	(2)	117.7
	September	122.7	121.4	118.5	120.5	116.2	(2)	111.6	116.8	(2)	117.8
	October	122.5	122.0	115.3	117.6	116.3	(2)	112.0	115.8	(2)	118.2
	November	123.3	123.2	119.5	118.2	116.7	(2)	114.1	115.8	(2)	118.8
	December	124.8	124.7	120.7	119.0	117.4	(2)	112.4	117.1	(2)	120.0
1982	January	125.3	124.7	120.6	118.7	117.1	(2)	112.7	116.1	(2)	119.7
	February	123.2	123.7	119.3	115.3	116.0	(2)	110.9	114.9	(2)	119.5
	March	117.4	119.0	112.3	112.9	111.0	(2)	106.4	109.7	(2)	118.1
	April	113.9	116.6	112.2	109.4	108.7	(2)	100.8	106.3	(2)	116.0
	May	115.9	117.1	113.2	111.7	110.8	(2)	108.7	108.4	(2)	116.6
	June	117.5	118.5	115.2	113.5	114.4	(2)	111.8	112.3	(2)	116.0
	July	117.7	118.5	113.4	115.2	113.6	(2)	111.7	(2)	(2)	115.9
	August	118.6	118.8	113.9	112.4	111.9	(2)	(2)	(2)	(2)	116.3
	September	119.4	119.3	(2)	115.0	112.4	(2)	(2)	114.2	(2)	116.2
	October	122.3	122.4	118.5	117.3	114.8	(2)	110.5	113.1	(2)	117.4
	November	124.2	124.7	120.1	118.4	115.9	(2)	110.2	114.7	(2)	118.9
	December	R122.2	R122.9	R117.8	114.1	R113.0	(2)	107.3	R112.0	(2)	R118.6

[1]Standard Federal Regions are defined in Note 7 on the last two pages of this section.
[2]Not available for publication.
R=Revised data.
Sources: • See the last two pages of this section.

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	**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	35.94	28.35	30.56	30.56	34.70
	May	33.61	41.09	32.53	35.94	28.77	30.64	30.41	34.11
	June	28.01	38.30	26.71	32.38	25.33	27.16	25.95	31.03
	July	29.56	39.02	27.38	31.93	25.62	25.96	26.52	30.57
	August	30.48	36.57	27.77	32.04	26.03	26.20	27.01	30.52
	September	29.91	39.17	27.46	32.08	24.80	26.26	26.20	30.33
	October	30.26	39.90	28.64	31.88	24.96	26.18	26.78	30.32
	November	31.71	39.48	29.63	31.02	26.09	26.45	27.99	30.16
	December	31.40	37.65	28.29	32.19	25.39	26.53	27.26	30.90
	AVERAGE	**32.97**	**39.31**	**30.56**	**33.69**	**27.07**	**28.57**	**28.86**	**32.50**
1982	January	33.03	37.56	28.90	31.13	24.60	25.94	27.07	29.83
	February	31.67	38.41	29.30	30.95	23.60	24.70	26.29	30.02
	March	30.95	38.96	27.60	30.57	23.45	24.21	25.73	29.50
	April	30.11	36.77	27.08	30.00	23.57	24.40	25.46	28.21
	May	30.38	37.97	27.89	30.05	25.15	25.94	26.52	28.93
	June	27.98	38.93	28.26	30.89	25.35	26.56	26.62	29.59
	July	30.05	37.46	27.39	29.84	24.19	26.49	25.97	29.33
	August	28.86	31.82	27.50	30.37	25.40	26.02	26.34	28.44
	September	30.22	32.41	27.73	30.45	25.21	25.93	26.49	28.43
	October	31.98	33.51	29.51	32.24	25.72	26.59	27.52	29.28
	November	32.28	34.14	29.44	32.24	26.30	26.99	28.31	29.84
	December	R31.31	32.59	R28.19	R30.25	R25.16	R26.22	R26.81	R28.47
	AVERAGE	**R30.92**	**36.34**	**28.27**	**30.71**	**R24.76**	**25.82**	**R26.55**	**R29.08**

Geographic coverage: the 50 United States and the 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.
R=Revised data.
Sources: • See the last two pages of this section.

Price

Natural Gas

		Average Wellhead Value	Delivered to Electric Plants[1]	Average Residential Heating
		Dollars per thousand cubic feet		
1973	**AVERAGE**	**0.22**	**0.35**	**1.08**
1974	**AVERAGE**	**0.30**	**0.49**	**1.25**
1975	**AVERAGE**	**0.45**	**0.77**	**1.54**
1976	**AVERAGE**	**0.58**	**1.06**	**1.85**
1977	**AVERAGE**	**0.79**	**1.33**	**2.26**
1978	**AVERAGE**	**0.91**	**1.48**	**2.63**
1979	**AVERAGE**	**1.18**	**1.80**	**3.23**
1980	**AVERAGE**	**1.59**	**2.28**	**3.95**
1981	January	1.77	2.51	4.10
	February	1.81	2.67	4.13
	March	1.86	2.71	4.21
	April	1.93	2.81	4.25
	May	1.95	2.92	4.61
	June	1.95	2.95	4.61
	July	2.01	2.97	4.64
	August	2.02	2.99	4.70
	September	2.08	2.95	4.90
	October	2.11	3.07	4.91
	November	2.15	3.07	4.88
	December	2.16	2.97	4.75
	AVERAGE	**1.98**	**2.91**	**4.56**
1982	January	2.21	3.07	4.86
	February	2.23	3.18	4.87
	March	2.31	3.25	5.06
	April	2.35	3.32	5.18
	May	2.41	3.42	5.63
	June	2.44	3.57	5.62
	July	2.45	3.69	5.60
	August	R2.51	3.67	5.56
	September	2.52	3.67	5.82
	October	R2.53	3.68	6.11
	November	R2.55	3.61	5.94
	December	2.56	3.64	6.06
	AVERAGE	**2.41**	**3.49**	**5.53**

Geographic coverage: the 50 United States and the District of Columbia.
[1]Includes all electric utility generating plants with a combined capacity of 25 megawatts or greater. Small quantities of coke oven gas, refinery gas, and blast furnace gas are included.
R = Revised data.
Sources: • See the last two pages of this section.

Price

Electricity

		Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants				Average Retail Electricity Prices for Privately Owned Utilities[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	**AVERAGE**	**135.1**	**427.9**	**221.4**	**190.4**	**5.36**	**5.48**	**3.69**	**4.76**	**4.73**
1981	January	142.7	540.2	245.9	219.2	5.43	5.72	3.94	4.92	4.96
	February	146.3	572.9	260.5	218.2	5.52	5.83	3.95	5.01	4.99
	March	148.3	583.9	264.0	215.0	5.76	6.01	4.04	5.33	5.12
	April	146.9	568.3	273.5	241.9	5.99	6.14	4.07	5.20	5.20
	May	146.7	552.8	282.7	250.6	6.26	6.29	4.16	5.47	5.36
	June	152.7	506.1	286.3	234.6	6.49	6.48	4.36	5.37	5.59
	July	156.5	496.3	288.6	227.5	6.58	6.47	4.48	5.61	5.76
	August	157.0	494.4	291.1	220.2	6.62	6.49	4.49	5.52	5.78
	September	157.2	501.0	286.5	212.3	6.63	6.48	4.49	5.65	5.74
	October	160.2	511.9	300.7	217.7	6.57	6.52	4.40	5.31	5.64
	November	159.1	521.0	300.0	215.1	6.42	6.48	4.46	5.43	5.61
	December	156.7	505.0	291.4	215.5	6.32	6.46	4.56	[5]4.60	5.65
	AVERAGE	**153.2**	**529.4**	**282.5**	**222.5**	**6.20**	**6.29**	**4.29**	**5.28**	**5.46**
1982	January	160.8	484.6	301.0	226.5	6.22	6.49	4.66	5.44	5.74
	February	164.1	487.6	310.4	222.2	6.35	6.68	4.70	5.84	5.84
	March	165.6	470.9	315.8	219.8	6.58	6.79	4.83	6.39	5.97
	April	164.6	478.0	323.5	214.3	6.72	6.82	4.84	5.77	5.99
	May	165.0	486.0	331.6	215.7	6.94	6.86	4.95	5.91	6.09
	June	167.0	479.6	345.8	224.7	7.08	6.94	4.92	6.01	6.18
	July	164.4	468.8	356.2	237.6	7.18	6.98	5.12	6.13	6.38
	August	164.7	458.8	355.7	227.6	7.22	6.91	5.14	6.09	6.40
	September	165.9	464.4	358.5	226.9	7.18	6.97	5.25	6.07	6.41
	October	164.7	479.3	360.4	219.9	7.21	7.09	5.09	5.81	6.33
	November	165.2	489.6	351.5	217.9	6.94	7.04	4.88	5.69	6.14
	December	162.8	453.6	355.6	216.5	6.71	6.78	5.01	5.85	6.11
	AVERAGE	**164.6**	**475.1**	**340.7**	**222.4**	**6.86**	**6.86**	**4.95**	**5.92**	**6.13**
1983	January†	NA	NA	NA	NA	6.65	6.78	5.03	5.91	6.13

Geographic coverage: Fossil Fuels—the lower 48 States and the District of Columbia. Electricity—the 50 United States and the District of Columbia.
[1]The 1973 through 1979 data are for Classes A and B privately owned electric utilities only. The 1980 and forward data are for selected Class A utilities whose electric operating revenues were $100 million or more during the previous year.
[2]See Note 8 on the last two pages of this section.
[3]Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.
[4]Average price for total sales to ultimate consumers.
[5]Includes a major adjustment by one utility.
†Preliminary data. NA=Not available.
Sources: • See the last two pages of this section.

Notes and Sources for the Price Section

Notes

1. 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.
2. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on EIA Form 14, the "Refiners' Monthly Cost Report." These prices were previously published from data collected on ERA Form 49, the "Domestic Crude Oil Entitlements Program Refiners Monthly Report." The ERA Form 49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for EIA Form 14 in accordance with conventions used for ERA Form 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 ERA Form 49. The revised costs are from data collected on EIA Form 14. The January prices are being replaced because the EIA Form 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 ERA Form 51, the "Transfer Pricing Report," or any crude oil that is not domestic oil.

Crude oil costs and volumes reported on ERA Form 49 excluded unfinished oils but included the 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 ERA Form 49 exclude oil purchased for SPR, whereas the composite averages derived from ERA Form 49 include SPR. None of the prices derived from EIA Form 14 include either unfinished oils or SPR.
3. 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.
4. 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 that 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.
5. The motor gasoline prices are calculated monthly by the Bureau of Labor Statistics 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 were 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).
6. 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.
7. Standard Federal 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, the 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.
8. Residual fuel oil prices include fuel oils No. 4, No. 5, and No. 6, and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (No. 2 fuel oil, kerosene, and jet fuel) prices.

Sources

Petroleum and Petroleum Products: • Actual domestic average wellhead prices—Economic Regulatory Administration (ERA), January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report"; February 1976 forward: ERA Form 182, "Domestic Crude Oil First Purchase Report."
• Refiner acquisition costs—Energy Information Administration (EIA), January 1976: FEO Form 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: EIA Form 14, "Refiners' Monthly Cost Report."
• No. 6 residual oil prices—EIA, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."
• No. 2 diesel prices—EIA, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

(Notes and Sources for the Price Section are continued on the next page.)

Notes and Sources for the Price Section (continued)

Petroleum and Petroleum Products (continued):
• No. 2 heating oil (residential heating oil) prices-EIA, 1976 through October 1980: FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report" and EIA Form 9A, "No. 2 Distillate Price Monitoring Report"; November 1980 forward: EIA Form 9A, "No. 2 Distillate Price Monitoring Report."
• Motor gasoline prices—Bureau of Labor Statistics.
• Propane and butane prices—EIA, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."
• Crude oil imports costs—Environmental Protection, Safety and Emergency Preparedness, 1975 through January 1979: FEA Form F701-M-0, "Transfer Pricing Report"; February 1979 forward: ERA Form 51, "Transfer Pricing Report."
• Aviation fuel prices—EIA, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."
Natural Gas: • Annual data for wellhead values are from the appropriate agencies of the individual producing States and the U.S. Minerals Management Service; monthly data are estimated primarily on the basis of values reported by State agencies in New Mexico, Oklahoma, and Texas, which together provide data for almost 50 percent of total U.S. marketed production excluding nonhydrocarbon gases removed. Monthly data for 1980 and 1981 have been adjusted to conform with final reported annual data.
• Electric plant data—Energy Information Administration (EIA), FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."
• Average residential heating prices—Bureau of Labor Statistics.
Electricity: • Cost of fossil fuels—EIA, FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."
• Retail prices—1973 through 1976: Federal Power Commission (FPC), Form 5, "Monthly Statement of Electric Operating Revenue and Income"; 1977 through February 1980: EIA, FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 through December 1982: EIA, FERC Form 5, "Electric Utility Company Monthly Statement"; January 1983 forward: EIA, EIA Form 826, "Electric Utility Company Monthly Statement."

International

Crude Oil Production

World crude oil production during December 1982 was 54.5 million barrels per day, down 0.4 million barrels per day (0.6 percent) from the November 1982 level.

Preliminary crude oil production for the year 1982 was 53.2 million barrels per day, down 4.7 percent from 1981. Organization of Petroleum Exporting Countries (OPEC) output during December 1982 averaged 19.0 million barrels per day, a decrease of 0.4 million barrels per day from the previous month. Average annual production by OPEC was 18.8 million barrels per day, down 3.8 million barrels per day from the 1981 annual average. A major portion of this decrease in annual OPEC production occurred in Saudi Arabia, where production declined 3.3 million barrels per day. Other significant decreases occurred in Kuwait, the United Arab Emirates, and Indonesia, where production decreased by 0.3 million barrels per day in each country.

Among non-OPEC nations, annual crude oil production in 1982 increased in Mexico, the United Kingdom, and the United States by 0.4, 0.3, and 0.1 million barrels per day, respectively.

Petroleum Consumption

Preliminary petroleum consumption data for December 1982 were available for France, Italy, the United Kingdom, and the United States. The level of consumption in the United Kingdom was the same as the level in December 1981; consumption in the other three countries in December 1982 declined from the level of December 1981. U.S. consumption in December 1982 was 1.1 million barrels per day lower than in December 1981.

Petroleum Stocks

Preliminary data on petroleum stocks for December 1982 were available for Canada, Italy, Japan, the United Kingdom, the United States, and West Germany. Petroleum stocks in Italy and Japan were up from the level at the end of December 1981 by 1.8 and 2.6 percent, respectively. In contrast, stocks in Canada and the United Kingdom were down 15.9 and 14.5 percent, respectively, during the same interval. Stock levels at the end of 1982 also declined in West Germany, by 7.4 percent, and in the United States, by 3.7 percent, from the levels at the end of 1981. Petroleum stocks for all Organization for Economic Cooperation and Development members stood at 3,350 million barrels at the end of September 1982 (latest data available), a decrease of 277 million barrels (7.6 percent) from stocks held at the end of September 1981. The United States held 1,415 million barrels (42.2 percent) of the September 1982 stocks.

Nuclear Electricity Production

In January 1983, the 19 non-Communist nations with significant nuclear power capacity generated 77.3 billion gross kilowatt-hours of nuclear-based electricity, the highest monthly generation on record. On a per-day basis, this generation was up 3.0 percent from December 1982 output and up 8.0 percent compared to generation during January 1982.

As of January 1, 1983, light water reactors supplied 86 percent of nuclear powerplant gross capacity in non-Communist countries, with pressurized water reactors contributing 58 percent of the total and boiling water reactors supplying 28 percent.

Italy's Trino unit, a 270-gross megawatt pressurized water reactor, was deleted from the list of operable reactors because it had been out of operation since June 1979. Deletion of Trino lowered the number of operational, non-Communist power reactors to 235 units, with a collective generating capacity of 160.7 million gross kilowatts (GWe). The 79 U.S. units accounted for 66.6 GWe (41 percent) of this capacity.

International

Crude Oil Production for Major Petroleum Producing 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**	**1,097**	**2,018**	**3,020**	**2,175**	**570**	**7,596**	**1,533**	**18,009**	**1,339**	**5,861**
1974	**AVERAGE**	**1,009**	**1,971**	**2,546**	**1,521**	**518**	**8,480**	**1,679**	**17,724**	**1,375**	**6,022**
1975	**AVERAGE**	**983**	**2,262**	**2,084**	**1,480**	**438**	**7,075**	**1,664**	**15,986**	**1,307**	**5,350**
1976	**AVERAGE**	**1,075**	**2,415**	**2,145**	**1,933**	**497**	**8,577**	**1,936**	**18,578**	**1,504**	**5,883**
1977	**AVERAGE**	**1,152**	**2,348**	**1,969**	**2,063**	**445**	**9,245**	**1,999**	**19,221**	**1,686**	**5,663**
1978	**AVERAGE**	**1,161**	**2,563**	**2,131**	**1,983**	**487**	**8,301**	**1,831**	**18,457**	**1,635**	**5,242**
1979	**AVERAGE**	**1,154**	**3,477**	**2,500**	**2,092**	**508**	**9,532**	**1,831**	**21,094**	**1,591**	**3,168**
1980	**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	1,400	435	10,140	1,550	16,415	1,600	1,500
	June	800	1,000	1,080	1,200	340	10,180	1,435	16,035	1,600	1,600
	July	725	1,100	1,200	750	380	10,170	1,415	15,740	1,600	1,400
	August	600	1,100	830	700	295	10,330	1,480	15,335	1,600	1,100
	September	550	1,100	855	700	365	9,155	1,465	14,190	1,600	1,100
	October	700	1,100	985	700	360	9,685	1,480	15,010	1,600	920
	November	750	1,100	890	900	340	8,640	1,365	13,985	1,600	930
	December	800	1,100	895	1,000	340	8,645	1,430	14,210	1,580	1,200
	AVERAGE	**805**	**1,000**	**1,125**	**1,140**	**405**	**9,815**	**1,474**	**15,764**	**1,605**	**1,380**
1982	January	800	1,500	805	1,000	405	8,655	1,450	14,615	1,490	1,100
	February	700	1,500	840	600	375	8,440	1,375	13,830	1,450	1,200
	March	600	1,500	745	600	300	7,145	1,365	12,255	1,400	1,800
	April	600	900	680	700	230	6,630	1,215	10,955	1,245	1,800
	May	620	750	720	800	320	5,870	1,125	10,205	1,240	2,500
	June	650	750	840	1,000	410	6,670	1,210	11,530	1,305	2,500
	July	650	800	870	1,300	275	6,170	1,160	11,225	1,305	2,500
	August	700	800	920	1,300	340	5,920	1,155	11,135	1,240	2,200
	September	800	800	885	1,400	285	5,685	1,155	11,010	1,300	2,700
	October	800	800	860	1,700	380	5,660	1,155	11,355	1,370	2,700
	November	800	800	915	1,700	310	5,615	1,155	11,295	1,400	2,700
	December	800	800	850	1,750	305	5,250	1,155	10,910	1,360	2,800
	AVERAGE	**710**	**972**	**827**	**1,158**	**328**	**6,470**	**1,214**	**11,679**	**1,339**	**2,214**

U.S. geographic coverage: the 50 United States and the District of Columbia.
Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available.
[1]Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In December 1982, total production in this region amounted to approximately 300,000 barrels per day.
[2]Arab members of the Organization of Petroleum Exporting Countries (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 Producing Countries (continued)

		Nigeria	Vene-zuela	Total OPEC[3]	Canada	Mexico	United Kingdom	United States	China	USSR	Other[4]	World
						Thousand barrels per day						
1973	**AVERAGE**	**2,054**	**3,366**	**30,989**	**1,800**	**465**	**2**	**9,208**	**1,090**	**8,465**	**3,655**	**55,674**
1974	**AVERAGE**	**2,255**	**2,976**	**30,729**	**1,684**	**571**	**2**	**8,774**	**1,315**	**9,000**	**3,777**	**55,852**
1975	**AVERAGE**	**1,783**	**2,346**	**27,155**	**1,439**	**705**	**12**	**8,375**	**1,490**	**9,625**	**4,079**	**52,880**
1976	**AVERAGE**	**2,067**	**2,294**	**30,738**	**1,295**	**831**	**245**	**8,132**	**1,670**	**10,143**	**4,258**	**57,312**
1977	**AVERAGE**	**2,085**	**2,238**	**31,278**	**1,320**	**981**	**768**	**8,245**	**1,874**	**10,682**	**4,537**	**59,685**
1978	**AVERAGE**	**1,897**	**2,166**	**29,805**	**1,313**	**1,209**	**1,082**	**8,707**	**2,082**	**11,185**	**4,674**	**60,057**
1979	**AVERAGE**	**2,302**	**2,356**	**30,928**	**1,496**	**1,461**	**1,568**	**8,552**	**2,122**	**11,460**	**4,948**	**62,535**
1980	**AVERAGE**	**2,055**	**2,168**	**26,890**	**1,435**	**1,936**	**1,622**	**8,597**	**2,114**	**11,773**	**5,171**	**59,538**
1981	January	1,900	2,220	25,025	1,390	2,220	1,765	8,540	2,024	11,900	5,111	57,975
	February	1,960	2,195	25,075	1,390	2,120	1,820	8,604	2,025	11,900	5,161	58,095
	March	1,875	2,240	25,190	1,280	2,365	1,885	8,613	2,025	11,900	5,152	58,410
	April	1,625	2,200	24,215	1,330	2,540	1,750	8,557	2,011	11,900	5,122	57,425
	May	1,295	2,200	23,380	1,250	2,545	1,770	8,501	2,025	11,900	5,264	56,635
	June	1,350	1,990	22,945	1,235	2,300	1,765	8,629	2,025	11,900	5,066	55,865
	July	770	1,760	21,620	1,270	2,095	1,750	8,500	2,010	11,900	5,215	54,360
	August	710	1,960	21,050	1,235	2,260	1,760	8,583	2,020	11,900	4,962	53,770
	September	1,065	2,080	20,385	1,265	2,480	1,830	8,604	1,990	11,900	5,166	53,620
	October	1,250	1,970	21,200	1,120	2,490	1,845	8,563	2,020	11,900	5,247	54,385
	November	1,590	2,230	20,575	1,280	2,090	1,840	8,586	2,020	11,900	5,109	53,400
	December	1,820	2,260	21,230	1,380	1,980	1,870	8,585	2,020	11,900	5,135	54,100
	AVERAGE	**1,433**	**2,102**	**22,624**	**1,285**	**2,313**	**1,811**	**8,572**	**2,012**	**11,909**	**5,262**	**55,788**
1982	January	1,765	1,985	21,285	1,218	2,315	1,905	8,669	2,020	11,900	5,488	54,800
	February	1,395	1,730	19,950	1,275	2,550	1,955	8,690	2,020	11,900	5,560	53,900
	March	945	1,870	18,615	1,182	2,545	2,000	8,597	2,020	11,900	5,341	52,200
	April	890	1,490	16,725	928	2,780	2,110	8,652	2,025	11,900	5,480	50,600
	May	1,310	1,480	17,075	1,114	2,715	2,085	8,660	2,025	11,900	5,526	51,100
	June	1,645	1,500	18,845	1,330	2,790	2,140	8,681	2,025	11,900	5,489	53,200
	July	1,280	1,800	18,450	1,235	2,790	2,120	8,649	2,025	12,000	5,506	52,775
	August	1,105	2,000	18,045	1,300	2,795	2,125	8,701	2,025	12,000	5,549	52,540
	September	1,170	1,990	18,515	1,300	2,830	2,175	8,733	2,025	12,000	5,497	53,075
	October	1,480	2,160	R19,430	1,310	2,900	2,165	8,676	R2,040	12,410	5,489	R54,420
	November	1,355	2,300	R19,415	1,420	2,940	2,220	8,690	2,040	12,410	5,685	R54,820
	December	1,215	2,325	18,985	1,300	3,025	2,315	8,660	2,040	12,410	5,730	54,465
	AVERAGE	**1,295**	**1,891**	**18,780**	**1,241**	**2,749**	**2,117**	**8,671**	**2,029**	**12,053**	**5,550**	**53,190**

Footnotes continued.
[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.
Sources: • See the last page of this section.

International

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

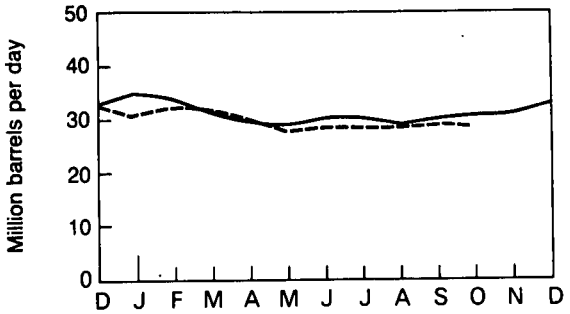
		Canada	France[2]	Italy	Japan	United Kingdom	United States	West Germany	Other IEA[3]	Total IEA[4]
						Thousand barrels per day				
1973	**AVERAGE**	**1,597**	**2,219**	**1,525**	**5,000**	**1,958**	**17,308**	**2,693**	**4,069**	**34,150**
1974	**AVERAGE**	**1,630**	**2,094**	**1,521**	**4,872**	**1,829**	**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	**AVERAGE**	**1,730**	**1,965**	**1,602**	**4,680**	**1,420**	**17,056**	**2,360**	**4,152**	**33,000**
1981	January	1,760	2,310	1,880	4,980	1,400	18,430	2,230	4,420	35,100
	February	1,770	2,170	2,195	5,350	1,460	16,989	2,510	4,126	34,400
	March	1,550	1,790	1,895	5,020	1,430	15,907	2,100	3,598	31,500
	April	1,600	1,500	1,785	4,140	1,290	15,350	1,810	3,925	29,900
	May	1,490	1,670	1,410	3,600	1,190	15,353	1,880	3,977	28,900
	June	1,635	1,600	1,510	3,915	1,210	16,095	2,155	3,880	30,400
	July	1,620	1,450	1,580	4,160	1,170	15,682	2,150	4,138	30,500
	August	1,630	1,160	1,360	4,100	1,125	15,263	2,111	3,711	29,300
	September	1,595	1,425	1,715	4,060	1,285	15,655	2,085	3,905	30,300
	October	1,585	1,655	1,600	4,085	1,390	15,822	2,305	4,013	30,800
	November	1,595	2,010	1,650	4,610	1,470	15,593	2,030	4,052	31,000
	December	1,635	2,215	1,930	5,425	1,380	16,596	2,100	3,934	33,000
	AVERAGE	**1,615**	**1,745**	**1,705**	**4,445**	**1,325**	**16,058**	**2,120**	**4,032**	**31,300**
1982	January	1,530	1,770	1,800	4,645	1,400	15,890	1,935	3,800	31,000
	February	1,715	1,815	1,795	5,275	1,465	15,941	2,230	4,179	32,600
	March	1,510	1,940	1,805	4,640	1,560	15,560	2,340	4,185	31,600
	April	1,350	1,730	1,560	4,015	1,340	16,048	2,125	3,962	30,400
	May	1,325	1,580	1,510	3,515	1,210	14,845	1,770	3,625	27,800
	June	1,430	1,505	1,520	3,780	1,280	14,931	2,115	3,704	28,900
	July	1,390	1,455	1,475	3,995	1,235	14,771	1,955	3,679	28,500
	August	1,500	1,295	1,410	3,705	1,170	14,838	2,105	3,672	28,400
	September	1,410	1,510	1,630	3,865	1,295	14,921	2,035	4,044	29,200
	October	R1,335	1,605	1,555	3,830	1,305	14,820	R1,922	R3,933	R28,700
	November	1,470	1,735	1,650	NA	1,415	15,031	2,005	NA	NA
	December	NA	1,815	1,670	NA	1,380	15,508	NA	NA	NA
	AVERAGE	**NA**	**1,645**	**1,614**	**NA**	**1,337**	**15,253**	**NA**	**NA**	**NA**

U.S. geographic coverage: the 50 United States and the 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 IEA are listed in Note 1 on the last page of this section.
R=Revised data. NA=Not available.
Note: Data for 1980 through 1982 are preliminary.
Sources: • See the last page of this section.

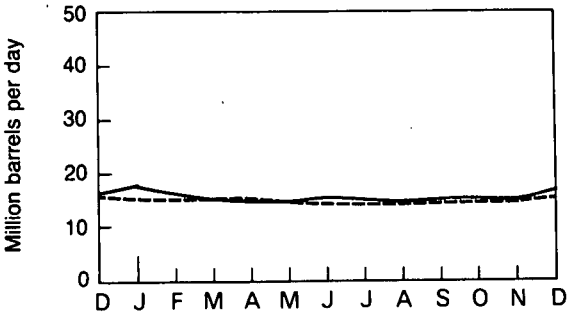
International

Petroleum Consumption

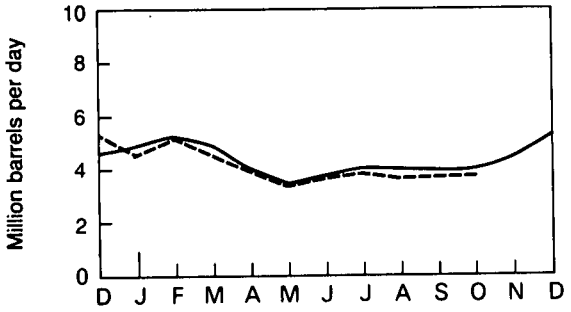
Total IEA



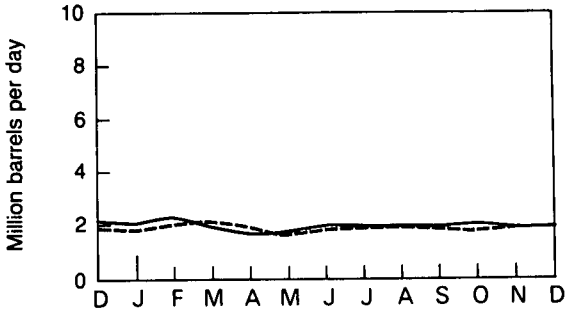
United States



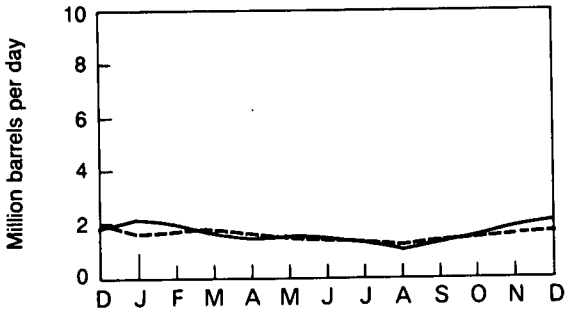
Japan*



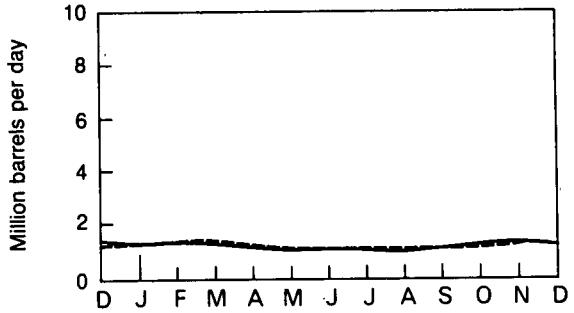
West Germany



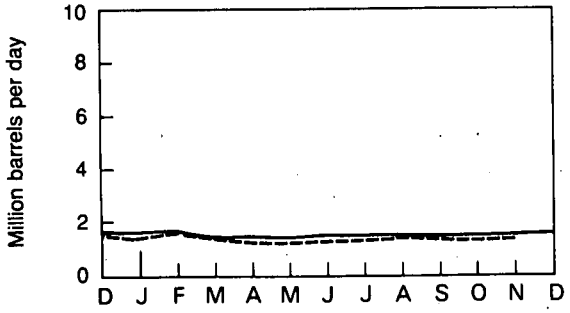
France**



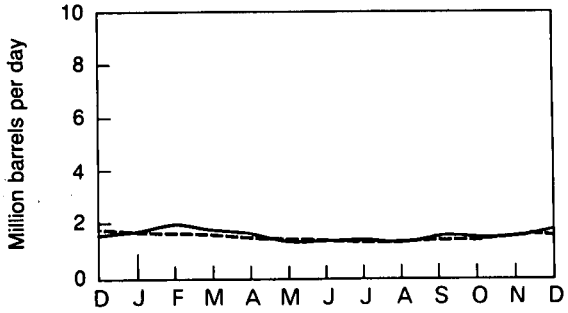
United Kingdom



Canada



Italy***



*Excludes liquefied petroleum gases and condensates.

**Not a member of IEA.

***Principal products only.

——— 1981

- - - - 1982

International

Petroleum Stocks for Major Non-Communist Industrialized Countries at End of Period[1]

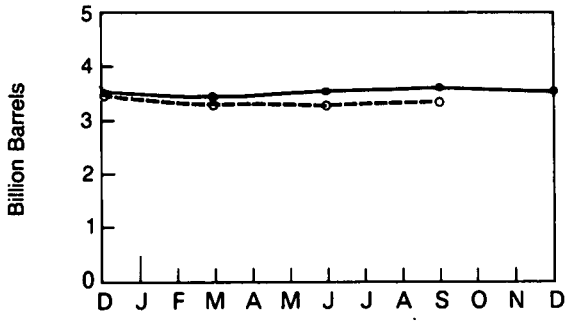
		Canada	France	Italy	Japan	United Kingdom	United States	West Germany	Other OECD[2]	Total OECD[2]
						Million barrels				
1973		**149**	**203**	**NA**	**303**	**156**	**1,008**	**NA**	**NA**	**NA**
1974		**164**	**240**	**169**	**370**	**191**	**1,074**	**215**	**NA**	**NA**
1975		**167**	**239**	**143**	**375**	**164**	**1,133**	**190**	**NA**	**NA**
1976		**156**	**231**	**142**	**394**	**165**	**1,112**	**214**	**NA**	**NA**
1977		**170**	**241**	**162**	**399**	**147**	**1,312**	**236**	**485**	**3,152**
1978		**148**	**214**	**153**	**422**	**147**	**1,278**	**239**	**487**	**3,089**
1979		**156**	**231**	**163**	**457**	**163**	**1,341**	**273**	**574**	**3,358**
1980		**171**	**254**	**173**	**481**	**169**	**1,392**	**323**	**610**	**3,573**
1981	January	169	234	155	479	168	1,388	319	NA	NA
	February	162	235	184	457	170	1,389	312	NA	NA
	March	165	227	158	452	164	1,401	317	581	3,465
	April	174	235	169	484	165	1,415	322	NA	NA
	May	176	229	173	496	162	1,438	321	NA	NA
	June	179	225	171	484	158	1,430	312	598	3,557
	July	179	228	177	476	153	1,439	305	NA	NA
	August	184	233	189	483	151	1,457	308	NA	NA
	September	181	241	187	493	151	1,476	307	591	3,627
	October	172	238	188	500	149	1,485	303	NA	NA
	November	163	230	178	483	147	1,501	300	NA	NA
	December	164	222	167	466	145	1,484	297	575	3,520
1982	January	163	222	165	464	NA	1,461	280	NA	NA
	February	156	215	162	460	NA	1,431	280	NA	NA
	March	149	207	158	480	133	1,401	279	524	3,331
	April	148	201	154	483	NA	1,350	312	NA	NA
	May	147	193	154	484	NA	1,349	310	NA	NA
	June	131	200	156	R478	141	1,362	288	R541	R3,297
	July	130	205	160	460	134	1,394	286	NA	NA
	August	137	207	179	470	139	1,407	311	NA	NA
	September	R136	212	R179	R458	R134	1,415	R280	536	3,350
	October	135	212	177	471	135	1,434	R279	NA	NA
	November	138	213	174	472	130	1,455	R280	NA	NA
	December	138	NA	170	478	124	1,429	275	NA	NA

U.S. geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined products. Petroleum stocks include all non-military petroleum held for storage, regardless of ownership, within each country in bulk terminals, refinery tanks, pipeline tankage, intercoastal tankers, tankers in port, and inland ship bunkers. Data exclude oil held in pipelines (except for the United States), rail and truck cars, sea-going ships' bunkers, service stations, retail stores, and tankers at sea.
[2]"Other OECD" includes Organization of Economic Cooperation and Development (OECD) members not shown.
[3]The members of OECD are listed in Note 2 on the last page of this section.
R=Revised data. NA=Not available.
Sources: • See the last page of this section.

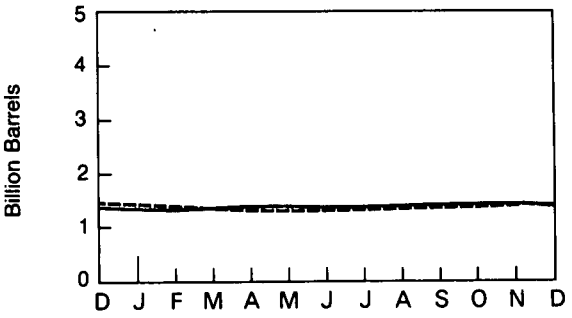
International

Petroleum Stocks

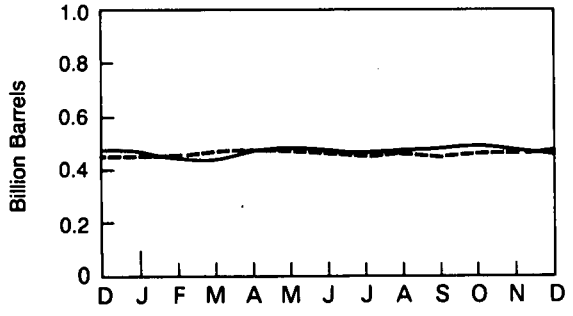
Total OECD



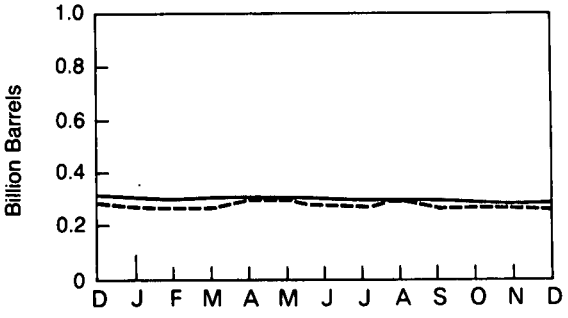
United States



Japan



West Germany



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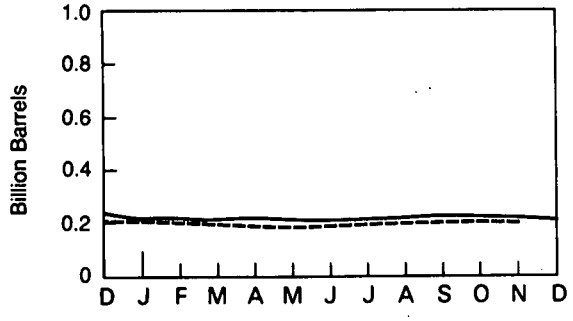
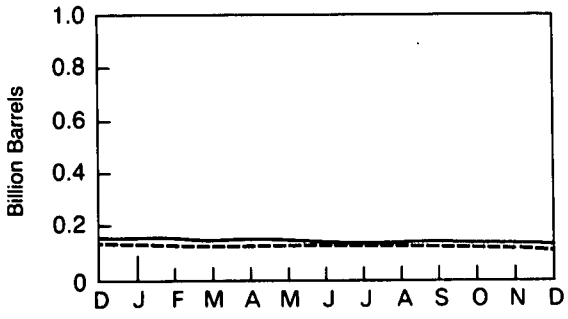


United Kingdom



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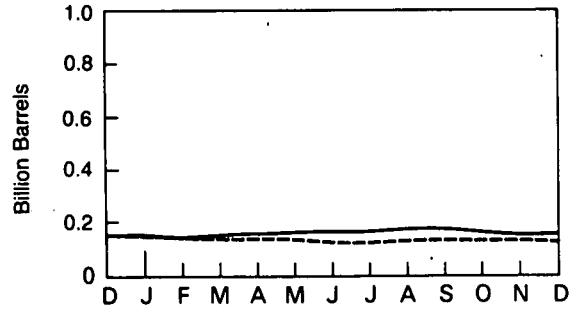
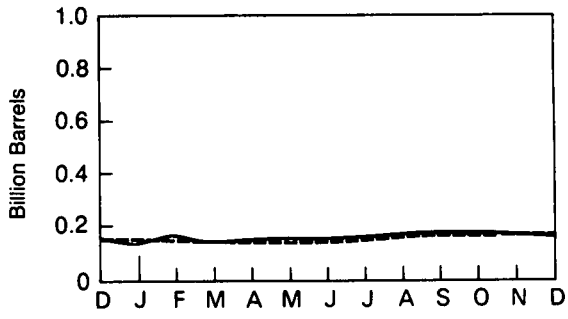
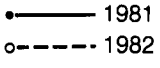


Italy





International

Nuclear Electricity Generation by Non-Communist Countries[1]

		Argentina	Belgium	Brazil	Canada	Finland	France	India	Italy	Japan	Netherlands	Pakistan
		Billion gross kilowatt-hours										
1973	**TOTAL**	**0**	**0**	**0**	**18.3**	**0**	**11.6**	**1.9**	**3.1**	**9.4**	**1.1**	**0.5**
1974	**TOTAL**	**1.0**	**0.1**	**0**	**15.4**	**0**	**14.7**	**2.5**	**3.4**	**18.1**	**3.3**	**0.6**
1975	**TOTAL**	**2.5**	**6.8**	**0**	**13.2**	**0**	**18.3**	**2.5**	**3.8**	**22.2**	**3.3**	**0.5**
1976	**TOTAL**	**2.6**	**10.0**	**0**	**18.0**	**0**	**15.8**	**3.2**	**3.8**	**36.7**	**3.9**	**0.5**
1977	**TOTAL**	**1.6**	**11.9**	**0**	**26.8**	**2.7**	**17.9**	**2.8**	**3.4**	**28.1**	**3.7**	**0.3**
1978	**TOTAL**	**2.9**	**12.5**	**0**	**32.9**	**3.3**	**30.5**	**2.3**	**4.4**	**53.2**	**4.1**	**0.2**
1979	**TOTAL**	**2.7**	**11.4**	**0**	**38.4**	**6.7**	**39.9**	**3.2**	**2.6**	**62.0**	**3.5**	**(s)**
1980	**TOTAL**	**2.3**	**12.5**	**0**	**40.4**	**7.0**	**61.2**	**2.9**	**2.2**	**82.8**	**4.2**	**0.1**
1981	January	0.3	1.2	0	3.2	1.3	9.3	0.2	0.2	8.2	0.1	(s)
	February	0.2	1.0	0	3.5	0.9	8.6	0.2	0.3	7.1	(s)	(s)
	March	0.3	0.6	0	3.9	1.4	8.8	0.3	0.1	7.8	0.3	0
	April	0.2	0.7	0	3.3	1.5	8.3	0.3	0.6	7.9	0.4	0
	May	0.2	1.2	0	3.4	1.0	8.9	0.4	0.3	8.0	0.4	(s)
	June	0.2	1.2	0	3.6	0.7	8.3	0.3	0.1	6.7	0.4	(s)
	July	0.3	1.3	0	4.0	0.8	8.4	0.3	0.3	8.3	0.4	(s)
	August	0.2	1.2	0	4.0	1.4	7.7	0.2	0.1	8.5	0.4	(s)
	September	0.3	0.9	0	3.3	1.5	8.5	0.2	0.1	6.4	0.4	(s)
	October	0.2	1.0	0	3.4	1.4	8.1	0.2	0.1	5.6	0.4	(s)
	November	0.2	1.3	0	3.5	1.3	9.3	0.2	0.1	5.3	0.4	(s)
	December	0.2	1.3	0	4.1	1.2	11.0	0.3	0.4	6.1	0.3	(s)
	TOTAL	**2.8**	**12.8**	**0**	**43.3**	**14.5**	**105.2**	**3.1**	**2.7**	**86.0**	**3.7**	**0.2**
1982	January	0.3	1.3	0	4.1	1.5	11.0	0.2	0.6	8.1	0.4	(s)
	February	0.2	0.8	0	3.2	1.5	10.0	0.2	0.7	7.7	0.1	(s)
	March	0.3	0.5	0	3.5	1.7	10.6	0.2	0.7	9.2	(s)	0
	April	0.3	1.0	(s)	3.7	1.6	10.1	0.2	0.5	9.7	0.3	0
	May	0.3	1.3	(s)	3.1	1.3	9.0	0.2	0.7	9.5	0.4	0
	June	0.3	1.2	(s)	3.3	0.9	7.8	0.1	0.6	9.5	0.4	0
	July	0.2	1.3	0	3.6	1.2	8.3	0.1	0.6	9.8	0.4	0
	August	0	1.2	0	3.9	1.5	7.0	0.2	0.4	9.7	0.4	(s)
	September	(s)	0.7	0	3.2	1.5	7.2	0.1	0.6	8.0	0.4	(s)
	October	0	1.7	0	4.0	1.4	6.6	0.2	0.6	7.5	0.4	(s)
	November	(s)	1.8	0	3.3	1.3	8.3	0.3	0.3	7.8	0.4	0
	December	0.2	1.8	0	3.8	1.3	13.0	0.2	0.5	8.1	0.4	(s)
	TOTAL	**1.9**	**15.6**	**0.1**	**42.6**	**16.5**	**108.9**	**2.2**	**6.8**	**104.5**	**3.9**	**0.1**
1983	January	0.2	1.9	0	4.3	1.7	13.8	0.2	0.2	8.0	0.4	(s)

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.
(s)=Less than 0.05 billion gross kilowatt-hours.
Sources: • See the last page of this section.

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**	**181.7**	**334.4**
1976	**TOTAL**	**0**	**7.6**	**16.0**	**7.9**	**0**	**36.8**	**24.5**	**187.3**	**201.8**	**389.1**
1977	**TOTAL**	**0.1**	**6.5**	**19.9**	**8.1**	**0.1**	**38.1**	**35.8**	**207.8**	**263.3**	**471.0**
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**	**270.6**	**570.7**
1980	**TOTAL**	**3.5**	**5.2**	**26.7**	**14.3**	**8.2**	**37.2**	**43.7**	**354.4**	**265.4**	**619.8**
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	0.8	2.8	1.4	0.8	2.5	4.3	36.6	20.9	57.4
	June	0.4	0.8	2.8	0.7	0.8	3.3	4.1	34.5	22.6	57.1
	July	0.4	1.1	1.4	0.6	0.8	2.5	5.2	36.1	24.8	61.0
	August	0.4	1.0	2.6	1.0	0.8	2.5	3.9	36.0	28.3	64.2
	September	0.3	0.6	3.0	1.3	0.8	3.1	3.3	33.9	25.7	59.6
	October	0.3	1.2	3.3	1.5	1.2	2.7	4.0	34.7	21.6	56.3
	November	0.3	0.6	3.6	1.4	1.0	3.1	4.3	36.0	24.0	60.1
	December	0.4	0.7	4.1	1.5	1.1	4.9	5.4	43.1	27.5	70.6
	TOTAL	**2.9**	**9.4**	**37.7**	**15.2**	**10.7**	**38.9**	**53.4**	**442.4**	**288.5**	**730.9**
1982	January	0.5	1.0	4.0	1.5	0.8	3.4	5.9	44.5	27.1	71.6
	February	0.4	0.9	3.3	1.3	1.0	3.5	5.4	40.0	21.3	61.3
	March	0.4	0.5	3.8	1.5	1.0	4.1	5.3	43.2	24.0	67.1
	April	0.2	0.4	3.8	1.4	0.8	3.3	5.3	42.5	22.8	65.3
	May	0	0.5	2.5	1.2	0.8	2.6	5.6	39.0	22.8	61.8
	June	(s)	0.7	1.9	0.6	1.0	3.3	4.2	35.6	25.3	60.9
	July	0.3	0.6	1.2	0.9	1.2	3.3	4.5	37.6	26.8	64.4
	August	0.4	0.7	2.0	1.0	1.2	3.7	4.5	37.7	26.4	64.1
	September	0.4	0.7	3.7	1.2	1.3	4.2	5.4	38.6	26.7	65.3
	October	0.4	1.0	4.2	1.5	1.4	3.7	5.2	39.8	25.4	65.3
	November	0.4	0.9	4.0	1.4	1.1	3.8	5.8	41.0	24.2	65.3
	December	0.4	0.9	4.2	1.5	1.4	5.1	6.5	49.2	25.8	75.0
	TOTAL	**3.8**	**8.8**	**38.8**	**15.0**	**13.1**	**44.1**	**63.4**	**489.9**	**298.6**	**788.5**
1983	January	0.4	1.0	4.2	1.5	1.5	4.8	6.5	49.9	27.4	77.3

U.S. geographic coverage: the 50 United States and the District of Columbia.
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-, 5- or 6-week intervals, rather than by calendar month.
(s)=Less than 0.05 billion gross kilowatt-hours.
Sources: • See the last page of this section.

Notes and Sources for the International Section

Notes

1. The 21 signatory nations of the International Energy Agency (IEA) are Australia, Austria, Belgium, Canada, Denmark, West Germany, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the 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.
2. The members of the Organization of Economic Cooperation and Development (OECD) are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Total OECD excludes the United States Territories.

Sources

Crude Oil Production: • 1973-1981 annual data: Energy Information Administration, *1981 International Energy Annual.*
• U.S. annual and monthly data: Energy Information Administration, *Petroleum Supply Monthly.*
• 1980-1982 monthly data (except U.S. and World): Central Intelligence Agency, "International Energy Statistical Review," and other industry sources.
• 1980-1982 monthly data for World: Sum of data for all countries using above sources.
Petroleum Consumption: • Central Intelligence Agency, "International Energy Statistical Review" (except the United States).
• United States data: Energy Information Administration, *Petroleum Supply Monthly.*
• IEA totals for latest months are Energy Information Administration estimates.
Petroleum Stocks: • Canada: Energy, Mines and Resources Canada, *Energy Information Handbook;* Statistics Canada, *Refined Petroleum Products.* • France: Comite Professionel du Petrole, *Petrole 80: Activite de L'Industrie Petroliere* and *Bulletin Mensuel.* • West Germany and Italy: OECD, *Quarterly Oil Statistics* and *Monthly Oil Statistics.* • Japan: Ministry of International Trade and Industry, *Yearbook of Coal, Petroleum, and Coke Statistics 1979; Energy Production: Supply and Demand Statistics Report.* • United Kingdom: United Kingdom Department of Energy, *Digest of United Kingdom Energy Statistics 1981* and *Energy Trends;* and OECD, *Monthly Oil Statistics.* • United States: 1973 through 1979: Energy Information Administration (EIA), *Energy Data Reports,* "Petroleum Statement, Annual"; January 1980 forward: EIA, *Petroleum Supply Monthly.* • Other OECD: OECD, *Quarterly Oil Statistics.* • Total OECD: Sum of data for all OECD member countries using above sources..
Nuclear Electricity Generation: • *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.

Bituminous Coal

A coal that is high in carbonaceous matter having a volatility greater than anthracite 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.

British Thermal Unit (Btu)

The amount of energy required to raise the temperature of 1 pound of water 1 degree Fahrenheit at or near 39.2 degrees Fahrenheit. One Btu is equivalent to about 252 calories. An average Btu content of fuel is a heat value per unit quantity of fuel as determined from tests of fuel samples.

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 used primarily 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, shale oil, and tar sands oil.

Crude Oil Refinery Input

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

Crude Oil Stocks

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

Distillate Fuel Oil

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

Electricity Production

Net electricity (gross electricity output measured at the generator terminals, minus powerplant use) generated at electric utilities. Excludes industrial electricity generation. International data are gross electricity output.

Ethane

A normally gaseous, colorless hydrocarbon (C_2H_6) produced at natural gas processing plants and refineries. It is used primarily as petrochemical feedstock for eventual production of chemicals and plastic materials.

Exports

Shipments from the 50 States and the District of Columbia to foreign countries. Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Full-Serve Station

Station at which services such as pumping gas, washing windows, and checking under the hood are performed by attendants.

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) that are classified by customs officials as "imports for consumption" or "withdrawals from bonded warehouse for consumption," including withdrawals from bonded warehouses 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 warehouses and into U.S. territories and U.S. Foreign Trade Zones.

Landed Cost of Imported Crude Oil

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 are computed based on major importers, which account for an estimated 90 to 95 percent of total crude oil imports. Coverage includes the United States and its territories.

Lease Condensate

A natural gas liquid recovered from gas-well gas in lease separators and field facilities. It consists primarily of pentanes and heavier hydrocarbons. Generally, it is blended with crude oil for refining.

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.

Liquefied Petroleum Gases

Propane, propylene, butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids. Formerly called "Liquefied Gases."

Line Miles of Seismic Exploration

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

Maximum Dependable Capacity, Net

Represents the dependable main-unit net capacity of domestic nuclear powerplant 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

See Motor Gasoline, Finished, and Motor Gasoline, Total.

Motor Gasoline, Average Retail Selling Price

The average price (including taxes) of sales of motor gasoline to retail customers at service stations.

Motor Gasoline, Finished

Beginning in January 1981, "Motor Gasoline" was redefined as "Finished Motor Gasoline" which is 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 premium and regular grade, both leaded and unleaded, gasohol, and all other refinery products listed in ASTM Specification D439. Excludes any blendstock until blending has been completed and the blendstock is incorporated in the finished gasoline and no longer separately identified. Also excludes any alcohol to be used in the blending of gasohol.

Motor Gasoline, Premium Grade

Finished motor gasoline that has an antiknock designation of 3 or more for unleaded motor gasoline and 4 or more for leaded motor gasoline.

Motor Gasoline, Regular Grade

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

Motor Gasoline, Total

This includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Natural Gas

A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions.

Natural Gas Plant Liquids

Those portions of natural gas that are liquefied at natural gas processing plants, including natural gasoline plants, cycling plants, and fractionators, and, in some instances, field facilities. Products obtained include ethane, liquefied petroleum gases (propane, butane, isobutane, propane-butane mixtures, ethane-propane mixtures), isopentane, natural gasoline, unfractionated streams, plant condensate, and minor quantities of finished products such as motor gasoline, aviation gasoline, special naphthas, jet fuel, kerosene, distillate fuel oil, and miscellaneous products.

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 products. This product is reported as marketable or catalyst coke.

Petroleum Products

Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, ethane, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400°F end-point, other oils over 400°F end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Propane

A colorless, highly volatile hydrocarbon (C_3H_8) that is gaseous at ordinary atmospheric conditions and readily recovered as a liquid at natural gas processing plants and refineries. Propane is used primarily for residential and commercial heating and cooling, and also as a fuel for transportation and industrial uses, including petrochemical feedstocks.

Refined Petroleum Product Supplied

Total refined petroleum product supplied is the sum of all refined petroleum products supplied. For each product the amount supplied is derived by summing production, imports, crude oil burned directly, and subtracting changes in primary stocks (net withdrawals is a plus quantity; net additions is a minus quantity) and 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 that 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, 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 Station

Station at which services such as pumping gas, washing windows, and checking under the hood are not performed by attendants.

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, natural gas processing plants, bulk terminals, and pipelines (including pipeline fill) where the storage capacity exceeds 50,000 barrels or where refined petroleum products are received by tanker, barge, or pipeline. Stocks held in secondary storage facilities, such as those held by jobbers, dealers, independent marketers, and consumers, are excluded.

Strategic Petroleum Reserve

Petroleum inventories (currently only crude oil) held in Government-owned underground storage for use during periods of major supply interruptions. 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.

Synthetic Natural Gas (SNG)

A product resulting from the manufacture, conversion, or reforming of hydrocarbons that 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.

Wells, Exploratory and Development

Holes drilled for the purpose of finding or producing crude oil or natural gas. They include wells classified as oil wells, gas wells, or dry holes.

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Conversion Factors

Approximate Heat Content of Various Fuels	Units	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982-83‡
Anthracite											
Production	Million Btu/short ton	23.17	22.56	23.39	22.77	23.18	23.52	23.59	23.35	23.69	23.69
Imports and exports	Million Btu/short ton	25.40	25.40	25.40	25.40	25.40	25.40	25.40	25.40	25.40	25.40
Consumption, average	Million Btu/short ton	22.71	21.95	21.74	22.15	22.69	22.97	22.70	22.16	22.10	22.10
Electric utility consumption	Million Btu/short ton	17.92	17.20	17.06	17.53	17.24	17.10	17.45	17.65	18.17	18.17
Non-utility consumption	Million Btu/short ton	24.34	23.75	23.65	23.84	24.99	25.17	25.20	23.74	25.12	25.12
Bituminous coal and lignite											
Production	Million Btu/short ton	24.01	23.73	23.20	23.15	22.70	22.43	22.59	22.46	22.38	22.38
Imports	Million Btu/short ton	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Exports	Million Btu/short ton	27.00	27.00	27.00	27.00	27.00	27.00	27.00	26.40	26.18	26.18
Consumption, average	Million Btu/short ton	23.65	23.07	22.80	22.75	22.33	22.14	22.20	22.00	21.80	21.80
Electric utility consumption	Million Btu/short ton	22.26	21.80	21.66	21.69	21.48	21.28	21.38	21.30	21.09	21.09
Non-utility consumption	Million Btu/short ton	26.84	26.12	25.81	25.87	25.13	25.07	25.06	25.06	24.96	24.96
Coal coke	Million Btu/short ton	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Crude petroleum[1]											
Production	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Imports	Million Btu/barrel	5.817	5.827	5.821	5.808	5.810	5.802	5.810	5.812	5.818	5.818
Exports	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Crude petroleum and products											
Imports, average	Million Btu/barrel	5.897	5.884	5.858	5.856	5.834	5.839	5.810	5.796	5.795	5.775
Exports, average	Million Btu/barrel	5.752	5.774	5.748	5.745	5.797	5.808	5.832	5.820	5.821	5.821
Petroleum products											
Consumption, average	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	5.519	5.494	5.479	5.448	5.448
Residential and commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382	5.471	5.468	5.408	5.354
Industrial	Million Btu/barrel	5.559	5.530	5.520	5.529	5.546	5.542	5.415	5.373	5.306	5.383
Transportation	Million Btu/barrel	5.399	5.397	5.395	5.399	5.405	5.409	5.430	5.442	5.436	5.429
Electric utility	Million Btu/barrel	6.245	6.238	6.250	6.251	6.249	6.251	6.258	6.254	6.258	6.258
Imports	Million Btu/barrel	5.983	5.959	5.935	5.980	5.908	5.955	5.811	5.748	5.659	5.659
Exports	Million Btu/barrel	5.752	5.773	5.747	5.743	5.796	5.814	5.864	5.841	5.837	5.837
LPG consumption average[2]	Million Btu/barrel	3.746	3.730	3.715	3.711	3.677	3.669	3.680	3.674	3.643	3.643
Natural gas plant liquid production	Million Btu/barrel	4.049	4.011	3.984	3.964	3.941	3.925	3.955	3.914	3.930	3.930
Natural gas, dry											
Production	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,016	1,015	1,015
Consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,027
Electric utility consumption	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034	1,034	1,034	1,034	1,034
Non-utility consumption	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019	1,016	1,018	1,024	1,025	1,025
Imports	Btu/cubic foot	1,026	1,027	1,026	1,025	1,026	1,030	1,037	1,022	1,014	1,014
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013	1,013	1,013	1,011	1,011
Wet natural gas production	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092	1,088	1,091	1,091
Hydropower[3]	Btu/kWh	10,389	10,442	10,406	10,373	10,435	10,361	10,353	10,388	10,388	10,388
Nuclear power[3]	Btu/kWh	10,903	11,161	11,013	11,047	10,769	10,941	10,640	10,908	10,908	10,908
Geothermal power[3]	Btu/kWh	21,674	21,674	21,611	21,611	21,611	21,611	21,545	21,637	21,594	21,594
Electricity consumption	Btu/kWh	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412

Approximate Heat Content of Refined Petroleum Products	Million 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° F or less	5.248
Other oils over 400° F	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
Unfractionated stream	5.418
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 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.

[4] 60 percent butane and 40 percent propane.

[5] 70 percent ethane and 30 percent propane.

‡ Preliminary data.

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