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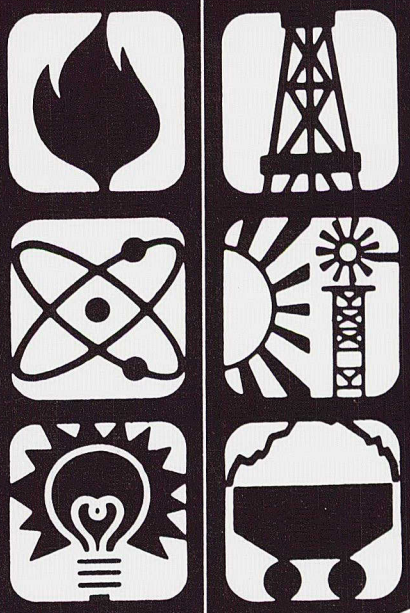
Monthly Energy Review

Energy Information Administration
Washington, D.C.

December 1983 [1]

September 1983 Data
Published December 1983

Third Quarter 1983 Summary
See Executive Summary



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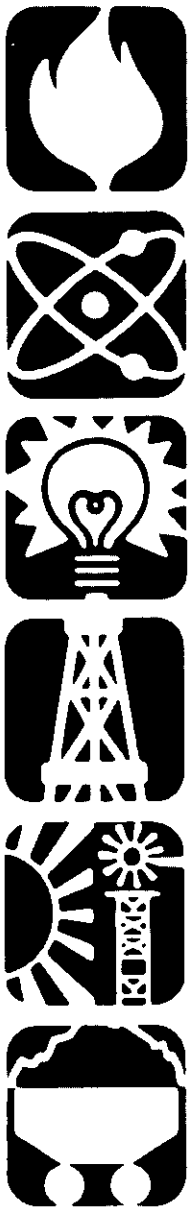

The *Monthly Energy Review* presents current data on production, consumption, stocks, imports, exports, and prices of the principal energy commodities in the United States. Also included are data on international production of crude oil, consumption of petroleum products, petroleum stocks, and production of electricity from nuclear powered facilities.

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

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

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Released for printing: December 22, 1983

Special Notice

Publications Date Change

The Energy Information Administration (EIA) is undertaking a program to make the dates of its periodicals consistent and explicit. Beginning in January 1984, issues of all EIA periodicals will be dated according to the bulk of the data in them, NOT (as in the past) the date of the publication. The data date will be displayed prominently on covers, title pages, and spines. The publication date will be less prominently displayed.

Some monthly periodicals will have to have more than one December issue (designated December 1983 [1], December 1983 [2], etc.). Once the bulk of the data in these periodicals is vintage January 1984, the periodical will be dated January 1984. In the case of the *Monthly Energy Review,* for example, there will be four "December 1983" issues; the January 1984 issue will be published in April. Other monthly periodicals will follow similar procedures.

Monthly Energy Review

December 1983 [1]

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

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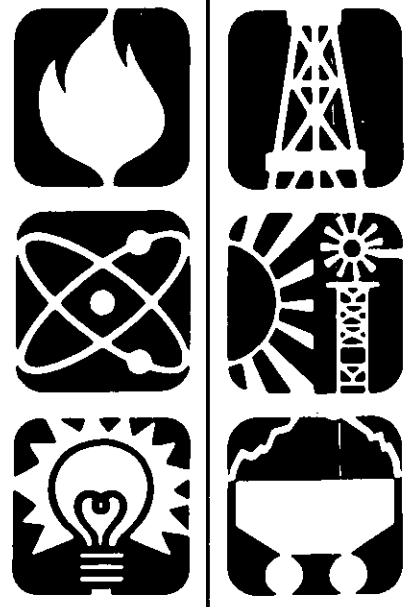

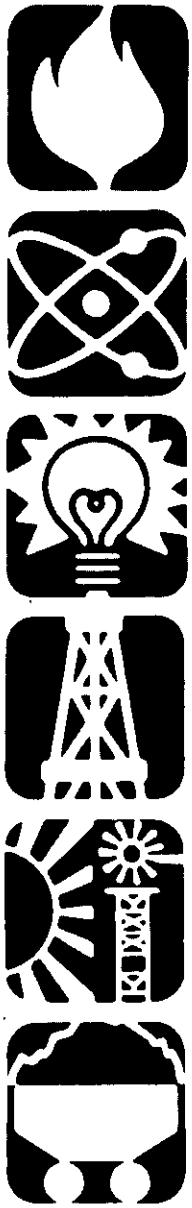

Contacts

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

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

Special Features		Barbara T. Fichman (202) 252-5737
Part 1.	**Executive Summary** and **Part 2. Consumption**	Roberta Searles (202) 252-5736 Dianne R. Dunn (202) 252-2792
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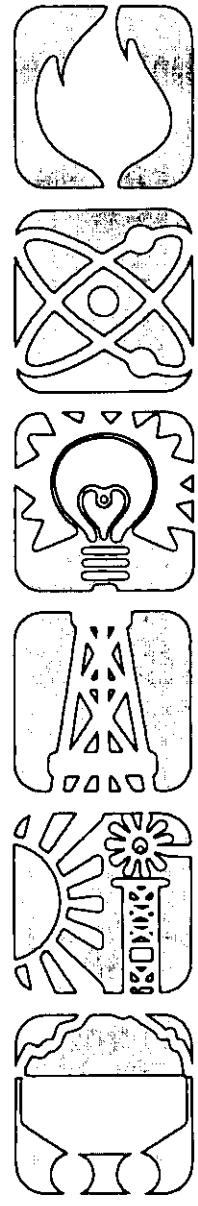
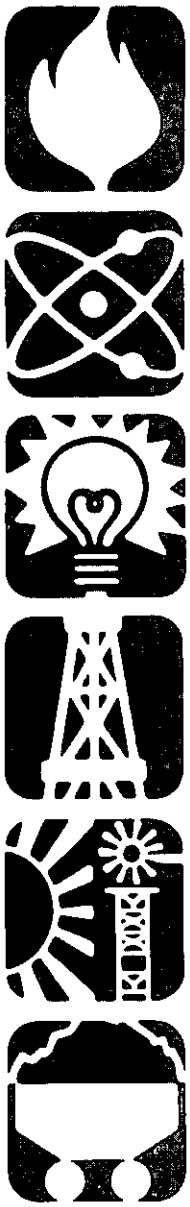




Articles

Feature articles on energy-related subjects and highlights from recently published Energy Information Administration reports are often included in this publication. The following articles and highlights have appeared in previous issues:

Overview

Production

Energy production during September 1983 totaled 5.1 quadrillion Btu, a 0.4-percent* increase from the level of production during September 1982. Coal production increased 3.6 percent and petroleum production was up 0.2 percent. Natural gas production fell 3.9 percent. Production of all other forms of energy combined increased 3.5 percent compared to production 1 year earlier.

Consumption

Energy consumption during September 1983 totaled 5.6 quadrillion Btu, 3.6 percent above the level of consumption during September 1982. Coal consumption increased 10.9 percent and petroleum consumption was up 2.5 percent. Natural gas consumption decreased 1.8 percent. Consumption of all other forms of energy combined increased 3.8 percent compared to consumption during September 1982.

Net Imports

Net imports of energy during September 1983 totaled 0.8 quadrillion Btu, 25.5 percent above the level of imports during September 1982. Net imports of petroleum increased 17.0 percent, while net imports of natural gas decreased 1.6 percent. Net exports of coal were down 13.7 percent compared to the level in September 1982.

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

Energy Summary

(Quadrillion (10^{15}) Btu)

	September			Cumulative January through September				
	1983	1982	Percent Change	1983	1983 Daily Rate	1982	1982 Daily Rate	Percent Change[1]
Total Production	**5.123**	**5.102**	**+0.4**	**45.336**	**0.166**	**48.253**	**0.177**	**-6.0**
Petroleum[2]	1.696	1.693	+0.2	15.387	0.056	15.335	0.056	+0.3
Natural Gas	1.338	1.393	-3.9	11.911	0.044	13.697	0.050	-13.0
Coal	1.576	1.521	+3.6	12.913	0.047	14.329	0.052	-9.9
Other[3]	0.513	0.496	+3.5	5.125	0.019	4.892	0.018	+4.8
Total Consumption	**5.577**	**5.382**	**+3.6**	**51.954**	**0.190**	**53.370**	**0.195**	**-2.7**
Petroleum[4]	2.516	2.455	+2.5	22.312	0.082	22.838	0.084	-2.3
Natural Gas	1.150	1.171	-1.8	12.435	0.046	13.756	0.050	-9.6
Coal	1.372	1.237	+10.9	11.850	0.043	11.660	0.043	+1.6
Other[5]	0.539	0.519	+3.8	5.357	0.020	5.117	0.019	+4.7
Net Imports	**0.826**	**0.658**	**+25.5**	**5.949**	**0.022**	**5.432**	**0.020**	**+9.5**
Petroleum[6]	0.934	0.798	+17.0	6.538	0.024	6.727	0.025	-2.8
Natural Gas	0.061	0.062	-1.6	0.661	0.002	0.626	0.002	+5.7
Coal[7]	(0.194)	(0.225)	(-13.7)	(1.482)	(0.005)	(2.145)	(0.008)	(-30.9)
Other[8]	0.026	0.023	+10.0	0.232	0.001	0.225	0.001	+3.2

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

First Three Quarters 1983 Summary

Preliminary figures for the first three quarters of 1983 for U.S. energy production and consumption declined compared to their levels in the first three quarters of 1982. Total energy produced in the first 9 months of 1983 was 6.0 percent* less than in the same period in 1982. Total energy consumed was down 2.7 percent. In contrast, net imports rose for the first time since 1977, increasing 9.5 percent from the level in the first 9 months of 1982.

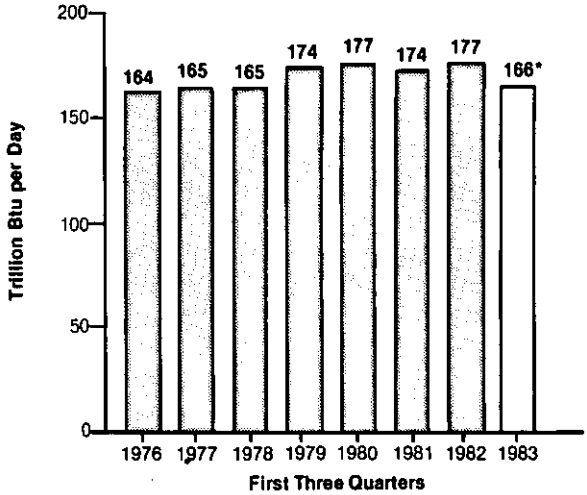
U.S. energy production in the first three quarters of 1983 totaled 45.3 quadrillion Btu (166 trillion Btu per day), compared to 48.3 quadrillion Btu (177 trillion Btu per day) in the first three quarters of 1982 (Figure 1). The decrease was caused by declines of 13.0 and 9.9 percent in the production of natural gas and coal, respectively. Production of petroleum (crude oil, lease condensate, and natural gas plant liquids) recorded a small increase of 0.3 percent from the same period 1 year earlier. Energy produced from hydroelectric power increased 6.9 percent and energy from nuclear power increased 1.8 percent in the first 9 months of 1983 compared to the first 9 months of 1982.

U.S. energy consumption in the first three quarters of 1983 totaled 52.0 quadrillion Btu (190 trillion Btu per day), compared to 53.4 quadrillion Btu (195 trillion Btu per day) in the first three quarters of 1982 (Figure 2). Energy consumption during the first 9 months fell each year after reaching the peak level of 215 trillion Btu per day in 1979. In the first 9 months of 1983, consumption of natural gas fell 9.6 percent and consumption of petroleum fell 2.3 percent. In contrast, consumption of coal was up 1.6 percent.

U.S. net imports of energy totaled 5.9 quadrillion Btu in the first three quarters of 1983. The rate of net imports for that period was 22 trillion Btu per day, up from 20 trillion Btu per day for the first three quarters of 1982, but less than half of the peak rate of 50 trillion Btu per day recorded in the first 9 months of 1977 (Figure 3). Net imports of petroleum declined 2.8 percent compared to the first 9 months of 1982. By comparison, net imports of petroleum in the first 9 months of 1982 were 22.4 percent below the level for the first 9 months of 1981, and that level was 15.9 percent below the level for the same 9-month period in 1980. Not only did the rate of decline of net imports of petroleum slow during the first 9 months of 1983, but the level of net imports of natural gas rose 5.7 percent and the level of net exports of coal decreased 30.9 percent compared to the levels during the first 9 months of 1982. All three factors contributed to the first increase since 1977 in net imports of energy in the first three quarters of the year.

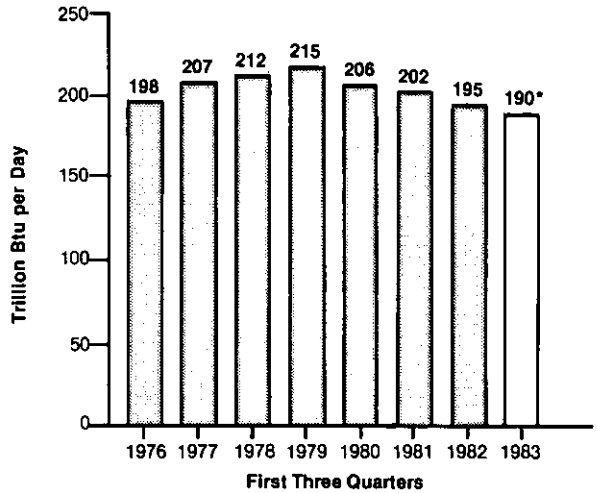
*All percentage increases/decreases are calculated using a daily rate prior to rounding.

Figure 1. U.S. Energy Production



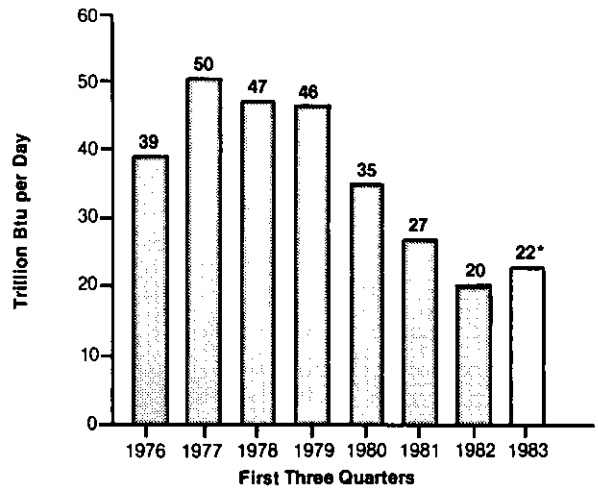
*Preliminary data.

Figure 2. U.S. Energy Consumption



*Preliminary data.

Figure 3. U.S. Energy Imports (Net)



*Preliminary data.

Executive Summary

Production of Energy by Source—Quarterly Summary

		Coal[1]	Crude Oil[2]	NGPL[3]	Natural Gas (Dry)	Hydro-electric Power[4]	Nuclear Electric Power	Other[5]	Total Energy Produced
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**14.366**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**62.433**
1974	**TOTAL**	**14.468**	**18.575**	**2.471**	**21.210**	**3.177**	**1.272**	**0.056**	**61.229**
1975	**TOTAL**	**15.189**	**17.729**	**2.374**	**19.640**	**3.155**	**1.900**	**0.072**	**60.059**
1976	1st Qtr	3.906	4.345	0.582	4.991	0.809	0.491	0.021	15.145
	2nd Qtr	4.130	4.275	0.578	4.821	0.789	0.427	0.019	15.040
	3rd Qtr	3.707	4.338	0.582	4.761	0.736	0.589	0.021	14.735
	4th Qtr	4.110	4.305	0.585	4.907	0.642	0.603	0.019	15.171
	TOTAL	**15.853**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**60.091**
1977	1st Qtr	3.678	4.188	0.571	5.046	0.589	0.672	0.021	14.765
	2nd Qtr	4.260	4.279	0.586	4.869	0.577	0.667	0.020	15.259
	3rd Qtr	4.047	4.426	0.579	4.804	0.528	0.691	0.020	15.096
	4th Qtr	3.843	4.560	0.592	4.847	0.639	0.671	0.021	15.173
	TOTAL	**15.829**	**17.454**	**2.327**	**19.565**	**2.333**	**2.702**	**0.082**	**60.293**
1978	1st Qtr	1.972	4.431	0.555	5.014	0.753	0.767	0.019	13.511
	2nd Qtr	4.455	4.658	0.563	4.834	0.829	0.658	0.013	16.011
	3rd Qtr	4.036	4.680	0.561	4.807	0.710	0.796	0.018	15.609
	4th Qtr	4.575	4.664	0.567	4.830	0.644	0.802	0.018	16.100
	TOTAL	**15.037**	**18.434**	**2.245**	**19.485**	**2.937**	**3.024**	**0.068**	**61.231**
1979	1st Qtr	4.053	4.455	0.550	5.084	0.756	0.830	0.020	15.749
	2nd Qtr	4.612	4.502	0.570	4.953	0.831	0.527	0.021	16.016
	3rd Qtr	4.289	4.524	0.571	4.889	0.660	0.711	0.023	15.665
	4th Qtr	4.696	4.623	0.595	5.151	0.684	0.647	0.025	16.421
	TOTAL	**17.651**	**18.104**	**2.286**	**20.076**	**2.931**	**2.715**	**0.089**	**63.851**
1980	1st Qtr	4.630	4.588	0.578	5.286	0.746	0.644	0.024	16.496
	2nd Qtr	4.764	4.552	0.571	4.887	0.864	0.605	0.028	16.271
	3rd Qtr	4.460	4.549	0.547	4.711	0.666	0.752	0.031	15.716
	4th Qtr	4.787	4.559	0.558	5.031	0.624	0.738	0.032	16.329
	TOTAL	**18.640**	**18.249**	**2.254**	**19.916**	**2.900**	**2.739**	**0.114**	**64.812**
1981	1st Qtr	4.816	4.481	0.581	R4.937	0.673	0.735	0.033	R16.256
	2nd Qtr	3.043	4.519	0.570	R4.884	0.749	0.671	0.031	R14.468
	3rd Qtr	5.252	4.569	0.575	R4.824	0.678	0.812	0.033	R16.743
	4th Qtr	5.332	4.577	0.581	R4.823	0.640	0.756	0.030	R16.740
	TOTAL	**18.443**	**18.146**	**2.307**	**R19.469**	**2.741**	**2.974**	**0.127**	**R64.207**
1982	1st Qtr	R4.976	4.502	0.556	R4.854	0.876	0.749	0.023	R16.534
	2nd Qtr	R4.845	4.561	0.545	R4.514	0.881	0.736	0.025	R16.105
	3rd Qtr	R4.508	4.623	0.549	R4.330	0.746	0.827	0.030	R15.614
	4th Qtr	R4.434	4.624	0.574	R4.327	0.742	0.773	0.030	R15.504
	TOTAL	**R18.763**	**18.309**	**2.224**	**R18.024**	**3.245**	**3.084**	**0.108**	**R63.757**
1983	1st Qtr	4.277	4.519	0.566	R4.133	0.918	0.777	0.028	R15.218
	2nd Qtr	R4.162	4.582	0.536	R3.778	0.964	0.748	0.026	R14.797
	3rd Qtr	4.474	4.618	0.566	4.000	0.793	0.829	0.042	15.321

[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes lease condensate.
[3]Natural gas plant liquids.
[4]Includes industrial and utility production of hydropower.
[5]Includes geothermal power and electricity produced from wood and waste.
R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

Executive Summary

Consumption of Energy by Source—Quarterly Summary

		Coal[1]	Natural Gas (Dry)	Petroleum	Hydro-electric Power[2]	Nuclear Electric Power	Net Imports of Coal Coke[3]	Other[4]	Total Energy Consumed
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**13.300**	**22.512**	**34.840**	**3.010**	**0.910**	**(0.008)**	**0.046**	**74.609**
1974	**TOTAL**	**12.876**	**21.732**	**33.455**	**3.309**	**1.272**	**0.059**	**0.056**	**72.759**
1975	**TOTAL**	**12.823**	**19.948**	**32.731**	**3.219**	**1.900**	**0.014**	**0.072**	**70.707**
1976	1st Qtr	3.405	6.069	8.929	0.831	0.491	(0.005)	0.021	19.742
	2nd Qtr	3.248	4.363	8.257	0.812	0.427	(0.007)	0.019	17.119
	3rd Qtr	3.471	4.071	8.453	0.759	0.589	0.002	0.021	17.366
	4th Qtr	3.609	5.843	9.536	0.664	0.603	0.010	0.019	20.284
	TOTAL	**13.733**	**20.345**	**35.175**	**3.066**	**2.111**	**0.000**	**0.081**	**74.510**
1977	1st Qtr	3.528	6.063	9.772	0.634	0.672	(0.004)	0.021	20.686
	2nd Qtr	3.317	4.238	8.800	0.623	0.667	(0.002)	0.020	17.664
	3rd Qtr	3.635	4.202	9.019	0.574	0.691	0.010	0.020	18.152
	4th Qtr	3.485	5.428	9.531	0.684	0.671	0.011	0.021	19.831
	TOTAL	**13.964**	**19.931**	**37.122**	**2.515**	**2.702**	**0.015**	**0.082**	**76.332**
1978	1st Qtr	3.169	6.561	9.971	0.804	0.767	0.008	0.019	21.299
	2nd Qtr	3.288	4.247	9.081	0.880	0.658	0.047	0.013	18.214
	3rd Qtr	3.749	3.926	9.178	0.762	0.796	0.040	0.018	18.470
	4th Qtr	3.640	5.265	9.735	0.696	0.802	0.037	0.018	20.192
	TOTAL	**13.846**	**20.000**	**37.965**	**3.141**	**3.024**	**0.131**	**0.068**	**78.175**
1979	1st Qtr	3.786	6.648	10.072	0.808	0.830	0.009	0.020	22.173
	2nd Qtr	3.589	4.423	8.837	0.883	0.527	0.026	0.021	18.306
	3rd Qtr	3.894	4.085	8.879	0.713	0.711	0.025	0.023	18.329
	4th Qtr	3.841	5.510	9.337	0.737	0.647	0.005	0.025	20.101
	TOTAL	**15.109**	**20.666**	**37.123**	**3.141**	**2.715**	**0.066**	**0.089**	**78.910**
1980	1st Qtr	4.005	6.606	9.143	0.800	0.644	(0.001)	0.024	21.222
	2nd Qtr	3.555	4.255	8.177	0.919	0.605	(0.015)	0.028	17.524
	3rd Qtr	4.030	3.977	8.123	0.721	0.752	(0.012)	0.031	17.621
	4th Qtr	3.871	5.553	8.759	0.678	0.738	(0.010)	0.032	19.621
	TOTAL	**15.461**	**20.391**	**34.202**	**3.118**	**2.739**	**(0.037)**	**0.114**	**75.988**
1981	1st Qtr	4.085	6.237	8.391	0.754	0.735	(0.004)	0.033	20.230
	2nd Qtr	3.692	R4.337	7.732	0.830	0.671	(0.006)	0.031	R17.288
	3rd Qtr	4.208	R3.997	7.785	0.760	0.812	(0.001)	0.033	R17.594
	4th Qtr	3.987	5.355	8.023	0.722	0.756	(0.006)	0.030	18.868
	TOTAL	**15.973**	**R19.926**	**31.931**	**3.066**	**2.974**	**(0.017)**	**0.127**	**R73.979**
1982	1st Qtr	4.070	R6.390	7.792	0.956	0.749	(0.004)	0.023	R19.976
	2nd Qtr	3.577	R3.837	7.581	0.962	0.736	(0.007)	0.025	R16.710
	3rd Qtr	4.013	R3.529	7.464	0.828	0.827	(0.008)	0.030	R16.684
	4th Qtr	3.752	R4.733	7.578	0.825	0.773	(0.004)	0.030	R17.687
	TOTAL	**15.412**	**R18.489**	**30.416**	**3.571**	**3.084**	**(0.023)**	**0.108**	**R71.057**
1983	1st Qtr	3.773	R5.368	7.362	0.999	0.777	(0.003)	0.028	R18.303
	2nd Qtr	R3.609	R3.636	7.320	1.046	0.748	(0.005)	0.026	R16.378
	3rd Qtr	4.469	3.431	7.630	0.875	0.829	(0.003)	0.042	17.272

[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes industrial and utility production and net imports of electricity.
[3]Parentheses indicate exports are greater than imports.
[4]Includes geothermal power and electricity produced from wood and waste.
R = Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

Executive Summary

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

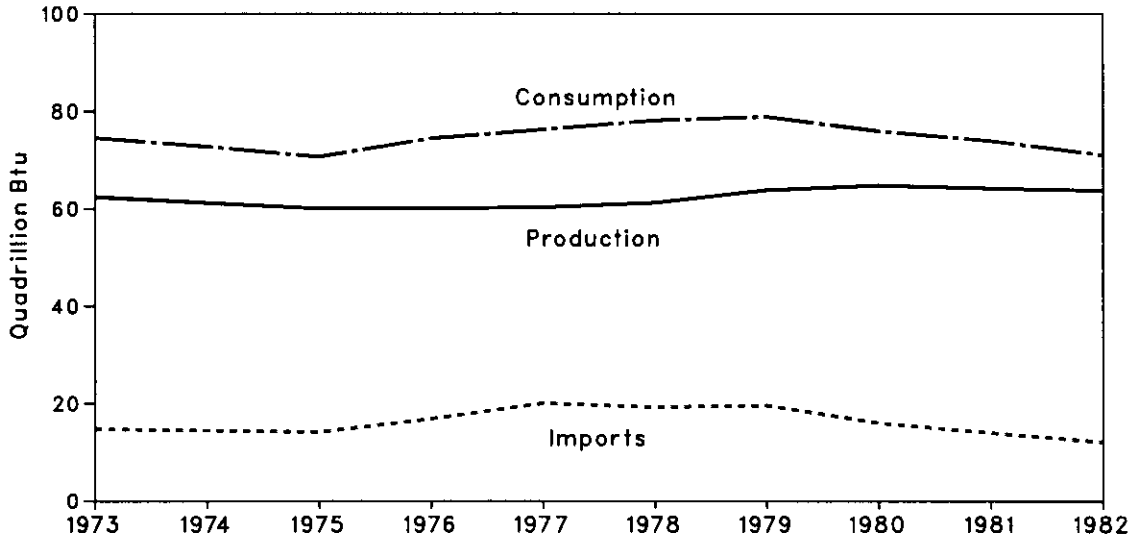
		Coal[2]	Crude Oil[3]	Refined Petroleum Products[4]	Natural Gas (Dry)	Electricity	Coal Coke	Total Net Imports
				Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**(1.443)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.659**
1974	**TOTAL**	**(1.585)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.059**	**12.175**
1975	**TOTAL**	**(1.766)**	**8.708**	**3.800**	**0.904**	**0.064**	**0.014**	**11.725**
1976	1st Qtr	(0.285)	2.389	1.088	0.237	0.022	(0.005)	3.446
	2nd Qtr	(0.482)	2.656	0.855	0.234	0.022	(0.007)	3.278
	3rd Qtr	(0.398)	3.064	0.980	0.211	0.022	0.002	3.883
	4th Qtr	(0.425)	3.112	1.059	0.240	0.022	0.010	4.018
	TOTAL	**(1.590)**	**11.221**	**3.982**	**0.922**	**0.089**	**0.000**	**14.625**
1977	1st Qtr	(0.230)	3.403	1.432	0.274	0.045	(0.004)	4.920
	2nd Qtr	(0.462)	3.628	0.881	0.241	0.045	(0.002)	4.331
	3rd Qtr	(0.387)	3.513	1.043	0.213	0.046	0.010	4.439
	4th Qtr	(0.345)	3.377	0.965	0.253	0.046	0.011	4.305
	TOTAL	**(1.424)**	**13.921**	**4.321**	**0.981**	**0.182**	**0.015**	**17.995**
1978	1st Qtr	(0.037)	3.138	1.112	0.241	0.050	0.008	4.512
	2nd Qtr	(0.312)	3.063	0.891	0.214	0.051	0.047	3.955
	3rd Qtr	(0.269)	3.422	0.942	0.209	0.052	0.040	4.395
	4th Qtr	(0.406)	3.502	0.987	0.276	0.052	0.037	4.448
	TOTAL	**(1.024)**	**13.125**	**3.932**	**0.941**	**0.204**	**0.131**	**17.309**
1979	1st Qtr	(0.282)	3.311	1.051	0.307	0.052	0.009	4.449
	2nd Qtr	(0.459)	3.252	0.787	0.307	0.052	0.026	3.966
	3rd Qtr	(0.463)	3.417	0.826	0.295	0.053	0.025	4.153
	4th Qtr	(0.526)	3.348	0.939	0.333	0.053	0.005	4.152
	TOTAL	**(1.730)**	**13.328**	**3.603**	**1.243**	**0.211**	**0.066**	**16.720**
1980	1st Qtr	(0.363)	3.021	0.902	0.326	0.054	(0.001)	3.940
	2nd Qtr	(0.652)	2.696	0.625	0.203	0.054	(0.015)	2.913
	3rd Qtr	(0.678)	2.446	0.626	0.174	0.055	(0.012)	2.611
	4th Qtr	(0.698)	2.423	0.760	0.254	0.055	(0.010)	2.783
	TOTAL	**(2.390)**	**10.586**	**2.912**	**0.957**	**0.217**	**(0.037)**	**12.246**
1981	1st Qtr	(0.578)	2.368	0.729	0.244	0.080	(0.004)	2.840
	2nd Qtr	(0.529)	2.127	0.552	0.185	0.081	(0.006)	2.410
	3rd Qtr	(0.883)	2.239	0.628	0.184	0.082	(0.001)	2.248
	4th Qtr	(0.929)	2.119	0.613	0.242	0.082	(0.006)	2.122
	TOTAL	**(2.918)**	**8.854**	**2.522**	**0.855**	**0.325**	**(0.017)**	**9.621**
1982	1st Qtr	(0.666)	1.522	0.568	0.256	0.080	(0.004)	1.755
	2nd Qtr	(0.825)	1.670	0.465	0.190	0.081	(0.007)	1.574
	3rd Qtr	(0.654)	1.967	0.535	0.181	0.082	(0.008)	2.103
	4th Qtr	(0.618)	1.748	0.556	0.267	0.082	(0.004)	2.031
	TOTAL	**(2.763)**	**6.907**	**2.124**	**0.892**	**0.326**	**(0.023)**	**7.463**
1983	1st Qtr	(0.390)	1.207	0.355	0.302	0.080	(0.003)	1.552
	2nd Qtr	(0.523)	1.654	0.514	0.192	0.081	(0.005)	1.913
	3rd Qtr	(0.569)	2.099	0.709	0.167	0.082	(0.003)	2.485

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

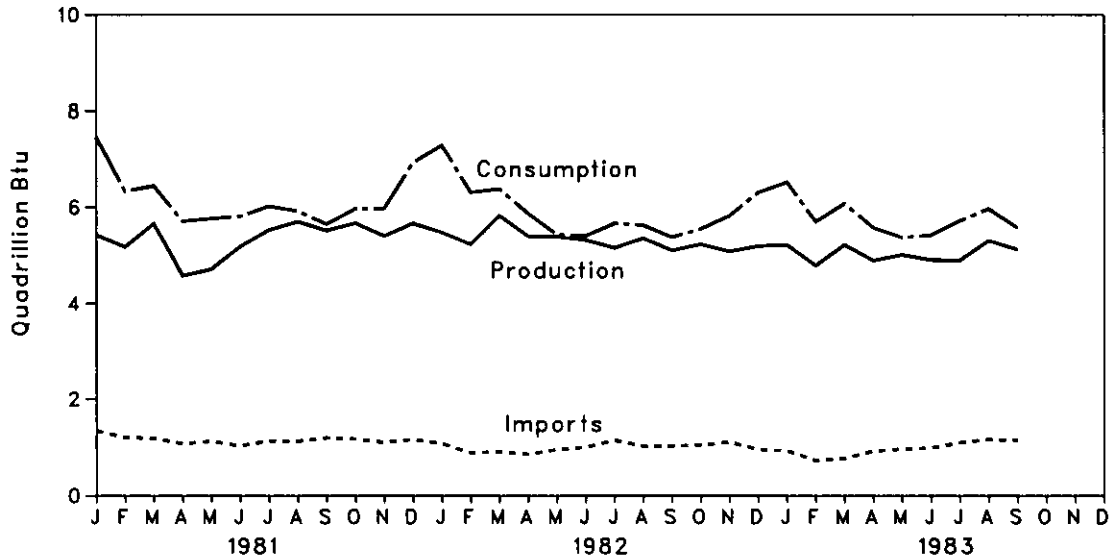
Executive Summary

Energy Summary

Yearly



Monthly



Executive Summary

Energy Summary[1]

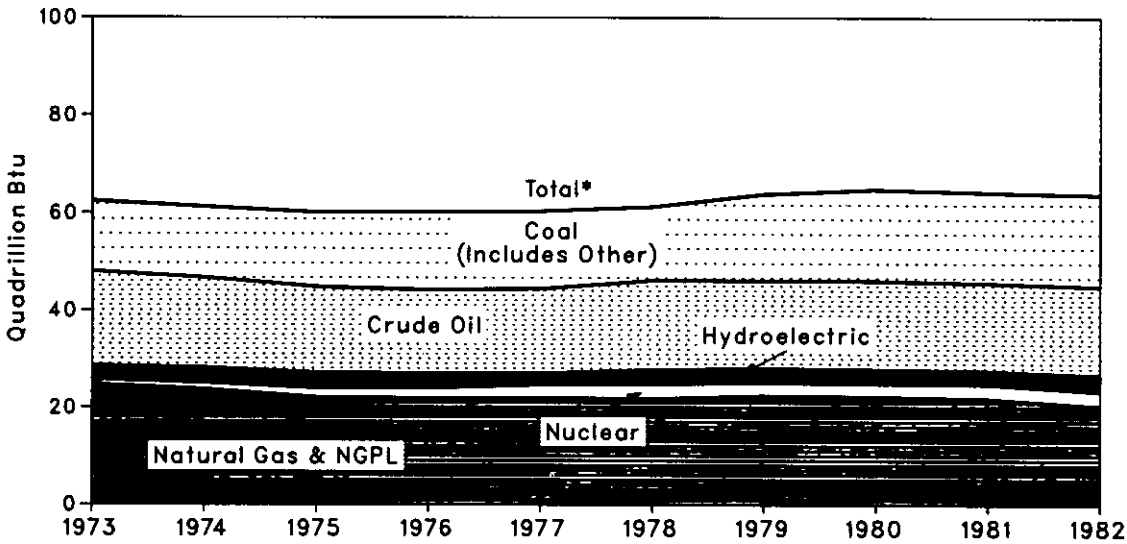
		Energy Production[2]	Energy Consumption[2]	Energy Imports[2]	Energy Exports
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**62.433**	**74.609**	**14.732**	**2.073**
1974	**TOTAL**	**61.229**	**72.759**	**14.417**	**2.241**
1975	**TOTAL**	**60.059**	**70.707**	**14.113**	**2.389**
1976	**TOTAL**	**60.091**	**74.510**	**16.838**	**2.213**
1977	**TOTAL**	**60.293**	**76.332**	**20.092**	**2.097**
1978	**TOTAL**	**61.231**	**78.175**	**19.261**	**1.952**
1979	**TOTAL**	**63.851**	**78.910**	**19.620**	**2.900**
1980	**TOTAL**	**64.812**	**75.988**	**15.972**	**3.726**
1981	January	R5.428	7.459	1.346	0.261
	February	R5.169	R6.331	1.210	0.278
	March	R5.660	R6.439	1.193	0.370
	April	R4.576	R5.708	1.084	0.325
	May	R4.711	5.764	1.131	0.274
	June	R5.180	5.816	1.041	0.246
	July	R5.524	R6.022	1.140	0.393
	August	R5.699	R5.923	1.132	0.420
	September	R5.520	R5.649	1.201	0.412
	October	R5.671	R5.972	1.179	0.466
	November	R5.403	5.975	1.109	0.440
	December	R5.666	R6.921	1.172	0.431
	TOTAL	**R64.207**	**R73.979**	**13.939**	**4.318**
1982	January	R5.478	R7.284	1.086	0.318
	February	R5.228	R6.312	0.890	0.376
	March	5.828	R6.379	0.915	0.442
	April	R5.400	R5.873	0.859	0.426
	May	5.387	5.433	0.960	0.419
	June	R5.318	5.405	1.014	0.415
	July	R5.156	R5.669	1.154	0.385
	August	5.356	R5.633	1.034	0.358
	September	R5.102	R5.382	1.034	0.376
	October	R5.230	R5.553	1.059	0.438
	November	R5.082	R5.827	1.117	0.351
	December	5.193	R6.307	0.966	0.322
	TOTAL	**R63.757**	**R71.057**	**12.089**	**4.626**
1983	January	R5.218	R6.517	0.935	0.302
	February	R4.782	R5.705	0.727	0.264
	March	R5.218	R6.081	0.773	0.318
	April	R4.888	R5.582	0.930	0.311
	May	R5.008	R5.375	0.973	0.342
	June	R4.901	R5.421	0.997	0.334
	July	R4.892	R5.723	1.107	0.273
	August	R5.307	R5.972	1.171	0.346
	September	5.123	5.577	1.151	0.325

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

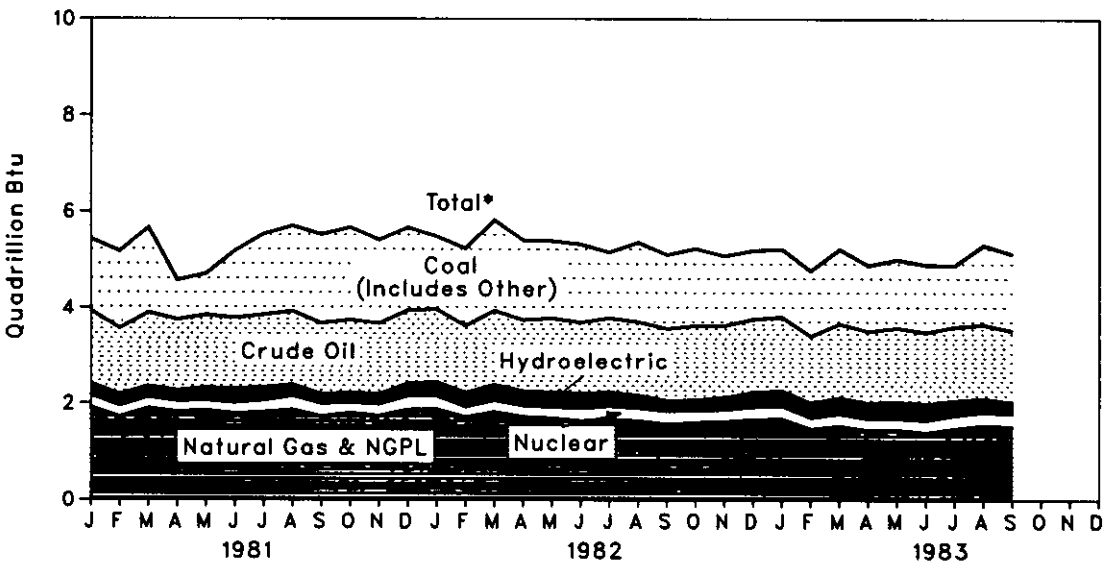
Executive Summary

Production of Energy by Source

Yearly



Monthly



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

Executive Summary

Production of Energy by Source

		Coal[1]	Crude Oil[2]	NGPL[3]	Natural Gas (Dry)	Hydro-electric Power[4]	Nuclear Electric Power	Other[5]	Total Energy Produced	Yearly Cumulative Energy Produced
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**14.366**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**62.433**	
1974	**TOTAL**	**14.468**	**18.575**	**2.471**	**21.210**	**3.177**	**1.272**	**0.056**	**61.229**	
1975	**TOTAL**	**15.189**	**17.729**	**2.374**	**19.640**	**3.155**	**1.900**	**0.072**	**60.059**	
1976	**TOTAL**	**15.853**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**60.091**	
1977	**TOTAL**	**15.829**	**17.454**	**2.327**	**19.565**	**2.333**	**2.702**	**0.082**	**60.293**	
1978	**TOTAL**	**15.037**	**18.434**	**2.245**	**19.485**	**2.937**	**3.024**	**0.068**	**61.231**	
1979	**TOTAL**	**17.651**	**18.104**	**2.286**	**20.076**	**2.931**	**2.715**	**0.089**	**63.851**	
1980	**TOTAL**	**18.640**	**18.249**	**2.254**	**19.916**	**2.900**	**2.739**	**0.114**	**64.812**	
1981	January	1.476	1.535	0.201	R1.709	0.235	0.259	0.011	R5.428	R5.428
	February	1.588	1.397	0.182	R1.535	0.222	0.236	0.010	R5.169	R10.597
	March	1.752	1.549	0.198	R1.693	0.217	0.240	0.011	R5.660	R16.256
	April	0.812	1.489	0.188	R1.633	0.218	0.225	0.010	R4.576	R20.833
	May	0.853	1.529	0.194	R1.656	0.254	0.215	0.010	R4.711	R25.544
	June	1.378	1.501	0.188	R1.595	0.277	0.231	0.010	R5.180	R30.724
	July	1.659	1.528	0.189	R1.622	0.264	0.252	0.011	R5.524	R36.248
	August	1.764	1.543	0.197	R1.664	0.227	0.294	0.011	R5.699	R41.947
	September	1.829	1.497	0.190	R1.539	0.187	0.266	0.011	R5.520	R47.467
	October	1.908	1.540	0.195	R1.603	0.190	0.224	0.011	R5.671	R53.138
	November	1.715	1.494	0.192	R1.545	0.199	0.249	0.010	R5.403	R58.541
	December	1.709	1.544	0.194	R1.676	0.251	0.284	0.010	R5.666	R64.207
	TOTAL	**18.443**	**18.146**	**2.307**	**R19.469**	**2.741**	**2.974**	**0.127**	**R64.207**	
1982	January	1.503	1.530	0.192	R1.682	0.282	0.280	0.009	R5.478	R5.478
	February	1.593	1.413	0.172	R1.542	0.280	0.220	0.008	R5.228	R10.706
	March	1.879	1.558	0.191	1.630	0.313	0.248	0.007	5.828	R16.534
	April	1.647	1.495	0.182	R1.539	0.293	0.238	0.007	R5.400	R21.934
	May	1.592	1.561	0.185	1.510	0.294	0.236	0.008	5.387	R27.321
	June	1.606	1.504	0.178	R1.465	0.294	0.262	0.010	R5.318	R32.639
	July	1.355	1.557	0.184	R1.485	0.286	0.278	0.010	R5.156	R37.795
	August	1.632	1.552	0.186	1.452	0.251	0.273	0.010	5.356	R43.151
	September	1.521	1.514	0.179	R1.393	0.209	0.277	0.010	R5.102	R48.253
	October	1.586	1.565	0.186	R1.421	0.207	0.254	0.011	R5.230	R53.483
	November	1.434	1.513	0.190	R1.436	0.244	0.253	0.011	R5.082	R58.565
	December	1.414	1.546	0.198	1.470	0.291	0.266	0.009	5.193	R63.757
	TOTAL	**18.763**	**18.309**	**2.224**	**R18.024**	**3.245**	**3.084**	**0.108**	**R63.757**	
1983	January	1.390	1.552	0.203	R1.480	0.308	0.274	0.011	R5.218	R5.218
	February	1.354	1.406	0.174	R1.304	0.293	0.242	0.008	R4.782	R10.000
	March	1.533	1.560	0.188	R1.349	0.318	0.261	0.010	R5.218	R15.218
	April	1.357	1.511	0.177	R1.275	0.315	0.244	0.009	R4.888	R20.106
	May	1.410	1.561	0.181	R1.281	0.327	0.241	0.007	R5.008	R25.114
	June	1.395	1.510	0.179	R1.222	0.322	0.264	0.010	R4.901	R30.015
	July	1.264	1.555	0.187	R1.300	0.294	0.279	0.012	R4.892	R34.906
	August	1.634	1.556	0.190	R1.362	0.271	0.279	0.016	R5.307	R40.213
	September	1.576	1.508	0.188	1.338	0.228	0.271	0.014	5.123	45.336

[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes lease condensate.
[3]Natural gas plant liquids.
[4]Includes industrial and utility production of hydropower.
[5]Includes geothermal power and electricity produced from wood and waste.
R=Revised data.
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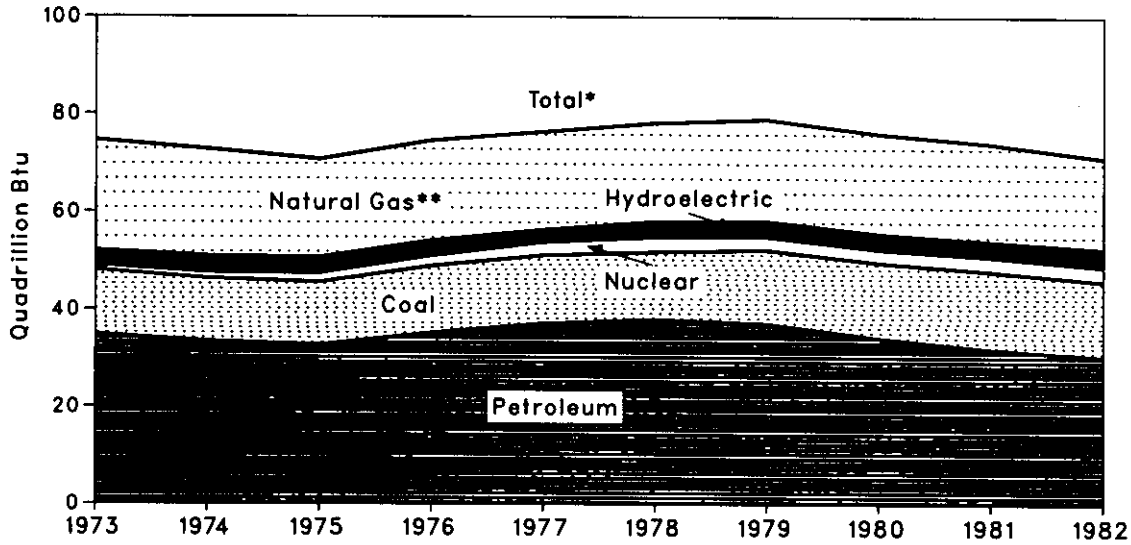
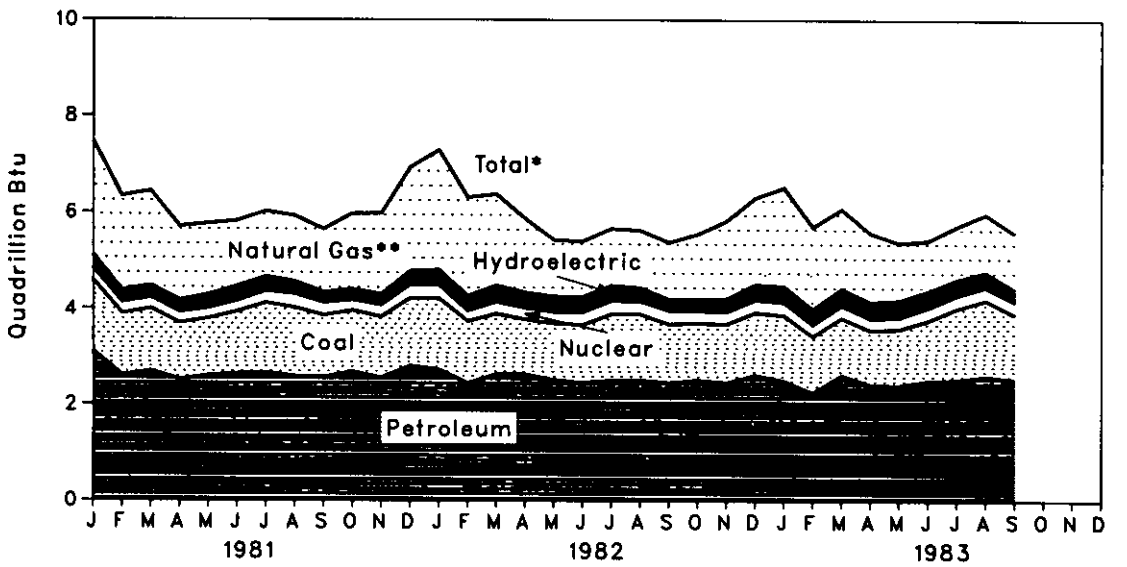
Executive Summary

Consumption of Energy by Source

Yearly



Monthly



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

Executive Summary

Consumption of Energy by Source

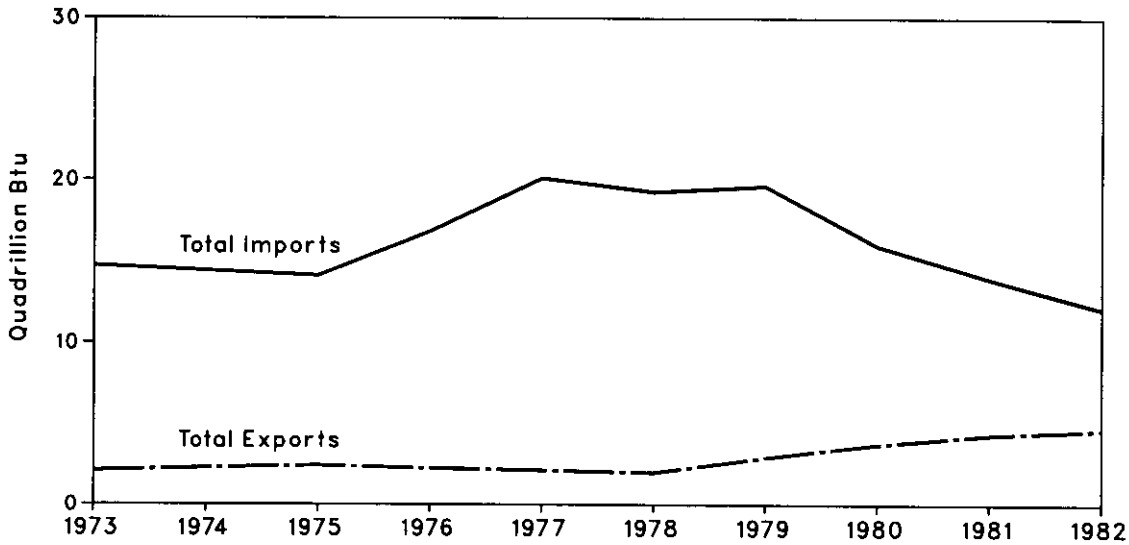
		Coal[1]	Natural Gas (Dry)	Petroleum	Hydroelectric Power[2]	Nuclear Electric Power	Net Imports of Coal Coke[3]	Other[4]	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**13.300**	**22.512**	**34.840**	**3.010**	**0.910**	**(0.008)**	**0.046**	**74.609**	
1974	**TOTAL**	**12.876**	**21.732**	**33.455**	**3.309**	**1.272**	**0.059**	**0.056**	**72.759**	
1975	**TOTAL**	**12.823**	**19.948**	**32.731**	**3.219**	**1.900**	**0.014**	**0.072**	**70.707**	
1976	**TOTAL**	**13.733**	**20.345**	**35.175**	**3.066**	**2.111**	**0.000**	**0.081**	**74.510**	
1977	**TOTAL**	**13.964**	**19.931**	**37.122**	**2.515**	**2.702**	**0.015**	**0.082**	**76.332**	
1978	**TOTAL**	**13.846**	**20.000**	**37.965**	**3.141**	**3.024**	**0.131**	**0.068**	**78.175**	
1979	**TOTAL**	**15.109**	**20.666**	**37.123**	**3.141**	**2.715**	**0.066**	**0.089**	**78.910**	
1980	**TOTAL**	**15.461**	**20.391**	**34.202**	**3.118**	**2.739**	**(0.037)**	**0.114**	**75.988**	
1981	January	1.473	2.341	3.113	0.263	0.259	0.000	0.011	7.459	7.459
	February	1.302	R1.946	2.592	0.247	0.236	(0.001)	0.010	R6.331	R13.791
	March	1.310	R1.950	2.686	0.244	0.240	(0.003)	0.011	R6.439	20.230
	April	1.191	R1.528	2.509	0.245	0.225	(0.001)	0.010	R5.708	R25.938
	May	1.200	1.465	2.593	0.281	0.215	0.000	0.010	5.764	R31.701
	June	1.301	1.344	2.631	0.304	0.231	(0.004)	0.010	5.816	R37.518
	July	1.469	R1.349	2.649	0.292	0.252	0.000	0.011	R6.022	R43.540
	August	1.437	R1.348	2.578	0.255	0.294	0.000	0.011	R5.923	R49.462
	September	1.302	R1.299	2.559	0.214	0.266	(0.002)	0.011	R5.649	R55.112
	October	1.290	R1.560	2.672	0.218	0.224	(0.003)	0.011	R5.972	R61.084
	November	1.280	1.663	2.548	0.226	0.249	0.000	0.010	5.975	R67.059
	December	1.418	R2.132	2.803	0.278	0.284	(0.003)	0.010	R6.921	R73.979
	TOTAL	**15.973**	**R19.926**	**31.931**	**3.066**	**2.974**	**(0.017)**	**0.127**	**R73.979**	
1982	January	1.498	R2.465	2.723	0.310	0.280	0.000	0.009	R7.284	R7.284
	February	1.303	R2.038	2.441	0.305	0.220	(0.001)	0.008	R6.312	R13.596
	March	1.270	R1.888	2.628	0.341	0.248	(0.002)	0.007	R6.379	R19.976
	April	1.161	R1.525	2.623	0.320	0.238	(0.001)	0.007	R5.873	R25.848
	May	1.196	1.167	2.507	0.322	0.236	(0.003)	0.008	5.433	R31.281
	June	1.220	1.145	2.451	0.320	0.262	(0.004)	0.010	5.405	R36.686
	July	1.392	R1.176	2.503	0.314	0.278	(0.003)	0.010	R5.669	R42.355
	August	1.385	R1.182	2.506	0.278	0.273	(0.001)	0.010	R5.633	R47.988
	September	1.237	R1.171	2.455	0.236	0.277	(0.003)	0.010	R5.382	R53.370
	October	1.200	R1.346	2.509	0.235	0.254	(0.001)	0.011	R5.553	R58.923
	November	1.239	R1.601	2.453	0.271	0.253	(0.002)	0.011	R5.827	R64.750
	December	1.313	R1.786	2.616	0.319	0.266	(0.001)	0.009	R6.307	R71.057
	TOTAL	**15.412**	**R18.489**	**30.416**	**3.571**	**3.084**	**(0.023)**	**0.108**	**R71.057**	
1983	January	1.376	R2.029	2.494	0.335	0.274	(0.001)	0.011	R6.517	R6.517
	February	1.190	R1.695	2.253	0.318	0.242	(0.001)	0.008	R5.705	R12.222
	March	1.207	R1.644	2.615	0.345	0.261	(0.001)	0.010	R6.081	R18.303
	April	1.152	R1.423	2.415	0.341	0.244	(0.002)	0.009	R5.582	R23.885
	May	1.186	R1.181	2.407	0.355	0.241	(0.002)	0.007	R5.375	R29.260
	June	1.272	R1.031	2.498	0.349	0.264	(0.001)	0.010	R5.421	R34.682
	July	1.499	R1.094	2.519	0.322	0.279	(0.002)	0.012	R5.723	R40.405
	August	1.597	R1.187	2.595	0.298	0.279	(0.001)	0.016	R5.972	R46.377
	September	1.372	1.150	2.516	0.255	0.271	(0.001)	0.014	5.577	51.954

[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes industrial and utility production and net imports of electricity.
[3]Parentheses indicate exports are greater than imports.
[4]Includes geothermal power and electricity produced from wood and waste.
R = Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

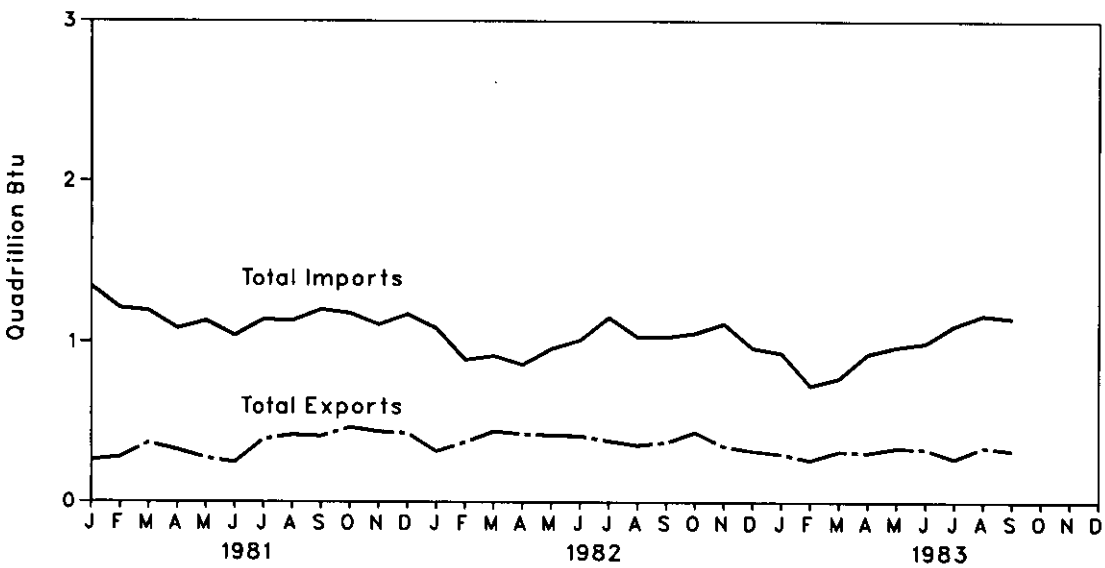
Executive Summary

Energy Imports and Exports

Yearly



Monthly



Executive Summary

Net Imports[1] of Energy by Source

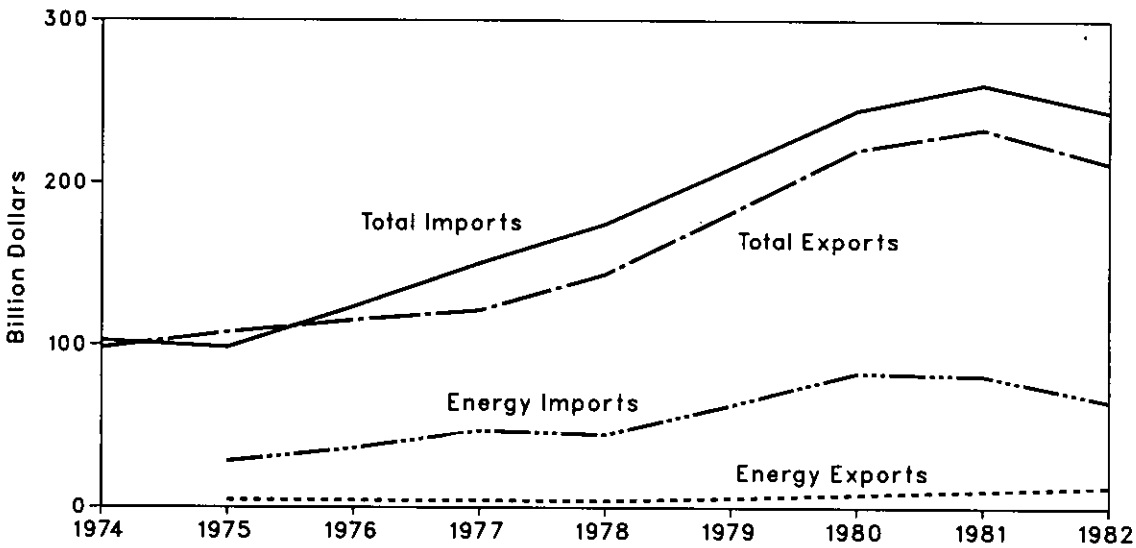
		Coal[2]	Crude Oil[3]	Refined Petroleum Products[4]	Natural Gas (Dry)	Electricity	Coal Coke	Total Net Imports	Yearly Cumulative Net Imports of Energy
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**(1.443)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.659**	
1974	**TOTAL**	**(1.585)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.059**	**12.175**	
1975	**TOTAL**	**(1.766)**	**8.708**	**3.800**	**0.904**	**0.064**	**0.014**	**11.725**	
1976	**TOTAL**	**(1.590)**	**11.221**	**3.982**	**0.922**	**0.089**	**0.000**	**14.625**	
1977	**TOTAL**	**(1.424)**	**13.921**	**4.321**	**0.981**	**0.182**	**0.015**	**17.995**	
1978	**TOTAL**	**(1.024)**	**13.125**	**3.932**	**0.941**	**0.204**	**0.131**	**17.309**	
1979	**TOTAL**	**(1.730)**	**13.328**	**3.603**	**1.243**	**0.211**	**0.066**	**16.720**	
1980	**TOTAL**	**(2.390)**	**10.586**	**2.912**	**0.957**	**0.217**	**(0.037)**	**12.246**	
1981	January	(0.151)	0.829	0.293	0.087	0.028	0.000	1.085	1.085
	February	(0.175)	0.762	0.240	0.081	0.025	(0.001)	0.932	2.018
	March	(0.252)	0.778	0.196	0.076	0.028	(0.003)	0.823	2.840
	April	(0.215)	0.723	0.161	0.065	0.027	(0.001)	0.759	3.599
	May	(0.157)	0.717	0.210	0.059	0.028	0.000	0.857	4.456
	June	(0.158)	0.687	0.181	0.061	0.027	(0.004)	0.794	5.250
	July	(0.281)	0.728	0.210	0.062	0.028	0.000	0.747	5.997
	August	(0.292)	0.717	0.199	0.060	0.028	0.000	0.712	6.709
	September	(0.310)	0.794	0.219	0.062	0.027	(0.002)	0.790	7.498
	October	(0.321)	0.749	0.184	0.075	0.028	(0.003)	0.713	8.211
	November	(0.308)	0.658	0.214	0.078	0.027	0.000	0.668	8.879
	December	(0.299)	0.712	0.215	0.089	0.028	(0.003)	0.741	9.621
	TOTAL	**(2.918)**	**8.854**	**2.522**	**0.855**	**0.325**	**(0.017)**	**9.621**	
1982	January	(0.160)	0.623	0.181	0.096	0.028	0.000	0.768	0.768
	February	(0.234)	0.438	0.206	0.081	0.025	(0.001)	0.515	1.282
	March	(0.273)	0.461	0.181	0.078	0.028	(0.002)	0.473	1.755
	April	(0.283)	0.467	0.153	0.071	0.027	(0.001)	0.433	2.188
	May	(0.262)	0.550	0.166	0.063	0.028	(0.003)	0.541	2.730
	June	(0.279)	0.653	0.146	0.056	0.027	(0.004)	0.599	3.329
	July	(0.239)	0.725	0.195	0.063	0.028	(0.003)	0.769	4.098
	August	(0.190)	0.640	0.144	0.056	0.028	(0.001)	0.676	4.774
	September	(0.225)	0.603	0.196	0.062	0.027	(0.003)	0.658	5.432
	October	(0.259)	0.613	0.167	0.073	0.028	(0.001)	0.621	6.053
	November	(0.202)	0.629	0.228	0.087	0.027	(0.002)	0.767	6.819
	December	(0.157)	0.506	0.161	0.106	0.028	(0.001)	0.644	7.463
	TOTAL	**(2.763)**	**6.907**	**2.124**	**0.892**	**0.326**	**(0.023)**	**7.463**	
1983	January	(0.115)	0.509	0.097	0.117	0.028	(0.001)	0.633	0.633
	February	(0.113)	0.327	0.127	0.098	0.025	(0.001)	0.463	1.096
	March	(0.162)	0.371	0.132	0.087	0.028	(0.001)	0.455	1.552
	April	(0.156)	0.535	0.144	0.073	0.027	(0.002)	0.620	2.171
	May	(0.179)	0.533	0.189	0.062	0.028	(0.002)	0.630	2.802
	June	(0.187)	0.586	0.181	0.057	0.027	(0.001)	0.663	3.464
	July	(0.159)	0.672	0.243	0.052	0.028	(0.002)	0.833	4.298
	August	(0.216)	0.722	0.238	0.055	0.028	(0.001)	0.825	5.123
	September	(0.194)	0.706	0.228	0.061	0.027	(0.001)	0.826	5.949

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

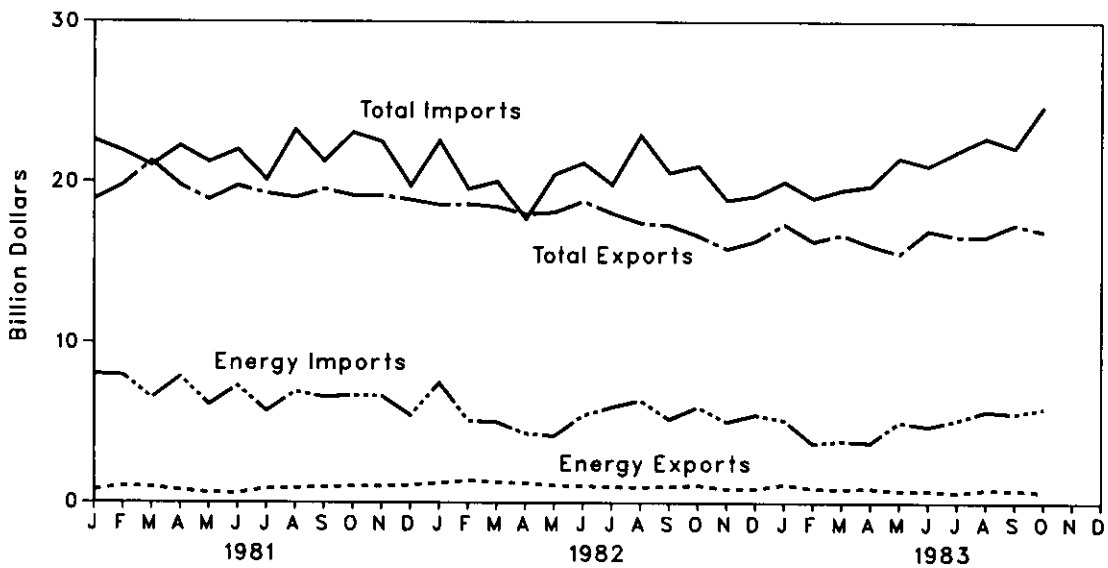
Executive Summary

Merchandise Trade Value

Yearly



Monthly



Executive Summary

Merchandise Trade Value

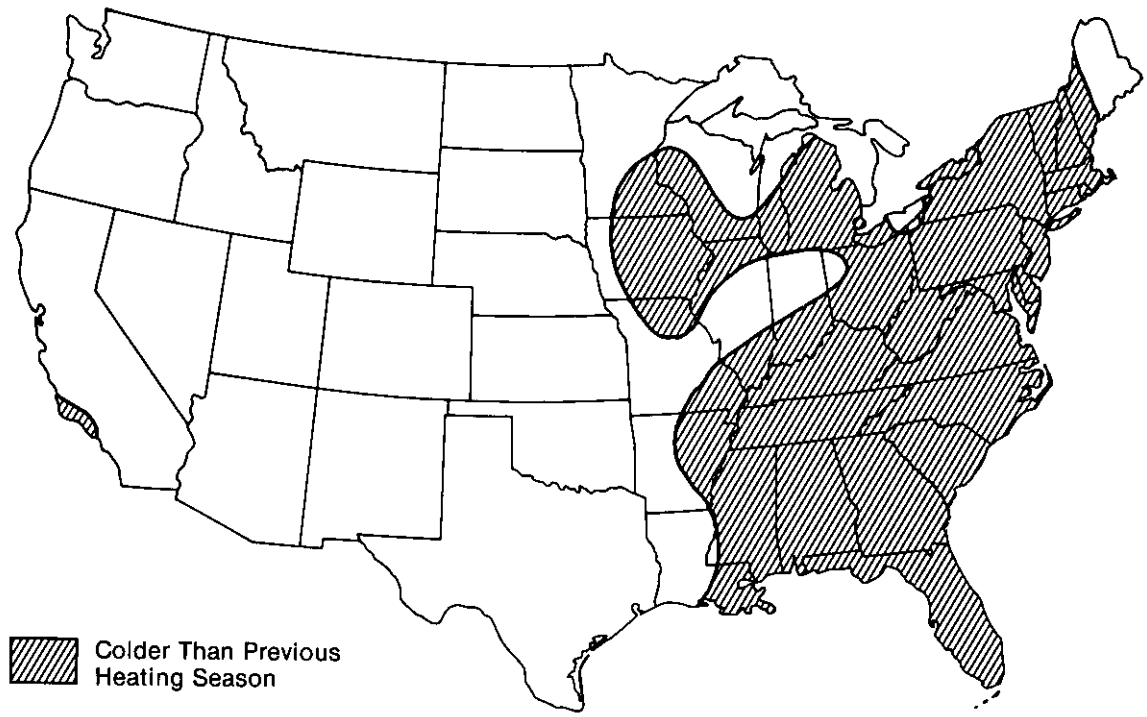
		Exports			Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total
		Million dollars								
1974	**TOTAL**	**NA**	**NA**	**98,092**	**NA**	**NA**	**102,559**	**NA**	**NA**	**-4,467**
1975	**TOTAL**	**4,470**	**103,182**	**107,652**	**28,325**	**70,178**	**98,503**	**-23,855**	**+33,004**	**+9,149**
1976	**TOTAL**	**4,226**	**110,997**	**115,223**	**36,384**	**87,093**	**123,477**	**-32,158**	**+23,904**	**-8,254**
1977	**TOTAL**	**4,184**	**117,048**	**121,232**	**47,153**	**103,237**	**150,390**	**-42,969**	**+13,811**	**-29,158**
1978	**TOTAL**	**3,882**	**139,799**	**143,681**	**44,763**	**129,994**	**174,757**	**-40,881**	**+9,805**	**-31,076**
1979	**TOTAL**	**5,675**	**176,185**	**181,860**	**63,077**	**146,381**	**209,458**	**-57,402**	**+29,804**	**-27,599**
1980	**TOTAL**	**7,982**	**212,644**	**220,626**	**82,924**	**161,947**	**244,871**	**-74,942**	**+50,697**	**-24,244**
1981	January	756	18,146	18,902	8,007	14,609	22,616	-7,251	+3,537	-3,714
	February	999	18,789	19,788	7,939	13,977	21,916	-6,940	+4,812	-2,127
	March	939	20,339	21,278	6,471	14,558	21,029	-5,532	+5,781	+249
	April	738	19,048	19,786	7,831	14,418	22,249	-7,093	+4,630	-2,463
	May	593	18,306	18,899	6,075	15,157	21,232	-5,482	+3,149	-2,333
	June	565	19,185	19,750	7,252	14,753	22,005	-6,687	+4,432	-2,255
	July	847	18,442	19,289	5,687	14,427	20,114	-4,840	+4,015	-825
	August	884	18,147	19,031	6,876	16,366	23,242	-5,992	+1,781	-4,212
	September	939	18,612	19,551	6,555	14,719	21,274	-5,616	+3,893	-1,724
	October	991	18,172	19,163	6,638	16,439	23,077	-5,648	+1,733	-3,914
	November	997	18,156	19,153	6,608	15,900	22,508	-5,611	+2,256	-3,356
	December	1,067	17,818	18,885	5,422	14,324	19,746	-4,355	+3,494	-861
	TOTAL	**10,279**	**223,398**	**233,677**	**81,360**	**179,622**	**260,982**	**-71,081**	**+43,776**	**-27,305**
1982	January	1,205	17,379	18,584	7,439	15,134	22,573	-6,234	+2,245	-3,989
	February	1,361	17,253	18,614	5,107	14,463	19,570	-3,746	+2,790	-956
	March	1,256	17,206	18,462	5,009	15,010	20,019	-3,753	+2,196	-1,557
	April	1,201	16,804	18,005	4,312	13,402	17,714	-3,111	+3,402	+291
	May	1,065	17,059	18,124	4,167	16,310	20,477	-3,102	+749	-2,353
	June	1,035	17,788	18,823	5,427	15,760	21,187	-4,392	+2,028	-2,364
	July	974	17,086	18,060	5,943	13,906	19,849	-4,969	+3,180	-1,790
	August	961	16,502	17,463	6,353	16,577	22,930	-5,392	-75	-5,467
	September	998	16,322	17,320	5,201	15,380	20,581	-4,203	+942	-3,261
	October	1,072	15,599	16,671	5,947	15,059	21,006	-4,875	+540	-4,335
	November	847	15,005	15,852	5,037	13,855	18,892	-4,190	+1,150	-3,041
	December	855	15,492	16,347	5,468	13,686	19,154	-4,613	+1,806	-2,808
	TOTAL	**12,729**	**199,464**	**212,193**	**65,409**	**178,543**	**243,952**	**-52,680**	**+20,921**	**-31,759**
1983	January	1,132	16,261	17,393	5,142	14,879	20,021	-4,010	+1,382	-2,628
	February	878	15,448	16,326	3,704	15,311	19,015	-2,826	+137	-2,689
	March	850	15,902	16,752	3,865	15,660	19,525	-3,015	+241	-2,774
	April	892	15,182	16,074	3,763	16,008	19,771	-2,871	-826	-3,697
	May	724	14,842	15,566	5,033	16,481	21,514	-4,309	-1,639	-5,948
	June	752	16,256	17,008	4,767	16,257	21,024	-4,015	-1	-4,016
	July	628	16,001	16,629	5,164	16,786	21,950	-4,536	-785	-5,321
	August	828	15,802	16,630	5,703	17,079	22,782	-4,875	-1,277	-6,152
	September	800	16,587	17,387	5,571	16,604	22,175	-4,771	-17	-4,788
	October	682	16,269	16,951	5,872	18,891	24,763	-5,190	-2,622	-7,812

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

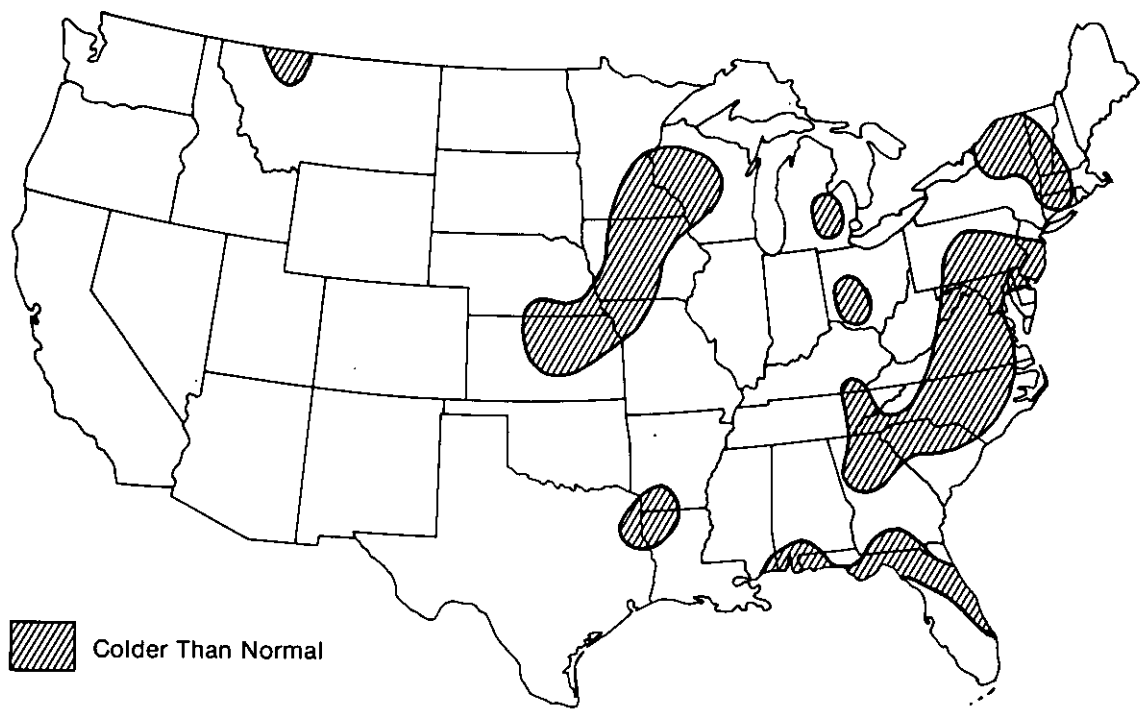
Executive Summary

Heating Degree-Days Accumulated from July 1, 1983, through December 3, 1983

Departure from Previous Heating Season



Departure from Normal



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

Executive 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]	1982	1983	Normal to 1983	1982 to 1983	Normal[2]	1982	1983	Normal to 1983	1982 to 1983
New England Conn., Maine, Mass., N.H., R.I., Vt.	706	619	666	-5.7	7.6	1322	1271	1226	-7.3	-3.5
Middle Atlantic N.J., N.Y., Pa.	654	585	636	-2.8	8.7	1121	1069	1115	-0.5	4.3
Eastern North Central Ill., Ind., Mich., Ohio, Wisc.	744	696	680	-8.6	-2.3	1231	1224	1184	-3.8	-3.3
Western North Central Iowa, Kans., Minn., Mo., Nebr., N.Dak., S.Dak.	806	843	748	-7.2	-11.3	1350	1403	1267	-6.1	-9.7
SOUTH ATLANTIC Del., Fla., Ga., Md. and D.C., N.C., S.C., Va., W.Va.	366	311	364	-0.5	17.0	549	508	549	0.0	8.1
EASTERN SOUTH CENTRAL Ala., Ky., Miss., Tenn.	454	390	444	-2.2	13.8	684	613	638	-6.7	4.1
Western South Central Ark., La., Okla., Tex.	297	288	250	-15.8	-13.2	387	386	314	-18.9	-18.7
Mountain Ariz., Colo., Idaho, Mont., Nev., N.Mex., Utah, Wyo.	702	740	678	-3.4	-8.4	1286	1352	1156	-10.1	-14.5
Pacific Coast Calif., Oreg., Wash.	410	428	351	-14.4	-18.0	797	664	545	-31.6	-17.9
U.S. AVERAGE[3]	**557**	**525**	**520**	**-6.6**	**-1.0**	**935**	**900**	**862**	**-7.8**	**-4.2**

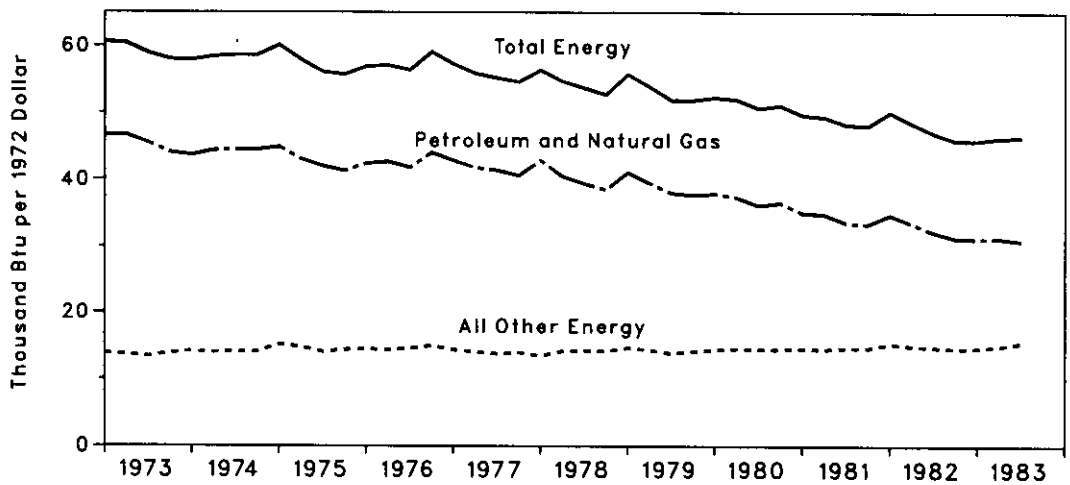
[1] See Note on the last page of this section for explanation of degree-days.
[2] Normal is based on calculations of data from 1951 through 1980.
[3] Excludes Alaska and Hawaii.

Executive Summary

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

		Annual Rate of Energy Consumption	Gross National Product (GNP)	Energy Consumption per Dollar of GNP (Seasonally Adjusted)		
				Total Energy	Petroleum and Natural Gas	All Other Energy
		Quadrillion Btu	Trillion 1972 dollars	Thousand Btu per 1972 dollar		
1973		**74.609**	**1.254**	**59.5**	**45.7**	**13.8**
1974		**72.759**	**1.246**	**58.4**	**44.3**	**14.1**
1975		**70.707**	**1.232**	**57.4**	**42.8**	**14.6**
1976		**74.510**	**1.298**	**57.4**	**42.8**	**14.6**
1977		**76.332**	**1.370**	**55.7**	**41.6**	**14.1**
1978		**78.175**	**1.439**	**54.3**	**40.3**	**14.0**
1979		**78.910**	**1.479**	**53.4**	**39.1**	**14.3**
1980		**75.988**	**1.475**	**51.5**	**37.0**	**14.5**
1981	1st Qtr[2]	R75.105	1.510	R49.7	35.1	14.6
	2nd Qtr[2]	R74.729	1.513	R49.4	34.9	14.5
	3rd Qtr[2]	R73.706	1.526	R48.3	33.6	14.7
	4th Qtr[2]	R72.413	1.507	R48.1	33.4	14.7
	YEAR	**R73.979**	**1.514**	**48.9**	**34.3**	**14.6**
1982	1st Qtr[2]	R74.407	1.486	R50.1	34.8	15.3
	2nd Qtr[2]	R72.150	1.489	R48.5	33.5	15.0
	3rd Qtr[2]	R69.771	1.486	R47.0	32.2	14.8
	4th Qtr[2]	R67.989	1.481	R45.9	31.3	14.6
	YEAR	**R71.057**	**1.485**	**R47.8**	**32.9**	**14.9**
1983	1st Qtr[2]	R68.332	1.490	R45.9	31.2	14.7
	2nd Qtr[2]	R70.678	1.525	R46.3	31.3	15.0
	3rd Qtr[2]	72.095	1.554	46.4	30.9	15.5

Quarterly Energy Consumption per Dollar of Gross National Product[2] (Seasonally Adjusted)



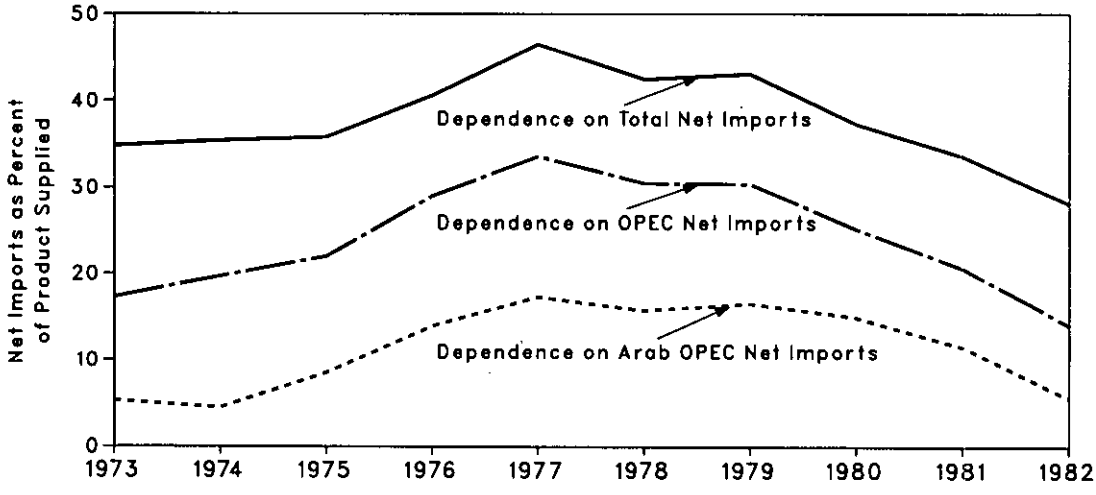
[1]Current dollars are converted to 1972 dollars by the Department of Commerce, Bureau of Economic Analysis.
[2]Quarterly data are seasonally adjusted and shown at annual rates.
R=Revised data.
Notes • Geographic coverage is the 50 States and the District of Columbia.
• Yearly data may not equal sum of quarters due to seasonality adjustments and independent rounding.
Sources: • See the last page of this section.

Executive Summary

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

		Net Imports[2]			Domestic Petroleum Products Supplied	Net Imports as Percent of U.S. Petroleum Products Supplied		
		from Arab OPEC[3] Countries	from All OPEC[4] Countries	from All Countries		from Arab OPEC[3] Countries	from All OPEC[4] Countries	from All Countries
ANNUAL RATE			Thousand Barrels per Day				Percent	
1973	**AVERAGE**	**915**	**2,991**	**6,025**	**17,308**	**5.3**	**17.3**	**34.8**
1974	**AVERAGE**	**751**	**3,277**	**5,891**	**16,653**	**4.5**	**19.7**	**35.4**
1975	**AVERAGE**	**1,382**	**3,598**	**5,847**	**16,322**	**8.5**	**22.0**	**35.8**
1976	**AVERAGE**	**2,423**	**5,063**	**7,090**	**17,461**	**13.9**	**29.0**	**40.6**
1977	**AVERAGE**	**3,184**	**6,190**	**8,564**	**18,431**	**17.3**	**33.6**	**46.5**
1978	**AVERAGE**	**2,962**	**5,747**	**8,001**	**18,847**	**15.7**	**30.5**	**42.5**
1979	**AVERAGE**	**3,054**	**5,632**	**7,985**	**18,513**	**16.5**	**30.4**	**43.1**
1980	**AVERAGE**	**2,549**	**4,293**	**6,365**	**17,056**	**14.9**	**25.2**	**37.3**
1981	1st Qtr	2,060	3,804	5,964	17,113	12.0	22.2	34.9
	2nd Qtr	1,786	3,117	5,099	15,597	11.5	20.0	32.7
	3rd Qtr	1,857	3,181	5,400	15,532	12.0	20.5	34.8
	4th Qtr	1,679	3,167	5,151	16,008	10.5	19.8	32.2
	AVERAGE	**1,845**	**3,315**	**5,401**	**16,058**	**11.5**	**20.6**	**33.6**
1982	1st Qtr	1,105	2,391	4,038	15,891	7.0	15.1	25.4
	2nd Qtr	817	1,925	4,074	15,292	5.3	12.6	26.6
	3rd Qtr	820	2,239	4,720	14,893	5.5	15.0	31.7
	4th Qtr	672	1,990	4,353	15,120	4.4	13.2	28.8
	AVERAGE	**851**	**2,136**	**4,298**	**15,296**	**5.6**	**14.0**	**28.1**
1983	1st Qtr	346	1,139	3,024	15,015	2.3	7.6	20.1
	2nd Qtr	446	1,655	4,142	14,764	3.0	11.2	28.1
	3rd Qtr	841	2,478	5,297	15,223	5.5	16.3	34.8

U.S. Dependence on Petroleum Net Imports



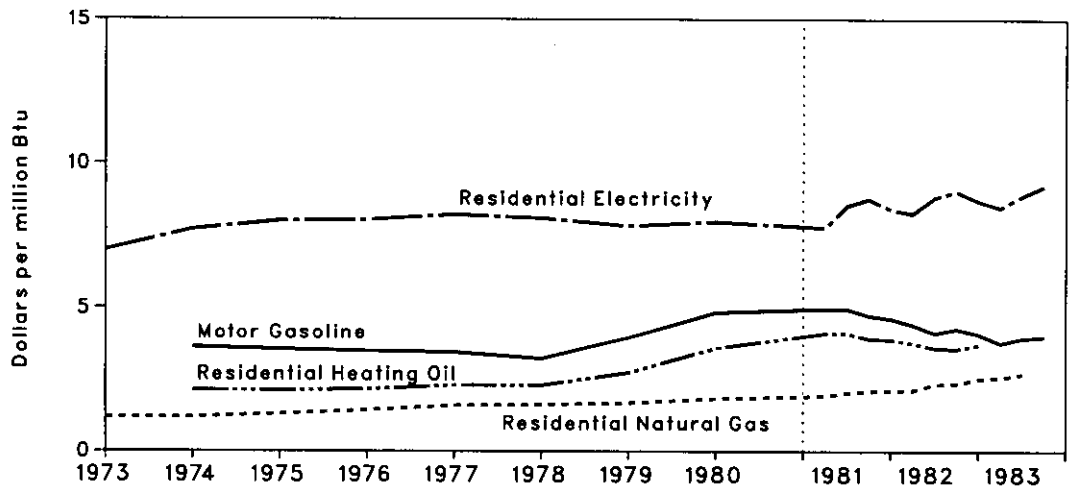
[1]Beginning in October 1977, Strategic Petroleum Reserves are included.
[2]Net imports equals imports minus exports. Imports from OPEC countries exclude indirect imports which are refined products imported primarily from Caribbean and West European areas and refined from crude oil produced in OPEC countries.
[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.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last page of this section.

Executive Summary

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

		Leaded Regular Motor Gasoline		Residential Heating Oil		Residential Natural Gas		Residential Electricity	
		cent/gal	$/MMBtu	cent/gal	$/MMBtu	cent/Mcf	$/MMBtu	cent/kWh	$/MMBtu
1973	**AVERAGE**	**NA**	**NA**	**NA**	**NA**	**121.2**	**1.19**	**2.39**	**7.00**
1974	**AVERAGE**	**45.1**	**3.61**	**29.4**	**2.12**	**121.4**	**1.19**	**2.63**	**7.71**
1975	**AVERAGE**	**44.1**	**3.53**	**29.3**	**2.11**	**132.8**	**1.30**	**2.73**	**8.00**
1976	**AVERAGE**	**43.4**	**3.47**	**29.8**	**2.15**	**145.4**	**1.43**	**2.74**	**8.03**
1977	**AVERAGE**	**42.9**	**3.43**	**31.8**	**2.29**	**162.2**	**1.59**	**2.80**	**8.21**
1978	**AVERAGE**	**40.1**	**3.21**	**31.7**	**2.29**	**164.4**	**1.62**	**2.76**	**8.09**
1979	**AVERAGE**	**49.4**	**3.95**	**37.8**	**2.73**	**171.5**	**1.68**	**2.67**	**7.83**
1980	**AVERAGE**	**60.5**	**4.84**	**49.7**	**3.58**	**186.9**	**1.83**	**2.72**	**7.97**
1981	1st Qtr	62.1	4.97	57.0	4.11	197.5	1.93	2.65	7.77
	2nd Qtr	62.1	4.97	57.2	4.12	209.1	2.04	2.91	8.53
	3rd Qtr	59.3	4.74	54.4	3.92	215.0	2.10	2.99	8.76
	4th Qtr	57.9	4.63	54.0	3.89	216.3	2.11	2.87	8.41
	AVERAGE	**60.4**	**4.83**	**55.7**	**4.01**	**209.7**	**2.05**	**2.85**	**8.35**
1982	1st Qtr	55.3	4.42	52.2	3.76	218.3	2.13	2.82	8.26
	2nd Qtr	51.7	4.13	49.8	3.59	239.0	2.33	3.01	8.82
	3rd Qtr	53.5	4.28	49.4	3.56	242.2	2.37	3.08	9.03
	4th Qtr	51.3	4.10	51.3	3.70	257.9	2.52	2.97	8.70
	AVERAGE	**53.0**	**4.24**	**51.4**	**3.71**	**239.7**	**2.34**	**2.97**	**8.70**
1983	1st Qtr	47.1	3.77	NA	NA	263.3	2.57	2.89	8.47
	2nd Qtr	49.3	3.94	NA	NA	276.1	2.69	3.03	8.88
	3rd Qtr	50.0	4.00	NA	NA	NA	NA	3.14	9.20

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



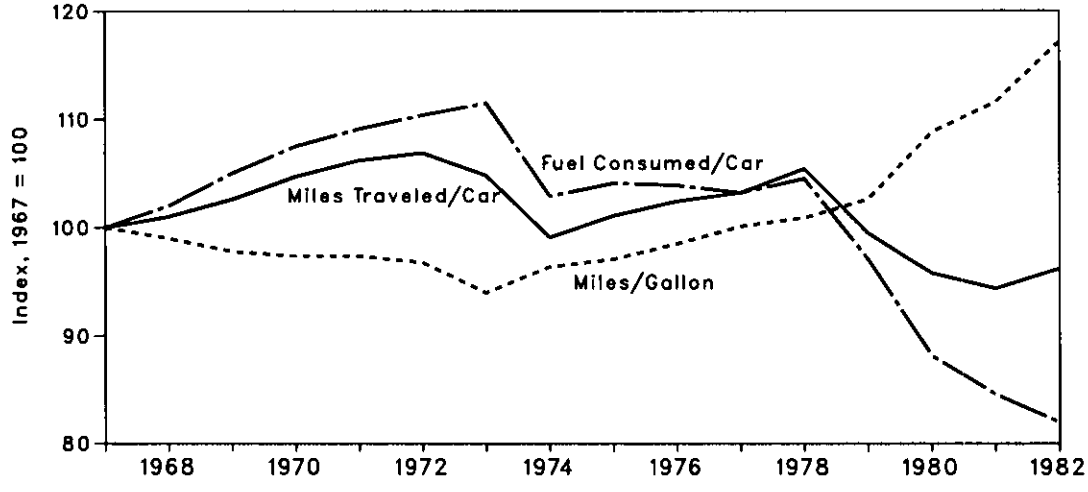
NA=Not available.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last page of this section.

Executive Summary

Energy Indicator—U.S. Passenger Car Efficiency

	Average Fuel Consumed per Car		Average Miles Traveled per Car		Average Miles Traveled per Gallon of Fuel Consumed	
	Gallons	Index	Miles	Index	Miles	Index
1967	684	100.0	9,531	100.0	13.93	100.0
1968	698	102.0	9,627	101.0	13.79	99.0
1969	718	105.0	9,782	102.6	13.63	97.8
1970	735	107.5	9,978	104.7	13.57	97.4
1971	746	109.1	10,121	106.2	13.57	97.4
1972	755	110.4	10,184	106.9	13.49	96.8
1973	763	111.5	9,992	104.8	13.10	94.0
1974	704	102.9	9,448	99.1	13.43	96.4
1975	712	104.1	9,634	101.1	13.53	97.1
1976	711	103.9	9,763	102.4	13.72	98.5
1977	706	103.2	9,839	103.2	13.94	100.1
1978	715	104.5	10,046	105.4	14.06	100.9
1979	664	97.1	9,485	99.5	14.29	102.6
1980	603	88.2	9,135	95.8	15.15	108.8
1981	579	84.6	9,002	94.4	15.54	111.6
1982	561	82.0	9,167	96.2	16.33	117.2

U.S. Passenger Car Efficiency Index



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

Notes and Sources for the Executive Summary Section

Notes

1. **Domestic Production:** Domestic production of energy includes production of coal (anthracite, bituminous coal, and lignite), crude oil and lease condensate, natural gas plant liquids, natural gas (dry), electric utility and industrial production of hydropower, and electricity generated from nuclear power, geothermal power, and wood and waste. The volumetric data were converted to approximate heat contents (Btu values) of these energy sources using conversion factors listed on the inside back cover of this publication.
2. **Domestic Consumption:** Domestic consumption of energy includes consumption of coal (anthracite, bituminous coal, and lignite), natural gas (dry), refined petroleum products supplied, electric utility and industrial production of hydropower, net imports of electricity produced from hydropower, net imports of coke made from coal, and electricity generated from nuclear power, geothermal power, and wood and waste. Approximate heat contents (Btu values) were derived using conversion factors listed on the inside back cover of this publication.
3. **U.S. Energy Imports:** U.S. energy imports include imports of bituminous coal, crude oil (including crude oil imported for the Strategic Petroleum Reserve), refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.
4. **U.S. Energy Exports:** U.S. energy exports include bituminous coal, crude oil, refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.
5. **Merchandise Trade Value:** The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory (which includes the 50 United States, the District of Columbia, and Puerto Rico) and the Virgin Islands. The statistics exclude imports into Guam, American Samoa, and other U.S. possessions, as well as shipments between the United States and Puerto Rico and the Virgin Islands, between the United States and other U.S. possessions, and between any of these outlying areas. From January 1981 forward, import data presented are on a customs value basis. All other values are on a free alongside ship (f.a.s.) basis. Monthly data are adjusted for seasonal and working-day variation, if present and identifiable; annual data are unadjusted, and annual totals may not equal sum of monthly totals. Statistics include nonmonetary gold. Statistics exclude Department of Defense Military Program Grant-Aid shipments. "All Other" and "Total" columns include foreign exports (i.e., reexports). The "Energy" columns include mineral fuels, lubricants, and related material. "Imports" represent general imports (i.e., entries for immediate consumption, entries into customs bonded warehouses, and entries for the Strategic Petroleum Reserve). "Trade Balance" is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. The "All Other" columns are calculated by subtracting "Energy" from "Total."
6. **Degree-Days:** Degree-days are relative measurements of outdoor air temperature. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65° F by convention. Heating degree-days are deviations of the mean daily temperature below 65° F. For example, if a weather station recorded a mean daily temperature of 78° F, cooling degree-days for that station would be 13 (and heating degree-days, 0). A weather station recording a mean daily temperature of 40° F would report 25 heating degree-days (and 0 cooling degree-days).

There are several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information published in the Monthly Energy Review (MER) is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland. The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at these weather stations is used to calculate statewide degree-day averages based on population. The State figures are then aggregated into Census Divisions and into the national average. The population weights currently in use represent resident State population data estimated for 1980 by the U.S. Department of Commerce, Bureau of the Census. The data shown in the MER are available sooner than the Historical Climatology Series 5-1 and 5-2 developed by the National Climatic Center, Asheville, North Carolina, which compiles data from some 8,000 weather stations.

Sources

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

Energy Consumption

Total U.S. energy consumption in September 1983 was 5.6 quadrillion Btu, 3.6 percent above the September 1982 level.

Residential and commercial sector consumption was 1.8 quadrillion Btu in September 1983, up 3.9 percent from the September 1982 level. The residential and commercial sector accounted for 31.8 percent of total consumption in both September 1983 and September 1982.

Industrial sector consumption was 2.2 quadrillion Btu in September 1983, up 5.1 percent from the September 1982 level. This sector consumed 39.5 percent of the September 1983 total, up from the sector's 39.0-percent share in September 1982.

Transportation sector consumption was 1.6 quadrillion Btu in September 1983, up 1.1 percent from the September 1982 level. This sector consumed 28.4 percent of the September 1983 total, down from the sector's 29.1-percent share in September 1982.

The electric utilities consumption was an estimated 2.1 quadrillion Btu of energy in September 1983, 8.1 percent higher than in September 1982. Coal contributed 54.1 percent of the energy consumed by electric utilities in September 1983, while natural gas contributed 14.6 percent; nuclear, 12.8 percent; hydroelectric, 11.9 percent; petroleum, 5.8 percent; and geothermal and wood and waste, 0.7 percent.

Energy Consumption Summary for September 1983

(Quadrillion (10^{15}) Btu)

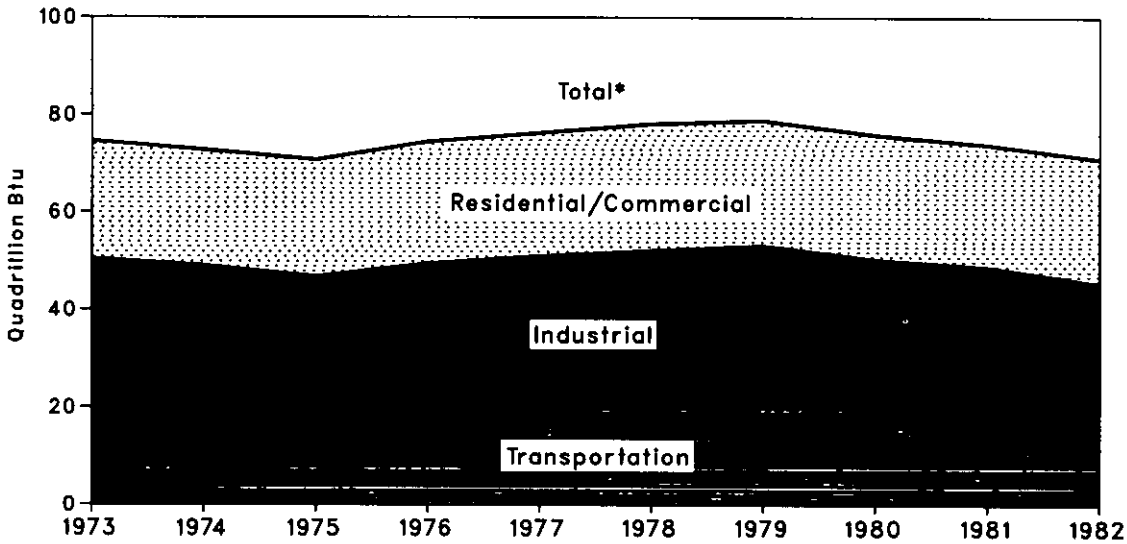
Primary Energy Source	Sector: Residential and Commercial	Industrial	Transportation	Electric Utilities	TOTAL
Coal	0.015	0.203	0.000	1.143	1.372
Natural Gas (dry)	0.233	0.571	0.038	0.309	1.150
Petroleum	0.149	0.700	1.544	0.123	2.516
Hydroelectric	0.000	0.002	0.000	0.252	0.255
Nuclear	0.000	0.000	0.000	0.271	0.271
Net Coke Imports	0.000	(0.001)	0.000	0.000	(0.001)
Other	0.000	0.000	0.000	0.014	0.014
TOTAL PRIMARY ENERGY	**0.396**	**1.476**	**1.582**	**2.112**	**5.577**
Electricity Sales	0.449	0.237	0.001	(0.688)	
Net Energy Consumption	0.846	1.713	1.583		4.153
Electrical Energy Losses	0.931	0.492	0.002	(1.424)	1.424
TOTAL ENERGY CONSUMED	**1.776**	**2.205**	**1.585**		**5.577**

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

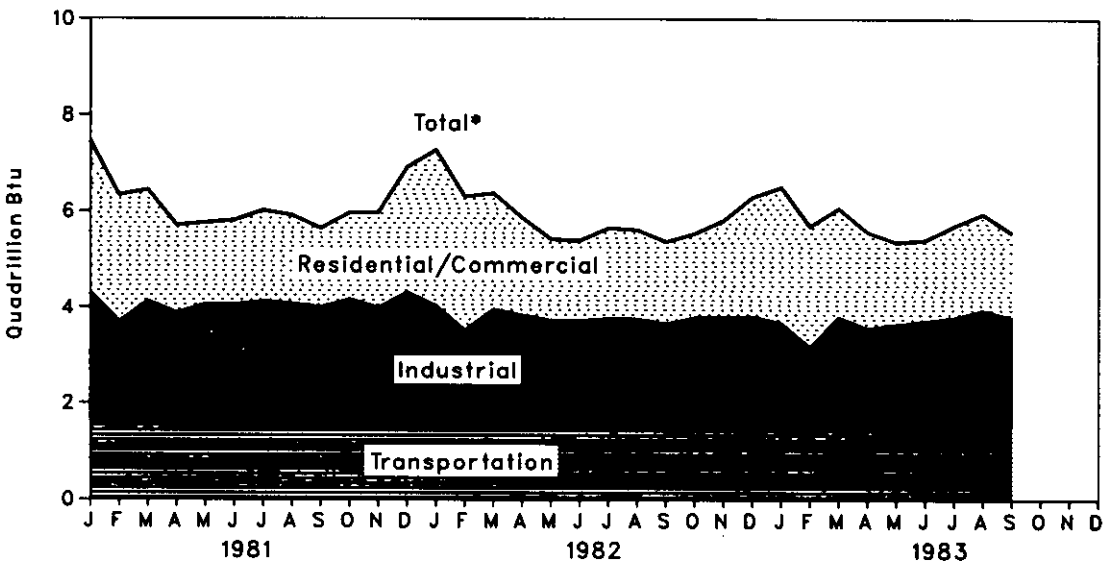
Consumption

Consumption of Energy by End-Use Sector

Yearly



Monthly



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

Consumption

Consumption of Energy by End-Use Sector

		Residential and Commercial	Industrial	Transportation	Total Energy Consumed
			Quadrillion (10^{15}) Btu		
1973	**TOTAL**	**24.179**	**31.846**	**18.577**	**74.609**
1974	**TOTAL**	**23.761**	**30.900**	**18.091**	**72.759**
1975	**TOTAL**	**23.928**	**28.569**	**18.209**	**70.707**
1976	**TOTAL**	**25.041**	**30.393**	**19.068**	**74.510**
1977	**TOTAL**	**25.392**	**31.149**	**19.785**	**76.332**
1978	**TOTAL**	**26.108**	**31.493**	**20.574**	**78.175**
1979	**TOTAL**	**25.796**	**32.652**	**20.457**	**78.910**
1980	**TOTAL**	**25.666**	**30.638**	**19.683**	**75.988**
1981	January	3.154	2.647	1.657	7.459
	February	2.640	R2.222	1.471	R6.331
	March	2.316	R2.510	1.614	R6.439
	April	1.833	R2.278	1.599	R5.708
	May	1.705	2.425	1.633	5.764
	June	1.758	2.392	1.662	5.816
	July	1.900	2.419	R1.699	R6.022
	August	1.845	R2.421	1.654	R5.923
	September	1.656	R2.392	1.603	R5.649
	October	1.809	R2.524	1.640	R5.972
	November	1.988	2.418	1.571	5.975
	December	2.608	R2.633	1.677	R6.921
	TOTAL	**25.213**	**R29.282**	**R19.480**	**R73.979**
1982	January	R3.251	R2.514	R1.513	R7.284
	February	R2.788	R2.084	R1.437	R6.312
	March	R2.423	R2.330	R1.623	R6.379
	April	R2.038	R2.118	1.716	R5.873
	May	R1.700	R2.082	1.647	5.433
	June	R1.678	R2.109	1.611	5.405
	July	R1.886	R2.141	1.631	R5.669
	August	R1.864	R2.148	1.610	R5.633
	September	R1.709	R2.098	1.568	R5.382
	October	R1.757	R2.214	1.577	R5.553
	November	R2.021	R2.227	R1.572	R5.827
	December	R2.486	R2.213	R1.598	R6.307
	TOTAL	**R25.601**	**R26.277**	**R19.105**	**R71.057**
1983	January	2.829	R2.219	R1.459	R6.517
	February	2.518	R1.834	1.346	R5.705
	March	2.274	R2.142	1.656	R6.081
	April	2.014	R1.979	1.585	R5.582
	May	1.719	R2.050	1.599	R5.375
	June	R1.700	R2.079	1.632	R5.421
	July	1.918	R2.169	1.621	R5.723
	August	R2.018	R2.266	R1.672	R5.972
	September	1.776	2.205	1.585	5.577

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

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**0.291**	**7.626**	**4.391**	**3.495**	**8.377**	**24.179**	
1974	**TOTAL**	**0.292**	**7.518**	**3.996**	**3.475**	**8.480**	**23.761**	
1975	**TOTAL**	**0.238**	**7.581**	**3.805**	**3.604**	**8.700**	**23.928**	
1976	**TOTAL**	**0.227**	**7.866**	**4.181**	**3.747**	**9.020**	**25.041**	
1977	**TOTAL**	**0.225**	**7.461**	**4.206**	**3.955**	**9.545**	**25.392**	
1978	**TOTAL**	**0.239**	**7.624**	**4.070**	**4.116**	**10.060**	**26.108**	
1979	**TOTAL**	**0.210**	**7.891**	**3.448**	**4.184**	**10.064**	**25.796**	
1980	**TOTAL**	**0.160**	**7.539**	**3.035**	**4.355**	**10.578**	**25.666**	
1981	January	0.022	1.268	0.437	0.425	1.002	3.154	3.154
	February	0.018	1.122	0.293	0.391	0.816	2.640	5.794
	March	0.012	0.911	0.202	0.355	0.836	2.316	8.110
	April	0.014	0.590	0.148	0.325	0.756	1.833	9.943
	May	0.012	0.421	0.155	0.321	0.796	1.705	11.648
	June	0.008	0.291	0.148	0.365	0.947	1.758	13.406
	July	0.011	0.241	0.138	0.429	1.081	1.900	15.306
	August	0.011	0.236	0.149	0.431	1.019	1.845	17.152
	September	0.015	0.246	0.153	0.392	0.850	1.656	18.808
	October	0.016	0.390	0.249	0.348	0.807	1.809	20.617
	November	0.021	0.583	0.257	0.336	0.790	1.988	22.605
	December	0.026	0.942	0.306	0.380	0.954	2.608	25.213
	TOTAL	**0.186**	**7.242**	**2.635**	**4.497**	**10.653**	**25.213**	
1982	January	0.025	R1.343	0.367	0.439	1.077	R3.251	R3.251
	February	0.017	R1.221	0.273	0.408	0.869	R2.788	R6.039
	March	0.014	R0.947	0.206	0.372	0.884	R2.423	R8.462
	April	0.018	R0.705	0.173	0.346	0.797	R2.038	R10.500
	May	0.012	R0.381	0.161	0.326	0.819	R1.700	R12.200
	June	0.009	R0.279	0.146	0.357	0.888	R1.678	R13.878
	July	0.016	R0.245	0.131	0.411	1.082	R1.886	R15.764
	August	0.017	R0.234	0.142	0.430	1.042	R1.864	R17.628
	September	0.016	R0.247	0.153	R0.402	0.891	R1.709	R19.337
	October	0.016	R0.342	0.232	0.349	0.817	R1.757	R21.093
	November	0.021	R0.605	0.232	0.340	0.824	R2.021	R23.115
	December	0.025	R0.877	0.270	0.381	0.933	R2.486	R25.601
	TOTAL	**0.206**	**R7.426**	**2.486**	**R4.561**	**10.922**	**R25.601**	
1983	January	0.025	1.080	0.310	0.413	1.001	2.829	2.829
	February	0.016	1.048	0.238	0.390	0.826	2.518	5.348
	March	0.014	0.820	0.192	0.366	0.882	2.274	7.621
	April	0.016	0.697	0.151	0.352	0.799	2.014	9.636
	May	0.010	0.426	0.145	0.327	0.811	1.719	11.355
	June	0.008	R0.290	0.142	0.359	0.902	R1.700	R13.055
	July	0.008	0.233	0.128	0.431	1.118	1.918	R14.973
	August	0.013	R0.223	0.145	0.470	1.166	R2.018	16.991
	September	0.015	0.233	0.149	0.449	0.931	1.776	18.767

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

		Coal	Natural Gas (Dry)	Petro-leum	Hydro-electric	Net Coke Imports	Electricity Sales	Electrical Energy Losses	Total Energy Consumed	Yearly Cumulative Energy Consumed
						Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**4.349**	**10.388**	**9.132**	**0.035**	**(0.008)**	**2.341**	**5.610**	**31.846**	
1974	**TOTAL**	**4.048**	**10.003**	**8.720**	**0.033**	**0.059**	**2.337**	**5.700**	**30.900**	
1975	**TOTAL**	**3.797**	**8.532**	**8.182**	**0.032**	**0.014**	**2.346**	**5.665**	**28.569**	
1976	**TOTAL**	**3.786**	**8.761**	**9.043**	**0.033**	**0.000**	**2.573**	**6.197**	**30.393**	
1977	**TOTAL**	**3.498**	**8.636**	**9.809**	**0.033**	**0.015**	**2.682**	**6.476**	**31.149**	
1978	**TOTAL**	**3.372**	**8.539**	**9.905**	**0.032**	**0.131**	**2.761**	**6.755**	**31.493**	
1979	**TOTAL**	**3.636**	**8.549**	**10.582**	**0.034**	**0.066**	**2.873**	**6.912**	**32.652**	
1980	**TOTAL**	**3.181**	**8.394**	**9.535**	**0.033**	**(0.037)**	**2.781**	**6.751**	**30.638**	
1981	January	0.299	0.754	0.823	0.003	0.000	0.229	0.539	2.647	2.647
	February	0.277	R0.526	0.707	0.003	(0.001)	0.230	0.480	R2.222	R4.869
	March	0.279	R0.690	0.754	0.003	(0.003)	0.234	0.552	R2.510	7.379
	April	0.260	R0.588	0.654	0.003	(0.001)	0.232	0.542	R2.278	R9.658
	May	0.239	0.668	0.700	0.003	0.000	0.234	0.580	2.425	R12.083
	June	0.232	0.616	0.665	0.003	(0.004)	0.244	0.635	2.392	R14.475
	July	0.270	0.641	0.644	0.003	0.000	0.245	0.616	2.419	R16.893
	August	0.273	R0.667	0.651	0.002	0.000	0.246	0.581	R2.421	R19.314
	September	0.266	R0.675	0.684	0.002	(0.002)	0.242	0.525	R2.392	R21.706
	October	0.268	R0.807	0.666	0.002	(0.003)	0.236	0.548	R2.524	R24.230
	November	0.270	0.756	0.634	0.002	0.000	0.226	0.530	2.418	R26.648
	December	0.271	R0.870	0.725	0.002	(0.003)	0.219	0.549	R2.633	R29.282
	TOTAL	**3.205**	**R8.257**	**8.308**	**0.033**	**(0.017)**	**2.817**	**6.677**	**R29.282**	
1982	January	0.271	R0.793	0.706	0.003	0.000	0.215	0.527	R2.514	R2.514
	February	0.254	R0.520	0.639	0.003	(0.001)	0.214	0.456	R2.084	R4.598
	March	0.244	R0.622	0.721	0.003	(0.002)	0.220	0.523	R2.330	R6.928
	April	0.227	R0.514	0.668	0.003	(0.001)	0.214	0.493	R2.118	R9.046
	May	0.219	R0.480	0.635	0.003	(0.003)	0.213	0.535	R2.082	R11.128
	June	0.204	R0.523	0.625	0.003	(0.004)	0.217	0.540	R2.109	R13.237
	July	0.198	R0.528	0.639	0.003	(0.003)	0.214	0.562	R2.141	R15.378
	August	0.200	R0.537	0.671	0.002	(0.001)	0.216	0.523	R2.148	R17.526
	September	0.192	R0.582	0.667	0.002	(0.003)	0.205	0.453	R2.098	R19.623
	October	0.201	R0.678	0.642	0.002	(0.001)	0.208	0.486	R2.214	R21.837
	November	0.204	R0.708	0.605	0.002	(0.002)	0.207	0.502	R2.227	R24.064
	December	0.207	R0.626	0.690	0.002	(0.001)	0.199	0.489	R2.213	R26.277
	TOTAL	**2.621**	**R7.109**	**7.907**	**0.033**	**(0.023)**	**2.541**	**6.088**	**R26.277**	
1983	January	0.219	R0.665	0.656	0.003	(0.001)	0.198	0.480	R2.219	R2.219
	February	0.203	R0.406	0.594	0.003	(0.001)	0.202	0.427	R1.834	R4.053
	March	0.194	R0.553	0.691	0.003	(0.001)	0.206	0.496	R2.142	R6.195
	April	0.215	R0.469	0.619	0.003	(0.002)	0.207	0.470	R1.979	R8.175
	May	0.207	R0.490	0.607	0.003	(0.002)	0.214	0.530	R2.050	R10.225
	June	0.191	R0.451	0.642	0.003	(0.001)	0.226	0.567	R2.079	R12.304
	July	0.201	R0.501	0.654	0.003	(0.002)	0.226	0.586	R2.169	R14.473
	August	0.214	R0.562	0.662	0.002	(0.001)	0.237	0.589	R2.266	R16.739
	September	0.203	0.571	0.700	0.002	(0.001)	0.237	0.492	2.205	18.944

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

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses	Total Energy Consumed	Yearly Cumulative Energy Consumed
				Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**0.003**	**0.743**	**17.803**	**0.009**	**0.020**	**18.577**	
1974	**TOTAL**	**0.002**	**0.685**	**17.374**	**0.009**	**0.022**	**18.091**	
1975	**TOTAL**	**0.001**	**0.595**	**17.579**	**0.010**	**0.025**	**18.209**	
1976	**TOTAL**	**(1)**	**0.559**	**18.473**	**0.010**	**0.025**	**19.068**	
1977	**TOTAL**	**(1)**	**0.543**	**19.207**	**0.010**	**0.025**	**19.785**	
1978	**TOTAL**	**(1)**	**0.539**	**20.004**	**0.009**	**0.022**	**20.574**	
1979	**TOTAL**	**(1)**	**0.612**	**19.810**	**0.010**	**0.025**	**20.457**	
1980	**TOTAL**	**(1)**	**0.648**	**18.999**	**0.011**	**0.026**	**19.683**	
1981	January	(1)	0.077	1.577	0.001	0.002	1.657	1.657
	February	(1)	0.065	1.403	0.001	0.002	1.471	3.128
	March	(1)	0.065	1.547	0.001	0.002	1.614	4.742
	April	(1)	0.050	1.546	0.001	0.002	1.599	6.342
	May	(1)	0.048	1.582	0.001	0.002	1.633	7.974
	June	(1)	0.044	1.614	0.001	0.002	1.662	9.636
	July	(1)	R0.044	1.652	0.001	0.002	R1.699	R11.335
	August	(1)	0.044	1.607	0.001	0.002	1.654	R12.990
	September	(1)	0.043	1.557	0.001	0.002	1.603	R14.592
	October	(1)	0.051	1.586	0.001	0.002	1.640	R16.232
	November	(1)	0.055	1.512	0.001	0.002	1.571	R17.803
	December	(1)	0.071	1.603	0.001	0.002	1.677	R19.480
	TOTAL	**(1)**	**R0.657**	**18.786**	**0.011**	**0.026**	**R19.480**	
1982	January	(1)	R0.081	1.428	0.001	0.003	R1.513	R1.513
	February	(1)	R0.068	1.367	0.001	0.002	R1.437	R2.950
	March	(1)	R0.063	1.558	0.001	0.002	R1.623	R4.574
	April	(1)	0.050	1.663	0.001	0.002	1.716	R6.290
	May	(1)	0.039	1.605	0.001	0.002	1.647	R7.937
	June	(1)	0.038	1.570	0.001	0.002	1.611	R9.548
	July	(1)	0.039	1.589	0.001	0.002	1.631	R11.179
	August	(1)	0.039	1.568	0.001	0.002	1.610	R12.789
	September	(1)	0.039	1.526	0.001	0.002	1.568	R14.357
	October	(1)	0.044	1.530	0.001	0.002	1.577	R15.934
	November	(1)	R0.053	1.516	0.001	0.002	R1.572	R17.506
	December	(1)	R0.059	1.536	0.001	0.002	R1.598	R19.105
	TOTAL	**(1)**	**R0.612**	**18.455**	**0.011**	**0.026**	**R19.105**	
1983	January	(1)	R0.067	1.390	0.001	0.002	R1.459	R1.459
	February	(1)	0.056	1.287	0.001	0.002	1.346	R2.806
	March	(1)	0.054	1.599	0.001	0.002	1.656	R4.462
	April	(1)	0.047	1.536	0.001	0.002	1.585	R6.047
	May	(1)	0.039	1.558	0.001	0.002	1.599	R7.647
	June	(1)	0.034	1.595	0.001	0.002	1.632	R9.278
	July	(1)	0.036	1.582	0.001	0.002	1.621	R10.899
	August	(1)	R0.039	1.630	0.001	0.002	R1.672	12.571
	September	(1)	0.038	1.544	0.001	0.002	1.585	14.156

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

		Coal	Natural Gas (Dry)	Petroleum[1]	Hydroelectric power[2]	Nuclear Electric Power	Other[3]	Total Energy Input	Yearly Cumulative Energy Input
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**8.658**	**3.748**	**3.515**	**2.975**	**0.910**	**0.046**	**19.852**	
1974	**TOTAL**	**8.535**	**3.519**	**3.365**	**3.276**	**1.272**	**0.056**	**20.023**	
1975	**TOTAL**	**8.786**	**3.240**	**3.166**	**3.187**	**1.900**	**0.072**	**20.350**	
1976	**TOTAL**	**9.720**	**3.152**	**3.477**	**3.032**	**2.111**	**0.081**	**21.573**	
1977	**TOTAL**	**10.243**	**3.284**	**3.901**	**2.482**	**2.702**	**0.082**	**22.694**	
1978	**TOTAL**	**10.236**	**3.297**	**3.987**	**3.110**	**3.024**	**0.068**	**23.722**	
1979	**TOTAL**	**11.264**	**3.609**	**3.283**	**3.107**	**2.715**	**0.089**	**24.068**	
1980	**TOTAL**	**12.122**	**3.807**	**2.634**	**3.085**	**2.739**	**0.114**	**24.501**	
1981	January	1.153	0.239	0.275	0.260	0.259	0.011	2.198	2.198
	February	1.010	0.232	0.188	0.244	0.236	0.010	1.919	4.117
	March	1.020	0.283	0.184	0.241	0.240	0.011	1.979	6.097
	April	0.921	0.299	0.160	0.242	0.225	0.010	1.858	7.955
	May	0.949	0.327	0.156	0.278	0.215	0.010	1.935	9.890
	June	1.056	0.394	0.203	0.301	0.231	0.010	2.194	12.084
	July	1.184	0.425	0.214	0.289	0.252	0.011	2.374	14.458
	August	1.149	0.403	0.171	0.252	0.294	0.011	2.279	16.737
	September	1.022	0.336	0.165	0.212	0.266	0.011	2.012	18.750
	October	1.008	0.312	0.171	0.216	0.224	0.011	1.941	20.691
	November	0.991	0.268	0.146	0.224	0.249	0.010	1.886	22.577
	December	1.120	0.248	0.169	0.276	0.284	0.010	2.105	24.682
	TOTAL	**12.583**	**3.764**	**2.202**	**3.033**	**2.974**	**0.127**	**24.682**	
1982	January	1.198	0.246	0.221	0.307	0.280	0.009	2.261	2.261
	February	1.031	0.228	0.162	0.302	0.220	0.008	1.950	4.211
	March	1.010	0.255	0.144	0.338	0.248	0.007	2.001	6.213
	April	0.917	0.255	0.120	0.317	0.238	0.007	1.853	8.065
	May	0.962	0.267	0.106	0.318	0.236	0.008	1.897	9.962
	June	1.000	0.306	0.111	0.317	0.262	0.010	2.005	11.967
	July	1.165	0.365	0.144	0.311	0.278	0.010	2.273	14.240
	August	1.156	0.374	0.125	0.276	0.273	0.010	2.214	16.453
	September	1.021	0.303	0.110	0.233	0.277	0.010	1.954	18.407
	October	0.977	0.282	0.106	0.233	0.254	0.011	1.862	20.270
	November	1.008	0.234	0.100	0.269	0.253	0.011	1.875	22.145
	December	1.073	0.222	0.120	0.316	0.266	0.009	2.006	24.151
	TOTAL	**12.517**	**3.335**	**1.568**	**3.538**	**3.084**	**0.108**	**24.151**	
1983	January	1.125	0.215	0.137	0.332	0.274	0.011	2.094	2.094
	February	0.965	0.183	0.134	0.315	0.242	0.008	1.848	3.942
	March	0.992	0.215	0.133	0.342	0.261	0.010	1.952	5.895
	April	0.919	0.210	0.110	0.338	0.244	0.009	1.830	7.725
	May	0.963	0.226	0.097	0.352	0.241	0.007	1.885	9.610
	June	1.062	0.256	0.119	0.346	0.264	0.010	2.056	11.666
	July	1.273	0.325	0.155	0.319	0.279	0.012	2.363	14.029
	August	1.353	0.364	0.158	0.296	0.279	0.016	2.466	16.495
	September	1.143	0.309	0.123	0.252	0.271	0.014	2.112	18.607

[1]Includes petroleum products reported as "oil consumed in steam plants" through 1979 and "heavy oil" from 1980 forward, which are assumed to be residual fuel oil; petroleum products reported as "oil consumed in gas turbine and internal combustion engine plants" through 1979 and "light oil" from 1980 forward, which are assumed to be distillate fuel oil and kerosene; and petroleum coke.
[2]Includes net imports of electricity.
[3]Includes geothermal power and electricity produced from wood and waste.
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. **End-Use Sectors:** Energy use is assigned to the major end-use sectors according to the following guidelines as closely as possible:
   - Residential and commercial sector—Energy consumed by private household establishments primarily for space heating, water heating, air conditioning, cooking, and clothes drying; by non-manufacturing business establishments, including motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; by health, social, and educational institutions; and by Federal, State, and local governments.
   - Industrial sector—Energy consumed by manufacturing, construction, mining, agriculture, fishing, and forestry establishments.
   - Transportation sector—Energy consumed to move people and commodities in both the public and private sectors, including military, railroad, vessel bunkering, and marine uses, as well as the pipeline transmission of natural gas.
   - Electric utility sector—Energy consumed by privately- and publicly-owned establishments that generate electricity primarily for resale.

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

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

4. **Natural Gas:** Total natural gas consumption is estimated monthly based on a supply disposition balance calculation. Residential and commercial sector monthly consumption is estimated by allocating the EIA annual residential and commercial sector consumption to the months in proportion to the American Gas Association (AGA) monthly sales to the residential and commercial sector. For current incomplete years, the AGA monthly sales data are used temporarily. Monthly transportation consumption (which is natural gas for pipeline use) for complete years is estimated by allocating the EIA annual transportation total to the months based on each month's total natural gas consumption as a share of the annual total natural gas consumption. For the current incomplete year, each month's transportation total is estimated by applying the percentage of total natural gas accounted for by the transportation sector in the same month a year ago to the current month's total natural gas consumption. Electric utilities consumption of natural gas is available monthly from EIA Form 759 (formerly FPC Form 4), "Monthly Power Plant Report." Each month's industrial sector consumption is estimated by subtracting the residential and commercial, transportation, and electric utilities sectors consumption from the total natural gas consumption.
   Sources:
   - 1973 through 1975: DOI, BOM, *Minerals Yearbook,* "Natural Gas" chapter.
   - 1976 through 1978: EIA, *Energy Data Reports,* "Natural Gas, Annual."
   - 1979: EIA, *Natural Gas Production and Consumption 1979.*
   - 1980 and 1981: EIA, *Natural Gas Annual.*
   - 1982 forward: EIA, *Natural Gas Monthly.*
   - Electric utilities consumption—1973 through 1976: FPC Form 4, "Monthly Power Plant Report."
     1977 through 1981: Federal Energy Regulatory Commission (FERC), FPC Form 4, "Monthly Power Plant Report."
     1982 forward: EIA, EIA Form 759, "Monthly Power Plant Report."
   - American Gas Association, "Monthly Gas Utility Statistical Report."

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

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

Notes and Sources for the Consumption Section (continued)

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

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

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

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

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

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

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

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

Notes and Sources for the Consumption Section (continued)

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

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

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

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

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

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

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

Sources for industrial sector:
- 1973 through 1978: FPC Forms 4 and 12-C.
- 1979: FPC Form 4 and EIA estimates.
- 1980 forward: EIA estimates.
  Note: For 1977 forward, monthly data are not available from above sources and were estimated by seasonalizing the annual numbers in proportion to each month's hydroelectricity generation in the electric utility sector.

Sources for imports and exports of electricity:
- 1973 through 1980 annual: DOE, Economic Regulatory Administration, "Report on Electric Energy Exchanges with Canada and Mexico."
- 1981 annual: DOE, Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).
- 1981 monthly: Estimates are derived from annual data by dividing by the number of days in the year and multiplying by the number of days in the month.
- 1982 forward: EIA estimates.

Notes and Sources for the Consumption Section (continued)

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

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

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

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

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

Crude Oil and Refined Petroleum Products*

Domestic crude oil production during October 1983 was estimated to be 8.7 million barrels per day, 0.1 percent below the rate in September 1983 and 0.5 percent below the rate in October 1982.

Total petroleum imports averaged 5.5 million barrels per day in October 1983, 10.0 percent less than the September 1983 rate but 3.3 percent more than the October 1982 rate.

In October 1983, 15.4 million barrels per day of petroleum products were supplied for domestic use, about the same level as in September 1983 but 3.7 percent above the level of the previous October. Motor gasoline accounted for 43.6 percent of the total; distillate fuel oil, 16.7 percent; and residual fuel oil, 8.5 percent.

Motor gasoline supplied during October 1983 averaged 6.7 million barrels per day, 0.4 percent above the rate in September 1983 and 5.1 percent above the level of the previous October. Stocks of motor gasoline totaled 222 million barrels at the end of October 1983, 8 million barrels below the inventories reported at the end of September 1983.

In October 1983, 2.6 million barrels of distillate fuel oil were supplied per day, 0.3 percent higher than the September 1983 rate but 0.2 percent lower than the October 1982 level. Distillate fuel oil stocks were 162 million barrels at the end of October 1983, 7 million barrels above the level at the end of the previous month.

Residual fuel oil supplied in October 1983 averaged 1.3 million barrels per day, 0.9 percent lower than in September 1983 and 11.9 percent lower than the October 1982 rate. Residual fuel oil stocks measured 47 million barrels at the end of October 1983, 3 million barrels below the stock level at the end of September 1983.

*Estimates for the most current month are based on Energy Information Administration (EIA) weekly data (except crude production) and will be revised to conform with data from the EIA Petroleum Reporting System as available. For the most recent month, crude production is an EIA estimate based on historical and provisional data through July 1983. 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**	**1,074**
1975	**AVERAGE**	**10,045**	**8,375**	**1,633**	**-17**	**-145**	**16,322**	**1,133**
1976	**AVERAGE**	**9,774**	**8,132**	**1,603**	**-39**	**96**	**17,461**	**1,112**
1977	**AVERAGE**	**9,913**	**8,245**	**1,618**	**-170**	**-378**	**18,431**	**1,312**
1978	**AVERAGE**	**10,328**	**8,707**	**1,567**	**-78**	**172**	**18,847**	**1,278**
1979	**AVERAGE**	**10,179**	**8,552**	**1,584**	**-148**	**-25**	**18,513**	**1,341**
1980	**AVERAGE**	**10,214**	**8,597**	**1,573**	**-98**	**-42**	**17,056**	**1,392**
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	**10,230**	**8,572**	**1,609**	**-290**	**130**	**16,058**	
1982	January	10,128	8,509	1,578	-401	1,298	16,124	1,456
	February	10,312	8,702	1,563	-242	1,230	16,001	1,428
	March	10,284	8,667	1,572	121	1,047	15,560	1,392
	April	10,188	8,591	1,542	-37	1,583	16,046	1,346
	May	10,244	8,683	1,518	29	-66	14,847	1,347
	June	10,212	8,646	1,511	40	-489	14,998	1,360
	July	10,229	8,658	1,513	-147	-926	14,821	1,393
	August	10,215	8,634	1,524	-440	-44	14,839	1,408
	September	10,279	8,701	1,518	263	-447	15,022	1,414
	October	10,299	8,701	1,530	-548	-47	14,859	1,432
	November	10,359	8,697	1,609	-398	-361	15,009	1,455
	December	10,276	8,598	1,628	128	688	15,487	1,430
	AVERAGE	**10,252**	**8,649**	**1,550**	**-136**	**283**	**15,296**	
1983	January	10,356	8,634	1,668	-567	865	14,765	1,453
	February	10,298	8,660	1,585	-382	1,128	14,772	1,432
	March	10,259	8,677	1,544	56	1,765	15,484	1,375
	April	10,229	8,686	1,502	-438	431	14,779	1,376
	May	10,231	8,682	1,483	68	-759	14,250	1,397
	June	10,262	8,676	1,514	-163	-242	15,281	1,409
	July	10,237	8,647	1,536	118	-922	14,913	1,434
	August	10,257	8,653	1,561	-781	-289	15,366	1,467
	September	10,323	8,666	1,598	R-191	R-634	R15,396	R1,492
	October†	NA	*8,654*	NA	*-270*	*163*	*15,408*	*1,491*
	AVERAGE	**NA**	**8,663**	**NA**	**-254**	**144**	**15,043**	

[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.
†Italics denote 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.
• In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end-of-year stocks would be: 1974—1,121; 1980—1,420; and 1982—1,462. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
Sources: • See the last page of this section.

Petroleum

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

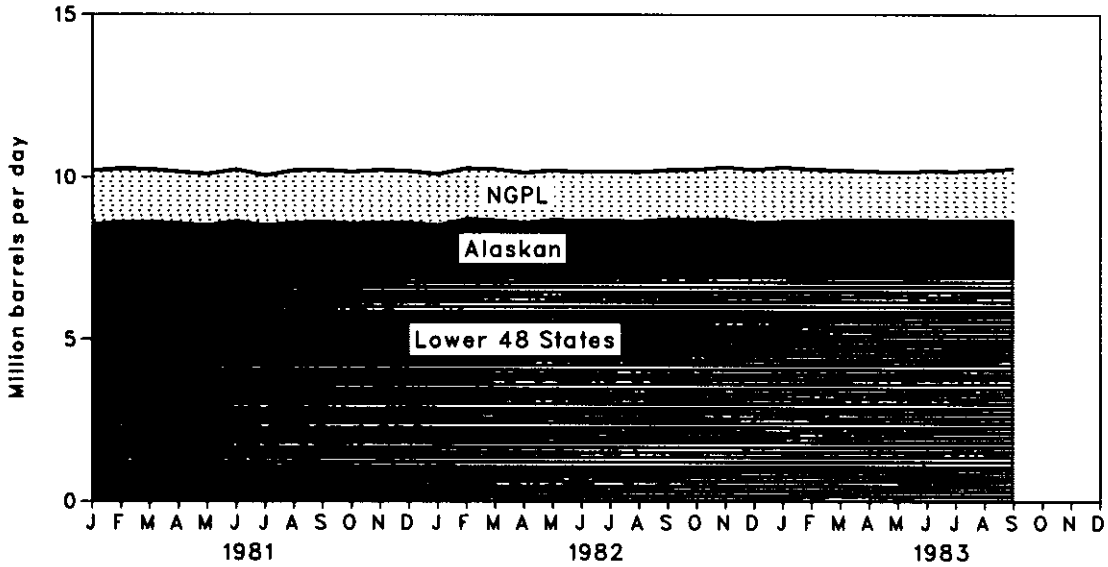
		Imports			Exports			
		Total	Crude Oil[2]	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports[3]
		Thousand barrels per day						
1973	**AVERAGE**	**6,256**	**3,244**	**3,012**	**231**	**2**	**229**	**6,025**
1974	**AVERAGE**	**6,112**	**3,477**	**2,635**	**221**	**3**	**218**	**5,892**
1975	**AVERAGE**	**6,056**	**4,105**	**1,951**	**209**	**6**	**204**	**5,846**
1976	**AVERAGE**	**7,313**	**5,287**	**2,026**	**223**	**8**	**215**	**7,090**
1977	**AVERAGE**	**8,807**	**6,615**	**2,193**	**243**	**50**	**193**	**8,565**
1978	**AVERAGE**	**8,363**	**6,356**	**2,008**	**362**	**158**	**204**	**8,002**
1979	**AVERAGE**	**8,456**	**6,519**	**1,937**	**471**	**235**	**236**	**7,985**
1980	**AVERAGE**	**6,909**	**5,263**	**1,646**	**544**	**287**	**258**	**6,365**
1981	January	6,827	4,932	1,895	558	339	219	6,270
	February	6,772	4,873	1,899	569	198	371	6,203
	March	6,028	4,521	1,507	586	210	376	5,442
	April	5,668	4,338	1,330	570	198	372	5,098
	May	5,775	4,287	1,489	595	312	283	5,180
	June	5,435	4,061	1,375	420	123	297	5,015
	July	5,816	4,296	1,521	571	257	314	5,245
	August	5,767	4,179	1,588	644	204	440	5,123
	September	6,365	4,740	1,624	519	194	325	5,845
	October	5,959	4,380	1,579	738	226	512	5,221
	November	5,741	4,046	1,695	701	278	423	5,041
	December	5,843	4,137	1,706	656	189	467	5,187
	AVERAGE	**5,996**	**4,396**	**1,599**	**595**	**228**	**367**	**5,401**
1982	January	5,332	3,693	1,639	829	238	591	4,503
	February	4,807	2,990	1,817	804	304	499	4,003
	March	4,484	2,874	1,610	882	321	561	3,602
	April	4,378	2,849	1,529	786	174	611	3,593
	May	4,811	3,309	1,503	803	262	542	4,008
	June	5,327	3,836	1,491	703	94	609	4,624
	July	5,890	4,248	1,642	741	229	512	5,149
	August	5,244	3,851	1,392	858	304	554	4,386
	September	5,414	3,636	1,778	791	184	606	4,624
	October	5,306	3,670	1,636	932	270	662	4,374
	November	5,744	3,862	1,882	786	262	524	4,958
	December	4,606	3,000	1,605	860	193	667	3,746
	AVERAGE	**5,113**	**3,488**	**1,625**	**815**	**236**	**579**	**4,298**
1983	January	4,372	2,938	1,434	973	117	856	3,399
	February	3,691	2,268	1,423	865	262	603	2,825
	March	3,629	2,232	1,398	801	174	627	2,829
	April	4,744	3,154	1,590	809	88	721	3,935
	May	4,898	3,234	1,664	848	280	568	4,049
	June	5,218	3,502	1,716	774	144	630	4,443
	July	5,690	3,868	1,822	571	145	426	5,119
	August	6,036	4,174	1,863	663	172	491	5,373
	September	R6,088	R4,221	R1,867	684	177	507	5,403
	October†	*5,482*	*3,785*	*1,697*	NA	NA	NA	NA
	AVERAGE	**4,994**	**3,345**	**1,649**	**NA**	**NA**	**NA**	**NA**

[1]Includes lease condensate.
[2]Includes crude oil for storage in the Strategic Petroleum Reserve.
[3]Net imports equals imports minus exports.
†Italics denote preliminary data. R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

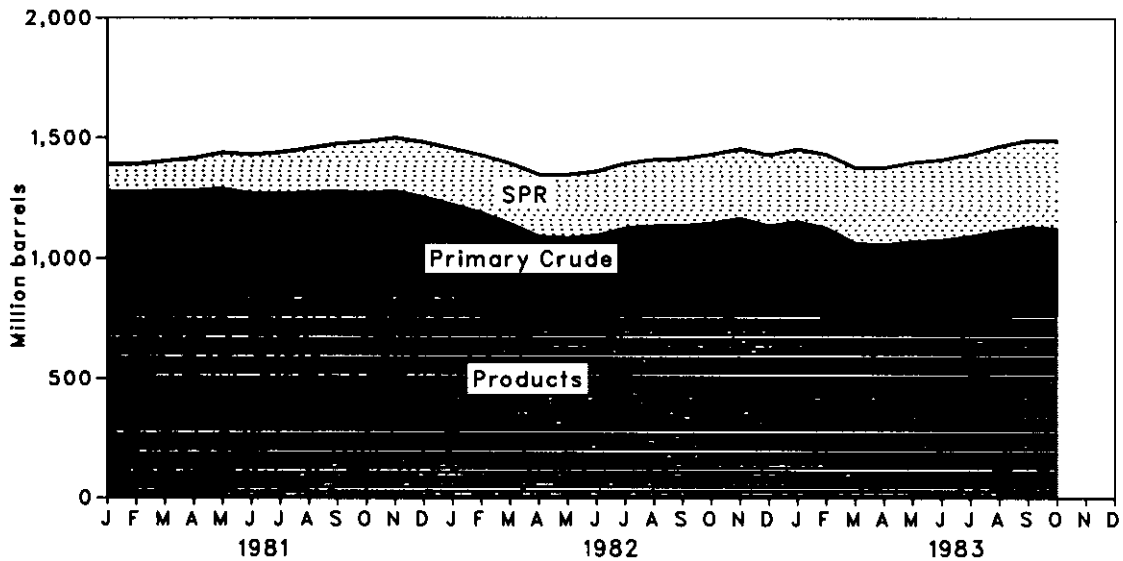
Petroleum

Overview

Production of Crude Oil and Natural Gas Plant Liquids



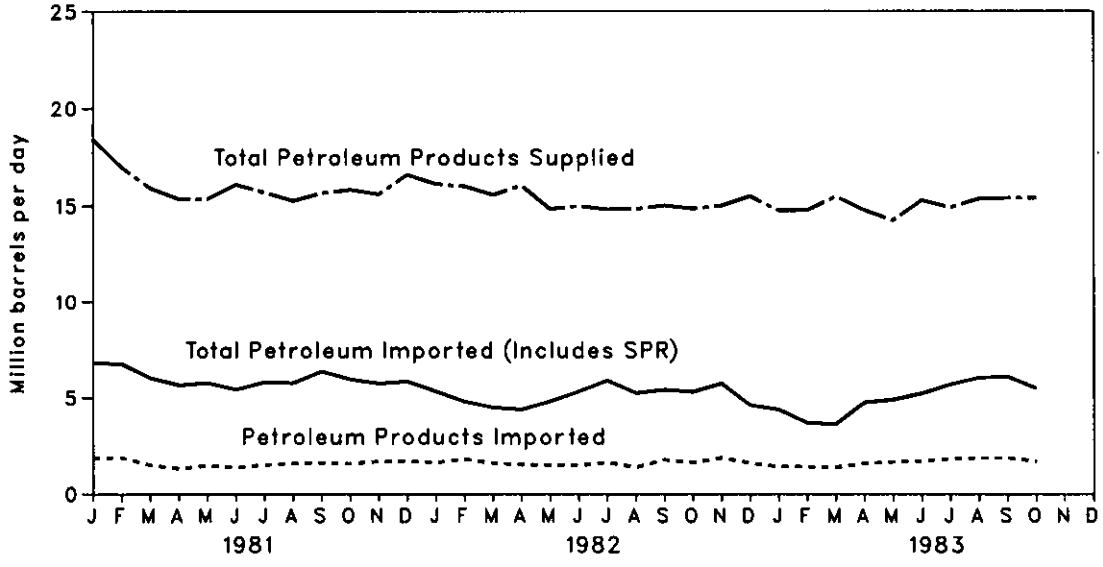
Stocks



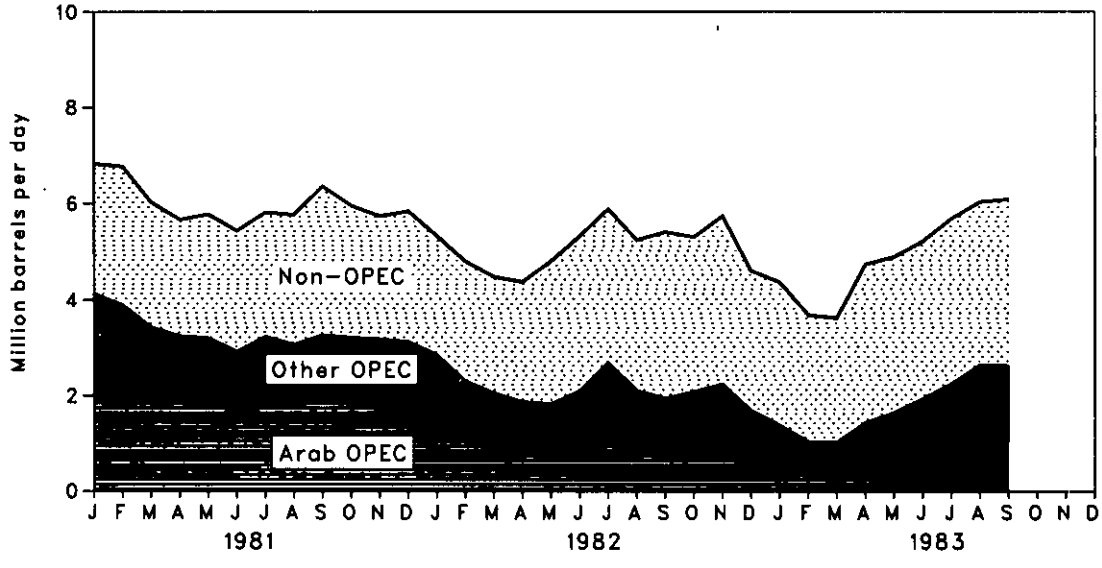
Petroleum

Overview

Products Supplied and Imports



Petroleum Imports by Source



Petroleum

Crude Oil[1] Supply and Disposition

		Supply							
		Field Production		Imports			Stock Withdrawal[2]		Unaccounted for Crude Oil
		Total Domestic	Alaskan	Total	SPR[3]	Other	SPR[3]	Other	
		Thousand barrels per day							
1973	**AVERAGE**	**9,208**	**198**	**3,244**		**3,244**		**11**	**3**
1974	**AVERAGE**	**8,774**	**193**	**3,477**		**3,477**		**-62**	**-25**
1975	**AVERAGE**	**8,375**	**191**	**4,105**		**4,105**		**-17**	**17**
1976	**AVERAGE**	**8,132**	**173**	**5,287**		**5,287**		**-39**	**77**
1977	**AVERAGE**	**8,245**	**464**	**6,615**	**21**	**6,594**	**-20**	**-150**	**-6**
1978	**AVERAGE**	**8,707**	**1,229**	**6,356**	**162**	**6,195**	**-163**	**84**	**-57**
1979	**AVERAGE**	**8,552**	**1,401**	**6,519**	**67**	**6,452**	**-67**	**-81**	**-11**
1980	**AVERAGE**	**8,597**	**1,617**	**5,263**	**44**	**5,219**	**-45**	**-52**	**34**
1981	January	8,540	1,606	4,932	106	4,826	-151	201	113
	February	8,604	1,619	4,873	80	4,793	-127	-150	-41
	March	8,613	1,618	4,521	140	4,382	-155	-477	154
	April	8,557	1,608	4,338	272	4,066	-444	-151	51
	May	8,501	1,580	4,287	386	3,901	-513	122	286
	June	8,629	1,632	4,061	318	3,743	-434	299	49
	July	8,500	1,605	4,296	175	4,121	-324	-36	147
	August	8,583	1,602	4,179	257	3,922	-372	769	16
	September	8,604	1,607	4,740	435	4,305	-486	201	-295
	October	8,563	1,596	4,380	453	3,927	-501	-259	166
	November	8,586	1,614	4,046	271	3,774	-259	-66	279
	December	8,585	1,623	4,137	165	3,971	-252	82	52
	AVERAGE	**8,572**	**1,609**	**4,396**	**256**	**4,141**	**-336**	**46**	**83**
1982	January	8,509	1,705	3,693	170	3,523	-159	-242	101
	February	8,702	1,707	2,990	159	2,830	-213	-29	156
	March	8,667	1,696	2,874	185	2,689	-235	357	2
	April	8,591	1,691	2,849	190	2,659	-233	196	231
	May	8,683	1,707	3,309	204	3,105	-176	205	111
	June	8,646	1,665	3,836	105	3,732	-105	144	133
	July	8,658	1,710	4,248	97	4,150	-97	-50	-20
	August	8,634	1,697	3,851	208	3,643	-208	-232	189
	September	8,701	1,705	3,636	139	3,497	-143	406	-210
	October	8,701	1,706	3,670	216	3,454	-216	-332	249
	November	8,697	1,676	3,862	180	3,683	-179	-219	-124
	December	8,598	1,682	3,000	124	2,877	-125	252	35
	AVERAGE	**8,649**	**1,696**	**3,488**	**165**	**3,323**	**-174**	**38**	**71**
1983	January	8,634	1,698	2,938	219	2,720	-219	-348	238
	February	8,660	1,725	2,268	197	2,071	-197	-185	423
	March	8,677	1,726	2,232	201	2,031	-184	240	134
	April	8,686	1,710	3,154	205	2,949	-197	-241	191
	May	8,682	1,710	3,234	289	2,945	-293	362	148
	June	8,676	1,710	3,502	190	3,312	-188	25	480
	July	8,647	1,705	3,868	274	3,594	-264	382	-74
	August	8,653	1,712	4,174	350	3,823	-358	-423	333
	September	8,666	1,722	R4,221	R309	R3,912	R-307	R116	-6
	October†	*8,654*	*1,731*	*3,785*	*213*	*3,572*	*-220*	*-50*	NA
	AVERAGE	**8,663**	**1,715**	**3,345**	**245**	**3,100**	**-243**	**-10**	**NA**

[1]Includes lease condensate.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3]Strategic Petroleum Reserve.
†Italics denote 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.
• In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
Sources: • See the last page of this section.

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**	**466**	**108**	**358**
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	**-58**	**5**	**12,470**	**228**	**NA**			
1982	January	-63	3	11,599	238	NA	606	235	371
	February	-64	2	11,236	304	NA	613	241	372
	March	-63	5	11,276	321	NA	609	249	361
	April	-65	3	11,392	174	NA	610	256	355
	May	-62	3	11,806	262	NA	609	261	348
	June	-60	7	12,494	94	NA	608	264	344
	July	-60	3	12,446	229	NA	613	267	346
	August	-57	2	11,871	304	NA	626	274	353
	September	-56	4	12,146	184	NA	619	278	341
	October	-51	2	11,749	270	NA	636	285	351
	November	-51	1	11,724	262	NA	648	290	358
	December	-53	1	11,514	193	NA	644	294	350
	AVERAGE	**-59**	**3**	**11,774**	**236**	**NA**			
1983	January	NA	2	11,070	117	54	661	301	361
	February	NA	3	10,635	262	69	672	306	366
	March	NA	2	10,854	174	70	670	312	359
	April	NA	2	11,436	88	68	684	318	366
	May	NA	1	11,789	280	63	681	327	355
	June	NA	1	12,287	144	64	686	332	354
	July	NA	2	12,347	145	65	683	341	342
	August	NA	1	12,141	172	64	707	352	355
	September	NA	1	R12,445	177	66	R713	R361	R352
	October†	NA	NA	*11,779*	NA	NA	*720*	*367*	*353*
	AVERAGE	**NA**	**NA**	**11,685**	**NA**	**NA**			

[1]Includes lease condensate.
[2]Stocks are totals as of end of period.
[3]Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983, crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils on those tables.
[4]Strategic Petroleum Reserve.
†Italics denote 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.
• In January 1975, 1981, and 1983, new respondents were added to bulk terminal and pipeline surveys affecting the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end-of-year stocks would be: 1974—265; 1980—483 (Total) and 375 (Other Primary); and 1982—644 (Total) and 350 (Other Primary).
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	January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
	February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
	March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
	April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
	May	393	443	933	17	297	0	664	331	124	3,203	1,796
	June	356	380	865	60	367	0	528	248	118	2,922	1,703
	July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
	August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
	September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
	October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
	November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
	December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
	AVERAGE	**311**	**319**	**1,129**	**81**	**366**	**0**	**620**	**406**	**90**	**3,323**	**1,848**
1982	January	254	161	877	111	289	0	663	376	128	2,859	1,403
	February	139	92	693	89	244	0	584	355	102	2,297	1,054
	March	91	37	555	155	200	0	522	399	91	2,051	860
	April	85	0	511	122	215	0	427	426	85	1,871	740
	May	179	0	601	116	236	0	222	422	54	1,830	897
	June	115	0	593	94	215	72	537	361	110	2,096	820
	July	159	0	660	108	327	69	910	356	95	2,685	965
	August	181	0	489	133	271	27	574	299	133	2,107	818
	September	179	0	432	57	191	21	477	518	69	1,943	677
	October	249	7	494	61	242	108	313	504	106	2,084	810
	November	247	14	489	47	283	34	479	528	115	2,235	797
	December	155	0	237	12	265	88	462	399	73	1,690	421
	AVERAGE	**170**	**26**	**552**	**92**	**248**	**35**	**514**	**412**	**97**	**2,146**	**854**
1983	January	204	0	282	47	255	43	186	324	43	1,384	533
	February	104	0	214	9	217	0	92	371	28	1,035	326
	March	63	0	103	0	138	0	121	425	173	1,023	183
	April	228	0	180	(s)	210	0	186	508	125	1,438	409
	May	284	0	122	12	324	37	352	444	69	1,645	419
	June	300	0	175	40	502	38	402	335	146	1,938	515
	July	282	0	182	58	464	112	525	431	187	2,240	599
	August	370	0	426	45	416	213	464	477	230	2,641	866
	September	413	0	587	21	516	86	324	472	208	2,627	1,074
	AVERAGE	**251**	**0**	**252**	**26**	**339**	**60**	**297**	**421**	**135**	**1,780**	**548**

[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)

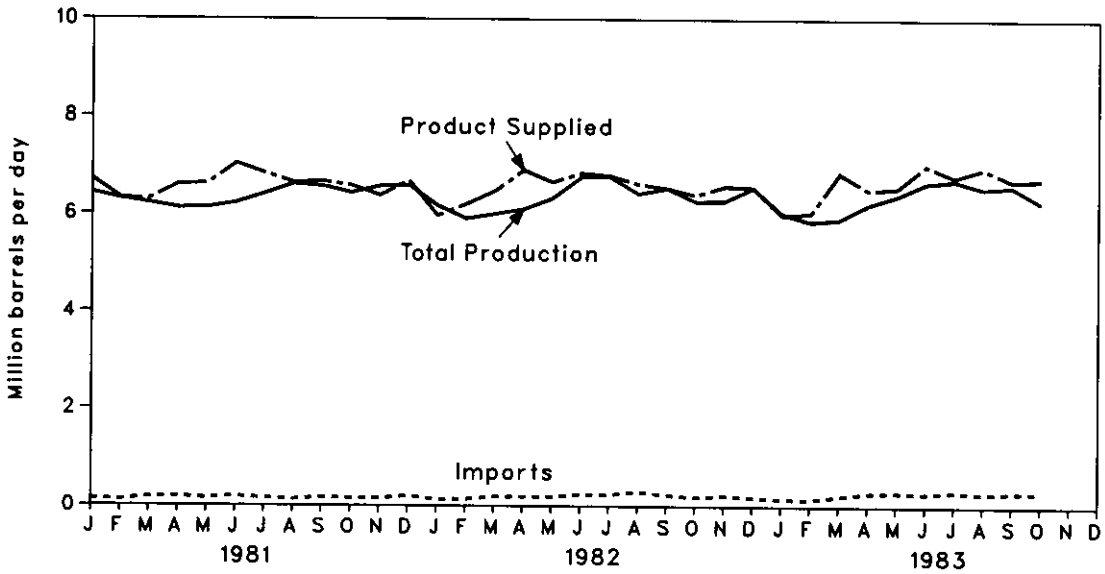
		Imports from Non-OPEC Sources[a]										
		Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non-OPEC	Total Non-OPEC	Total Imports
		Thousand barrels per day										
1973	**AVERAGE**	**174**	**1,325**	**16**	**585**	**255**	**15**	**99**	**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	January	39	543	401	198	150	233	89	494	552	2,701	6,827
	February	84	546	437	227	163	271	46	481	626	2,881	6,772
	March	74	472	488	227	93	263	45	370	571	2,603	6,028
	April	68	412	418	198	139	402	40	365	380	2,423	5,668
	May	122	365	522	213	105	368	58	344	474	2,573	5,775
	June	51	353	538	196	124	397	67	262	525	2,513	5,435
	July	77	382	384	212	178	553	50	206	541	2,583	5,816
	August	69	378	489	255	123	592	68	184	539	2,698	5,767
	September	111	423	708	163	169	528	72	265	661	3,100	6,365
	October	63	449	669	161	121	351	60	303	562	2,739	5,959
	November	63	547	628	168	108	253	76	294	421	2,557	5,741
	December	70	501	587	148	125	280	73	367	563	2,714	5,843
	AVERAGE	**74**	**447**	**522**	**197**	**133**	**375**	**62**	**327**	**534**	**2,672**	**5,996**
1982	January	58	513	425	179	106	346	62	334	452	2,474	5,332
	February	67	537	476	221	120	181	38	362	508	2,510	4,807
	March	43	437	503	189	118	294	62	307	480	2,433	4,484
	April	82	360	476	184	166	247	36	266	690	2,507	4,378
	May	77	419	766	152	95	516	47	302	607	2,981	4,811
	June	32	481	797	148	129	557	58	322	708	3,231	5,327
	July	64	536	783	158	118	433	38	376	698	3,204	5,890
	August	80	443	853	145	106	520	24	317	650	3,137	5,244
	September	92	493	897	195	89	631	51	278	746	3,472	5,414
	October	45	459	682	148	109	666	52	262	801	3,222	5,306
	November	51	553	860	212	90	623	81	334	706	3,508	5,744
	December	88	561	689	174	102	438	48	336	480	2,916	4,606
	AVERAGE	**65**	**482**	**685**	**175**	**112**	**456**	**50**	**316**	**627**	**2,968**	**5,113**
1983	January	68	536	849	218	73	315	40	299	588	2,988	4,372
	February	92	592	722	179	81	193	50	192	554	2,655	3,691
	March	86	488	760	187	78	240	43	162	563	2,606	3,629
	April	167	452	981	216	85	421	20	183	781	3,306	4,744
	May	135	501	944	153	108	483	42	235	651	3,252	4,898
	June	137	576	831	181	120	424	48	252	712	3,281	5,218
	July	69	633	849	191	103	369	37	364	836	3,450	5,690
	August	142	540	891	194	90	461	40	313	725	3,395	6,036
	September	137	523	832	251	82	472	33	308	822	3,461	6,088
	AVERAGE	**115**	**537**	**852**	**197**	**91**	**377**	**39**	**257**	**693**	**3,158**	**4,938**

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

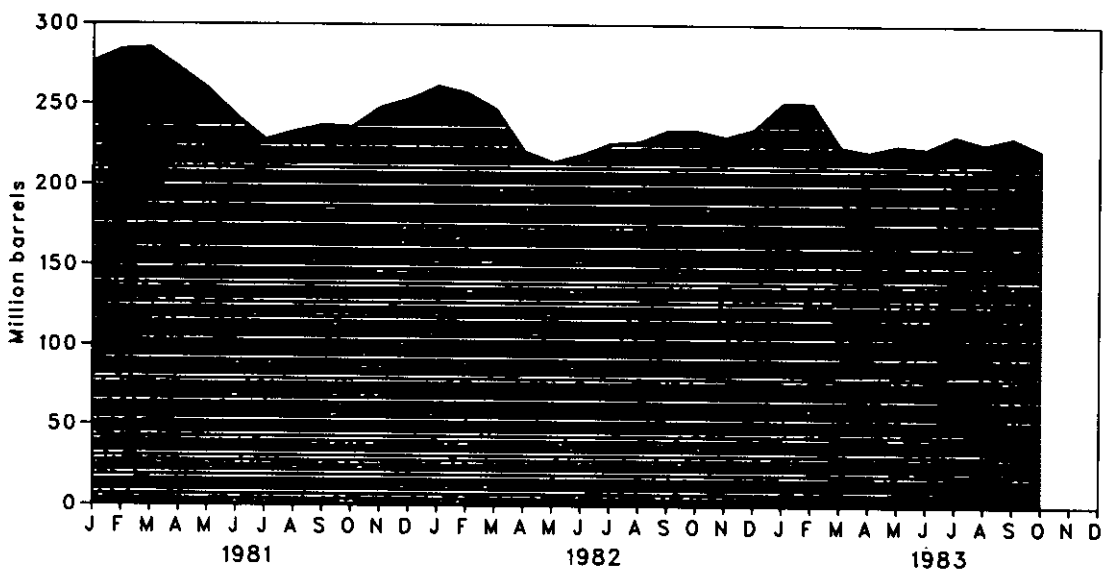
Petroleum

Motor Gasoline

Products Supplied, Total Production, and Imports



Stocks



Petroleum

Finished Motor Gasoline Supply and Disposition

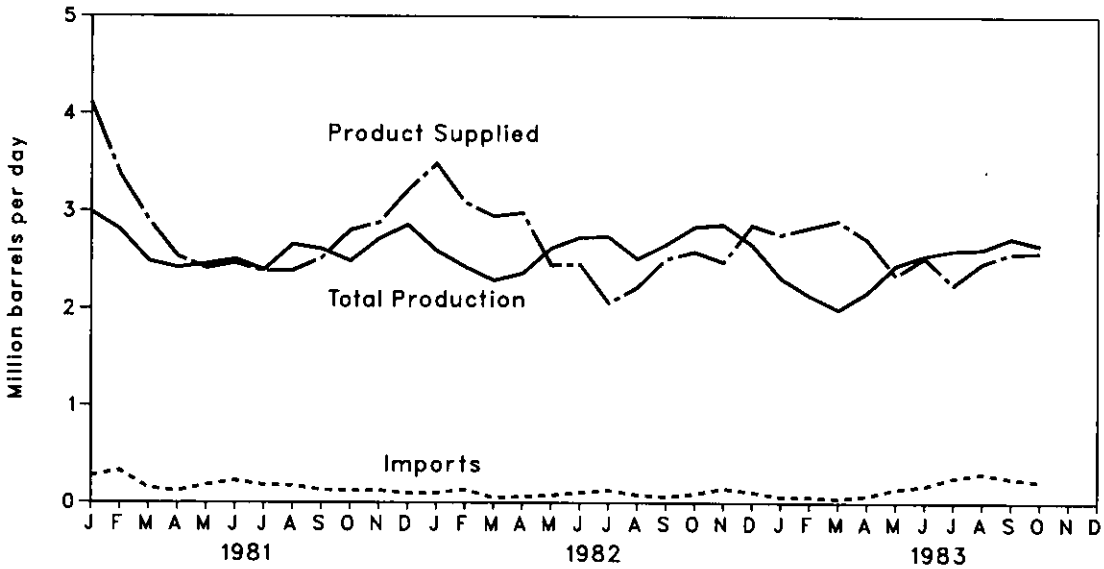
		Supply			Disposition				Ending Stocks	
						Product Supplied				
		Total Production	Imports[1]	Stock Withdrawal[1,2]	Exports	Total	Unleaded[3]	Unleaded Percent of Total	Total Motor Gasoline[4]	Finished Motor Gasoline
		Thousand barrels per day							Million barrels	
1973	**AVERAGE**	**6,535**	**134**	**9**	**4**	**6,674**			**209**	
1974	**AVERAGE**	**6,360**	**204**	**-24**	**2**	**6,537**			**218**	
1975	**AVERAGE**	**6,520**	**184**	**-28**	**2**	**6,675**			**235**	
1976	**AVERAGE**	**6,841**	**131**	**10**	**3**	**6,978**			**231**	
1977	**AVERAGE**	**7,033**	**217**	**-72**	**2**	**7,177**	**1,976**	**27.5**	**258**	
1978	**AVERAGE**	**7,169**	**190**	**54**	**1**	**7,412**	**2,521**	**34.0**	**238**	
1979	**AVERAGE**	**6,852**	**181**	**2**	**(s)**	**7,034**	**2,798**	**39.8**	**237**	
1980	**AVERAGE**	**6,506**	**140**	**-66**	**1**	**6,579**	**3,067**	**46.6**	**261**	
1981	January	6,715	138	-421	(s)	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	(s)	6,303	3,097	49.1	285	232
	April	6,114	186	303	(s)	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	(s)	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
	AVERAGE	**6,405**	**157**	**28**	**2**	**6,588**	**3,264**	**49.5**		
1982	January	6,167	128	-316	18	5,961	3,067	51.5	261	213
	February	5,899	133	172	8	6,196	3,210	51.8	257	208
	March	5,994	183	334	44	6,466	3,358	51.9	247	198
	April	6,095	185	650	33	6,897	3,495	50.7	221	179
	May	6,319	182	177	23	6,655	3,415	51.3	214	173
	June	6,754	230	-134	14	6,835	3,565	52.2	219	177
	July	6,768	225	-178	24	6,790	3,577	52.7	226	183
	August	6,419	291	-81	16	6,614	3,526	53.3	227	185
	September	6,527	223	-198	22	6,531	3,404	52.1	234	191
	October	6,262	185	-42	15	6,391	3,351	52.4	234	192
	November	6,273	211	101	11	6,574	3,451	52.5	230	189
	December	6,542	178	-165	7	6,549	3,485	53.2	235	194
	AVERAGE	**6,338**	**197**	**25**	**20**	**6,539**	**3,409**	**52.1**		
1983	January	6,020	148	-186	(s)	5,981	3,352	56.0	251	208
	February	5,848	142	32	(s)	6,022	3,257	54.1	251	207
	March	5,897	205	765	23	6,843	3,620	52.9	224	184
	April	6,202	273	27	1	6,501	3,505	53.9	221	183
	May	6,386	284	-128	1	6,540	3,547	54.2	225	187
	June	6,646	265	118	22	7,008	3,796	54.2	223	183
	July	6,704	297	-210	18	6,773	3,752	55.4	231	190
	August	6,539	260	159	13	6,946	3,836	55.2	226	185
	September	R6,582	R285	R-160	14	R6,693	3,671	54.8	R230	R190
	October†	*6,245*	*287*	*203*	NA	*6,719*	NA	NA	*222*	*185*
	AVERAGE	**6,310**	**245**	**63**	**NA**	**6,607**	**NA**	**NA**		

[1]Beginning in 1981, excludes blending components.
[2]A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3]Includes gasohol.
[4]Includes motor gasoline blending components. Stocks are totals as of end of period.
†Italics denote 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.
• Beginning in 1981, survey forms were modified. See Note 2 on the last page of this section.
• In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end-of-year stocks would be: 1974—225; 1980—263; 1982—244 (Total) and 203 (Finished). Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
Sources: • See the last page of this section.

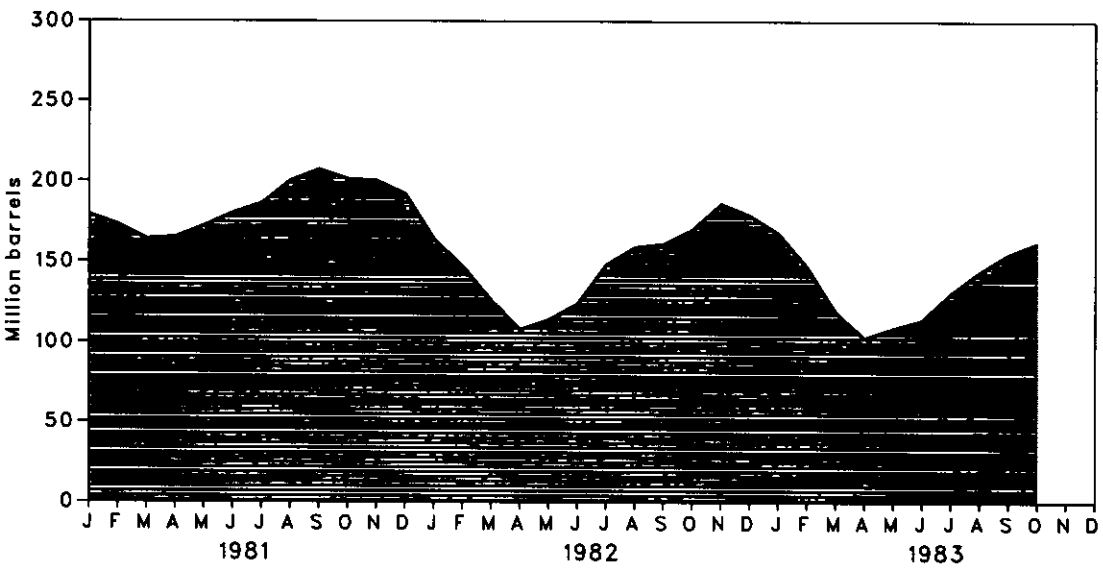
Petroleum

Distillate Fuel Oil

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Distillate Fuel Oil Supply and Disposition

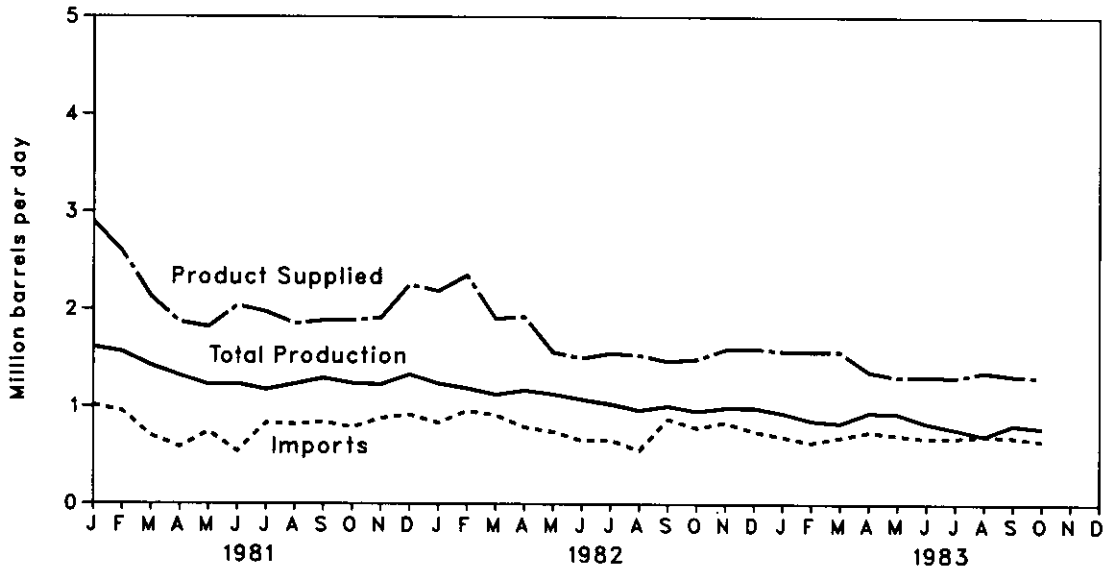
		Supply				Disposition		Ending Stocks[1]
		Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Product Supplied[3]	
		Thousand barrels per day						Million barrels
1973	**AVERAGE**	**2,822**	**392**	**-115**	**2**	**9**	**3,092**	**196**
1974	**AVERAGE**	**2,669**	**289**	**-9**	**2**	**2**	**2,948**	**200**
1975	**AVERAGE**	**2,654**	**155**	**40**	**2**	**1**	**2,851**	**209**
1976	**AVERAGE**	**2,924**	**146**	**62**	**1**	**1**	**3,133**	**186**
1977	**AVERAGE**	**3,278**	**250**	**-176**	**1**	**1**	**3,352**	**250**
1978	**AVERAGE**	**3,167**	**173**	**93**	**1**	**3**	**3,432**	**216**
1979	**AVERAGE**	**3,153**	**193**	**-34**	**1**	**3**	**3,311**	**229**
1980	**AVERAGE**	**2,662**	**142**	**64**	**1**	**3**	**2,866**	**205**
1981	January	2,989	273	836	11	(s)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(s)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(s)	2,411	172
	June	2,501	225	-270	9	(s)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(s)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	**2,613**	**173**	**38**	**10**	**5**	**2,829**	
1982	January	2,591	97	876	10	90	3,484	164
	February	2,427	132	605	11	90	3,085	147
	March	2,288	48	682	10	84	2,945	126
	April	2,358	59	612	13	64	2,978	108
	May	2,618	74	-183	10	75	2,444	114
	June	2,729	102	-335	10	55	2,452	124
	July	2,734	125	-789	11	24	2,058	148
	August	2,507	80	-339	10	40	2,218	159
	September	2,657	61	-85	12	139	2,507	161
	October	2,838	91	-289	8	66	2,581	170
	November	2,860	145	-514	8	24	2,475	186
	December	2,655	109	225	10	143	2,855	179
	AVERAGE	**2,606**	**93**	**35**	**10**	**74**	**2,671**	
1983	January	2,314	58	561	NA	173	2,760	168
	February	2,136	58	742	NA	105	2,832	147
	March	1,991	42	926	NA	59	2,900	119
	April	2,169	73	518	NA	47	2,713	103
	May	2,444	141	-193	NA	50	2,341	109
	June	2,545	175	-154	NA	40	2,526	114
	July	2,600	259	-556	NA	55	2,248	131
	August	2,612	302	-403	NA	43	2,467	144
	September	R2,725	R253	R-374	NA	37	R2,568	R155
	October†	*2,651*	*220*	*-244*	NA	NA	*2,576*	*162*
	AVERAGE	**2,421**	**159**	**77**	**NA**	**NA**	**2,591**	

[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.
†Italics denote 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.
• Beginning in 1981, survey forms were modified. See Note 3 on the last page of this section.
• In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end-of-year stocks would be: 1974—224; 1980—205; and 1982—186. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
Sources: • See the last page of this section.

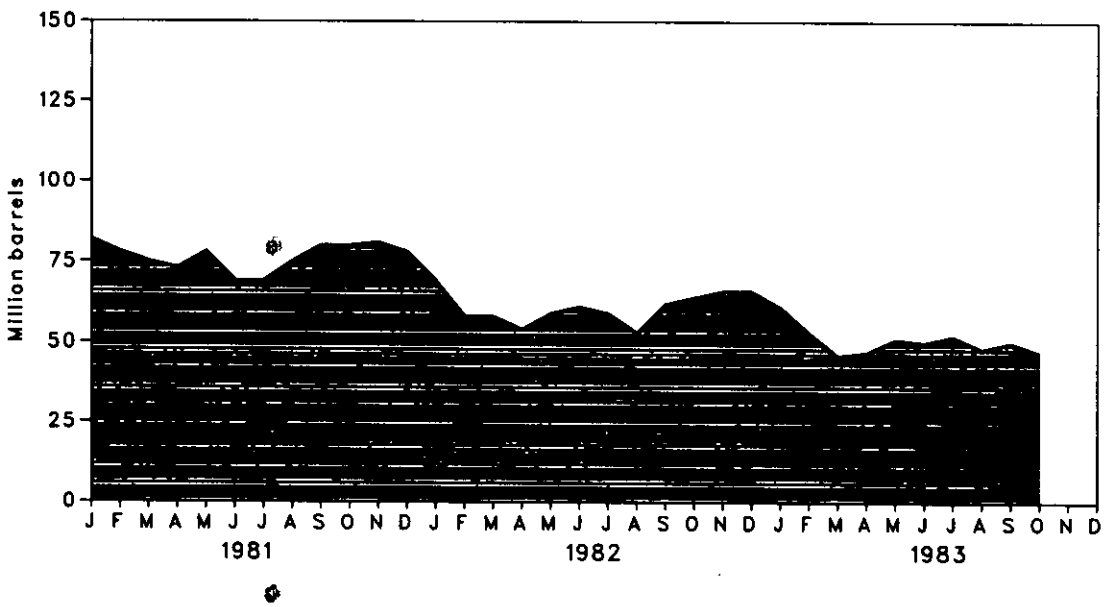
Petroleum

Residual Fuel Oil

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Residual Fuel Oil Supply and Disposition

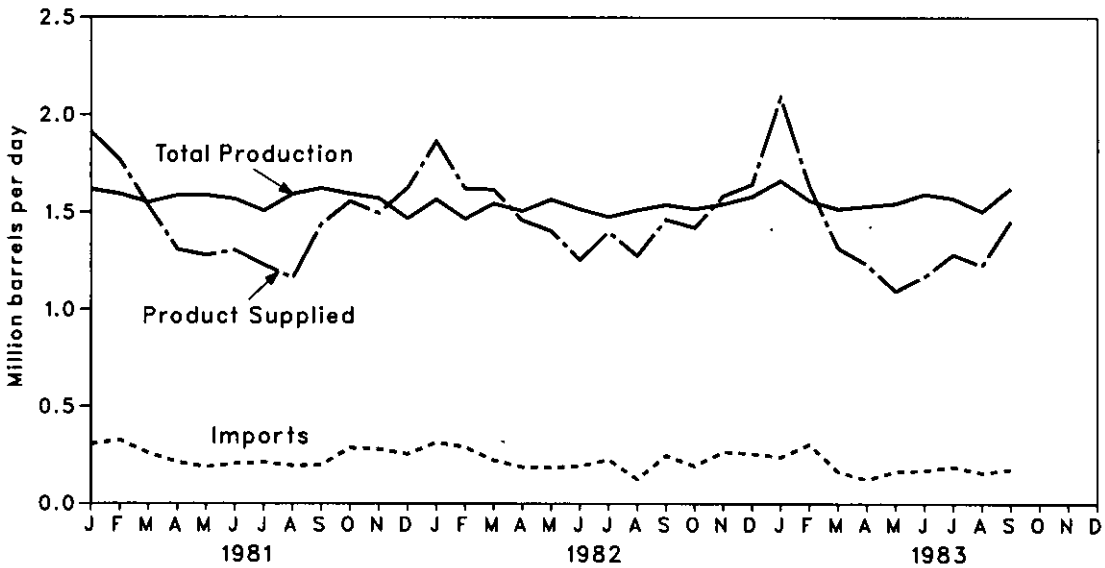
		Supply				Disposition		Ending Stocks[1]
		Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Product Supplied[3]	
		Thousand barrels per day						Million barrels
1973	**AVERAGE**	**971**	**1,853**	**5**	**17**	**23**	**2,822**	**53**
1974	**AVERAGE**	**1,070**	**1,587**	**-17**	**13**	**14**	**2,639**	**60**
1975	**AVERAGE**	**1,235**	**1,223**	**2**	**15**	**15**	**2,462**	**74**
1976	**AVERAGE**	**1,377**	**1,413**	**5**	**17**	**12**	**2,801**	**72**
1977	**AVERAGE**	**1,754**	**1,359**	**-48**	**13**	**6**	**3,071**	**90**
1978	**AVERAGE**	**1,667**	**1,355**	**-1**	**13**	**13**	**3,023**	**90**
1979	**AVERAGE**	**1,687**	**1,151**	**-15**	**12**	**9**	**2,826**	**96**
1980	**AVERAGE**	**1,580**	**939**	**10**	**12**	**33**	**2,508**	**92**
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	**1,321**	**800**	**37**	**48**	**118**	**2,088**	
1982	January	1,235	831	301	53	235	2,185	69
	February	1,186	956	363	53	213	2,344	58
	March	1,123	912	12	53	197	1,903	58
	April	1,166	788	150	52	234	1,923	54
	May	1,128	742	-172	52	191	1,560	59
	June	1,074	652	-57	50	217	1,501	61
	July	1,028	657	56	49	239	1,550	59
	August	965	551	203	47	235	1,531	53
	September	1,008	872	-306	44	148	1,470	62
	October	955	783	-57	43	234	1,490	64
	November	989	837	-94	43	182	1,591	66
	December	989	747	6	43	186	1,598	66
	AVERAGE	**1,070**	**776**	**32**	**48**	**209**	**1,716**	
1983	January	935	691	243	NA	294	1,574	61
	February	857	632	270	NA	191	1,568	53
	March	833	686	220	NA	169	1,569	46
	April	942	743	-10	NA	310	1,364	47
	May	930	709	-139	NA	190	1,310	51
	June	832	676	28	NA	219	1,317	50
	July	771	682	-58	NA	90	1,306	52
	August	706	705	115	NA	165	1,362	48
	September	R815	R690	R-47	NA	134	R1,324	R50
	October†	*785*	*652*	*-8*	NA	NA	*1,312*	*47*
	AVERAGE	**840**	**687**	**60**	**NA**	**NA**	**1,400**	

[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.
†Italics denote 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.
• Beginning in 1981, survey forms were modified. See Note 3 on the last page of this section.
• In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end-of-year stocks would be: 1974—75; 1980—91; and 1982—68. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
Sources: • See the last page of this section.

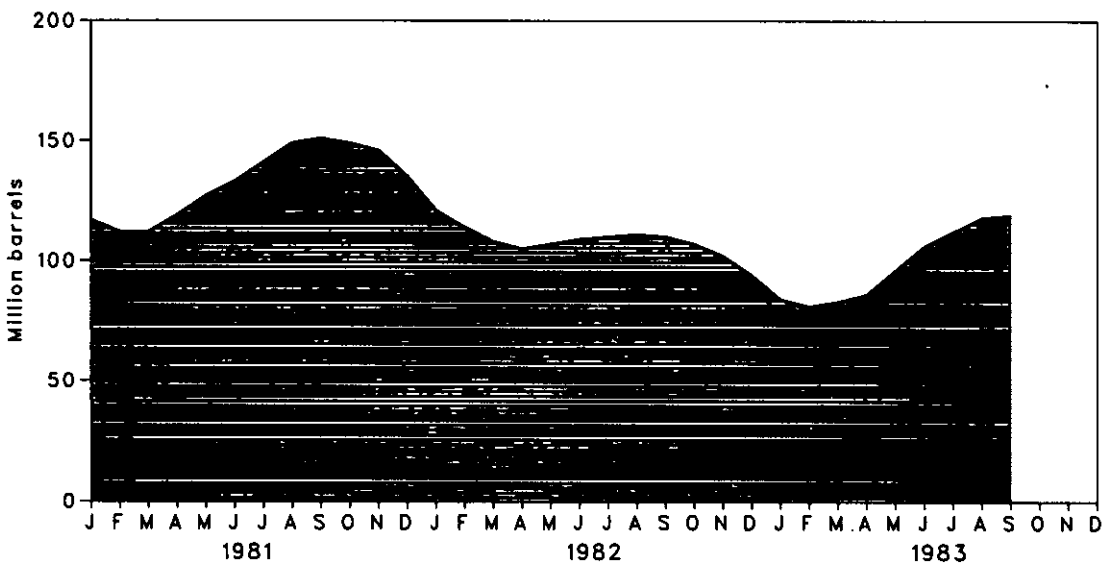
Petroleum

Liquefied Petroleum Gases

Product Supplied, Total Production, and Imports



Stocks



Petroleum

Liquefied Petroleum Gases Supply and Disposition

		Supply			Disposition			Ending Stocks[1]
		Total Production	Imports	Stock Withdrawal[2]	Refinery Inputs	Exports	Product Supplied	
		Thousand barrels per day						Million barrels
1973	**AVERAGE**	**1,600**	**132**	**-35**	**220**	**27**	**1,449**	**99**
1974	**AVERAGE**	**1,565**	**123**	**-38**	**220**	**25**	**1,406**	**113**
1975	**AVERAGE**	**1,527**	**112**	**-35**	**246**	**26**	**1,333**	**125**
1976	**AVERAGE**	**1,535**	**130**	**24**	**260**	**25**	**1,404**	**116**
1977	**AVERAGE**	**1,566**	**161**	**-55**	**233**	**18**	**1,422**	**136**
1978	**AVERAGE**	**1,537**	**123**	**12**	**239**	**20**	**1,413**	**132**
1979	**AVERAGE**	**1,556**	**217**	**70**	**236**	**15**	**1,592**	**111**
1980	**AVERAGE**	**1,535**	**216**	**-27**	**233**	**21**	**1,469**	**120**
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	**1,571**	**244**	**-18**	**289**	**42**	**1,466**	
1982	January	1,565	314	443	391	67	1,863	121
	February	1,466	291	243	327	51	1,621	114
	March	1,544	223	211	289	74	1,615	108
	April	1,506	188	98	257	77	1,458	105
	May	1,565	186	-71	234	43	1,403	107
	June	1,515	192	-86	262	106	1,254	109
	July	1,476	227	-13	253	37	1,399	110
	August	1,511	125	-45	254	61	1,276	111
	September	1,538	247	37	274	85	1,463	110
	October	1,517	194	97	306	81	1,421	107
	November	1,542	267	175	363	37	1,583	102
	December	1,580	258	256	395	56	1,642	94
	AVERAGE	**1,528**	**226**	**111**	**300**	**65**	**1,499**	
1983	January	1,662	240	618	313	118	2,088	84
	February	1,560	305	84	237	76	1,636	81
	March	1,517	166	-51	189	127	1,316	83
	April	1,531	124	-107	198	116	1,232	86
	May	1,545	167	-326	207	84	1,094	96
	June	1,593	172	-333	205	59	1,169	106
	July	1,571	191	-206	217	55	1,284	112
	August	1,505	160	-183	229	29	1,225	118
	September	1,625	178	-23	236	86	1,457	119
	AVERAGE	**1,568**	**188**	**-59**	**226**	**83**	**1,387**	

[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.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end-of-year stocks would be: 1974—113; 1980—128; and 1982—103. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
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**	**218**
1975	**AVERAGE**	**3,424**	**277**	**-2**	**537**	**160**	**3,002**	**219**
1976	**AVERAGE**	**3,643**	**206**	**-5**	**524**	**175**	**3,145**	**220**
1977	**AVERAGE**	**3,912**	**205**	**-27**	**514**	**165**	**3,410**	**230**
1978	**AVERAGE**	**4,046**	**166**	**14**	**492**	**167**	**3,568**	**225**
1979	**AVERAGE**	**4,153**	**195**	**-37**	**352**	**209**	**3,749**	**238**
1980	**AVERAGE**	**3,956**	**210**	**-23**	**311**	**198**	**3,634**	**247**
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	286	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	**3,739**	**226**	**46**	**723**	**199**	**3,088**	
1982	January	3,171	269	-7	624	180	2,631	282
	February	3,403	305	-153	663	138	2,755	287
	March	3,466	243	-191	725	161	2,631	293
	April	3,408	309	73	796	204	2,790	290
	May	3,317	318	184	824	210	2,785	285
	June	3,547	315	123	812	216	2,954	281
	July	3,660	408	-1	856	187	3,023	281
	August	3,583	346	217	743	202	3,201	274
	September	3,533	375	105	749	213	3,051	271
	October	3,529	383	244	915	266	2,976	264
	November	3,498	423	-28	837	269	2,786	264
	December	3,324	313	366	885	275	2,842	253
	AVERAGE	**3,453**	**334**	**80**	**787**	**211**	**2,869**	
1983	January	3,222	297	-371	570	271	2,307	271
	February	3,270	287	-1	680	232	2,645	271
	March	3,400	298	-94	570	249	2,786	273
	April	3,363	377	3	596	247	2,901	273
	May	3,448	364	26	694	242	2,902	273
	June	3,674	427	99	715	292	3,197	270
	July	3,703	393	106	757	209	3,237	266
	August	3,774	435	23	689	242	3,302	266
	September	3,861	460	-31	768	236	3,287	267
	AVERAGE	**3,526**	**371**	**-27**	**671**	**246**	**2,978**	

[1]Includes natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and ethane.
[2]Stocks are totals as of end of period.
[3]A negative number indicates an increase in stocks and a positive number indicates a decrease.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end-of-year stocks would be: 1974—220; 1980—249; and 1982—259. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
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.*

Sources

- 1973 through 1976: Bureau of Mines, *Mineral Industry Surveys,* "Petroleum Statement, Annual" (except unleaded gasoline) and "PAD Districts Supply/Demand, Annual."
- Unleaded gasoline—1977 through 1980: Energy Information Administration (EIA), *Monthly Petroleum Statistics Report.*
- 1977 through 1982: EIA, *Energy Data Reports,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
- January 1983 through September 1983: EIA, *Petroleum Supply Monthly.*
- Data for the most recent month are estimates based on EIA weekly data (except domestic production).
- Domestic production for the most recent month is an EIA estimate based on historical data from State Conservation Agencies and the U.S. Geological Survey.
- Sources for the *Energy Data Reports,* the *Petroleum Supply Monthly,* and the *Monthly Petroleum Statistics Report* are: EIA Forms EIA-816 (Natural Gas Liquids Operations Report), EIA-810 (Refinery Report), EIA-811 (Bulk Terminals Report), EIA-812 (Pipeline Report), and EIA-813 (Crude Oil Stock Report); Economic Regulatory Administration (ERA) Forms ERA-60 (Imports) and FEA P133 (Imports from Puerto Rico); Bureau of the Census IM 145 (Imports), EM 522 (Exports), and EM 594 (Exports); U.S. Geological Survey (Crude Production); and State conservation agencies (Crude Production).

Part 4 Natural Gas

Natural Gas

Total dry natural gas production in the United States during October 1983 was an estimated 1.4 trillion cubic feet (Tcf). This was 1.4 percent lower than in October 1982. Output during the first 10 months of 1983 totaled 13.1 Tcf, 11.9 percent less than during the period January through October 1982.

Consumption of natural and supplemental gas in October 1983 was an estimated 1.3 Tcf, 1.7 percent lower than in October 1982. Estimated consumption during the period January through October 1983 totaled 13.4 Tcf, 8.9 percent lower than during the comparable 1982 period.

Deliveries to industrial consumers, the principal end users of natural and supplemental gas, during September 1983 (latest data available) were an estimated 475 billion cubic feet (Bcf). This was 42.4 percent of total September 1983 consumption and was 1.5 percent lower than deliveries to industrial consumers in September 1982.

Imports of natural gas in October 1983 were an estimated 70 Bcf, 9.1 percent lower than in the previous October. During the first 10 months of 1983, imports of natural gas totaled an estimated 763 Bcf, 4.0 percent higher than during the comparable 1982 period. Receipts of foreign gas during October 1983 included Algerian liquefied natural gas (LNG) equivalent to approximately 6 Bcf.

Stocks of working gas* in underground natural gas storage reservoirs at the end of October 1983 totaled 3.3 Tcf. This was 2.8 percent below stocks available a year earlier. Net additions to storage during October 1983 were 130 Bcf, almost the same as in the previous October.

*Gas available for withdrawal.

Beginning with this issue, the *Monthly Energy Review* contains a revised and expanded natural gas section. This section now includes the following:

- Expanded and redesigned production, supply, and disposition tables to provide additional detail;
- Additional columns in the storage table to show incremental changes and percent changes; and
- A new table giving natural gas consumption by end-use sector in physical units.

The "Total Marketed Production" and the "Total Dry Production" data series in previous issues are not the same as the "Marketed Production" and the "Total Dry Gas Production" data series shown in the new tables. The previous series may be reconstructed by adding "Supplemental Gaseous Fuels" to the two new data series.

The data series "Domestic Producer Sales to Major Interstate Pipelines" is no longer shown in the natural gas section but can be found in Table 15 of the EIA *Natural Gas Monthly.*

The revisions and additions to this section in the *Monthly Energy Review* have been timed to coincide with similar changes in the *Natural Gas Monthly* and to reflect the same format as the comparable tables in the *Natural Gas Monthly.*

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[6]
					Billion cubic feet			
1973	**TOTAL**	**24,067**	**1,171**	**NA**	**248**	**[7]22,648**	**917**	**21,731**
1974	**TOTAL**	**22,850**	**1,080**	**NA**	**169**	**[7]21,601**	**887**	**20,713**
1975	**TOTAL**	**21,104**	**861**	**NA**	**134**	**[7]20,109**	**872**	**19,236**
1976	**TOTAL**	**20,944**	**859**	**NA**	**132**	**[7]19,952**	**854**	**19,098**
1977	**TOTAL**	**21,097**	**935**	**NA**	**137**	**[7]20,025**	**863**	**19,163**
1978	**TOTAL**	**21,309**	**1,181**	**NA**	**153**	**[7]19,974**	**852**	**19,122**
1979	**TOTAL**	**21,883**	**1,245**	**NA**	**167**	**[7]20,471**	**808**	**19,663**
1980	**TOTAL**	**21,870**	**1,365**	**R199**	**125**	**20,180**	**777**	**19,403**
1981	January	1,890	108	20	10	1,752	68	1,684
	February	1,702	101	R18	10	1,573	61	1,512
	March	1,871	109	18	9	1,735	67	1,668
	April	1,808	108	R18	8	1,674	65	1,609
	May	1,838	115	18	7	1,698	66	1,632
	June	1,770	109	19	8	1,634	63	1,571
	July	1,797	106	20	9	1,663	65	1,598
	August	1,841	108	18	10	1,705	66	1,639
	September	1,716	114	18	7	1,577	61	1,516
	October	1,781	113	R18	7	1,643	64	1,579
	November	1,714	108	17	6	1,583	61	1,522
	December	1,860	114	R20	8	1,718	67	1,651
	TOTAL	**21,587**	**1,312**	**R222**	**98**	**19,956**	**775**	**19,181**
1982	January	1,865	108	R19	9	1,728	71	1,657
	February	1,712	101	18	8	1,584	65	1,519
	March	1,816	115	R19	7	1,675	69	1,606
	April	1,714	108	R18	7	1,581	65	1,516
	May	1,692	117	R17	7	1,552	64	1,488
	June	1,643	114	R16	7	1,505	62	1,443
	July	1,667	119	15	7	1,526	63	1,463
	August	1,638	120	R18	8	1,492	61	1,431
	September	1,570	116	R16	6	1,431	59	1,372
	October	1,610	126	R16	8	1,460	60	1,400
	November	1,621	119	R18	9	1,476	61	1,415
	December	1,663	125	R19	10	1,510	62	1,448
	TOTAL	**20,210**	**1,388**	**R208**	**93**	**18,520**	**762**	**17,758**
1983	January	1,668	122	R19	7	1,520	62	1,458
	February	1,471	108	16	6	1,340	55	1,285
	March	1,534	124	17	7	1,386	57	1,329
	April	1,453	120	16	7	1,310	54	1,256
	May	1,450	111	16	8	1,316	54	1,262
	June	1,399	118	19	7	1,256	52	1,204
	July	1,487	125	19	7	1,336	55	1,281
	August	1,553	124	R22	7	1,399	57	1,342
	September	*1,527*	*126*	*19*	*7*	*1,375*	*57*	*1,318*
	October	*1,599*	*132*	*19*	*8*	*1,440*	*59*	*1,381*

[1]Gas withdrawn from gas and oil wells.
[2]Gas returned to formations for repressuring, pressure maintenance, and cycling.
[3]Data on nonhydrocarbon gases removed are not reported by all producing States. Monthly data are reported by three States and computed for four States. See Note 1 on the last two pages of this section for further explanation.
[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]The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants. See Note 3 on the last two pages of this section for further explanation.
[6]Equal to marketed production (wet) minus extraction loss.
[7]May include unknown quantities of nonhydrocarbon gases.
R=Revised data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
• Italics denote estimated data. Data for 1973 through 1982 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

Natural Gas

Supply and Disposition of Dry Natural Gas and Supplemental Gaseous Fuels

		Supply					Disposition			
		Total Dry Gas Production	Withdrawals from Storage[1]	Supplemental Gaseous Fuels[2]	Imports[3]	Total Supply/ Disposition[4]	Additions to Storage[1]	Exports[3]	Consumption[5]	Unaccounted for[6]
		Billion cubic feet								
1973	**TOTAL**	**21,731**	**1,533**	**NA**	**1,033**	**24,297**	**1,974**	**77**	**22,049**	**196**
1974	**TOTAL**	**20,713**	**1,701**	**NA**	**959**	**23,373**	**1,784**	**77**	**21,223**	**289**
1975	**TOTAL**	**19,236**	**1,760**	**NA**	**953**	**21,949**	**2,104**	**73**	**19,538**	**235**
1976	**TOTAL**	**19,098**	**1,921**	**NA**	**R963**	**21,983**	**1,756**	**65**	**19,946**	**216**
1977	**TOTAL**	**19,163**	**1,750**	**NA**	**1,011**	**21,924**	**2,307**	**56**	**19,521**	**41**
1978	**TOTAL**	**19,122**	**2,158**	**NA**	**966**	**22,245**	**2,278**	**53**	**19,627**	**287**
1979	**TOTAL**	**19,663**	**2,047**	**NA**	**1,253**	**22,964**	**2,295**	**58**	**20,241**	**372**
1980	**TOTAL**	**19,403**	**1,972**	**155**	**985**	**22,515**	**1,949**	**49**	**19,877**	**640**
1981	January	1,684	571	20	91	2,366	38	5	2,279	44
	February	1,512	385	17	85	1,999	60	5	R1,895	39
	March	1,668	239	17	80	2,004	56	5	R1,899	44
	April	1,609	56	14	69	1,748	213	5	R1,488	42
	May	1,632	27	13	62	1,734	261	4	1,426	43
	June	1,571	28	12	65	1,676	321	5	1,309	41
	July	1,598	27	12	66	1,703	342	5	R1,314	42
	August	1,639	15	12	64	1,730	369	5	R1,313	43
	September	1,516	9	12	67	1,604	293	6	R1,265	40
	October	1,579	51	14	79	1,723	158	5	R1,519	41
	November	1,522	127	15	82	1,746	82	5	1,619	40
	December	1,651	396	19	93	2,159	35	5	R2,076	43
	TOTAL	**19,181**	**1,930**	**176**	**904**	**22,191**	**2,228**	**59**	**19,404**	**501**
1982	January	1,657	697	R19	98	2,471	24	3	R2,400	44
	February	1,519	461	R16	85	2,081	51	5	R1,984	41
	March	1,606	274	R15	82	1,977	91	5	R1,838	43
	April	1,516	112	R12	72	1,712	185	2	R1,485	40
	May	1,488	11	R9	65	1,573	394	3	1,136	40
	June	1,443	11	R9	61	1,524	364	6	1,115	39
	July	1,463	12	R9	67	1,551	362	5	R1,145	39
	August	1,431	36	R9	61	1,537	342	6	R1,151	38
	September	1,372	20	R9	66	1,467	285	5	R1,140	37
	October	1,400	62	R11	77	1,550	197	5	R1,311	37
	November	1,415	168	R13	91	1,687	85	5	R1,559	38
	December	1,448	299	R14	110	1,871	88	5	R1,739	39
	TOTAL	**17,758**	**2,165**	**R145**	**933**	**21,001**	**2,472**	**52**	**R18,001**	**475**
1983	January	1,458	R450	R16	120	2,044	R24	5	R1,976	39
	February	1,285	324	R13	102	1,724	35	5	R1,650	34
	March	1,329	266	R13	91	1,699	58	5	R1,601	35
	April	1,256	162	R11	76	1,505	R81	4	R1,386	34
	May	1,262	R41	R9	64	1,376	R189	3	R1,150	34
	June	1,204	22	R8	61	1,295	R254	5	R1,004	32
	July	1,281	R25	R9	56	1,371	R267	5	R1,065	34
	August	1,342	R35	R9	58	1,444	248	4	R1,156	36
	September	*1,318*	*R27*	*R9*	*R65*	*1,419*	*R259*	*5*	*R1,120*	*35*
	October	*1,381*	*35*	*10*	*70*	*1,496*	*166*	*4*	*1,289*	*37*

[1]Monthly and annual data for 1980 through 1982 include underground storage and liquefied natural gas storage. All other data include underground storage only. Computation procedures are discussed in Note 8 at the end of this section.
[2]Includes synthetic natural gas, propane-air, refinery gas, and other gases. See Note 4 at the end of this section.
[3]The United States imports natural gas via pipeline from Mexico and Canada, and liquefied natural gas from Algeria. The United States exports natural gas via pipeline to Mexico and Canada and liquefied natural gas to Japan. See Note 5 at the end of this section.
[4]Data for 1978 through 1982 exclude intransit receipts and deliveries.
[5]Consists of pipeline fuel use, lease and plant fuel use, and deliveries to consuming sectors. See Note 6 at the end of this section.
[6]Represents quantities lost and imbalances in data due to differences among data sources. See Note 7 at the end 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 December 1982 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

Natural Gas

Natural and Supplemental Gas Consumption

				Delivered to Consumers					
		Lease and Plant Fuel	Pipeline Fuel	Residential	Commercial[1]	Industrial	Electric Utilities	Total	Total Consumption
				Billion cubic feet					
1973	**TOTAL**	**1,496**	**728**	**4,879**	**2,597**	**8,689**	**3,660**	**19,825**	**22,049**
1974	**TOTAL**	**1,477**	**669**	**4,786**	**2,556**	**8,292**	**3,443**	**19,077**	**21,223**
1975	**TOTAL**	**1,396**	**583**	**4,924**	**2,508**	**6,968**	**3,158**	**17,558**	**19,538**
1976	**TOTAL**	**1,634**	**548**	**5,051**	**2,668**	**6,964**	**3,081**	**17,764**	**19,946**
1977	**TOTAL**	**1,659**	**533**	**4,821**	**2,501**	**6,815**	**3,191**	**17,329**	**19,521**
1978	**TOTAL**	**1,648**	**530**	**4,903**	**2,601**	**6,757**	**3,188**	**17,449**	**19,627**
1979	**TOTAL**	**1,499**	**601**	**4,965**	**2,786**	**6,899**	**3,491**	**18,141**	**20,241**
1980	**TOTAL**	**1,026**	**635**	**4,752**	**2,611**	**7,172**	**3,682**	**18,216**	**19,877**
1981	January	81	75	831	406	654	232	2,123	2,279
	February	73	63	740	355	440	224	1,759	R1,895
	March	81	63	585	304	593	273	1,755	R1,899
	April	78	49	372	204	496	289	1,361	R1,488
	May	79	47	260	151	573	316	1,300	1,426
	June	76	43	168	116	525	381	1,190	1,309
	July	77	43	136	99	548	411	1,194	R1,314
	August	79	43	123	107	571	390	1,191	R1,313
	September	73	42	133	107	585	325	1,150	R1,265
	October	76	50	232	148	711	302	1,393	R1,519
	November	74	54	364	205	663	259	1,491	1,619
	December	80	69	601	318	769	239	1,927	R2,076
	TOTAL	**928**	**642**	**4,546**	**2,520**	**7,128**	**3,640**	**17,834**	**19,404**
1982	January	104	79	866	444	669	238	2,217	R2,400
	February	95	66	786	405	412	220	1,823	R1,984
	March	100	61	602	322	506	247	1,677	R1,838
	April	95	49	451	237	407	246	1,341	R1,485
	May	93	38	233	139	375	258	1,005	1,136
	June	90	37	165	107	420	296	988	1,115
	July	91	38	138	101	424	353	1,016	R1,145
	August	89	38	123	105	435	361	1,024	R1,151
	September	86	38	136	105	482	293	1,016	R1,140
	October	87	43	204	130	573	273	1,181	R1,311
	November	88	52	372	218	603	226	1,419	R1,559
	December	90	58	557	299	520	215	1,591	R1,739
	TOTAL	**1,109**	**596**	**4,633**	**2,606**	**5,831**	**3,226**	**16,295**	**R18,001**
1983	January	91	65	697	357	558	208	1,820	R1,976
	February	80	55	673	349	316	177	1,515	R1,650
	March	83	53	525	275	457	208	1,465	R1,601
	April	78	46	449	231	379	203	1,262	R1,386
	May	79	38	269	147	399	218	1,033	R1,150
	June	75	33	176	107	365	248	896	R1,004
	July	80	35	130	97	409	314	950	R1,065
	August	84	38	119	99	464	352	1,034	R1,156
	September	82	37	124	103	475	299	1,001	R1,120

[1]Includes deliveries to local, State, and Federal agencies engaged in nonmanufacturing activities.
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 1973 through December 1982 are final. All other data are preliminary unless otherwise indicated.
Sources: • See the last page of this section.

Natural Gas

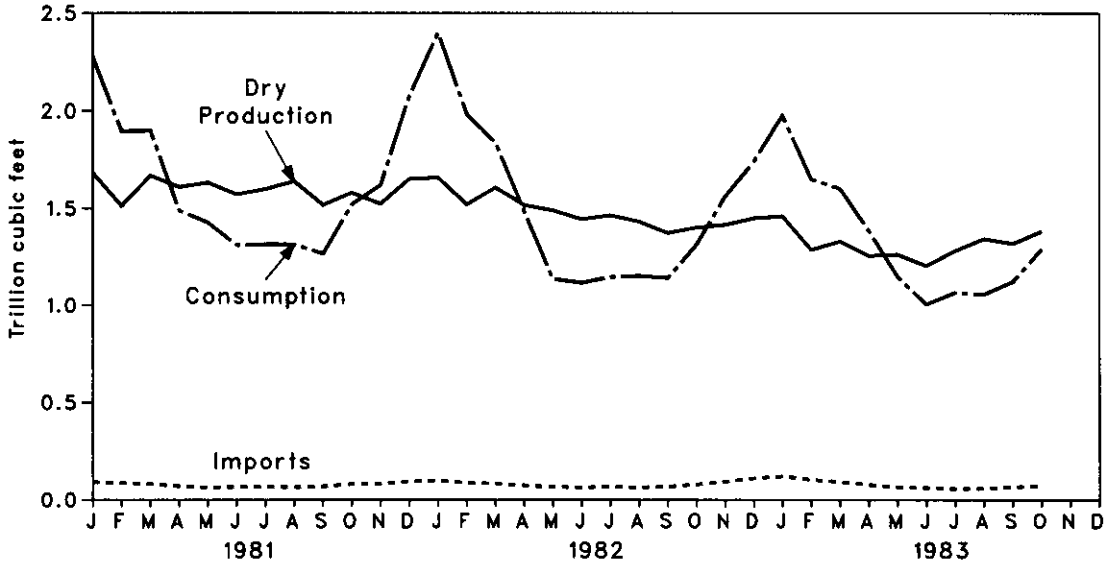
Underground Natural Gas Storage—All Operators

		Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
		Base Gas	Working Gas	Total[1]	Volume	Percent	Injections	Withdrawals	Net[2]
		Volumes in Billion cubic feet							
1973	**TOTAL**	**2,864**	**2,034**	**4,898**	**305**	**17.6**	**1,974**	**1,533**	**441**
1974	**TOTAL**	**2,912**	**2,050**	**4,962**	**16**	**0.8**	**1,784**	**1,701**	**83**
1975	**TOTAL**	**3,162**	**2,212**	**5,374**	**162**	**7.9**	**2,104**	**1,760**	**344**
1976	**TOTAL**	**3,323**	**1,926**	**5,250**	**-286**	**-12.9**	**R1,756**	**R1,921**	**R-165**
1977	**TOTAL**	**3,391**	**2,475**	**5,866**	**549**	**28.5**	**R2,307**	**R1,750**	**R557**
1978	**TOTAL**	**3,473**	**2,547**	**6,020**	**72**	**2.9**	**R2,278**	**R2,158**	**R120**
1979	**TOTAL**	**3,553**	**2,753**	**6,306**	**207**	**8.1**	**R2,295**	**R2,047**	**R248**
1980	**TOTAL**	**3,642**	**2,655**	**6,297**	**-99**	**-3.6**	**R1,896**	**R1,910**	**-14**
1981	January	3,642	2,152	5,795	-172	-7.4	37	558	-521
	February	3,648	1,824	5,472	-28	-1.5	59	376	-317
	March	3,654	1,631	5,285	37	2.3	55	234	-179
	April	3,670	1,764	5,434	73	4.3	208	55	153
	May	3,684	1,977	5,660	-22	-1.1	255	26	228
	June	3,681	2,252	5,933	-46	-2.0	314	27	287
	July	3,699	2,558	6,257	-29	-1.1	335	26	309
	August	3,713	2,882	6,595	28	1.0	361	15	346
	September	3,720	3,152	6,872	53	1.7	287	9	277
	October	3,726	3,248	6,974	61	1.9	155	50	104
	November	3,731	3,201	6,932	175	5.8	80	124	-44
	December	3,752	2,817	6,569	162	6.1	34	387	-353
	TOTAL						**2,180**	**1,887**	**293**
1982	January	3,751	2,182	5,932	29	1.4	24	R673	R-649
	February	3,750	1,787	5,536	-37	-2.0	50	446	-396
	March	3,766	1,604	5,370	-26	-1.6	88	R265	R-176
	April	3,778	1,676	5,454	-88	-5.0	180	R108	73
	May	3,780	2,034	5,814	57	2.9	R382	11	R371
	June	3,778	2,369	6,147	117	5.2	R353	R11	R342
	July	3,780	2,704	6,484	146	5.7	R351	12	R339
	August	3,781	2,998	6,778	116	4.0	R332	R35	R298
	September	3,782	3,251	7,033	99	3.1	R277	20	R257
	October	3,785	3,364	7,149	116	3.6	R191	60	R131
	November	3,772	3,309	7,081	108	3.4	83	163	-80
	December	3,808	3,071	6,879	255	9.0	R86	R289	R-204
	TOTAL						**2,399**	**2,094**	**306**
1983	January	3,813	2,644	6,457	462	21.2	R24	R450	R-425
	February	3,811	2,356	6,167	569	31.9	35	324	-288
	March	3,812	2,148	5,959	544	33.9	58	266	-208
	April	R3,818	R2,074	R5,893	398	23.8	R81	162	R-81
	May	R3,818	R2,222	R6,041	188	9.3	R189	R41	R148
	June	R3,819	R2,454	R6,272	85	3.6	R254	22	R232
	July	R3,826	R2,696	R6,522	-8	-0.3	R267	R25	R242
	August	R3,823	R2,908	R6,732	-89	-3.0	248	R35	R214
	September	3,823	R3,140	6,964	-110	-3.4	R259	R27	R232
	October	3,825	3,269	7,094	-95	-2.8	166	35	130

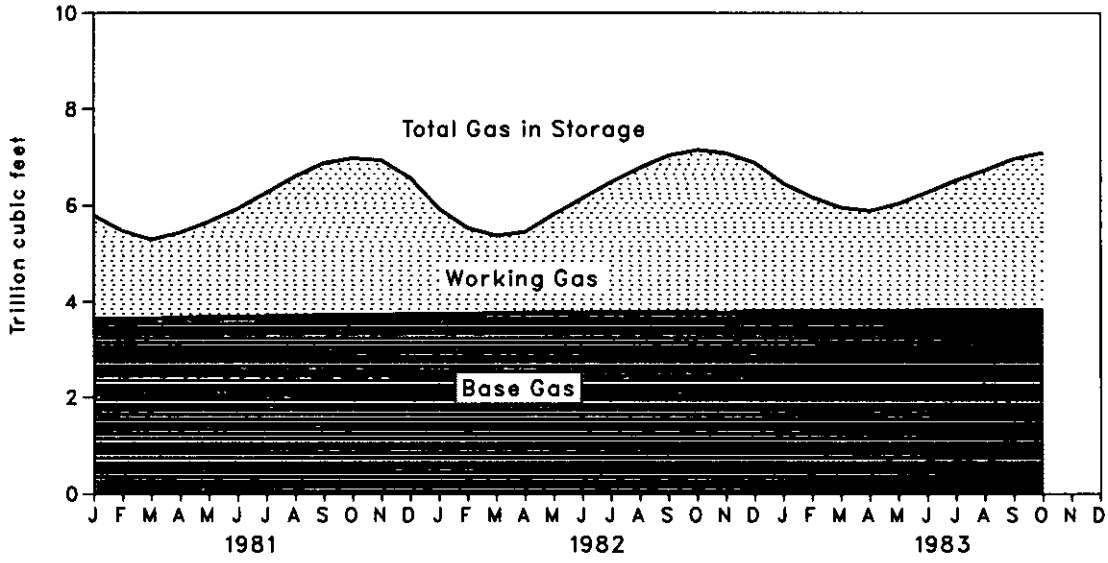
[1]Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1978–6,890; 1979–6,929; 1980–7,434; 1981–7,805; and 1982–7,915. Current total capacity is 7,965.
[2]Positive numbers indicate the volume of injections in excess of withdrawals. Negative numbers indicate the volume of withdrawals in excess of injections.
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 December 1982 are final.
• All other data are preliminary unless otherwise noted. See Note 8 on the last two pages of this section for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs.
Sources: • See the last page of this section.

Natural Gas

Consumption, Dry Production, and Imports



Gas in Storage



Notes and Sources for the Natural Gas Section

Notes

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

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

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

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

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

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

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

3. **Extraction Loss:** 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, 1982.*

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

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

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

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

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

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

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

6. **Consumption:** All final data are from the EIA, *Natural Gas Annual, 1982.*

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

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

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

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

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

Notes and Sources for the Natural Gas Section (continued)

Sources

Production: 1973 through 1982: Energy Information Administration (EIA), *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: State reports to the Interstate Oil Compact Commission, data from the U.S. Minerals Management Service, and EIA estimates for States that do not report monthly data on a regular or timely basis.
Extraction Loss, Consumption, and Unaccounted For: 1973 through 1982: EIA, *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: EIA computations.
Withdrawals from and Additions to Storage: 1973 through 1982: EIA, *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: Form FPC-8 and Form EIA-191, "Underground Gas Storage Report".
Supplemental Gaseous Fuels: 1980 through 1982: EIA, *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: EIA computations.
Imports and Exports: 1973 through 1982: Form FPC-14, "Imports and Exports of Natural Gas"; January 1983 forward: EIA computations.
End-Use Consumption: •All data except electric utility—1973 through 1982: EIA, *Natural Gas Annual, 1982,* Appendix B; January 1983 forward: EIA computations. •Electric utility data—EIA, Form 759, "Monthly Power Plant Report" (formerly Form FPC-4).
Underground Storage: 1973 and 1974: American Gas Association, *Gas Facts;* 1975 through 1979: EIA, Form FPC-8 and Form EIA-191, and the *Natural Gas Annual;* 1980 forward: EIA, From FPC-8, Form EIA-191, and Form 176, "Annual Report of Natural and Supplemental Gas Supply and Disposition".

Part 5 Oil and Gas Resource Development

Oil and Gas Resource Development

The October 1983 rotary rig count of 2,382 was 0.8 percent lower than the October 1982 count of 2,402. The 177 rigs operating offshore were 23.0 percent fewer than those working in October 1982.

In October 1983, the reported total wells drilled were 5,880, a 4.7-percent decrease from the 6,168 reported for October 1982. Oil well completions reported during October 1983 were 2,970, a 4.8-percent increase from the comparable 1982 figure of 2,833. Gas well completions of 1,211 were reported for October 1983, about the same as 1982's comparable figure of 1,210. Total reported footage drilled for October 1983 of 24.9 million feet decreased 8.8 percent from the October 1982 figure of 27.3 million feet.

In October 1983, 498 crews were engaged in seismic exploration, 3.5 percent fewer than during October 1982. The 448 land crews employed during October 1983 were 3.7 percent fewer than those reported during October 1982. The 50 marine vessels working during October 1983 were 2.0 percent fewer than those in October 1982.

Oil and Gas Resource Development

		Rotary Rigs in Operation[1]		Exploratory and Development Wells Drilled[2]				Total Footage of Wells Drilled[2]
		Monthly average		Oil	Gas	Dry	Total	Thousand feet
1973	**AVERAGE**	**1,194**	**TOTAL**	**9,902**	**6,385**	**10,305**	**26,592**	**136,391**
1974	**AVERAGE**	**1,472**	**TOTAL**	**12,784**	**7,240**	**11,674**	**31,698**	**150,551**
1975	**AVERAGE**	**1,660**	**TOTAL**	**16,408**	**7,580**	**13,247**	**37,235**	**174,434**
1976	**AVERAGE**	**1,658**	**TOTAL**	**17,059**	**9,085**	**13,621**	**39,765**	**181,780**
1977	**AVERAGE**	**2,001**	**TOTAL**	**18,912**	**11,378**	**14,692**	**44,982**	**210,848**
1978	**AVERAGE**	**2,259**	**TOTAL**	**17,775**	**13,064**	**16,218**	**47,057**	**227,110**
1979	**AVERAGE**	**2,177**	**TOTAL**	**19,383**	**14,681**	**15,752**	**49,816**	**238,659**
1980	**AVERAGE**	**2,909**	**TOTAL**	**27,026**	**15,730**	**18,089**	**60,845**	**284,461**
1981	January	3,386		1,794	964	1,339	4,097	19,907
	February	3,502		2,459	1,046	1,610	5,115	22,726
	March	3,595		3,099	1,423	1,883	6,405	30,166
	April	3,728		2,905	1,600	1,546	6,051	27,836
	May	3,816		2,604	1,159	1,675	5,438	24,842
	June	3,926		3,497	1,320	2,105	6,922	31,689
	July	3,998		2,790	1,116	1,698	5,604	25,542
	August	4,131		3,140	1,260	1,874	6,274	28,933
	September	4,242		3,414	1,978	2,014	7,406	33,630
	October	4,352		3,772	1,879	2,099	7,750	35,520
	November	4,436		3,591	1,584	2,069	7,244	32,263
	December	4,520		4,619	2,586	3,078	10,283	48,594
	AVERAGE	**3,970**	**TOTAL**	**37,671**	**17,894**	**22,973**	**78,538**	**361,407**
1982	January	4,436		2,798	954	2,132	5,884	28,167
	February	4,160		3,036	1,430	2,234	6,700	31,985
	March	3,816		3,736	1,480	2,479	7,695	37,896
	April	3,460		3,674	1,530	2,287	7,491	36,439
	May	3,178		3,451	1,940	2,205	7,596	36,987
	June	2,908		3,888	1,891	2,521	8,300	38,962
	July	2,746		3,290	1,703	1,931	6,924	31,111
	August	2,620		2,865	1,588	1,917	6,370	28,836
	September	2,482		3,363	1,599	2,330	7,292	32,611
	October	2,402		R2,833	R1,210	R2,125	R6,168	R27,274
	November	2,500		3,282	1,662	2,020	6,964	31,141
	December	2,696		4,090	1,966	2,361	8,417	34,737
	AVERAGE	**3,105**	**TOTAL**	**40,298**	**18,953**	**26,549**	**85,800**	**396,017**
1983	January	2,622		2,381	892	1,651	4,924	20,998
	February	2,192		2,899	1,190	2,223	6,312	27,758
	March	2,003		3,462	1,606	2,644	7,712	34,360
	April	1,846		3,028	1,401	1,985	6,414	27,459
	May	1,926		3,186	1,745	1,827	6,758	28,544
	June	1,979		3,514	1,237	2,105	6,856	28,050
	July	2,039		2,683	1,132	1,640	5,455	22,953
	August	2,156		2,641	1,075	1,533	5,249	22,582
	September	2,252		3,733	1,271	2,019	7,023	30,325
	October	2,382		2,970	1,211	1,699	5,880	24,887

[1]These data are for operating rotary rigs reported by the Hughes Tool Company during the reporting period. Monthly figures are averages of a 4- or 5-week reporting period and are not calendar months.
[2]These data are for wells drilled reported to the American Petroleum Institute (API) during the reporting period. They exclude service wells and stratigraphic and core tests. Data reported for the first 2 months of each quarter cover 4 weeks of drilling activity, and data for the last month of the quarter cover 5 weeks of drilling activity.
R=Revised data.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.
Sources: • Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running—By State."
• Wells: API, "Monthly Drilling Report" and "Quarterly Review of Drilling Statistics for the United States."

Oil and Gas Resource Development

		Crews Engaged in Seismic Exploration			Line-Miles of Seismic Exploration		
		Offshore	Onshore	Total	Offshore[1]	Onshore[1]	Total[1]
		Monthly average			Annual total		
1973	**AVERAGE**	**23**	**227**	**250**	**258,944**	**127,160**	**386,104**
1974	**AVERAGE**	**31**	**274**	**305**	**341,784**	**158,629**	**500,413**
1975	**AVERAGE**	**30**	**254**	**284**	**309,283**	**150,694**	**459,977**
1976	**AVERAGE**	**25**	**237**	**262**	**226,303**	**142,926**	**369,229**
1977	**AVERAGE**	**27**	**281**	**308**	**124,676**	**120,072**	**244,748**
1978	**AVERAGE**	**25**	**327**	**352**	**174,607**	**135,899**	**310,506**
1979	**AVERAGE**	**30**	**370**	**400**	**193,212**	**163,929**	**357,141**
1980	**AVERAGE**	**37**	**493**	**530**	**202,694**	**184,088**	**386,782**
1981	January	38	553	591			
	February	41	561	602			
	March	40	570	610			
	April	40	605	645			
	May	42	619	661			
	June	44	652	696			
	July	43	668	711			
	August	46	689	735			
	September	47	697	744			
	October	52	689	741			
	November	52	681	733			
	December	47	656	703			
	AVERAGE	**44**	**637**	**681**	**338,201**	**256,201**	**594,402**
1982	January	53	642	695			
	February	53	625	678			
	March	52	597	649			
	April	55	571	626			
	May	61	551	612			
	June	69	546	615			
	July	66	527	593			
	August	62	500	562			
	September	59	476	535			
	October	51	465	516			
	November	50	452	502			
	December	49	428	477			
	AVERAGE	**57**	**531**	**588**	**558,464**	**248,483**	**806,947**
1983	January	49	407	456			
	February	47	404	451			
	March	45	402	447			
	April	39	410	449			
	May	39	410	449			
	June	43	428	471			
	July	46	437	483			
	August	49	435	484			
	September	57	444	501			
	October	50	448	498			

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

Coal

Coal production in October 1983 was 72.1 million short tons, 1.7 percent more than the 70.9 million short tons produced in October 1982.

Electric utility coal consumption in September 1983 totaled 54.2 million short tons, 12.0 percent more than consumption in September 1982.

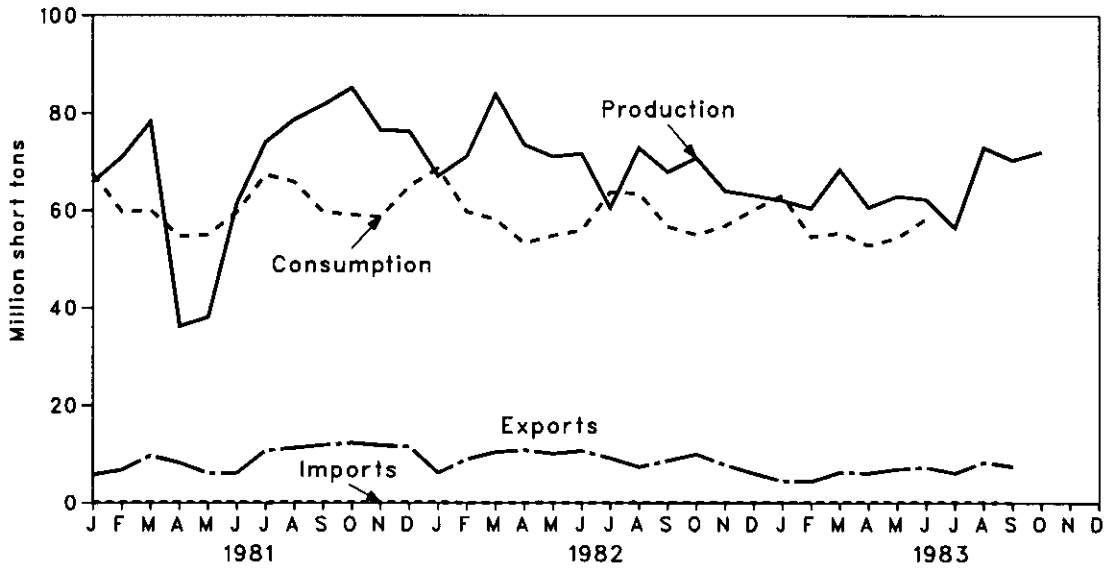
Electric utility coal stocks of 161.4 million short tons at the end of September 1983 were 13.9 million short tons (7.9 percent) below the level 1 year earlier.

Imports of coal in September 1983 totaled 97 thousand short tons, 26 thousand short tons more than the amount imported in September 1982. Exports of coal in September 1983 totaled 7.5 million short tons, 13.3 percent less than the amount exported during September 1982. Coal exports in September 1983 were principally to Europe (35.4 percent), Canada (27.2 percent), and Japan (21.0 percent).

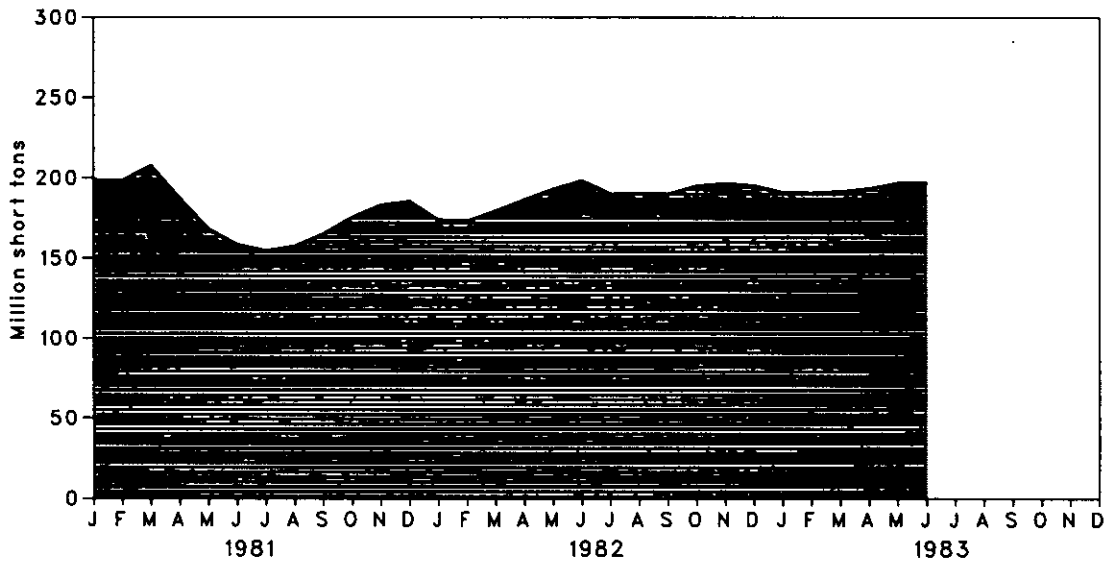
Coal

Bituminous Coal, Lignite, and Anthracite

Production, Consumption, Imports, and Exports



Stocks



Coal

Bituminous Coal, Lignite, and Anthracite

		Production	Domestic Consumption	Imports[1]	Exports[2]	Stocks[3]
				Thousand short tons		
1973	**TOTAL**	**598,568**	**562,584**	**127**	**53,587**	**104,335**
1974	**TOTAL**	**610,023**	**558,402**	**2,080**	**60,661**	**96,323**
1975	**TOTAL**	**654,641**	**562,641**	**940**	**66,309**	**128,050**
1976	**TOTAL**	**684,913**	**603,790**	**1,203**	**60,021**	**134,438**
1977	**TOTAL**	**697,205**	**625,291**	**1,647**	**54,312**	**157,098**
1978	**TOTAL**	**670,164**	**625,225**	**2,953**	**40,714**	**145,551**
1979	**TOTAL**	**781,134**	**680,524**	**2,059**	**66,042**	**181,646**
1980	**TOTAL**	**829,700**	**702,729**	**1,194**	**91,742**	**204,028**
1981	January	65,927	67,580	35	5,795	198,603
	February	70,918	59,735	104	6,771	197,962
	March	78,266	60,069	77	9,710	207,340
	April	36,253	54,649	63	8,271	187,143
	May	38,100	55,025	96	6,086	168,126
	June	61,555	59,685	138	6,158	158,274
	July	74,076	67,394	13	10,762	154,423
	August	78,782	65,896	150	11,315	157,141
	September	81,720	59,722	69	11,900	164,970
	October	85,241	59,161	94	12,360	175,384
	November	76,577	58,695	76	11,849	183,044
	December	76,360	65,017	127	11,564	185,274
	TOTAL	**823,775**	**732,627**	**1,043**	**112,541**	
1982	January	67,138	68,692	71	6,177	173,931
	February	71,169	59,746	30	8,964	173,193
	March	83,943	58,236	12	10,423	179,484
	April	73,587	53,274	10	10,831	186,458
	May	71,127	54,844	109	10,110	192,926
	June	71,720	55,950	9	10,680	198,377
	July	60,535	63,828	69	9,182	189,997
	August	72,898	63,528	131	7,385	190,310
	September	67,951	56,734	71	8,683	189,967
	October	70,852	55,034	66	9,972	195,107
	November	64,055	56,831	87	7,807	196,700
	December	63,136	60,214	76	6,064	195,254
	TOTAL	**838,112**	**706,911**	**742**	**106,277**	
1983	January†	62,103	63,118	78	4,471	191,130
	February†	60,487	54,573	71	4,382	190,782
	March†	68,462	55,364	120	6,291	191,530
	April†	60,630	52,827	144	6,115	193,402
	May†	62,980	54,382	102	6,952	196,982
	June†	62,323	58,331	133	7,279	197,037
	July†	56,468	NA	87	6,140	NA
	August†	72,973	NA	115	8,380	NA
	September†	70,382	NA	97	7,525	NA
	October†	72,065	NA	NA	NA	NA

[1]Bituminous coal was the only type of coal imported during the years shown above.
[2]Excludes shipments of anthracite to U.S. Armed Forces overseas (335,000 short tons in 1982).
[3]Stocks held by electric utilities, coke plants, and general industry at the end of period. Excludes stocks at retail dealers that are consumed by the residential and commercial sector.
†Preliminary data. 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—Bituminous Coal, Lignite, and Anthracite

			Industrial			
		Electric Utilities	Coke Plants[1]	Other Industrial[2] Including Transportation	Residential and Commercial	Total
				Thousand short tons		
1973	**TOTAL**	**389,212**	**94,101**	**68,154**	**11,117**	**562,584**
1974	**TOTAL**	**391,811**	**90,191**	**64,983**	**11,417**	**558,402**
1975	**TOTAL**	**405,962**	**83,598**	**63,670**	**9,410**	**562,641**
1976	**TOTAL**	**448,371**	**84,704**	**61,799**	**8,916**	**603,790**
1977	**TOTAL**	**477,126**	**77,739**	**61,472**	**8,954**	**625,291**
1978	**TOTAL**	**481,235**	**71,394**	**63,085**	**9,511**	**625,225**
1979	**TOTAL**	**527,051**	**77,368**	**67,717**	**8,388**	**680,524**
1980	**TOTAL**	**569,274**	**66,657**	**60,347**	**6,451**	**702,729**
1981	January	54,688	5,465	6,532	895	67,580
	February	47,914	5,177	5,932	712	59,735
	March	48,398	5,532	5,665	474	60,069
	April	43,677	4,862	5,548	562	54,649
	May	44,999	4,259	5,297	470	55,025
	June	50,080	4,460	4,845	300	59,685
	July	56,144	5,449	5,371	430	67,394
	August	54,483	5,434	5,520	459	65,896
	September	48,483	5,340	5,312	587	59,722
	October	47,800	5,158	5,577	626	59,161
	November	47,014	5,037	5,793	851	58,695
	December	53,116	4,842	6,003	1,056	65,017
	TOTAL	**596,797**	**61,014**	**67,395**	**7,421**	**732,627**
1982	January	56,825	4,444	6,430	993	68,692
	February	48,878	4,340	5,835	693	59,746
	March	47,884	4,173	5,616	563	58,236
	April	43,490	3,708	5,373	703	53,274
	May	45,622	3,622	5,133	467	54,844
	June	47,424	3,481	4,681	364	55,950
	July	55,248	3,121	4,831	628	63,828
	August	54,838	3,058	4,962	670	63,528
	September	48,414	2,924	4,759	637	56,734
	October	46,330	2,757	5,287	660	55,034
	November	47,799	2,693	5,494	845	56,831
	December	50,914	2,587	5,695	1,018	60,214
	TOTAL	**593,666**	**40,908**	**64,097**	**8,240**	**706,911**
1983	January†	53,351	2,813	5,963	990	63,118
	February†	45,772	2,742	5,399	660	54,573
	March†	47,039	2,567	5,200	557	55,364
	April†	43,589	3,206	5,402	630	52,827
	May†	45,691	3,145	5,165	381	54,382
	June†	50,362	2,734	4,934	301	58,331
	July†	60,390	NA	NA	NA	NA
	August†	64,170	NA	NA	NA	NA
	September†	54,212	NA	NA	NA	NA

[1]Bituminous coal and anthracite only. Lignite is not used at coke plants.
[2]See Note on the last page of this section.
†Preliminary data. 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[1]—Bituminous Coal, Lignite, and Anthracite

		Electric Utilities	Industrial		Total[3]
			Coke Plants[2]	Other Industrial	
		Thousand short tons			
1973		**86,967**	**6,998**	**10,370**	**104,335**
1974		**83,509**	**6,209**	**6,605**	**96,323**
1975		**110,724**	**8,797**	**8,529**	**128,050**
1976		**117,436**	**9,902**	**7,100**	**134,438**
1977		**133,219**	**12,816**	**11,063**	**157,098**
1978		**128,225**	**8,278**	**9,048**	**145,551**
1979		**159,714**	**10,155**	**11,777**	**181,646**
1980		**183,010**	**9,067**	**11,951**	**204,028**
1981	January	176,975	9,634	11,994	198,603
	February	175,715	10,211	12,036	197,962
	March	183,983	10,788	12,569	207,340
	April	169,221	6,952	10,970	187,143
	May	153,415	4,850	9,861	168,126
	June	144,520	4,500	9,254	158,274
	July	140,124	5,074	9,225	154,423
	August	142,318	5,648	9,175	157,141
	September	149,526	6,163	9,281	164,970
	October	159,676	6,308	9,400	175,384
	November	167,002	6,392	9,650	183,044
	December	168,893	6,475	9,906	185,274
1982	January	158,469	6,207	9,255	173,931
	February	158,136	5,909	9,148	173,193
	March	164,518	5,612	9,354	179,484
	April	171,390	5,931	9,137	186,458
	May	177,461	6,231	9,234	192,926
	June	182,513	6,532	9,331	198,377
	July	174,503	6,166	9,328	189,997
	August	175,194	5,800	9,316	190,310
	September	175,225	5,434	9,308	189,967
	October	180,571	5,171	9,365	195,107
	November	182,368	4,908	9,424	196,700
	December	181,132	4,642	9,479	195,254
1983	January†	177,832	4,338	8,960	191,130
	February†	178,310	4,034	8,439	190,782
	March†	179,883	3,728	7,919	191,530
	April†	181,371	4,089	7,942	193,402
	May†	184,567	4,450	7,965	196,982
	June†	184,236	4,812	7,989	197,037
	July†	168,576	NA	NA	NA
	August†	162,088	NA	NA	NA
	September†	161,368	NA	NA	NA

[1]Stocks held by electric utilities, coke plants, and general industry at end of period.
[2]Bituminous coal and anthracite only. Lignite is not used at coke plants.
[3]Total excludes stocks at retail dealers that are consumed by the residential and commercial sector.
†Preliminary data. NA=Not available.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

Notes and Sources for the Coal Section

Note

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

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

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

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

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

$$C = S_b + R - S_e \quad (1)$$

where S_b = beginning stocks
R = receipts
S_e = ending stocks.

The change in stocks ($S_b - S_e$) can be denoted by ΔS. From equation (1), consumption is

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

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

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

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

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

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

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

Sources

Production: 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys;* October 1977 forward: Energy Information Administration (EIA), "Weekly Coal Production Report" from selected State agencies and EIA Form 6, "Coal Distribution Report."

Consumption and Stocks: 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys;*

- Electric Utilities—October 1977 forward: EIA, EIA Form 759 (formerly FPC Form 4), "Monthly Power Plant Report."
- Other Industrial—October 1977 through December 1979: EIA, EIA Form 3, "Monthly Fuel Consumption Report-Manufacturing Plants"; January 1980 forward: EIA, EIA Form 3, "Quarterly Fuel Consumption Report-Manufacturing Plants" and EIA Form 6, "Coal Distribution Report."
- Coke Plants—October 1977 through December 1980: EIA, EIA Form 5/5A, "Coke and Coal Chemicals-Monthly/Annual"; January 1981 forward: EIA, EIA Form 5/5A, "Coke and Coal Chemicals—Quarterly/Annual."
- Residential and Commercial—October 1977 through December 1979: EIA, EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks"; January 1980 forward: EIA, EIA Form 6, "Coal Distribution Report."

Imports/Exports: 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys;* October 1977 forward: Bureau of the Census, Monthly Reports IM-145 (Imports) and EM-522 (Exports).

Electric Utilities

September 1983 production of electricity by utilities was 195.4 billion kilowatt-hours, 8.2 percent above the September 1982 production level. Coal-fired production totaled 108.9 billion kilowatt-hours, 12.4 percent above the September 1982 level. Natural gas-fired production totaled 28.0 billion kilowatt-hours, 1.4 percent above the September 1982 level. Nuclear production was 24.8 billion kilowatt-hours in September 1983, 2.2 percent below the September 1982 level. Hydroelectric production was 21.7 billion kilowatt-hours, 9.1 percent above the level 1 year earlier. Petroleum-fired production totaled 11.3 billion kilowatt-hours, 9.0 percent above the September 1982 level.

Sales of electricity to all ultimate consumers in the United States in September 1983 were 201.6 billion kilowatt-hours, 13.2 percent above September 1982 sales. Sales to residential consumers during September 1983 were 72.9 billion kilowatt-hours, 15.7 percent above the level of sales during the same month in 1982. Commercial sales were 52.1 billion kilowatt-hours, 8.6 percent more than the amount sold to commercial consumers in September 1982. Sales to industrial consumers totaled 69.6 billion kilowatt-hours in September 1983, 16.1 percent more than the 1982 figure. In September 1983, other sales totaled 7.0 billion kilowatt-hours, 2.8 percent below the September 1982 level.

Electric utility petroleum consumption (excluding petroleum coke) during September 1983 was 19.5 million barrels, 11.8 percent above the September 1982 level. Coal consumption for September 1983 was 54.2 million short tons, 12.0 percent above the September 1982 rate. During September 1983, consumption of natural gas by electric utilities was 298.5 billion cubic feet, 1.8 percent above the September 1982 consumption level.

On September 30, 1983, utility stocks of anthracite, bituminous coal, and lignite totaled 161.4 million short tons. Stockpiles were 7.9 percent below the level of September 1982. Petroleum stocks (excluding petroleum coke) on September 30, 1983, totaled 95.2 million barrels, 22.2 percent below the level on the same date in 1982.

Electric Utilities

Net Electricity Generation by Primary Energy Source

		Coal[1]	Petroleum[2]	Natural Gas	Nuclear	Hydro	Other[3]	Total
				Million kilowatt-hours				
1973	**TOTAL**	**847,651**	**314,343**	**340,858**	**83,479**	**272,083**	**2,294**	**1,860,710**
1974	**TOTAL**	**828,433**	**300,931**	**320,065**	**113,976**	**301,032**	**2,703**	**1,867,140**
1975	**TOTAL**	**852,786**	**289,095**	**299,778**	**172,505**	**300,047**	**3,437**	**1,917,649**
1976	**TOTAL**	**944,391**	**319,988**	**294,624**	**191,104**	**283,707**	**3,883**	**2,037,696**
1977	**TOTAL**	**985,219**	**358,179**	**305,505**	**250,883**	**220,475**	**4,063**	**2,124,323**
1978	**TOTAL**	**975,742**	**365,060**	**305,391**	**276,403**	**280,419**	**3,315**	**2,206,331**
1979	**TOTAL**	**1,075,037**	**303,525**	**329,485**	**255,155**	**279,783**	**4,387**	**2,247,372**
1980	**TOTAL**	**1,161,562**	**245,994**	**346,240**	**251,116**	**276,021**	**5,506**	**2,286,439**
1981	January	111,765	25,963	22,081	23,779	22,338	540	206,467
	February	97,653	17,444	21,339	21,595	21,099	483	179,613
	March	99,482	16,957	25,997	22,004	20,572	541	185,553
	April	88,109	15,106	27,460	20,646	20,723	500	172,545
	May	88,941	14,508	30,070	19,723	24,081	483	177,806
	June	99,837	18,972	35,885	21,166	26,370	473	202,702
	July	112,854	20,072	38,712	23,080	25,133	523	220,373
	August	108,403	16,001	36,918	26,946	21,615	520	210,403
	September	97,664	15,566	30,850	24,398	17,822	538	186,838
	October	97,046	16,213	28,917	20,556	18,088	531	181,352
	November	94,841	13,847	24,670	22,783	18,963	465	175,570
	December	106,608	15,772	22,877	25,997	23,879	457	195,590
	TOTAL	**1,203,203**	**206,421**	**345,777**	**272,674**	**260,684**	**6,054**	**2,294,812**
1982	January	113,124	20,674	22,621	25,678	26,896	411	209,403
	February	96,906	15,217	20,920	20,188	26,690	380	180,299
	March	97,625	13,495	23,598	22,755	29,885	330	187,687
	April	88,116	11,192	23,231	21,785	27,928	328	172,580
	May	92,997	9,868	24,291	21,639	27,971	381	177,147
	June	95,314	10,419	27,959	24,026	27,953	458	186,128
	July	110,617	13,380	33,340	25,467	27,294	485	210,584
	August	110,124	11,753	34,418	24,986	23,894	480	205,656
	September	96,896	10,363	27,649	25,391	19,896	468	180,662
	October	93,769	9,885	25,804	23,248	19,750	509	172,966
	November	95,547	9,313	21,466	23,235	23,297	520	173,377
	December	100,970	11,238	19,963	24,376	27,760	415	184,722
	TOTAL	**1,192,004**	**146,797**	**305,260**	**282,773**	**309,213**	**5,164**	**2,241,211**
1983	January	108,164	12,881	19,720	25,090	29,318	506	195,680
	February	92,692	12,586	16,659	22,204	27,950	395	172,485
	March	95,598	12,557	19,686	23,897	30,302	455	182,494
	April	88,114	10,337	19,174	22,352	29,988	424	170,389
	May	91,296	9,050	20,444	22,064	31,193	356	174,403
	June	101,512	11,130	23,091	24,158	30,692	462	191,046
	July	121,633	14,636	29,605	25,602	28,033	565	220,074
	August	129,313	14,870	33,147	25,581	25,824	738	229,472
	September	108,868	11,299	28,040	24,830	21,711	678	195,426

[1]Includes bituminous coal, lignite, and anthracite.
[2]Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
[3]Includes geothermal and wood and waste.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

Electric Utilities

Electricity Sales[1]

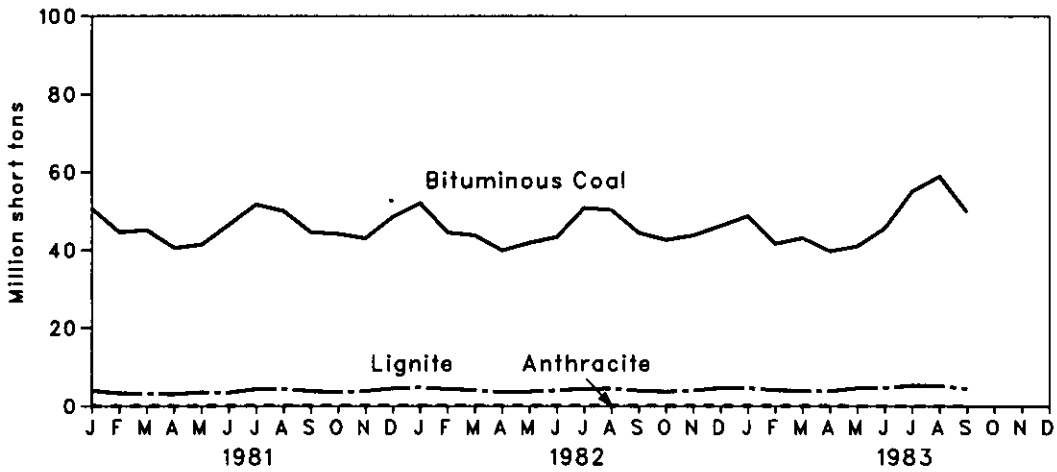
		Residential	Commercial	Industrial	Other[2]	Total
				Million kilowatt-hours		
1973	**TOTAL**	**579,231**	**388,266**	**686,085**	**59,328**	**1,712,910**
1974	**TOTAL**	**578,184**	**384,826**	**684,875**	**58,039**	**1,705,924**
1975	**TOTAL**	**588,140**	**403,049**	**687,680**	**68,222**	**1,747,091**
1976	**TOTAL**	**606,452**	**425,094**	**754,069**	**69,631**	**1,855,246**
1977	**TOTAL**	**645,239**	**446,514**	**786,037**	**70,571**	**1,948,361**
1978	**TOTAL**	**674,466**	**461,163**	**809,078**	**73,215**	**2,017,922**
1979	**TOTAL**	**682,819**	**473,307**	**841,903**	**73,070**	**2,071,099**
1980	**TOTAL**	**717,495**	**488,156**	**815,067**	**73,732**	**2,094,449**
1981	January	74,087	43,229	67,076	7,557	191,949
	February	66,359	41,345	67,411	7,092	182,207
	March	57,660	39,541	68,590	7,035	172,826
	April	50,914	37,910	68,138	6,562	163,525
	May	48,348	39,331	68,714	6,780	163,173
	June	56,165	44,244	71,641	6,777	178,827
	July	69,990	48,989	71,712	7,124	197,814
	August	70,299	49,003	72,010	7,147	198,459
	September	61,098	46,977	71,011	7,164	186,250
	October	52,989	42,183	69,154	7,024	171,350
	November	51,965	39,747	66,161	7,143	165,016
	December	62,391	41,839	64,124	7,351	175,705
	TOTAL	**722,265**	**514,338**	**825,742**	**84,756**	**2,147,101**
1982	January	76,193	44,866	62,928	7,894	191,881
	February	69,070	43,389	62,767	7,409	182,634
	March	60,441	41,635	64,484	7,221	173,780
	April	54,868	39,968	62,711	6,804	164,352
	May	49,044	39,955	62,469	6,947	158,415
	June	54,037	44,136	63,673	6,736	168,582
	July	65,651	48,134	62,605	7,006	183,395
	August	69,851	49,642	63,294	6,778	189,565
	September	R63,005	R47,998	R59,969	R7,166	R178,137
	October	52,638	42,864	60,830	7,084	163,416
	November	52,136	40,572	60,651	7,122	160,479
	December	62,102	42,584	58,464	7,128	170,278
	TOTAL	**R729,036**	**R525,743**	**R744,845**	**R85,295**	**R2,084,914**
1983	January	69,929	44,011	57,931	7,251	179,122
	February	65,094	42,495	59,085	6,922	173,596
	March	59,003	41,589	60,267	6,902	167,761
	April	56,314	40,689	60,565	6,297	163,865
	May	49,648	40,273	62,697	6,214	158,832
	June	54,101	45,080	66,111	6,228	171,519
	July	68,923	50,818	66,094	6,759	192,594
	August	78,074	53,138	69,598	6,884	207,695
	September†	72,885	52,131	69,603	6,962	201,581

[1]Electricity sales to all ultimate consumers.
[2]Includes street lighting and transportation uses.
†Initial estimates.
R=Revised data. For further explanation of factors used in revising data, see the Technical Notes section of the Energy Information Administration (EIA), *Electric Power Monthly.*
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • EIA, 1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 through December 1982: FERC Form 5, "Electric Utility Company Monthly Statement"; January 1983 forward: EIA Form 826, "Electric Utility Company Monthly Statement."

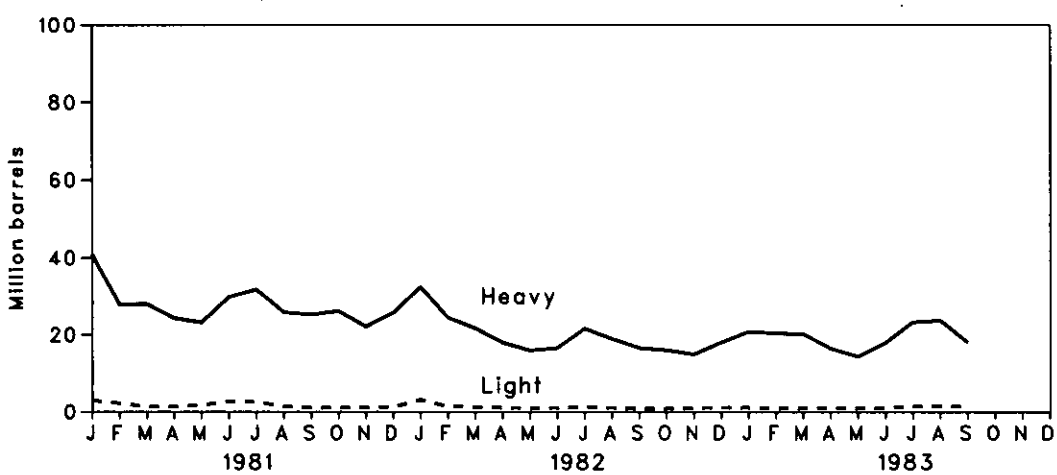
Electric Utilities

Primary Energy Consumed to Produce Electricity

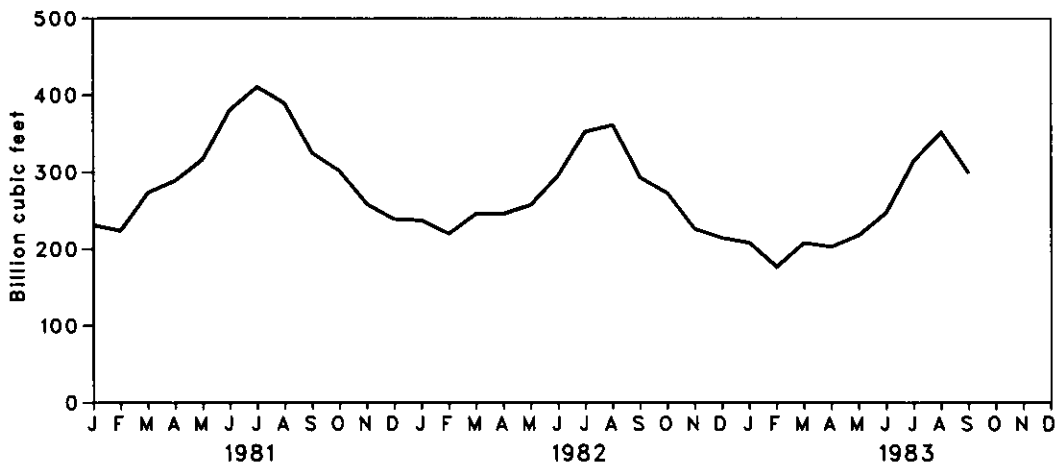
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities

Primary Energy Consumed to Produce Electricity

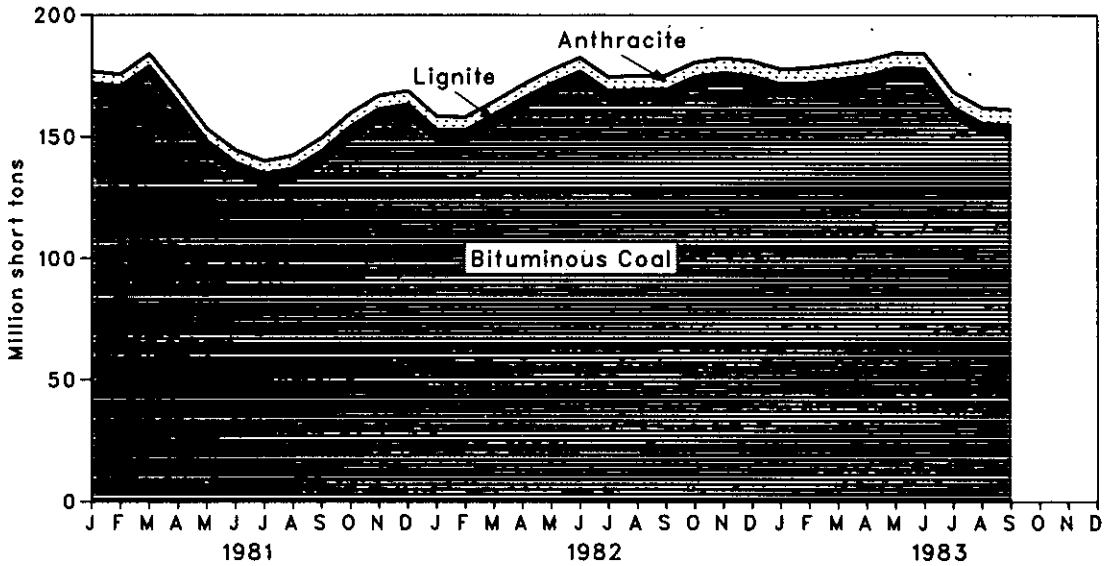
		Coal				Petroleum				Natural Gas
		Anthracite	Bituminous Coal	Lignite	Total	Heavy[1]	Light[2]	Total Liquids	Petroleum Coke	
		Thousand short tons				Thousand barrels			Thousand short tons	Million cubic feet
1973	**TOTAL**	**1,443**	**376,975**	**10,794**	**389,212**	**(3)**	**(3)**	**560,248**	**507**	**3,660,172**
1974	**TOTAL**	**1,498**	**378,643**	**11,670**	**391,811**	**(3)**	**(3)**	**536,274**	**625**	**3,443,428**
1975	**TOTAL**	**1,480**	**388,523**	**15,960**	**405,962**	**(3)**	**(3)**	**506,128**	**70**	**3,157,669**
1976	**TOTAL**	**1,350**	**425,205**	**21,817**	**448,371**	**(3)**	**(3)**	**555,920**	**68**	**3,080,868**
1977	**TOTAL**	**1,425**	**451,051**	**24,650**	**477,126**	**(3)**	**(3)**	**623,705**	**98**	**3,191,200**
1978	**TOTAL**	**1,064**	**448,763**	**31,407**	**481,235**	**(3)**	**(3)**	**635,839**	**398**	**3,188,363**
1979	**TOTAL**	**1,046**	**488,129**	**37,876**	**527,051**	**(3)**	**(3)**	**523,297**	**268**	**3,490,523**
1980	**TOTAL**	**951**	**526,680**	**41,642**	**569,274**	**391,163**	**29,051**	**420,214**	**179**	**3,681,595**
1981	January	81	50,635	3,972	54,688	40,885	3,047	43,931	10	231,606
	February	58	44,583	3,272	47,914	27,755	2,242	29,997	9	224,003
	March	75	45,168	3,155	48,398	27,862	1,405	29,267	9	273,431
	April	73	40,535	3,069	43,677	24,229	1,356	25,585	7	289,053
	May	91	41,405	3,503	44,999	23,130	1,795	24,925	14	316,310
	June	105	46,503	3,471	50,080	29,699	2,705	32,404	13	380,775
	July	102	51,705	4,337	56,144	31,628	2,615	34,243	11	410,666
	August	133	50,010	4,339	54,483	25,760	1,422	27,182	13	389,564
	September	98	44,557	3,828	48,483	25,137	1,145	26,282	13	324,828
	October	115	44,161	3,524	47,800	26,078	1,123	27,201	15	301,670
	November	141	43,032	3,841	47,014	22,042	1,139	23,181	12	258,811
	December	148	48,487	4,481	53,116	25,593	1,319	26,912	12	239,436
	TOTAL	**1,221**	**550,784**	**44,792**	**596,797**	**329,798**	**21,313**	**351,111**	**139**	**3,640,154**
1982	January	89	52,014	4,723	56,825	32,269	3,131	35,399	10	237,675
	February	83	44,478	4,317	48,878	24,351	1,421	25,772	9	220,032
	March	73	43,751	4,060	47,884	21,617	1,304	22,921	4	246,550
	April	88	39,888	3,515	43,490	17,913	1,132	19,045	11	246,344
	May	98	41,845	3,678	45,622	15,939	991	16,930	12	257,848
	June	94	43,340	3,990	47,424	16,539	1,053	17,592	13	295,557
	July	108	50,769	4,371	55,248	21,550	1,360	22,910	11	352,818
	August	95	50,283	4,460	54,838	18,873	1,053	19,926	13	361,351
	September	67	44,431	3,916	48,414	16,544	921	17,464	9	293,232
	October	81	42,598	3,650	46,330	15,990	870	16,860	17	273,003
	November	100	43,756	3,943	47,799	14,908	1,007	15,916	18	226,477
	December	99	46,192	4,622	50,914	17,940	1,094	19,035	22	214,630
	TOTAL	**1,075**	**543,346**	**49,245**	**593,666**	**234,434**	**15,337**	**249,771**	**149**	**3,225,518**
1983	January	73	48,695	4,583	53,351	20,728	1,122	21,850	17	208,337
	February	73	41,668	4,032	45,772	20,305	996	21,301	19	176,965
	March	75	43,095	3,870	47,039	20,174	957	21,131	16	208,010
	April	92	39,716	3,781	43,589	16,374	1,066	17,440	24	202,919
	May	104	41,002	4,585	45,691	14,360	949	15,309	30	218,186
	June	88	45,584	4,690	50,362	17,879	1,034	18,913	23	247,858
	July	89	55,082	5,219	60,390	23,144	1,472	24,616	25	314,373
	August	92	58,879	5,200	64,170	23,610	1,542	25,152	24	352,170
	September	86	49,745	4,381	54,212	18,021	1,507	19,529	25	298,540

[1]Heavy oil includes Grade Nos. 4, 5, and 6, and residual fuel oils.
[2]Light oil includes Grade No. 2 heating oil, kerosene, and jet fuel.
[3]Prior to 1980, petroleum consumption data were not disaggregated by type of fuel. Disaggregation by prime mover type is provided in the last table of this section.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

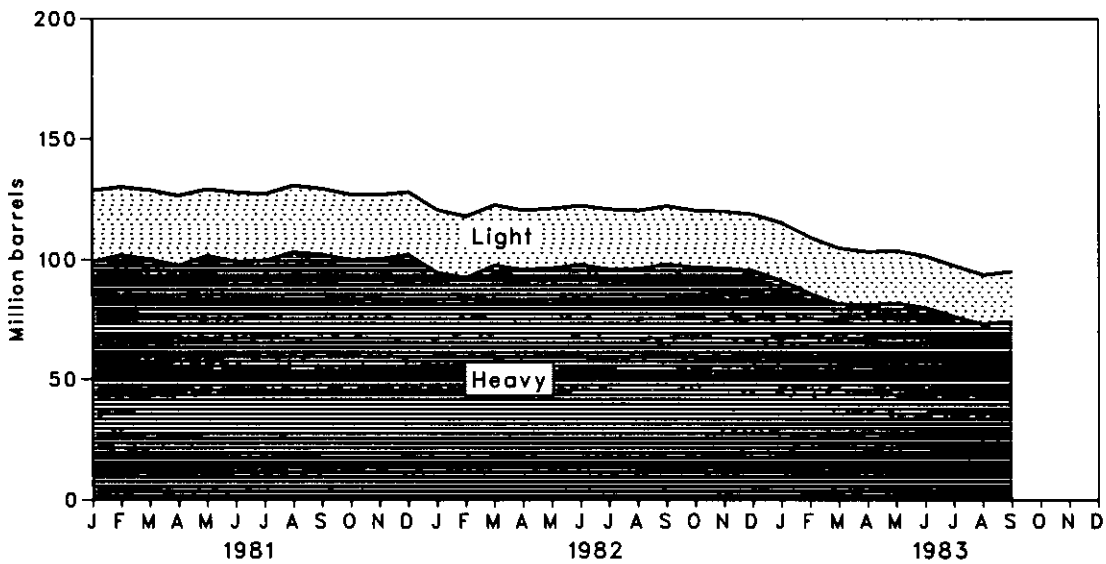
Electric Utilities

Coal and Petroleum Stocks at End of Period

Coal Stocks (Bituminous Coal, Lignite, and Anthracite)



Petroleum Stocks



Electric Utilities

Coal and Petroleum Stocks at End of Period

		Coal				Petroleum			
		Anthracite	Bituminous Coal	Lignite	Total	Heavy[1]	Light[2]	Total Liquids	Petroleum Coke
		Thousand short tons				Thousand barrels			Thousand short tons
1973		**1,066**	**84,941**	**961**	**86,967**	**([3])**	**([3])**	**89,216**	**312**
1974		**930**	**81,712**	**867**	**83,509**	**([3])**	**([3])**	**112,917**	**35**
1975		**982**	**107,927**	**1,815**	**110,724**	**([3])**	**([3])**	**125,257**	**31**
1976		**1,000**	**114,130**	**2,306**	**117,436**	**([3])**	**([3])**	**121,696**	**32**
1977		**2,321**	**128,210**	**2,688**	**133,219**	**([3])**	**([3])**	**144,031**	**44**
1978		**2,178**	**123,020**	**3,027**	**128,225**	**([3])**	**([3])**	**118,788**	**198**
1979		**3,274**	**152,981**	**3,459**	**159,714**	**([3])**	**([3])**	**131,422**	**183**
1980		**4,741**	**174,154**	**4,115**	**183,010**	**105,351**	**30,023**	**135,374**	**52**
1981	January	4,824	167,884	4,267	176,975	99,196	29,535	128,732	51
	February	4,859	166,552	4,304	175,715	101,867	28,328	130,195	52
	March	4,951	174,554	4,478	183,983	100,178	28,732	128,911	52
	April	5,035	159,645	4,541	169,221	97,629	29,024	126,652	51
	May	5,008	143,500	4,907	153,415	101,574	27,671	129,245	52
	June	5,081	134,321	5,119	144,520	99,398	28,547	127,945	49
	July	5,269	129,684	5,171	140,124	99,603	27,729	127,332	48
	August	5,337	132,072	4,909	142,318	103,104	27,714	130,817	47
	September	5,428	138,808	5,290	149,526	102,104	27,403	129,506	46
	October	5,512	148,952	5,213	159,676	100,008	27,055	127,063	44
	November	5,548	156,360	5,094	167,002	100,301	26,715	127,016	43
	December	5,537	158,258	5,098	168,893	102,042	26,094	128,136	42
1982	January	5,437	148,404	4,628	158,469	94,609	26,162	120,771	39
	February	5,401	148,118	4,617	158,136	92,622	25,418	118,040	40
	March	5,488	154,724	4,305	164,518	97,706	25,136	122,842	43
	April	5,542	161,720	4,128	171,390	95,984	24,636	120,620	42
	May	5,569	167,805	4,088	177,461	96,607	24,796	121,403	41
	June	5,603	172,819	4,092	182,513	97,959	24,647	122,606	43
	July	5,658	164,688	4,157	174,503	96,085	25,008	121,093	43
	August	5,791	165,182	4,221	175,194	96,345	24,193	120,538	42
	September	5,896	165,065	4,264	175,225	98,160	24,225	122,385	47
	October	5,992	170,281	4,298	180,571	96,920	23,595	120,515	36
	November	6,060	171,832	4,476	182,368	96,618	23,553	120,171	42
	December	6,080	170,480	4,573	181,132	95,515	23,369	118,884	41
1983	January	6,107	167,515	4,210	177,832	91,474	23,942	115,416	54
	February	6,104	167,843	4,362	178,310	85,847	23,438	109,284	53
	March	6,143	169,538	4,201	179,883	81,632	23,199	104,831	54
	April	6,120	170,815	4,436	181,371	81,243	22,084	103,327	47
	May	6,145	173,969	4,453	184,567	82,007	21,742	103,749	44
	June	6,230	173,483	4,524	184,236	80,092	21,435	101,527	52
	July	6,299	158,711	3,566	168,576	76,543	21,130	97,673	50
	August	6,380	151,671	4,038	162,088	73,257	20,649	93,906	45
	September	6,435	150,762	4,171	161,368	74,560	20,688	95,248	47

[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	January	41,904	2,027	43,931	110,533	18,199	128,732
	February	28,948	1,049	29,997	112,879	17,315	130,195
	March	28,492	775	29,267	111,490	17,421	128,911
	April	25,028	557	25,585	109,455	17,197	126,652
	May	23,958	967	24,925	112,172	17,073	129,245
	June	30,673	1,731	32,404	109,988	17,957	127,945
	July	32,577	1,666	34,243	110,476	16,856	127,332
	August	26,598	584	27,182	114,016	16,801	130,817
	September	25,762	520	26,282	112,992	16,515	129,506
	October	26,646	556	27,201	110,900	16,164	127,063
	November	22,749	432	23,181	110,939	16,077	127,016
	December	26,345	567	26,912	112,380	15,756	128,136
	TOTAL	**339,680**	**11,431**	**351,111**			
1982	January	33,832	1,567	35,399	105,475	15,296	120,771
	February	25,249	524	25,772	102,883	15,157	118,040
	March	22,371	550	22,921	108,142	14,699	122,842
	April	18,553	492	19,045	106,143	14,477	120,620
	May	16,614	316	16,930	106,701	14,702	121,403
	June	17,241	351	17,592	108,189	14,417	122,606
	July	22,192	718	22,910	106,170	14,923	121,093
	August	19,508	418	19,926	106,438	14,100	120,538
	September	17,146	318	17,464	108,177	14,208	122,385
	October	16,547	313	16,860	106,701	13,813	120,515
	November	15,591	325	15,916	106,361	13,809	120,171
	December	18,694	341	19,035	105,287	13,597	118,884
	TOTAL	**243,537**	**6,234**	**249,771**			
1983	January	21,373	477	21,850	101,246	14,170	115,416
	February	20,885	416	21,301	95,459	13,825	109,284
	March	20,728	403	21,131	91,288	13,543	104,831
	April	16,997	444	17,440	90,796	12,531	103,327
	May	14,968	341	15,309	91,276	12,473	103,749
	June	18,436	477	18,913	89,199	12,328	101,527
	July	23,745	871	24,616	85,599	12,074	97,673
	August	24,167	985	25,152	82,192	11,714	93,906
	September	18,532	996	19,529	83,509	11,740	95,248

[1]GT/IC = Gas turbine and internal combustion plants.
Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • 1973 through September 1977: Federal Power Commission, Form 4, "Monthly Power Plant Report"; October 1977 through 1981: Federal Energy Regulatory Commission, FPC Form 4, "Monthly Power Plant Report"; 1982 forward: Energy Information Administration Form 759, "Monthly Power Plant Report."

Nuclear

During September 1983, U.S. nuclear powerplants generated a total of 24.8 billion net kilowatt-hours (kWh) of electricity, equivalent to an average hourly output of 34.5 million net kWh. This was 0.3 percent above the average hourly generation for August 1983, but 2.2 percent below the comparable output for September 1982. Nuclear power supplied 12.7 percent of the electricity generated by domestic utilities in September 1983.

San Onofre-3, a 1,087-net megawatt pressurized water reactor operated by Southern California Edison, generated its first electricity on September 25, 1983.

As of September 30, 1983, there were 81 licensed U.S. power reactors with a total capacity of 63.9 million net kilowatts. Of the 81 units, 1 was in low-power testing (Grand Gulf-1), 5 were in power ascension (LaSalle-1, McGuire-2, San Onofre-2, San Onofre-3, and Summer-1), and 21 units generated no electricity or operated substantially below capacity in September (Beaver Valley, Browns Ferry-1, Browns Ferry-3, Cook-1, Davis-Besse, Hanford-1, Indian Point-3, Millstone-2, Oyster Creek, Palisades, Peach Bottom-2, Peach Bottom-3, Prairie Island-2, Quad Cities-2, Salem-2, San Onofre-1, Sequoyah-2, St. Lucie-1, Surry-2, Three Mile Island-1, and Zion-1).

As of September 30, 1983, the total number of domestic nuclear powerplants in all stages of planning, construction, or operation was 143, with an aggregate design capacity of 134 million net kilowatts.

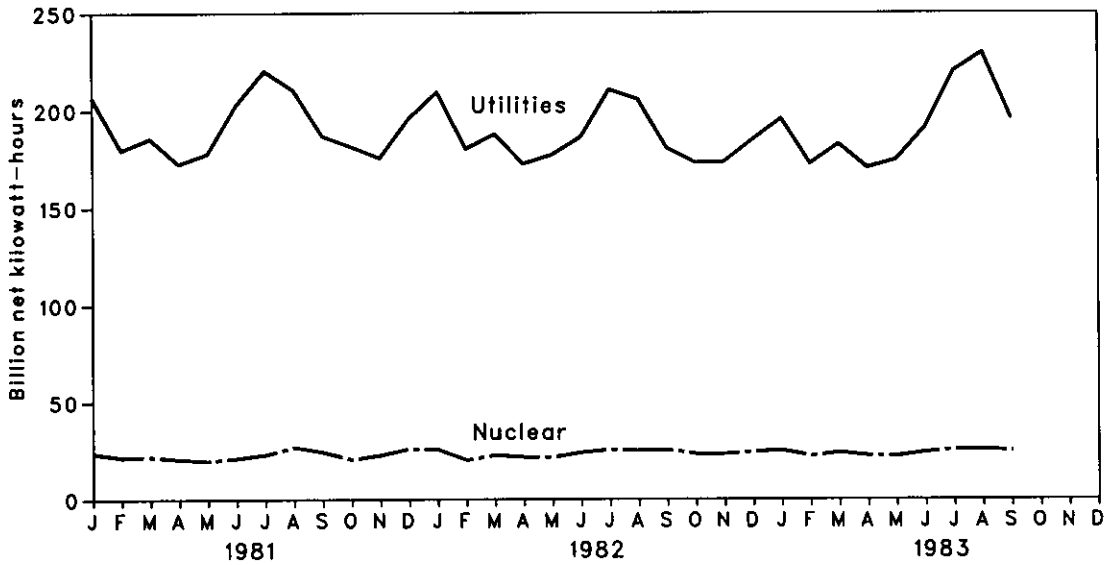
On September 17, Rancho Seco, a 913-net megawatt pressurized water reactor operated by the Sacramento Municipal Utility District, was shut down due to a steam generator leak. It had been in operation for only 3 months since a similar leak had required repair. On September 19 (during this forced outage), a relief valve inexplicably stuck. Two days later, in the process of repairing the steam generator leak, a small amount of radioactive gas was released into the atmosphere.

Part 8 Nuclear

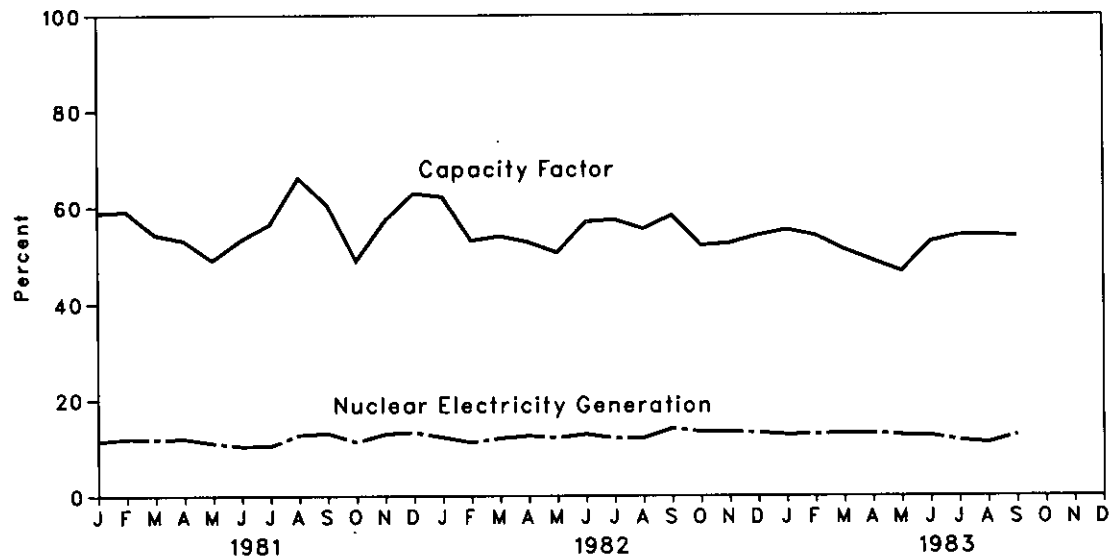
Nuclear

Nuclear Powerplant Operations

Electricity Generated by Utilities and by Nuclear Powerplants



Nuclear Portion of Electricity Generation and Capacity Factor*



*Percentage of Maximum Dependable Capacity utilized.

Nuclear

Nuclear Powerplant Operations[1]

		Reactors Licensed For Operation[2]	Nuclear-Based Electricity Generation	Nuclear Portion of Domestic Electricity Generation	Maximum Dependable Capacity[3]	Capacity Factor[4]
			Million net kilowatt-hours	Percent	Million net kilowatts	Percent
1973		**40**	**83,479**	**4.5**	**19.843**	**63.2**
1974		**55**	**113,976**	**6.1**	**35.732**	**43.5**
1975		**58**	**172,505**	**9.0**	**35.794**	**55.2**
1976		**65**	**191,104**	**9.4**	**44.609**	**53.5**
1977		**68**	**250,883**	**11.8**	**47.155**	**62.9**
1978		**72**	**276,403**	**12.5**	**50.824**	**63.9**
1979		**71**	**255,155**	**11.4**	**50.944**	**57.6**
1980		**72**	**251,116**	**11.0**	**52.597**	**55.1**
1981	January	73	23,779	11.5	54.374	58.8
	February	73	21,595	12.0	54.372	59.1
	March	73	22,004	11.9	54.429	54.3
	April	73	20,646	12.0	54.095	53.1
	May	73	19,723	11.1	54.074	49.0
	June	74	21,166	10.4	55.214	53.2
	July	74	23,080	10.5	54.998	56.4
	August	74	26,946	12.8	54.820	66.1
	September	75	24,398	13.1	56.037	60.5
	October	75	20,556	11.3	56.412	48.9
	November	74	22,783	13.0	55.328	57.2
	December	74	25,997	13.3	55.524	62.9
	YEAR	**74**	**272,674**	**11.9**	**55.524**	**56.6**
1982	January	74	25,678	12.3	55.471	62.2
	February	75	20,188	11.2	56.608	53.1
	March	75	22,755	12.1	56.609	54.0
	April	76	21,785	12.6	57.424	52.8
	May	76	21,639	12.2	57.415	50.6
	June	77	24,026	12.9	58.560	57.0
	July	78	25,467	12.1	59.601	57.4
	August	79	24,986	12.1	60.521	55.5
	September	79	25,391	14.1	60.501	58.3
	October	78	23,248	13.4	59.921	52.1
	November	79	23,235	13.4	61.523	52.5
	December	79	24,376	13.2	60.528	54.1
	YEAR	**79**	**282,773**	**12.6**	**60.528**	**55.0**
1983	January	79	25,090	12.8	61.030	55.3
	February	79	22,204	12.9	61.117	54.1
	March	80	23,897	13.1	62.697	51.2
	April	81	22,352	13.1	63.515	48.9
	May	81	22,064	12.7	63.495	46.7
	June	81	24,158	12.6	63.553	52.8
	July	81	25,602	11.6	63.552	54.1
	August	81	25,581	11.1	63.492	54.2
	September	81	24,930	12.7	63.924	53.9

[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.
[3]In this table, when possible, net maximum dependable capacity (MDC) is used. When a reactor has not been operating long enough to permit determination of an MDC, the net design electrical rating (DER) is used. The capacities for some units have been reduced by the imposition of a "power limit" by the Nuclear Regulatory Commission or by the operating utility. Beginning in January 1980, the reduced capacities are used for these units. For the definitions of MDC and DER, see Note 2 on the last page of this section.
[4]The monthly capacity factors are computed as the actual monthly generation divided by the maximum possible generation for that month, where the maximum possible generation is the number of hours in the month multiplied by the monthly maximum dependable capacity (MDC). This fraction is then multiplied by 100 to obtain a percentage. Monthly capacity factors are averaged to obtain annual values. For the definition of MDC, see Note 2 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.

Nuclear

Status of Nuclear Reactor Units[1]

		Reactors Licensed For Operation[2]	Construction Permits Granted	Construction Permits Pending	Reactor Units on Order	Reactor Units Announced	Total Reactor Units	Total Design Capacity[3] (Million Net Kilowatts)
1973		**40**	**51**	**58**	**48**	**20**	**217**	**212**
1974		**55**	**58**	**80**	**28**	**16**	**235**	**234**
1975		**58**	**69**	**73**	**19**	**19**	**236**	**236**
1976		**65**	**72**	**66**	**16**	**19**	**235**	**236**
1977		**68**	**80**	**52**	**13**	**9**	**221**	**220**
1978		**72**	**90**	**32**	**9**	**4**	**206**	**204**
1979		**71**	**91**	**21**	**3**	**0**	**186**	**180**
1980		**72**	**82**	**12**	**3**	**0**	**169**	**163**
1981	January	73	81	12	3	0	169	163
	February	73	81	12	3	0	169	163
	March	73	81	12	3	0	169	163
	April	73	81	12	3	0	169	163
	May	73	81	12	3	0	169	163
	June	74	80	12	3	0	169	163
	July	74	80	12	3	0	169	163
	August	74	79	12	3	0	168	162
	September	75	78	11	3	0	167	161
	October	75	77	11	3	0	166	160
	November	74	78	11	3	0	166	160
	December	74	75	11	3	0	163	157
1982	January	74	73	11	3	0	161	154
	February	75	72	6	2	0	155	147
	March	75	72	6	2	0	155	147
	April	76	71	6	2	0	155	147
	May	76	71	6	2	0	155	147
	June	77	70	6	2	0	155	147
	July	78	67	6	2	0	153	145
	August	79	64	5	2	0	150	141
	September	79	64	3	2	0	148	138
	October	78	64	3	2	0	147	138
	November	79	60	3	2	0	144	135
	December	79	60	3	2	0	144	135
1983	January	79	60	3	2	0	144	135
	February	79	60	3	2	0	144	135
	March	80	59	3	2	0	144	135
	April	81	57	3	2	0	143	134
	May	81	57	3	2	0	143	134
	June	81	57	3	2	0	143	134
	July	81	57	3	2	0	143	134
	August	81	57	3	2	0	143	134
	September	81	57	3	2	0	143	134

[1]Monthly data are the status as of the last day of the month. Annual data are the status as of December 31 of each year.
[2]See Note 1 on the last page of this section.
[3]Net design electrical rating is used because many of the units in this table have not been operating long enough for a maximum dependable capacity to be determined. See Note 2 on the last page of this section.
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. **Reactors Licensed for Operation:** This column includes units that have received Full Power and/or Low Power Licenses from the Nuclear Regulatory Commission with two exceptions. Hanford, an 850-net megawatt (MWe) reactor operated by the Department of Energy, is included, although it is not licensed by the NRC, because it distributes commercial electricity. The Experimental Breeder Reactor-2 is not included, although it generates electricity, because it does not distribute the electricity commercially. Three units that had been inoperative for at least 9 months prior to January 1980 are deleted from subsequent entries in the tables: Humboldt Bay (capacity=65 MWe), which requires major seismic modifications; Dresden-1 (capacity=200 MWe), which also needs major modifications; and Three Mile Island-2 (capacity=906 MWe), whose core was severely damaged by a loss-of-coolant accident in March 1979. Shippingport (capacity=60 MWe), which was a second reactor operated by the Department of Energy, was officially retired from service on October 1, 1982, and is deleted from subsequent entries in the tables.
2. **Capacity:** Nuclear powerplants may have more than one type of capacity rating, including:
   (a) Gross Maximum Dependable Capacity (MDC)—The gross electrical output measured at the output terminals of the turbine generator(s) during the most restrictive seasonal conditions (usually summer).
   (b) Net Maximum Dependable Capacity (MDC)—The gross MDC less the station service load. The typical station service load for a nuclear plant is about 5 percent of its gross generation.
   (c) Net Design Capacity or Net Design Electrical Rating (DER) —The nominal net electrical output of the unit, specified by the utility and used for plant design.

Sources

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

Price

Crude Oil

The average price of domestic crude oil purchased at the wellhead was $26.02 per barrel in September 1983. This was $0.01 below the previous month's level and $1.97 (7.0 percent) below the level in September 1982.

During September 1983, the composite refiner acquisition cost of crude oil was $28.97 per barrel, $0.09 per barrel (0.3 percent) above the previous month's price of $28.88. The price of imported crude oil increased $0.04 per barrel from the August 1983 level to $29.54 per barrel in September. This price was 10.6 percent below the September 1982 level. The price of domestic crude oil in September 1983 was $28.69, an increase of $0.11 per barrel from the August 1983 average.

Motor Gasoline

The national average retail price of all grades and all types of motor gasoline was $1.24 per gallon in October 1983. Leaded regular gasoline at all types of stations sold for an average of $1.17 per gallon in October, $0.02 (1.4 percent) lower than the price in September 1983. The price of unleaded regular gasoline at all types of stations was $1.26 per gallon in October, $0.02 (1.5 percent) lower than the price in September.

Natural Gas

The average wellhead price of marketed natural gas production in August 1983 was $2.59 per thousand cubic feet (Mcf), $0.05 per Mcf more than in July 1983 and $0.06 per Mcf (2.4 percent) more than the August 1982 price. The average price of natural gas delivered to electric utility plants was $3.75 per Mcf in August, up $0.03 per Mcf (0.8 percent) from the July 1983 price and up $0.08 (2.2 percent) from the August 1982 price. The average price of natural gas used by residential consumers in August 1983 was $6.59 per Mcf, $0.03 less than in July 1983 but $1.03 per Mcf (18.5 percent) more than the August 1982 price.

Electricity

The average retail price of electricity sold by selected privately owned utilities to all types of consumers in September 1983 was 6.52 cents per kilowatt-hour (kWh), a 0.2-percent increase from the August 1983 price and 1.7 percent more than the September 1982 price of 6.41 cents per kWh. The average price of electricity sold to residential consumers in September 1983 was 7.55 cents per kWh, an increase of 0.4 percent from the previous month's average price and 5.2 percent above the September 1982 price. The average price of electricity sold to commercial consumers was 7.15 cents per kWh in September 1983, a 1.3-percent increase compared to the August 1983 price and up 2.6 percent from the September 1982 price. The average electricity price to industrial users during September 1983 was 5.00 cents per kWh, a 0.2-percent decrease from the price during the previous month and 4.8 percent less than during September 1982.

Price

Price

Petroleum Price Summary

		Actual Domestic Average Wellhead Price[1]	Refiner Acquisition Cost of Crude Oil[2]			No. 6 Residual Oil Price Average[3]	
			Domestic	Imported	Composite	Wholesale[4]	Retail[4]
		Dollars per barrel					
1976	**AVERAGE**	**8.19**	**8.84**	**13.48**	**10.89**	**10.72**	**11.49**
1977	**AVERAGE**	**8.57**	**9.55**	**14.53**	**11.96**	**11.96**	**13.23**
1978	**AVERAGE**	**9.00**	**10.61**	**14.57**	**12.46**	**11.51**	**12.75**
1979	**AVERAGE**	**12.64**	**14.27**	**21.67**	**17.72**	**17.66**	**18.67**
1980	**AVERAGE**	**21.59**	**24.23**	**33.89**	**28.07**	**23.14**	**26.09**
1981	January	28.85	32.71	38.85	34.86	31.14	33.65
	February	34.14	36.27	39.00	37.28	31.81	36.04
	March	34.70	36.97	38.31	37.48	31.78	36.11
	April	34.05	35.58	38.41	36.58	30.56	34.70
	May	32.71	35.21	37.84	36.11	30.41	34.11
	June	31.71	34.20	37.03	35.03	25.95	31.03
	July	31.13	33.76	36.58	34.70	26.52	30.57
	August	31.13	33.79	35.82	34.46	27.01	30.52
	September	31.13	33.47	35.44	34.11	26.20	30.33
	October	31.00	33.48	35.43	34.07	26.78	30.32
	November	30.98	33.49	36.21	34.33	27.99	30.16
	December	30.72	33.51	35.95	34.33	27.26	30.90
	AVERAGE	**31.77**	**34.33**	**37.05**	**35.24**	**28.86**	**32.50**
1982	January	30.87	33.39	35.54	33.95	27.07	29.83
	February	29.76	32.71	35.48	33.40	26.29	30.02
	March	28.31	31.08	34.07	31.81	25.73	29.50
	April	27.65	30.27	32.82	30.83	25.46	28.21
	May	27.67	30.37	32.78	31.02	26.52	28.93
	June	28.11	30.79	33.79	31.74	26.62	29.59
	July	28.33	30.92	33.44	31.74	25.97	29.33
	August	28.18	30.85	32.95	31.45	26.34	28.44
	September	27.99	30.76	33.03	31.40	26.49	28.43
	October	28.74	31.38	33.28	31.98	27.52	29.28
	November	28.70	31.57	33.09	32.07	28.31	29.84
	December	28.12	30.80	32.85	31.29	26.81	28.47
	AVERAGE	**28.52**	**31.22**	**33.55**	**31.87**	**26.55**	**29.08**
1983	January	27.22	30.55	31.40	30.73	NA	NA
	February	26.41	29.16	30.76	29.49	NA	NA
	March	26.08	28.69	28.43	28.64	NA	NA
	April	25.85	28.45	27.95	28.33	NA	NA
	May	26.08	28.68	28.53	28.64	NA	NA
	June	25.98	28.67	29.23	28.85	NA	NA
	July	25.86	28.74	28.76	28.75	NA	NA
	August	R26.03	28.58	29.50	28.88	NA	NA
	September	†26.02	28.69	29.54	28.97	NA	NA
	October	NA	NA	NA	NA	NA	NA

[1]See Note 1 on the last two pages of this section.
[2]See Note 2 on the last two pages of this section.
[3]Wholesale refers to the price of residual fuel oil sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, commercial, and residential accounts.
[4]Excludes tax.
[5]Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded and unbranded jobbers and commercial accounts. Retail refers to the price at which company-owned and operated retail dealers sell to customers.
Footnotes continued on following page.

Price

Petroleum Price Summary (continued)

		No. 2 Diesel Price Average[5]		No. 2 Heating Oil Price Average		Gasoline Price Average All Types[6]	Propane Price Average[7]	Butane Price Average[7]
		Wholesale[4]	Retail[4]	Wholesale	Retail	Retail	Wholesale[4]	Wholesale[4]
					Cents per gallon			
1976	**AVERAGE**	**31.9**	**34.7**	**32.6**	**40.6**	**NA**	**20.6**	**21.9**
1977	**AVERAGE**	**36.1**	**39.3**	**36.9**	**46.0**	**NA**	**25.0**	**25.4**
1978	**AVERAGE**	**37.1**	**40.2**	**38.7**	**49.4**	**65.2**	**24.0**	**23.0**
1979	**AVERAGE**	**58.2**	**62.4**	**53.0**	**65.6**	**88.2**	**29.5**	**45.8**
1980	**AVERAGE**	**81.2**	**87.3**	**82.2**	**97.8**	**122.1**	**42.4**	**62.9**
1981	January	92.5	100.9	98.6	114.4	126.9	46.5	66.1
	February	99.5	106.1	106.0	123.4	135.3	48.2	63.0
	March	101.7	108.8	106.3	125.5	138.8	48.3	62.1
	April	101.3	107.7	105.2	123.9	138.1	49.3	60.1
	May	100.8	106.8	104.0	122.7	137.0	48.6	56.8
	June	99.5	106.6	103.0	120.9	136.2	46.0	52.7
	July	98.8	103.8	102.7	121.0	135.3	46.0	56.5
	August	97.8	105.9	102.2	119.4	134.8	47.2	60.6
	September	97.6	104.8	101.6	119.7	135.8	47.7	64.6
	October	97.4	105.3	101.1	118.8	135.3	47.3	64.7
	November	98.3	105.2	102.3	120.8	135.1	47.5	61.6
	December	98.3	105.1	102.6	122.0	134.8	45.5	55.4
	AVERAGE	**98.5**	**106.2**	**102.6**	**120.5**	**135.3**	**47.2**	**60.4**
1982	January	98.0	105.3	101.5	122.0	134.1	43.1	51.8
	February	94.8	103.2	98.3	120.7	131.8	38.3	48.9
	March	90.2	98.0	91.3	115.3	126.8	35.7	49.6
	April	86.6	96.1	90.0	113.2	121.0	34.9	56.1
	May	89.1	97.6	95.1	114.3	122.4	35.4	65.6
	June	93.5	102.2	98.5	116.2	129.6	36.9	67.9
	July	93.4	101.1	98.6	115.8	131.8	39.7	69.7
	August	92.3	99.3	96.7	115.9	131.0	43.8	72.2
	September	92.4	99.8	97.7	115.2	129.5	49.5	77.4
	October	95.7	102.1	102.0	119.6	128.0	51.0	75.7
	November	97.3	104.5	101.5	121.6	126.8	53.2	76.1
	December	91.2	100.3	95.9	119.6	124.4	49.5	72.6
	AVERAGE	**92.7**	**100.5**	**97.4**	**118.6**	**128.1**	**43.3**	**64.8**
1983	January	NA	NA	NA	NA	121.3	NA	NA
	February	NA	NA	NA	NA	117.0	NA	NA
	March	NA	NA	NA	NA	113.5	NA	NA
	April	NA	NA	NA	NA	119.8	NA	NA
	May	NA	NA	NA	NA	124.3	NA	NA
	June	NA	NA	NA	NA	126.1	NA	NA
	July	NA	NA	NA	NA	127.2	NA	NA
	August	NA	NA	NA	NA	126.9	NA	NA
	September	NA	NA	NA	NA	125.7	NA	NA
	October	NA	NA	NA	NA	123.9	NA	NA

Footnotes continued.
[6]Beginning with September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. In the average for all types category, gasohol is now included and unleaded premium is weighted more heavily. See Note 5 on the last two pages of this section for additional information on motor gasoline prices.
[7]Wholesale refers to the price at which refiners, resellers, retailers, and gas plants sell to one another, including sales to agricultural and industrial accounts. Excludes butane/propane mixtures.
†Preliminary data. R=Revised data. NA=Not available.
Note: • Geographic coverage is the 50 States and the District of Columbia, except for the refiner acquisition cost of crude oil, which is the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.
Sources: • See the last two pages of this section.

Price

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

		Algeria	Indonesia	Iran	Libya	Mexico	Nigeria	Saudi Arabia	United Arab Emirates	United Kingdom	Venezuela
						Dollars per barrel					
1976	**AVERAGE**	**13.05**	**12.76**	**11.61**	**12.55**	**NA**	**13.08**	**11.69**	**11.94**	**NA**	**11.32**
1977	**AVERAGE**	**14.38**	**13.57**	**12.67**	**13.90**	**13.42**	**14.44**	**12.37**	**12.83**	**NA**	**12.68**
1978	**AVERAGE**	**14.10**	**13.64**	**12.65**	**13.75**	**13.24**	**14.04**	**12.70**	**13.24**	**13.82**	**12.45**
1979	**AVERAGE**	**20.65**	**19.35**	**23.71**	**22.43**	**20.29**	**21.80**	**17.63**	**19.58**	**21.20**	**17.37**
1980	**AVERAGE**	**36.57**	**32.37**	(2)	**36.41**	**31.11**	**35.82**	**28.53**	**NA**	**34.58**	**24.78**
1981	January	39.37	36.54	(2)	40.52	35.88	40.11	32.39	NA	38.34	32.87
	February	40.13	36.13	(2)	40.73	36.57	40.03	32.60	NA	39.41	30.36
	March	40.30	36.40	(2)	40.25	35.60	39.85	32.73	NA	39.50	31.24
	April	39.70	36.38	(2)	40.04	33.81	39.92	32.41	NA	38.85	29.93
	May	39.57	36.09	(2)	38.91	34.45	39.11	32.13	NA	37.16	28.39
	June	39.20	36.95	(2)	39.85	30.30	38.44	32.42	NA	35.84	30.50
	July	38.06	35.47	(2)	38.70	32.72	39.25	32.07	NA	34.89	29.25
	August	39.34	35.61	(2)	39.45	31.23	39.55	31.95	NA	34.38	27.08
	September	39.60	35.82	(2)	36.74	30.37	36.04	32.09	NA	34.44	28.14
	October	36.90	35.08	(2)	36.36	30.83	35.45	33.56	NA	34.87	27.27
	November	36.55	35.53	(2)	37.15	31.80	36.41	33.49	NA	35.97	28.39
	December	37.35	36.08	(2)	36.78	31.29	36.49	33.70	NA	36.46	28.02
	AVERAGE	**39.09**	**35.93**	(2)	**39.44**	**33.13**	**38.53**	**32.48**	**NA**	**36.08**	**28.86**
1982	January	36.96	35.53	(2)	35.69	29.67	36.23	33.40	NA	36.20	29.07
	February	35.56	35.59	(2)	34.64	30.92	35.92	33.50	NA	34.00	28.94
	March	31.50	35.74	(2)	34.21	27.86	34.94	33.77	NA	30.78	22.89
	April	30.54	35.69	(2)	(2)	26.96	33.80	33.49	NA	32.49	21.89
	May	33.32	34.82	31.11	(2)	28.53	35.22	32.97	NA	32.43	22.31
	June	34.72	35.95	W	(2)	28.18	35.18	33.80	NA	33.67	22.25
	July	34.35	35.22	31.44	(2)	28.32	35.15	33.26	NA	33.66	23.50
	August	33.03	35.63	31.17	(2)	27.67	35.13	32.63	NA	33.17	20.71
	September	34.20	35.24	W	(2)	27.95	34.70	32.98	NA	33.30	23.58
	October	34.26	35.25	W	(2)	27.82	35.05	33.54	NA	33.93	22.93
	November	34.44	34.99	29.80	(2)	27.63	35.02	33.59	NA	34.08	23.74
	December	34.86	34.73	29.09	(2)	27.63	33.18	34.04	NA	33.21	26.21
	AVERAGE	**34.23**	**35.27**	**30.93**	**35.12**	**28.07**	**35.13**	**33.50**	**NA**	**33.46**	**23.77**
1983	January	W	34.71	W	(2)	26.90	W	W	NA	32.77	21.58
	February	W	33.74	W	(2)	25.69	W	W	NA	30.95	21.82
	March	31.07	29.69	W	(2)	24.53	29.52	30.03	NA	29.16	20.04
	April	29.37	29.57	W	(2)	24.18	29.63	W	NA	30.07	20.05
	May	29.54	29.31	W	(2)	24.60	29.72	W	NA	29.61	19.88
	June	29.80	29.59	W	(2)	24.13	29.57	W	NA	28.92	20.80
	July	30.15	29.73	28.41	(2)	24.92	29.81	27.91	NA	30.00	19.89
	August	R30.32	R29.60	R28.19	(2)	R25.15	R29.92	R27.83	NA	R29.88	R21.56
	September†	30.26	29.87	28.25	(2)	25.10	29.81	27.85	NA	30.73	21.93

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

Price

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

		Algeria	Canada	Indonesia	Iran	Libya	Mexico	Nigeria	Saudi Arabia	United Arab Emirates	United Kingdom	Venezuela
						Dollars per barrel						
1975	**AVERAGE**	**12.72**	**12.72**	**13.79**	**12.21**	**12.35**	**NA**	**12.62**	**12.30**	**12.87**	**NA**	**11.65**
1976	**AVERAGE**	**13.81**	**13.57**	**13.82**	**12.82**	**13.58**	**NA**	**13.80**	**13.04**	**13.30**	**NA**	**11.80**
1977	**AVERAGE**	**15.20**	**14.21**	**14.63**	**13.80**	**14.87**	**13.75**	**15.25**	**13.61**	**14.04**	**NA**	**13.13**
1978	**AVERAGE**	**14.91**	**14.50**	**14.64**	**13.88**	**14.72**	**13.54**	**14.86**	**13.92**	**14.39**	**NA**	**12.83**
1979	**AVERAGE**	**21.90**	**20.43**	**20.69**	**25.02**	**23.68**	**20.86**	**22.96**	**19.15**	**21.90**	**22.16**	**18.18**
1980	**AVERAGE**	**37.90**	**30.47**	**33.92**	**(2)**	**37.72**	**31.80**	**37.05**	**30.02**	**NA**	**35.88**	**25.86**
1981	January	41.25	34.26	38.08	(2)	41.81	36.81	41.55	34.06	NA	39.90	33.80
	February	41.90	33.73	37.86	(2)	42.19	37.23	41.46	34.38	NA	40.69	31.20
	March	41.62	33.88	38.11	(2)	41.60	36.42	40.98	34.42	NA	40.72	32.09
	April	40.96	33.74	37.95	(2)	41.58	34.42	41.04	34.16	NA	40.02	30.97
	May	40.81	32.70	37.72	(2)	40.46	34.83	40.10	33.73	NA	38.31	29.39
	June	40.31	32.67	38.73	(2)	41.44	31.03	39.60	34.29	NA	37.04	31.46
	July	39.59	31.19	37.20	(2)	40.27	33.18	40.05	33.72	NA	35.87	29.22
	August	40.65	30.44	37.07	(2)	40.30	31.77	40.85	33.23	NA	35.40	28.11
	September	41.62	30.83	37.52	(2)	37.73	30.84	37.20	33.66	NA	35.26	29.12
	October	37.52	31.17	36.39	(2)	38.15	31.34	36.64	34.88	NA	36.00	28.27
	November	37.43	31.04	36.84	(2)	38.50	32.42	37.59	34.91	NA	36.87	29.27
	December	38.14	31.37	37.31	(2)	38.89	31.85	37.52	35.37	NA	37.44	29.00
	AVERAGE	**40.49**	**32.16**	**37.57**	**(2)**	**40.92**	**33.78**	**39.70**	**34.19**	**NA**	**37.24**	**29.87**
1982	January	38.19	31.05	36.88	(2)	36.91	30.21	37.37	34.44	NA	36.78	29.82
	February	37.09	28.80	36.81	(2)	35.28	31.47	37.06	34.51	NA	35.04	30.09
	March	32.25	26.71	37.17	(2)	34.80	28.69	35.81	34.92	NA	31.35	23.92
	April	31.66	24.86	36.87	(2)	(2)	27.58	34.82	34.80	NA	33.19	23.09
	May	34.24	24.90	36.50	32.01	(2)	29.18	36.06	34.28	NA	33.22	23.44
	June	35.41	24.63	37.35	W	(2)	28.76	36.15	35.20	NA	34.41	23.43
	July	35.26	26.62	37.04	32.08	(2)	28.95	36.19	35.04	NA	34.67	24.61
	August	33.87	26.40	36.81	31.84	(2)	28.19	36.16	34.28	NA	33.88	21.90
	September	34.88	26.52	36.65	W	(2)	28.50	35.56	34.45	NA	34.01	24.53
	October	35.41	26.91	36.83	33.28	(2)	28.22	35.98	35.21	NA	34.56	23.90
	November	35.82	26.78	36.49	32.66	(2)	28.17	36.04	35.41	NA	34.74	24.91
	December	35.70	27.35	36.19	32.73	(2)	28.19	34.54	36.43	NA	34.05	27.09
	AVERAGE	**35.28**	**26.92**	**36.75**	**32.40**	**36.05**	**28.64**	**36.17**	**35.00**	**NA**	**34.28**	**24.82**
1983	January	33.20	27.62	36.12	W	(2)	27.50	W	W	NA	33.48	23.20
	February	32.17	26.19	35.07	W	(2)	26.15	32.24	W	NA	33.33	23.36
	March	31.24	24.78	31.17	W	(2)	25.06	30.49	31.63	NA	29.92	21.48
	April	30.55	24.35	31.14	W	(2)	24.65	30.63	W	NA	30.84	21.45
	May	30.48	24.32	30.82	W	(2)	25.17	30.75	W	NA	30.60	21.24
	June	30.88	24.88	31.40	29.10	(2)	24.81	30.56	W	NA	30.02	22.07
	July	31.36	25.45	31.46	30.06	(2)	25.34	30.91	29.53	NA	30.86	21.30
	August	R31.85	25.45	R31.65	R29.57	(2)	R25.80	R31.21	R29.39	NA	R30.83	R22.82
	September†	31.76	25.71	31.48	29.20	(2)	25.66	30.81	29.69	NA	31.73	23.20

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

Price

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

		Leaded Regular	Unleaded Regular	Leaded Premium	Average for All Types
		Cents per gallon, including tax			
1974	**AVERAGE**	**53.2**	**NA**	**56.9**	**NA**
1975	**AVERAGE**	**56.7**	**NA**	**60.9**	**NA**
1976	**AVERAGE**	**59.0**	**61.4**	**63.6**	**NA**
1977	**AVERAGE**	**62.2**	**65.6**	**67.4**	**NA**
1978	**AVERAGE**	**62.6**	**67.0**	**69.4**	**65.2**
1979	**AVERAGE**	**85.7**	**90.3**	**92.2**	**88.2**
1980	**AVERAGE**	**119.1**	**124.5**	**128.1**	**122.1**
1981	January	123.8	129.8	133.8	126.9
	February	132.1	138.2	141.0	135.3
	March	135.2	141.7	144.9	138.8
	April	134.4	141.2	145.1	138.1
	May	133.3	140.0	144.7	137.0
	June	132.4	139.1	144.6	136.2
	July	131.5	138.2	144.6	135.3
	August	131.0	137.6	144.4	134.8
	September[2]	130.5	137.6	145.6	135.8
	October	129.9	137.1	145.7	135.3
	November	129.7	136.9	146.2	135.1
	December	129.3	136.5	146.0	134.8
	AVERAGE	**131.1**	**137.8**	**143.9**	**135.3**
1982	January	128.5	135.8	145.6	134.1
	February	126.0	133.4	143.8	131.8
	March	120.6	128.4	140.7	126.8
	April	114.8	122.5	136.8	121.0
	May	116.6	123.7	137.9	122.4
	June	124.2	130.9	140.8	129.6
	July	126.3	133.1	145.0	131.8
	August	125.4	132.3	145.8	131.0
	September	123.6	130.8	144.1	129.5
	October	121.9	129.5	141.3	128.0
	November	120.7	128.3	141.2	126.8
	December	118.1	126.0	137.1	124.4
	AVERAGE	**122.2**	**129.6**	**141.7**	**128.1**
1983	January	114.6	122.8	135.3	121.3
	February	109.9	118.7	131.8	117.0
	March	106.4	115.1	127.4	113.5
	April	113.1	121.5	132.1	119.8
	May	117.7	125.9	137.6	124.3
	June	119.7	127.7	142.9	126.1
	July	120.7	128.8	144.6	127.2
	August	120.3	128.5	143.7	126.9
	September	118.9	127.4	140.5	125.7
	October	117.2	125.5	137.2	123.9

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

Price

Aviation Fuel

		Aviation Gasoline		Naphtha-Type[1]	Kerosene-Type	
		Wholesale[2]	Retail[2]	Retail[2]	Wholesale[2]	Retail[2]
		Cents per gallon, excluding tax				
1976	**AVERAGE**	**42.4**	**43.1**	**31.5**	**32.5**	**31.2**
1977	**AVERAGE**	**46.7**	**47.7**	**35.0**	**36.7**	**35.8**
1978	**AVERAGE**	**51.0**	**52.1**	**37.5**	**38.9**	**38.9**
1979	**AVERAGE**	**68.5**	**69.5**	**52.3**	**66.5**	**55.1**
1980	**AVERAGE**	**107.2**	**109.4**	**88.2**	**87.5**	**87.4**
1981	January	118.9	121.6	99.2	97.1	95.7
	February	121.3	128.1	102.7	103.6	101.6
	March	127.2	131.1	106.9	104.8	106.3
	April	117.5	131.3	109.0	103.8	106.4
	May	120.7	133.5	109.1	104.4	106.2
	June	116.5	132.1	107.6	102.3	104.8
	July	120.1	133.4	106.3	100.5	103.8
	August	120.0	132.5	105.7	101.4	103.3
	September	121.0	133.5	105.6	103.0	103.3
	October	117.2	134.5	104.8	99.9	101.1
	November	114.4	133.2	104.5	101.9	102.6
	December	116.8	131.9	103.8	101.9	102.2
	AVERAGE	**118.8**	**131.5**	**105.7**	**102.0**	**103.1**
1982	January	122.4	133.2	101.7	101.3	101.6
	February	122.0	134.0	101.3	100.0	101.0
	March	117.0	134.8	98.4	97.6	99.6
	April	113.4	132.7	96.0	93.0	96.8
	May	109.6	132.7	94.1	91.7	95.5
	June	114.7	132.5	98.4	94.1	95.3
	July	120.4	134.4	98.7	94.3	95.3
	August	117.7	132.6	97.3	95.0	95.4
	September	115.7	130.0	98.2	95.5	95.1
	October	116.6	131.5	98.5	98.4	95.8
	November	118.4	131.7	96.4	98.2	96.4
	December	119.6	130.3	94.0	93.7	95.6
	AVERAGE	**116.7**	**132.4**	**97.7**	**96.1**	**96.9**

[1]Nearly all naphtha-type fuels are sold directly to the Defense Fuel Supply Center. Consequently, wholesale prices are not applicable.
[2]Wholesale refers to the price of aviation fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and aviation fuel distributors. Retail refers to the price of aviation fuel sold to ultimate consumers, including commercial airline and military accounts.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last two pages of this section.

Price

National Average Heating Oil Prices[1]

		Refiners' Average Selling Price to Resellers and Retailers	Average Purchase Price Paid by Distributors for Heating Oil[2]	Average Distributor Margin on Residential Heating Oil[2]	Average Selling Price to Residential Customers[2]
		Cents per gallon			
1976	**AVERAGE**	**31.4**	**32.6**	**NA**	**40.6**
1977	**AVERAGE**	**35.7**	**36.9**	**NA**	**46.0**
1978	**AVERAGE**	**37.2**	**38.7**	**11.0**	**49.4**
1979	**AVERAGE**	**55.9**	**53.0**	**12.8**	**65.6**
1980	**AVERAGE**	**80.0**	**82.2**	**15.8**	**97.8**
1981	January	94.9	98.6	15.1	114.4
	February	102.5	106.0	16.1	123.4
	March	102.8	106.3	17.6	125.5
	April	100.9	105.2	17.7	123.9
	May	100.7	104.0	17.6	122.7
	June	99.3	103.0	16.9	120.9
	July	98.5	102.7	17.1	121.0
	August	98.2	102.2	16.2	119.4
	September	97.8	101.6	17.2	119.7
	October	98.0	101.1	16.6	118.8
	November	100.0	102.3	17.6	120.8
	December	100.6	102.6	18.3	122.0
	AVERAGE	**99.3**	**102.6**	**16.8**	**120.5**
1982	January	99.1	101.5	19.3	122.0
	February	94.7	98.3	21.3	120.7
	March	87.4	91.3	22.6	115.3
	April	86.0	90.0	22.0	113.2
	May	91.2	95.1	18.4	114.3
	June	95.4	98.5	16.9	116.2
	July	93.8	98.6	16.3	115.8
	August	92.5	96.7	18.2	115.9
	September	93.3	97.7	16.3	115.2
	October	98.8	102.0	16.7	119.6
	November	99.2	101.5	19.0	121.6
	December	89.9	95.9	22.9	119.6
	AVERAGE	**93.2**	**97.4**	**20.2**	**118.6**

[1]See Note 6 on the last two pages of this section.
[2]Average selling prices, purchase prices, and dealer margins represent sales for residential heating oil only.
NA=Not available.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last two pages of this section.

Price

Residential Heating Oil Prices by Region

		Standard Federal Region[1]									
		Cents per gallon									
		1	2	3	4	5	6	7	8	9	10
1980	January	91.8	91.0	90.2	88.6	90.4	W	90.0	90.2	89.6	91.0
	February	96.7	95.3	94.7	93.0	93.5	W	93.6	93.5	95.8	95.7
	March	98.7	97.2	96.5	94.8	94.3	W	95.1	95.9	93.9	97.6
	April	99.2	97.3	96.6	94.1	94.5	W	95.3	99.5	94.7	99.0
	May	98.7	97.3	96.4	94.2	95.8	W	95.2	97.7	95.5	98.6
	June	99.8	97.9	96.8	95.1	95.8	W	95.3	98.4	96.0	99.8
	July	100.3	98.1	96.6	94.2	96.2	W	93.1	97.0	96.7	100.2
	August	100.2	97.9	96.8	94.8	95.7	W	95.4	92.1	99.7	100.4
	September	100.5	98.2	97.0	94.7	95.7	W	93.7	93.0	97.2	100.6
	October	101.1	98.8	97.4	95.6	95.9	W	94.7	94.1	98.6	100.4
	November	102.5	103.0	99.9	101.5	98.8	W	95.2	98.5	101.0	103.1
	December	108.2	108.5	105.3	106.6	103.4	W	99.6	101.8	W	105.6
1981	January	116.2	117.1	113.2	114.0	110.4	W	106.3	108.6	W	107.5
	February	125.8	126.6	123.0	124.4	117.8	W	114.2	113.1	W	113.7
	March	127.6	128.4	125.0	125.3	119.3	W	115.4	119.3	111.5	116.5
	April	126.8	126.6	122.7	124.8	118.3	W	114.7	118.4	W	117.5
	May	125.5	125.6	122.1	118.8	117.3	W	114.5	115.1	114.1	115.6
	June	124.1	123.6	121.1	115.9	116.5	W	112.5	116.0	W	117.1
	July	123.3	122.9	120.6	120.2	116.0	W	115.9	116.2	W	118.3
	August	122.7	122.2	117.9	117.4	115.1	W	112.1	116.9	W	117.7
	September	122.7	121.4	118.5	120.5	116.2	W	111.6	116.8	W	117.8
	October	122.5	122.0	115.3	117.6	116.3	W	112.0	115.8	W	118.2
	November	123.3	123.2	119.5	118.2	116.7	W	114.1	115.8	W	118.8
	December	124.8	124.7	120.7	119.0	117.4	W	112.4	117.1	W	120.0
1982	January	125.3	124.7	120.6	118.7	117.1	W	112.7	116.1	W	119.7
	February	123.2	123.7	119.3	115.3	116.0	W	110.9	114.9	W	119.5
	March	117.4	119.0	112.3	112.9	111.0	W	106.4	109.7	W	118.1
	April	113.9	116.6	112.2	109.4	108.7	W	100.8	106.3	W	116.0
	May	115.9	117.1	113.2	111.7	110.8	W	108.7	108.4	W	116.6
	June	117.5	118.5	115.2	113.5	114.4	W	111.8	112.3	W	116.0
	July	117.7	118.5	113.4	115.2	113.6	W	111.7	W	W	115.9
	August	118.6	118.8	113.9	112.4	111.9	W	W	W	W	116.3
	September	119.4	119.3	W	115.0	112.4	W	W	114.2	W	116.2
	October	122.3	122.4	118.5	117.3	114.8	W	110.5	113.1	W	117.4
	November	124.2	124.7	120.1	118.4	115.9	W	110.2	114.7	W	118.9
	December	122.2	122.9	117.8	114.1	113.0	W	107.3	112.0	W	118.6

[1]Standard Federal Regions are defined in Note 7 on the last two pages of this section.
W = Value withheld to avoid disclosure of company data.
Sources: • See the last two pages of this section.

Price

Average No. 6 Residual Fuel Oil Prices

		0.0 to 0.3 percent sulfur		0.31 to 1.0 percent sulfur		Greater than 1.0 percent sulfur		Average	
		Wholesale	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail
		Dollars per barrel, excluding taxes							
1976	**AVERAGE**	**12.20**	**12.54**	**10.83**	**11.79**	**9.98**	**10.43**	**10.72**	**11.49**
1977	**AVERAGE**	**13.45**	**14.36**	**12.09**	**13.45**	**11.31**	**12.27**	**11.96**	**13.23**
1978	**AVERAGE**	**12.77**	**14.47**	**11.95**	**12.78**	**10.73**	**11.70**	**11.51**	**12.75**
1979	**AVERAGE**	**19.87**	**21.21**	**18.33**	**19.33**	**15.89**	**16.44**	**17.66**	**18.67**
1980	**AVERAGE**	**26.41**	**31.13**	**24.91**	**27.59**	**20.77**	**22.11**	**23.14**	**26.09**
1981	January	34.27	37.23	32.12	33.96	29.12	31.35	31.14	33.65
	February	38.04	41.60	34.96	37.32	28.96	32.02	31.81	36.04
	March	37.78	41.19	34.47	38.01	29.55	31.95	31.78	36.11
	April	35.66	41.71	33.10	35.94	28.35	30.56	30.56	34.70
	May	33.61	41.09	32.53	35.94	28.77	30.64	30.41	34.11
	June	28.01	38.30	26.71	32.38	25.33	27.16	25.95	31.03
	July	29.56	39.02	27.38	31.93	25.62	25.96	26.52	30.57
	August	30.48	36.57	27.77	32.04	26.03	26.20	27.01	30.52
	September	29.91	39.17	27.46	32.08	24.80	26.26	26.20	30.33
	October	30.26	39.90	28.64	31.88	24.96	26.18	26.78	30.32
	November	31.71	39.48	29.63	31.02	26.09	26.45	27.99	30.16
	December	31.40	37.65	28.29	32.19	25.39	26.53	27.26	30.90
	AVERAGE	**32.97**	**39.31**	**30.56**	**33.69**	**27.07**	**28.57**	**28.86**	**32.50**
1982	January	33.03	37.56	28.90	31.13	24.60	25.94	27.07	29.83
	February	31.67	38.41	29.30	30.95	23.60	24.70	26.29	30.02
	March	30.95	38.96	27.60	30.57	23.45	24.21	25.73	29.50
	April	30.11	36.77	27.08	30.00	23.57	24.40	25.46	28.21
	May	30.38	37.97	27.89	30.05	25.15	25.94	26.52	28.93
	June	27.98	38.93	28.26	30.89	25.35	26.56	26.62	29.59
	July	30.05	37.46	27.39	29.84	24.19	26.49	25.97	29.33
	August	28.86	31.82	27.50	30.37	25.40	26.02	26.34	28.44
	September	30.22	32.41	27.73	30.45	25.21	25.93	26.49	28.43
	October	31.98	33.51	29.51	32.24	25.72	26.59	27.52	29.28
	November	32.28	34.14	29.44	32.24	26.30	26.99	28.31	29.84
	December	31.31	32.59	28.19	30.25	25.16	26.22	26.81	28.47
	AVERAGE	**30.92**	**36.34**	**28.27**	**30.71**	**24.76**	**25.82**	**26.55**	**29.08**

Notes: • Geographic coverage is the 50 States and the District of Columbia.
• Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, commercial, and residential accounts.
Sources: • See the last two pages of this section.

Price

Natural Gas

		Average Wellhead Price of Marketed Production	Delivered to Electric Plants[1]	Average Residential
		Dollars per thousand cubic feet		
1973	**AVERAGE**	**0.22**	**0.35**	**1.08**
1974	**AVERAGE**	**0.30**	**0.49**	**1.25**
1975	**AVERAGE**	**0.45**	**0.77**	**1.54**
1976	**AVERAGE**	**0.58**	**1.06**	**1.85**
1977	**AVERAGE**	**0.79**	**1.33**	**2.26**
1978	**AVERAGE**	**0.91**	**1.48**	**2.63**
1979	**AVERAGE**	**1.18**	**1.80**	**3.23**
1980	**AVERAGE**	**1.59**	**2.28**	**3.95**
1981	January	1.77	2.51	4.10
	February	1.81	2.67	4.13
	March	1.86	2.71	4.21
	April	1.93	2.81	4.25
	May	1.95	2.92	4.61
	June	1.95	2.95	4.61
	July	2.01	2.97	4.64
	August	2.02	2.99	4.70
	September	2.08	2.95	4.90
	October	2.11	3.07	4.91
	November	2.15	3.07	4.88
	December	2.16	2.97	4.75
	AVERAGE	**1.98**	**2.91**	**4.56**
1982	January	R2.23	3.07	4.86
	February	R2.30	3.18	4.87
	March	R2.35	3.25	5.06
	April	R2.40	3.32	5.18
	May	R2.45	3.42	5.63
	June	R2.45	3.57	5.62
	July	R2.47	3.69	5.60
	August	R2.53	3.67	5.56
	September	R2.56	3.67	5.82
	October	R2.60	3.68	6.11
	November	R2.62	3.61	5.94
	December	R2.62	3.64	6.06
	AVERAGE	**R2.46**	**3.49**	**5.53**
1983	January	R2.63	[1]3.57	6.15
	February	R2.64	3.41	6.15
	March	R2.61	3.44	6.17
	April	R2.57	3.34	6.37
	May	R2.56	3.54	6.63
	June	R2.49	3.58	6.63
	July	R2.54	R3.72	6.62
	August	2.59	3.75	6.59

[1]Includes all steam and gas turbine engine electric utility generating plants with a combined capacity of 25 megawatts or greater through December 1982. Beginning with January 1983 data, coverage is of steam electric utility generating plants with a combined capacity of 50 megawatts or greater. Small quantities of coke oven gas, refinery gas, and blast furnace gas are included.
R=Revised data.
Note: • Geographic coverage is the 50 States and the District of Columbia.
Sources: • See the last two pages of this section.

Price

Electricity

		Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants[1]				Average Retail Electricity Prices for Privately Owned Utilities[2]				
		Coal	Residual Oil[3]	Gas[4]	All Fossil Fuels[5]	Residential	Commercial	Industrial	Other	Total[5]
		Cents per million Btu				Cents per kilowatt-hour				
1973	**AVERAGE**	**40.5**	**78.8**	**33.8**	**47.5**	**2.54**	**2.41**	**1.25**	**2.10**	**1.96**
1974	**AVERAGE**	**71.0**	**191.0**	**48.1**	**90.9**	**3.10**	**3.04**	**1.69**	**2.75**	**2.49**
1975	**AVERAGE**	**81.4**	**201.4**	**75.4**	**103.0**	**3.51**	**3.45**	**2.07**	**3.08**	**2.92**
1976	**AVERAGE**	**84.8**	**195.9**	**103.4**	**110.4**	**3.73**	**3.69**	**2.21**	**3.27**	**3.09**
1977	**AVERAGE**	**94.7**	**220.4**	**130.0**	**127.7**	**4.05**	**4.09**	**2.50**	**3.51**	**3.42**
1978	**AVERAGE**	**111.6**	**212.3**	**143.8**	**139.3**	**4.31**	**4.36**	**2.79**	**3.62**	**3.69**
1979	**AVERAGE**	**122.4**	**299.7**	**175.4**	**162.1**	**4.64**	**4.68**	**3.05**	**3.96**	**3.99**
1980	**AVERAGE**	**135.1**	**427.9**	**221.4**	**190.4**	**5.36**	**5.48**	**3.69**	**4.76**	**4.73**
1981	January	142.7	540.2	245.9	219.2	5.43	5.72	3.94	4.92	4.96
	February	146.3	572.9	260.5	218.2	5.52	5.83	3.95	5.01	4.99
	March	148.3	583.9	264.0	215.0	5.76	6.01	4.04	5.33	5.12
	April	146.9	568.3	273.5	241.9	5.99	6.14	4.07	5.20	5.20
	May	146.7	552.8	282.7	250.6	6.26	6.29	4.16	5.47	5.36
	June	152.7	506.1	286.3	234.6	6.49	6.48	4.36	5.37	5.59
	July	156.5	496.3	288.6	227.5	6.58	6.47	4.48	5.61	5.76
	August	157.0	494.4	291.1	220.2	6.62	6.49	4.49	5.52	5.78
	September	157.2	501.0	286.5	212.3	6.63	6.48	4.49	5.65	5.74
	October	160.2	511.9	300.7	217.7	6.57	6.52	4.40	5.31	5.64
	November	159.1	521.0	300.0	215.1	6.42	6.48	4.46	5.43	5.61
	December	156.7	505.0	291.4	215.5	6.32	6.46	4.56	[6]4.60	5.65
	AVERAGE	**153.2**	**529.4**	**282.5**	**222.5**	**6.20**	**6.29**	**4.29**	**5.28**	**5.46**
1982	January	160.9	484.6	301.0	226.4	6.22	6.49	4.66	5.44	5.74
	February	164.1	487.6	310.4	220.7	6.35	6.68	4.70	5.83	5.84
	March	165.7	470.9	315.8	219.8	6.58	6.79	4.83	6.38	5.97
	April	164.6	478.0	323.4	214.3	6.72	6.81	4.84	5.77	5.99
	May	165.1	485.7	331.6	215.7	6.94	6.86	4.95	5.91	6.09
	June	167.0	479.6	345.8	224.7	7.08	6.94	4.92	6.01	6.18
	July	164.5	468.8	335.9	237.6	7.18	6.98	5.12	6.13	6.38
	August	164.7	458.8	355.7	227.6	7.22	6.91	5.15	6.09	6.40
	September	165.9	464.4	358.5	226.9	7.18	6.97	5.25	6.07	6.41
	October	164.9	479.3	360.4	220.1	7.21	7.09	5.09	5.81	6.33
	November	165.3	493.4	351.5	218.2	6.94	7.04	4.88	5.69	6.14
	December	162.9	456.3	355.4	216.8	6.71	6.78	5.01	5.85	6.11
	AVERAGE	**164.7**	**475.5**	**340.6**	**222.5**	**6.86**	**6.86**	**4.95**	**5.92**	**6.13**
1983	January	166.7	444.0	346.9	214.6	6.65	6.78	5.03	5.91	6.13
	February	167.7	439.7	331.9	212.1	6.73	6.86	4.96	5.97	6.12
	March	168.1	421.0	334.9	213.9	6.93	6.93	5.07	6.16	6.23
	April	168.1	435.5	325.5	215.2	6.91	6.86	4.92	6.15	6.12
	May	165.1	443.7	343.5	215.0	7.20	7.04	4.89	6.60	6.21
	June	167.3	450.2	346.7	219.8	7.41	7.13	4.96	6.62	6.35
	July	165.5	464.7	359.4	235.2	7.50	7.13	5.11	6.24	6.53
	August	164.4	464.8	363.1	229.6	7.52	7.06	5.01	6.37	6.51
	September†	NA	NA	NA	NA	7.55	7.15	5.00	6.58	6.52

[1]Includes all steam-electric utility generating plants with a capacity of 25 megawatts or greater through December 1982. Beginning with January 1983 data, coverage is for steam-electric plants with a capacity of 50 megawatts or greater.
[2]The 1973 through 1979 data are for Classes A and B privately owned electric utilities only. The 1980 and forward data are for selected Class A utilities whose electric operating revenues were $100 million or more during the previous year.
[3]See Note 8 on the last two pages of this section.
[4]Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.
[5]Average price for total sales to ultimate consumers.
[6]Includes a major adjustment by one utility.
†Initial estimates. NA=Not available.
Note: • Geographic coverage for fossil fuels is the lower 48 States and the District of Columbia. For electricity it is the 50 States and the District of Columbia.
Sources: • See the last two pages of this section.

Notes and Sources for the Price Section

Notes

1. The actual domestic average price represents the average price at which all domestic crude oil is purchased. Prior to February 1976, the domestic crude oil wellhead price represented an estimate of the average of posted prices; after February 1976, the wellhead price represents an average of first sale prices.
2. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on EIA Form 14, the "Refiners' Monthly Cost Report." These prices were previously published from data collected on ERA Form 49, the "Domestic Crude Oil Entitlements Program Refiners Monthly Report." The ERA Form 49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for EIA Form 14 in accordance with conventions used for ERA Form 49. Also, the respondents for the two forms are essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken in comparing the data collected on the two forms.

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

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

Crude oil costs and volumes reported on ERA Form 49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on the FEA Form P110-M-1 included unfinished oils but excluded SPR. Imported averages derived from ERA Form 49 exclude oil purchased for SPR, whereas the composite averages derived from ERA Form 49 include SPR. None of the prices derived from EIA Form 14 include either unfinished oils or SPR.
3. FOB literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.
4. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries that export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.
5. The motor gasoline prices are calculated monthly by the Bureau of Labor Statistics in conjunction with the construction of the Consumer Price Index (CPI). For the period 1974 through 1978, prices were collected in 56 urban areas. For the period 1978 forward, prices were collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-serve).
6. The survey and method used to derive data for March 1976 forward differ from those used for prior months. Data for January 1974 through February 1976 are derived from a survey of distributors, and prices and margins are computed as unweighted averages. The average distributor purchase price and average dealer margin for March 1976 forward are for distributors only, whereas the average selling price includes both refiners and distributors. Data for March 1976 forward are computed as sales weighted averages.
7. Standard Federal Regions are defined as follows:
Region 1 —Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island;
Region 2 —New York, New Jersey, Puerto Rico, Virgin Islands;
Region 3 —Pennsylvania, Maryland, West Virginia, Virginia, the District of Columbia, Delaware;
Region 4 —Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, Canal Zone;
Region 5 —Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio;
Region 6 —Texas, New Mexico, Oklahoma, Arkansas, Louisiana;
Region 7 —Kansas, Missouri, Iowa, Nebraska;
Region 8 —Montana, North Dakota, South Dakota, Wyoming, Utah, Colorado;
Region 9 —California, Nevada, Arizona, Hawaii, Trust Territory of the Pacific Islands, American Samoa, Guam;
Region 10 —Washington, Oregon, Idaho, Alaska.
8. Residual fuel oil prices include fuel oils No. 4, No. 5, and No. 6, and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (No. 2 fuel oil, kerosene, and jet fuel) prices.

Sources

Petroleum and Petroleum Products: • Actual domestic average wellhead prices—Economic Regulatory Administration (ERA), January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report"; February 1976 through September 1979: FEA Form P124, "Domestic Crude Oil Purchaser's (Monthly) Report"; October 1979 through December 1982: ERA Form 182, "Domestic Crude Oil First Purchase Report."; January 1983 forward: EIA Form 182, "Domestic Crude Oil First Purchase Report."
• Refiner acquisition costs—Energy Information Administration (EIA), January 1976: FEO Form 96, "Monthly Cost Allocation Report"; February 1976 through June 1978: FEA Form P110-M-1, "Refiners' Monthly Cost Allocation Report"; July 1978 through December 1980: ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report"; January 1981 forward: EIA Form 14, "Refiners' Monthly Cost Report."
• No. 6 residual oil prices—EIA, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."
• No. 2 diesel prices—EIA, FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

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

Notes and Sources for the Price Section (continued)

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

International

Crude Oil Production

World crude oil production during August 1983 was 54.3 million barrels per day, up 0.4 million barrels per day (0.7 percent) from the July 1983 level.

Organization of Petroleum Exporting Countries (OPEC) output during August 1983 averaged 18.7 million barrels per day, down less than 0.1 million barrels per day from the level the previous month. Average production by Arab members of OPEC was 11.4 million barrels per day, up 0.6 million barrels per day from the July 1983 level. Production levels remained the same as during the previous month in Algeria, Iraq, and Libya, while Qatar showed a slight decrease in production during the month. Saudi Arabia experienced the largest increase in production, 0.5 million barrels per day. Kuwait reported an increase of 0.1 million barrels per day. Among non-Arab OPEC countries, Indonesian and Venezuelan production increased slightly, while production in Nigeria and Iran decreased by 0.4 and 0.3 million barrels per day, respectively.

Of the non-OPEC nations, Mexico experienced a production increase of 0.1 million barrels per day. Canada, the United Kingdom, and the United States each reported a slight increase in production during the month.

Petroleum Consumption

Preliminary petroleum consumption data for August 1983 were available for Canada, France, Italy, Japan, the United Kingdom, the United States, and West Germany. Compared to August 1982 levels, consumption in Japan increased by 0.2 million barrels per day; France and the United Kingdom each reported increases in consumption of 0.1 million barrels per day. West Germany showed a decline of 0.2 million barrels per day and both Canada and Italy experienced 0.1-million-barrel-per-day decreases from consumption levels 1 year earlier. U.S. consumption in August 1983 was 0.5 million barrels per day higher than in August 1982.

Petroleum Stocks

Preliminary data for August 1983 indicate petroleum stock levels were down compared to August 1982 levels in every country reporting except the United States. Petroleum stocks in Canada, France, and the United Kingdom were down compared to the August 31, 1982, level by 19.7, 15.0, and 12.9 percent, respectively. West Germany, Italy, and Japan showed declines of 11.9, 10.1, and 7.9 percent, respectively. The United States reported a 4.2-percent increase in stocks compared to the level at the end of August 1982.

Petroleum stocks for all Organization for Economic Cooperation and Development members stood at 3,169 million barrels on June 30, 1983 (latest data available), a decrease of 126 million barrels (3.8 percent) compared to stocks held on June 30, 1982.

Nuclear Electricity Production

In September 1983, the 19 non-Communist nations with significant nuclear power capacity generated 76.0 gross terawatt-hours (billion kilowatt-hours) of nuclear-based electricity. On a per-hour basis, this output was up 5.1 percent from August 1983 generation and up 15.6 percent compared to generation in September 1982.

On August 29, 1983, Asco-1, a 930-gross megawatt pressurized water reactor in Spain, operated by Fuerzas Electricas de Cataluna, generated its first electricity. In the United Kingdom, Heysham-1 and Hartlepool-1, both 660-gross megawatt advanced gas-cooled reactors, generated their first electricity on July 9 and August 1, 1983, respectively. With the addition of Asco-1, Heysham-1, and Hartlepool-1, there were, as of September 30, 1983, 246 operational power reactors in the non-Communist countries with a collective generating capacity of 169.2 gross gigawatts (million kilowatts). The 81 U.S. units accounted for 68.6 gigawatts (40 percent) of this capacity.

International

Crude Oil Production for Major Petroleum Producing Countries

		Algeria	Iraq	Kuwait[1]	Libya	Qatar	Saudi Arabia[1]	United Arab Emirates	Arab Members of OPEC[2]	Indonesia	Iran
		Thousand barrels per day									
1973	**AVERAGE**	**1,097**	**2,018**	**3,020**	**2,175**	**570**	**7,596**	**1,533**	**18,009**	**1,339**	**5,861**
1974	**AVERAGE**	**1,009**	**1,971**	**2,546**	**1,521**	**518**	**8,480**	**1,679**	**17,724**	**1,375**	**6,022**
1975	**AVERAGE**	**983**	**2,262**	**2,084**	**1,480**	**438**	**7,075**	**1,664**	**15,986**	**1,307**	**5,350**
1976	**AVERAGE**	**1,075**	**2,415**	**2,145**	**1,933**	**497**	**8,577**	**1,936**	**18,578**	**1,504**	**5,883**
1977	**AVERAGE**	**1,152**	**2,348**	**1,969**	**2,063**	**445**	**9,245**	**1,999**	**19,221**	**1,686**	**5,663**
1978	**AVERAGE**	**1,161**	**2,563**	**2,131**	**1,983**	**487**	**8,301**	**1,831**	**18,457**	**1,635**	**5,242**
1979	**AVERAGE**	**1,154**	**3,477**	**2,500**	**2,092**	**508**	**9,532**	**1,831**	**21,094**	**1,591**	**3,168**
1980	**AVERAGE**	**1,012**	**2,514**	**1,656**	**1,787**	**472**	**9,900**	**1,709**	**19,050**	**1,577**	**1,662**
1981	January	950	600	1,765	1,600	505	10,265	1,620	17,305	1,630	1,600
	February	950	700	1,565	1,650	480	10,265	1,605	17,215	1,620	1,700
	March	950	1,000	1,560	1,600	505	10,110	1,610	17,335	1,635	1,700
	April	900	1,000	995	1,600	515	10,195	1,570	16,775	1,630	1,600
	May	900	1,000	990	1,400	435	10,140	1,550	16,415	1,600	1,500
	June	800	1,000	1,080	1,200	340	10,180	1,435	16,035	1,600	1,600
	July	725	1,100	1,200	750	380	10,170	1,415	15,740	1,600	1,400
	August	600	1,100	830	700	295	10,330	1,480	15,335	1,600	1,100
	September	550	1,100	855	700	365	9,155	1,465	14,190	1,600	1,100
	October	700	1,100	985	700	360	9,685	1,480	15,010	1,600	920
	November	750	1,100	890	900	340	8,640	1,365	13,985	1,600	930
	December	800	1,100	895	1,000	340	8,645	1,430	14,210	1,580	1,200
	AVERAGE	**805**	**1,000**	**1,125**	**1,140**	**405**	**9,815**	**1,474**	**15,764**	**1,605**	**1,380**
1982	January	800	1,500	805	1,000	405	8,655	1,450	14,615	1,490	1,100
	February	700	1,500	840	600	375	8,440	1,375	13,830	1,450	1,200
	March	600	1,500	745	600	300	7,145	1,365	12,255	1,400	1,800
	April	600	900	680	700	230	6,630	1,215	10,955	1,245	1,800
	May	620	750	720	800	320	5,870	1,125	10,205	1,240	2,500
	June	650	750	840	1,000	410	6,670	1,210	11,530	1,305	2,500
	July	650	800	870	1,300	275	6,170	1,160	11,225	1,305	2,500
	August	700	800	920	1,300	340	5,920	1,155	11,135	1,240	2,200
	September	800	800	885	1,400	285	5,685	1,155	11,010	1,300	2,700
	October	800	800	860	1,700	380	5,660	1,155	11,355	1,370	2,700
	November	800	800	915	1,700	310	5,615	1,155	11,295	1,400	2,700
	December	800	800	850	1,750	305	5,250	1,155	10,910	1,360	2,800
	AVERAGE	**710**	**972**	**827**	**1,158**	**R329**	**6,470**	**1,214**	**R11,680**	**1,339**	**2,214**
1983	January	700	800	780	1,100	255	4,750	1,030	9,415	1,155	2,500
	February	600	800	895	900	200	3,710	1,030	8,135	945	2,500
	March	600	800	960	900	170	3,610	1,010	8,050	1,100	2,500
	April	700	800	900	1,000	260	4,100	1,120	8,880	1,200	2,300
	May	600	900	1,030	1,100	275	4,530	1,150	9,585	1,300	2,400
	June	700	900	1,035	1,100	300	4,735	1,150	9,920	1,400	2,500
	July	700	1,000	1,085	1,100	300	R5,535	1,150	R10,870	1,300	R2,800
	August	700	1,000	1,180	1,100	265	6,030	1,160	11,435	1,350	2,500

[1]Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In August 1983, total production in this region amounted to approximately 460,000 barrels per day.
[2]Arab members of the Organization of Petroleum Exporting Countries (OPEC) include Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.
[3]OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates, Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon.
Footnotes continued on following page.

International

Crude Oil Production for Major Petroleum Producing Countries (continued)

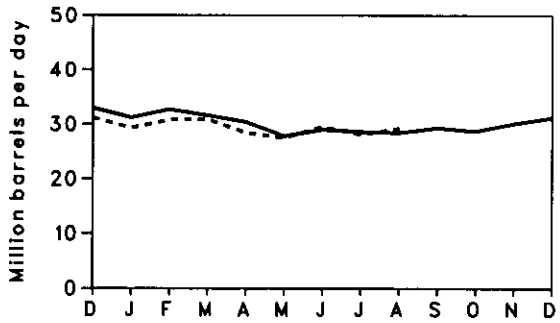
		Nigeria	Vene-zuela	Total OPEC[3]	Canada	Mexico	United Kingdom	United States	China	USSR	Other[4]	World
						Thousand barrels per day						
1973	**AVERAGE**	**2,054**	**3,366**	**30,989**	**1,800**	**465**	**2**	**9,208**	**1,090**	**8,465**	**3,655**	**55,674**
1974	**AVERAGE**	**2,255**	**2,976**	**30,729**	**1,684**	**571**	**2**	**8,774**	**1,315**	**9,000**	**3,777**	**55,852**
1975	**AVERAGE**	**1,783**	**2,346**	**27,155**	**1,439**	**705**	**12**	**8,375**	**1,490**	**9,625**	**4,079**	**52,880**
1976	**AVERAGE**	**2,067**	**2,294**	**30,738**	**1,295**	**831**	**245**	**8,132**	**1,670**	**10,143**	**4,258**	**57,312**
1977	**AVERAGE**	**2,085**	**2,238**	**R31,298**	**1,320**	**981**	**768**	**8,245**	**1,874**	**10,682**	**R4,517**	**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**	**R26,891**	**1,435**	**1,936**	**1,622**	**8,597**	**2,114**	**11,773**	**R5,170**	**59,538**
1981	January	1,900	2,220	25,025	1,390	2,220	1,765	8,540	2,024	11,900	5,111	57,975
	February	1,960	2,195	25,075	1,390	2,120	1,820	8,604	2,025	11,900	5,161	58,095
	March	1,875	2,240	25,190	1,280	2,365	1,885	8,613	2,025	11,900	5,152	58,410
	April	1,625	2,200	24,215	1,330	2,540	1,750	8,557	2,011	11,900	5,122	57,425
	May	1,295	2,200	23,380	1,250	2,545	1,770	8,501	2,025	11,900	5,264	56,635
	June	1,350	1,990	22,945	1,235	2,300	1,765	8,629	2,025	11,900	5,066	55,865
	July	770	1,760	21,620	1,270	2,095	1,750	8,500	2,010	11,900	5,215	54,360
	August	710	1,960	21,050	1,235	2,260	1,760	8,583	2,020	11,900	4,962	53,770
	September	1,065	2,080	20,385	1,265	2,480	1,830	8,604	1,990	11,900	5,166	53,620
	October	1,250	1,970	21,200	1,120	2,490	1,845	8,563	2,020	11,900	5,247	54,385
	November	1,590	2,230	20,575	1,280	2,090	1,840	8,586	2,020	11,900	5,109	53,400
	December	1,820	2,260	21,230	1,380	1,980	1,870	8,585	2,020	11,900	5,135	54,100
	AVERAGE	**1,433**	**2,102**	**R22,646**	**1,285**	**2,313**	**1,811**	**8,572**	**2,012**	**11,909**	**R5,352**	**R55,900**
1982	January	1,765	1,985	21,285	1,218	2,315	1,905	8,509	2,020	11,900	5,488	54,640
	February	1,395	1,730	19,950	1,275	2,550	1,955	8,702	2,020	11,900	5,558	53,910
	March	945	1,870	18,615	1,182	2,545	2,000	8,667	2,020	11,900	5,341	52,270
	April	890	1,490	16,725	928	2,780	2,110	8,591	2,025	11,900	5,481	50,540
	May	1,310	1,480	17,075	1,114	2,715	2,085	8,683	2,025	11,900	5,528	51,125
	June	1,645	1,500	18,845	1,330	2,790	2,140	8,646	2,025	11,900	5,489	53,165
	July	1,280	1,800	18,450	1,235	2,790	2,120	8,658	2,025	12,000	5,507	52,785
	August	1,105	2,000	18,045	1,300	2,795	2,125	8,634	2,025	12,000	5,551	52,475
	September	1,170	1,990	18,515	1,300	2,830	2,175	8,701	2,025	12,000	5,499	53,045
	October	1,480	2,160	19,430	1,310	2,900	2,165	8,701	2,040	12,410	5,489	54,445
	November	1,355	2,300	19,415	1,420	2,940	2,220	8,697	2,040	12,410	5,683	54,825
	December	1,215	2,325	18,985	1,300	3,025	2,315	8,598	2,040	12,410	5,732	54,405
	AVERAGE	**1,295**	**1,891**	**R18,784**	**1,241**	**2,749**	**2,117**	**8,649**	**2,029**	**R12,000**	**R5,593**	**R53,162**
1983	January	880	2,085	16,415	1,230	2,980	2,135	8,634	2,085	12,410	5,853	51,742
	February	675	1,780	14,370	1,360	2,295	2,315	8,660	2,085	12,410	5,958	49,453
	March	905	2,080	15,000	1,395	2,415	2,265	8,677	2,085	12,410	5,916	50,163
	April	1,150	1,715	15,620	1,260	2,670	2,170	8,686	2,085	12,410	5,994	50,895
	May	1,625	1,685	16,945	1,300	2,795	2,235	8,682	2,085	11,900	6,043	51,985
	June	1,535	1,690	17,435	1,365	2,775	2,045	8,676	2,085	11,900	6,049	52,330
	July	R1,710	1,695	R18,770	1,480	2,685	2,280	8,647	R2,105	R12,365	R5,568	R53,900
	August	1,300	1,730	18,735	1,515	2,775	2,290	8,653	2,105	12,385	5,822	54,280

Footnotes continued.
[4]Other is a calculated total derived from the difference between world production and the nations represented above.
R = Revised data.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available.
Sources: • See the last page of this section.

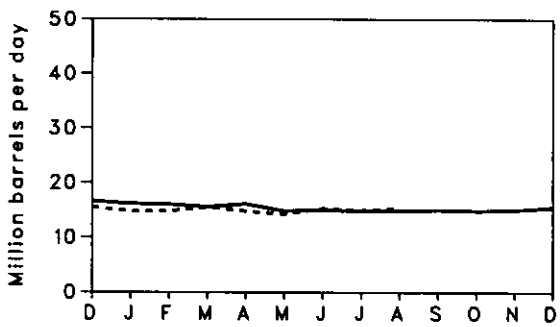
International

Petroleum Consumption

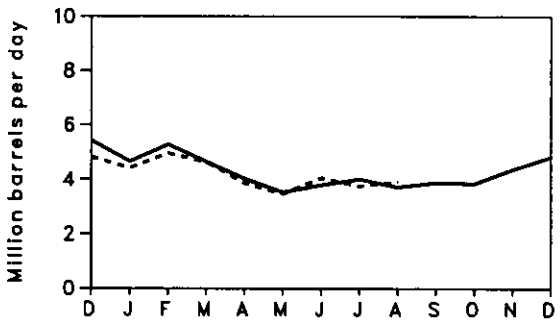
Total IEA



United States



Japan*



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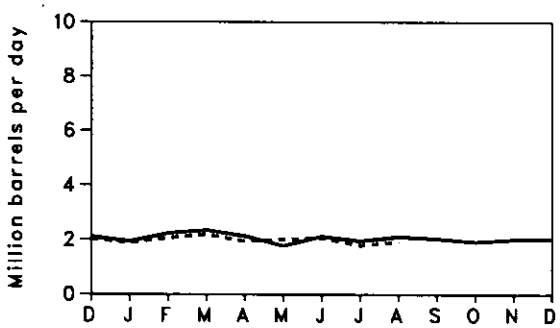
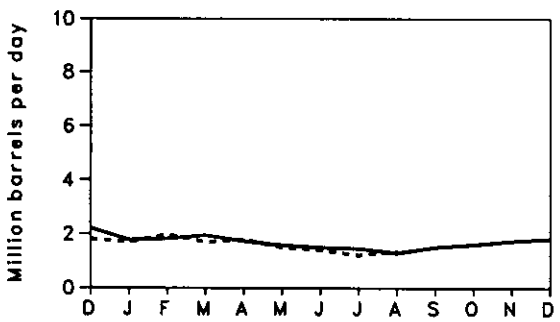


France**



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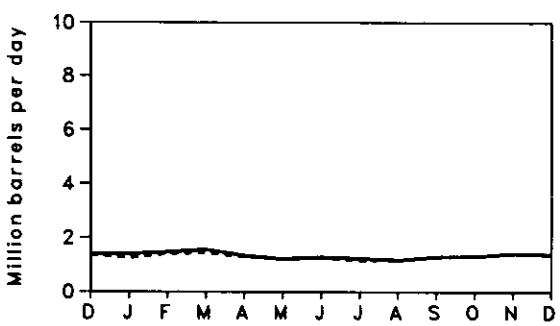
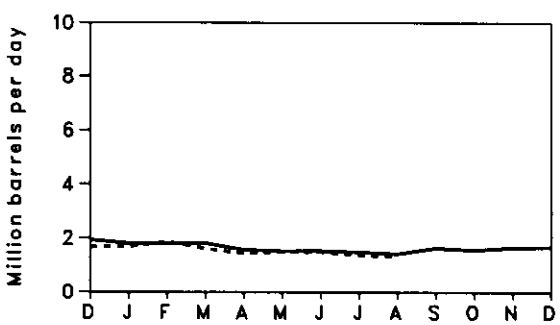


Canada

Italy***



*Excludes liquefied petroleum gases and condensates.
**Not a member of IEA.
***Principal products only.
—— 1982 ----- 1983

International

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

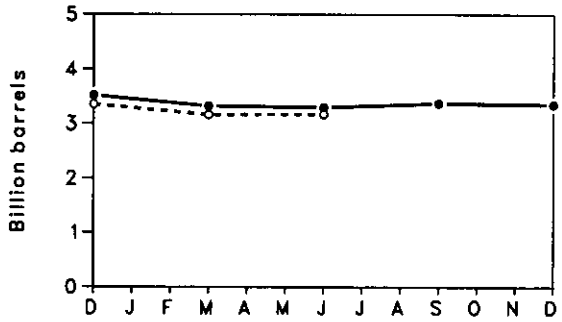
		Canada	France[2]	Italy	Japan	United Kingdom	United States	West Germany	Other IEA[3]	Total IEA[4]
					Thousand barrels per day					
1973	**AVERAGE**	**1,597**	**2,219**	**1,525**	**5,000**	**1,958**	**17,308**	**2,693**	**4,069**	**34,150**
1974	**AVERAGE**	**1,630**	**2,094**	**1,521**	**4,872**	**1,829**	**16,653**	**2,408**	**4,047**	**32,960**
1975	**AVERAGE**	**1,595**	**1,925**	**1,468**	**4,568**	**1,633**	**16,322**	**2,319**	**3,905**	**31,810**
1976	**AVERAGE**	**1,647**	**2,075**	**1,503**	**4,786**	**1,601**	**17,461**	**2,507**	**4,265**	**33,770**
1977	**AVERAGE**	**1,661**	**1,973**	**1,476**	**5,015**	**1,655**	**18,431**	**2,478**	**4,214**	**34,930**
1978	**AVERAGE**	**1,701**	**2,077**	**1,551**	**5,115**	**1,683**	**18,847**	**2,596**	**4,387**	**35,880**
1979	**AVERAGE**	**1,766**	**2,107**	**1,607**	**5,173**	**1,690**	**18,513**	**2,664**	**4,487**	**35,900**
1980	**AVERAGE**	**1,730**	**1,965**	**1,602**	**4,680**	**1,420**	**17,056**	**2,360**	**4,152**	**33,000**
1981	January	1,760	2,310	1,880	4,980	1,400	18,430	2,230	4,420	35,100
	February	1,770	2,170	2,195	5,350	1,460	16,989	2,510	4,126	34,400
	March	1,550	1,790	1,895	5,020	1,430	15,907	2,100	3,598	31,500
	April	1,600	1,500	1,785	4,140	1,290	15,350	1,810	3,925	29,900
	May	1,490	1,670	1,410	3,600	1,190	15,353	1,880	3,977	28,900
	June	1,635	1,600	1,510	3,915	1,210	16,095	2,155	3,880	30,400
	July	1,620	1,450	1,580	4,160	1,170	15,682	2,150	4,138	30,500
	August	1,630	1,160	1,360	4,100	1,125	15,263	2,111	3,711	29,300
	September	1,595	1,425	1,715	4,060	1,285	15,655	2,085	3,905	30,300
	October	1,585	1,655	1,600	4,085	1,390	15,822	2,305	4,013	30,800
	November	1,595	2,010	1,650	4,610	1,470	15,593	2,030	4,052	31,000
	December	1,635	2,215	1,930	5,425	1,380	16,596	2,100	3,934	33,000
	AVERAGE	**1,615**	**1,745**	**1,705**	**4,445**	**1,325**	**16,058**	**2,120**	**4,032**	**31,300**
1982	January	1,530	1,770	1,800	4,645	1,400	16,124	1,935	3,766	31,200
	February	1,715	1,815	1,795	5,275	1,465	16,001	2,230	4,219	32,700
	March	1,510	1,940	1,805	4,640	1,560	15,560	2,340	4,185	31,600
	April	1,350	1,730	1,560	4,015	1,340	16,046	2,125	3,964	30,400
	May	1,325	1,580	1,510	3,515	1,210	14,847	1,770	3,623	27,800
	June	1,430	1,505	1,520	3,780	1,280	14,998	2,115	3,877	29,000
	July	1,390	1,455	1,475	3,995	1,235	14,821	1,955	3,729	28,600
	August	1,500	1,295	1,410	3,705	1,170	14,839	2,105	3,671	28,400
	September	1,410	1,510	1,630	3,865	1,295	15,022	2,035	4,043	29,300
	October	1,335	1,605	1,555	3,830	1,305	14,859	1,922	3,894	28,700
	November	1,470	1,735	1,650	4,355	1,415	15,009	2,005	4,196	30,100
	December	1,460	1,815	1,670	4,810	1,380	15,487	2,025	4,368	31,200
	AVERAGE	**1,450**	**1,645**	**1,614**	**4,196**	**1,337**	**15,296**	**2,045**	**3,962**	**29,900**
1983	January	1,260	1,685	1,675	4,410	1,260	14,765	1,875	4,055	29,300
	February	1,430	1,985	1,865	4,950	1,415	14,772	2,060	4,308	30,800
	March	1,305	1,685	1,605	4,625	1,430	15,484	2,180	4,271	30,900
	April	1,190	1,785	1,415	3,850	1,300	14,779	1,940	3,926	28,400
	May	1,320	1,500	1,470	3,460	1,230	14,250	2,010	3,760	27,500
	June	1,360	1,405	1,475	4,040	1,255	15,281	2,060	4,029	29,500
	July	1,265	1,210	1,365	3,745	1,160	14,913	1,785	3,867	28,100
	August	1,440	1,350	1,315	3,900	1,220	15,366	1,920	4,039	29,200

[1]These data represent inland consumption, i.e., sales of petroleum products excluding refinery fuel, refinery losses, and ocean bunkers except for the United States, where it represents domestic products supplied.
[2]Not a member of the International Energy Agency (IEA).
[3]Other is a calculated total derived from the difference between total IEA consumption and the IEA nations represented above.
[4]The 21 signatory nations of the IEA are listed in Note 1 on the last page of this section.
NA=Not available.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Data for 1980 through 1983 are preliminary.
Sources: • See the last page of this section.

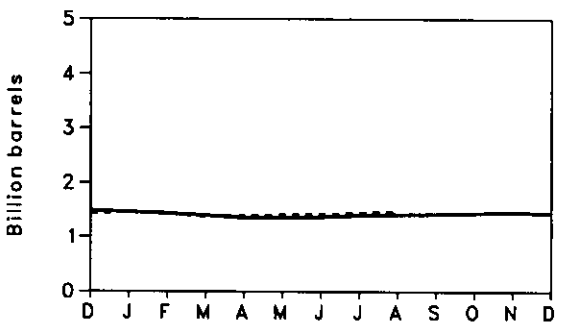
International

Petroleum Stocks

Total OECD



United States



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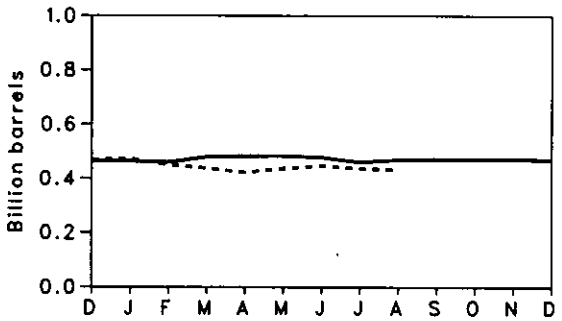
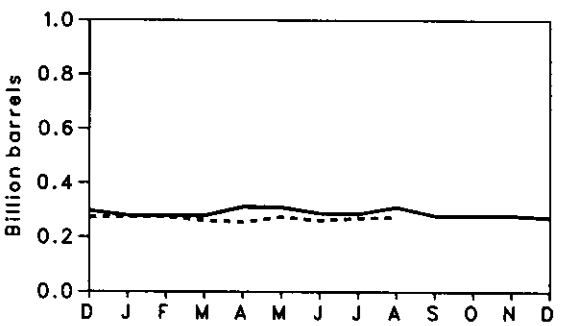
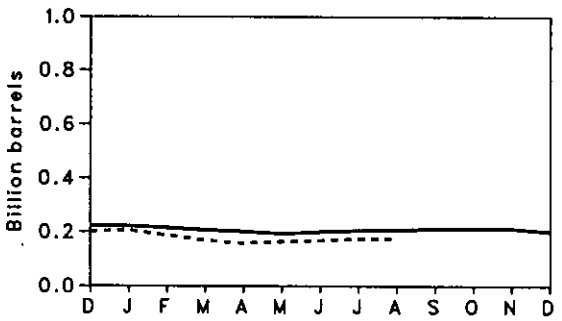


West Germany



France



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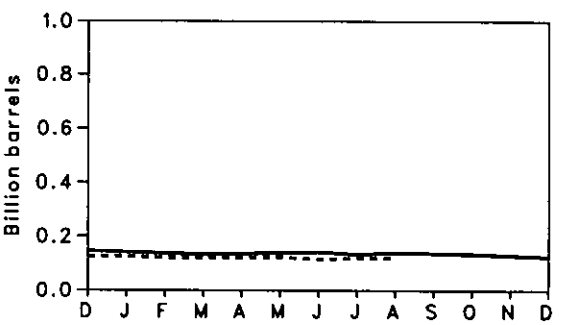

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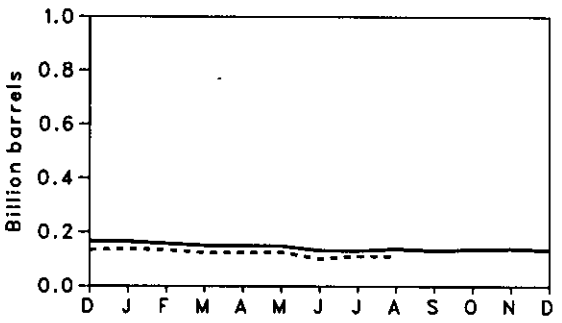
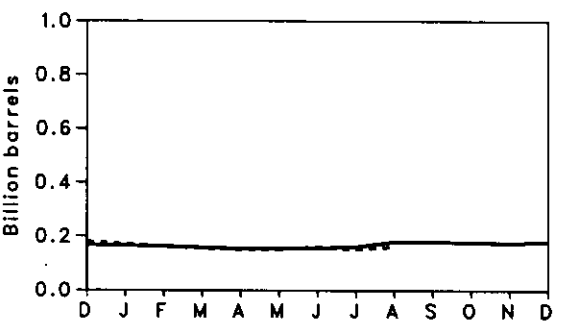


Italy



●——● 1982 ○- - -○ 1983

International

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

		Canada	France	Italy	Japan	United Kingdom	United States	West Germany	Other OECD[2]	Total OECD[3]
						Million barrels				
1973		**149**	**203**	**NA**	**303**	**156**	**1,008**	**NA**	**NA**	**NA**
1974		**164**	**240**	**169**	**370**	**191**	**1,074**	**215**	**NA**	**NA**
1975		**167**	**239**	**143**	**375**	**164**	**1,133**	**190**	**NA**	**NA**
1976		**156**	**231**	**142**	**394**	**165**	**1,112**	**214**	**NA**	**NA**
1977		**170**	**241**	**162**	**399**	**147**	**1,312**	**236**	**485**	**3,152**
1978		**148**	**214**	**153**	**422**	**147**	**1,278**	**239**	**487**	**3,089**
1979		**156**	**231**	**163**	**457**	**163**	**1,341**	**273**	**574**	**3,358**
1980		**171**	**254**	**173**	**481**	**169**	**1,392**	**323**	**610**	**3,573**
1981	January	169	234	155	479	168	1,388	319	NA	NA
	February	162	235	184	457	170	1,389	312	NA	NA
	March	165	227	158	452	164	1,401	317	581	3,465
	April	174	235	169	484	165	1,415	322	NA	NA
	May	176	229	173	496	162	1,438	321	NA	NA
	June	179	225	171	484	158	1,430	312	598	3,557
	July	179	228	177	476	153	1,439	305	NA	NA
	August	184	233	189	483	151	1,457	308	NA	NA
	September	181	241	187	493	151	1,476	307	591	3,627
	October	172	238	188	500	149	1,485	303	NA	NA
	November	163	230	178	483	147	1,501	300	NA	NA
	December	164	222	167	466	145	1,484	297	575	3,520
1982	January	163	222	165	464	NA	1,456	280	NA	NA
	February	156	215	162	460	NA	1,428	280	NA	NA
	March	149	207	158	480	133	1,392	279	524	3,322
	April	148	201	154	483	NA	1,346	312	NA	NA
	May	147	193	154	484	NA	1,347	310	NA	NA
	June	131	200	156	478	141	1,360	288	541	3,295
	July	130	205	160	460	134	1,393	286	NA	NA
	August	137	207	179	470	139	1,408	311	NA	NA
	September	131	212	179	472	137	1,414	280	548	3,373
	October	135	212	177	471	135	1,432	279	NA	NA
	November	138	213	174	472	130	1,455	280	NA	NA
	December	133	201	179	469	125	1,430	273	542	3,352
1983	January	136	206	170	473	125	1,453	274	NA	NA
	February	133	187	163	450	121	1,432	274	NA	NA
	March	123	168	155	438	120	1,375	262	520	3,161
	April	123	158	151	422	120	1,376	255	NA	NA
	May	125	164	152	437	123	1,397	274	NA	NA
	June	100	168	159	447	116	1,409	262	508	3,169
	July	110	R174	151	436	119	1,434	270	NA	NA
	August	110	176	161	433	121	1,467	274	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 of Economic Cooperation and Development (OECD) members not shown.
[3]The members of OECD are listed in Note 2 on the last page of this section.
R = Revised data. NA = Not available.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

International

Nuclear Electricity Generation by Non-Communist Countries[1]

		Argentina	Belgium	Brazil	Canada	Finland	France	India	Italy	Japan	Netherlands	Pakistan
						Billion gross kilowatt-hours						
1973	**TOTAL**	**0**	**0**	**0**	**18.3**	**0**	**11.6**	**1.9**	**3.1**	**9.4**	**1.1**	**0.5**
1974	**TOTAL**	**1.0**	**0.1**	**0**	**15.4**	**0**	**14.7**	**2.5**	**3.4**	**18.1**	**3.3**	**0.6**
1975	**TOTAL**	**2.5**	**6.8**	**0**	**13.2**	**0**	**18.3**	**2.5**	**3.8**	**22.2**	**3.3**	**0.5**
1976	**TOTAL**	**2.6**	**10.0**	**0**	**18.0**	**0**	**15.8**	**3.2**	**3.8**	**36.7**	**3.9**	**0.5**
1977	**TOTAL**	**1.6**	**11.9**	**0**	**26.8**	**2.7**	**17.9**	**2.8**	**3.4**	**28.1**	**3.7**	**0.3**
1978	**TOTAL**	**2.9**	**12.5**	**0**	**32.9**	**3.3**	**30.5**	**2.3**	**4.4**	**53.2**	**4.1**	**0.2**
1979	**TOTAL**	**2.7**	**11.4**	**0**	**38.4**	**6.7**	**39.9**	**3.2**	**2.6**	**62.0**	**3.5**	**(s)**
1980	**TOTAL**	**2.3**	**12.5**	**0**	**40.4**	**7.0**	**61.2**	**2.9**	**2.2**	**82.8**	**4.2**	**0.1**
1981	January	0.3	1.2	0	3.2	1.3	9.3	0.2	0.2	8.2	0.1	(s)
	February	0.2	1.0	0	3.5	0.9	8.6	0.2	0.3	7.1	(s)	(s)
	March	0.3	0.6	0	3.9	1.4	8.8	0.3	0.1	7.8	0.3	0
	April	0.2	0.7	0	3.3	1.5	8.3	0.3	0.6	7.9	0.4	0
	May	0.2	1.2	0	3.4	1.0	8.9	0.4	0.3	8.0	0.4	(s)
	June	0.2	1.2	0	3.6	0.7	8.3	0.3	0.1	6.7	0.4	(s)
	July	0.3	1.3	0	4.0	0.8	8.4	0.3	0.3	8.3	0.4	(s)
	August	0.2	1.2	0	4.0	1.4	7.7	0.2	0.1	8.5	0.4	(s)
	September	0.3	0.9	0	3.3	1.5	8.5	0.2	0.1	6.4	0.4	(s)
	October	0.2	1.0	0	3.4	1.4	8.1	0.2	0.1	5.6	0.4	(s)
	November	0.2	1.3	0	3.5	1.3	9.3	0.2	0.1	5.3	0.4	(s)
	December	0.2	1.3	0	4.1	1.2	11.0	0.3	0.4	6.1	0.3	(s)
	TOTAL	**2.8**	**12.8**	**0**	**43.3**	**14.5**	**105.2**	**3.1**	**2.7**	**86.0**	**3.7**	**0.2**
1982	January	0.3	1.3	0	4.1	1.5	11.0	0.2	0.6	8.1	0.4	(s)
	February	0.2	0.8	0	3.2	1.5	10.0	0.2	0.7	7.7	0.1	(s)
	March	0.3	0.5	0	3.5	1.7	10.6	0.2	0.7	9.2	(s)	0
	April	0.3	1.0	(s)	3.7	1.6	10.1	0.2	0.5	9.7	0.3	0
	May	0.3	1.3	(s)	3.1	1.3	9.0	0.2	0.7	9.5	0.4	0
	June	0.3	1.2	(s)	3.3	0.9	7.8	0.1	0.6	9.5	0.4	0
	July	0.2	1.3	0	3.6	1.2	8.3	0.1	0.6	9.8	0.4	0
	August	0	1.2	0	3.9	1.5	7.0	0.2	0.4	9.7	0.4	(s)
	September	(s)	0.7	0	3.2	1.5	7.2	0.1	0.6	8.0	0.4	(s)
	October	0	1.7	0	4.0	1.4	6.6	0.2	0.6	7.5	0.4	(s)
	November	(s)	1.8	0	3.3	1.3	8.3	0.3	0.3	7.8	0.4	0
	December	0.2	1.8	0	3.8	1.3	13.0	0.2	0.5	8.1	0.4	(s)
	TOTAL	**1.9**	**15.6**	**0.1**	**42.6**	**16.5**	**108.9**	**2.2**	**6.8**	**104.5**	**3.9**	**0.1**
1983	January	0.2	1.9	0	4.3	1.7	13.8	0.2	0.2	8.0	0.4	(s)
	February	0.2	1.4	0	4.5	1.5	10.9	0.1	0.1	6.8	(s)	(s)
	March	0.2	0.7	(s)	4.6	1.6	11.3	0.2	0.1	7.9	(s)	(s)
	April	0.2	1.6	(s)	4.3	1.5	10.5	0.2	0.1	8.4	0.2	(s)
	May	0.2	2.5	0	3.9	1.2	9.6	0.3	0.7	9.2	0.3	(s)
	June	0.2	2.5	0	4.4	1.0	9.3	0.3	0.7	9.1	0.4	(s)
	July	0.3	2.5	0	4.8	1.3	11.0	0.2	0.7	9.5	0.4	0
	August	0.1	2.4	0	3.8	1.6	12.1	0.3	0.5	10.4	0.4	(s)
	September	0.2	2.1	0	4.4	1.5	12.4	0.3	0.6	9.8	0.4	(s)

[1]Figures are for gross electricity generation, as opposed to net electricity generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves.
[2]The United Kingdom assesses generation at 4-, 5- or 6-week intervals, rather than by calendar month.
(s)=Less than 0.05 billion gross kilowatt-hours.
Footnotes continued on following page.

International

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

		South Korea	Spain	Sweden	Switzer-land	Taiwan	United Kingdom[2]	West Germany	Non-Communist World Excluding U.S.	United States	Total Non-Communist World
						Billion gross kilowatt-hours					
1973	**TOTAL**	**0**	**6.5**	**2.1**	**6.2**	**0**	**28.0**	**11.9**	**100.7**	**88.0**	**188.7**
1974	**TOTAL**	**0**	**7.2**	**1.6**	**7.0**	**0**	**34.0**	**12.0**	**121.1**	**104.5**	**225.6**
1975	**TOTAL**	**0**	**7.5**	**12.0**	**7.7**	**0**	**30.5**	**21.7**	**152.7**	**181.7**	**334.4**
1976	**TOTAL**	**0**	**7.6**	**16.0**	**7.9**	**0**	**36.8**	**24.5**	**187.3**	**201.8**	**389.1**
1977	**TOTAL**	**0.1**	**6.5**	**19.9**	**8.1**	**0.1**	**38.1**	**35.8**	**207.8**	**263.3**	**471.0**
1978	**TOTAL**	**2.3**	**7.6**	**23.8**	**8.3**	**2.7**	**36.7**	**35.9**	**263.6**	**292.7**	**556.3**
1979	**TOTAL**	**3.2**	**6.7**	**21.0**	**11.8**	**6.3**	**38.5**	**42.2**	**300.1**	**270.6**	**570.7**
1980	**TOTAL**	**3.5**	**5.2**	**26.7**	**14.3**	**8.2**	**37.2**	**43.7**	**354.4**	**265.4**	**619.8**
1981	January	0.3	0.8	3.5	1.5	0.8	3.8	5.0	39.7	25.7	65.4
	February	0	0.6	3.6	1.4	0.7	3.4	4.6	36.2	22.6	58.8
	March	0	0.7	3.7	1.5	0.8	4.2	4.9	39.1	23.1	62.2
	April	0	0.6	3.3	1.4	0.8	2.8	4.4	36.5	21.7	58.2
	May	0.2	0.8	2.8	1.4	0.8	2.5	4.3	36.6	20.9	57.4
	June	0.4	0.8	2.8	0.7	0.8	3.3	4.1	34.5	22.6	57.1
	July	0.4	1.1	1.4	0.6	0.8	2.5	5.2	36.1	24.8	61.0
	August	0.4	1.0	2.6	1.0	0.8	2.5	3.9	36.0	28.3	64.2
	September	0.3	0.6	3.0	1.3	0.8	3.1	3.3	33.9	25.7	59.6
	October	0.3	1.2	3.3	1.5	1.2	2.7	4.0	34.7	21.6	56.3
	November	0.3	0.6	3.6	1.4	1.0	3.1	4.3	36.0	24.0	60.1
	December	0.4	0.7	4.1	1.5	1.1	4.9	5.4	43.1	27.5	70.6
	TOTAL	**2.9**	**9.4**	**37.7**	**15.2**	**10.7**	**38.9**	**53.4**	**442.4**	**288.5**	**730.9**
1982	January	0.4	1.0	4.0	1.5	0.8	3.4	5.9	44.5	27.1	71.6
	February	0.4	0.9	3.3	1.3	1.0	3.5	5.4	40.0	21.3	61.3
	March	0.4	0.5	3.8	1.5	1.0	4.1	5.3	43.2	24.0	67.1
	April	0.2	0.4	3.8	1.4	0.8	3.3	5.3	42.5	22.8	65.3
	May	0	0.5	2.5	1.2	0.8	2.6	5.6	39.0	22.8	61.8
	June	(s)	0.7	1.9	0.6	1.0	3.3	4.2	35.6	25.3	60.9
	July	0.3	0.6	1.2	0.9	1.2	3.3	4.5	37.6	26.8	64.4
	August	0.4	0.7	2.0	1.0	1.2	3.7	4.5	37.7	26.4	64.1
	September	0.4	0.7	3.7	1.2	1.3	4.2	5.4	38.6	26.7	65.3
	October	0.4	1.0	4.2	1.5	1.4	3.7	5.2	39.8	25.4	65.3
	November	0.4	0.9	4.0	1.4	1.1	3.8	5.8	41.0	24.2	65.3
	December	0.4	0.9	4.2	1.5	1.4	5.1	6.5	49.2	25.8	75.0
	TOTAL	**3.8**	**8.8**	**38.8**	**15.0**	**13.1**	**44.1**	**63.4**	**489.9**	**298.6**	**788.5**
1983	January	0.5	1.0	4.2	1.5	1.5	4.8	6.5	49.9	27.4	77.3
	February	0.4	0.9	3.7	1.4	0.8	4.3	5.6	42.5	23.8	66.5
	March	0.6	0.9	4.1	1.5	1.8	4.9	6.0	46.7	25.0	71.7
	April	0.4	0.8	3.3	1.5	1.7	4.3	4.0	43.0	23.4	66.4
	May	0.2	0.4	2.4	1.2	2.0	3.4	2.9	40.5	23.9	64.4
	June	0.7	0.6	2.4	0.5	2.0	3.9	4.2	42.0	25.7	67.8
	July	0.7	0.6	1.6	1.2	1.6	3.3	5.1	44.8	27.3	72.1
	August	0.9	1.0	2.7	1.0	1.4	3.7	4.6	46.9	27.9	74.8
	September	1.0	1.0	3.0	1.4	1.2	4.3	6.0	49.8	26.2	76.0

Footnotes continued.
Notes: • U.S. geographic coverage is the 50 States and the District of Columbia.
• Totals may not equal sum of components due to independent rounding.
Sources: • See the last page of this section.

Notes and Sources for the International Section

Notes

1. The 21 signatory nations of the International Energy Agency (IEA) are Australia, Austria, Belgium, Canada, Denmark, West Germany, Greece, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Australia and Portugal joined the IEA as new members in 1979 and 1980, respectively. In an effort to maintain comparability within this time series, consumption data for these two countries have been incorporated into the IEA total for all years.
2. The members of the Organization of Economic Cooperation and Development (OECD) are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Total OECD excludes the United States Territories.

Sources

Crude Oil Production: • 1973-1981 annual data: Energy Information Administration, *1981 International Energy Annual.*
• U.S. annual and monthly data: Energy Information Administration, *Petroleum Supply Monthly.*
• 1980-1983 monthly data (except U.S. and World): Central Intelligence Agency, "International Energy Statistical Review," and other industry sources.
• 1980-1983 monthly data for World: Sum of data for all countries using above sources.
Petroleum Consumption: • Central Intelligence Agency, "International Energy Statistical Review" (except the United States).
• United States data: Energy Information Administration, *Petroleum Supply Monthly.*
• IEA totals for latest months are Energy Information Administration estimates.
Petroleum Stocks: • Canada: Energy, Mines and Resources Canada, *Energy Information Handbook;* Statistics Canada, *Refined Petroleum Products.* • France: Comite Professionel du Petrole, *Petrole 80: Activite de L'Industrie Petroliere* and *Bulletin Mensuel.* • West Germany and Italy: OECD, *Quarterly Oil Statistics* and *Monthly Oil Statistics.* • Japan: Ministry of International Trade and Industry, *Yearbook of Coal, Petroleum, and Coke Statistics 1979; Energy Production: Supply and Demand Statistics Report.* • United Kingdom: United Kingdom Department of Energy, *Digest of United Kingdom Energy Statistics 1981* and *Energy Trends;* and OECD, *Monthly Oil Statistics.* • United States: 1973 through 1979: Energy Information Administration (EIA), *Energy Data Reports,* "Petroleum Statement, Annual"; January 1980 forward: EIA, *Petroleum Supply Monthly.* • Other OECD: OECD, *Quarterly Oil Statistics.* • Total OECD: Sum of data for all OECD member countries using above sources.
Nuclear Electricity Generation: • *Nucleonics Week.*

Definitions

Anthracite

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

Bituminous Coal

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

British Thermal Unit (Btu)

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

Coke (Coal)

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

Crude Oil

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

Crude Oil Refinery Input

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

Crude Oil Stocks

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

Distillate Fuel Oil

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

Electricity Production

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

Ethane

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

Exports

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

Full-Serve Station

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

Imports

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

Landed Cost of Imported Crude Oil

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

imports. Coverage includes the United States and its territories.

Lease Condensate

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

Lignite

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

Liquefied Petroleum Gases

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

Line Miles of Seismic Exploration

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

Maximum Dependable Capacity, Net

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

Motor Gasoline

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

Motor Gasoline, Average Retail Selling Price

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

Motor Gasoline, Finished

Beginning in January 1981, "Motor Gasoline" was redefined as "Finished Motor Gasoline," which is a complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives that have been blended to form a fuel suitable for use in spark ignition engines. Included are premium and regular grade, both leaded and unleaded, gasohol, and all other refinery products listed in ASTM Specification D439. Excludes any blendstock until blending has been completed and the blendstock is incorporated in the finished gasoline and no longer separately identified. Also excludes any alcohol to be used in the blending of gasohol.

Motor Gasoline, Premium Grade

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

Motor Gasoline, Regular Grade

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

Motor Gasoline, Total

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

Natural Gas

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

Natural Gas Plant Liquids

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

Petroleum

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

Petroleum Coke

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

Petroleum Products

Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, ethane, liquefied petroleum gases, aviation gasoline, motor gasoline,

naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400°F end-point, other oils over 400°F end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Propane

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

Refined Petroleum Product Supplied

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

Refiner Acquisition Cost

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

Residual Fuel Oil

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

Rotary Rig

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

Self-Serve Station

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

Startup Test Phase of Nuclear Powerplant

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

Stocks (Refined Petroleum Product)

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

Strategic Petroleum Reserve

Petroleum inventories (currently only crude oil) held in Government-owned underground storage for use during periods of major supply interruptions. Congress enacted legislation to establish a Strategic Petroleum Reserve in Title I, Part B, of the Energy Policy and Conservation Act of 1975, Public Law 94-163.

Synthetic Natural Gas (SNG)

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

Unaccounted for Crude Oil

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

Wells, Exploratory and Development

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

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Conversion Factors

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

Approximate Heat Content of Refined Petroleum Products	Million Btu/barrel
Asphalt	6.636
Aviation gasoline	5.048
Butane	4.326
Butane-propane mixture[4]	4.130
Distillate fuel oil	5.825
Ethane	3.082
Ethane-propane mixture[5]	3.308
Isobutane	3.974
Jet fuel—kerosene type	5.670
Jet fuel—naphtha type	5.355
Kerosene	5.670
Lubricants	6.065
Motor gasoline	5.253
Natural gasoline	4.620
Petrochemical feedstocks	
Naphtha 400° F or less	5.248
Other oils over 400° F	5.825
Still gas	6.000
Petroleum coke	6.024
Plant condensate	5.418
Propane	3.836
Residual fuel oil	6.287
Road oil	6.636
Special naphtha	5.248
Still gas	6.000
Unfinished oils	5.825
Unfractionated stream	5.418
Wax	5.537
Miscellaneous	5.796

Units of Measure

Weight

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

Conversion Factors for Crude Oil (Average Gravity)

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

Conversion Factors for Uranium

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

[1] Includes lease condensate.

[2] LPG consumption average is the annual weighted average of the LPG product supplied components: ethane, ethylene, propane, propylene, butane, butylene, butane-propane mixture, ethane-propane mixture, and isobutane.

[3] There is no generally accepted practice for measuring hydropower thermal conversion rates. The hydropower factors on this page are the prevailing rate factors at fossil fuel steam electric powerplants. By using the heat rate factor, it is possible to evaluate fossil fuel requirements for replacing hydropower production during periods of drought. Furthermore, it allows for better comparisons with certain other countries such as Norway where hydropower is the principal means for producing electricity. Similarly, the nuclear power and geothermal power conversion factors represent the thermal conversion equivalent of the uranium and geothermal steam consumed at powerplants. The heat content of a kilowatt-hour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatt-hour.

[4] 60 percent butane and 40 percent propane.

[5] 70 percent ethane and 30 percent propane.

* Based on data reported in Energy Information Administration (and predecessor) surveys.

‡ Preliminary data.

Note: For a listing of sources for the approximate heat content values, see pages 241-246, *1982 Annual Energy Review*, DOE/EIA-0384(82).

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