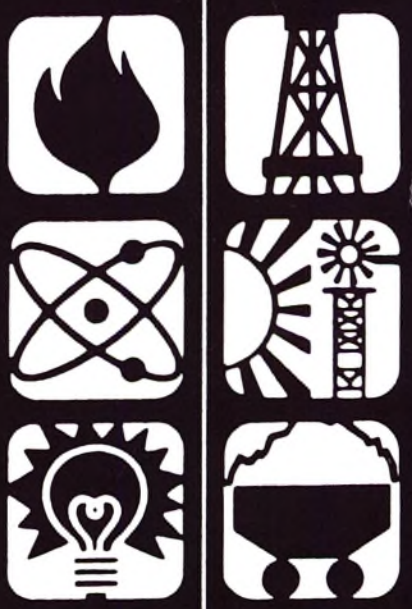
DOE/EIA-0035(84/03)

Monthly Energy Review

Energy Information Administration
Washington, D.C.

March 1984

First Quarter 1984 Summary
See Executive Summary



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The *Monthly Energy Review* presents current data on production, consumption, stocks, imports, exports, and prices of 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 . . . ."

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Information

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Office of Energy Markets
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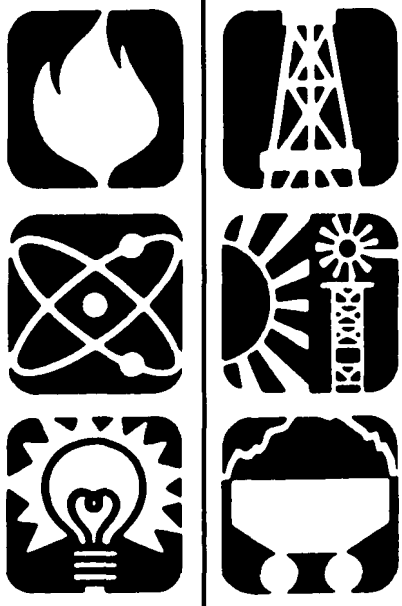

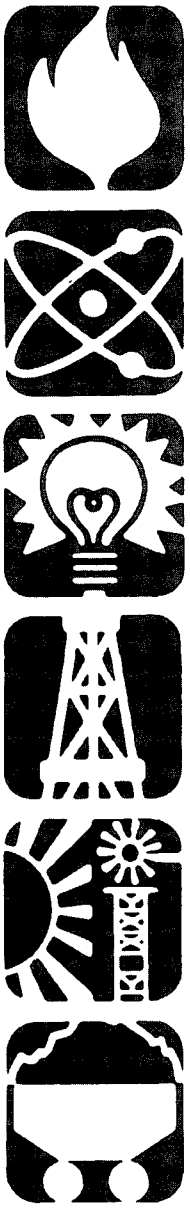

Contacts

The *Monthly Energy Review* is prepared in the Statistics Branch of the Office of Energy Markets and End Use, Energy Information Administration, under the direction of Katherine E. Seiferlein (202) 252-5692.

Questions concerning the contents of the *Monthly Energy Review* may be referred to the following subject specialists:

Special Features		Barbara T. Fichman (202) 252-5737
Part 1.	**Executive Summary** and **Part 2. Consumption**	Roberta Searles (202) 252-5736
Part 3.	**Petroleum**	Christine D. Gray (202) 252-8995
Part 4.	**Natural Gas**	Gordon W. Koelling (202) 252-6305
Part 5.	**Oil and Gas Resource Development**	Lawrence R. Mangen (202) 252-4804
Part 6.	**Coal**	Leonard Westerstrom (202) 252-5220
Part 7.	**Electric Utilities**	
	Generation, Consumption, and Stocks	Vicki Moorhead (202) 252-6521
	Sales	Charlene Harris-Russell (202) 252-2028
Part 8.	**Nuclear**	Hal Steinberg (202) 252-1332
Part 9.	**Price**	
	Petroleum	
	Heating Oil	Annie P. Whatley (202) 252-6612
	All Other Petroleum	Charles Riner (202) 252-6610
	Natural Gas	
	Wellhead and Residential	Gordon W. Koelling (202) 252-6305
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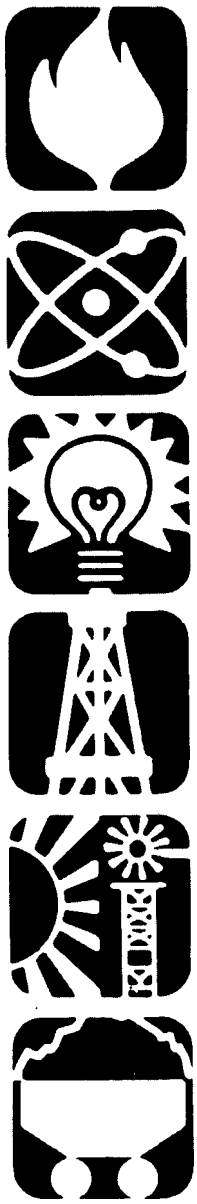
	Electricity	
	Fuel Costs to Steam Plants	Dean Fennell (202) 252-6523
	Prices for Privately Owned Utilities	Charlene Harris-Russell (202) 252-2028
Part 10.	**International**	
	Petroleum	Patricia A. Smith (202) 252-6925
	Nuclear Electricity Generation	Hal Steinberg (202) 252-1332

Contents



Articles

Feature articles on energy-related subjects and highlights from recently published Energy Information Administration reports are often included in this publication. The following articles and highlights have appeared in issues since the beginning of 1981. A list of articles included in this report prior to 1981 may be found in any issue published from 1981 through 1983.

HIGHLIGHTS:

State Energy Data Report, Consumption Estimates, 1960-1982

In 1982, per capita energy consumption varied from a high of 926 million Btu in Alaska to a low of 186 million Btu in Rhode Island (Table 1). Per capita consumption in Alaska was more than three times the per capita consumption of 305 million Btu for the United States as a whole. The top five consuming States on a per capita basis in 1982 were Alaska, Louisiana (750 million Btu), Wyoming (748 million Btu), Texas (520 million Btu), and Oklahoma (409 million Btu). The five States consuming the least energy on a per capita basis in 1982, all located in the Northeast, were Rhode Island, New York (197 million Btu), New Hampshire (198 million Btu), Vermont (205 million Btu), and Massachusetts (211 million Btu).

Disaggregation of 1982 per capita consumption estimates by economic end-use sector reveals that Alaska had the highest per capita consumption in each of the four end-use sectors (residential, commercial, industrial, and transportation). Hawaii had the lowest per capita consumption in both the residential and commercial sectors, Massachusetts was lowest in the industrial sector, and New York was lowest in the transportation sector. The residential sector had the smallest variation among States, ranging from 87 million Btu in Alaska to 22 million Btu in Hawaii. The industrial sector, which had the highest per capita energy consumption of any sector (113 million Btu for the United States as a whole), also had the largest variation among States. Per capita consumption ranged from 516 million Btu in the industrial sector in Alaska to 38 million Btu in the industrial sector in Massachusetts.

In addition to providing the per capita consumption estimates described above, the *State Energy Data Report, Consumption Estimates, 1960-1982* provides estimates of total energy consumption for the United States as a whole and for each State plus the District of Columbia. Annual consumption estimates for the 23-year period are disaggregated by energy source and by economic sector. Estimates are expressed not only in physical units, such as barrels of petroleum and cubic feet of natural gas, but in British thermal units (Btu), allowing for direct comparisons among fuels. This year's report, published by the Energy Information Administration in May 1984, is the first to contain

Table 1. Per Capita Energy Consumption, 1982 (Million Btu)

Rankings		Consumption
1	Alaska	926
2	Louisiana	750
3	Wyoming	748
4	Texas	520
5	Oklahoma	409
6	Kansas	397
7	Indiana	393
8	Montana	382
9	North Dakota	366
10	Washington	366
11	West Virginia	362
12	Idaho	351
13	Alabama	343
14	New Mexico	340
15	Kentucky	336
16	Arkansas	331
17	Nevada	331
18	Ohio	329
19	Tennessee	329
20	Iowa	328
21	Maine	326
22	Nebraska	322
23	Oregon	316
	United States	**305**
24	Mississippi	304
25	Utah	303
26	Delaware	299
27	Illinois	291
28	South Carolina	291
29	South Dakota	288
30	Minnesota	287
31	Georgia	284
32	Missouri	278
33	New Jersey	278
34	Colorado	276
35	Pennsylvania	274
36	Michigan	267
37	Wisconsin	267
38	Virginia	266
39	District of Columbia	260
40	North Carolina	259
41	Arizona	256
42	Maryland	256
43	California	239
44	Florida	224
45	Hawaii	219
46	Connecticut	217
47	Massachusetts	211
48	Vermont	205
49	New Hampshire	198
50	New York	197
51	Rhode Island	186

estimates of energy consumption by Census Division.

In the report, State energy consumption estimates are disaggregated by energy source. Of the five States with the highest total consumption (Texas, California, Ohio, New York, and Illinois), all but one (Ohio) relied on petroleum more than on any other energy source (Figure 1). Texas, the State that consumed the most energy in 1982, relied on petroleum for 45 percent of its energy supply; the remaining energy came almost exclusively from the other two major fossil fuels—natural gas and coal. Although the other four highest consuming States relied mainly on fossil fuels, they also derived significant amounts of energy from other sources such as nuclear and hydropower. In Ohio, coal accounted for more consumption than any other energy source.

When State energy consumption estimates are disaggregated by end-use sector, the industrial sector emerges as the largest consumer of the four sectors in three of the five highest consuming States (Figure 2). In Texas, the industrial sector accounted for 54 percent of the total; in Ohio, for 42 percent; and in Illinois, for 33 percent. Consumption in the industrial sector varied the most among the five States, from a high of 4.3 quadrillion Btu in Texas to a low of 0.8 quadrillion Btu in New York. Residential consumption varied the least, from a high of 1.2 quadrillion Btu in California to a low of 0.8 quadrillion Btu in Ohio.

The report presents annual consumption estimates for the 23 years of 1960 through 1982, allowing for analysis of trends in consumption. The five States consuming the most petroleum in 1982 were Texas, California, New York, Florida, and Louisiana (Table 2). Texas and Louisiana, major oil-producing States, showed annual increases in petroleum consumption in almost every year of the 1960-1982 period, although consumption in both States reached a high in 1981 and declined slightly in 1982. California, New York, and Florida reached their highest consumption levels earlier in the period and showed larger declines in consumption between the high year and 1982.

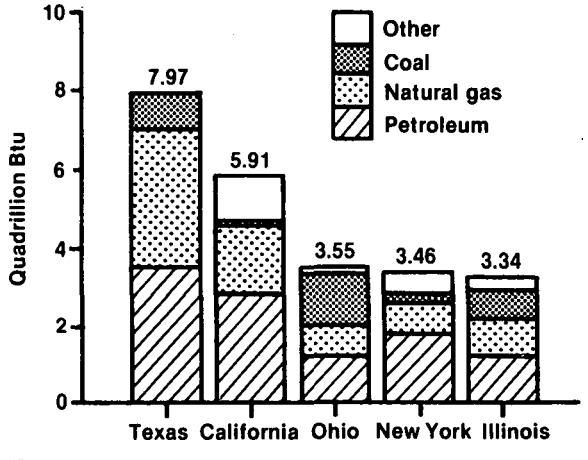
Table 2. Petroleum Consumption in Top 5 States,* 1960-1982 (Quadrillion Btu)

	1960 Use	1972 Use	High Year	High Use	1982 Use
Texas	1.3	2.5	1981	3.7	3.6
California	1.8	2.6	1979	3.7	2.8
New York	1.7	3.0	1973	3.1	1.8
Florida	0.6	1.4	1980	1.8	1.5
Louisiana	0.4	0.8	1981	1.5	1.4

*States that consumed the most petroleum in 1982.

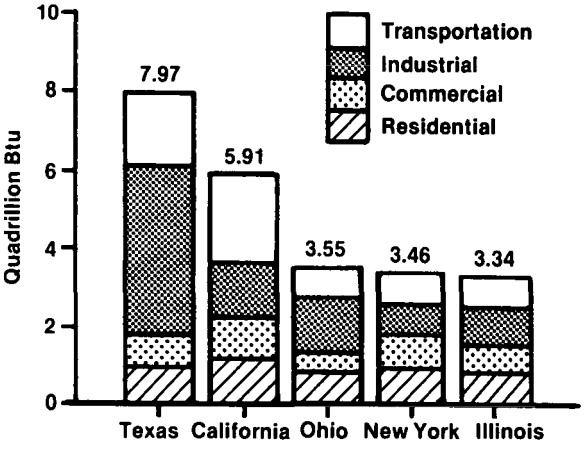
The *State Energy Data Report, Consumption Estimates, 1960-1982,* DOE/EIA-0214(82), contains a 21-page executive summary on the highlights of U.S. and State energy consumption for the 1960-1982 period. Over 500 pages provide detailed estimates of energy consumption by State and Census Division, by energy source, and by economic sector; graphs summarize the tabular data. An extensive section of technical documentation describes how the consumption estimates were made. The report is available from the Superintendent of Documents, Government Printing Office (stock number 061-003-00378-8) for $15.00 per copy.

Figure 1. Energy Consumption by Source in Top 5 States,* 1982



*States that consumed the most energy in 1982.

Figure 2. Energy Consumption by Sector in Top 5 States,* 1982



*States that consumed the most energy in 1982.

HIGHLIGHTS:

Annual Energy Outlook 1983

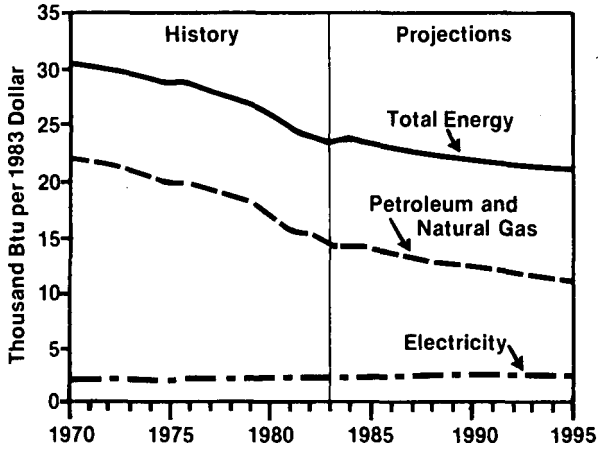
Continued improvement in energy conservation, moderate increases in energy prices, and a further shift to the use of more coal-fired and nuclear generation of electricity dominate the Energy Information Administration's most recent long-term outlook. Projections for 1984 through 1995 of the consumption and supply of energy by energy source and by end-use sector are published in the May 1984 release of the *Annual Energy Outlook 1983.*

The forecasts are based on the assumption that the domestic economy will continue its recovery and that gross national product (GNP) will grow at an average of 2.9 percent per year from 1983 through 1995. An initial rise in GNP of 3.3 percent per year to 1990 will slow to 2.2 percent per year for the 1990-1995 period.

Overall energy efficiency, indicated by energy consumption per dollar of GNP, also is expected to continue to improve. In 1983, energy use[1] per dollar of GNP declined 3.8 percent from the 1982 level, at about the same rate as the average annual rate of decline recorded for the 1979-1982 period. From 1983 to 1995, improvements in energy efficiency are expected to slow: energy use per constant dollar of GNP is expected to decline at about 1 percent per year (Figure 1). The slower rate of improvement in efficiency is expected because many of the best opportunities to save energy have been exhausted and because energy price increases have moderated.

[1] The source for historical energy data for 1983 and earlier is the *Annual Energy Review 1983,* DOE/EIA-0384(83), published by the Energy Information Administration in April 1984.

Figure 1. Energy Consumption per 1983 Dollar of GNP, 1970-1995



Petroleum's share of total energy consumption is expected to decline, because petroleum consumption increases 1.3 percent per year during the 1983-1995 period, while total energy consumption increases 1.7 percent per year. The share decline is partly attributable to a projected decline in motor gasoline consumption based on improved automobile efficiency.

The 1.3-percent-per-year increase in petroleum consumption, when coupled with the forecast stabilization of petroleum production near 1983 levels during the 1980's and a decline in production during the 1990's, is expected to result in increased imports. Net petroleum imports are forecast to rise from their 12-year low of 4.2 million barrels per day in 1983 to 7.0 million barrels per day in 1995 (Table 1).

Natural gas consumption in 1983 totaled 17 trillion cubic feet (Tcf), a decline of about 1 Tcf from the 1982 level. Consumption of natural gas is projected to rise during the remainder of the 1980's to 18 Tcf per year, then return to 1983 levels in 1995.

The most significant change in the 1983 forecast compared to the 1982 forecast is that no "flyup" in natural gas prices is expected in 1985 (Table 2), when much of the natural gas produced is scheduled to be decontrolled under the Natural Gas Policy Act of 1978. The partial decontrol of gas during

Table 1. Petroleum Consumption, Production, and Net Imports, Historic and Projected (Million Barrels per Day)

Year	Consumption	Production[1]	Net Imports
1983[2]	15.2	10.7	4.2
1985	15.8	10.9	5.2
1990	16.6	10.9	6.0
1995	17.4	10.5	7.0

[1] Production includes crude oil, natural gas liquids, refinery gains, hydrogen, and other hydrocarbons.
[2] Preliminary data.

the last few years, the decline in gas consumption to levels below current production capacity, and the renegotiation of natural gas contracts have probably already brought about most of the likely effects of gas price decontrol. It is expected that competition between gas and oil will keep natural gas prices to electric utilities and industrial users in rough parity with low-sulfur fuel oil in the West and Southwest. Gas prices elsewhere are expected to be higher, reflecting transportation and distribution margins. A significant assumption in the forecast is that gas distributors will adjust prices charged to electric utilities and industrial users when necessary to prevent the loss of sales to those major customers.

Coal is forecast to become the major domestically produced energy source by the late 1980's, contributing 36 percent of U.S. energy production in 1995. By comparison, coal accounted for 28 percent of U.S. energy production in 1983. Coal prices (at the mine mouth) are projected to increase at the rate of about 1 percent per year in real terms. Coal is less affected by variation in the assumed world oil price because its consumption is limited principally by coal-fired capacity of electric utilities rather than by price.

About 85 percent of domestic coal consumption is for electricity generation by utilities, and most of the projected increase in coal production will be used to meet increasing demand for electricity. Annual growth in electricity sales is forecast to average 3.3 percent from 1983 through 1995, compared to the 2.9-percent growth rate forecast for GNP. As a result, electricity's share of end-use energy consumption[2] will rise from about 13 percent in 1983 to about 18 percent in 1995.

[2] End-use energy consumption excludes electricity generation and transmission losses.

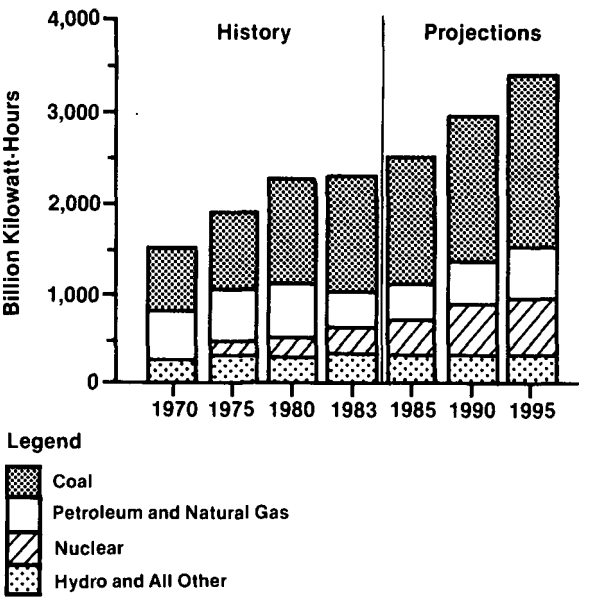
Table 2. Fuel Prices, Historic and Projected

	Crude Oil[1] (1983$ per Barrel)	Natural Gas[2] (1983$ per Mcf)	Coal[3] (1983$ per Short Ton)
1983[4]	29.35	2.60	28.14
1985	26.52	2.68	29.51
1990	36.65	3.62	30.36
1995	50.49	6.33	31.67

[1] Average of imported and domestic refiner acquisition costs.
[2] Average wellhead price.
[3] Average mine-mouth price.
[4] Preliminary data.

Average electricity prices are not projected to rise as rapidly as in the recent past: the moderate increase forecast for electricity prices relative to other fuels explains much of the increase expected in electricity's share of end-use consumption. The slower increase in prices is attributable to completion of most of the generating plants under construction and to the industry's increased ability to consume coal (Figure 2). Increased coal consumption at powerplants is expected to provide the largest share of the increase in U.S. energy consumption through 1995. Electricity generated by nuclear power is projected to be the Nation's most rapidly growing source of energy through the forecast period as nuclear powerplants currently under construction are completed. No new construction resulting in completion of nuclear powerplants during the forecast period is assumed.

Figure 2. Production of Electricity by Fuel Type



The *Annual Energy Outlook 1983* (AEO), DOE/EIA-0383(83), was published in May 1984 by the Energy Information Administration (EIA). In addition to long-term forecasts on U.S. energy production, consumption, and imports for all major fuels and electricity, the AEO provides comparisons of this year's projections with earlier EIA projections and with projections published by other professional organizations, including many from the private sector. The report also includes a section on the forecast methodologies and assumptions. The report is available from the Superintendent of Documents, Government Printing Office (stock number 061-003-00383-4) for $8.50 per copy.

Overview

January through March Summary

The United States produced 8.3 percent* more energy during the first 3 months of 1984 than during the same period in 1983, and U.S. energy consumption was up 8.9 percent. Net imports of all energy were 52.3 percent higher, with net imports of petroleum up 56.7 percent compared to the first 3 months of 1983.

Production

Energy production during March 1984 totaled 5.7 quadrillion Btu, a 9.5-percent increase compared to the level of production during March 1983. Coal production increased 17.3 percent, natural gas production was up 13.5 percent, and petroleum production increased 0.7 percent. Production of all other forms of energy combined increased 6.1 percent compared to production 1 year earlier.

*All percentage increases or decreases are calculated using a daily rate prior to rounding.

Consumption

Energy consumption during March 1984 totaled 6.6 quadrillion Btu, 9.6 percent above the level of consumption during March 1983. Coal consumption and natural gas consumption each increased 16.0 percent, and petroleum consumption increased 3.4 percent. Consumption of all other forms of energy combined increased 5.8 percent compared to consumption during March 1983.

Net Imports

Net imports of energy during March 1984 totaled 0.7 quadrillion Btu, 59.5 percent above the level of imports during March 1983. Net imports of petroleum increased 56.3 percent, while net imports of natural gas decreased 25.6 percent. Net exports of coal were down 6.7 percent compared to the level in March 1983.

Energy Summary

(Quadrillion (10^{15}) Btu)

	March			Cumulative January through March				
	1984	1983	Percent Change	1984	1984 Daily Rate	1983	1983 Daily Rate	Percent Change[1]
Total Production	**5.730**	**5.233**	**+9.5**	**16.691**	**0.183**	**15.247**	**0.169**	**+8.3**
Petroleum[2]	1.757	1.745	+0.7	5.154	0.057	5.074	0.056	+0.4
Natural Gas	1.550	1.366	+13.5	4.704	0.052	4.186	0.047	+11.1
Coal	1.793	1.529	+17.3	4.937	0.054	4.249	0.047	+14.9
Other[3]	0.629	0.593	+6.1	1.896	0.021	1.738	0.019	+7.9
Total Consumption	**6.638**	**6.059**	**+9.6**	**20.082**	**0.221**	**18.235**	**0.203**	**+8.9**
Petroleum[4]	2.686	2.597	+3.4	7.906	0.087	7.311	0.081	+7.0
Natural Gas	1.909	1.646	+16.0	5.941	0.065	5.373	0.060	+9.3
Coal	1.385	1.195	+16.0	4.253	0.047	3.732	0.041	+12.7
Other[5]	0.658	0.621	+5.8	1.983	0.022	1.820	0.020	+7.8
Net Imports	**0.730**	**0.458**	**+59.5**	**2.402**	**0.026**	**1.560**	**0.017**	**+52.3**
Petroleum[6]	0.788	0.504	+56.3	2.481	0.027	1.566	0.017	+56.7
Natural Gas	0.065	0.088	-25.6	0.225	0.002	0.303	0.003	-26.6
Coal[7]	(0.152)	(0.162)	(-6.7)	(0.391)	(0.004)	(0.392)	(0.004)	(-1.3)
Other[8]	0.028	0.029	-0.8	0.087	0.001	0.082	0.001	+5.1

[1] Based on daily rates prior to rounding.
[2] Includes crude oil, lease condensate, and natural gas plant liquids.
[3] Other is hydroelectric, nuclear, and geothermal power and electricity produced from wood, waste, and wind energy.
[4] Includes refined petroleum products and natural gas plant liquids.
[5] Other is hydroelectric, nuclear, and geothermal power; electricity produced from wood, waste, and wind energy; 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] Other is net imports of electricity and coal coke.
Note: • Totals may not equal sum of components due to independent rounding.

First Quarter 1984 Summary

U.S. energy production, consumption, and net imports all increased in the first quarter of 1984 compared to their levels in the first quarter of 1983. Total energy produced in the quarter was 8.3 percent* higher than in the same period 1 year earlier, and total energy consumed was up 8.9 percent. Net imports for the quarter rose for the first time since 1977, increasing 52.3 percent from the level of net imports in the first quarter of 1983.

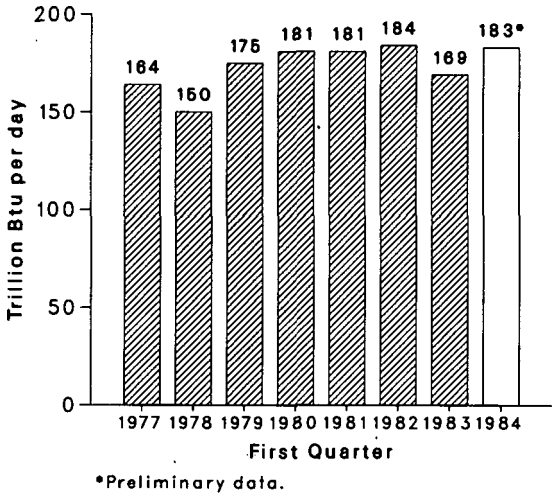
U.S. energy production in the first quarter of 1984 totaled 16.7 quadrillion Btu (183 trillion Btu per day), compared to 15.2 quadrillion Btu (169 trillion Btu per day) in the first quarter of 1983 (Figure 1). The rise in production was due primarily to increases in the production of coal and natural gas of 14.9 percent and 11.1 percent, respectively. Production of petroleum (crude oil, lease condensate, and natural gas plant liquids) was up 0.4 percent from the same period 1 year earlier. Electricity generated from nuclear power increased 16.9 percent, but electricity generated from hydroelectric power recorded a small decrease of 0.5 percent in the first quarter of 1984 compared to the first quarter of 1983.

U.S. energy consumption in the first quarter of 1984 totaled 20.1 quadrillion Btu (221 trillion Btu per day), compared to 18.2 quadrillion Btu (203 trillion Btu per day) in the first quarter of 1983 (Figure 2). First quarter energy consumption peaked at the level of 246 trillion Btu per day in 1979, then declined each year until 1984, when energy consumption increased 8.9 percent compared to the first quarter of the previous year. Consumption of all three major fossil fuels increased significantly in the first quarter of 1984 compared to the same quarter in 1983. Coal consumption was up 12.7 percent, followed by increases in natural gas consumption of 9.3 percent, and in petroleum consumption of 7.0 percent.

U.S. net imports of energy totaled 2.4 quadrillion Btu (26 trillion Btu per day) in the first quarter of 1984, up 52.3 percent from the 17 trillion Btu per day in 1983's first quarter, but less than half the peak rate of 55 trillion Btu per day recorded in the first quarter of 1977 (Figure 3). The large increase in net imports of energy was due primarily to a 56.7-percent rise in net imports of petroleum in the first quarter of 1984 compared to the first quarter of 1983. A 1.3-percent decline in coal exports also contributed to the increase in net imports of energy. The changes in petroleum and coal trade were somewhat offset by a 26.6-percent decrease in net imports of natural gas.

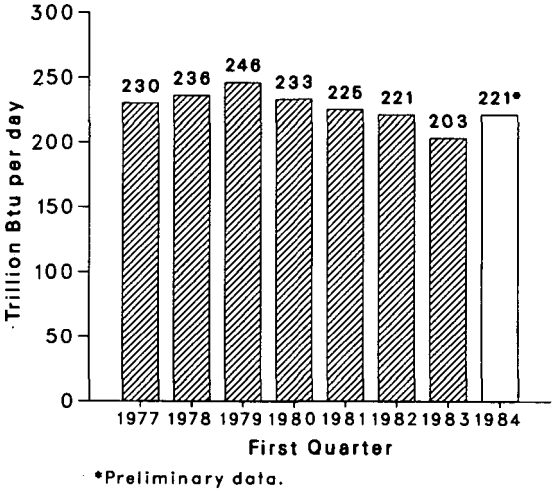
*All percentage increases or decreases are calculated using a daily rate prior to rounding.

Figure 1. U.S. Energy Production



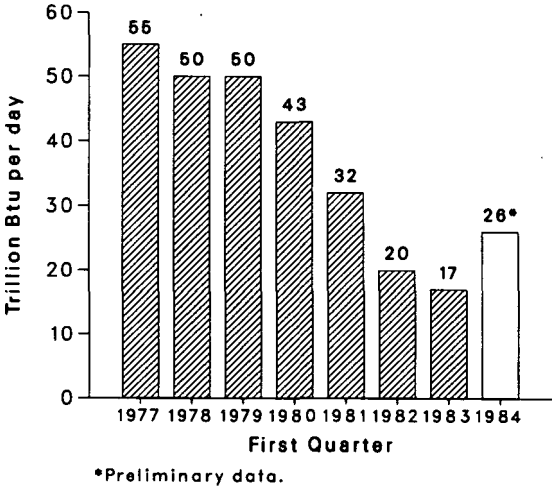
*Preliminary data.

Figure 2. U.S. Energy Consumption



*Preliminary data.

Figure 3. U.S. Energy Net Imports



*Preliminary data.

Executive Summary

Production of Energy by Source—Quarterly Summary

		Coal	Crude Oil[1]	NGPL[2]	Natural Gas (Dry)	Hydro-electric Power[3]	Nuclear Electric Power	Other[4]	Total Energy Produced
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**13.926**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**61.993**
1974	**TOTAL**	**14.010**	**18.575**	**2.471**	**21.210**	**3.177**	**1.272**	**0.056**	**60.770**
1975	**TOTAL**	**14.931**	**17.729**	**2.374**	**19.640**	**3.155**	**1.900**	**0.072**	**59.801**
1976	**TOTAL**	**15.649**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**59.886**
1977	1st Qtr	3.643	4.188	0.571	5.046	0.589	0.672	0.021	14.730
	2nd Qtr	4.220	4.279	0.586	4.869	0.577	0.667	0.020	15.218
	3rd Qtr	4.009	4.426	0.579	4.804	0.528	0.691	0.020	15.058
	4th Qtr	3.807	4.560	0.592	4.847	0.639	0.671	0.021	15.136
	TOTAL	**15.679**	**17.454**	**2.327**	**19.565**	**2.333**	**2.702**	**0.082**	**60.142**
1978	1st Qtr	1.948	4.431	0.555	5.014	0.753	0.767	0.019	13.488
	2nd Qtr	4.401	4.658	0.563	4.834	0.829	0.658	0.013	15.957
	3rd Qtr	3.987	4.680	0.561	4.807	0.710	0.796	0.018	15.560
	4th Qtr	4.520	4.664	0.567	4.830	0.644	0.802	0.018	16.045
	TOTAL	**14.856**	**18.434**	**2.245**	**19.485**	**2.937**	**3.024**	**0.068**	**61.049**
1979	1st Qtr	4.015	4.455	0.550	5.084	0.756	0.849	0.020	15.729
	2nd Qtr	4.569	4.502	0.570	4.953	0.831	0.539	0.021	15.984
	3rd Qtr	4.248	4.524	0.571	4.889	0.660	0.727	0.023	15.641
	4th Qtr	4.652	4.623	0.595	5.151	0.684	0.661	0.025	16.391
	TOTAL	**17.483**	**18.104**	**2.286**	**20.076**	**2.931**	**2.776**	**0.089**	**63.744**
1980	1st Qtr	4.606	4.588	0.578	5.287	0.746	0.644	0.024	16.473
	2nd Qtr	4.739	4.552	0.571	4.885	0.864	0.605	0.028	16.244
	3rd Qtr	4.437	4.549	0.547	4.706	0.666	0.752	0.031	15.688
	4th Qtr	4.762	4.559	0.558	5.029	0.624	0.738	0.032	16.302
	TOTAL	**18.544**	**18.249**	**2.254**	**19.907**	**2.900**	**2.739**	**0.114**	**64.708**
1981	1st Qtr	4.787	4.481	0.581	4.995	0.678	0.743	0.033	16.298
	2nd Qtr	3.025	4.519	0.570	4.942	0.754	0.679	0.031	14.519
	3rd Qtr	5.220	4.569	0.575	4.881	0.683	0.821	0.033	16.782
	4th Qtr	5.300	4.577	0.581	4.880	0.644	0.765	0.030	16.777
	TOTAL	**18.331**	**18.146**	**2.307**	**19.699**	**2.758**	**3.008**	**0.127**	**64.376**
1982	1st Qtr	4.933	4.502	0.547	4.916	0.883	0.756	0.023	16.560
	2nd Qtr	4.804	4.561	0.537	4.572	0.888	0.743	0.025	16.128
	3rd Qtr	4.470	4.623	0.541	4.385	0.752	0.835	0.030	15.637
	4th Qtr	4.396	4.624	0.566	4.382	0.748	0.781	0.030	15.527
	TOTAL	**18.603**	**18.309**	**2.191**	**18.255**	**3.271**	**3.115**	**0.108**	**63.851**
1983	1st Qtr	R4.249	4.519	0.555	4.186	0.925	0.784	0.028	R15.247
	2nd Qtr	R4.127	4.582	0.527	3.826	0.972	0.755	0.026	R14.814
	3rd Qtr	R4.398	4.618	0.556	R4.014	R0.800	R0.846	0.042	R15.273
	4th Qtr	R4.512	4.605	0.565	R4.393	0.814	R0.850	0.039	R15.778
	TOTAL	**17.286**	**18.324**	**2.202**	**R16.419**	**R3.511**	**R3.235**	**0.135**	**R61.113**
1984	1st Qtr	4.937	4.592	0.562	4.704	0.931	0.926	0.039	16.691

[1]Includes lease condensate.
[2]Natural gas plant liquids.
[3]Includes industrial and utility production of hydropower.
[4]Includes only geothermal power and electricity produced from wood, waste, and wind energy.
R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data do not include wood-derived fuel (other than that consumed by the electric utilities). Data also exclude small quantities of energy forms for which consistent historical data are not available, such as solar energy obtained by the use of thermal and photovoltaic collectors; and geothermal, biomass, waste, and wind energy (other than that consumed at electric utilities).
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

Executive Summary

Consumption of Energy by Source—Quarterly Summary

		Coal	Natural Gas (Dry)	Petroleum	Hydro-electric Power[1]	Nuclear Electric Power	Net Imports of Coal Coke[2]	Other[3]	Total Energy Consumed
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**12.903**	**22.512**	**34.840**	**3.010**	**0.910**	**(0.008)**	**0.046**	**74.212**
1974	**TOTAL**	**12.596**	**21.732**	**33.455**	**3.309**	**1.272**	**0.059**	**0.056**	**72.479**
1975	**TOTAL**	**12.601**	**19.948**	**32.731**	**3.219**	**1.900**	**0.014**	**0.072**	**70.485**
1976	**TOTAL**	**13.519**	**20.345**	**35.175**	**3.066**	**2.111**	**0.000**	**0.081**	**74.297**
1977	1st Qtr	3.499	6.063	9.772	0.634	0.672	(0.004)	0.021	20.657
	2nd Qtr	3.289	4.238	8.800	0.623	0.667	(0.002)	0.020	17.636
	3rd Qtr	3.604	4.202	9.019	0.574	0.691	0.010	0.020	18.121
	4th Qtr	3.456	5.428	9.531	0.684	0.671	0.011	0.021	19.801
	TOTAL	**13.848**	**19.931**	**37.122**	**2.515**	**2.702**	**0.015**	**0.082**	**76.215**
1978	1st Qtr	3.138	6.561	9.971	0.804	0.767	0.008	0.019	21.268
	2nd Qtr	3.256	4.247	9.081	0.880	0.658	0.047	0.013	18.182
	3rd Qtr	3.712	3.926	9.178	0.762	0.796	0.040	0.018	18.433
	4th Qtr	3.604	5.265	9.735	0.696	0.802	0.037	0.018	20.157
	TOTAL	**13.710**	**20.000**	**37.965**	**3.141**	**3.024**	**0.131**	**0.068**	**78.039**
1979	1st Qtr	3.755	6.648	10.072	0.808	0.849	0.009	0.020	22.160
	2nd Qtr	3.559	4.423	8.837	0.883	0.539	0.026	0.021	18.288
	3rd Qtr	3.861	4.085	8.879	0.713	0.727	0.025	0.023	18.313
	4th Qtr	3.809	5.510	9.337	0.737	0.661	0.005	0.025	20.084
	TOTAL	**14.983**	**20.666**	**37.123**	**3.141**	**2.776**	**0.066**	**0.089**	**78.845**
1980	1st Qtr	3.982	6.606	9.143	0.800	0.644	(0.001)	0.024	21.199
	2nd Qtr	3.534	4.255	8.177	0.919	0.605	(0.015)	0.028	17.504
	3rd Qtr	4.007	3.977	8.123	0.721	0.752	(0.012)	0.031	17.598
	4th Qtr	3.849	5.553	8.759	0.678	0.738	(0.010)	0.032	19.599
	TOTAL	**15.373**	**20.391**	**34.202**	**3.118**	**2.739**	**(0.037)**	**0.114**	**75.900**
1981	1st Qtr	4.056	6.237	8.391	0.763	0.743	(0.004)	0.033	20.219
	2nd Qtr	3.666	4.337	7.732	0.841	0.679	(0.006)	0.031	17.280
	3rd Qtr	4.178	3.997	7.785	0.770	0.821	(0.001)	0.033	17.583
	4th Qtr	3.959	5.355	8.023	0.731	0.765	(0.006)	0.030	18.858
	TOTAL	**15.860**	**19.926**	**31.931**	**3.105**	**3.008**	**(0.017)**	**0.127**	**73.940**
1982	1st Qtr	4.038	6.396	7.745	0.962	0.756	(0.004)	0.023	19.916
	2nd Qtr	3.549	3.841	7.535	0.968	0.743	(0.007)	0.025	16.653
	3rd Qtr	3.982	3.532	7.419	0.833	0.835	(0.008)	0.030	16.624
	4th Qtr	3.722	4.738	7.532	0.829	0.781	(0.004)	0.030	17.629
	TOTAL	**15.291**	**18.507**	**30.232**	**3.592**	**3.115**	**(0.023)**	**0.108**	**70.822**
1983	1st Qtr	R3.732	5.373	7.311	1.011	0.784	(0.003)	0.028	R18.235
	2nd Qtr	3.564	3.639	7.269	1.058	0.755	(0.005)	0.026	16.306
	3rd Qtr	R4.434	R3.399	7.577	R0.887	R0.846	(0.003)	0.042	R17.180
	4th Qtr	R4.147	R5.092	7.827	0.901	R0.850	(0.005)	0.039	R18.851
	TOTAL	**R15.877**	**R17.503**	**29.983**	**R3.857**	**R3.235**	**(0.016)**	**0.135**	**R70.573**
1984	1st Qtr	4.253	5.941	7.906	1.016	0.926	0.002	0.039	20.082

[1]Includes industrial and utility production and net imports of electricity.
[2]Parentheses indicate exports are greater than imports.
[3]Includes only geothermal power and electricity produced from wood, waste, and wind energy.
R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data do not include wood-derived fuel (other than that consumed by the electric utilities). Data also exclude small quantities of energy forms for which consistent historical data are not available, such as solar energy obtained by the use of thermal and photovoltaic collectors; and geothermal, biomass, waste, and wind energy (other than that consumed at electric utilities).
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

Executive Summary

Net Imports[1] of Energy by Source—Quarterly Summary

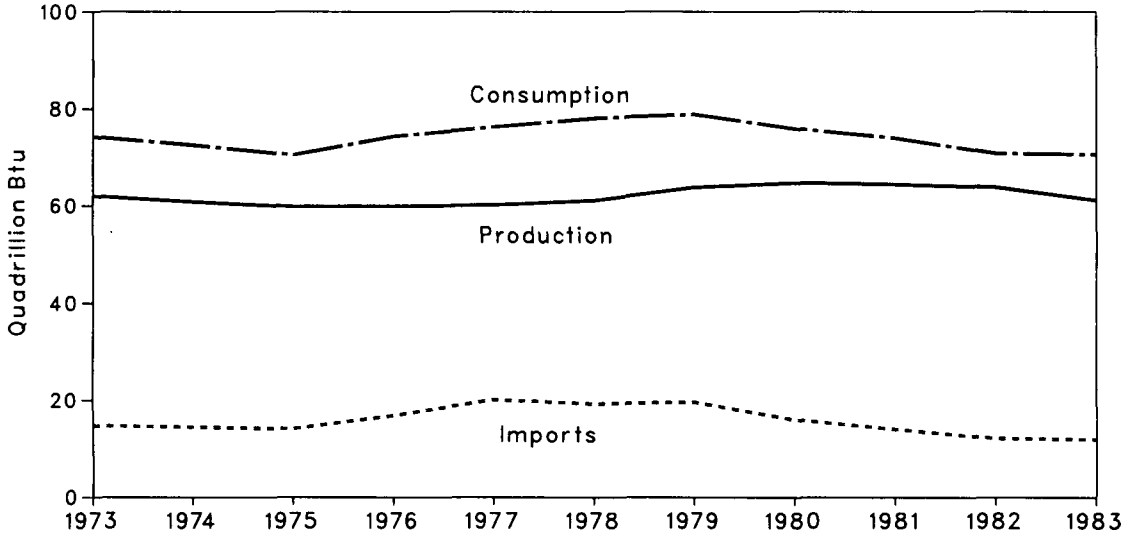
		Coal	Crude Oil[2]	Refined Petroleum Products[3]	Natural Gas (Dry)	Electricity	Coal Coke	Total Net Imports
				Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**(1.422)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.679**
1974	**TOTAL**	**(1.568)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.059**	**12.192**
1975	**TOTAL**	**(1.738)**	**8.708**	**3.800**	**0.904**	**0.064**	**0.014**	**11.753**
1976	**TOTAL**	**(1.567)**	**11.221**	**3.982**	**0.922**	**0.089**	**0.000**	**14.648**
1977	1st Qtr	(0.227)	3.403	1.432	0.274	0.045	(0.004)	4.924
	2nd Qtr	(0.455)	3.628	0.881	0.241	0.045	(0.002)	4.339
	3rd Qtr	(0.380)	3.513	1.043	0.213	0.046	0.010	4.445
	4th Qtr	(0.339)	3.377	0.965	0.253	0.046	0.011	4.311
	TOTAL	**(1.401)**	**13.921**	**4.321**	**0.981**	**0.182**	**0.015**	**18.019**
1978	1st Qtr	(0.036)	3.138	1.112	0.241	0.050	0.008	4.512
	2nd Qtr	(0.306)	3.063	0.891	0.214	0.051	0.047	3.961
	3rd Qtr	(0.264)	3.422	0.942	0.209	0.052	0.040	4.401
	4th Qtr	(0.398)	3.502	0.987	0.276	0.052	0.037	4.455
	TOTAL	**(1.004)**	**13.125**	**3.932**	**0.941**	**0.204**	**0.131**	**17.329**
1979	1st Qtr	(0.277)	3.311	1.051	0.307	0.052	0.009	4.454
	2nd Qtr	(0.452)	3.252	0.787	0.307	0.052	0.026	3.973
	3rd Qtr	(0.455)	3.417	0.826	0.295	0.053	0.025	4.161
	4th Qtr	(0.517)	3.348	0.939	0.333	0.053	0.005	4.161
	TOTAL	**(1.702)**	**13.328**	**3.603**	**1.243**	**0.211**	**0.066**	**16.748**
1980	1st Qtr	(0.363)	3.021	0.902	0.326	0.054	(0.001)	3.940
	2nd Qtr	(0.652)	2.696	0.625	0.203	0.054	(0.015)	2.912
	3rd Qtr	(0.678)	2.446	0.626	0.174	0.055	(0.012)	2.611
	4th Qtr	(0.698)	2.423	0.760	0.254	0.055	(0.010)	2.783
	TOTAL	**(2.391)**	**10.586**	**2.912**	**0.957**	**0.217**	**(0.037)**	**12.246**
1981	1st Qtr	(0.578)	2.368	0.729	0.244	0.086	(0.004)	2.846
	2nd Qtr	(0.529)	2.127	0.552	0.185	0.087	(0.006)	2.415
	3rd Qtr	(0.883)	2.239	0.628	0.184	0.088	(0.001)	2.254
	4th Qtr	(0.929)	2.119	0.613	0.242	0.088	(0.006)	2.128
	TOTAL	**(2.918)**	**8.854**	**2.522**	**0.855**	**0.347**	**(0.017)**	**9.643**
1982	1st Qtr	(0.668)	1.524	0.569	0.257	0.079	(0.004)	1.757
	2nd Qtr	(0.826)	1.672	0.466	0.190	0.080	(0.007)	1.575
	3rd Qtr	(0.655)	1.970	0.536	0.181	0.081	(0.008)	2.106
	4th Qtr	(0.619)	1.751	0.557	0.268	0.081	(0.004)	2.034
	TOTAL	**(2.768)**	**6.917**	**2.128**	**0.896**	**0.322**	**(0.023)**	**7.473**
1983	1st Qtr	(0.392)	1.208	0.358	0.303	0.085	(0.003)	1.560
	2nd Qtr	(0.525)	1.656	0.516	0.192	0.086	(0.005)	1.920
	3rd Qtr	(0.572)	2.102	0.710	0.168	0.087	(0.003)	2.492
	4th Qtr	(0.524)	1.707	0.682	0.241	0.087	(0.005)	2.188
	TOTAL	**(2.013)**	**6.673**	**2.266**	**0.905**	**0.346**	**(0.016)**	**8.160**
1984	1st Qtr	(0.391)	1.568	0.912	0.225	0.085	0.002	2.402

[1]Net imports equals imports minus exports. Parentheses indicate exports are greater than imports.
[2]Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve.
[3]Includes refined petroleum products, unfinished oils, natural gasoline, and plant condensate.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

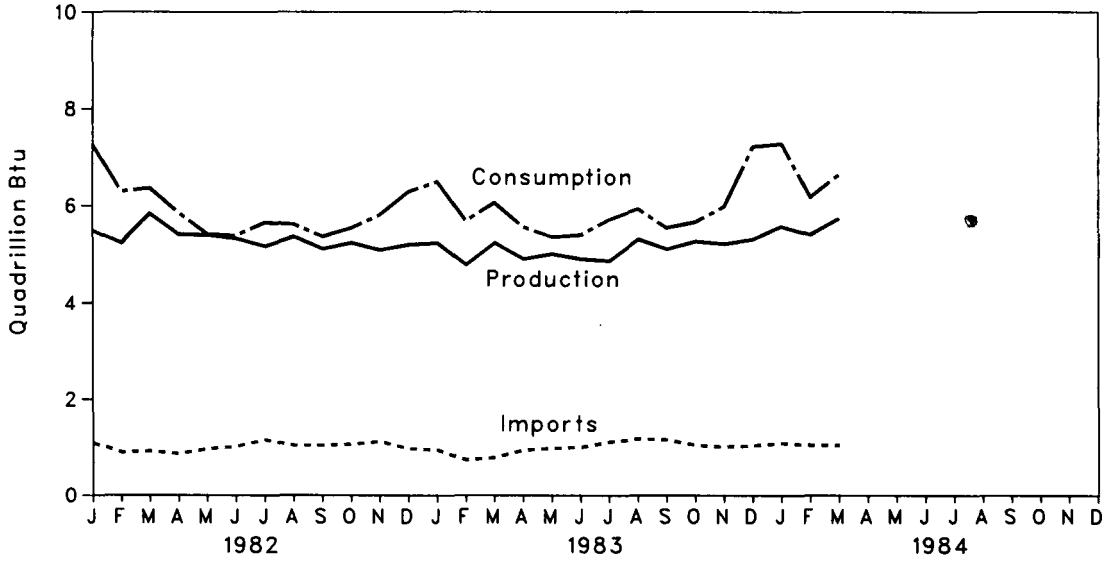
Executive Summary

Energy Summary

Yearly



Monthly



Executive Summary

Energy Summary[1]

		Energy Production[2]	Energy Consumption[2]	Energy Imports[2]	Energy Exports	Total Net Imports
				Quadrillion (10^{15}) Btu		
1973	**TOTAL**	**61.993**	**74.212**	**14.732**	**2.053**	**12.679**
1974	**TOTAL**	**60.770**	**72.479**	**14.417**	**2.224**	**12.192**
1975	**TOTAL**	**59.801**	**70.485**	**14.113**	**2.361**	**11.753**
1976	**TOTAL**	**59.886**	**74.297**	**16.838**	**2.190**	**14.648**
1977	**TOTAL**	**60.142**	**76.215**	**20.092**	**2.073**	**18.019**
1978	**TOTAL**	**61.049**	**78.039**	**19.261**	**1.932**	**17.329**
1979	**TOTAL**	**63.744**	**78.845**	**19.620**	**2.872**	**16.748**
1980	**TOTAL**	**64.708**	**75.900**	**15.972**	**3.726**	**12.246**
1981	**TOTAL**	**64.376**	**73.940**	**13.974**	**4.331**	**9.643**
1982	January	5.489	7.263	1.088	0.319	0.769
	February	5.236	6.293	0.892	0.377	0.515
	March	5.835	6.360	0.916	0.443	0.473
	April	5.408	5.854	0.861	0.427	0.434
	May	5.395	5.414	0.962	0.420	0.542
	June	5.325	5.386	1.016	0.416	0.600
	July	5.165	5.649	1.156	0.386	0.770
	August	5.362	5.612	1.036	0.359	0.677
	September	5.109	5.363	1.036	0.377	0.659
	October	5.236	5.534	1.061	0.439	0.621
	November	5.090	5.808	1.119	0.352	0.768
	December	5.202	6.287	0.968	0.323	0.645
	TOTAL	**63.851**	**70.822**	**12.110**	**4.637**	**7.473**
1983	January	5.232	6.491	0.939	0.303	0.636
	February	4.783	5.686	0.731	0.265	0.465
	March	5.233	6.059	0.777	0.319	0.458
	April	4.904	5.560	0.934	0.312	0.622
	May	5.009	5.351	0.976	0.344	0.633
	June	4.901	5.395	1.000	0.335	0.665
	July	4.864	5.711	1.110	0.275	0.836
	August	5.305	5.931	1.175	0.348	0.827
	September	5.104	5.539	1.155	0.326	0.829
	October	5.265	5.662	1.044	0.326	0.718
	November	5.209	5.978	1.008	0.281	0.727
	December	5.304	7.211	1.035	0.291	0.743
	TOTAL	**61.113**	**70.573**	**11.884**	**3.725**	**8.160**
1984	January	5.565	7.270	1.087	0.245	0.842
	February	5.397	6.174	1.047	0.217	0.830
	March	5.730	6.638	1.044	0.314	0.730

[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.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
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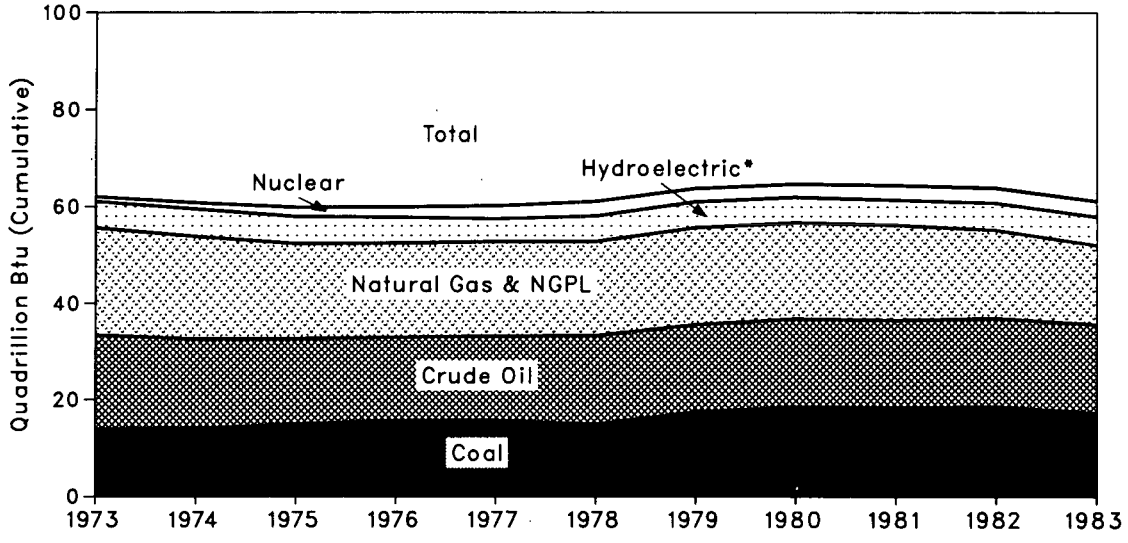
• Data do not include wood-derived fuel (other than that consumed by the electric utilities). Data also exclude small quantities of energy forms for which consistent historical data are not available, such as solar energy obtained by the use of thermal and photovoltaic collectors; and geothermal, biomass, waste, and wind energy (other than that consumed at electric utilities).
Source: • Energy Information Administration calculations based on data appearing elsewhere in this publication.

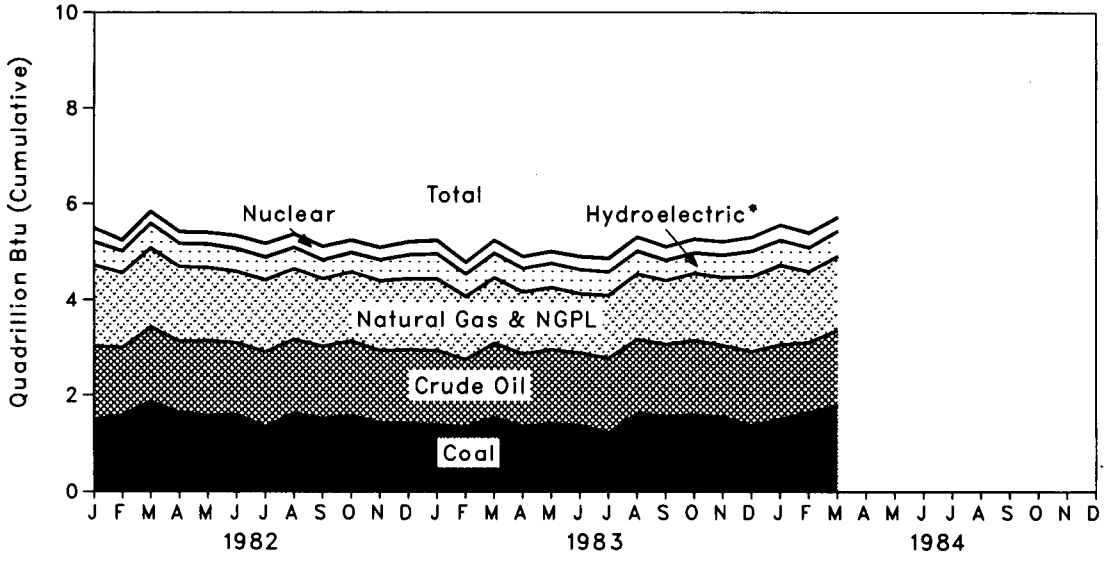
Executive Summary

Production of Energy by Source

Yearly



Monthly



*Includes industrial and utility production of hydropower. Also includes geothermal power and electricity produced from wood, waste, and wind energy.

Executive Summary

Production of Energy by Source

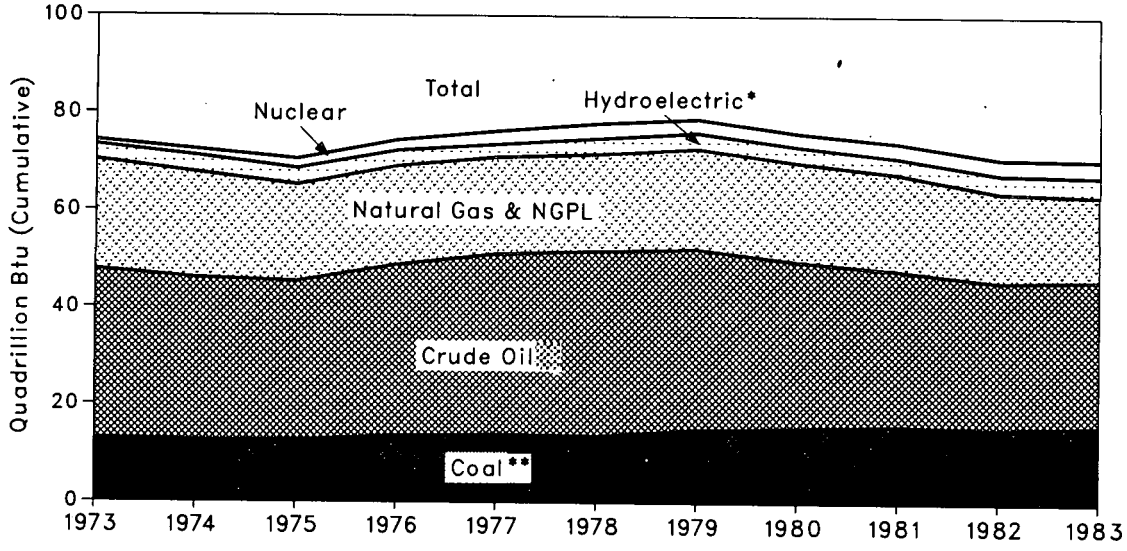
		Coal	Crude Oil[1]	NGPL[2]	Natural Gas (Dry)	Hydro-electric Power[3]	Nuclear Electric Power	Other[4]	Total Energy Produced	Yearly Cumulative Energy Produced
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**13.926**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**61.993**	
1974	**TOTAL**	**14.010**	**18.575**	**2.471**	**21.210**	**3.177**	**1.272**	**0.056**	**60.770**	
1975	**TOTAL**	**14.931**	**17.729**	**2.374**	**19.640**	**3.155**	**1.900**	**0.072**	**59.801**	
1976	**TOTAL**	**15.649**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**59.886**	
1977	**TOTAL**	**15.679**	**17.454**	**2.327**	**19.565**	**2.333**	**2.702**	**0.082**	**60.142**	
1978	**TOTAL**	**14.856**	**18.434**	**2.245**	**19.485**	**2.937**	**3.024**	**0.068**	**61.049**	
1979	**TOTAL**	**17.483**	**18.104**	**2.286**	**20.076**	**2.931**	**2.776**	**0.089**	**63.744**	
1980	**TOTAL**	**18.544**	**18.249**	**2.254**	**19.907**	**2.900**	**2.739**	**0.114**	**64.708**	
1981	**TOTAL**	**18.331**	**18.146**	**2.307**	**19.699**	**2.758**	**3.008**	**0.127**	**64.376**	
1982	January	1.490	1.530	0.189	1.703	0.285	0.283	0.009	5.489	5.489
	February	1.580	1.413	0.169	1.562	0.282	0.222	0.008	5.236	10.725
	March	1.863	1.558	0.189	1.651	0.316	0.251	0.007	5.835	16.560
	April	1.633	1.495	0.179	1.558	0.296	0.240	0.007	5.408	21.968
	May	1.579	1.561	0.182	1.530	0.296	0.238	0.008	5.395	27.362
	June	1.592	1.504	0.175	1.483	0.296	0.265	0.010	5.325	32.688
	July	1.344	1.557	0.182	1.504	0.289	0.281	0.010	5.165	37.853
	August	1.618	1.552	0.183	1.471	0.253	0.275	0.010	5.362	43.216
	September	1.508	1.514	0.176	1.410	0.211	0.280	0.010	5.109	48.324
	October	1.573	1.565	0.184	1.439	0.209	0.256	0.011	5.236	53.560
	November	1.422	1.513	0.187	1.455	0.246	0.256	0.011	5.090	58.650
	December	1.401	1.546	0.195	1.489	0.293	0.269	0.009	5.202	63.851
	TOTAL	**18.603**	**18.309**	**2.191**	**18.255**	**3.271**	**3.115**	**0.108**	**63.851**	
1983	January	1.384	1.552	0.200	1.499	0.310	0.276	0.011	5.232	5.232
	February	1.336	1.406	0.171	1.321	0.295	0.245	0.008	4.783	10.015
	March	1.529	1.560	0.185	1.366	0.320	0.263	0.010	5.233	15.247
	April	1.356	1.511	0.174	1.291	0.317	0.246	0.009	4.904	20.151
	May	1.393	1.561	0.177	1.297	0.330	0.243	0.007	5.009	25.160
	June	1.378	1.510	0.175	1.238	0.325	0.266	0.010	4.901	30.062
	July	1.219	1.555	0.184	1.316	0.297	0.282	0.012	4.864	34.926
	August	1.619	1.556	0.187	1.366	0.273	0.289	0.016	5.305	40.231
	September	1.560	1.508	0.185	1.332	0.230	0.275	0.014	5.104	45.335
	October	1.594	1.556	0.192	1.404	0.219	0.284	0.015	5.265	50.600
	November	1.547	1.501	0.189	1.423	0.261	0.275	0.013	5.209	55.809
	December	1.371	1.548	0.183	1.566	0.334	0.290	0.011	5.304	61.113
	TOTAL	**17.286**	**18.324**	**2.202**	**16.419**	**3.511**	**3.235**	**0.135**	**61.113**	
1984	January	1.502	1.557	0.190	1.669	0.314	0.321	0.011	5.565	5.565
	February	1.642	1.468	0.182	1.484	0.295	0.312	0.013	5.397	10.961
	March	1.793	1.567	0.190	1.550	0.321	0.293	0.015	5.730	16.691

[1]Includes lease condensate.
[2]Natural gas plant liquids.
[3]Includes industrial and utility production of hydropower.
[4]Includes only geothermal power and electricity produced from wood, waste, and wind energy.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data do not include wood-derived fuel (other than that consumed by the electric utilities). Data also exclude small quantities of energy forms for which consistent historical data are not available, such as solar energy obtained by the use of thermal and photovoltaic collectors; and geothermal, biomass, waste, and wind energy (other than that consumed at electric utilities).
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

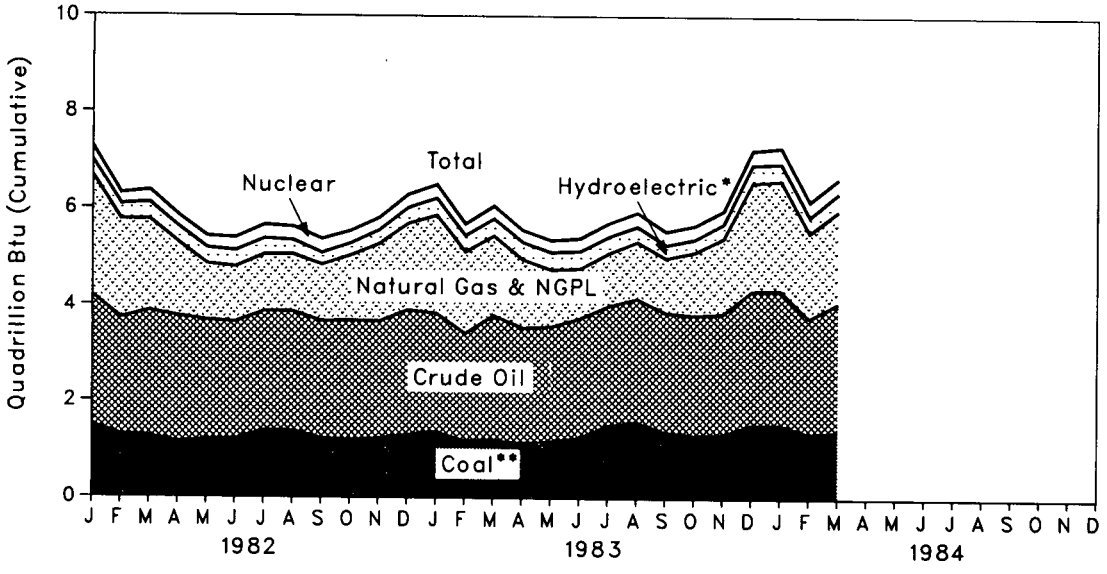
Executive Summary

Consumption of Energy by Source

Yearly



Monthly



*Includes geothermal power and electricity produced from wood, waste, and wind energy.
**Includes net imports of coal coke.

Executive Summary

Consumption of Energy by Source

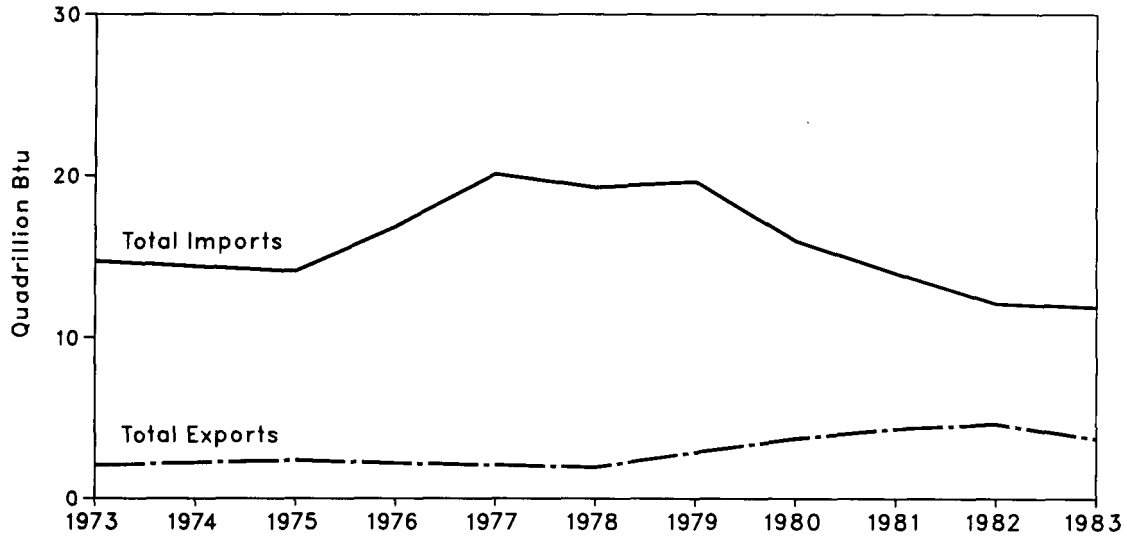
		Coal	Natural Gas (Dry)	Petro-leum	Hydro-electric Power[1]	Nuclear Electric Power	Net Imports of Coal Coke[2]	Other[3]	Total Energy Con-sumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**12.903**	**22.512**	**34.840**	**3.010**	**0.910**	**(0.008)**	**0.046**	**74.212**	
1974	**TOTAL**	**12.596**	**21.732**	**33.455**	**3.309**	**1.272**	**0.059**	**0.056**	**72.479**	
1975	**TOTAL**	**12.601**	**19.948**	**32.731**	**3.219**	**1.900**	**0.014**	**0.072**	**70.485**	
1976	**TOTAL**	**13.519**	**20.345**	**35.175**	**3.066**	**2.111**	**0.000**	**0.081**	**74.297**	
1977	**TOTAL**	**13.848**	**19.931**	**37.122**	**2.515**	**2.702**	**0.015**	**0.082**	**76.215**	
1978	**TOTAL**	**13.710**	**20.000**	**37.965**	**3.141**	**3.024**	**0.131**	**0.068**	**78.039**	
1979	**TOTAL**	**14.983**	**20.666**	**37.123**	**3.141**	**2.776**	**0.066**	**0.089**	**78.845**	
1980	**TOTAL**	**15.373**	**20.391**	**34.202**	**3.118**	**2.739**	**(0.037)**	**0.114**	**75.900**	
1981	**TOTAL**	**15.860**	**19.926**	**31.931**	**3.105**	**3.008**	**(0.017)**	**0.127**	**73.940**	
1982	January	1.486	2.467	2.707	0.312	0.283	0.000	0.009	7.263	7.263
	February	1.292	2.040	2.426	0.307	0.222	(0.001)	0.008	6.293	13.556
	March	1.260	1.889	2.612	0.343	0.251	(0.002)	0.007	6.360	19.916
	April	1.152	1.527	2.607	0.322	0.240	(0.001)	0.007	5.854	25.770
	May	1.186	1.168	2.492	0.324	0.238	(0.003)	0.008	5.414	31.183
	June	1.210	1.146	2.436	0.322	0.265	(0.004)	0.010	5.386	36.569
	July	1.381	1.177	2.488	0.316	0.281	(0.003)	0.010	5.649	42.218
	August	1.374	1.183	2.491	0.280	0.275	(0.001)	0.010	5.612	47.831
	September	1.227	1.172	2.440	0.237	0.280	(0.003)	0.010	5.363	53.193
	October	1.190	1.348	2.494	0.236	0.256	(0.001)	0.011	5.534	58.727
	November	1.229	1.603	2.438	0.273	0.256	(0.002)	0.011	5.808	64.535
	December	1.303	1.788	2.600	0.320	0.269	(0.001)	0.009	6.287	70.822
	TOTAL	**15.291**	**18.507**	**30.232**	**3.592**	**3.115**	**(0.023)**	**0.108**	**70.822**	
1983	January	1.358	2.031	2.476	0.339	0.276	(0.001)	0.011	6.491	6.491
	February	1.179	1.696	2.238	0.322	0.245	(0.001)	0.008	5.686	12.177
	March	1.195	1.646	2.597	0.350	0.263	(0.001)	0.010	6.059	18.235
	April	1.138	1.425	2.399	0.345	0.246	(0.002)	0.009	5.560	23.795
	May	1.171	1.182	2.390	0.359	0.243	(0.002)	0.007	5.351	29.146
	June	1.255	1.032	2.480	0.353	0.266	(0.001)	0.010	5.395	34.541
	July	1.497	1.094	2.501	0.327	0.282	(0.002)	0.012	5.711	40.252
	August	1.572	1.176	2.577	0.302	0.289	(0.001)	0.016	5.931	46.183
	September	1.365	1.129	2.499	0.258	0.275	(0.001)	0.014	5.539	51.721
	October	1.303	1.306	2.507	0.249	0.284	(0.001)	0.015	5.662	57.384
	November	1.324	1.556	2.521	0.289	0.275	(0.001)	0.013	5.978	63.362
	December	1.520	2.230	2.799	0.364	0.290	(0.003)	0.011	7.211	70.573
	TOTAL	**15.877**	**17.503**	**29.983**	**3.857**	**3.235**	**(0.016)**	**0.135**	**70.573**	
1984	January	1.526	2.263	2.805	0.344	0.321	0.001	0.011	7.270	7.270
	February	1.342	1.769	2.414	0.321	0.312	0.002	0.013	6.174	13.444
	March	1.385	1.909	2.686	0.351	0.293	(0.001)	0.015	6.638	20.082

[1]Includes industrial and utility production and net imports of electricity.
[2]Parentheses indicate exports are greater than imports.
[3]Includes only geothermal power and electricity produced from wood, waste, and wind energy.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data do not include wood-derived fuel (other than that consumed by the electric utilities). Data also exclude small quantities of energy forms for which consistent historical data are not available, such as solar energy obtained by the use of thermal and photovoltaic collectors; and geothermal, biomass, waste, and wind energy (other than that consumed at electric utilities).
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

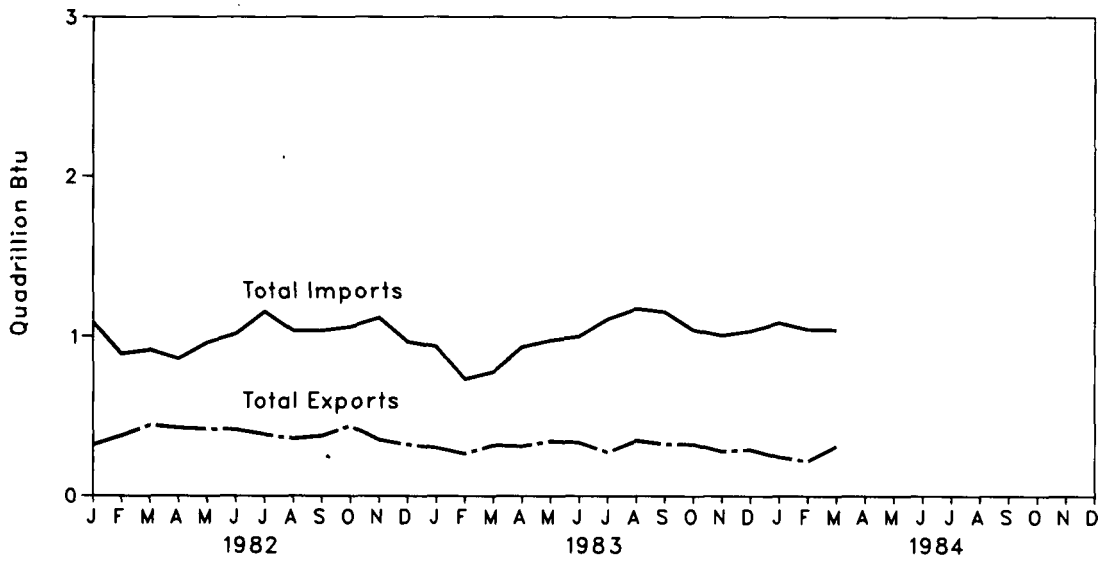
Executive Summary

Energy Imports and Exports

Yearly



Monthly



Executive Summary

Net Imports[1] of Energy by Source

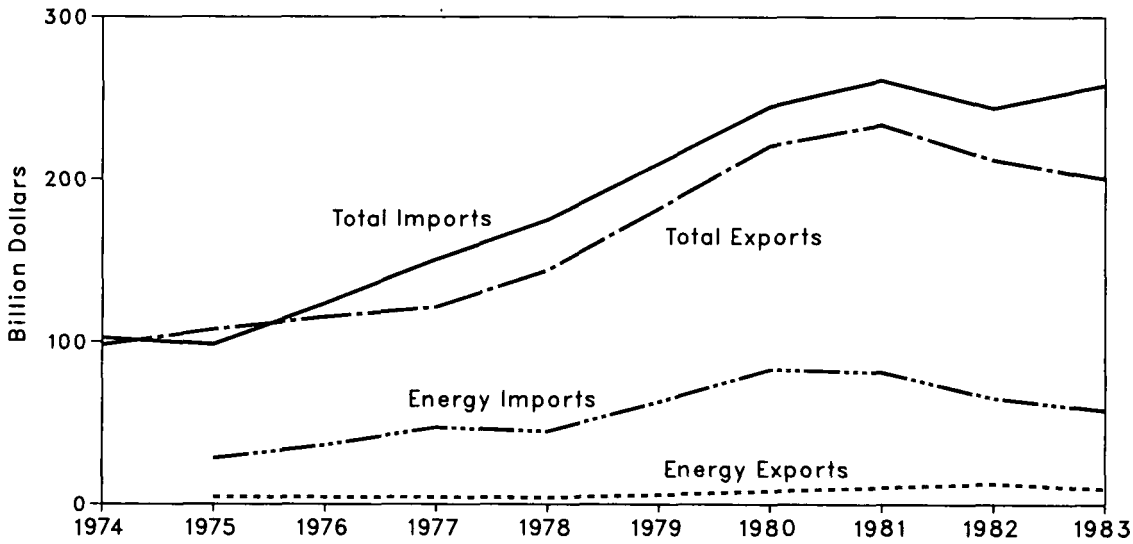
		Coal	Crude Oil[2]	Refined Petroleum Products[3]	Natural Gas (Dry)	Electricity	Coal Coke	Total Net Imports	Yearly Cumulative Net Imports of Energy
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**(1.422)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.679**	
1974	**TOTAL**	**(1.568)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.059**	**12.192**	
1975	**TOTAL**	**(1.738)**	**8.708**	**3.800**	**0.904**	**0.064**	**0.014**	**11.753**	
1976	**TOTAL**	**(1.567)**	**11.221**	**3.982**	**0.922**	**0.089**	**0.000**	**14.648**	
1977	**TOTAL**	**(1.401)**	**13.921**	**4.321**	**0.981**	**0.182**	**0.015**	**18.019**	
1978	**TOTAL**	**(1.004)**	**13.125**	**3.932**	**0.941**	**0.204**	**0.131**	**17.329**	
1979	**TOTAL**	**(1.702)**	**13.328**	**3.603**	**1.243**	**0.211**	**0.066**	**16.748**	
1980	**TOTAL**	**(2.391)**	**10.586**	**2.912**	**0.957**	**0.217**	**(0.037)**	**12.246**	
1981	**TOTAL**	**(2.918)**	**8.854**	**2.522**	**0.855**	**0.347**	**(0.017)**	**9.643**	
1982	January	(0.160)	0.624	0.181	0.097	0.027	0.000	0.769	0.769
	February	(0.234)	0.438	0.207	0.081	0.025	(0.001)	0.515	1.284
	March	(0.273)	0.461	0.181	0.078	0.027	(0.002)	0.473	1.757
	April	(0.284)	0.468	0.153	0.071	0.026	(0.001)	0.434	2.191
	May	(0.262)	0.551	0.166	0.063	0.027	(0.003)	0.542	2.733
	June	(0.280)	0.654	0.147	0.056	0.026	(0.004)	0.600	3.333
	July	(0.239)	0.726	0.196	0.063	0.027	(0.003)	0.770	4.103
	August	(0.190)	0.641	0.144	0.056	0.027	(0.001)	0.677	4.780
	September	(0.226)	0.603	0.196	0.062	0.026	(0.003)	0.659	5.439
	October	(0.260)	0.614	0.168	0.073	0.027	(0.001)	0.621	6.060
	November	(0.203)	0.629	0.228	0.088	0.026	(0.002)	0.768	6.828
	December	(0.157)	0.507	0.161	0.107	0.027	(0.001)	0.645	7.473
	TOTAL	**(2.768)**	**6.917**	**2.128**	**0.896**	**0.322**	**(0.023)**	**7.473**	
1983	January	(0.116)	0.509	0.098	0.117	0.029	(0.001)	0.636	0.636
	February	(0.113)	0.327	0.128	0.099	0.027	(0.001)	0.465	1.102
	March	(0.162)	0.372	0.132	0.088	0.029	(0.001)	0.458	1.560
	April	(0.157)	0.536	0.144	0.073	0.028	(0.002)	0.622	2.182
	May	(0.180)	0.533	0.190	0.062	0.029	(0.002)	0.633	2.815
	June	(0.188)	0.587	0.182	0.057	0.028	(0.001)	0.665	3.480
	July	(0.159)	0.672	0.243	0.052	0.029	(0.002)	0.836	4.316
	August	(0.217)	0.723	0.239	0.055	0.029	(0.001)	0.827	5.143
	September	(0.195)	0.707	0.229	0.061	0.028	(0.001)	0.829	5.972
	October	(0.209)	0.597	0.239	0.062	0.029	(0.001)	0.718	6.689
	November	(0.153)	0.546	0.229	0.076	0.028	(0.001)	0.727	7.416
	December	(0.162)	0.563	0.213	0.103	0.029	(0.003)	0.743	8.160
	TOTAL	**(2.013)**	**6.673**	**2.266**	**0.905**	**0.346**	**(0.016)**	**8.160**	
1984	January	(0.131)	0.519	0.331	0.093	0.029	0.001	0.842	0.842
	February	(0.108)	0.468	0.375	0.067	0.027	0.002	0.830	1.672
	March	(0.152)	0.581	0.207	0.065	0.029	(0.001)	0.730	2.402

[1]Net imports equals imports minus exports. Parentheses indicate exports are greater than imports.
[2]Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve.
[3]Includes refined petroleum products, unfinished oils, natural gasoline, and plant condensate.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

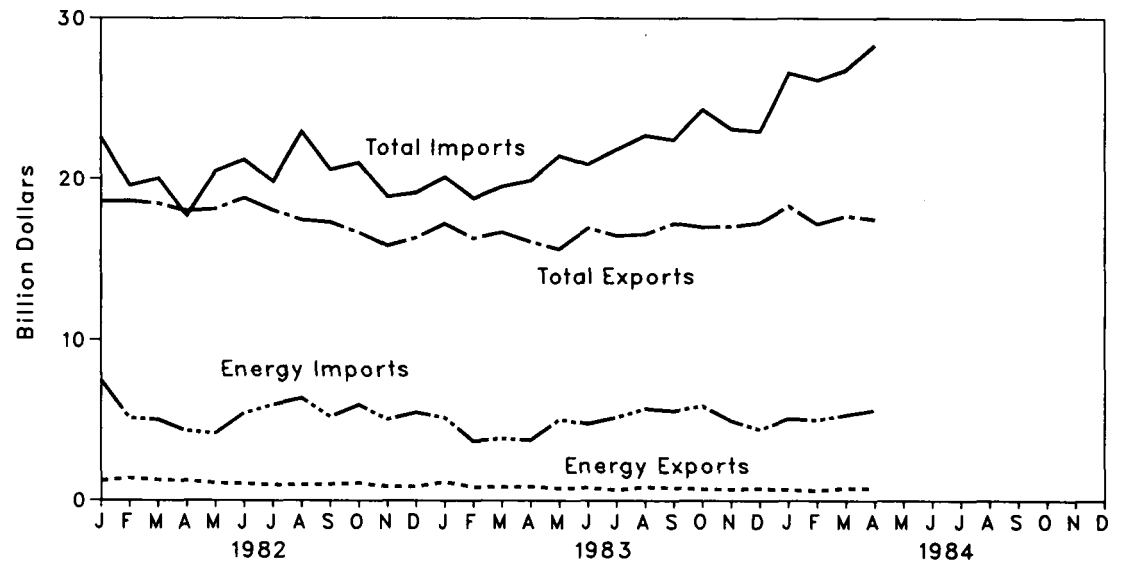
Executive Summary

Merchandise Trade Value

Yearly



Monthly



Executive Summary

Merchandise Trade Value

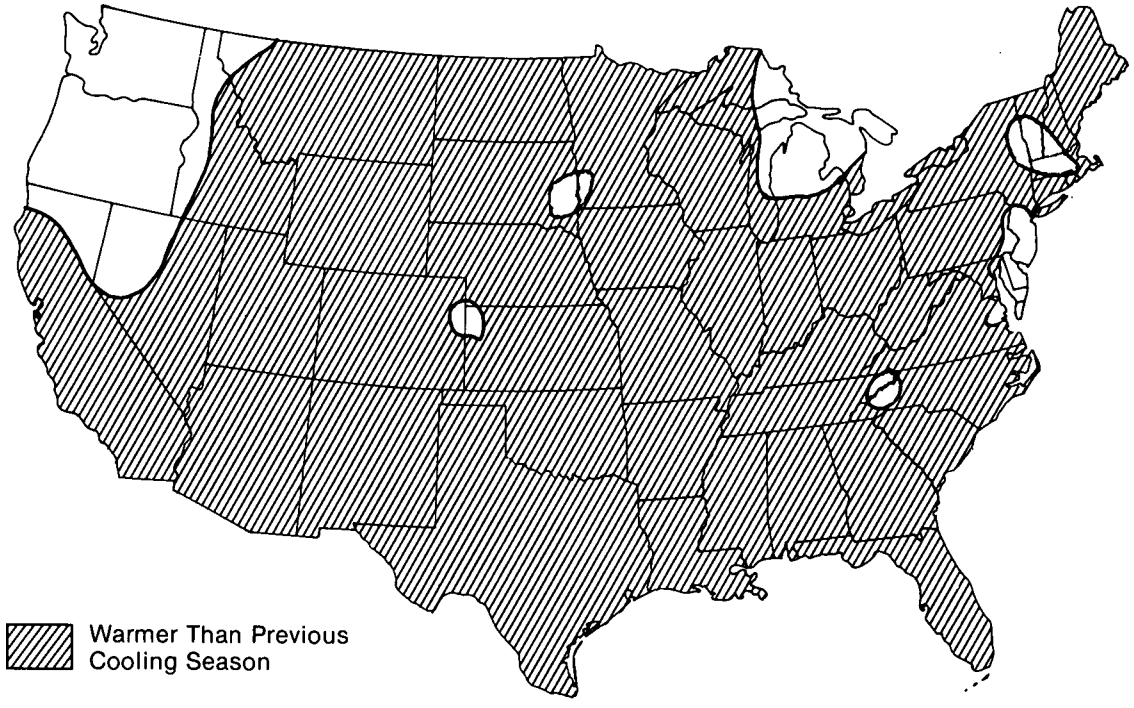
		Exports			Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total
					Million dollars					
1974	**TOTAL**	**NA**	**NA**	**98,092**	**NA**	**NA**	**102,559**	**NA**	**NA**	**-4,467**
1975	**TOTAL**	**4,470**	**103,182**	**107,652**	**28,325**	**70,178**	**98,503**	**-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**	**+29,803**	**-27,599**
1980	**TOTAL**	**7,982**	**212,644**	**220,626**	**82,924**	**161,947**	**244,871**	**-74,942**	**+50,698**	**-24,244**
1981	**TOTAL**	**10,279**	**223,398**	**233,677**	**81,360**	**179,622**	**260,982**	**-71,081**	**+43,776**	**-27,305**
1982	January	1,205	17,379	18,584	7,439	15,134	22,573	-6,234	+2,245	-3,989
	February	1,361	17,253	18,614	5,107	14,463	19,570	-3,746	+2,790	-956
	March	1,256	17,206	18,462	5,009	15,010	20,019	-3,753	+2,196	-1,557
	April	1,201	16,804	18,005	4,312	13,402	17,714	-3,111	+3,402	+291
	May	1,065	17,059	18,124	4,167	16,310	20,477	-3,102	+749	-2,353
	June	1,035	17,788	18,823	5,427	15,760	21,187	-4,392	+2,028	-2,364
	July	974	17,086	18,060	5,943	13,906	19,849	-4,969	+3,179	-1,790
	August	961	16,502	17,463	6,353	16,577	22,930	-5,392	-75	-5,467
	September	998	16,322	17,320	5,201	15,380	20,581	-4,203	+942	-3,261
	October	1,072	15,599	16,671	5,947	15,059	21,006	-4,875	+540	-4,335
	November	847	15,005	15,852	5,037	13,855	18,892	-4,190	+1,149	-3,041
	December	855	15,492	16,347	5,468	13,686	19,154	-4,613	+1,805	-2,808
	TOTAL	**12,729**	**199,464**	**212,193**	**65,409**	**178,543**	**243,952**	**-52,680**	**+20,921**	**-31,759**
1983	January	1,142	16,090	17,232	5,142	14,985	20,127	-4,000	+1,105	-2,895
	February	833	15,479	16,312	3,704	15,100	18,804	-2,871	+378	-2,493
	March	822	15,868	16,690	3,865	15,663	19,528	-3,043	+206	-2,837
	April	850	15,245	16,095	3,763	16,151	19,914	-2,913	-906	-3,819
	May	750	14,905	15,655	5,033	16,413	21,446	-4,283	-1,508	-5,791
	June	791	16,168	16,959	4,767	16,149	20,916	-3,976	+19	-3,957
	July	644	15,842	16,486	5,164	16,664	21,828	-4,520	-821	-5,341
	August	824	15,758	16,582	5,703	17,011	22,714	-4,879	-1,253	-6,132
	September	778	16,479	17,257	5,571	16,880	22,451	-4,793	-402	-5,195
	October	699	16,334	17,033	5,872	18,461	24,333	-5,173	-2,127	-7,300
	November	689	16,374	17,063	4,951	18,164	23,115	-4,262	-1,790	-6,052
	December	739	16,559	17,298	4,417	18,559	22,976	-3,678	-2,000	-5,678
	TOTAL	**9,500**	**190,986**	**200,486**	**57,952**	**200,096**	**258,048**	**-48,452**	**-9,110**	**-57,562**
1984	January	660	17,666	18,326	5,089	21,497	26,586	-4,429	-3,831	-8,260
	Februaqy	610	16,603	17,213	5,006	21,141	26,147	-4,396	-4,539	-8,935
	March	767	16,960	17,727	5,323	21,448	26,771	-4,556	-4,488	-9,044
	April	739	16,783	17,522	5,629	22,739	28,368	-4,890	-5,957	-10.847

NA=Not available.
Notes: • 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.
• 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 States, the District of Columbia, and Puerto Rico) and the Virgin Islands.
Additional Notes and Sources: • See the last page of this section.

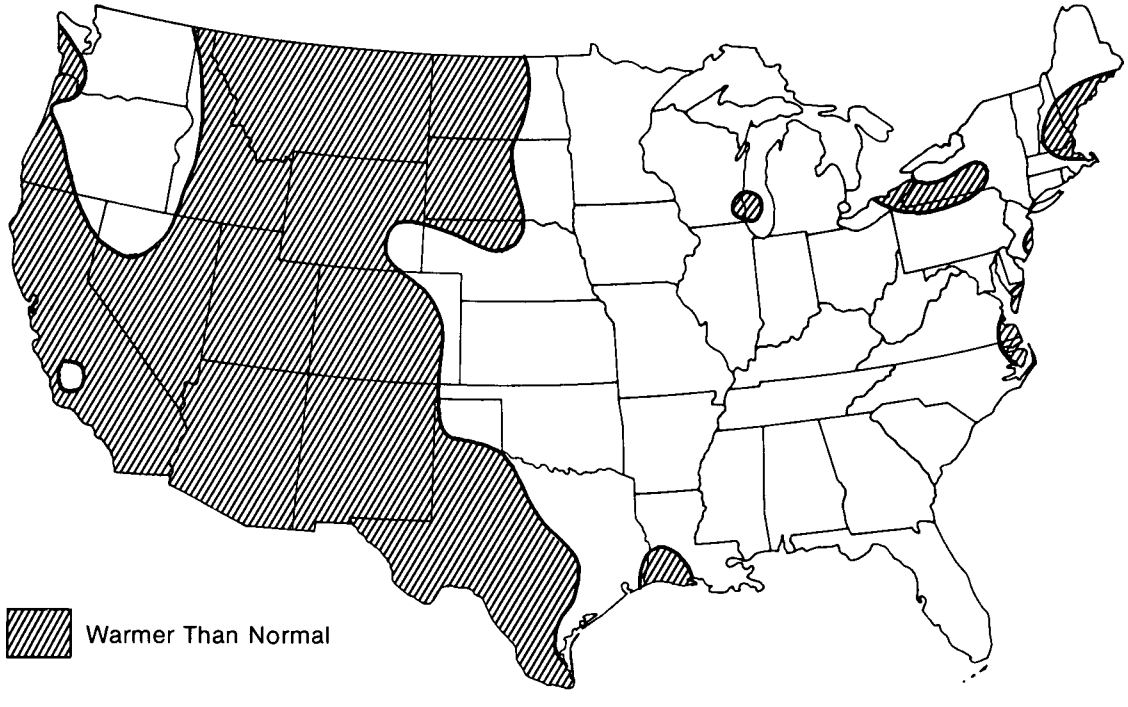
Executive Summary

Cooling Degree-Days Accumulated from January 1, 1984, through June 2, 1984

Departure from Previous Cooling Season



Departure from Normal



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

Executive Summary

Population-Weighted Cooling Degree-Days[1]

Census Divisions	May 1 through May 31					Cumulative January 1 through May 31				
				Percent Change					Percent Change	
	Normal[2]	1983	1984	Normal to 1984	1983 to 1984	Normal[2]	1983	1984	Normal to 1984	1983 to 1984
New England Conn., Maine, Mass., N.H., R.I., Vt.	0	8	14	0.0	75.0	0	11	15	0.0	36.4
Middle Atlantic N.J., N.Y., Pa.	24	17	29	20.8	70.6	24	23	30	25.0	30.4
Eastern North Central Ill., Ind., Mich., Ohio, Wisc.	71	11	21	-70.4	90.9	71	13	26	-63.4	100.0
Western North Central Iowa, Kans., Minn., Mo., Nebr., N.Dak., S.Dak.	91	28	43	-52.7	53.6	98	30	49	-50.0	63.3
South Atlantic Del., Fla., Ga., Md. and D.C., N.C., S.C., Va., W.Va.	180	164	170	-5.6	3.7	345	278	302	-12.5	8.6
Eastern South Central Ala., Ky., Miss., Tenn.	158	94	114	-27.8	21.3	210	113	145	-31.0	28.3
Western South Central Ark., La., Okla., Tex.	261	195	264	1.1	35.4	450	283	402	-10.7	42.0
Mountain Ariz., Colo., Idaho, Mont., Nev., N.Mex., Utah, Wyo.	69	92	142	105.8	54.3	85	105	171	101.2	62.9
Pacific Coast Calif., Oreg., Wash.	5	56	77	1,440.0	37.5	5	59	84	1,580.0	42.4
U.S. AVERAGE[3]	**96**	**73**	**93**	**-3.1**	**27.4**	**147**	**105**	**136**	**-7.5**	**29.5**

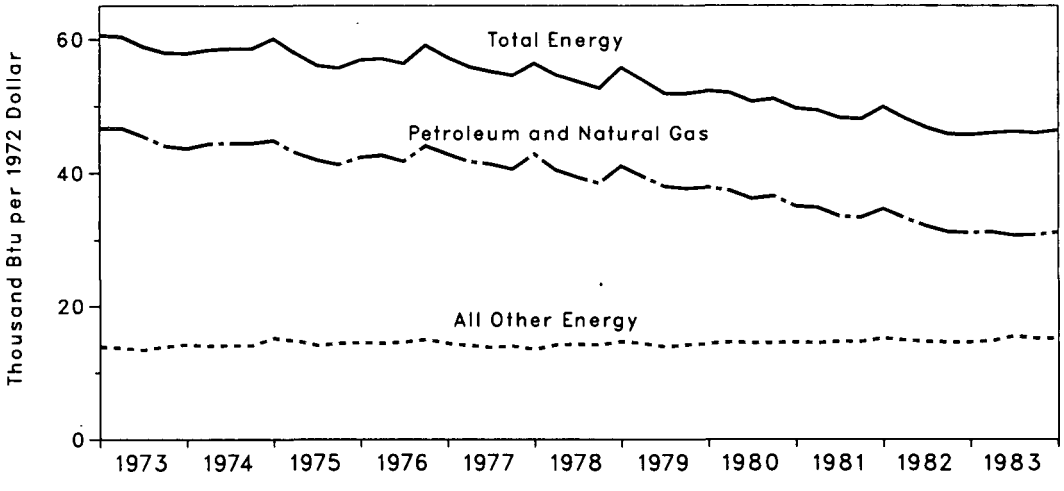
[1] See Note on the last page of this section for explanation of degree-days.
[2] Normal is based on calculations of data from 1951 through 1980.
[3] Excludes Alaska and Hawaii.

Executive Summary

Energy Indicator—Energy Consumption per Dollar of Gross National Product (Seasonally Adjusted)

		Annual Rate of Energy Consumption	Gross National Product (GNP)	Energy Consumption per Dollar of GNP (Seasonally Adjusted)		
				Total Energy	Petroleum and Natural Gas	All Other Energy
		Quadrillion Btu	Trillion 1972 dollars	Thousand Btu per 1972 dollar		
1973		**74.212**	**1.254**	**59.2**	**45.7**	**13.5**
1974		**72.479**	**1.246**	**58.2**	**44.3**	**13.9**
1975		**70.485**	**1.232**	**57.2**	**42.8**	**14.4**
1976		**74.297**	**1.298**	**57.2**	**42.8**	**14.4**
1977		**76.215**	**1.370**	**55.6**	**41.6**	**14.0**
1978		**78.039**	**1.439**	**54.2**	**40.3**	**13.9**
1979		**78.845**	**1.479**	**53.3**	**39.1**	**14.2**
1980		**75.900**	**1.475**	**51.5**	**37.0**	**14.5**
1981		**73.940**	**1.514**	**48.8**	**34.3**	**14.5**
1982	1st Qtr[1]	74.192	1.486	49.9	34.7	15.2
	2nd Qtr[1]	71.781	1.489	48.2	33.3	14.9
	3rd Qtr[1]	69.525	1.486	46.8	32.1	14.7
	4th Qtr[1]	67.870	1.481	45.8	31.2	14.6
	YEAR	**70.822**	**1.485**	**47.7**	**32.8**	**14.9**
1983	1st Qtr[1]	68.049	1.490	45.7	31.1	14.6
	2nd Qtr[1]	70.191	1.525	46.0	31.2	14.8
	3rd Qtr[1]	71.690	1.553	46.2	30.7	15.5
	4th Qtr[1]	72.302	1.573	46.0	30.8	15.2
	YEAR	**70.573**	**1.535**	**46.0**	**30.9**	**15.1**
1984	1st Qtr[1]	74.483	1.606	46.4	31.2	15.2

Quarterly Energy Consumption per Dollar of Gross National Product[1] (Seasonally Adjusted)



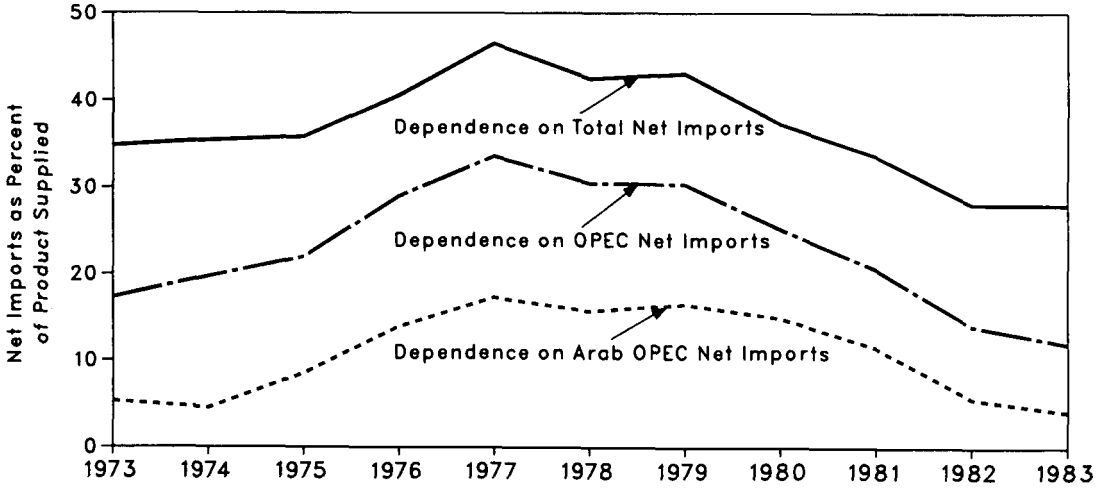
[1]Quarterly data are seasonally adjusted and shown at annual rates.
Notes • Geographic coverage is the 50 States and the District of Columbia.
• Yearly data may not equal sum of quarters due to seasonality adjustments and independent rounding.
Sources: • See the last page of this section.

Executive Summary

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

		Net Imports[2]				Net Imports as Percent of U.S. Petroleum Products Supplied		
		from Arab OPEC[3] Countries	from All OPEC[4] Countries	from All Countries	Petroleum Products Supplied	from Arab OPEC[3] Countries	from All OPEC[4] Countries	from All Countries
ANNUAL RATE			Thousand Barrels per Day				Percent	
1973	**AVERAGE**	**R914**	**2,991**	**6,025**	**17,308**	**5.3**	**17.3**	**34.8**
1974	**AVERAGE**	**R752**	**3,277**	**5,892**	**16,653**	**4.5**	**19.7**	**35.4**
1975	**AVERAGE**	**1,382**	**R3,599**	**5,846**	**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**	**8,565**	**18,431**	**17.3**	**33.6**	**46.5**
1978	**AVERAGE**	**2,962**	**5,747**	**8,002**	**18,847**	**15.7**	**30.5**	**42.5**
1979	**AVERAGE**	**3,054**	**R5,633**	**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	**AVERAGE**	**R1,844**	**3,315**	**5,401**	**16,058**	**11.5**	**20.6**	**33.6**
1982	1st Qtr	1,105	2,391	4,038	15,892	7.0	15.1	25.4
	2nd Qtr	817	1,925	4,075	15,292	5.3	12.6	26.6
	3rd Qtr	819	2,239	4,721	14,893	5.5	15.0	31.7
	4th Qtr	672	1,992	4,353	15,119	4.4	13.2	28.8
	AVERAGE	**852**	**2,136**	**4,298**	**15,296**	**5.6**	**14.0**	**28.1**
1983	1st Qtr	346	1,139	3,024	15,015	2.3	7.6	20.1
	2nd Qtr	446	1,655	4,141	14,764	3.0	11.2	28.0
	3rd Qtr	842	2,478	5,298	15,223	5.5	16.3	34.8
	4th Qtr	850	1,961	4,505	15,726	5.4	12.5	28.6
	AVERAGE	**623**	**1,813**	**4,249**	**15,184**	**4.1**	**11.9**	**28.0**
1984	1st Qtr	754	1,855	4,741	16,058	4.7	11.6	29.5

U.S. Dependence on Petroleum Net Imports



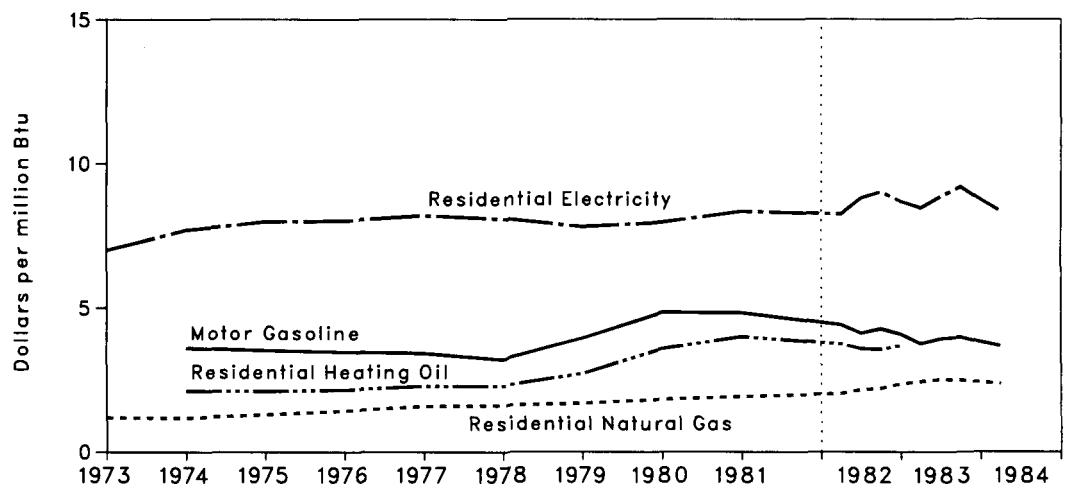
[1]Beginning in October 1977, Strategic Petroleum Reserves are included.
[2]Net imports equals imports minus exports. Imports from OPEC countries exclude indirect imports which are refined products imported primarily from Caribbean and West European areas and refined from crude oil produced in OPEC countries.
[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.
R=Revised data.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the 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**	**121.4**	**1.19**	**2.39**	**7.00**
1974	**AVERAGE**	**45.1**	**3.61**	**29.4**	**2.12**	**121.3**	**1.18**	**2.63**	**7.71**
1975	**AVERAGE**	**44.1**	**3.53**	**29.3**	**2.11**	**132.9**	**1.30**	**2.73**	**8.00**
1976	**AVERAGE**	**43.4**	**3.47**	**29.8**	**2.15**	**145.5**	**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**	**164.2**	**1.62**	**2.76**	**8.09**
1979	**AVERAGE**	**49.4**	**3.95**	**37.8**	**2.73**	**171.8**	**1.69**	**2.67**	**7.83**
1980	**AVERAGE**	**60.5**	**4.84**	**49.7**	**3.58**	**186.8**	**1.82**	**2.72**	**7.97**
1981	**AVERAGE**	**60.4**	**4.83**	**55.7**	**4.01**	**197.3**	**1.92**	**2.85**	**8.35**
1982	1st Qtr	55.3	4.42	52.2	3.76	208.5	2.03	2.82	8.26
	2nd Qtr	51.7	4.13	49.8	3.59	221.6	2.16	3.01	8.82
	3rd Qtr	53.5	4.28	49.4	3.56	226.4	2.21	3.08	9.03
	4th Qtr	51.3	4.10	51.3	3.70	243.0	2.37	2.97	8.70
	AVERAGE	**53.0**	**4.24**	**51.4**	**3.71**	**224.1**	**2.19**	**2.97**	**8.70**
1983	1st Qtr	47.1	3.77	NA	NA	251.3	2.45	2.89	8.47
	2nd Qtr	49.3	3.94	NA	NA	259.1	2.53	3.03	8.88
	3rd Qtr	50.0	4.00	NA	NA	257.7	2.51	3.14	9.20
	4th Qtr	47.9	3.83	NA	NA	249.7	2.43	2.99	8.76
	AVERAGE	**48.6**	**3.89**	**NA**	**NA**	**251.5**	**2.45**	**3.01**	**8.82**
1984	1st Qtr	46.1	3.69	NA	NA	244.1	2.38	2.85	8.35

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



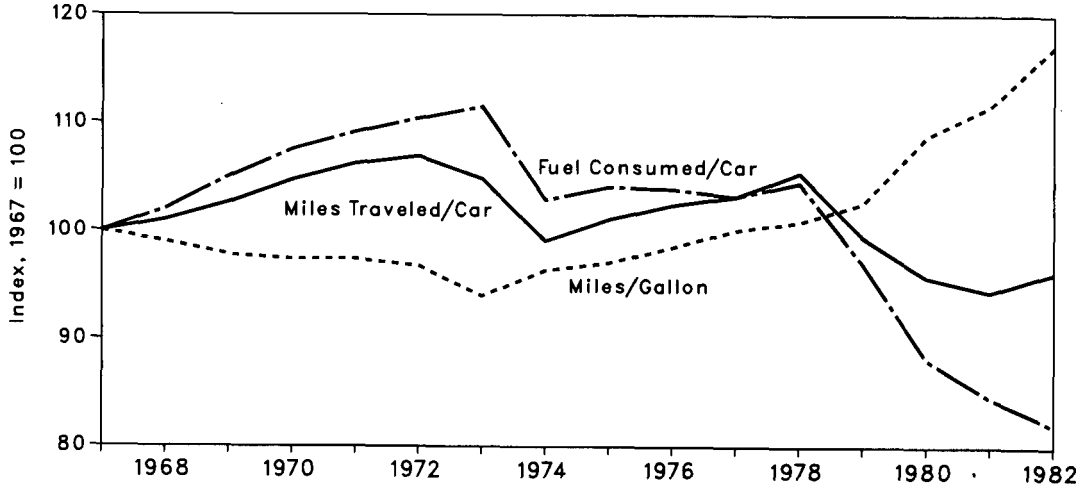
NA=Not available.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last page of this section.

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	579	84.6	9,002	94.4	15.54	111.6
1982	561	82.0	9,167	96.2	16.33	117.2

U.S. Passenger Car Efficiency Index



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

Notes and Sources for the Executive Summary Section

Notes

1. **Energy Production:** Production of energy includes production of coal, 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, waste, and wind energy. The volumetric data are converted to approximate heat contents (Btu values) of these energy sources using the conversion factors provided in the Conversion Factors section of this publication.
2. **Energy Consumption:** Consumption of energy includes consumption of coal, 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, waste, and wind energy. Approximate heat contents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication.
3. **Energy Imports:** Energy imports include imports of 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. Approximate heat contents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication.
4. **Energy Exports:** Energy exports include coal, crude oil, refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal. Approximate heat contents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication.
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 several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information published in the *Monthly Energy Review* (MER) is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland. The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. 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 Census Divisions and into the national average. The population weights currently in use represent resident State population data estimated for 1980 by the U.S. Department of Commerce, Bureau of the Census. The data shown in the MER are available sooner than the Historical Climatology Series 5-1 and 5-2 developed by the National Climatic Center, Asheville, North Carolina, which compiles data from some 8,000 weather stations.

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 1982: Energy Information Administration (EIA), *Energy Data Reports*, "Petroleum Statement, Annual"; 1983 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—Annual data 1973 through 1982 from EIA, *Natural Gas Annual*, based on Form EIA-176, 'Supply and Distribution of Natural Gas,' and predecessors. Annual 1983 and quarterly data are EIA estimates based on the Bureau of Labor Statistics Urban Consumer Price Index for natural gas and are adjusted to conform with final reported annual data. See Note 9 in the Notes and Sources for the Price Section.
• Electricity—Federal Energy Regulatory Commission (FERC), 1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: FERC Form 5, "Electric Utility Company Monthly Statement."
• Deflator (The Urban Consumer Price Index)—Bureau of Labor Statistics.
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 March 1984 was 6.6 quadrillion Btu, 9.6 percent above the March 1983 level.

Residential and commercial sector consumption was 2.6 quadrillion Btu in March 1984, up 10.1 percent from the March 1983 level. The residential and commercial sector accounted for 38.5 percent of the March 1984 total consumption, about the same as the sector's 38.3-percent share in March 1983.

Industrial sector consumption was 2.4 quadrillion Btu in March 1984, up 16.1 percent from the March 1983 level. This sector consumed 36.4 percent of the March 1984 total, up from the sector's 34.3-percent March 1983 share.

Transportation sector consumption was 1.7 quadrillion Btu in March 1984, up 0.7 percent from the March 1983 level. This sector consumed 25.1 percent of the March 1984 total, down from the sector's 27.3-percent share in March 1983.

The electric utilities consumption was an estimated 2.1 quadrillion Btu of energy in March 1984, 8.9 percent higher than in March 1983. Coal contributed 54.0 percent of the energy consumed by electric utilities in March 1984, while hydroelectric contributed 16.3 percent; nuclear, 13.7 percent; natural gas, 10.0 percent; petroleum, 5.4 percent; and geothermal, wood, waste, and wind, 0.7 percent.

Energy Consumption Summary for March 1984

(Quadrillion (10^{15}) Btu)

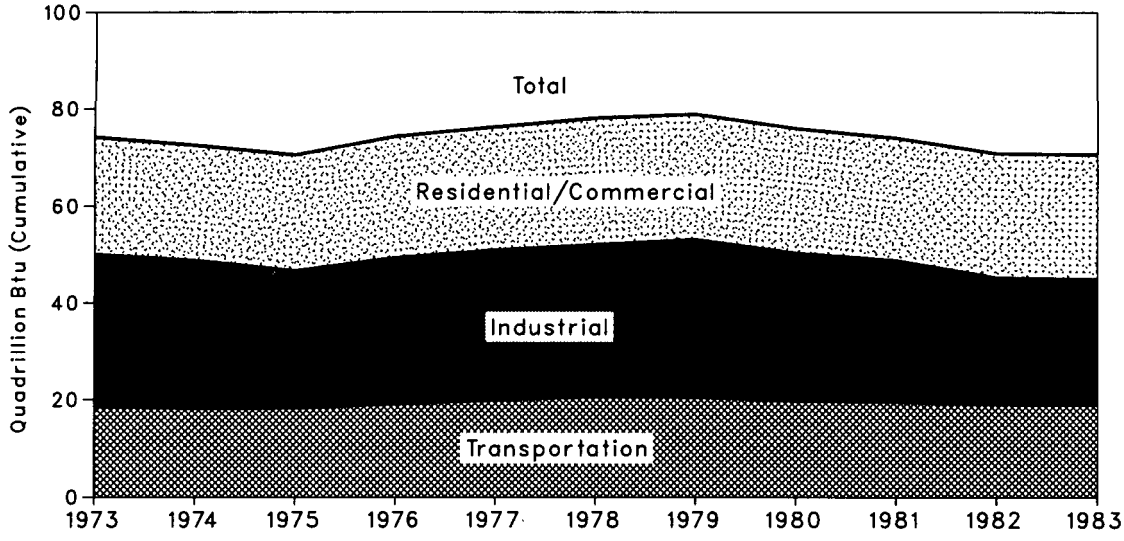
Energy Source	Sector: Residential and Commercial	Industrial	Transportation	Electric Utilities	TOTAL
Coal	0.013	0.220	0.000	1.154	1.385
Natural Gas (dry)	0.947	0.684	0.063	0.213	1.909
Petroleum Products	0.265	0.704	1.602	0.115	2.686
Hydroelectric	0.000	0.003	0.000	0.348	0.351
Nuclear	0.000	0.000	0.000	0.293	0.293
Net Imports of Coal Coke	0.000	(0.001)	0.000	0.000	(0.001)
Other[1]	0.000	0.000	0.000	0.015	0.015
PRIMARY CONSUMPTION	**1.225**	**1.610**	**1.665**	**2.138**	**6.638**
Electricity Sales	0.395	0.238	0.001	(0.633)	
Net Energy Consumption	1.619	1.848	1.665		5.133
Electrical Energy Losses	0.938	0.565	0.002	(1.505)	1.505
TOTAL ENERGY CONSUMED	**2.557**	**2.413**	**1.668**		**6.638**

[1] Includes only geothermal power and electricity produced from wood, waste, and wind energy.
Notes: • Totals may not equal sum of components due to independent rounding and the use of preliminary conversion factors.
• Additional notes and sources for this table and all other tables in this section are provided on the last four pages of this section.

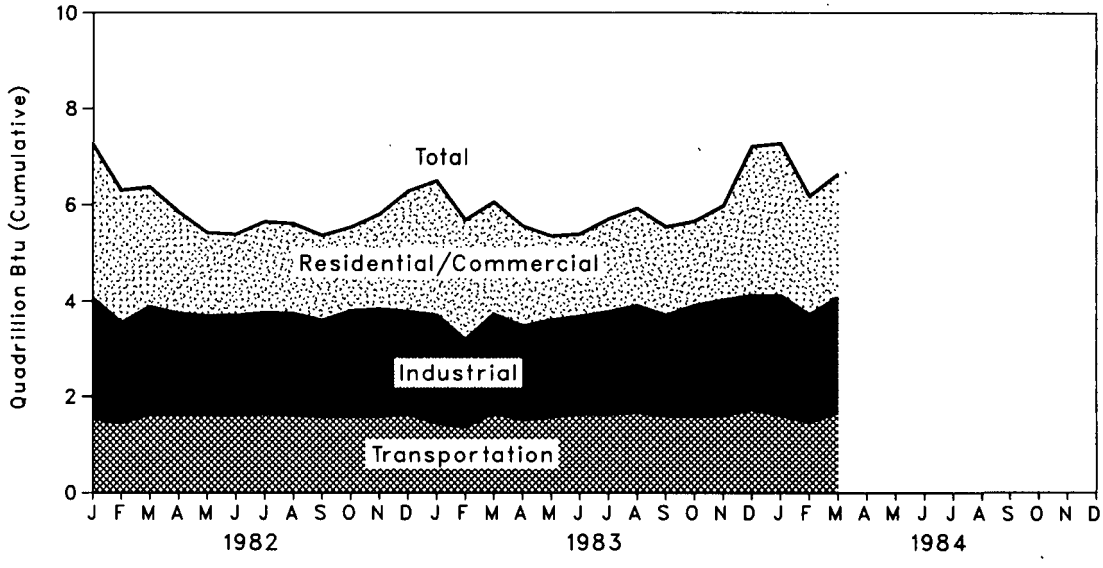
Consumption

Consumption of Energy by End-Use Sector

Yearly



Monthly



Consumption

Consumption of Energy by End-Use Sector

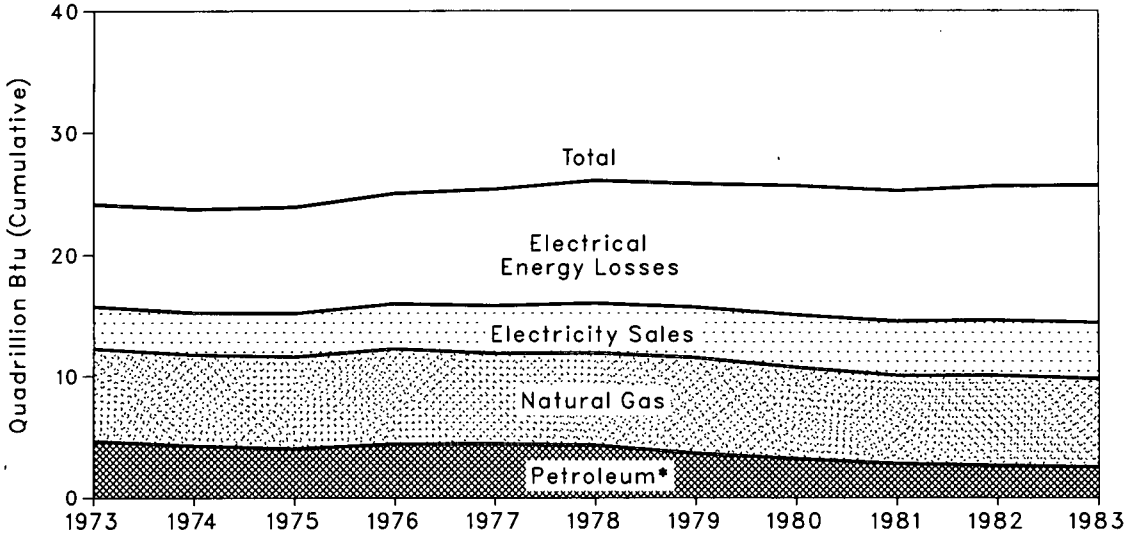
		Residential and Commercial	Industrial	Transportation	Total Energy Consumed
			Quadrillion (10^{15}) Btu		
1973	**TOTAL**	**24.147**	**31.463**	**18.596**	**74.212**
1974	**TOTAL**	**23.729**	**30.630**	**18.113**	**72.479**
1975	**TOTAL**	**23.902**	**28.343**	**18.240**	**70.485**
1976	**TOTAL**	**25.020**	**30.177**	**19.093**	**74.297**
1977	**TOTAL**	**25.375**	**31.021**	**19.808**	**76.215**
1978	**TOTAL**	**26.084**	**31.363**	**20.589**	**78.039**
1979	**TOTAL**	**25.810**	**32.567**	**20.464**	**78.845**
1980	**TOTAL**	**25.654**	**30.549**	**19.693**	**75.900**
1981	**TOTAL**	**25.246**	**29.208**	**19.495**	**73.940**
1982	January	3.194	2.533	1.536	7.263
	February	2.750	2.098	1.449	6.293
	March	2.475	2.268	1.620	6.360
	April	2.114	2.122	1.621	5.854
	May	1.726	2.077	1.613	5.414
	June	1.683	2.092	1.611	5.386
	July	1.883	2.124	1.640	5.649
	August	1.862	2.139	1.607	5.612
	September	1.759	2.026	1.576	5.363
	October	1.731	2.225	1.577	5.534
	November	1.966	2.257	1.582	5.808
	December	2.496	2.151	1.634	6.287
	TOTAL	**25.638**	**26.111**	**19.066**	**70.822**
1983	January	2.779	2.262	1.446	6.491
	February	2.487	1.838	1.360	5.686
	March	2.323	2.078	1.656	6.059
	April	2.081	1.970	1.511	5.560
	May	1.745	2.038	1.569	5.351
	June	1.704	2.055	1.634	5.395
	July	1.925	2.153	1.631	5.711
	August	2.017	2.240	1.671	5.931
	September	1.830	2.115	1.594	5.539
	October	1.752	2.327	1.585	5.662
	November	1.956	2.425	1.599	5.978
	December	3.091	2.382	1.736	7.211
	TOTAL	**25.690**	**25.882**	**18.993**	**70.573**
1984	January	3.150	2.505	1.611	7.270
	February	2.447	R2.260	R1.467	6.174
	March	2.557	2.413	1.668	6.638

R=Revised data.
Notes: • Geographic coverage is the 50 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.
Additional Notes and Sources: • See the last four pages of this section.

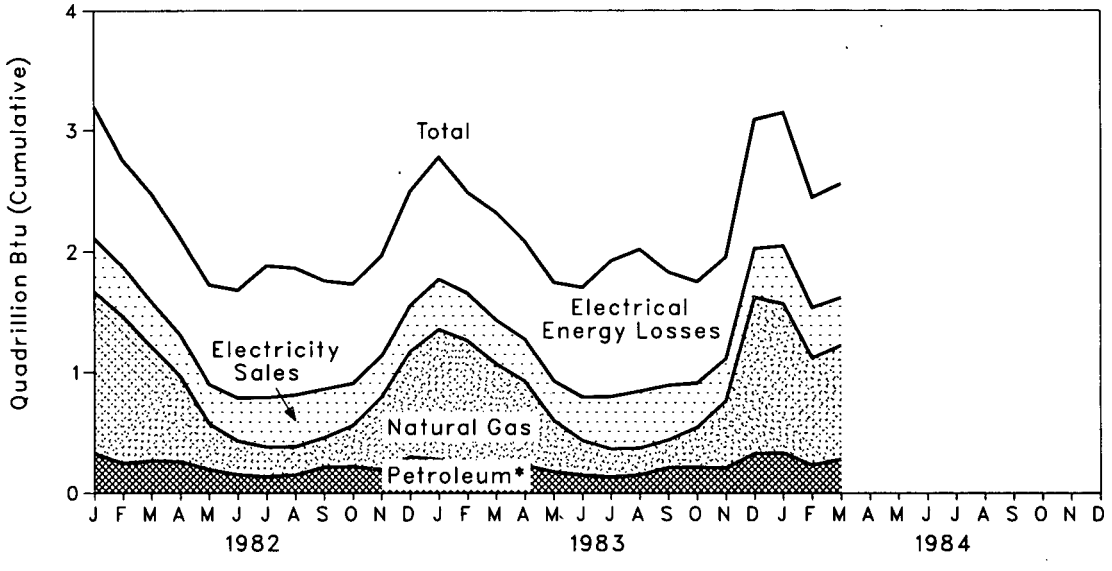
Consumption

Consumption of Energy by the Residential and Commercial Sector

Yearly



Monthly



*Includes very small quantities of coal.

Consumption

Consumption of Energy by the Residential and Commercial Sector

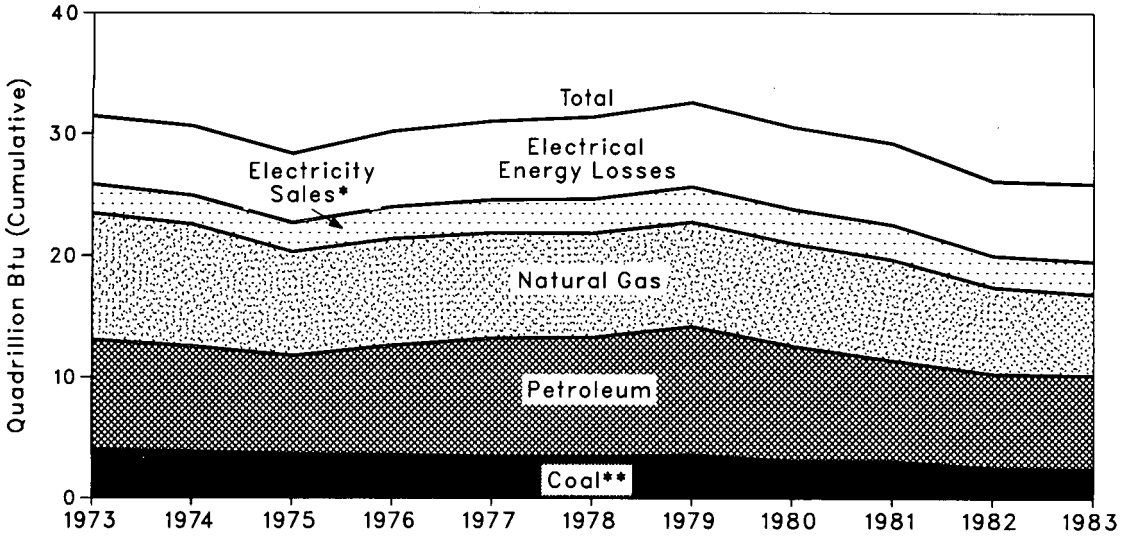
		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**0.259**	**7.626**	**4.391**	**3.495**	**8.377**	**24.147**	
1974	**TOTAL**	**0.260**	**7.518**	**3.996**	**3.475**	**8.480**	**23.729**	
1975	**TOTAL**	**0.212**	**7.581**	**3.805**	**3.604**	**8.700**	**23.902**	
1976	**TOTAL**	**0.206**	**7.866**	**4.181**	**3.747**	**9.020**	**25.020**	
1977	**TOTAL**	**0.207**	**7.461**	**4.206**	**3.955**	**9.545**	**25.375**	
1978	**TOTAL**	**0.215**	**7.624**	**4.070**	**4.116**	**10.060**	**26.084**	
1979	**TOTAL**	**0.188**	**7.891**	**3.448**	**4.184**	**10.100**	**25.810**	
1980	**TOTAL**	**0.147**	**7.539**	**3.035**	**4.355**	**10.578**	**25.654**	
1981	**TOTAL**	**0.171**	**7.249**	**2.634**	**4.497**	**10.696**	**25.246**	
1982	January	0.023	1.344	0.303	0.440	1.085	3.194	3.194
	February	0.016	1.222	0.228	0.409	0.875	2.750	5.943
	March	0.013	0.948	0.252	0.373	0.890	2.475	8.419
	April	0.016	0.706	0.243	0.346	0.803	2.114	10.533
	May	0.011	0.382	0.181	0.327	0.825	1.726	12.258
	June	0.008	0.279	0.144	0.358	0.894	1.683	13.941
	July	0.014	0.245	0.121	0.412	1.090	1.883	15.824
	August	0.015	0.234	0.134	0.431	1.049	1.862	17.686
	September	0.015	0.247	0.197	0.403	0.897	1.759	19.445
	October	0.015	0.343	0.201	0.349	0.823	1.731	21.176
	November	0.019	0.605	0.172	0.340	0.830	1.966	23.142
	December	0.023	0.878	0.274	0.381	0.940	2.496	25.638
	TOTAL	**0.189**	**7.433**	**2.449**	**4.566**	**11.000**	**25.638**	
1983	January	0.020	1.081	0.257	0.413	1.008	2.779	2.779
	February	0.018	1.049	0.199	0.390	0.833	2.487	5.267
	March	0.013	0.821	0.235	0.365	0.889	2.323	7.589
	April	0.017	0.698	0.210	0.352	0.805	2.081	9.671
	May	0.011	0.427	0.164	0.327	0.817	1.745	11.416
	June	0.008	0.290	0.139	0.359	0.908	1.704	13.120
	July	0.014	0.233	0.118	0.435	1.125	1.925	15.045
	August	0.013	0.224	0.136	0.472	1.173	2.017	17.062
	September	0.017	0.233	0.191	0.451	0.938	1.830	18.892
	October	0.018	0.333	0.192	0.367	0.841	1.752	20.643
	November	0.019	0.559	0.185	0.350	0.842	1.956	22.599
	December	0.025	1.296	0.301	0.402	1.067	3.091	25.690
	TOTAL	**0.192**	**7.244**	**2.326**	**4.683**	**11.246**	**25.690**	
1984	January	0.021	1.240	0.309	0.476	1.104	3.150	3.150
	February	0.018	0.894	0.210	0.416	0.909	2.447	5.597
	March	0.013	0.947	0.265	0.395	0.938	2.557	8.154

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

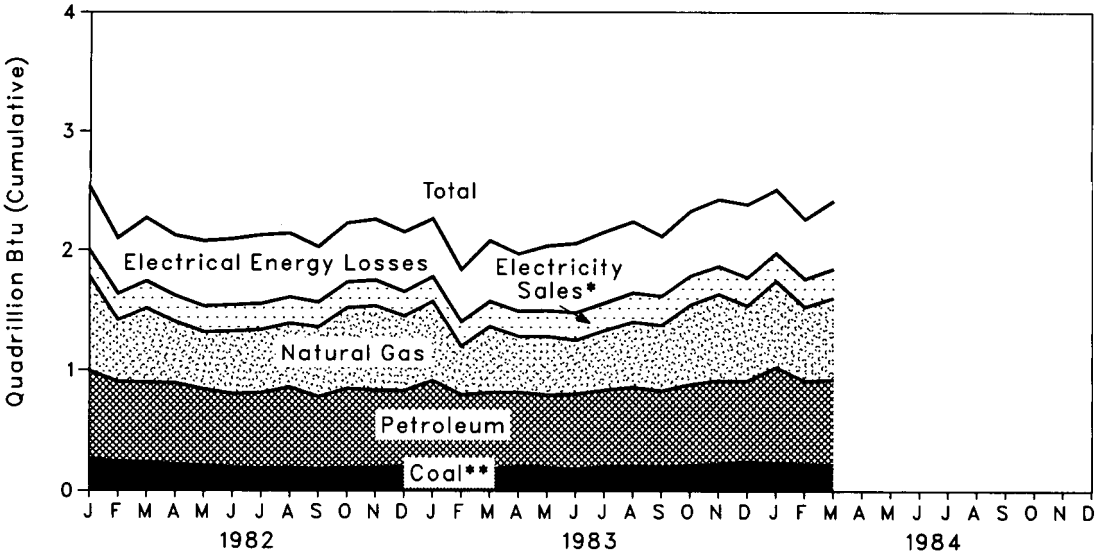
Consumption

Consumption of Energy by the Industrial Sector

Yearly



Monthly



*Includes hydroelectric.
**Includes net coke imports.

Consumption

Consumption of Energy by the Industrial Sector

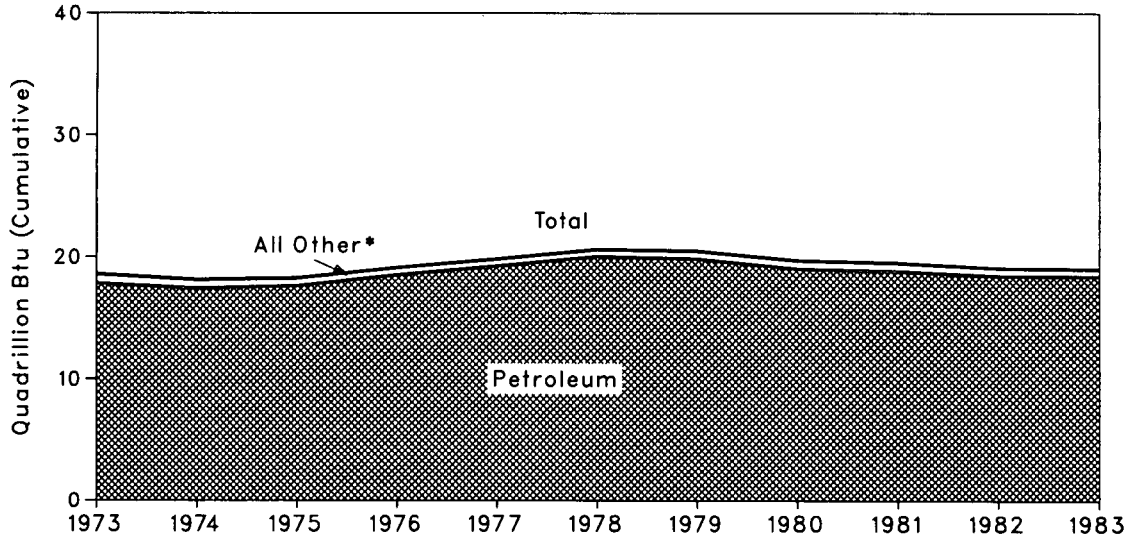
		Coal	Natural Gas (Dry)	Petro-leum	Hydro-electric	Net Coke Imports	Electricity Sales	Electrical Energy Losses	Total Energy Consumed	Yearly Cumulative Energy Consumed
						Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**3.984**	**10.388**	**9.113**	**0.035**	**(0.008)**	**2.341**	**5.610**	**31.463**	
1974	**TOTAL**	**3.800**	**10.003**	**8.698**	**0.033**	**0.059**	**2.337**	**5.700**	**30.630**	
1975	**TOTAL**	**3.602**	**8.532**	**8.151**	**0.032**	**0.014**	**2.346**	**5.665**	**28.343**	
1976	**TOTAL**	**3.595**	**8.761**	**9.018**	**0.033**	**0.000**	**2.573**	**6.197**	**30.177**	
1977	**TOTAL**	**3.394**	**8.636**	**9.786**	**0.033**	**0.015**	**2.682**	**6.476**	**31.021**	
1978	**TOTAL**	**3.258**	**8.539**	**9.890**	**0.032**	**0.131**	**2.761**	**6.755**	**31.363**	
1979	**TOTAL**	**3.532**	**8.549**	**10.576**	**0.034**	**0.066**	**2.873**	**6.937**	**32.567**	
1980	**TOTAL**	**3.103**	**8.394**	**9.524**	**0.033**	**(0.037)**	**2.781**	**6.751**	**30.549**	
1981	**TOTAL**	**3.109**	**8.265**	**8.295**	**0.033**	**(0.017)**	**2.817**	**6.704**	**29.208**	
1982	January	0.262	0.793	0.731	0.003	0.000	0.215	0.530	2.533	2.533
	February	0.245	0.520	0.658	0.003	(0.001)	0.214	0.459	2.098	4.631
	March	0.236	0.622	0.663	0.003	(0.002)	0.220	0.526	2.268	6.898
	April	0.218	0.515	0.676	0.003	(0.001)	0.214	0.496	2.122	9.020
	May	0.211	0.480	0.634	0.003	(0.003)	0.213	0.538	2.077	11.097
	June	0.197	0.524	0.612	0.003	(0.004)	0.217	0.543	2.092	13.189
	July	0.191	0.529	0.625	0.003	(0.003)	0.214	0.565	2.124	15.313
	August	0.192	0.537	0.667	0.002	(0.001)	0.216	0.526	2.139	17.452
	September	0.184	0.583	0.600	0.002	(0.003)	0.205	0.456	2.026	19.478
	October	0.192	0.678	0.657	0.002	(0.001)	0.208	0.489	2.225	21.703
	November	0.195	0.708	0.641	0.002	(0.002)	0.207	0.505	2.257	23.960
	December	0.197	0.626	0.635	0.002	(0.001)	0.199	0.493	2.151	26.111
	TOTAL	**2.520**	**7.116**	**7.798**	**0.033**	**(0.023)**	**2.542**	**6.126**	**26.111**	
1983	January	0.208	0.666	0.706	0.003	(0.001)	0.198	0.483	2.262	2.262
	February	0.194	0.407	0.604	0.003	(0.001)	0.201	0.431	1.838	4.100
	March	0.185	0.554	0.631	0.003	(0.001)	0.206	0.501	2.078	6.178
	April	0.202	0.469	0.618	0.003	(0.002)	0.207	0.473	1.970	8.147
	May	0.196	0.490	0.602	0.003	(0.002)	0.214	0.534	2.038	10.185
	June	0.180	0.452	0.625	0.003	(0.001)	0.226	0.571	2.055	12.241
	July	0.203	0.500	0.635	0.003	(0.002)	0.227	0.586	2.153	14.393
	August	0.206	0.550	0.654	0.002	(0.001)	0.238	0.590	2.240	16.633
	September	0.200	0.551	0.631	0.002	(0.001)	0.238	0.495	2.115	18.748
	October	0.214	0.669	0.669	0.002	(0.001)	0.235	0.539	2.327	21.075
	November	0.224	0.723	0.692	0.002	(0.001)	0.230	0.554	2.425	23.500
	December	0.246	0.632	0.668	0.002	(0.003)	0.229	0.608	2.382	25.882
	TOTAL	**2.458**	**6.663**	**7.733**	**0.033**	**(0.016)**	**2.648**	**6.364**	**25.882**	
1984	January	0.230	0.722	0.794	0.003	0.001	0.228	0.528	2.505	2.505
	February	0.220	0.621	R0.690	0.003	0.002	0.227	0.496	R2.260	R4.765
	March	0.220	0.684	0.704	0.003	(0.001)	0.238	0.565	2.413	7.177

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

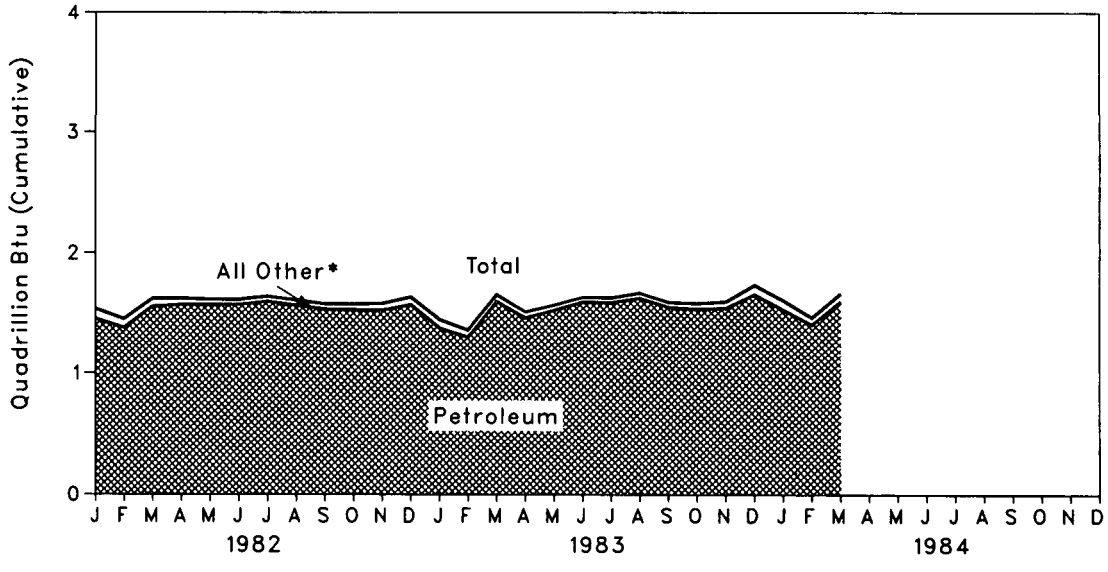
Consumption

Consumption of Energy by the Transportation Sector

Yearly



Monthly



*Includes coal, natural gas, electricity sales, and electrical energy losses.

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**	**17.821**	**0.009**	**0.020**	**18.596**	
1974	**TOTAL**	**0.002**	**0.685**	**17.396**	**0.009**	**0.022**	**18.113**	
1975	**TOTAL**	**0.001**	**0.595**	**17.610**	**0.010**	**0.025**	**18.240**	
1976	**TOTAL**	**(1)**	**0.559**	**18.499**	**0.010**	**0.025**	**19.093**	
1977	**TOTAL**	**(1)**	**0.543**	**19.230**	**0.010**	**0.025**	**19.808**	
1978	**TOTAL**	**(1)**	**0.539**	**20.019**	**0.009**	**0.022**	**20.589**	
1979	**TOTAL**	**(1)**	**0.612**	**19.817**	**0.010**	**0.025**	**20.464**	
1980	**TOTAL**	**(1)**	**0.648**	**19.009**	**0.011**	**0.026**	**19.693**	
1981	**TOTAL**	**(1)**	**0.658**	**18.800**	**0.011**	**0.026**	**19.495**	
1982	January	(1)	0.081	1.452	0.001	0.002	1.536	1.536
	February	(1)	0.068	1.378	0.001	0.002	1.449	2.985
	March	(1)	0.063	1.554	0.001	0.002	1.620	4.605
	April	(1)	0.050	1.568	0.001	0.002	1.621	6.226
	May	(1)	0.039	1.571	0.001	0.002	1.613	7.840
	June	(1)	0.038	1.570	0.001	0.002	1.611	9.451
	July	(1)	0.039	1.597	0.001	0.002	1.640	11.090
	August	(1)	0.039	1.565	0.001	0.002	1.607	12.698
	September	(1)	0.039	1.534	0.001	0.002	1.576	14.274
	October	(1)	0.044	1.529	0.001	0.002	1.577	15.850
	November	(1)	0.053	1.525	0.001	0.002	1.582	17.432
	December	(1)	0.060	1.571	0.001	0.002	1.634	19.066
	TOTAL	**(1)**	**0.613**	**18.417**	**0.011**	**0.026**	**19.066**	
1983	January	(1)	0.067	1.376	0.001	0.002	1.446	1.446
	February	(1)	0.056	1.301	0.001	0.002	1.360	2.806
	March	(1)	0.054	1.599	0.001	0.002	1.656	4.462
	April	(1)	0.047	1.462	0.001	0.002	1.511	5.974
	May	(1)	0.039	1.527	0.001	0.002	1.569	7.543
	June	(1)	0.034	1.597	0.001	0.002	1.634	9.177
	July	(1)	0.036	1.592	0.001	0.002	1.631	10.808
	August	(1)	0.039	1.629	0.001	0.002	1.671	12.479
	September	(1)	0.037	1.554	0.001	0.002	1.594	14.073
	October	(1)	0.043	1.539	0.001	0.002	1.585	15.658
	November	(1)	0.051	1.545	0.001	0.002	1.599	17.257
	December	(1)	0.074	1.659	0.001	0.002	1.736	18.993
	TOTAL	**(1)**	**0.578**	**18.380**	**0.010**	**0.024**	**18.993**	
1984	January	(1)	0.075	1.533	0.001	0.002	1.611	1.611
	February	(1)	0.058	R1.406	0.001	0.002	R1.467	R3.079
	March	(1)	0.063	1.602	0.001	0.002	1.668	4.746

[1]Since 1976, the amount of coal consumed by the transportation sector has been negligible.
R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
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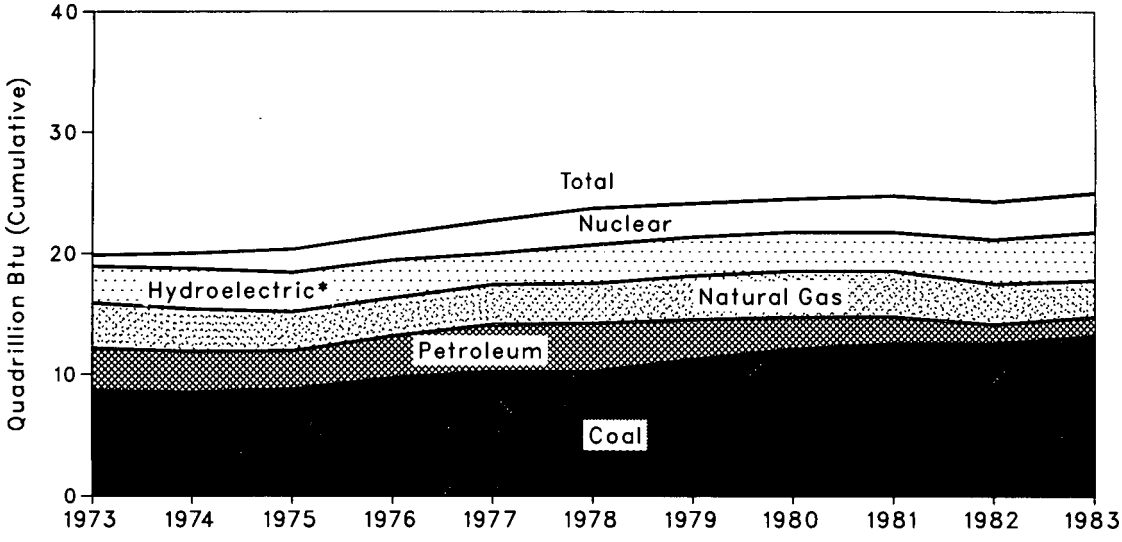
Additional Notes and Sources: • See the last four pages of this section.

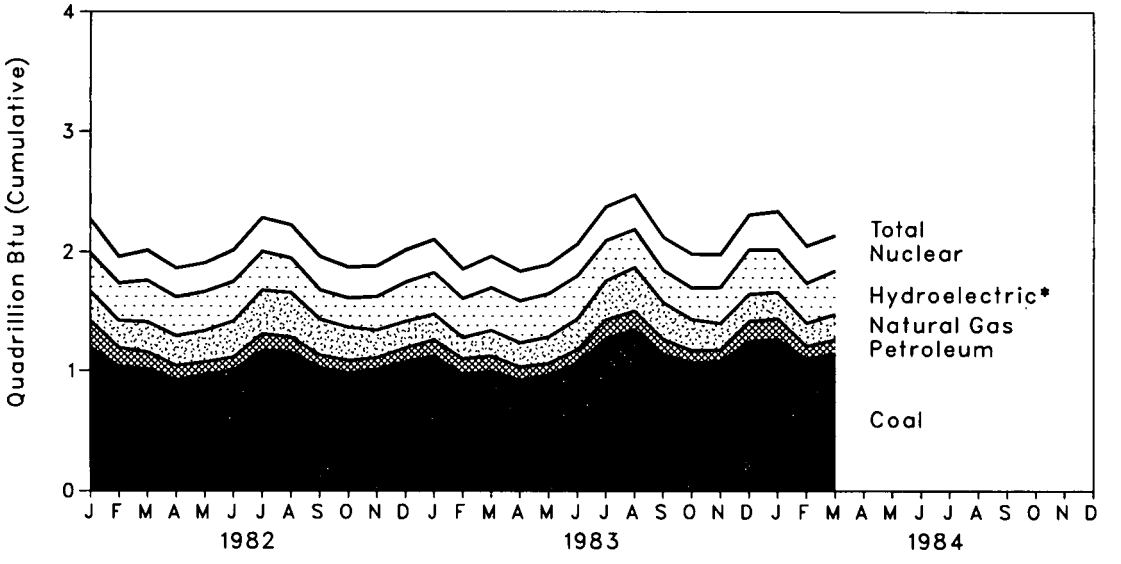
Consumption

Energy Input at Electric Utilities

Yearly



Monthly



*Includes geothermal power and electricity produced from wood, waste, and wind energy.

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**	**2.776**	**0.089**	**24.129**	
1980	**TOTAL**	**12.122**	**3.807**	**2.634**	**3.085**	**2.739**	**0.114**	**24.501**	
1981	**TOTAL**	**12.583**	**3.760**	**2.202**	**3.072**	**3.008**	**0.127**	**24.752**	
1982	January	1.204	0.246	0.221	0.309	0.283	0.009	2.272	2.272
	February	1.036	0.228	0.162	0.304	0.222	0.008	1.960	4.232
	March	1.015	0.255	0.144	0.340	0.251	0.007	2.011	6.243
	April	0.922	0.255	0.120	0.319	0.240	0.007	1.862	8.105
	May	0.967	0.267	0.106	0.320	0.238	0.008	1.907	10.012
	June	1.005	0.306	0.111	0.319	0.265	0.010	2.015	12.027
	July	1.171	0.365	0.144	0.313	0.281	0.010	2.284	14.310
	August	1.162	0.374	0.125	0.278	0.275	0.010	2.224	16.535
	September	1.026	0.303	0.110	0.235	0.280	0.010	1.964	18.498
	October	0.982	0.283	0.106	0.234	0.256	0.011	1.871	20.370
	November	1.013	0.234	0.100	0.270	0.256	0.011	1.885	22.254
	December	1.079	0.222	0.120	0.318	0.269	0.009	2.016	24.271
	TOTAL	**12.582**	**3.338**	**1.568**	**3.559**	**3.115**	**0.108**	**24.271**	
1983	January	1.129	0.215	0.137	0.336	0.276	0.011	2.105	2.105
	February	0.968	0.183	0.134	0.319	0.245	0.008	1.857	3.962
	March	0.997	0.215	0.133	0.347	0.263	0.010	1.964	5.925
	April	0.922	0.210	0.110	0.342	0.246	0.009	1.839	7.764
	May	0.967	0.226	0.097	0.356	0.243	0.007	1.895	9.659
	June	1.065	0.256	0.119	0.350	0.266	0.010	2.066	11.725
	July	1.278	0.325	0.156	0.324	0.282	0.012	2.376	14.102
	August	1.349	0.364	0.158	0.300	0.289	0.016	2.475	16.577
	September	1.147	0.309	0.123	0.256	0.275	0.014	2.124	18.701
	October	1.072	0.260	0.106	0.247	0.284	0.015	1.984	20.685
	November	1.083	0.222	0.099	0.287	0.275	0.013	1.979	22.664
	December	1.251	0.226	0.171	0.361	0.290	0.011	2.310	24.975
	TOTAL	**13.226**	**3.011**	**1.544**	**3.824**	**3.235**	**0.135**	**24.975**	
1984	January	1.274	0.223	0.169	0.341	0.321	0.011	2.338	2.338
	February	1.106	0.194	0.108	0.319	0.312	0.013	2.052	4.390
	March	1.154	0.213	0.115	0.348	0.293	0.015	2.138	6.528

[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 only geothermal power and electricity produced from wood, waste, and wind energy.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Additional Notes and Sources: • See the last four pages of this section.

Notes and Sources for the Consumption Section

1. **Total Energy Consumed:** Total energy consumed includes coal (anthracite, bituminous coal, and lignite), natural gas (dry), refined petroleum products supplied, electric utility and industrial generation of electricity from hydropower, net imports of electricity generated from hydropower, and electricity generated from nuclear power, geothermal power, and wood, waste, and wind energy. Data do not include the consumption of wood-derived fuel other than that consumed by the electric utility industry. Also excluded are small quantities of energy forms for which consistent historical data are not available, such as solar energy obtained by the use of thermal and photovoltaic collectors; and geothermal, biomass, waste, and wind energy other than that consumed at electric utilities.

2. **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 that generate electricity primarily for resale.

3. **Conversion Factors:** See the Conversion Factors section of this publication.

4. **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."

5. **Natural Gas:** Natural gas consumption by end-use sector is based on data presented in the table titled "Natural and Supplemental Gas Consumption" in Part 4. For the Part 2 consumption summary, lease and plant fuel consumption are added to the industrial sector deliveries and pipeline fuel represents the transportation sector's use of natural gas. Values in Btu are derived using the conversion factors provided in the Conversion Factors section of this publication.

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 1982: EIA, *Natural Gas Annual.*
- 1983 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."

6. **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 Part 3.

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 and 1982: EIA, *Petroleum Supply Annual.*
- 1983 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.

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

Notes and Sources for the Consumption Section (continued)

6. **Petroleum (continued):**
   - **Distillate Fuel**
     - — ***Electqic Utility Sector, All Perhods.***
       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."
     - — ***Nonutility Sectors, Annual Estimates.***
       The aggregate nonutility use of distillate fuel is total distillate fuel supplied minus the electric utility consumption. The nonutility annual totals are allocated into the individual nonutility 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 1982. Deliveries for 1982 are used as estimates for 1983. 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 1982. Deliveries for 1982 are used as estimates for 1983. 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 1982 are the sum of deliveries for industrial, farm, oil company, off-highway, diesel, and all other uses. Deliveries for 1982 are used as estimates for 1983. 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 1982 are used as estimates for 1983.
     - — ***Nonutility Sectors, Monthly Estimates Through 1982.***
       - 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.
     - — ***Nonutility Sectors, 1983 Forward.***
       Each month's nonutility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the nonutility subtotal in the same month in 1982.

   - **Jet Fuel**—Small amounts of kerosene-type jet fuel in all periods are consumed by the electric utility sector. Kerosene-type jet fuel deliveries to electric utilities as reported on the FERC-423 (formerly FPC-423) are used as an estimate of this consumption. All remaining jet fuel (kerosene-type and naphtha-type) 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 1982. Deliveries for 1982 are used as estimates for 1983 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 1982. Deliveries for 1982 are used as estimates for 1983 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 1982. Deliveries for 1982 are used as estimates for 1983 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 1982: 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;
       - The quantity of LPG sold each year that is consumed in internal combustion engines is allocated between the transportation and industrial sectors according to a 5-year moving average of the percentage of carburetors sold to each end-use category. The proportions range from 31 percent transportation and 69 percent industrial in 1973 to 52 percent transportation and 48 percent industrial in 1982.

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

Notes and Sources for the Consumption Section (continued)

6. **Petroleum (continued):**
   - 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 industrial sector includes LPG used by chemical plants as raw materials or solvents and for use in the production of synthetic rubber; refinery fuel use; use as synthetic natural gas feedstock and use in secondary recovery projects; all farm use; LPG sold to gas utility companies for distribution through the mains; and a portion of the use of LPG as an internal combustion engine fuel.

   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.

   — 1983 forward: The 1982 annual end-use shares are applied for succeeding periods to estimate the amount of the total LPG supplied that 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.

- **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 are 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."
  — ***Nonutility Sectors, Annual Estimates.***
  The aggregate nonutility use of residual fuel is total residual fuel supplied minus the electric utility consumption. The nonutility annual totals are allocated into the individual nonutility 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 1982. Deliveries for 1982 are used as estimates for 1983. 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 1982 are the sum of deliveries for industrial, oil company, and all other uses. Deliveries for 1982 are used as estimates for 1983. 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 1982 are used as estimates for 1983.
  — ***Nonutility Sectors, Monthly Estimates Through 1982.***
    - 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.
  — ***Nonutility Sectors, 1983 Forward.***
  Each month's nonutility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the nonutility subtotal in the same month in 1982.

- **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.

7. **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.

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

Notes and Sources for the Consumption Section (continued)

7. **Hydroelectric (continued):**
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).
- 1982 annual: DOE, Economic Regulatory Administration, Office of Fuels Programs, 'Electricity Exchanges Across International Borders - 1982,' DOE/RG-0062, May 1983.
- Monthly through 1982: Estimates are derived by dividing the annual number by the number of days in the year and multiplying by the number of days in the month.
- 1983 forward: EIA estimates.

8. **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."

9. **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.

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

11. **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, primarily by railroads and railways. 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."

12. **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 May 1984 was estimated to be 8.8 million barrels per day, only 0.7 percent above the rate in April 1984 and 0.8 percent above the rate in May 1983.

Total petroleum imports averaged 5.5 million barrels per day in May 1984, 3.3 percent more than the April 1984 rate and 12.1 percent more than the May 1983 rate.

In May 1984, 15.4 million barrels per day of petroleum products were supplied for domestic use, slightly below the level in April 1984 but 8.4 percent above the level of the previous May. Motor gasoline accounted for 45.2 percent of the total; distillate fuel oil, 18.1 percent; and residual fuel oil, 7.7 percent.

Motor gasoline supplied during May 1984 averaged 7.0 million barrels per day, 4.4 percent above the rate in April 1984 and 6.7 percent above the rate of the previous May. Stocks of motor gasoline totaled 248 million barrels at the end of May 1984, the same as the level at the end of April 1984 but 23 million barrels above the May 1983 level.

In May 1984, 2.8 million barrels of distillate fuel oil were supplied per day, 4.4 percent lower than the April 1984 rate but 19.6 percent higher than the May 1983 level. Distillate fuel oil stocks were 99 million barrels at the end of May 1984, 1 million barrels above the level at the end of the previous month but 10 million barrels below the stock level of 1 year earlier.

Residual fuel oil supplied in May 1984 averaged 1.2 million barrels per day, 12.5 percent lower than in April 1984 and 9.4 percent lower than the May 1983 rate. Residual fuel oil stocks measured 44 million barrels at the end of May 1984, 3 million barrels below the level at the end of April 1984, and 7 million barrels below the ending stocks for the month of May 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 February 1984. 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[3]
		Total Domestic[4]	Crude Oil	Natural Gas Plant Production	Crude Oil[5]	Petroleum Products	Petroleum Products Supplied	Crude Oil[5] 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**	**[8]1,074**
1975	**AVERAGE**	**10,045**	**8,375**	**1,633**	**[8]-17**	**[8]-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**	**[8]1,392**
1981	**AVERAGE**	**10,230**	**8,572**	**1,609**	**[8]-290**	**[8]130**	**16,058**	**1,484**
1982	January	10,128	8,509	1,578	-401	1,298	16,124	1,456
	February	10,312	8,702	1,563	-242	1,230	16,001	1,428
	March	10,284	8,667	1,572	121	1,047	15,560	1,392
	April	10,188	8,591	1,542	-37	1,583	16,046	1,346
	May	10,244	8,683	1,518	29	-66	14,847	1,347
	June	10,212	8,646	1,511	40	-489	14,998	1,360
	July	10,229	8,658	1,513	-147	-926	14,821	1,393
	August	10,215	8,634	1,524	-440	-44	14,839	1,408
	September	10,279	8,701	1,518	263	-447	15,022	1,414
	October	10,299	8,701	1,530	-548	-47	14,859	1,432
	November	10,359	8,697	1,609	-398	-361	15,009	1,455
	December	10,276	8,598	1,628	128	688	15,487	[8]1,430
	AVERAGE	**10,252**	**8,649**	**1,550**	**-136**	**283**	**15,296**	
1983	January	10,356	8,634	1,668	-567	[8]865	14,765	1,453
	February	10,298	8,660	1,585	-382	1,128	14,772	1,432
	March	10,259	8,677	1,544	56	1,765	15,484	1,375
	April	10,229	8,686	1,502	-438	431	14,779	1,376
	May	10,231	8,682	1,483	68	-759	14,250	1,397
	June	10,262	8,676	1,514	-163	-242	15,281	1,409
	July	10,237	8,647	1,536	118	-922	14,913	1,434
	August	10,257	8,653	1,561	-781	-289	15,366	1,467
	September	10,323	8,666	1,598	-191	-634	15,396	1,492
	October	10,317	8,654	1,604	-180	-456	14,947	1,512
	November	10,310	8,624	1,636	182	-128	15,533	1,510
	December	10,188	8,612	1,533	-306	2,150	16,691	1,453
	AVERAGE	**10,272**	**8,656**	**1,564**	**-215**	**239**	**15,184**	
1984	January	10,282	8,659	1,585	-342	1,085	16,726	1,430
	February	10,410	8,726	1,629	186	-1,353	15,389	1,464
	March	10,354	8,718	1,588	-2	643	16,017	1,444
	April	10,347	8,688	1,616	R-565	R-128	R15,484	R1,465
	May†	NA	*8,753*	NA	*-709*	*-346*	*15,446*	*1,485*
	AVERAGE	**NA**	**8,708**	**NA**	**-291**	**-1**	**15,820**	

[1]Includes lease condensate.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3]Stocks are totals as of end of period.
[4]Includes crude oil, natural gas plant production, other hydrocarbons, and alcohol.
[5]Includes stocks located in the Strategic Petroleum Reserve.
[6]Includes crude oil for storage in the Strategic Petroleum Reserve.
[7]Net imports equals imports minus exports.
[8]In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stocks withdrawal calculations. See Note 5 on the last page of this section.
Footnotes continued on following page.

Petroleum

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

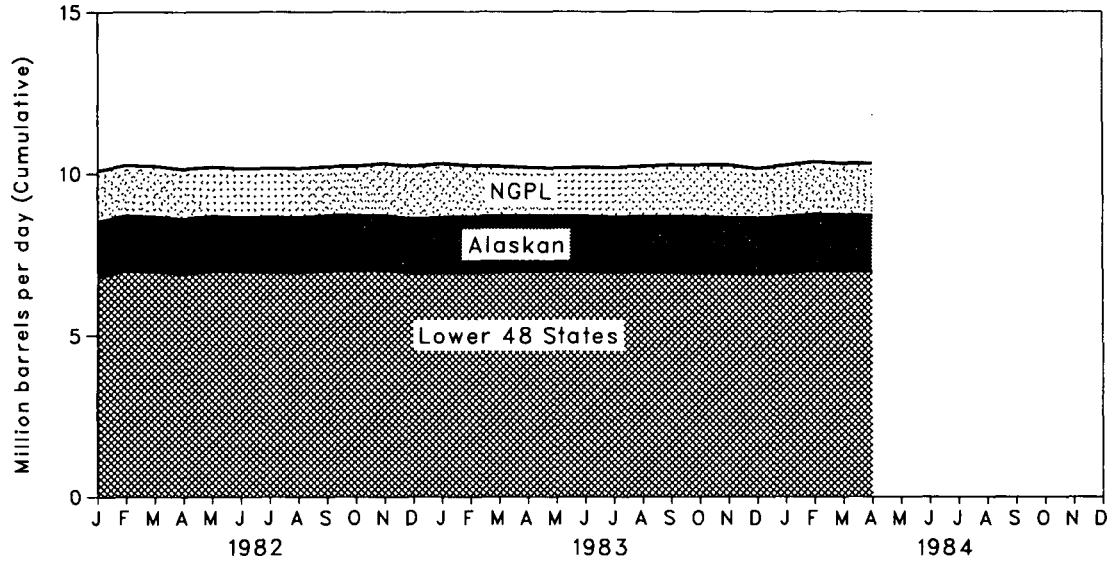
		Imports			Exports			
		Total	Crude Oil[6]	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports[7]
		Thousand barrels per day						
1973	**AVERAGE**	**6,256**	**3,244**	**3,012**	**231**	**2**	**229**	**6,025**
1974	**AVERAGE**	**6,112**	**3,477**	**2,635**	**221**	**3**	**218**	**5,892**
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	**AVERAGE**	**5,996**	**4,396**	**1,599**	**595**	**228**	**367**	**5,401**
1982	January	5,332	3,693	1,639	829	238	591	4,503
	February	4,807	2,990	1,817	804	304	499	4,003
	March	4,484	2,874	1,610	882	321	561	3,602
	April	4,378	2,849	1,529	786	174	611	3,593
	May	4,811	3,309	1,503	803	262	542	4,008
	June	5,327	3,836	1,491	703	94	609	4,624
	July	5,890	4,248	1,642	741	229	512	5,149
	August	5,244	3,851	1,392	858	304	554	4,386
	September	5,414	3,636	1,778	791	184	606	4,624
	October	5,306	3,670	1,636	932	270	662	4,374
	November	5,744	3,862	1,882	786	262	524	4,958
	December	4,606	3,000	1,605	860	193	667	3,746
	AVERAGE	**5,113**	**3,488**	**1,625**	**815**	**236**	**579**	**4,298**
1983	January	4,372	2,938	1,434	973	117	856	3,399
	February	3,691	2,268	1,423	865	262	603	2,825
	March	3,629	2,232	1,398	801	174	627	2,829
	April	4,744	3,154	1,590	809	88	721	3,935
	May	4,898	3,234	1,664	848	280	568	4,049
	June	5,218	3,502	1,716	774	144	630	4,443
	July	5,690	3,868	1,822	571	145	426	5,119
	August	6,036	4,174	1,863	663	172	491	5,373
	September	6,088	4,221	1,867	684	177	507	5,403
	October	5,256	3,446	1,810	576	140	436	4,680
	November	5,168	3,312	1,856	679	186	494	4,489
	December	4,986	3,214	1,772	639	95	544	4,348
	AVERAGE	**4,988**	**3,303**	**1,686**	**739**	**164**	**575**	**4,249**
1984	January	5,347	3,029	2,318	575	153	422	4,772
	February	5,643	2,952	2,691	582	185	397	5,061
	March	5,253	3,455	1,798	840	236	605	4,413
	April	R5,319	R3,417	R1,902	655	172	483	4,664
	May†	*5,493*	*3,805*	*1,688*	NA	NA	NA	NA
	AVERAGE	**5,408**	**3,336**	**2,072**	**NA**	**NA**	**NA**	**NA**

Footnotes continued.
†Italics denote estimates based upon preliminary data. R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

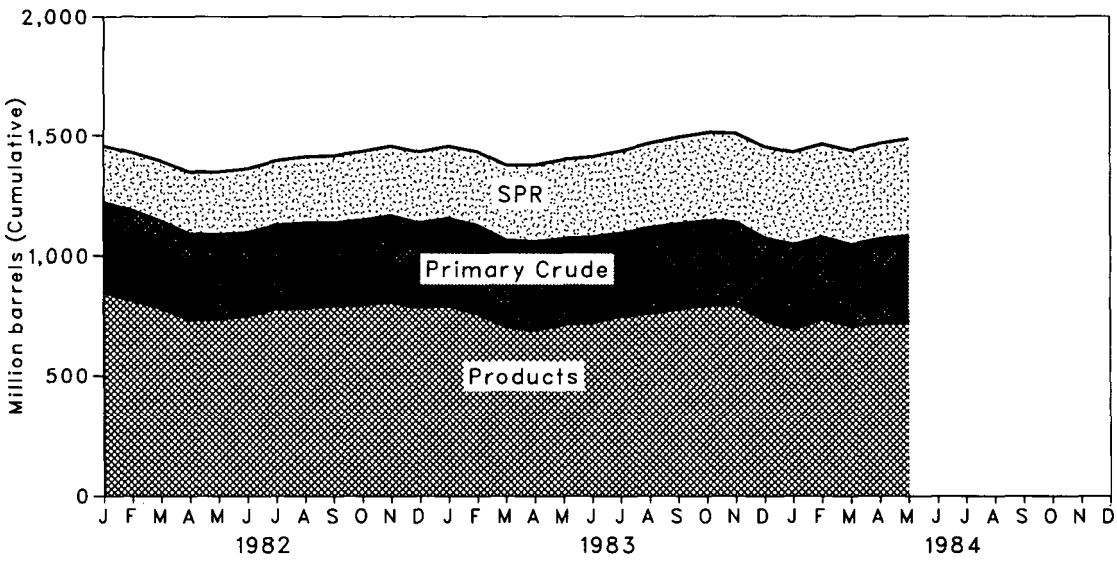
Petroleum

Overview

Production of Crude Oil and Natural Gas Plant Liquids



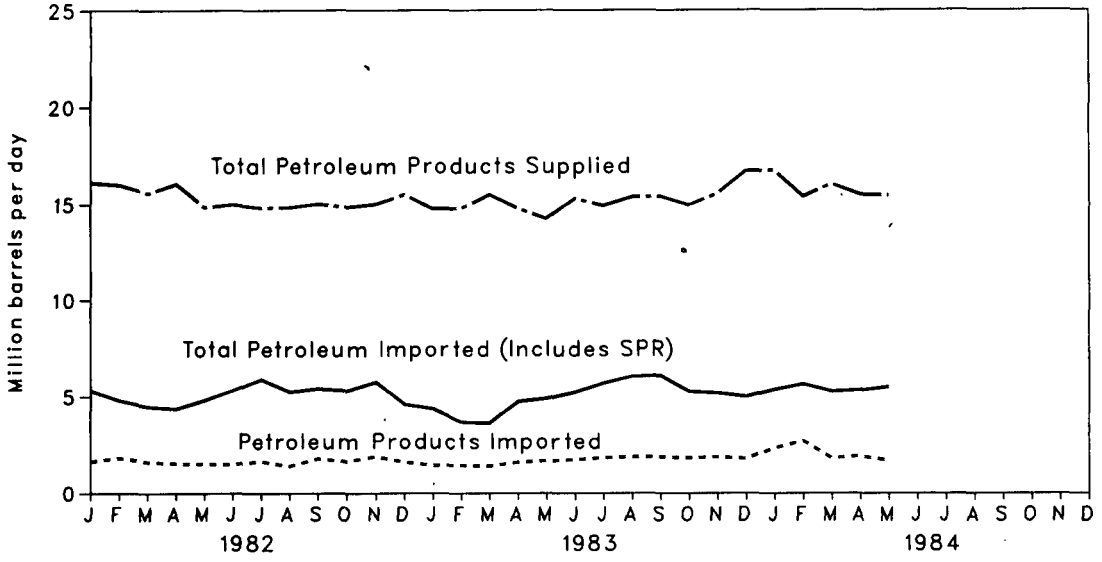
Stocks



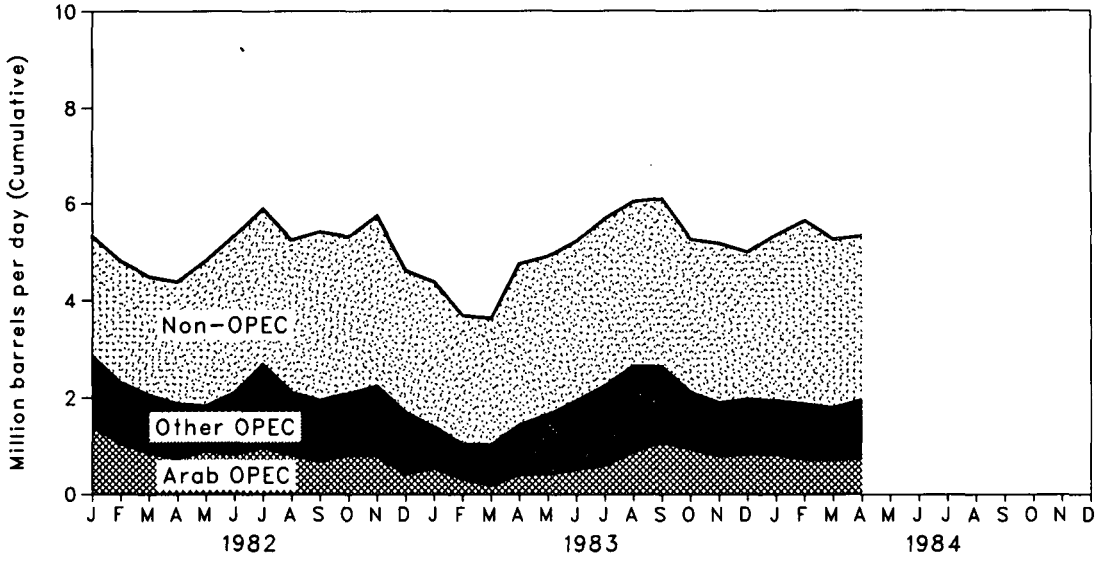
Petroleum

Overview

Products Supplied and Imports



Petroleum Imports by Source



Petroleum

Crude Oil[1] Supply and Disposition

		Supply							
		Field Production		Imports			Stock Withdrawal[3]		Unaccounted for Crude Oil
		Total Domestic	Alaskan	Total	SPR[4]	Other	SPR[4]	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	**AVERAGE**	**8,572**	**1,609**	**4,396**	**256**	**4,141**	**-336**	**[6]46**	**83**
1982	January	8,509	1,705	3,693	170	3,523	-159	-242	101
	February	8,702	1,707	2,990	159	2,830	-213	-29	156
	March	8,667	1,696	2,874	185	2,689	-235	357	2
	April	8,591	1,691	2,849	190	2,659	-233	196	231
	May	8,683	1,707	3,309	204	3,105	-176	205	111
	June	8,646	1,665	3,836	105	3,732	-105	144	133
	July	8,658	1,710	4,248	97	4,150	-97	-50	-20
	August	8,634	1,697	3,851	208	3,643	-208	-232	189
	September	8,701	1,705	3,636	139	3,497	-143	406	-210
	October	8,701	1,706	3,670	216	3,454	-216	-332	249
	November	8,697	1,676	3,862	180	3,683	-179	-219	-124
	December	8,598	1,682	3,000	124	2,877	-125	252	35
	AVERAGE	**8,649**	**1,696**	**3,488**	**165**	**3,323**	**-174**	**38**	**71**
1983	January	8,634	1,698	2,938	219	2,720	-219	-348	238
	February	8,660	1,725	2,268	197	2,071	-197	-185	423
	March	8,677	1,726	2,232	201	2,031	-184	240	134
	April	8,686	1,710	3,154	205	2,949	-197	-241	191
	May	8,682	1,710	3,234	289	2,945	-293	362	148
	June	8,676	1,710	3,502	190	3,312	-188	25	480
	July	8,647	1,705	3,868	274	3,594	-264	382	-74
	August	8,653	1,712	4,174	350	3,823	-358	-423	333
	September	8,666	1,722	4,221	309	3,912	-307	116	-6
	October	8,654	1,731	3,446	202	3,244	-201	21	69
	November	8,624	1,713	3,312	171	3,141	-135	317	137
	December	8,612	1,713	3,214	193	3,021	-252	-55	-141
	AVERAGE	**8,656**	**1,715**	**3,303**	**234**	**3,069**	**-234**	**19**	**159**
1984	January	8,659	1,741	3,029	200	2,829	-173	-169	451
	February	8,726	1,740	2,952	85	2,868	-96	282	487
	March	8,718	1,740	3,455	148	3,307	-147	145	66
	April	8,688	1,725	R3,417	R170	R3,247	R-170	R-396	590
	May†	*8,753*	*1,793*	*3,805*	*198*	*3,607*	*-199*	*-511*	NA
	AVERAGE	**8,708**	**1,748**	**3,336**	**161**	**3,175**	**-158**	**-133**	**NA**

[1]Includes lease condensate.
[2]Stocks are totals as of end of period.
[3]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4]Strategic Petroleum Reserve.
[5]Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
[6]Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels. See Note 6 on the last page of this section.
Footnotes continued on following page.

Petroleum

Crude Oil[1] Supply and Disposition (continued)

		Supply		Disposition			Ending Stocks[2]		
		Crude Used Directly[5]	Crude Losses	Refinery Inputs	Exports	Product Supplied[5]	Total	SPR[4]	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**	**[6]466**	**108**	**[6]358**
1981	**AVERAGE**	**-58**	**5**	**12,470**	**228**	**NA**	**594**	**230**	**363**
1982	January	-63	3	11,599	238	NA	606	235	371
	February	-64	2	11,236	304	NA	613	241	372
	March	-63	5	11,276	321	NA	609	249	361
	April	-65	3	11,392	174	NA	610	256	355
	May	-62	3	11,806	262	NA	609	261	348
	June	-60	7	12,494	94	NA	608	264	344
	July	-60	3	12,446	229	NA	613	267	346
	August	-57	2	11,871	304	NA	626	274	353
	September	-56	4	12,146	184	NA	619	278	341
	October	-51	2	11,749	270	NA	636	285	351
	November	-51	1	11,724	262	NA	648	290	358
	December	-53	1	11,514	193	NA	644	294	350
	AVERAGE	**-59**	**3**	**11,774**	**236**	**NA**			
1983	January	NA	2	11,070	117	54	661	301	361
	February	NA	3	10,635	262	69	672	306	366
	March	NA	2	10,854	174	70	670	312	359
	April	NA	2	11,436	88	68	684	318	366
	May	NA	1	11,789	280	63	681	327	355
	June	NA	1	12,287	144	64	686	332	354
	July	NA	2	12,347	145	65	683	341	342
	August	NA	1	12,141	172	64	707	352	355
	September	NA	1	12,445	177	66	713	361	352
	October	NA	1	11,784	140	63	718	367	351
	November	NA	2	12,003	186	64	713	371	341
	December	NA	1	11,217	95	67	722	379	343
	AVERAGE	**NA**	**1**	**11,672**	**164**	**65**			
1984	January	NA	1	11,579	153	64	733	384	348
	February	NA	1	12,100	185	65	727	387	340
	March	NA	2	11,936	236	62	728	392	336
	April	NA	(s)	R11,893	172	64	R744	397	R348
	May†	NA	NA	*12,341*	NA	NA	*764*	*403*	*361*
	AVERAGE	**NA**	**NA**	**11,969**	**NA**	**NA**			

Footnotes continued.
†Italics denote estimates based upon preliminary data. R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

Petroleum

Crude Oil and Petroleum Product Imports

		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	**AVERAGE**	**311**	**319**	**1,129**	**81**	**366**	**0**	**620**	**406**	**90**	**3,323**	**1,848**
1982	January	254	161	877	111	289	0	663	376	128	2,859	1,403
	February	139	92	693	89	244	0	584	355	102	2,297	1,054
	March	91	37	555	155	200	0	522	399	91	2,051	860
	April	85	0	511	122	215	0	427	426	85	1,871	740
	May	179	0	601	116	236	0	222	422	54	1,830	897
	June	115	0	593	94	215	72	537	361	110	2,096	820
	July	159	0	660	108	327	69	910	356	95	2,685	965
	August	181	0	489	133	271	27	574	299	133	2,107	818
	September	179	0	432	57	191	21	477	518	69	1,943	677
	November	247	14	489	47	283	34	479	528	115	2,235	797
	December	155	0	237	12	265	88	462	399	73	1,690	421
	AVERAGE	**170**	**26**	**552**	**92**	**248**	**35**	**514**	**412**	**97**	**2,146**	**854**
1983	January	204	0	282	47	255	43	186	324	43	1,384	533
	February	104	0	214	9	217	0	92	371	28	1,035	326
	March	63	0	103	0	138	0	121	425	173	1,023	183
	April	228	0	180	(s)	210	0	186	508	125	1,438	409
	May	284	0	122	12	324	37	352	444	69	1,645	419
	June	300	0	175	40	502	38	402	335	146	1,938	515
	July	282	0	182	58	464	112	525	431	187	2,240	599
	August	370	0	426	45	416	213	464	477	230	2,641	866
	September	413	0	587	21	516	86	324	472	208	2,627	1,074
	October	261	0	638	16	368	12	307	337	169	2,108	938
	November	165	0	545	56	318	21	214	435	135	1,891	789
	December	141	0	569	45	291	9	329	408	163	1,957	823
	AVERAGE	**235**	**0**	**336**	**29**	**335**	**48**	**294**	**414**	**140**	**1,832**	**625**
1984	January	242	0	463	114	278	0	243	547	51	1,939	828
	February	348	0	324	33	267	0	244	481	174	1,871	723
	March	283	0	307	112	284	67	260	354	127	1,792	717
	April	280	0	320	95	221	0	288	581	158	1,944	734
	AVERAGE	**287**	**0**	**354**	**90**	**263**	**17**	**259**	**490**	**126**	**1,886**	**751**

[1]Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products that 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.
Footnotes continued on following page.

Petroleum

Crude Oil and Petroleum Product Imports (continued)

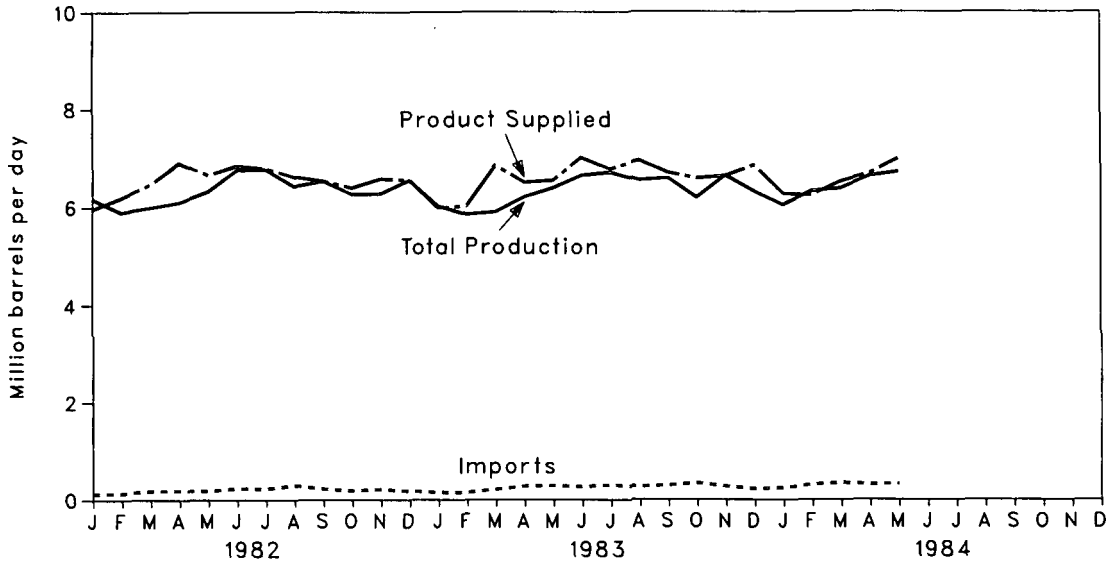
		Imports from Non-OPEC Sources[4]										
		Bahamas	Canada	Mexico	Nether-lands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non-OPEC	Total Non-OPEC	Total Imports
		Thousand barrels per day										
1973	**AVERAGE**	**174**	**1,325**	**16**	**585**	**255**	**15**	**99**	**329**	**465**	**3,263**	**6,256**
1974	**AVERAGE**	**164**	**1,070**	**8**	**511**	**251**	**8**	**90**	**391**	**340**	**2,832**	**6,112**
1975	**AVERAGE**	**152**	**846**	**71**	**332**	**242**	**14**	**90**	**406**	**300**	**2,454**	**6,056**
1976	**AVERAGE**	**118**	**599**	**87**	**275**	**274**	**31**	**88**	**422**	**353**	**2,247**	**7,313**
1977	**AVERAGE**	**171**	**517**	**179**	**211**	**289**	**126**	**105**	**466**	**550**	**2,614**	**8,807**
1978	**AVERAGE**	**160**	**467**	**318**	**229**	**253**	**180**	**94**	**429**	**484**	**2,613**	**8,363**
1979	**AVERAGE**	**147**	**538**	**439**	**231**	**190**	**202**	**92**	**431**	**548**	**2,819**	**8,456**
1980	**AVERAGE**	**78**	**455**	**533**	**225**	**176**	**176**	**88**	**388**	**491**	**2,609**	**6,909**
1981	**AVERAGE**	**74**	**447**	**522**	**197**	**133**	**375**	**62**	**327**	**534**	**2,672**	**5,996**
1982	January	58	513	425	179	106	346	62	334	452	2,474	5,332
	February	67	537	476	221	120	181	38	362	508	2,510	4,807
	March	43	437	503	189	118	294	62	307	480	2,433	4,484
	April	82	360	476	184	166	247	36	266	690	2,507	4,378
	May	77	419	766	152	95	516	47	302	607	2,981	4,811
	June	32	481	797	148	129	557	58	322	708	3,231	5,327
	July	64	536	783	158	118	433	38	376	698	3,204	5,890
	August	80	443	853	145	106	520	24	317	650	3,137	5,244
	September	92	493	897	195	89	631	51	278	746	3,472	5,414
	October	45	459	682	148	109	666	52	262	801	3,222	5,306
	November	51	553	860	212	90	623	81	334	706	3,508	5,744
	December	88	561	689	174	102	438	48	336	480	2,916	4,606
	AVERAGE	**65**	**482**	**685**	**175**	**112**	**456**	**50**	**316**	**627**	**2,968**	**5,113**
1983	January	68	536	849	218	73	315	40	299	588	2,988	4,372
	February	92	592	722	179	81	193	50	192	554	2,655	3,691
	March	86	488	760	187	78	240	43	162	563	2,606	3,629
	April	167	452	981	216	85	421	20	183	781	3,306	4,744
	May	135	501	944	153	108	483	42	235	651	3,252	4,898
	June	137	576	831	181	120	424	48	252	712	3,281	5,218
	July	69	633	849	191	103	369	37	364	836	3,450	5,690
	August	142	540	891	194	90	461	40	313	725	3,395	6,036
	September	137	523	832	251	82	472	33	308	822	3,461	6,088
	October	164	539	771	172	106	414	48	370	565	3,149	5,256
	November	143	542	717	144	110	334	55	440	793	3,278	5,168
	December	119	592	718	153	113	429	22	271	613	3,030	4,886
	AVERAGE	**122**	**542**	**822**	**187**	**96**	**381**	**40**	**283**	**684**	**3,156**	**4,988**
1984	January	152	624	705	277	54	382	53	390	772	3,408	5,347
	February	142	620	747	288	77	338	58	418	1,083	3,772	5,643
	March	88	726	707	169	93	400	34	247	996	3,460	5,253
	April	88	691	859	207	91	282	37	257	863	3,375	5,319
	AVERAGE	**117**	**666**	**754**	**235**	**79**	**351**	**45**	**327**	**926**	**3,500**	**5,387**

Footnotes continued.
[4]Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products that were refined from crude oil produced in OPEC countries.
(s)=Less than 500 barrels per day.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Beginning in October 1977, Strategic Petroleum Reserve imports are included.
Sources: • See the last page of this section.

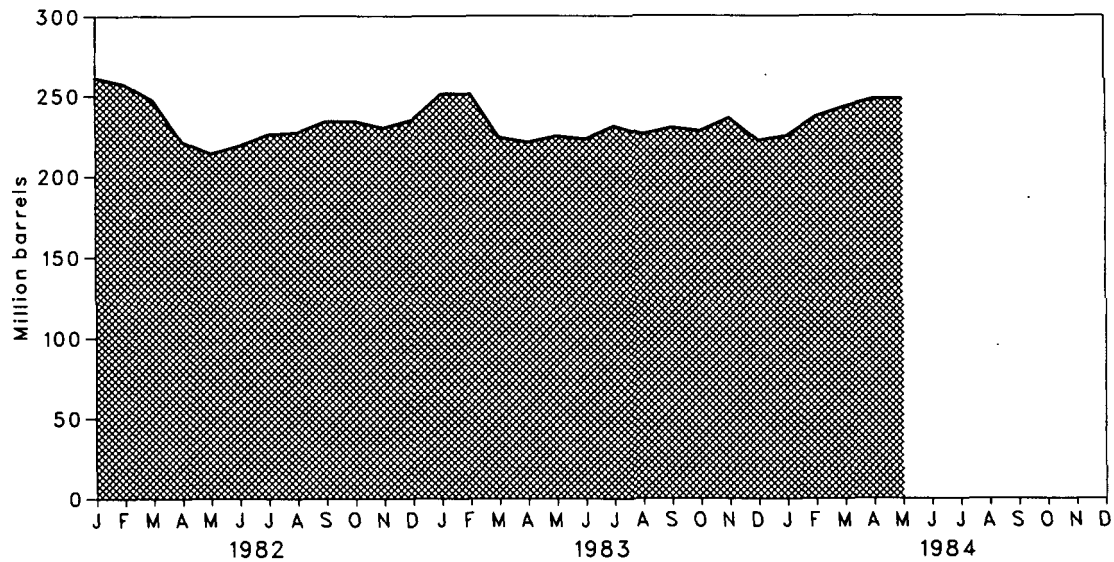
Petroleum

Motor Gasoline

Products Supplied, Total Production, and Imports



Stocks



Petroleum

Finished Motor Gasoline Supply and Disposition

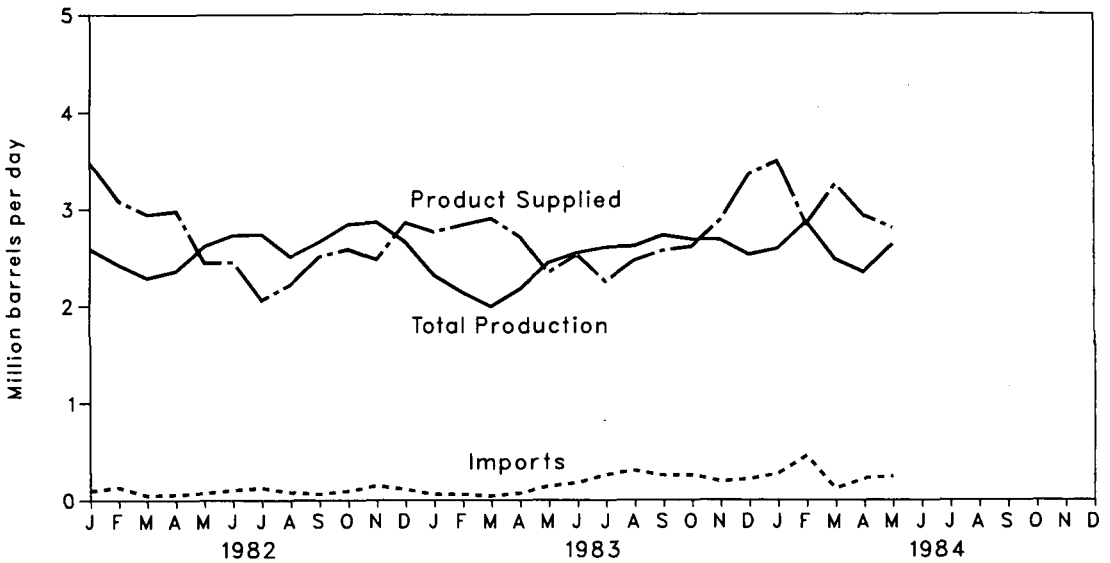
		Supply			Disposition				Ending Stocks[1]	
						Product Supplied				
		Total Production	Imports[2]	Stock Withdrawal[2,3]	Exports	Total	Unleaded[4]	Unleaded Percent of Total	Total Motor Gasoline[5]	Finished Motor Gasoline
		Thousand barrels per day							Million barrels	
1973	**AVERAGE**	**6,535**	**134**	**9**	**4**	**6,674**			**209**	
1974	**AVERAGE**	**6,360**	**204**	**-24**	**2**	**6,537**			**[6]218**	
1975	**AVERAGE**	**6,520**	**184**	**[6]-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**	**[6]261**	
1981	**AVERAGE[7]**	**6,405**	**157**	**[6]28**	**2**	**6,588**	**3,264**	**49.5**	**253**	
1982	January	6,167	128	-316	18	5,961	3,067	51.5	261	213
	February	5,899	133	172	8	6,196	3,210	51.8	257	208
	March	5,994	183	334	44	6,466	3,358	51.9	247	198
	April	6,095	185	650	33	6,897	3,495	50.7	221	179
	May	6,319	182	177	23	6,655	3,415	51.3	214	173
	June	6,754	230	-134	14	6,835	3,565	52.2	219	177
	July	6,768	225	-178	24	6,790	3,577	52.7	226	183
	August	6,419	291	-81	16	6,614	3,526	53.3	227	185
	September	6,527	223	-198	22	6,531	3,404	52.1	234	191
	October	6,262	185	-42	15	6,391	3,351	52.4	234	192
	November	6,273	211	101	11	6,574	3,451	52.5	230	189
	December	6,542	178	-165	7	6,549	3,485	53.2	[6]235	[6]194
	AVERAGE	**6,338**	**197**	**25**	**20**	**6,539**	**3,409**	**52.1**		
1983	January	6,020	148	[6]-186	(s)	5,981	3,352	56.0	251	208
	February	5,848	142	32	(s)	6,022	3,257	54.1	251	207
	March	5,897	205	765	23	6,843	3,620	52.9	224	184
	April	6,202	273	27	1	6,501	3,505	53.9	221	183
	May	6,386	284	-128	1	6,540	3,547	54.2	225	187
	June	6,646	265	118	22	7,008	3,796	54.2	223	183
	July	6,704	297	-210	18	6,773	3,752	55.4	231	190
	August	6,539	260	159	13	6,946	3,836	55.2	226	185
	September	6,582	285	-160	14	6,693	3,671	54.8	230	190
	October	6,188	335	60	2	6,581	3,698	56.2	228	188
	November	6,636	269	-274	2	6,629	3,714	56.0	236	196
	December	6,314	217	340	25	6,846	3,967	57.9	222	185
	AVERAGE	**6,332**	**249**	**47**	**10**	**6,617**	**3,646**	**55.1**		
1984	January	6,037	233	-1	1	6,268	3,606	57.5	225	186
	February	6,320	303	-384	2	6,237	3,585	57.5	237	197
	March	6,375	343	-197	9	6,512	3,747	57.5	243	203
	April	R6,528	R308	R-153	(s)	R6,682	3,854	57.7	R248	R207
	May†	*6,709*	*316*	*-42*	NA	*6,977*	NA	NA	*248*	*207*
	AVERAGE	**6,394**	**300**	**-153**	**NA**	**6,538**	**NA**	**NA**		

[1]Stocks are totals as of end of period.
[2]Beginning in 1981, excludes blending components.
[3]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4]Includes gasohol.
[5]Includes motor gasoline blending components.
[6]In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
[7]Beginning in January 1981, survey forms were modified. See Note 2 on the last page of this section.
†Italics denote estimates based upon preliminary data. R=Revised data. NA=Not available. (s)= Less than 500 barrels per day.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

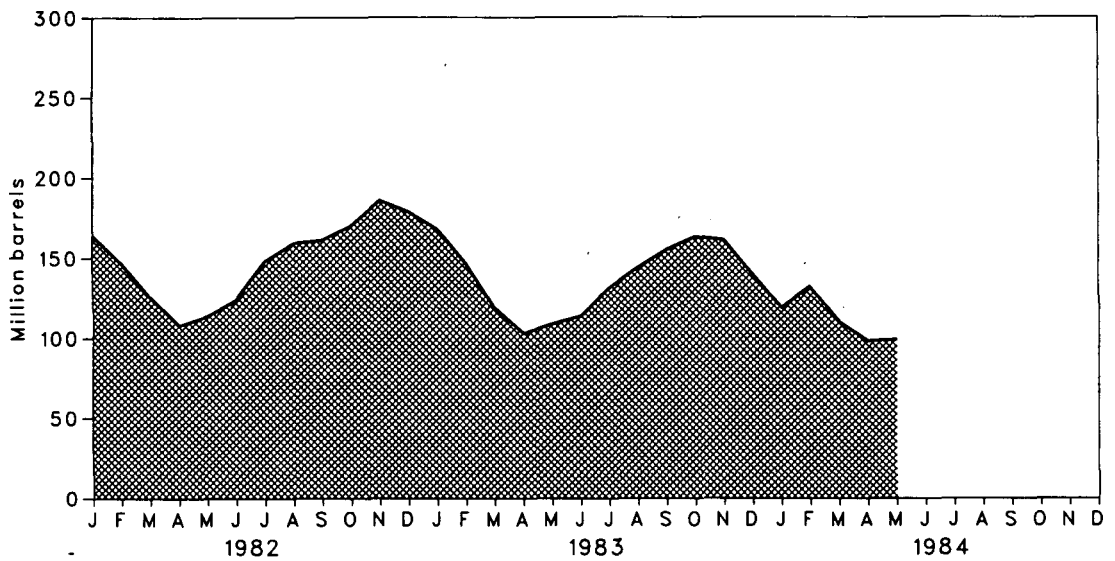
Petroleum

Distillate Fuel Oil

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks[1]
		Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Product Supplied[3]	
		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**	**[4]200**
1975	**AVERAGE**	**2,654**	**155**	**[4]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**	**[4]205**
1981	**AVERAGE[5]**	**2,613**	**173**	**[4]38**	**10**	**5**	**2,829**	**192**
1982	January	2,591	97	876	10	90	3,484	164
	February	2,427	132	605	11	90	3,085	147
	March	2,288	48	682	10	84	2,945	126
	April	2,358	59	612	13	64	2,978	108
	May	2,618	74	-183	10	75	2,444	114
	June	2,729	102	-335	10	55	2,452	124
	July	2,734	125	-789	11	24	2,058	148
	August	2,507	80	-339	10	40	2,218	159
	September	2,657	61	-85	12	139	2,507	161
	October	2,838	91	-289	8	66	2,581	170
	November	2,860	145	-514	8	24	2,475	186
	December	2,655	109	225	10	143	2,855	[4]179
	AVERAGE	**2,606**	**93**	**35**	**10**	**74**	**2,671**	
1983	January	2,314	58	[4]561	NA	173	2,760	168
	February	2,136	58	742	NA	105	2,832	147
	March	1,991	42	926	NA	59	2,900	119
	April	2,169	73	518	NA	47	2,713	103
	May	2,444	141	-193	NA	50	2,341	109
	June	2,545	175	-154	NA	40	2,526	114
	July	2,600	259	-556	NA	55	2,248	131
	August	2,612	302	-403	NA	43	2,467	144
	September	2,725	253	-374	NA	37	2,568	155
	October	2,682	255	-275	NA	55	2,606	163
	November	2,679	189	65	NA	54	2,879	161
	December	2,524	212	675	NA	54	3,358	140
	AVERAGE	**2,454**	**169**	**124**	**NA**	**64**	**2,682**	
1984	January	2,585	270	676	NA	40	3,490	119
	February	2,864	458	-439	NA	41	2,842	132
	March	2,480	115	727	NA	66	3,256	110
	April	R2,347	R220	R393	NA	32	R2,929	R98
	May†	*2,630*	*241*	*-12*	NA	NA	*2,801*	*99*
	AVERAGE	**2,579**	**259**	**278**	**NA**	**NA**	**3,067**	

[1]Stocks are totals as of end of period.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3]Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Note 4 on the last page of this section.
[4]In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
[5]Beginning in January 1981, survey forms were modified. See Note 2 on the last page of this section.
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Notes: • Geographic coverage is the 50 States and the District of Columbia.
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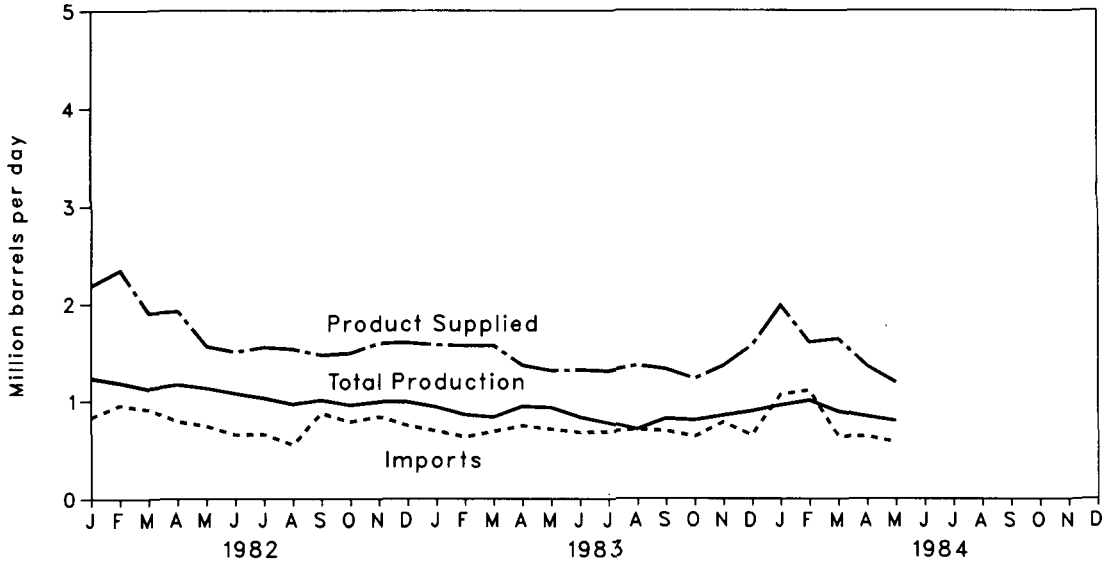
Sources: • See the last page of this section.

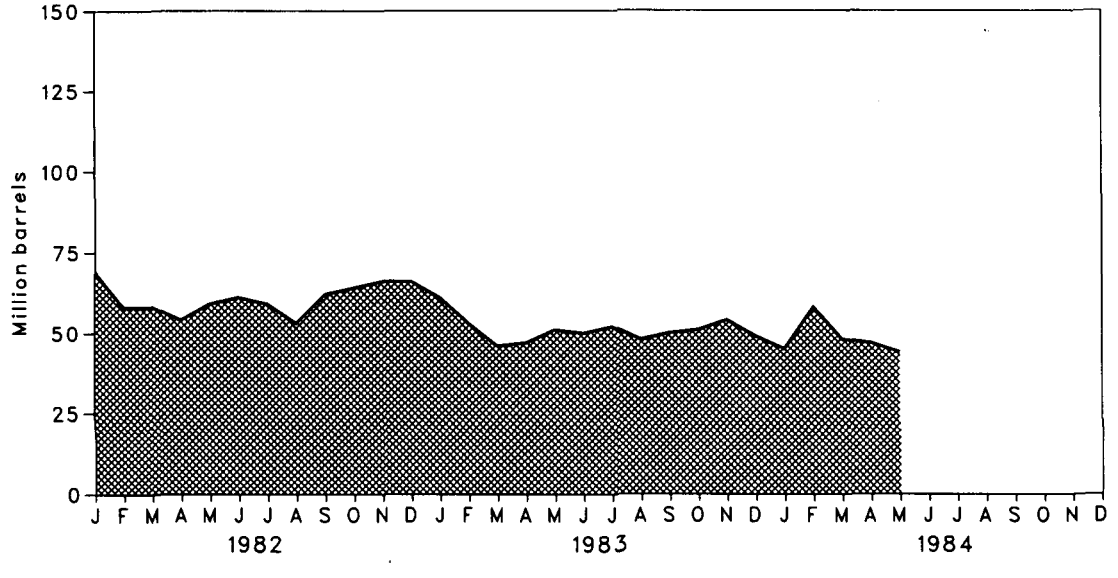
Petroleum

Residual Fuel Oil

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks[1]
		Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Product Supplied[3]	
		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**	**[4]60**
1975	**AVERAGE**	**1,235**	**1,223**	**[4]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**	**[4]92**
1981	**AVERAGE[5]**	**1,321**	**800**	**[4]37**	**48**	**118**	**2,088**	**78**
1982	January	1,235	831	301	53	235	2,185	69
	February	1,186	956	363	53	213	2,344	58
	March	1,123	912	12	53	197	1,903	58
	April	1,166	788	150	52	234	1,923	54
	May	1,128	742	-172	52	191	1,560	59
	June	1,074	652	-57	50	217	1,501	61
	July	1,028	657	56	49	239	1,550	59
	August	965	551	203	47	235	1,531	53
	September	1,008	872	-306	44	148	1,470	62
	October	955	783	-57	43	234	1,490	64
	November	989	837	-94	43	182	1,591	66
	December	989	747	6	43	186	1,598	[4]66
	AVERAGE	**1,070**	**776**	**32**	**48**	**209**	**1,716**	
1983	January	935	691	[4]243	NA	294	1,574	61
	February	857	632	270	NA	191	1,568	53
	March	833	686	220	NA	169	1,569	46
	April	942	743	-10	NA	310	1,364	47
	May	930	709	-139	NA	190	1,310	51
	June	832	676	28	NA	219	1,317	50
	July	771	682	-58	NA	90	1,306	52
	August	706	705	115	NA	165	1,362	48
	September	815	690	-47	NA	134	1,324	50
	October	799	634	-56	NA	153	1,224	51
	November	848	777	-101	NA	167	1,358	54
	December	893	646	173	NA	141	1,570	49
	AVERAGE	**846**	**689**	**52**	**NA**	**185**	**1,403**	
1984	January	953	1,061	119	NA	151	1,981	45
	February	1,003	1,107	-420	NA	87	1,602	58
	March	887	633	321	NA	204	1,637	48
	April	R840	R637	R9	NA	130	R1,357	R47
	May†	*793*	*575*	*-15*	NA	NA	*1,187*	*44*
	AVERAGE	**894**	**800**	**8**	**NA**	**NA**	**1,553**	

[1]Stocks are totals as of end of period.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3]Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Note 4 on the last page of this section.
[4]In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
[5]Beginning in January 1981, survey forms were modified. See Note 2 on the last page of this section.
†Italics denote estimates based upon preliminary data. R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
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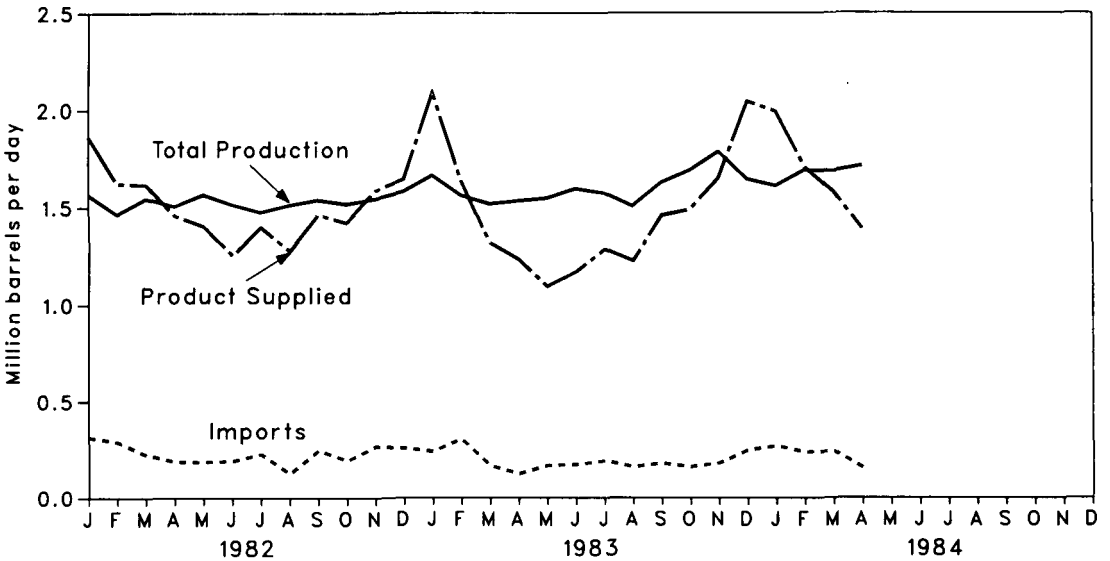
Sources: • See the last page of this section.

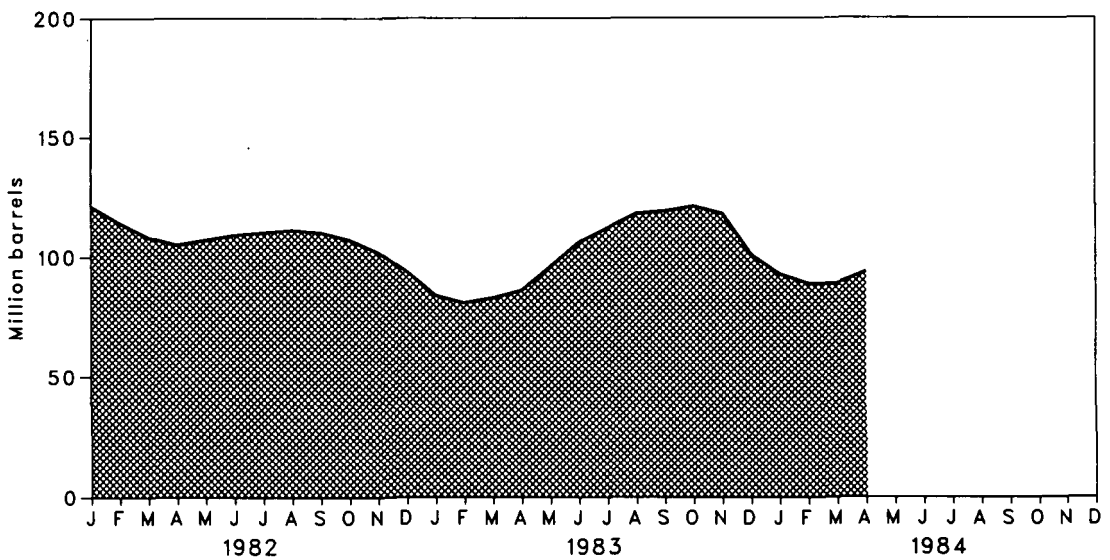
Petroleum

Liquefied Petroleum Gases

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Liquefied Petroleum Gases[1] Supply and Disposition

		Supply			Disposition			Ending Stocks[2]
		Total Production	Imports	Stock Withdrawal[3]	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**	**[4]113**
1975	**AVERAGE**	**1,527**	**112**	**[4]-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**	**[4]120**
1981	**AVERAGE**	**1,571**	**244**	**[4]-18**	**289**	**42**	**1,466**	**135**
1982	January	1,565	314	443	391	67	1,863	121
	February	1,466	291	243	327	51	1,621	114
	March	1,544	223	211	289	74	1,615	108
	April	1,506	188	98	257	77	1,458	105
	May	1,565	186	-71	234	43	1,403	107
	June	1,515	192	-86	262	106	1,254	109
	July	1,476	227	-13	253	37	1,399	110
	August	1,511	125	-45	254	61	1,276	111
	September	1,538	247	37	274	85	1,463	110
	October	1,517	194	97	306	81	1,421	107
	November	1,542	267	175	363	37	1,583	102
	December	1,580	258	256	395	56	1,642	[4]94
	AVERAGE	**1,528**	**226**	**111**	**300**	**65**	**1,499**	
1983	January	1,662	240	[4]618	313	118	2,088	84
	February	1,560	305	84	237	76	1,636	81
	March	1,517	166	-51	189	127	1,316	83
	April	1,531	124	-107	198	116	1,232	86
	May	1,545	167	-326	207	84	1,094	96
	June	1,593	172	-333	205	59	1,169	106
	July	1,571	191	-206	217	55	1,284	112
	August	1,505	160	-183	229	29	1,225	118
	September	1,625	178	-23	236	86	1,457	119
	October	1,688	160	-61	268	32	1,487	121
	November	1,784	180	78	361	33	1,648	118
	December	1,644	247	575	358	66	2,043	[4]101
	AVERAGE	**1,602**	**190**	**6**	**252**	**73**	**1,473**	
1984	January	1,610	269	[4]470	333	23	1,993	93
	February	1,690	237	146	323	41	1,708	89
	March	1,685	241	12	289	68	1,581	89
	April	1,711	155	-170	253	54	1,389	94
	AVERAGE	**1,673**	**226**	**116**	**300**	**47**	**1,669**	

[1]Includes ethane, propane, normal butane, and isobutane.
[2]Stocks are totals as of end of period.
[3]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4]In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
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Sources: • See the last page of this section.

Petroleum

Other Petroleum Products[1] Supply and Disposition

		Supply			Disposition			Ending Stocks[2]
		Total Production	Imports	Stock Withdrawal[3]	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**	**[4]218**
1975	**AVERAGE**	**3,424**	**277**	**[4]-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**	**[4]247**
1981	**AVERAGE**	**3,739**	**226**	**[4]46**	**723**	**199**	**3,088**	**282**
1982	January	3,171	269	-7	624	180	2,631	282
	February	3,403	305	-153	663	138	2,755	287
	March	3,466	243	-191	725	161	2,631	293
	April	3,408	309	73	796	204	2,790	290
	May	3,317	318	184	824	210	2,785	285
	June	3,547	315	123	812	216	2,954	281
	July	3,660	408	-1	856	187	3,023	281
	August	3,583	346	217	743	202	3,201	274
	September	3,533	375	105	749	213	3,051	271
	October	3,529	383	244	915	266	2,976	264
	November	3,498	423	-28	837	269	2,786	264
	December	3,324	313	366	885	275	2,842	[4]253
	AVERAGE	**3,453**	**334**	**80**	**787**	**211**	**2,869**	
1983	January	3,222	297	[4]-371	570	271	2,307	271
	February	3,270	287	-1	680	232	2,645	271
	March	3,400	298	-94	570	249	2,786	273
	April	3,363	377	3	596	247	2,901	273
	May	3,448	364	26	694	242	2,902	273
	June	3,674	427	99	715	292	3,197	270
	July	3,703	393	106	757	209	3,237	266
	August	3,774	435	23	689	242	3,302	266
	September	3,861	460	-31	768	236	3,287	267
	October	3,579	427	-124	701	195	2,985	270
	November	3,560	442	101	912	238	2,955	267
	December	3,106	450	387	877	257	2,808	[4]255
	AVERAGE	**3,498**	**388**	**10**	**711**	**242**	**2,943**	
1984	January	3,391	486	[4]-177	561	207	2,931	253
	February	3,582	586	-256	751	225	2,935	261
	March	3,510	466	-218	530	258	2,969	268
	April	3,584	582	-207	627	268	3,063	274
	AVERAGE	**3,515**	**529**	**-215**	**615**	**239**	**2,975**	

[1]Includes pentanes plus, other hydrocarbons and alcohol, unfinished oil, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.
[2]Stocks are totals as of end of period.
[3]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4]In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Note 5 on the last page of this section.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

Notes and Sources for the Petroleum Section

Notes

1. During 1981 the listing (frame) of operators of all facilities required to complete each monthly survey was updated. The refinery frame was found to be complete and accurate, although the frames for bulk terminals, pipelines, and crude oil stocks facilities were found to be outdated. A variety of sources (published directories, listings, and exploratory surveys) were researched for potential new respondents. As a result of this research, a significant number of respondents were added to the frames. The increase in the respondents for the frames affects the stocks of crude oil and petroleum products. For further details, see the Energy Information Administration (EIA), *Petroleum Supply Monthly.*
2. Research conducted by the 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.
3. **Motor Gasoline:** Beginning in January 1981, the EIA expanded its universe to include non-refinery blenders; redefined motor gasoline into two categories (finished leaded and finished unleaded); and separated blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to describe refinery operations more accurately. For further details, see the EIA, *Petroleum Supply Monthly.*
4. **Distillate and Residual Fuel Oils:** The requirement to report crude oil burned on leases and pipelines as either distillate or residual fuel oil has been eliminated. Prior 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.*
5. **New Stock Basis:** In January 1975, 1981, and 1883, numeqous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million baqrels, would have been:
•Crude Oil and Petroleum Products: 1974—1,121; 1980—1,420; and 1982—1,462.
•Motoq Gasolhne: 1974—225; 1880—263; 1882—244 (Total) and 203 (Finished).
•Distillate Fuel Oil: 1974—224; 1980—205; and 1982—186.
•Residual Fuel Oil: 1974—75; 1980—91; and 1982—68.
•Liquefied Petroleum Gases: 1974—113;1980—128; and 1982—103.
•Other Petroleum Products: 1974—220; 1980—249; and 1982—259.
•Stock withdrawal calculations beginning in 1975, 1981, and 1983, were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Products Supply and Disposition" table, is now reported on a component basis (ethane, propane, normal butane, isobutane and pentanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table. This change will affect stocks reported and stock withdrawals in each table. Under new basis, end-of-year 1983 stocks, in million barrels would have been:
•Liquefied Petroleum Gases: 1983—108.
•Other Petroleum Products: 1983—248.
6. Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

Sources

• 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
• 1977 through 1980: Energy Information Administration (EIA), *Energy Data Reports*, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual" and unleaded gasoline data from *Monthly Petroleum Statistics Report.*
• January 1981 through December 1982: EIA, *Petroleum Supply Annual.*
• January 1983 through April 1984: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly* (except domestic crude oil production).
• May 1984: Estimates based on EIA weekly data (except domestic crude oil production).
• January 1983 through May 1984: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey.

Part 4 Natural Gas

Natural Gas

Total dry natural gas production in the United States during April 1984 was an estimated 1.4 trillion cubic feet (Tcf). This was 13.7 percent higher than in April 1983. Output during the first 4 months of 1984 totaled 6.0 Tcf, 12.7 percent more than during the first 4 months of 1983.

Consumption of natural and supplemental gas in April 1984 was an estimated 1.4 Tcf, 2.1 percent higher than in April 1983. Estimated consumption during the first 4 months of 1984 totaled 7.2 Tcf, 8.8 percent higher than during the comparable 1983 period.

Deliveries to residential consumers during March 1984 (latest data available) were an estimated 611 billion cubic feet (Bcf). This was 16.4 percent higher than in March 1983. Residential consumption totaled 1,996 Bcf during the first quarter of 1984. This was 5.3 percent higher than the same period of 1983. Total deliveries to industrial consumers during March 1984 were an estimated 573 Bcf. This was 25.4 percent higher than in March 1983.

Imports of natural gas in April 1984 were an estimated 66 Bcf, 13.2 percent lower than in the previous April. During the first 4 months of 1984, imports of natural gas totaled an estimated 300 Bcf, 22.9 percent lower than during the comparable 1983 period. Receipts of foreign gas during April 1984 included Algerian liquefied natural gas (LNG) equivalent to approximately 6 Bcf.

Stocks of working gas* in underground natural gas storage reservoirs at the end of April 1984 totaled 1.6 Tcf. This was 21.9 percent below stocks available a year earlier. Net injections into storage during April 1984 were 47 Bcf compared to net withdrawals of 81 Bcf during the previous April.

*Gas available for withdrawal.

Natural Gas

Production Summary

		Gross Wet Gas Withdrawals[1]	Used for Repressuring[2]	Nonhydrocarbon Gas Removed[3]	Vented and Flared	Marketed Production (Wet)[4]	Extraction Loss[3]	Total Dry Gas Production[5]
		Billion cubic feet						
1973	**TOTAL**	**24,067**	**1,171**	**NA**	**248**	**[6]22,648**	**917**	**[6]21,731**
1974	**TOTAL**	**22,850**	**1,080**	**NA**	**169**	**[6]21,601**	**887**	**[6]20,713**
1975	**TOTAL**	**21,104**	**861**	**NA**	**134**	**[6]20,109**	**872**	**[6]19,236**
1976	**TOTAL**	**20,944**	**859**	**NA**	**132**	**[6]19,952**	**854**	**[6]19,098**
1977	**TOTAL**	**21,097**	**935**	**NA**	**137**	**[6]20,025**	**863**	**[6]19,163**
1978	**TOTAL**	**21,309**	**1,181**	**NA**	**153**	**[6]19,974**	**852**	**[6]19,122**
1979	**TOTAL**	**21,883**	**1,245**	**NA**	**167**	**[6]20,471**	**808**	**[6]19,663**
1980	**TOTAL**	**21,870**	**1,365**	**199**	**125**	**20,180**	**777**	**19,403**
1981	**TOTAL**	**21,587**	**1,312**	**222**	**98**	**19,956**	**775**	**19,181**
1982	January	1,865	108	19	9	1,728	71	1,657
	February	1,712	101	18	8	1,584	65	1,519
	March	1,816	115	19	7	1,675	69	1,606
	April	1,714	108	18	7	1,581	65	1,516
	May	1,692	117	17	7	1,552	64	1,488
	June	1,643	114	16	7	1,505	62	1,443
	July	1,667	119	15	7	1,526	63	1,463
	August	1,638	120	18	8	1,492	61	1,431
	September	1,570	116	16	6	1,431	59	1,372
	October	1,610	126	16	8	1,460	60	1,400
	November	1,621	119	18	9	1,476	61	1,415
	December	1,663	125	19	10	1,510	62	1,448
	TOTAL	**20,210**	**1,388**	**208**	**93**	**18,520**	**762**	**17,758**
1983	January	1,668	122	19	7	1,520	62	1,458
	February	1,471	108	16	6	1,340	55	1,285
	March	1,534	124	17	7	1,386	57	1,329
	April	1,453	120	16	7	1,310	54	1,256
	May	1,450	111	16	8	1,316	54	1,262
	June	1,399	118	19	7	1,256	52	1,204
	July	1,485	125	18	7	1,335	55	1,280
	August	1,537	124	20	7	1,386	57	1,329
	September	1,496	118	19	7	1,352	56	1,296
	October	1,572	122	18	7	1,425	59	1,366
	November	1,583	114	19	7	1,443	59	1,384
	December	1,733	116	21	8	1,588	65	1,523
	TOTAL	**18,381**	**1,421**	**218**	**85**	**16,657**	**685**	**15,972**
1984	January	1,842	119	22	7	1,694	70	1,624
	February	R1,646	R115	R19	R6	1,506	62	1,444
	March	*R1,716*	*R115*	*21*	*7*	*1,573*	*65*	*1,508*
	April	*1,624*	*109*	*19*	*7*	*1,489*	*61*	*1,428*

[1]Gas withdrawn from gas and oil wells.
[2]Gas returned to formations for repressuring, pressure maintenance, and cycling.
[3]For definitions and further explanations, see Notes on the last two pages of this section.
[4]Equal to gross withdrawals minus volumes used for repressuring, volumes of nonhydrocarbon gases removed, and volumes vented and flared. See Note 2 on the last two pages of this section for further explanation.
[5]Equal to marketed production (wet) minus extraction loss.
[6]May include unknown quantities of nonhydrocarbon gases.
R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Italics denote estimated data. Data for 1973 through 1982 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

Natural Gas

Supply and Disposition of Dry Natural Gas and Supplemental Gaseous Fuels

		Supply					Disposition			
		Total Dry Gas Production	Withdrawals from Storage[1]	Supplemental Gaseous Fuels[2]	Imports[2]	Total Supply/ Disposition[3]	Additions to Storage[1]	Exports[2]	Consumption[2]	Unaccounted for[2]
		Billion cubic feet								
1973	**TOTAL**	**[4]21,731**	**1,533**	**NA**	**1,033**	**24,297**	**1,974**	**77**	**22,049**	**196**
1974	**TOTAL**	**[4]20,713**	**1,701**	**NA**	**959**	**23,373**	**1,784**	**77**	**21,223**	**289**
1975	**TOTAL**	**[4]19,236**	**1,760**	**NA**	**953**	**21,949**	**2,104**	**73**	**19,538**	**235**
1976	**TOTAL**	**[4]19,098**	**1,921**	**NA**	**963**	**21,983**	**1,756**	**65**	**19,946**	**216**
1977	**TOTAL**	**[4]19,163**	**1,750**	**NA**	**1,011**	**21,924**	**2,307**	**56**	**19,521**	**41**
1978	**TOTAL**	**[4]19,122**	**2,158**	**NA**	**966**	**22,245**	**2,278**	**53**	**19,627**	**287**
1979	**TOTAL**	**[4]19,663**	**2,047**	**NA**	**1,253**	**22,964**	**2,295**	**56**	**20,241**	**372**
1980	**TOTAL**	**19,403**	**1,972**	**155**	**985**	**22,515**	**1,949**	**49**	**19,877**	**640**
1981	**TOTAL**	**19,181**	**1,930**	**176**	**904**	**22,191**	**2,228**	**59**	**19,404**	**501**
1982	January	1,657	697	19	98	2,471	24	3	2,400	44
	February	1,519	461	16	85	2,081	51	5	1,984	41
	March	1,606	274	15	82	1,977	91	5	1,838	43
	April	1,516	112	12	72	1,712	185	2	1,485	40
	May	1,488	11	9	65	1,573	394	3	1,136	40
	June	1,443	11	9	61	1,524	364	6	1,115	39
	July	1,463	12	9	67	1,551	362	5	1,145	39
	August	1,431	36	9	61	1,537	342	6	1,151	38
	September	1,372	20	9	66	1,467	285	5	1,140	37
	October	1,400	62	11	77	1,550	197	5	1,311	37
	November	1,415	168	13	91	1,687	85	5	1,559	38
	December	1,448	299	14	110	1,871	88	5	1,739	39
	TOTAL	**17,758**	**2,165**	**145**	**933**	**21,001**	**2,472**	**52**	**18,001**	**475**
1983	January	1,458	450	16	120	2,044	24	5	1,976	39
	February	1,285	324	13	102	1,724	35	5	1,650	34
	March	1,329	266	13	91	1,699	58	5	1,601	35
	April	1,256	162	11	76	1,505	81	4	1,386	34
	May	1,262	41	9	64	1,376	189	3	1,150	34
	June	1,204	22	8	61	1,295	254	5	1,004	32
	July	1,280	25	9	56	1,370	267	5	1,064	34
	August	1,329	35	9	58	1,431	248	4	1,144	35
	September	1,296	27	9	65	1,397	259	5	1,098	35
	October	1,366	35	10	65	1,476	166	4	1,270	36
	November	1,384	152	12	80	1,628	72	5	1,514	37
	December	1,523	601	17	106	2,247	32	5	2,169	44
	TOTAL	**15,972**	**2,140**	**136**	**944**	**19,192**	**1,685**	**55**	**17,026**	**426**
1984	January	1,624	562	17	95	2,298	50	4	2,201	43
	February	1,444	304	14	70	1,832	68	4	1,721	39
	March	*1,508*	359	15	R69	R1,951	49	5	R1,857	40
	April	*1,428*	101	11	66	1,606	148	5	1,415	38

[1]Monthly and annual data for 1980 through 1982 include underground storage and liquefied natural gas storage. All other data include underground storage only. Computation procedures are discussed in Note 8 on the last two pages of this section.
[2]For definitions and further explanations, see Notes on the last two pages of this section.
[3]Data for 1978 through 1982 do not include intransit receipts and deliveries.
[4]May include unknown quantities of nonhydrocarbon gases.
R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Italics denote estimated data. Data for 1973 through 1982 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

Natural Gas

Natural and Supplemental Gas Consumption

				Delivered to Consumers					
		Lease and Plant Fuel	Pipeline Fuel	Residential	Commercial[1]	Industrial	Electric Utilities	Total	Total Consumption
				Billion cubic feet					
1973	**TOTAL**	**1,496**	**728**	**4,879**	**2,597**	**8,689**	**3,660**	**19,825**	**22,049**
1974	**TOTAL**	**1,477**	**669**	**4,786**	**2,556**	**8,292**	**3,443**	**19,077**	**21,223**
1975	**TOTAL**	**1,396**	**583**	**4,924**	**2,508**	**6,968**	**3,158**	**17,558**	**19,538**
1976	**TOTAL**	**1,634**	**548**	**5,051**	**2,668**	**6,964**	**3,081**	**17,764**	**19,946**
1977	**TOTAL**	**1,659**	**533**	**4,821**	**2,501**	**6,815**	**3,191**	**17,329**	**19,521**
1978	**TOTAL**	**1,648**	**530**	**4,903**	**2,601**	**6,757**	**3,188**	**17,449**	**19,627**
1979	**TOTAL**	**1,499**	**601**	**4,965**	**2,786**	**6,899**	**3,491**	**18,141**	**20,241**
1980	**TOTAL**	**1,026**	**635**	**4,752**	**2,611**	**7,172**	**3,682**	**18,216**	**19,877**
1981	**TOTAL**	**928**	**642**	**4,546**	**2,520**	**7,128**	**3,640**	**17,834**	**19,404**
1982	January	104	79	866	444	669	238	2,217	2,400
	February	95	66	786	405	412	220	1,823	1,984
	March	100	61	602	322	506	247	1,677	1,838
	April	95	49	451	237	407	246	1,341	1,485
	May	93	38	233	139	375	258	1,005	1,136
	June	90	37	165	107	420	296	988	1,115
	July	91	38	138	101	424	353	1,016	1,145
	August	89	38	123	105	435	361	1,024	1,151
	September	86	38	136	105	482	293	1,016	1,140
	October	87	43	204	130	573	273	1,181	1,311
	November	88	52	372	218	603	226	1,419	1,559
	December	90	58	557	299	520	215	1,591	1,739
	TOTAL	**1,109**	**596**	**4,633**	**2,606**	**5,831**	**3,226**	**16,295**	**18,001**
1983	January	91	65	697	357	558	208	1,820	1,976
	February	80	55	673	349	316	177	1,515	1,650
	March	83	53	525	275	457	208	1,465	1,601
	April	78	46	449	231	379	203	1,262	1,386
	May	79	38	269	147	399	218	1,033	1,150
	June	75	33	176	107	365	248	896	1,004
	July	80	35	130	97	408	314	949	1,064
	August	83	38	119	99	453	352	1,023	1,144
	September	81	36	124	103	455	299	981	1,098
	October	85	42	195	130	567	251	1,143	1,270
	November	85	50	347	198	619	214	1,378	1,514
	December	95	72	[2]825	[2]438	520	219	2,002	2,169
	TOTAL	**996**	**563**	**4,530**	**2,530**	**5,496**	**2,912**	**15,467**	**17,026**
1984	January	101	73	[2]805	[2]404	603	215	2,027	2,201
	February	90	57	[2]580	[2]291	516	187	1,574	1,721
	March	94	61	611	312	573	206	1,702	1,857

[1]Includes deliveries to local, State, and Federal agencies engaged in nonmanufacturing activities.
[2]Estimated on the basis of heating degree-day data obtained from the National Oceanic and Atmospheric Administration.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data for 1973 through December 1982 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

Natural Gas

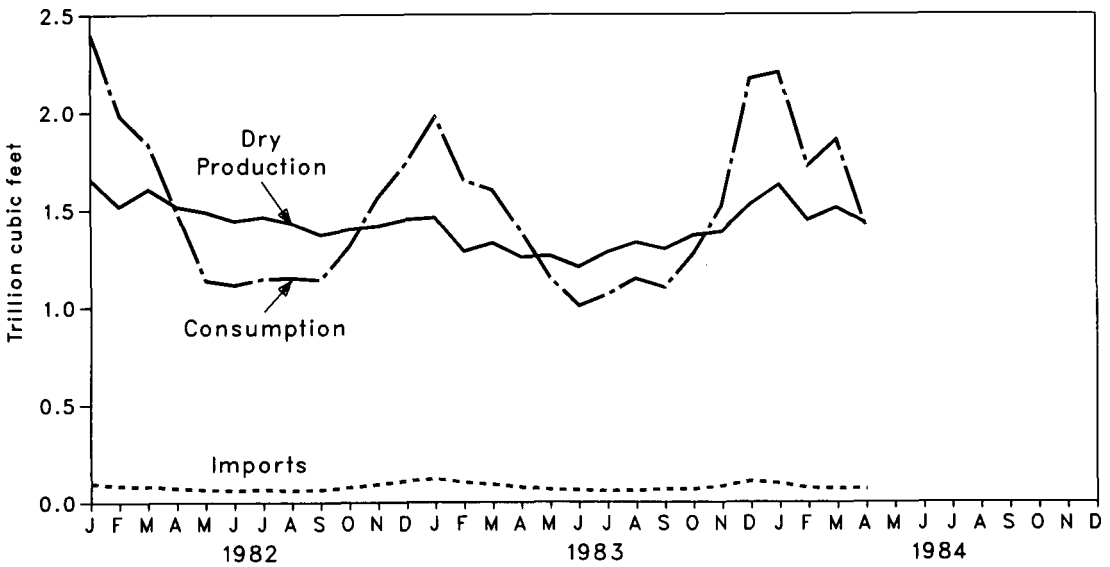
Underground Natural Gas Storage—All Operators

		Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
		Base Gas	Working Gas	Total[1]	Volume	Percent	Injections	Withdrawals	Net[2]
		Volumes in Billion cubic feet							
1973	**TOTAL**	**2,864**	**2,034**	**4,898**	**305**	**17.6**	**1,974**	**1,533**	**441**
1974	**TOTAL**	**2,912**	**2,050**	**4,962**	**16**	**0.8**	**1,784**	**1,701**	**83**
1975	**TOTAL**	**3,162**	**2,212**	**5,374**	**162**	**7.9**	**2,104**	**1,760**	**344**
1976	**TOTAL**	**3,323**	**1,926**	**5,250**	**-286**	**-12.9**	**1,756**	**1,921**	**-165**
1977	**TOTAL**	**3,391**	**2,475**	**5,866**	**549**	**28.5**	**2,307**	**1,750**	**557**
1978	**TOTAL**	**3,473**	**2,547**	**6,020**	**72**	**2.9**	**2,278**	**2,158**	**120**
1979	**TOTAL**	**3,553**	**2,753**	**6,306**	**207**	**8.1**	**2,295**	**2,047**	**248**
1980	**TOTAL**	**3,642**	**2,655**	**6,297**	**-99**	**-3.6**	**1,896**	**1,910**	**-14**
1981	**TOTAL**	**3,752**	**2,817**	**6,569**	**162**	**6.1**	**2,180**	**1,887**	**293**
1982	January	3,751	2,182	5,932	29	1.4	24	673	-649
	February	3,750	1,787	5,536	-37	-2.0	50	446	-396
	March	3,766	1,604	5,370	-26	-1.6	88	265	-176
	April	3,778	1,676	5,454	-88	-5.0	180	108	73
	May	3,780	2,034	5,814	57	2.9	382	11	371
	June	3,778	2,369	6,147	117	5.2	353	11	342
	July	3,780	2,704	6,484	146	5.7	351	12	339
	August	3,781	2,998	6,778	116	4.0	332	35	298
	September	3,782	3,251	7,033	99	3.1	277	20	257
	October	3,785	3,364	7,149	116	3.6	191	60	131
	November	3,772	3,309	7,081	108	3.4	83	163	-80
	December	3,808	3,071	6,879	255	9.0	86	289	-204
	TOTAL						**2,399**	**2,094**	**306**
1983	January	3,813	2,644	6,457	462	21.2	24	450	-425
	February	3,811	2,356	6,167	569	31.9	35	324	-288
	March	3,812	2,148	5,959	544	33.9	58	266	-208
	April	3,818	2,074	5,893	398	23.8	81	162	-81
	May	3,818	2,222	6,041	188	9.3	189	41	148
	June	3,819	2,454	6,272	85	3.6	254	22	232
	July	3,826	2,696	6,522	-8	-0.3	267	25	242
	August	3,823	2,908	6,732	-89	-3.0	248	35	214
	September	3,823	3,140	6,964	-110	-3.4	259	27	232
	October	3,825	3,269	7,094	-95	-2.8	166	35	130
	November	3,838	3,174	7,013	-135	-4.1	72	152	-80
	December	3,845	2,596	6,441	-475	-15.5	32	601	-569
	TOTAL						**1,685**	**2,140**	**-455**
1984	January	3,843	2,089	5,932	-555	-21.0	50	562	-512
	February	3,825	1,877	5,701	-479	-20.3	68	304	-236
	March	3,824	1,572	5,395	-576	-26.8	49	359	-309
	April	3,822	1,620	5,442	-454	-21.9	148	101	47

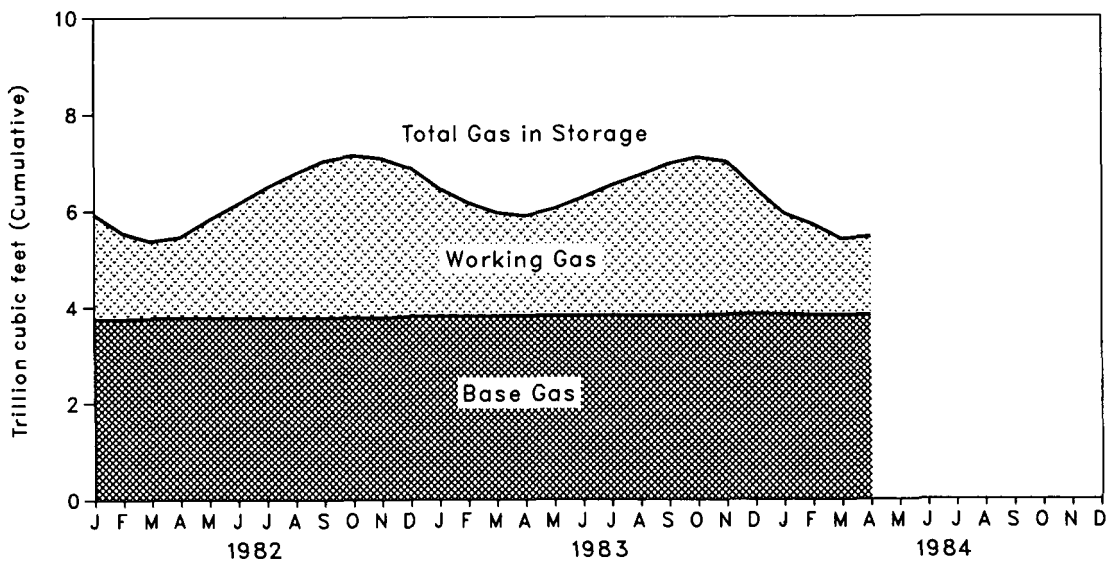
[1]Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1978—6,890; 1979—6,929; 1980—7,434; 1981—7,805; 1982—7,915; and 1983—7,985. Current total capacity is 8,043.
[2]Positive numbers indicate injections are greater than withdrawals. Negative numbers indicate withdrawals are greater than injections. Net injections or withdrawals may not equal the difference between applicable ending stocks. See Note 8 on the last two pages of this section.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Data for 1978 through 1982 are final. All other data are preliminary unless otherwise noted.
Sources: • See the last page of this section.

Natural Gas

Consumption, Dry Production, and Imports



Gas in Storage



Notes and Sources for the Natural Gas Section

Notes

1. **Nonhydrocarbon Gases Removed:** Annual data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are from the EIA *Natural Gas Annual, 1982.* These data are not available for periods prior to 1980. For 1982, of the 31 producing States, 18 reported data on nonhydrocarbon gases removed. These 18 States accounted for 53 percent of total 1982 gross withdrawals. In addition, gross withdrawals data from two States, which together accounted for 40 percent of the 1982 total production, did not include all or most of the nonhydrocarbon gases removed on leases. No estimates are made for the two States not reporting nonhydrocarbon gases removed. For further information, see the Energy Information Administration (EIA) *Natural Gas Monthly.*

Monthly data are reported by two States and computed for four States. All monthly data are considered preliminary until after publication of the EIA *Natural Gas Annual* for the year in which the report month falls. Three States report monthly data on nonhydrocarbon gases removed; the rest of the data is estimated. For further informaton on methods of estimating preliminary monthly data, see the EIA *Natural Gas Monthly.*

Monthly data are revised and considered final after publication of the EIA *Natural Gas Annual* by proportionally allocating the differences between annual data published in the EIA *Natural Gas Annual* and the sum of the preliminary monthly data (January-December).

2. **Production:** Annual data. Final annual data are from the Energy Information Administration (EIA) *Natural Gas Annual, 1982.*

Estimated Monthly Data. All data for the two most recent months presented are estimated. Some of the data for earlier months are also estimated or computed. For a discussion of computation and estimation procedures, see the EIA *Natural Gas Monthly.*

Preliminary monthly data. All monthly data are considered preliminary until after publication of the EIA *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are gathered from reports from the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary to a standard 14.73 psia pressure base. Unless there are major changes, data are not revised until after publication of the EIA *Natural Gas Annual.*

Final monthly data. The difference between annual production data published in the EIA *Natural Gas Annual, 1982* and the sum of preliminary monthly data (January-December) is allocated proportionally to the preliminary monthly data.

3. **Extraction Loss:** Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Annual data for extraction loss are from the EIA *Natural Gas Annual* for which they have been estimated based on the type and quantity of liquid products extracted from the gas stream and the calculated volume of such products at standard conditions. For a detailed explanation of the calculations used to derive estimated extraction losses, see the EIA *Natural Gas Annual.*

Preliminary monthly data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Monthly data are revised and considered final after the publication of the EIA *Natural Gas Annual.* Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas disposition.

4. **Supplemental Fuels:** Supplemental gaseous fuels are mainly synthetic natural gas, propane-air, and refinery gas. Other gases may also be included. During 1982, coke oven gas, biomass gas, manufactured gas, and air injected for Btu stabilization were reported in this category.

Annual data beginning with 1980 are from the EIA *Natural Gas Annual, 1982.* Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years.

All monthly data are considered preliminary until after the publication of the EIA *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthy supplemental gaseous fuels figure.

5. **Imports and Exports:** The United States imports natural gas via pipeline from Mexico and Canada, and liquefied natural gas via tanker from Algeria. The United States exports natural gas via pipeline to Mexico and Canada and liquefied natural gas via tanker to Japan.

Annual and final monthly data are published from the annual Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be reported by month for the calendar year.

Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *Natural Gas Monthly.* Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas* for the calendar year in which the report month falls.

6. **Consumption:** Consumption includes pipeline fuel use, lease and plant fuel use, and deliveries to consuming sectors.

All final data are from the EIA, *Natural Gas Annual. All monthly data are considered preliminary until after publication of the EIA Natural Gas Annual.* For more detailed information on the methods of estimating preliminary and final monthly data, see the EIA *Natural Gas Monthly.*

7. **Unaccounted For:** The "unaccounted for" category represents quantities lost, the net result of flow data metered at varying temperature and pressure conditions and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; and imbalances from EIA's merger of data reporting systems which vary in scope, format, definitions, and type of respondents. For additional explanatory information, see the EIA *Natural Gas Monthly.*

8. **Natural Gas Storage:** Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. This difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

All monthly data concerning underground storage are collected from the essentially identical Forms FPC-8 and EIA-191. Monthly data are revised after publication of the EIA *Underground Natural Gas Storage in the United States* for the heating year (April through March) in which the report month falls. In addition, injection and withdrawal data from the FPC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA *Natural Gas Annual.*

The final monthly and annual storage and withdrawal data for 1980 through 1982 include both underground and liquefied natural gas (LNG) storage. Underground storage data are taken from the FPC-8/EIA-191 survey in the following manner. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

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

Notes and Sources for the Natural Gas Section (continued)

Sources

Production: 1973 through 1982: Energy Information Administration (EIA), *Natural Gas Annual, 1982,* Appendix B; January 1983 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.
Extraction Loss, Consumption, and Unaccounted For: 1973 through 1982: EIA, *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: EIA computations.
Withdrawals from and Additions to Storage: 1973 through 1982: EIA, *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: Form FPC-8 and Form EIA-191, "Underground Gas Storage Report."
Supplemental Gaseous Fuels: 1980 through 1982: EIA, *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: EIA computations.
Imports and Exports: 1973 through 1982: Form FPC-14, "Imports and Exports of Natural Gas"; January 1983 forward: EIA computations.
End-Use Consumption: •All data except electric utility—1973 through 1982: EIA, *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: EIA computations. •Electric utility data—EIA, Form 759, "Monthly Power Plant Report" (formerly Form FPC-4).
Underground Storage: 1973 and 1974: American Gas Association, *Gas Facts;* 1975 through 1979: EIA, Form FPC-8 and Form EIA-191, and the *Natural Gas Annual;* 1980 forward: EIA, From FPC-8, Form EIA-191, and Form 176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Part 5 Oil and Gas Resource Development

Oil and Gas Resource Development

The April 1984 rotary rig count of 2,120 was 14.8 percent higher than the April 1983 count of 1,846. The 203 rigs operating offshore were 4.7 percent fewer than those working in April 1983.

For April 1984, the reported total number of wells drilled was 5,673, a decrease of 11.5 percent from the 6,413 reported in April 1983. Oil well completions reported during April 1984 were 2,821, a 6.9-percent decrease from the comparable 1983 figure of 3,031. The 1,162 gas well completions reported for April 1984 were 17.2 percent less than the April 1983 figure of 1,403. The April 1984 reported footage drilled of 26.2 million feet was 4.3 percent less than the April 1983 figure of 27.4 million feet.

The 473 crews engaged in seismic exploration in April 1984 were 5.3 percent more than those in April 1983. The 423 land crews working in April 1984 were 3.2 percent more, and the 50 marine vessels working were 28.2 percent more, than those working during April 1983.

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	**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		3,036	1,430	2,234	6,700	31,985
	March	3,816		3,736	1,480	2,479	7,695	37,896
	April	3,460		3,674	1,530	2,287	7,491	36,439
	May	3,178		3,451	1,940	2,205	7,596	36,987
	June	2,908		3,888	1,891	2,521	8,300	38,962
	July	2,746		3,290	1,703	1,931	6,924	31,111
	August	2,620		2,865	1,588	1,917	6,370	28,836
	September	2,482		3,363	1,599	2,330	7,292	32,611
	October	2,402		2,833	1,210	2,125	6,168	27,274
	November	2,500		3,279	1,658	2,025	6,962	31,130
	December	2,696		4,087	1,970	2,363	8,420	34,648
	AVERAGE	**3,105**	**TOTAL**	**40,301**	**18,952**	**26,542**	**85,795**	**395,993**
1983	January	2,622		2,376	891	1,640	4,907	20,922
	February	2,192		2,885	1,184	2,211	6,280	27,659
	March	2,003		3,433	1,607	2,630	7,670	34,210
	April	1,846		R3,031	R1,403	R1,979	R6,413	R27,423
	May	1,926		3,186	1,745	1,827	6,758	28,544
	June	1,979		3,514	1,237	2,105	6,856	28,050
	July	2,039		2,683	1,132	1,640	5,455	22,953
	August	2,156		2,641	1,075	1,533	5,249	22,582
	September	2,252		3,733	1,271	2,019	7,023	30,325
	October	2,382		2,970	1,211	1,699	5,880	24,887
	November	2,572		3,237	1,140	1,991	6,368	26,811
	December	2,780		3,470	1,699	2,201	7,370	30,942
	AVERAGE	**2,232**	**TOTAL**	**37,207**	**15,628**	**23,494**	**76,329**	**325,760**
1984	January	2,666		[2]3,253	[2]1,058	[2]2,004	[2]6,315	[2]27,915
	February	2,423		3,212	1,425	2,123	6,760	27,623
	March	2,245		4,092	1,373	2,941	8,406	34,156
	April	2,120		2,821	1,162	1,690	5,673	26,234

[1]Monthly data are averages of 4- or 5-week reporting periods and are not calendar months.
[2]Data exclude service wells and stratigraphic and core tests. Prior to 1984, weekly data are aggregated into months within quarters using the following number of weeks in the 12 months—(4,4,5), (4,4,5), (4,4,5), and (4,4,5). In 1984, weekly data are aggregated into months differently to more closely represent the actual number of weeks in the calendar months—(5,4,5), (4,4,5), (4,5,4), and (4,5,4).
R = Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• 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 and Footage Drilled: American Petroleum Institute, "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	**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**	**558,464**	**248,483**	**806,947**
1983	January	49	407	456			
	February	47	404	451			
	March	45	402	447			
	April	39	410	449			
	May	39	410	449			
	June	43	428	471			
	July	46	437	483			
	August	49	435	484			
	September	57	444	501			
	October	50	448	498			
	November	49	446	495			
	December	48	445	493			
	AVERAGE	**47**	**426**	**473**			
1984	January	50	427	477			
	February	53	433	486			
	March	47	424	471			
	April	50	423	473			

[1]Monthly data not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals and averages may not equal sum of components due to independent rounding.
Sources: • Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports published in their bulletins, *Geophysics* and *Leading Edge*.

Part 6 Coal

Coal

Coal production in April 1984 was 71.5 million short tons, 16.2 percent more than the 61.6 million short tons produced in April 1983.

Electric utility coal consumption in March 1984 totaled 54.5 million short tons, 15.8 percent more than consumption in March 1983. Coal consumption by electric utilities during the first quarter of 1984 was 14.2 percent higher than during the same period in 1983.

Electric utility coal stocks of 158.9 million short tons at the end of March 1984 were 21.8 million short tons (12.1 percent) below the level 1 year earlier.

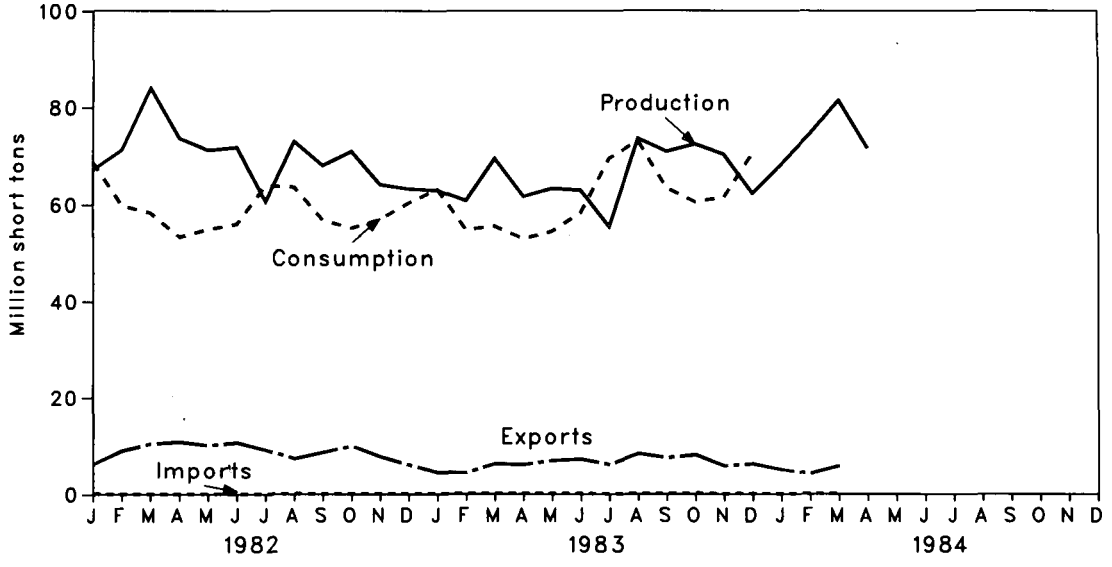
Imports of coal in March 1984 totaled 55 thousand short tons, 65 thousand short tons less than the amount imported in March 1983. Imports of coal during the first quarter of 1984 totaled 276 thousand short tons, 2.6 percent more than during the first quarter of 1983.

Exports of coal in March 1984 totaled 5.8 million short tons, 7.6 percent less than the amount exported during March 1983. Coal exports in March 1984 were principally to Europe (50.2 percent) and Japan (33.5 percent). The amounts of coal exported during the first quarters of 1984 and of 1983 were almost the same.

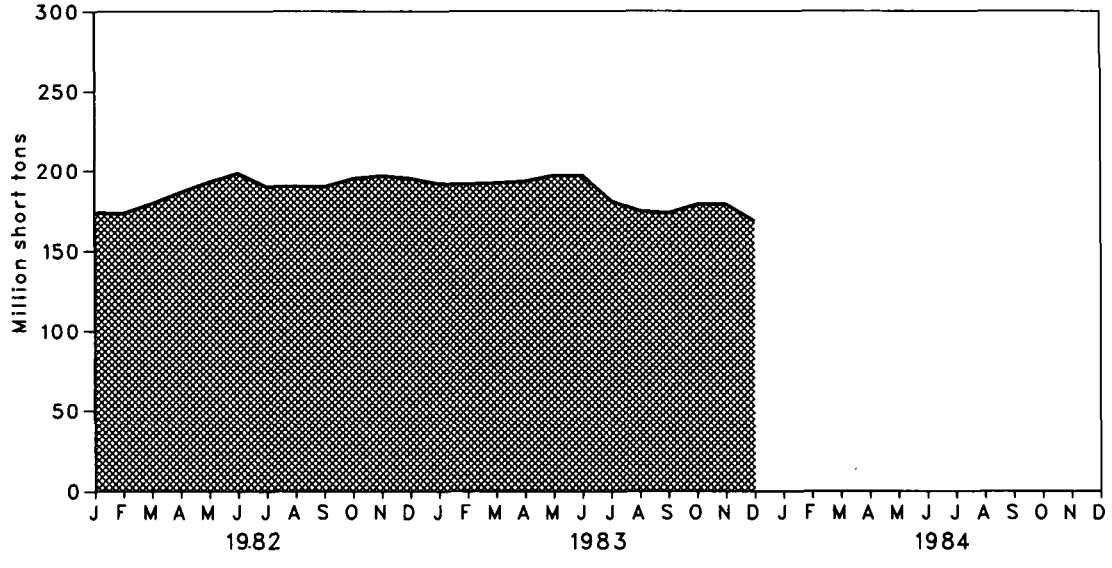
Coal

Overview

Production, Consumption, Imports, and Exports



Stocks



Coal

Overview

		Production	Consumption	Imports	Exports[1]	Stocks[2]
				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**	**702,729**	**1,194**	**91,742**	**204,028**
1981	**TOTAL**	**823,775**	**732,627**	**1,043**	**112,541**	
1982	January	67,138	68,692	71	6,177	173,931
	February	71,169	59,746	30	8,964	173,193
	March	83,943	58,236	12	10,423	179,484
	April	73,587	53,274	10	10,831	186,458
	May	71,127	54,844	109	10,110	192,926
	June	71,720	55,950	9	10,680	198,377
	July	60,535	63,828	69	9,182	189,997
	August	72,898	63,528	131	7,385	190,310
	September	67,951	56,734	71	8,683	189,967
	October	70,852	55,034	66	9,972	195,107
	November	64,055	56,831	87	7,807	196,700
	December	63,136	60,214	76	6,064	195,254
	TOTAL	**838,112**	**706,911**	**742**	**106,277**	
1983	January†	62,839	63,019	78	4,471	191,902
	February†	60,682	54,692	71	4,382	191,574
	March†	69,414	55,434	120	6,291	192,315
	April†	61,554	52,816	144	6,115	193,402
	May†	63,239	54,327	102	6,952	196,982
	June†	R62,585	58,237	133	7,279	197,033
	July†	55,340	69,478	87	6,140	181,222
	August†	73,512	72,947	115	8,380	175,067
	September†	70,824	63,317	97	7,525	173,743
	October†	72,372	60,454	190	8,131	179,166
	November†	70,247	61,411	32	5,838	179,281
	December†	62,257	70,541	102	6,269	168,654
	TOTAL†	**784,865**	**736,672**	**1,271**	**77,772**	
1984	January†	68,214	NA	81	5,062	NA
	February†	74,559	NA	140	4,251	NA
	March†	81,402	NA	55	5,813	NA
	April†	71,510	NA	NA	NA	NA

[1]Excludes shipments of anthracite to U.S. Armed Forces overseas (335,000 short tons in 1982 and 363,000 short tons in 1983).
[2]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.
Notes: • Geographic coverage is the 50 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.
Sources: • See the last page of this section.

Coal

Consumption by End-Use Sector

		Electric Utilities	Industrial: Coke Plants	Industrial: Other Industrial[1] including Transportation	Residential and Commercial	Total
				Thousand short tons		
1973	**TOTAL**	**389,212**	**94,101**	**68,154**	**11,117**	**562,584**
1974	**TOTAL**	**391,811**	**90,191**	**64,983**	**11,417**	**558,402**
1975	**TOTAL**	**405,962**	**83,598**	**63,670**	**9,410**	**562,641**
1976	**TOTAL**	**448,371**	**84,704**	**61,799**	**8,916**	**603,790**
1977	**TOTAL**	**477,126**	**77,739**	**61,472**	**8,954**	**625,291**
1978	**TOTAL**	**481,235**	**71,394**	**63,085**	**9,511**	**625,225**
1979	**TOTAL**	**527,051**	**77,368**	**67,717**	**8,388**	**680,524**
1980	**TOTAL**	**569,274**	**66,657**	**60,347**	**6,451**	**702,729**
1981	**TOTAL**	**596,797**	**61,014**	**67,395**	**7,421**	**732,627**
1982	January	56,825	4,444	6,430	993	68,692
	February	48,878	4,340	5,835	693	59,746
	March	47,884	4,173	5,616	563	58,236
	April	43,490	3,708	5,373	703	53,274
	May	45,622	3,622	5,133	467	54,844
	June	47,424	3,481	4,681	364	55,950
	July	55,248	3,121	4,831	628	63,828
	August	54,838	3,058	4,962	670	63,528
	September	48,414	2,924	4,759	637	56,734
	October	46,330	2,757	5,287	660	55,034
	November	47,799	2,693	5,494	845	56,831
	December	50,914	2,587	5,695	1,018	60,214
	TOTAL	**593,666**	**40,908**	**64,097**	**8,240**	**706,911**
1983	January†	53,351	2,813	5,970	884	63,019
	February†	45,772	2,742	5,405	773	54,692
	March†	47,110	2,567	5,206	551	55,434
	April†	43,589	3,206	5,254	767	52,816
	May†	45,691	3,151	5,023	463	54,327
	June†	50,338	2,734	4,798	367	58,237
	July†	60,390	3,269	5,220	599	69,478
	August†	63,767	3,252	5,362	566	72,947
	September†	54,212	3,196	5,156	752	63,317
	October†	50,689	3,307	5,659	799	60,454
	November†	51,185	3,335	6,046	845	61,411
	December†	59,117	3,461	6,880	1,082	70,541
	TOTAL†	**625,211**	**37,033**	**65,980**	**8,448**	**736,672**
1984	January†	60,224	NA	NA	NA	NA
	February†	52,257	NA	NA	NA	NA
	March†	54,534	NA	NA	NA	NA

[1]See Note on the last page of this section.
†Preliminary data. NA = Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

Coal

Stocks by End-Use Sector at End of Period

		Electric Utilities	Industrial		Total[1]
			Coke Plants	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		**168,893**	**6,475**	**9,906**	**185,274**
1982	January	158,469	6,207	9,255	173,931
	February	158,136	5,909	9,148	173,193
	March	164,518	5,612	9,354	179,484
	April	171,390	5,931	9,137	186,458
	May	177,461	6,231	9,234	192,926
	June	182,513	6,532	9,331	198,377
	July	174,503	6,166	9,328	189,997
	August	175,194	5,800	9,316	190,310
	September	175,225	5,434	9,308	189,967
	October	180,571	5,171	9,365	195,107
	November	182,368	4,908	9,424	196,700
	December	181,132	4,642	9,479	195,254
1983	January†	178,604	4,338	8,960	191,902
	February†	179,101	4,034	8,439	191,574
	March†	180,671	3,728	7,916	192,315
	April†	181,371	4,089	7,942	193,402
	May†	184,567	4,450	7,965	196,982
	June†	184,236	4,812	7,985	197,033
	July†	168,566	4,489	8,167	181,222
	August†	162,557	4,165	8,345	175,067
	September†	161,384	3,842	8,518	173,743
	October†	166,574	4,010	8,582	179,166
	November†	166,457	4,178	8,645	179,281
	December†	155,598	4,346	8,710	168,654
1984	January†	148,723	NA	NA	NA
	February†	154,811	NA	NA	NA
	March†	158,897	NA	NA	NA

[1]Total excludes stocks at retail dealers that are consumed by the residential and commercial sector.
†Preliminary data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
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).

Electric Utilities

During March 1984, electric utilities generated 199.4 billion kilowatt-hours of electricity, 9.2 percent above the March 1983 generation level. Coal-fired generation totaled 111.2 billion kilowatt-hours, 16.3 percent above the March 1983 level. Hydroelectric generation totaled 30.4 billion kilowatt-hours, 0.4 percent above the March 1983 level. Nuclear generation was 26.6 billion kilowatt-hours in March 1984, 11.4 percent above the March 1983 level. Gas-fired generation was 19.6 billion kilowatt-hours, 0.2 percent below the level 1 year earlier. Petroleum-fired generation totaled 10.8 billion kilowatt-hours, 13.9 percent below the March 1983 level.

Sales of electricity to all ultimate consumers in the United States in March 1984 were 185.6 billion kilowatt-hours, 10.7 percent above March 1983 sales. Sales to residential consumers during March 1984 were 63.7 billion kilowatt-hours, 8.2 percent above the level of sales during the same month in 1983. Commercial sales were 45.3 billion kilowatt-hours, 9.0 percent more than the amount sold to commercial consumers in March 1983. Sales to industrial consumers totaled 69.7 billion kilowatt-hours in March 1984, 15.6 percent more than the 1983 figure. In March 1984, other sales totaled 6.9 billion kilowatt-hours, 0.2 percent above the March 1983 level.

Electric utility petroleum consumption (excluding petroleum coke) during March 1984 was 18.3 million barrels, 13.4 percent below the March 1983 level. Coal consumption during March 1984 was 54.5 million short tons, 15.8 percent above the March 1983 rate. During March 1984, electric utilities consumed 206.2 billion cubic feet of natural gas, 0.9 percent below the March 1983 consumption level.

On March 31, 1984, utility stocks of anthracite, bituminous coal, and lignite totaled 158.9 million short tons. Stockpiles were 12.1 percent below the level of March 31, 1983. Petroleum stocks (excluding petroleum coke) on March 31, 1984, totaled 88.9 million barrels, 14.8 percent below the level on the same date in 1983.

Electric Utilities

Net Electricity Generation by Primary Energy Source

		Coal	Petroleum[1]	Natural Gas	Nuclear	Hydro	Other[2]	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	**TOTAL**	**1,203,203**	**206,421**	**345,777**	**272,674**	**260,684**	**6,054**	**2,294,812**
1982	January	113,124	20,674	22,621	25,678	26,896	411	209,403
	February	96,906	15,217	20,920	20,188	26,690	380	180,299
	March	97,625	13,495	23,598	22,755	29,885	330	187,687
	April	88,116	11,192	23,231	21,785	27,928	328	172,580
	May	92,997	9,868	24,291	21,639	27,971	381	177,147
	June	95,314	10,419	27,959	24,026	27,953	458	186,128
	July	110,617	13,380	33,340	25,467	27,294	485	210,584
	August	110,124	11,753	34,418	24,986	23,894	480	205,656
	September	96,896	10,363	27,649	25,391	19,896	468	180,662
	October	93,769	9,885	25,804	23,248	19,750	509	172,966
	November	95,547	9,313	21,466	23,235	23,297	520	173,377
	December	100,970	11,238	19,963	24,376	27,760	415	184,722
	TOTAL	**1,192,004**	**146,797**	**305,260**	**282,773**	**309,213**	**5,164**	**2,241,211**
1983	January	108,164	12,880	19,721	25,073	29,235	506	195,579
	February	92,692	12,586	16,659	22,198	27,950	395	172,479
	March	95,598	12,556	19,686	23,890	30,302	455	182,488
	April	88,114	10,337	19,174	22,335	29,989	424	170,372
	May	91,296	9,050	20,445	22,051	31,194	356	174,392
	June	101,512	11,139	23,091	24,152	30,692	462	191,048
	July	121,560	14,710	29,615	25,602	28,113	565	220,165
	August	129,313	14,731	33,147	26,201	25,828	738	229,957
	September	108,868	11,299	28,040	25,007	21,712	678	195,604
	October	101,951	9,941	23,783	25,797	20,747	712	182,931
	November	103,225	9,229	20,169	25,010	24,678	637	182,949
	December	117,131	16,041	20,567	26,361	31,691	528	212,319
	TOTAL	**1,259,424**	**144,499**	**274,098**	**293,677**	**332,130**	**6,456**	**2,310,285**
1984	January	120,850	15,939	20,245	29,135	29,738	541	216,450
	February	104,706	10,079	17,835	28,340	27,901	637	189,498
	March	111,158	10,806	19,645	26,613	30,425	713	199,359

[1]Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
[2]Includes only geothermal and wood and waste through 1982. Beginning in January 1983, also includes wind.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • 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]

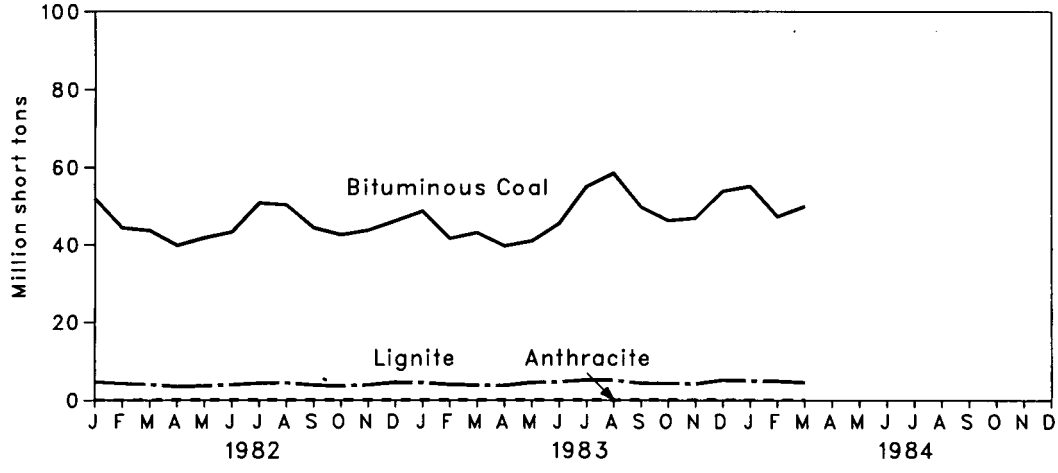
		Residential	Commercial	Industrial	Other[2]	Total
				Million kilowatt-hours		
1973	**TOTAL**	**579,231**	**388,266**	**686,085**	**59,328**	**1,712,910**
1974	**TOTAL**	**578,184**	**384,826**	**684,875**	**58,039**	**1,705,924**
1975	**TOTAL**	**588,140**	**403,049**	**687,680**	**68,222**	**1,747,091**
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	**TOTAL**	**722,265**	**514,338**	**825,742**	**84,756**	**2,147,101**
1982	January	76,264	44,947	62,939	7,929	192,079
	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	**729,519**	**526,397**	**744,949**	**85,575**	**2,086,440**
1983	January	69,967	44,019	57,938	7,252	179,176
	February	65,039	42,475	59,032	6,919	173,465
	March	58,912	41,518	60,261	6,893	167,584
	April	56,284	40,679	60,548	6,296	163,807
	May	49,669	40,305	62,729	6,216	158,919
	June	54,138	45,086	66,152	6,228	171,604
	July	69,965	51,013	66,424	6,752	194,153
	August	78,374	53,245	69,611	6,885	208,115
	September	73,197	52,147	69,618	6,960	201,922
	October	55,374	45,517	68,924	6,942	176,307
	November	53,704	42,666	67,544	6,560	170,474
	December	66,326	45,119	67,217	6,765	185,428
	TOTAL	**750,948**	**543,788**	**775,999**	**80,219**	**2,150,955**
1984	January	83,300	49,216	66,743	7,289	206,548
	February	69,776	45,840	66,604	6,638	188,857
	March†	63,741	45,251	69,687	6,906	185,563

[1]Electricity sales to all ultimate consumers.
[2]Includes sales of electricity to Government, railways, street lighting authorities, and sales not included elsewhere.
†Initial estimates.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • Energy Information Administration (EIA), 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."

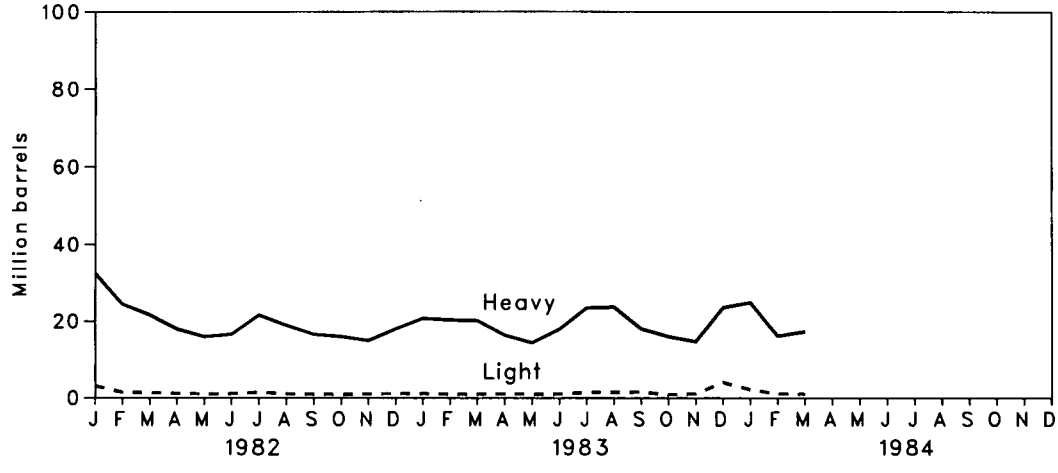
Electric Utilities

Primary Energy Consumed to Produce Electricity

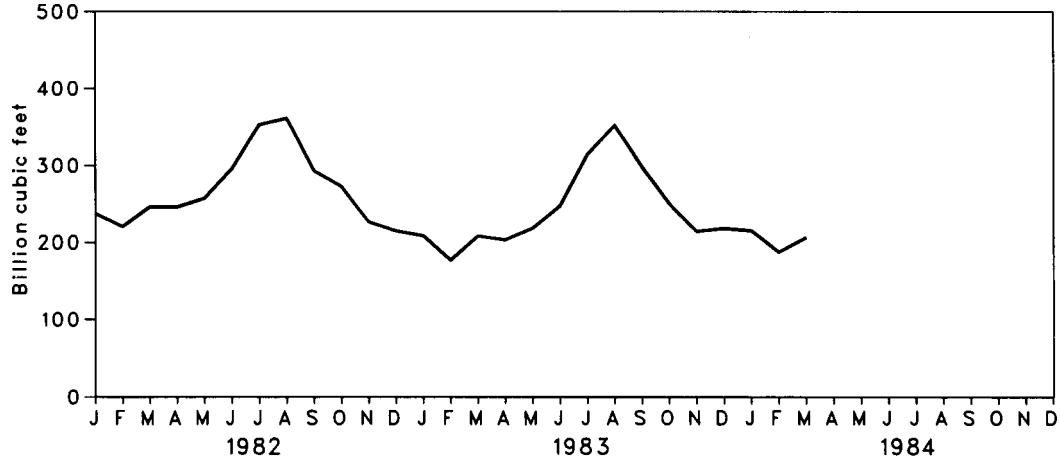
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities

Primary Energy Consumed to Produce Electricity

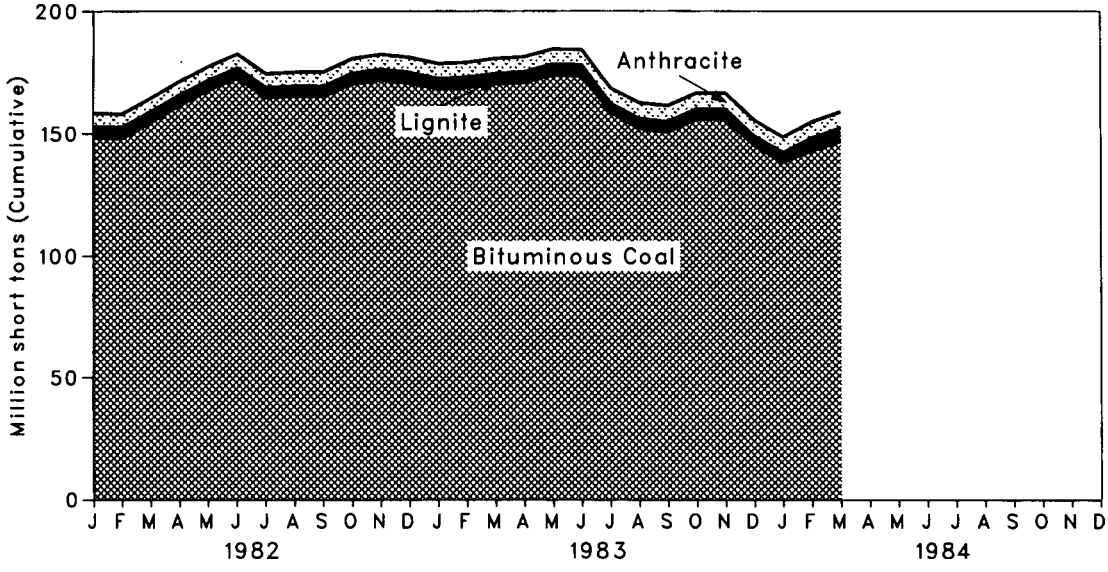
		Coal				Petroleum				Natural Gas
		Anthracite	Bituminous Coal	Lignite	Total	Heavy[1]	Light[2]	Total Liquids	Petroleum Coke	
		Thousand short tons				Thousand barrels			Thousand short tons	Million cubic feet
1973	**TOTAL**	**1,443**	**376,975**	**10,794**	**389,212**	**([3])**	**([3])**	**560,248**	**507**	**3,660,172**
1974	**TOTAL**	**1,498**	**378,643**	**11,670**	**391,811**	**([3])**	**([3])**	**536,274**	**625**	**3,443,428**
1975	**TOTAL**	**1,480**	**388,523**	**15,960**	**405,962**	**([3])**	**([3])**	**506,128**	**70**	**3,157,669**
1976	**TOTAL**	**1,350**	**425,205**	**21,817**	**448,371**	**([3])**	**([3])**	**555,920**	**68**	**3,080,868**
1977	**TOTAL**	**1,425**	**451,051**	**24,650**	**477,126**	**([3])**	**([3])**	**623,705**	**98**	**3,191,200**
1978	**TOTAL**	**1,064**	**448,763**	**31,407**	**481,235**	**([3])**	**([3])**	**635,839**	**398**	**3,188,363**
1979	**TOTAL**	**1,046**	**488,129**	**37,876**	**527,051**	**([3])**	**([3])**	**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	**TOTAL**	**1,221**	**550,784**	**44,792**	**596,797**	**329,798**	**21,313**	**351,111**	**139**	**3,640,154**
1982	January	89	52,014	4,723	56,825	32,269	3,131	35,399	10	237,675
	February	83	44,478	4,317	48,878	24,351	1,421	25,772	9	220,032
	March	73	43,751	4,060	47,884	21,617	1,304	22,921	4	246,550
	April	88	39,888	3,515	43,490	17,913	1,132	19,045	11	246,344
	May	98	41,845	3,678	45,622	15,939	991	16,930	12	257,848
	June	94	43,340	3,990	47,424	16,539	1,053	17,592	13	295,557
	July	108	50,769	4,371	55,248	21,550	1,360	22,910	11	352,818
	August	95	50,283	4,460	54,838	18,873	1,053	19,926	13	361,351
	September	67	44,431	3,916	48,414	16,544	921	17,464	9	293,232
	October	81	42,598	3,650	46,330	15,990	870	16,860	17	273,003
	November	100	43,756	3,943	47,799	14,908	1,007	15,916	18	226,477
	December	99	46,192	4,622	50,914	17,940	1,094	19,035	22	214,630
	TOTAL	**1,075**	**543,346**	**49,245**	**593,666**	**234,434**	**15,337**	**249,771**	**149**	**3,225,518**
1983	January	73	48,695	4,583	53,351	20,728	1,110	21,838	17	208,341
	February	73	41,668	4,032	45,772	20,305	984	21,289	19	176,965
	March	75	43,165	3,870	47,110	20,174	945	21,119	16	208,013
	April	92	39,716	3,781	43,589	16,374	1,054	17,429	24	202,917
	May	104	41,002	4,585	45,691	14,360	937	15,297	30	218,184
	June	88	45,560	4,690	50,338	17,892	1,020	18,912	23	247,825
	July	89	55,082	5,219	60,390	23,383	1,433	24,815	25	314,357
	August	92	58,475	5,200	63,767	23,622	1,543	25,165	24	352,031
	September	86	49,745	4,381	54,212	18,021	1,507	19,529	25	298,517
	October	91	46,263	4,335	50,689	15,993	870	16,863	22	251,151
	November	86	46,883	4,216	51,185	14,690	1,075	15,766	17	214,275
	December	88	53,854	5,176	59,117	23,440	4,034	27,474	21	218,191
	TOTAL	**1,036**	**570,108**	**54,067**	**625,211**	**228,984**	**16,512**	**245,497**	**261**	**2,910,767**
1984	January	98	55,141	4,985	60,224	24,745	2,176	26,921	24	215,215
	February	75	47,279	4,904	52,257	16,099	1,065	17,165	21	187,322
	March	69	49,921	4,543	54,534	17,274	1,016	18,291	18	206,177

[1]Heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils.
[2]Light oil includes Grade No. 2 heating oil, kerosene, and jet fuel.
[3]Prior to 1980, petroleum consumption data were not disaggregated by type of fuel. Disaggregation by prime mover type is provided in the last table of this section.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • 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."

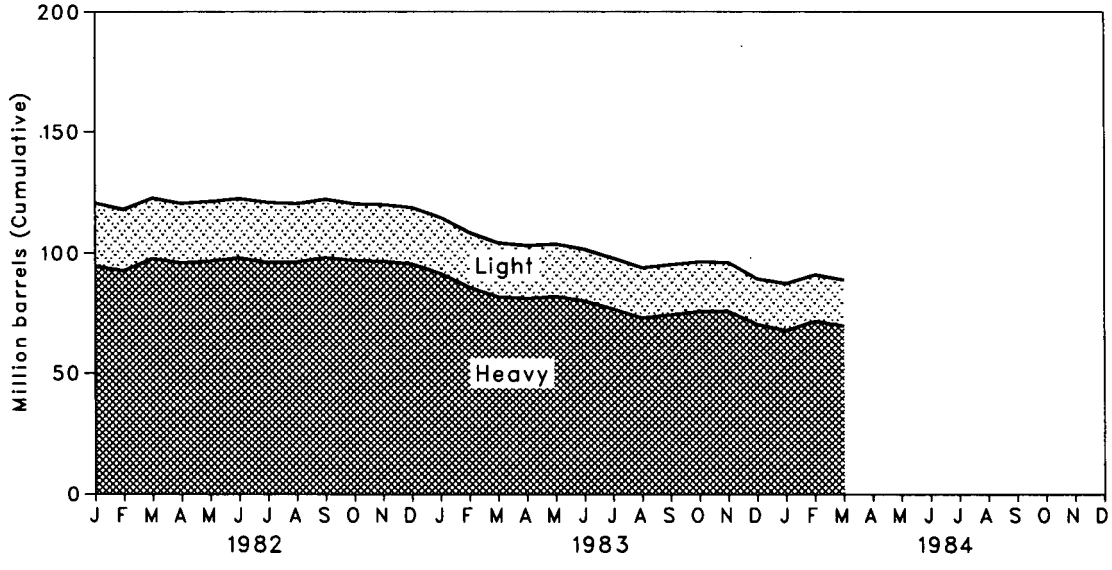
Electric Utilities

Coal and Petroleum Stocks at End of Period

Coal Stocks



Petroleum Stocks



Electric Utilities

Coal and Petroleum Stocks at End of Period

		Coal				Petroleum			
		Anthracite	Bituminous Coal	Lignite	Total	Heavy[1]	Light[2]	Total Liquids	Petroleum Coke
		Thousand short tons				Thousand barrels			Thousand short tons
1973		**1,066**	**84,941**	**961**	**86,967**	**([3])**	**([3])**	**89,216**	**312**
1974		**930**	**81,712**	**867**	**83,509**	**([3])**	**([3])**	**112,917**	**35**
1975		**982**	**107,927**	**1,815**	**110,724**	**([3])**	**([3])**	**125,257**	**31**
1976		**1,000**	**114,130**	**2,306**	**117,436**	**([3])**	**([3])**	**121,696**	**32**
1977		**2,321**	**128,210**	**2,688**	**133,219**	**([3])**	**([3])**	**144,031**	**44**
1978		**2,178**	**123,020**	**3,027**	**128,225**	**([3])**	**([3])**	**118,788**	**198**
1979		**3,274**	**152,981**	**3,459**	**159,714**	**([3])**	**([3])**	**131,422**	**183**
1980		**4,741**	**174,154**	**4,115**	**183,010**	**105,351**	**30,023**	**135,374**	**52**
1981		**5,537**	**158,258**	**5,098**	**168,893**	**102,042**	**26,094**	**128,136**	**42**
1982	January	5,437	148,404	4,628	158,469	94,609	26,162	120,771	39
	February	5,401	148,118	4,617	158,136	92,622	25,418	118,040	40
	March	5,488	154,724	4,305	164,518	97,706	25,136	122,842	43
	April	5,542	161,720	4,128	171,390	95,984	24,636	120,620	42
	May	5,569	167,805	4,088	177,461	96,607	24,796	121,403	41
	June	5,603	172,819	4,092	182,513	97,959	24,647	122,606	43
	July	5,658	164,688	4,157	174,503	96,085	25,008	121,093	43
	August	5,791	165,182	4,221	175,194	96,345	24,193	120,538	42
	September	5,896	165,065	4,264	175,225	98,160	24,225	122,385	47
	October	5,992	170,281	4,298	180,571	96,920	23,595	120,515	36
	November	6,060	171,832	4,476	182,368	96,618	23,553	120,171	42
	December	6,080	170,480	4,573	181,132	95,515	23,369	118,884	41
1983	January	6,107	168,287	4,210	178,604	91,523	23,183	114,706	54
	February	6,104	168,635	4,362	179,101	85,847	22,665	108,512	53
	March	6,143	170,327	4,201	180,671	81,957	22,387	104,344	54
	April	6,120	170,815	4,436	181,371	81,243	21,967	103,211	47
	May	6,145	173,969	4,453	184,567	82,091	21,758	103,849	44
	June	6,230	173,483	4,524	184,236	80,197	21,471	101,667	52
	July	6,299	158,701	3,566	168,566	76,881	21,101	97,982	50
	August	6,380	152,140	4,038	162,557	73,266	20,763	94,029	45
	September	6,435	150,778	4,171	161,384	74,560	20,696	95,256	47
	October	6,506	156,012	4,056	166,574	75,949	20,568	96,517	53
	November	6,531	155,931	3,995	166,457	75,930	20,271	96,201	63
	December	6,507	145,250	3,841	155,598	70,573	18,801	89,375	55
1984	January	6,500	138,346	3,877	148,723	68,049	19,390	87,439	43
	February	6,510	142,949	5,352	154,811	71,827	19,238	91,065	41
	March	6,519	146,879	5,500	158,897	69,882	19,056	88,937	45

[1]Heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils.
[2]Light oil includes Grade No. 2 heating oil, kerosene, and jet fuel.
[3]Prior to 1980, petroleum stock data were not disaggregated by type of fuel. Disaggregation by prime mover type is provided in the last table of this section.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • 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

Petroleum Consumption and Stocks by Prime Mover Type

		Petroleum Consumption			Petroleum Stocks at End of Period		
		Steam Plants	GT/IC[1]	Total Liquids	Steam Plants	GT/IC[1]	Total Liquids
		Thousand barrels					
1973	**TOTAL**	**513,190**	**47,058**	**560,248**	**79,121**	**10,095**	**89,216**
1974	**TOTAL**	**483,146**	**53,128**	**536,274**	**97,718**	**15,199**	**112,917**
1975	**TOTAL**	**467,221**	**38,907**	**506,128**	**108,825**	**16,432**	**125,257**
1976	**TOTAL**	**514,077**	**41,843**	**555,920**	**106,993**	**14,703**	**121,696**
1977	**TOTAL**	**574,869**	**48,837**	**623,705**	**124,750**	**19,281**	**144,031**
1978	**TOTAL**	**588,319**	**47,520**	**635,839**	**102,402**	**16,386**	**118,788**
1979	**TOTAL**	**492,606**	**30,691**	**523,297**	**111,121**	**20,301**	**131,422**
1980	**TOTAL**	**401,863**	**18,351**	**420,214**	**117,227**	**18,147**	**135,374**
1981	**TOTAL**	**339,680**	**11,431**	**351,111**	**112,380**	**15,756**	**128,136**
1982	January	33,832	1,567	35,399	105,475	15,296	120,771
	February	25,249	524	25,772	102,883	15,157	118,040
	March	22,371	550	22,921	108,142	14,699	122,842
	April	18,553	492	19,045	106,143	14,477	120,620
	May	16,614	316	16,930	106,701	14,702	121,403
	June	17,241	351	17,592	108,189	14,417	122,606
	July	22,192	718	22,910	106,170	14,923	121,093
	August	19,508	418	19,926	106,438	14,100	120,538
	September	17,146	318	17,464	108,177	14,208	122,385
	October	16,547	313	16,860	106,701	13,813	120,515
	November	15,591	325	15,916	106,361	13,809	120,171
	December	18,694	341	19,035	105,287	13,597	118,884
	TOTAL	**243,537**	**6,234**	**249,771**			
1983	January	21,373	465	21,838	101,394	13,312	114,706
	February	20,885	404	21,289	95,459	13,053	108,512
	March	20,728	392	21,119	91,394	12,750	104,344
	April	16,997	432	17,429	90,667	12,544	103,211
	May	14,968	330	15,297	91,360	12,489	103,849
	June	18,437	475	18,912	89,283	12,384	101,667
	July	23,927	888	24,815	85,891	12,091	97,982
	August	24,166	999	25,165	82,307	11,722	94,029
	September	18,532	996	19,529	83,511	11,745	95,256
	October	16,518	345	16,863	84,873	11,644	96,517
	November	15,336	430	15,766	84,804	11,397	96,201
	December	25,978	1,496	27,474	78,285	11,090	89,375
	TOTAL	**237,845**	**7,652**	**245,497**			
1984	January	25,838	1,082	26,921	76,188	11,251	87,439
	February	16,718	447	17,165	79,885	11,180	91,065
	March	17,881	410	18,291	77,905	11,032	88,937

[1]GT/IC = Gas turbine and internal combustion plants.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • 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."

Nuclear

During March 1984, U.S. nuclear powerplants generated a total of 26.6 billion net kilowatthours electric (kWhe) of electricity, equivalent to an average hourly output of 35.8 million net kWhe. This was 12.2 percent below the average hourly generation for February 1984, but 11.4 percent above the comparable output for March 1983. Nuclear power supplied 13.3 percent of the electricity distributed in March 1984.

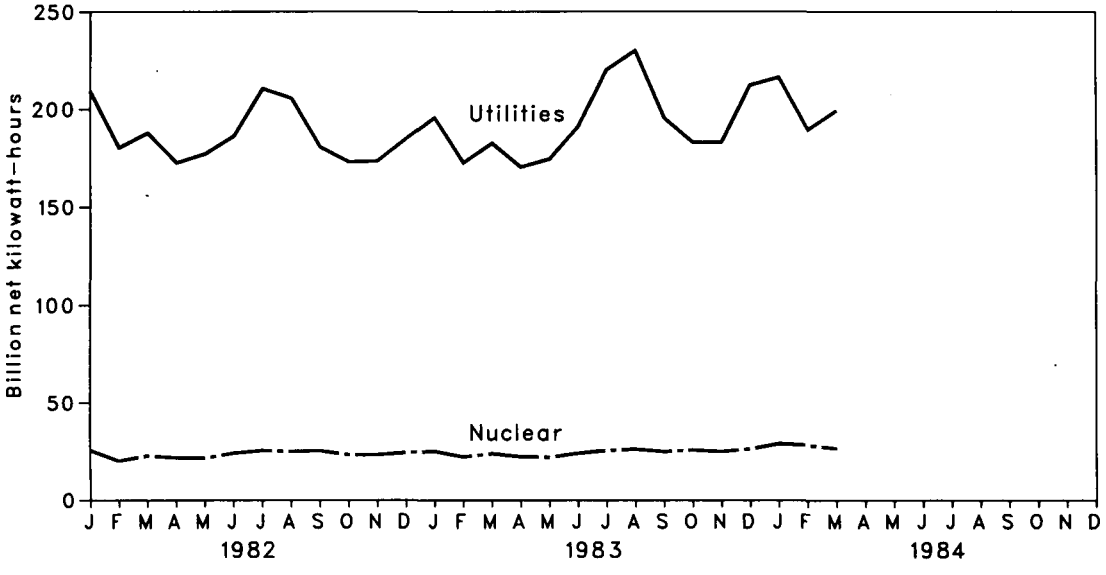
On March 23, 1984, LaSalle-2, a 1,078-net-megawatts-electric (MWe) boiling water reactor operated by Pennsylvania Power and Light, received a Full Power License. Also on March 23, Susquehanna-2, a 1,068-net-MWe boiling water reactor operated by Commonwealth Edison Co., received a Low Power License. As of March 31, 1984, there were 81 operable nuclear power reactors, with a collective generating capacity of 63.9 thousand net MWe. Of these 81 operable reactors, 2 units were in power ascension (LaSalle-2 and San Onofre-3) and 21 units generated no electricity or operated substantially below capacity in March (Browns Ferry-3, Dresden-3, Farley-1, Fort Calhoun, Fort St. Vrain, Ginna, Hatch-2, Monticello, Oconee-3, Oyster Creek, Palisades, Pilgrim, Point Beach-1, Quad Cities-1, Robinson-2, Salem-1, San Onofre-1, St. Lucie-1, Sequoyah-1, Three Mile Island-1, and Turkey Point-4). Three additional units were licensed by the Nuclear Regulatory Commission for fuel-loading and low-power testing (Grand Gulf-1, Susquehanna-2, and WNP-2).

As of March 31, 1984, there were 134 domestic nuclear powerplants in all stages of planning, construction, and operation with an aggregate design capacity of 125.2 thousand net MWe.

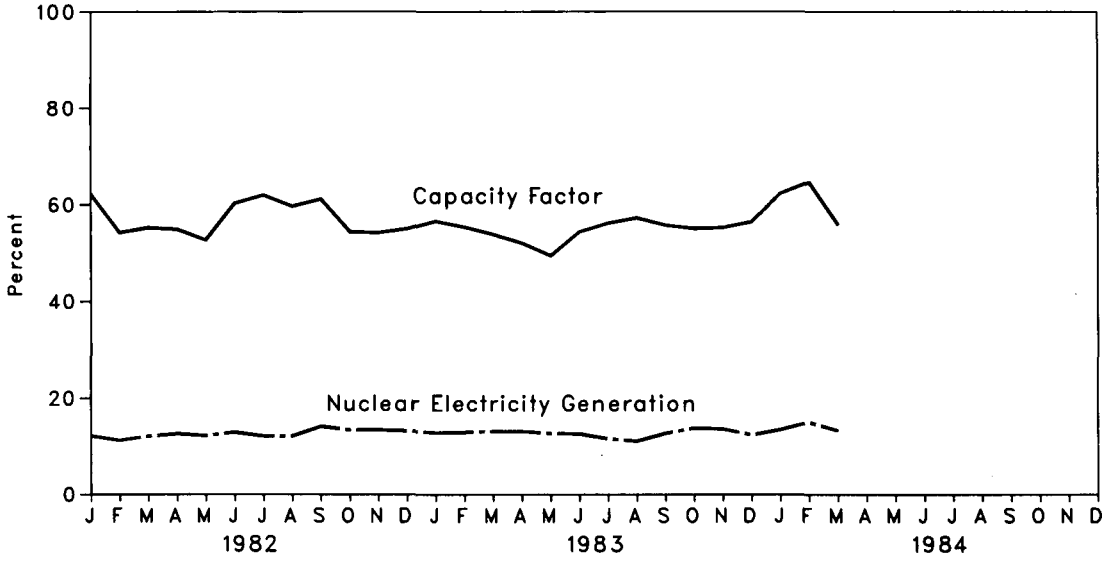
Nuclear

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

Nuclear Powerplant Operations

		Operable Reactors[1,2]	Nuclear-Based Electricity Generation	Nuclear Portion of Domestic Electricity Generation	Maximum Dependable Capacity of Operable Reactors[1,3]	Capacity Factor[4]
			Million net kilowatt-hours	Percent	Million net kilowatts	Percent
1973		**39**	**83,479**	**4.5**	**22.900**	**52.9**
1974		**48**	**113,976**	**6.1**	**31.710**	**48.3**
1975		**54**	**172,505**	**9.0**	**33.312**	**59.7**
1976		**60**	**191,104**	**9.4**	**43.277**	**57.8**
1977		**65**	**250,883**	**11.8**	**46.046**	**64.1**
1978		**70**	**276,403**	**12.5**	**49.629**	**65.7**
1979		**68**	**255,155**	**11.4**	**49.326**	**58.7**
1980		**70**	**251,116**	**11.0**	**51.059**	**57.1**
1981		**74**	**272,674**	**11.9**	**55.534**	**58.4**
1982	January	74	25,678	12.2	55.481	62.2
	February	74	20,188	11.2	55.476	54.2
	March	74	22,755	12.1	55.421	55.2
	April	74	21,785	12.6	55.230	54.9
	May	74	21,639	12.2	55.230	52.7
	June	74	24,026	12.9	55.320	60.3
	July	74	25,467	12.1	55.195	62.0
	August	75	24,986	12.1	56.293	59.7
	September	76	25,391	14.1	57.600	61.2
	October	75	23,248	13.4	57.345	54.4
	November	77	23,235	13.4	59.531	54.2
	December	77	24,376	13.2	59.552	55.0
	YEAR	**77**	**282,773**	**12.6**	**59.552**	**57.2**
1983	January	77	25,073	12.8	59.532	56.6
	February	77	22,198	12.9	59.632	55.4
	March	77	23,890	13.1	59.632	53.9
	April	77	22,335	13.1	59.658	52.1
	May	78	22,051	12.7	59.883	49.5
	June	79	24,152	12.6	61.686	54.4
	July	79	25,602	11.6	61.230	56.2
	August	79	26,201	11.1	61.440	57.3
	September	80	25,007	12.7	62.227	55.8
	October	80	25,797	13.8	62.876	55.1
	November	80	25,010	13.6	62.809	55.3
	December	80	26,361	12.4	62.809	56.5
	YEAR	**80**	**293,677**	**12.6**	**62.809**	**54.8**
1984	January	80	29,135	13.5	62.772	62.4
	February	80	28,340	15.0	R62.942	R64.7
	March	81	26,613	13.3	†63.941	†55.9

The "Reactors Licensed for Operation" data series previously shown in this table has been replaced by a new data series entitled "Operable Reactors." Data in the "Maximum Dependable Capacity" and "Capacity Factor" columns have been revised to reflect this change. See the explanation on page 90 for additional information.

[1]Monthly data are the status as of the last day of the month. Yearly data are the status as of December 31 of each year.
[2]See Note 1 on the last pages of this section for the definition.
[3]When possible, net maximum dependable capacity (MDC) is used. When a reactor has not operated long enough to permit determination of a net MDC, the net design electrical rating (DER) is used. The capacities for some units have been reduced to reflect the imposition of a "power limit" by the Nuclear Regulatory Commission or by the operating utility. For the definitions of net MDC and net DER, see Note 3 on the last pages of this section.
[4]For an explanation of the method of calculating the capacity factor, see Note 4 on the last pages of this section.
†Preliminary data. R=Revised data.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last pages of this section.

Nuclear

Status of Nuclear Reactor Units[1]

		Reactors Licensed for Operation		Construction Permits Granted	Construction Permits Pending	Reactor Units on Order	Reactor Units Announced	Total Reactor Units	Total Design Capacity[4]
		Operable[2]	In Startup[3]						Million Net Kilowatts
1973		**39**	**3**	**51**	**58**	**48**	**20**	**219**	**212**
1974		**48**	**5**	**58**	**80**	**28**	**16**	**235**	**234**
1975		**54**	**2**	**69**	**73**	**19**	**19**	**236**	**236**
1976		**60**	**1**	**72**	**66**	**16**	**19**	**234**	**236**
1977		**65**	**1**	**80**	**52**	**13**	**9**	**220**	**220**
1978		**70**	**0**	**90**	**32**	**9**	**4**	**205**	**204**
1979		**68**	**0**	**91**	**21**	**3**	**0**	**183**	**179**
1980		**70**	**2**	**82**	**12**	**3**	**0**	**169**	**163**
1981		**74**	**0**	**75**	**11**	**3**	**0**	**163**	**157**
1982	January	74	0	73	11	3	0	161	154
	February	74	1	72	6	2	0	155	147
	March	74	1	72	6	2	0	155	147
	April	74	2	71	6	2	0	155	147
	May	74	2	71	6	2	0	155	147
	June	74	2	70	6	2	0	154	147
	July	74	4	67	6	2	0	153	145
	August	75	4	64	5	2	0	150	141
	September	76	3	64	3	2	0	148	138
	October	75	3	64	3	2	0	147	138
	November	77	2	60	3	2	0	144	135
	December	77	2	60	3	2	0	144	135
1983	January	77	2	60	3	2	0	144	135
	February	77	2	60	3	2	0	144	135
	March	77	3	59	3	2	0	144	135
	April	77	4	57	3	2	0	143	134
	May	78	3	57	3	2	0	143	134
	June	79	2	57	3	2	0	143	134
	July	79	2	57	3	2	0	143	134
	August	79	2	57	3	2	0	143	134
	September	80	1	57	3	2	0	143	134
	October	80	1	56	2	2	0	141	133
	November	80	1	56	0	2	0	139	131
	December	80	3	53	0	2	0	138	129
1984	January	80	3	49	0	2	0	134	125
	February	80	3	49	0	2	0	134	125
	March	81	3	48	0	2	0	134	125

The "Reactors Licensed for Operation" data series previously shown in this table has been separated into two new series entitled "Operable" and "In Startup." In general, the previous data series may be re-created by adding the two new series. However, the re-created series will not exactly equal the previous series because several revisions were incorporated as the data were reevaluated to develop the new series. See the explanation on page 90 for additional information.

[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 pages of this section for the definition.
[3]See Note 2 on the last pages of this section for the definition.
[4]Net design electrical rating (DER) is used because many of the units have not had the operational experience needed to determine a net maximum dependable capacity (MDC). See Note 3 on the last pages of this section.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last pages of this section.

Notes and Sources for the Nuclear Section

Notes

1. **Operable Reactors:** Units that have received Operating Licenses, completed low-power testing, and are authorized to operate at full power (i.e., in receipt of a Full Power Amendment) by the Nuclear Regulatory Commission (NRC), plus the Hanford-N reactor operated by the Department of Energy (DOE). The Hanford-N reactor, with a net capacity of 860 megawatts electric (MWe), is included, although it is not licensed by the NRC, because electricity produced from its output steam is distributed commercially. Similarly, the Shippingport reactor (net capacity of 60 Mwe) operated by DOE, was included prior to retirement from service on October 1, 1982, except for the interval from March 1974 through August 1977 when it was excluded because of a major core modification outage. The DOE-operated Experimental Breeder Reactor-2 (EBR-2) is not included because the electricity it generates is not distributed commercially. Five units, each of which has been inoperative for at least 4 years prior to January 1, 1984, are deleted from entries subsequent to their removal from service: Peach Bottom-1 (net capacity of 40 MWe) and Indian Point-1 (net capacity of 265 MWe), both out of service since November 1974; Humboldt Bay (net capacity of 65 MWe), down since August 1976 for major seismic modifications and subsequently officially retired; Dresden-1 (net capacity of 200 MWe), out of service since January 1979 for major modifications; and Three Mile Island-2 (net capacity of 906 MWe), whose core was severely damaged by a loss-of-coolant accident in March 1979. A sister unit, Three Mile Island-1 (net capacity of 819 MWe), continues to be listed as "Operable" because it could, in theory, return to service once the restraining order imposed by the NRC is lifted.
2. **In Startup:** Units that have received Operating Licenses authorizing fuel loading and low-power testing prior to receipt of a Full Power Amendment from the NRC. Due to current licensing restrictions, these units cannot distribute electricity commercially.
3. **Capacity:** Nuclear powerplants may have more than one type of net capacity rating including:
(a) Net 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) less the station service load. The typical station service load for a nuclear plant is about 5 percent of its gross generation.
(b) 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.
4. **Monthly Capacity Factors:** The monthly capacity factors are computed as the actual monthly generation divided by the maximum possible generation for that month. The maximum possible generation is the number of hours in the month multiplied by the net monthly maximum dependable capacity. This fraction is then multiplied by 100 to obtain a percentage. Annual capacity factors are averages of the monthly values for that year.

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."

Explanation of Changes in Nuclear Data Series

The "Reactors Licensed for Operation" data series previously shown in this section has been separated into two new series entitled "Operable Reactors" and "In Startup." Operable units are those that have received Operating Licenses, completed low-power testing, and are authorized to operate at full power (i.e., in a receipt of Full Power Amendment) by the Nuclear Regulatory Commission (NRC), plus the Hanford-N reactor operated by the Department of Energy (DOE). The Hanford-N reactor, with a net capacity of 860 megawatts electric (MWe), is included, although it is not licensed by the NRC, because electricity produced from its output steam is distributed commercially. Similarly, the Shippingport reactor (net capacity of 60 MWe) operated by DOE, was included prior to retirement from service on October 1, 1982, except for the interval from March 1974 through August 1977 when it was excluded because of a major core modification outage. The Experimental Breeder Reactor-2 (EBR-2) is not included because the electricity it generates in not distributed commercially. Five units, each of which has been inoperative for at least 4 years prior to January 1, 1984, are deleted from entries subsequent to their removal from service: Peach Bottom-1 (net capacity of 40 MWe) and Indian Point-1 (net capacity of 265 MWe), both out of service since November, 1974; Humboldt Bay (net capacity of 65 MWe), down since August 1976 for major seismic modifications and subsequently officially retired; Dresden-1 (net capacity of 200 MWe), out of service since January 1979 for major modifications; and Three Mile Island-2 (net capacity of 906 MWe), whose core was severely damaged by a loss-of- coolant accident in March 1979. A sister unit, Three Mile Island-1 (net capacity of 819 MWe), continues to be listed as "Operable" because it could, in theory, return to service once the restraining order imposed by the NRC is lifted. "In Startup" units are those that have received Operating Licenses authorizing fuel loading and low-power testing prior to receipt of a Full Power Amendment from the NRC. Due to current licensing restrictions, these units cannot distribute electricity commercially. In general, the previous data series may be re-created by adding the two new series. However, the re-created series will not exactly equal the previous series because several revisions were incorporated as the data were reevaluated to develop the new series. Data on the "Maximum Dependable Capacity" and "Capacity Factor" have also been revised to reflect these changes. For comparison, the previous and new data series are shown below.

		Previous			New			
					Reactors Licensed for Operation			
		Reactors Licensed for Operation	Maximum Dependable Capacity	Capacity Factor	Operable	In Startup	Maximum Dependable Capacity of Operable Reactors	Capacity Factor
			Thousand net megawatts	Percent			Million net kilowatts	Percent
1973		**40**	**19.843**	**63.2**	**39**	**3**	**22.900**	**52.9**
1974		**55**	**35.732**	**43.5**	**48**	**5**	**31.710**	**48.3**
1975		**58**	**35.794**	**55.2**	**54**	**2**	**33.312**	**59.7**
1976		**65**	**44.609**	**53.5**	**60**	**1**	**43.277**	**57.8**
1977		**68**	**47.155**	**62.9**	**65**	**1**	**46.046**	**64.1**
1978		**72**	**50.824**	**63.9**	**70**	**0**	**49.629**	**65.7**
1979		**71**	**50.944**	**57.6**	**68**	**0**	**49.326**	**58.7**
1980		**72**	**52.597**	**55.1**	**70**	**2**	**51.059**	**57.1**
1981		**74**	**55.524**	**56.6**	**74**	**0**	**55.534**	**58.4**
1982	January	74	55.471	62.2	74	0	55.481	62.2
	February	75	56.608	53.1	74	1	55.476	54.2
	March	75	56.609	54.0	74	1	55.421	55.2
	April	76	57.424	52.8	74	2	55.230	54.9
	May	76	57.415	50.6	74	2	55.230	52.7
	June	77	58.560	57.0	74	2	55.320	60.3
	July	78	59.601	57.4	74	4	55.195	62.0
	August	79	60.521	55.5	75	4	56.293	59.7
	September	79	60.501	58.3	76	3	57.600	61.2
	October	78	59.921	52.1	75	3	57.345	54.4
	November	79	61.523	52.5	77	2	59.531	54.2
	December	79	60.528	54.1	77	2	59.552	55.0
	YEAR	**79**	**60.528**	**55.0**	**77**	**2**	**59.552**	**57.2**
1983	January	79	61.030	55.3	77	2	59.532	56.6
	February	79	61.117	54.1	77	2	59.632	55.4
	March	80	62.697	51.2	77	3	59.632	53.9
	April	81	63.515	48.9	77	4	59.658	52.1
	May	81	63.495	46.7	78	3	59.883	49.5
	June	81	63.553	52.8	79	2	61.686	54.4
	July	81	63.552	54.1	79	2	61.230	56.2
	August	81	63.492	54.2	79	2	61.440	57.3
	September	81	63.924	53.9	80	1	62.227	55.8
	October	81	64.064	52.5	80	1	62.876	55.1
	November	81	64.058	54.0	80	1	62.809	55.3
	December	83	66.239	53.8	80	3	62.809	56.5
	YEAR	**83**	**66.239**	**52.6**	**80**	**3**	**62.809**	**54.8**

Price

Crude Oil

The average price of domestic crude oil purchased at the wellhead was $26.03 per barrel in March 1984. This was 0.1 percent below the previous month's level and 0.2 percent below the level in March 1983.

During March 1984, the composite refiner acquisition cost of crude oil was $28.81 per barrel, unchanged from the previous month. The price of imported crude oil increased $0.04 per barrel from the February 1984 level to $28.95 per barrel in March. This price was 1.8 percent above the March 1983 level. The price of domestic crude oil in March 1984 was $28.75, a decrease of $0.01 from the February 1984 average.

Motor Gasoline

The national average retail price of all grades and all types of motor gasoline was $1.21 per gallon in April 1984. Leaded regular gasoline at all types of stations sold for an average of $1.14 per gallon in April, 1.8 percent higher than the price in March 1984. The price of unleaded regular gasoline at all types of stations was $1.23 per gallon in April, 1.4 percent higher than the price in March.

Natural Gas

In February 1984, the average wellhead price of marketed natural gas production was $2.63 per thousand cubic feet (Mcf), $0.06 per Mcf less than in January 1984 and $0.01 per Mcf less than the February 1983 price. The average price of natural gas delivered to electric utility plants was $3.59 per Mcf in February 1984, up $0.18 per Mcf (5.3 percent) from the February 1983 price and up $0.03 from the January 1984 price. The average price of natural gas used by residential consumers in April 1984 was $5.98 per Mcf, $0.01 more than in March 1984 but $0.06 per Mcf less than the April 1983 price.

Electricity

The average retail price of electricity sold by selected privately owned utilities to all types of consumers in March 1984 was 6.26 cents per kilowatt-hour (kWh), a 1.0-percent increase from the February 1984 average and 0.5 percent above the price in March 1983. The average price of electricity sold to residential consumers in March 1984 was 7.16 cents per kWh, an increase of 2.6 percent from the previous month's average and 3.3 percent above the March 1983 price. The average price of electricity sold to commercial consumers was 7.12 cents per kWh in March 1984, a 1.7-percent increase compared to the February 1984 price and up 2.7 percent from the March 1983 price. The average electricity price to industrial users during March 1984 was 4.88 cents per kWh, an increase of 0.4 percent from the previous month, but 3.7 percent less than during March 1983.

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	**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	31.57	33.09	32.07	28.31	29.84
	December	28.12	30.80	32.85	31.29	26.81	28.47
	AVERAGE	**28.52**	**31.22**	**33.55**	**31.87**	**26.55**	**29.08**
1983	January	27.22	30.55	31.40	30.73	NA	NA
	February	26.41	29.16	30.76	29.49	NA	NA
	March	26.08	28.69	28.43	28.64	NA	NA
	April	25.85	28.45	27.95	28.33	NA	NA
	May	26.08	28.68	28.53	28.64	NA	NA
	June	25.98	28.67	29.23	28.85	NA	NA
	July	25.86	28.74	28.76	28.75	NA	NA
	August	26.03	28.58	29.50	28.88	NA	NA
	September	26.08	28.69	29.54	28.97	NA	NA
	October	26.04	28.88	29.67	29.14	NA	NA
	November	26.09	28.76	29.09	28.85	NA	NA
	December	25.88	28.62	29.30	28.83	NA	NA
	AVERAGE	**26.19**	**28.87**	**29.30**	**28.99**	**NA**	**NA**
1984	January	25.93	28.62	28.80	28.67	NA	NA
	February	26.06	28.76	28.91	28.81	NA	NA
	March	†26.03	28.75	28.95	28.81	NA	NA
	April	NA	NA	NA	NA	NA	NA

[1]See Note 1 on the last pages of this section.
[2]See Note 2 on the last 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.
[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.
Footnotes continued on 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	**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	100.3	95.9	119.6	124.4	49.5	72.6
	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
	March	NA	NA	NA	NA	113.5	NA	NA
	April	NA	NA	NA	NA	119.8	NA	NA
	May	NA	NA	NA	NA	124.3	NA	NA
	June	NA	NA	NA	NA	126.1	NA	NA
	July	NA	NA	NA	NA	127.2	NA	NA
	August	NA	NA	NA	NA	126.9	NA	NA
	September	NA	NA	NA	NA	125.7	NA	NA
	October	NA	NA	NA	NA	123.9	NA	NA
	November	NA	NA	NA	NA	122.4	NA	NA
	December	NA	NA	NA	NA	121.5	NA	NA
	AVERAGE	**NA**	**NA**	**NA**	**NA**	**122.5**	**NA**	**NA**
1984	January	NA	NA	NA	NA	120.0	NA	NA
	February	NA	NA	NA	NA	119.3	NA	NA
	March	NA	NA	NA	NA	119.4	NA	NA
	April	NA	NA	NA	NA	121.1	NA	NA

Footnotes continued.
[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 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. NA=Not available.
Note: • Geographic coverage is the 50 States and the District of Columbia, except for the refiner acquisition cost of crude oil, which is the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.
Sources: • See the last 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	**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	W	(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	W	(2)	27.95	34.70	32.98	NA	33.30	23.58
	October	34.26	35.25	W	(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	34.86	34.73	29.09	(2)	27.63	33.18	34.04	NA	33.21	26.21
	AVERAGE	**34.23**	**35.27**	**30.93**	**35.12**	**28.07**	**35.13**	**33.50**	**NA**	**33.46**	**23.77**
1983	January	W	34.71	W	(2)	26.90	W	W	NA	32.77	21.58
	February	W	33.74	W	(2)	25.69	W	W	NA	30.95	21.82
	March	31.07	29.69	W	(2)	24.53	29.52	30.03	NA	29.16	20.04
	April	29.37	29.57	W	(2)	24.18	29.63	W	NA	30.07	20.05
	May	29.54	29.31	W	(2)	24.60	29.72	W	NA	29.61	19.88
	June	29.80	29.59	W	(2)	24.13	29.57	W	NA	28.92	20.80
	July	30.15	29.73	28.41	(2)	24.92	29.81	27.91	NA	30.00	19.89
	August	30.32	29.60	28.19	(2)	25.15	29.92	27.83	NA	29.88	21.56
	September	30.33	29.77	28.03	(2)	25.10	29.59	27.73	NA	30.33	21.81
	October	29.98	29.81	28.29	(2)	25.72	30.23	28.24	NA	29.73	23.58
	November	29.75	30.34	W	(2)	25.76	29.99	28.22	NA	29.42	23.17
	December	W	29.77	28.30	(2)	26.20	29.60	27.18	NA	29.05	24.17
	AVERAGE	**30.06**	**29.93**	**28.25**	**(2)**	**25.19**	**29.78**	**28.03**	**NA**	**29.84**	**21.48**
1984	January	27.60	29.89	W	(2)	26.22	29.80	27.76	NA	29.29	24.21
	February	R28.56	R29.09	W	(2)	26.04	R29.98	26.72	NA	R29.70	R23.55
	March†	28.85	W	NA	(2)	26.32	29.79	28.39	NA	29.87	22.41

[1]The Free on Board (FOB) cost excludes all costs related to insurance and transportation. See Note 3 on the last pages of this section.
[2]No crude oil was imported.
†Preliminary data. R=Revised data. NA=Not available. W=Value withheld to avoid disclosure of company data.
Note: • Prices shown through December 1980 are for the month of reporting; prices since then are for the month of loading. Annual averages are the weighted average of all 12 monthly prices, including those prices that were not published.
Sources: • See the last 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	**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	W	[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	W	[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	35.70	27.35	36.19	32.73	[2]	28.19	34.54	36.43	NA	34.05	27.09
	AVERAGE	**35.28**	**26.92**	**36.75**	**32.40**	**36.05**	**28.64**	**36.17**	**35.00**	**NA**	**34.28**	**24.82**
1983	January	33.20	27.62	36.12	W	[2]	27.50	W	W	NA	33.48	23.20
	February	32.17	26.19	35.07	W	[2]	26.15	32.24	W	NA	33.33	23.36
	March	31.24	24.78	31.17	W	[2]	25.06	30.49	31.63	NA	29.92	21.48
	April	30.55	24.35	31.14	W	[2]	24.65	30.63	W	NA	30.84	21.45
	May	30.48	24.32	30.82	W	[2]	25.17	30.75	W	NA	30.60	21.24
	June	30.88	24.88	31.40	29.10	[2]	24.81	30.56	W	NA	30.02	22.07
	July	31.36	25.45	31.46	30.06	[2]	25.34	30.91	29.53	NA	30.86	21.30
	August	31.85	25.45	31.65	29.57	[2]	25.80	31.21	29.39	NA	30.83	22.82
	September	31.78	25.71	31.27	29.31	[2]	25.66	30.70	29.53	NA	31.39	23.12
	October	30.97	26.01	31.14	29.73	[2]	26.44	31.16	29.98	NA	30.79	24.75
	November	30.96	25.83	31.30	W	[2]	26.29	31.02	29.88	NA	30.33	24.68
	December	30.23	26.69	31.12	28.57	[2]	26.88	30.57	28.83	NA	30.00	24.91
	AVERAGE	**31.26**	**25.63**	**31.57**	**29.81**	**[2]**	**25.78**	**30.84**	**29.76**	**NA**	**30.87**	**22.94**
1984	January	29.19	26.44	31.22	W	[2]	26.85	30.62	29.67	NA	30.09	25.28
	February	R29.73	26.40	R30.91	W	[2]	R26.73	R31.29	28.38	NA	R30.77	R25.21
	March†	30.43	26.01	W	NA	[2]	27.01	30.96	30.20	NA	30.94	23.92

[1]See Note 4 on the last pages of this section.
[2]No crude oil was imported.
†Preliminary data. R=Revised data. NA=Not available. W=Value withheld to avoid disclosure of company data.
Note: • Prices shown through December 1980 are for the month of reporting; prices since then are for the month of loading. Annual averages are the weighted average of all 12 monthly prices, including those prices that were not published.
Sources: • See the last pages of this section.

Price

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

		Leaded Regular	Unleaded Regular	Leaded Premium	Unleaded Premium Prices	Average for All Types[2]
		Cents per gallon, including tax				
1974	**AVERAGE**	**53.2**	**NA**	**56.9**	**NA**	**NA**
1975	**AVERAGE**	**56.7**	**NA**	**60.9**	**NA**	**NA**
1976	**AVERAGE**	**59.0**	**61.4**	**63.6**	**NA**	**NA**
1977	**AVERAGE**	**62.2**	**65.6**	**67.4**	**NA**	**NA**
1978	**AVERAGE**	**62.6**	**67.0**	**69.4**	**NA**	**65.2**
1979	**AVERAGE**	**85.7**	**90.3**	**92.2**	**NA**	**88.2**
1980	**AVERAGE**	**119.1**	**124.5**	**128.1**	**NA**	**122.1**
1981	**AVERAGE[3]**	**131.1**	**137.8**	**143.9**	**147.0**	**135.3**
1982	January	128.5	135.8	145.6	146.6	134.1
	February	126.0	133.4	143.8	144.8	131.8
	March	120.6	128.4	140.7	140.8	126.8
	April	114.8	122.5	136.8	135.1	121.0
	May	116.6	123.7	137.9	135.5	122.4
	June	124.2	130.9	140.8	141.8	129.6
	July	126.3	133.1	145.0	144.3	131.8
	August	125.4	132.3	145.8	143.9	131.0
	September	123.6	130.8	144.1	142.9	129.5
	October	121.9	129.5	141.3	142.1	128.0
	November	120.7	128.3	141.2	141.2	126.8
	December	118.1	126.0	137.1	139.4	124.4
	AVERAGE	**122.2**	**129.6**	**141.7**	**141.5**	**128.1**
1983	January	114.6	122.8	135.3	137.6	121.3
	February	109.9	118.7	131.8	133.8	117.0
	March	106.4	115.1	127.4	130.8	113.5
	April	113.1	121.5	132.1	136.0	119.8
	May	117.7	125.9	137.6	139.7	124.3
	June	119.7	127.7	142.9	141.1	126.1
	July	120.7	128.8	144.6	142.1	127.2
	August	120.3	128.5	143.7	141.9	126.9
	September	118.9	127.4	140.5	141.0	125.7
	October	117.2	125.5	137.2	139.5	123.9
	November	115.6	124.1	135.6	138.4	122.4
	December	114.6	123.1	138.1	137.6	121.5
	AVERAGE	**115.7**	**124.1**	**137.2**	**138.3**	**122.5**
1984	January	113.1	121.6	NA	136.9	120.0
	February	112.5	120.9	NA	136.1	119.3
	March	112.5	121.0	NA	136.2	119.4
	April	114.5	122.7	NA	137.5	121.1

A new data series for "Unleaded Premium" motor gasoline prices has been added to this table. As indicated, data for some earlier years are not available because this product was not widely marketed at that time. The price of "Leaded Premium" motor gasoline is no longer being published by the Bureau of Labor Statistics and the *Monthly Energy Review* will discontinue the series after this issue.

[1]See Note 5 on the last pages of this section.
[2]Also includes types of gasoline not shown separately.
[3]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.
Note: • Geographic coverage for 1974 through 1977 is 56 urban areas. For 1978 forward it is 85 urban areas.
Sources: • See the last 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	130.3	94.0	93.7	95.6
	AVERAGE	**116.7**	**132.4**	**97.7**	**96.1**	**96.9**

[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.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last 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	89.9	95.9	22.9	119.6
	AVERAGE	**93.2**	**97.4**	**20.2**	**118.6**

[1]See Note 6 on the last pages of this section.
[2]Average selling prices, purchase prices, and dealer margins represent sales for residential heating oil only.
NA = Not available.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last 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	W	90.0	90.2	89.6	91.0
	February	96.7	95.3	94.7	93.0	93.5	W	93.6	93.5	95.8	95.7
	March	98.7	97.2	96.5	94.8	94.3	W	95.1	95.9	93.9	97.6
	April	99.2	97.3	96.6	94.1	94.5	W	95.3	99.5	94.7	99.0
	May	98.7	97.3	96.4	94.2	95.8	W	95.2	97.7	95.5	98.6
	June	99.8	97.9	96.8	95.1	95.8	W	95.3	98.4	96.0	99.8
	July	100.3	98.1	96.6	94.2	96.2	W	93.1	97.0	96.7	100.2
	August	100.2	97.9	96.8	94.8	95.7	W	95.4	92.1	99.7	100.4
	September	100.5	98.2	97.0	94.7	95.7	W	93.7	93.0	97.2	100.6
	October	101.1	98.8	97.4	95.6	95.9	W	94.7	94.1	98.6	100.4
	November	102.5	103.0	99.9	101.5	98.8	W	95.2	98.5	101.0	103.1
	December	108.2	108.5	105.3	106.6	103.4	W	99.6	101.8	W	105.6
1981	January	116.2	117.1	113.2	114.0	110.4	W	106.3	108.6	W	107.5
	February	125.8	126.6	123.0	124.4	117.8	W	114.2	113.1	W	113.7
	March	127.6	128.4	125.0	125.3	119.3	W	115.4	119.3	111.5	116.5
	April	126.8	126.6	122.7	124.8	118.3	W	114.7	118.4	W	117.5
	May	125.5	125.6	122.1	118.8	117.3	W	114.5	115.1	114.1	115.6
	June	124.1	123.6	121.1	115.9	116.5	W	112.5	116.0	W	117.1
	July	123.3	122.9	120.6	120.2	116.0	W	115.9	116.2	W	118.3
	August	122.7	122.2	117.9	117.4	115.1	W	112.1	116.9	W	117.7
	September	122.7	121.4	118.5	120.5	116.2	W	111.6	116.8	W	117.8
	October	122.5	122.0	115.3	117.6	116.3	W	112.0	115.8	W	118.2
	November	123.3	123.2	119.5	118.2	116.7	W	114.1	115.8	W	118.8
	December	124.8	124.7	120.7	119.0	117.4	W	112.4	117.1	W	120.0
1982	January	125.3	124.7	120.6	118.7	117.1	W	112.7	116.1	W	119.7
	February	123.2	123.7	119.3	115.3	116.0	W	110.9	114.9	W	119.5
	March	117.4	119.0	112.3	112.9	111.0	W	106.4	109.7	W	118.1
	April	113.9	116.6	112.2	109.4	108.7	W	100.8	106.3	W	116.0
	May	115.9	117.1	113.2	111.7	110.8	W	108.7	108.4	W	116.6
	June	117.5	118.5	115.2	113.5	114.4	W	111.8	112.3	W	116.0
	July	117.7	118.5	113.4	115.2	113.6	W	111.7	W	W	115.9
	August	118.6	118.8	113.9	112.4	111.9	W	W	W	W	116.3
	September	119.4	119.3	W	115.0	112.4	W	W	114.2	W	116.2
	October	122.3	122.4	118.5	117.3	114.8	W	110.5	113.1	W	117.4
	November	124.2	124.7	120.1	118.4	115.9	W	110.2	114.7	W	118.9
	December	122.2	122.9	117.8	114.1	113.0	W	107.3	112.0	W	118.6

[1]Standard Federal Regions are defined in Note 7 on the last pages of this section.
W = Value withheld to avoid disclosure of company data.
Sources: • See the last 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	31.31	32.59	28.19	30.25	25.16	26.22	26.81	28.47
	AVERAGE	**30.92**	**36.34**	**28.27**	**30.71**	**24.76**	**25.82**	**26.55**	**29.08**

Notes: • Geographic coverage is the 50 States and the District of Columbia.
• 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.
Sources: • See the last pages of this section.

Price

National Average Natural Gas Prices

		Wellhead Price	Imports by Major Interstate Pipeline Companies	Purchased from Producers by Major Interstate Pipeline Companies	Industrial Sales by Major Interstate Pipeline Companies	Purchased by Electric Plants[1]	Residential Price[2]
		Dollars per thousand cubic feet					
1973	**AVERAGE**	**0.22**	**NA**	**NA**	**NA**	**0.35**	**1.29**
1974	**AVERAGE**	**0.30**	**NA**	**NA**	**NA**	**0.49**	**1.43**
1975	**AVERAGE**	**0.45**	**NA**	**NA**	**NA**	**0.77**	**1.71**
1976	**AVERAGE**	**0.58**	**NA**	**NA**	**NA**	**1.06**	**1.98**
1977	**AVERAGE**	**0.79**	**NA**	**NA**	**NA**	**1.33**	**2.35**
1978	**AVERAGE**	**0.91**	**2.21**	**0.83**	**1.54**	**1.48**	**2.56**
1979	**AVERAGE**	**1.18**	**2.60**	**1.22**	**2.01**	**1.80**	**2.98**
1980	**AVERAGE**	**1.59**	**4.42**	**1.63**	**R2.53**	**2.28**	**3.68**
1981	**AVERAGE**	**1.98**	**R4.84**	**2.15**	**R3.11**	**2.91**	**4.29**
1982	January	2.23	R4.94	R2.47	3.59	3.07	4.65
	February	2.30	R4.96	R2.50	3.58	3.18	4.69
	March	2.35	R4.94	R2.52	3.61	3.25	4.78
	April	2.40	R4.94	R2.54	3.61	3.32	4.86
	May	2.45	4.93	R2.68	R3.60	3.42	5.17
	June	2.45	4.86	R2.83	3.66	3.57	5.20
	July	2.47	5.00	2.79	3.71	3.69	5.23
	August	2.53	5.07	R2.86	3.75	3.67	5.23
	September	2.56	5.05	R2.78	3.88	3.67	5.41
	October	2.60	5.02	R2.93	3.91	3.68	5.66
	November	2.62	5.01	R2.89	3.98	3.61	5.68
	December	2.62	R4.94	R2.96	R4.06	3.64	5.74
	AVERAGE	**2.46**	**R4.94**	**R2.72**	**R3.73**	**3.49**	**5.17**
1983	January	2.63	5.03	R3.06	R4.38	[1]3.57	5.84
	February	2.64	5.09	3.15	R4.41	3.41	5.85
	March	2.61	5.01	R3.01	R4.24	3.45	5.94
	April	2.57	R4.58	2.90	4.37	3.35	6.04
	May	2.56	4.40	R2.98	4.24	3.55	6.20
	June	2.62	4.41	R2.95	4.22	3.58	6.18
	July	2.56	4.31	2.96	R4.28	3.72	6.19
	August	2.61	3.93	2.90	4.23	3.75	6.16
	September	2.70	4.02	2.87	R4.08	3.70	6.16
	October	R2.62	4.03	2.86	4.22	3.60	6.08
	November	R2.63	4.26	2.84	4.26	3.53	6.02
	December	R2.65	4.33	2.73	4.12	3.49	6.03
	AVERAGE	**2.62**	**R4.51**	**R2.93**	**R4.25**	**3.58**	**†5.99**
1984	January	R2.69	4.40	2.80	R4.25	3.56	5.96
	February	2.63	4.37	2.82	3.97	3.59	5.99
	March	NA	NA	NA	NA	NA	5.97
	April	NA	NA	NA	NA	NA	5.98

Data revised to reflect reporting companies' adjustments to initial estimates.

[1]Data through December 1982 cover all steam-electric utility plants with a capacity of 25 megawatts or greater. From 1974 through 1982, data include peaking units. Beginning with January 1983, data cover steam-electric utility plants with a capacity of 50 megawatts or greater. Small quantities of coke oven gas, refinery gas, and blast furnace gas are included.
[2]Monthly residential prices are EIA calculations. See Note 9 on last pages of this section for estimation procedures.
†Preliminary estimate. R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Data for 1973 through December 1982 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last pages of this section.

Price

Electricity

		Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants[1]				Average Retail Electricity Prices for Privately Owned Utilities[2]				
		Coal	Heavy Oil[3]	Gas[4]	All Fossil Fuels[3]	Residential	Commercial	Industrial	Other	Total[5]
		Cents per million Btu				Cents per kilowatt-hour				
1973	**AVERAGE**	**40.5**	**78.5**	**33.8**	**47.6**	**2.54**	**2.41**	**1.25**	**2.10**	**1.96**
1974	**AVERAGE**	**70.9**	**189.0**	**48.2**	**91.4**	**3.10**	**3.04**	**1.69**	**2.75**	**2.49**
1975	**AVERAGE**	**81.4**	**200.5**	**75.2**	**104.4**	**3.51**	**3.45**	**2.07**	**3.08**	**2.92**
1976	**AVERAGE**	**84.8**	**195.2**	**103.4**	**111.9**	**3.73**	**3.69**	**2.21**	**3.27**	**3.09**
1977	**AVERAGE**	**94.7**	**219.8**	**129.1**	**129.7**	**4.05**	**4.09**	**2.50**	**3.51**	**3.42**
1978	**AVERAGE**	**111.6**	**212.5**	**142.2**	**141.1**	**4.31**	**4.36**	**2.79**	**3.62**	**3.69**
1979	**AVERAGE**	**122.4**	**298.8**	**174.9**	**163.9**	**4.64**	**4.68**	**3.05**	**3.96**	**3.99**
1980	**AVERAGE**	**135.1**	**426.7**	**219.9**	**192.8**	**5.36**	**5.48**	**3.69**	**4.76**	**4.73**
1981	**AVERAGE**	**153.2**	**533.4**	**280.5**	**225.6**	**6.20**	**6.29**	**4.29**	**5.28**	**5.46**
1982	January	160.9	489.2	297.4	229.4	6.22	6.49	4.66	5.44	5.74
	February	164.1	493.6	307.8	223.1	6.35	6.68	4.70	5.83	5.84
	March	165.7	477.1	314.2	221.9	6.58	6.79	4.83	6.38	5.97
	April	164.6	487.0	320.7	216.9	6.72	6.81	4.84	5.77	5.99
	May	165.1	494.2	327.6	217.7	6.94	6.86	4.95	5.91	6.09
	June	167.0	488.3	341.8	226.8	7.08	6.94	4.92	6.01	6.18
	July	164.5	477.8	353.3	241.0	7.18	6.98	5.12	6.13	6.38
	August	164.7	467.1	353.4	230.2	7.22	6.91	5.15	6.09	6.40
	September	165.9	475.3	354.7	229.4	7.18	6.97	5.25	6.07	6.41
	October	164.9	490.2	355.9	222.2	7.21	7.09	5.09	5.81	6.33
	November	165.3	501.0	349.8	220.8	6.94	7.04	4.88	5.69	6.14
	December	162.9	461.9	352.5	218.8	6.71	6.78	5.01	5.85	6.11
	AVERAGE	**164.7**	**483.2**	**337.6**	**224.9**	**6.86**	**6.86**	**4.95**	**5.92**	**6.13**
1983	January	[1]166.8	[1]448.9	[1]347.1	[1]216.7	6.65	6.78	5.03	5.91	6.13
	February	167.8	441.4	331.9	213.9	6.73	6.86	4.96	5.97	6.12
	March	168.1	426.0	336.1	215.5	6.93	6.93	5.07	6.16	6.23
	April	168.5	431.6	326.1	215.8	6.91	6.86	4.92	6.15	6.12
	May	165.0	446.6	344.3	216.6	7.20	7.04	4.89	6.60	6.21
	June	167.3	453.6	347.2	220.9	7.41	7.13	4.96	6.62	6.35
	July	165.3	467.0	361.1	237.4	7.50	7.13	5.11	6.24	6.53
	August	164.3	470.4	363.2	230.1	7.52	7.06	5.01	6.37	6.51
	September	163.9	482.8	358.1	226.4	7.55	7.15	5.00	6.58	6.52
	October	164.6	479.6	350.1	219.8	7.50	7.19	5.01	6.66	6.41
	November	163.6	472.2	340.5	212.2	7.25	7.13	4.83	6.63	6.23
	December	162.2	468.7	338.7	219.2	6.97	6.91	4.81	6.40	6.14
	AVERAGE	**165.6**	**457.8**	**347.4**	**220.6**	**7.18**	**7.01**	**4.97**	**6.36**	**6.29**
1984	January	161.4	488.2	344.0	221.1	6.76	6.79	4.86	6.34	6.13
	February	165.0	495.8	347.5	217.8	6.98	7.00	4.86	6.53	6.20
	March†	NA	NA	NA	NA	7.16	7.12	4.88	6.69	6.26

The geographic coverage for the "Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants" has been changed to the 50 States and the District of Columbia. Coverage for the rest of the table continues unchanged as the 50 States and the District of Columbia. The title of the "Residual Oil" column has been changed to "Heavy Oil" but the fuels included remain the same. See Note 8 on page 103 and the explanation on page 105 for additional information.

[1]Data through December 1982 cover all steam-electric utility plants with a capacity of 25 megawatts or greater. From 1974 through 1982, data include peaking units. Beginning with January 1983, data cover steam-electric utility plants with a capacity of 50 megawatts or greater.
[2]Data through 1979 cover privately owned electric utilities in Classes A and B. Data for 1980 forward cover selected utilities in Class A only whose electric operating revenues were $100 million or more during the previous year.
[3]See Note 8 on the last pages of this section.
[4]Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.
[5]Average price for total sales to ultimate consumers.
†Initial estimates. NA=Not available.
Note: • Geographic coverage is the 50 States and the the District of Columbia.
Sources: • See the last 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. Heavy 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.
9. The monthly national average price of residential natural gas is based on data from the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) for natural gas (piped) and on data from Form EIA-176. Initial monthly estimates are obtained by multiplying the annual average price of residential natural gas collected on Form EIA-176 by the ratio of monthly values of the natural gas CPI-U for consecutive months. When a subsequent year's annual average price becomes available, the initial monthly estimates are adjusted to this annual average.

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 through September 1979: FEA Form P124, "Domestic Crude Oil Purchaser's (Monthly) Report"; October 1979 through December 1982: ERA Form 182, "Domestic Crude Oil First Purchase Report."; January 1983 forward: EIA 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 through September 1982: ERA Form 51, "Transfer Pricing Report"; October 1982 forward: EP Form 51, "Monthly Foreign Crude Oil Transaction Report."
• Aviation fuel prices—EIA, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."
Natural Gas: • Average wellhead price—annual data from EIA, *Natural Gas Annual,* 1973 through 1982. Monthly data are estimated primarily on the basis of values reported by State agencies in New Mexico, Oklahoma, and Texas. These States together account for almost 50 percent of total U.S. marketed production. Monthly data are adjusted to conform with final reported annual data.
• Imports, Purchased from Producers, and Industrial Sales by Major Interstate Pipeline Companies—FERC Form 11, "Interstate Pipeline Company Purchases, and Industrial Sales".
• Electric plant data—EIA, FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."
• Residential Price—Annual data from EIA, *Natural Gas Annual,* 1973 through 1982. Monthly data are EIA estimates based on the Bureau of Labor Statistics Urban Consumer Price Index (CPI-U) for natural gas and are adjusted to conform with final reported annual data. See Note 9 on the previous page for estimation procedures.
Electricity: • Cost of fossil fuels—EIA, FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."
• Retail prices—EIA, January 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."

Explanation of Changes to Cost of Fossil Fuels to Electric Utilities Data Series

The geographic coverage for the "Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants" has been changed from the 48 contiguous States and the District of Columbia to all 50 States and the District of Columbia. The new coverage conforms to that regularly provided in the Energy Information Administration, *Electric Power Monthly* (EPM). The title of the "Residual Oil" column has been changed to "Heavy Oil"; the new title conforms to the EPM and is more descriptive of the fuels included. The fuels included have not changed and the column will continue to show the consumption-weighted average of Nos. 4, 5, and 6, and topped crude fuel oil prices as it has in the past. Since prices of fuels in Alaska and Hawaii will now be included, almost all of the numbers have been revised (except in the coal column which has only one revision). Gas prices did not change after January 1983 because the gas generating units in Alaska dropped out of the reporting universe when the reporting threshold was increased from 25 to 50 megawatts in January 1983. The table below compares the prices published in previous issues with the prices published in this issue.

Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants[1]

		Coal		Heavy Oil[2]		Gas		All Fossil Fuels[3]	
		New	Old	New	Old	New	Old	New	Old
		Cents per million Btu							
1973	**AVERAGE**	**40.5**	**40.5**	**78.5**	**78.8**	**33.8**	**33.8**	**47.6**	**47.5**
1974	**AVERAGE**	**70.9**	**71.0**	**189.0**	**191.0**	**48.2**	**48.1**	**91.4**	**90.9**
1975	**AVERAGE**	**81.4**	**81.4**	**200.5**	**201.4**	**75.2**	**75.4**	**104.4**	**103.0**
1976	**AVERAGE**	**84.8**	**84.8**	**195.2**	**195.9**	**103.4**	**103.4**	**111.9**	**110.4**
1977	**AVERAGE**	**94.7**	**94.7**	**219.8**	**220.4**	**129.1**	**130.0**	**129.7**	**127.7**
1978	**AVERAGE**	**111.6**	**111.6**	**212.5**	**212.3**	**142.2**	**143.8**	**141.1**	**139.3**
1979	**AVERAGE**	**122.4**	**122.4**	**298.8**	**299.7**	**174.9**	**175.4**	**163.9**	**162.1**
1980	**AVERAGE**	**135.1**	**135.1**	**426.7**	**427.9**	**219.9**	**221.4**	**192.8**	**190.4**
1981	**AVERAGE**	**153.2**	**153.2**	**533.4**	**529.4**	**280.5**	**282.5**	**225.6**	**222.5**
1982	January	160.9	160.9	489.2	484.6	297.4	301.0	229.4	226.4
	February	164.1	164.1	493.6	487.6	307.8	310.4	223.1	220.7
	March	165.7	165.7	477.1	470.9	314.2	315.8	221.9	219.8
	April	164.6	164.6	487.0	478.0	320.7	323.4	216.9	214.3
	May	165.1	165.1	494.2	485.7	327.6	331.6	217.7	215.7
	June	167.0	167.0	488.3	479.6	341.8	345.8	226.8	224.7
	July	164.5	164.5	477.8	468.8	353.3	335.9	241.0	237.6
	August	164.7	164.7	467.1	458.8	353.4	355.7	230.2	227.6
	September	165.9	165.9	475.3	464.4	354.7	358.5	229.4	226.9
	October	164.9	164.9	490.2	479.3	355.9	360.4	222.2	220.1
	November	165.3	165.3	501.0	493.4	349.8	351.5	220.8	218.2
	December	162.9	162.9	461.9	456.3	352.5	355.4	218.8	216.8
	AVERAGE	**164.7**	**164.7**	**483.2**	**475.5**	**337.6**	**340.6**	**224.9**	**222.5**
1983	January	[1]166.8	[1]166.8	[1]448.9	[1]443.1	[1]347.1	[1]347.1	[1]216.7	[1]215.4
	February	167.8	167.8	441.4	436.8	331.9	331.9	213.9	212.8
	March	168.1	168.1	426.0	421.6	336.1	336.1	215.5	214.5
	April	168.5	168.5	431.6	427.1	326.1	326.1	215.8	214.7
	May	165.0	165.0	446.6	440.3	344.3	344.3	216.6	214.9
	June	167.3	167.3	453.6	449.6	347.2	347.2	220.9	219.9
	July	165.3	165.3	467.0	464.6	361.1	361.1	237.4	236.5
	August	164.3	164.3	470.4	465.9	363.2	363.2	230.1	228.9
	September	163.9	163.9	482.8	480.8	358.1	358.1	226.4	225.7
	October	164.6	164.6	479.6	474.4	350.1	350.1	219.8	218.4
	November	163.6	163.6	472.2	468.1	340.5	340.5	212.2	211.1
	December	162.2	162.2	468.7	465.9	338.7	338.7	219.2	218.2
	AVERAGE	**165.6**	**165.6**	**457.8**	**453.6**	**347.4**	**347.4**	**220.6**	**219.5**

[1]Data through December 1982 cover all steam-electric utility plants with a capacity of 25 megawatts or greater. Data in the "New" series from 1974 through 1982 include peaking units. Beginning with January 1983, data cover steam-electric plants with a capacity of 50 megawatts or greater.
[2]See Note 8 on the last pages of this section.
[3]Average price for total sales to ultimate consumers.

International

Crude Oil Production

World crude oil production during March 1984 was 54.1 million barrels per day, down 0.3 million barrels per day (0.6 percent) from the February 1984 level.

Organization of Petroleum Exporting Countries (OPEC) output during March 1984 averaged 18.3 million barrels per day, up 55 thousand barrels per day from the level during the previous month. Average production by Arab members of OPEC was 10.6 million barrels per day, up 105 thousand barrels per day from the February 1984 level. Production levels during March 1984 in Iraq, Kuwait, and Qatar increased by 200, 55, and 40 thousand barrels per day, respectively. Production in Saudi Arabia decreased by 195 thousand barrels per day, while production levels in Algeria, Libya, and United Arab Emirates remained about the same as during the previous month. Among non-Arab OPEC countries, production during March 1984 in Iran and Venezuela increased by 50 and 15 thousand barrels per day, respectively. Production levels decreased in Nigeria and Indonesia during the month by 105 and 15 thousand barrels per day, respectively.

Of the non-OPEC nations, Canada, experienced an increase in production of 15 thousand barrels per day during March 1984. The United Kingdom, Mexico, and the United States reported decreases in production during the month of 130, 45, and 8 thousand barrels per day, respectively.

Petroleum Consumption

Preliminary petroleum consumption data for March 1984 were available for France, Italy, and the United States. In comparison to March 1983 levels, consumption in the United States and Italy increased by 533 and 55 thousand barrels per day, respectively. Consumption in France decreased by 85 thousand barrels per day compared to the level 1 year earlier.

Petroleum Stocks

Preliminary data for March 1984 indicate that petroleum stock levels were down compared to March 1983 levels in every country reporting except the United States, where stocks increased by 5.0 percent. Petroleum stocks were down compared to March 1983 levels in Canada by 10.4 percent, in Italy by 6.5 percent, in the United Kingdom by 5.8 percent, in Japan by 4.1 percent, and in West Germany by 3.4 percent.

Petroleum stocks for all Organization for Economic Cooperation and Development members stood at 3,242 million barrels on December 31, 1983 (latest data available), a decrease of 121 million barrels (3.6 percent) compared to stocks held on December 31, 1982.

Nuclear Electricity Production

In March 1984, the 19 non-Communist nations with significant nuclear power capacity generated 88.1 gross terawatt-hours (billion kilowatt-hours) of nuclear-based electricity. On a per-hour basis, this output was down 6.5 percent from February 1984 generation but 22.9 percent greater than the comparable March 1983 output.

In West Germany, Gundremmingen-B, a 1,310-gross-megawatts-electric (MWe) boiling water reactor, began commercial operation on March 16. Also in West Germany, Kruemmel, a 1,316-gross-MWe boiling water reactor, which began operation in September 1983, announced commercial operation on March 28, 1984. In the United States, LaSalle-2, a 1,078-gross-MWe boiling water reactor operated by Commonwealth Edison Co., received a Full Power License on March 23, 1984. With the addition of Gundremmingen-B, Kruemmel, and LaSalle-2, the number of operable power reactors in the non-Communist countries as of March 31, 1984, totaled 252, with a collective generating capacity of 175.8 gross gigawatts (million kilowatts). The 81 operable U.S. units accounted for 68.4 gross gigawatts (38.9 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	**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**	**329**	**6,470**	**1,214**	**11,680**	**1,339**	**2,214**
1983	January	700	850	780	1,100	255	4,950	1,060	9,695	1,225	2,700
	February	600	850	895	900	200	3,510	1,060	8,015	1,015	2,400
	March	600	900	965	900	170	3,910	1,035	8,480	1,180	2,200
	April	700	950	880	1,000	260	3,930	1,145	8,865	1,400	2,000
	May	600	1,000	1,030	1,100	275	4,725	1,175	9,905	1,400	2,300
	June	700	1,000	920	1,100	300	4,620	1,180	9,820	1,400	2,500
	July	700	1,050	1,085	1,100	300	5,535	1,175	10,945	1,490	2,800
	August	700	1,100	1,180	1,100	265	5,930	1,185	11,460	1,490	2,500
	September	700	1,050	1,375	1,150	310	6,025	1,185	11,795	1,470	2,700
	October	700	1,100	1,305	1,150	320	6,005	1,165	11,745	1,520	2,400
	November	700	1,150	1,265	1,150	460	5,915	1,195	11,835	1,560	2,300
	December	700	1,050	1,075	1,150	420	5,825	1,195	11,415	1,440	2,300
	AVERAGE	**675**	**1,005**	**1,065**	**1,075**	**295**	**5,085**	**1,145**	**10,345**	**1,385**	**2,425**
1984	January	650	1,150	R1,080	1,100	440	5,130	1,200	R10,750	1,470	2,000
	February	600	1,000	1,235	1,100	R340	5,035	1,200	R10,510	R1,575	2,350
	March	600	1,200	1,290	1,100	380	4,840	1,205	10,615	1,560	2,400

[1]Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In March 1984, total production in this region amounted to approximately 482,000 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.
[3]OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates, Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon.
Footnotes continued on following page.

International

Crude Oil Production for Major Petroleum Producing Countries (continued)

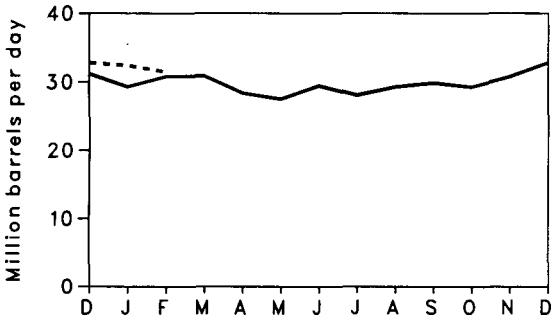
		Nigeria	Vene-zuela	Total OPEC[3]	Canada	Mexico	United Kingdom	United States	China	USSR	Other[4]	World
						Thousand barrels per day						
1973	**AVERAGE**	**2,054**	**3,366**	**30,989**	**1,800**	**465**	**2**	**9,208**	**1,090**	**8,465**	**3,655**	**55,674**
1974	**AVERAGE**	**2,255**	**2,976**	**30,729**	**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**	**31,298**	**1,320**	**981**	**768**	**8,245**	**1,874**	**10,682**	**4,517**	**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**	**26,891**	**1,435**	**1,936**	**1,622**	**8,597**	**2,114**	**11,773**	**5,170**	**59,538**
1981	**AVERAGE**	**1,433**	**2,102**	**22,646**	**1.285**	**2,313**	**1.811**	**8,572**	**2,012**	**11,909**	**5,352**	**55,900**
1982	Januaqy	1,765	1,985	21,285	1,218	2,315	1,905	8,509	2,020	11,900	5,488	54,640
	February	1,395	1,730	19,950	1,275	2,550	1,955	8,702	2,020	11,900	5,558	53,910
	March	945	1,870	18,615	1,182	2,545	2,000	8,667	2,020	11,900	5,341	52,270
	April	890	1,490	16,725	928	2,780	2,110	8,591	2,025	11,900	5,481	50,540
	May	1,310	1,480	17,075	1,114	2,715	2,085	8,683	2,025	11,900	5,528	51,125
	June	1,645	1,500	18,845	1,330	2,790	2,140	8,646	2,025	11,900	5,489	53,165
	July	1,280	1,800	18,450	1,235	2,790	2,120	8,658	2,025	12,000	5,507	52,785
	August	1,105	2,000	18,045	1,300	2,795	2,125	8,634	2,025	12,000	5,551	52,475
	September	1,170	1,990	18,515	1,300	2,830	2,175	8,701	2,025	12,000	5,499	53,045
	October	1,480	2,160	19,430	1,310	2,900	2,165	8,701	2,040	12,410	5,489	54,445
	November	1,355	2,300	19,415	1,420	2,940	2,220	8,697	2,040	12,410	5,683	54,825
	December	1,215	2,325	18,985	1,300	3,025	2,315	8,598	2,040	12,410	5,732	54,405
	AVERAGE	**1,295**	**1,891**	**18,784**	**1,241**	**2,749**	**2,117**	**8,649**	**2,029**	**12,000**	**5,593**	**53,162**
1983	January	880	2,085	16,975	1,230	2,980	2,135	8,634	2,085	12,410	5,886	52,335
	February	675	1,780	14,270	1,360	2,295	2,315	8,660	2,085	12,410	6,000	49,395
	March	905	2,080	15,215	1,395	2,415	2,265	8,677	2,085	12,410	5,838	50,400
	April	1,150	1,715	15,525	1,260	2,670	2,170	8,686	2,085	12,000	6,094	50,490
	May	1,625	1,685	17,285	1,320	2,795	2,235	8,682	2,085	11,900	6,083	52,385
	June	1,535	1,690	17,345	1,505	2,775	2,045	8,676	2,085	11,900	6,079	52,510
	July	1,710	1,695	19,050	1,480	2,685	2,280	8,647	2,105	11,900	6,173	54,320
	August	1,300	1,730	18,895	1,420	2,775	2,290	8,653	2,105	11,900	6,077	54,115
	September	1,220	1,725	19,295	1,435	2,735	2,385	8,666	2,105	11,900	6,144	54,665
	October	1,290	1,740	19,095	1,390	2,660	2,355	8,654	2,105	11,900	6,271	54,430
	November	1,245	1,770	19,095	1,415	2,730	2,490	8,624	2,085	11,900	6,381	54,720
	December	1,310	1,775	18,640	1,400	2,690	2,530	8,612	2,085	11,900	6,423	54,280
	AVERAGE	**1,240**	**1,790**	**17,575**	**1,385**	**2,685**	**2,290**	**8,656**	**2,090**	**12,035**	**6,139**	**52,855**
1984	January	1,360	1,810	R17,780	1,310	2,670	2,515	8,659	2,105	11,900	R6,586	R53,525
	February	1,565	1,815	R18,205	1,440	2,755	2,585	8,726	2,105	11,900	R6,654	R54,370
	March	1,460	1,830	18,260	1,455	2,710	2,455	8,718	2,105	11,750	6,602	54,055

Footnotes continued.
[4]Other is a calculated total derived from the difference between world production and the nations represented above.
R = Revised data.
Notes: • U.S. geographic coverage is the 50 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.
Sources: • See the last page of this section.

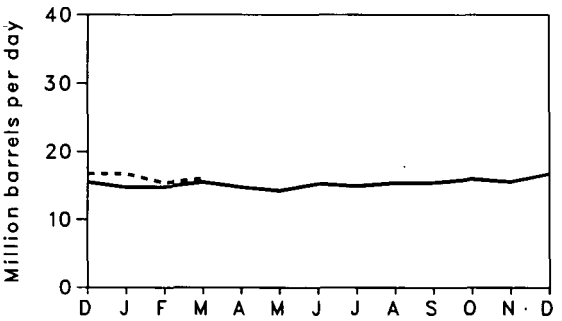
International

Petroleum Consumption

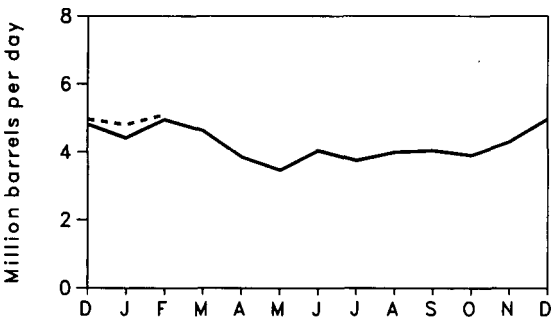
Total IEA



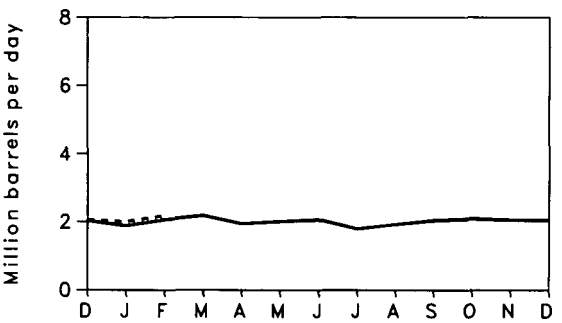
United States



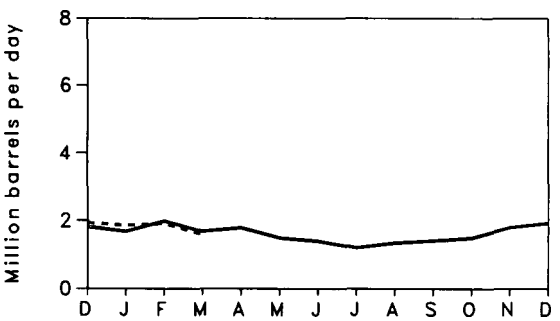
Japan*



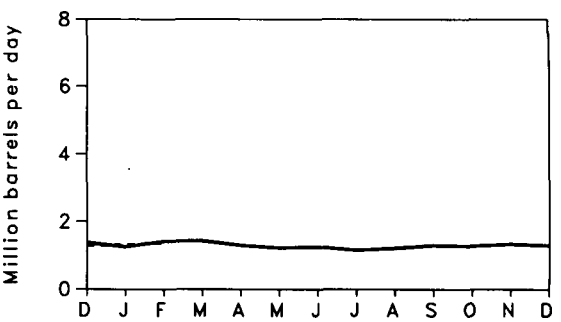
West Germany



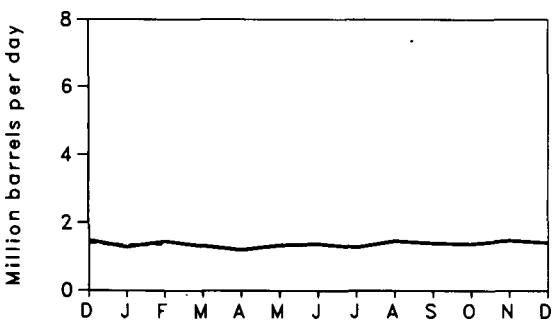
France**



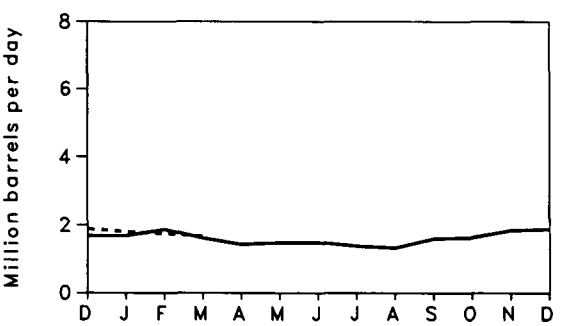
United Kingdom



Canada



Italy***



*Excludes liquefied petroleum gases and condensates.

**Not a member of IEA.

***Principal products only.

1983 ----- 1984

International

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

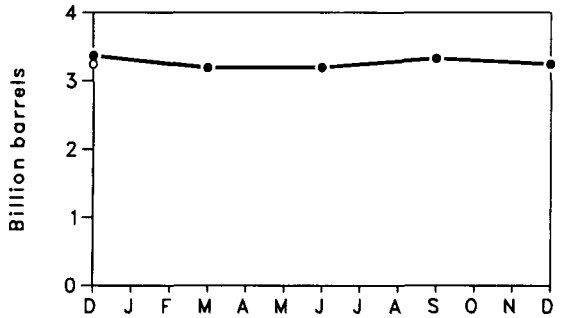
		Canada	France[2]	Italy	Japan	United Kingdom	United States	West Germany	Other IEA[3]	Total IEA[4]
						Thousand barrels per day				
1973	**AVERAGE**	**1,597**	**2,219**	**1,525**	**5,000**	**1,958**	**17,308**	**2,693**	**4,069**	**34,150**
1974	**AVERAGE**	**1,630**	**2,094**	**1,521**	**4,872**	**1,829**	**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	**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	16,124	1,935	3,766	31,200
	February	1,715	1,815	1,795	5,275	1,465	16,001	2,230	4,219	32,700
	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	16,046	2,125	3,964	30,400
	May	1,325	1,580	1,510	3,515	1,210	14,847	1,770	3,623	27,800
	June	1,430	1,505	1,520	3,780	1,280	14,998	2,115	3,877	29,000
	July	1,390	1,455	1,475	3,995	1,235	14,821	1,955	3,729	28,600
	August	1,500	1,295	1,410	3,705	1,170	14,839	2,105	3,671	28,400
	September	1,410	1,510	1,630	3,865	1,295	15,022	2,035	4,043	29,300
	October	1,335	1,605	1,555	3,830	1,305	14,859	1,922	3,894	28,700
	November	1,470	1,735	1,650	4,355	1,415	15,009	2,005	4,196	30,100
	December	1,460	1,815	1,670	4,810	1,380	15,487	2,025	4,368	31,200
	AVERAGE	**1,450**	**1,645**	**1,614**	**4,196**	**1,337**	**15,296**	**2,045**	**3,962**	**29,900**
1983	January	1,260	1,685	1,675	4,410	1,260	14,765	1,875	4,055	29,300
	February	1,430	1,985	1,865	4,950	1,415	14,772	2,060	4,308	30,800
	March	1,305	1,685	1,605	4,625	1,430	15,484	2,180	4,271	30,900
	April	1,190	1,785	1,415	3,850	1,300	14,779	1,940	3,926	28,400
	May	1,320	1,500	1,470	3,460	1,230	14,250	2,010	3,760	27,500
	June	1,360	1,405	1,475	4,040	1,255	15,281	2,060	4,029	29,500
	July	1,265	1,210	1,365	3,745	1,160	14,913	1,785	3,867	28,100
	August	1,440	1,350	1,315	3,990	1,220	15,366	1,920	4,049	29,300
	September	1,380	1,415	1,590	4,040	1,300	15,396	2,040	4,154	29,900
	October	1,360	1,495	1,625	3,900	1,280	14,947	2,090	4,098	29,300
	November	1,460	1,800	1,840	4,290	1,340	15,533	2,055	4,282	30,800
	December	1,400	1,930	1,880	4,960	1,300	16,691	2,050	4,519	32,800
	AVERAGE	**1,345**	**1,600**	**1,590**	**4,185**	**1,290**	**15,184**	**2,005**	**4,101**	**29,700**
1984	January	R1,300	1,860	R1,800	R4,800	1,310	16,726	2,000	R4,464	R32,400
	February	1,370	R1,915	R1,750	5,100	1,380	15,389	2,180	4,331	31,500
	March	NA	1,600	1,660	NA	NA	16,017	NA	NA	NA

[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.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Data for 1982 through 1984 are preliminary.
Sources: • See the last page of this section.

International

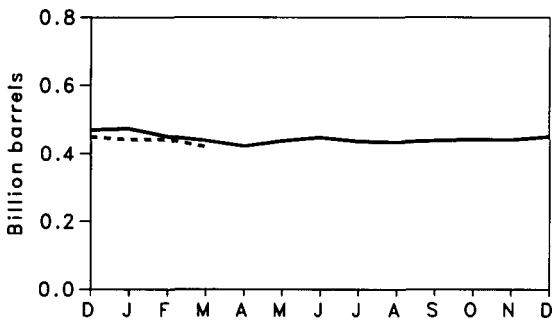
Petroleum Stocks

Total OECD

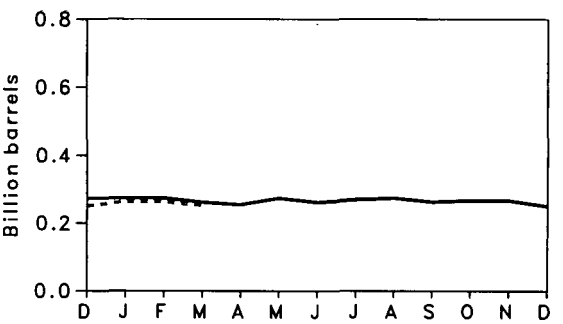


United States

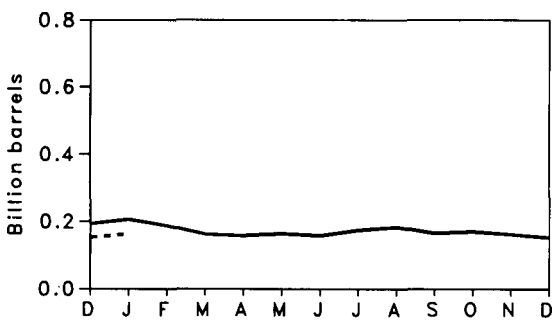
Japan



West Germany

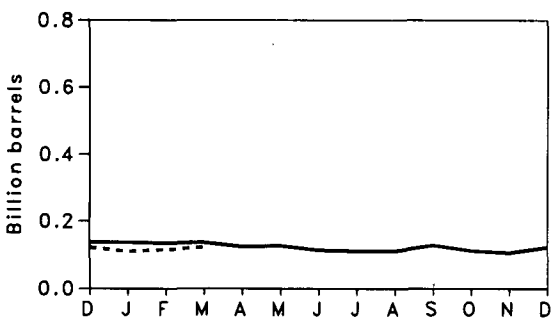


France

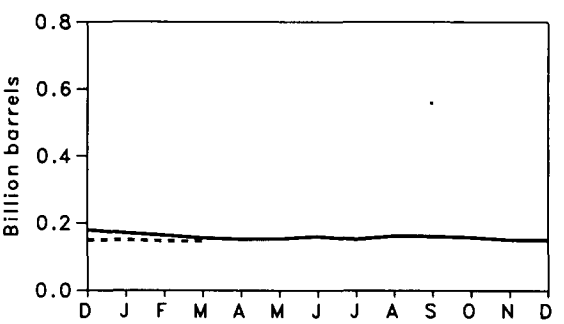


United Kingdom

Canada



Italy



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[3]
						Million barrels				
1973		**149**	**203**	**NA**	**303**	**156**	**1,008**	**NA**	**NA**	**NA**
1974		**164**	**240**	**169**	**370**	**161**	**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		**167**	**239**	**161**	**409**	**148**	**1,312**	**225**	**524**	**3,185**
1978		**144**	**201**	**154**	**413**	**157**	**1,278**	**238**	**512**	**3,097**
1979		**150**	**226**	**163**	**460**	**169**	**1,341**	**272**	**594**	**3,375**
1980		**164**	**243**	**170**	**495**	**168**	**1,392**	**319**	**636**	**3,587**
1981		**161**	**214**	**167**	**482**	**143**	**1,484**	**297**	**583**	**3,531**
1982	January	163	222	165	464	NA	1,456	280	NA	NA
	February	156	215	162	460	NA	1,428	280	NA	NA
	March	149	198	158	480	133	1,392	279	549	3,338
	April	148	201	154	483	NA	1,346	312	NA	NA
	May	147	193	154	484	NA	1,347	310	NA	NA
	June	144	192	156	478	141	1,360	287	566	3,324
	July	130	205	160	460	134	1,393	286	NA	NA
	August	137	207	179	470	139	1,408	311	NA	NA
	September	145	208	179	472	134	1,414	280	570	3,402
	October	135	212	177	471	135	1,432	279	NA	NA
	November	138	213	174	472	130	1,455	280	NA	NA
	December	136	193	179	469	125	1,430	273	558	3,363
1983	January	136	206	170	473	125	1,453	274	NA	NA
	February	133	187	163	450	121	1,432	274	NA	NA
	March	135	162	155	438	120	1,375	262	541	3,188
	April	123	158	151	422	120	1,376	255	NA	NA
	May	125	164	152	437	123	1,397	274	NA	NA
	June	113	158	159	447	116	1,409	262	531	3,195
	July	110	174	151	436	119	1,434	270	NA	NA
	August	110	183	161	433	121	1,467	274	NA	NA
	September	127	165	160	438	125	1,492	263	551	3,321
	October	111	170	157	441	129	1,512	267	NA	NA
	November	105	162	150	440	124	1,510	267	NA	NA
	December	121	153	149	449	116	1,453	251	550	3,242
1984	January	109	163	149	441	125	1,430	264	NA	NA
	February	114	NA	146	441	121	1,464	263	NA	NA
	March	121	NA	145	420	113	1,444	253	NA	NA

[1]Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined products. Petroleum stocks include all nonmilitary 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 for 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.
NA=Not available.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported. Using the new basis, the end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,420 in 1980, and 1,462 in 1982.
Sources: • See the last page of this section.

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	**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)
	February	0.2	1.4	0	4.5	1.5	10.9	0.1	0.1	6.8	(s)	(s)
	March	0.2	0.7	(s)	4.6	1.6	11.3	0.2	0.1	7.9	(s)	(s)
	April	0.2	1.6	(s)	4.3	1.5	10.5	0.2	0.1	8.4	0.2	(s)
	May	0.2	2.5	0	3.9	1.2	9.6	0.3	0.7	9.2	0.3	(s)
	June	0.2	2.5	0	4.4	1.0	9.3	0.3	0.7	9.1	0.4	(s)
	July	0.3	2.5	0	4.8	1.3	11.0	0.2	0.7	9.6	0.4	0
	August	0.1	2.4	0	3.8	1.6	12.1	0.3	0.5	10.5	0.4	(s)
	September	0.2	2.2	0	4.4	1.5	12.4	0.3	0.6	10.0	0.4	(s)
	October	0.2	2.2	0	4.7	1.4	13.0	0.3	0.6	10.1	0.4	(s)
	November	0.2	2.0	(s)	4.2	1.5	13.4	0.2	0.7	8.9	0.4	(s)
	December	0.2	2.1	0.1	5.0	1.7	16.8	0.3	0.7	9.6	0.4	(s)
	TOTAL	**2.5**	**24.1**	**0.2**	**53.0**	**17.4**	**144.2**	**2.9**	**5.8**	**108.3**	**3.6**	**0.2**
1984	January	0.2	2.7	(s)	5.0	1.7	18.0	0.2	0.4	9.7	0.3	(s)
	February	0.2	2.3	0.2	4.6	1.6	17.1	0.2	0.6	8.8	0.4	0
	March	0.2	1.9	0.1	5.1	1.7	17.8	0.2	0.7	8.2	0.2	0

[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.
See additional footnotes on the following page.

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	**TOTAL**	**2.9**	**9.4**	**37.7**	**15.2**	**10.7**	**38.9**	**53.4**	**442.4**	**288.5**	**730.9**
1982	January	0.4	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	0.5	1.0	4.2	1.5	1.5	4.3	6.5	50.0	27.4	77.4
	February	0.4	0.9	3.7	1.4	0.8	4.3	5.6	42.7	23.8	66.5
	March	0.6	0.9	4.1	1.5	1.8	4.9	6.0	46.7	25.0	71.7
	April	0.4	0.8	3.3	1.5	1.7	4.3	4.0	43.1	23.4	66.5
	May	0.2	0.4	2.4	1.2	2.0	3.4	2.9	40.5	23.9	64.5
	June	0.7	0.6	2.4	0.5	2.0	3.9	4.2	42.4	25.7	68.1
	July	0.7	0.6	1.6	1.2	1.6	3.3	5.1	44.9	27.3	72.2
	August	1.1	1.0	2.7	1.0	1.4	3.7	4.6	47.3	27.9	75.1
	September	1.1	1.0	3.0	1.4	1.2	4.4	6.0	50.1	26.4	76.5
	October	0.8	1.1	3.6	1.5	1.6	3.7	R7.6	R52.9	27.6	R80.5
	November	1.2	1.1	4.5	1.4	1.6	3.9	R7.1	R52.5	26.6	R79.1
	December	1.3	1.4	5.0	1.5	1.7	5.5	R6.2	R59.4	28.6	R87.9
	TOTAL	**9.0**	**10.7**	**40.5**	**15.5**	**18.9**	**50.0**	**R65.8**	**R572.5**	**313.6**	**R886.1**
1984	January	1.3	1.5	5.3	1.5	1.7	4.4	R6.9	R60.9	30.8	R91.7
	February	1.2	1.5	5.0	1.4	1.8	R4.6	R7.4	R58.8	R29.4	R88.2
	March	1.0	1.4	5.4	1.5	2.0	4.8	7.1	59.5	28.6	88.1

Footnotes continued.
R=Revised data.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
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 for 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 includes the U.S. Territories.

Sources

Crude Oil Production: • 1973-1982 annual data: Energy Information Administration, *1982 International Energy Annual.*
• U.S. annual and monthly data: Energy Information Administration, *Petroleum Supply Monthly.*
• 1982-1984 monthly data (except U.S. and World): Central Intelligence Agency, "International Energy Statistical Review," and other industry sources.
• 1982-1984 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: • United States data: Energy Information Administration, *Petroleum Supply Monthly.* • Other OECD data: OECD, *Quarterly Oil Statistics;* Comite Professionnel du Petrole, *Bulletin Mensuel.* • *Total OECD: Sum of data foq all OECD member countqies using above sources.*
Nuclear Electricity Generation: • *Nucleonics Week.*

Conversion Factors

Approximate Heat Content

Refined Petroleum Product	Million Btu per Barrel
Asphalt	6.636
Aviation gasoline	5.048
Butane	4.326
Butane-propane mixture[1]	4.130
Distillate fuel oil	5.825
Ethane	3.082
Ethane-propane mixture[2]	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

[1] 60 percent butane and 40 percent propane.
[2] 70 percent ethane and 20 percent propane.

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

Price Indexes, 1972 = 100.0

	Gross National Product Implicit Price Deflator	Consumer Price Index, All Urban Consumers, All Items
1972	100.00	100.0
1973	105.75	106.2
1974	115.08	117.9
1975	125.79	128.7
1976	132.34	136.1
1977	140.05	144.9
1978	150.42	155.9
1979	163.42	173.5
1980	178.42	197.0
1981	195.14	217.4
1982	206.88	230.7
1983	215.67	238.1

Sources: Gross National Product Implicit Price Deflator—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business.*
Consumer Price Index, All Urban Consumers, All Items—1967 = 100.0 from U.S. Department of Labor, Bureau of Labor Statistics. Rebased to 1972 = 100.0 by Energy Information Administration.

Approximate Heat Content of Fuels

	Units	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983-84‡
Coal												
Production	Million Btu/short ton	23.27	22.96	22.81	22.85	22.49	22.17	22.38	22.35	22.25	22.20	22.02
Consumption	Million Btu/short ton	22.94	22.56	22.39	22.39	22.14	21.93	22.01	21.87	21.65	21.63	21.55
Non-utility	Million Btu/short ton	24.48	24.38	24.35	24.45	24.33	24.12	24.23	24.35	24.15	23.92	23.80
Electric utility	Million Btu/short ton	22.24	21.78	21.64	21.68	21.47	21.27	21.37	21.29	21.08	21.20	21.16
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	25.00
Exports	Million Btu/short ton	26.59	26.70	26.56	26.60	26.55	26.48	26.55	26.28	26.08	26.22	26.29
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	23.75
Consumption	Million Btu/short ton	22.71	21.95	21.74	22.15	22.69	22.97	22.70	22.16	22.10	23.00	22.80
Non-utility	Million Btu/short ton	24.34	23.75	23.65	23.84	24.99	25.17	25.20	23.74	25.12	25.37	25.20
Electric utility*	Million Btu/short ton	17.92	17.20	17.06	17.53	17.24	17.10	17.45	17.65	18.17	18.16	18.15
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	25.40
Bituminous coal and lignite												
Production	Million Btu/short ton	23.267	22.970	22.802	22.849	22.482	22.157	22.374	22.343	22.243	22.188	22.015
Consumption	Million Btu/short ton	22.937	22.564	22.402	22.393	22.142	21.921	22.014	21.874	21.645	21.624	21.547
Residential and commercial	Million Btu/short ton	22.887	22.523	22.258	22.819	22.594	22.078	21.884	22.488	22.191	22.373	22.300
Coke plants	Million Btu/short ton	26.000	26.000	26.000	26.000	26.000	26.000	26.000	26.000	26.000	26.000	26.000
Other industrial & transp.	Million Btu/short ton	22.585	22.420	22.439	22.528	22.290	22.175	22.436	22.690	22.572	22.694	22.650
Electric utility	Million Btu/short ton	22.260	21.800	21.660	21.690	21.480	21.280	21.380	21.300	21.090	21.200	21.160
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.612	26.716	26.573	26.613	26.561	26.501	26.570	26.404	26.176	26.231	26.300
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	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	5.800
Imports	Million Btu/barrel	5.817	5.827	5.821	5.808	5.810	5.802	5.810	5.812	5.818	5.826	5.824
Exports	Million Btu/barrel	5.800	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	Million Btu/barrel	5.897	5.884	5.858	5.856	5.834	5.839	5.810	5.796	5.775	5.775	5.768
Exports	Million Btu/barrel	5.752	5.774	5.748	5.745	5.797	5.808	5.832	5.820	5.821	5.820	5.800
Petroleum products												
Consumption	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	5.519	5.494	5.479	5.448	5.415	5.410
Residential and commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382	5.471	5.468	5.409	5.392	5.361
Industrial	Million Btu/barrel	5.565	5.537	5.527	5.536	5.552	5.546	5.416	5.376	5.310	5.262	5.279
Transportation	Million Btu/barrel	5.397	5.394	5.392	5.396	5.402	5.407	5.430	5.440	5.434	5.423	5.412
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	6.254
Imports	Million Btu/barrel	5.983	5.959	5.935	5.980	5.908	5.955	5.811	5.748	5.659	5.664	5.660
Exports	Million Btu/barrel	5.752	5.773	5.747	5.743	5.796	5.814	5.864	5.841	5.837	5.829	5.800
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	3.615	3.612
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	3.872	3.859
Natural gas, dry												
Production	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,028	1,028
Consumption*	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,027	1,028	1,028
Non-utility consumption	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019	1,016	1,018	1,024	1,026	1,026	1,026
Electric utility consumption*	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034	1,034	1,034	1,033	1,035	1,035
Imports*	Btu/cubic foot	1,026	1,027	1,026	1,025	1,026	1,030	1,037	1,022	1,014	1,018	1,018
Exports*	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013	1,013	1,013	1,011	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	1,098	1,103	1,107	1,107

Approximate Heat Rates for Electricity

Hydropower generation[3]	Btu/kWh	10,389	10,442	10,406	10,373	10,435	10,361	10,353	10,388	10,453	10,470	10,470
Nuclear power generation[3]	Btu/kWh	10,903	11,161	11,013	11,047	10,769	10,941	10,879	10,908	11,030	11,015	11,015
Geothermal power generation[3]	Btu/kWh	21,674	21,674	21,611	21,611	21,611	21,611	21,545	21,639	21,639	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	3,412

[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.
* Based on data reported in Energy Information Administration (and predecessor) surveys.
‡ Preliminary data.
Note: A listing of sources for the approximate heat content values are published in the *1983 Annual Energy Review*, DOE/EIA-0384(83).

Glossary

Anthracite. A hard, jet black, high-luster coal containing a high percentage of fixed carbon and a low percentage of volatile matter and having an ignition temperature of about 900° F. Domestic anthracite is mined almost exclusively in northeastern Pennsylvania and is often referred to as hard coal. It is used for generating electricity and for space heating. It includes meta-anthracite and semianthracite and conforms to ASTM Specification D388 for anthracite.

ASTM. The acronym for the American Society for Testing and Materials.

Bituminous Coal. A dense, black coal that often has well-defined bands of bright and dull material. It has a volatility greater than anthracite and a calorific value greater than lignite. In the United States, it is often referred to as soft coal and is used for electricity generation, coke production, and space heating. It includes subbituminous coal and conforms to ASTM Specification D388 for bituminous coal and subbituminous coal.

British Thermal Unit (Btu). The amount of energy required to raise the temperature of 1 pound of water 1 ° Fahrenheit (F.) at or near 39.2 ° F. 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.

Butane. A normally gaseous, colorless, paraffinic hydrocarbon (C_4H_{10}) extracted from natural gas and refinery gas streams. Included are isobutane, a branch-chain configuration of $(CH_3)_3CH$ with a boiling point of 10.9° F. and normal butane, a straight-chain configuration of C_4H_{10} with a boiling point of 31.1° F. Butane is used primarily for blending into motor gasoline, for residential and commercial heating, and for industrial uses, especially the manufacture of chemicals and synthetic rubber.

Coal. Includes all ranks of coal—anthracite, bituminous coal (including subbituminous coal), and lignite—conforming to ASTM Specification D388.

Coal Coke. The strong, porous residue consisting of carbon and mineral ash that is formed when the volatile constituents of bituminous coal are driven off by heat in the absence of or in a limited supply of air. It is used primarily in blast furnaces for smelting ores, especially iron ore.

Cooling Degree-Days. The number of degrees per day that the daily average temperature is above 65° F. The daily average temperature is the mean of the maximum and minimum temperatures for a 24-hour period.

Crude Oil (including lease condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are excluded where identifiable.

Crude Oil Refinery Input. Total crude oil (including lease condensate) input to crude oil distillation units and other processing units.

Degree-Day Normals. Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1951–1980). These may be simple degree-day normals or population-weighted degree-day normals.

Degree-Days. See **Cooling Degree-Days, Heating Degree-Days, Population-Weighted Degree-Days,** and **Degree-Day Normals.**

Distillate Fuel Oil. Light fuel oils distilled during the refining process. Included are products known as No. 1, No. 2, and No. 4 fuel oils; and No. 1, No. 2, and No. 4 diesel fuels that 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 fuel for agricultural machinery), 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, paraffinic, straight-chain hydrocarbon (C_2H_6) with a boiling point of -127.48° F. extracted from natural gas and refinery gas streams. Ethane

is used primarily as petrochemical feedstock for 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.

Heating Degree-Days. The number of degrees per day that the daily average temperature is below 65° F. The daily average temperature is the mean of the maximum and minimum temperatures for a 24-hour period.

Imports. Receipts into the 50 States and the District of Columbia of foreign goods (including 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 warehouses 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.

Isobutane. See **Butane.**

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, and license (ticket) fees. Averages are based on major importers, which account for an estimated 90 to 95 percent total crude oil imports. Coverage includes the United States and its territories.

Lease Condensate. A natural gas liquid recovered from gas-well gas (associated and nonassociated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons. Generally, it is blended with crude oil for refining.

Lignite. A brownish-black coal with a high moisture content. It is also referred to as brown coal. Domestic lignite is mined in North Dakota, Montana, and Texas and is used mainly for electric power generation. It conforms to ASTM Specification D388 for lignite.

Line Miles of Seismic Exploration. The distance along the earth's surface that is covered by seismic surveying.

Liquefied Petroleum Gases. Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Maximum Dependable Capacity, Net. The dependable main-unit net capacity of nuclear powerplant reactors and generally varies throughout the year because the unit efficiency varies with seasonal cooling water temperature variations. The 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. 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 and conforming to ASTM Specification D439. Included are finished leaded gasoline, finished unleaded gasoline, and gasohol. Excludes blendstock until blending has been completed and excludes alcohol that is 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 hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in natural reservoirs.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the ASTM and the Gas Processors Association and are classified as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Normal Butane. See **Butane.**

Pentanes Plus. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. This product includes isopentane, natural gasoline, and plant condensate.

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 residue that is the final product of the cracking process in petroleum refining. 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, liquefied petroleum gases, pentanes plus, 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.

Petroleum Stocks, Primary. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petrolum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve, is included. Excluded are stocks of foreign origin that are held in bonded warehouse storage.

Population-Weighted Degree-Days. Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree-days, each State is divided into from one to nine climatically homogeneous divisions which are assigned weights based on the ratio of the population of the division to the total population of the State. Degree-day readings for each division are multiplied by the corresponding population weight for each division and these products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions comprised of from three to eight States which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and these products are then summed to arrive at the national population-weighted degree-day figure.

Propane. A normally gaseous, colorless, paraffinic, straight-chain hydrocarbon (C_3H_8) with a boiling point of -43.67° F. It is extracted from natural gas and refinery gas streams. 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 calculated by adding production, imports, and crude oil burned directly; and subtracting exports and changes in primary stocks (net withdrawals is a plus quantity and net additions is a minus quantity).

Refiner Acquisition Cost. The cost of crude oil to the refiner, including transportation and fees. 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 distilled away in refinery operations. Included are products known as No. 5 and No. 6 fuel oils that conform to ASTM Specification D396 and Navy Special Fuel Oil specifications, as well as Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include imported crude oil burned as fuel.

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

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.

Strategic Petroleum Reserve (SPR). Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

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 crude oil 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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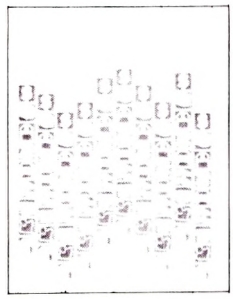

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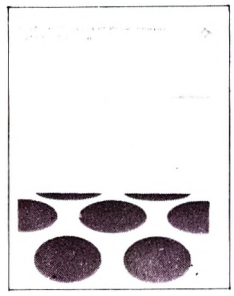

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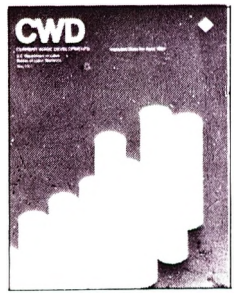

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