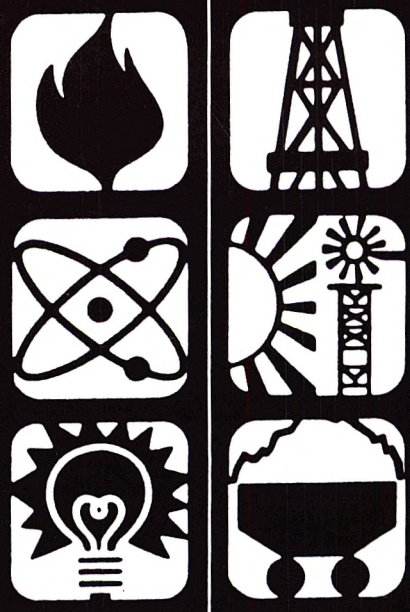
DOE/EIA-0035(85/09)

Monthly Energy Review

Energy Information Administration
Washington, DC

September 1985

First Three Quarters 1985 Summaries



Monthly Energy Review

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 . . . ."

The *Monthly Energy Review* is intended to provide timely energy information to Members of Congress, to Federal and State agencies, and to the general public.

Subscriptions

This publication is available on an annual subscription basis from the Superintendent of Documents, U.S. Government Printing Office (GPO). Prices and ordering information for this and other Energy Information Administration (EIA) publications may be obtained from the GPO or the EIA's National Energy Information Center. Addresses and telephone numbers appear below. An order form is included in the back of this publication for your convenience.

National Energy Information Center, EI-20
Energy Information Administration
Room 1F-048, Forrestal Building
Washington, D.C. 20585
(202) 252-8800

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
(202) 783-3238

Information

Questions on energy statistics may be directed to the National Energy Information Center at the address and phone number shown above.

Released for printing: December 23, 1985

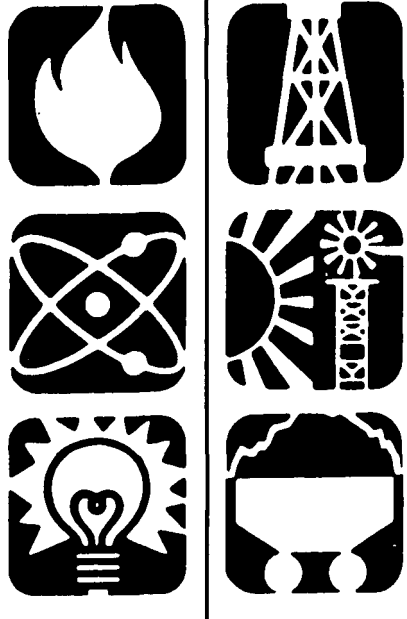
Fichman

Monthly Energy Review

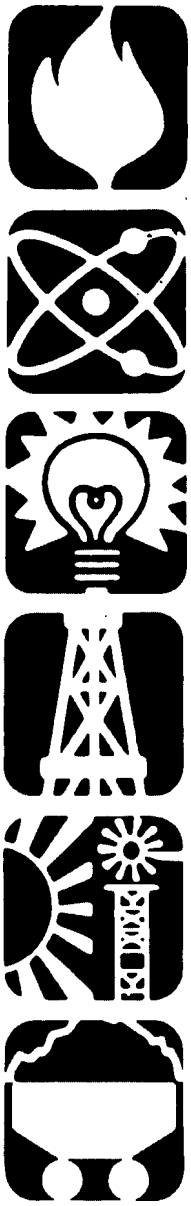
September 1985

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

DOE/EIA–0035(85/09)
Distribution Category UC–98



This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the Department of Energy. The information contained herein should not be construed as advocating or necessarily reflecting any policy position of the Department of Energy or any other organization.



Contacts

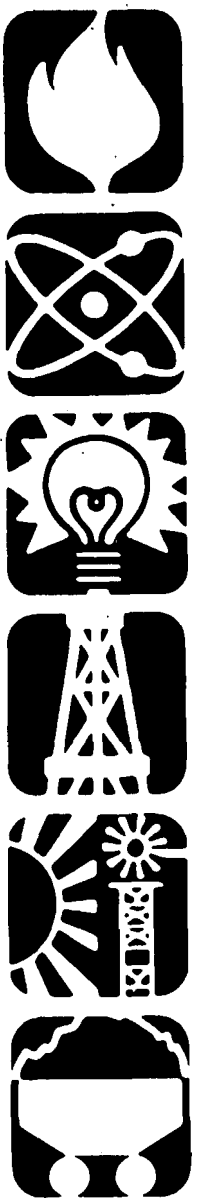
The *Monthly Energy Review* is prepared in the Statistics Branch of the Office of Energy Markets and End Use, Energy Information Administration, under the direction of Katherine E. Seiferlein (202) 252-5692.

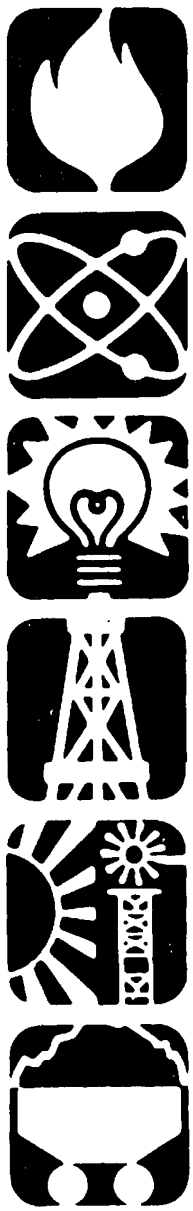
Questions and comments concerning the contents of the *Monthly Energy Review* may be referred to Julia F. Hutchins (202) 252-5138 or the following subject specialists:

Special Features		Barbara T. Fichman (202) 252-5737
Part 1.	**Energy Summary**	Roberta Searles (202) 252-5736
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**	Judith L. Wood (202) 252-5228
Part 7.	**Electric Utilities**	Vicki Moorhead (202) 252-6521
Part 8.	**Nuclear**	Thomas S. Murphy (202) 252-9866
Part 9.	**Price**	
	Petroleum	
	Heating Oil	Annie P. Whatley (202) 252-6612
	All Other Petroleum	Bruce H. Bawks (202) 252-9795
	Natural Gas	Gordon W. Koelling (202) 252-6305
	Electricity	
	Fuel Costs to Steam Plants	Kenneth M. McClevey (202) 252-5310
	Prices for Privately Owned Utilities	Vicki Moorhead (202) 252-6521
Part 10.	**International**	
	Petroleum	Patricia A. Smith (202) 252-6925
	Nuclear Electricity Generation	Thomas S. Murphy (202) 252-9866

Additional information on all energy statistics available from the Energy Information Administration may be obtained from the National Energy Information Center (202) 252-8800.

Contents





Articles

Feature articles on energy-related subjects are occasionally included in this publication. The following articles have appeared in issues since the beginning of 1981. A list of the articles included prior to 1981 may be found in any issue published from 1981 through 1983.

Changes in 1981 Petroleum Data Series	May	1981
Information Services of the Energy Information Administration	September	1981
An Overview of Natural Gas Markets	December	1981
The Interstate and Intrastate Natural Gas Markets	January	1982
Natural Gas Drilling and Production Under the Natural Gas Policy Act	February	1982
Impacts of Financial Constraints on the Electric Utility Industry	October	1982
The Effect of Weather on Energy Use	April	1983
Trends in U.S. Energy Since 1973	May	1983
Data Series on Petroleum Use at Electric Utilities	July	1983
Residential Energy Consumption, 1978 Through 1981	September	1983
Exploring for Oil and Gas	November	1983
The Influence of Federal Actions on Petroleum Exploration	December[2]	1983
Aggregate Statistics: Accurate or Misleading?	December[3]	1983
Estimating Well Completions	March	1985

Highlights

Summaries of Energy Information Administration reports have appeared as "Highlights" in this publication since 1982. The following is a list of all the reports that have been summarized in previous issues.

U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1981 Annual Report	September	1982
Energy Company Development Patterns in the Postembargo Era, Volume One	November	1982
Residential Energy Consumption Survey: Consumption and Expenditures	January	1983
Residential Energy Consumption Survey: Housing Characteristics	February	1983
Energy Price and Expenditure Data Report, 1970–1980	July	1983
Railroad Deregulation: Impact on Coal	August	1983
Port Deepening and User Fees: Impact on U.S. Coal Exports	August	1983
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1982 Annual Report	September	1983
Annual Energy Review 1983	February	1984
State Energy Data Report, Consumption Estimates, 1960–1982	March	1984
Annual Energy Outlook 1983	March	1984
State Energy Price and Expenditure Report, 1970–1981	May	1984
Solar Collector Manufacturing Activity 1983	June	1984
Estimates of U.S. Wood Energy Consumption, 1980–1983	September	1984
International Energy Annual 1983	September	1984
Energy Conservation Indicators 1983 Annual Report	November	1984
Annual Energy Outlook 1984	December	1984
Annual Energy Review 1984	January	1985
Performance Profiles of Major Energy Producers 1983	February	1985
State Energy Price and Expenditure Report 1970–1982	March	1985
State Energy Data Report, Consumption Estimates, 1960–1983	April	1985
Annual Outlook for U.S. Electric Power 1985	June	1985
Short-Term Energy Outlook, Volume 1, October 1985	August	1985
Analysis of Growth in Electricity Demand, 1980–1984	August	1985

Part 1 Energy Summary

Energy Summary

Production

Energy production during September 1985 totaled 5.3 quadrillion Btu, a 3.0-percent decrease compared with the level of production during September 1984. Coal production was down 7.5 percent and natural gas production decreased 3.2 percent. Petroleum production decreased 1.7 percent compared with production in the previous September. Production of all other forms of energy combined increased 7.1 percent compared with production 1 year earlier.

Consumption

Energy consumption during September 1985 totaled 5.6 quadrillion Btu, 0.6 percent above the level of consumption during September 1984. Coal consumption increased 4.3 percent. Petroleum consumption dropped 0.9 percent and natural gas consumption dropped 3.8 percent from their levels 1 year earlier. Consumption of all other forms of energy combined increased 7.2 percent compared with consumption during September 1984.

Net Imports

Net imports of energy during September 1985 totaled 0.6 quadrillion Btu, 6.7 percent below the level of net imports during September 1984. Net imports of petroleum decreased 9.1 percent, while net imports of natural gas increased 13.5 percent. Net exports of coal were down 8.1 percent from the level in September 1984.

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

	September			Cumulative January through September				
	1985	1984	Percent Change[1]	1985	1985 Daily Rate	1984	1984 Daily Rate	Percent Change[1]
Total Production	**5.271**	**5.436**	**-3.0**	**48.601**	**0.178**	**49.995**	**0.182**	**-2.4**
Petroleum[2]	1.725	1.755	-1.7	15.792	0.058	15.777	0.058	0.5
Natural Gas (Dry)	1.350	1.394	-3.2	12.664	0.046	13.416	0.049	-5.3
Coal	1.608	1.739	-7.5	14.646	0.054	15.364	0.056	-4.3
Other[3]	0.587	0.548	7.1	5.499	0.020	5.437	0.020	1.5
Total Consumption	**5.647**	**5.611**	**0.6**	**54.925**	**0.201**	**55.498**	**0.203**	**-0.7**
Petroleum[4]	2.446	2.468	-0.9	22.985	0.084	23.339	0.085	-1.2
Natural Gas[5]	1.130	1.174	-3.8	12.886	0.047	13.609	0.050	-5.0
Coal	1.444	1.384	4.3	13.253	0.049	12.814	0.047	3.8
Other[6]	0.627	0.585	7.2	5.800	0.021	5.736	0.021	1.5
Net Imports	**0.607**	**0.651**	**-6.7**	**5.552**	**0.020**	**6.640**	**0.024**	**-16.1**
Petroleum[7]	0.717	0.789	-9.1	6.386	0.023	7.453	0.027	-14.0
Natural Gas	0.059	0.052	13.5	0.640	0.002	0.556	0.002	15.6
Coal[8]	(0.209)	(0.228)	(8.1)	(1.774)	(0.006)	(1.668)	(0.006)	(6.7)
Other[9]	0.040	0.037	8.1	0.300	0.001	0.300	0.001	0.6

[1] Based on daily rates prior to rounding.
[2] Includes crude oil, lease condensate, and natural gas plant liquids.
[3] Other is hydroelectric and nuclear electric power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
[4] Includes refined petroleum products and natural gas plant liquids.
[5] Includes supplemental gaseous fuels.
[6] Other is hydroelectric and nuclear electric power; electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems; and net imports of electricity and coal coke.
[7] Includes crude oil, lease condensate, refined petroleum products, unfinished oils, natural gasoline, plant condensate, and imports of crude oil for the Strategic Petroleum Reserve.
[8] Parentheses indicate exports are greater than imports.
[9] Other is net imports of electricity and coal coke.
Note: • Totals may not equal sum of components due to independent rounding.

First Three Quarters 1985 Summary

U.S. energy production during the first three quarters of 1985 was 48.6 quadrillion British thermal units (Btu), 2.4 percent[1] below the record level attained in the first three quarters of 1984 (Figure 1). U.S. consumption of energy totaled 54.9 quadrillion Btu, slightly below the level during the first three quarters of 1984.

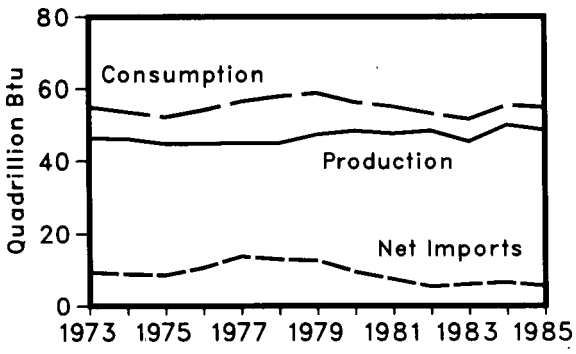
The change in net imports of energy was more dramatic. The 5.6-quadrillion-Btu level of energy net imports in the first three quarters of 1985 was down 16.1 percent compared with the first three quarters of the previous year and was significantly below the all-time high of 13.7 quadrillion Btu reached in the first three quarters of 1977.

Production

As the pace of economic recovery slowed in the first three quarters of 1985, two of the three major fossil fuels registered production declines. Coal production fell to 14.6 quadrillion Btu during the first three quarters of 1985, down 4.3 percent from the record level attained in the first three quarters of 1984. Natural gas production was down 5.3 percent to 12.7 quadrillion Btu, well below the 16.6-quadrillion-Btu peak level of the first three quarters of 1973. In contrast, production of crude oil (including natural gas plant liquids) for the first three quarters of 1985 rose 0.5 percent to 15.8 quadrillion Btu; that level, however, remained below the record level of 16.5 quadrillion Btu produced during the first three quarters of 1973.

[1]All statistics for 1985 are preliminary. Percentage changes are calculated using daily rates prior to rounding.

Figure 1. U.S. Energy Production, Consumption, and Net Imports, First Three Quarters, 1973-1985



Note: 1985 data are preliminary.
Source: Energy Information Administration calculations based on data reported in Part 1 of this publication.

Coal- and nuclear-based generation of electricity reached record levels for the first three quarters of the year in 1985. In contrast, first-three-quarter generation of electricity from petroleum, the electric utilities' most expensive fuel, fell for the seventh year in a row. Generation from natural gas and hydroelectric power declined from previous-year levels.

Consumption

Consumption of natural gas in the first three quarters of 1985 fell 5.0 percent compared with first-three-quarters 1984 use. In contrast, consumption of coal increased, reaching a record for the first three quarters of the year of 13.3 quadrillion Btu.

The refiner acquisition cost of crude oil was down in the first three quarters of 1985 compared with the first three quarters of 1984, and prices of most petroleum products (with the notable exception of motor gasoline) also were lower. Nevertheless, petroleum consumption in the first three quarters of 1985 fell to 23.0 quadrillion Btu, well below petroleum consumption during the first three quarters of 1978, when consumption peaked at 28.2 quadrillion Btu.

Imports

Petroleum net imports declined dramatically in the first 9 months of 1985 compared with the first 9 months of 1984. Despite a decrease in the price of foreign crude oil, net imports of crude oil were 2.9 million barrels per day in the first 9 months of 1985 compared with 3.2 million barrels per day in the first 9 months of 1984. Net imports of refined petroleum products also were down.

Members of the Organization of Petroleum Exporting Countries (OPEC) supplied an average of 1.7 million barrels per day of petroleum to the United States in the first 9 months of 1985, significantly below the level of U.S. total imports from OPEC during the first 9 months of the previous year.

In the first 9 months of 1985, net imports of natural gas totalled 637 billion cubic feet, significantly above the 553 billion cubic feet imported during the first 9 months of 1984.

In contrast to the other fossil fuels, coal registered net exports. In the first 9 months of 1985, net exports of coal totaled 67 million short tons. A 6.7-percent increase in coal net exports in the first 9 months of 1985 compared with the same period of 1984 contributed to the large overall decline in U.S. net imports of energy.

Energy 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
					Quadrillion (10^{15}) Btu				
1973	**Total**	**R13.993**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**R62.060**
1974	**Total**	**R14.074**	**18.575**	**2.471**	**21.210**	**3.177**	**1.272**	**0.056**	**R60.835**
1975	**Total**	**R14.990**	**17.729**	**2.374**	**19.640**	**3.155**	**1.900**	**0.072**	**R59.860**
1976	**Total**	**R15.654**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**R59.891**
1977	**Total**	**R15.755**	**17.454**	**2.327**	**19.565**	**2.333**	**2.702**	**0.082**	**R60.219**
1978	1st Quarter	R1.955	4.431	0.555	5.014	0.753	0.767	0.019	13.495
	2nd Quarter	R4.417	4.658	0.563	4.834	0.829	0.658	0.013	15.973
	3rd Quarter	R4.001	4.680	0.561	4.807	0.710	0.796	0.018	R15.574
	4th Quarter	R4.536	4.664	0.567	4.830	0.644	0.802	0.018	R16.061
	Total	**R14.910**	**18.434**	**2.245**	**19.485**	**2.937**	**3.024**	**0.068**	**R61.103**
1979	1st Quarter	R4.028	4.455	0.550	5.084	0.756	0.849	0.020	R15.742
	2nd Quarter	R4.583	4.502	0.570	4.953	0.831	0.539	0.021	R15.998
	3rd Quarter	R4.262	4.524	0.571	4.889	0.660	0.727	0.023	R15.654
	4th Quarter	R4.667	4.623	0.595	5.151	0.684	0.661	0.025	R16.406
	Total	**R17.539**	**18.104**	**2.286**	**20.076**	**2.931**	**2.776**	**0.089**	**R63.800**
1980	1st Quarter	R4.619	4.588	0.578	5.287	0.746	0.644	0.024	R16.486
	2nd Quarter	4.753	4.552	0.571	4.885	0.864	0.605	0.028	R16.258
	3rd Quarter	R4.449	4.549	0.547	4.706	0.666	0.752	0.031	R15.701
	4th Quarter	4.776	4.559	0.558	5.029	0.624	0.738	0.032	R16.316
	Total	**R18.597**	**18.249**	**2.254**	**19.907**	**2.900**	**2.739**	**0.114**	**R64.761**
1981	1st Quarter	4.799	4.481	0.581	4.995	0.678	0.743	0.033	16.310
	2nd Quarter	R3.032	4.519	0.570	4.942	0.754	0.679	0.031	14.527
	3rd Quarter	R5.233	4.569	0.575	4.881	0.683	0.821	0.033	R16.795
	4th Quarter	R5.313	4.577	0.581	4.880	0.644	0.765	0.030	R16.790
	Total	**R18.377**	**18.146**	**2.307**	**19.699**	**2.758**	**3.008**	**0.127**	**R64.422**
1982	1st Quarter	4.943	4.502	0.547	4.916	0.879	0.760	0.023	16.570
	2nd Quarter	R4.813	4.561	0.537	4.572	0.884	0.747	0.025	R16.137
	3rd Quarter	4.479	4.623	0.541	4.385	0.749	0.840	0.030	15.647
	4th Quarter	4.405	4.624	0.566	4.382	0.745	0.785	0.030	R15.536
	Total	**R18.639**	**18.309**	**2.191**	**18.255**	**3.256**	**3.131**	**0.108**	**R63.890**
1983	1st Quarter	4.241	4.550	0.541	4.215	0.922	0.776	0.028	R15.273
	2nd Quarter	R4.121	4.587	0.526	3.851	0.970	0.747	0.026	14.828
	3rd Quarter	R4.385	4.642	0.553	4.040	0.798	0.838	0.041	R15.297
	4th Quarter	R4.503	4.613	0.564	4.424	0.812	0.842	0.039	15.796
	Total	**R17.250**	**18.392**	**2.184**	**16.530**	**3.502**	**3.203**	**0.133**	**R61.194**
1984	1st Quarter	R4.911	4.646	R0.555	R4.682	R0.922	R0.919	0.039	R16.675
	2nd Quarter	R5.068	4.693	R0.560	R4.393	R0.949	R0.814	0.041	R16.519
	3rd Quarter	R5.385	4.746	R0.576	R4.342	R0.770	R0.939	0.044	R16.801
	4th Quarter	R4.359	4.763	R0.582	R4.515	R0.722	R0.866	0.050	R15.857
	Total	**R19.723**	**18.848**	**R2.274**	**R17.931**	**R3.363**	**R3.538**	**0.174**	**R65.852**
1985	1st Quarter	R4.701	4.660	R0.559	R4.541	R0.817	R1.059	0.052	R16.388
	2nd Quarter	R5.037	4.711	R0.557	R4.052	R0.784	R0.929	0.047	R16.116
	3rd Quarter	4.908	4.744	0.560	4.071	0.630	1.129	0.054	16.096

Revisions result primarily from revised conversion factors. See page 37.

[1]Includes lease condensate.
[2]Natural gas plant liquids.
[3]Includes industrial and utility production of hydroelectric power.
[4]Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
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 geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

Energy Summary

Consumption of Energy by Source—Quarterly Summary

		Coal	Natural Gas[1]	Petroleum	Hydro-electric Power[2]	Nuclear Electric Power	Other[3]	Total
					Quadrillion (10^{15}) Btu			
1973	**Total**	**R12.971**	**22.512**	**34.840**	**3.010**	**0.910**	**R0.039**	**R74.282**
1974	**Total**	**R12.663**	**21.732**	**33.455**	**3.309**	**1.272**	**R0.112**	**R72.543**
1975	**Total**	**R12.663**	**19.948**	**32.731**	**3.219**	**1.900**	**R0.086**	**R70.546**
1976	**Total**	**R13.584**	**20.345**	**35.175**	**3.066**	**2.111**	**0.081**	**R74.362**
1977	**Total**	**R13.922**	**19.931**	**37.122**	**2.515**	**2.702**	**R0.097**	**R76.289**
1978	1st Quarter	R3.150	6.561	9.971	0.804	0.767	R0.026	21.280
	2nd Quarter	R3.269	4.247	9.081	0.880	0.658	R0.057	R18.193
	3rd Quarter	3.727	3.926	9.178	0.762	0.796	R0.056	R18.446
	4th Quarter	3.619	5.265	9.735	0.696	0.802	R0.053	20.170
	Total	**R13.765**	**20.000**	**37.965**	**3.141**	**3.024**	**R0.193**	**R78.088**
1979	1st Quarter	3.769	6.648	10.072	0.808	0.849	R0.029	R22.174
	2nd Quarter	R3.572	4.423	8.837	0.883	0.539	R0.046	R18.300
	3rd Quarter	3.876	4.085	8.879	0.713	0.727	R0.047	R18.326
	4th Quarter	3.823	5.510	9.337	0.737	0.661	R0.030	20.098
	Total	**R15.039**	**20.666**	**37.123**	**3.141**	**2.776**	**R0.152**	**R78.898**
1980	1st Quarter	R3.995	6.606	9.143	0.800	0.644	R0.023	R21.212
	2nd Quarter	R3.546	4.255	8.177	0.919	0.605	R0.014	R17.516
	3rd Quarter	R4.020	3.977	8.123	0.721	0.752	R0.019	17.612
	4th Quarter	R3.861	5.553	8.759	0.678	0.738	R0.023	R19.612
	Total	**R15.423**	**20.391**	**34.202**	**3.118**	**2.739**	**R0.079**	**R75.952**
1981	1st Quarter	4.069	6.237	8.391	0.763	0.743	R0.029	20.232
	2nd Quarter	3.677	4.337	7.732	0.841	0.679	R0.025	17.291
	3rd Quarter	4.191	3.997	7.785	0.770	0.821	R0.032	17.596
	4th Quarter	3.971	5.355	8.023	0.731	0.765	R0.025	18.870
	Total	**15.908**	**19.926**	**31.931**	**3.105**	**3.008**	**R0.111**	**73.989**
1982	1st Quarter	R4.046	6.396	7.745	0.948	0.760	R0.019	19.915
	2nd Quarter	3.556	3.841	7.535	0.937	0.747	R0.018	16.634
	3rd Quarter	R3.990	3.532	7.419	0.834	0.840	R0.023	16.638
	4th Quarter	3.730	4.738	7.532	0.842	0.785	R0.027	R17.653
	Total	**R15.322**	**18.507**	**30.232**	**3.561**	**3.131**	**R0.086**	**R70.840**
1983	1st Quarter	3.737	5.369	7.311	1.008	0.776	R0.025	18.226
	2nd Quarter	R3.569	3.572	7.293	1.048	0.747	R0.021	16.251
	3rd Quarter	R4.440	3.317	7.626	0.901	0.838	R0.038	17.160
	4th Quarter	R4.152	5.093	7.824	0.914	0.842	R0.034	R18.859
	Total	**R15.898**	**17.352**	**30.054**	**3.871**	**3.203**	**R0.118**	**R70.495**
1984	1st Quarter	R4.314	R6.041	R7.909	R1.012	R0.919	R0.041	R20.235
	2nd Quarter	R4.009	R3.985	R7.675	R1.043	R0.814	R0.038	R17.564
	3rd Quarter	R4.490	R3.584	R7.755	R0.891	R0.939	R0.040	R17.699
	4th Quarter	R4.260	R4.923	R7.712	R0.829	R0.866	R0.044	R18.634
	Total	**R17.074**	**R18.532**	**R31.051**	**R3.774**	**R3.538**	**R0.163**	**R74.132**
1985	1st Quarter	R4.439	R5.927	R7.675	R0.916	R1.059	R0.054	R20.070
	2nd Quarter	R4.182	R3.548	R7.586	R0.875	R0.929	R0.042	R17.161
	3rd Quarter	4.632	3.412	7.724	0.749	1.129	0.048	17.694

Revisions result primarily from revised conversion factors. See page 37.

[1]Includes supplemental gaseous fuels.
[2]Includes industrial and utility production and net imports of electricity.
[3]Other is net imports of coal coke and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
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 geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

Energy Summary

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

		Coal	Crude Oil[2]	Refined Petroleum Products[3]	Natural Gas	Electricity	Coal Coke	Total
				Quadrillion (10^{15}) Btu				
1973	**Total**	**(1.422)**	**6.883**	**6.097**	**0.981**	**0.148**	**R(0.007)**	**12.680**
1974	**Total**	**(1.568)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.056**	**12.190**
1975	**Total**	**(1.738)**	**8.708**	**3.800**	**0.904**	**0.064**	**0.014**	**11.752**
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**	**18.018**
1978	1st Quarter	(0.036)	3.138	1.112	0.241	0.050	0.007	4.512
	2nd Quarter	(0.306)	3.063	0.891	0.214	0.051	0.044	3.959
	3rd Quarter	(0.264)	3.422	0.942	0.209	0.052	0.038	4.399
	4th Quarter	(0.398)	3.502	0.987	0.276	0.052	0.035	4.453
	Total	**(1.004)**	**13.125**	**3.932**	**0.941**	**0.204**	**0.125**	**17.323**
1979	1st Quarter	(0.277)	3.311	1.051	0.307	0.052	0.009	4.453
	2nd Quarter	(0.452)	3.252	0.787	0.307	0.052	0.025	3.972
	3rd Quarter	(0.455)	3.417	0.826	0.295	0.053	0.024	4.159
	4th Quarter	(0.517)	3.348	0.939	0.333	0.053	0.005	4.160
	Total	**(1.702)**	**13.328**	**3.603**	**1.243**	**0.211**	**0.063**	**16.745**
1980	1st Quarter	(0.363)	3.021	0.902	0.326	0.054	0.000	3.940
	2nd Quarter	(0.652)	2.696	0.625	0.203	0.054	(0.014)	2.913
	3rd Quarter	(0.678)	2.446	0.626	0.174	0.055	(0.011)	2.611
	4th Quarter	(0.698)	2.423	0.760	0.254	0.055	(0.009)	2.783
	Total	**(2.391)**	**10.586**	**2.912**	**0.957**	**0.217**	**(0.035)**	**12.247**
1981	1st Quarter	(0.578)	2.368	0.729	0.244	0.086	(0.004)	2.846
	2nd Quarter	(0.529)	2.127	0.552	0.185	0.087	(0.005)	2.416
	3rd Quarter	(0.883)	2.239	0.628	0.184	0.088	(0.001)	2.254
	4th Quarter	(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**	**(0.016)**	**9.644**
1982	1st Quarter	(0.668)	1.524	0.569	0.257	0.070	(0.004)	1.748
	2nd Quarter	(0.826)	1.672	0.466	0.190	0.053	(0.007)	1.549
	3rd Quarter	(0.655)	1.970	0.536	0.181	0.086	(0.008)	2.111
	4th Quarter	(0.619)	1.751	0.557	0.268	0.097	(0.004)	2.050
	Total	**(2.768)**	**6.917**	**2.128**	**0.896**	**0.306**	**(0.022)**	**7.457**
1983	1st Quarter	(0.392)	1.224	0.373	0.285	0.086	(0.003)	1.572
	2nd Quarter	(0.525)	1.686	0.539	0.186	0.079	(0.005)	1.959
	3rd Quarter	(0.572)	2.110	0.743	0.170	0.103	(0.003)	2.551
	4th Quarter	(0.524)	1.711	0.696	0.243	0.101	(0.004)	2.223
	Total	**(2.013)**	**6.731**	**2.351**	**0.883**	**0.369**	**(0.016)**	**8.306**
1984	1st Quarter	(0.393)	1.575	R0.924	R0.220	0.090	0.002	R2.418
	2nd Quarter	R(0.620)	1.820	R0.712	R0.184	R0.094	(0.003)	R2.186
	3rd Quarter	R(0.656)	1.747	R0.675	R0.152	R0.121	(0.003)	R2.036
	4th Quarter	(0.451)	1.775	R0.659	R0.231	0.107	(0.007)	R2.315
	Total	**R(2.119)**	**6.918**	**R2.970**	**R0.787**	**R0.411**	**(0.011)**	**R8.955**
1985	1st Quarter	R(0.481)	1.245	R0.587	R0.279	0.099	0.002	R1.731
	2nd Quarter	R(0.626)	1.696	R0.687	R0.194	R0.091	(0.005)	R2.037
	3rd Quarter	(0.666)	1.595	0.576	0.167	0.119	(0.006)	1.784

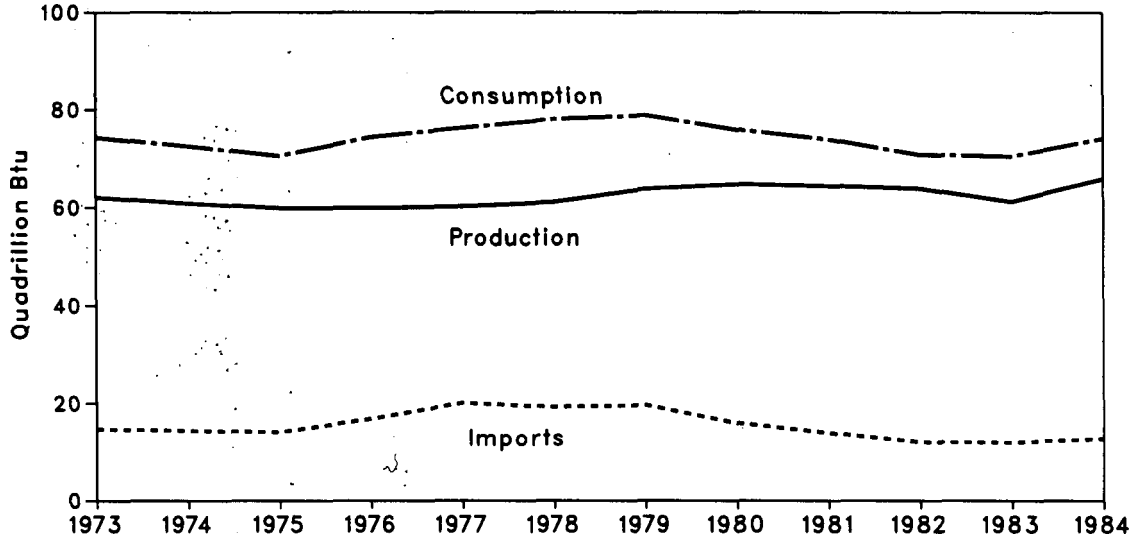
Revisions result primarily from revised conversion factors. See page 37.

[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.
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.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

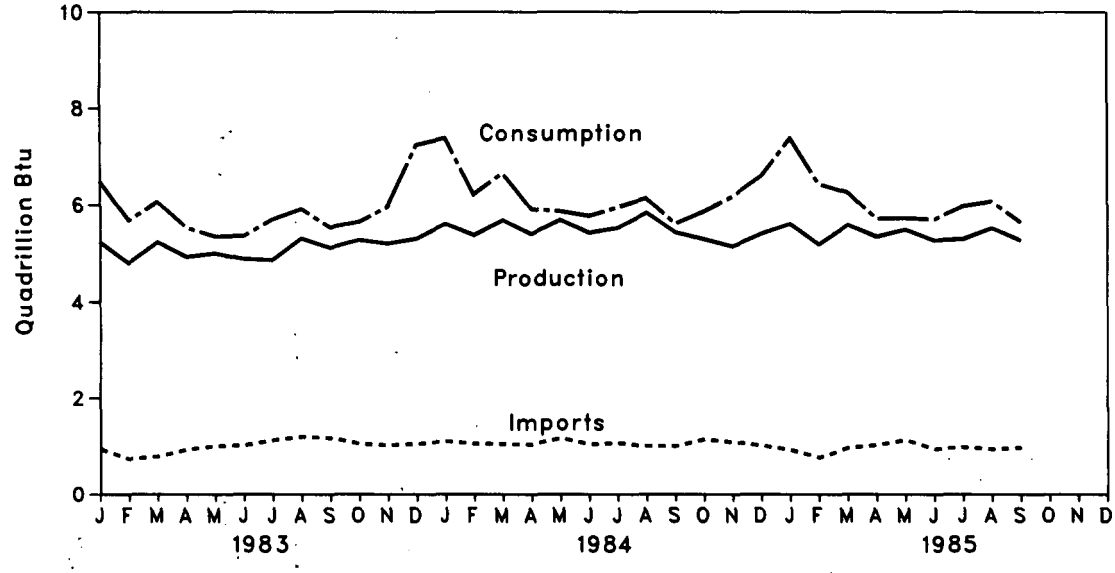
Energy Summary

Overview

Yearly



Monthly



Energy Summary

Overview[1]

		Production[2]	Consumption[2]	Imports[2]	Exports	Net Imports
				Quadrillion (10^{15}) Btu		
1973	**Total**	**R62.060**	**R74.282**	**R14.731**	**2.051**	**12.680**
1974	**Total**	**R60.835**	**R72.543**	**14.412**	**2.223**	**12.190**
1975	**Total**	**R59.860**	**R70.546**	**14.111**	**2.359**	**11.752**
1976	**Total**	**R59.891**	**R74.362**	**16.837**	**2.189**	**14.648**
1977	**Total**	**R60.219**	**R76.289**	**20.090**	**2.072**	**18.018**
1978	**Total**	**R61.103**	**R78.088**	**19.254**	**1.931**	**17.323**
1979	**Total**	**R63.800**	**R78.898**	**19.616**	**2.871**	**16.745**
1980	**Total**	**R64.761**	**R75.952**	**15.971**	**3.724**	**12.247**
1981	**Total**	**R64.422**	**73.989**	**13.974**	**4.329**	**9.644**
1982	**Total**	**R63.890**	**R70.840**	**12.093**	**4.636**	**7.457**
1983	January	5.237	6.483	0.942	0.301	0.641
	February	4.803	5.685	0.732	0.264	0.468
	March	5.233	6.058	0.783	0.319	0.464
	April	4.933	R5.532	0.931	0.314	0.617
	May	5.006	R5.354	1.005	0.348	0.657
	June	4.889	5.364	1.018	0.334	0.684
	July	4.866	5.700	1.124	0.273	0.851
	August	5.312	5.922	1.199	0.348	0.852
	September	5.120	5.538	1.172	0.323	0.849
	October	5.280	5.648	1.051	0.325	0.726
	November	5.208	5.966	1.019	0.280	0.739
	December	5.308	7.246	1.047	0.290	0.758
	Total	**R61.194**	**R70.495**	**12.024**	**3.719**	**8.306**
1984	January	R5.609	R7.367	R1.102	R0.247	R0.854
	February	R5.380	R6.213	R1.053	0.221	R0.832
	March	R5.686	R6.656	R1.047	R0.315	R0.732
	April	R5.401	R5.914	R1.035	0.327	R0.708
	May	R5.691	R5.873	R1.170	0.365	R0.805
	June	R5.427	R5.776	R1.040	0.367	R0.673
	July	R5.528	R5.953	R1.065	R0.326	R0.739
	August	R5.837	R6.135	R1.005	0.359	R0.646
	September	R5.436	R5.611	R1.005	0.355	R0.651
	October	R5.300	R5.870	R1.144	R0.295	R0.848
	November	R5.149	R6.166	R1.085	0.271	R0.814
	December	R5.408	R6.599	R1.012	R0.360	R0.652
	Total	**R65.852**	**R74.132**	**R12.763**	**R3.808**	**R8.955**
1985	January	R5.609	R7.382	R0.924	0.307	R0.618
	February	R5.190	R6.431	R0.767	0.307	R0.461
	March	R5.589	R6.257	R0.964	0.311	R0.653
	April	R5.347	R5.720	R1.025	0.332	R0.694
	May	R5.495	R5.732	R1.129	0.388	R0.741
	June	R5.274	R5.709	R0.945	R0.342	R0.603
	July	R5.299	R5.975	R0.982	0.327	R0.655
	August	R5.526	R6.072	R0.941	0.419	R0.522
	September	5.271	5.647	0.972	0.365	0.607
	Year to Date	**48.601**	**54.925**	**8.649**	**3.097**	**5.552**

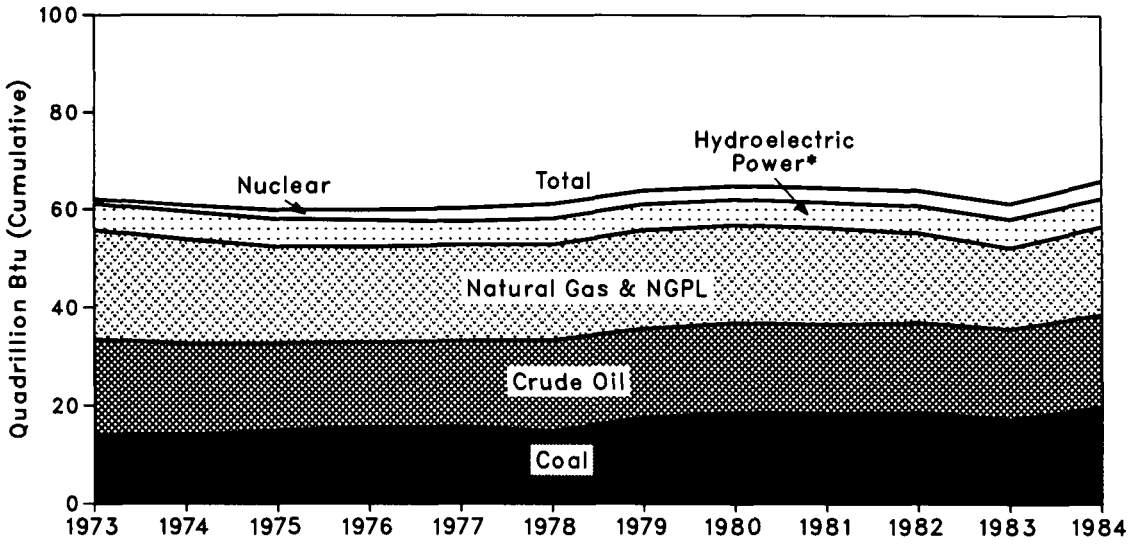
Revisions result primarily from revised conversion factors. See page 37.

[1]For definitions, see Notes on the last page of this section.
[2]The sum of domestic energy production and net imports of energy does not equal domestic energy consumption. The difference is attributed to stock changes; losses and gains in conversion, transportation, and distribution; the addition of blending compounds; shipments of anthracite to U.S. Armed Forces in Europe; and adjustments to account for discrepancies between reporting systems.
R=Revised data.
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 geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.
Source: • Energy Information Administration calculations based on data appearing elsewhere in this publication.

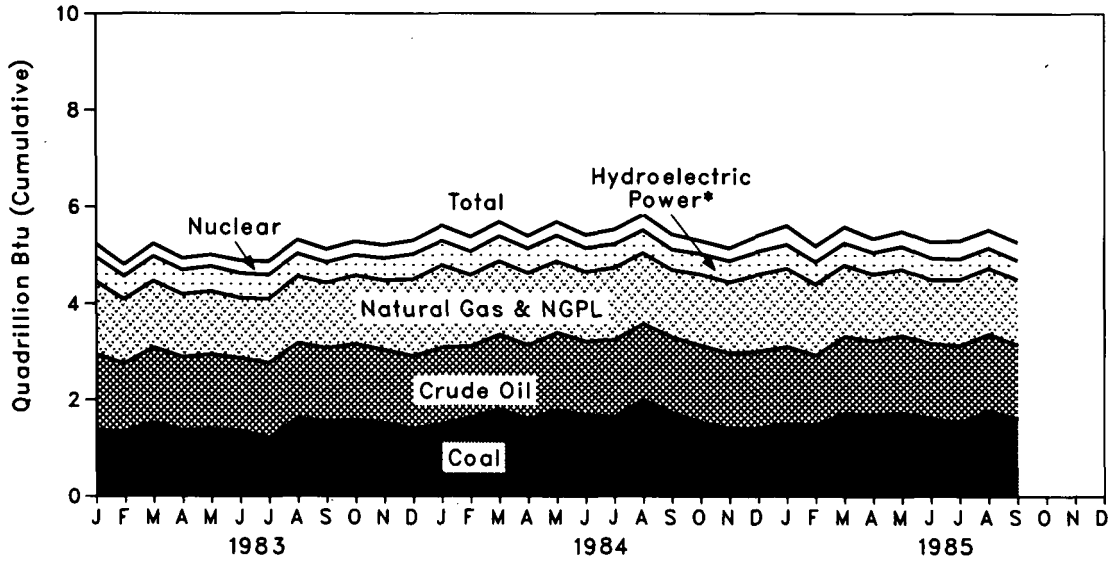
Energy Summary

Production of Energy by Source

Yearly



Monthly



*Includes other.

Energy 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	Year to Date
					Quadrillion (10^{15}) Btu					
1973	**Total**	**R13.993**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**R62.060**	
1974	**Total**	**R14.074**	**18.575**	**2.471**	**21.210**	**3.177**	**1.272**	**0.056**	**R60.835**	
1975	**Total**	**R14.990**	**17.729**	**2.374**	**19.640**	**3.155**	**1.900**	**0.072**	**R59.860**	
1976	**Total**	**R15.654**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**R59.891**	
1977	**Total**	**R15.755**	**17.454**	**2.327**	**19.565**	**2.333**	**2.702**	**0.082**	**R60.219**	
1978	**Total**	**R14.910**	**18.434**	**2.245**	**19.485**	**2.937**	**3.024**	**0.068**	**R61.103**	
1979	**Total**	**R17.539**	**18.104**	**2.286**	**20.076**	**2.931**	**2.776**	**0.089**	**R63.800**	
1980	**Total**	**R18.597**	**18.249**	**2.254**	**19.907**	**2.900**	**2.739**	**0.114**	**R64.761**	
1981	**Total**	**R18.377**	**18.146**	**2.307**	**19.699**	**2.758**	**3.008**	**0.127**	**R64.422**	
1982	**Total**	**R18.639**	**18.309**	**2.191**	**18.255**	**3.256**	**3.131**	**0.108**	**R63.890**	
1983	January	1.384	1.564	0.188	1.509	0.308	0.273	0.011	5.237	5.237
	February	1.338	1.422	0.169	1.329	0.295	0.242	0.008	4.803	10.040
	March	1.520	1.564	0.183	1.376	0.319	0.261	0.009	5.233	R15.273
	April	1.364	1.527	0.173	1.300	0.316	0.244	0.009	4.933	R20.206
	May	1.394	1.552	0.178	1.305	0.329	0.240	0.007	5.006	R25.212
	June	1.363	1.508	0.175	1.245	0.324	0.263	0.009	4.889	R30.101
	July	1.218	1.553	0.183	1.325	0.297	0.279	0.012	4.866	R34.967
	August	1.617	1.561	0.186	1.375	0.272	0.286	0.015	5.312	R40.278
	September	1.551	1.528	0.184	1.340	0.229	0.273	0.014	5.120	R45.398
	October	1.583	1.577	0.191	1.415	0.219	0.281	0.015	5.280	R50.678
	November	1.515	1.526	0.189	1.432	0.260	0.273	0.013	5.208	R55.886
	December	1.405	1.510	0.184	1.577	0.333	0.287	0.011	5.308	R61.194
	Total	**R17.250**	**18.392**	**2.184**	**16.530**	**3.502**	**3.203**	**0.133**	**R61.194**	
1984	January	R1.495	1.594	R0.186	1.695	R0.311	R0.317	0.011	R5.609	R5.609
	February	R1.622	1.493	R0.181	1.472	R0.292	R0.307	0.013	R5.380	R10.989
	March	R1.795	1.559	R0.189	1.515	R0.318	R0.295	0.015	R5.686	R16.675
	April	R1.601	1.542	R0.185	1.483	R0.314	R0.262	0.014	R5.401	R22.076
	May	R1.785	1.610	R0.191	1.478	R0.333	R0.279	0.014	R5.691	R27.766
	June	R1.682	1.540	R0.184	1.432	R0.302	R0.273	0.013	R5.427	R33.193
	July	R1.646	1.598	R0.193	1.485	R0.288	R0.305	0.013	R5.528	R38.721
	August	R1.999	1.584	R0.193	1.463	R0.263	R0.319	0.016	R5.837	R44.559
	September	R1.739	1.565	R0.190	1.394	R0.219	R0.315	0.015	R5.436	R49.995
	October	R1.536	1.601	R0.195	1.465	R0.219	R0.268	0.016	R5.300	R55.295
	November	R1.417	1.562	R0.192	1.463	R0.233	R0.265	0.016	R5.149	R60.444
	December	R1.405	1.600	R0.195	1.587	R0.270	R0.333	0.018	R5.408	R65.852
	Total	**R19.723**	**18.848**	**R2.274**	**17.931**	**R3.363**	**R3.538**	**0.174**	**R65.852**	
1985	January	R1.503	1.605	R0.194	1.610	R0.288	R0.391	0.018	R5.609	R5.609
	February	R1.482	1.450	R0.174	1.465	R0.271	R0.333	0.016	R5.190	R10.800
	March	R1.717	1.605	R0.191	1.465	R0.258	R0.335	0.018	R5.589	R16.388
	April	R1.690	1.539	R0.183	1.378	R0.256	R0.286	R0.015	R5.347	R21.735
	May	R1.730	1.613	R0.190	1.360	R0.277	R0.310	0.016	R5.495	R27.231
	June	R1.617	1.560	R0.185	1.313	R0.250	R0.333	0.016	R5.274	R32.505
	July	R1.532	1.601	R0.188	1.357	R0.224	R0.380	0.018	R5.299	R37.804
	August	R1.767	1.599	R0.191	1.365	R0.210	R0.376	0.018	R5.526	R43.330
	September	1.608	1.544	0.181	1.350	0.197	0.373	0.018	5.271	48.601
	Year to Date	**14.646**	**14.116**	**1.676**	**12.664**	**2.231**	**3.116**	**0.152**	**48.601**	

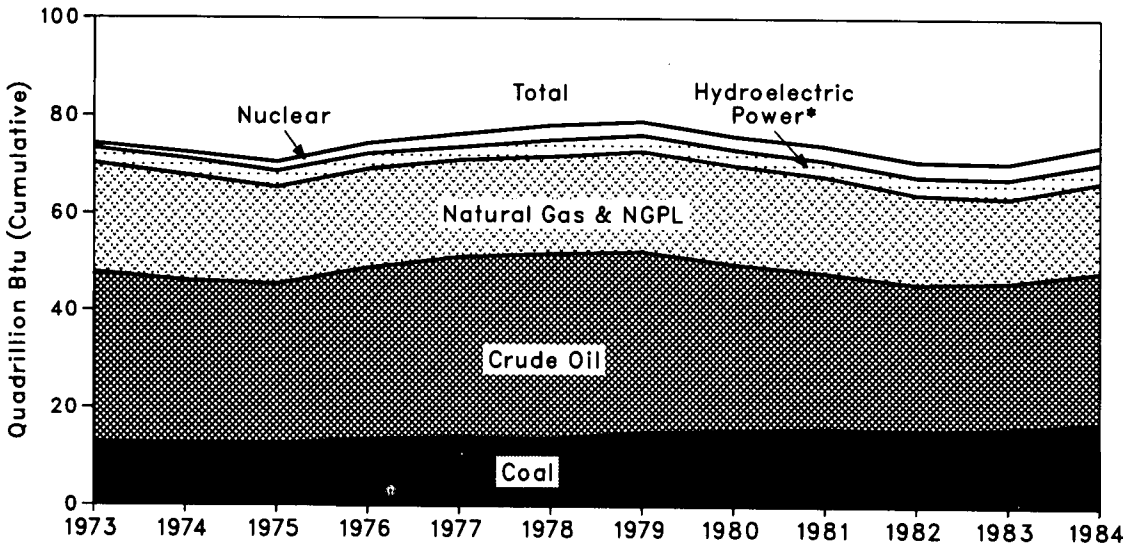
Revisions result primarily from revised conversion factors. See page 37.

[1]Includes lease condensate.
[2]Natural gas plant liquids.
[3]Includes industrial and utility production of hydroelectric power.
[4]Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
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 geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

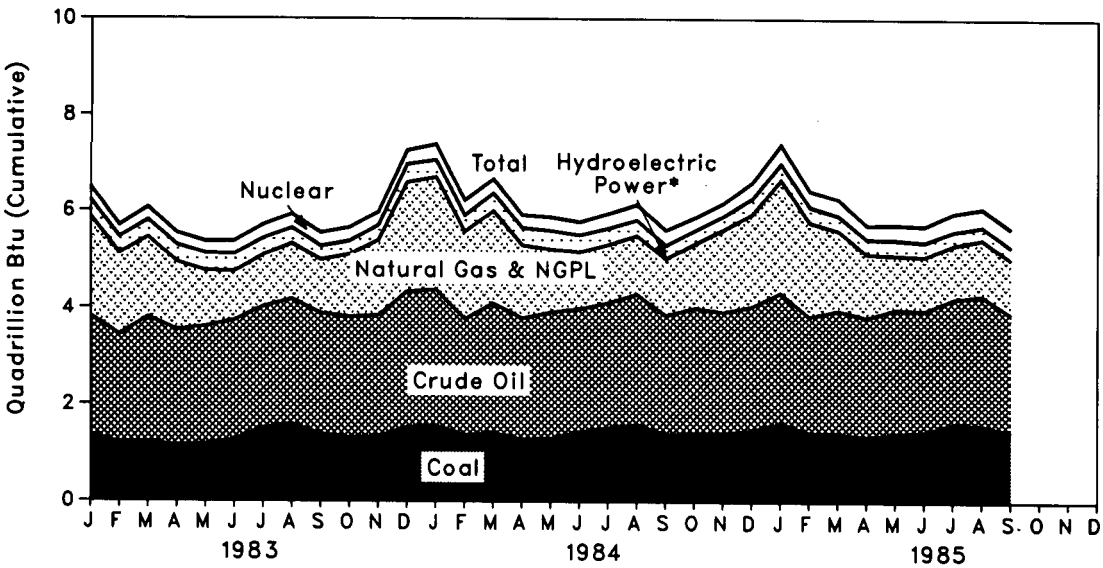
Energy Summary

Consumption of Energy by Source

Yearly



Monthly



*Includes other.

Energy Summary

Consumption of Energy by Source

		Coal	Natural Gas[1]	Petro-leum	Hydro-electric Power[2]	Nuclear Electric Power	Other[3]	Total	Year to Date
					Quadrillion (10^{15}) Btu				
1973	**Total**	**R12.971**	**22.512**	**34.840**	**3.010**	**0.910**	**R0.039**	**R74.282**	
1974	**Total**	**R12.663**	**21.732**	**33.455**	**3.309**	**1.272**	**R0.112**	**R72.543**	
1975	**Total**	**R12.663**	**19.948**	**32.731**	**3.219**	**1.900**	**R0.086**	**R70.546**	
1976	**Total**	**R13.584**	**20.345**	**35.175**	**3.066**	**2.111**	**0.081**	**R74.362**	
1977	**Total**	**R13.922**	**19.931**	**37.122**	**2.515**	**2.702**	**R0.097**	**R76.289**	
1978	**Total**	**R13.765**	**20.000**	**37.965**	**3.141**	**3.024**	**R0.193**	**R78.088**	
1979	**Total**	**R15.039**	**20.666**	**37.123**	**3.141**	**2.776**	**R0.152**	**R78.898**	
1980	**Total**	**R15.423**	**20.391**	**34.202**	**3.118**	**2.739**	**R0.079**	**R75.952**	
1981	**Total**	**15.908**	**19.926**	**31.931**	**3.105**	**3.008**	**R0.111**	**73.989**	
1982	**Total**	**R15.322**	**18.507**	**30.232**	**3.561**	**3.131**	**R0.086**	**R70.840**	
1983	January	1.360	2.036	2.467	0.337	0.273	R0.009	6.483	6.483
	February	1.180	1.693	2.239	0.323	0.242	R0.007	5.685	12.168
	March	1.196	1.640	2.604	0.348	0.261	0.009	6.058	18.226
	April	1.140	1.416	2.383	0.344	0.244	R0.006	R5.532	R23.758
	May	R1.172	1.153	2.431	0.352	0.240	R0.006	R5.354	R29.112
	June	1.257	1.004	2.480	0.351	0.263	0.009	5.364	R34.476
	July	R1.499	1.066	2.517	0.328	0.279	R0.010	5.700	R40.176
	August	1.574	1.146	2.594	0.307	0.286	0.015	5.922	R46.098
	September	R1.366	1.104	2.515	0.266	0.273	R0.013	5.538	R51.636
	October	1.305	1.285	2.507	0.256	0.281	R0.014	5.648	R57.284
	November	R1.325	1.550	2.514	0.292	0.273	R0.012	5.966	R63.249
	December	R1.522	2.259	2.803	0.366	0.287	R0.008	7.246	R70.495
	Total	**R15.898**	**17.352**	**30.054**	**3.871**	**3.203**	**R0.118**	**R70.495**	
1984	January	R1.552	2.333	R2.810	R0.344	R0.317	R0.012	R7.367	R7.367
	February	R1.359	1.796	R2.415	R0.320	R0.307	R0.015	R6.213	R13.580
	March	R1.403	1.911	R2.684	R0.348	R0.295	R0.014	R6.656	R20.235
	April	R1.272	1.503	R2.520	R0.344	R0.262	0.014	R5.914	R26.150
	May	R1.298	1.304	R2.612	R0.366	R0.279	R0.013	R5.873	R32.023
	June	R1.439	1.177	R2.542	R0.333	R0.273	R0.011	R5.776	R37.799
	July	R1.519	1.199	R2.592	R0.325	R0.305	R0.012	R5.953	R43.752
	August	R1.587	1.210	R2.695	R0.309	R0.319	R0.014	R6.135	R49.887
	September	R1.384	1.174	R2.468	R0.256	R0.315	R0.014	R5.611	R55.498
	October	R1.395	1.323	R2.612	R0.260	R0.268	R0.013	R5.870	R61.368
	November	R1.394	1.697	R2.529	R0.266	R0.265	R0.014	R6.166	R67.534
	December	R1.470	1.903	R2.571	R0.303	R0.333	R0.017	R6.599	R74.132
	Total	**R17.074**	**18.532**	**R31.051**	**R3.774**	**R3.538**	**R0.163**	**R74.132**	
1985	January	R1.618	2.334	R2.700	R0.321	R0.391	0.018	R7.382	R7.382
	February	R1.422	1.942	R2.413	R0.304	R0.333	R0.017	R6.431	R13.813
	March	R1.400	1.651	R2.562	R0.291	R0.335	0.018	R6.257	R20.070
	April	R1.336	1.311	R2.484	R0.288	R0.286	0.016	R5.720	R25.790
	May	R1.401	1.119	R2.586	R0.304	R0.310	R0.013	R5.732	R31.522
	June	R1.445	1.118	R2.517	R0.282	R0.333	R0.014	R5.709	R37.231
	July	R1.606	1.118	R2.595	R0.260	R0.380	R0.016	R5.975	R43.206
	August	R1.583	1.164	R2.683	R0.249	R0.376	R0.017	R6.072	R49.277
	September	1.444	1.130	2.446	0.240	0.373	0.015	5.647	54.925
	Year to Date	**13.253**	**12.886**	**22.985**	**2.540**	**3.116**	**0.144**	**54.925**	

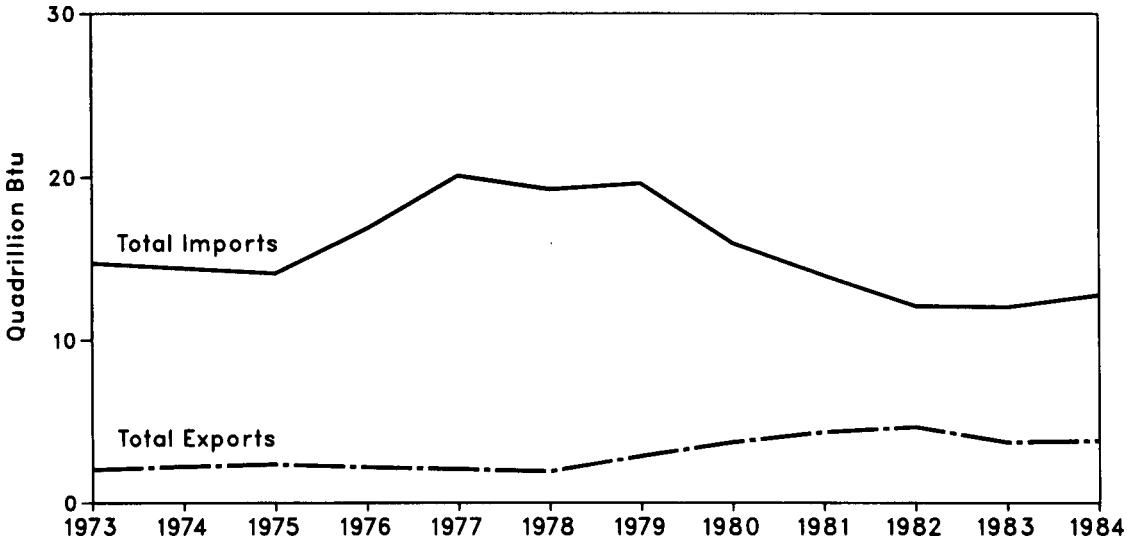
Revisions result primarily from revised conversion factors. See page 37.

[1]Includes supplemental gaseous fuels.
[2]Includes industrial and utility production and net imports of electricity.
[3]Other is net imports of coal coke and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
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 geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by electric utilities.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

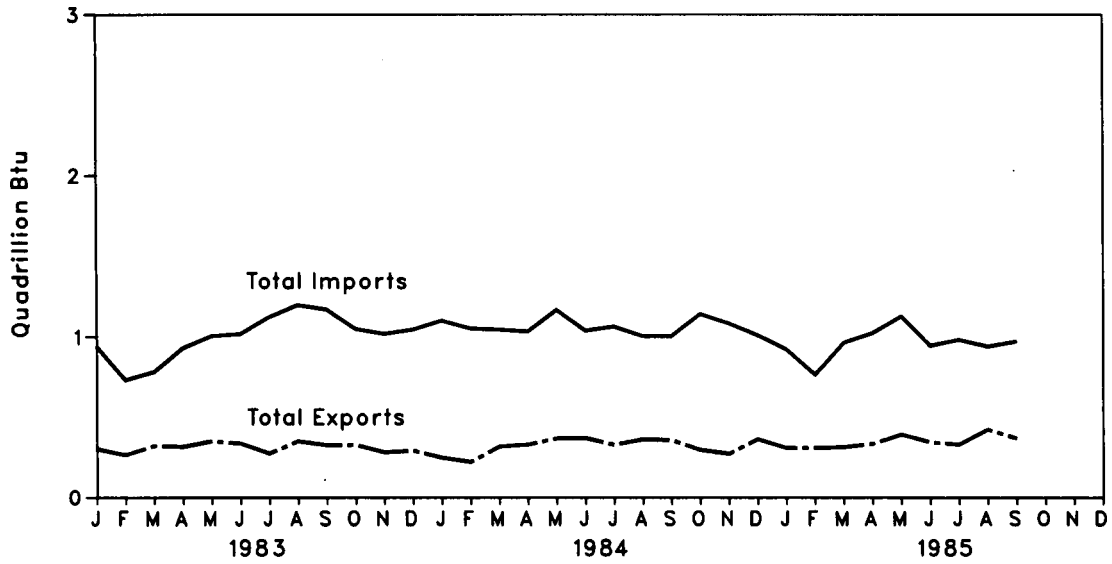
Energy Summary

Energy Imports and Exports

Yearly



Monthly



Energy Summary

Net Imports[1] of Energy by Source

		Coal	Crude Oil[2]	Refined Petroleum Products[3]	Natural Gas	Electricity	Coal Coke	Total	Year to Date
					Quadrillion (10^{15}) Btu				
1973	**Total**	**(1.422)**	**6.883**	**6.097**	**0.981**	**0.148**	**R(0.007)**	**12.680**	
1974	**Total**	**(1.568)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.056**	**12.190**	
1975	**Total**	**(1.738)**	**8.708**	**3.800**	**0.904**	**0.064**	**0.014**	**11.752**	
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**	**18.018**	
1978	**Total**	**(1.004)**	**13.125**	**3.932**	**0.941**	**0.204**	**0.125**	**17.323**	
1979	**Total**	**(1.702)**	**13.328**	**3.603**	**1.243**	**0.211**	**0.063**	**16.745**	
1980	**Total**	**(2.391)**	**10.586**	**2.912**	**0.957**	**0.217**	**(0.035)**	**12.247**	
1981	**Total**	**(2.918)**	**8.854**	**2.522**	**0.855**	**0.347**	**(0.016)**	**9.644**	
1982	**Total**	**(2.768)**	**6.917**	**2.128**	**0.896**	**0.306**	**(0.022)**	**7.457**	
1983	January	(0.116)	0.514	0.105	0.110	0.028	(0.001)	0.641	0.641
	February	(0.113)	0.327	0.134	0.092	0.029	(0.001)	0.468	1.108
	March	(0.162)	0.382	0.134	0.083	0.028	(0.001)	0.464	1.572
	April	(0.157)	0.530	0.148	0.071	0.028	(0.002)	0.617	2.190
	May	(0.180)	0.556	0.202	0.057	0.023	(0.002)	0.657	2.847
	June	(0.188)	0.600	0.188	0.057	0.028	(0.001)	0.684	3.531
	July	(0.159)	0.673	0.252	0.054	0.032	(0.002)	0.851	4.382
	August	(0.217)	0.732	0.252	0.051	0.034	(0.001)	0.852	5.233
	September	(0.195)	0.705	0.239	0.065	0.037	(0.001)	0.849	6.082
	October	(0.209)	0.597	0.241	0.061	0.037	(0.001)	0.726	6.809
	November	(0.153)	0.551	0.233	0.077	0.032	(0.001)	0.739	7.548
	December	(0.162)	0.563	0.222	0.105	0.032	(0.003)	0.758	8.306
	Total	**(2.013)**	**6.731**	**2.351**	**0.883**	**0.369**	**(0.016)**	**8.306**	
1984	January	(0.132)	0.524	R0.336	0.092	R0.032	0.001	R0.854	R0.854
	February	(0.109)	0.467	R0.379	0.064	R0.028	0.002	R0.832	R1.686
	March	(0.152)	0.584	R0.209	0.063	0.029	(0.001)	R0.732	R2.418
	April	R(0.199)	0.567	R0.244	0.066	0.030	0.000	R0.708	R3.126
	May	R(0.215)	0.672	R0.255	0.061	R0.032	(0.001)	R0.805	R3.931
	June	R(0.205)	0.581	R0.213	0.056	0.031	(0.002)	R0.673	R4.605
	July	(0.215)	0.639	R0.228	0.050	R0.037	(0.001)	R0.739	R5.344
	August	(0.214)	0.552	R0.214	0.049	0.046	(0.002)	R0.646	R5.990
	September	(0.228)	0.556	R0.233	0.052	R0.037	0.000	R0.651	R6.640
	October	(0.173)	0.652	R0.269	0.062	0.041	(0.003)	R0.848	R7.489
	November	(0.109)	0.591	R0.223	0.079	0.033	(0.003)	R0.814	R8.303
	December	(0.169)	0.533	R0.167	0.089	0.033	(0.001)	R0.652	R8.955
	Total	**R(2.119)**	**6.918**	**R2.970**	**0.787**	**R0.411**	**(0.011)**	**R8.955**	
1985	January	R(0.150)	0.462	R0.174	0.099	E0.033	0.000	R0.618	R0.618
	February	(0.157)	0.311	R0.178	0.094	E0.033	0.001	R0.461	R1.078
	March	(0.174)	0.473	R0.236	0.085	E0.033	0.000	R0.653	R1.731
	April	R(0.181)	0.553	R0.219	0.070	RE0.032	0.001	R0.694	R2.425
	May	(0.240)	0.627	R0.264	0.065	E0.027	(0.003)	R0.741	R3.166
	June	R(0.205)	0.515	R0.205	0.058	E0.032	(0.002)	R0.603	R3.768
	July	(0.189)	0.548	R0.207	0.054	E0.037	(0.002)	R0.655	R4.423
	August	R(0.268)	0.518	R0.181	0.053	RE0.039	(0.001)	R0.522	R4.945
	September	(0.209)	0.529	0.188	0.059	E0.043	(0.003)	0.607	5.552
	Year to Date	**(1.774)**	**4.536**	**1.850**	**0.640**	**E0.309**	**(0.008)**	**5.552**	

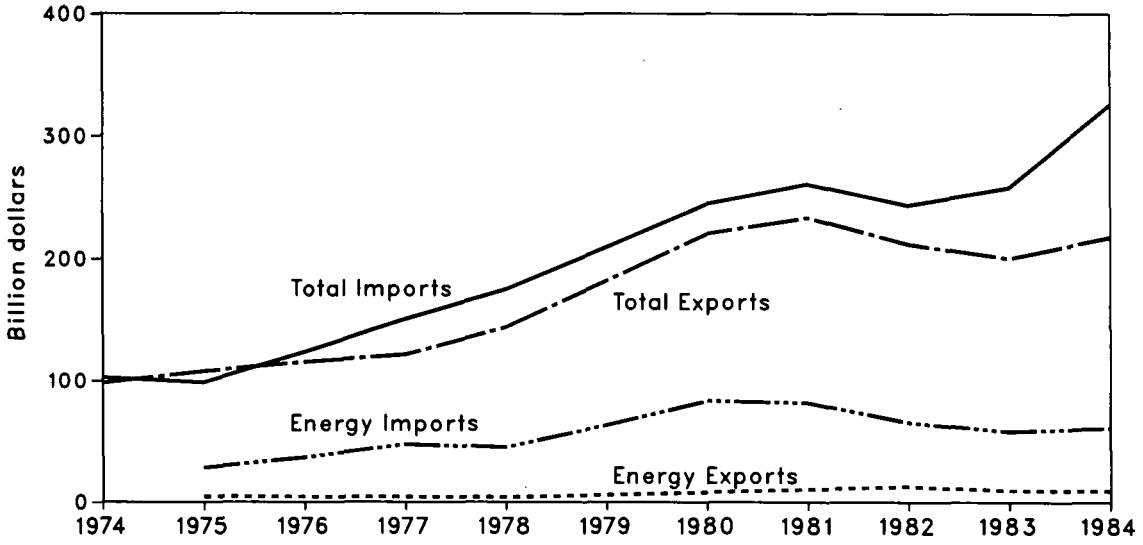
Revisions result primarily from revised conversion factors. See page 37.

[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.
E=Estimated value. 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.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

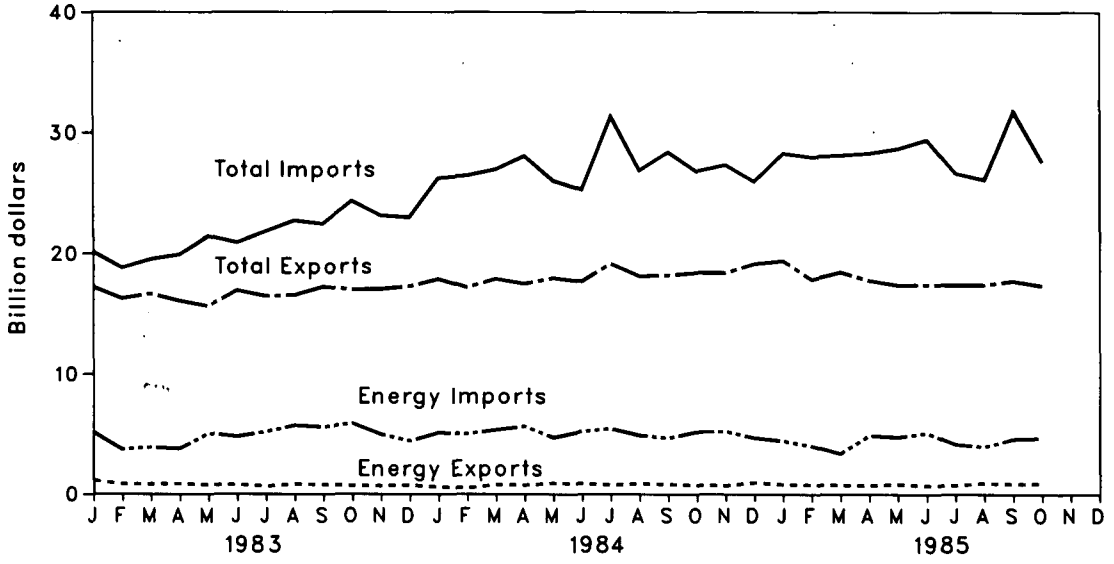
Energy Summary

Merchandise Trade Value

Yearly



Monthly



Energy Summary

Merchandise Trade Value

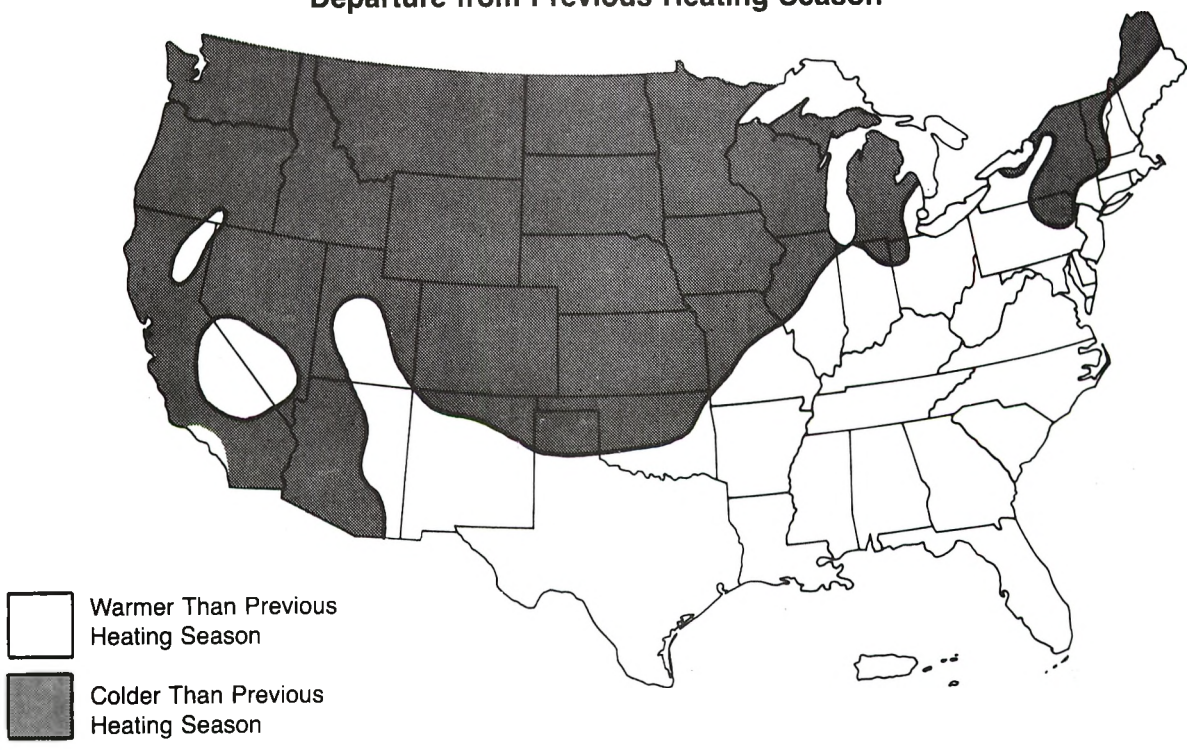
		Exports			Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total
					Million dollars					
1974	**Total**	**NA**	**NA**	**98,092**	**NA**	**NA**	**102,559**	**NA**	**NA**	**-4,467**
1975	**Total**	**4,470**	**103,182**	**107,652**	**28,325**	**70,178**	**98,503**	**-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	**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	582	17,307	17,889	5,089	21,116	26,205	-4,507	-3,809	-8,316
	February	502	16,706	17,208	5,006	21,414	26,420	-4,504	-4,708	-9,212
	March	790	17,116	17,906	5,323	21,625	26,948	-4,533	-4,510	-9,043
	April	759	16,761	17,520	5,629	22,445	28,074	-4,870	-5,683	-10,553
	May	901	17,077	17,978	4,696	21,316	26,012	-3,795	-4,239	-8,034
	June	872	16,833	17,705	5,206	20,070	25,276	-4,334	-3,237	-7,571
	July	765	18,389	19,154	5,434	25,900	31,334	-4,669	-7,511	-12,180
	August	878	17,245	18,123	4,886	21,980	26,866	-4,008	-4,735	-8,743
	September	820	17,390	18,210	4,663	23,746	28,409	-3,843	-6,357	-10,200
	October	757	17,654	18,411	5,168	21,615	26,783	-4,411	-3,961	-8,372
	November	712	17,683	18,395	5,207	22,124	27,331	-4,495	-4,442	-8,937
	December	973	18,169	19,142	4,672	21,261	25,933	-3,699	-3,092	-6,791
	Total	**9,311**	**208,554**	**217,865**	**60,980**	**264,746**	**325,726**	**-51,669**	**-56,192**	**-107,861**
1985	January	804	18,597	19,401	4,434	23,863	28,297	-3,630	-5,266	-8,896
	February	786	17,067	17,853	3,989	23,996	27,985	-3,203	-6,928	-10,131
	March	754	17,692	18,446	3,351	24,778	28,129	-2,597	-7,086	-9,683
	April	738	17,041	17,779	4,876	23,419	28,295	-4,138	-6,378	-10,516
	May	837	16,577	17,414	4,748	23,937	28,685	-3,911	-7,360	-11,271
	June	708	16,730	17,438	5,088	24,337	29,425	-4,380	-7,607	-11,987
	July	760	16,652	17,412	4,146	22,484	26,630	-3,386	-5,833	-9,219
	August	934	16,489	17,423	3,937	22,146	26,083	-3,003	-5,657	-8,660
	September	868	16,864	17,732	4,597	27,167	31,764	-3,729	-10,303	-14,032
	October	903	16,465	17,368	4,699	22,895	27,594	-3,796	-6,430	-10,226
	Year to Date	**8,092**	**170,175**	**178,267**	**43,865**	**239,022**	**282,887**	**-35,773**	**-68,847**	**-104,620**

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.

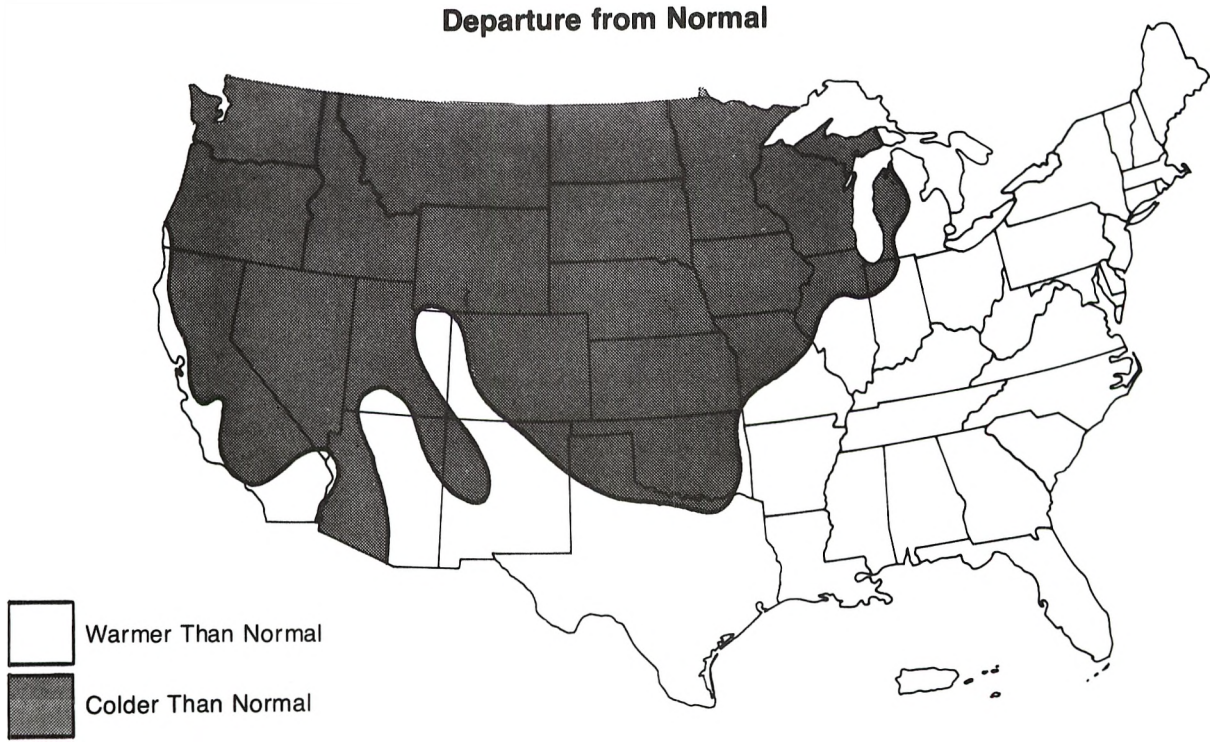
Energy Summary

Heating Degree-Days Accumulated from July 1, 1985 through November 30, 1985

Departure from Previous Heating Season



Departure from Normal



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

Energy Summary

Population-Weighted Heating Degree-Days[1]

Census Divisions	November 1 through November 30					Cumulative July 1 through November 30				
				Percent Change					Percent Change	
	Normal[2]	1984	1985	Normal to 1985	1984 to 1985	Normal[2]	1984	1985	Normal to 1985	1984 to 1985
New England CT, ME, MA, NH, RI, VT	705	707	679	-3.7	-4.0	1,320	1,325	1,256	-4.8	-5.2
Middle Atlantic NJ, NY, PA	654	671	557	-14.8	-17.0	1,124	1,034	953	-15.2	-7.8
Eastern North Central IL, IN, MI, OH, WI	744	759	707	-5.0	-6.9	1,235	1,243	1,226	-0.7	-1.4
Western North Central IA, KS, MN, MO, NE, ND, SD	805	782	997	23.9	27.5	1,334	1,390	1,662	24.6	19.6
South Atlantic DE, FL, GA, MD and DC, NC, SC, VA, WV	366	410	201	-45.1	-51.0	552	525	340	-38.4	-35.2
Eastern South Central AL, KY, MS, TN	453	500	253	-44.2	-49.4	684	596	383	-44.0	-35.7
Western South Central AR, LA, OK, TX	296	307	226	-23.6	-26.4	387	405	314	-18.9	-22.5
Mountain AZ, CO, ID, MT, NV, NM, UT, WY	700	677	841	20.1	24.2	1,250	1,362	1,503	20.2	10.4
Pacific Coast CA, OR, WA	387	413	500	29.2	21.1	632	713	794	25.6	11.4
U.S. Average[3]	**553**	**571**	**519**	**-6.1**	**-9.1**	**911**	**910**	**875**	**-4.0**	**-3.8**

[1] See Note 6 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.
Source: • See Note 6 on the last page of this section.

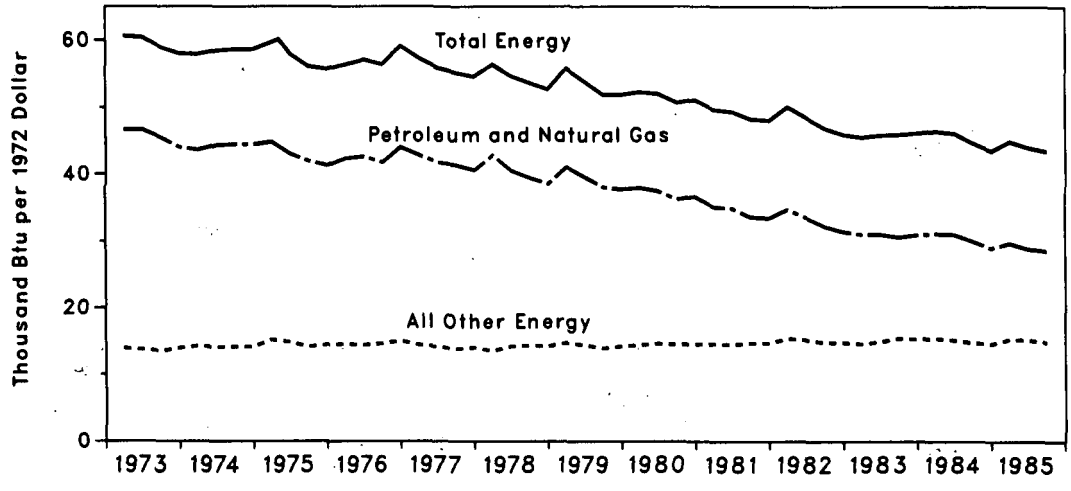
Energy Summary

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	**Year**	**R74.282**	**1.254**	**59.2**	**45.7**	**13.5**
1974	**Year**	**R72.543**	**1.246**	**58.2**	**44.3**	**13.9**
1975	**Year**	**R70.546**	**1.232**	**57.3**	**42.8**	**14.5**
1976	**Year**	**R74.362**	**1.298**	**57.3**	**42.8**	**14.5**
1977	**Year**	**R76.289**	**1.370**	**55.7**	**41.6**	**14.1**
1978	**Year**	**R78.088**	**1.439**	**54.3**	**40.3**	**14.0**
1979	**Year**	**R78.898**	**1.479**	**53.3**	**39.1**	**14.2**
1980	**Year**	**R75.952**	**1.475**	**51.5**	**37.0**	**14.5**
1981	**Year**	**73.989**	**1.512**	**48.9**	**34.3**	**14.6**
1982	**Year**	**R70.840**	**1.480**	**47.9**	**32.9**	**15.0**
1983	1st Quarter[1]	R68.028	1.491	R45.6	31.0	R14.6
	2nd Quarter[1]	R69.936	1.525	45.9	31.0	14.9
	3rd Quarter[1]	R71.302	1.550	46.0	30.6	15.4
	4th Quarter[1]	R72.655	1.573	R46.2	30.9	R15.3
	Year	**R70.495**	**1.535**	**45.9**	**30.9**	**15.0**
1984	1st Quarter[1]	R74.873	1.611	R46.5	R31.1	15.4
	2nd Quarter[1]	R75.674	1.639	46.2	31.0	15.2
	3rd Quarter[1]	R73.622	1.645	R44.8	30.0	R14.8
	4th Quarter[1]	R72.388	1.662	R43.6	R29.0	R14.6
	Year	**R74.132**	**1.639**	**R45.2**	**30.3**	**R14.9**
1985	1st Quarter[1]	R74.959	1.664	R45.0	R29.7	R15.3
	2nd Quarter[1]	R73.746	1.671	R44.1	28.9	R15.2
	3rd Quarter[1]	73.440	1.689	43.5	28.6	14.9

Revisions result primarily from revised conversion factors. See page 37.

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



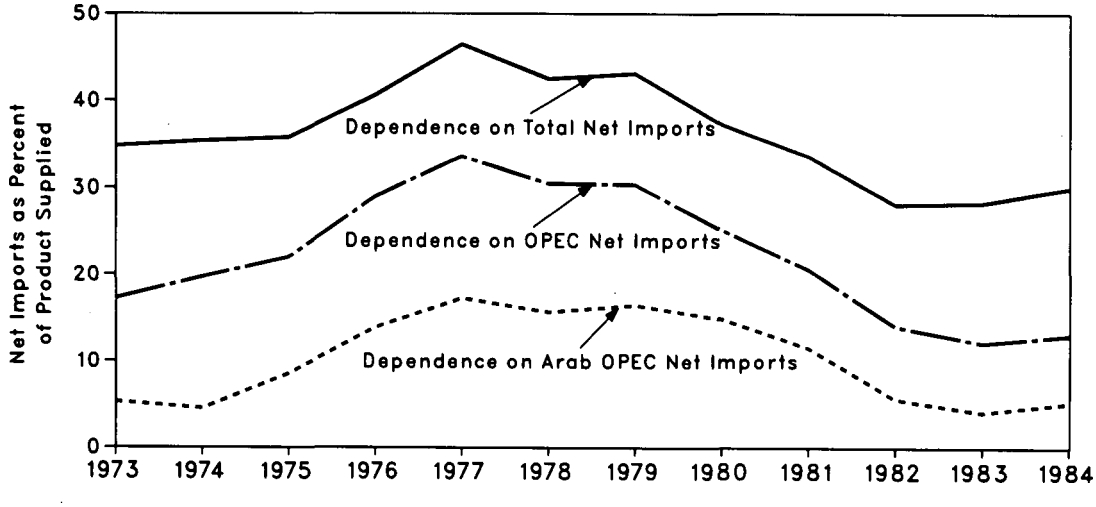
[1]Quarterly data are seasonally adjusted and shown at annual rates.
R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Yearly data may not equal average of quarters due to seasonality adjustments and independent rounding.
Sources: • See the last page of this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

Energy 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**	**914**	**2,991**	**6,025**	**17,308**	**5.3**	**17.3**	**34.8**
1974	**Average**	**752**	**3,277**	**5,892**	**16,653**	**4.5**	**19.7**	**35.4**
1975	**Average**	**1,382**	**3,599**	**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**	**5,633**	**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**	**1,844**	**3,315**	**5,401**	**16,058**	**11.5**	**20.6**	**33.6**
1982	**Average**	**852**	**2,136**	**4,298**	**15,296**	**5.6**	**14.0**	**28.1**
1983	1st Quarter	351	1,174	3,079	15,026	2.3	7.8	20.5
	2nd Quarter	444	1,708	4,237	14,825	3.0	11.5	28.6
	3rd Quarter	860	2,501	5,370	15,333	5.6	16.3	35.0
	4th Quarter	857	1,972	4,536	15,732	5.4	12.5	28.8
	Average	**630**	**1,843**	**4,312**	**15,231**	**4.1**	**12.1**	**28.3**
1984	1st Quarter	769	1,878	4,802	16,110	4.8	11.7	29.8
	2nd Quarter	907	2,278	4,853	15,632	5.8	14.6	31.0
	3rd Quarter	877	2,080	4,590	15,625	5.6	13.3	29.4
	4th Quarter	715	1,912	4,618	15,538	4.6	12.3	29.7
	Average	**817**	**2,037**	**4,715**	**15,726**	**5.2**	**13.0**	**30.0**
1985	1st Quarter	327	1,364	3,564	15,807	2.1	8.6	22.5
	2nd Quarter	536	1,837	4,567	15,452	3.5	11.9	29.6
	3rd Quarter	292	1,767	4,116	15,562	1.9	11.4	26.4

U.S. Dependence on Petroleum Net Imports



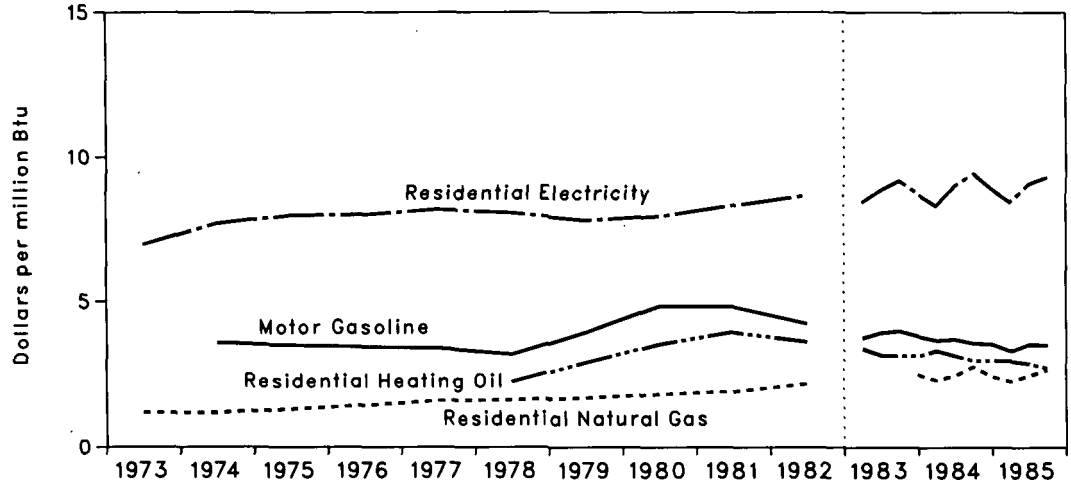
[1]Beginning in October 1977, Strategic Petroleum Reserves are included.
[2]Net imports equals imports minus exports. Imports from OPEC countries exclude indirect imports which are refined products imported primarily from Caribbean and West European areas and refined from crude oil produced in OPEC countries.
[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.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Annual averages may not equal average of quarters due to independent rounding.
Sources: • See the last page of this section.

Energy Summary

Energy Indicator—Cost of Fuels to End Users in Constant (1972) Dollars[1]

		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**	**NA**	**NA**	**121.3**	**1.18**	**2.63**	**7.71**
1975	**Average**	**44.1**	**3.53**	**NA**	**NA**	**132.9**	**1.30**	**2.73**	**8.00**
1976	**Average**	**43.4**	**3.47**	**NA**	**NA**	**145.5**	**1.43**	**2.74**	**8.03**
1977	**Average**	**42.9**	**3.43**	**NA**	**NA**	**162.2**	**1.59**	**2.80**	**8.21**
1978	**Average**	**40.1**	**3.21**	**31.4**	**2.26**	**164.2**	**1.62**	**2.76**	**8.09**
1979	**Average**	**49.4**	**3.95**	**40.6**	**2.93**	**171.8**	**1.69**	**2.67**	**7.83**
1980	**Average**	**60.5**	**4.84**	**49.4**	**3.56**	**186.8**	**1.82**	**2.72**	**7.97**
1981	**Average**	**60.4**	**4.83**	**54.9**	**3.96**	**197.3**	**1.92**	**2.85**	**8.35**
1982	**Average**	**53.0**	**4.24**	**50.3**	**3.63**	**224.1**	**2.19**	**2.97**	**8.70**
1983	1st Quarter	47.1	3.77	47.3	3.41	NA	NA	2.89	8.47
	2nd Quarter	49.3	3.94	44.2	3.19	NA	NA	3.03	8.88
	3rd Quarter	50.0	4.00	43.9	3.17	NA	NA	3.14	9.20
	4th Quarter	47.9	3.83	43.9	3.17	260.9	2.53	2.99	8.76
	Average	**48.6**	**3.89**	**45.3**	**3.27**	**254.5**	**2.47**	**3.01**	**8.82**
1984	1st Quarter	46.1	3.69	46.4	3.35	239.6	2.33	2.85	8.35
	2nd Quarter	46.5	3.72	43.9	3.17	256.1	2.49	3.08	9.03
	3rd Quarter	44.9	3.59	41.6	3.00	286.9	2.79	3.22	9.44
	4th Quarter	44.5	3.56	41.7	3.01	253.5	2.46	3.04	8.91
	Average	**45.5**	**3.64**	**43.9**	**3.17**	**246.5**	**2.39**	**3.04**	**8.91**
1985	1st Quarter	41.7	3.33	41.5	2.99	234.5	2.28	2.89	8.47
	2nd Quarter	44.4	3.55	40.2	2.90	255.5	2.48	3.10	9.09
	3rd Quarter	44.2	3.53	38.1	2.75	275.7	2.68	3.18	9.32

Average Cost of Fuels to End Users in Constant (1972) Dollars[1]



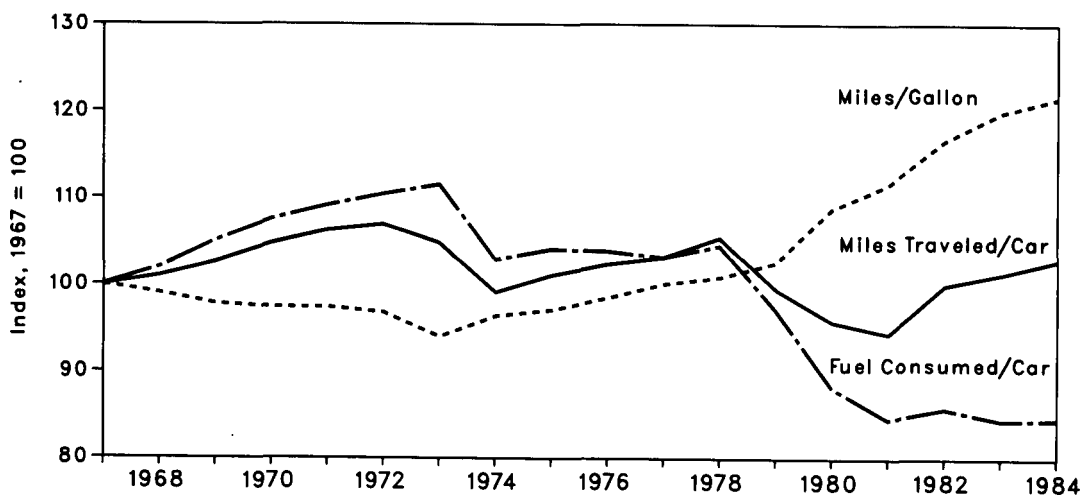
[1]*Fuel costs shown on this page are calculated using the Urban Consumer Price Index developed by the Bureau of Labor Statistics. See the Conversion Factors section of this report.*
NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Annual averages may not equal average of quarters due to independent rounding.
Sources: • See the last page of this section.

Energy 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	587	85.8	9,533	100.0	16.25	116.7
1983	578	84.5	9,654	101.3	16.70	119.9
1984†	579	84.6	9,809	102.9	16.94	121.6

U.S. Passenger Car Efficiency Index



†Preliminary data.
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 Energy 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 hydroelectric power, electricity generated from nuclear power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. 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 (including supplemental gaseous fuels), refined petroleum products supplied, electric utility and industrial production of hydroelectric power, net imports of electricity produced from hydroelectric power, net imports of coal coke, electricity generated from nuclear power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. 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, electricity produced from hydroelectric power, and coal coke. Approximate heat contents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication. For further information on electricity, see the note and sources for imports and exports of electricity in Note 7 of the Notes and Sources for the Consumption Section.

4. Energy Exports: Energy exports include coal, crude oil, refined petroleum products, natural gas, electricity produced from hydroelectric power, and coal coke. Approximate heat contents (Btu values) are derived using the conversion factors provided in the Conversion Factors section of this publication. For more information on electricity, see the note and sources for imports and exports of electricity in Note 7 of the Notes and Sources for the Consumption Section.

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 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., re-exports). 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 used 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, NC, 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:
• Leaded Regular Motor Gasoline—Bureau of Labor Statistics (BLS).
• Residential Heating Oil—EIA, 1983 forward: EIA Form-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA Form-782B, "Resellers/Retailers' Monthly Petroleum Product Sales Report." Prices prior to 1983 are EIA estimates using data from FEA Form P112-M1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report" and EIA Form 9-A, "No. 2 Distillate Price Monitoring Report." See Note 8 in the Notes and Sources for the Price Section for additional information.
• Residential Natural Gas—EIA, Annual data from Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Monthly data from Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."
• Residential 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)—BLS.
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.

Consumption

Total U.S. energy consumption in September 1985 was 5.6 quadrillion Btu, 0.6 percent above the September 1984 level. Petroleum products accounted for 43.3 percent of the energy consumed in September 1985, while coal accounted for 25.6 percent and natural gas accounted for 20.0 percent.

The transportation sector used 63.4 percent of the petroleum products consumed in September 1985 and the industrial sector used 27.3 percent. Of natural gas consumed, the industrial sector used 51.6 percent; electric utilities, 25.0 percent; and the residential and commercial sector, 20.5 percent. Most of the coal used (83.0 percent) was consumed by electric utilities. The residential and commercial sector used 65.1 percent of total electricity sales, while the industrial sector used 34.8 percent.

Residential and commercial sector consumption was 1.8 quadrillion Btu in September 1985, up 3.6 percent from the level in September 1984. This sector consumed 32.2 percent of the September 1985 total, up from its 31.3-percent share in September 1984.

Industrial sector consumption was 2.2 quadrillion Btu in September 1985, down 0.3 percent from the September 1984 level. The industrial sector accounted for 39.7 percent of the September 1985 total consumption, down from the industrial sector's 40.0-percent share in September 1984.

Transportation sector consumption of energy was 1.6 quadrillion Btu in September 1985, down 1.4 percent from the September 1984 level. This sector consumed 28.1 percent of the September 1985 total, down from the sector's 28.7-percent share in September 1984.

The electric utilities consumption of energy was an estimated 2.2 quadrillion Btu in September 1985, 3.9 percent higher than in September 1984. Coal contributed 54.7 percent of the energy consumed by electric utilities in September 1985, while nuclear electric power contributed 17.0 percent; natural gas, 12.9 percent; hydroelectric power, 10.9 percent; petroleum products, 3.7 percent; and geothermal, wood, waste, wind, photovoltaic, and solar thermal energy, 0.8 percent.

Consumption Summary for September 1985
(Quadrillion (10^{15}) Btu)

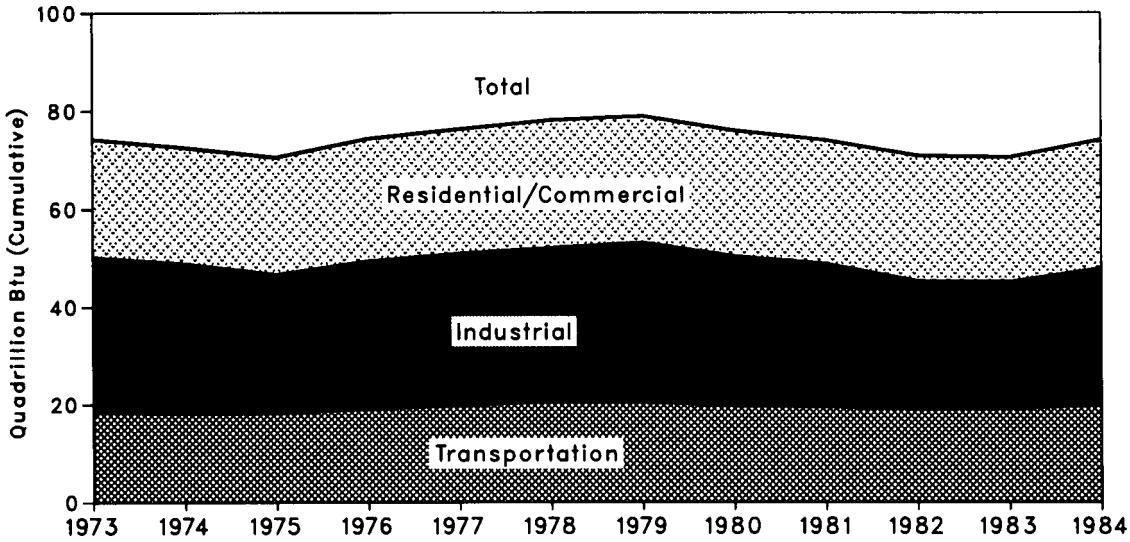
Energy Source	Sector: Residential and Commercial	Industrial	Transportation	Electric Utilities	Total
Coal	0.015	0.229	0.000	1.198	1.444
Natural Gas[1]	0.232	0.583	0.033	0.282	1.130
Petroleum Products	0.146	0.668	1.551	0.082	2.446
Hydroelectric Power	0.000	0.002	0.000	0.238	0.240
Nuclear Electric Power	0.000	0.000	0.000	0.373	0.373
Net Imports of Coal Coke	0.000	(0.003)	0.000	0.000	(0.003)
Other[2]	0.000	0.000	0.000	0.018	0.018
Primary Consumption	**0.392**	**1.480**	**1.584**	**2.190**	**5.647**
Electricity	0.457	0.244	0.001	(0.702)	
Net Energy Consumption	0.849	1.723	1.585		4.159
Electrical System Energy Losses	0.970	0.517	0.002	(1.489)	1.489
Total Energy Consumption	**1.819**	**2.240**	**1.587**		**5.647**

[1] Includes supplemental gaseous fuels. Transportation sector is pipeline fuel only.
[2] Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
Notes: • Totals may not equal sum of components due to independent rounding and the use of sector-specific conversion factors.
• Additional notes and sources are provided on the last four pages of this section.

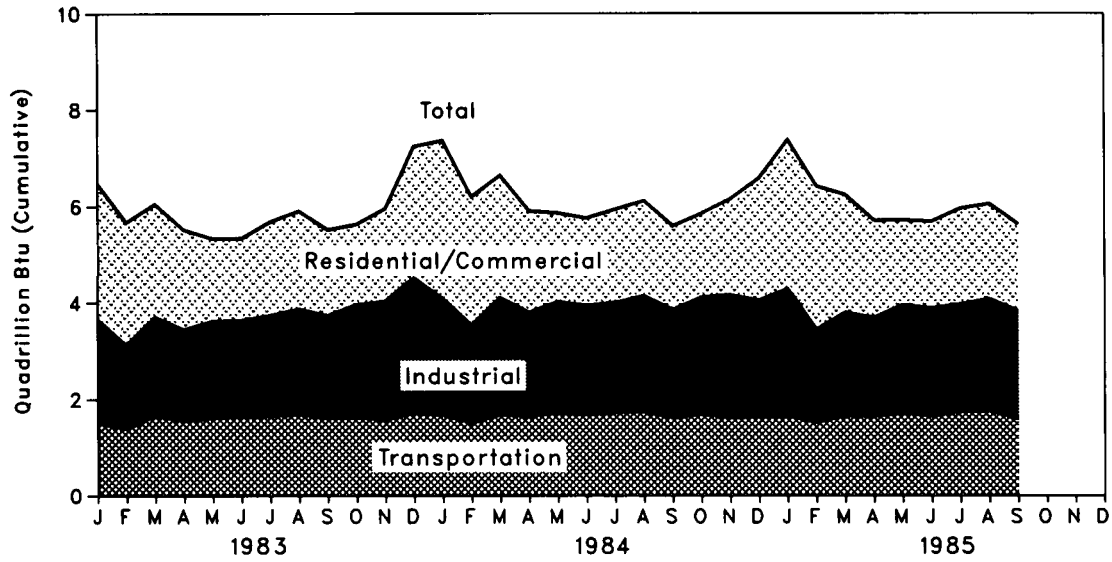
Consumption

Consumption of Energy by End-Use Sector

Yearly



Monthly



Consumption

Consumption of Energy by End-Use Sector

		Residential and Commercial	Industrial	Transportation	Total
			Quadrillion (10^{15}) Btu		
1973	**Total**	**R24.142**	**R31.537**	**18.596**	**R74.282**
1974	**Total**	**R23.726**	**R30.697**	**18.113**	**R72.543**
1975	**Total**	**R23.899**	**R28.407**	**18.240**	**R70.546**
1976	**Total**	**R25.018**	**R30.243**	**19.093**	**R74.362**
1977	**Total**	**R25.384**	**R31.089**	**19.808**	**R76.289**
1978	**Total**	**R26.084**	**R31.414**	**20.589**	**R78.088**
1979	**Total**	**R25.808**	**R32.624**	**20.464**	**R78.898**
1980	**Total**	**R25.655**	**R30.605**	**19.693**	**R75.952**
1981	**Total**	**R25.241**	**R29.251**	**19.495**	**73.989**
1982	**Total**	**R25.630**	**26.140**	**19.066**	**R70.840**
1983	January	2.820	2.156	1.506	6.483
	February	2.556	1.751	1.379	5.685
	March	2.351	2.046	1.660	6.058
	April	2.088	1.907	1.541	R5.532
	May	1.733	2.021	1.603	R5.354
	June	1.723	2.000	1.639	5.364
	July	1.957	2.091	R1.649	5.700
	August	2.048	2.193	1.676	5.922
	September	1.798	2.141	1.598	5.538
	October	R1.691	2.342	1.616	5.648
	November	R1.943	2.459	1.566	5.966
	December	2.731	2.801	1.714	7.246
	Total	**R25.438**	**R25.907**	**R19.147**	**R70.495**
1984	January	R3.280	R2.417	1.668	R7.367
	February	R2.672	R2.041	1.501	R6.213
	March	R2.551	R2.429	1.675	R6.656
	April	R2.124	R2.159	1.638	R5.914
	May	R1.859	R2.300	1.718	R5.873
	June	R1.834	R2.265	R1.676	R5.776
	July	R1.949	R2.278	1.724	R5.953
	August	R1.991	R2.400	1.739	R6.135
	September	R1.756	R2.247	R1.609	R5.611
	October	R1.756	R2.425	1.688	R5.870
	November	R2.004	R2.540	1.620	R6.166
	December	R2.548	R2.420	1.630	R6.599
	Total	**R26.323**	**R27.922**	**R19.886**	**R74.132**
1985	January	R3.090	R2.633	1.653	R7.382
	February	R2.982	R1.935	R1.512	R6.431
	March	R2.460	R2.140	1.656	R6.257
	April	R2.035	R2.038	1.651	R5.720
	May	R1.781	R2.235	1.716	R5.732
	June	R1.823	R2.234	1.649	R5.709
	July	R2.007	R2.224	1.739	R5.975
	August	R1.990	R2.317	R1.761	R6.072
	September	1.819	2.240	1.587	5.647
	Year to Date	**19.985**	**19.996**	**14.925**	**54.925**

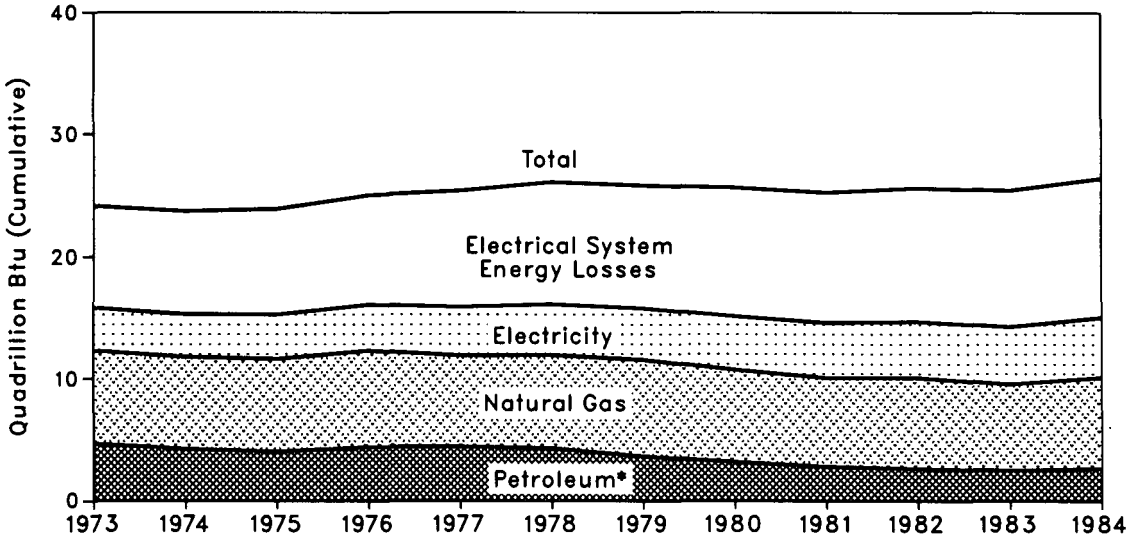
Revisions result primarily from revised conversion factors. See page 37.

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.

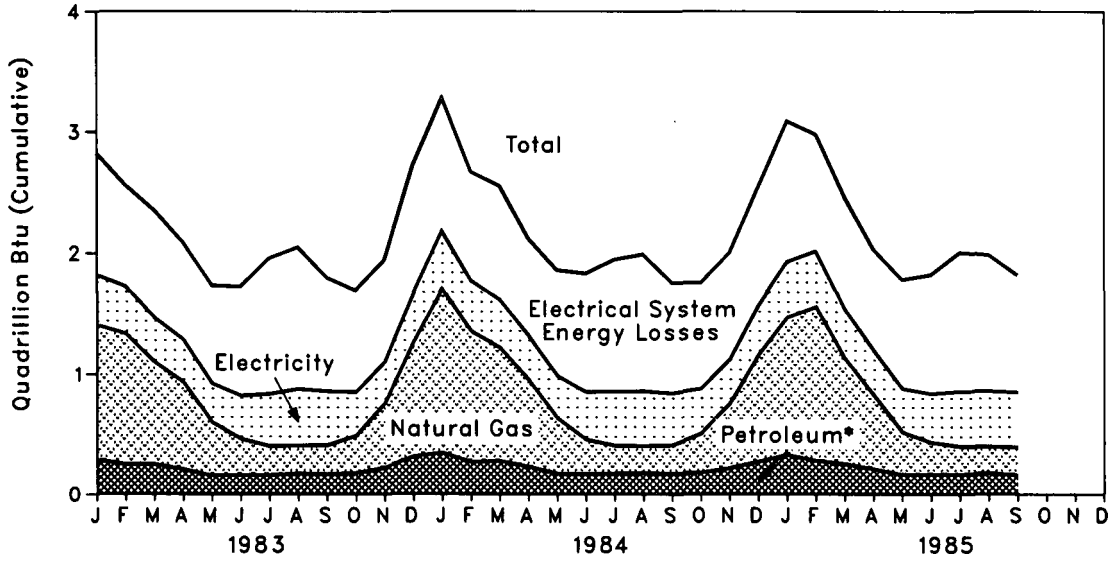
Consumption

Consumption of Energy by the Residential and Commercial Sector

Yearly



Monthly



*Includes coal.

Consumption

Consumption of Energy by the Residential and Commercial Sector

		Coal	Natural Gas[1]	Petroleum	Electricity	Electrical System Energy Losses	Total	Year to Date
					Quadrillion (10^{15}) Btu			
1973	**Total**	**R0.254**	**7.626**	**4.391**	**3.495**	**8.377**	**R24.142**	
1974	**Total**	**R0.257**	**7.518**	**3.996**	**3.475**	**8.480**	**R23.726**	
1975	**Total**	**R0.209**	**7.581**	**3.805**	**3.604**	**8.700**	**R23.899**	
1976	**Total**	**R0.203**	**7.866**	**4.181**	**3.747**	**9.021**	**R25.018**	
1977	**Total**	**R0.205**	**7.461**	**4.206**	**3.955**	**9.556**	**R25.384**	
1978	**Total**	**R0.214**	**7.624**	**4.070**	**4.116**	**10.061**	**R26.084**	
1979	**Total**	**R0.187**	**7.891**	**3.448**	**4.184**	**10.100**	**R25.808**	
1980	**Total**	**R0.145**	**7.539**	**3.035**	**4.355**	**10.580**	**R25.655**	
1981	**Total**	**R0.168**	**7.242**	**2.634**	**4.497**	**10.700**	**R25.241**	
1982	**Total**	**R0.188**	**7.433**	**2.449**	**4.566**	**10.993**	**R25.630**	
1983	January	R0.020	1.118	0.266	0.413	1.003	2.820	2.820
	February	0.018	1.087	0.231	0.390	0.831	2.556	5.376
	March	0.013	0.852	0.236	0.365	0.885	2.351	R7.726
	April	0.018	0.727	0.190	0.351	0.801	2.088	R9.814
	May	0.011	0.441	0.144	0.327	0.810	1.733	R11.547
	June	0.009	0.300	0.152	0.359	0.903	1.723	R13.270
	July	0.014	0.241	0.144	0.435	1.123	1.957	R15.227
	August	0.013	0.233	0.159	0.472	1.171	2.048	R17.275
	September	R0.017	0.240	0.150	0.450	0.940	1.798	R19.072
	October	0.019	0.307	0.159	0.366	0.841	R1.691	R20.764
	November	0.020	0.531	0.202	0.350	0.841	R1.943	R22.707
	December	0.025	0.949	0.290	0.402	1.065	2.731	R25.438
	Total	**R0.196**	**7.025**	**2.322**	**R4.680**	**R11.214**	**R25.438**	
1984	January	0.024	1.361	0.320	0.476	R1.098	R3.280	R3.280
	February	0.021	1.088	0.247	0.418	R0.897	R2.672	R5.951
	March	0.015	0.947	0.261	0.394	R0.935	R2.551	R8.503
	April	0.022	0.730	0.207	0.360	R0.804	R2.124	R10.626
	May	0.013	0.461	0.159	0.355	R0.872	R1.859	R12.486
	June	0.010	0.288	0.159	0.395	R0.981	R1.834	R14.320
	July	0.016	0.233	0.158	0.449	R1.093	R1.949	R16.269
	August	0.015	0.224	0.164	0.456	R1.133	R1.991	R18.260
	September	0.020	0.236	0.152	0.433	R0.915	R1.756	R20.016
	October	0.016	0.321	0.165	0.377	R0.876	R1.756	R21.772
	November	0.017	0.536	0.200	0.372	R0.879	R2.004	R23.775
	December	0.022	0.891	0.250	0.410	R0.975	R2.548	R26.323
	Total	**R0.212**	**7.315**	**2.443**	**R4.894**	**R11.458**	**R26.323**	
1985	January	0.019	1.144	0.309	0.457	R1.161	R3.090	R3.090
	February	0.017	1.280	0.263	0.458	R0.963	R2.982	R6.072
	March	0.012	0.884	0.242	0.400	R0.922	R2.460	R8.531
	April	0.018	0.619	0.194	0.371	R0.834	R2.035	R10.566
	May	0.011	0.352	0.153	0.366	R0.899	R1.781	R12.347
	June	R0.008	0.267	0.158	0.405	R0.984	R1.823	R14.170
	July	0.012	0.234	0.154	0.457	R1.151	R2.007	R16.177
	August	0.011	0.219	0.169	R0.463	R1.127	R1.990	R18.166
	September	0.015	0.232	0.146	0.457	0.970	1.819	19.985
	Year to Date	**0.122**	**5.231**	**1.788**	**3.834**	**9.011**	**19.985**	

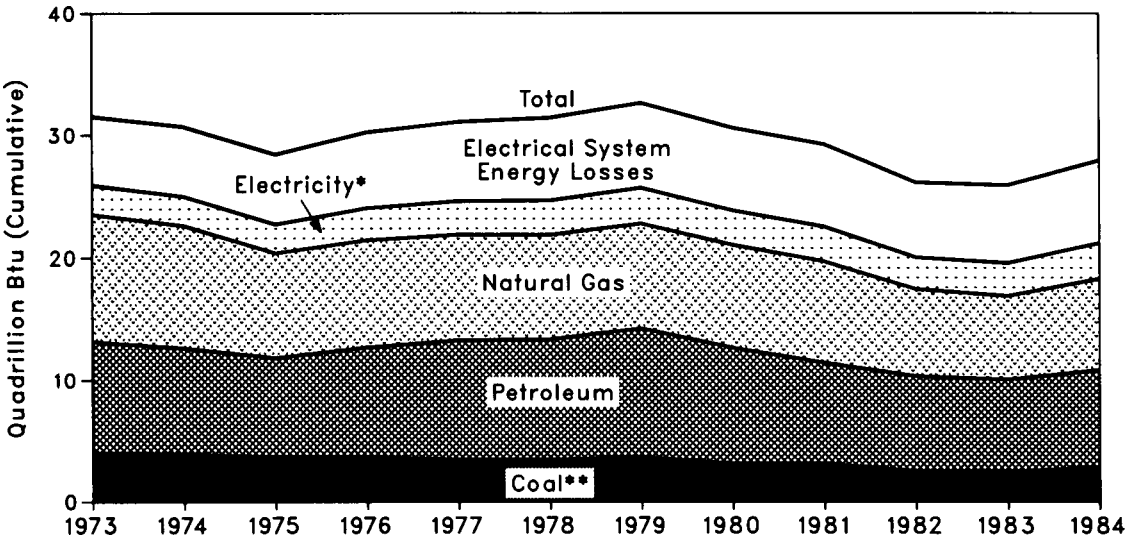
Revisions result primarily from revised conversion factors. See page 37.

[1]Includes supplemental gaseous fuels.
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.

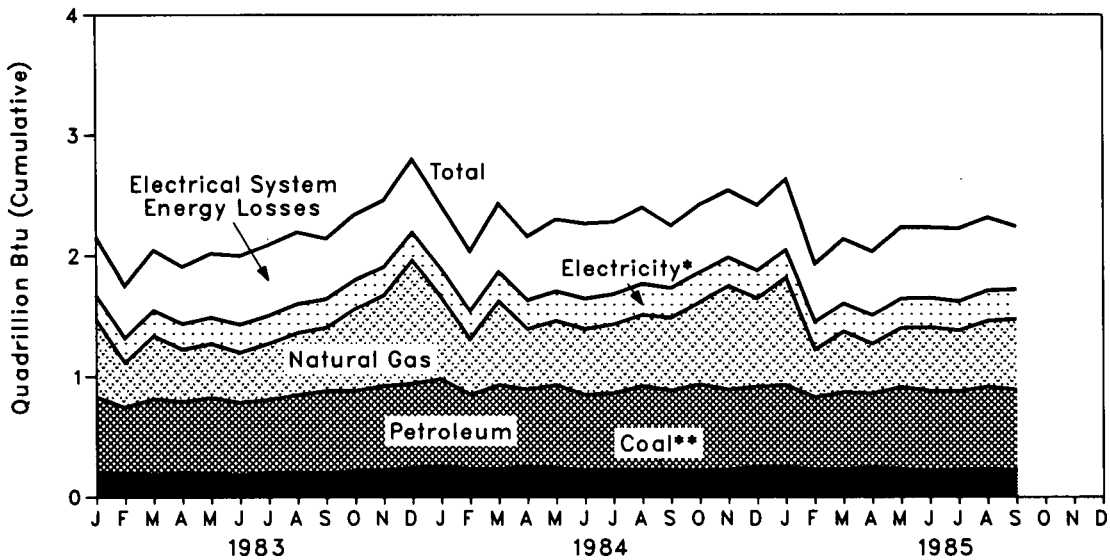
Consumption

Consumption of Energy by the Industrial Sector

Yearly



Monthly



*Includes hydroelectric power.
**Includes net imports of coal coke.

Consumption

Consumption of Energy by the Industrial Sector

		Coal	Natural Gas[1]	Petro-leum	Hydro-electric Power	Net Imports of Coal Coke	Electricity	Electrical System Energy Losses	Total	Year to Date
						Quadrillion (10^{15}) Btu				
1973	**Total**	**R4.057**	**10.388**	**9.113**	**0.035**	**R(0.007)**	**2.341**	**5.611**	**R31.537**	
1974	**Total**	**R3.870**	**10.003**	**8.698**	**0.033**	**0.056**	**2.337**	**5.700**	**R30.697**	
1975	**Total**	**R3.667**	**8.532**	**8.151**	**0.032**	**0.014**	**2.346**	**5.665**	**R28.407**	
1976	**Total**	**R3.661**	**8.761**	**9.018**	**0.033**	**0.000**	**2.573**	**6.198**	**R30.243**	
1977	**Total**	**R3.454**	**8.636**	**9.786**	**0.033**	**0.015**	**2.682**	**6.484**	**R31.089**	
1978	**Total**	**R3.314**	**8.539**	**9.890**	**0.032**	**0.125**	**2.761**	**6.755**	**R31.414**	
1979	**Total**	**R3.593**	**8.549**	**10.576**	**0.034**	**0.063**	**2.873**	**6.936**	**R32.624**	
1980	**Total**	**R3.155**	**8.394**	**9.524**	**0.033**	**(0.035)**	**2.781**	**6.752**	**R30.605**	
1981	**Total**	**R3.157**	**8.257**	**8.295**	**0.033**	**(0.016)**	**2.817**	**6.707**	**R29.251**	
1982	**Total**	**2.552**	**7.116**	**7.798**	**0.033**	**(0.022)**	**2.542**	**6.121**	**26.140**	
1983	January	0.211	0.645	0.620	0.003	(0.001)	0.198	0.480	2.156	2.156
	February	0.196	0.374	0.548	0.003	(0.001)	0.201	0.430	1.751	3.907
	March	0.187	0.527	0.626	0.003	(0.001)	0.206	0.498	2.046	5.953
	April	0.205	0.438	0.586	0.003	(0.002)	0.207	0.471	1.907	7.860
	May	0.198	0.452	0.625	0.003	(0.002)	0.214	0.529	2.021	9.881
	June	0.182	0.420	0.601	0.003	(0.001)	0.226	0.568	2.000	11.881
	July	0.206	0.470	0.602	0.003	(0.002)	0.227	0.585	2.091	13.972
	August	0.209	0.518	0.638	0.002	(0.001)	0.238	0.590	2.193	16.165
	September	0.203	0.524	0.679	0.002	(0.001)	0.238	0.496	2.141	18.306
	October	0.217	0.681	0.666	0.002	(0.001)	0.235	0.541	2.342	R20.647
	November	0.227	0.752	0.695	0.002	(0.001)	0.230	0.553	2.459	23.107
	December	0.249	1.019	0.696	0.002	(0.003)	0.229	0.607	2.801	R25.907
	Total	**2.490**	**6.821**	**7.583**	**0.033**	**(0.016)**	**2.648**	**6.349**	**R25.907**	
1984	January	R0.256	0.680	R0.725	0.003	0.001	0.228	R0.525	R2.417	R2.417
	February	R0.237	0.461	R0.615	0.003	0.002	0.230	R0.494	R2.041	R4.458
	March	R0.238	0.694	R0.694	0.003	(0.001)	0.238	R0.564	R2.429	R6.888
	April	R0.253	0.501	R0.641	0.003	0.000	0.236	R0.526	R2.159	R9.047
	May	R0.245	0.531	R0.687	0.003	(0.001)	0.241	R0.593	R2.300	R11.347
	June	R0.225	0.546	R0.625	0.003	(0.002)	0.249	R0.619	R2.265	R13.612
	July	R0.227	0.571	R0.637	0.003	(0.001)	0.245	R0.596	R2.278	R15.890
	August	R0.230	0.589	R0.694	0.002	(0.002)	0.254	R0.632	R2.400	R18.290
	September	R0.223	0.604	R0.661	0.002	0.000	0.243	R0.514	R2.247	R20.537
	October	R0.222	0.683	R0.716	0.002	(0.003)	0.242	R0.562	R2.425	R22.961
	November	R0.232	0.858	R0.662	0.002	(0.003)	0.234	R0.554	R2.540	R25.502
	December	R0.255	0.731	R0.664	0.002	(0.001)	0.227	R0.541	R2.420	R27.922
	Total	**R2.842**	**7.450**	**R8.019**	**0.033**	**(0.011)**	**2.868**	**R6.721**	**R27.922**	
1985	January	R0.252	0.887	R0.678	0.003	0.000	0.229	R0.583	R2.633	R2.633
	February	R0.233	0.396	R0.597	0.003	0.001	0.227	R0.478	R1.935	R4.569
	March	R0.233	0.504	R0.638	0.003	0.000	0.230	R0.531	R2.140	R6.708
	April	R0.248	0.413	R0.614	0.003	0.001	0.234	R0.525	R2.038	R8.746
	May	R0.240	0.490	R0.677	0.003	(0.003)	0.239	R0.589	R2.235	R10.982
	June	R0.220	0.528	R0.664	0.003	(0.002)	0.239	R0.581	R2.234	R13.215
	July	R0.233	0.505	R0.648	0.003	(0.002)	0.238	R0.599	R2.224	R15.439
	August	R0.236	0.545	R0.683	0.002	(0.001)	0.248	R0.604	R2.317	R17.756
	September	0.229	0.583	0.668	0.002	(0.003)	0.244	0.517	2.240	19.996
	Year to Date	**2.124**	**4.851**	**5.868**	**0.026**	**(0.008)**	**2.129**	**5.007**	**19.996**	

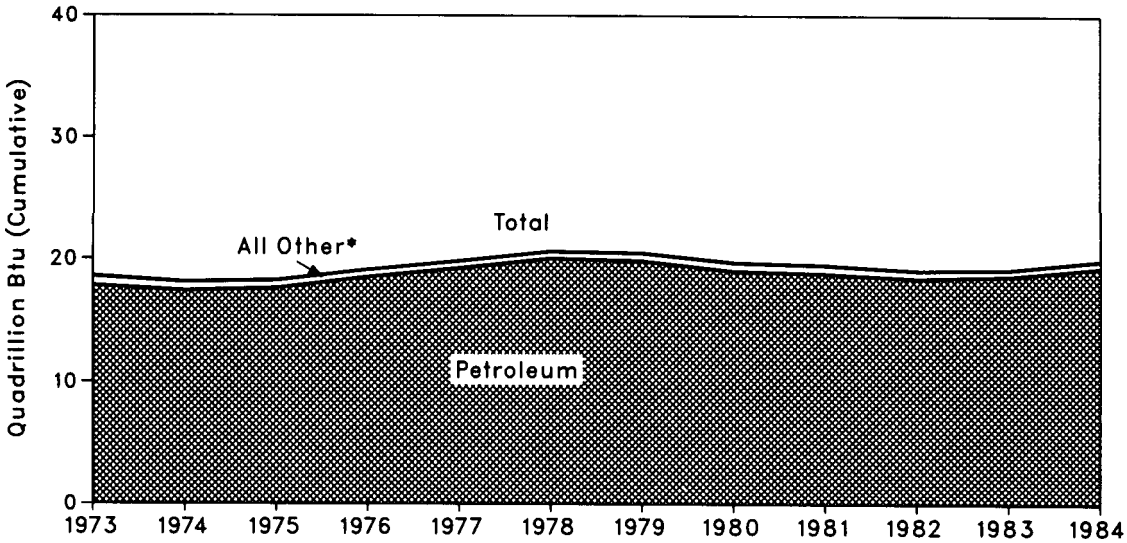
Revisions result primarily from revised conversion factors. See page 37.

[1]Includes supplemental gaseous fuels.
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.

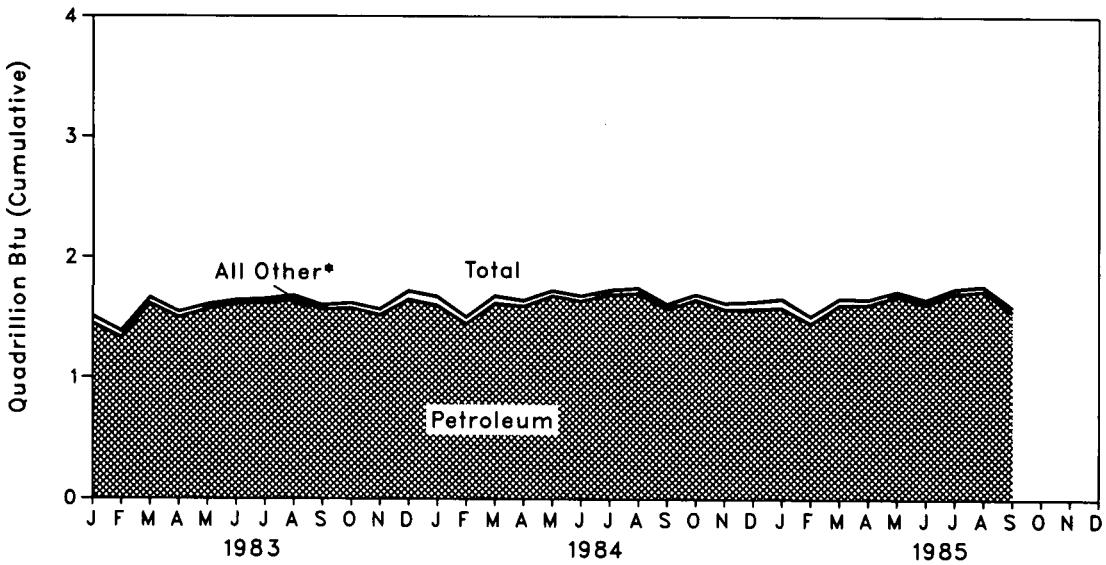
Consumption

Consumption of Energy by the Transportation Sector

Yearly



Monthly



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

Consumption

Consumption of Energy by the Transportation Sector

		Coal	Natural Gas[1]	Petroleum	Electricity	Electrical System Energy Losses	Total	Year to Date
				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**	**(2)**	**0.559**	**18.499**	**0.010**	**0.025**	**19.093**	
1977	**Total**	**(2)**	**0.543**	**19.230**	**0.010**	**0.025**	**19.808**	
1978	**Total**	**(2)**	**0.539**	**20.019**	**0.009**	**0.022**	**20.589**	
1979	**Total**	**(2)**	**0.612**	**19.817**	**0.010**	**0.025**	**20.464**	
1980	**Total**	**(2)**	**0.648**	**19.009**	**0.011**	**0.026**	**19.693**	
1981	**Total**	**(2)**	**0.657**	**18.800**	**0.011**	**0.026**	**19.495**	
1982	**Total**	**(2)**	**0.613**	**18.417**	**0.011**	**0.026**	**19.066**	
1983	January	(2)	0.059	1.444	0.001	0.002	1.506	1.506
	February	(2)	0.049	1.327	0.001	0.002	1.379	2.885
	March	(2)	0.047	1.609	0.001	0.002	1.660	4.545
	April	(2)	0.041	1.497	0.001	0.002	1.541	6.086
	May	(2)	0.034	1.566	0.001	0.002	1.603	R7.689
	June	(2)	0.029	1.607	0.001	0.002	1.639	9.327
	July	(2)	0.031	1.614	0.001	0.002	R1.649	R10.976
	August	(2)	0.033	1.640	0.001	0.002	1.676	R12.652
	September	(2)	0.032	1.563	0.001	0.002	1.598	R14.250
	October	(2)	0.037	1.576	0.001	0.002	1.616	15.866
	November	(2)	0.045	1.517	0.001	0.002	1.566	R17.432
	December	(2)	0.066	1.645	0.001	0.002	1.714	R19.147
	Total	**(2)**	**0.504**	**18.605**	**0.011**	**0.026**	**R19.147**	
1984	January	(2)	0.069	1.596	0.001	0.002	1.668	1.668
	February	(2)	0.053	1.445	0.001	0.002	1.501	3.169
	March	(2)	0.057	1.615	0.001	0.002	1.675	4.844
	April	(2)	0.044	1.591	0.001	0.002	1.638	R6.482
	May	(2)	0.038	1.677	0.001	0.002	1.718	R8.200
	June	(2)	0.035	1.637	0.001	0.002	R1.676	R9.876
	July	(2)	0.035	1.686	0.001	0.002	1.724	R11.600
	August	(2)	0.036	1.700	0.001	0.002	1.739	R13.339
	September	(2)	0.034	1.572	0.001	0.002	R1.609	R14.947
	October	(2)	0.039	1.646	0.001	0.002	1.688	R16.635
	November	(2)	0.049	1.568	0.001	0.002	1.620	R18.256
	December	(2)	0.056	1.571	0.001	0.002	1.630	R19.886
	Total	**(2)**	**0.545**	**19.303**	**0.011**	**R0.027**	**R19.886**	
1985	January	(2)	0.069	1.581	0.001	R0.003	1.653	1.653
	February	(2)	0.057	1.452	0.001	0.002	R1.512	3.165
	March	(2)	0.048	1.605	0.001	0.002	1.656	4.821
	April	(2)	0.038	1.610	0.001	0.002	1.651	6.472
	May	(2)	0.033	1.680	0.001	0.002	1.716	R8.189
	June	(2)	0.033	1.612	0.001	0.002	1.649	9.837
	July	(2)	0.033	1.703	0.001	R0.003	1.739	R11.577
	August	(2)	0.034	1.723	R0.001	R0.002	R1.761	R13.338
	September	(2)	0.033	1.551	0.001	0.002	1.587	14.925
	Year to Date	**(2)**	**0.378**	**14.517**	**0.009**	**0.021**	**14.925**	

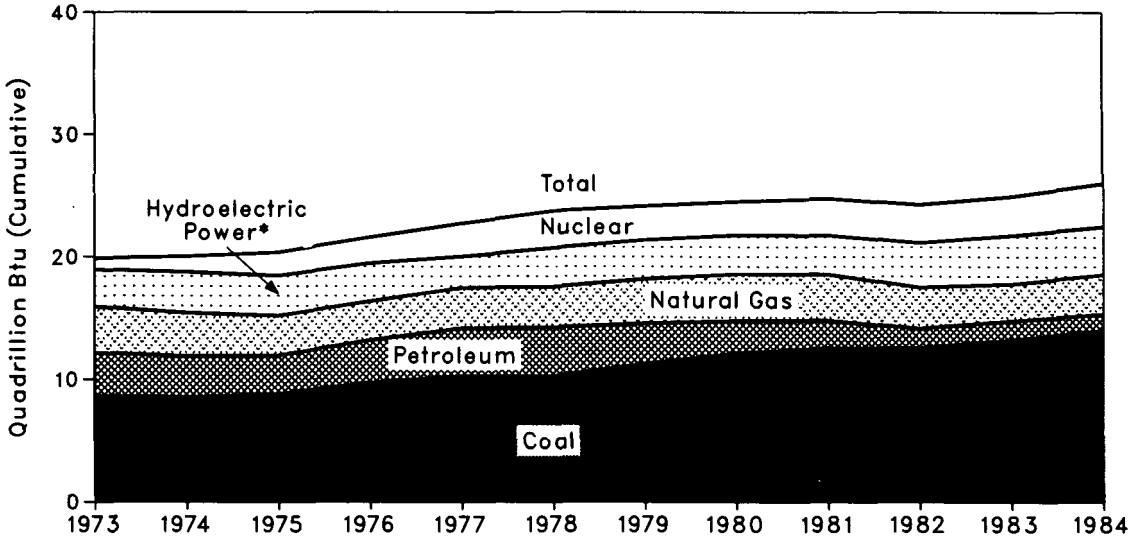
Revisions result primarily from revised conversion factors. See page 37.

[1]Pipeline fuel only, including supplemental gaseous fuels.
[2]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.
• Totals may not equal sum of components due to independent rounding.
Additional Notes and Sources: • See the last four pages of this section.

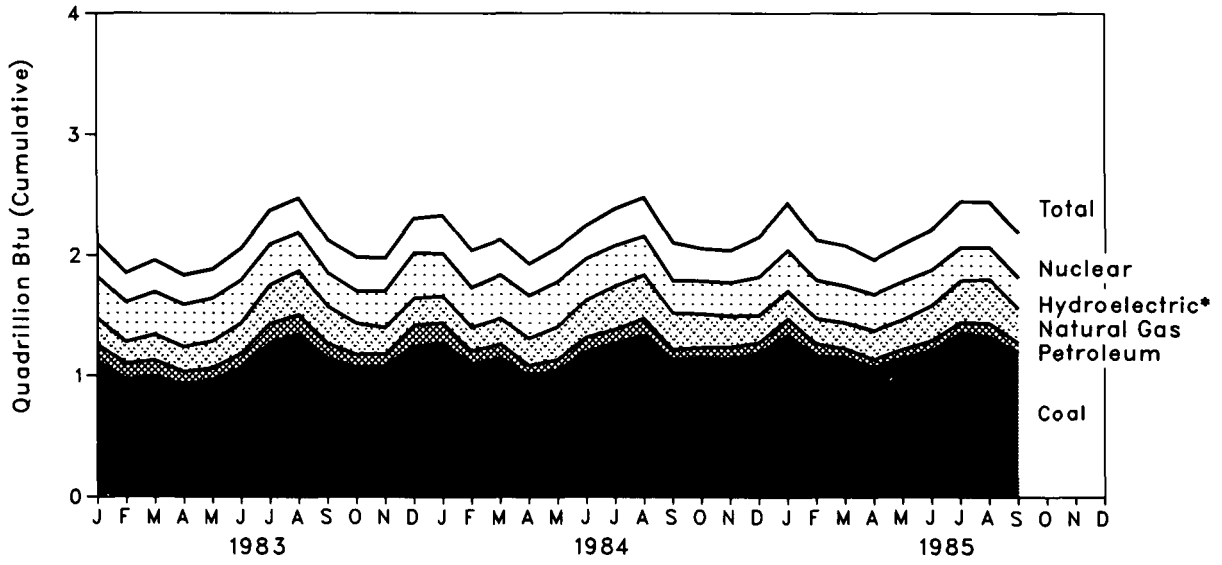
Consumption

Energy Input at Electric Utilities

Yearly



Monthly



*Includes other.

Consumption

Energy Input at Electric Utilities

		Coal	Natural Gas[1]	Petroleum[2]	Hydroelectric Power[3]	Nuclear Electric Power	Other[4]	Total	Year to Date
					Quadrillion (10^{15}) Btu				
1973	**Total**	**8.658**	**3.748**	**3.515**	**2.975**	**0.910**	**0.046**	**19.852**	
1974	**Total**	**8.534**	**3.519**	**3.365**	**3.276**	**1.272**	**0.056**	**20.022**	
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**	**21.574**	
1977	**Total**	**10.262**	**3.284**	**3.901**	**2.482**	**2.702**	**0.082**	**22.713**	
1978	**Total**	**10.238**	**3.297**	**3.987**	**3.110**	**3.024**	**0.068**	**23.724**	
1979	**Total**	**11.260**	**3.613**	**3.283**	**3.107**	**2.776**	**0.089**	**24.128**	
1980	**Total**	**12.123**	**3.810**	**2.634**	**3.085**	**2.739**	**0.114**	**24.505**	
1981	**Total**	**12.583**	**3.768**	**2.202**	**3.072**	**3.008**	**0.127**	**24.760**	
1982	**Total**	**12.582**	**3.342**	**1.568**	**3.528**	**3.131**	**0.108**	**24.259**	
1983	January	1.128	0.215	0.137	0.334	0.273	0.011	2.097	2.097
	February	0.967	0.182	0.134	0.321	0.242	0.008	1.855	3.952
	March	0.996	0.214	0.133	0.345	0.261	0.009	1.958	5.909
	April	0.921	0.209	0.110	0.341	0.244	0.009	1.833	7.743
	May	0.965	0.225	0.097	0.349	0.240	0.007	1.883	9.626
	June	1.064	0.255	0.119	0.348	0.263	0.009	2.059	11.685
	July	1.276	0.324	0.156	0.325	0.279	0.012	2.373	14.058
	August	1.348	0.363	0.158	0.304	0.286	0.015	2.474	16.531
	September	1.146	0.307	0.123	0.264	0.273	0.014	2.127	18.658
	October	1.071	0.259	0.106	0.253	0.281	0.015	1.986	20.644
	November	1.082	0.221	0.099	0.290	0.273	0.013	1.977	22.621
	December	1.249	0.225	0.171	0.363	0.287	0.011	2.307	24.929
	Total	**13.213**	**2.998**	**1.544**	**3.838**	**3.203**	**0.133**	**24.929**	
1984	January	R1.271	0.223	0.169	R0.341	R0.317	0.011	R2.331	R2.331
	February	R1.103	0.194	0.108	R0.318	R0.307	0.013	R2.042	R4.373
	March	R1.151	0.213	0.115	R0.345	R0.295	0.015	R2.134	R6.507
	April	R1.004	0.228	0.081	R0.341	R0.262	0.014	R1.929	R8.436
	May	R1.045	0.274	0.090	R0.362	R0.279	0.014	R2.064	R10.500
	June	R1.202	0.308	0.121	R0.330	R0.273	0.013	R2.247	R12.747
	July	R1.274	0.361	0.111	R0.323	R0.305	0.013	R2.387	R15.135
	August	R1.338	0.362	0.137	R0.307	R0.319	0.016	R2.478	R17.613
	September	R1.140	0.301	0.083	R0.254	R0.315	0.015	R2.108	R19.721
	October	R1.155	0.279	0.084	R0.258	R0.268	0.016	R2.060	R21.781
	November	R1.144	0.253	0.100	R0.264	R0.265	0.016	R2.043	R23.824
	December	R1.193	0.225	0.086	R0.301	R0.333	0.018	R2.156	R25.980
	Total	**R14.020**	**3.220**	**1.286**	**R3.741**	**R3.538**	**0.174**	**R25.980**	
1985	January	R1.343	0.233	0.132	R0.318	R0.391	0.018	R2.434	R2.434
	February	R1.170	0.208	0.101	R0.302	R0.333	0.016	R2.129	R4.563
	March	R1.154	0.213	0.077	R0.288	R0.335	0.018	R2.086	R6.649
	April	R1.073	0.241	0.066	R0.285	R0.286	R0.015	R1.966	R8.615
	May	R1.150	0.244	0.075	R0.301	R0.310	0.016	R2.096	R10.712
	June	R1.213	0.291	0.082	R0.279	R0.333	0.016	R2.213	R12.925
	July	R1.356	0.347	0.090	R0.257	R0.380	0.018	R2.448	R15.374
	August	R1.331	0.366	0.107	R0.247	R0.376	0.018	R2.446	R17.819
	September	1.198	0.282	0.082	0.238	0.373	0.018	2.190	20.010
	Year to Date	**10.989**	**2.425**	**0.813**	**2.514**	**3.116**	**0.152**	**20.010**	

Revisions result primarily from revised conversion factors. See page 37.

[1]Includes supplemental gaseous fuels.
[2]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.
[3]Includes net imports of electricity.
[4]Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
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.

Notes and Sources for the Consumption Section

1. Total Energy Consumed: Total energy consumed includes coal, natural gas (including supplemental gaseous fuels), refined petroleum products supplied, electric utility and industrial generation of hydroelectric power, net imports of electricity generated from hydroelectric power, electricity generated from nuclear power, and electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems. Data do not include geothermal, wood, waste, wind, photovoltaic, or solar thermal energy sources except that consumed by 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, refrigeration, cooking, and clothes drying; by nonmanufacturing 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, (including subbituminous 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 Gas Consumption" in Part 4. For the Part 2 consumption section, 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, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," and EIA computations.
- 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 through 1984: EIA, *Petroleum Supply Annual.*
- 1985 forward: EIA, *Petroleum Supply Monthly.*

Specific petroleum products' end-use allocation procedures follow:

- **Aviation Gasoline**—All product supplied is assigned to the transportation sector.
- **Asphalt**—All product supplied is assigned to the industrial sector.
- **Distillate Fuel**
  - ***Electric Utility Sector, All Periods.***
    Monthly and annual consumption in 1973 through 1979 is assumed to be the amount of oil (minus small amounts of kerosene and kerosene-type jet fuel deliveries) reported as consumed in internal combustion and gas turbine engine plants. From January 1980, electric utility consumption of distillate fuel is assumed to be the petroleum products reported as "light oil" (minus small amounts of kerosene deliveries through 1982) consumed at utilities.
    Sources: 1973 through September 1977—FPC Form 4, "Monthly Power Plant Report;" October 1977 through 1981—FERC, FPC Form 4, "Monthly Power Plant Report;" 1982 forward—EIA, Form EIA-759, "Monthly Power Plant Report."
  - ***Non-Electric Utility Sectors, Annual Estimates Through 1983.***
    The aggregate non-electric utility use of distillate fuel is total distillate fuel supplied minus the electric utility consumption. The non-electric utility annual totals are allocated into the individual non-electric utility sectors in proportion to the amount of distillate fuel delivered to end users, grouped into sectors from EIA's "Deliveries of Fuel Oil and Kerosene" ("Deliveries") reports (based primarily on data collected by Form EIA-172) as follows:
    - Residential sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;

(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 (continued)**
  - ***Non-Electric Utility Sectors, Annual Estimates Through 1983 (cont'd).***
    - Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;
    - Industrial sector deliveries for 1979 through 1983 are the sum of deliveries for industrial, farm, oil company, off-highway, diesel, and all other uses. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category 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.
  - ***Non-Electric Utility Sectors, Monthly Estimates Through 1983.***
    - Residential and commercial sector monthly consumption is estimated by allocating the annual sector estimates to months in proportion to each month's share of the year's sales of No. 2 heating oil as reported in the "Monthly Report of Heating Oil Sales" by the Ethyl Corporation from 1973 through 1980 and the American Petroleum Institute since January 1981.
    - The transportation sector highway use portion is allocated into the months in proportion to each month's share of the year's total sales for highway use as reported by the Federal Highway Administration's Table MF-25, "Private and Commercial Highway Use of Special Fuels by Months." The remaining transportation use of distillate fuel (i.e., for railroads, vessel bunkering, and military use) is evenly distributed over the months, adjusted for the number of days per month.
    - Industrial sector monthly estimates are made by subtracting the residential and commercial, transportation, and electric utility sector estimates from each month's total distillate fuel supplied.
  - ***Non-Electric Utility Sectors, 1984 Forward.*** Each month's non-electric utility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the non-electric utility subtotal in the same month in 1983.

- **Jet Fuel**—Through 1982, small amounts of kerosene-type jet fuel were consumed by the electric utility sector. Kerosene-type jet fuel deliveries to electric utilities as reported on the FERC-423 (formerly FPC-423) were used as estimates 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" ("Deliveries") reports (based primarily on data collected by Form EIA-172) as follows:
  - Residential sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. Deliveries for 1983 are used as estimates for 1984 forward. Prior to 1979, each year's deliveries category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares;
  - Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. Deliveries for 1983 are used as estimates for 1984 forward. Prior to 1979, each year's deliveries category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares; and
  - Industrial sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. Deliveries for 1983 are used as estimates for 1984 forward. Prior to 1979, each year's deliveries 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 be 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.
    - 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: Because the collection of data under Form EIA-174 was discontinued after data year 1982, the 1982 annual end-use shares based on the 1982 sales data are applied for all succeeding periods to estimate LPG end-use consumption.

- **Lubricants**—Total product supplied is allocated to the industrial and transportation sectors for all months according to proportions developed from annual sales of lubricants to those two sectors from U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports,* "Sales of Lubricating and Industrial Oils and Greases." The 1973 shares are applied to 1973 and 1974; the 1975 shares are applied to 1975 and 1976; and the 1977 shares are applied to 1977 forward.

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

Notes and Sources for the Consumption Section (continued)

6. Petroleum (continued):

- **Motor Gasoline**—Total product supplied monthly is allocated to the major end-use sectors in proportion to aggregations of annual sales categories formed from the U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Tables MF-21, MF-24, and MF-25, as follows:
  - — Commercial sales are the sum of sales for public non-highway use, miscellaneous use, and unclassified use;
  - — Industrial sales are the sum of sales for agriculture, construction, and industrial and commercial use as classified in the *Highway Statistics;* and
  - — Transportation sales are the sum of sales for highway use (minus the sales of special fuels, which are primarily diesel fuel and 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 petroleum coke 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 power plants. From January 1980, electric utility consumption of residual fuel is assumed to be the petroleum products reported as "heavy oil" consumed at utilities.
    Sources: 1973 through September 1977—FPC Form 4, "Monthly Power Plant Report;" October 1977 through 1981—FERC, FPC Form 4, "Monthly Power Plant Report;" 1982 forward—EIA, Form EIA-759, "Monthly Power Plant Report."
  - — ***Non-Electric Utility Sectors, Annual Estimates Through 1983.*** The aggregate non-electric utility use of residual fuel is total residual fuel supplied minus the electric utility consumption. The non-electric utility annual totals are allocated into the individual non-electric utility sectors in proportion to the amount of residual fuel delivered to end users, grouped into sectors from EIA's "Deliveries of Fuel Oil and Kerosene" ("Deliveries") reports (based primarily on data collected by Form EIA-172) as follows:
    - Commercial sector deliveries are directly from the "Deliveries" reports for 1979 through 1983. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares;
    - Industrial sector deliveries for 1979 through 1983 are the sum of deliveries for industrial, oil company, and all other uses. Prior to 1979, each year's deliveries subtotal of the heating plus industrial category 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.
  - — ***Non-Electric Utility Sectors, Monthly Estimates Through 1983.***
    - Commercial sector monthly consumption is estimated by allocating the annual commercial sector estimates to months in proportion to each month's share of the year's sales of No. 2 heating oil as reported in the "Monthly Report of Heating Oil Sales" by the Ethyl Corporation for 1973 through 1980 and the American Petroleum Institute since January 1981.
    - Transportation sector monthly estimates are made by evenly distributing the annual sector estimate over the months, adjusted for the number of days per month.
    - Industrial sector monthly estimates are made by subtracting the commercial, transportation, and electric utility sector estimates from each month's total residual fuel supplied.
  - — ***Non-Electric Utility Sectors, 1984 Forward.*** Each month's non-electric utility consumption subtotal is disaggregated into the major end-use sectors in proportion to the shares each sector held of the non-electric utility subtotal in the same month in 1983.

- **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 Power: Includes electricity generated by hydroelectric power at electric utilities, small amounts in the industrial sector, and net imports of electricity, which are assumed to be generated by hydroelectric power and are included in the hydroelectricity in the electric utilities sector.

Sources for electric utilities sector:
- 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
- 1977 through 1981: FERC, FPC Form 4, "Monthly Power Plant Report."
- 1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report."

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

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

Note for imports and exports of electricity:
- Monthly electricity imports and exports estimates for 1982 forward were revised in the May 1984 *Monthly Energy Review.* The revisions do not cause discontinuity in the annual data series: the data continue to come from the same source. The monthly data series, however, are discontinuous because monthly data from January 1982 forward are now available from the same source as the annual data. Estimates for monthly values prior to 1982, published in previous issues, were developed by converting the annual value to a daily rate and multiplying by the number of days in the month. Accordingly, month-to-month analyses are not comparable when taken across the transition date of January 1982. Monthly analyses on either side of that date will be comparable. There is no known bias in either the annual data or the monthly data since January 1982.

Sources for imports and exports of electricity:
- 1973 through 1980: DOE, Economic Regulatory Administration, "Report on Electric Energy Exchanges with Canada and Mexico."
- 1981: 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 through 1984: DOE, Economic Regulatory Administration, ERA-781, "Annual Report of International Electric Import/Export Data."
- 1985 forward: EIA estimates.

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

Notes and Sources for the Consumption Section (continued)

8. Nuclear Electric Power and Geothermal, Wood, Waste, Wind, Photovoltaic, and Solar Thermal Energy Sources Connected to Electric Utility Distribution Systems:

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 Imports of Coal Coke: 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: EIA, *Energy Data Report,* "Coke Plant Report," quarterly.
- 1982 forward: EIA, *Quarterly Coal Report.*

10. Electricity: Sales of electricity represent consumption. From the sources cited below the following electricity 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 kilowatthour.

Sources of sales data:

- 1973 through 1976: FPC, Form 5, "Monthly Statement of Electric Operating Revenue and Income."
- 1977 through February 1980: EIA, FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income."
- March 1980 through December 1982: EIA, FERC Form 5, "Electric Utility Company Monthly Statement."
- January 1983 forward: EIA, EIA Form 826, "Electric Utility Company Monthly Statement."

11. Electrical System Energy Losses: Electrical system energy losses are calculated as the difference between total energy input at electric utilities and the total energy content of electricity sold to end-use consumers. Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. This loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input to output losses are a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring these thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line-losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, approximately 67 percent of total energy input is lost in conversion; of electricity generated, approximately 5 percent is lost in plant use and 9 percent in transmission and distribution. Calculated electrical system energy losses may be less than actual losses, because primary consumption does not include the energy equivalent of utility purchases of electricity from non-electric utilities and from Canada and Mexico, although they are included in electricity sales.

Explanation of Revisions

Revisions to the British thermal unit (Btu) data in this *Monthly Energy Review* (MER) are caused by:

- Coal conversion factor revisions:

  –Factors for the conversion of anthracite production and consumption were recalculated, affecting the coal series and the total energy data. Specifically, the factor for anthracite production had been a weighted average of freshly-mined anthracite with an estimated average thermal content of 25.40 million Btu per short ton and anthracite recovered from culm banks with an estimated average thermal content of 19.00 million Btu per short ton. The revised factors weight freshly-mined anthracite (25.40 million Btu per short ton) and anthracite recovered from culm banks and river dredging estimated to have a thermal content of 17.50 million Btu per short ton.

  –Bituminous coal and lignite production factors were corrected for 1975 (from 22.911 million Btu per short ton to 22.910 million Btu per short ton) and for 1979 (from 22.459 million Btu per short ton to 22.449 million Btu per short ton).

  –Overall coal factors were recalculated to reflect the revisions cited above.

  See Conversion Factors section of this publication for listings of all factors and their sources.

- Total U.S. coal coke imports for 1973 was corrected from 1,078 thousand short tons to 1,094 thousand short tons.

- The "Other" column in the table titled "Consumption of Energy by Source" on page 11 was revised to include net imports of coal coke previously shown in a separate column. The net imports of coal coke data continue to be displayed separately in the "Net Imports of Energy by Source" table on page 13.

- Routine updates for 1984 were implemented in this MER for the fossil fuel steam-electric power plant conversion factor, the nuclear and geothermal energy power plant generation factors, and most petroleum factors. See pages 118 and 119 for conversion factor updates.

Petroleum*

Domestic crude oil production during November 1985 was estimated to be 8.9 million barrels per day, 0.1 percent lower than the October 1985 rate and 0.5 percent lower than the rate in November 1984.

Total petroleum imports averaged 5.8 million barrels per day in November 1985, 13.1 percent more than the October 1985 rate and 4.3 percent more than the November 1984 rate.

In November 1985, 15.5 million barrels per day of petroleum products were supplied for domestic use, 2.8 percent below the level in October 1985 and 1.0 percent below the level of the previous November. Motor gasoline accounted for 43.4 percent of the total; distillate fuel oil, 17.4 percent; and residual fuel oil, 8.6 percent.

Motor gasoline supplied during November 1985 averaged 6.7 million barrels per day, 2.9 percent below the rate in October 1985 and 1.3 percent below the rate of the previous November. Stocks of motor gasoline totaled 183 million barrels at the end of November 1985, 4 million barrels above the level at the end of October 1985 but 16 million barrels below the stocks level 1 year earlier.

In November 1985, 2.7 million barrels of distillate fuel oil were supplied per day, 8.1 percent lower than the October 1985 rate and 4.7 percent lower than the November 1984 rate. Distillate fuel oil stocks at the end of November 1985 were 138 million barrels, 16 million barrels higher than the stocks level at the end of the previous month but 23 million barrels lower than the November 1984 ending stocks level.

Residual fuel oil supplied in November 1985 averaged 1.3 million barrels per day, 31.0 percent higher than in October 1985 but 1.5 percent lower than the November 1984 rate. Residual fuel oil stocks measured 48 million barrels at the end of November 1985, 2 million barrels lower than the level in the previous month, but 1 million barrels more than the ending stocks in November 1984.

*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 August 1985. 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**	**[6]-17**	**[6]-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**	**[6]-290**	**[6]130**	**16,058**	**1,484**
1982	**Average**	**10,252**	**8,649**	**1,550**	**-136**	**283**	**15,296**	**[8]1,430**
1983	January	10,331	8,697	1,580	[6]-499	[6]772	14,722	1,452
	February	10,388	8,758	1,575	-320	1,113	14,792	1,430
	March	10,279	8,700	1,541	83	1,810	15,541	1,372
	April	10,322	8,776	1,506	-402	308	14,692	1,374
	May	10,190	8,631	1,493	-15	-602	14,505	1,394
	June	10,261	8,667	1,523	-122	-276	15,289	1,405
	July	10,228	8,636	1,539	233	-909	15,019	1,426
	August	10,284	8,679	1,562	-796	-271	15,480	1,460
	September	10,447	8,784	1,602	-239	-621	15,506	1,485
	October	10,434	8,771	1,604	-274	-442	14,962	1,508
	November	10,461	8,770	1,641	114	-182	15,500	1,510
	December	9,983	8,397	1,544	-329	2,133	16,726	1,454
	Average	**10,299**	**8,688**	**1,559**	**-214**	**234**	**15,231**	
1984	January	10,477	8,868	1,572	-328	1,115	16,801	1,429
	February	10,565	8,874	1,635	197	-1,374	15,437	1,463
	March	10,319	8,672	1,599	-25	641	16,050	1,444
	April	10,531	8,862	1,619	-476	-106	15,568	1,462
	May	10,623	8,955	1,614	-677	-434	15,620	1,496
	June	10,507	8,852	1,613	-104	-109	15,709	1,503
	July	10,587	8,885	1,634	-169	-169	15,498	1,513
	August	10,478	8,809	1,637	250	252	16,116	1,498
	September	10,692	8,993	1,660	260	-769	15,247	1,513
	October	10,608	8,906	1,649	-759	-246	15,616	1,544
	November	10,689	8,979	1,678	-236	-177	15,627	1,556
	December	10,578	8,897	1,649	-290	293	15,375	1,556
	Average	**10,554**	**8,879**	**1,630**	**-199**	**-81**	**15,726**	
1985	January	10,612	8,929	1,642	18	1,443	16,142	1,510
	February	10,598	8,928	1,629	281	1,232	15,975	1,467
	March	10,588	8,927	1,615	-165	426	15,321	1,459
	April	10,481	8,842	1,600	-534	46	15,345	1,474
	May	10,619	8,969	1,607	-696	-386	15,460	1,508
	June	10,622	8,965	1,614	296	-378	15,551	1,510
	July	10,537	8,904	1,591	300	-449	15,517	1,515
	August	10,597	8,895	1,612	170	542	16,039	1,493
	September	10,520	8,874	1,584	-33	-211	15,115	1,500
	October	10,610	8,943	1,605	R71	R170	R15,923	R1,492
	November†	NA	8,932	NA	*-214*	*-521*	*15,474*	*1,519*
	Average	**NA**	**8,919**	**NA**	**-48**	**170**	**15,623**	

[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)

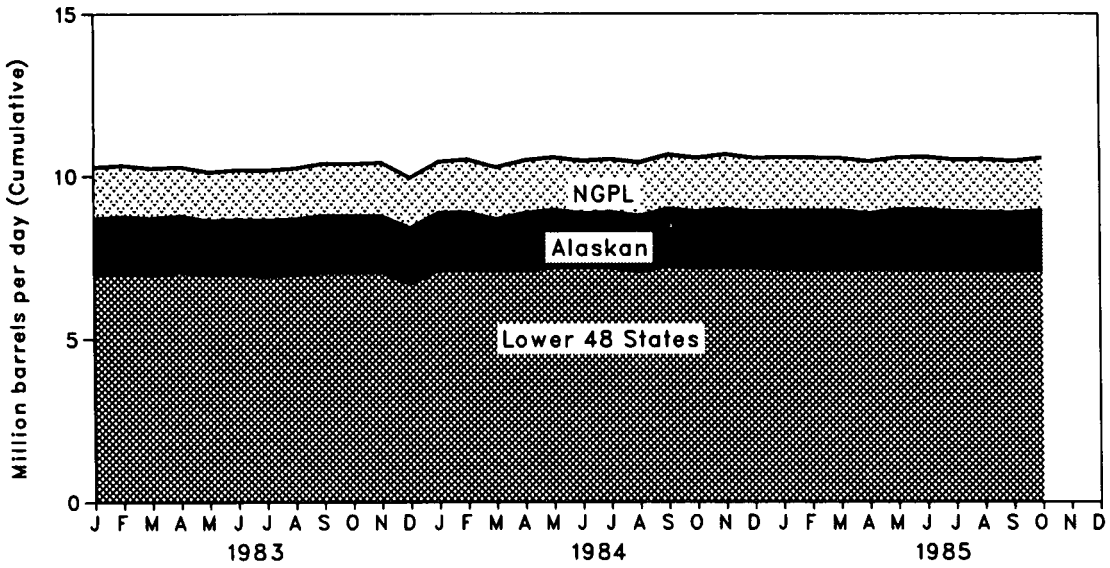
		Imports			Exports			
		Total	Crude Oil[e]	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports[r]
		Thousand barrels per day						
1973	**Average**	**6,256**	**3,244**	**3,012**	**231**	**2**	**229**	**6,025**
1974	**Average**	**6,112**	**3,477**	**2,635**	**221**	**3**	**218**	**5,892**
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	**Average**	**5,113**	**3,488**	**1,625**	**815**	**236**	**579**	**4,298**
1983	January	4,438	2,964	1,474	973	117	856	3,464
	February	3,726	2,267	1,459	865	262	603	2,861
	March	3,690	2,290	1,400	801	174	627	2,889
	April	4,727	3,118	1,609	809	88	721	3,918
	May	5,089	3,360	1,729	848	280	568	4,241
	June	5,326	3,577	1,749	774	144	630	4,552
	July	5,741	3,871	1,870	571	145	426	5,170
	August	6,159	4,227	1,933	663	172	491	5,496
	September	6,129	4,210	1,919	684	177	507	5,445
	October	5,258	3,446	1,812	576	140	436	4,682
	November	5,210	3,337	1,873	679	186	494	4,531
	December	5,033	3,213	1,820	639	95	544	4,394
	Average	**5,051**	**3,329**	**1,722**	**739**	**164**	**575**	**4,312**
1984	January	5,430	3,055	2,375	575	153	422	4,855
	February	5,693	2,950	2,743	582	185	397	5,111
	March	5,301	3,470	1,832	840	236	605	4,461
	April	5,372	3,417	1,955	655	172	483	4,717
	May	5,979	3,942	2,036	766	219	548	5,212
	June	5,482	3,546	1,936	864	222	642	4,618
	July	5,407	3,646	1,761	536	108	429	4,871
	August	5,044	3,248	1,796	732	190	542	4,312
	September	5,252	3,342	1,909	664	162	502	4,588
	October	5,779	3,751	2,028	599	141	458	5,179
	November	5,587	3,583	2,004	854	202	652	4,733
	December	4,933	3,136	1,796	986	185	801	3,947
	Average	**5,437**	**3,426**	**2,011**	**722**	**181**	**541**	**4,715**
1985	January	4,376	2,700	1,676	792	144	647	3,584
	February	3,921	2,126	1,795	857	221	636	3,064
	March	4,689	2,808	1,881	694	189	505	3,996
	April	5,252	3,401	1,851	764	236	528	4,488
	May	5,718	3,724	1,994	705	250	455	5,012
	June	4,877	3,175	1,702	692	226	467	4,185
	July	4,921	3,189	1,732	675	154	521	4,246
	August	4,682	3,110	1,572	749	241	508	3,934
	September	4,977	3,213	1,764	806	188	618	4,171
	October	R5,153	R3,325	R1,828	690	123	567	4,463
	November†	*5,826*	*3,985*	*1,842*	NA	NA	NA	NA
	Average	**4,950**	**3,166**	**1,784**	**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.

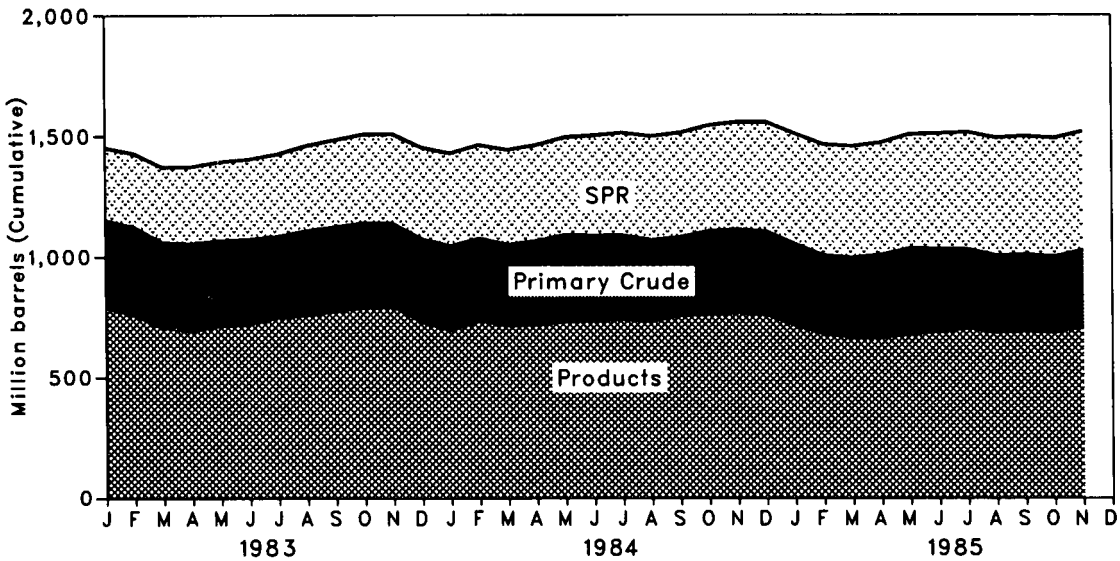
Petroleum

Overview

Production of Crude Oil and Natural Gas Plant Liquids



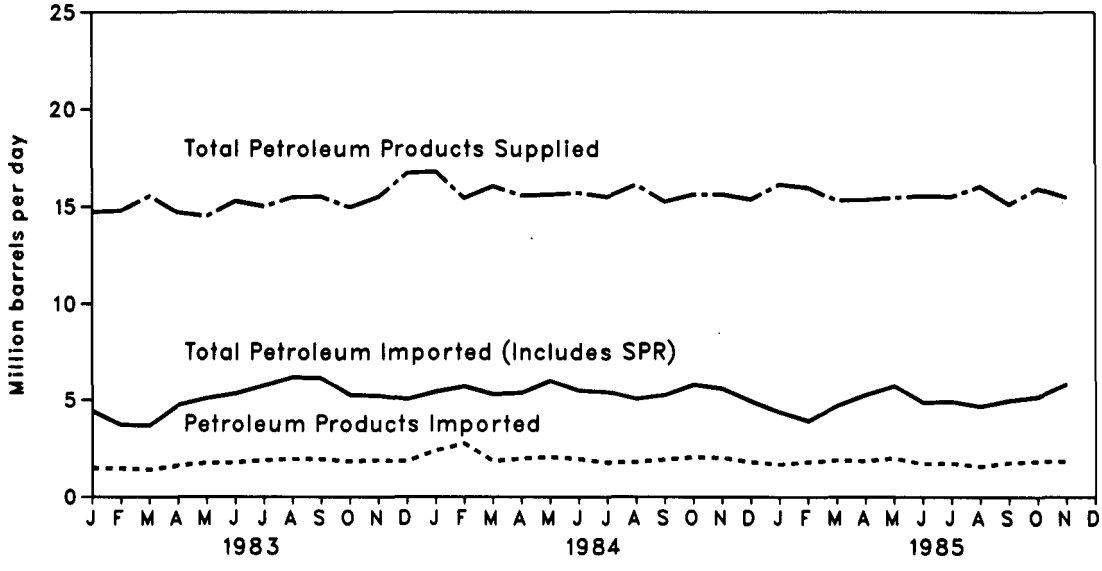
Ending Stocks



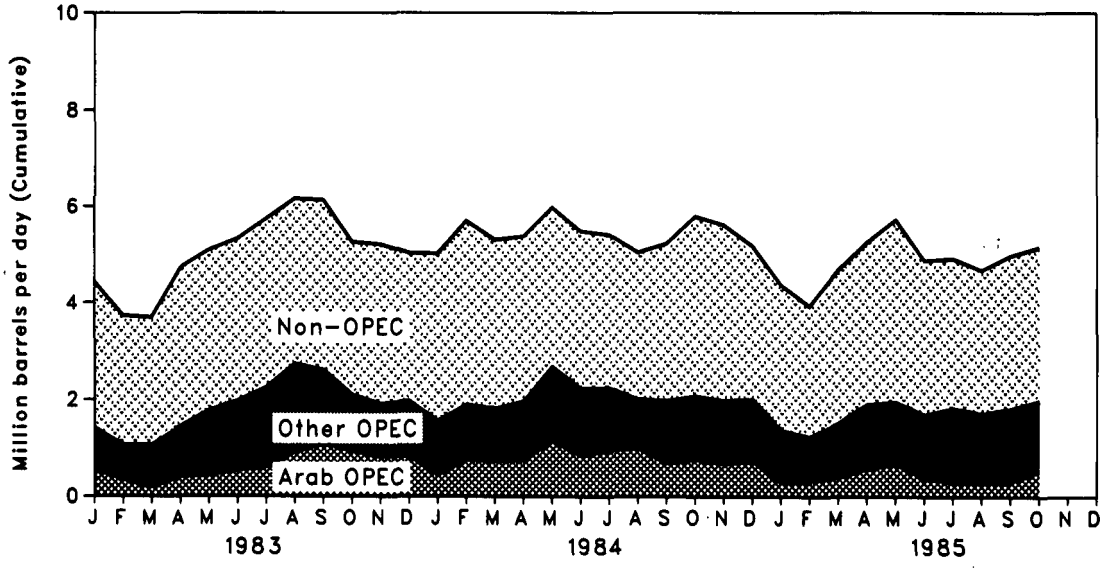
Petroleum

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	**Average**	**8,649**	**1,696**	**3,488**	**165**	**3,323**	**-174**	**38**	**71**
1983	January	8,697	1,732	2,964	219	2,746	-219	[6]-280	170
	February	8,758	1,717	2,267	197	2,070	-197	-123	262
	March	8,700	1,732	2,290	201	2,089	-184	267	31
	April	8,776	1,721	3,118	205	2,913	-197	-205	98
	May	8,631	1,662	3,360	289	3,071	-293	278	169
	June	8,667	1,687	3,577	190	3,387	-188	66	370
	July	8,636	1,715	3,871	274	3,597	-264	497	-167
	August	8,679	1,697	4,227	350	3,876	-358	-438	281
	September	8,784	1,738	4,210	309	3,901	-307	68	-30
	October	8,771	1,733	3,446	202	3,244	-201	-73	44
	November	8,770	1,720	3,337	171	3,166	-135	250	34
	December	8,397	1,711	3,213	193	3,020	-252	-78	117
	Average	**8,688**	**1,714**	**3,329**	**234**	**3,096**	**-234**	**20**	**114**
1984	January	8,868	1,752	3,055	200	2,855	-173	-155	211
	February	8,874	1,749	2,950	85	2,866	-96	293	386
	March	8,672	1,570	3,470	148	3,322	-147	122	110
	April	8,862	1,770	3,417	170	3,248	-170	-307	325
	May	8,955	1,764	3,942	246	3,696	-245	-432	309
	June	8,852	1,659	3,546	309	3,237	-309	205	246
	July	8,885	1,695	3,646	329	3,317	-328	159	-164
	August	8,809	1,722	3,248	180	3,068	-179	429	293
	September	8,993	1,761	3,342	53	3,289	-53	314	-94
	October	8,906	1,732	3,751	187	3,565	-186	-573	291
	November	8,979	1,781	3,583	219	3,364	-207	-29	47
	December	8,897	1,720	3,136	229	2,907	-241	-50	262
	Average	**8,879**	**1,722**	**3,426**	**197**	**3,229**	**-195**	**-4**	**185**
1985	January	8,929	1,788	2,700	223	2,478	-223	241	23
	February	8,928	1,787	2,126	98	2,028	-97	378	346
	March	8,927	1,786	2,808	48	2,760	-48	-117	92
	April	8,842	1,699	3,401	108	3,293	-111	-423	411
	May	8,969	1,827	3,724	222	3,501	-225	-471	457
	June	8,965	1,828	3,175	155	3,020	-155	451	202
	July	8,904	1,802	3,189	226	2,963	-225	525	295
	August	8,895	1,801	3,110	116	2,995	-116	286	195
	September	8,874	1,801	3,213	71	3,142	-71	38	126
	October	8,943	1,822	R3,325	20	R3,305	-20	R91	48
	November†	8,932	1,821	*3,985*	*47*	*3,938*	*-47*	*-167*	NA
	Average	**8,919**	**1,797**	**3,166**	**122**	**3,044**	**-122**	**74**	**NA**

[1]Includes lease condensate.
[3]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 Notes 5 and 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[3]	Crude Losses	Refinery Inputs	Exports	Product Supplied[3]	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	**Average**	**-59**	**3**	**11,774**	**236**	**NA**	**[6]644**	**294**	**350**
1983	January	NA	2	11,143	117	71	660	301	360
	February	NA	3	10,633	262	71	669	306	363
	March	NA	2	10,859	174	70	667	312	355
	April	NA	2	11,433	88	68	679	318	361
	May	NA	1	11,800	280	63	679	327	353
	June	NA	(s)	12,284	144	64	683	332	351
	July	NA	2	12,360	145	65	676	341	335
	August	NA	1	12,152	172	64	700	352	349
	September	NA	1	12,482	177	66	708	361	347
	October	NA	1	11,782	140	63	716	367	349
	November	NA	2	12,004	186	64	713	371	341
	December	NA	1	11,234	95	67	723	379	344
	Average	**NA**	**2**	**11,685**	**164**	**66**			
1984	January	NA	1	11,587	153	64	733	384	349
	February	NA	1	12,157	185	65	727	387	340
	March	NA	2	11,926	236	62	728	392	336
	April	NA	1	11,891	172	64	742	397	346
	May	NA	2	12,247	219	62	763	404	359
	June	NA	2	12,255	222	61	767	414	353
	July	NA	2	12,028	108	60	772	424	348
	August	NA	1	12,346	190	63	764	429	335
	September	NA	3	12,271	162	66	756	431	325
	October	NA	1	11,978	141	69	780	437	343
	November	NA	(s)	12,108	202	62	787	443	344
	December	NA	(s)	11,755	185	64	796	451	345
	Average	**NA**	**2**	**12,044**	**181**	**64**			
1985	January	NA	1	11,456	144	69	793	457	336
	February	NA	1	11,393	221	66	786	460	325
	March	NA	1	11,404	189	69	791	462	329
	April	NA	(s)	11,817	236	67	807	465	342
	May	NA	1	12,141	250	62	828	472	356
	June	NA	1	12,355	226	56	819	477	343
	July	NA	1	12,477	154	55	810	484	327
	August	NA	(s)	12,073	241	55	805	487	318
	September	NA	(s)	11,937	188	55	806	489	317
	October	NA	(s)	R12,209	123	55	R804	490	R314
	November†	NA	NA	*12,403*	NA	NA	*809*	*491*	*318*
	Average	**NA**	**NA**	**11,973**	**NA**	**NA**			

Footnotes continued.
†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

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	**Average**	**170**	**26**	**552**	**92**	**248**	**35**	**514**	**412**	**97**	**2,146**	**854**
1983	January	207	0	282	47	255	43	186	337	54	1,412	537
	February	115	0	214	9	217	0	92	393	28	1,068	338
	March	63	0	103	0	138	0	121	440	201	1,066	183
	April	227	0	162	(s)	210	0	186	523	125	1,432	389
	May	286	0	122	12	405	37	385	455	69	1,771	420
	June	300	0	188	40	466	38	467	335	138	1,973	528
	July	283	0	182	64	464	112	525	434	187	2,251	606
	August	378	0	448	52	433	213	464	511	230	2,728	903
	September	423	0	587	21	501	86	324	432	221	2,595	1,084
	October	261	0	638	16	368	12	307	337	169	2,108	938
	November	184	0	545	56	302	21	215	452	135	1,910	807
	December	144	0	569	45	294	9	329	415	163	1,969	826
	Average	**240**	**0**	**337**	**30**	**338**	**48**	**302**	**422**	**144**	**1,862**	**632**
1984	January	242	0	477	114	289	0	243	549	51	1,965	842
	February	369	7	324	33	267	0	244	478	174	1,896	751
	March	285	0	310	112	283	67	269	358	127	1,811	723
	April	280	0	320	95	226	0	288	593	158	1,962	735
	May	471	0	329	240	479	0	289	627	242	2,677	1,146
	June	302	0	411	46	415	0	243	640	171	2,227	838
	July	332	0	429	112	384	0	204	539	242	2,241	946
	August	404	0	438	82	281	0	114	475	216	2,009	993
	September	359	0	159	113	333	17	160	715	147	2,002	688
	October	333	0	287	114	421	0	208	585	115	2,062	754
	November	298	0	183	124	424	24	163	564	173	1,954	668
	December	204	0	224	211	314	12	166	459	174	1,765	723
	Average	**323**	**1**	**325**	**117**	**343**	**10**	**216**	**548**	**166**	**2,049**	**819**
1985	January	95	0	106	60	274	0	262	481	89	1,367	289
	February	174	0	108	0	232	0	131	524	64	1,233	307
	March	252	0	85	52	283	0	180	575	84	1,512	390
	April	286	8	186	70	313	0	280	669	86	1,899	561
	May	281	0	49	128	211	0	381	549	354	1,953	669
	June	178	5	26	81	439	0	357	444	152	1,682	379
	July	136	10	44	13	389	42	376	559	248	1,817	298
	August	135	0	46	17	377	85	194	563	290	1,707	280
	September	147	0	27	57	206	43	263	820	243	1,805	302
	October	177	20	251	17	278	41	282	712	196	1,973	520
	Average	**186**	**4**	**93**	**50**	**301**	**21**	**272**	**590**	**182**	**1,698**	**400**

[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)

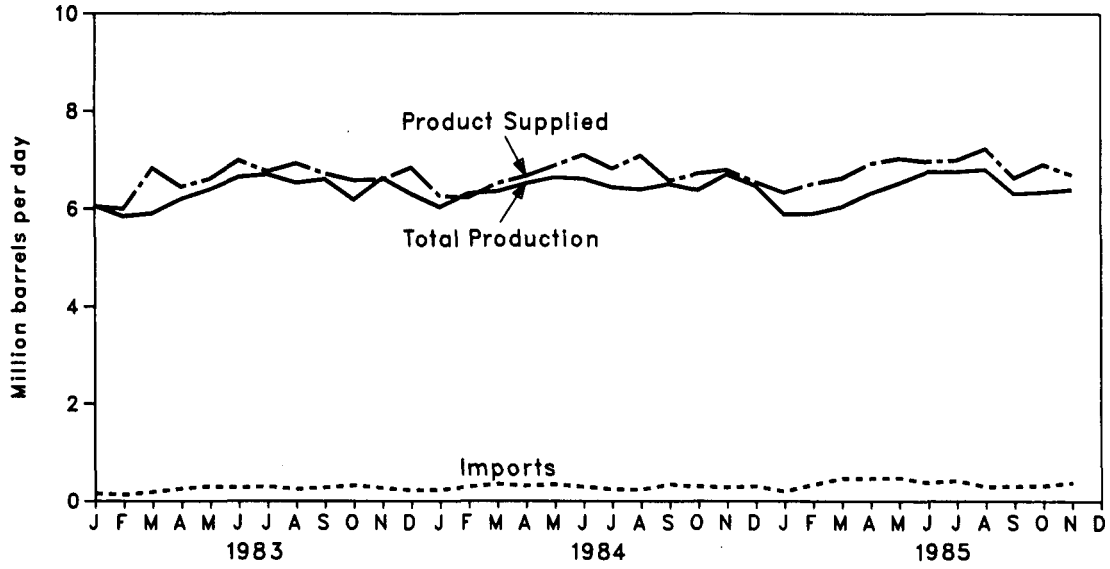
		Imports from Non-OPEC Sources[1]										
		Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non-OPEC	Total Non-OPEC	Total Imports
		Thousand barrels per day										
1973	**Average**	**174**	**1,325**	**16**	**585**	**255**	**15**	**99**	**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	**Average**	**65**	**482**	**685**	**175**	**112**	**456**	**50**	**316**	**627**	**2,968**	**5,113**
1983	January	68	534	849	228	73	314	40	299	621	3,026	4,438
	February	92	586	722	183	81	193	50	192	558	2,658	3,726
	March	86	488	775	187	78	240	43	162	565	2,624	3,690
	April	174	454	981	216	85	421	20	183	759	3,295	4,727
	May	135	518	944	153	108	484	42	235	699	3,318	5,089
	June	137	586	830	173	120	440	48	262	757	3,353	5,326
	July	69	634	849	198	107	369	37	364	864	3,490	5,741
	August	144	542	906	197	90	461	40	313	738	3,431	6,159
	September	148	533	849	261	82	475	33	307	845	3,534	6,129
	October	171	532	771	172	106	414	48	357	580	3,151	5,258
	November	148	556	726	144	110	334	55	427	801	3,300	5,210
	December	127	604	710	153	113	429	22	278	628	3,063	5,033
	Average	**125**	**547**	**826**	**189**	**96**	**382**	**40**	**282**	**701**	**3,189**	**5,051**
1984	January	159	635	710	279	54	382	53	390	804	3,465	5,430
	February	156	620	748	289	77	344	58	418	1,087	3,797	5,693
	March	90	694	716	169	93	434	34	248	1,013	3,490	5,301
	April	95	705	869	207	91	282	37	257	869	3,410	5,372
	May	31	722	676	192	57	429	38	336	819	3,302	5,979
	June	52	506	754	234	104	345	53	268	939	3,255	5,482
	July	14	577	740	99	120	362	27	292	934	3,166	5,407
	August	57	547	640	206	98	388	34	236	829	3,035	5,044
	September	98	550	780	133	103	490	38	250	808	3,249	5,252
	October	151	682	827	112	122	486	37	321	979	3,717	5,779
	November	88	640	841	181	115	544	44	283	897	3,633	5,587
	December	75	675	686	161	98	337	46	235	855	3,168	4,933
	Average	**88**	**630**	**748**	**188**	**94**	**402**	**42**	**294**	**902**	**3,388**	**5,437**
1985	January	90	610	765	125	113	345	32	235	695	3,009	4,376
	February	37	730	649	39	119	150	50	213	702	2,688	3,921
	March	32	900	921	52	137	141	29	235	730	3,177	4,689
	April	0	880	950	18	107	214	42	205	937	3,353	5,252
	May	66	796	959	22	126	419	37	252	1,088	3,765	5,718
	June	21	716	712	30	92	481	23	271	848	3,195	4,877
	July	36	610	813	26	133	323	14	236	912	3,104	4,921
	August	19	679	859	18	121	336	28	241	673	2,975	4,682
	September	30	807	852	29	134	311	26	173	811	3,173	4,977
	October	14	836	744	5	92	372	21	260	834	3,180	5,153
	Average	**35**	**756**	**824**	**36**	**118**	**310**	**30**	**233**	**824**	**3,166**	**4,864**

Footnotes continued.
[1]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.

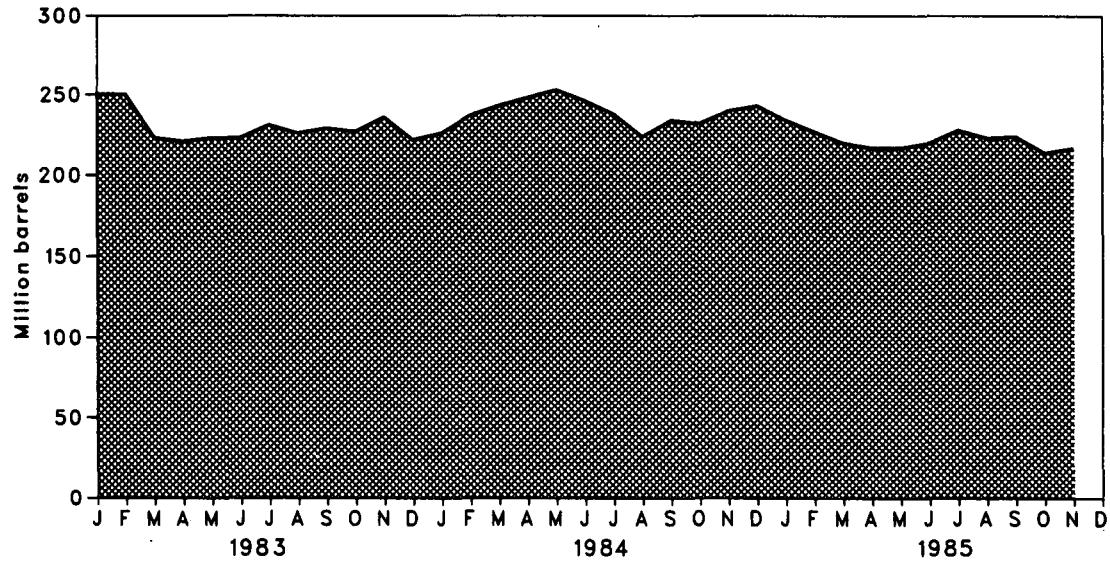
Petroleum

Finished Motor Gasoline Supply and Disposition

Products Supplied, Total Production, and Imports



Ending Stocks



Petroleum

Finished Motor Gasoline Supply and Disposition

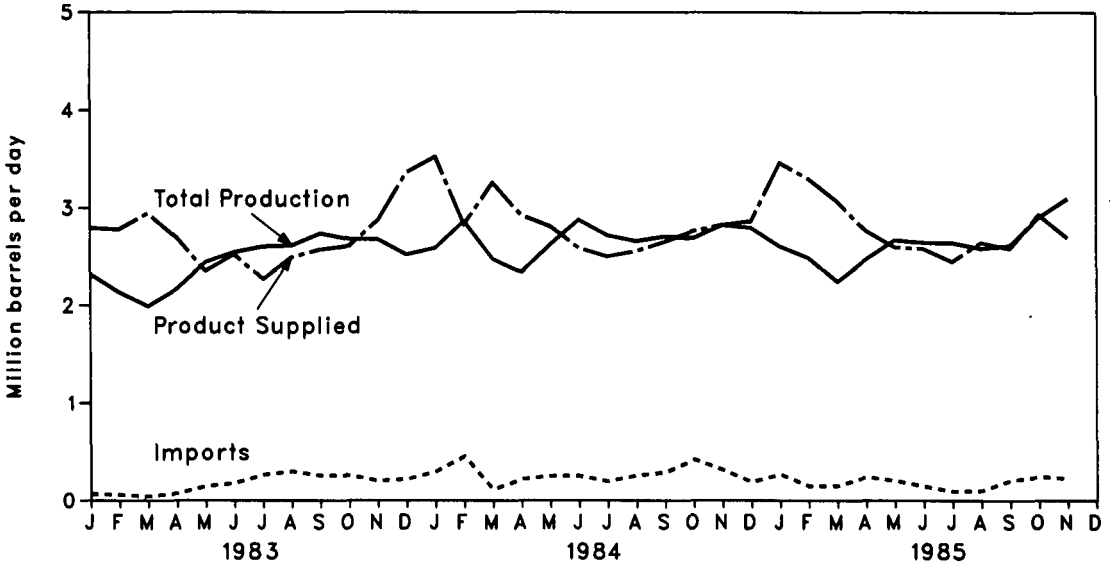
		Supply			Disposition				Ending Stocks[1]	
						Product Supplied				
		Total Production	Imports[2]	Stock Withdrawal[2,3]	Exports	Total	Unleaded[4]	Unleaded Percent of Total	Total Motor Gasoline[5]	Finished Motor Gasoline
		Thousand barrels per day							Million barrels	
1973	Average	6,535	134	9	4	6,674			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	Average	6,338	197	25	20	6,539	3,409	52.1	[6]235	
1983	January	6,065	153	[6]-167	(s)	6,051	3,364	55.6	250	207
	February	5,848	128	24	(s)	6,000	3,264	54.4	250	207
	March	5,906	186	768	23	6,836	3,622	53.0	223	183
	April	6,201	255	-3	1	6,452	3,492	54.1	221	183
	May	6,397	305	-83	1	6,617	3,558	53.8	223	185
	June	6,655	277	84	22	6,994	3,792	54.2	223	183
	July	6,707	302	-225	18	6,765	3,746	55.4	231	190
	August	6,537	250	161	13	6,936	3,836	55.3	226	185
	September	6,611	279	-149	14	6,727	3,691	54.9	229	189
	October	6,188	330	72	2	6,588	3,711	56.3	227	187
	November	6,634	269	-298	2	6,603	3,692	55.9	236	196
	December	6,308	224	339	25	6,846	3,966	57.9	222	186
	Average	6,340	247	45	10	6,622	3,647	55.1		
1984	January	6,036	231	-1	1	6,265	3,605	57.5	226	186
	February	6,317	299	-383	2	6,231	3,585	57.5	237	197
	March	6,359	355	-176	9	6,528	3,750	57.4	243	202
	April	6,525	319	-167	(s)	6,676	3,857	57.8	248	207
	May	6,650	346	-105	(s)	6,890	4,004	58.1	253	210
	June	6,619	296	209	17	7,107	4,214	59.3	246	204
	July	6,450	247	142	9	6,830	4,057	59.4	238	200
	August	6,405	242	447	1	7,093	4,283	60.4	224	186
	September	6,516	349	-275	2	6,588	3,973	60.3	234	194
	October	6,388	308	34	1	6,729	4,093	60.8	232	193
	November	6,709	286	-183	11	6,800	4,245	62.4	240	199
	December	6,478	308	-215	16	6,555	4,168	63.6	243	205
	Average	6,453	299	-54	6	6,693	3,987	59.6		
1985	January	5,889	204	245	2	6,336	4,026	63.5	234	198
	February	5,900	347	277	2	6,521	4,048	62.1	227	190
	March	6,041	473	118	3	6,629	4,189	63.2	220	186
	April	6,322	475	145	11	6,931	4,377	63.1	217	182
	May	6,533	487	25	8	7,036	4,422	62.8	217	181
	June	6,766	384	-168	7	6,975	4,456	63.9	220	186
	July	6,763	426	-174	18	6,997	4,536	64.8	228	192
	August	6,810	302	129	4	7,236	4,753	65.7	223	188
	September	6,315	313	16	6	6,639	4,374	65.9	224	187
	October	R6,350	R323	R261	19	R6,914	4,488	64.9	R214	R179
	November†	*6,405*	*388*	*-77*	NA	*6,711*	NA	NA	*217*	*183*
	Average	6,375	375	72	NA	6,814	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.

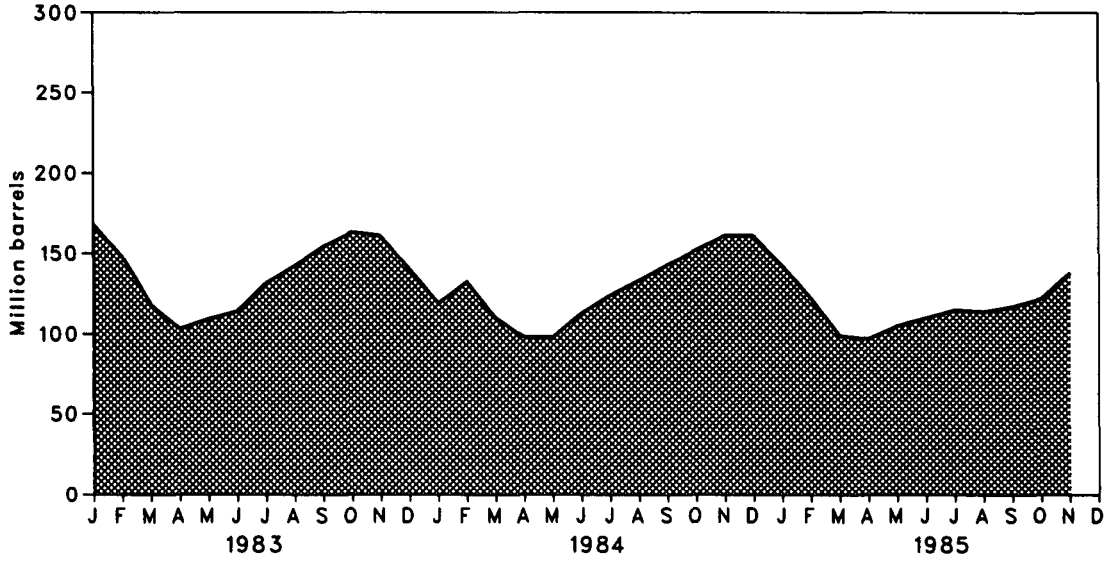
Petroleum

Distillate Fuel Oil Supply and Disposition

Product Supplied, Total Production, and Imports



Ending Stocks



Petroleum

Distillate Fuel Oil Supply and Disposition

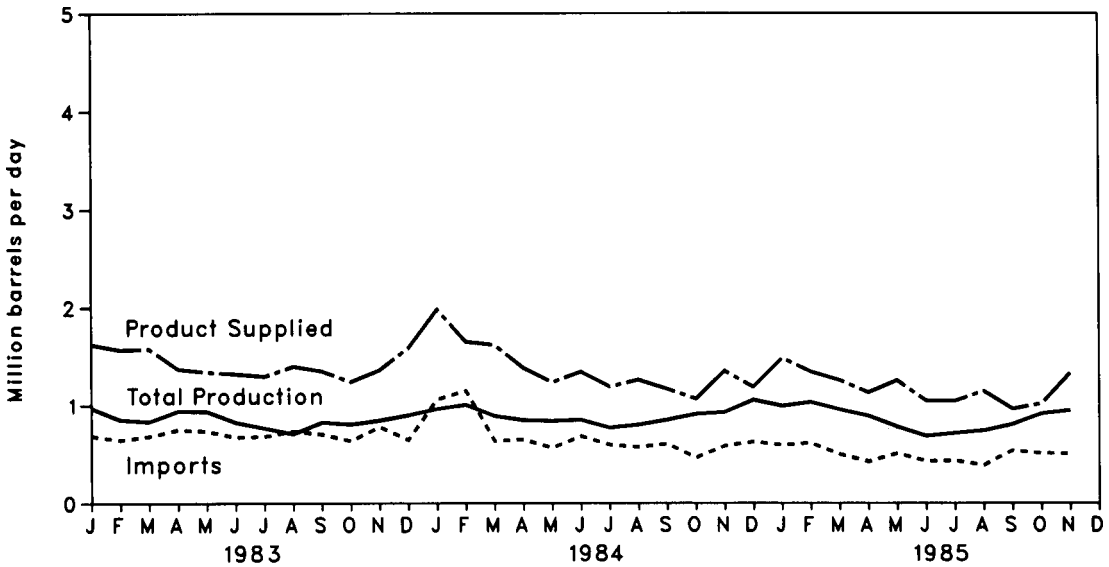
		Supply				Disposition		Ending Stocks[1]
		Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Product Supplied[3]	
		Thousand barrels per day						Million barrels
1973	**Average**	**2,822**	**392**	**-115**	**2**	**9**	**3,092**	**196**
1974	**Average**	**2,669**	**289**	**-9**	**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	**Average**	**2,606**	**93**	**35**	**10**	**74**	**2,671**	**[4]179**
1983	January	2,321	68	[4]580	NA	173	2,797	168
	February	2,135	59	691	NA	105	2,780	148
	March	1,993	42	971	NA	59	2,947	118
	April	2,171	73	500	NA	47	2,697	103
	May	2,444	147	-186	NA	50	2,354	109
	June	2,546	179	-161	NA	40	2,524	114
	July	2,604	267	-546	NA	55	2,270	131
	August	2,615	301	-379	NA	43	2,495	142
	September	2,739	259	-386	NA	37	2,575	154
	October	2,681	260	-276	NA	55	2,611	163
	November	2,680	203	45	NA	54	2,874	161
	December	2,522	221	676	NA	54	3,365	140
	Average	**2,456**	**174**	**124**	**NA**	**64**	**2,690**	
1984	January	2,591	299	676	NA	40	3,525	119
	February	2,867	454	-446	NA	41	2,834	132
	March	2,479	115	731	NA	66	3,259	110
	April	2,342	220	396	NA	32	2,926	98
	May	2,624	253	-15	NA	48	2,814	98
	June	2,880	256	-490	NA	53	2,593	113
	July	2,719	199	-373	NA	40	2,504	124
	August	2,661	259	-287	NA	74	2,559	133
	September	2,707	291	-321	NA	22	2,654	143
	October	2,691	421	-300	NA	47	2,765	152
	November	2,826	316	-291	NA	24	2,827	161
	December	2,798	190	-3	NA	120	2,865	161
	Average	**2,681**	**272**	**-57**	**NA**	**51**	**2,845**	
1985	January	2,608	271	624	NA	41	3,462	142
	February	2,491	148	724	NA	64	3,299	122
	March	2,244	153	715	NA	44	3,069	99
	April	2,474	244	75	NA	27	2,767	97
	May	2,670	203	-243	NA	31	2,600	105
	June	2,645	147	-177	NA	30	2,584	110
	July	2,644	95	-177	NA	112	2,450	115
	August	2,587	101	58	NA	100	2,646	114
	September	2,614	208	-115	NA	121	2,586	117
	October	R2,902	R247	R-149	NA	67	R2,932	122
	November†	*3,097*	*229*	*-519*	NA	NA	*2,695*	*138*
	Average	**2,635**	**186**	**71**	**NA**	**NA**	**2,824**	

[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.
†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.

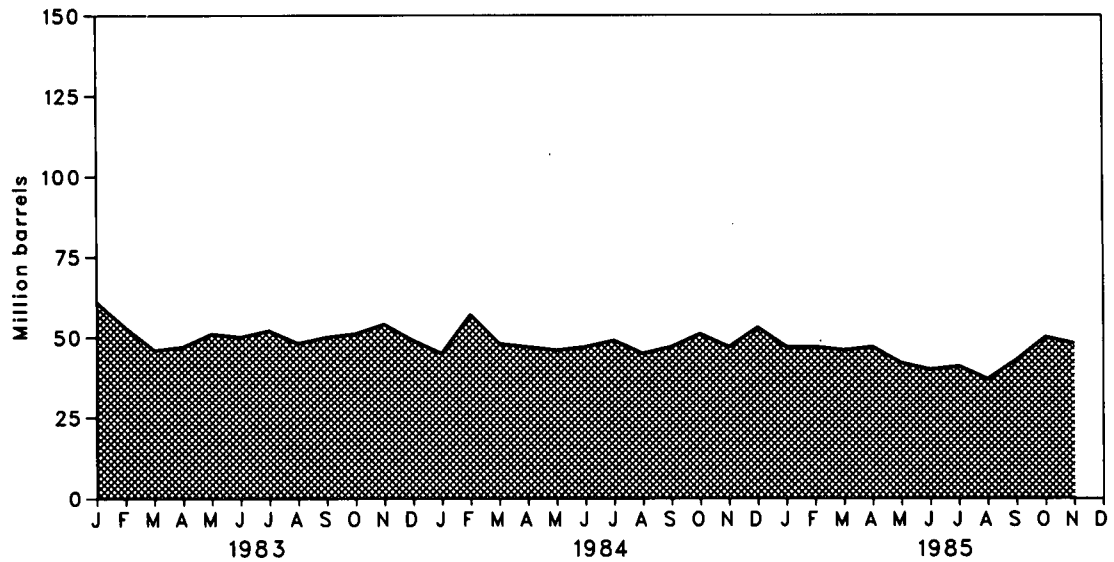
Petroleum

Residual Fuel Oil Supply and Disposition

Product Supplied, Total Production, and Imports



Ending Stocks



Petroleum

Residual Fuel Oil Supply and Disposition

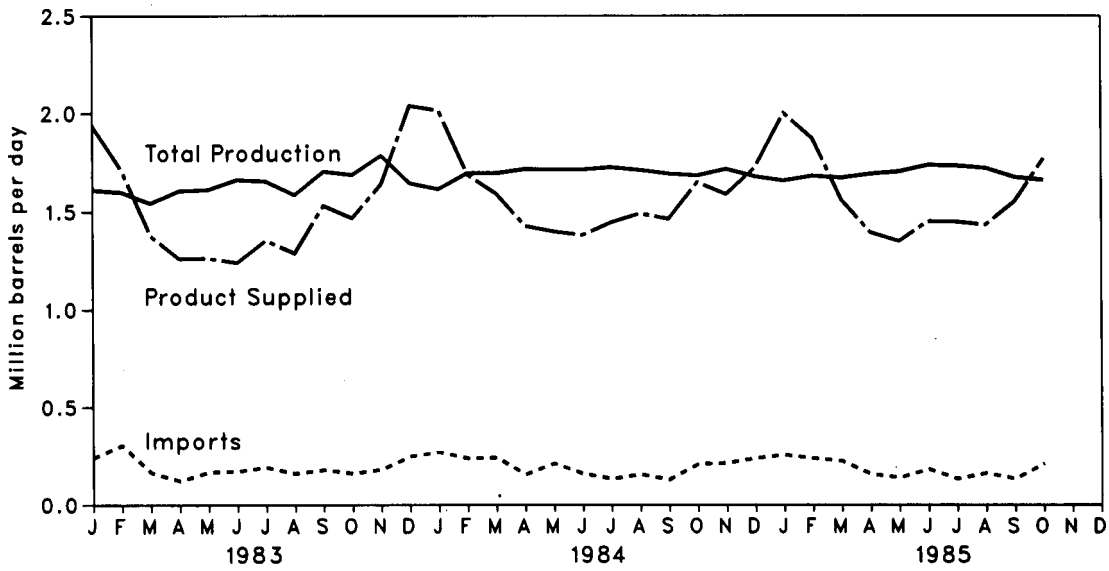
		Supply				Disposition		Ending Stocks[1]
		Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Product Supplied[3]	
		Thousand barrels per day						Million barrels
1973	**Average**	**971**	**1,853**	**5**	**17**	**23**	**2,822**	**53**
1974	**Average**	**1,070**	**1,587**	**-17**	**13**	**14**	**2,639**	**'60**
1975	**Average**	**1,235**	**1,223**	**'2**	**15**	**15**	**2,462**	**74**
1976	**Average**	**1,377**	**1,413**	**5**	**17**	**12**	**2,801**	**72**
1977	**Average**	**1,754**	**1,359**	**-48**	**13**	**6**	**3,071**	**90**
1978	**Average**	**1,667**	**1,355**	**-1**	**13**	**13**	**3,023**	**90**
1979	**Average**	**1,687**	**1,151**	**-15**	**12**	**9**	**2,826**	**96**
1980	**Average**	**1,580**	**939**	**10**	**12**	**33**	**2,508**	**'92**
1981	**Average[5]**	**1,321**	**800**	**'37**	**48**	**118**	**2,088**	**78**
1982	**Average**	**1,070**	**776**	**32**	**48**	**209**	**1,716**	**'66**
1983	January	972	691	'258	NA	294	1,626	61
	February	857	647	257	NA	191	1,570	53
	March	835	686	227	NA	169	1,579	46
	April	941	753	-10	NA	310	1,374	47
	May	936	738	-141	NA	190	1,342	51
	June	828	677	36	NA	218	1,323	50
	July	769	684	-64	NA	90	1,299	52
	August	710	739	115	NA	165	1,400	48
	September	826	706	-47	NA	134	1,351	50
	October	807	638	-50	NA	153	1,243	51
	November	845	780	-97	NA	167	1,362	54
	December	897	649	182	NA	141	1,587	49
	Average	**852**	**699**	**55**	**NA**	**185**	**1,421**	
1984	January	961	1,059	110	NA	151	1,979	45
	February	1,003	1,151	-416	NA	87	1,651	57
	March	889	636	298	NA	204	1,619	48
	April	847	651	15	NA	130	1,384	47
	May	840	565	32	NA	200	1,237	46
	June	849	685	-15	NA	176	1,344	47
	July	770	597	-76	NA	99	1,192	49
	August	800	572	149	NA	260	1,261	45
	September	850	606	-74	NA	214	1,168	47
	October	907	461	-127	NA	174	1,066	51
	November	928	585	125	NA	286	1,352	47
	December	1,053	627	-193	NA	299	1,189	53
	Average	**891**	**681**	**-12**	**NA**	**190**	**1,369**	
1985	January	991	594	208	NA	312	1,481	47
	February	1,031	614	-7	NA	295	1,343	47
	March	954	496	22	NA	216	1,256	46
	April	888	422	-11	NA	167	1,133	47
	May	780	505	156	NA	185	1,255	42
	June	686	426	53	NA	118	1,047	40
	July	714	431	-20	NA	83	1,042	41
	August	741	386	125	NA	106	1,146	37
	September	804	537	-193	NA	188	961	43
	October	R912	R509	R-221	NA	184	R1,017	R50
	November†	*947*	*505*	*29*	NA	NA	*1,332*	*48*
	Average	**858**	**492**	**13**	**NA**	**NA**	**1,182**	

[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.
'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.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

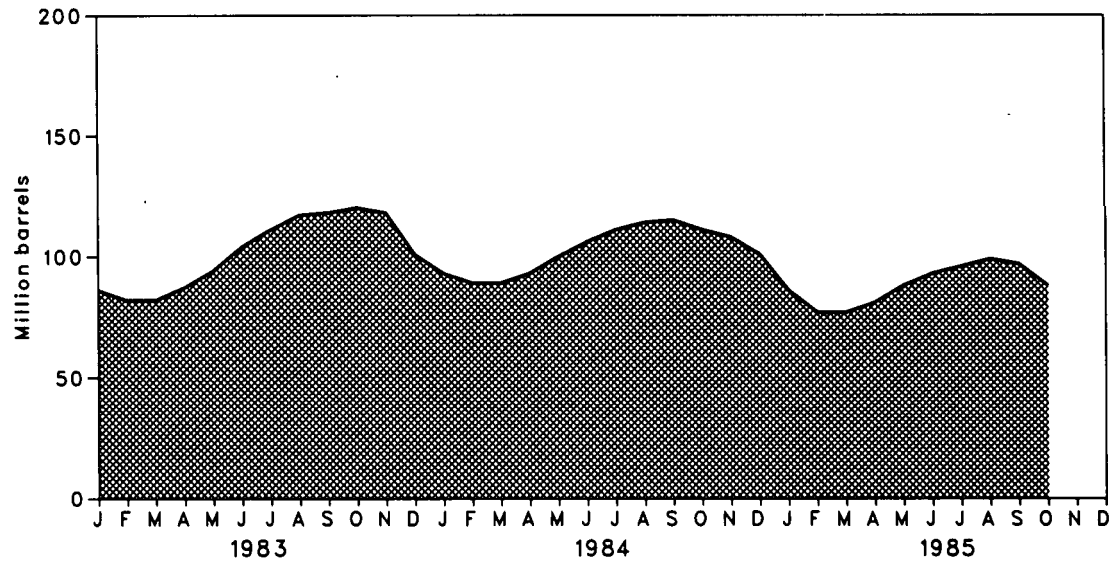
Petroleum

Liquefied Petroleum Gases Supply and Disposition

Product Supplied, Total Production, and Imports



Ending 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	**Average**	**1,528**	**226**	**111**	**300**	**65**	**1,499**	**[4]94**
1983	January	1,611	240	[4]520	313	118	1,939	86
	February	1,600	305	128	244	76	1,713	82
	March	1,543	166	-9	197	127	1,377	82
	April	1,607	124	-156	198	116	1,260	87
	May	1,613	167	-225	207	84	1,263	94
	June	1,664	172	-334	203	59	1,241	104
	July	1,656	191	-221	217	55	1,354	111
	August	1,586	160	-199	229	29	1,289	117
	September	1,705	178	-30	236	86	1,531	118
	October	1,688	160	-81	268	32	1,467	120
	November	1,785	180	70	362	33	1,640	118
	December	1,645	247	575	363	66	2,038	[4]101
	Average	**1,642**	**190**	**4**	**253**	**73**	**1,509**	
1984	January	1,615	269	[4]494	340	23	2,015	93
	February	1,696	237	122	324	41	1,690	89
	March	1,696	241	12	288	68	1,593	89
	April	1,716	155	-139	253	54	1,426	93
	May	1,714	211	-240	244	42	1,399	100
	June	1,714	158	-201	237	53	1,380	106
	July	1,725	132	-139	232	43	1,444	111
	August	1,711	154	-100	241	34	1,490	114
	September	1,693	128	-50	283	26	1,462	115
	October	1,684	207	138	322	56	1,650	111
	November	1,716	212	89	376	52	1,588	108
	December	1,679	237	239	349	82	1,724	101
	Average	**1,697**	**195**	**19**	**291**	**48**	**1,572**	
1985	January	1,658	255	466	309	70	2,001	86
	February	1,682	237	338	313	72	1,872	77
	March	1,672	223	-13	270	52	1,560	77
	April	1,691	156	-115	260	78	1,394	81
	May	1,703	138	-217	235	40	1,349	88
	June	1,736	181	-173	244	51	1,449	93
	July	1,733	131	-107	243	68	1,447	96
	August	1,721	161	-103	267	80	1,432	99
	September	1,675	132	84	311	29	1,551	97
	October	1,661	209	270	322	47	1,770	88
	Average	**1,693**	**181**	**41**	**277**	**59**	**1,580**	

[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.
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

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	**Average**	**3,453**	**334**	**80**	**787**	**211**	**2,869**	**[4]253**
1983	January	3,194	322	[4]-419	588	271	2,239	271
	February	3,229	321	12	673	232	2,658	270
	March	3,381	319	-147	572	249	2,732	275
	April	3,299	404	-24	592	247	2,840	276
	May	3,405	374	35	705	242	2,866	275
	June	3,610	444	96	717	292	3,144	272
	July	3,636	425	148	735	209	3,265	267
	August	3,695	482	30	668	242	3,297	266
	September	3,792	497	-6	788	236	3,255	266
	October	3,578	424	-107	711	195	2,990	270
	November	3,568	441	95	912	238	2,957	267
	December	3,123	479	361	883	257	2,823	[4]256
	Average	**3,460**	**411**	**6**	**712**	**242**	**2,923**	
1984	January	3,376	517	[4]-163	570	207	2,953	253
	February	3,595	602	-250	754	225	2,966	261
	March	3,512	485	-227	527	258	2,988	268
	April	3,584	610	-211	623	268	3,092	274
	May	3,683	662	-105	764	257	3,218	277
	June	3,869	541	391	1,232	343	3,223	265
	July	3,864	587	277	1,022	238	3,467	257
	August	3,848	569	41	637	172	3,650	256
	September	3,759	536	-50	699	238	3,308	257
	October	3,585	632	10	709	180	3,336	257
	November	3,532	606	81	945	279	2,997	254
	December	3,379	434	464	1,016	284	2,977	240
	Average	**3,632**	**565**	**23**	**791**	**245**	**3,183**	
1985	January	3,258	352	-102	494	223	2,792	243
	February	3,385	449	-99	658	204	2,874	246
	March	3,436	536	-415	627	190	2,739	259
	April	3,570	553	-49	776	245	3,054	260
	May	3,677	661	-106	883	191	3,158	264
	June	3,927	564	87	878	261	3,439	261
	July	3,998	649	31	910	241	3,525	260
	August	4,078	622	335	1,292	218	3,523	250
	September	3,874	574	-1	846	274	3,323	250
	October	3,800	541	9	867	250	3,234	249
	Average	**3,702**	**551**	**-31**	**825**	**230**	**3,168**	

[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 1983, numerous 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 barrels, would have been:

- Crude Oil: 1982—645 (Total) and 351 (Other Primary).
- Crude Oil and Petroleum Products: 1974—1,121; 1980—1,420; and 1982—1,462.
- Motor Gasoline: 1974—225; 1980—263; 1982—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 1984: EIA, *Petroleum Supply Annual.*
- January 1985 through October 1985: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly* (except domestic crude oil production).
- November 1985: Estimates based on EIA weekly data (except domestic crude oil production).
- January 1985 through November 1985: 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 October 1985 was an estimated 1.4 trillion cubic feet. This was 4.0 percent less than in October 1984.

Consumption of natural and supplemental gas in October 1985 was an estimated 1.3 trillion cubic feet. This was essentially the same as in October 1984.

Deliveries to industrial consumers, the principal end users of natural gas, during September 1985 (latest data available) were an estimated 485 billion cubic feet. This was 3.4 percent lower than in September 1984.

Imports of natural gas in October 1985 were an estimated 73 billion cubic feet, 9.0 percent higher than in the previous October. There were no imports of Algerian liquefied natural gas (LNG) during October.

Stocks of working gas* in underground natural gas storage reservoirs at the end of October 1985 totaled 3,207 billion cubic feet. This was 1.0 percent above stocks available a year earlier. Net injections into storage during October 1985 were 128 billion cubic feet, 34.4 percent lower than during the previous October.

*Gas available for withdrawal.

Natural Gas

Production Summary

		Gross Wet Gas Withdrawals[1]	Used for Repressuring[2]	Nonhydro-carbon Gas Removed[3]	Vented and Flared	Marketed Production (Wet)[4]	Extraction Loss[5]	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	**Total**	**20,210**	**1,388**	**208**	**93**	**18,520**	**762**	**17,758**
1983	January	1,688	125	20	7	1,536	72	1,464
	February	1,488	111	17	7	1,353	64	1,289
	March	1,552	125	18	8	1,401	66	1,335
	April	1,470	123	16	8	1,323	62	1,261
	May	1,467	114	17	9	1,328	62	1,266
	June	1,415	121	19	7	1,268	60	1,208
	July	1,502	128	18	8	1,348	63	1,285
	August	1,555	127	20	8	1,400	66	1,334
	September	1,514	123	19	8	1,364	64	1,300
	October	1,591	125	18	8	1,440	68	1,372
	November	1,602	117	19	9	1,457	68	1,389
	December	1,753	119	21	8	1,605	75	1,530
	Total	**18,597**	**1,458**	**222**	**95**	**16,822**	**790**	**16,033**
1984	January	1,887	135	21	9	1,723	79	1,644
	February	1,650	127	17	8	1,497	69	1,428
	March	1,693	125	19	9	1,540	71	1,469
	April	1,666	132	18	9	1,507	69	1,438
	May	1,668	138	19	9	1,503	69	1,434
	June	1,619	135	18	9	1,456	67	1,389
	July	1,676	137	20	10	1,509	69	1,440
	August	1,653	137	19	9	1,487	68	1,419
	September	1,574	132	16	9	1,417	65	1,352
	October	1,661	143	19	9	1,490	69	1,421
	November	1,656	142	17	10	1,487	68	1,419
	December	1,789	146	21	8	1,613	74	1,539
	Total	**20,192**	**1,630**	**224**	**108**	**18,230**	**838**	**17,392**
1985	January	1,788	124	20	7	1,637	75	1,562
	February	1,635	122	18	6	1,489	68	1,421
	March	1,651	137	19	6	1,490	69	1,421
	April	1,563	137	18	6	1,401	64	1,337
	May	1,541	133	19	7	1,383	64	1,319
	June	1,484	126	17	6	1,335	61	1,274
	July	1,538	133	20	7	1,379	63	1,316
	August	1,547	133	19	7	1,388	64	1,324
	September	*1,529*	*131*	*19*	*7*	*1,372*	*63*	*1,309*
	October	*1,594*	*137*	*20*	*7*	*1,430*	*66*	*1,364*
	Year to Date	**15,870**	**1,313**	**189**	**66**	**14,304**	**657**	**13,647**

[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.
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 1984 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

Natural Gas

Supply and Disposition of Natural Gas

		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[3]
		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**	**964**	**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	**Total**	**17,758**	**2,164**	**145**	**933**	**21,000**	**2,472**	**52**	**18,001**	**475**
1983	January	1,464	474	15	112	2,065	26	5	1,975	59
	February	1,289	341	13	95	1,738	39	5	1,642	52
	March	1,335	280	12	86	1,713	63	5	1,591	54
	April	1,261	171	11	74	1,517	88	5	1,373	51
	May	1,266	43	9	61	1,379	205	5	1,118	51
	June	1,208	23	8	59	1,298	273	3	974	48
	July	1,285	26	8	58	1,377	287	5	1,034	51
	August	1,334	37	9	56	1,436	265	6	1,112	53
	September	1,300	28	9	67	1,404	277	4	1,071	52
	October	1,372	42	10	64	1,488	183	4	1,246	55
	November	1,389	169	12	80	1,650	86	5	1,503	56
	December	1,530	634	17	107	2,288	31	5	2,191	61
	Total	**16,033**	**2,270**	**132**	**920**	**19,354**	**1,822**	**55**	**16,835**	[5]**642**
1984	January	1,644	580	13	97	2,334	55	5	2,263	11
	February	1,428	310	10	69	1,817	61	5	1,742	9
	March	1,469	R371	10	69	1,919	49	6	1,854	10
	April	1,438	102	8	71	1,619	147	5	1,458	9
	May	1,434	31	7	66	1,538	259	5	1,265	9
	June	1,389	28	7	59	1,483	329	3	1,142	9
	July	1,440	29	7	55	1,531	353	5	1,163	10
	August	1,419	31	8	54	1,512	324	5	1,174	9
	September	1,352	31	8	57	1,448	295	5	1,139	9
	October	1,421	48	8	67	1,544	247	5	1,283	9
	November	1,419	231	11	84	1,745	85	5	1,646	9
	December	1,539	309	13	94	1,955	94	5	1,846	10
	Total	**17,392**	**2,098**	**110**	**843**	**20,443**	**2,295**	**55**	**17,978**	[5]**115**
1985	January	1,562	659	16	104	2,341	35	5	2,264	37
	February	1,421	437	14	98	1,970	48	4	1,884	34
	March	1,421	213	13	89	1,736	97	4	1,601	34
	April	1,337	94	10	75	1,516	207	5	1,272	32
	May	1,319	25	8	70	1,422	300	5	1,085	32
	June	1,274	33	10	63	1,380	260	5	1,084	31
	July	1,316	45	10	60	1,431	309	6	1,084	32
	August	1,324	50	11	58	1,443	277	5	1,129	32
	September	*1,309*	20	9	63	1,401	270	4	1,096	31
	October	*1,364*	69	12	73	1,518	197	4	1,284	33
	Year to Date	**13,647**	**1,645**	**113**	**753**	**16,158**	**2,000**	**47**	**13,783**	**328**

[1]Monthly and annual data for 1980 through 1984 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.
[5]See Note 7 on the last two pages of this section.
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 1984 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

Natural Gas

Natural Gas[1] Consumption

		Lease and Plant Fuel	Pipeline Fuel	Delivered to Consumers					Total Consumption
				Residential	Commercial[2]	Industrial	Electric Utilities	Total	
				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	**Total**	**1,109**	**596**	**4,633**	**2,606**	**5,831**	**3,226**	**16,295**	**18,001**
1983	January	89	57	718	366	537	208	1,829	1,975
	February	79	48	694	360	284	177	1,515	1,642
	March	81	46	541	285	430	208	1,464	1,591
	April	77	40	464	241	348	203	1,256	1,373
	May	77	33	277	151	362	218	1,008	1,118
	June	74	28	181	110	333	248	872	974
	July	78	30	134	100	378	314	926	1,034
	August	81	32	123	103	421	352	999	1,112
	September	79	31	128	105	429	299	961	1,071
	October	84	36	179	119	577	251	1,126	1,246
	November	85	44	330	185	645	214	1,374	1,503
	December	93	64	612	308	896	218	2,034	2,191
	Total	**978**	**490**	**4,381**	**2,433**	**5,643**	**2,911**	**15,367**	**16,835**
1984	January	102	67	885	436	558	215	2,094	2,263
	February	88	51	701	355	360	187	1,603	1,742
	March	91	55	607	312	583	206	1,708	1,854
	April	89	43	465	244	397	220	1,326	1,458
	May	89	37	288	160	426	265	1,139	1,265
	June	86	34	171	109	444	298	1,022	1,142
	July	89	34	129	97	465	349	1,040	1,163
	August	88	35	119	98	484	350	1,051	1,174
	September	84	33	127	102	502	291	1,022	1,139
	October	88	38	183	129	575	270	1,157	1,283
	November	88	48	324	196	745	245	1,510	1,646
	December	95	54	568	297	615	217	1,697	1,846
	Total	**1,077**	**529**	**4,567**	**2,535**	**6,159**	**3,111**	**16,373**	**17,978**
1985	January	97	67	742	369	764	225	2,100	2,264
	February	88	55	836	407	297	201	1,741	1,884
	March	88	47	569	289	402	206	1,466	1,601
	April	83	37	397	204	318	233	1,152	1,272
	May	82	32	213	129	393	236	971	1,085
	June	79	32	157	102	433	281	973	1,084
	July	81	32	130	97	409	335	971	1,084
	August	82	33	119	94	447	354	1,014	1,129
	September	81	32	128	97	485	273	983	1,096
	Year to Date	**761**	**367**	**3,291**	**1,788**	**3,948**	**2,344**	**11,371**	**12,499**

[1]Includes supplemental gaseous fuels.
[2]Includes deliveries to local, State, and Federal agencies engaged in nonmanufacturing activities.
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 1984 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

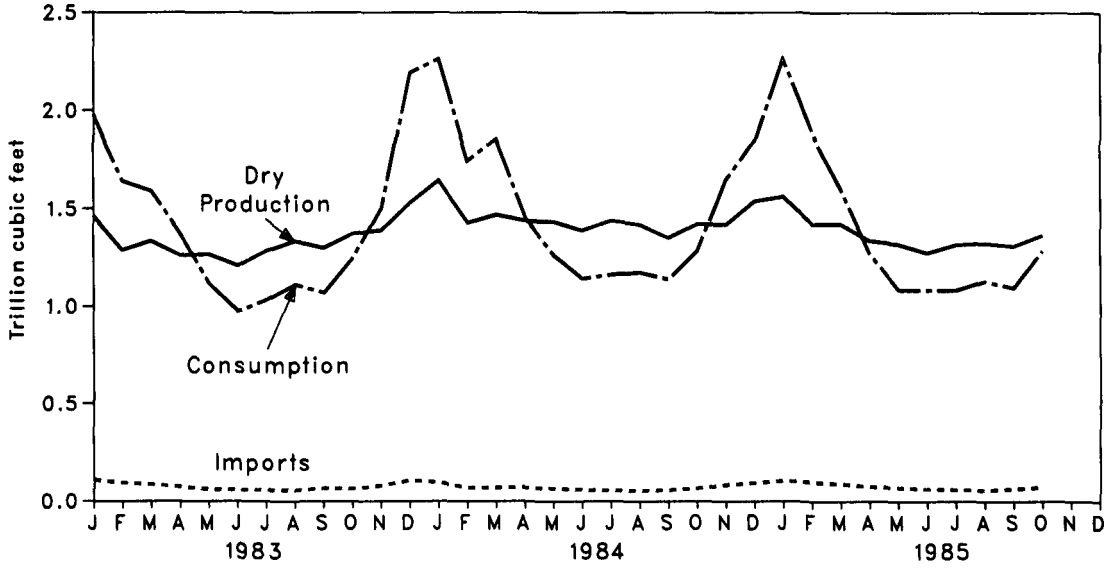
		Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
		Base Gas	Working Gas	Total[1]	Volume	Percent	Injections	Withdrawals	Net[2]
		Volumes in billion cubic feet							
1973	**Total**	**2,864**	**2,034**	**4,898**	**305**	**17.6**	**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	**Total**	**3,808**	**3,071**	**6,879**	**255**	**9.0**	**2,399**	**2,094**	**306**
1983	January	3,813	2,644	6,457	462	21.2	24	449	-424
	February	3,811	2,356	6,167	569	31.9	36	325	-289
	March	3,812	2,148	5,959	544	33.9	59	266	-207
	April	3,818	2,074	5,893	398	23.8	82	160	-78
	May	3,818	2,222	6,041	188	9.3	191	40	151
	June	3,819	2,454	6,272	85	3.6	255	22	234
	July	3,826	2,696	6,522	-8	-0.3	268	25	243
	August	3,823	2,908	6,732	-89	-3.0	247	35	212
	September	3,823	3,141	6,964	-110	-3.4	258	26	232
	October	3,825	3,270	7,095	-94	-2.8	171	40	131
	November	3,841	3,175	7,015	-134	-4.1	80	158	-78
	December	3,847	2,595	6,442	-476	-15.5	29	597	-567
	Total						**1,700**	**2,142**	**-442**
1984	January	3,847	2,091	5,937	-553	-20.9	54	571	-517
	February	3,828	1,876	5,704	-480	-20.4	60	305	-244
	March	3,824	1,572	5,396	-575	-26.8	48	365	-317
	April	3,822	1,620	5,442	-454	-21.9	144	100	44
	May	3,827	1,843	5,670	-379	-17.1	254	30	244
	June	3,828	2,141	5,969	-313	-12.7	323	27	296
	July	3,829	2,456	6,285	-239	-8.9	346	28	317
	August	3,829	2,740	6,569	-168	-5.8	318	30	288
	September	3,829	2,996	6,825	-144	-4.6	289	30	259
	October	3,837	3,175	7,011	-95	-2.9	242	47	R195
	November	3,900	3,015	6,915	-160	-5.0	83	227	-145
	December	3,830	2,876	6,706	281	10.8	92	304	-213
	Total						**2,252**	**2,064**	**188**
1985	January	3,841	2,242	6,083	151	7.2	35	659	-623
	February	3,841	1,853	5,694	-23	-1.2	48	437	-389
	March	3,835	1,743	5,578	171	10.8	97	213	-116
	April	3,831	1,859	5,691	239	14.8	207	94	113
	May	3,837	2,129	5,965	286	15.5	300	25	275
	June	3,839	2,351	6,191	211	9.8	260	33	227
	July	3,849	2,605	6,454	149	6.1	309	45	264
	August	3,849	2,832	6,681	92	3.4	277	50	227
	September	3,849	3,082	6,931	85	2.9	270	20	250
	October	3,851	3,207	7,059	33	1.0	197	69	128

[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; 1983—7,985; and 1984—8,043. Current total capacity is 8,087.
[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.
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 for 1978 through 1984 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

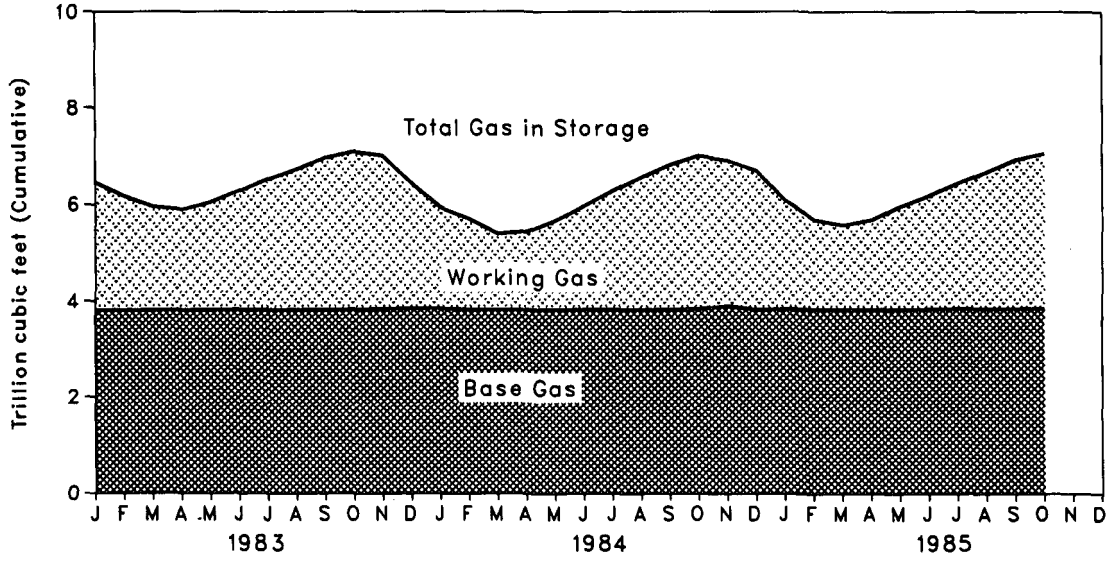
Natural Gas

Overview

Consumption, Dry Production, and Imports



Gas in Storage at End of Period



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 Energy Information Administration (EIA) *Natural Gas Annual 1984.* These data are not available for periods prior to 1980. For 1984, of the 32 producing States, 24 reported data on nonhydrocarbon gases removed. These 24 States accounted for 57 percent of total 1984 gross withdrawals. In addition, gross withdrawals data from two States, which together accounted for 39 percent of the 1984 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 EIA *Natural Gas Monthly.*

Monthly data are reported by two States and computed for seven States. All monthly data are considered preliminary until after publication of the EIA *Natural Gas Annual* for that year. For further information 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 EIA *Natural Gas Annual 1984.*

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 that year. 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 1984* 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 Gaseous Fuels: Supplemental gaseous fuels are mainly synthetic natural gas, propane-air, and refinery gas. Other gases may also be included such as, coke oven gas, biomass gas, manufactured gas, and air injected for Btu stabilization.

Annual data beginning with 1980 are from the EIA *Natural Gas Annual 1984.* 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 that year. 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 that year.

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; metering inaccuracies; differences between billing cycle and calendar period time frames; 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. The increase of almost 0.2 trillion cubic feet (Tcf) in the "Unaccounted for" category in 1983 followed by a decline of 0.5 trillion cubic feet in 1984 reflected unusually large differences resulting from the use of the annual billing cycle (essentially December 15, through the following December 14) consumption data in conjunction with calendar year supply data. Record cold temperatures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For underground storage data, see Table F2 in the May 1985 *Natural Gas Monthly,* which was published in July 1985.

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 that heating year (April through March). 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 1984 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 (continued)

Sources

Production: 1973 through 1984: Energy Information Administration (EIA), *Natural Gas Annual 1984;* January 1985 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 1984: EIA, *Natural Gas Annual 1984;* January 1985 forward: EIA computations.
Withdrawals from and Additions to Storage: 1973 through 1984: EIA, *Natural Gas Annual 1984;* January 1985 forward: Form FPC-8 and Form EIA-191, "Underground Gas Storage Report."
Supplemental Gaseous Fuels: 1980 through 1984: EIA, *Natural Gas Annual 1984;* January 1985 forward: EIA computations.
Imports and Exports: 1973 through 1984: Form FPC-14, "Imports and Exports of Natural Gas"; January 1985 forward: EIA computations.
End-Use Consumption: • All data except electric utility—1973 through 1982: EIA, *Natural Gas Annual, 1984;* January 1983 forward: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," and 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, Form 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

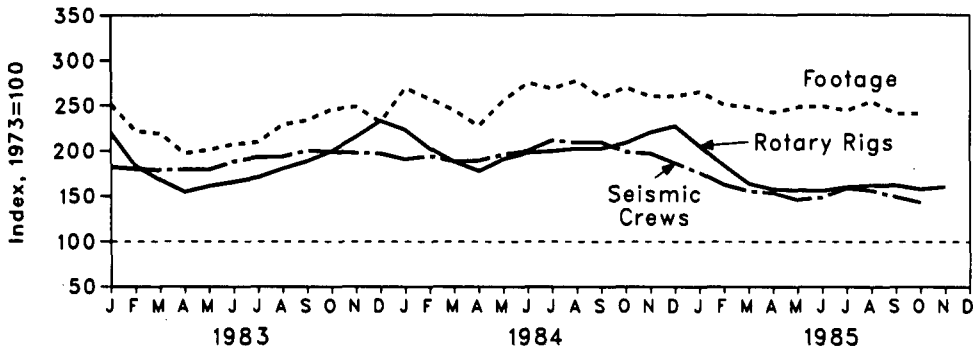
Oil and Gas Resource Development

In October 1985, the 357 crews engaged in seismic exploration were 28.2 percent fewer than those in October 1984. The 45 marine vessels were 6.3 percent fewer and the 312 land crews were 30.5 percent fewer than those working in October 1984.

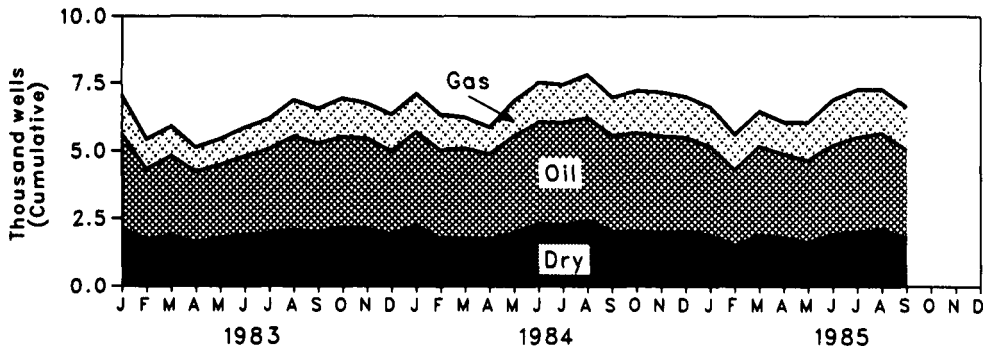
The November 1985 rotary rig count of 1,912 was 27.3 percent less than the November 1984 count of 2,629. The 187 rigs operating offshore were 19.4 percent fewer and the 1,725 rigs onshore were 28.0 percent fewer than those in November 1984.

Exploratory and development well completions during October 1985 were an estimated 6,720, 7.1 percent less than the 7,230 completions estimated in October 1984. Oil well completions were an estimated 3,210, 11.1 percent fewer than the 3,610 oil well completions in the previous October. The 1,700 gas well completions were 8.3 percent more than the October 1984 number of 1,570. Total footage drilled in October 1985 was 28.5 million feet, a decrease of 10.6 percent compared with the 31.9 million feet drilled in October 1984.

Seismic Crews and Rotary Rigs in Operation, and Footage Drilled



Exploratory and Development Well Completions



Oil and Gas Resource Development

Seismic Crews and Rotary Rigs

		Crews Engaged in Seismic Exploration			Rotary Rigs in Operation[1]		
		Offshore	Onshore	Total	Offshore	Onshore	Total
		Monthly average			Weekly average		
1973	**Average**	**23**	**227**	**250**	**84**	**1,110**	**1,194**
1974	**Average**	**31**	**274**	**305**	**94**	**1,378**	**1,472**
1975	**Average**	**30**	**254**	**284**	**106**	**1,554**	**1,660**
1976	**Average**	**25**	**237**	**262**	**129**	**1,529**	**1,658**
1977	**Average**	**27**	**281**	**308**	**167**	**1,834**	**2,001**
1978	**Average**	**25**	**327**	**352**	**185**	**2,074**	**2,259**
1979	**Average**	**30**	**370**	**400**	**207**	**1,970**	**2,177**
1980	**Average**	**37**	**493**	**530**	**231**	**2,678**	**2,909**
1981	**Average**	**44**	**637**	**681**	**256**	**3,714**	**3,970**
1982	**Average**	**57**	**531**	**588**	**243**	**2,862**	**3,105**
1983	January	49	407	456	218	2,404	2,622
	February	47	404	451	216	1,976	2,192
	March	45	402	447	210	1,793	2,003
	April	39	410	449	213	1,633	1,846
	May	39	410	449	209	1,717	1,926
	June	43	428	471	202	1,777	1,979
	July	46	437	483	178	1,861	2,039
	August	49	435	484	181	1,975	2,156
	September	57	444	501	175	2,077	2,252
	October	50	448	498	177	2,205	2,382
	November	49	446	495	159	2,413	2,572
	December	48	445	493	210	2,570	2,780
	Average	**47**	**426**	**473**	**196**	**2,033**	**2,232**
1984	January	50	427	477	216	2,450	2,666
	February	53	433	486	202	2,221	2,423
	March	47	424	471	198	2,047	2,245
	April	50	423	473	203	1,917	2,120
	May	46	444	490	202	2,075	2,277
	June	45	455	500	205	2,158	2,363
	July	47	482	529	206	2,180	2,386
	August	53	470	523	216	2,201	2,417
	September	52	472	524	214	2,206	2,420
	October	48	449	497	223	2,269	2,492
	November	49	444	493	232	2,397	2,629
	December	52	414	466	242	2,471	2,713
	Average	**49**	**445**	**494**	**213**	**2,215**	**2,428**
1985	January	46	393	439	242	2,210	2,452
	February	46	360	406	233	1,955	2,188
	March	48	340	388	223	1,732	1,955
	April	47	336	383	210	1,667	1,877
	May	41	323	364	200	1,665	1,865
	June	47	324	371	203	1,653	1,858
	July	47	350	397	194	1,715	1,909
	August	49	341	390	197	1,734	1,931
	September	49	323	372	197	1,733	1,930
	October	45	312	357	195	1,684	1,879
	November	NA	NA	NA	187	1,725	1,912
	Average[2]	**47**	**340**	**387**	**207**	**1,770**	**1,977**

[1]Monthly data are averages of 4- or 5-week reporting periods and are not calendar months.
[2]Average of available data.
NA=Not available.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last page of this section.

Oil and Gas Resource Development

Exploratory and Development Wells and Footage Drilled

		Exploratory and Development Well Completions[1]				
		Oil	Gas	Dry	Total	Total Footage[1]
		Thousand wells				Million feet
1973	**Total**	**10.25**	**6.97**	**10.47**	**27.69**	**139.42**
1974	**Total**	**13.66**	**7.17**	**12.20**	**33.03**	**153.79**
1975	**Total**	**16.98**	**8.17**	**13.74**	**38.89**	**181.05**
1976	**Total**	**17.70**	**9.44**	**13.80**	**40.94**	**187.29**
1977	**Total**	**18.70**	**12.12**	**15.04**	**45.86**	**215.70**
1978	**Total**	**19.06**	**14.40**	**16.59**	**50.05**	**238.39**
1979	**Total**	**20.70**	**15.17**	**16.04**	**51.91**	**243.69**
1980	**Total**	**32.24**	**17.19**	**20.30**	**69.73**	**312.03**
1981	**Total**	**42.91**	**19.97**	**27.25**	**90.13**	**409.13**
1982	**Total**	**38.82**	**16.80**	**25.97**	**83.59**	**375.77**
1983	January	3.47	1.44	2.13	7.04	29.74
	February	2.59	1.10	1.74	5.43	23.72
	March	2.93	1.09	1.88	5.90	25.93
	April	2.61	0.89	1.62	5.12	22.60
	May	2.69	0.95	1.79	5.43	23.82
	June	2.91	1.06	1.89	5.86	23.76
	July	3.09	1.11	1.97	6.17	24.79
	August	3.43	1.35	2.09	6.87	27.08
	September	3.27	1.28	2.00	6.55	26.77
	October	R3.34	1.43	R2.18	6.95	R29.09
	November	3.31	1.30	2.13	6.74	28.49
	December	3.06	1.36	1.92	6.34	27.44
	Total	**R36.70**	**14.36**	**R23.34**	**74.40**	**R313.23**
1984	January	3.45	1.41	2.25	7.11	31.90
	February	3.24	1.31	1.78	6.33	28.50
	March	3.31	1.14	1.78	6.23	28.98
	April	3.14	0.98	1.75	5.87	26.03
	May	3.56	1.31	1.99	6.86	30.25
	June	3.73	1.47	2.32	7.52	31.53
	July	3.78	1.41	2.26	7.45	31.79
	August	3.76	1.59	2.46	7.81	32.87
	September	3.52	1.42	2.05	6.99	29.64
	October	R3.61	1.57	2.05	R7.23	R31.93
	November	3.58	1.62	1.97	7.17	30.77
	December	3.44	1.51	2.06	7.01	30.77
	Total	**R42.12**	**16.74**	**24.72**	**R83.58**	**R364.96**
1985	January	3.25	1.45	1.92	6.62	31.38
	February	2.78	1.31	1.52	5.61	26.79
	March	3.27	1.28	1.91	6.46	29.38
	April	R3.08	R1.17	R1.82	R6.06	R27.75
	May	3.03	1.39	1.64	R6.07	29.37
	June	3.28	1.68	1.93	6.89	28.55
	July	3.49	1.76	2.03	R7.28	R30.55
	August	3.53	1.62	2.13	7.28	30.15
	September	3.24	1.57	1.81	6.62	27.60
	October	3.21	1.70	1.81	6.72	28.54
	Year to Date	**32.16**	**14.93**	**18.52**	**65.61**	**290.06**

[1]Data exclude service wells and stratigraphic and core tests.
R=Revised data.
Note: • Geographic coverage is the 50 States and the District of Columbia.
• Due to the method of estimation, data shown on this page are frequently revised. See the last page of this section for further explanation.
Source: • See the last page of this section.

Notes and Sources for the Oil and Gas Resource Development Section

Notes

Beginning in the March 1985 *Monthly Energy Review* (MER), the Energy Information Administration (EIA) revised the exploratory and development wells drilled data series. In order to present a consistent series, historical as well as current statistics were adjusted.

In previous issues, the MER published statistics based on data on well completions reported to the American Petroleum Institute during a given month, as opposed to data on wells actually completed during the month. Because of the time lag from date of well completion to date of reporting, data on well completions reported are not as accurate an indicator of drilling activity as are data on well completions. For example, during 1982 well completions reported continued to rise even though the number of wells actually completed fell. Starting in the March 1985 issue of the MER, published figures have been EIA estimates of the number of wells actually completed in a given month and are shown in thousands, rounded to two decimal places. The associated footage drilled is shown in millions, also rounded to two decimal places.

The EIA estimates are calculated using an adjustment process model that imputes total well counts and footage by type and class based on partial counts of well completions available from the reported data. That is, based on statistical analysis of the incomplete reported data, the model imputes the missing portions to determine values for total well completions and footage. Estimates for a given month are first published in the MER for that month, that is, estimates for June 1984 are first published in the June 1984 MER. Revisions to the estimates are scheduled for the 6th, 12th, and 24th months following initial publication, as newly reported data refine the accuracy of the estimate. Unscheduled revisions to the published data will also be made when the latest estimate differs by more than 15 percent during the first 6 months, more than 10 percent during the next 6 months, more than 5 percent during the following 6 months, or more than 2 percent thereafter through 5 years. After 5 years, the actual reported data will be published.

The three well types considered in the model are oil, gas, and dry. By convention, wells with both oil and gas zones are categorized as oil. Well classes in the model are either development or exploratory; wells in any other class have been deleted. Exploratory well categories considered are new field wildcat, new pool wildcat, deeper pool test, shallower pool test, or extension (American Association of Petroleum Geologists well classification codes 1 through 5).

Additional information may be obtained from "Estimating Well Completions," the feature article published in the March 1985 *Monthly Energy Review*.

Sources

- Crews Engaged: Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports published in their bulletins, *Geophysics* and *Leading Edge*.
- Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running—by State."
- Wells and Footage Drilled: EIA computations based on well reports submitted to the American Petroleum Institute.

Part 6 Coal

Coal

Coal production in October 1985 was 80.5 million short tons, 15.3 percent more than the 69.8 million short tons produced in October 1984.

Electric utility coal consumption in September 1985 totaled 56.8 million short tons, 5.1 percent more than consumption in September 1984. Consumption of coal by electric utilities for January through September of 1985 was 520.8 million short tons, compared with 498.9 million short tons consumed during January through September of 1984.

Electric utility coal stocks of 162.9 million short tons at the end of September 1985 were 20.2 million short tons (11.0 percent) below the level 1 year earlier.

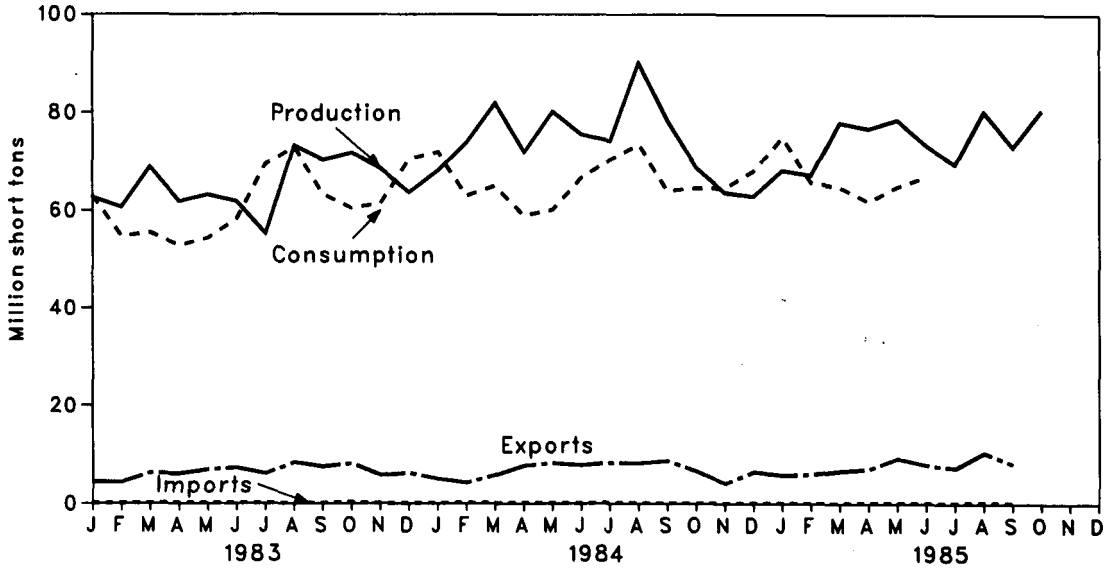
Exports of coal in September 1985 totaled 8.1 million short tons, 7.1 percent less than the 8.7 million short tons exported in September 1984. Coal exports in the first 9 months of 1985 totaled 68.6 million short tons, up 7.0 percent from the 64.1 million short tons exported during the same period of 1984. This increase was chiefly due to a rise in bituminous steam coal exports that went mostly to European countries.

Imports of coal in September 1985 totaled 182,000 short tons, 87,000 short tons more than the amount imported in September 1984. Coal imports in the first 9 months of 1985 totaled nearly 1.5 million short tons, 48.3 percent more than in the same period in 1984. These imports were mainly from South Africa and Colombia.

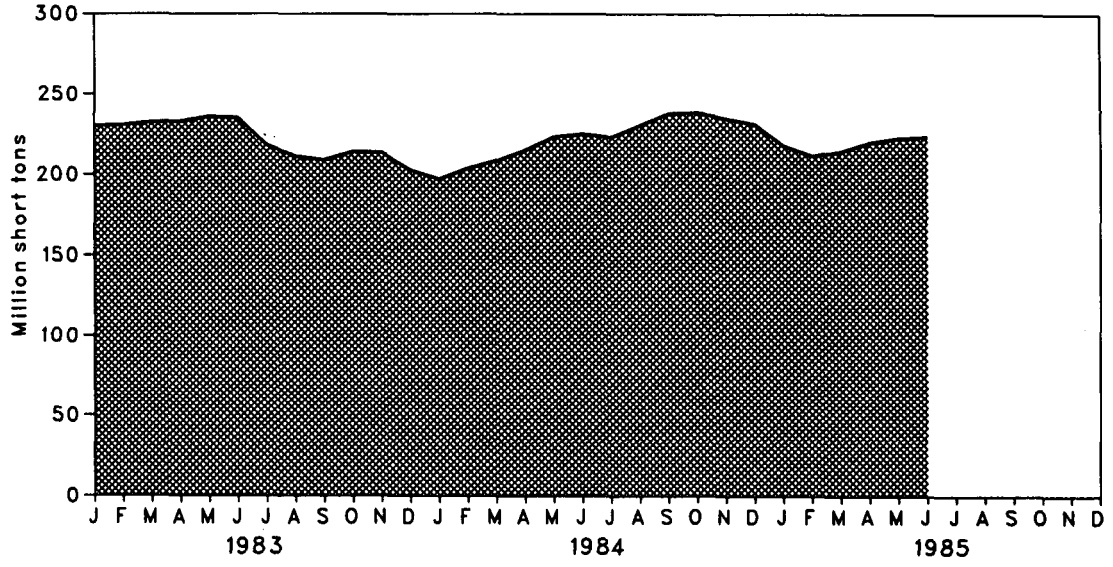
Coal

Overview

Production, Consumption, Imports, and Exports



Stocks at End of Period



Coal

Overview

		Production	Consumption	Imports[1]	Exports[2]	Stocks[3]
				Thousand short tons		
1973	**Total**	**598,568**	**562,584**	**127**	**53,587**	**NA**
1974	**Total**	**610,023**	**558,402**	**2,080**	**60,661**	**NA**
1975	**Total**	**654,641**	**562,641**	**940**	**66,309**	**NA**
1976	**Total**	**684,913**	**603,790**	**1,203**	**60,021**	**NA**
1977	**Total**	**697,205**	**625,291**	**1,647**	**54,312**	**NA**
1978	**Total**	**670,164**	**625,225**	**2,953**	**40,714**	**NA**
1979	**Total**	**781,134**	**680,524**	**2,059**	**66,042**	**202,472**
1980	**Total**	**829,700**	**702,729**	**1,194**	**91,742**	**228,407**
1981	**Total**	**823,775**	**732,627**	**1,043**	**112,541**	**209,423**
1982	**Total**	**838,112**	**706,911**	**742**	**106,277**	**232,038**
1983	January	62,731	63,019	78	4,471	229,713
	February	60,654	54,692	71	4,382	230,413
	March	68,896	55,434	120	6,291	232,182
	April	61,837	52,816	144	6,115	232,567
	May	63,210	54,327	102	6,952	235,445
	June	61,797	58,237	133	7,279	234,794
	July	55,213	69,478	87	6,140	218,145
	August	73,291	72,947	115	8,380	211,153
	September	70,312	63,317	97	7,525	208,993
	October	71,754	60,454	190	8,131	213,975
	November	68,684	61,411	32	5,838	213,651
	December	63,713	70,541	102	6,269	202,584
	Total	**782,091**	**736,672**	**1,271**	**77,772**	
1984	January	67,921	71,919	81	5,062	196,985
	February	73,670	62,994	140	4,251	203,771
	March	81,524	65,028	55	5,813	208,548
	April	72,751	58,946	148	7,688	215,023
	May	81,073	60,164	72	8,221	223,262
	June	76,402	66,707	49	7,828	224,905
	July	74,785	70,422	193	8,318	223,118
	August	90,823	73,558	147	8,235	230,224
	September	78,984	64,133	95	8,710	237,720
	October	69,785	64,664	104	6,641	238,350
	November	64,388	64,613	68	4,190	234,702
	December	63,815	68,147	134	6,526	231,300
	Total	**895,921**	**791,296**	**1,286**	**81,483**	
1985	January†	68,259	74,978	126	5,817	217,975
	February†	67,319	65,881	101	6,030	211,804
	March†	77,989	64,892	103	6,696	214,517
	April†	76,783	61,900	203	7,065	219,944
	May†	78,574	64,911	159	9,231	222,580
	June†	73,436	66,985	138	7,913	223,423
	July†	69,595	NA	177	7,314	NA
	August†	80,289	NA	264	10,422	NA
	September†	73,067	NA	182	8,095	NA
	October†	80,488	NA	NA	NA	NA
	Year to Date[4]	**745,800**	**399,548**	**1,453**	**68,583**	

[1]Includes Puerto Rico.
[2]Excludes shipments of anthracite to U.S. Armed Forces overseas (347,000 short tons in 1982, 341,000 short tons in 1983, and 298,000 short tons in 1984).
[3]Stocks held by electric utilities, coke plants, general industry, and coal producers and distributors at the end of period. Excludes stocks held at retail dealers for consumption by the residential and commercial sector.
[4]Total of available data.
†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.
• 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[1]

			Industrial			
		Electric Utilities	Coke Plants	Other Industrial 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	**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	60,225	3,791	6,858	1,045	71,919
	February	52,257	3,592	6,230	915	62,994
	March	54,534	3,843	5,999	652	65,028
	April	47,565	4,180	6,273	928	58,946
	May	49,507	4,100	5,997	560	60,164
	June	56,971	3,564	5,729	443	66,707
	July	60,359	3,639	5,730	694	70,422
	August	63,396	3,620	5,886	656	73,558
	September	54,045	3,557	5,659	872	64,133
	October	54,753	3,317	5,902	692	64,664
	November	54,229	3,346	6,305	733	64,613
	December	56,560	3,473	7,176	938	68,147
	Total	**664,399**	**44,022**	**73,745**	**9,130**	**791,296**
1985	January†	63,629	3,463	7,063	823	74,978
	February†	55,463	3,282	6,416	720	65,881
	March†	54,690	3,511	6,178	513	64,892
	April†	50,854	3,851	6,432	764	61,900
	May†	54,523	3,778	6,149	461	64,911
	June†	57,462	3,284	5,874	365	66,985
	July†	64,274	NA	NA	NA	NA
	August†	63,096	NA	NA	NA	NA
	September†	56,780	NA	NA	NA	NA
	Year to Date[2]	**520,772**	**21,169**	**38,112**	**3,645**	**399,548**

[1]See Note 2 on the last page of this section.
[2]Total of available data.
†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 at End of Period

		Consumer					
		Electric Utilities	Coke Plants	Other Industrial	Total[1]	Producers and Distributors	Total[1]
		Thousand short tons					
1973	**Year**	**86,967**	**6,998**	**10,370**	**104,335**	**NA**	**NA**
1974	**Year**	**83,509**	**6,209**	**6,605**	**96,323**	**NA**	**NA**
1975	**Year**	**110,724**	**8,797**	**8,529**	**128,050**	**NA**	**NA**
1976	**Year**	**117,436**	**9,902**	**7,100**	**134,438**	**NA**	**NA**
1977	**Year**	**133,219**	**12,816**	**11,063**	**157,098**	**NA**	**NA**
1978	**Year**	**126,225**	**8,278**	**9,048**	**145,551**	**NA**	**NA**
1979	**Year**	**159,714**	**10,155**	**11,777**	**181,646**	**20,826**	**202,472**
1980	**Year**	**163,010**	**9,067**	**11,951**	**204,028**	**24,379**	**228,407**
1981	**Year**	**168,893**	**6,475**	**9,906**	**185,274**	**24,149**	**209,423**
1982	**Year**	**181,132**	**4,642**	**9,479**	**195,254**	**36,784**	**232,038**
1983	January	178,604	4,338	8,960	191,902	37,811	229,713
	February	179,101	4,034	8,439	191,574	38,839	230,413
	March	180,671	3,728	7,916	192,315	39,867	232,182
	April	181,371	4,089	7,942	193,402	39,165	232,567
	May	184,567	4,450	7,965	196,982	38,463	235,445
	June	184,236	4,812	7,985	197,033	37,761	234,794
	July	168,566	4,489	8,167	181,222	36,923	218,145
	August	162,557	4,165	8,345	175,067	36,086	211,153
	September	161,384	3,842	8,518	173,743	35,249	208,993
	October	166,574	4,010	8,582	179,166	34,809	213,975
	November	166,457	4,178	8,645	179,281	34,370	213,651
	December	155,598	4,346	8,710	168,654	33,931	202,584
1984	January	149,403	4,947	8,593	162,943	34,042	196,985
	February	155,593	5,548	8,476	169,617	34,154	203,771
	March	159,775	6,149	8,359	174,283	34,265	208,548
	April	165,592	7,171	9,137	181,900	33,123	215,023
	May	173,171	8,194	9,915	191,280	31,982	223,262
	June	174,155	9,217	10,693	194,065	30,841	224,905
	July	171,095	9,658	11,904	192,657	30,461	223,118
	August	176,928	10,099	13,116	200,143	30,081	230,224
	September	183,151	10,541	14,327	208,019	29,701	237,720
	October	184,779	9,083	13,324	207,186	31,164	238,350
	November	182,130	7,625	12,320	202,075	32,627	234,702
	December	179,727	6,166	11,317	197,211	34,090	231,300
1985	January†	167,524	5,583	10,423	183,530	34,445	217,975
	February†	162,476	4,999	9,529	177,004	34,800	211,804
	March†	166,313	4,415	8,635	179,363	35,155	214,517
	April†	171,651	4,472	8,688	184,811	35,133	219,944
	May†	174,198	4,530	8,740	187,468	35,112	222,580
	June†	174,953	4,587	8,793	188,333	35,090	223,423
	July†	165,910	NA	NA	NA	NA	NA
	August†	162,837	NA	NA	NA	NA	NA
	September†	162,939	NA	NA	NA	NA	NA

[1]Excludes stocks held at retail dealers for consumption 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

Notes

1. Production: Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the Energy Information Administration (EIA) and published in the *Weekly Coal Production* report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly estimates are based on Association of American Railroads (AAR) data showing the number of railcars loaded with coal during the week by Class I and certain other railroads. This number is converted into tons of coal by EIA using the average number of tons of coal per railcar loaded reported in the most recent Quarterly Freight Commodity Statistics from the Interstate Commerce Commission (ICC). If an average coal tonnage per railcar loaded is not available for a specific railroad, the national average is used. To derive the estimate of total weekly production, the total rail tonnage for the week is divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years are used to derive this factor because data for the current quarter are not yet available. This method also ensures that the seasonal variations in production are preserved.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figure. The adjustment procedure uses State-level production data and is explained in the *Quarterly Coal Report.* Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first 9 months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference between the estimates and the preliminary data. In any event, all quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the *Monthly Energy Review* in the fall of the following year.

2. Consumption: Both monthly and quarterly consumption for electric utility plants are taken directly from reported data. Prior to 1980, monthly consumption at coke plants was also taken directly from reported data. Since that time, it has been estimated by proportioning reported quarterly data using the ratios of monthly to quarterly consumption in 1979, the last year in which monthly data were reported. Quarterly consumption is taken directly from reported data.

Prior to 1978, monthly consumption for the other industrial sector (i.e., all industrial users minus coke plants) was derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and subsequent years, monthly figures were derived from data reported on Forms EIA-3 and EIA-6. Beginning in 1980, monthly figures have been estimated by proportioning derived quarterly data using the ratios of monthly to quarterly consumption in 1979, the last year in which monthly data were reported on Form EIA-3. Quarterly consumption for the other industrial sector is derived from reported data by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts are taken as the greater of either reported receipts from manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, mining, and construction consumption are included where appropriate.

Prior to 1980, monthly consumption for the residential and commercial sector was derived by using reported data to modify baseline figures developed by the Bureau of Mines. Since that time, it has been estimated by proportioning reported quarterly data using the ratios of monthly to quarterly consumption in 1979, the last year in which monthly data were reported on Form EIA-2. During 1981 and 1982, the estimates were also modified to reflect air temperature degree-days. Quarterly consumption is taken directly from reported data and is defined as distribution to the residential and commercial sector as reported by coal producers and distributors on Form EIA-6.

3. Stocks: Both monthly and quarterly stocks at electric utility plants are taken directly from reported data. Prior to 1980, monthly stocks at coke plants were also taken directly from reported data. Since that time, they have been estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Quarterly stocks are taken directly from data reported on Form EIA-5.

Prior to 1978, stocks for the other industrial sector were derived by using reported data to modify baseline figures from a one-time Bureau of Mines survey of consumers. During the period 1978 through 1982, they were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. Since that time, they have been estimated as indicated above for coke plants. Quarterly stocks are taken directly from data reported on Form EIA-3 and therefore include only manufacturing industries: data for agriculture, forestry, fishing, mining, and construction stocks are not available.

Prior to 1980, monthly and quarterly stock data for the residential and commercial sector were taken directly from reported data. Monthly and quarterly stock data are not available for the residential and commercial sector after December 1979.

Quarterly stocks at producers and distributors are taken directly from reported data. Monthly data are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks.

4. Imports and Exports: All coal import and export figures are taken directly from data reported monthly by the Bureau of the Census.

Additional information concerning coal production, consumption, and stock data and estimation procedures may be obtained in EIA's *Quarterly Coal Report,* DOE/EIA-0121.

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.*

Consumption and Stocks: 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys* (except Residential and Commercial Consumption and Stocks and Producers and Distributors Stocks);

- Electric Utilities—October 1977 forward: EIA, Form EIA-759 (formerly FPC Form 4), "Monthly Power Plant Report."
- Coke Plants—October 1977 through December 1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals-Monthly/Annual"; January 1981 forward: EIA, Form EIA-5/5A, "Coke Plant Report-Quarterly/Annual Supplement."
- Other Industrial—October 1977 through December 1979: EIA, Form EIA-3, "Monthly Fuel Consumption Report-Manufacturing Plants"; January 1980 forward: EIA, Form EIA-3, "Quarterly Fuel Consumption Report-Manufacturing Plants" and Form EIA-6, "Coal Distribution Report."
- Residential and Commercial Consumption and Stocks—1973 through 1976: Bureau of Mines, *Minerals Yearbook;* January 1977 through September 1977: Bureau of Mines, Form 6-1400-M, "Monthly Coal Report, Retail Dealers—Upper Lake Docks"; October 1977 through December 1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks"; January 1980 forward: EIA, Form EIA-6, "Coal Distribution Report," (stock data are not collected).
- Producers and Distributors Stocks—January 1980 forward: EIA, Form EIA-6, "Coal Distribution Report."

Imports and Exports: Bureau of the Census, U.S. Department of Commerce, Monthly Reports IM-145 (Imports) and EM-522 (Exports).

Part 7 Electric Utilities

Electric Utilities

During September 1985, electric utilities generated 202.4 billion kilowatthours of electricity, 3.7 percent above the September 1984 generation level. Coal-fired generation totaled 114.6 billion kilowatthours, 5.3 percent above the September 1984 level. Nuclear generation totaled 34.5 billion kilowatthours, 18.4 percent above the September 1984 level. Natural gas-fired generation was 26.2 billion kilowatthours in September 1985, 6.0 percent below the September 1984 level. Hydroelectric generation was 18.8 billion kilowatthours, 10.0 percent below the level 1 year earlier. Petroleum-fired generation totaled 7.4 billion kilowatthours, 3.6 percent below the September 1984 level.

During the first three quarters of 1985, electric utilities generated a daily average of 1.9 percent more electricity than during the first three quarters of 1984. Comparing generation during the first 9 months of 1985 and 1984 on a daily-average basis, coal-fired generation was up 5.0 percent in 1985, nuclear was up 17.0 percent, hydroelectric was down 15.4 percent, natural gas-fired was down 0.5 percent, and petroleum-fired was down 21.1 percent.

Sales of electricity to all ultimate consumers in the United States in September 1985 were 205.7 billion kilowatthours, 3.7 percent above September 1984 sales. Sales to residential consumers during September 1985 were 71.1 billion kilowatthours, 5.3 percent above the level of sales during the same month in 1984. Commercial sales were 56.0 billion kilowatthours, 5.9 percent more than the amount sold to commercial consumers in September 1984. Sales to industrial consumers totaled 71.4 billion kilowatthours in September 1985, 0.2 percent more than the 1984 figure. In September 1985, other sales totaled 7.2 billion kilowatthours, 6.5 percent above the September 1984 level.

During the first three quarters of 1985, electric utilities sold 1,750.1 billion kilowatthours of electricity, a daily-average increase of 1.4 percent from the first three quarters of 1984 level. Residential sales during the first three quarters of 1985 totaled 604.1 billion kilowatthours, 1.4 percent (on a daily-average basis) above comparable sales in 1984. Commercial sales totaled 458.4 billion kilowatthours, a daily-average increase of 5.1 percent from the first three quarters of 1984 commercial sales. Industrial sales during the first three quarters of 1985 were 623.9 billion kilowatthours, a daily-average decrease of 1.3 percent compared with sales in the same period of 1984. Other sales were 63.6 billion kilowatthours, a daily-average of 4.1 percent above comparable 1984 sales.

Electric utility petroleum consumption (excluding petroleum coke) during September 1985 was 13.0 million barrels, 1.9 percent below the September 1984 level. Coal consumption during September 1985 was 56.8 million short tons, 5.1 percent above the September 1984 rate. During September 1985, electric utilities consumed 272.6 billion cubic feet of natural gas, 6.2 percent below the September 1984 consumption level.

Electric utility petroleum consumption (excluding petroleum coke) during the first three quarters of 1985 was down a daily average of 19.6 percent from petroleum consumption during the first three quarters of 1984. Coal consumption during the first 9 months of 1985 was up a daily average of 4.8 percent compared with coal consumption during the same period of 1984, while natural gas consumption was down a daily average of 1.2 percent comparing the same time periods.

On September 30, 1985, utility stocks of anthracite, bituminous coal, and lignite totaled 162.9 million short tons. These stockpiles were 11.0 percent below the level of September 30, 1984. Petroleum stocks (excluding petroleum coke) on September 30, 1985, totaled 72.9 million barrels, 15.6 percent below the level on the same date in 1984.

Electric Utilities

Net Electricity Generation by Primary Energy Source

		Coal	Petroleum[1]	Natural Gas[2]	Nuclear Electric Power	Hydroelectric Power	Other[3]	Total
				Million kilowatthours				
1973	Total	647,651	314,343	340,658	83,479	272,083	2,294	1,660,710
1974	Total	626,433	300,931	320,065	113,976	301,032	2,703	1,667,140
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	250,683	220,475	4,063	2,124,323
1978	Total	975,742	365,060	305,391	276,403	260,419	3,315	2,206,331
1979	Total	1,075,037	303,525	329,485	255,155	279,763	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	260,664	6,054	2,294,812
1982	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	25,928	738	229,957
	September	108,866	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	1,269,424	144,499	274,098	293,677	332,130	6,456	2,310,285
1984	January	120,850	15,939	20,245	29,313	29,737	547	216,632
	February	104,706	10,053	17,927	29,436	27,900	643	189,564
	March	111,159	10,906	19,645	27,345	30,435	719	200,107
	April	97,542	7,450	21,197	24,231	29,970	695	181,084
	May	100,139	8,422	25,304	25,867	31,814	673	192,217
	June	115,426	11,152	26,345	25,299	28,773	654	209,648
	July	121,094	10,397	33,327	26,284	27,495	648	221,245
	August	127,744	12,936	33,292	29,493	25,137	794	229,396
	September	108,862	7,713	27,939	29,146	20,911	726	195,198
	October	110,801	7,874	25,783	24,774	20,887	819	190,936
	November	109,759	9,232	23,726	24,575	22,259	827	190,380
	December	113,601	7,935	20,963	30,872	25,834	892	199,996
	Total	1,341,681	119,606	297,394	327,634	321,150	8,636	2,416,304
1985	January	129,066	12,076	22,001	36,186	27,498	906	227,733
	February	111,994	9,264	19,370	30,809	25,880	803	198,121
	March	111,223	7,116	19,813	31,041	24,583	930	194,707
	April	104,706	6,015	22,409	29,456	24,370	783	184,740
	May	111,394	6,958	22,465	29,697	26,415	816	198,635
	June	116,276	7,575	26,714	30,837	23,834	788	205,025
	July	126,980	8,289	32,191	35,184	21,263	885	226,712
	August	126,550	9,656	33,915	34,812	19,981	934	226,050
	September	114,630	7,435	26,169	34,509	18,810	867	202,436
	Year to Date	1,053,709	74,466	225,047	286,534	212,655	7,731	1,862,162

[1]Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
[2]Includes supplemental gaseous fuels.
[3]Other is electricity produced from geothermal, wood, waste, wind, photovoltaic, and solar thermal energy sources connected to electric utility distribution systems.
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]

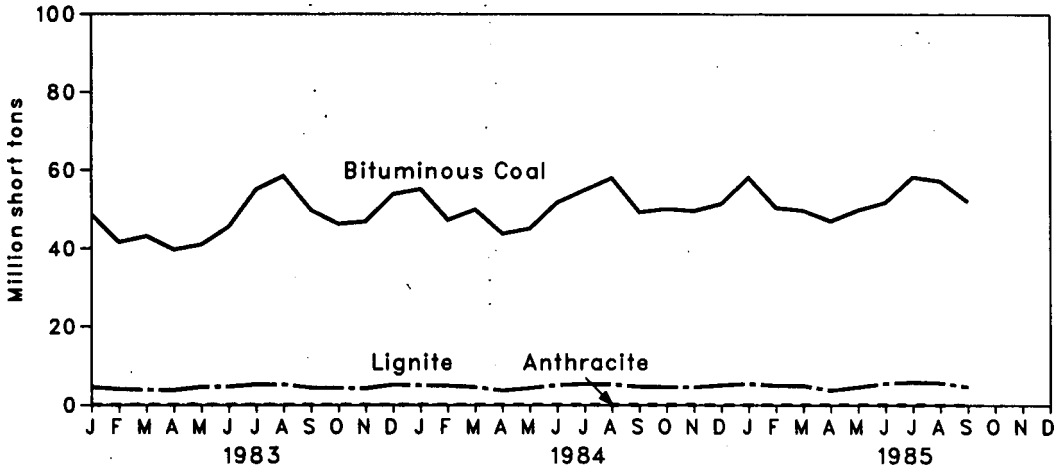
		Residential	Commercial	Industrial	Other[2]	Total
				Million kilowatthours		
1973	**Total**	**579,231**	**388,266**	**686,085**	**59,328**	**1,712,910**
1974	**Total**	**578,184**	**384,826**	**684,875**	**58,039**	**1,705,924**
1975	**Total**	**588,140**	**403,049**	**687,680**	**68,222**	**1,747,091**
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	**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	6,492	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	83,295	49,243	66,709	7,289	206,537
	February	69,818	46,293	67,445	6,690	190,246
	March	63,656	45,252	69,684	6,902	185,475
	April	56,373	43,052	69,048	6,339	174,813
	May	53,519	44,150	70,774	6,559	175,003
	June	59,955	49,454	73,037	6,714	189,160
	July	71,020	53,922	71,843	7,006	203,791
	August	73,138	53,603	74,534	7,089	208,364
	September	67,456	52,854	71,275	6,780	198,365
	October	55,965	48,061	70,945	6,732	181,702
	November	56,543	45,937	68,688	6,840	178,008
	December	66,915	46,481	66,606	6,908	186,910
	Total	**777,654**	**578,281**	**840,588**	**81,849**	**2,278,372**
1985	January	77,242	49,634	67,220	7,270	201,365
	February	78,011	49,406	66,582	7,046	201,045
	March	63,981	46,629	67,437	6,875	184,922
	April	56,025	45,826	68,445	7,049	177,345
	May	52,842	47,711	70,140	6,903	177,596
	June	60,612	51,582	70,141	6,861	189,196
	July	71,027	56,109	69,761	7,136	204,034
	August	73,311	55,544	72,789	7,278	208,922
	September†	71,064	55,960	71,402	7,224	205,650
	Year to Date	**604,114**	**458,401**	**623,918**	**63,642**	**1,750,075**

[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: Form EIA 826, "Electric Utility Company Monthly Statement."

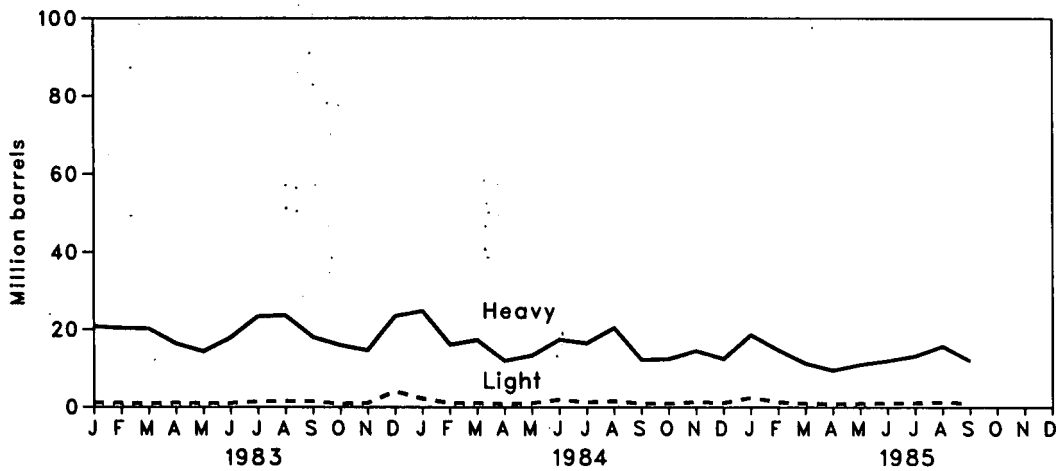
Electric Utilities

Primary Energy Consumed to Produce Electricity

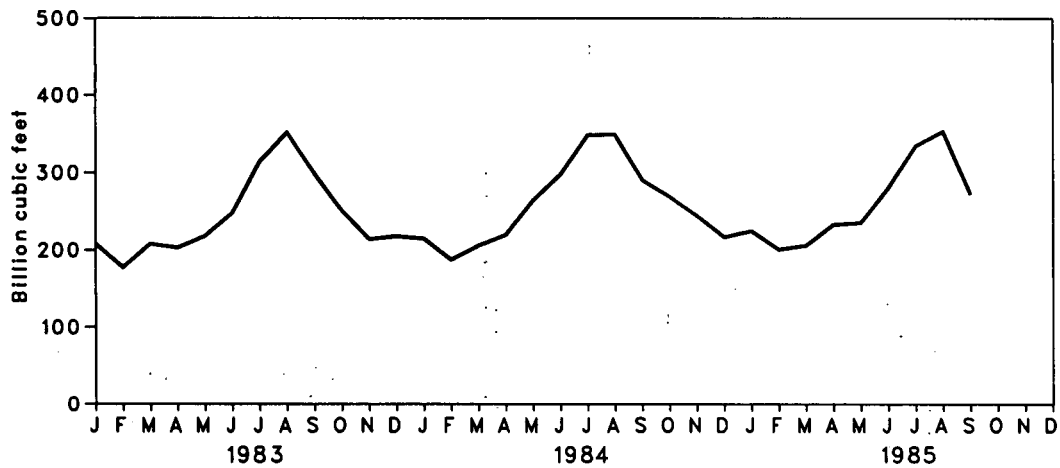
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities

Primary Energy Consumed to Produce Electricity

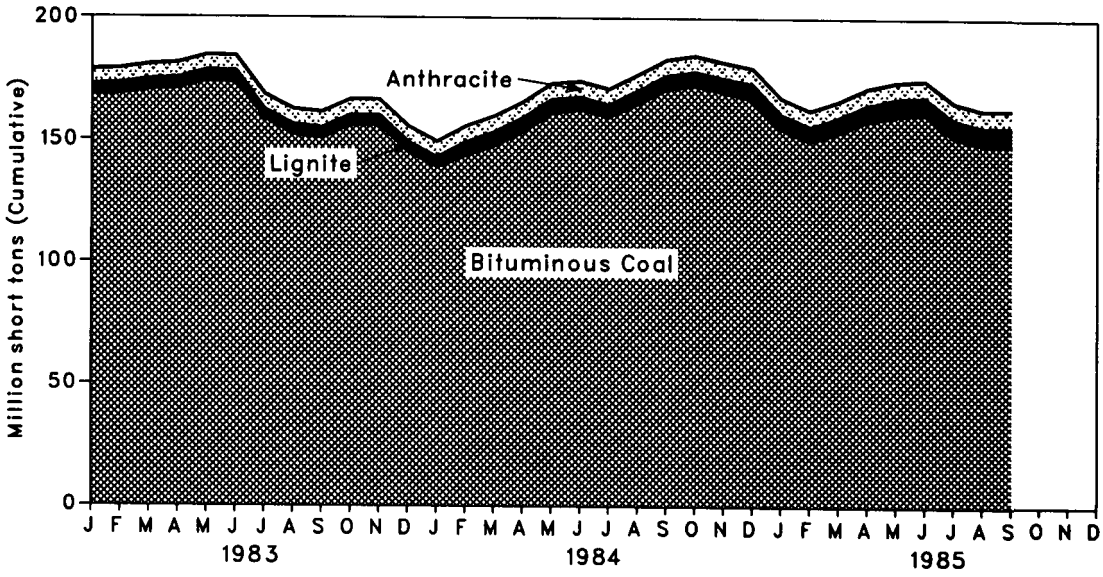
		Coal				Petroleum				Natural Gas[1]
		Anthracite	Bituminous Coal	Lignite	Total	Heavy[2]	Light[3]	Total Liquids	Petroleum Coke	
		Thousand short tons				Thousand barrels			Thousand short tons	Million cubic feet
1973	**Total**	**1,443**	**376,975**	**10,794**	**389,212**	**(4)**	**(4)**	**560,248**	**507**	**3,660,172**
1974	**Total**	**1,498**	**378,643**	**11,670**	**391,811**	**(4)**	**(4)**	**536,274**	**625**	**3,443,428**
1975	**Total**	**1,480**	**388,523**	**15,960**	**405,962**	**(4)**	**(4)**	**506,128**	**70**	**3,157,669**
1976	**Total**	**1,350**	**425,205**	**21,817**	**448,371**	**(4)**	**(4)**	**555,920**	**68**	**3,080,868**
1977	**Total**	**1,425**	**451,051**	**24,650**	**477,126**	**(4)**	**(4)**	**623,705**	**98**	**3,191,200**
1978	**Total**	**1,064**	**448,763**	**31,407**	**481,235**	**(4)**	**(4)**	**635,839**	**398**	**3,188,363**
1979	**Total**	**1,046**	**488,129**	**37,876**	**527,051**	**(4)**	**(4)**	**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	**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	55,142	4,985	60,225	24,745	2,176	26,921	24	215,027
	February	75	47,279	4,904	52,257	16,091	1,018	17,108	21	187,259
	March	69	49,921	4,543	54,534	17,274	1,016	18,290	18	206,171
	April	83	43,779	3,703	47,565	11,971	831	12,802	22	220,005
	May	99	45,115	4,294	49,507	13,327	1,010	14,337	23	264,522
	June	102	51,757	5,112	56,971	17,363	1,927	19,289	23	297,560
	July	100	54,928	5,331	60,359	16,453	1,259	17,712	22	348,848
	August	97	58,026	5,273	63,396	20,337	1,522	21,859	20	349,878
	September	81	49,288	4,675	54,045	12,235	996	13,231	21	290,595
	October	83	50,091	4,578	54,753	12,450	965	13,415	19	269,629
	November	91	49,595	4,543	54,229	14,543	1,326	15,870	17	244,637
	December	93	51,418	5,050	56,560	12,499	1,146	13,645	20	217,210
	Total	**1,070**	**606,339**	**56,990**	**664,399**	**189,289**	**15,190**	**204,479**	**252**	**3,112,342**
1985	January	88	58,139	5,402	63,629	18,574	2,478	21,052	18	224,873
	February	70	50,453	4,940	55,463	14,729	1,315	16,044	17	201,160
	March	78	49,699	4,913	54,690	11,323	970	12,294	16	206,247
	April	92	47,024	3,738	50,854	9,561	905	10,466	16	233,201
	May	98	49,818	4,607	54,523	11,046	959	12,004	13	235,626
	June	90	51,812	5,561	57,462	12,005	1,090	13,095	21	280,722
	July	92	58,350	5,833	64,274	13,238	1,109	14,347	20	335,185
	August	96	57,324	5,676	63,096	15,730	1,338	17,067	19	353,541
	September	74	52,031	4,675	56,780	11,994	979	12,973	24	272,618
	Year to Date	**778**	**474,649**	**45,345**	**520,772**	**118,199**	**11,142**	**129,341**	**164**	**2,343,173**

[1]Includes supplemental gaseous fuels.
[2]Heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils.
[3]Light oil includes Grade No. 2 heating oil, kerosene, and jet fuel.
[4]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."

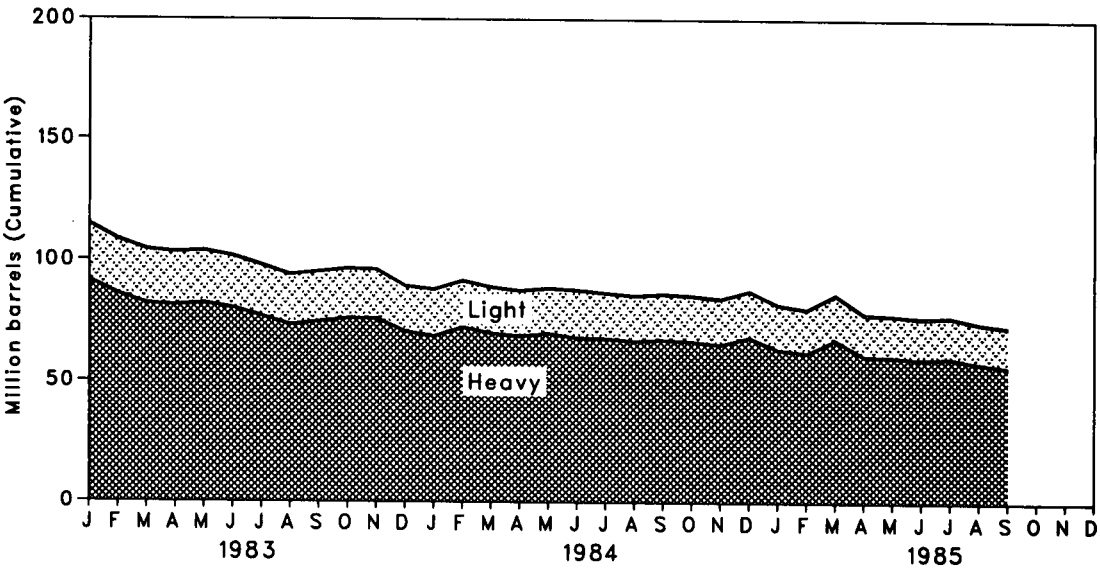
Electric Utilities

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	Year	1,066	84,941	961	86,967	(3)	(3)	89,216	312
1974	Year	930	81,712	867	83,509	(3)	(3)	112,917	35
1975	Year	982	107,927	1,815	110,724	(3)	(3)	125,257	31
1976	Year	1,000	114,130	2,306	117,436	(3)	(3)	121,696	32
1977	Year	2,321	128,210	2,688	133,219	(3)	(3)	144,031	44
1978	Year	2,178	123,020	3,027	128,225	(3)	(3)	118,788	198
1979	Year	3,274	152,981	3,459	159,714	(3)	(3)	131,422	183
1980	Year	4,741	174,154	4,115	183,010	105,351	30,023	135,374	52
1981	Year	5,537	158,258	5,098	168,893	102,042	26,094	128,136	42
1982	Year	6,060	170,460	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	168,701	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	139,026	3,877	149,403	69,679	19,369	89,048	43
	February	6,510	143,731	5,352	155,593	72,339	19,227	91,566	41
	March	6,519	147,756	5,500	159,775	69,994	19,058	89,042	45
	April	6,518	153,300	5,777	165,592	69,771	18,849	87,620	47
	May	6,532	161,067	5,573	173,171	69,890	18,695	88,584	51
	June	6,541	162,426	5,188	174,155	69,098	18,807	87,906	51
	July	6,530	159,663	4,863	171,095	67,856	18,840	86,696	50
	August	6,593	164,987	5,369	176,928	66,936	18,795	85,632	47
	September	6,628	170,987	5,536	183,151	67,370	18,921	86,291	49
	October	6,674	172,553	5,552	184,779	66,717	18,965	85,682	49
	November	6,715	169,798	5,627	182,130	65,548	18,875	84,423	43
	December	6,710	167,118	5,999	179,727	68,503	19,116	87,619	50
1985	January	6,719	154,999	5,906	167,624	63,546	18,511	82,057	57
	February	6,736	150,023	5,717	162,476	62,072	18,073	80,145	50
	March	6,782	153,697	5,834	166,313	62,558	18,652	81,209	43
	April	6,836	158,174	6,641	171,651	60,999	17,356	78,245	31
	May	6,805	160,326	6,867	174,198	60,530	17,226	77,756	33
	June	6,991	161,003	6,959	174,953	59,613	17,093	76,706	33
	July	7,045	151,815	7,049	165,910	60,116	17,030	77,146	43
	August	7,109	148,709	7,018	162,837	57,797	16,696	74,493	42
	September	7,195	148,610	7,243	162,939	56,463	16,409	72,872	40

[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	**Total**	**243,537**	**6,234**	**249,771**	**105,287**	**13,597**	**118,884**
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	76,756	11,292	88,048
	February	16,662	447	17,108	80,404	11,163	91,566
	March	17,881	410	18,290	78,014	11,028	89,042
	April	12,495	306	12,802	76,721	10,899	87,620
	May	13,896	441	14,337	77,699	10,886	88,584
	June	17,997	1,293	19,289	76,126	11,780	87,906
	July	17,085	627	17,712	75,788	10,908	86,696
	August	20,957	902	21,859	74,832	10,799	85,632
	September	12,795	436	13,231	75,588	10,703	86,291
	October	13,019	396	13,415	74,906	10,775	85,682
	November	15,177	692	15,870	73,833	10,590	84,423
	December	13,247	398	13,645	76,836	10,784	87,619
	Total	**197,050**	**7,429**	**204,479**			
1985	January	19,842	1,210	21,052	71,522	10,535	82,057
	February	15,576	467	16,044	70,051	10,094	80,145
	March	11,957	337	12,294	70,364	10,845	81,209
	April	10,127	338	10,466	68,641	9,604	78,245
	May	11,601	403	12,004	68,249	9,507	77,756
	June	12,495	601	13,095	67,468	9,238	76,706
	July	13,840	507	14,347	67,816	9,330	77,146
	August	16,272	795	17,067	65,284	9,209	74,493
	September	12,485	488	12,973	63,667	9,205	72,872
	Year to Date	**124,195**	**5,146**	**129,341**			

[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

In September 1985, U.S. nuclear power plants generated a total of 34.5 billion net kilowatthours of electricity while achieving an average capacity factor of 61.4 percent. This generation represents an increase of 18.4 percent compared with September 1984 generation. Nuclear power supplied 17.0 percent of the electricity generated in September 1985.

Nuclear generation for the first three quarters of 1985 increased 17.0 percent, on a daily-average basis, compared with nuclear generation during the same period in 1984. From January 1985 through September 1985, net operable nuclear generating capacity increased 8.5 million kilowatts as 8 nuclear generating units became operable. For the first three quarters of 1985, monthly capacity factors averaged 59.3 percent, compared with 57.8 percent for the same period in 1984.

Three operating units were declared commercially operable in September 1985: Waterford-3 on September 3, Byron-1 on September 9, and Wolf Creek-1 on September 24. Waterford-3, a 1,151-net-megawatt-electric pressurized-water reactor operated in Louisiana, had received a full-power license from the Nuclear Regulatory Commission in March 1985. Byron-1, a 1,120-net-megawatt-electric pressurized-water reactor operated in Illinois, had received a full-power license in February 1985. Wolf Creek-1, a 1,150-net-megawatt-electric pressurized-water reactor operated in Kansas, had received a full-power license in June 1985.

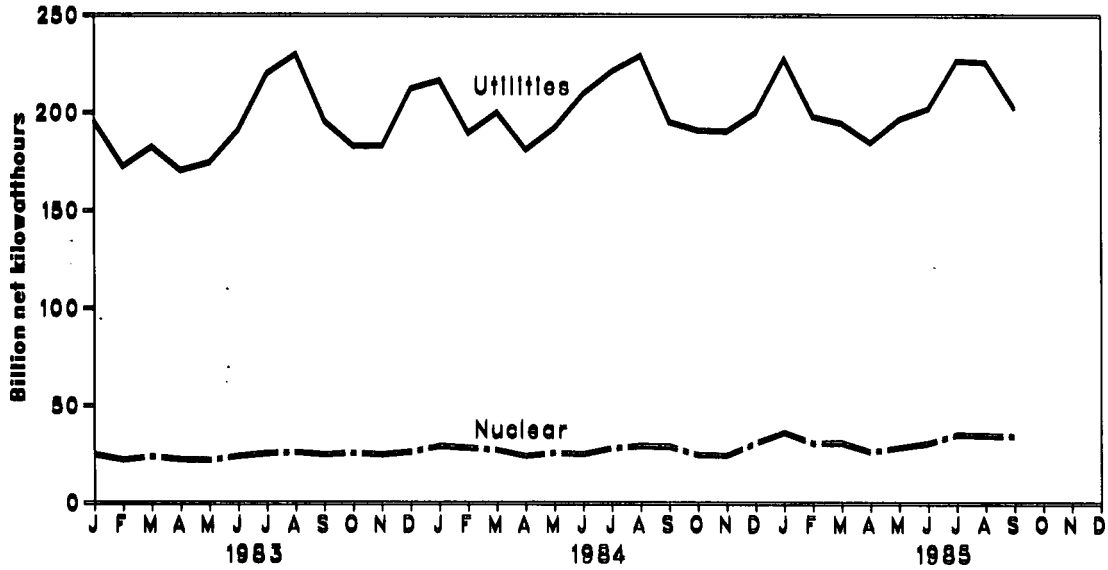
There were 94 operable U.S. nuclear power generating units as of September 30, 1985, with a collective net generating capacity of 78.0 million kilowatts. Of the 94 operable units, 4 were in power ascension (Diablo Canyon-2, Fermi-2, Limerick-1, Palo Verde-1), and 21 units generated no electricity or operated substantially below capacity (Big Rock Point, Browns Ferry-1, Browns Ferry-2, Browns Ferry-3, Brunswick-1, Cook-1, Cook-2, Davis-Besse, Fort St. Vrain, Indian Point-3, Limerick-1, Maine Yankee, Oconee-3, Peach Bottom-3, Prairie Island-2, Rancho Seco, Sequoyah-1, Sequoyah-2, Three Mile Island-1, Waterford-3, and Zion-2). Two units had licenses from the Nuclear Regulatory Commission authorizing fuel-loading and low-power testing (River Bend-1 and Shoreham).

As of September 30, 1985, there were 130 domestic nuclear power generating units in all stages of planning, construction, or operation, with an aggregate design capacity of 121 million net kilowatts.

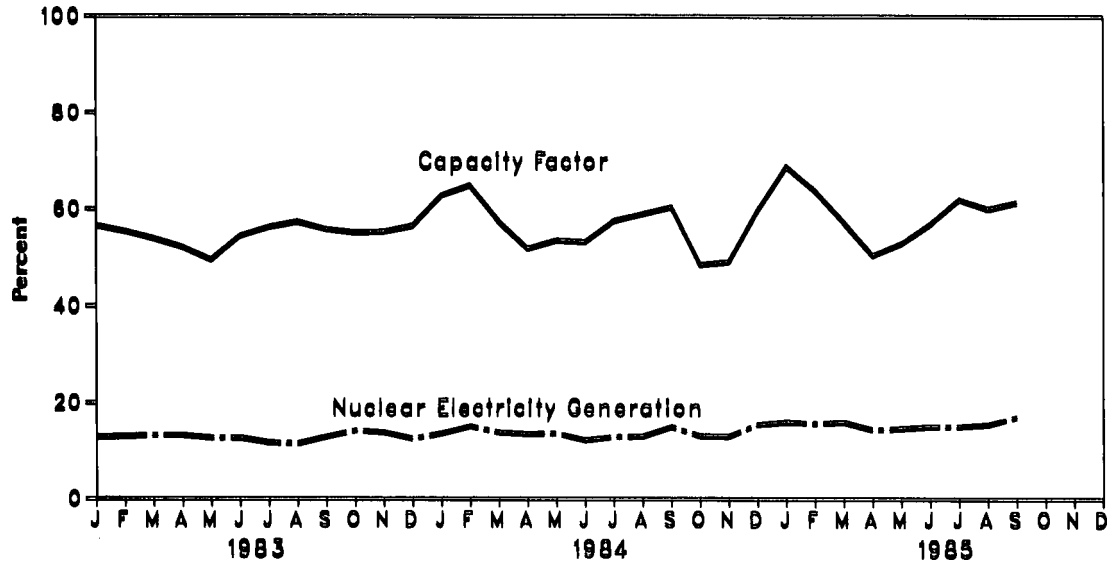
Nuclear

Nuclear Power Plant Operations

Electricity Generated by Utilities and by Nuclear Power Plants



Nuclear Portion of Electricity Generation and Capacity Factor



Nuclear

Nuclear Power Plant 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 kilowatthours	Percent	Million net kilowatts	Percent
1973	**Year**	**39**	**83,479**	**4.5**	**22.900**	**52.9**
1974	**Year**	**48**	**113,976**	**6.1**	**31.710**	**48.3**
1975	**Year**	**54**	**172,505**	**9.0**	**33.312**	**59.7**
1976	**Year**	**60**	**191,104**	**9.4**	**43.277**	**57.8**
1977	**Year**	**65**	**250,883**	**11.8**	**46.046**	**64.1**
1978	**Year**	**70**	**276,403**	**12.5**	**49.629**	**65.7**
1979	**Year**	**68**	**255,155**	**11.4**	**49.326**	**58.7**
1980	**Year**	**70**	**251,116**	**11.0**	**51.059**	**57.1**
1981	**Year**	**74**	**272,674**	**11.9**	**55.534**	**58.4**
1982	**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	12.6	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	11.4	61.440	57.3
	September	80	25,007	12.8	62.227	55.8
	October	80	25,797	14.1	62.876	55.1
	November	80	25,010	13.7	62.809	55.3
	December	80	26,361	12.4	62.809	56.5
	Year	**80**	**293,677**	**12.7**	**62.809**	**54.8**
1984	January	80	29,313	13.5	62.772	62.8
	February	80	28,436	15.0	62.942	64.9
	March	81	27,345	13.7	64.036	57.4
	April	82	24,231	13.4	65.049	51.8
	May	82	25,867	13.5	64.986	53.5
	June	83	25,299	12.1	66.091	53.2
	July	83	28,284	12.8	66.091	57.5
	August	84	29,493	12.9	67.341	58.9
	September	84	29,146	14.9	67.066	60.4
	October	85	24,774	13.0	68.497	48.5
	November	86	24,575	12.9	69.534	49.1
	December	86	30,872	15.4	69.522	59.7
	Year	**86**	**327,634**	**13.6**	**69.522**	**56.5**
1985	January	87	36,186	15.9	70.667	68.8
	February	88	30,809	15.6	71.841	63.8
	March	89	31,041	15.9	72.931	57.2
	April	89	26,458	14.3	72.911	50.4
	May	89	28,697	14.6	72.920	52.9
	June	91	30,837	15.0	75.262	56.9
	July	92	35,184	15.0	76.272	62.0
	August	94	34,812	15.4	77.989	60.0
	September	94	34,508	17.0	†78.047	†61.4

[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 page 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 page of this section.
[4]For an explanation of the method of calculating the capacity factor, see Note 4 on the last page of this section.
†Preliminary data.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last page of this section.

Nuclear

Status of Nuclear Reactor Units[1]

		Licensed for Operation		Construction Permits					Total Design Capacity[4]
		Operable[2]	In Startup[3]	Granted	Pending	On Order	Announced	Total	
									Million net kilowatts
1973	**Year**	**39**	**3**	**51**	**58**	**48**	**20**	**219**	**212**
1974	**Year**	**48**	**5**	**58**	**80**	**28**	**16**	**235**	**234**
1975	**Year**	**54**	**2**	**69**	**73**	**19**	**19**	**236**	**236**
1976	**Year**	**60**	**1**	**72**	**66**	**16**	**19**	**234**	**236**
1977	**Year**	**65**	**1**	**80**	**52**	**13**	**9**	**220**	**220**
1978	**Year**	**70**	**0**	**90**	**32**	**9**	**4**	**205**	**204**
1979	**Year**	**68**	**0**	**91**	**21**	**3**	**0**	**183**	**179**
1980	**Year**	**70**	**2**	**82**	**12**	**3**	**0**	**169**	**163**
1981	**Year**	**74**	**0**	**75**	**11**	**3**	**0**	**163**	**157**
1982	**Year**	**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	51	0	2	0	136	128
	February	80	3	51	0	2	0	136	128
	March	81	3	50	0	2	0	136	128
	April	82	3	49	0	2	0	136	128
	May	82	3	49	0	2	0	136	128
	June	83	3	48	0	2	0	136	128
	July	83	3	48	0	2	0	136	128
	August	84	2	44	0	2	0	132	123
	September	84	2	44	0	2	0	132	123
	October	85	3	42	0	2	0	132	123
	November	86	2	42	0	2	0	132	123
	December	86	6	38	0	2	0	132	123
1985	January	87	5	38	0	2	0	132	123
	February	88	4	38	0	2	0	132	123
	March	89	5	36	0	2	0	132	123
	April	89	6	35	0	2	0	132	123
	May	89	6	35	0	2	0	132	123
	June	91	4	35	0	2	0	132	123
	July	92	3	33	0	2	0	130	121
	August	94	2	32	0	2	0	130	121
	September	94	2	32	0	2	0	130	121

[1]Monthly data are the status as of the last day of the month. Annual data are the status as of December 31 of each year.
[2]See Note 1 on the last page of this section for the definition.
[3]See Note 2 on the last page 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 page of this section.
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 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 officially retired in August 1984; 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 but have not received a Full Power Amendment from the NRC. Without the amendment, these units cannot distribute electricity commercially.

3. Capacity: Nuclear power plants 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."

Price

Crude Oil

The average price of domestic crude oil purchased at the wellhead was $23.93 per barrel in September 1985. This was $0.01 per barrel above the previous month's level but $2.04 (7.9 percent) below the level in September 1984.

During September 1985, the composite refiner acquisition cost of crude oil was $26.44 per barrel, 7.6 percent below the September 1984 average of $28.60. The cost of imported crude oil decreased $0.03 per barrel from the August 1985 level to $26.59 per barrel in September. This was 7.4 percent below the September 1984 average. The cost of domestic crude oil in September 1985 was $26.38, a decrease of 7.6 percent from the September 1984 average.

Motor Gasoline

The national city average retail price of leaded regular gasoline at all types of stations was $1.12 per gallon in October 1985, 1.1 percent lower than the price in September 1985. The price of unleaded regular gasoline was $1.20 per gallon in October, 1.0 percent lower than the price in the previous month. The price of unleaded premium gasoline averaged $1.34 per gallon in October, 0.5 percent lower than during September 1985.

Residual Fuel Oil

The average price, excluding taxes, of residual fuel oil sold to end users (utilities, industry, and other ultimate consumers) in September 1985 was $0.58 per gallon, 4.5 percent above the previous month's price but 13.6 percent below the September 1984 average. The average price, excluding taxes, of residual fuel oil sold to other-than-ultimate consumers for resale in September 1985 was $0.56 per gallon, 5.1 percent above the August 1985 average but 13.3 percent below the September 1984 average.

Aviation Fuel

The average price, excluding taxes, of aviation gasoline sold to end users in September 1985 was $1.20 per gallon, 0.5 percent above the price in the previous month but 3.4 percent below the price in September 1984. The average price, excluding taxes, of kerosene-type jet fuel sold to end users in September 1985 was $0.78 per gallon, up 0.5 percent from the previous month's price but down 6.0 percent from the price 1 year earlier.

No. 2 Distillate Fuel Oil

The national average price of heating oil sold to residential customers in September 1985 was $1.00 per gallon. This was 2.7 percent above the price in August 1985 but 3.7 percent below the September 1984 price. The average price for resale was $0.77 per gallon in September 1985, 6.9 percent above the price in the previous month, but 3.8 percent below the price in September 1984.

Natural Gas

In August 1985, the average wellhead price of marketed natural gas production was $2.62 per thousand cubic feet, $0.01 less than in July 1985 and $0.07 (2.6 percent) below the August 1984 price. The average price of natural gas delivered to electric utility plants was $3.49 per thousand cubic feet in August 1985, $0.10 less than the July 1985 price and $0.31 (8.2 percent) below the August 1984 price. The average price of natural gas used by residential consumers in September 1985 was $7.08 per thousand cubic feet, $0.09 (1.3 percent) less than the September 1984 price.

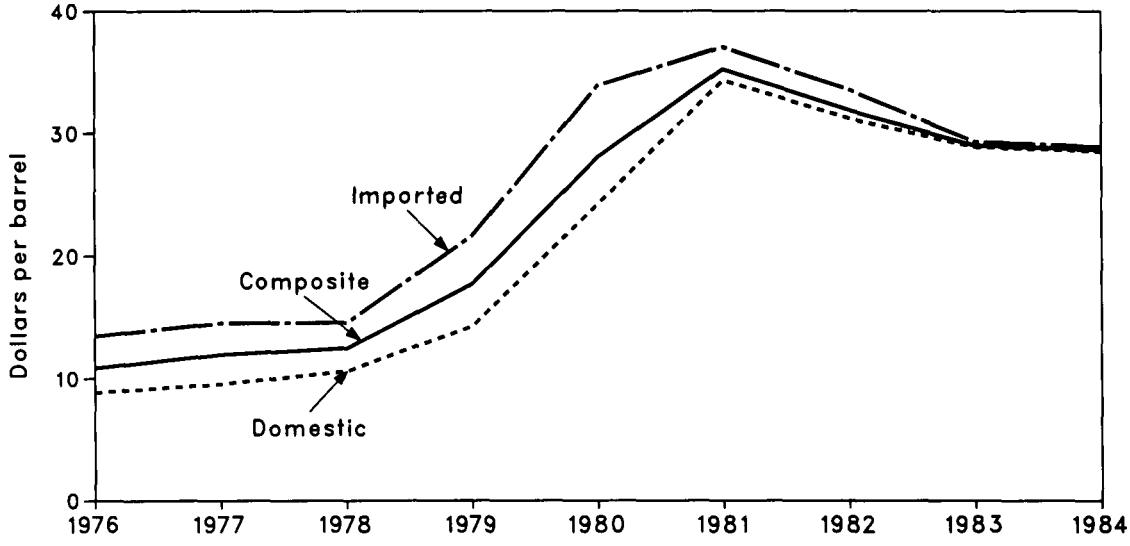
Electricity

The average retail price of electricity sold by selected privately owned utilities to residential consumers in September 1985 was 8.16 cents per kilowatthour, the same as in the previous month but 1.5 percent above the September 1984 price. The average price of electricity sold to commercial consumers was 7.62 cents per kilowatthour in September 1985, a 0.9-percent increase from the previous month's price but down 0.3 percent from the September 1984 price. The average electricity price to industrial users during September 1985 was 5.24 cents per kilowatthour, an increase of 0.8 percent from the previous month's price but 0.2 percent less than during September 1984.

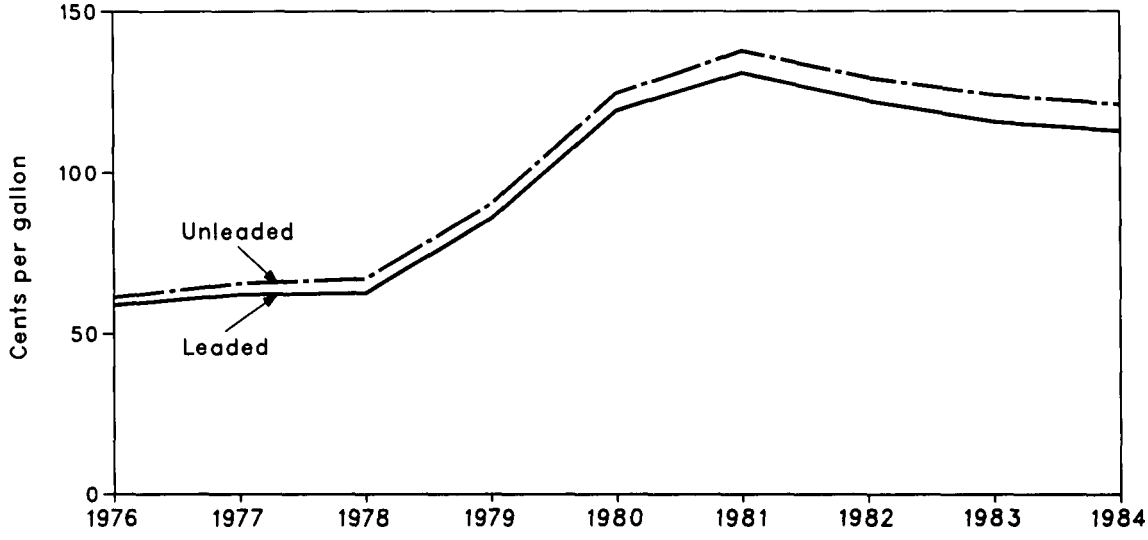
Price

Selected Petroleum Series

Refiner Acquisition Cost of Crude Oil



Regular Motor Gasoline Prices (Including Tax)



Price

Crude Oil Price Summary

		Actual Domestic Average Wellhead Price[1]	Average FOB Cost of Crude Oil Imports[2]	Average Landed Cost of Crude Oil Imports[3]	Refiner Acquisition Cost of Crude Oil[4]		
					Domestic	Imported	Composite
		Dollars per barrel					
1976	**Average**	**8.19**	**12.17**	**13.34**	**8.84**	**13.48**	**10.89**
1977	**Average**	**8.57**	**13.24**	**14.31**	**9.55**	**14.53**	**11.96**
1978	**Average**	**9.00**	**13.30**	**14.38**	**10.61**	**14.57**	**12.46**
1979	**Average**	**12.64**	**20.19**	**21.65**	**14.27**	**21.67**	**17.72**
1980	**Average**	**21.59**	**32.27**	**33.95**	**24.23**	**33.89**	**28.07**
1981	**Average**	**31.77**	**35.10**	**36.52**	**34.33**	**37.05**	**35.24**
1982	**Average**	**28.52**	**32.11**	**33.18**	**31.22**	**33.55**	**31.87**
1983	January	27.22	29.47	30.62	30.55	31.40	30.73
	February	26.41	27.79	29.08	29.16	30.76	29.49
	March	26.08	26.88	27.84	28.69	28.43	28.64
	April	25.85	27.18	28.24	28.45	27.95	28.33
	May	26.08	27.36	28.55	28.68	28.53	28.64
	June	25.98	27.71	29.00	28.67	29.23	28.85
	July	25.86	27.84	28.99	28.74	28.76	28.75
	August	26.03	27.89	29.22	28.58	29.50	28.88
	September	26.08	27.88	29.24	28.69	29.54	28.97
	October	26.04	27.84	29.08	28.88	29.67	29.14
	November	26.09	27.75	28.93	28.76	29.09	28.85
	December	25.88	27.50	28.58	28.62	29.30	28.83
	Average	**26.19**	**27.73**	**28.93**	**28.87**	**29.30**	**28.99**
1984	January	25.93	27.56	28.49	28.62	28.80	28.67
	February	26.06	27.78	28.89	28.76	28.91	28.81
	March	26.05	27.70	28.69	28.75	28.95	28.81
	April	25.93	27.84	28.91	28.63	29.11	28.77
	May	26.00	27.87	28.94	28.65	29.26	28.83
	June	26.09	27.78	28.89	28.58	29.19	28.77
	July	26.11	27.19	28.32	28.70	29.00	28.79
	August	26.02	27.29	28.20	28.59	28.92	28.69
	September	25.97	27.14	28.14	28.56	28.70	28.60
	October	25.92	27.15	28.18	28.46	28.79	28.56
	November	25.44	26.91	27.88	28.10	28.74	28.30
	December	25.05	26.69	27.69	27.95	28.02	27.97
	Average	**25.88**	**27.44**	**28.46**	**28.53**	**28.88**	**28.63**
1985	January	24.28	26.10	26.95	26.89	27.51	27.02
	February	23.63	25.90	26.82	26.39	27.05	26.53
	March	23.88	26.32	27.14	26.61	27.23	26.77
	April	24.15	26.58	27.47	26.79	27.61	27.04
	May	24.18	26.25	27.13	26.90	27.62	27.11
	June	24.03	25.69	26.47	26.50	27.27	26.69
	July	24.00	R25.41	R26.20	26.67	26.46	26.61
	August	R23.92	R†25.46	R†26.18	26.45	26.62	26.50
	September†	23.93	25.47	26.25	26.38	26.59	26.44

[1]See Note 1 in the Notes and Sources for this section.
[2]See Note 2 in the Notes and Sources for this section.
[3]See Note 3 in the Notes and Sources for this section.
[4]See Note 4 in the Notes and Sources for this section.
†Preliminary data. R=Revised data.
Note: • Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.
Sources: • See the Notes and Sources for this section.

Price

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

		Algeria	Indonesia	Iran	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela
					Dollars per barrel				
1976	**Average**	**13.05**	**12.76**	**11.61**	**NA**	**13.08**	**11.69**	**NA**	**11.32**
1977	**Average**	**14.36**	**13.57**	**12.67**	**13.42**	**14.44**	**12.37**	**NA**	**12.68**
1978	**Average**	**14.10**	**13.64**	**12.65**	**13.24**	**14.04**	**12.70**	**13.82**	**12.45**
1979	**Average**	**20.65**	**19.36**	**23.71**	**20.29**	**21.60**	**17.63**	**21.20**	**17.37**
1980	**Average**	**36.57**	**32.37**	**(2)**	**31.11**	**35.82**	**28.53**	**34.58**	**24.78**
1981	**Average**	**39.09**	**35.93**	**(2)**	**33.13**	**38.53**	**32.48**	**36.08**	**28.88**
1982	**Average**	**34.23**	**35.27**	**30.93**	**28.07**	**35.13**	**33.50**	**33.46**	**23.77**
1983	January	W	34.71	W	26.90	W	W	32.77	21.58
	February	W	33.74	W	25.69	W	W	30.95	21.82
	March	31.07	29.69	W	24.53	29.52	30.03	29.16	20.04
	April	29.37	29.57	W	24.18	29.63	W	30.07	20.05
	May	29.54	29.31	W	24.60	29.72	W	29.61	19.88
	June	29.80	29.59	W	24.13	29.57	W	28.92	20.80
	July	30.15	29.73	28.41	24.92	29.81	27.91	30.00	19.89
	August	30.32	29.60	28.19	25.15	29.92	27.83	29.88	21.56
	September	30.33	29.77	28.03	25.10	29.59	27.73	30.33	21.81
	October	29.98	29.81	28.29	25.72	30.23	28.24	29.73	23.58
	November	29.75	30.34	W	25.76	29.99	28.22	29.42	23.17
	December	W	29.77	28.30	26.20	29.60	27.18	29.05	24.17
	Average	**30.06**	**29.93**	**28.25**	**25.19**	**29.78**	**28.03**	**29.84**	**21.48**
1984	January	27.60	29.89	W	26.22	29.80	27.76	29.29	24.21
	February	28.56	29.09	W	26.04	29.98	26.72	29.70	23.55
	March	28.69	W	NA	26.30	29.89	28.39	29.95	23.86
	April	28.90	29.50	W	26.07	29.93	28.17	29.85	23.93
	May	28.98	29.44	W	26.36	29.67	27.43	29.93	24.07
	June	28.52	29.35	NA	26.58	29.34	W	29.67	24.23
	July	27.43	29.21	W	26.62	29.22	W	28.91	24.37
	August	26.97	W	W	26.71	29.02	W	28.13	23.91
	September	26.90	28.83	NA	26.34	29.24	27.99	27.99	24.57
	October	27.42	28.93	NA	26.44	28.40	W	28.50	24.43
	November	26.50	28.66	NA	26.53	28.32	NA	27.61	24.24
	December	25.13	28.03	NA	26.43	28.11	NA	27.85	24.32
	Average	**28.04**	**29.10**	**26.93**	**26.37**	**29.39**	**27.60**	**28.90**	**24.16**
1985	January	25.47	27.43	NA	26.10	27.22	W	W	24.02
	February	W	27.62	NA	26.00	27.41	W	W	24.36
	March	26.50	27.01	W	26.31	28.20	NA	W	24.93
	April	27.47	27.50	W	26.33	27.95	NA	28.09	24.49
	May	W	27.44	W	26.24	27.77	NA	27.41	24.52
	June	W	27.06	W	24.75	27.09	NA	26.65	24.32
	July	W	27.44	W	24.25	27.95	NA	26.58	23.13
	August†	NA	R26.60	W	R24.69	27.82	NA	26.98	R22.51
	September†	W	25.17	W	24.54	28.00	NA	27.64	22.52

[1]The Free on Board (FOB) cost excludes all costs related to insurance and transportation. See Note 2 in the Notes and Sources for 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 through 1980 reflect the period of reporting; prices since then reflect the period of loading. Annual averages are the weighted average of the 12 monthly prices including those prices that were not published.
Sources: • See the Notes and Sources for this section.

Price

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

		Algeria	Canada	Indonesia	Iran	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela
		Dollars per barrel								
1975	**Average**	**12.72**	**12.72**	**13.79**	**12.21**	**NA**	**12.62**	**12.30**	**NA**	**11.65**
1976	**Average**	**13.81**	**13.57**	**13.82**	**12.82**	**NA**	**13.80**	**13.04**	**NA**	**11.80**
1977	**Average**	**15.20**	**14.21**	**14.63**	**13.80**	**13.75**	**15.25**	**13.61**	**NA**	**13.13**
1978	**Average**	**14.91**	**14.50**	**14.64**	**13.88**	**13.54**	**14.86**	**13.92**	**NA**	**12.83**
1979	**Average**	**21.90**	**20.43**	**20.69**	**25.02**	**20.86**	**22.96**	**19.15**	**22.16**	**18.18**
1980	**Average**	**37.90**	**30.47**	**33.92**	**(2)**	**31.80**	**37.05**	**30.02**	**35.88**	**25.86**
1981	**Average**	**40.49**	**32.16**	**37.57**	**(2)**	**33.78**	**39.70**	**34.19**	**37.24**	**29.87**
1982	**Average**	**35.28**	**26.92**	**36.75**	**32.40**	**28.64**	**36.17**	**35.00**	**34.28**	**24.82**
1983	January	33.20	27.62	36.12	W	27.50	W	W	33.48	23.20
	February	32.17	26.19	35.07	W	26.15	32.24	W	33.33	23.36
	March	31.24	24.78	31.17	W	25.06	30.49	31.63	29.92	21.48
	April	30.55	24.35	31.14	W	24.65	30.63	W	30.84	21.45
	May	30.48	24.32	30.82	W	25.17	30.75	W	30.60	21.24
	June	30.88	24.88	31.40	29.10	24.81	30.56	W	30.02	22.07
	July	31.36	25.45	31.46	30.06	25.34	30.91	29.53	30.86	21.30
	August	31.85	25.45	31.65	29.57	25.80	31.21	29.39	30.83	22.82
	September	31.78	25.71	31.27	29.31	25.66	30.70	29.53	31.39	23.12
	October	30.97	26.01	31.14	29.73	26.44	31.16	29.98	30.79	24.75
	November	30.96	25.83	31.30	W	26.29	31.02	29.88	30.33	24.68
	December	30.23	26.69	31.12	28.57	26.88	30.57	28.83	30.00	24.91
	Average	**31.26**	**25.63**	**31.57**	**29.81**	**25.78**	**30.84**	**29.76**	**30.87**	**22.94**
1984	January	29.19	26.44	31.22	W	26.85	30.62	29.67	30.09	25.28
	February	29.73	26.40	30.91	W	26.73	31.29	28.38	30.77	25.21
	March	30.31	26.01	30.81	NA	26.92	30.93	30.20	30.98	24.75
	April	29.81	26.10	31.02	W	26.68	31.08	29.95	30.73	24.86
	May	29.96	27.12	30.80	W	26.92	30.96	28.95	30.75	24.93
	June	29.62	26.00	31.21	NA	27.24	31.05	29.90	30.43	25.29
	July	28.63	27.16	30.26	W	26.98	30.07	W	29.54	25.24
	August	28.16	26.95	30.59	W	26.99	29.99	W	28.93	24.95
	September	27.94	27.03	30.05	W	26.66	30.60	29.75	28.81	25.29
	October	28.42	26.82	30.11	W	26.80	29.47	28.57	29.27	25.49
	November	28.12	26.33	30.03	W	26.78	29.45	NA	28.39	25.35
	December	27.07	26.50	30.12	NA	26.86	29.32	NA	28.55	25.24
	Average	**29.08**	**26.59**	**30.64**	**28.67**	**26.87**	**30.50**	**29.50**	**29.60**	**25.15**
1985	January	26.28	24.99	29.26	NA	26.46	28.70	W	W	25.18
	February	26.06	24.00	28.73	NA	26.37	28.55	W	W	25.37
	March	27.09	25.13	28.40	W	26.60	29.42	NA	W	25.69
	April	28.28	26.16	29.02	W	26.60	28.99	W	28.57	25.44
	May	W	26.33	28.98	W	26.56	28.69	NA	27.98	25.26
	June	W	26.34	28.73	24.55	25.16	27.81	NA	27.42	25.13
	July	27.35	25.96	28.95	W	R24.54	28.56	W	27.28	23.81
	August†	W	26.05	28.01	25.70	R24.85	R28.54	NA	R27.69	R23.45
	September†	W	25.89	26.70	W	24.87	28.74	NA	28.20	23.32

[1]See Note 3 in the Notes and Sources for 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 through 1980 reflect the period of reporting; prices since then reflect the period of loading. Annual averages are the weighted average of the 12 monthly prices including those prices that were not published.
Sources: • See the Notes and Sources for this section.

Price

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

		Leaded Regular	Unleaded Regular	Unleaded Premium	Average for All Types[2]
		Cents per gallon, including tax			
1974	**Average**	**53.2**	**NA**	**NA**	**NA**
1975	**Average**	**56.7**	**NA**	**NA**	**NA**
1976	**Average**	**59.0**	**61.4**	**NA**	**NA**
1977	**Average**	**62.2**	**65.6**	**NA**	**NA**
1978	**Average**	**62.6**	**67.0**	**NA**	**65.2**
1979	**Average**	**85.7**	**90.3**	**NA**	**88.2**
1980	**Average**	**119.1**	**124.5**	**NA**	**122.1**
1981	**Average[3]**	**131.1**	**137.8**	**147.0**	**135.3**
1982	**Average**	**122.2**	**129.6**	**141.5**	**128.1**
1983	January	114.6	122.8	137.6	121.3
	February	109.9	118.7	133.8	117.0
	March	106.4	115.1	130.8	113.5
	April	113.1	121.5	136.0	119.8
	May	117.7	125.9	139.7	124.3
	June	119.7	127.7	141.1	126.1
	July	120.7	128.8	142.1	127.2
	August	120.3	128.5	141.9	126.9
	September	118.9	127.4	141.0	125.7
	October	117.2	125.5	139.5	123.9
	November	115.6	124.1	138.4	122.4
	December	114.6	123.1	137.6	121.5
	Average	**115.7**	**124.1**	**138.3**	**122.5**
1984	January	113.1	121.6	136.9	120.0
	February	112.5	120.9	136.1	119.3
	March	112.5	121.0	136.2	119.4
	April	114.5	122.7	137.5	121.1
	May	115.4	123.6	138.0	122.1
	June	*114.7*	*122.9*	*137.7*	*121.4*
	July	112.9	121.2	137.0	119.7
	August	111.6	119.6	135.5	118.4
	September	112.0	120.3	136.0	118.9
	October	112.7	120.9	136.5	119.5
	November	112.4	120.7	136.4	119.3
	December	110.9	119.3	135.4	117.9
	Average	**112.9**	**121.2**	**136.6**	**119.8**
1985	January	106.0	114.8	130.4	114.5
	February	104.1	113.1	129.0	112.8
	March	107.1	115.9	131.0	115.5
	April	111.9	120.5	134.0	119.9
	May	114.4	123.1	136.0	122.3
	June	115.3	124.1	137.1	123.3
	July	115.4	124.2	136.7	123.3
	August	114.3	122.9	135.9	122.2
	September	112.9	121.6	134.9	120.9
	October	111.7	120.4	134.2	119.8

[1]See Note 5 in the Notes and Sources for 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 Notes and Sources for this section.

Price

Refiner and Gas Plant Operator Sales Prices of Residual Fuel Oil[1]

		Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent		Residual Fuel Oil Sulfur Content Greater Than 1 Percent		Average	
		Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
		Cents per gallon, excluding tax					
1978	**Average**	**29.3**	**31.4**	**24.5**	**27.5**	**26.3**	**29.8**
1979	**Average**	**45.0**	**46.8**	**36.6**	**38.9**	**39.9**	**43.6**
1980	**Average**	**60.8**	**67.5**	**47.9**	**52.3**	**52.8**	**60.7**
1981	**Average**	**74.8**	**82.9**	**62.2**	**67.3**	**66.3**	**75.6**
1982	**Average**	**69.5**	**74.7**	**57.2**	**61.1**	**61.2**	**67.6**
1983	January	65.0	70.5	57.0	60.1	60.3	64.2
	February	63.0	66.0	55.7	58.5	58.5	62.0
	March	60.0	66.2	55.9	57.0	57.7	60.9
	April	60.1	64.3	56.5	58.7	57.7	61.0
	May	62.6	66.9	57.8	59.7	59.2	63.2
	June	63.2	69.2	58.5	60.1	60.2	64.7
	July	65.2	70.4	60.5	61.4	62.2	65.9
	August	66.7	71.6	62.0	63.2	63.8	67.7
	September	67.0	72.6	63.3	65.3	64.6	69.0
	October	68.8	72.1	62.6	64.9	64.7	68.7
	November	66.5	70.7	62.2	64.4	63.6	67.4
	December	67.3	72.0	60.2	63.1	62.3	67.2
	Average	**64.3**	**69.5**	**59.1**	**61.1**	**60.9**	**65.1**
1984	January	71.0	73.6	62.3	64.6	64.8	69.0
	February	71.4	75.1	65.7	65.8	67.5	70.4
	March	70.5	73.1	61.9	64.7	64.5	68.5
	April	69.2	73.1	64.7	66.5	66.2	69.1
	May	68.3	72.7	65.0	67.4	66.0	69.5
	June	69.8	73.2	66.1	68.9	67.2	71.0
	July	66.8	71.5	64.0	66.7	65.0	69.0
	August	65.6	69.5	62.7	65.0	63.6	67.1
	September	65.9	70.0	63.8	64.9	64.5	67.5
	October	66.8	70.8	64.3	65.8	65.1	67.8
	November	66.8	70.4	63.6	65.8	64.6	67.9
	December	67.5	70.5	63.3	65.6	64.6	67.7
	Average	**68.5**	**72.0**	**63.9**	**65.9**	**65.4**	**68.7**
1985	January	67.6	71.1	63.3	66.5	64.7	68.4
	February	67.6	71.2	63.4	66.3	65.0	68.7
	March	66.2	70.1	60.8	65.0	62.4	67.2
	April	63.0	67.5	58.7	61.9	60.2	64.1
	May	58.1	61.2	53.4	58.0	54.9	59.5
	June	54.9	59.9	50.6	52.8	52.4	55.6
	July	56.4	58.9	52.8	54.6	53.9	56.4
	August	R55.1	57.7	R52.1	53.7	53.2	55.8
	September†	59.5	62.6	53.3	54.8	55.9	58.3

[1]Sales for Resale are those made to purchasers who are other-than-ultimate consumers, that is, wholesale sales. Sales to End Users are those made directly to the ultimate consumer including bulk customers such as agriculture, industry, and utilities, as well as residential and commercial customers.
†Preliminary data. R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
•Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information.
Sources: •See the Notes and Sources for this section.

Price

Refiner and Gas Plant Operator Sales Prices of Petroleum Products for Resale[1]

		Finished Motor Gasoline[2]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
		Cents per gallon, excluding tax						
1978	**Average**	**43.4**	**53.7**	**38.6**	**40.4**	**36.9**	**36.5**	**23.7**
1979	**Average**	**63.7**	**72.1**	**66.0**	**62.4**	**56.9**	**57.4**	**29.1**
1980	**Average**	**94.1**	**112.8**	**86.8**	**86.4**	**80.3**	**80.1**	**41.5**
1981	**Average**	**106.4**	**125.0**	**101.2**	**106.6**	**97.6**	**97.2**	**46.6**
1982	**Average**	**97.3**	**122.8**	**95.3**	**101.8**	**91.4**	**91.4**	**42.7**
1983	January	88.5	124.8	91.8	94.2	85.7	85.5	47.0
	February	85.4	123.7	89.9	90.0	80.1	80.7	46.7
	March	82.9	121.2	84.5	83.1	76.0	75.2	47.4
	April	86.5	120.0	82.9	84.2	78.9	76.8	50.0
	May	90.4	120.2	84.3	87.7	80.9	80.2	50.5
	June	91.5	115.0	84.1	84.6	80.9	80.3	50.9
	July	92.3	115.2	84.8	85.2	81.7	80.8	50.7
	August	91.5	114.7	85.4	86.7	83.4	81.7	49.8
	September	90.2	113.7	86.3	91.9	85.1	83.5	50.1
	October	88.1	118.9	86.4	90.8	83.5	83.0	49.9
	November	86.6	118.7	84.4	90.4	82.6	82.0	47.3
	December	83.8	118.8	83.6	88.6	80.7	80.1	45.4
	Average	**88.2**	**117.8**	**85.4**	**89.2**	**81.5**	**80.8**	**48.4**
1984	January	83.2	116.7	86.4	95.9	87.5	82.6	47.7
	February	83.8	116.5	86.5	100.4	89.2	84.5	47.4
	March	84.7	117.1	84.6	91.5	81.3	81.0	45.3
	April	86.9	116.8	84.2	90.7	82.8	80.8	44.6
	May	86.6	117.1	84.3	90.9	83.2	81.9	44.4
	June	84.5	116.8	84.2	88.1	82.4	81.9	44.1
	July	81.7	117.2	82.8	87.6	79.4	79.3	42.3
	August	81.1	116.7	81.0	86.0	77.8	77.7	43.2
	September	82.8	116.8	81.7	88.8	80.0	78.4	44.8
	October	83.6	116.4	82.9	88.9	80.8	80.0	46.1
	November	81.9	114.8	81.4	88.0	79.4	79.0	45.6
	December	78.0	114.0	80.1	86.4	77.1	77.0	43.0
	Average	**83.2**	**116.5**	**83.0**	**91.6**	**82.1**	**80.3**	**45.0**
1985	January	75.2	114.5	79.5	85.8	75.7	74.9	40.0
	February	76.3	114.0	79.3	86.5	75.2	74.1	39.4
	March	81.0	113.6	78.6	85.7	76.4	75.6	38.0
	April	86.0	112.6	79.5	84.7	79.3	79.1	37.9
	May	87.5	113.2	78.1	80.4	76.5	78.9	38.1
	June	87.7	113.7	76.0	75.9	72.9	75.5	37.1
	July	87.3	113.6	75.2	76.9	70.3	72.3	36.3
	August	85.0	113.3	76.8	79.7	72.0	72.5	36.5
	September†	83.2	112.9	79.2	85.9	77.0	76.4	37.6

[1]Sales for Resale are those made to purchasers who are other-than-ultimate consumers, that is, wholesale sales. Sales to End Users are those made directly to the ultimate consumer including bulk customers such as agriculture, industry, and utilities, as well as residential and commercial customers.
[2]See Note 5 in the Notes and Sources for this section.
†Preliminary data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
•Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information.
Sources: • See the Notes and Sources for this section.

Price

Refiner and Gas Plant Operator Sales Prices of Petroleum Products to End Users[1]

		Finished Motor Gasoline[2]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
		Cents per gallon, excluding tax						
1978	**Average**	**48.4**	**51.6**	**38.7**	**42.1**	**40.0**	**37.7**	**33.5**
1979	**Average**	**71.3**	**68.9**	**54.7**	**58.5**	**51.6**	**56.5**	**35.7**
1980	**Average**	**103.5**	**108.4**	**86.8**	**90.2**	**78.8**	**81.8**	**48.2**
1981	**Average**	**114.7**	**130.3**	**102.4**	**112.3**	**91.4**	**99.5**	**56.5**
1982	**Average**	**108.0**	**131.2**	**96.3**	**108.9**	**90.5**	**94.2**	**59.2**
1983	January	97.1	129.2	94.5	104.5	100.9	89.2	72.7
	February	92.5	127.2	92.6	101.4	97.0	84.0	71.7
	March	89.8	126.6	90.6	97.1	93.0	78.0	68.1
	April	94.7	125.2	88.8	93.4	89.1	78.8	68.6
	May	96.6	125.4	87.8	93.8	89.5	81.8	72.2
	June	97.8	125.6	86.3	90.0	87.3	81.5	67.3
	July	98.8	125.1	85.6	89.0	85.1	82.0	66.4
	August	98.4	125.9	85.5	90.8	86.1	83.0	68.9
	September	96.9	124.2	86.1	92.7	88.0	84.8	74.9
	October	95.4	124.7	86.0	98.9	89.0	84.2	69.6
	November	93.9	124.5	85.8	100.0	90.1	83.5	72.8
	December	92.4	124.4	85.5	96.6	92.1	82.2	76.4
	Average	**95.4**	**125.5**	**87.8**	**96.1**	**91.6**	**82.6**	**70.9**
1984	January	90.6	123.9	85.8	106.8	97.7	84.4	76.8
	February	90.2	123.7	86.5	117.9	104.6	87.4	76.3
	March	90.7	123.8	85.6	111.3	94.7	83.2	76.4
	April	92.9	124.4	85.1	105.8	91.9	82.4	76.5
	May	93.4	123.9	85.2	102.4	90.9	83.2	70.4
	June	92.5	124.6	84.5	94.3	86.9	84.0	70.6
	July	90.4	124.3	84.1	90.6	84.3	81.3	69.6
	August	89.2	123.2	83.4	92.8	82.8	79.7	71.9
	September	89.7	123.7	83.1	99.2	84.3	80.2	73.4
	October	90.5	123.3	83.2	102.7	87.3	81.6	74.1
	November	89.9	119.3	82.4	106.1	87.7	80.7	73.8
	December	88.0	121.9	82.2	101.4	88.1	79.4	70.0
	Average	**90.7**	**123.4**	**84.2**	**103.6**	**91.6**	**82.3**	**73.7**
1985	January	84.6	121.7	81.4	106.0	87.0	77.6	78.8
	February	83.6	121.1	80.9	103.7	86.1	76.7	76.1
	March	87.1	121.4	80.4	103.1	86.0	77.0	74.6
	April	92.4	121.2	80.1	101.0	85.8	79.9	75.7
	May	94.4	121.9	79.5	94.1	82.2	79.7	70.5
	June	95.2	121.7	78.6	88.2	77.8	77.2	66.8
	July	95.4	120.2	78.2	86.0	72.4	74.5	62.9
	August	94.0	118.9	77.7	89.9	74.4	73.8	62.9
	September†	91.9	119.5	78.1	96.0	80.9	78.1	63.7

[1]Sales for Resale are those made to purchasers who are other-than-ultimate consumers, that is, wholesale sales. Sales to End Users are those made directly to the ultimate consumer including bulk customers such as agriculture, industry, and utilities, as well as residential and commercial customers.
[2]See Note 5 in the Notes and Sources for this section.
†Preliminary data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
•Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information.
Sources: • See the Notes and Sources for this section.

Price

Sales Prices of No. 2 Distillate to Residences for Selected States[1]

		CT	ME	MA	NH	RI	VT	DE	DC	MD	NJ	NY	PA	VA
		Cents per gallon, excluding tax												
1978	**Average**	**50.1**	**48.6**	**48.8**	**50.3**	**50.7**	**50.8**	**47.8**	**50.7**	**49.2**	**49.6**	**50.1**	**48.8**	**49.1**
1979	**Average**	**72.0**	**68.8**	**70.9**	**72.5**	**72.8**	**72.5**	**68.2**	**74.2**	**70.1**	**71.0**	**71.2**	**69.8**	**70.4**
1980	**Average**	**98.0**	**96.3**	**97.8**	**100.4**	**101.1**	**101.5**	**95.4**	**102.6**	**97.9**	**97.9**	**98.2**	**96.4**	**98.5**
1981	**Average**	**121.7**	**120.4**	**121.3**	**123.7**	**123.8**	**125.4**	**117.3**	**127.4**	**121.4**	**121.5**	**123.2**	**118.1**	**120.5**
1982	**Average**	**118.3**	**115.5**	**117.6**	**117.4**	**120.1**	**120.1**	**111.3**	**124.5**	**117.1**	**117.4**	**120.5**	**113.7**	**117.7**
1983	January	119.5	109.0	116.3	111.6	116.2	121.5	110.5	122.8	115.4	115.7	120.6	113.7	116.0
	February	115.8	103.7	113.2	105.5	112.2	116.9	108.2	119.7	112.6	110.4	117.6	109.6	112.0
	March	108.3	97.4	105.4	100.8	106.8	109.6	103.9	115.3	108.2	104.6	110.2	104.0	106.9
	April	104.5	99.5	104.4	100.9	108.8	110.6	103.0	113.1	107.9	104.4	106.9	101.8	106.7
	May	105.9	101.6	107.0	102.6	109.6	111.2	104.6	112.9	108.6	105.5	108.2	103.3	107.2
	June	104.3	102.6	105.9	101.2	112.0	112.8	107.3	114.7	108.3	104.6	110.5	102.2	106.8
	July	104.2	102.6	105.3	104.3	109.1	112.3	107.8	112.8	107.2	104.5	109.9	101.3	107.4
	August	103.8	105.6	105.4	103.5	107.9	111.7	102.5	113.3	107.0	105.5	110.0	101.6	107.7
	September	103.8	103.8	106.2	104.0	108.1	111.0	103.5	113.9	108.1	106.1	110.5	102.8	108.1
	October	104.3	102.9	105.6	103.1	108.0	109.4	103.5	113.4	108.7	105.4	110.3	103.3	104.8
	November	104.1	101.8	106.1	101.5	108.7	109.8	103.7	113.5	108.8	104.6	110.2	103.7	104.9
	December	105.6	102.2	108.1	103.7	109.4	110.0	105.5	114.7	109.2	106.7	110.9	104.6	105.2
	Average	**109.1**	**102.8**	**109.1**	**104.1**	**110.5**	**112.9**	**106.0**	**117.0**	**110.3**	**107.9**	**112.1**	**105.8**	**108.7**
1984	January	115.7	110.2	114.4	114.0	113.7	116.6	114.8	122.0	115.6	114.1	118.3	112.9	111.4
	February	121.7	112.6	119.7	117.8	117.5	118.9	118.4	128.6	121.9	119.5	124.3	117.4	117.5
	March	114.5	103.3	113.1	108.8	111.7	115.1	111.1	122.6	116.2	113.5	117.0	110.9	112.6
	April	113.4	103.3	112.4	107.7	110.7	113.3	109.9	119.9	115.6	110.6	116.0	107.8	110.8
	May	112.5	102.7	112.5	108.8	111.4	112.2	109.0	119.5	113.0	109.1	114.5	105.8	111.1
	June	110.6	103.7	110.5	104.5	110.8	112.8	107.2	116.3	109.9	107.1	115.0	103.3	108.7
	July	107.4	102.5	107.3	101.9	109.3	108.6	103.7	116.5	109.0	104.9	112.8	99.7	107.2
	August	104.7	98.0	105.5	98.6	106.0	108.0	103.7	109.8	105.2	103.6	110.2	99.6	105.2
	September	105.4	99.1	106.0	101.0	105.9	106.9	102.1	109.9	106.7	104.3	109.3	100.9	105.9
	October	106.2	101.9	106.9	102.2	107.4	108.0	103.5	111.8	107.5	105.7	111.9	101.5	106.7
	November	*107.2*	*100.6*	*107.2*	*102.7*	*106.5*	*107.5*	*103.3*	*111.9*	*108.2*	*105.2*	*111.7*	*102.9*	*107.1*
	December	106.4	97.9	107.0	103.1	107.1	106.4	102.8	112.9	107.1	104.9	111.3	103.2	107.7
	Average	**112.1**	**103.9**	**111.6**	**108.4**	**111.4**	**111.9**	**109.6**	**118.7**	**113.5**	**111.0**	**115.5**	**107.9**	**110.5**
1985	January	106.9	97.9	107.2	101.3	108.1	106.9	103.8	112.1	107.5	105.0	111.3	102.9	106.2
	February	107.2	98.5	107.1	102.7	106.9	107.3	104.0	117.1	108.6	105.7	112.0	103.2	106.8
	March	106.8	100.6	107.3	103.3	106.2	107.9	104.6	115.9	108.3	105.1	111.3	102.1	105.8
	April	107.0	101.5	106.6	102.2	106.9	106.4	105.1	113.9	109.7	105.2	110.7	100.9	103.8
	May	106.2	99.4	104.5	99.9	102.1	105.4	100.7	112.4	108.1	103.4	109.7	99.8	103.9
	June	103.5	95.4	101.1	94.4	98.6	103.7	96.4	107.1	104.4	99.6	108.1	95.0	104.4
	July	100.2	91.4	98.3	90.9	97.5	101.6	96.2	107.3	101.2	97.4	105.0	92.1	99.6
	August	99.5	R91.0	R96.1	R91.7	R95.9	101.5	97.5	105.5	R98.9	97.3	R105.0	92.5	R99.2
	September†	99.7	94.1	100.8	97.5	101.3	104.9	98.6	107.1	103.2	100.6	104.7	97.2	102.0

[1]The States are listed by geographic region of the country. State names are abbreviated as follows: CT - Connecticut, ME - Maine, MA - Massachusetts, NH - New Hampshire, RI - Rhode Island, VT - Vermont, DE - Delaware, DC - District of Columbia, MD - Maryland, NJ - New Jersey, NY - New York, PA - Pennsylvania, VA - Virginia, WV - West Virginia, IL - Illinois, IN - Indiana, MI - Michigan, MN - Minnesota, OH - Ohio, WI - Wisconsin, ID - Idaho, AK - Alaska, OR - Oregon, WA - Washington.

Footnotes continued on following page.

Price

Sales Prices of No. 2 Distillate to Residences for Selected States[1] (continued)

		WV	IL	IN	MI	MN	OH	WI	ID	AK	OR	WA	U.S. Average
		Cents per gallon, excluding tax											
1978	**Average**	**46.2**	**46.5**	**48.5**	**47.9**	**47.8**	**47.4**	**44.7**	**43.6**	**53.2**	**45.8**	**48.6**	**49.0**
1979	**Average**	**65.1**	**68.8**	**72.7**	**70.9**	**72.4**	**68.6**	**67.3**	**62.1**	**68.2**	**68.0**	**69.7**	**70.4**
1980	**Average**	**92.2**	**95.8**	**99.6**	**97.8**	**99.9**	**91.9**	**91.5**	**91.6**	**97.8**	**97.3**	**100.8**	**97.4**
1981	**Average**	**115.0**	**114.9**	**118.5**	**118.3**	**118.4**	**113.2**	**109.1**	**110.4**	**118.0**	**111.4**	**116.5**	**119.4**
1982	**Average**	**109.3**	**110.9**	**114.3**	**113.9**	**115.1**	**110.2**	**107.8**	**110.4**	**117.4**	**111.6**	**117.6**	**116.0**
1983	January	105.6	103.8	105.7	110.6	107.8	107.9	108.5	109.1	114.6	113.6	117.7	115.0
	February	104.7	99.5	102.8	108.5	101.6	104.4	104.5	104.8	NA	107.8	114.3	111.6
	March	99.2	96.6	95.7	103.7	96.5	98.2	96.8	99.6	110.7	101.4	109.0	105.1
	April	97.5	97.7	96.8	102.5	100.5	95.8	97.1	99.0	106.6	99.1	106.0	103.5
	May	96.1	100.3	98.2	102.7	101.9	96.5	98.7	99.2	106.0	99.0	105.5	104.8
	June	97.3	100.2	98.2	110.7	102.4	96.1	98.7	98.7	105.0	99.4	105.4	106.0
	July	94.9	99.6	99.4	105.3	102.6	97.3	99.0	99.3	105.8	97.8	105.2	105.0
	August	96.1	100.7	98.9	102.2	104.4	95.2	99.2	98.1	105.1	98.7	104.0	104.9
	September	100.7	102.5	101.4	103.9	103.7	101.2	100.7	98.9	106.2	100.5	105.6	105.7
	October	100.6	101.0	101.5	105.8	104.8	100.2	101.8	99.5	106.1	101.4	106.3	106.0
	November	100.5	100.8	100.7	105.4	104.4	101.0	100.4	99.5	105.5	102.1	106.4	106.0
	December	101.5	99.6	101.1	106.8	104.2	102.1	100.5	100.3	105.5	101.8	106.1	106.7
	Average	**101.0**	**100.4**	**100.7**	**106.4**	**103.1**	**101.3**	**101.2**	**101.8**	**108.8**	**103.6**	**109.0**	**107.8**
1984	January	108.5	104.7	106.0	107.3	106.6	104.6	101.5	100.1	104.1	100.5	103.6	112.0
	February	109.9	105.9	107.3	108.0	102.8	105.7	102.8	101.3	106.5	100.9	103.8	116.9
	March	104.9	102.3	100.6	105.6	105.1	101.7	101.7	97.2	107.3	100.9	104.6	111.3
	April	101.6	100.3	103.4	104.8	103.9	101.9	101.4	96.2	107.3	100.6	105.0	109.8
	May	98.9	102.3	102.4	105.2	105.3	103.1	101.0	98.1	107.2	99.5	104.2	108.4
	June	99.5	101.6	105.9	103.3	104.2	101.7	100.5	93.8	107.8	98.2	103.3	107.2
	July	96.2	99.4	101.4	102.6	105.1	101.8	100.5	93.1	107.2	97.1	100.4	104.8
	August	96.6	98.9	100.3	101.8	104.5	99.5	100.0	97.4	107.3	94.9	99.7	103.3
	September	96.9	98.6	100.7	103.2	103.5	100.1	98.8	98.4	105.0	95.9	100.4	103.6
	October	98.3	97.1	100.9	103.0	103.0	101.2	100.7	99.4	107.8	96.5	100.9	104.9
	November	99.6	95.8	102.3	103.5	103.1	100.8	101.0	97.9	107.8	97.6	101.3	105.3
	December	99.2	94.4	100.9	103.2	102.8	99.3	99.0	98.8	107.5	97.4	100.5	104.8
	Average	**102.1**	**100.1**	**103.1**	**105.0**	**104.1**	**102.1**	**101.0**	**98.5**	**106.9**	**99.3**	**102.6**	**109.1**
1985	January	98.6	95.2	98.6	102.1	99.5	98.3	97.3	96.8	108.6	96.1	100.6	104.9
	February	98.3	94.4	97.8	101.0	99.8	98.7	96.1	96.9	107.6	96.6	99.8	105.3
	March	98.1	94.5	96.3	101.3	101.0	97.9	96.4	96.6	112.8	95.7	100.3	105.0
	April	96.4	96.7	98.6	98.2	101.4	99.9	97.6	96.1	NA	96.5	99.2	105.0
	May	93.8	96.4	101.5	96.8	103.8	99.9	99.6	96.8	106.8	96.7	98.1	103.5
	June	90.7	92.1	97.5	98.2	104.3	97.1	94.2	95.9	107.4	95.5	99.1	100.8
	July	90.2	90.0	93.2	99.4	100.5	92.9	93.0	94.9	108.1	95.3	97.5	98.0
	August	R88.6	R90.8	R93.1	R96.8	R101.0	R91.8	93.0	94.5	107.1	93.0	R97.1	R97.2
	September†	96.2	95.4	95.5	98.8	98.6	95.7	94.9	95.6	109.1	93.9	97.5	99.8

Footnotes continued.
†Preliminary data. R=Revised data. NA=Not available.
Note: • Prices prior to January 1983 are Energy Information Administration estimates. See Note 8 in the Notes and Sources for this section for additional information.
Sources: • See the Notes and Sources for this section.

Price

National Average Natural Gas Prices—Previous Series

		Wellhead Price	Imports by Major Interstate Pipeline Companies	Purchased from Producers by Major Interstate Pipeline Companies	Industrial Sales by Major Interstate Pipeline Companies[1]	Purchased by Electric Plants[1,2]	Residential Price[1,3]
		Dollars per thousand cubic feet[4]					
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**	**2.53**	**2.28**	**3.68**
1981	**Average**	**1.98**	**4.84**	**2.15**	**3.11**	**2.91**	**4.29**
1982	**Average**	**2.46**	**4.94**	**2.72**	**3.73**	**3.49**	**5.17**
1983	January	2.66	5.03	3.06	4.38	[3]3.57	5.86
	February	2.66	5.09	3.15	4.41	3.41	5.87
	March	2.58	5.01	3.01	4.24	3.45	6.00
	April	2.53	4.58	2.90	4.44	3.35	6.06
	May	2.53	4.40	2.98	4.24	3.55	6.22
	June	2.59	4.41	2.95	4.22	3.58	6.20
	July	2.52	4.31	2.96	4.28	3.72	6.21
	August	2.58	3.93	2.90	4.23	3.75	6.18
	September	2.67	4.02	2.87	4.08	3.70	6.19
	October	2.58	4.03	2.86	4.22	3.62	6.10
	November	2.60	4.26	2.84	4.26	3.54	6.04
	December	2.61	4.33	2.73	4.12	3.49	6.06
	Average	**2.59**	**4.51**	**2.93**	**4.26**	**3.58**	**6.06**
1984	January	2.67	4.40	2.80	4.25	3.55	5.98
	February	2.71	4.37	2.82	3.97	3.61	6.01
	March	2.67	4.40	2.80	4.18	3.52	5.98
	April	2.64	4.23	2.95	4.11	3.57	6.00
	May	2.67	4.15	2.86	4.17	3.75	6.19
	June	2.70	4.25	2.89	4.06	3.76	6.13
	July	2.68	4.15	2.95	4.04	3.89	6.17
	August	2.69	4.12	2.95	4.07	3.80	6.20
	September	2.62	4.34	2.84	4.10	3.83	6.26
	October	2.63	4.19	2.96	4.06	3.75	6.25
	November	2.61	3.43	3.13	4.26	3.72	6.12
	December	2.57	3.34	2.95	4.22	3.69	6.09
	Average	**2.66**	**4.08**	**2.91**	**4.13**	**3.72**	**6.06**
1985	January	[5]2.69	3.21	2.89	4.19	3.77	6.19
	February	[5]2.77	3.08	2.87	4.15	3.72	6.12
	March	2.67	3.29	2.90	4.00	3.79	6.16
	April	2.69	3.39	2.86	3.96	3.76	6.14
	May	2.59	3.32	2.89	3.84	3.60	NA
	June	R2.63	3.40	3.00	3.86	3.60	NA
	July	R2.63	3.41	2.82	3.83	3.59	NA
	August	2.62	3.28	2.69	3.75	3.49	NA

Previous Data Series. The residential and industrial price series shown on this page are being replaced by the series shown on the following page. Concurrent publication of both previous and current data series will continue until 3 months overlap of industrial data has occurred.

[1]Includes supplemental gaseous fuels.
[2]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.
[3]Monthly residential prices are Energy Information Administration calculations. See Note 6 in the Notes and Sources for this section for estimation procedures.
[4]Prices shown on this page are intended to include all taxes. See Note 9 in the Notes and Sources for this section.
[5]The increase from the previous month was primarily the result of the expiration of large, long-term, low-priced intrastate contracts in Texas.
R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Data for 1973 through December 1984 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the Notes and Sources for this section.

Price

National Average Natural Gas Prices—Current Series

			Major Interstate Pipeline Companies			Delivered to Consumers[1]				
		Wellhead	Imports	Purchases from Producers	City Gate	Residential	Commercial	Industrial	Electric Utilities[2]	Average
		Dollars per thousand cubic feet[3]								
1973	**Average**	**0.22**	**NA**	**NA**	**NA**	**1.29**	**0.94**	**0.50**	**0.38**	**0.73**
1974	**Average**	**0.30**	**NA**	**NA**	**NA**	**1.43**	**1.07**	**0.67**	**0.51**	**0.89**
1975	**Average**	**0.45**	**NA**	**NA**	**NA**	**1.71**	**1.35**	**0.96**	**0.77**	**1.19**
1976	**Average**	**0.58**	**NA**	**NA**	**NA**	**1.98**	**1.64**	**1.24**	**1.06**	**1.47**
1977	**Average**	**0.79**	**NA**	**NA**	**NA**	**2.35**	**2.04**	**1.50**	**1.32**	**1.78**
1978	**Average**	**0.91**	**2.21**	**0.83**	**NA**	**2.56**	**2.23**	**1.70**	**1.48**	**1.98**
1979	**Average**	**1.18**	**2.60**	**1.22**	**NA**	**2.98**	**2.73**	**1.99**	**1.81**	**2.34**
1980	**Average**	**1.59**	**4.42**	**1.63**	**NA**	**3.68**	**3.39**	**2.56**	**2.27**	**2.91**
1981	**Average**	**1.98**	**4.84**	**2.15**	**NA**	**4.29**	**4.00**	**3.14**	**2.89**	**3.51**
1982	**Average**	**2.46**	**4.94**	**2.72**	**NA**	**5.17**	**4.82**	**3.87**	**3.48**	**4.32**
1983	January	2.66	5.03	3.06	NA	NA	NA	NA	3.57	NA
	February	2.66	5.09	3.15	NA	NA	NA	NA	3.41	NA
	March	2.58	5.01	3.01	NA	NA	NA	NA	3.45	NA
	April	2.53	4.58	2.90	NA	NA	NA	NA	3.35	NA
	May	2.53	4.40	2.98	NA	NA	NA	NA	3.55	NA
	June	2.59	4.41	2.95	NA	NA	NA	NA	3.58	NA
	July	2.52	4.31	2.96	NA	NA	NA	NA	3.72	NA
	August	2.58	3.93	2.90	NA	NA	NA	NA	3.75	NA
	September	2.67	4.02	2.87	NA	NA	NA	NA	3.70	NA
	October	2.58	4.03	2.86	3.97	6.70	5.62	NA	3.62	NA
	November	2.60	4.26	2.84	3.91	6.30	5.67	NA	3.54	NA
	December	2.61	4.33	2.73	3.88	5.94	5.62	NA	3.49	NA
	Average	**2.59**	**4.51**	**2.93**	**NA**	**6.06**	**5.59**	**4.18**	**3.58**	**4.82**
1984	January	2.67	4.40	2.80	3.94	5.80	5.48	NA	3.55	NA
	February	2.71	4.37	2.82	4.02	5.85	5.53	NA	3.61	NA
	March	2.67	4.40	2.80	3.91	5.92	5.56	NA	3.52	NA
	April	2.64	4.23	2.95	3.97	5.96	5.52	NA	3.57	NA
	May	2.67	4.15	2.86	3.99	6.27	5.60	NA	3.75	NA
	June	2.70	4.25	2.89	4.04	6.76	5.67	NA	3.76	NA
	July	2.68	4.15	2.95	4.07	7.11	5.64	NA	3.89	NA
	August	2.69	4.12	2.95	[4]3.69	7.23	5.51	NA	3.80	NA
	September	2.62	4.34	2.84	4.04	7.17	5.56	NA	3.83	NA
	October	2.63	4.19	2.96	3.98	6.80	5.56	NA	3.75	NA
	November	2.61	3.43	3.13	3.92	6.30	5.54	NA	3.72	NA
	December	2.57	3.34	2.95	3.98	6.05	5.59	NA	3.69	NA
	Average	**2.66**	**4.08**	**2.91**	**3.96**	**6.12**	**5.55**	**4.22**	**3.72**	**4.86**
1985	January	[5]2.69	3.21	2.89	3.90	5.98	5.64	NA	3.77	NA
	February	[5]2.77	3.08	2.87	3.94	5.87	5.55	NA	3.72	NA
	March	2.67	3.29	2.90	3.98	5.98	5.61	NA	3.79	NA
	April	2.69	3.39	2.86	3.91	6.11	5.65	NA	3.76	NA
	May	2.59	3.32	2.89	3.91	6.58	5.58	NA	3.60	NA
	June	R2.63	3.40	3.00	3.90	6.96	5.62	NA	3.60	NA
	July	R2.63	3.41	2.82	3.75	7.07	5.44	NA	3.59	NA
	August	2.62	3.28	2.69	3.75	7.21	5.44	NA	3.49	NA
	September	NA	NA	NA	3.72	7.08	5.41	NA	NA	NA

Current Data Series. The residential and industrial price series shown on this page are replacing the series shown on the preceding page. The city gate, commercial, and consumer average price series are new. See the last page of this section for a listing of the sources for all data series.

[1]Includes supplemental gaseous fuels.
[2]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.
[3]Prices shown on this page are intended to include all taxes. See Note 9 in the Notes and Sources for this section.
[4]The decline from the previous month was primarily the result of refunds in the form of reduced charges.
[5]The increase from the previous month was primarily the result of the expiration of large, long-term, low-priced intrastate contracts in Texas.
R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Data for 1973 through December 1984 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the Notes and Sources for this section.

Price

Electricity

		Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants[2]				Average Retail Electricity Prices[1] for Selected Privately Owned Utilities[3]				
		Coal	Heavy Oil[4]	Natural Gas[5]	All Fossil Fuels[4]	Residential	Commercial	Industrial	Other	Total[6]
		Cents per million Btu				Cents per kilowatthour				
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	**Average**	**164.7**	**483.2**	**337.6**	**224.9**	**6.86**	**6.86**	**4.95**	**5.92**	**6.13**
1983	January	[2]166.8	[2]448.9	[2]347.1	[2]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	161.6	488.9	343.7	221.0	6.77	6.81	4.86	6.33	6.14
	February	164.9	496.3	347.5	217.4	6.97	7.01	4.86	6.51	6.19
	March	163.4	484.0	339.8	208.4	7.18	7.14	4.88	6.68	6.27
	April	165.7	494.1	344.4	210.6	7.33	7.25	4.88	6.73	6.30
	May	168.6	486.9	360.4	220.3	7.59	7.30	4.92	6.85	6.40
	June	169.1	488.3	360.9	223.2	7.90	7.48	5.09	6.78	6.65
	July	168.2	474.6	373.1	231.3	8.00	7.51	5.21	6.97	6.83
	August	167.2	459.6	365.6	223.5	8.06	7.51	5.15	6.75	6.82
	September	167.4	472.5	368.0	217.5	8.06	7.64	5.25	7.05	6.88
	October	168.7	474.1	361.4	218.8	7.95	7.63	5.13	6.86	6.71
	November	166.6	470.6	357.2	216.8	7.62	7.43	5.06	6.99	6.54
	December	165.0	480.4	355.4	218.7	7.34	7.30	5.07	6.70	6.48
	Average	**166.4**	**481.2**	**358.3**	**219.2**	**7.56**	**7.33**	**5.03**	**6.76**	**6.52**
1985	January	164.0	472.7	364.2	218.8	7.28	7.25	5.12	6.80	6.52
	February	167.3	482.4	358.1	218.4	7.19	7.21	5.12	6.77	6.47
	March	167.5	458.9	365.1	210.2	7.48	7.36	5.13	7.01	6.55
	April	167.7	453.0	361.7	210.7	7.73	7.44	5.09	6.95	6.58
	May	166.8	405.2	346.2	206.2	7.98	7.55	5.08	7.09	6.66
	June	165.1	384.8	345.0	208.1	8.15	7.60	5.24	7.07	6.86
	July	164.2	391.9	344.2	217.2	8.24	7.64	5.36	7.13	7.02
	August	164.0	380.5	335.0	211.1	8.18	7.55	5.20	7.01	6.92
	September†	NA	NA	NA	NA	8.18	7.62	5.24	7.08	6.95

[1]Prices are calculated by dividing revenues by sales. Revenues may not correspond to sales for a particular month because of utility billing and accounting procedures. This could result in uncharacteristic increases or decreases in the monthly prices.
[2]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.
[3]Data through 1979 cover privately owned electric utilities in Classes A and B. Data for 1980 forward cover selected privately owned electric utilities in Class A whose electric operating revenues were $100 million or more during the previous year.
[4]See Note 7 in the Notes and Sources for this section.
[5]Includes supplemental gaseous fuels.
[6]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 Notes and Sources for 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. 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.

3. 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.

4. 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 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. The composite cost is the weighted average of domestic and imported crude oil costs.

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.

5. Several different series of motor gasoline prices are published in this section. U.S. City Average Retail Prices for Motor Gasoline are calculated monthly by the Bureau of Labor Statistics during the development of the Consumer Price Index (CPI). These prices include all Federal, State, and local taxes paid at the time of sale. 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).

Refiner and Gas Plant Operator Sales Prices of Finished Motor Gasoline for Resale and to End Users are determined by the Energy Information Administration in a monthly survey of refiners and gas plant operators (Form EIA-782A). The prices do not include any Federal, State, or local taxes paid at the time of sale. Estimates of prices prior to January 1983 are based on FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices," and also exclude all Federal, State, or local taxes paid at the time of sale. Sales for Resale are those made to purchasers who are other-than-ultimate consumers. Sales to End Users are sales made directly to the consumer of the product, including bulk consumers such as agriculture, industry, and utilities, as well as residential and commercial consumers.

6. 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.

7. 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.

8. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous annual data series have been generated for 1978–1980, and monthly series for 1981 and 1982, by estimating the prices that would have been published had the EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment for product and sales type matching, and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale, and between retail and end user. The resale category continues to include sales among resellers. However, bulk sales to utility, industrial, and commercial accounts previously included in the wholesale category are now counted as made to end users. The end user category continues to include retail sales through company owned and operated outlets but also includes the bulk utility, industrial, and commercial sales. Additional information may be found in "Estimated Historic Time Series for the EIA-782," a feature article reprinted from the December 1983 [3] *Petroleum Marketing Monthly* published by the Energy Information Administration.

9. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all U.S., State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on consumers' bills are sometimes excluded by the reporting utilities.

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

Notes and Sources for the Price Section (continued)

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."
• Crude oil imports costs—Energy Information Administration (EIA), 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 through June 1984: EP Form 51, "Monthly Foreign Crude Oil Transaction Report"; July 1984 forward: Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report."
• Refiner acquisition costs—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."
• U.S. City average retail motor gasoline prices—Bureau of Labor Statistics.
• No. 2 Distillate to Residences—January 1983 forward, EIA Form-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers/Retailers' Monthly Petroleum Product Sales Report." Prices prior to January 1983 are EIA estimates using data from 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." See Note 8 on the previous page for additional information on the estimated data.
• All other petroleum products—January 1983 forward, EIA Form-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report." Prices prior to January 1983 are EIA estimates using data from FEA Form 302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices." See Note 8 on the previous page for additional information on the estimated data.
Natural Gas—Previous Series: • Average wellhead price—Annual data through 1982 from EIA, *Natural Gas Annual, 1973* through *1983*. Annual data for 1983 and 1984 from Form EIA-627, "Annual Quantity and Value of Natural Gas Report" and the U.S. Minerals Management Service. Monthly data are estimated primarily on the basis of values reported by State agencies in Mississippi, 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 through 1983 from EIA, *Natural Gas Annual, 1973* through *1983*. Annual data for 1984 from Form EIA-176,"Annual Report of Natural and Supplemental Gas Supply and Disposition." 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 6 on the previous page for estimation procedures.
Natural Gas—Current Series: • Average wellhead—Annual data through 1982 from EIA, *Natural Gas Annual, 1973* through *1983*. Annual data for 1983 and 1984 from Form EIA-627, "Annual Quantity and Value of Natural Gas Report" and the U.S. Minerals Management Service. Monthly data are estimated primarily on the basis of values reported by State agencies in Mississippi, 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 and Purchases from Producers by Major Interstate Pipeline Companies—FERC Form 11, "Interstate Pipeline Company Purchases, and Industrial Sales".
• City Gate—EIA, October 1983 forward: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."
• Residential, Commercial, Industrial and Consumer Average—Annual data from EIA, Form EIA-176 "Annual Report of Natural and Supplemental Gas Supply and Disposition." Monthly data from EIA, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."
• Electric Utilities—EIA, FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."
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."

International

Crude Oil Production

World crude oil production during September 1985 was 53.1 million barrels per day, up 1.3 million from the level in the previous month. World crude oil production in the first three quarters of 1985 averaged 52.6 million barrels per day, compared with the 54.2 million in the first three quarters of 1984.

Organization of Petroleum Exporting Countries (OPEC) production during September 1985 averaged 15.5 million barrels per day, up 0.8 million from the level during the previous month. OPEC crude oil production during the first three quarters of 1985 averaged 15.4 million barrels per day, a 13.5-percent decrease from the 17.8 million averaged during the same period in 1984. Production by the Arab members of OPEC during September 1985 averaged 8.7 million barrels per day, up 0.9 million from the August 1985 level. During September 1985, production increased in Saudi Arabia by 640,000 barrels per day. Among non-Arab OPEC countries during the month, production decreased in Iran and Indonesia by 300,000 and 100,000 barrels per day, respectively, while production in Nigeria increased by 250,000 barrels per day.

Petroleum Consumption

Preliminary petroleum consumption data for September 1985 indicate consumption in the United States and Italy decreased by 132,000 and 75,000 barrels per day, respectively, compared with levels 1 year earlier, while consumption in France increased by 40,000 barrels per day. Petroleum consumption during the first three quarters of 1985 decreased in the United States by 182,000 barrels per day, in Italy by 58,000, and in France by 40,000 compared with consumption during the same period in 1984.

Petroleum Stocks

Preliminary data for September 1985 indicate petroleum stock levels were lower than September 1984 levels in all countries reporting. Petroleum stocks were down in Italy by 6.8 percent, in Japan by 6.6 percent, in West Germany by 1.6 percent, and in the United States by 0.9 percent, compared with stocks held 1 year earlier.

Petroleum stocks for all Organization for Economic Cooperation and Development members were 3,206 million barrels on June 30, 1985 (latest data available), a decrease of 105 million barrels (3.2 percent) compared with stocks held on June 30, 1984.

Nuclear Electricity Production

In September 1985, the 20 non-Communist nations with nuclear power capacity generated 105.3 gross terawatthours (billion kilowatthours) of nuclear-based electricity, 15.5 percent more than September 1984 generation. The United States accounted for 35.9 gross terawatthours, 34.1 percent of the total in September 1985. Non-Communist nuclear electricity generation for the first three quarters of 1985 increased a daily average of 19.4 percent compared with generation during the same period in 1984. From January 1985 through September 1985, gross operable nuclear generating capacity increased 19.6 gigawatts (million kilowatts) as 17 nuclear power generating units became operable.

During September 1985, three nuclear generating units were declared commercially operable: in Belgium, Tihange-3, a 1,048-gross-megawatt-electric pressurized-water reactor, on September 1; in Japan, Kaskiwazaki-Kariwa-1, a 1,100-gross-megawatt-electric boiling-water reactor, on September 18; and in South Korea, Kori-5, a 950-gross-megawatt electric pressurized-water reactor, on September 30.

With the additions of Tihange-3, Kaskiwazaki-Kariwa-1, and Kori-5, there were 293 operable nuclear generating units in non-Communist countries as of September 30, 1985, with a collective gross generating capacity of 221.0 gigawatts. In September 1985, the 94 operable U.S. units accounted for 83.7 gross gigawatts, 37.9 percent of total non-Communist nuclear generating 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	**Average**	**710**	**1,012**	**823**	**1,150**	**330**	**6,483**	**1,250**	**11,758**	**1,339**	**2,214**
1983	January	685	850	780	1,130	255	4,950	1,062	9,712	1,188	2,716
	February	585	850	895	925	200	3,510	1,062	8,027	984	2,414
	March	585	900	965	925	170	3,910	1,037	8,492	1,144	2,213
	April	685	950	880	1,030	260	3,930	1,147	8,882	1,358	2,012
	May	585	1,000	1,030	1,130	275	4,725	1,177	9,922	1,358	2,313
	June	685	1,000	920	1,130	300	4,620	1,182	9,837	1,358	2,514
	July	685	1,050	1,086	1,130	300	5,536	1,177	10,964	1,445	2,816
	August	685	1,100	1,181	1,130	265	5,931	1,187	11,479	1,445	2,514
	September	685	1,050	1,376	1,180	310	6,026	1,187	11,814	1,425	2,716
	October	685	1,100	1,305	1,180	320	6,005	1,167	11,762	1,474	2,414
	November	685	1,150	1,265	1,180	460	5,915	1,197	11,852	1,513	2,313
	December	685	1,050	1,075	1,180	420	5,825	1,197	11,432	1,396	2,313
	Average	**660**	**1,005**	**1,064**	**1,105**	**295**	**5,086**	**1,149**	**10,364**	**1,343**	**2,440**
1984	January	650	1,100	1,080	1,100	445	5,130	1,200	10,705	1,470	2,200
	February	600	1,000	1,240	1,100	315	5,040	1,200	10,495	1,575	2,300
	March	600	1,200	1,293	1,100	440	4,843	1,205	10,681	1,560	2,400
	April	600	1,200	1,250	1,200	400	5,150	1,205	11,005	1,570	2,200
	May	650	1,200	1,200	1,200	400	5,000	1,200	10,850	1,470	1,700
	June	700	1,200	1,200	1,250	500	5,450	1,225	11,525	1,520	2,200
	July	650	1,200	1,110	1,100	430	5,010	1,090	10,590	1,390	2,400
	August	650	1,300	1,220	1,000	400	4,520	990	10,080	1,410	1,800
	September	650	1,300	1,183	1,000	480	4,133	1,110	9,856	1,400	1,900
	October	650	1,200	1,129	1,000	380	4,129	1,060	9,548	1,430	2,100
	November	650	1,300	990	1,000	280	3,990	1,060	9,270	1,350	2,400
	December	600	1,300	990	1,000	260	3,590	1,210	8,950	1,450	2,500
	Average	**638**	**1,209**	**1,157**	**1,087**	**394**	**4,663**	**1,146**	**10,294**	**1,466**	**2,175**
1985	January	600	1,300	1,110	1,000	270	3,510	1,100	8,890	1,310	1,900
	February	650	1,300	1,125	1,000	290	4,025	1,160	9,550	1,330	2,100
	March	690	1,250	1,085	1,000	315	3,835	1,215	9,390	1,300	2,200
	April	650	1,350	970	1,000	260	3,470	1,215	8,915	1,300	2,300
	May	650	1,300	940	1,100	290	2,590	1,160	8,030	1,200	2,000
	June	600	1,350	920	980	300	2,420	1,100	7,670	1,050	2,200
	July	600	1,400	940	910	320	2,740	1,155	8,065	1,300	2,200
	August	600	1,450	R940	R910	320	R2,340	1,200	7,760	1,300	2,400
	September	650	1,500	980	1,000	295	2,980	1,250	8,655	1,200	2,100
	Average	**632**	**1,356**	**1,000**	**989**	**296**	**3,093**	**1,173**	**8,538**	**1,254**	**2,156**

[1]Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In September 1985, total production in this region amounted to approximately 360,000 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)

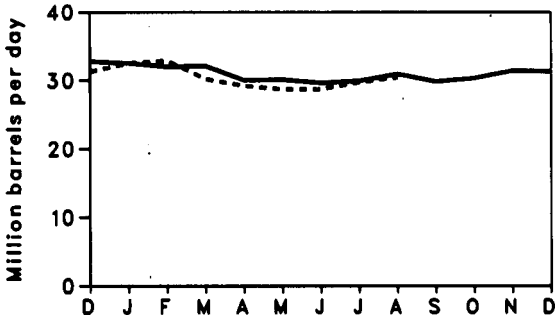
		Nigeria	Venezuela	Total OPEC[3]	Canada	Mexico	United Kingdom	United States	China	USSR	Other[4]	World
						Thousand barrels per day						
1973	**Average**	**2,054**	**3,366**	**30,989**	**1,800**	**465**	**2**	**9,208**	**1,090**	**8,465**	**3,655**	**55,674**
1974	**Average**	**2,255**	**2,976**	**30,729**	**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**	**11,907**	**5,355**	**55,901**
1982	**Average**	**1,295**	**1,895**	**18,868**	**1,271**	**2,748**	**2,065**	**8,649**	**2,045**	**11,967**	**5,639**	**53,252**
1983	January	880	2,098	16,985	1,205	2,983	2,135	8,697	2,085	12,400	6,003	52,493
	February	675	1,791	14,277	1,333	2,298	2,315	8,758	2,110	12,400	6,104	49,595
	March	905	2,093	15,218	1,366	2,418	2,265	8,700	2,110	12,400	6,039	50,516
	April	1,150	1,726	15,524	1,234	2,673	2,170	8,776	2,120	11,990	6,200	50,687
	May	1,625	1,695	17,284	1,293	2,798	2,235	8,631	2,120	11,895	6,180	52,436
	June	1,535	1,700	17,345	1,475	2,778	2,045	8,667	2,120	11,895	6,280	52,605
	July	1,710	1,705	19,051	1,450	2,688	2,280	8,636	2,120	11,895	6,273	54,393
	August	1,300	1,741	18,895	1,392	2,778	2,290	8,679	2,130	11,895	6,177	54,236
	September	1,220	1,736	19,297	1,406	2,738	2,385	8,784	2,130	11,895	6,243	54,878
	October	1,290	1,750	19,091	1,362	2,663	2,355	8,771	2,130	11,895	6,357	54,624
	November	1,245	1,781	19,090	1,387	2,733	2,490	8,770	2,130	11,895	6,489	54,984
	December	1,310	1,786	18,638	1,372	2,693	2,530	8,397	2,130	11,895	6,524	54,179
	Average	**1,241**	**1,801**	**17,583**	**1,356**	**2,689**	**2,291**	**8,688**	**2,120**	**12,027**	**6,239**	**52,993**
1984	January	1,365	1,840	17,980	1,365	2,670	2,525	8,868	2,200	11,950	6,643	54,201
	February	1,565	1,815	18,140	1,445	2,755	2,600	8,874	2,200	11,950	6,629	54,593
	March	1,560	1,815	18,416	1,475	2,710	2,480	8,672	2,200	11,800	6,563	54,316
	April	1,300	1,815	18,300	1,430	2,770	2,475	8,862	2,225	11,800	6,649	54,511
	May	1,300	1,840	17,570	1,415	2,800	2,439	8,955	2,225	11,950	6,724	54,078
	June	1,400	1,805	18,870	1,470	2,820	2,350	8,852	2,225	11,950	6,834	55,371
	July	1,200	1,860	17,860	1,515	2,845	2,470	8,885	2,305	11,920	6,838	54,638
	August	1,150	1,820	16,670	1,435	2,680	2,300	8,809	2,305	11,920	6,846	52,965
	September	1,400	1,850	16,826	1,330	2,705	2,435	8,993	2,335	11,840	6,957	53,421
	October	1,600	1,800	16,893	1,450	2,675	2,615	8,906	2,335	11,840	7,118	53,832
	November	1,600	1,725	16,760	1,460	2,745	2,605	8,979	2,335	11,800	7,170	53,854
	December	1,600	1,770	16,685	1,445	2,830	2,645	8,897	2,335	11,800	7,211	53,848
	Average	**1,419**	**1,813**	**17,576**	**1,436**	**2,750**	**2,495**	**8,879**	**2,269**	**11,878**	**6,847**	**54,130**
1985	January	1,400	1,670	15,580	1,450	2,635	2,780	8,929	2,390	11,700	7,214	52,678
	February	1,690	1,680	16,770	1,450	2,685	2,650	8,928	2,390	11,700	7,253	53,826
	March	1,700	1,670	16,690	1,500	2,810	2,600	8,927	2,390	11,700	7,327	53,944
	April	1,600	1,670	16,215	1,465	2,825	2,635	8,842	2,390	11,700	7,404	53,476
	May	1,450	1,670	14,780	1,475	2,790	2,545	8,969	2,400	11,750	7,373	52,082
	June	1,100	1,670	14,090	1,450	2,555	2,450	8,965	2,400	11,750	7,164	50,824
	July	1,000	1,670	14,665	R1,430	2,620	2,385	8,904	2,450	R11,800	R7,465	R51,719
	August	1,200	1,670	14,760	1,450	2,795	R2,215	8,895	2,450	R11,850	R7,456	R51,871
	September	1,450	1,670	15,515	1,450	2,815	2,620	8,874	2,450	11,850	7,551	53,125
	Average	**1,396**	**1,671**	**15,439**	**1,458**	**2,726**	**2,541**	**8,915**	**2,412**	**11,756**	**7,357**	**52,604**

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.

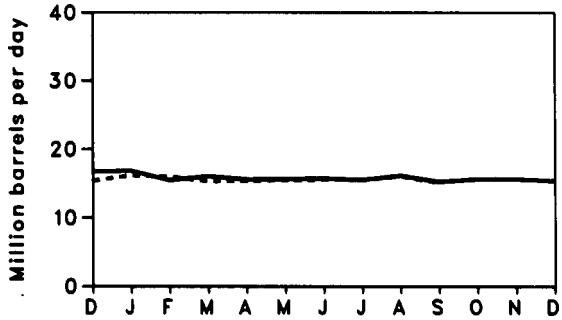
International

Petroleum Consumption for Major Non-Communist Industrialized Countries

Total IEA

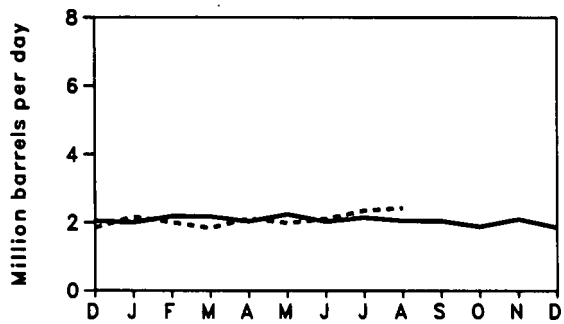


United States

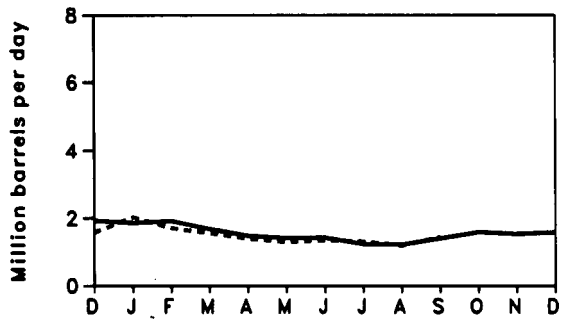


Japan

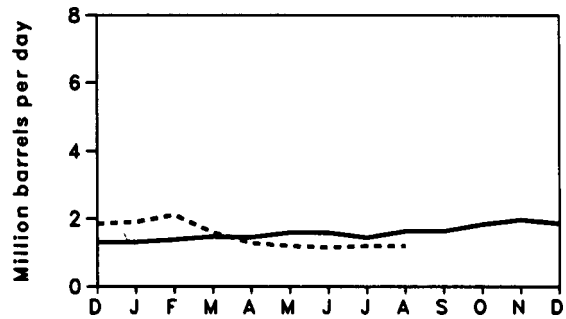
West Germany



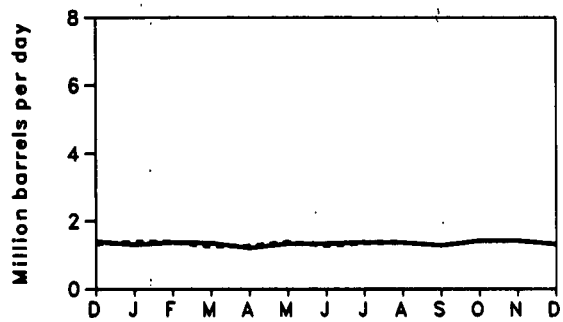
France



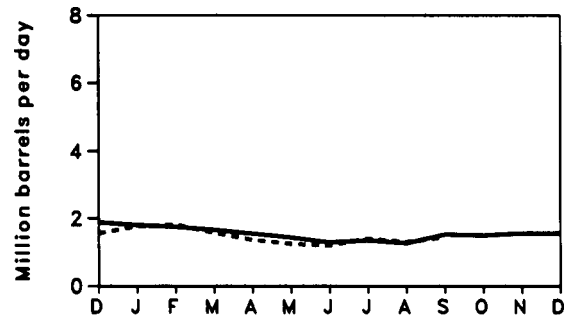
United Kingdom



Canada



Italy



1984 ----- 1985

International

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

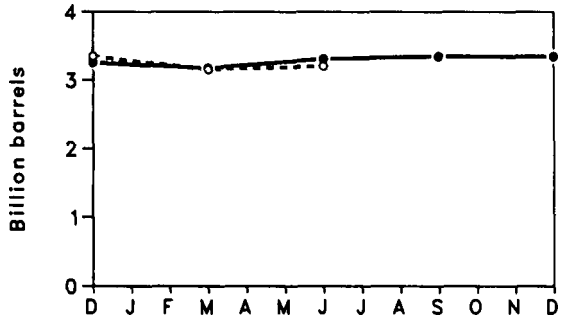
		Canada	France[2]	Italy[3]	Japan[4]	United Kingdom	United States	West Germany	Other IEA[5]	Total IEA[6]
					Thousand barrels per day					
1973	**Average**	**1,597**	**2,219**	**1,525**	**5,000**	**1,958**	**17,308**	**2,693**	**4,069**	**34,150**
1974	**Average**	**1,630**	**2,094**	**1,521**	**4,872**	**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	**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	14,722	1,875	3,998	29,200
	February	1,430	1,985	1,865	4,950	1,415	14,792	2,060	4,288	30,800
	March	1,305	1,685	1,605	4,625	1,430	15,541	2,180	4,314	31,000
	April	1,190	1,785	1,415	3,850	1,300	14,692	1,940	3,913	28,300
	May	1,320	1,500	1,470	3,460	1,230	14,505	2,010	3,805	27,800
	June	1,360	1,405	1,475	4,040	1,255	15,289	2,060	4,121	29,600
	July	1,265	1,210	1,365	3,745	1,160	15,019	1,785	3,861	28,200
	August	1,440	1,350	1,315	3,990	1,220	15,480	1,920	4,035	29,400
	September	1,380	1,415	1,590	4,040	1,300	15,506	2,040	4,144	30,000
	October	1,360	1,495	1,625	3,900	1,280	14,962	2,090	4,083	29,300
	November	1,460	1,800	1,840	4,290	1,340	15,500	2,055	4,215	30,700
	December	1,400	1,930	1,880	4,960	1,300	16,726	2,050	4,484	32,800
	Average	**1,345**	**1,600**	**1,590**	**4,185**	**1,290**	**15,231**	**2,005**	**4,054**	**29,700**
1984	January	1,300	1,860	1,800	4,800	1,310	16,801	2,000	4,489	32,500
	February	1,370	1,915	1,750	5,450	1,380	15,437	2,180	4,433	32,000
	March	1,350	1,680	1,660	5,020	1,470	16,050	2,170	4,380	32,100
	April	1,200	1,475	1,550	4,110	1,450	15,568	2,030	4,092	30,000
	May	1,329	1,410	1,435	3,740	1,590	15,620	2,230	4,156	30,100
	June	1,330	1,420	1,295	3,590	1,585	15,709	2,020	4,071	29,600
	July	1,370	1,225	1,350	3,950	1,440	15,498	2,140	4,152	29,900
	August	1,365	1,210	1,270	4,230	1,630	16,116	2,050	4,239	30,900
	September	1,280	1,400	1,525	3,960	1,635	15,247	2,040	4,113	29,800
	October	1,415	1,590	1,500	3,860	1,830	15,616	1,880	4,199	30,300
	November	1,420	1,530	1,560	4,375	1,965	15,627	2,095	4,358	31,400
	December	1,320	1,580	1,560	4,995	1,855	15,375	1,855	4,340	31,300
	Average	**1,338**	**1,523**	**1,520**	**4,338**	**1,595**	**15,726**	**2,057**	**4,226**	**30,800**
1985	January	1,390	2,025	1,765	4,670	1,905	16,142	2,165	4,463	32,500
	February	1,390	1,710	1,810	5,060	2,110	15,975	2,005	4,550	32,900
	March	1,245	1,560	1,575	4,480	1,600	15,321	1,840	4,139	30,200
	April	1,270	1,390	1,370	3,755	1,280	15,345	2,110	4,070	29,200
	May	1,380	1,290	1,255	3,450	1,190	15,460	1,985	3,980	28,700
	June	1,270	1,340	1,205	3,485	1,150	15,551	2,105	3,934	28,700
	July	1,350	1,300	1,400	R3,815	1,190	15,517	R2,345	R4,083	29,700
	August	1,380	R1,180	R1,300	3,935	1,190	16,039	2,415	4,141	30,400
	September	NA	1,440	1,450	NA	NA	15,115	NA	NA	NA
	Average[7]	**1,334**	**1,469**	**1,456**	**4,073**	**1,446**	**15,606**	**2,123**	**4,167**	**30,266**

[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]Principal products only prior to 1981.
[4]Excludes liquefied petroleum gases and condensate.
[5]Other is a calculated total derived from the difference between total IEA consumption and the IEA nations represented above.
[6]The 21 signatory nations of the IEA are listed in Note 1 on the last page of this section.
[7]Average of available data.
R=Revised data. NA=Not available.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Data for 1983 through 1985 are preliminary.
Sources: • See the last page of this section.

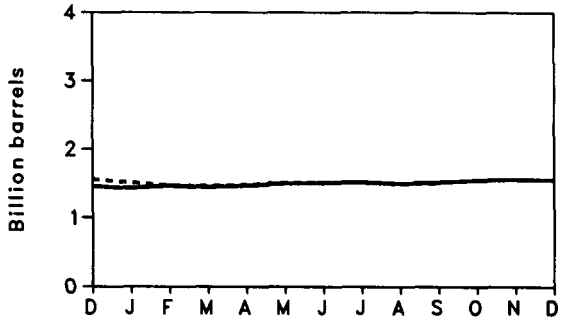
International

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

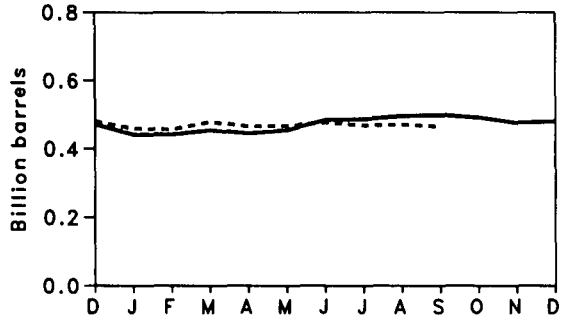
Total OECD



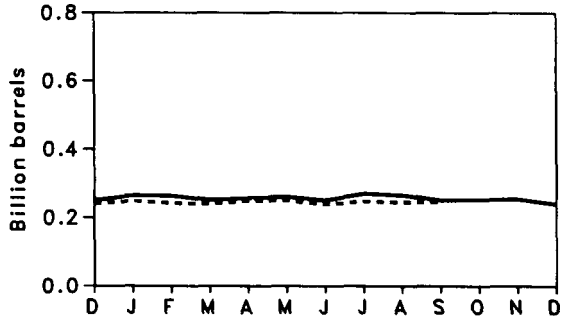
United States



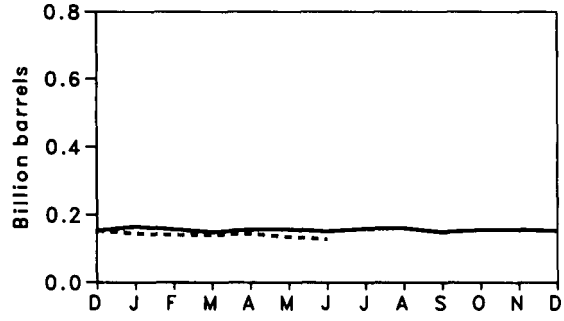
Japan



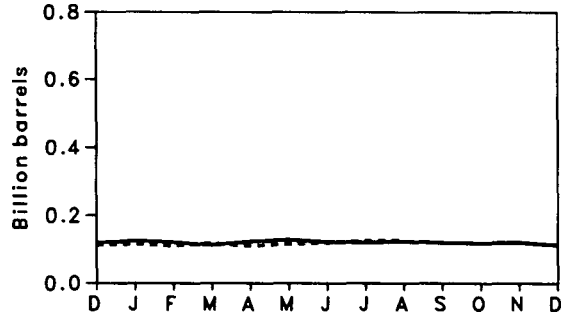
West Germany



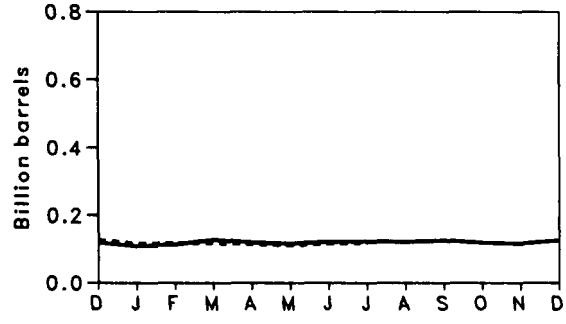
France



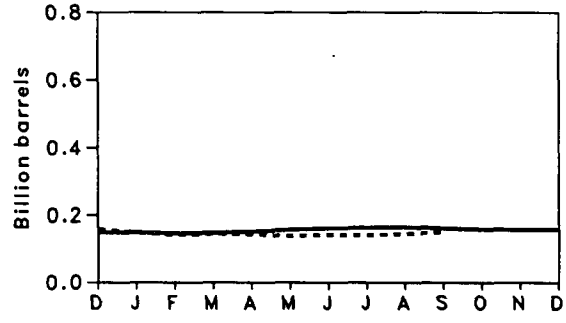
United Kingdom



Canada



Italy



●——● 1984 ○- - -○ 1985

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	**Year**	**149**	**203**	**NA**	**303**	**156**	**1,008**	**NA**	**NA**	**NA**
1974	**Year**	**164**	**R249**	**169**	**370**	**161**	**1,074**	**215**	**NA**	**NA**
1975	**Year**	**167**	**R225**	**143**	**375**	**164**	**1,133**	**190**	**NA**	**NA**
1976	**Year**	**R153**	**R234**	**142**	**394**	**165**	**1,112**	**214**	**NA**	**NA**
1977	**Year**	**167**	**239**	**161**	**409**	**148**	**1,312**	**225**	**524**	**3,185**
1978	**Year**	**144**	**201**	**154**	**413**	**157**	**1,278**	**238**	**512**	**3,097**
1979	**Year**	**150**	**226**	**163**	**460**	**169**	**1,341**	**272**	**594**	**3,375**
1980	**Year**	**164**	**243**	**170**	**495**	**168**	**1,392**	**319**	**636**	**3,587**
1981	**Year**	**161**	**214**	**167**	**482**	**143**	**1,484**	**297**	**583**	**3,531**
1982	**Year**	**136**	**193**	**179**	**468**	**125**	**1,430**	**272**	**557**	**3,360**
1983	January	136	206	170	473	125	1,452	274	NA	NA
	February	133	187	163	450	121	1,430	274	NA	NA
	March	135	162	155	456	120	1,372	262	539	3,201
	April	123	158	151	422	120	1,374	255	NA	NA
	May	125	164	152	437	123	1,394	274	NA	NA
	June	113	158	159	460	116	1,405	261	531	3,203
	July	110	174	151	436	119	1,426	270	NA	NA
	August	110	183	161	433	121	1,460	274	NA	NA
	September	125	165	160	452	125	1,485	263	549	3,324
	October	111	170	157	441	129	1,508	267	NA	NA
	November	105	162	150	440	124	1,510	267	NA	NA
	December	120	153	149	471	119	1,454	250	542	3,258
1984	January	109	165	149	441	125	1,429	264	NA	NA
	February	114	157	146	441	121	1,463	263	NA	NA
	March	128	149	148	454	112	1,444	251	489	3,175
	April	120	156	151	444	123	1,462	256	NA	NA
	May	117	157	157	454	128	1,496	260	NA	NA
	June	122	151	161	484	122	1,503	250	518	3,311
	July	123	159	163	486	120	1,513	269	NA	NA
	August	122	160	165	495	123	1,498	265	NA	NA
	September	126	149	161	498	119	1,513	250	532	3,348
	October	120	155	158	491	118	1,544	252	NA	NA
	November	117	156	157	476	120	1,556	254	NA	NA
	December	127	153	159	480	R113	1,556	240	520	3,347
1985	January	117	145	149	459	115	1,510	248	NA	NA
	February	118	141	142	456	110	1,467	242	NA	NA
	March	118	140	145	R479	R117	1,459	240	R459	R3,157
	April	115	144	143	465	110	1,474	248	NA	NA
	May	112	135	139	467	115	1,508	249	NA	NA
	June	117	128	R142	R477	R120	1,510	R239	473	3,206
	July	119	NA	141	468	125	1,515	247	NA	NA
	August	NA	NA	145	470	127	1,493	245	NA	NA
	September	NA	NA	150	465	NA	1,500	246	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.
R=Revised data. 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 kilowatthours										
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	**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	0.3	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	0.3	2.4	0	3.8	1.6	12.1	0.3	0.5	10.5	0.4	(s)
	September	0.5	2.2	0	4.4	1.5	12.4	0.3	0.6	10.1	0.4	(s)
	October	0.3	2.2	0	4.7	1.4	13.0	0.3	0.6	10.3	0.4	(s)
	November	0.4	2.0	(s)	4.3	1.5	13.4	0.2	0.7	9.1	0.4	(s)
	December	0.4	2.1	0.1	5.0	1.7	16.8	0.3	0.7	10.1	0.4	(s)
	Total	**3.4**	**24.1**	**0.2**	**53.0**	**17.4**	**144.2**	**2.9**	**5.8**	**109.1**	**3.6**	**0.2**
1984	January	0.7	2.7	(s)	5.0	1.7	18.0	0.3	0.4	10.1	0.3	(s)
	February	0.4	2.3	0.2	4.6	1.6	17.1	0.4	0.6	9.2	0.4	0
	March	0.6	1.9	0.1	5.1	1.7	17.8	0.3	0.7	8.8	0.2	0
	April	0.5	2.4	(s)	4.3	1.6	15.4	0.4	0.3	8.9	0.2	(s)
	May	0.5	2.0	0.1	3.6	1.2	14.2	0.5	0.3	10.5	0.4	(s)
	June	0.4	2.6	0.0	3.7	1.3	13.1	0.4	0.3	9.9	0.4	(s)
	July	0.4	2.4	0.0	4.4	1.4	13.1	0.5	0.3	10.6	0.2	(s)
	August	0.3	1.9	(s)	4.7	1.4	13.2	0.4	0.8	11.0	0.3	(s)
	September	0.4	1.9	0.3	3.9	1.5	14.7	0.2	0.8	11.4	0.4	(s)
	October	0.1	2.5	0.5	4.5	1.8	16.0	0.4	0.8	11.6	0.4	(s)
	November	0	2.6	0.4	4.7	1.7	17.8	0.3	0.8	11.9	0.4	(s)
	December	0.1	2.6	0.4	5.1	1.7	20.9	0.2	0.8	12.8	0.4	(s)
	Total	**4.5**	**27.7**	**2.0**	**54.0**	**18.5**	**191.2**	**4.1**	**6.9**	**126.9**	**3.7**	**0.3**
1985	January	0.2	2.5	0.4	5.7	1.7	21.9	0.2	0.8	12.2	0.4	(s)
	February	0.4	1.7	0.3	5.0	1.6	19.2	0.2	0.7	R10.7	0.3	(s)
	March	0.5	2.0	0.3	5.9	1.8	20.6	0.4	0.8	R12.0	0.2	0.0
	April	0.4	2.2	0.1	5.2	1.6	17.7	0.6	0.7	R11.7	(s)	0.0
	May	0.4	2.8	0.2	2.4	1.2	15.9	0.5	0.7	R12.9	0.2	0.0
	June	0.4	2.7	0.4	4.2	1.2	13.6	0.4	0.6	R12.4	0.4	(s)
	July	0.5	2.2	0.3	5.7	1.4	16.1	0.4	0.6	R12.3	0.4	0.1
	August	0.5	2.7	0.1	6.0	1.5	15.4	0.2	0.5	R12.7	0.4	(s)
	September	0.5	3.3	0.3	5.4	1.2	17.2	0.1	0.3	12.4	0.4	0.0
	Year to Date	**3.8**	**22.0**	**2.4**	**45.5**	**13.3**	**157.5**	**3.2**	**5.8**	**109.1**	**2.7**	**0.2**

[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.
R=Revised data. (s)=Less than 0.05 billion gross kilowatthours.
Footnotes continued on following page.

International

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

		South Africa	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 kilowatthours										
1973	**Total**	**0**	**0**	**6.5**	**2.1**	**6.2**	**0**	**28.0**	**11.9**	**100.7**	**88.0**	**188.7**
1974	**Total**	**0**	**0**	**7.2**	**1.6**	**7.0**	**0**	**34.0**	**12.0**	**121.1**	**104.5**	**225.6**
1975	**Total**	**0**	**0**	**7.5**	**12.0**	**7.7**	**0**	**30.5**	**21.7**	**152.7**	**181.7**	**334.4**
1976	**Total**	**0**	**0**	**7.6**	**16.0**	**7.9**	**0**	**36.8**	**24.5**	**187.3**	**201.8**	**389.1**
1977	**Total**	**0**	**0.1**	**6.5**	**19.9**	**8.1**	**0.1**	**38.1**	**35.8**	**207.8**	**263.3**	**471.0**
1978	**Total**	**0**	**2.3**	**7.6**	**23.8**	**8.3**	**2.7**	**36.7**	**35.9**	**263.6**	**292.7**	**556.3**
1979	**Total**	**0**	**3.2**	**6.7**	**21.0**	**11.8**	**6.3**	**38.5**	**42.2**	**300.1**	**270.6**	**570.7**
1980	**Total**	**0**	**3.5**	**5.2**	**26.7**	**14.3**	**8.2**	**37.2**	**43.7**	**354.4**	**265.4**	**619.8**
1981	**Total**	**0**	**2.9**	**9.4**	**37.7**	**15.2**	**10.7**	**38.9**	**53.4**	**442.4**	**288.5**	**730.9**
1982	**Total**	**0**	**3.8**	**8.8**	**38.8**	**15.0**	**13.1**	**44.1**	**63.4**	**489.9**	**298.6**	**788.5**
1983	January	0	0.5	1.0	4.2	1.5	1.5	4.3	6.5	50.0	27.4	77.4
	February	0	0.4	0.9	3.7	1.4	0.8	4.3	5.6	42.7	23.8	66.6
	March	0	0.6	0.9	4.1	1.5	1.8	4.9	6.0	46.7	25.0	71.7
	April	0	0.4	0.8	3.3	1.5	1.7	4.3	4.0	43.1	23.4	66.5
	May	0	0.2	0.4	2.4	1.2	2.0	3.4	2.9	40.6	23.9	64.5
	June	0	0.7	0.6	2.4	0.5	2.0	3.9	4.2	42.4	25.7	67.8
	July	0	0.7	0.6	1.6	1.2	1.6	3.4	5.1	44.9	27.3	72.2
	August	0	1.1	1.0	2.7	1.0	1.4	3.7	4.6	47.3	27.9	75.4
	September	0	1.1	1.0	3.0	1.4	1.2	4.4	6.0	50.2	26.4	76.7
	October	0	0.8	1.1	3.6	1.5	1.6	3.7	7.6	53.0	27.6	80.8
	November	0	1.2	1.1	4.5	1.4	1.6	3.9	7.1	52.8	26.6	79.3
	December	0	1.3	1.4	5.0	1.5	1.7	5.5	6.2	59.8	28.6	88.6
	Total	**0**	**9.0**	**10.7**	**40.4**	**15.5**	**18.9**	**50.0**	**65.8**	**573.9**	**313.6**	**887.5**
1984	January	0	1.3	1.5	5.3	1.5	1.7	4.4	6.9	61.8	30.8	92.6
	February	0	1.2	1.5	5.0	1.4	1.8	4.6	7.4	59.7	29.4	89.1
	March	0	1.0	1.4	5.4	1.5	2.0	4.8	7.1	60.6	28.6	89.2
	April	0.1	0.9	1.3	4.5	1.5	1.8	4.2	6.4	54.5	24.7	79.2
	May	0.1	0.8	1.9	3.3	1.3	1.4	4.3	7.2	53.6	27.3	80.9
	June	0.3	0.7	2.2	2.8	0.6	1.8	4.7	7.1	52.3	26.4	R78.8
	July	0.5	0.7	2.5	2.4	1.3	2.4	3.7	6.2	53.2	29.4	82.6
	August	0.7	0.9	2.3	3.5	1.0	2.4	3.6	6.3	54.7	31.8	86.5
	September	0.7	0.9	2.6	4.2	1.4	2.6	4.9	8.2	61.0	30.3	91.2
	October	0.7	1.3	1.8	5.0	1.5	2.0	4.1	8.6	63.6	26.8	90.4
	November	0.4	1.3	1.9	4.5	1.5	1.8	4.4	9.8	66.2	26.2	92.3
	December	0.5	0.9	2.2	5.4	1.9	2.3	6.3	10.4	75.0	32.0	107.0
	Total	**4.0**	**11.8**	**23.0**	**51.3**	**16.3**	**24.6**	**54.1**	**92.4**	**717.2**	**343.8**	**1,061.0**
1985	January	0.3	R1.1	2.2	5.4	2.2	2.4	5.7	10.8	R76.1	38.0	114.0
	February	0.0	R1.2	1.9	5.0	2.0	2.1	5.6	10.1	R68.2	32.4	R100.5
	March	0.0	R1.5	2.8	5.6	2.2	2.5	6.6	11.7	R77.4	R32.5	R109.9
	April	0.0	R1.3	2.4	4.5	2.2	2.7	5.1	10.6	R68.9	R28.3	R97.2
	May	0.0	R1.5	2.3	3.9	1.9	2.8	4.7	9.3	R63.7	R31.8	R95.5
	June	0.2	R1.2	3.1	2.6	1.2	2.6	5.1	9.6	R61.8	R31.0	R92.8
	July	0.7	R1.1	2.2	3.1	1.3	2.2	4.1	8.4	R63.1	36.4	R99.5
	August	0.8	R1.2	2.1	4.3	1.0	2.2	3.8	9.5	R64.8	36.8	R101.6
	September	0.7	1.3	2.1	4.7	1.7	2.6	4.9	10.3	69.4	35.9	105.3
	Year to Date	**2.5**	**11.3**	**21.1**	**39.2**	**15.8**	**22.0**	**45.5**	**90.4**	**613.2**	**303.1**	**916.3**

Footnotes continued.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• The sum of the months may not equal the annual total because the annual total may reflect revisions which are not included in the monthly data. Also, the sum of the months may not equal the annual total 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: • 1973–1984 annual data (except the United States): Energy Information Administration (EIA), *1984 International Energy Annual.*
• 1973–1985 U.S. annual and monthly data: EIA, *Petroleum Supply Monthly.*
• 1983–1985 monthly data (except U.S. and World): Central Intelligence Agency, "International Energy Statistical Review," and other industry sources.
• 1983–1985 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).
• U.S. data: EIA, *Petroleum Supply Monthly.*
• International Energy Agency totals for latest months are EIA estimates.
Petroleum Stocks: • U.S. data: EIA, *Petroleum Supply Monthly.*
• Other OECD data: OECD, *Quarterly Oil Statistics;* Comite Professionnel du Petrole, *Bulletin Mensuel.*
• Total OECD data: Sum of data for all OECD member countries using above sources.
Nuclear Electricity Generation and Capacities: • *Nucleonics Week.*

Conversion Factors

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 Indices, 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	195.60	217.4
1982	207.38	230.7
1983	215.34	238.1
1984‡	223.43	248.3

‡ = Preliminary data.
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 Petroleum Products

	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
Pentanes Plus	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 30 percent propane.

Conversion Factors (continued)

Approximate Heat Content of Fuels, 1973–1979

	Units	1973	1974	1975	1976	1977	1978	1979
Coal								
Production	Million Btu/short ton	R23.376	R23.072	R22.897	R22.855	R22.597	R22.248	R22.454
Consumption	Million Btu/short ton	R23.057	R22.677	R22.506	R22.498	R22.265	R22.017	R22.100
Non-electric utility users	Million Btu/short ton	R24.878	R24.783	R24.745	R24.861	R24.701	R24.496	R24.626
Electric utilities	Million Btu/short ton	22.246	21.781	21.642	21.679	21.508	21.275	R21.364
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	R26.596	R26.700	R26.562	R26.601	R26.548	R26.478	R26.548
Anthracite								
Production	Million Btu/short ton	R22.132	R21.711	R21.582	R22.045	R22.661	R23.079	R23.170
Consumption	Million Btu/short ton	R21.464	R20.919	R20.762	R21.254	R22.066	R22.398	R22.069
Non-electric utility users	Million Btu/short ton	R22.674	R22.330	R22.272	R22.618	R24.101	R24.388	R24.272
Electric utilities	Million Btu/short ton	R17.920	R17.200	R17.064	R17.526	R17.244	R17.104	R17.454
Imports and exports	Million Btu/short ton	25.400	25.400	25.400	25.400	25.400	25.400	25.400
Bituminous coal and lignite								
Production	Million Btu/short ton	23.391	23.087	R22.910	22.863	22.597	22.242	R22.449
Consumption	Million Btu/short ton	23.073	22.694	22.522	22.509	22.266	22.014	22.100
Residential and commercial	Million Btu/short ton	22.887	22.523	22.258	22.819	22.594	22.078	21.884
Coke plants	Million Btu/short ton	26.800	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial & transportation	Million Btu/short ton	22.585	22.420	22.439	22.528	22.290	22.175	22.436
Electric utilities	Million Btu/short ton	22.262	21.799	21.659	21.692	21.521	21.284	21.372
Imports	Million Btu/short ton	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
Coal coke, imports and exports	Million Btu/short ton	24.800	24.800	24.800	24.800	24.800	24.800	24.800
Crude oil[1]								
Production	Million Btu/barrel	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
Exports	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800	5.800
Crude oil and petroleum products								
Imports	Million Btu/barrel	5.897	5.884	5.858	5.856	5.834	5.839	5.810
Exports	Million Btu/barrel	5.752	5.774	5.748	5.745	5.797	5.808	5.832
Petroleum products[2]								
Consumption	Million Btu/barrel	5.515	5.504	5.494	5.504	5.518	5.519	5.494
Residential and commercial	Million Btu/barrel	5.387	5.377	5.358	5.383	5.389	5.382	5.471
Industrial	Million Btu/barrel	5.565	5.537	5.527	5.535	5.552	5.546	5.416
Transportation	Million Btu/barrel	5.397	5.394	5.392	5.396	5.402	5.407	5.430
Electric utilities	Million Btu/barrel	6.245	6.238	6.250	6.251	6.249	6.251	6.258
Imports	Million Btu/barrel	5.983	5.959	5.935	5.980	5.908	5.955	5.811
Exports	Million Btu/barrel	5.752	5.773	5.747	5.743	5.796	5.814	5.864
LPG consumption	Million Btu/barrel	3.746	3.730	3.715	3.711	3.677	3.669	3.680
Natural gas plant liquids								
Production	Million Btu/barrel	4.049	4.011	3.984	3.964	3.941	3.925	3.955
Natural gas								
Production, dry	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021
Production, wet	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092
Consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021
Non-electric utility users	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019	1,016	1,018
Electric utilities	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034	1,035
Imports	Btu/cubic foot	1,026	1,027	1,026	1,025	1,026	1,030	1,037
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013	1,013

Approximate Heat Rates for Electricity

Fossil fuel steam-electric power plant generation[3]	Btu/kilowatthour	10,389	10,442	10,406	10,373	10,435	10,361	10,353
Nuclear power plant generation	Btu/kilowatthour	10,903	11,161	11,013	11,047	10,769	10,941	10,879
Geothermal energy power plant generation	Btu/kilowatthour	21,674	21,674	21,611	21,611	21,611	21,611	21,545
Electricity consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412	3,412

[1] Includes lease condensate.
[2] Weighted averages of the products included in each category are calculated using heat content values shown on the first page of this section.
[3] This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

R=Revised data.
Sources: • See "Thermal Conversion Factor Source Documentation" on the following pages.

Conversion Factors (continued)

Approximate Heat Content of Fuels, 1980–1985

	Units	1980	1981	1982	1983	1984	1985‡
Coal							
Production	Million Btu/short ton	R22.415	R22.309	R22.240	R22.056	R22.014	R22.014
Consumption	Million Btu/short ton	R21.947	R21.714	R21.675	R21.581	R21.577	R21.577
Non-electric utility users	Million Btu/short ton	R24.731	R24.477	R24.194	R24.093	R24.069	R24.069
Electric utilities	Million Btu/short ton	21.295	21.085	21.194	21.133	R21.101	R21.101
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	R26.384	R26.160	R26.223	R26.291	R26.402	R26.402
Anthracite							
Production	Million Btu/short ton	R22.869	R23.291	R23.289	R22.734	R23.107	R23.107
Consumption	Million Btu/short ton	R21.405	R22.080	R22.485	R21.583	R22.322	R22.322
Non-electric utility users	Million Btu/short ton	R22.719	R23.749	R24.530	R24.536	R25.128	R25.128
Electric utilities	Million Btu/short ton	R17.652	R18.168	R18.160	R16.516	R17.018	R17.018
Imports and exports	Million Btu/short ton	25.400	25.400	25.400	25.400	25.400	25.400
Bituminous coal and lignite							
Production	Million Btu/short ton	22.411	22.302	22.234	22.053	R22.009	R22.009
Consumption	Million Btu/short ton	21.950	21.712	21.671	21.581	R21.574	R21.574
Residential and commercial	Million Btu/short ton	22.488	22.191	22.373	22.934	R22.880	R22.880
Coke plants	Million Btu/short ton	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial & transportation	Million Btu/short ton	22.690	22.572	22.694	22.679	R22.524	R22.524
Electric utilities	Million Btu/short ton	21.301	21.091	21.200	21.141	R21.108	R21.108
Imports	Million Btu/short ton	25.000	25.000	25.000	25.000	25.000	25.000
Exports	Million Btu/short ton	26.404	26.176	26.231	26.300	R26.410	R26.410
Coal coke, imports and exports	Million Btu/short ton	24.800	24.800	24.800	24.800	24.800	24.800
Crude oil[1]							
Production	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800
Imports	Million Btu/barrel	5.812	5.818	5.826	5.825	5.823	5.823
Exports	Million Btu/barrel	5.800	5.800	5.800	5.800	5.800	5.800
Crude oil and petroleum products							
Imports	Million Btu/barrel	5.796	5.775	5.775	5.774	R5.745	R5.745
Exports	Million Btu/barrel	5.820	5.821	5.820	5.800	R5.850	R5.850
Petroleum products[2]							
Consumption	Million Btu/barrel	5.479	5.448	5.415	5.406	R5.395	R5.395
Residential and commercial	Million Btu/barrel	5.468	5.409	5.392	5.363	5.267	5.267
Industrial	Million Btu/barrel	5.376	5.310	5.262	5.279	5.305	5.305
Transportation	Million Btu/barrel	5.440	5.434	5.423	5.416	5.424	5.424
Electric utilities	Million Btu/barrel	6.254	6.258	6.258	6.255	6.251	6.251
Imports	Million Btu/barrel	5.748	5.659	5.664	5.677	R5.613	R5.613
Exports	Million Btu/barrel	5.841	5.837	5.829	5.800	R5.867	R5.867
LPG consumption	Million Btu/barrel	3.674	3.643	3.615	3.614	3.599	3.599
Natural gas plant liquids							
Production	Million Btu/barrel	3.914	3.930	3.872	3.839	R3.812	R3.812
Natural gas							
Production, dry	Btu/cubic foot	1,026	1,027	1,028	1,031	1,031	1,031
Production, wet	Btu/cubic foot	1,098	1,103	1,107	1,115	1,109	1,109
Consumption	Btu/cubic foot	1,026	1,027	1,028	1,031	1,031	1,031
Non-electric utility users	Btu/cubic foot	1,024	1,025	1,026	1,031	1,030	1,030
Electric utilities	Btu/cubic foot	1,035	1,035	1,036	1,030	1,035	1,035
Imports	Btu/cubic foot	1,022	1,014	1,018	1,024	1,005	1,005
Exports	Btu/cubic foot	1,013	1,011	1,011	1,010	1,010	1,010

Approximate Heat Rates for Electricity

Fossil fuel steam-electric power plant generation[3]	Btu/kilowatthour	10,388	10,453	10,423	10,445	R10,369‡	R10,369
Nuclear power plant generation	Btu/kilowatthour	10,908	11,030	11,073	10,905	R10,800‡	R10,800
Geothermal energy power plant generation	Btu/kilowatthour	21,639	21,639	21,629	21,290‡	21,303‡	21,303
Electricity consumption	Btu/kilowatthour	3,412	3,412	3,412	3,412	3,412	3,412

[1] Includes lease condensate.
[2] Weighted averages of the products included in each category are calculated using heat content values shown on the first page of this section.
[3] This is used as the thermal conversion factor for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

‡ = Preliminary data. R = Revised data.
Sources: • See "Thermal Conversion Factor Source Documentation" on the following pages.

Thermal Conversion Factor Source Documentation

Approximate Heat Content of Petroleum Products

Asphalt. • 1973 forward: The Energy Information Administration (EIA) adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.*

Aviation Gasoline. • 1973 forward: EIA adopted the thermal conversion factor of 5.048 million Btu per barrel as adopted by the Bureau of Mines from the Texas Eastern Transmission Corporation publication *Competition and Growth in American Energy Markets 1947-1985,* 1968.

Butane. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel as published in the *California Oil World and Petroleum Industry,* First Issue, April 1942.

Butane-Propane Mixture. • 1973 forward: EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See "Butane" and "Propane."

Distillate Fuel Oil. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, *Bureau of Mines Standard Average Heating Value of Various Fuels, adopted January 3, 1950.*

Ethane. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in the *California Oil World and Petroleum Industry,* First Issue, April 1942.

Ethane-Propane Mixture. • 1979 forward: EIA calculated 3.308 million Btu per barrel based on an assumed mixture of 70 percent ethane and 30 percent propane. See "Ethane" and "Propane."

Isobutane. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel as published in the *California Oil World and Petroleum Industry,* First Issue, April 1942.

Jet Fuel, Kerosene Type. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as published for "Jet Fuel, Commercial" by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947-1985,* 1968.

Jet Fuel, Naphtha Type. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel as published for "Jet Fuel, Military" by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947-1985,* 1968.

Kerosene. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, *Bureau of Mines Standard Average Heating Values of Various Fuels, adopted January 3, 1950.*

Lubricants. • 1973 forward: EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.*

Miscellaneous Products. • 1973 forward: EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.*

Motor Gasoline. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel as published for "Gasoline, Motor Fuel" by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947-1985,* 1968.

Natural Gasoline. • 1973 forward: EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.*

Pentanes Plus. • 1984 forward: EIA assumed the thermal conversion factor to be 4.620 million Btu per barrel or equal to that for natural gasoline. See "Natural Gasoline."

Petrochemical Feedstocks, Naphtha 400 Degrees Fahrenheit or Less. • 1973 forward: Assumed by EIA to be 5.248 million Btu per barrel, equal to the thermal conversion factor for special naphtha. See "Special Naphtha."

Petrochemical Feedstock, Oils Over 400 Degrees Fahrenheit. • 1973 forward: Assumed by EIA to be 5.825 million Btu per barrel, equal to the thermal conversion factor for distillate fuel oil. See "Distillate Fuel Oil."

Thermal Conversion Factor Source Documentation (continued)

Petrochemical Feedstock, Still Gas. • 1973 forward: Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See "Still Gas."

Petroleum Coke. • 1973 forward: EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in the Bureau of Mines internal memorandum *Bureau of Mines Standard Average Heating Value of Various Fuels, adopted January 3, 1950.* The Bureau of Mines calculated this factor by dividing the 30,120,000 Btu per short ton as given in the referenced Bureau of Mines internal memorandum by 5.0 barrels per short ton as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

Plant Condensate. • 1973 forward: Estimated to be 5.418 million Btu per barrel by EIA from data provided by McClanahan Consultants, Inc., Houston, Texas.

Propane. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel as published in the *California Oil World and Petroleum Industry,* First Issue, April 1942.

Residual Fuel Oil. • 1973 forward: EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the Bureau of Mines internal memorandum *Bureau of Mines Standard Average Heating Values of Various Fuels, adopted January 3, 1950.*

Road Oil. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel which was assumed to be equal to that of asphalt (see "Asphalt") and was first published by the Bureau of Mines in the *Petroleum Statement, Annual, 1970.*

Special Naphtha. • 1973 forward: EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel which was assumed to be equal to that of total gasoline (aviation and motor) factor and was first published in the *Petroleum Statement, Annual, 1970.*

Still Gas. • 1973 forward: EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel and first published in the *Petroleum Statement, Annual, 1970.*

Unfinished Oil. • 1973 forward: EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel or equal to that for distillate fuel oil (see "Distillate Fuel Oil") and first published in the *Annual Report to Congress, Volume 3, 1977.*

Unfractionated Stream. • 1979 forward: EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see "Plant Condensate") and first published in the *Annual Report to Congress, Volume 2, 1981.*

Wax. • 1973 forward: EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956.*

Approximate Heat Content of Fuels

Petroleum

Crude Oil, Exports. • 1973 forward: Assumed by EIA to be 5.800 million Btu per barrel or equal to the thermal conversion factor for crude oil produced in the United States. See "Crude Oil and Lease Condensate, Production."

Crude Oil, Imports. • 1973 forward: Calculated annually by EIA by weighting the thermal conversion factor of each type of crude oil imported by the quantity imported. Thermal conversion factors for each type were calculated on a foreign country basis, by determining the average American Petroleum Institute (API) gravity of crude imported from each foreign country from Form ERA-60 in 1977 and converting average API gravity to average Btu content using National Bureau of Standards, Miscellaneous Publication No. 97, *Thermal Properties of Petroleum Products,* 1933.

Crude Oil and Lease Condensate, Production. • 1973 forward: EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum *Bureau of Mines Standard Average Heating Values of Various Fuels adopted January 3, 1950.*

Crude Oil and Petroleum Products, Exports. • 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported and crude oil exported weighted by the quantity of each petroleum product and crude oil exported. See "Petroleum Products, Exports" and "Crude Oil, Exports."

Crude Oil and Petroleum Products, Imports. • 1973 forward: Calculated annually by EIA as the

average of the thermal conversion factors for each petroleum product and each type of crude oil imported weighted by the quantity of each petroleum product and each type of crude oil imported. See "Crude Oil, Imports." and "Petroleum Products, Imports."

Natural Gas Plant Liquids, Production. ◦ 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors of each natural gas plant liquid produced weighted by the quantity of each natural gas plant liquid produced.

Petroleum Products, Consumption. ◦ 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed, weighted by the quantity of each petroleum product consumed.

Petroleum Products, Consumption by Electric Utilities. ◦ 1973–1983: Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed at electric utilities, weighted by the quantity of each petroleum product consumed at electric utilities. The quantity of petroleum consumed is estimated in the State Energy Data System as documented in the *State Energy Data Report.* ◦ 1984 forward: Estimated by EIA.

Petroleum Products, Consumption by Industrial Users. ◦ 1973–1983: Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed in the industrial sector, weighted by the estimated quantity of each petroleum product consumed in the industrial sector. The quantity of petroleum products consumed is estimated in the State Energy Data System as documented in the *State Energy Data Report.* ◦ 1984 forward: Estimated by EIA.

Petroleum Products, Consumption by Residential and Commercial Users. ◦ 1973–1983: Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential and commercial sector, weighted by the estimated quantity of each petroleum product consumed in the residential and commercial sector. The quantity of petroleum products consumed is estimated in the State Energy Data System as documented in the *State Energy Data Report.* ◦ 1984 forward: Estimated by EIA.

Petroleum Products, Consumption by Transportation Users. ◦ 1973–1983: Calculated annually by EIA as the average of the thermal conversion factor for all petroleum products consumed in the transportation sector, weighted by the estimated quantity of each petroleum product consumed in the transportation sector. The quantity of petroleum products consumed is estimated in the State Energy Data System as documented in the *State Energy Data Report.* ◦ 1984 forward: Estimated by EIA.

Petroleum Products, Exports. ◦ 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product weighted by the quantity of each petroleum product exported.

Petroleum Products, Imports. ◦ 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product imported weighted by the quantity of each petroleum product imported.

Petroleum Products, Liquefied Petroleum Gases (LPG) Consumption. ◦ 1973 forward: Calculated annually by EIA as the average of the thermal conversion factors of each liquefied petroleum gas consumed weighted by the quantity of each liquefied petroleum gas consumed.

Natural Gas

Natural Gas, Consumption. ◦ 1973–1979: EIA adopted the thermal conversion factor calculated annually by the American Gas Association (AGA) and published in *Gas Facts,* an AGA annual. ◦ 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity of natural gas consumed. Heat content and quantity consumed are from Form EIA-176.

Natural Gas, Consumption by Electric Utilities. ◦ 1973 forward: Calculated annually by EIA by dividing the total heat content of natural gas received at electric utilities by the total quantity received at electric utilities. The heat contents and the quantities consumed are from Form EIA-759 and predecessor forms.

Natural Gas, Consumption by Non-Electric Utility Users. ◦ 1973 forward: Calculated annually by EIA by dividing the heat content of natural gas consumed by non-electric utility consumers by the quantity of non-electric utility natural gas consumed. Data are from Forms EIA-176, FERC Form 423, EIA-759, and predecessor forms.

Natural Gas, Exports. ◦ 1973 forward: Calculated annually by EIA by dividing the heat content of exported natural gas by the quantity of natural gas exported, both reported on Form FPC-14.

Thermal Conversion Factor Source Documentation (continued)

Natural Gas, Imports. • 1973 forward: Calculated annually by EIA by dividing the heat content of imported natural gas by the quantity of natural gas imported, both reported on Form FPC-14.

Natural Gas Production, Dry. • 1973 forward: Assumed by EIA to be equal to the thermal conversion factor for the consumption of dry natural gas. See "Natural Gas, Consumption."

Natural Gas Production, Wet. • 1973 forward: Calculated annually by EIA by adding the heat content of dry natural gas production and the total heat content of natural gas plant liquids production and dividing this sum by the total quantity of marketed (wet) natural gas production.

Coal and Coal Coke

Anthracite, Consumption. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of anthracite consumed by electric utilities and non-electric utilities by the total quantity of anthracite consumed.

Anthracite, Consumption by Electric Utilities. • 1973 forward: Calculated annually by EIA by dividing the heat content of anthracite receipts at electric utilities by the quantity of anthracite received at electric utilities. Heat contents and receipts are from FERC Form 423 and predecessor forms.

Anthracite, Consumption by Non-Electric Utility Users. • 1973 forward: Calculated annually by EIA by dividing the heat content of anthracite production less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of non-electric utility anthracite consumption less the quantity of anthracite stock changes, losses, and unaccounted for.

Anthracite, Imports and Exports. • 1973 forward: EIA assumed the anthracite imports and exports to be freshly mined anthracite having an estimated heat content of 25.400 million Btu per short ton.

Anthracite, Production. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of freshly mined anthracite (estimated to have an average heat content of 25.400 million Btu per short ton) and the heat content of anthracite recovered from culm banks and river dredging (estimated to have an average heat content of 17.500 million Btu per short ton) by the total quantity of anthracite production.

Bituminous Coal and Lignite, Consumption. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite consumed by electric utilities, coal coke plants, other industrial plants, the residential and commercial sector, and the transportation sector by the sum of their respective tonnages.

Bituminous Coal and Lignite, Consumption by Coke Plants. • 1973 forward: Estimated by EIA to be 26.800 million Btu per short ton based on an input/output analysis of coal carbonization.

Bituminous Coal and Lignite, Consumption by Electric Utilities. • 1973 forward: Calculated annually by EIA by dividing the total heat content of bituminous coal and lignite received at electric utilities by the total quantity received at electric utilities. Heat contents and receipts are from FERC Form 423 and predecessor forms.

Bituminous Coal and Lignite, Consumption by Other Industrial and Transportation Users. • 1973: Calculated by EIA through regression analysis measuring the difference between the average Btu value of coal consumed by other industrial users and that of coal consumed at electric utilities in the 1974-1982 period. • 1974 forward: Calculated annually by EIA assuming that the bituminous coal and lignite delivered to other industrial users from each coal-producing district (reported on EIA Form 6 and predecessor Bureau of Mines Form 6-1419-Q) contained a heat value equal to bituminous coal and lignite received at electric utilities from each of the same coal-producing districts (reported on FERC Form 423). The average Btu value of coal by coal-producing district was applied to the volume of deliveries to other industrial users from each coal-producing district, and the sum total of the heat content was divided by the total volume of deliveries.

Bituminous Coal and Lignite, Consumption by Residential and Commercial Users. • 1973: Calculated by EIA through regression analysis measuring the difference between the average Btu value of coal consumed by residential and commercial users and that of coal consumed by electric utilities in the 1974–1982 period. • 1974 forward: Calculated annually by EIA by assuming that the bituminous coal and lignite delivered to residential and commercial users from each coal-producing district (reported on EIA Form 6 and predecessor Bureau of Mines Form 6-1419-Q) contained a heat value equal to bituminous coal and lignite received at electric utilities from each of the same coal-producing districts (reported on FERC Form 423). The average Btu value of coal by coal-producing district was applied to the volume of deliveries to residential and commercial users from

Thermal Conversion Factor Source Documentation (continued)

each coal-producing district, and the total of the heat value was divided by the total volume of deliveries.

Bituminous Coal and Lignite, Exports. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of exported metallurgical coal (estimated to average 27.000 million Btu per short ton) and the heat content of exported steam coal (estimated to have an average thermal content of 25.000 million Btu per short ton) by the total quantity of bituminous coal and lignite exported.

Bituminous Coal and Lignite, Imports. • 1973 forward: EIA estimated the average thermal conversion factor to be 25.000 million Btu per short ton.

Bituminous Coal and Lignite, Production. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite consumption, net exports, stock changes, and unaccounted for by the sum of their respective tonnages. Consumers' stock changes by sectors were assumed to have the same conversion factor as the consumption sector. Producers' stock changes and unaccounted for were assumed to have the same conversion factor as consumption by all users.

Coal, Consumption. • 1973 forward: Calculated annualy by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite consumption by the sum of their respective tonnages.

Coal, Consumption by Electric Utilities. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite received at electric utilities by the sum of their respective tonnages received.

Coal, Consumption by Non-Electric Utility Users. • 1973 forward: Calculated annualy by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite consumed by non-electric utility users by the sum of their respective tonnages.

Coal, Exports. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite exported by the sum of their respective tonnages.

Coal, Imports. • 1973 forward: Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite and anthracite imported by the sum of their respective tonnages.

Coal, Production. • 1973 forward: Calculated annually by EIA by dividing the sum of the total heat content of bituminous coal and lignite and anthracite production by the sum of their respective tonnages.

Coal Coke, Imports and Exports. • 1973 forward: EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

Approximate Heat Rates for Electricity

Fossil Fuel Steam-Electric Power Plant Generation. There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydroelectric, wood and waste, wind photovoltaic, or solar thermal electric energy sources. EIA has selected a rate that is equal to the prevailing annual average heat rate factor for fossil-fueled steam-electric power plants. By using this factor, it is possible to evaluate fossil fuel requirements for replacing these sources during periods of interruption such as drought. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatthour. • 1973 forward: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States as published by EIA in *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants.*

Geothermal Energy Power Plant Generation. • 1973–1981: Calculated annually by EIA by weighting the average annual heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12. • 1982 forward: Estimated annually by EIA based on an informal survey of relevant plants.

Nuclear Power Plant Generation. • 1973 forward: Calculated annually by EIA by dividing the total heat content consumed in reactors at nuclear plants by the total (net) electricity generated by nuclear plants as reported on Form FERC-1, EIA-412 and predecessor forms.

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 degrees Fahrenheit. 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 degree 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.

City Gate Price of Natural Gas. Price of natural gas at the point it is transferred from a pipeline to a local distribution company.

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.

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, Cooling. 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.

Degree-Days, Heating. 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.

Degree-Days, Population-Weighted. 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.

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 Generation. Net electricity (gross electricity output measured at the generator terminals, minus power plant 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.

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.

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.

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.

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 weighted average of domestic and imported crude oil costs.

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.

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

Supplemental Gaseous Fuels. Mainly synthetic natural gas, propane-air, and refinery gas. May also include coke oven gas, biomass gas, manufactured gas, and air injected for Btu stabilization.

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.

☆U.S. GOVERNMENT PRINTING OFFICE: 1985—591-161/20004

DOE F 1340.1
(2-80)

Energy Information Administration

GPO SUBSCRIPTION ORDER FORM

A

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

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

Enclosed is $ _____ ☐ Check

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

☐☐☐☐☐☐☐ - ☐

Order No. _____

VISA

MasterCard

Credit Card Orders Only

Total charges $ _____ Fill in the boxes below

Credit Card No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

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

PLEASE PRINT OR TYPE **NAME AND ADDRESS**

NAME — FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY STATE ZIP CODE

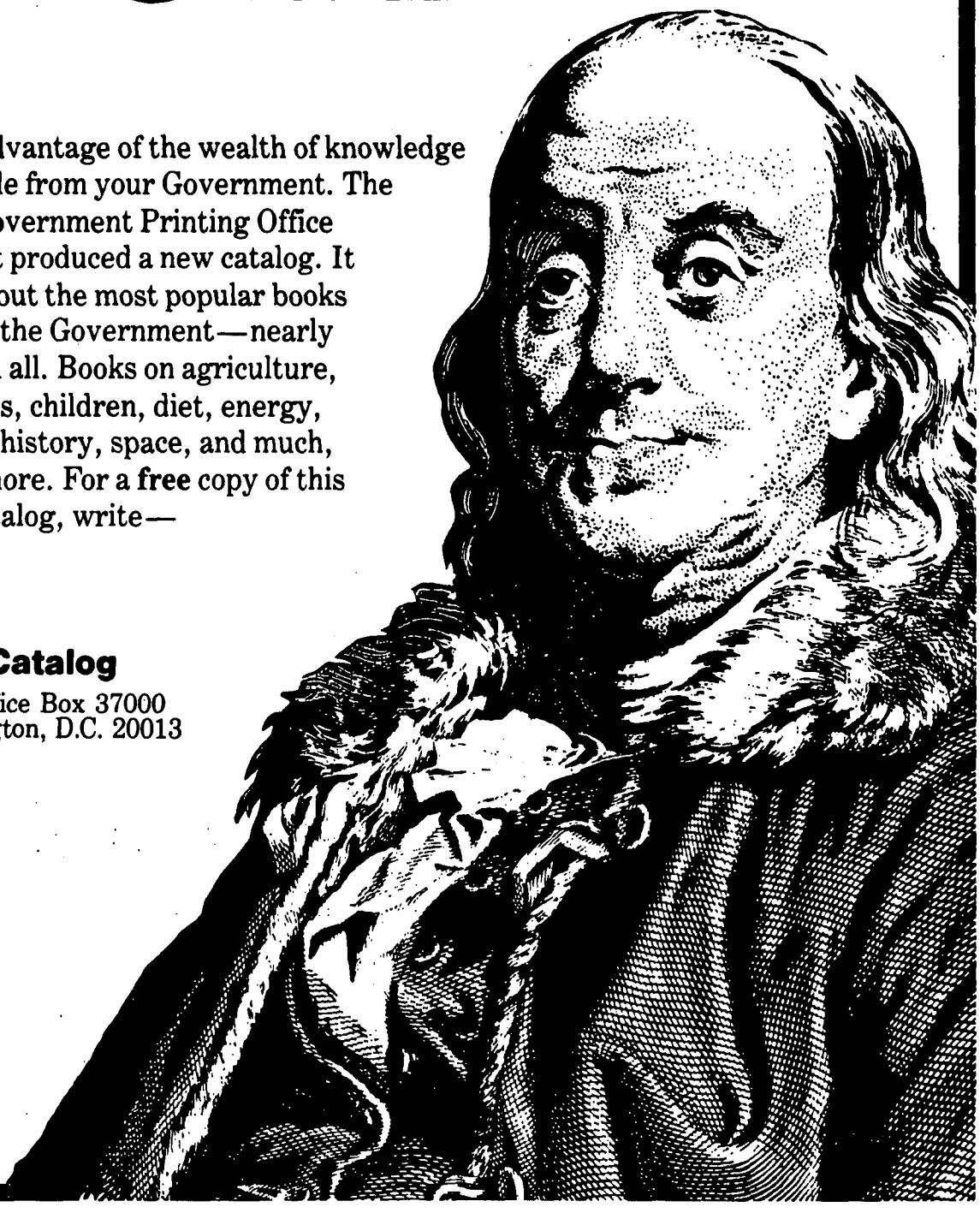
(OR COUNTRY)

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

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

GPO 884-039

KEEP UP IN A CHANGING WORLD

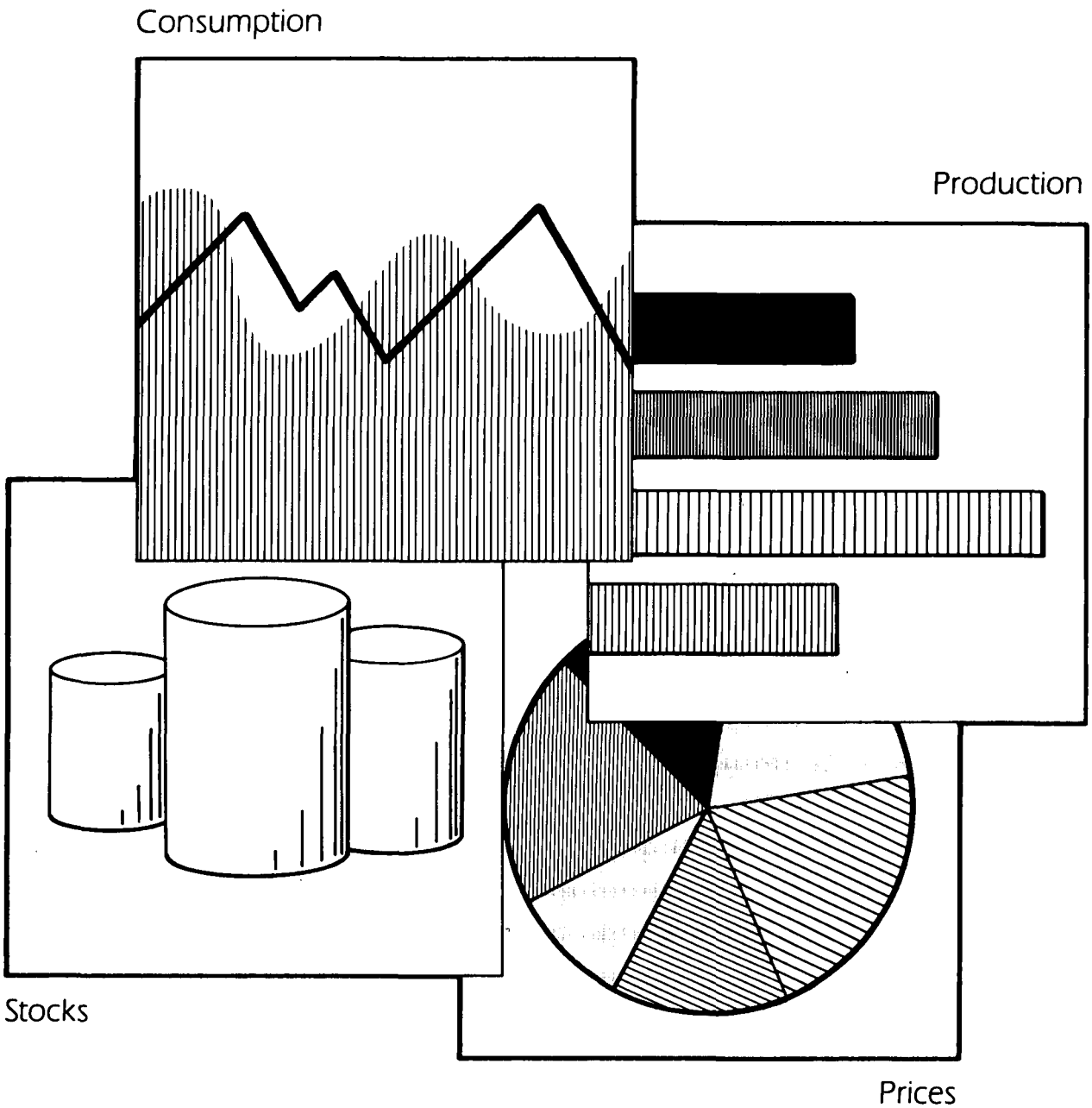


Take advantage of the wealth of knowledge available from your Government. The U.S. Government Printing Office has just produced a new catalog. It tells about the most popular books sold by the Government—nearly 1,000 in all. Books on agriculture, business, children, diet, energy, health, history, space, and much, much more. For a **free** copy of this new catalog, write—

New Catalog
Post Office Box 37000
Washington, D.C. 20013

Looking for Energy Information?

The Energy Information Administration has Data and Projections on:



Contact:

Energy Information Administration
National Energy Information Center
Forrestal Building, 1F-048
1000 Independence Avenue, S.W.
Washington, D.C. 20585
(202) 252-8800

Energy Information Administration
Forrestal Building
Washington, DC 20585