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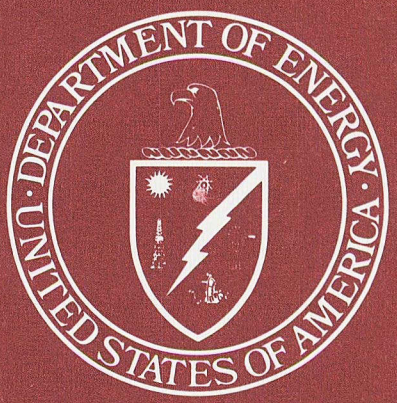
Monthly Energy Review

September 1980



First Half 1980 Summary

U.S. Department of Energy
Energy Information Administration

The *Monthly Energy Review* is prepared by the Office of Energy Data Operations, Energy Information Administration, U.S. Department of Energy, under the direct supervision of Sam O. Wood, Jr.

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Part 1 Executive Summary

Introduction

This issue of the *Monthly Energy Review* contains energy summary data for the first 6 months of 1980. Because of an increase in domestic energy production during the first 6 months of this year over the same period last year and because of a concurrent decrease in energy consumption, energy imports were lower in the first half of 1980 than they were in the comparable 1978 and 1979 periods. However, while the volume of imported energy decreased, its cost rose dramatically.

Production

During the first 6 months of 1980, domestic energy production totaled 32.8 quadrillion Btu, a 3.5 percent increase compared to production during the same period in 1979 (see Figure 1 and page 6). This increase amounted to 3 percent when measured as a daily rate (a measure which removes the influence of leap year). This rise in output is attributed principally to a 9.9 percent increase in the daily rate of coal production and a 2.0 percent increase in the daily rate of crude oil production. Together, these sources provided 18.7 quadrillion Btu of energy, nearly 57 percent of the U.S. total. Modest daily average increases of 0.9 percent in natural gas production and 1.1 percent in hydroelectric power output further contributed to the overall rise. Increases in the daily rate of production of coal, crude oil, natural gas, and hydroelectric power more than offset a decrease of 1.1 trillion Btu per day derived from the production of natural gas plant liquids and nuclear power in the first half of 1980 compared to the same period in 1979.

Consumption

In the first half of 1980, domestic energy consumption totaled 39.2 quadrillion Btu, 3.1 percent below the level of consumption during the first 6 months of the previous year (see Figure 2 and page 8), or 3.6 percent lower when average daily rates are compared. The decrease in consumption was accounted for primarily by an 8.4 percent decline in the average daily consumption of petroleum products, which followed a minor decrease (0.8 percent) from the first half of 1978 to the first half of 1979. The 8.4 percent decline represents an average daily savings of about 8.2 trillion Btu, the equivalent of 1.4 million barrels of crude oil per day. A 10.5 percent decline occurred in the consumption of nuclear power. These declines in the consumption of petroleum and nuclear power more than offset increases in the average daily consumption of all other forms of energy: 3.7 percent for coal, 1.1 percent for hydroelectric power, and 0.3 percent for natural gas.

Figure 1. Domestic Energy Production

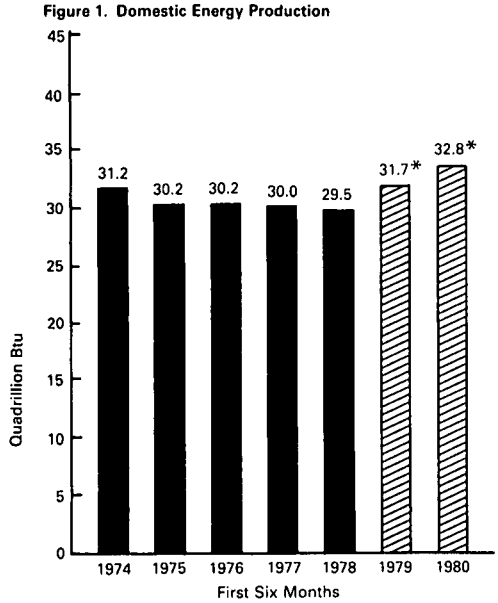
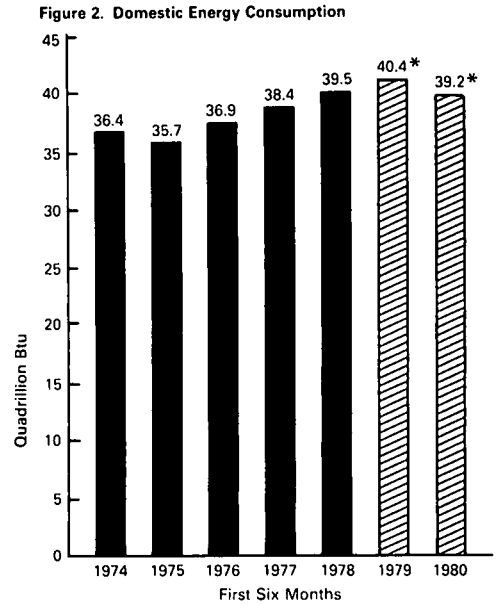


Figure 2. Domestic Energy Consumption



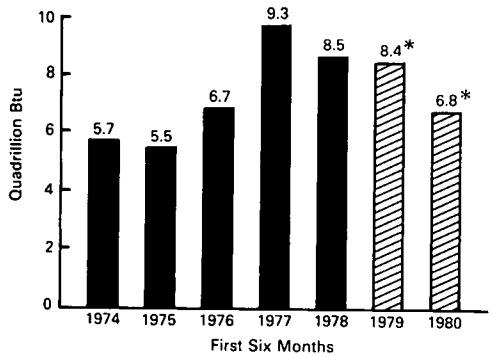
*Preliminary data.

Imports

Domestic energy production fell short of providing for all U.S. energy needs; the resulting shortfall was met through imports. Net U.S. energy imports (total imports less exports) decreased 19.5 percent from the first half of 1979 to the first half of 1980 (see Figure 3 and page 10), an average daily rate decrease of 20.0 percent. Despite this decrease, energy imports during the first half of 1980 cost approximately the same amount ($42 billion) as did energy imports during all of 1978 (see page 12).

Net imports of oil (crude oil and refined petroleum products) during the first half of 1980 averaged 6.8 million barrels per day, 15.3 percent below the first half of 1979 daily average and substantially below the President's net import ceiling of 8.2 million barrels per day. This decrease is a departure from the historical upward trend that included a 2.7 percent increase from the first 6 months of 1978 to the first 6 months of 1979. Imports of natural gas declined 11.8 percent (average daily rate basis). In contrast, the daily average net exports of coal were 39.0 percent higher than the amount exported in the first half of 1979, and triple the level of the comparable period in 1978.

Figure 3. U.S. Net Imports of Energy



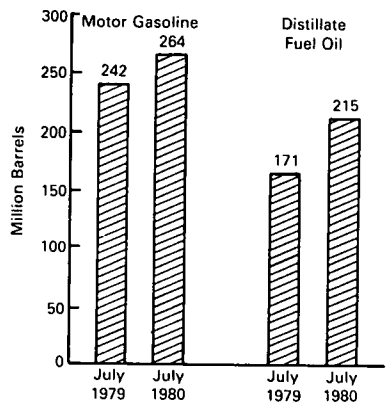
*Preliminary data.

Total United States direct petroleum imports from Organization of Petroleum Exporting Countries (OPEC) Nations for the first 6 months of 1980 were 18.5 percent below imports during a comparable period in 1979 (see page 32). Curtailment of imports from Iran and Venezuela was partially responsible for the decline. The last direct shipments of petroleum from Iran were received in February 1980, following President Carter's embargo on Iranian imports. Imports from Venezuela have fallen 37.2 percent this year. The decline in OPEC imports amounted to an average of about 1 million barrels per day and was only partially offset by a slight gain of 90,000 barrels per day from all non-OPEC Nations (see pages 32 and 33).

Stocks and Prices of Selected Commodities

From March 1980 through the end of July 1980, stocks of motor gasoline remained unusually high (see Figure 4 and page 34). On July 31, 1980, motor gasoline stocks totaled 264 million barrels, 9.1 percent higher than the level 1 year earlier. Concurrently, the price of gasoline climbed slightly, from an average for all grades of

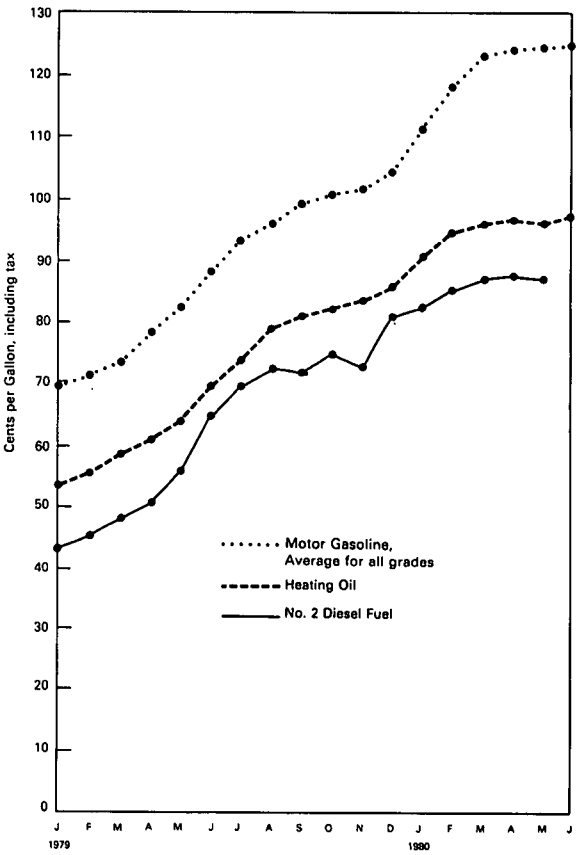
Figure 4. Stocks of Selected Petroleum Products



123.0 cents per gallon in March to 124.7 cents per gallon in July. The average price in July 1980 was 31.7 cents per gallon higher than the average for July 1979 (see Figure 5 and page 83).

Stocks of distillate fuel oil (used in home heating and in diesel engines) and natural gas in storage were higher at the end of July 1980 than at the end of July 1979 by 25.3 percent for distillate fuel oil and by 6.7 percent for natural gas. Coal stocks as of March 1980 (the latest month for which data are available) were up 31.8 percent over the March 1979 level. If customary rates of stock build-ups in these fuels continue through October, supplies are expected to be adequate for a normal winter. Despite high stock levels for these fuels, prices climbed between January and May 1980 by 11.0 percent for residential purchases of natural gas, by 3.6 percent for coal purchased by electric utilities, and by 6.8 percent for diesel fuel. Between January and June 1980, the price of home heating oil rose 7.7 percent.

Figure 5. Average Retail Prices of Selected Petroleum Products



Executive Summary

Energy Summary

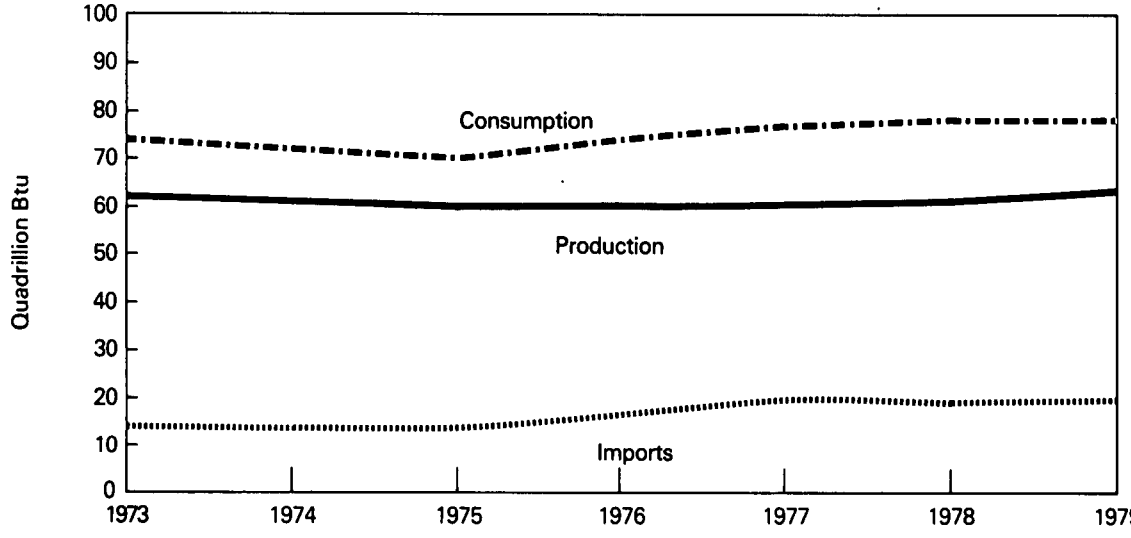
		Energy Production[1]	Energy Consumption[2]	Energy Imports[3]	Energy Exports[4]
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**62.433**	**74.609**	**14.732**	**2.073**
1974	**TOTAL**	**61.229**	**72.759**	**14.417**	**2.243**
1975	**TOTAL**	**60.059**	**70.707**	**14.113**	**2.389**
1976	**TOTAL**	**60.090**	**74.509**	**16.838**	**2.213**
1977	**TOTAL**	**60.297**	**76.390**	**20.092**	**2.097**
1978	**TOTAL**	**61.208**	**78.154**	**19.262**	**1.951**
1979	January	R5.318	R7.944	1.777	0.175
	February	R4.913	R7.239	1.532	0.161
	March	R5.501	R6.971	1.727	0.242
	April	R5.235	R6.122	1.519	0.237
	May	R5.447	R6.185	1.606	0.257
	June	R5.293	R5.977	1.593	0.252
	July	R4.990	R6.102	1.646	0.272
	August	R5.502	R6.339	1.693	0.259
	September	R5.142	R5.875	1.537	0.222
	October	R5.607	R6.382	1.703	0.288
	November	R5.370	R6.525	1.562	0.264
	December	R5.341	R7.157	1.693	0.261
	TOTAL	**R63.657**	**R78.816**	**19.587**	**2.891**
1980	January	R5.547	R7.407	1.659	0.225
	February	R5.206	R7.011	1.467	0.205
	March	R5.599	R6.976	1.492	0.265
	April	R5.465	R6.024	R1.337	R0.297
	May	R5.565	R5.920	R1.258	0.351
	June	5.448	5.853	1.278	0.366
	TOTAL (Year-to-date)	**32.828**	**39.191**	**8.492**	**1.710**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]See Explanatory Note 1.
[2]See Explanatory Note 2.
[3]See Explanatory Note 3.
[4]See Explanatory Note 4.
R = Revised data.
Note: The sum of domestic energy production and net imports of energy does not equal domestic energy consumption. The difference is attributed to stock changes; losses and gains in conversion, transportation and distribution; the addition of blending compounds; shipments of anthracite to U.S. Armed Forces in Europe; and adjustments to account for discrepancies between reporting systems.
Source: •Energy Information Administration calculations based on data appearing elsewhere in this publication.

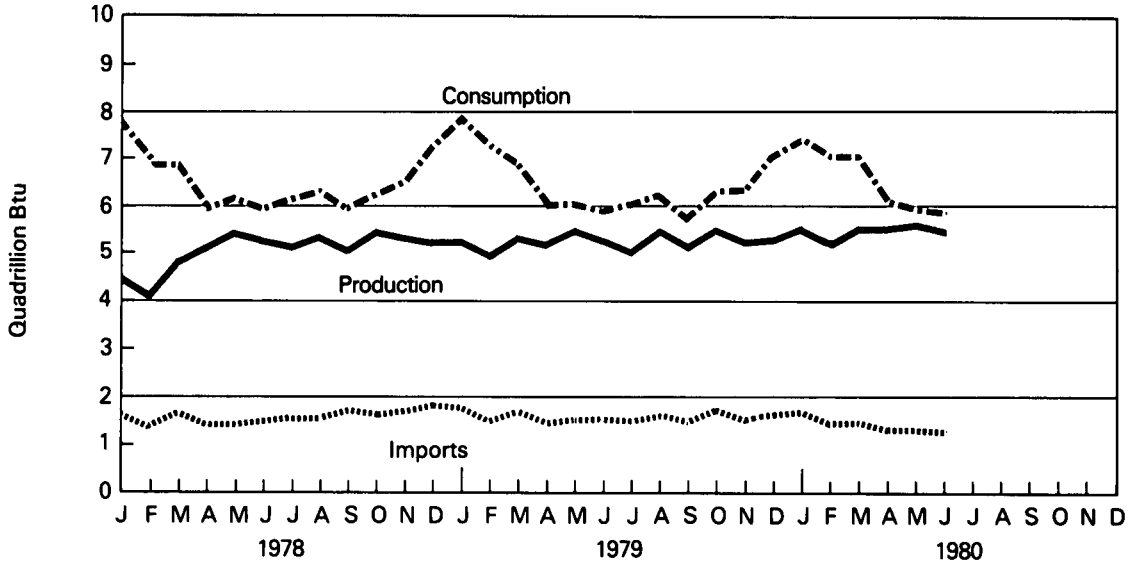
Executive Summary

Energy Summary

Yearly



Monthly



Executive Summary

Production of Energy by Type

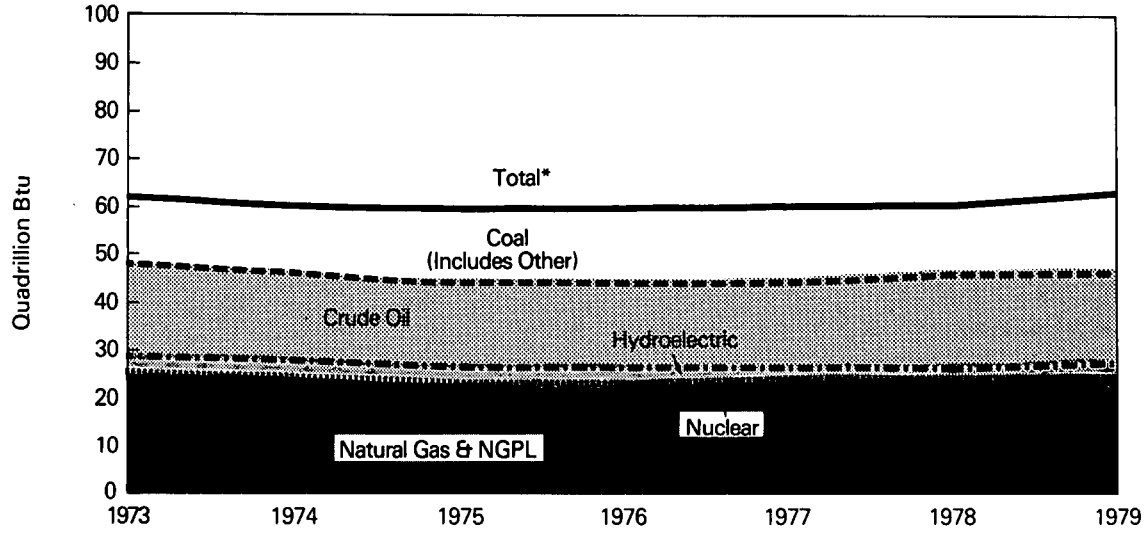
		Coal[1]	Crude Oil[2]	NGPL[3]	Natural Gas (Dry)	Hydro-electric Power[4]	Nuclear Electric Power	Other[5]	Total Energy Produced	Yearly Cumulative Energy Produced
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**14.366**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**62.433**	
1974	**TOTAL**	**14.468**	**18.575**	**2.471**	**21.210**	**3.177**	**1.272**	**0.056**	**61.229**	
1975	**TOTAL**	**15.189**	**17.729**	**2.374**	**19.640**	**3.155**	**1.900**	**0.072**	**60.059**	
1976	**TOTAL**	**15.853**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**60.090**	
1977	**TOTAL**	**15.829**	**17.454**	**2.327**	**19.565**	**2.337**	**2.702**	**0.082**	**60.297**	
1978	**TOTAL**	**15.037**	**18.434**	**2.245**	**19.485**	**2.962**	**2.977**	**0.068**	**61.208**	
1979	January	R1.297	1.521	0.213	1.718	0.264	0.299	0.007	R5.318	R5.318
	February	R1.230	1.380	0.187	1.606	0.225	0.279	0.006	R4.913	R10.230
	March	R1.498	1.544	0.210	1.706	0.274	0.262	0.008	R5.501	R15.732
	April	R1.435	1.485	0.201	1.641	0.268	0.198	0.007	R5.235	R20.966
	May	R1.559	1.544	0.200	1.670	0.305	0.162	0.007	R5.447	R26.414
	June	R1.586	1.463	0.193	1.606	0.264	0.173	0.007	R5.293	R31.706
	July	R1.203	1.502	0.200	1.613	0.241	0.224	0.007	R4.990	R36.696
	August	R1.607	1.564	0.196	1.641	0.225	0.261	0.008	R5.502	R42.198
	September	R1.449	1.473	0.190	1.587	0.201	0.235	0.007	R5.142	R47.339
	October	R1.763	1.540	0.202	1.655	0.213	0.225	0.008	R5.607	R52.947
	November	R1.537	1.505	0.205	1.671	0.237	0.207	0.008	R5.370	R58.316
	December	1.363	1.544	0.200	1.762	0.240	0.222	0.009	R5.341	R63.657
	TOTAL	**R17.526**	**18.064**	**2.398**	**19.875**	**2.957**	**2.748**	**0.089**	**R63.657**	
1980	January	R1.532	1.555	0.200	1.772	0.267	0.213	0.008	R5.547	R5.547
	February	R1.451	1.463	0.188	1.663	0.226	0.208	0.008	R5.206	R10.752
	March	R1.578	1.566	0.191	1.782	0.257	0.216	0.008	R5.599	R16.351
	April	1.652	R1.512	R0.191	1.626	0.272	0.202	0.008	R5.465	R21.816
	May	1.641	1.568	0.193	R1.651	0.305	0.198	0.010	R5.565	R27.380
	June	1.645	1.512	0.183	1.610	0.292	0.197	0.009	5.448	32.828
	TOTAL (Year-to-date)	**9.499**	**9.176**	**1.146**	**10.104**	**1.618**	**1.234**	**0.051**	**32.828**	

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

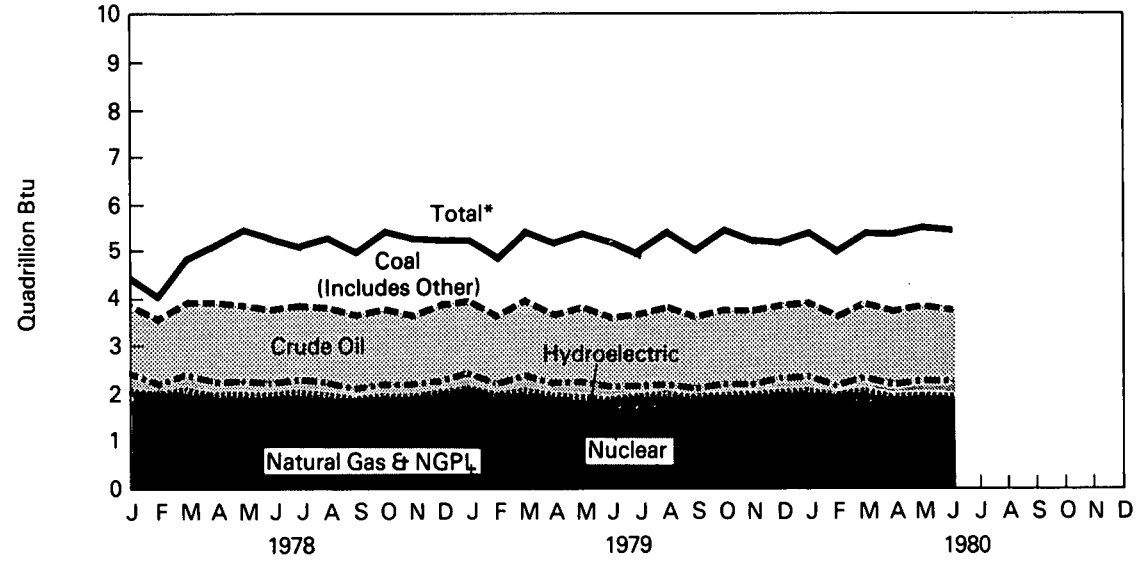
Executive Summary

Production of Energy by Type

Yearly



Monthly



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

Executive Summary

Consumption of Energy by Type

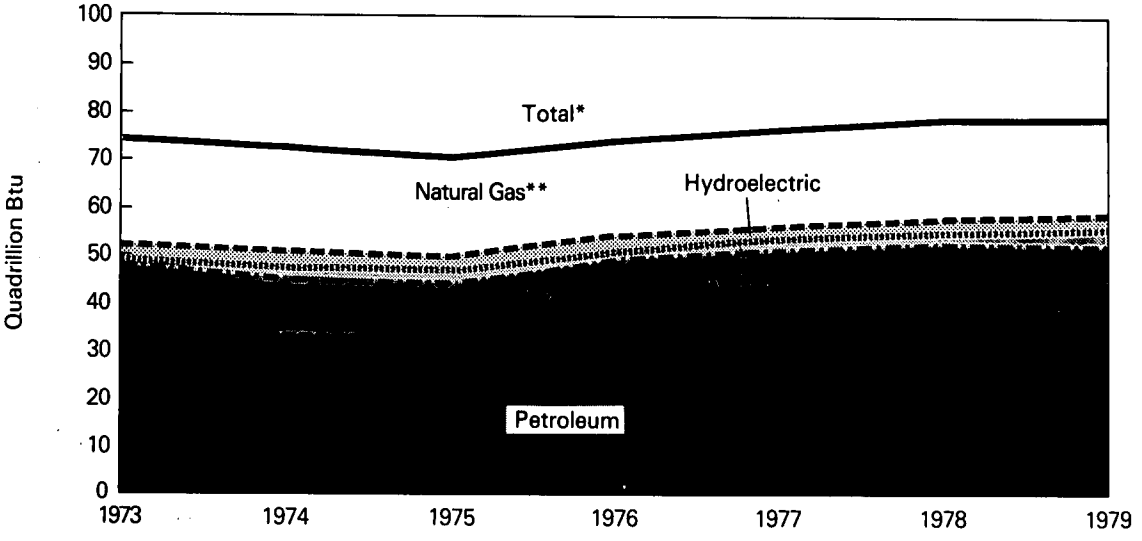
		Coal[1]	Natural Gas (Dry)	Petroleum	Hydroelectric Power[2]	Nuclear Electric Power	Net Imports of Coal Coke[3]	Other[4]	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**13.300**	**22.512**	**34.840**	**3.010**	**0.910**	**(0.008)**	**0.046**	**74.609**	
1974	**TOTAL**	**12.876**	**21.732**	**33.455**	**3.309**	**1.272**	**0.059**	**0.056**	**72.759**	
1975	**TOTAL**	**12.823**	**19.948**	**32.731**	**3.219**	**1.900**	**0.014**	**0.072**	**70.707**	
1976	**TOTAL**	**13.732**	**20.345**	**35.175**	**3.066**	**2.111**	**0.000**	**0.081**	**74.509**	
1977	**TOTAL**	**13.965**	**19.931**	**37.176**	**2.519**	**2.702**	**0.015**	**0.082**	**76.390**	
1978	**TOTAL**	**13.846**	**20.000**	**37.965**	**3.168**	**2.977**	**0.131**	**0.068**	**78.154**	
1979	January	R1.355	2.463	3.534	0.281	0.299	0.004	0.007	R7.944	R7.944
	February	R1.206	2.237	3.268	0.241	0.279	0.003	0.006	R7.239	R15.183
	March	R1.215	1.912	3.282	0.291	0.262	0.002	0.008	R6.971	R22.154
	April	R1.143	1.616	2.867	0.285	0.198	0.005	0.007	R6.122	R28.276
	May	R1.196	1.454	3.031	0.323	0.162	0.011	0.007	R6.185	R34.461
	June	R1.241	1.339	2.926	0.281	0.173	0.010	0.007	R5.977	R40.437
	July	R1.337	1.348	2.918	0.258	0.224	0.008	0.007	R6.102	R46.539
	August	R1.345	1.362	3.111	0.242	0.261	0.009	0.008	R6.339	R52.878
	September	R1.201	1.347	2.859	0.218	0.235	0.008	0.007	R5.875	R58.753
	October	R1.234	1.579	3.101	0.231	0.225	0.004	0.008	R6.382	R65.135
	November	R1.240	1.792	3.024	0.253	0.207	0.000	0.008	R6.525	R71.659
	December	R1.357	2.096	3.214	0.258	0.222	0.002	0.009	R7.157	R78.816
	TOTAL	**R15.070**	**20.546**	**37.135**	**3.163**	**2.748**	**0.066**	**0.089**	**R78.816**	
1980	January	R1.409	2.323	3.167	0.284	0.213	0.003	0.008	R7.407	R7.407
	February	R1.323	2.235	2.996	0.242	0.208	(0.001)	0.008	R7.011	R14.418
	March	R1.304	2.220	2.956	0.275	0.216	(0.003)	0.008	R6.976	R21.394
	April	1.180	1.599	R2.751	0.289	0.202	(0.005)	0.008	R6.024	R27.419
	May	1.187	R1.382	2.827	0.322	0.198	(0.006)	0.010	R5.920	R33.339
	June	1.257	1.355	2.729	0.309	0.197	(0.004)	0.009	5.853	39.191
	TOTAL (Year-to-date)	**7.660**	**11.114**	**17.426**	**1.721**	**1.234**	**(0.015)**	**0.051**	**39.191**	

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

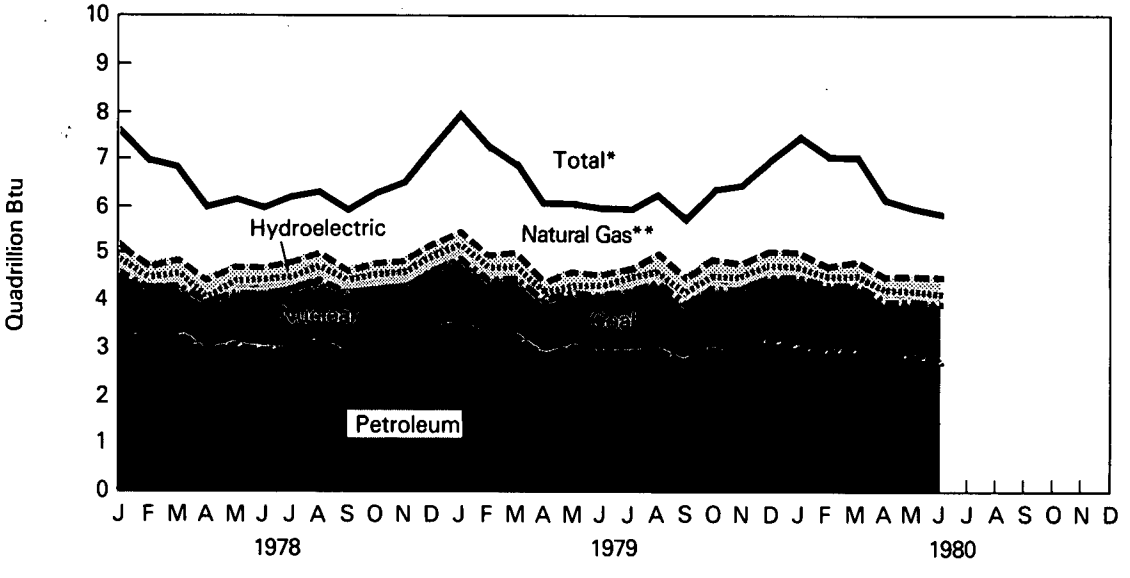
Executive Summary

Consumption of Energy by Type

Yearly



Monthly



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

Executive Summary

Net Imports of Energy by Type[1]

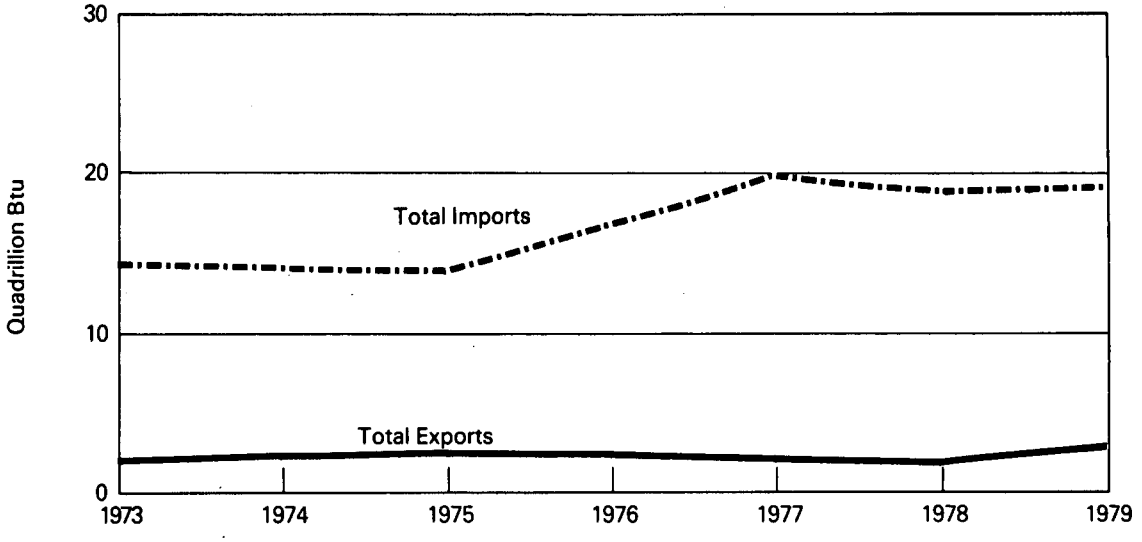
		Coal[2]	Crude Oil[3]	Refined Petroleum Products[4]	Natural Gas (Dry)	Electricity[5]	Coal Coke	Net Imports	Yearly Cumulative Net Imports of Energy
		Quadrillion (10^{15}) Btu							
1973	**TOTAL**	**(1.442)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.659**	
1974	**TOTAL**	**(1.586)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.059**	**12.174**	
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**	**(1.023)**	**13.125**	**3.932**	**0.941**	**0.206**	**0.131**	**17.311**	
1979	January	(0.093)	1.202	0.372	0.099	0.017	0.004	1.602	1.602
	February	(0.067)	1.013	0.311	0.095	0.016	0.003	1.371	2.973
	March	(0.122)	1.078	0.398	0.111	0.017	0.002	1.485	4.457
	April	(0.138)	1.036	0.258	0.104	0.017	0.005	1.282	5.739
	May	(0.165)	1.095	0.287	0.102	0.017	0.011	1.349	7.088
	June	(0.156)	1.111	0.260	0.099	0.017	0.010	1.341	8.429
	July	(0.168)	1.105	0.310	0.101	0.017	0.008	1.374	9.803
	August	(0.160)	1.181	0.290	0.096	0.017	0.009	1.434	11.237
	September	(0.134)	1.085	0.243	0.096	0.017	0.008	1.315	12.552
	October	(0.197)	1.201	0.283	0.107	0.017	0.004	1.415	13.967
	November	(0.163)	1.025	0.305	0.114	0.017	0.000	1.298	15.265
	December	(0.166)	1.090	0.378	0.109	0.017	0.002	1.432	16.696
	TOTAL	**(1.729)**	**13.223**	**3.697**	**1.234**	**0.206**	**0.066**	**16.696**	
1980	January	(0.117)	1.088	0.325	0.118	0.017	0.003	1.434	1.434
	February	(0.104)	0.947	0.292	0.111	0.016	(0.001)	1.261	2.696
	March	(0.150)	0.982	0.274	0.106	0.017	(0.003)	1.228	3.923
	April	(0.202)	R0.929	R0.213	0.088	0.017	(0.005)	R1.040	R4.963
	May	(0.227)	0.844	0.211	R0.066	0.017	(0.006)	R0.907	R5.870
	June	(0.237)	0.888	0.183	0.066	0.017	(0.004)	0.912	6.782
	TOTAL (Year-to-date)	**(1.037)**	**5.679**	**1.498**	**0.555**	**0.103**	**(0.015)**	**6.782**	

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Net imports = imports minus exports. Parentheses indicate exports are greater than imports.
[2]Includes bituminous coal, lignite, and anthracite.
[3]Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve.
[4]Includes refined petroleum products, unfinished oils, natural gasoline, and plant condensate.
[5]Only yearly totals are available for electricity imports and exports of data. Figures shown are estimates derived by dividing the yearly net import total by the number of days in the year and multiplying by the number of days in the month. Annual data for 1978 are used in estimating 1979 and 1980 data until actual annual data become available for those years.
R = Revised data.
Source: •Energy Information Administration calculations based on data reported elsewhere in this publication.

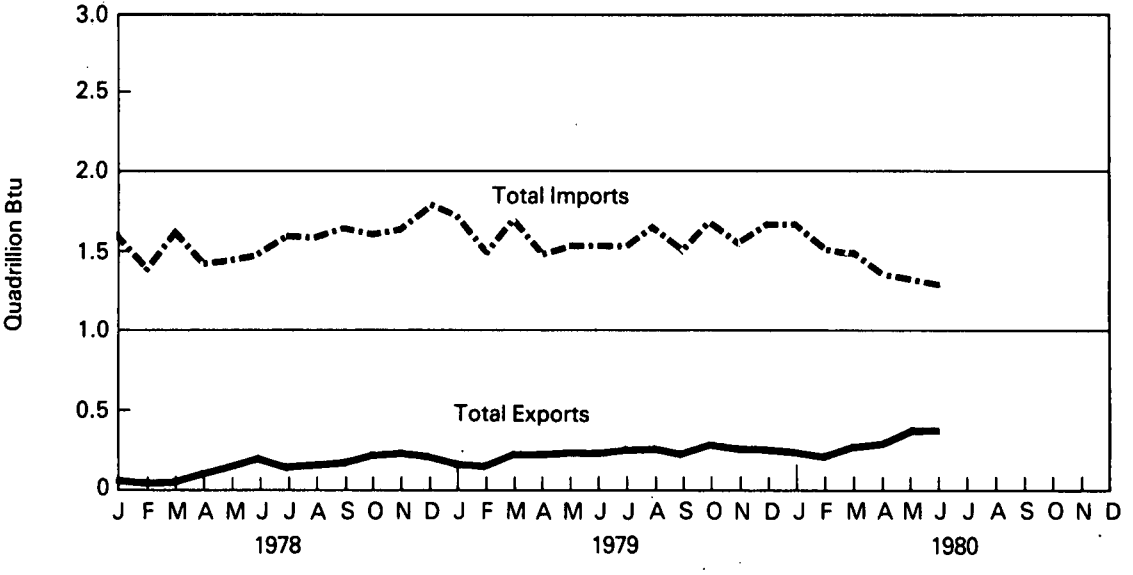
Executive Summary

Energy Imports and Exports

Yearly



Monthly



Executive Summary

Merchandise Trade Value[1]

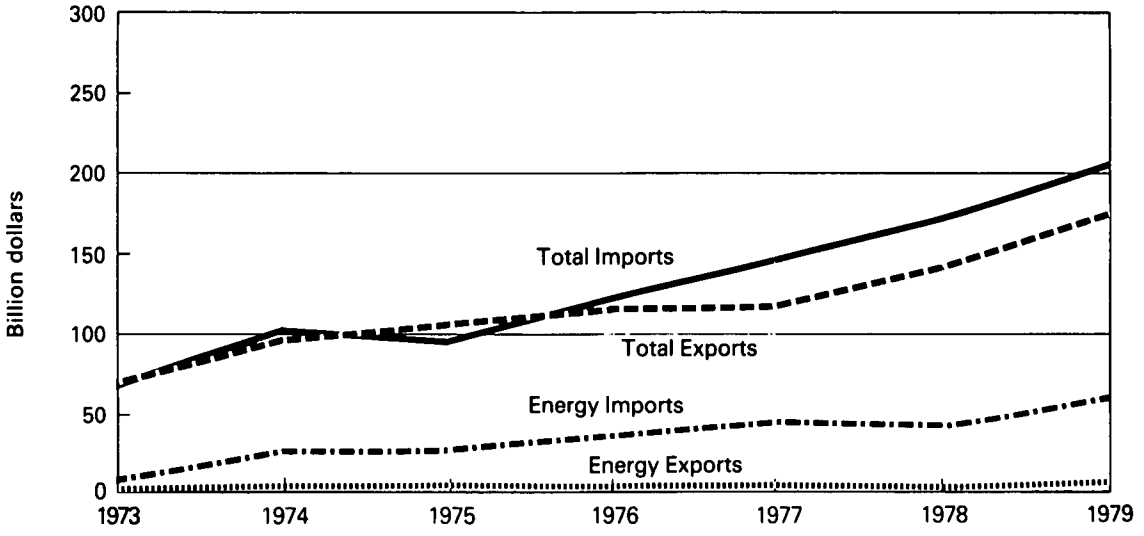
		Exports				Imports			
		Energy	Manufactured Products	Agricultural, Chemical, and Other	Total	Energy	Manufactured Products	Agricultural, Chemical, and Other	Total
		Million dollars							
1973	**TOTAL**	**1,671**	**38,982**	**29,643**	**70,296**	**8,173**	**42,537**	**19,122**	**69,832**
1974	**TOTAL**	**3,444**	**54,704**	**39,085**	**97,233**	**25,454**	**51,205**	**23,989**	**100,648**
1975	**TOTAL**	**4,470**	**62,260**	**39,832**	**106,562**	**26,476**	**47,384**	**22,714**	**96,574**
1976	**TOTAL**	**4,226**	**67,282**	**42,159**	**113,667**	**33,996**	**60,004**	**27,010**	**121,010**
1977	**TOTAL**	**4,184**	**69,339**	**45,484**	**119,007**	**44,537**	**71,583**	**31,550**	**147,670**
1978	**TOTAL**	**3,881**	**81,850**	**55,310**	**141,041**	**42,096**	**93,887**	**35,996**	**171,979**
1979	January	350	7,035	4,965	12,349	4,228	8,391	3,227	15,846
	February	292	7,446	4,966	12,705	3,525	7,480	2,771	13,776
	March	436	8,842	6,020	15,298	3,948	8,432	3,385	15,765
	April	467	8,038	5,506	14,011	4,241	8,550	3,381	16,172
	May	471	8,474	5,584	14,529	4,166	8,690	3,655	16,512
	June	500	8,527	6,054	15,081	4,528	9,247	3,661	17,436
	July	534	7,879	6,077	14,490	5,075	8,778	3,262	17,115
	August	496	7,981	6,237	14,714	5,460	8,988	3,482	17,931
	September	438	8,086	6,142	14,666	6,084	8,539	3,452	18,076
	October	567	9,072	7,352	16,991	6,559	9,255	3,430	19,243
	November	522	8,849	7,577	16,948	5,411	9,363	3,884	18,658
	December	543	9,030	7,039	16,612	6,836	9,037	3,924	19,797
	TOTAL	**5,616**	**99,259**	**73,519**	**178,394**	**60,061**	**104,750**	**41,514**	**206,327**
1980	January	481	8,837	6,696	16,015	6,559	9,779	3,801	20,139
	February	436	9,684	6,556	16,675	7,742	9,226	3,671	20,639
	March	567	10,870	7,865	19,302	7,392	9,821	3,848	21,060
	April	631	10,481	6,691	17,803	6,346	9,597	3,737	19,681
	May	737	10,574	7,079	18,390	6,895	9,881	3,818	20,593
	June	730	10,570	7,000	18,300	6,938	9,745	3,837	20,520
	July	707	9,669	6,491	16,867	5,792	9,797	3,736	19,324
	TOTAL (Year-to-date)	**4,289**	**70,685**	**48,378**	**123,352**	**47,664**	**67,846**	**26,448**	**141,958**

Note: The U.S. trade statistics include the 50 States, the District of Columbia, and Puerto Rico, except data on shipments between the United States, Puerto Rico, and U.S. possessions, between U.S. possessions and foreign countries, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use and American goods returned to the United States by its Armed Forces, intransit shipments, etc.
Totals may not equal sum of components due to independent rounding.
[1]Data presented are free alongside ship (f.a.s.) basis and are unadjusted for seasonality and working days. Beginning January 1979, the data excludes U.S. Department of Defense Military Assistance Program Grant-Aid Shipments. Commodity categories shown above include groups of BOC sections as follows: Energy—BOC section 3. (Mineral fuels, lubricants, and related materials). Manufactured products—BOC sections 6. (Manufactured goods classified chiefly by material), 7. (Machinery and transport equipment), and 8. (Miscellaneous manufactured articles, not elsewhere classified). Agricultural, chemical, and other—BOC sections 0. (Food and live animals), 1. (Beverages and tobacco), 2. (Crude material inedible, except fuels), 4. (Animal and vegetable fats and oils), 5. (Chemicals), and 9. (Commodities and transactions not classified according to kind).
Source: • U.S. Department of Commerce, Bureau of the Census (BOC) publication FT 900, *Summary of U.S. Export and Import Merchandise Trade.*

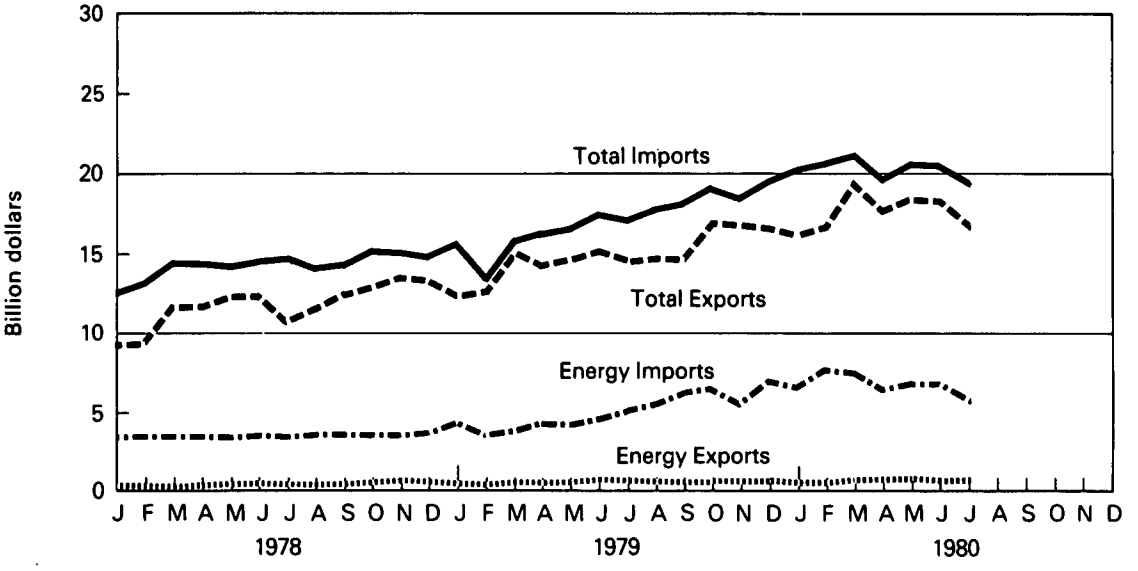
Executive Summary

Merchandise Trade Value

Yearly



Monthly



Executive Summary

Cooling Degree-Days[1]

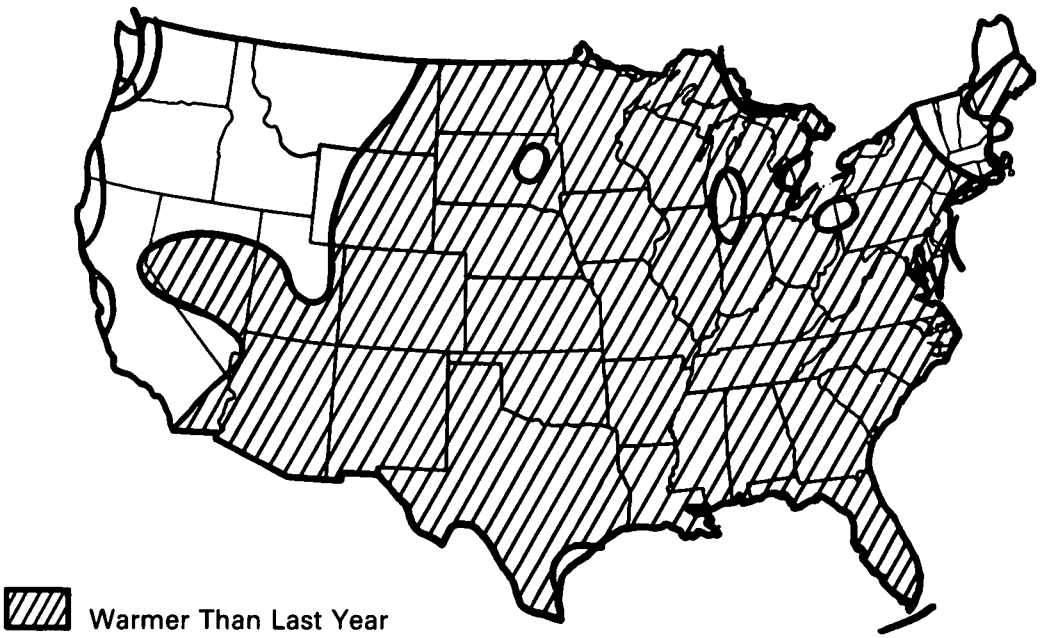
Petroleum Administration For Defense (PAD) Districts	August 4 through August 31					January 1 through August 31				
	1980	1979[2]		Normal (1941–70)[2]		1980	1979[2]		Normal (1941–70[2])	
PAD District I	358	270	(32.8)	265	(35.0)	1,204	1,030	(16.9)	1,041	(15.7)
New England Conn., Maine, Mass., N.H., R.I., Vt.	229	147	(56.1)	155	(47.4)	682	629	(8.4)	529	(28.8)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	334	227	(47.2)	224	(48.7)	975	796	(22.6)	803	(21.4)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W. Va.	452	389	(16.2)	375	(20.4)	1,778	1,558	(14.1)	1,623	(9.5)
PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.	305	219	(39.4)	227	(34.3)	995	783	(27.1)	827	(20.3)
PAD District III Ala., Ark., La., Miss., N. Mex., Tex.	558	444	(25.8)	474	(17.9)	2,219	1,818	(22.0)	1,958	(13.3)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	181	163	(11.1)	186	(–2.4)	709	657	(7.9)	613	(15.6)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	188	197	(–4.3)	182	(3.6)	637	730	(–12.7)	622	(2.5)
U.S. AVERAGE[3]	**336**	**261**	**(28.9)**	**264**	**(27.4)**	**1,165**	**992**	**(17.4)**	**1,011**	**(15.2)**

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

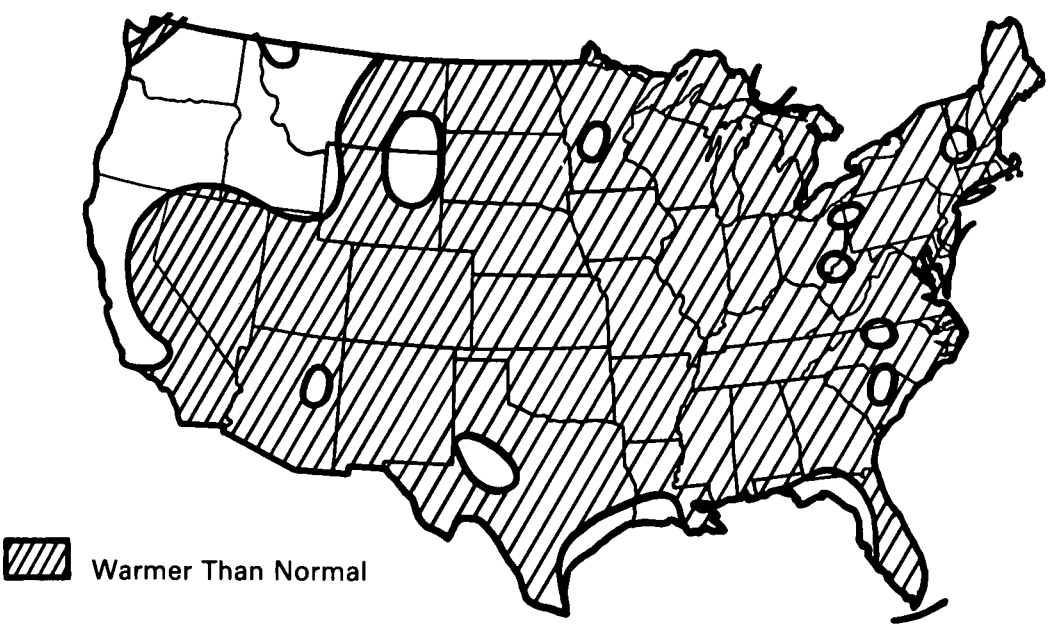
Cooling Degree-Days

Cooling Degree-Days Accumulated from January 1 through August 31

Departure from Last Year



Departure from Normal



Source: • Department of Commerce — NOAA.

Executive Summary

Energy Indicators—

		Energy Consumption per GNP Dollar				U.S. Dependence on Petroleum Imports[3]			
				Gross National Product (Annual rate)		Direct Imports			
		Energy Consumption per GNP Dollar[1]	Yearly Rate of Energy Consumption	Current Dollars	1972 Dollars[2]	From Arab/OPEC Countries	From OPEC Countries	Total All Countries	Domestic Petroleum Products Supplied
ANNUAL RATE		Quadrillion Btu		Trillion dollars		Million barrels per day			
1973	AVERAGE	60.4	74.609	1.307	1.235	0.91	2.99	6.26	17.31
1974	AVERAGE	59.7	72.759	1.413	1.218	0.75	3.28	6.11	16.65
1975	AVERAGE	58.8	70.707	1.529	1.202	1.38	3.60	6.06	16.32
1976	AVERAGE	58.5	74.509	1.702	1.273	2.42	5.07	7.31	17.46
1977	AVERAGE	57.0	76.390	1.900	1.341	R3.19	6.19	8.81	18.43
1978	AVERAGE	55.9	78.154	2.128	1.399	2.96	5.75	8.36	18.85
1979	1st Qtr	62.8	R89.847	2.292	1.431	3.24	5.87	8.81	20.30
	2nd Qtr	51.6	R73.337	2.330	1.422	3.16	5.44	8.09	17.57
	3rd Qtr	50.7	R72.663	2.397	1.433	2.95	5.68	8.31	17.51
	4th Qtr	R55.3	R79.598	2.457	1.440	2.80	5.46	8.44	18.39
	AVERAGE	55.0	R78.816	2.369	1.432	3.04	5.61	8.41	18.43
1980	1st Qtr	R59.5	R86.046	R2.521	R1.445	R3.00	R4.97	R7.90	R18.16
	2nd Qtr	50.7	71.579	2.523	1.411	2.57	4.25	6.72	16.54

Geographic coverage: the 50 United States and District of Columbia.
[1]Thousand Btu per 1972 constant dollar.
[2]Current dollars converted to 1972 constant dollars by the formula:

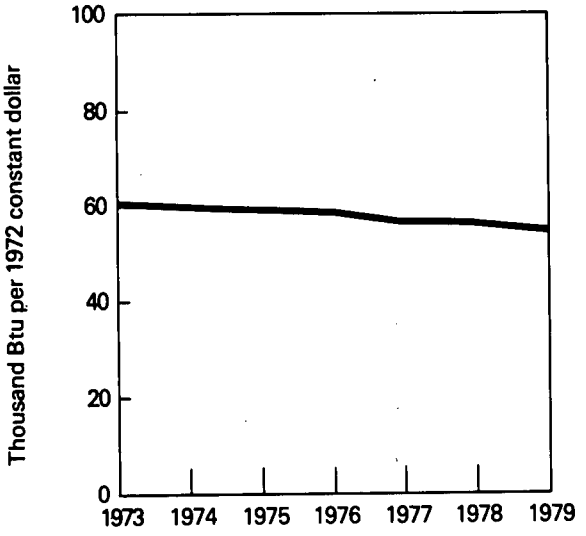
$$\text{Constant 1972 dollars} = \frac{\text{Current dollars in year N}}{\text{Gross National Product implicit price deflator in year N}} \times 100$$

The Gross National Product deflators (1972 = 100) were determined by the Department of Commerce, Bureau of Economic Analysis. GNP rates are from the Business Conditions Digest published by the Bureau of Economic Analysis.
[3]Beginning in October 1977 Strategic Petroleum Reserve imports are included.
R = Revised data.
Note: This page is updated every quarter, during the months of March, June, September, and December. In other months, data appearing elsewhere in this publication are more current.

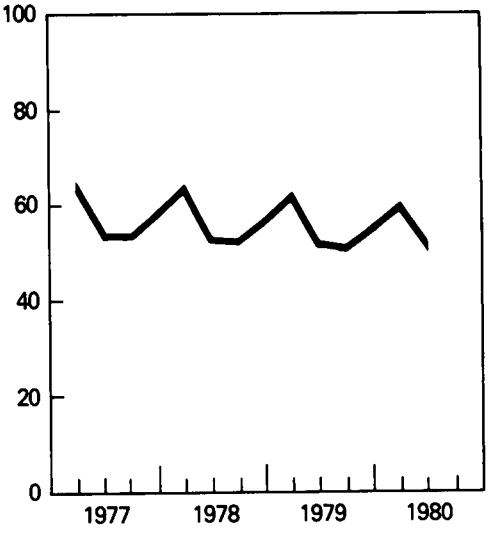
Executive Summary

Energy Consumption per GNP Dollar

Yearly

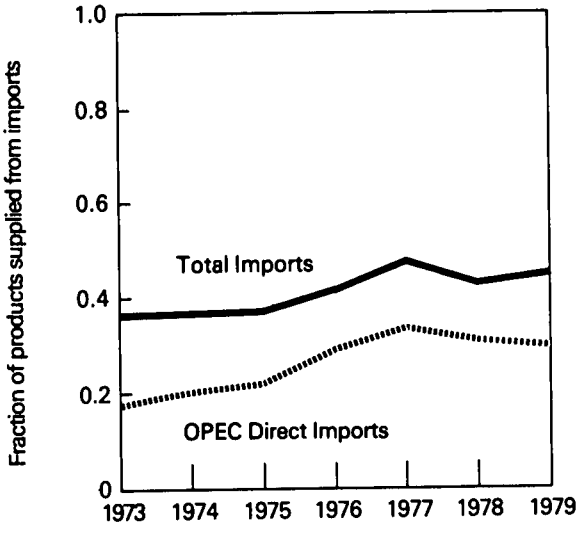


Quarterly

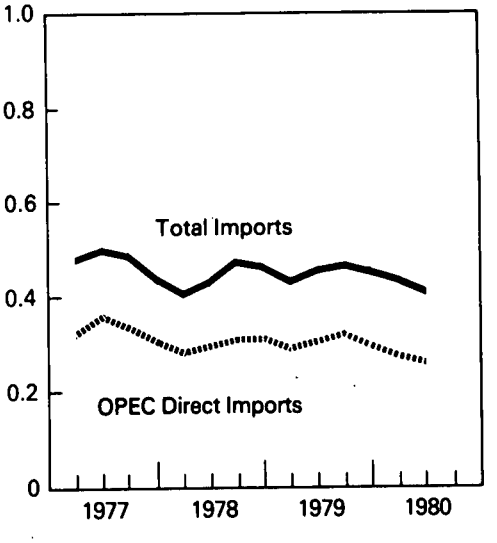


U.S. Dependence on Petroleum Imports

Yearly



Quarterly

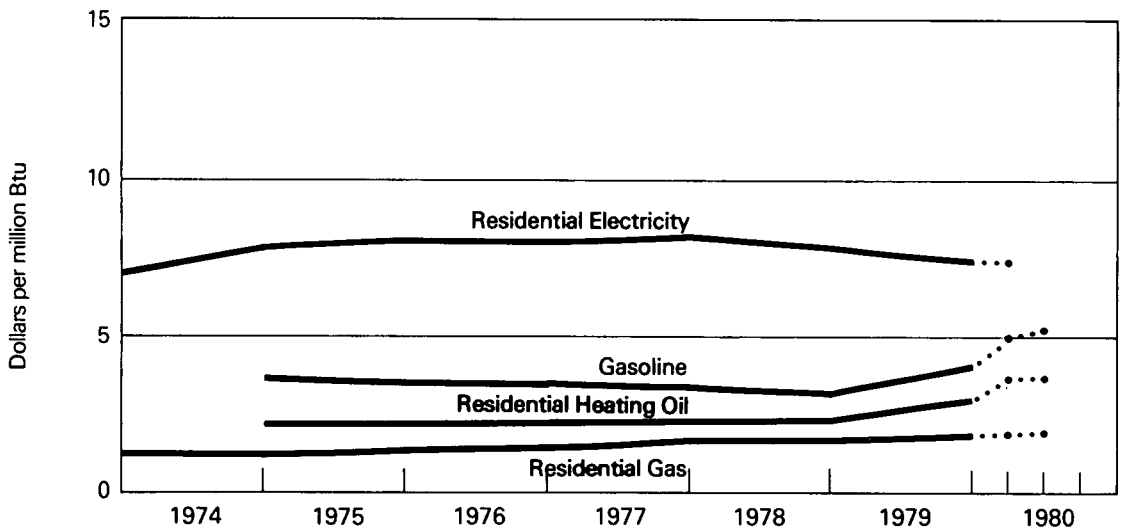


Executive Summary

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

		Leaded Regular Motor Gasoline		Residential Heating Oil		Residential Natural Gas		Residential Electricity	
		cent/gal	$/MMBtu	cent/gal	$/MMBtu	cent/Mcf	$/MMBtu	cent/kWh	$/MMBtu
1973	**AVERAGE**	**NA**	**NA**	**NA**	**NA**	**121.2**	**1.19**	**2.39**	**7.00**
1974	**AVERAGE**	**R45.1**	**R3.61**	**29.4**	**2.12**	**121.4**	**1.19**	**2.63**	**7.71**
1975	**AVERAGE**	**R44.1**	**R3.53**	**29.3**	**2.11**	**132.8**	**1.30**	**2.73**	**8.00**
1976	**AVERAGE**	**R43.4**	**R3.47**	**30.2**	**2.18**	**145.4**	**1.43**	**2.74**	**8.03**
1977	**AVERAGE**	**R42.9**	**R3.43**	**31.2**	**2.25**	**162.2**	**1.59**	**2.80**	**8.20**
1978	**AVERAGE**	**R40.1**	**R3.21**	**31.7**	**2.29**	**164.4**	**1.62**	**2.76**	**8.10**
1979	1st Qtr	R41.5	R3.32	33.8	2.44	179.4	1.77	2.51	7.36
	2nd Qtr	R46.9	R3.75	37.2	2.68	181.3	1.79	2.74	8.03
	3rd Qtr	R53.3	R4.26	44.0	3.17	189.0	1.86	2.79	8.17
	4th Qtr	R54.9	R4.39	46.4	3.35	193.1	1.90	R2.66	R7.79
	AVERAGE	**R49.3**	**R3.94**	**40.8**	**2.94**	**185.3**	**1.88**	**2.66**	**7.79**
1980	1st Qtr	R62.3	R4.98	49.8	3.59	190.8	1.88	2.53	7.42
	2nd Qtr	63.6	5.09	49.8	3.59	197.0	1.94	NA	NA

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



Geographic coverage: the 50 United States and District of Columbia.
NA = Not available.
R = Revised data.
Note: This page is updated every quarter, during the months of March, June, September, and December. In other months, data appearing elsewhere in this publication are more current.
Sources: • Motor Gasoline—Bureau of Labor Statistics.
- Heating Oil—1974 and 1975, Form CLC-92, "No. 2 Heating Oil Monthly Price Adjustment Report," and 1976 forward, FEA Form P112-M-1, and EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."
- Natural Gas—1973 through 1979 annual numbers, Bureau of Mines and Energy Information Administration Form 1340-A, "Supply and Disposition of Natural Gas to Non-Producing Distributors;" and Form 1341-A, "Supply and Disposition of Natural Gas to Producers and Pipelines;" 1980 quarterly numbers, Bureau of Labor Statistics.
- Electricity—1973 through February 1980: FPC Form 5, "Reports of Classes A and B Privately Owned Electric Utilities"; March 1980 forward: FERC Form 5, "Electric Utility Company Monthly Statement."
- Deflator—The Consumer Price Index.

Energy Consumption

Energy consumption in the 50 United States and the District of Columbia in June 1980 was 5.9 quadrillion Btu, 1.1 percent lower than during a month earlier. This figure was 2.1 percent lower than the June 1979 consumption level.

The Residential and Commercial Sector consumption was 2.0 quadrillion Btu in June 1980, 0.1 percent higher than in May 1980 and 1.5 percent higher than the amount consumed during June 1979. The Residential and Commercial Sector consumed 34.5 percent of the total consumption for June 1980, up from the sector's 33.3 percent share in June 1979.

The Industrial Sector consumption was 2.4 quadrillion Btu in June 1980, down 0.7 percent from May 1980, and down 1.6 percent from the consumption level in June 1979. The Industrial Sector consumed 40.2 percent of the June 1980 total, as compared to the 40.0 percent share of June 1979.

The Transportation Sector consumption was 1.5 quadrillion Btu in June 1980, down 3.6 percent from May 1980 and down 7.2 percent from the consumption level in June 1979. This sector consumed 25.3 percent of the June 1980 total, as compared to a 26.7 percent share in June 1979.

The Electric Utilities consumption was an estimated 2.1 quadrillion Btu of energy in June 1980, 6.9 percent higher than in the previous month, and 4.4 percent higher than the energy consumed in June 1979. Coal contributed 47.2 percent of the energy consumed by Electric Utilities in June 1980, while natural gas contributed 16.7 percent, hydroelectric power 14.7 percent, petroleum 11.6 percent, nuclear power 9.5 percent, and geothermal, wood and waste 0.4 percent.

Consumption

Energy Consumption Summary for June 1980
Quadrillion (10^{15}) Btu

Primary Energy Source	Sector: Residential and Commercial	Industrial	Transportation	Electric Utilities	TOTAL
Coal	0.014	0.260	0.000	0.983	1.257
Natural Gas (dry)	0.329	0.644	0.035	0.348	1.355
Petroleum	0.461	0.583	1.443	0.241	2.729
Hydroelectric	0.000	0.003	0.000	0.306	0.309
Nuclear	0.000	0.000	0.000	0.197	0.197
Net Coke Imports	0.000	(0.004)	0.000	0.000	(0.004)
Other	0.000	0.000	0.000	0.009	0.009
TOTAL PRIMARY ENERGY	**0.804**	**1.487**	**1.478**	**2.084**	**5.853**
Electricity Sales	0.342	0.243	0.001	(0.586)	
Net Energy Consumption	1.146	1.730	1.479		4.354
Electrical Energy Losses	0.875	0.621	0.002	(1.498)	1.498
TOTAL ENERGY CONSUMED	**2.021**	**2.351**	**1.480**		**5.853**

Totals may not equal sum of components due to independent rounding.
Notes and sources for this table and all other tables in this section are provided on the last page of this section.

Consumption

Consumption of Energy by the End-Use Sector[1]

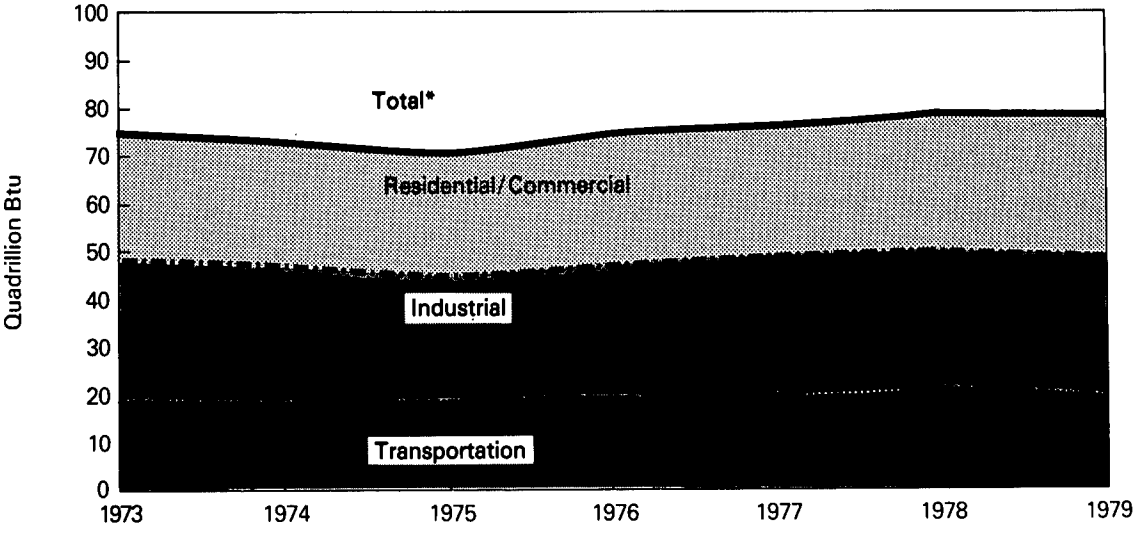
		Residential and Commercial	Industrial	Transportation	Total Energy Consumed
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**27.396**	**28.685**	**18.525**	**74.609**
1974	**TOTAL**	**26.699**	**27.998**	**18.057**	**72.759**
1975	**TOTAL**	**26.635**	**25.881**	**18.186**	**70.707**
1976	**TOTAL**	**27.831**	**27.603**	**19.071**	**74.509**
1977	**TOTAL**	**28.193**	**28.442**	**19.751**	**76.390**
1978	**TOTAL**	**28.807**	**28.716**	**20.626**	**78.154**
1979	January	R3.427	2.736	1.780	R7.944
	February	R3.232	2.322	1.684	R7.239
	March	R2.811	R2.407	1.753	R6.971
	April	R2.299	R2.239	1.584	R6.122
	May	R2.079	R2.443	1.663	R6.185
	June	R1.992	2.389	1.595	R5.977
	July	R2.100	2.415	1.587	R6.102
	August	R2.202	2.455	1.682	R6.339
	September	R1.998	R2.325	1.552	R5.875
	October	R2.103	R2.628	1.651	R6.382
	November	R2.324	R2.611	1.589	R6.525
	December	R2.776	R2.713	1.667	R7.157
	TOTAL	**R29.343**	**R29.682**	**19.786**	**R78.816**
1980	January	R3.086	R2.702	1.618	R7.407
	February	3.026	R2.430	1.555	R7.011
	March	R2.825	R2.565	1.586	R6.976
	April	R2.254	R2.232	R1.538	R6.024
	May	R2.018	R2.367	1.535	R5.920
	June	2.021	2.351	1.480	5.853
	TOTAL (Year-to-date)	**15.231**	**14.647**	**9.311**	**39.191**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]See Explanatory Note 5 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculations is provided in the Notes and Sources on the last page of this section.
R=Revised data.
Source: •See Notes and Sources on the last page of this section.

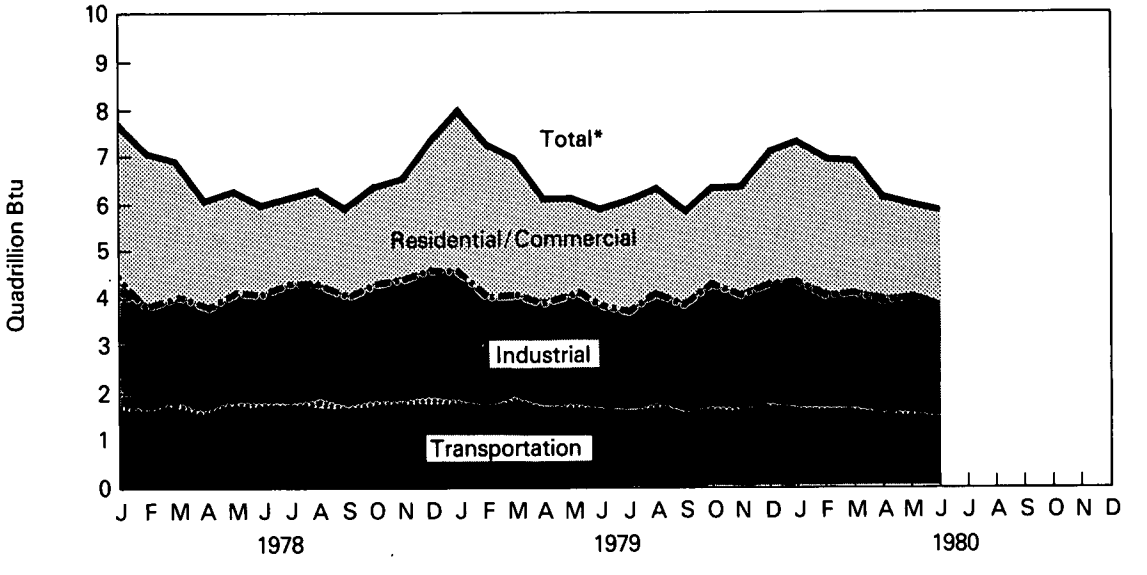
Consumption

Consumption of Energy by End-Use Sector

Yearly



Monthly



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

Consumption

Consumption of Energy by the Residential and Commercial Sector[1]

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses[2]	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**0.291**	**7.626**	**7.524**	**3.495**	**8.460**	**27.396**	
1974	**TOTAL**	**0.293**	**7.518**	**6.865**	**3.475**	**8.548**	**26.699**	
1975	**TOTAL**	**0.239**	**7.581**	**6.413**	**3.588**	**8.814**	**26.635**	
1976	**TOTAL**	**0.227**	**7.866**	**6.919**	**3.729**	**9.089**	**27.831**	
1977	**TOTAL**	**0.225**	**7.461**	**6.869**	**3.936**	**9.702**	**28.193**	
1978	**TOTAL**	**0.250**	**7.624**	**6.916**	**4.100**	**9.918**	**28.807**	
1979	January	R0.031	1.294	0.706	0.399	0.997	R3.427	R3.427
	February	R0.020	1.316	0.643	0.388	0.866	R3.232	R6.659
	March	R0.015	0.982	0.579	R0.352	R0.883	R2.811	R9.470
	April	R0.013	0.740	0.496	R0.312	R0.738	R2.299	R11.769
	May	R0.012	0.457	0.540	0.297	0.773	R2.079	R13.848
	June	R0.013	0.316	0.527	0.321	0.815	R1.992	R15.841
	July	R0.012	0.270	0.531	0.363	0.924	R2.100	R17.940
	August	R0.011	0.249	0.582	0.390	0.971	R2.202	R20.142
	September	R0.014	0.260	0.528	0.368	0.828	R1.998	R22.140
	October	R0.019	0.359	0.597	0.321	0.806	R2.103	R24.243
	November	R0.023	0.626	0.572	0.314	0.788	R2.324	R26.567
	December	R0.025	0.902	0.606	0.349	0.894	R2.776	R29.343
	TOTAL	**R0.209**	**7.770**	**6.908**	**R4.174**	**R10.283**	**R29.343**	
1980	January	R0.025	1.113	0.597	0.381	0.970	R3.086	R3.086
	February	0.022	1.191	0.552	0.375	0.886	3.026	R6.112
	March	R0.015	1.053	0.513	R0.359	R0.885	R2.825	R8.937
	April	0.016	0.716	R0.433	R0.319	R0.770	R2.254	R11.191
	May	0.014	0.450	R0.456	R0.309	R0.790	R2.018	R13.210
	June	0.014	0.329	0.461	0.342	0.875	2.021	15.231
	TOTAL (Year-to-date)	**0.106**	**4.852**	**3.011**	**2.086**	**5.176**	**15.231**	

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. Notes on the methodology used for sector calculations are provided in the Notes and Sources on the last page of this section.
[2]Proportion of total electrical energy losses incurred in the generation and transmission of electricity plus plant use and unaccounted for that are attributed to this sector.
R = Revised data.
Source: • See Notes and Sources on the last page of this section.

Consumption

Consumption of Energy by the Industrial Sector[1]

		Coal	Natural Gas (Dry)	Petro-leum	Hydro-electric	Net Coke Imports[2]	Electricity Sales	Electrical Energy Losses[3]	Total Energy Con-sumed	Yearly Cumulative Energy Consumed
						Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**4.350**	**10.397**	**5.893**	**0.035**	**(0.008)**	**2.341**	**5.676**	**28.685**	
1974	**TOTAL**	**4.057**	**10.012**	**5.750**	**0.033**	**0.059**	**2.337**	**5.751**	**27.998**	
1975	**TOTAL**	**3.801**	**8.531**	**5.530**	**0.032**	**0.014**	**2.304**	**5.669**	**25.881**	
1976	**TOTAL**	**3.791**	**8.768**	**6.325**	**0.033**	**0.000**	**2.525**	**6.162**	**27.603**	
1977	**TOTAL**	**3.494**	**8.642**	**7.106**	**0.037**	**0.015**	**2.635**	**6.513**	**28.442**	
1978	**TOTAL**	**3.462**	**8.540**	**7.179**	**0.036**	**0.131**	**2.732**	**6.637**	**28.716**	
1979	January	0.315	0.869	0.729	0.003	0.004	0.233	0.583	2.736	2.736
	February	0.295	0.629	0.646	0.003	0.003	0.231	0.515	2.322	5.058
	March	0.300	0.610	0.656	0.003	0.002	R0.238	R0.597	R2.407	R7.464
	April	0.289	0.565	0.574	0.003	0.005	R0.239	0.564	R2.239	R9.704
	May	R0.290	0.674	0.598	0.003	0.011	0.240	0.625	R2.443	R12.146
	June	0.282	0.657	0.579	0.003	0.010	0.242	0.615	2.389	R14.535
	July	0.318	0.662	0.577	0.003	0.008	0.239	0.608	2.415	R16.950
	August	R0.297	0.689	0.611	0.003	0.009	0.242	0.604	2.455	R19.405
	September	0.286	0.703	0.549	0.003	0.008	0.239	0.538	R2.325	R21.730
	October	R0.297	0.846	0.622	0.003	0.004	0.244	0.613	R2.628	R24.358
	November	R0.301	0.850	0.621	0.003	0.000	0.238	0.597	R2.611	R26.969
	December	R0.331	0.883	0.677	0.003	0.002	0.230	0.588	R2.713	R29.682
	TOTAL	**R3.602**	**8.636**	**7.439**	**0.037**	**0.066**	**R2.855**	**R7.047**	**R29.682**	
1980	January	R0.311	0.864	0.703	0.003	0.003	0.231	0.587	R2.702	R2.702
	February	R0.291	0.714	0.639	0.003	(0.001)	0.233	0.551	R2.430	R5.132
	March	R0.297	0.816	0.634	0.003	(0.003)	R0.236	R0.582	R2.565	R7.698
	April	0.290	0.577	R0.575	0.003	(0.005)	R0.232	R0.560	R2.232	R9.929
	May	R0.283	R0.605	R0.632	0.003	(0.006)	R0.239	R0.610	R2.367	R12.296
	June	0.260	0.644	0.583	0.003	(0.004)	0.243	0.621	2.351	14.647
	TOTAL (Year-to-date)	**1.733**	**4.220**	**3.766**	**0.019**	**(0.015)**	**1.414**	**3.510**	**14.647**	

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. Notes on the methodology used for sector calculations are provided in the Notes and Sources on the last page of this section.
[2]Net Imports = imports minus exports. Parentheses indicate exports are greater than imports.
[3]Proportion of total electrical energy losses incurred in the generation and transmission of electricity plus plant use and unaccounted for that are attributed to this sector.
R = Revised data.
Source: •See Notes and Sources on the last page of this section.

Consumption

Consumption of Energy by the Transportation Sector[1]

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses[2]	Total Energy Consumed	Yearly Cumulative Energy Consumed
				Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**0.003**	**0.743**	**17.751**	**0.009**	**0.020**	**18.525**	
1974	**TOTAL**	**0.002**	**0.685**	**17.341**	**0.009**	**0.021**	**18.057**	
1975	**TOTAL**	**0.001**	**0.595**	**17.557**	**0.010**	**0.024**	**18.186**	
1976	**TOTAL**	**(3)**	**0.559**	**18.477**	**0.010**	**0.025**	**19.071**	
1977	**TOTAL**	**(3)**	**0.543**	**19.173**	**0.010**	**0.024**	**19.751**	
1978	**TOTAL**	**(3)**	**0.539**	**20.057**	**0.009**	**0.020**	**20.626**	
1979	January	(3)	0.064	1.714	0.001	0.002	1.780	1.780
	February	(3)	0.058	1.624	0.001	0.002	1.684	3.464
	March	(3)	0.049	1.701	0.001	0.002	1.753	5.217
	April	(3)	0.042	1.540	0.001	0.002	1.584	6.801
	May	(3)	0.038	1.623	0.001	0.002	1.663	8.464
	June	(3)	0.035	1.558	0.001	0.002	1.595	10.059
	July	(3)	0.035	1.549	0.001	0.002	1.587	11.645
	August	(3)	0.035	1.644	0.001	0.002	1.682	13.327
	September	(3)	0.035	1.514	0.001	0.002	1.552	14.878
	October	(3)	0.041	1.607	0.001	0.002	1.651	16.529
	November	(3)	0.046	1.541	0.001	0.002	1.589	18.118
	December	(3)	0.054	1.610	0.001	0.002	1.667	19.786
	TOTAL	**(3)**	**0.530**	**19.225**	**0.009**	**0.021**	**19.786**	
1980	January	(3)	0.060	1.555	0.001	0.002	1.618	1.618
	February	(3)	0.058	1.495	0.001	0.002	1.555	3.173
	March	(3)	0.057	1.526	0.001	0.002	1.586	4.758
	April	(3)	0.041	R1.495	0.001	0.002	R1.538	R6.296
	May	(3)	R0.036	R1.497	0.001	0.002	1.535	R7.831
	June	(3)	0.035	1.443	0.001	0.002	1.480	9.311
	TOTAL (Year-to-date)	**(3)**	**0.287**	**9.010**	**0.004**	**0.010**	**9.311**	

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]The Transportation Sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. Notes on the methodology used for sector calculations are provided in the Notes and Sources on the last page of this section.
[2]Proportion of total electrical energy losses incurred in the generation and transmission of electricity plus plant use and unaccounted for that are attributed to this sector.
[3]Since 1976 the amount of coal consumed by the Transportaion Sector has been negligible.
R=Revised data.
Source: •See Notes and Sources on the last page of this section.

Consumption

Consumption of Energy by the Electric Utilities

		Coal[1]	Natural Gas (Dry)	Petro-leum	Hydro-electric power[2]	Nuclear Electric Power	Other[3]	Total Energy Consumed	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**8.655**	**3.746**	**3.671**	**2.975**	**0.910**	**0.046**	**20.004**	
1974	**TOTAL**	**8.524**	**3.518**	**3.499**	**3.276**	**1.272**	**0.056**	**20.144**	
1975	**TOTAL**	**8.783**	**3.241**	**3.231**	**3.187**	**1.900**	**0.072**	**20.414**	
1976	**TOTAL**	**9.714**	**3.153**	**3.454**	**3.032**	**2.111**	**0.081**	**21.544**	
1977	**TOTAL**	**10.245**	**3.285**	**4.028**	**2.482**	**2.702**	**0.082**	**22.825**	
1978	**TOTAL**	**10.134**	**3.297**	**3.813**	**3.132**	**2.977**	**0.068**	**23.421**	
1979	January	1.009	0.236	0.386	0.279	0.299	0.007	2.215	2.215
	February	0.892	0.235	0.354	0.238	0.279	0.006	2.003	4.218
	March	0.900	0.270	0.345	0.288	0.262	0.008	2.073	6.291
	April	0.840	0.270	0.258	0.282	0.198	0.007	1.855	8.146
	May	0.894	0.286	0.270	0.319	0.162	0.007	1.938	10.084
	June	0.946	0.331	0.262	0.278	0.173	0.007	1.996	12.080
	July	1.007	0.382	0.261	0.255	0.224	0.007	2.136	14.217
	August	1.037	0.390	0.275	0.239	0.261	0.008	2.210	16.427
	September	0.901	0.350	0.268	0.215	0.235	0.007	1.976	18.403
	October	0.917	0.334	0.274	0.228	0.225	0.008	1.987	20.390
	November	0.916	0.270	0.289	0.250	0.207	0.008	1.940	22.330
	December	1.000	0.257	0.320	0.255	0.222	0.009	2.064	24.394
	TOTAL	**11.258**	**3.610**	**3.563**	**3.125**	**2.748**	**0.089**	**24.394**	
1980	January	1.073	0.286	0.312	0.281	0.213	0.008	2.172	2.172
	February	1.010	0.272	0.311	0.239	0.208	0.008	2.048	4.221
	March	0.992	0.293	0.283	0.271	0.216	0.008	2.064	6.284
	April	0.874	0.265	R0.249	0.286	0.202	0.008	R1.884	R8.169
	May	0.890	0.291	0.243	0.319	0.198	0.010	R1.950	R10.119
	June	0.983	0.348	0.241	0.306	0.197	0.009	2.084	12.203
	TOTAL (Year-to-date)	**5.821**	**1.756**	**1.639**	**1.702**	**1.234**	**0.051**	**12.203**	

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

Notes and Sources for the Consumption Section

1. See Explanatory Note 5 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.
2. **Coal**: Coal is bituminous coal, anthracite, and lignite. *Sources:* • Anthracite—1973 through 1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook,* "Coal—Pennsylvania Anthracite, Annual."
• 1977 through 1980, U.S. Department of Energy (DOE), Energy Information Administration, (EIA) *Energy Data Reports,* "Weekly Coal Report."
• Bituminous coal and lignite—1973 through 1975, U.S. DOI, BOM, *Minerals Yearbook,* "Bituminous Coal and Lignite, Annual," Federal Power Commission (FPC), Form 4, "Monthly Power Plant Report," 1976 through 1980, DOE, EIA, *Energy Data Reports,* "Weekly Coal Report."
• Electric Utility consumption of coal sources: same as Note 6 below.
3. **Natural Gas**: Total natural gas consumption is estimated monthly based on a supply/disposition balance calculation. Residential and Commercial Sector monthly consumption is estimated by allocating the EIA annual Residential and Commercial Sector consumption to the months in proportion to the American Gas Association (AGA) monthly sales to the Residential and Commercial Sectors. For incomplete years, the AGA monthly sales data are used temporarily. Monthly Transportation Sector consumption (which is natural gas for pipeline use) for complete years is estimated by allocating the EIA annual Transportation total to the months based on each month's total natural gas consumption as a share of the annual total natural gas consumption. For incomplete years, each month's Transportation total is estimated by applying the percentage of total natural gas accounted for by the Transportation Sector in the same month a year ago to the current month's total natural gas consumption. The Electric Utility consumption of natural gas is available monthly from Form 4, "Monthly Power Plant Report." Each month's Industrial Sector consumption is estimated by subtracting the Residential and Commercial, Transportation, and Electric Utilities Sectors consumption from the total natural gas consumption.
Sources: • 1973 through 1975: DOI, BOM, *Minerals Yearbook,* "Natural Gas" chapter.
• 1976 through 1980, DOE, *Energy Data Reports,* "Natural Gas Monthly Production and Consumption."
• Electric Utilities consumption: 1973 through 1976, FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1980, DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."
• American Gas Association, "Monthly Gas Utility Statistical Report."
4. **Petroleum**: Petroleum consumption by end-use is the sum of all individual petroleum products consumed in each end-use. First, total consumption by product is determined. Petroleum consumption in this section of the *Monthly Energy Review* uses the series called "products supplied" in the Petroleum Section.
Sources for petroleum products supplied by individual products are:
• 1973 through 1975: DOI, BOM, *Mineral Industry Surveys,* "Petroleum Statement, Annual."
• 1976 through 1978: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Annual."
• 1979 and 1980: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Monthly." DOE, EIA, Monthly Petroleum Statistics Report. DOE, EIA, estimates based on EIA weekly data.
DOE, EIA estimates for current and previous month data for several minor petroleum products' total consumption.
Each product's total is allocated to end-use sectors as follows:
• Aviation gasoline—Transportation.
• Asphalt and road oil—Commercial.
• Distillate fuel, residual fuel, kerosene end-uses are proportioned according to sales by end-use reported for 1973 through 1976 in the DOI, BOM, *Mineral Industry Surveys,* "Fuel Oil Sales, Annual," and for 1976 through 1978 in the DOE, EIA, *Energy Data Reports,* "Fuel Oil Sales, Annual." The proportions from 1978 are applied to 1979 and 1980 data.
• Jet fuel—small amounts in 1975 through 1977 are used in industrial and small amounts in all months are consumed by the electric utilities. All remaining jet fuel is allocated to the Transportation Sector.
• Liquefied petroleum gases—end-uses are proportioned according to sales by end-use reported for 1973 through 1975 in the DOI, BOM, *Mineral Industry Surveys,* "Liquefied Petroleum Gas Sales, Annual," and for 1976 through 1978 in the DOE, EIA, *Energy Data Reports,* "Liquefied Petroleum Gas Sales, Annual." The proportions from 1978 are applied to 1979 and 1980 data.
• Lubricants—allocated to Industrial and Transportation Sectors for all months according to proportions of sales to those sectors from U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports,* "Sales of Lubricating and Industrial Oils and Greases, 1977."
• Motor gasoline—the DOE motor gasoline consumption data are allocated to end-use according to shares derived from the U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics,* Tables MF-21, MF-24 and MF-25. The proportions from 1978 are applied to 1979 and 1980 data.
• Petroleum coke consumed by the Electric Utilities—FPC, Form 4, "Monthly Power Plant Report."
• All other products are allocated to the Industrial Sector.
Sources: • 1973 through 1975: DOI, BOM, *Mineral Industry Surveys,* "Petroleum Statement, Annual."
• 1976 through 1978: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Annual."
• 1979 and 1980: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Monthly" and "Monthly Petroleum Statistics Report," and EIA estimates based on data from the American Petroleum Institute, "Weekly Statistical Bulletin."
• Electric Utility consumption of petroleum sources: 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1980: DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."
5. **Hydroelectric**: Industrial and electric utility generation of hydropower. *Sources:* • 1973 through 1976, FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1980: DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."
• Imports and exports of electricity—*Sources:* DOE, Economic Regulatory Administration, "Report on Electric Energy Exchanges with Canada and Mexico." Monthly estimates are derived from annual data by dividing by the number of days in the year and multiplying by the number of days in the month. 1978 data are temporarily used for 1979 and 1980.
6. **Nuclear**: *Sources:* • 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1980: DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."
7. **Net Coke Imports**: Net coke imports is coke made from coal. *Sources:* • 1973 through 1975, DOI, BOM, *Minerals Yearbook,* "Coke and Coal Chemicals, Annual."
• 1976 through 1980: DOE, EIA, *Energy Data Reports,* "Coke and Coal Chemicals, Monthly."
8. **Other Energy**: "Other" is electricity produced from geothermal power and from wood and waste. *Sources:* same as Note 6 above.
9. **Electricity Sales**: Energy consumed by electric utilities to produce electricity is distributed to the major end-use sectors using EIA data in kilowatt-hour sales to ultimate customers. "Other" sales, largely for use in government buildings, are distributed to the Residential and Commercial Sector and a small portion to the Transportation Sector. *Source:* • Sales data—1973 through February 1980: FPC, Form 5, "Monthly Statement of Electric Operating Revenue and Income"; FERC Form 5, "Electric Utility Company Monthly Statement."
10. **Electrical Energy Losses**: In generating electricity with nuclear or fossil fuels, approximately 65 percent of the energy is lost in the form of heat. Transmission and distribution losses consume about an additional 3 percent of the energy inputs of the utility industry. In order to fully account for all energy consumed both directly and indirectly (i.e., utilities energy disposition), the electricity losses are allocated to the final end-use sectors in proportion to their direct kilowatt-hour usage.

Crude Oil and Refined Petroleum Products*

Domestic crude oil production during July 1980 averaged 8.7 million barrels per day. This production rate was 3.5 percent higher than in July 1979 and 0.5 percent lower than in June 1980.

Total petroleum imports averaged 6.2 million barrels per day in July 1980, 25.4 percent less than the July 1979 rate and 8.8 percent lower than in June 1980.

In July 1980, 16.2 million barrels per day of petroleum products were supplied for domestic use. Motor gasoline accounted for 42.6 percent of the total, distillate fuel oil 13.7 percent, and residual fuel oil 14.8 percent.

The average for motor gasoline supplied during July 1980 was 6.9 million barrels per day, 0.5 percent higher than the amount supplied in July 1979 and 3.6 percent higher than in June 1980.

In July 1980, 2.2 million barrels of distillate fuel oil were supplied per day, 13.1 percent lower than the amount supplied a year ago and 7.8 percent lower than in June 1980. Distillate fuel oil stocks were 214.6 million barrels at the end of June 1980, 25.3 percent above the stock level 1 year ago and 10.2 percent higher than a month earlier.

Residual fuel oil supplied in July 1980 averaged 2.4 million barrels per day, 2.2 percent lower than in July 1979. Residual fuel oil stocks measured 81.9 million barrels at the end of July 1980, 5.5 percent below the level a year ago and 6.3 percent lower than in the previous month.

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

Petroleum

Crude Oil

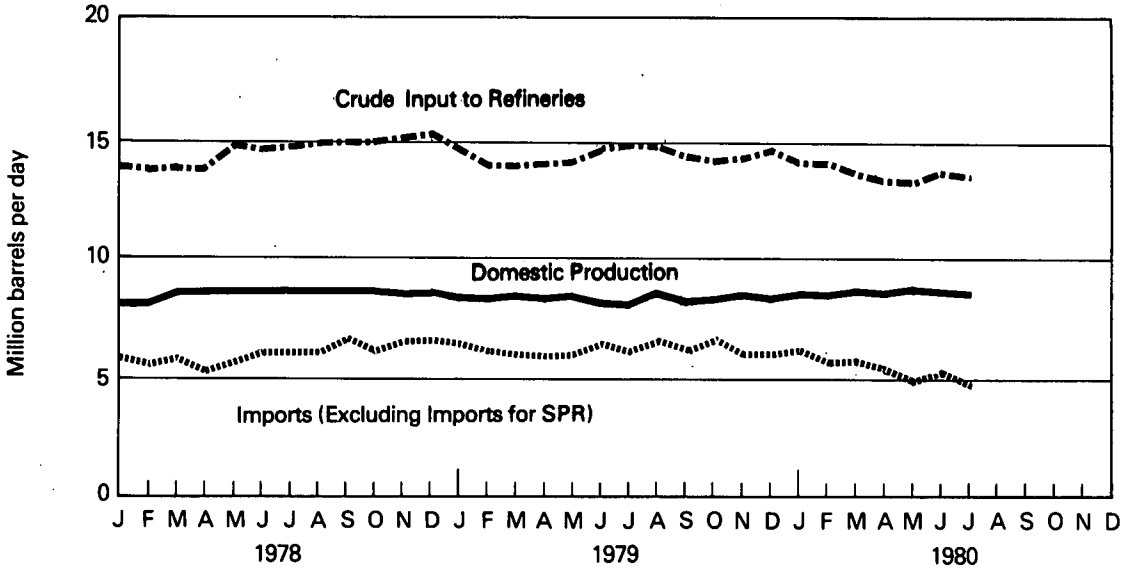
		Crude Input to Refineries	Total Domestic Production[1,2]	Alaskan Production	Crude Oil Imports[1,3]	Strategic Petroleum Reserve (SPR) Imports	Crude Oil Exports	Primary Crude Oil Stocks[1,3]	Strategic Petroleum Reserve (SPR) Stocks[3]
		Thousand barrels per day						Thousand barrels	
1973	**AVERAGE**	**12,431**	**9,208**	**198**	**3,244**		**2**	**‡242,478**	
1974	**AVERAGE**	**12,133**	**8,774**	**193**	**3,477**		**3**	**‡265,020**	
1975	**AVERAGE**	**12,442**	**8,375**	**191**	**4,105**		**6**	**‡271,354**	
1976	**AVERAGE**	**13,416**	**8,132**	**173**	**5,287**		**8**	**‡285,471**	
1977	**AVERAGE**	**14,602**	**8,245**	**464**	**6,594**	**21**	**50**	**‡339,857**	**‡7,826**
1978	**AVERAGE**	**14,739**	**8,707**	**1,229**	**6,195**	**161**	**158**	**‡309,421**	**‡66,860**
1979	January	14,658	8,457	1,351	6,656	204	177	302,728	73,142
	February	14,121	8,498	1,267	6,344	179	288	302,981	78,166
	March	14,062	8,585	1,355	6,240	122	370	317,432	82,501
	April	14,346	8,533	1,347	6,145	66	260	319,759	83,867
	May	14,273	8,585	1,350	6,163	97	171	316,355	86,880
	June	14,655	8,409	1,247	6,554	65	235	325,893	88,567
	July	14,977	8,355	1,405	6,349	41	244	312,852	90,101
	August	14,827	8,699	1,434	6,774	35	242	320,745	91,189
	September	14,461	8,466	1,436	6,410	0	175	323,854	91,189
	October	14,330	8,568	1,481	6,854	0	179	344,679	[4]91,191
	November	14,397	8,649	1,614	6,154	0	264	347,367	91,191
	December	14,817	8,587	1,520	6,273	0	210	339,080	91,191
	AVERAGE	**14,497**	**8,533**	**1,401**	**6,411**	**67**	**234**		
1980	January	14,147	8,648	1,634	6,359	0	311	353,611	91,191
	February	14,094	8,696	1,630	5,936	0	310	361,648	91,191
	March	13,603	8,712	1,647	5,785	0	323	361,742	91,191
	April	R13,376	R8,688	R1,649	R5,555	0	R216	R379,352	91,191
	May†	13,322	*8,720*	*1,615*	5,020	0	326	378,842	91,191
	June†	R13,702	*8,690*	*1,618*	R5,467	0	365	R382,135	91,191
	July†	*13,561*	*8,650*	*1,607*	*4,906*	0	NA	*374,629*	91,191
	AVERAGE	**13,684**	**8,686**	**1,630**	**5,573**	**0**	**NA**		

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

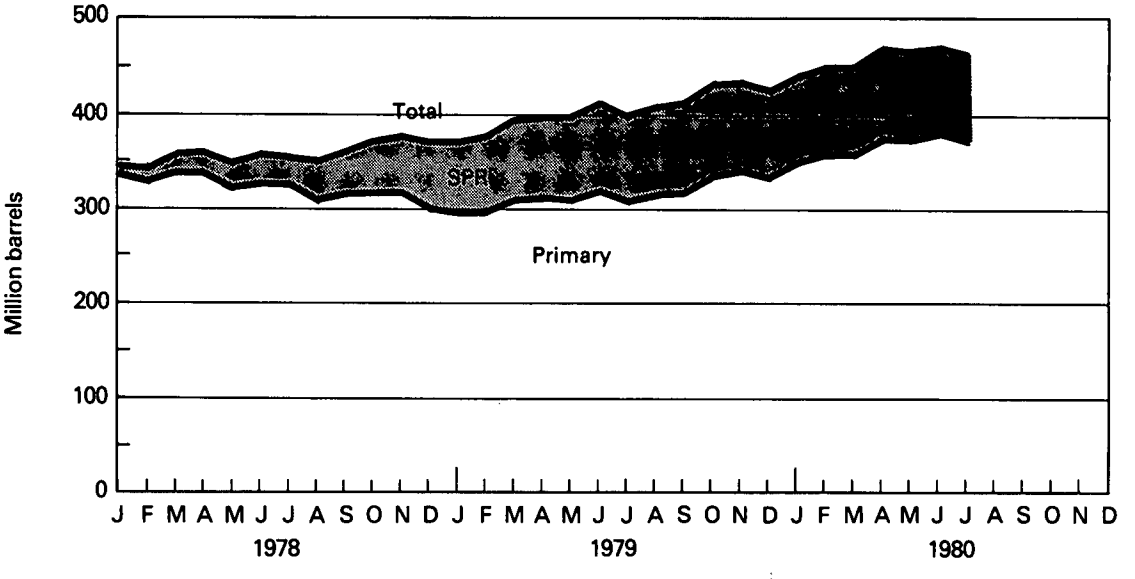
Petroleum

Crude Oil

Production, Refinery Input and Imports



Stocks



Petroleum

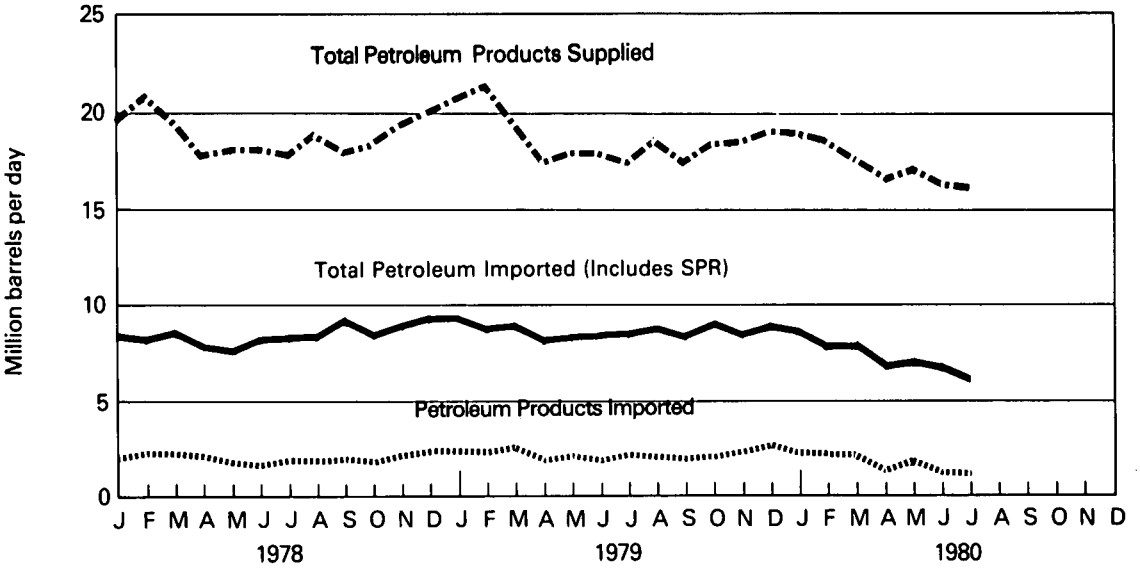
		Total Petroleum Products[1]			Total Crude Oil and Petroleum Products Trade				
		Products Supplied[1]	Product Imports[2]	Product Exports	Total Imports (Excluding SPR)	SPR Imports[3]	Total Imports (Including SPR)[3]	Total Exports	Net Imports
		Thousand barrels per day			Thousand barrels per day				
1973	**AVERAGE**	**17,308**	**3,012**	**229**	**6,256**			**231**	**6,025**
1974	**AVERAGE**	**16,653**	**2,635**	**218**	**6,112**			**221**	**5,892**
1975	**AVERAGE**	**16,322**	**1,951**	**204**	**6,056**			**209**	**5,846**
1976	**AVERAGE**	**17,461**	**2,026**	**215**	**7,313**			**223**	**7,090**
1977	**AVERAGE**	**18,431**	**2,193**	**193**	**8,787**	**21**	**8,807**	**243**	**8,565**
1978	**AVERAGE**	**18,847**	**2,008**	**204**	**8,202**	**161**	**8,363**	**362**	**8,002**
1979	January	20,657	2,222	212	8,878	204	9,082	388	8,694
	February	21,145	2,062	200	8,406	179	8,585	488	8,096
	March	19,180	2,385	234	8,625	122	8,747	604	8,144
	April	17,319	1,673	235	7,820	66	7,885	495	7,390
	May	17,718	1,826	278	7,989	97	8,087	449	7,638
	June	17,675	1,672	220	8,226	65	8,291	455	7,836
	July	17,055	1,932	258	8,280	41	8,322	502	7,819
	August	18,184	1,778	210	8,552	35	8,587	451	8,136
	September	17,270	1,596	241	8,006	0	8,006	416	7,590
	October	18,124	1,785	258	8,639	0	8,639	437	8,202
	November	18,262	1,946	246	8,099	0	8,099	510	7,590
	December	18,783	2,305	262	8,577	0	8,577	472	8,105
	AVERAGE	**18,434**	**1,933**	**238**	**8,344**	**67**	**8,411**	**472**	**7,939**
1980	January	18,509	1,983	228	8,342	0	8,342	539	7,803
	February	18,721	1,911	227	7,847	0	7,847	536	7,311
	March	17,279	1,724	243	7,509	0	7,509	566	6,943
	April	R16,616	R1,430	241	R6,985	0	R6,985	R457	R6,528
	May†	16,525	1,402	266	6,422	0	6,422	592	5,830
	June†	R16,481	R1,304	289	R6,771	0	R6,771	654	6,117
	July†	*16,156*	*1,268*	NA	*6,174*	0	*6,174*	NA	NA
	AVERAGE	**17,175**	**1,573**	**NA**	**7,146**	**0**	**7,146**	**NA**	**NA**

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

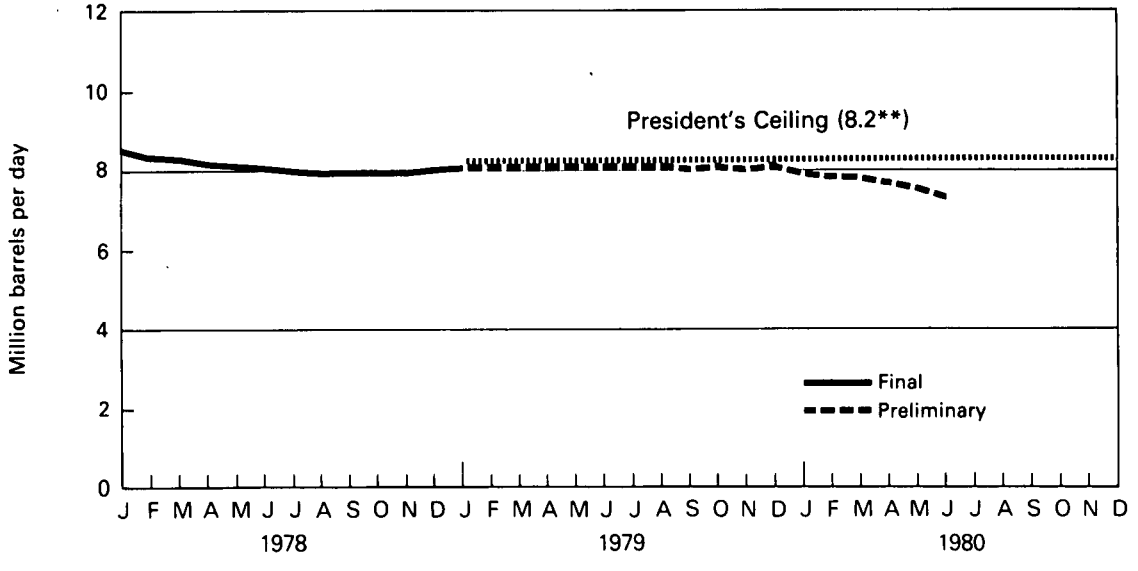
Petroleum

Products Supplied and Imports

Products Supplied and Imports



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



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

Petroleum

Petroleum Imports from OPEC Sources

	Algeria	Indonesia	Iran	Libya	Nigeria	Saudi Arabia	United Arab Emirates	Venezuela	Other OPEC[1]	Total OPEC	Arab Members of OPEC[2]
						Thousand barrels per day					
1973											
AVERAGE	**136.0**	**213.3**	**222.8**	**164.4**	**458.8**	**485.7**	**70.6**	**1,134.9**	**106.4**	**2,992.9**	**914.7**
1974											
AVERAGE	**190.1**	**300.4**	**468.8**	**4.4**	**713.4**	**461.3**	**73.9**	**979.1**	**88.4**	**3,279.8**	**752.5**
1975											
AVERAGE	**282.4**	**389.6**	**280.4**	**231.8**	**761.8**	**714.6**	**116.7**	**702.5**	**121.5**	**3,601.3**	**1,382.6**
1976											
AVERAGE	**432.2**	**538.8**	**298.5**	**453.3**	**1,024.7**	**1,229.8**	**254.4**	**700.1**	**134.0**	**5,065.8**	**2,424.1**
1977											
AVERAGE	**558.6**	**541.0**	**535.0**	**722.6**	**1,143.0**	**1,380.4**	**335.3**	**690.4**	**286.7**	**6,193.1**	**3,185.1**
1978											
AVERAGE	**648.7**	**573.3**	**555.3**	**653.9**	**919.5**	**1,143.9**	**385.4**	**644.9**	**226.0**	**5,750.9**	**2,963.2**
1979											
January	669.2	502.8	187.1	734.9	1,158.6	1,562.9	341.4	661.0	240.4	6,058.4	3,405.9
February	746.3	521.3	85.8	613.7	984.3	1,628.2	309.8	745.9	170.8	5,806.0	3,403.8
March	579.0	418.9	22.2	598.3	1,403.0	1,298.4	298.4	851.4	272.5	5,742.0	2,938.3
April	686.8	376.1	51.6	770.8	988.9	1,483.5	285.2	619.3	129.6	5,391.8	3,311.0
May	755.5	342.5	196.5	650.5	1,117.9	1,273.4	291.9	671.2	147.5	5,447.0	3,023.7
June	559.9	390.5	318.3	764.2	932.0	1,258.3	281.9	609.4	363.8	5,478.4	3,156.6
July	591.4	416.1	410.7	654.2	981.4	1,359.9	252.6	675.8	170.6	5,509.1	2,956.0
August	669.3	499.1	516.0	657.2	1,183.0	1,332.4	247.1	731.0	261.5	6,096.6	3,051.7
September	510.2	358.7	372.9	610.5	1,103.3	1,281.1	269.9	726.2	199.8	5,432.6	2,833.1
October	601.5	452.2	495.6	761.6	973.7	1,262.1	234.0	616.7	304.4	5,701.9	3,064.2
November	614.2	332.9	548.6	469.5	1,007.1	1,162.9	307.1	713.0	151.4	5,306.7	2,602.6
December	589.2	394.5	413.8	559.2	1,079.9	1,279.4	241.5	677.6	130.5	5,365.6	2,729.7
AVERAGE	**630.5**	**416.9**	**303.2**	**654.0**	**1,077.6**	**1,346.8**	**279.7**	**691.1**	**212.2**	**5,612.0**	**3,037.4**
1980											
January	484.2	433.0	80.5	616.8	1,054.4	1,562.1	201.6	583.3	179.1	5,195.1	3,000.7
February	638.7	317.1	9.2	603.3	1,012.6	1,398.9	304.0	543.0	140.3	4,967.1	3,016.7
March	472.0	405.4	0.0	654.1	924.2	1,389.5	370.1	352.3	174.8	4,742.3	2,978.6
April	555.9	R373.6	0.0	R682.7	R722.3	R1,294.3	150.1	R339.2	227.9	R4,346.0	R2,866.2
May†	441.0	344.8	0.0	464.4	964.4	1,115.1	162.2	403.7	132.4	4,027.9	2,266.3
June†	496.6	327.5	0.0	548.9	998.3	1,327.4	178.1	393.8	105.6	4,376.2	2,584.6
AVERAGE	**513.3**	**367.6**	**15.2**	**594.7**	**946.2**	**1,347.7**	**227.5**	**435.5**	**160.2**	**4,607.9**	**2,783.6**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
Beginning in October 1977 Strategic Petroleum Reserve imports are included.
[1]Includes Ecuador, Gabon, Iraq, Kuwait and Qatar.
[2]Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait and Qatar.
†Preliminary data. R=Revised data.
Sources: • See Sources on the last page of this section.

Petroleum

Petroleum Imports from Non-OPEC Sources

	Bahamas	Canada	Mexico	Netherlands Antilles	Puerto Rico	Trinidad and Tobago	Virgin Islands	Other[1]	Total
				Thousand barrels per day					
1973									
AVERAGE	**174.0**	**1,324.8**	**15.7**	**584.7**	**99.5**	**254.8**	**329.4**	**480.3**	**3,263.2**
1974									
AVERAGE	**163.8**	**1,069.5**	**8.5**	**511.0**	**90.4**	**250.8**	**391.0**	**347.4**	**2,832.4**
1975									
AVERAGE	**152.4**	**846.4**	**71.4**	**331.8**	**89.7**	**242.4**	**406.4**	**313.9**	**2,454.4**
1976									
AVERAGE	**118.5**	**599.3**	**87.2**	**275.4**	**88.1**	**274.3**	**422.3**	**381.7**	**2,246.8**
1977									
AVERAGE	**170.5**	**516.9**	**179.4**	**210.9**	**105.1**	**289.3**	**466.2**	**675.8**	**2,614.1**
1978									
AVERAGE	**159.9**	**466.8**	**317.8**	**229.2**	**93.8**	**253.1**	**428.7**	**663.2**	**2,612.5**
1979									
January	159.5	564.1	584.1	237.9	109.1	116.0	477.0	776.3	3,023.9
February	103.6	560.3	415.4	254.8	68.2	191.4	421.1	763.6	2,778.5
March	93.6	614.5	397.5	314.1	63.8	214.7	561.6	745.5	3,005.4
April	129.4	577.0	301.6	178.7	64.9	154.3	474.7	612.4	2,492.9
May	134.8	554.8	402.9	191.1	101.7	216.6	382.0	655.7	2,639.7
June	138.1	468.4	457.7	171.4	105.7	169.5	413.7	888.2	2,812.6
July	193.2	488.6	370.3	208.7	117.2	169.1	451.2	814.2	2,812.4
August	156.6	463.1	439.4	246.5	92.5	237.9	357.1	497.4	2,490.4
September	149.1	463.4	431.3	275.8	86.2	166.2	285.7	715.9	2,573.5
October	150.5	486.3	531.1	242.4	60.2	199.7	403.0	863.6	2,936.7
November	181.7	554.5	417.7	195.8	109.7	161.1	438.4	733.8	2,792.7
December	178.1	595.8	453.9	257.4	120.3	236.7	507.5	862.1	3,211.9
AVERAGE	**147.7**	**532.5**	**434.1**	**231.3**	**91.8**	**186.3**	**431.5**	**744.0**	**2,799.1**
1980									
January	175.1	568.9	545.2	289.0	55.9	239.4	467.2	809.1	3,146.8
February	111.5	539.6	462.6	205.2	95.3	191.8	521.6	752.5	2,880.1
March	124.0	459.7	459.6	184.0	81.3	188.7	443.2	826.6	2,767.1
April	55.7	R411.2	R545.6	R230.8	63.1	143.4	418.2	R771.0	R2,639.0
May†	77.1	407.7	556.7	172.0	70.1	222.1	303.4	584.9	2,394.1
June†	77.1	387.8	598.8	190.6	64.6	161.6	307.4	606.7	2,394.8
AVERAGE	**103.7**	**462.3**	**528.3**	**212.0**	**71.6**	**191.6**	**409.5**	**724.7**	**2,703.7**

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

Petroleum

Motor Gasoline

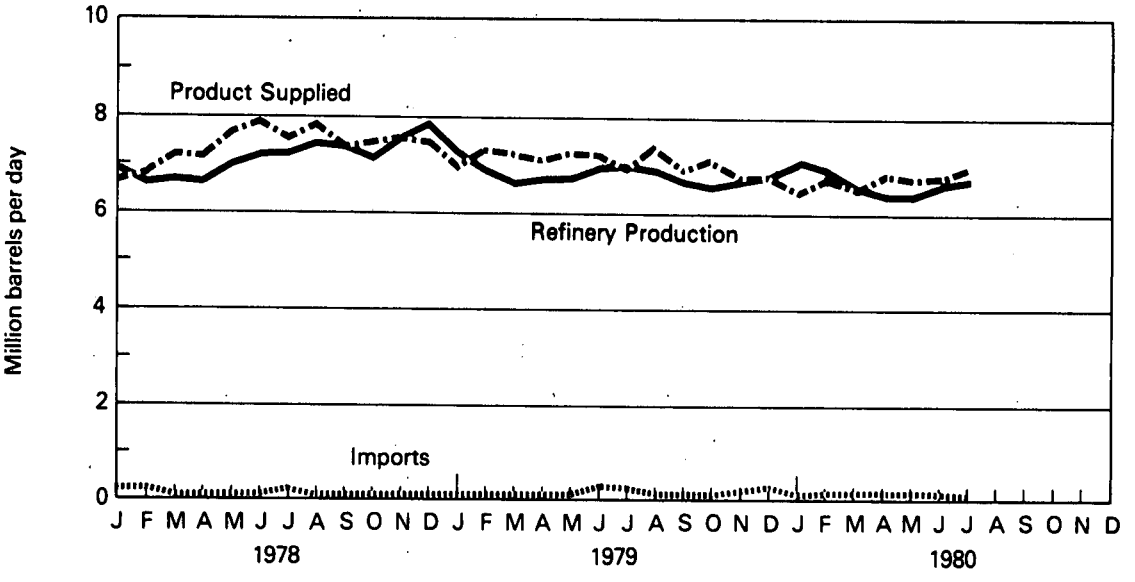
		Product Supplied						
		Total	Unleaded	Unleaded Percent of Total	Refinery Production[1]	Imports	Exports	Stocks[1]
		Thousand barrels per day						Thousand barrels
1973	**AVERAGE**	**6,674**	**NA**	**NA**	**6,527**	**134**	**4**	**‡209,395**
1974	**AVERAGE**	**6,537**	**NA**	**NA**	**6,358**	**204**	**2**	**‡218,346**
1975	**AVERAGE**	**6,675**	**NA**	**NA**	**6,518**	**184**	**2**	**‡234,925**
1976	**AVERAGE**	**6,978**	**NA**	**NA**	**6,838**	**131**	**3**	**‡231,387**
1977	**AVERAGE**	**7,177**	**1,976**	**27.5**	**7,031**	**217**	**2**	**‡257,578**
1978	**AVERAGE**	**7,412**	**2,521**	**34.0**	**7,167**	**190**	**1**	**‡237,956**
1979	January	6,893	2,609	37.8	7,272	179	2	255,664
	February	7,267	2,715	37.4	6,941	160	2	251,346
	March	7,221	2,733	37.8	6,654	168	1	239,162
	April	7,068	2,786	39.4	6,765	156	1	235,192
	May	7,203	2,751	38.2	6,786	145	2	227,193
	June	7,187	2,787	38.8	6,987	261	1	229,349
	July	6,850	2,789	40.7	7,006	222	1	241,536
	August	7,332	2,970	40.5	6,882	147	1	232,742
	September	6,878	2,815	40.9	6,626	135	1	229,608
	October	7,022	2,802	39.9	6,483	150	1	218,066
	November	6,771	2,928	43.2	6,654	182	1	220,486
	December	6,690	2,890	43.2	6,962	263	1	237,503
	AVERAGE	**7,030**	**2,798**	**39.8**	**6,835**	**181**	**1**	
1980	January	6,335	2,718	42.9	6,977	141	1	262,134
	February	6,594	2,969	45.0	6,851	153	(s)	274,422
	March	6,411	3,032	47.3	6,512	154	(s)	282,688
	April	R6,799	3,021	R44.5	R6,268	R152	1	R271,729
	May†	6,695	2,980	44.5	6,294	132	1	262,959
	June†	R6,645	3,099	46.6	R6,552	R147	1	R264,572
	July†	*6,884*	NA	NA	*6,635*	*90*	NA	*263,514*
	AVERAGE	**6,623**	**NA**	**NA**	**6,583**	**138**	**NA**	

Geographic coverage: the 50 United States and District of Columbia.
[1]See Definitions.
Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
†Preliminary data. R=Revised data. NA=Not available.
(s)=Less than 500 barrels per day.
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.
Sources: •See Sources on the last page of this section.

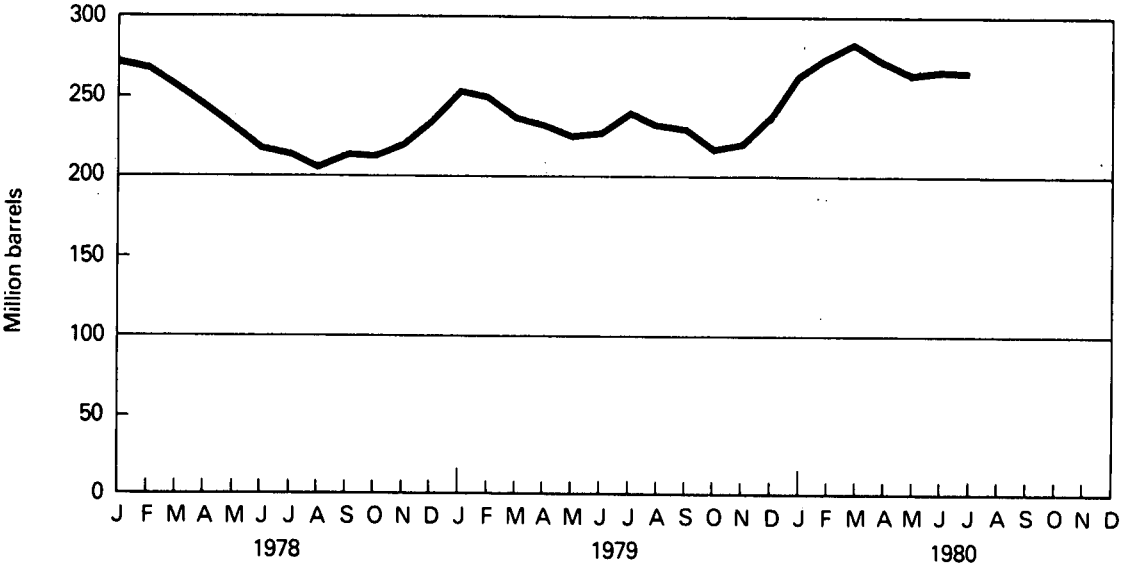
Petroleum

Motor Gasoline

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Jet Fuel

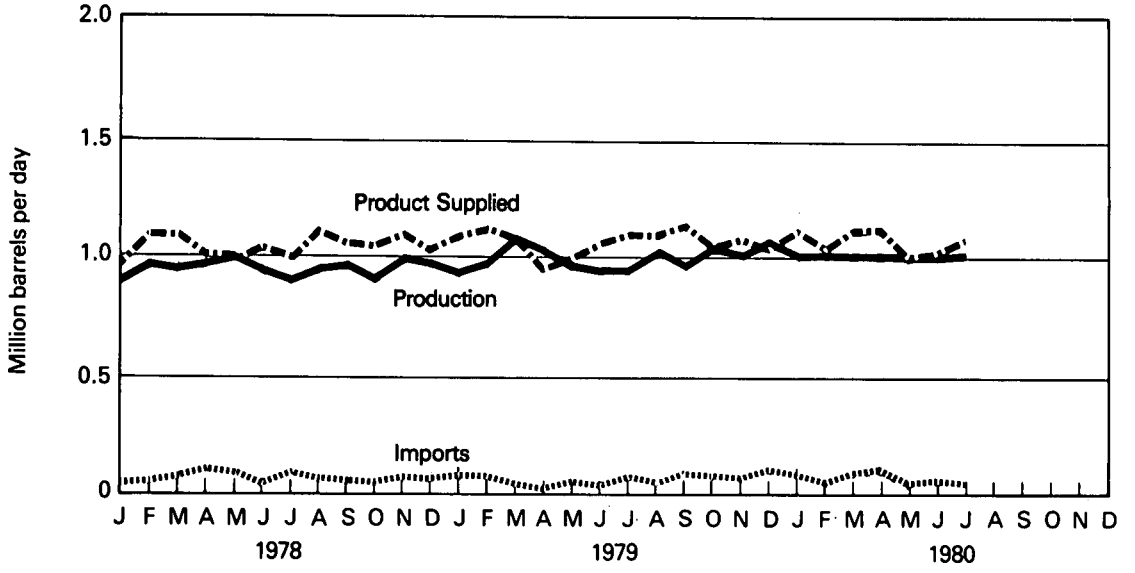
		Product Supplied	Refinery Production	Imports	Exports	Stocks
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**1,059**	**859**	**212**	**4**	**‡28,544**
1974	**AVERAGE**	**993**	**836**	**163**	**3**	**‡29,435**
1975	**AVERAGE**	**1,001**	**871**	**133**	**2**	**‡30,380**
1976	**AVERAGE**	**987**	**918**	**76**	**2**	**‡32,085**
1977	**AVERAGE**	**1,039**	**973**	**75**	**2**	**‡34,548**
1978	**AVERAGE**	**1,057**	**970**	**86**	**1**	**‡33,665**
1979	January	1,100	950	97	1	31,993
	February	1,137	996	88	2	30,449
	March	1,088	1,097	61	1	32,607
	April	961	1,040	43	1	36,217
	May	1,008	976	75	1	37,547
	June	1,073	956	57	1	35,741
	July	1,105	964	90	1	34,152
	August	1,088	1,040	49	1	34,156
	September	1,105	958	84	1	32,251
	October	1,050	1,046	90	(s)	34,891
	November	1,070	1,027	83	1	36,058
	December	1,095	1,068	108	2	38,520
	AVERAGE	**1,073**	**1,011**	**77**	**1**	
1980	January	1,101	1,004	95	1	38,412
	February	1,072	1,026	43	2	38,258
	March	1,116	1,031	99	2	38,661
	April	R1,105	1,023	R107	3	R39,339
	May†	991	1,002	54	2	41,299
	June†	R1,027	R1,002	R64	1	R42,414
	July†	*1,071*	*1,013*	*54*	NA	*42,024*
	AVERAGE	**1,069**	**1,014**	**74**	**NA**	

Geographic coverage: the 50 United States and District of Columbia.
Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
†Preliminary data. R = Revised data. NA = Not available.
(s) = Less than 500 barrels per day.
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.
Sources: •See Sources on the last page of this section.

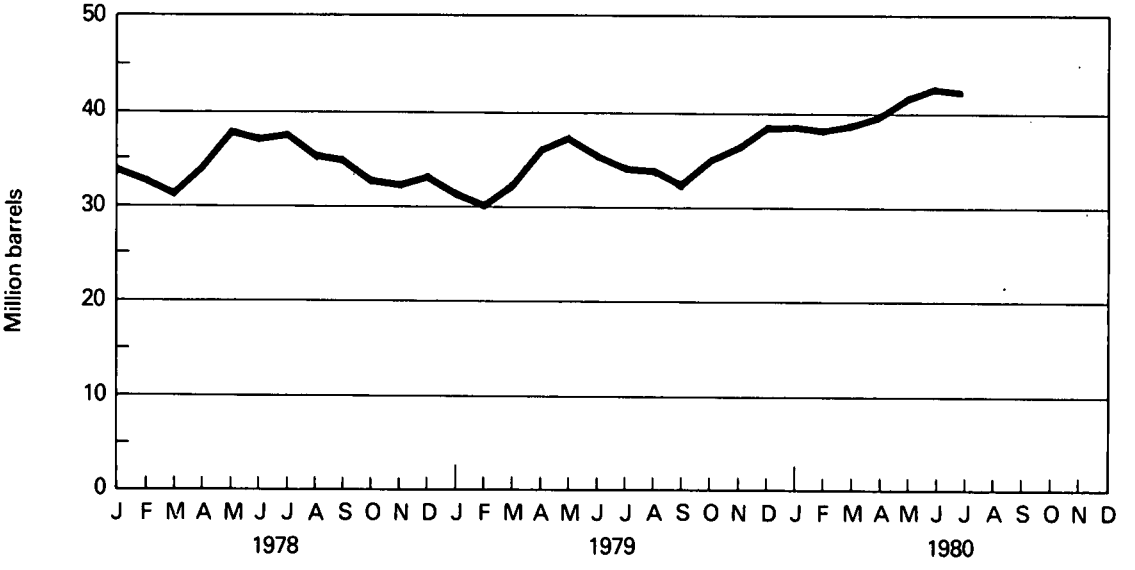
Petroleum

Jet Fuel

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Distillate Fuel Oil

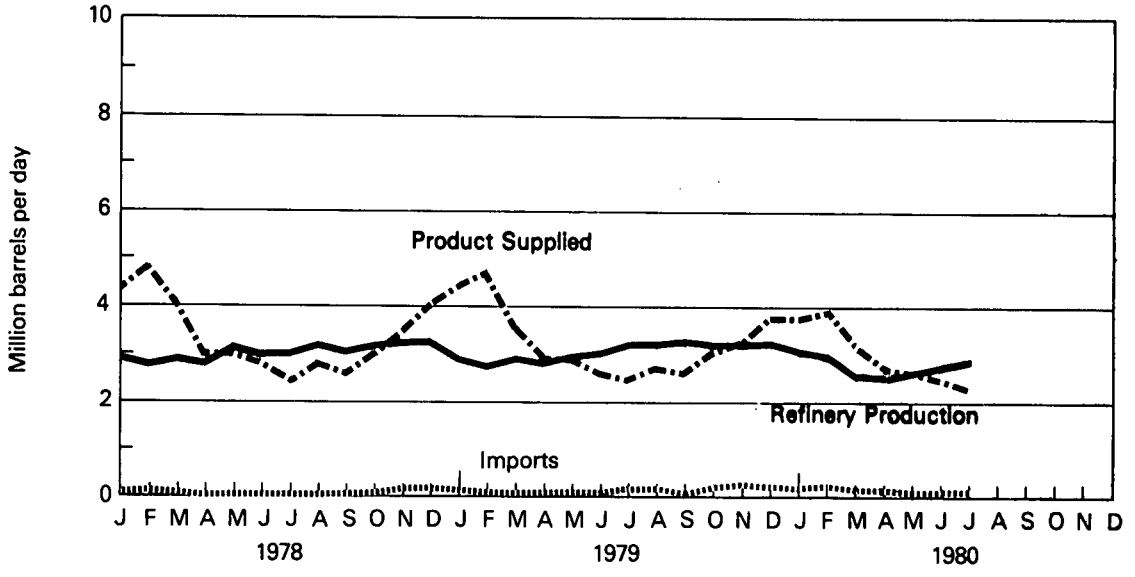
		Product Supplied	Refinery Production[1]	Imports	Exports	Stocks[1]
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**3,092**	**2,820**	**392**	**9**	**‡196,421**
1974	**AVERAGE**	**2,948**	**2,668**	**289**	**2**	**‡200,029**
1975	**AVERAGE**	**2,851**	**2,653**	**155**	**1**	**‡208,787**
1976	**AVERAGE**	**3,133**	**2,924**	**146**	**1**	**‡185,948**
1977	**AVERAGE**	**3,352**	**3,277**	**250**	**1**	**‡250,260**
1978	**AVERAGE**	**3,432**	**3,167**	**173**	**3**	**‡216,439**
1979	January	4,543	3,005	226	1	175,695
	February	4,792	2,863	196	7	127,034
	March	3,627	2,992	176	5	112,728
	April	3,006	2,935	149	4	114,989
	May	2,989	3,064	185	2	123,059
	June	2,707	3,137	180	1	141,365
	July	2,552	3,305	219	9	171,243
	August	2,772	3,332	217	2	195,339
	September	2,659	3,368	126	3	220,328
	October	3,104	3,248	211	10	231,083
	November	3,311	3,257	235	(s)	236,554
	December	3,722	3,238	229	1	228,706
	AVERAGE	**3,308**	**3,147**	**196**	**4**	
1980	January	3,732	3,023	179	7	212,126
	February	3,706	2,778	221	8	191,464
	March	3,171	2,564	179	19	177,659
	April	R2,630	R2,462	R147	2	R177,006
	May†	2,519	2,619	105	1	182,979
	June†	R2,404	R2,720	R94	(s)	R194,794
	July†	*2,217*	*2,815*	*95*	NA	*214,639*
	AVERAGE	**2,908**	**2,712**	**145**	**NA**	

Geographic coverage: the 50 United States and District of Columbia.
[1]See Definitions.
Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
†Preliminary data. R=Revised data. NA=Not available.
(s)=Less than 500 barrels per day.
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.
Sources: •See Sources on the last page of this section.

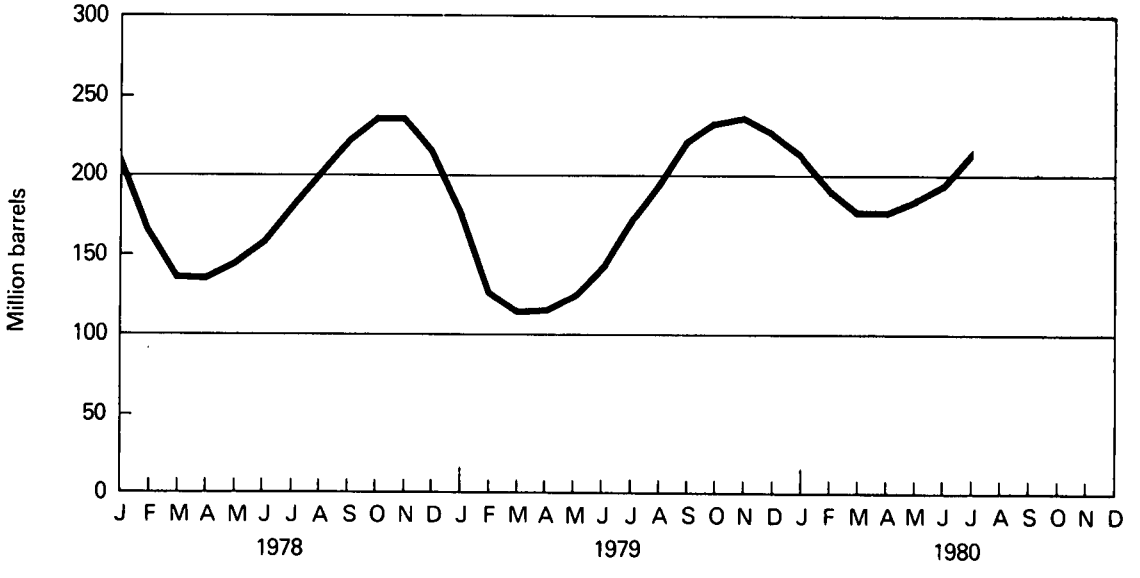
Petroleum

Distillate Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Residual Fuel Oil

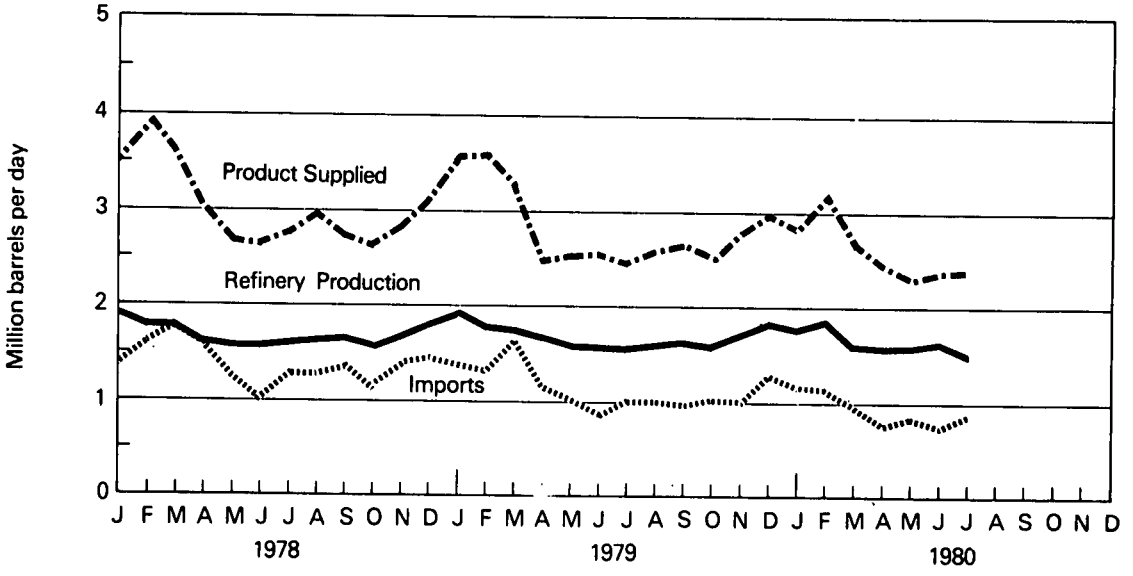
		Product Supplied	Refinery Production	Imports	Exports	Stocks
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**2,822**	**971**	**1,853**	**23**	**‡53,480**
1974	**AVERAGE**	**2,639**	**1,070**	**1,587**	**14**	**‡59,694**
1975	**AVERAGE**	**2,462**	**1,235**	**1,223**	**15**	**‡74,126**
1976	**AVERAGE**	**2,801**	**1,377**	**1,413**	**12**	**‡72,344**
1977	**AVERAGE**	**3,071**	**1,754**	**1,359**	**6**	**‡89,993**
1978	**AVERAGE**	**3,023**	**1,667**	**1,355**	**13**	**‡90,194**
1979	January	3,550	1,907	1,371	6	81,997
	February	3,589	1,792	1,300	10	68,229
	March	3,238	1,718	1,642	14	71,968
	April	2,487	1,643	1,134	2	81,002
	May	2,519	1,588	1,051	8	84,855
	June	2,552	1,534	880	8	80,893
	July	2,451	1,576	1,065	18	86,631
	August	2,582	1,590	1,023	14	87,542
	September	2,617	1,638	979	2	87,775
	October	2,553	1,611	1,042	8	90,896
	November	2,793	1,742	1,037	5	90,636
	December	2,976	1,879	1,272	16	95,859
	AVERAGE	**2,822**	**1,684**	**1,150**	**9**	
1980	January	2,865	1,766	1,132	5	97,153
	February	3,099	1,770	1,119	17	90,959
	March	2,650	1,581	971	2	88,269
	April	R2,434	R1,591	R769	[1]40	R85,219
	May†	2,289	1,577	813	20	87,596
	June†	R2,363	R1,612	R745	14	R87,356
	July†	*2,396*	*1,508*	*872*	NA	*81,854*
	AVERAGE	**2,582**	**1,628**	**917**	**NA**	

Geographic coverage: the 50 United States and District of Columbia.
[1]In April 1980, residual fuel oil exports increased due to shipments of high sulfur fuel to a Caribbean refinery to be desulfurized and returned to the United States.
Estimated data in italics. These are likely to be revised next month.
‡Total as of December 31.
†Preliminary data. R=Revised data. NA=Not available.
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.
Sources: •See Sources on the last page of this section.

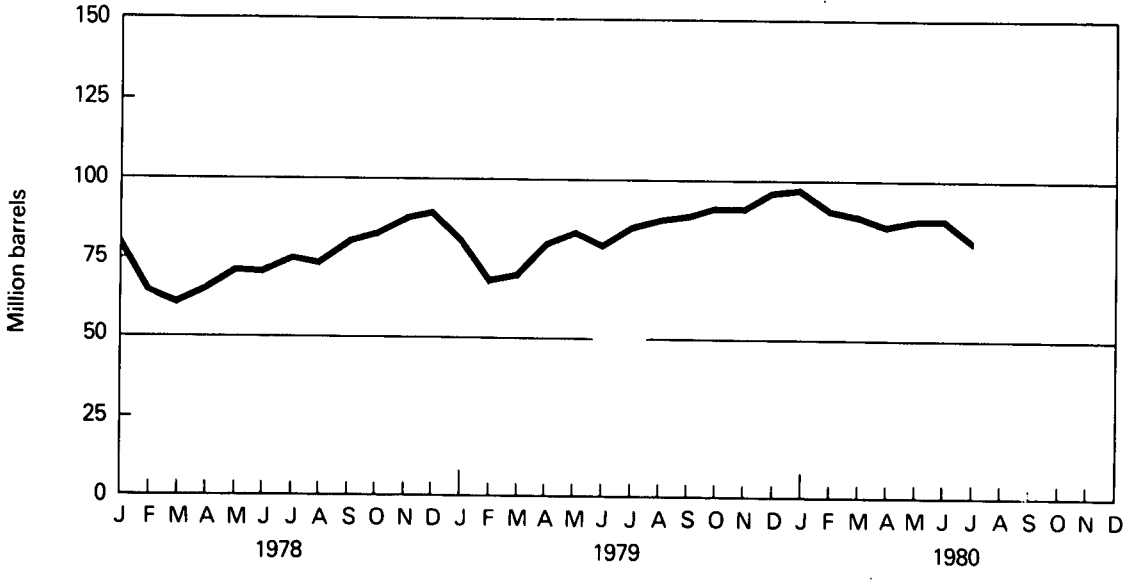
Petroleum

Residual Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Natural Gas Plant Liquids, Including Liquefied Refinery Gases

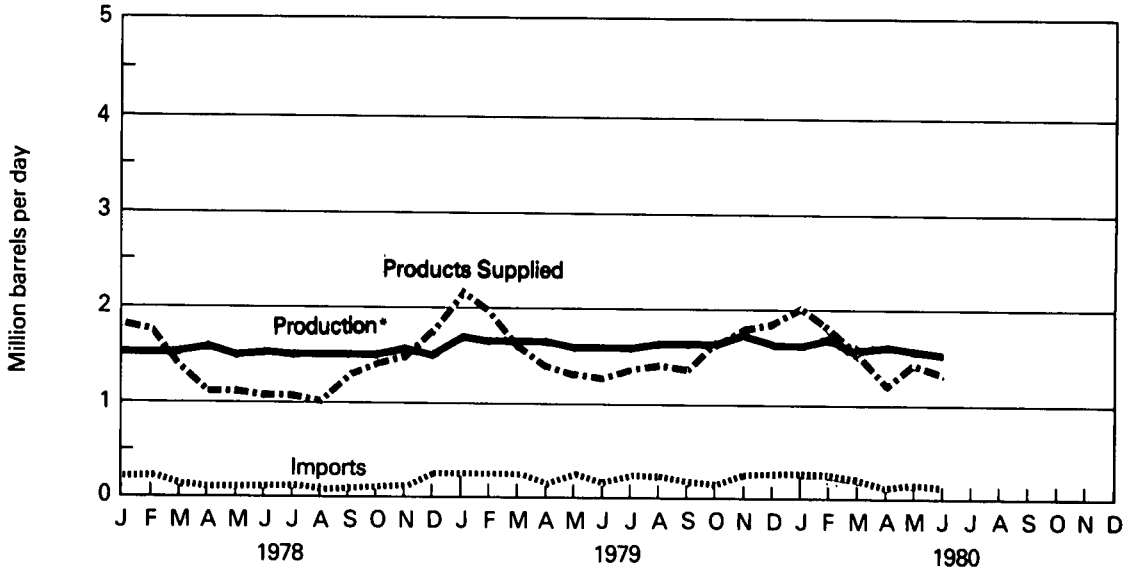
		Products Supplied[1]	Production[1]		Used at Refineries[1]	Imports	Stocks[1]
			At processing plants	At refineries			
		Thousand barrels per day					Thousand barrels
1973	**AVERAGE**	**1,454**	**1,738**	**375**	**815**	**239**	**‡106,659**
1974	**AVERAGE**	**1,422**	**1,688**	**338**	**746**	**212**	**‡120,175**
1975	**AVERAGE**	**1,352**	**1,633**	**311**	**710**	**185**	**‡132,653**
1976	**AVERAGE**	**1,407**	**1,603**	**340**	**725**	**196**	**‡124,518**
1977	**AVERAGE**	**1,427**	**1,618**	**352**	**673**	**203**	**‡144,902**
1978	**AVERAGE**	**1,416**	**1,567**	**355**	**639**	**139**	**[2]‡140,052**
1979	January	2,222	1,748	337	763	256	124,138
	February	1,998	1,703	325	757	252	110,412
	March	1,654	1,728	333	718	257	107,759
	April	1,449	1,708	354	679	160	110,216
	May	1,357	1,647	389	655	255	118,505
	June	1,316	1,641	382	606	175	126,468
	July	1,410	1,643	361	565	240	134,523
	August	1,477	1,614	363	599	236	138,491
	September	1,376	1,612	323	584	194	143,336
	October	1,669	1,663	321	596	193	140,215
	November	1,806	1,738	323	713	268	133,925
	December	1,876	1,643	343	630	273	125,597
	AVERAGE	**1,633**	**1,674**	**346**	**655**	**230**	
1980	January	2,076	1,647	338	698	282	110,378
	February	1,843	1,651	354	572	265	105,389
	March	1,573	1,569	342	518	224	106,070
	April	R1,212	R1,626	R328	R507	R149	R117,006
	May	1,397	1,583	371	584	176	122,000
	June	1,338	1,551	366	527	159	128,000
	AVERAGE	**1,572**	**1,604**	**350**	**568**	**209**	

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 7 and Definitions.
[2]EIA natural gas plant coverage was expanded in January 1979 to include approximately 80 more plants. Calculated on the new basis, December 1978 closing stocks of natural gas plant liquids totaled 144,500 thousand barrels.
‡Total as of December 31. R=Revised data.
Sources: • 1973 through April 1980 are shown on last page of this section.
• May 1980 through June 1980: EIA estimates based on historical analyses.
• Sources for the *Energy Data Reports* are shown on the last page of this section.

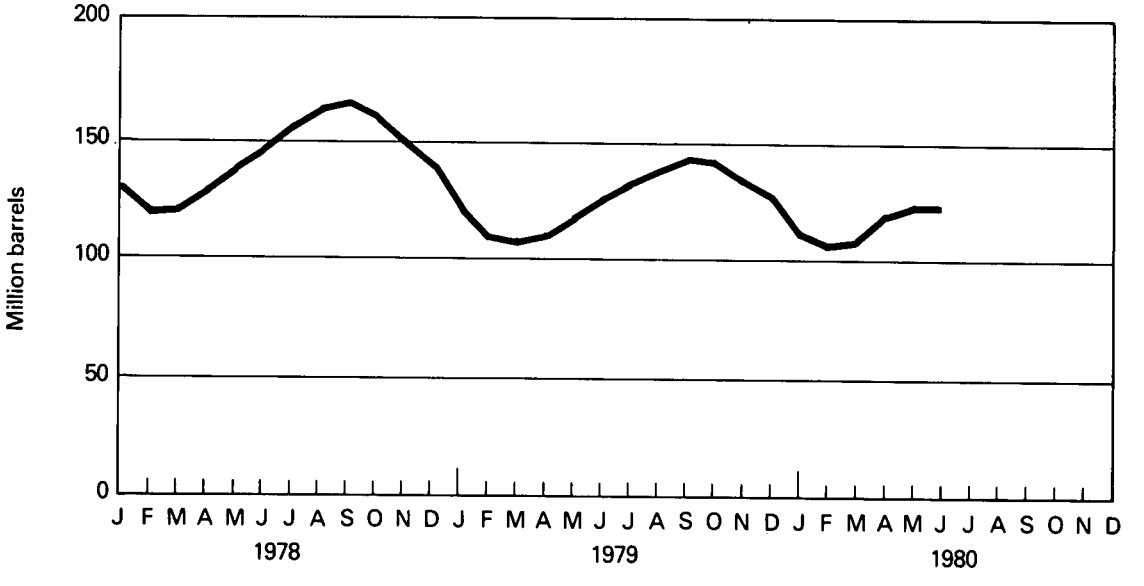
Petroleum

Natural Gas Plant Liquids

Products Supplied, Production and Imports



Stocks



*At processing plants.

Petroleum

Petroleum Primary Supply Balance

	1979				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
	Thousand barrels per day				
Primary Supply					
Crude oil and lease condensate production	8,514	8,510	8,507	8,601	8,533
Natural gas plant liquids production	1,727	1,665	1,623	1,681	1,674
Other hydrocarbon supply	32	38	64	70	51
Crude oil imported[1]	6,584	6,362	6,537	6,430	6,478
Petroleum products imported[2]	2,228	1,725	1,771	2,013	1,933
Total new primary supply	19,085	18,300	18,503	18,794	18,669
Processing gain	458	498	567	560	521
Stock change—all oils[3]	−1,512	+707	+1,061	+370	+164
Total net primary supply	21,055	18,091	18,009	18,984	19,026
Unaccounted for crude oil[4]	−246	−38	−30	−105	−104
Disposition					
Crude oil and petroleum products exported	494	466	457	473	472
Crude oil losses	15	15	16	15	15
Total products supplied[5]	20,300	17,572	17,506	18,391	18,434
Total disposition	20,809	18,054	17,978	18,879	18,922

	1980	
	1st Qtr.	2nd Qtr.†
Primary Supply		
Crude oil and lease condensate production	R8,685	8,700
Natural gas plant liquids production	R1,622	1,587
Other hydrocarbon supply	R56	50
Crude oil imported[1]	R6,029	5,344
Petroleum products imported[2]	R1,872	1,379
Total new primary supply	R18,263	17,060
Processing gain	R629	570
Stock change—all oils[3]	R−2	+677
Total net primary supply	R18,895	16,953
Unaccounted for crude oil[4]	R−175	+170
Disposition		
Crude oil and petroleum products exported	R547	568
Crude oil losses	R15	15
Total products supplied[5]	R18,157	16,540
Total disposition	R18,720	17,123

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Includes crude oil imported for the Strategic Petroleum Reserve.
[2]Includes plant condensate, natural gasoline and unfinished oils.
[3]Includes petroleum stored in the Strategic Petroleum Reserve.
[4]Balancing item resulting from statistical inconsistencies.
[5]Includes international bunkers.
†Preliminary data. R = Revised data.
Sources: • 1979 through the 1st Quarter 1980: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Monthly."
- 2nd Quarter 1980: EIA, "Petroleum Statement, Monthly" and "Monthly Petroleum Statistics Report" (except domestic production and exports).
- Exports for May 1980 through June 1980 are preliminary data based on the EIA-87 and the Bureau of the Census publications EM 522 and EM 594.
- Domestic production for May 1980 through June 1980 are estimates based on historical data from State Conservation Agencies.
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are shown on last page of this section.

Sources for the Petroleum Section

- 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual" (except unleaded gasoline) and "PAD Districts Supply/Demand, Annual."
- Unleaded gasoline — Energy Information Administration (EIA) "Monthly Petroleum Statistics Report."
- 1977 and 1978: EIA *Energy Data Reports,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
- January 1979 through April 1980: EIA *Energy Data Reports,* "Petroleum Statement, Monthly" and "PAD Districts Supply/Demand, Monthly."
- Penultimate and preceding months: EIA "Monthly Petroleum Statistics Report"(except domestic production and exports).
- Domestic production for the 3 most recent months are EIA estimates based on historical data from State Conservation Agencies.
- Exports for penultimate and preceding month are preliminary data based on Form EIA-87 and the Bureau of the Census publications EM 522 and EM 594.
- Data for the most recent month are estimates based on EIA weekly data.
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: EIA Forms EIA-64 (Natural Gas Liquids Operations Report), EIA-87 (Refinery Report), EIA-88 (Bulk Terminals Report), EIA-89 (Pipeline Report) and EIA-90 (Crude Oil Stock Report); Economic Regulatory Administration (ERA) Forms ERA-60 (Imports) and FEA P133 (Imports from Puerto Rico); Bureau of the Census publications IM 145 (Imports), EM 522 (Exports), and EM 594 (Exports); and State Conservation Agencies (Crude Production).

Part 4 Natural Gas

Natural Gas

Consumption of natural gas in the United States during July 1980 was an estimated 1.4 trillion cubic feet (Tcf). This was 3.8 percent higher than in June 1980 and 4.3 percent greater than in July 1979. Estimated consumption during the first 7 months of 1980 totaled 12.3 Tcf, 1.2 percent higher than during the period January through July 1979.

Production of dry natural gas in July 1980 was an estimated 1.6 Tcf, 2.5 percent greater than in June 1980 and approximately 2.3 percent higher than in July 1979. Output during the first 7 months of 1980 totaled 11.5 Tcf, 1.7 percent above that of the comparable 1979 period.

Imports of natural gas in July 1980 were an estimated 64 billion cubic feet (Bcf), 38.5 percent lower than in the previous July. There were no U.S. receipts of liquefied natural gas (LNG) from Algeria during July 1980 due to the continuing impasse in negotiations on a new pricing formula. Imports of natural gas during the period January through July 1980 totaled an estimated 632 Bcf, 13.1 percent lower than during the first 7 months of 1979.

Domestic producer sales to major interstate pipelines in May 1980 totaled 859 Bcf, 2.1 percent below sales for the previous May. Total sales during the first 5 months of 1980 were 4.6 Tcf, 5.3 percent above those for the comparable 1979 period.

Stocks of working gas* in underground natural gas storage reservoirs at the end of July 1980 totaled almost 2.6 Tcf, 12.2 percent above those available a year earlier. Net injections into storage during July 1980 were 284 Bcf, 17.0 percent lower than during the previous July.

*Gas available for withdrawal.

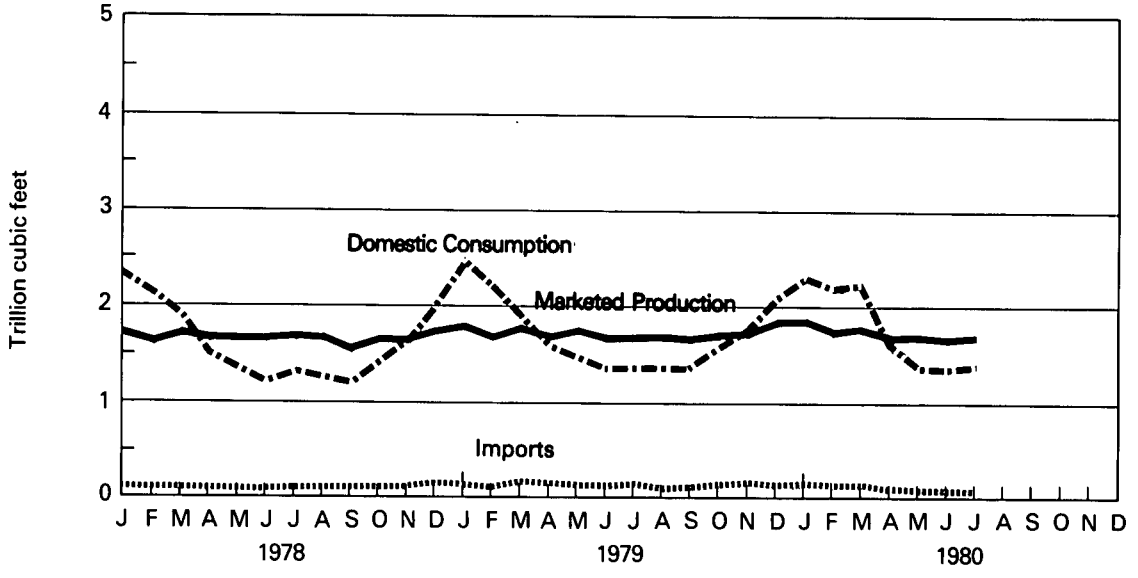
Natural Gas

		Domestic Consumption	Production		Domestic Producer Sales to Major Interstate Pipelines	Imports	Exports
			Marketed	Dry			
		Billion cubic feet					
1973	**TOTAL**	**22,049**	**22,648**	**21,731**	**12,067**	**1,033**	**77**
1974	**TOTAL**	**21,223**	**21,601**	**20,714**	**11,462**	**959**	**77**
1975	**TOTAL**	**19,538**	**20,109**	**19,237**	**10,652**	**953**	**73**
1976	**TOTAL**	**19,946**	**19,952**	**19,098**	**10,140**	**964**	**65**
1977	**TOTAL**	**19,521**	**20,025**	**19,163**	**9,883**	**1,011**	**56**
1978	**TOTAL**	**19,627**	**19,974**	**19,122**	**9,911**	**966**	**53**
1979	January	2,417	1,761	1,686	890	102	6
	February	2,195	1,646	1,576	819	97	5
	March	1,876	1,749	1,674	907	113	5
	April	1,586	1,682	1,610	871	106	5
	May	1,427	1,712	1,639	877	104	5
	June	1,314	1,646	1,576	812	101	5
	July	1,323	1,654	1,583	851	104	6
	August	1,337	1,682	1,610	880	97	4
	September	1,322	1,626	1,557	820	98	5
	October	1,550	1,696	1,624	888	107	3
	November	1,759	1,713	1,640	921	114	3
	December	2,057	1,806	1,729	960	110	4
	TOTAL	**20,163**	**20,373**	**19,504**	**10,496**	**1,253**	**56**
1980	January	2,280	1,817	1,739	981	119	5
	February	2,193	1,705	1,632	898	111	3
	March	2,179	1,827	1,749	960	108	5
	April	1,569	1,667	1,596	897	91	6
	May	R1,356	R1,692	R1,620	859	R70	6
	June	1,330	1,650	1,580	NA	69	5
	July	1,380	1,690	1,620	NA	64	6
	TOTAL (Year-to-date)	**12,287**	**12,048**	**11,536**	**NA**	**632**	**36**

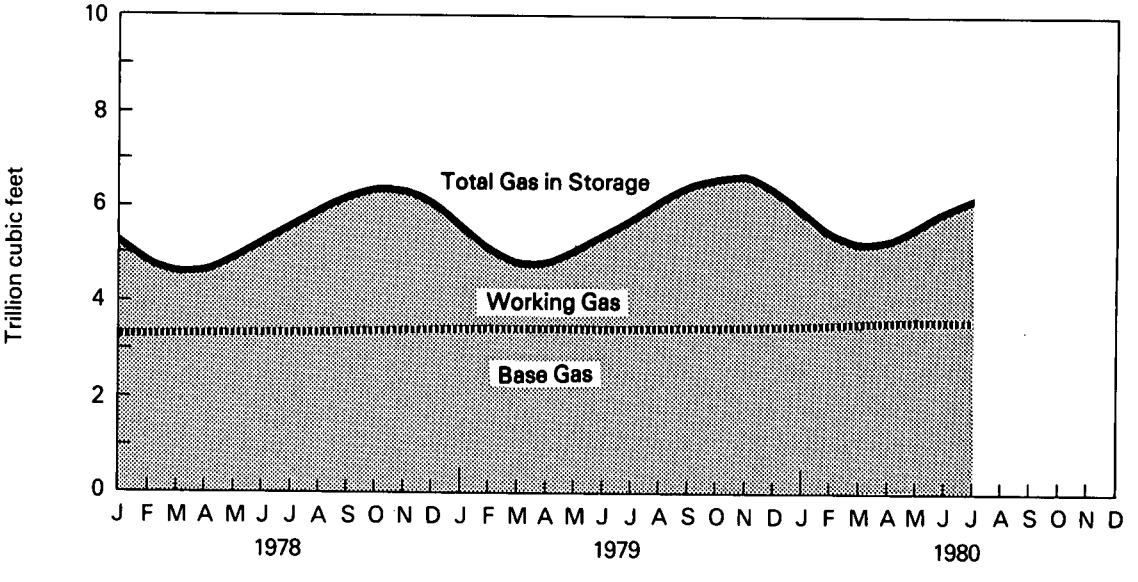
Geographic coverage: the 50 United States and District of Columbia.
R = Revised data. NA = Not available.
Sources: • Domestic Consumption — 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook,* "Natural Gas" chapter; January 1977 forward: EIA estimates based on a supply/disposition balance calculation.
- Production — State reports to the Interstate Oil Compact Commission, data from the United States Geological Survey and EIA estimates for states that do not report monthly data on a regular or timely basis.
- Domestic Producer Sales — Federal Power Commission (FPC) Form 11, "Natural Gas Pipeline Company Monthly Statement."
- Imports — 1973 through 1979: FPC Form 14, "Imports and Exports of Natural Gas"; January 1980 forward: EIA estimates based on import data from FPC Form 11.
- Exports — 1973 through 1979: FPC Form 14; January 1980 forward: EIA estimates based primarily on historical data reported on FPC Form 14.

Natural Gas

Domestic Consumption, Marketed Production and Imports



Gas in Storage



Natural Gas

Natural Gas in Underground Storage[1]

		Total Gas in Storage	Base Gas	Working Gas	Storage Injections	Storage Withdrawals	Net Storage Injections[2]
				Billion cubic feet			
1975		**‡5,358**	**‡3,150**	**‡2,208**	**NA**	**NA**	**NA**
1976		**‡5,231**	**‡3,310**	**‡1,921**	**1,952**	**2,074**	**(122)**
1977		**‡5,844**	**‡3,377**	**‡2,467**	**2,390**	**1,767**	**623**
1978		**‡5,999**	**‡3,459**	**‡2,540**	**2,330**	**2,176**	**154**
1979	January	5,348	3,458	1,890	21	673	(652)
	February	4,806	3,457	1,349	23	566	(543)
	March	4,695	3,459	1,236	94	205	(111)
	April	4,762	3,427	1,335	182	73	109
	May	5,057	3,438	1,619	308	13	295
	June	5,399	3,449	1,950	350	8	342
	July	5,743	3,459	2,284	361	19	342
	August	6,095	3,467	2,628	362	12	350
	September	6,401	3,481	2,920	326	14	312
	October	6,563	3,484	3,079	196	34	162
	November	6,541	3,496	3,045	108	132	(24)
	December	6,297	3,537	2,760	53	292	(239)
1980	January	5,865	3,535	2,330	21	465	(444)
	February	5,397	3,536	1,861	24	493	(469)
	March	5,131	3,542	1,589	41	307	(266)
	April	5,227	3,547	1,680	174	78	96
	May	5,538	3,553	1,985	319	8	311
	June	5,841	3,560	2,281	316	13	303
	July	6,127	3,564	2,563	302	18	284

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 9.
[2]Net Storage Injections = storage injection minus storage withdrawal. Parentheses indicate withdrawal greater than injection.
‡Total as of December 31.
NA = Not available.
Source: • Energy Information Administration Form 191 and Federal Power Commission Form 8, "Underground Gas Storage Report."

Part 5 Oil and Gas Resource Development

Oil and Gas Resource Development

The rotary rig count increased to 2,953 in July 1980, up from the 2,850 count of the month before. This represents a 41.0 percent increase over the July 1979 count of 2,094 rotary rigs.

Wells completed in July 1980 totaled 4,438. This is a 18.2 percent increase from the number completed during July 1979.

Oil well completions in July 1980 (2,068 well completions) were up 34.7 percent from July 1979 (1,535 completions). In July 1980, 1,037 gas wells were completed, 4.9 percent below the July 1979 level. Dry holes increased 17.9 percent (1,333 as compared to 1,131 during the previous July). Total footage drilled increased 28.0 percent (21.6 million feet as compared to 16.9 million feet the year before).

There were 42 crews engaged in seismic exploratory work offshore in July 1980. This is a 35.5 percent increase from the July 1979 level. July 1980 onshore seismic activity attained a new high of 514 crews, 36.7 percent higher than activity during July 1979.

Oil and Gas Resource Development

		Rotary Rigs in Operation		Exploratory and Development Wells Completed[1,2]				Total Footage of Wells Completed[1]
		Monthly average		Oil	Gas	Dry	Total	Thousand feet
1973	**AVERAGE**	**1,194**	**TOTAL**	**9,902**	**6,385**	**10,305**	**26,592**	**136,391**
1974	**AVERAGE**	**1,475**	**TOTAL**	**12,784**	**7,240**	**11,674**	**31,698**	**150,551**
1975	**AVERAGE**	**1,660**	**TOTAL**	**16,408**	**7,580**	**13,247**	**37,235**	**174,434**
1976	**AVERAGE**	**1,656**	**TOTAL**	**17,059**	**9,085**	**13,621**	**39,765**	**181,780**
1977	**AVERAGE**	**2,001**	**TOTAL**	**18,912**	**11,378**	**14,692**	**44,982**	**210,848**
1978	**AVERAGE**	**2,259**	**TOTAL**	**17,775**	**13,064**	**16,218**	**47,057**	**227,110**
1979	January	2,199		1,372	996	1,278	3,646	17,963
	February	2,064		1,463	1,139	1,076	3,678	18,017
	March	1,970		1,544	1,343	1,372	4,259	21,175
	April	1,943		1,135	1,085	926	3,146	16,019
	May	1,960		1,335	1,024	1,166	3,525	17,451
	June	1,999		1,696	1,199	1,252	4,147	19,520
	July	2,094		R1,535	R1,090	R1,131	R3,756	R16,910
	August	2,222		1,523	1,246	1,368	4,137	19,565
	September	2,284		1,819	1,374	1,428	4,621	22,590
	October	2,380		1,623	1,123	1,287	4,033	18,840
	November	2,460		1,867	1,273	1,496	4,636	21,846
	December	2,552		2,383	1,739	1,886	6,008	27,010
	AVERAGE	**2,177**	**TOTAL**	**19,383**	**14,681**	**15,752**	**49,816**	**238,659**
1980	January	2,571		1,440	781	1,243	3,464	16,438
	February	2,613		1,632	1,007	1,311	3,950	18,988
	March	2,658		2,383	1,839	1,547	5,769	27,665
	April	2,682		1,836	1,120	1,168	4,124	18,884
	May	2,797		2,061	1,080	1,202	4,343	20,034
	June	2,850		2,232	1,296	1,463	4,991	24,640
	July	2,953		2,068	1,037	1,333	4,438	21,649
	AVERAGE	**2,732**	**TOTAL**	**13,665**	**8,143**	**9,255**	**31,063**	**148,255**

Geographic coverage: the 50 United States and District of Columbia.
[1]Excludes service wells and stratigraphic and core tests.
[2]Data reported for the first 2 months of each quarter cover 4 weeks of drilling activity, and data for the last month of the quarter cover 5 weeks of drilling activity.
R = Revised data.
Note: Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.
Sources: • Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running — By State."
• Wells: American Petroleum Institute (API), "Monthly Drilling Report" and "Quarterly Review of Drilling Statistics for the United States."

Oil and Gas Resource Development

		Crews Engaged in Seismic Exploration			Line-Miles of Seismic Exploration		
		Offshore	Onshore	Total	Offshore[1]	Onshore[1]	Total[1]
		Monthly average			Annual total		
1973	**AVERAGE**	**23**	**227**	**250**	**258,944**	**127,160**	**386,104**
1974	**AVERAGE**	**31**	**274**	**305**	**341,784**	**158,629**	**500,413**
1975	**AVERAGE**	**30**	**254**	**284**	**309,283**	**150,694**	**459,977**
1976	**AVERAGE**	**25**	**237**	**262**	**226,303**	**142,926**	**369,229**
1977	**AVERAGE**	**27**	**281**	**308**	**124,676**	**120,072**	**244,748**
1978	**AVERAGE**	**25**	**327**	**352**	**174,607**	**135,899**	**310,506**
1979	January	28	327	355			
	February	29	321	350			
	March	32	332	364			
	April	30	330	360			
	May	28	355	383			
	June	32	372	404			
	July	31	376	407			
	August	31	393	424			
	September	30	403	433			
	October	29	407	436			
	November	31	408	439			
	December	31	419	450			
	AVERAGE	**30**	**370**	**400**			
1980	January	29	439	468			
	February	29	440	469			
	March	29	448	477			
	April	31	465	496			
	May	34	468	502			
	June	39	496	535			
	July	42	514	556			
	AVERAGE	**33**	**467**	**500**			

Geographic coverage: the 50 United States and District of Columbia.
[1]Monthly data not available.
Sources: • Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports published in their bulletin, *Geophysics*.

Coal

Coal production in June 1980 was 73.3 million tons, 3.7 percent above the 70.7 million tons produced in June 1979. Production in the first 6 months of 1980 totaled 423.4 million tons, 10.4 percent higher than production in the first 6 months of 1979.

Imports of coal in June 1980 totaled 0.1 million tons, 0.1 million tons below the amount imported during June 1979. Exports of coal in June 1980 totaled 8.9 million tons, 2.9 million tons more than the amount exported during June 1979. During June, coal exports were principally to Japan (26.5 percent) and Canada (23.6 percent).

Electric utility coal consumption in June 1980 totaled 45.8 million tons, 1.8 million tons more than consumption in June 1979. Coke plants, the second largest coal consuming sector, used 5.3 million tons in June 1980, 17.7 percent below the amount consumed in June 1979.

Electric utility stockpiles increased from 136.6 million tons at the end of June 1979 to 179.0 million tons at the end of June 1980. Coal stocks held by coke plants decreased from 10.1 million tons at the end of June 1979 to 9.9 million tons at the end of June 1980.

Note: All 1979 coal data are final. Total coal production in 1979 was revised from 775.8 million tons to 781.1 million tons based on reports from selected State agencies and the Energy Information Administration's survey on the distribution of bituminous coal and lignite (Form EIA–6). In the "Other Industrial" sector, minor adjustments were made to monthly consumption and stock data in the first 9 months. Total consumption in the "Other Industrial" sector in the fourth quarter 1979 was revised from 16.2 million tons to 18.3 million tons, and inventories at the end of December were revised from 9.8 million tons to 11.8 million tons based on the methodology described under Explanatory Note 10.

Coal

Bituminous, Lignite, and Anthracite

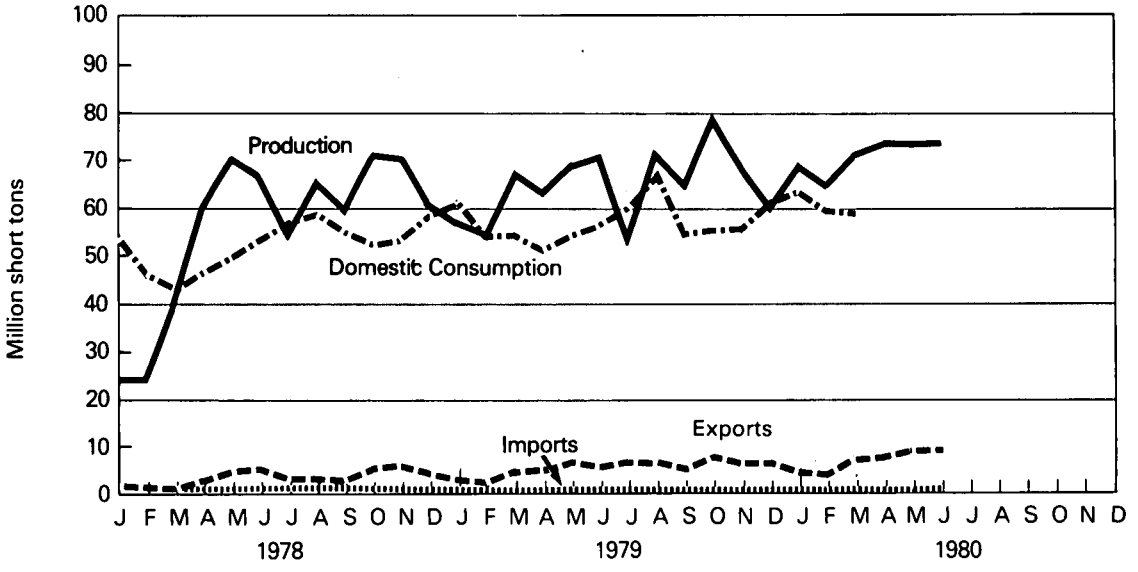
		Production	Domestic Consumption	Imports[1]	Exports[2,3]	Stocks[4]
				Thousand short tons		
1973	**TOTAL**	**598,568**	**562,584**	**127**	**53,587**	**104,335**
1974	**TOTAL**	**610,023**	**558,402**	**2,080**	**60,661**	**96,323**
1975	**TOTAL**	**654,641**	**562,641**	**940**	**66,309**	**128,050**
1976	**TOTAL**	**684,913**	**603,791**	**1,203**	**60,021**	**134,438**
1977	**TOTAL**	**697,205**	**625,290**	**1,647**	**54,312**	**157,098**
1978	**TOTAL**	**670,164**	**625,225**	**2,953**	**40,691**	**145,551**
1979	January	R57,794	R61,199	186	3,605	R136,425
	February	R54,810	R54,463	252	2,726	R129,042
	March	R66,775	R54,864	123	4,642	R134,044
	April	R63,937	R51,601	161	5,268	R142,328
	May	R69,488	R54,026	112	6,215	R151,269
	June	R70,698	R56,025	209	5,975	R155,406
	July	R53,595	R60,397	88	6,297	R148,265
	August	R71,616	R60,750	320	6,248	R152,787
	September	R64,590	R54,219	180	5,146	R158,016
	October	R78,563	R55,719	152	7,446	R169,633
	November	R68,506	R55,997	130	6,170	R177,722
	December	R60,762	R61,263	146	6,278	R181,646
	TOTAL	**R781,134**	**R680,524**	**2,059**	**66,016**	
1980	January	R68,276	63,615	121	4,460	179,424
	February	R64,678	59,761	193	4,041	176,772
	March	R70,326	58,904	93	5,633	176,637
	April	73,645	NA	63	7,563	NA
	May	73,130	NA	207	8,597	NA
	June	73,295	NA	104	8,899	NA
	TOTAL (Year-to-date)	**423,350**	**NA**	**781**	**39,193**	**NA**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
See Explanatory Note 10 for methodology used to calculate domestic consumption from 1978 forward.
[1]Bituminous coal is the only type of coal imported during the years shown above.
[2]Data include bituminous coal and anthracite only from 1973 through 1979. 1980 includes lignite (about 4,000 short tons in June 1980).
[3]Excludes shipments of anthracite to U.S. Armed Forces overseas (300,000 tons in 1979).
[4]Stocks held by electric utilities, coke plants, and the other Industrial Sector at the end of period.
R = Revised data. NA = Not available.
Sources: • See Sources on the last page of this section.

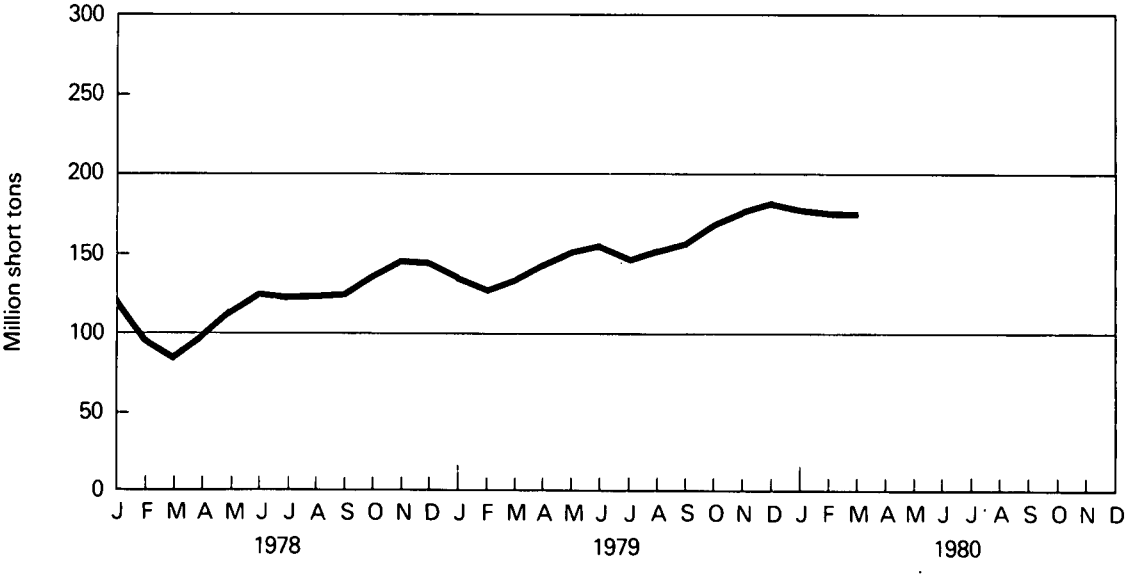
Coal

Bituminous, Lignite, and Anthracite

Domestic Production, Consumption, Imports, and Exports



Stocks



Coal

Consumption — Bituminous, Lignite, and Anthracite

		Electric Utilities	Industrial		Residential and Commercial	Total
			Coke Plants[1]	Other Industrial[2] Including Transportation		
		Thousand short tons				
1973	**TOTAL**	**389,212**	**94,101**	**68,154**	**11,117**	**562,584**
1974	**TOTAL**	**391,811**	**90,191**	**64,983**	**11,417**	**558,402**
1975	**TOTAL**	**405,962**	**83,598**	**63,670**	**9,410**	**562,641**
1976	**TOTAL**	**448,371**	**84,704**	**61,800**	**8,916**	**603,791**
1977	**TOTAL**	**477,126**	**77,739**	**61,472**	**8,954**	**625,290**
1978	**TOTAL**	**481,235**	**71,394**	**63,085**	**9,511**	**625,225**
1979	January	46,902	R6,578	R6,428	R1,291	R61,199
	February	41,891	R5,954	R5,836	R782	R54,463
	March	41,781	R6,850	R5,617	R616	R54,864
	April	38,979	R6,558	R5,511	R553	R51,601
	May	41,532	R6,725	R5,269	R500	R54,026
	June	44,008	R6,470	R5,034	R513	R56,025
	July	48,216	R6,513	R5,223	R445	R60,397
	August	48,549	R6,417	R5,363	R421	R60,750
	September	42,167	R6,334	R5,159	R559	R54,219
	October	42,970	R6,404	R5,565	R780	R55,719
	November	42,980	R6,138	R5,946	R933	R55,997
	December	47,075	R6,427	R6,766	R995	R61,263
	TOTAL	**527,051**	**R77,368**	**R67,717**	**R8,388**	**R680,524**
1980	January	50,369	6,343	5,923	980	63,615
	February	47,513	6,010	5,380	858	59,761
	March	46,685	6,428	5,179	612	58,904
	April	40,692	6,247	NA	NA	NA
	May	41,464	6,127	NA	NA	NA
	June	45,821	5,326	NA	NA	NA
	TOTAL (Year-to-date)	**272,543**	**36,483**	**NA**	**NA**	**NA**

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

Coal

Stocks [1] — Bituminous, Lignite and Anthracite

			Industrial		
		Electric Utilities	Coke Plants[2]	Other Industrial	Total
			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	January	119,948	R7,647	8,830	R136,425
	February	114,394	R6,763	7,885	R129,042
	March	118,542	R7,561	7,941	R134,044
	April	125,776	R8,482	8,070	R142,328
	May	133,793	R9,228	8,248	R151,269
	June	136,627	R10,051	8,728	R155,406
	July	131,095	R8,306	8,864	R148,265
	August	134,257	R9,021	9,509	R152,787
	September	139,129	R9,036	9,851	R158,016
	October	149,949	R9,724	R9,960	R169,633
	November	157,737	R9,983	R10,002	R177,722
	December	159,714	10,155	R11,777	R181,646
1980	January	158,707	9,634	11,083	179,424
	February	157,120	9,263	10,389	176,772
	March	157,625	9,317	9,695	176,637
	April	164,524	9,579	NA	NA
	May	174,044	9,692	NA	NA
	June	178,959	9,913	NA	NA

Geographic coverage: the 50 United States and Distict of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Stocks held by utilities, coke plants, and general industry at end of period.
[2]Bituminous coal and anthracite only. Lignite is not used at coke plants.
R = Revised data. NA = Not available.
Sources: • See Sources on the last page of this section.

Sources for the Coal Section

- 1973 through September 1977: Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys.*
- October 1977 forward: Production: Association of American Railroads, Statement CS54A; Commonwealth of Pennsylvania, Department of Environmental Resources, "Anthracite Mines—Monthly Tonnage, Manhour and Accident Report" and "Annual Report on Mining, Oil and Gas, and Land Reclamation and Conservation Activities"; Energy Information Administration (EIA) "Weekly Coal Report," "Bituminous Coal and Lignite Quarterly Distribution Report" (Form EIA-6), "Bituminous Coal and Lignite, Production and Mine Operation—Annual Report" (Form EIA-7), and Bureau of Mines Form 6–1385A, "Pennsylvania Anthracite Production, Mines Without Preparation Plants," BOM Form 6–1387A, "Pennsylvania Anthracite Production, Contractor's Report," BOM Form 6–1388A, "Pennsylvania Anthracite Production, River Coal Report"; and Various States, Annual Coal Mining Reports.
- October 1977 forward: Domestic Consumption and Stocks: EIA, "Monthly Power Plant Report" (FPC Form 4), "Monthly Fuel Consumption Report—Manufacturing Plants" (Form EIA-3), "Coke and Coal Chemicals—Monthly/Annual" (Form EIA-5/5A), "Bituminous Coal and Lignite—Quarterly Distribution Report" (Form EIA-6) and "Monthly Coal Report, Retail Dealers and Upper Lakes Docks" (Form EIA-2).
- October 1977 forward: Imports/Exports: Bureau of the Census, Monthly Reports IM 145 (Imports) and EM 552 (Exports).

Electric Utilities

June 1980 production of electricity by utilities was 189.4 billion kilowatt-hours, 1.5 percent above the June 1979 production level. Coal-fired production totaled 93.7 billion kilowatt-hours, natural gas-fired production totaled 31.3 billion kilowatt-hours, nuclear production totaled 18.3 billion kilowatt-hours, and hydroelectric production totaled 27.7 billion kilowatt-hours. These figures reflect increases of 3.2, 3.9, 14.0 and 10.7 percent, respectively, above the June 1979 output levels. Petroleum-fired production totaled 18.0 billion kilowatt-hours, 26.0 percent below the June 1979 levels.

Sales of electricity to all ultimate consumers in the United States in April 1980 totaled 161.7 billion kilowatt-hours, a decrease of 7.3 percent from sales of the month before and 0.1 percent above April 1979 sales. Sales to residential consumers during April 1980 were 51.7 billion kilowatt-hours, 3.3 percent below sales for the corresponding month in 1979. Commercial sales were 36.4 billion kilowatt-hours, 1.4 percent more than the amount for April 1979. Sales to industrial consumers totaled 68.0 billion kilowatt-hours in April 1980, about 2.8 percent less than the April 1979 figure. In April 1980 other sales totaled 5.5 billion kilowatt-hours, 1.7 percent below the April 1979 level.

Electric utility petroleum consumption during June 1980 was 30.8 million barrels, a 26.0 percent drop from the June 1979 level. Coal consumption for June 1980 was 45.8 million tons, 4.1 percent above the June 1979 rate. During June 1980, consumption of natural gas by electric utilities was 336.9 billion cubic feet, 5.2 percent above the June 1979 consumption level.

On June 30, 1980, utility stocks of anthracite, bituminous and lignite totaled 179.0 million tons. Stockpiles were 31.0 percent above the levels of June 1979.

Petroleum stocks (excluding petroleum coke) on June 30, 1980, totaled 144.0 million barrels, 18.3 percent above the levels for the same month of 1979.

Electric Utilities

Net Electricity Production By Primary Energy Source

		Coal[1]	Petroleum[2]	Natural Gas	Nuclear	Hydro	Other[3]	Total
				Million kilowatt-hours				
1973	**TOTAL**	**847,651**	**314,343**	**340,858**	**83,479**	**272,083**	**2,294**	**1,860,710**
1974	**TOTAL**	**828,433**	**300,931**	**320,065**	**113,976**	**301,032**	**2,703**	**1,867,140**
1975	**TOTAL**	**852,786**	**289,095**	**299,778**	**172,505**	**300,047**	**3,437**	**1,917,649**
1976	**TOTAL**	**944,391**	**319,988**	**294,624**	**191,104**	**283,707**	**3,883**	**2,037,696**
1977	**TOTAL**	**985,219**	**358,179**	**305,505**	**250,883**	**220,475**	**4,063**	**2,124,323**
1978	**TOTAL**	**975,742**	**365,060**	**305,391**	**276,403**	**280,419**	**3,315**	**2,206,331**
1979	January	94,986	39,474	22,093	27,792	25,021	326	209,692
	February	84,748	32,274	21,844	25,911	21,275	285	186,337
	March	85,220	22,076	24,916	24,335	25,921	382	182,849
	April	80,450	20,599	24,763	18,418	25,389	342	169,962
	May	86,149	21,470	26,135	15,025	28,939	350	178,069
	June	90,817	24,367	30,107	16,065	24,979	347	186,682
	July	97,879	25,750	34,676	20,825	22,761	364	202,255
	August	97,910	26,123	34,949	24,204	21,260	405	204,850
	September	85,664	22,509	31,442	21,804	18,978	354	180,751
	October	87,528	20,279	30,419	20,934	20,167	389	179,716
	November	87,456	23,380	24,661	19,255	22,367	387	177,506
	December	96,230	25,223	23,481	20,586	22,727	456	188,703
	TOTAL	**1,075,037**	**303,525**	**329,485**	**255,155**	**279,783**	**4,387**	**2,247,372**
1980	January	103,147	25,099	26,350	19,746	25,297	388	200,027
	February	98,148	24,784	24,748	19,277	21,378	373	188,708
	March	95,387	20,419	26,964	20,039	24,332	401	187,542
	April	83,534	16,064	24,015	18,794	25,745	410	168,562
	May	84,882	16,560	26,573	18,385	28,866	468	175,733
	June	93,690	18,034	31,282	18,322	27,656	445	189,430
	TOTAL (Year-to-date)	**558,788**	**120,961**	**159,931**	**114,563**	**153,274**	**2,485**	**1,110,002**

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

Electric Utilities

Electricity Sales[1]

		Residential	Commercial	Industrial	Other[2]	Total
				Million kilowatt-hours		
1973	**TOTAL**	**579,231**	**388,266**	**686,085**	**59,326**	**1,712,909**
1974	**TOTAL**	**578,184**	**384,826**	**684,875**	**58,039**	**1,705,924**
1975	**TOTAL**	**584,712**	**401,674**	**675,271**	**68,153**	**1,729,810**
1976	**TOTAL**	**602,863**	**423,639**	**739,965**	**69,557**	**1,836,024**
1977	**TOTAL**	**641,134**	**444,931**	**772,291**	**70,489**	**1,928,845**
1978	**TOTAL**	**671,094**	**459,908**	**800,656**	**73,152**	**2,004,814**
1979	January	69,939	40,362	68,324	6,762	185,387
	February	67,842	39,865	67,632	6,176	181,515
	March	R59,314	R38,123	R69,783	R6,029	R173,249
	April	R50,079	R35,930	R69,944	R5,604	R161,557
	May	45,378	36,259	70,421	5,630	157,688
	June	49,109	39,474	70,968	5,705	165,256
	July	58,054	42,528	69,938	5,975	176,495
	August	64,168	43,915	71,058	6,377	185,519
	September	59,251	42,416	70,075	6,479	178,220
	October	49,430	38,750	71,444	6,098	165,721
	November	49,480	36,656	69,787	6,173	162,096
	December	58,437	37,952	67,283	6,142	169,815
	TOTAL	**R680,481**	**R472,230**	**R836,657**	**R73,150**	**R2,062,518**
1980	January	65,852	39,516	67,634	6,658	179,660
	February	64,503	39,600	68,384	6,171	178,658
	March	60,497	38,784	69,058	6,028	174,368
	April	51,749	36,436	68,007	5,510	161,703
	TOTAL (Year-to-date)	**242,601**	**154,336**	**273,083**	**24,367**	**694,389**

Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Electricity sales to all ultimate consumers.
[2]Includes street lighting and transportation uses.
R = Revised data.
Source: • 1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: Federal Energy Regulatory Commission Form 5, "Electric Utility Company Monthly Statement."

Electric Utilities

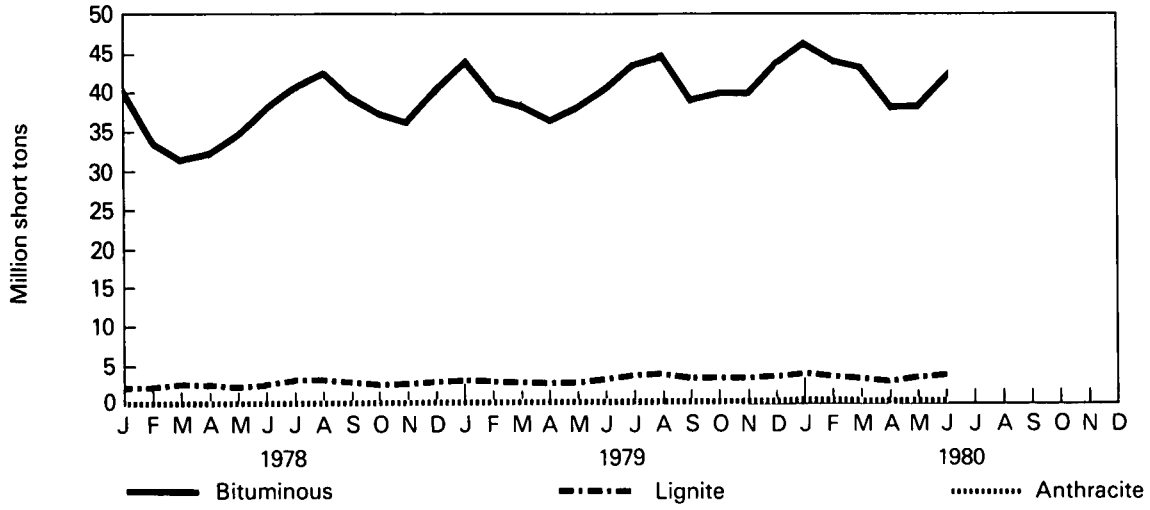
Primary Energy Consumed to Produce Electricity

		Coal				Petroleum			Natural Gas
		Anthracite	Bituminous	Lignite	Total	Steam	Gas Turb./ Int. Comb.	Coke	
		Thousand short tons				Thousand barrels		Thousand short tons	Million cubic feet
1973	**TOTAL**	**1,443**	**376,975**	**10,794**	**389,212**	**513,190**	**47,058**	**507**	**3,660,172**
1974	**TOTAL**	**1,498**	**378,643**	**11,670**	**391,811**	**483,146**	**53,128**	**625**	**3,443,428**
1975	**TOTAL**	**1,480**	**388,523**	**15,960**	**405,962**	**467,221**	**38,907**	**70**	**3,157,669**
1976	**TOTAL**	**1,350**	**425,205**	**21,817**	**448,371**	**514,077**	**41,843**	**68**	**3,080,868**
1977	**TOTAL**	**1,425**	**451,051**	**24,650**	**477,126**	**574,869**	**48,837**	**98**	**3,191,200**
1978	**TOTAL**	**1,064**	**448,763**	**31,407**	**481,235**	**588,319**	**47,520**	**398**	**3,188,363**
1979	January	89	43,791	3,021	46,902	62,226	6,244	33	228,479
	February	75	39,010	2,806	41,891	51,655	4,959	32	226,896
	March	65	38,865	2,852	41,781	36,371	1,872	22	260,351
	April	66	36,362	2,551	38,979	33,800	1,682	15	260,974
	May	106	38,669	2,757	41,532	35,285	2,053	23	277,318
	June	103	40,882	3,023	44,008	39,258	2,314	25	320,196
	July	96	44,391	3,730	48,216	41,895	2,413	23	369,318
	August	97	44,553	3,899	48,549	42,478	2,416	23	375,370
	September	86	38,920	3,162	42,167	36,768	1,747	17	338,308
	October	75	39,634	3,261	42,970	33,445	1,132	16	323,082
	November	92	39,571	3,317	42,980	37,822	1,954	18	260,982
	December	96	43,480	3,499	47,075	41,601	1,906	20	249,249
	TOTAL	**1,046**	**488,129**	**37,876**	**527,051**	**492,606**	**30,691**	**268**	**3,490,523**
1980	January	74	46,516	3,779	50,369	41,107	2,197	54	276,784
	February	72	43,969	3,471	47,513	40,238	1,920	21	263,709
	March	83	43,244	3,357	46,685	33,413	1,397	13	283,845
	April	71	37,971	2,651	40,692	27,030	673	7	256,606
	May	86	38,116	3,262	41,464	27,090	841	11	281,862
	June	89	42,073	3,658	45,821	29,635	1,139	11	336,894
	TOTAL (Year-to-date)	**476**	**251,889**	**20,178**	**272,543**	**198,514**	**8,168**	**118**	**1,699,698**

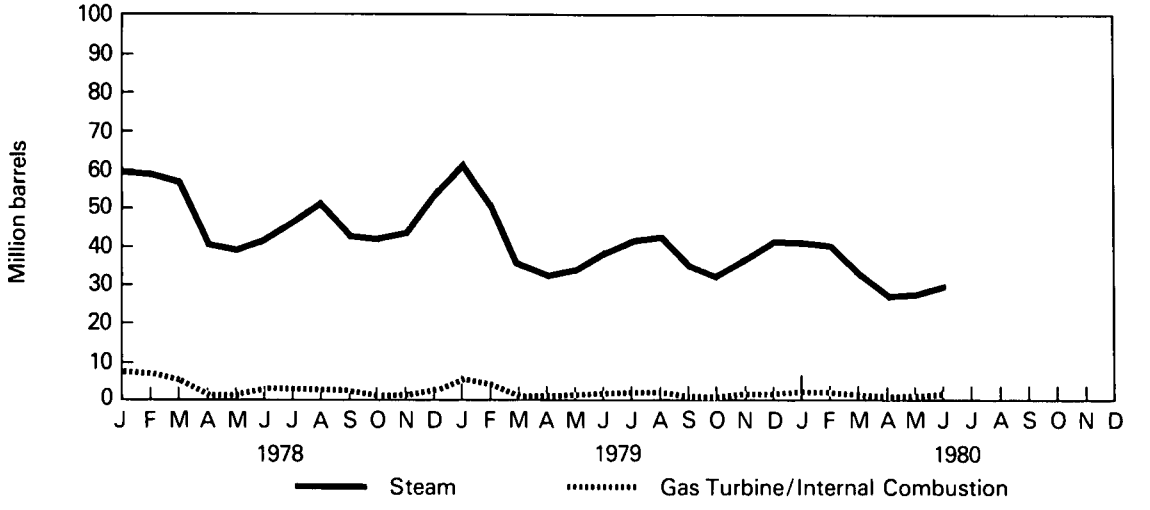
Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
Source: • Federal Power Commission Form 4, "Monthly Power Plant Report."

Electric Utilities

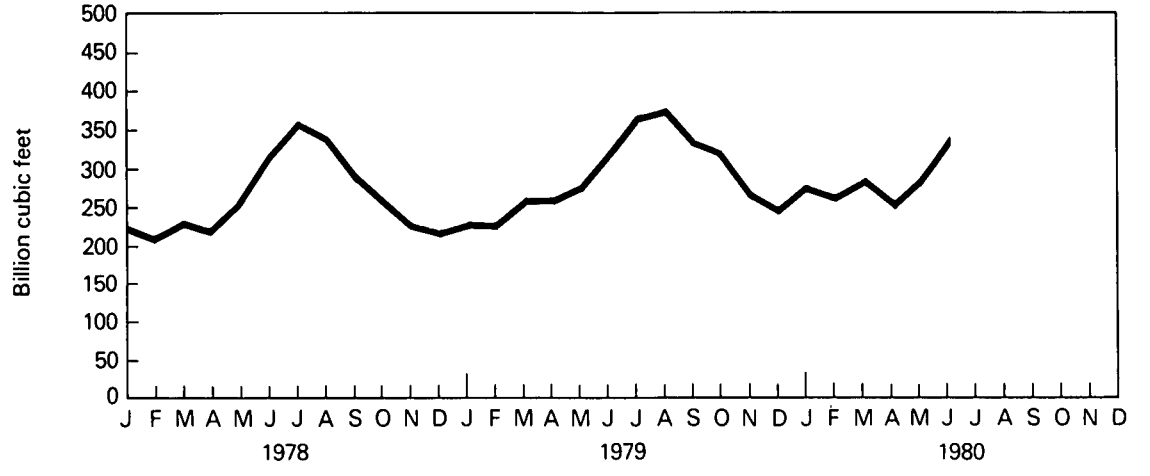
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities

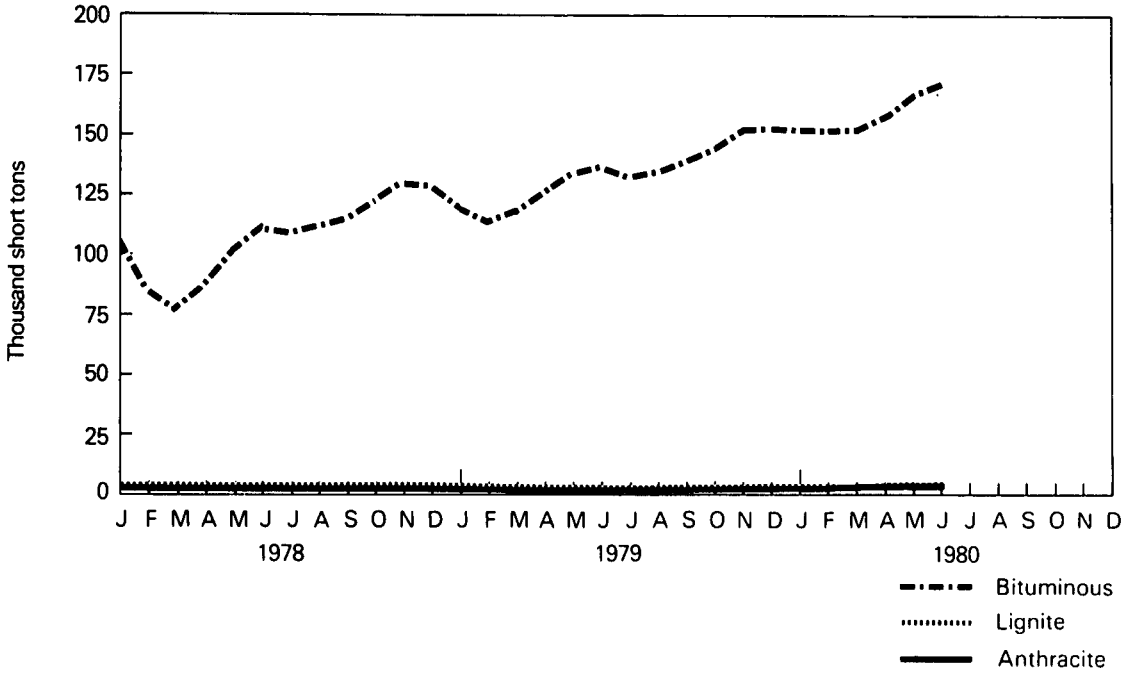
End-of-Month Coal and Petroleum Stocks

		Coal				Petroleum		
		Anthracite	Bituminous	Lignite	Total	Steam	Gas Turb./ Int. Comb.	Coke
		Thousand short tons				Thousand barrels		Thousand short tons
1973		**‡1,066**	**‡84,941**	**‡961**	**‡86,967**	**‡79,121**	**‡10,095**	**‡312**
1974		**‡930**	**‡81,712**	**‡867**	**‡83,509**	**‡97,718**	**‡15,199**	**‡35**
1975		**‡982**	**‡107,927**	**‡1,815**	**‡110,724**	**‡108,825**	**‡16,432**	**‡31**
1976		**‡1,000**	**‡114,130**	**‡2,306**	**‡117,436**	**‡106,993**	**‡14,703**	**‡32**
1977		**‡2,321**	**‡128,210**	**‡2,688**	**‡133,219**	**‡124,750**	**‡19,281**	**‡44**
1978		**‡2,178**	**‡123,020**	**‡3,027**	**‡128,225**	**‡102,402**	**‡16,386**	**‡198**
1979	January	2,154	114,980	2,814	119,948	89,583	15,635	181
	February	2,136	109,532	2,726	114,394	82,078	15,541	166
	March	2,170	113,669	2,704	118,542	96,033	16,386	170
	April	2,220	120,876	2,680	125,776	99,500	16,835	170
	May	2,231	128,962	2,600	133,793	106,017	16,974	159
	June	2,233	131,898	2,495	136,627	104,513	17,180	150
	July	2,290	126,328	2,478	131,095	104,170	17,578	160
	August	2,328	128,760	3,170	134,257	103,965	17,910	163
	September	2,385	133,605	3,139	139,129	104,857	18,733	164
	October	2,452	144,035	3,462	149,949	109,590	19,410	170
	November	2,496	151,848	3,393	157,737	111,072	19,714	170
	December	3,274	152,981	3,459	159,714	111,121	20,301	183
1980	January	3,371	151,881	3,455	158,707	114,007	19,607	175
	February	3,451	150,147	3,522	157,120	111,362	19,050	168
	March	3,488	151,022	3,116	157,625	116,291	18,909	154
	April	3,533	157,148	3,843	164,524	118,803	19,176	103
	May	3,725	166,339	3,980	174,044	122,832	19,463	69
	June	3,838	171,041	4,079	178,959	124,781	19,216	65

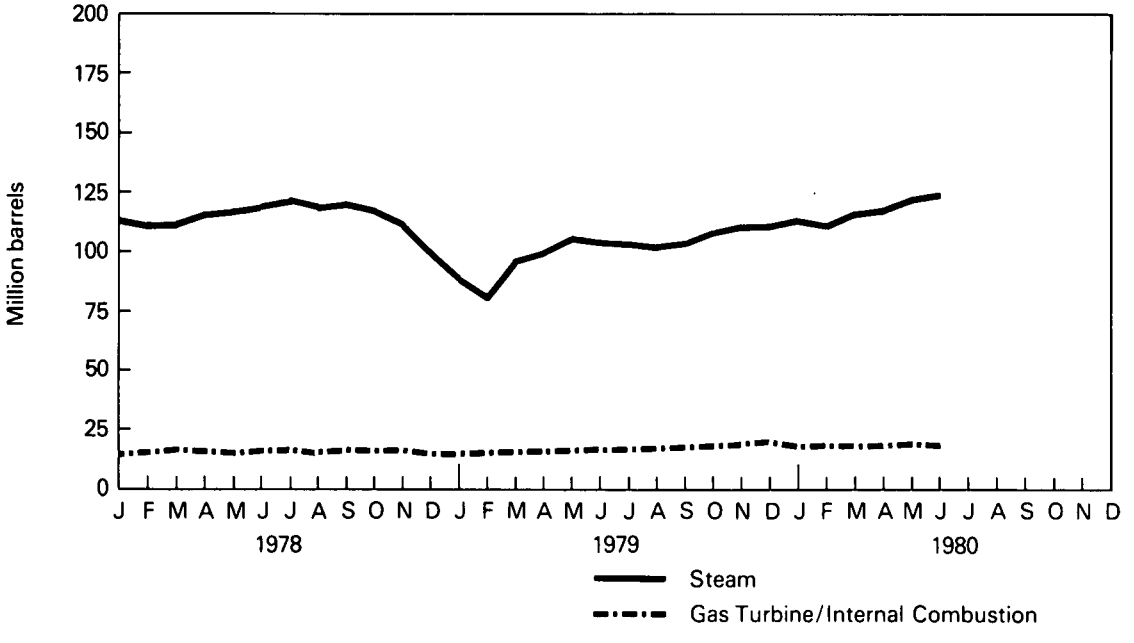
Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
‡Total as of December 31.
Source: • Federal Power Commission Form 4, "Monthly Power Plant Report."

Electric Utilities

Coal Stocks (Bituminous, Lignite, and Anthracite)



Petroleum Stocks



Nuclear Power

During June 1980, the 74 operational reactor units generated 18.3 billion net kilowatt-hours of electricity, representing a decrease of 0.3 percent and an increase of 14.0 percent respectively, from the May 1980 and June 1979 levels.

In April 1980, North Anna Unit Number 2, owned by the Virginia Electric Power Company, and Salem Unit Number 2, owned jointly by Public Service Electric & Gas Company, Philadelphia Electric Company, Delmarva Power & Light Company, and Atlantic City Electric Company received limited licenses from the Nuclear Regulatory Commission (NRC) to begin low-power testing. This brings to three the number of units licensed since the NRC ended its moratorium on the licensing of new reactor units. This moratorium was imposed following the accident at Three Mile Island in March 1979.

As of June 30 the total number of reactor units planned or in operation was 176, unchanged from the May level, but 19 below the June 1979 level. This scaling back by utilities can be attributed to the increasing time and cost required to bring a nuclear unit on line and decreases in the projected rate of growth of electrical consumption.

Nuclear Power

Domestic Nuclear Powerplant Operations

		Maximum Dependable Capacity[1] All Plants[2]	Capacity Factor[3]	Electricity Generation[4]	Nuclear Portion of Domestic Electricity Generation
		Million net kilowatts	Percent	Million net kilowatt-hours	Percent
1973	**AVERAGE**	**13.850**	**63.2**	**83,479**	**4.5**
1974	**AVERAGE**	**29.921**	**43.5**	**113,976**	**6.1**
1975	**AVERAGE**	**35.671**	**55.2**	**172,505**	**9.0**
1976	**AVERAGE**	**40.642**	**53.5**	**191,104**	**9.4**
1977	**AVERAGE**	**45.554**	**62.9**	**250,883**	**11.8**
1978	**AVERAGE**	**49.385**	**63.9**	**276,403**	**12.5**
1979	January	50.771	73.6	27,792	13.3
	February	50.720	76.0	25,911	13.9
	March	50.720	64.5	24,335	13.3
	April	50.705	50.5	18,418	10.8
	May	50.705	39.8	15,025	8.4
	June	50.705	44.0	16,065	8.6
	July	50.759	55.1	20,825	10.3
	August	50.732	64.1	24,204	11.8
	September	50.781	59.6	21,804	12.1
	October	50.814	55.7	20,934	11.6
	November	49.917	53.6	19,255	10.8
	December	49.937	55.4	20,586	11.0
	AVERAGE	**50.604**	**57.6**	**255,155**	**11.4**
1980	January	49.945	53.1	19,746	9.9
	February	51.055	54.3	19,277	10.2
	March	51.031	52.8	20,039	10.7
	April	53.040	49.3	18,794	11.1
	May	53.040	46.6	18,385	10.5
	June	53.040	48.0	18,322	9.7
	AVERAGE	**51.854**	**50.7**	**114,562**	**10.4**

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 11 and Definitions.
[2]Includes all units authorized to generate commercial electricity, including units in start-up testing (see definitions) and those owned by the Government.
[3]Average percentage of Maximum Dependable Capacity utilized yearly or monthly.
[4]Annual figures for 1973–1979 and monthly figures for 1979 and 1980 represent totals rather than averages.
Sources: • Capacity data for units in commercial operation or start-up testing—Nuclear Regulatory Commission.
• Nuclear Regulatory Commission Report NUREG 0020, "Operating Units Status Report."
• Federal Power Commission Form 4, "Monthly Power Plant Report."

Nuclear Power

Status of Nuclear Reactor Units[1]

		In Operation or Start-up Testing[2]	Construction Permits Granted	Construction Permits Pending	Reactor Units Ordered	Reactor Units Announced	Total Reactor Units	Total Design Capacity (Million Gross Kilowatts)
1973		**40**	**51**	**58**	**48**	**20**	**217**	**212**
1974		**53**	**58**	**80**	**28**	**16**	**235**	**234**
1975		**56**	**69**	**73**	**19**	**19**	**236**	**236**
1976		**62**	**72**	**66**	**16**	**19**	**235**	**236**
1977		**67**	**80**	**52**	**13**	**9**	**221**	**220**
1978		**71**	**90**	**32**	**9**	**4**	**206**	**204**
1979	January	71	92	30	5	1	199	195
	February	71	92	28	5	1	197	193
	March	71	92	28	5	1	197	193
	April	71	92	27	5	0	195	190
	May	71	92	27	5	0	195	190
	June	71	92	27	5	0	195	190
	July	71	91	25	5	0	192	187
	August	71	91	25	5	0	192	187
	September	71	91	25	3	0	190	185
	October	71	91	25	3	0	190	185
	November	71	91	23	3	0	188	182
	December	71	91	21	3	0	186	180
1980	January	71	90	17	3	0	181	174
	February	72	89	16	3	0	180	173
	March	72	87	14	3	0	176	168
	April	74	85	14	3	0	176	168
	May	74	85	14	3	0	176	168
	June	74	85	14	3	0	176	168

Geographic coverage: the 50 United States and District of Columbia.
[1]Monthly data are recorded the last day of the month. Annual data are recorded as of December 31 of each year.
[2]Includes Humboldt Bay shut-down for seismic modifications, and Three Mile Island 2 which was shut down due to an accident in March of 1979. Also includes two dual-purpose Department of Energy owned reactors, both operating. Does not include the Indian Point reactor which is in indefinite shut-down status.
Sources: • Compiled by the Energy Information Administration from various sources, but primarily from the Nuclear Regulatory Commission (NRC), Report NUREG 0380, "Program Summary Report."

Price

Crude Oil

The average price of domestic crude oil purchased at the wellhead was $21.00 per barrel in May 1980. The Alaskan North Slope price increased to $14.36 per barrel. Actual stripper price of $36.11 per barrel was a 1.2 percent decrease from the April 1980 price. The Naval Petroleum Reserve crude oil price of $34.16 per barrel increased slightly (1.0 percent) above the April 1980 level. The upper tier price of $14.29 per barrel increased slightly by 0.8 percent above the previous month's figure, and the lower tier price of $6.47 per barrel was 1.6 percent above the April 1980 price.

During June 1980, the composite refiner acquisition cost of crude oil was $28.80 per barrel, $0.95 per barrel (3.4 percent) above the previous month's price. The imported price increased $0.15 per barrel from the May 1980 level to $34.48 per barrel in June. This price was 0.4 percent above the previous month's level and 64.0 percent above the June 1979 level. The domestic price was $24.48, an increase of $0.85 per barrel (3.6 percent) above the May average.

Residual Fuel Oil

The average price, excluding taxes, for No. 6 residual fuel oil sold to utilities, industry, and other ultimate consumers in May 1980 was $23.75 per barrel, $0.88 above the previous month's price (3.8 percent) and 38.2 percent over the May 1979 average. The average price, excluding taxes, for No. 6 residual fuel oil sold to resellers, bulk plants, jobbers, and other wholesale accounts was $20.48 per barrel, $1.39 above (7.3 percent) the April 1980 average and a 30.4 percent increase over the May 1979 average.

Heating Oil

The national average price of heating oil sold to residential customers increased 0.6 cent in June 1980 to 97.8 cents per gallon. This was a 0.6 percent increase above the selling price in May 1980 and a 41.5 percent increase over the June 1979 price. The average residential distributor margin in June was 15.8 cents per gallon, 24.4 percent above the margin of June 1979. Refiners' national average selling price to resellers and retailers was 80.2 cents per gallon, 36.4 percent above the June 1979 average.

Aviation Fuel

The average price, excluding taxes, for kerosene-type jet fuel sold to commercial airlines, Department of Defense, and other ultimate consumers in May 1980 was 87.5 cents per gallon, or 0.1 cents (0.1 percent) over the previous month's average and a 80.8 percent increase over the May 1979 average.

Motor Gasoline

Beginning with this issue of the *Monthly Energy Review* (MER), the source for average prices of motor gasoline will be the Bureau of Labor Statistics (BLS). The "Monthly Motor Gasoline Service Station Survey" (EIA–79), the source of figures previously published in the MER, was discontinued after May 1980 prices.

The national average retail price for all grades and all types of motor gasoline was 124.7 cents per gallon in July 1980. Leaded regular gasoline at all types of stations sold for an average of 121.6 cents per gallon in July, 0.1 cent lower (0.1 percent) than the price in June. The price for unleaded regular gasoline at all types of stations was 127.1 cents per gallon in July, 0.2 cent higher (0.2 percent) than in June.

Liquefied Petroleum Gases

The average wholesale price for propane during May 1980, excluding taxes, was 42.2 cents per gallon, 1.0 cent above the previous month's level, or 2.4 percent, and 74.4 percent above the May 1979 level.

In May 1980, the average wholesale price for butane, excluding taxes, was 64.4 cents per gallon, 2.1 percent above the previous month's revised price and 63.0 percent above the May 1979 average.

Price

Price

Petroleum Price Summary

		Actual Domestic Average Wellhead Price[1]	Refiner Acquisition Cost of Crude Oil[2]			No. 6 Residual Oil Price Average[3]	
			Domestic	Imported	Composite	Wholesale[4]	Retail[4]
		Dollars per barrel					
1976	**AVERAGE**	**8.19**	**8.84**	**13.48**	**10.89**	**10.72**	**11.49**
1977	**AVERAGE**	**8.57**	**9.55**	**14.53**	**11.96**	**11.96**	**13.23**
1978	**AVERAGE**	**9.00**	**10.61**	**14.57**	**12.46**	**11.51**	**12.75**
1979	January	9.46	11.02	15.50	13.11	12.78	14.13
	February	9.69	11.34	15.88	13.42	13.72	14.68
	March	9.83	11.45	16.41	13.70	14.82	15.95
	April	10.33	12.06	17.58	14.52	15.51	16.61
	May	10.71	12.41	19.00	15.40	15.71	17.18
	June	11.70	13.24	21.03	17.00	17.81	17.97
	July	13.39	14.61	23.09	18.58	19.18	19.89
	August	14.00	15.73	23.98	19.75	19.00	20.33
	September	14.57	16.05	25.06	20.14	19.62	20.90
	October	15.11	16.93	25.05	20.68	20.88	21.59
	November	15.52	17.65	27.02	22.04	22.00	22.84
	December	17.03	18.84	28.91	23.63	23.55	24.44
	AVERAGE	**12.64**	**14.27**	**21.67**	**17.72**	**17.66**	**18.67**
1980	January	17.86	19.78	30.75	24.81	24.41	26.21
	February	18.81	21.22	32.40	26.11	23.34	26.48
	March	19.34	22.07	33.42	26.88	21.11	25.33
	April	R20.29	22.89	33.54	27.09	19.09	22.87
	May	21.00	23.63	34.33	27.85	†20.48	†23.75
	June	NA	24.48	34.48	28.80	NA	NA
	AVERAGE	**NA**	**22.35**	**33.08**	**26.90**	**NA**	**NA**

Geographic coverage: Actual domestic average wellhead prices and No. 6 residual oil prices— the 50 United States and District of Columbia. Refiner acquisition cost of crude oil— the 50 United States, District of Columbia, Puerto Rico, Guam, and the Virgin Islands.
[1]See Explanatory Note 12.
[2]See Explanatory Note 13. Crude oil costs and volumes reported on the Economic Regulatory Administration (ERA) Form 49 exclude unfinished oils but include Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on the FEA Form P110-M-1 include unfinished oils but exclude SPR. Imported averages derived from ERA Form 49 exclude crude oil purchased for Strategic Petroleum Reserve (SPR), whereas, the composite averages derived from the ERA Form 49 include SPR.
[3]Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, commercial and residential accounts.
[4]Excludes tax.
†Preliminary data. R=Revised data. NA=Not available.
Sources: •Actual domestic average, January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report." February 1976 forward: ERA Form 182, "Domestic Crude Oil First Purchase Report."
•Refiner acquisition cost, January 1976: Form FEO 96, "Monthly Cost Allocation Report." February 1976 through June 1978: FEA Form P110-M-1, "Refiners' Monthly Cost Allocation Report." July 1978 forward: ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."
•No.6 residual oil price, FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

Petroleum Price Summary (continued)

		No. 2 Diesel Price Average[1]		No. 2 Heating Oil Price Average		Gasoline Price Average All Grades[2]	Propane Price Average[3]	Butane Price Average[3]
		Wholesale[4]	Retail[4]	Wholesale	Retail	Retail	Wholesale[4]	Wholesale[4]
		Cents per gallon						
1976	**AVERAGE**	**31.9**	**34.7**	**32.6**	**40.6**	**NA**	**20.6**	**21.9**
1977	**AVERAGE**	**36.1**	**39.3**	**36.9**	**46.0**	**NA**	**25.0**	**25.4**
1978	**AVERAGE**	**37.1**	**40.2**	**38.7**	**49.4**	**R65.2**	**24.0**	**23.0**
1979	January	39.7	43.0	42.1	53.7	R69.5	22.4	24.9
	February	41.8	46.1	44.5	56.3	R70.7	21.8	28.5
	March	44.5	47.9	47.0	58.8	R73.3	21.2	32.5
	April	47.7	50.6	49.3	61.1	R78.0	22.0	35.4
	May	53.4	56.1	52.6	64.2	R82.3	24.2	39.5
	June	58.7	65.0	56.9	69.1	R88.0	27.9	46.9
	July	62.4	68.9	61.1	73.8	R93.0	29.3	51.1
	August	66.0	72.3	64.6	78.4	96.7	30.8	48.0
	September	69.0	71.8	67.8	81.0	R99.8	33.3	51.9
	October	71.1	74.8	68.1	82.3	R100.6	35.2	56.1
	November	70.3	72.1	69.0	83.7	R101.9	37.6	57.0
	December	73.0	80.7	70.8	85.8	R104.2	40.4	65.8
	AVERAGE	**58.2**	**62.4**	**53.0**	**65.6**	**R88.2**	**29.5**	**45.8**
1980	January	76.0	82.2	75.2	90.8	R111.0	41.8	73.3
	February	78.3	85.0	79.0	95.3	R118.6	42.7	70.1
	March	79.8	87.8	80.4	97.1	R123.0	41.0	R66.8
	April	80.4	R88.0	81.0	97.4	R124.2	R41.2	R63.1
	May†	80.5	87.8	R81.4	R97.2	R124.4	42.2	64.4
	June†	NA	NA	82.5	97.8	124.6	NA	NA
	AVERAGE	**NA**	**NA**	**78.8**	**94.9**	**NA**	**NA**	**NA**

Geographic coverage: the 50 United States and District of Columbia.
Note: Gasoline Price Average data have been revised because of a change in the source.
[1]Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded jobbers, unbranded jobbers, and commercial accounts. Retail refers to the price at which company-owned and operated retail dealers sell to customers.
[2]See Explanatory Note 16.
[3]Wholesale refers to the price at which refiners, resellers, retailers and gas plants sell to one another, including sales to agricultural and industrial accounts. Excludes butane/propane mixtures.
[4]Excludes tax.
†Preliminary data. R=Revised data. NA=Not available.
Sources: •No. 2 diesel price, FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."
•No. 2 heating oil price, FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."
•Gasoline price average, Bureau of Labor Statistics.
•Propane and Butane prices, FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

Domestic Prices and Percentages of Crude Oil Purchased at the Wellhead[1]

		Incremental Tertiary[2]		Newly Discovered[2]		Marginal Property[2]		Heavy Crude[2]		Other Decontrolled Oil[2]		Tertiary Incentive[2]	
		Dollars per barrel											
		Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Percent
1976	AVERAGE												
1977	AVERAGE												
1978	AVERAGE												
1979	January							Not Applicable					
	February												
	March												
	April												
	May												
	June	11.98	0.05	22.97	0.61	13.16	0.81						
	July	15.09	0.02	26.60	1.12	13.28	1.13						
	August	16.14	0.15	26.63	1.66	13.37	1.33						
	September	17.89	0.06	30.38	2.38	13.67	3.08	16.77	2.82	12.54	NA	24.89	NA
	October	14.21	(0.01)	31.92	3.04	13.55	3.39	17.12	3.46	13.08	NA	21.07	NA
	November	26.17	NA	33.86	3.24	13.70	3.11	18.61	3.28	11.33	NA	NA	NA
	December	15.80	(0.03)	37.59	3.61	13.83	3.05	23.62	4.04	10.05	NA	NA	NA
1980	January	31.14	0.01	39.04	3.86	14.01	3.16	26.43	4.24	33.37	2.15	28.18	NA
	February	26.33	0.01	38.68	4.33	13.90	2.71	25.70	5.13	33.11	4.79	36.47	0.01
	March	29.82	0.01	38.97	4.76	14.07	2.52	25.55	5.15	32.91	7.42	39.00	0.04
	April	34.94	0.04	R38.67	R5.20	14.12	2.99	25.57	R4.96	33.03	R9.89	R37.52	0.12
	May†	34.46	0.03	39.08	5.52	14.27	2.78	25.54	5.43	32.94	12.46	34.65	0.43
	AVERAGE	**32.57**	**0.02**	**38.89**	**4.73**	**14.07**	**2.83**	**25.73**	**4.98**	**33.01**	**7.34**	**35.51**	**0.12**

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 12.
[2]See Definitions.
†Preliminary data. R=Revised data. NA=Not available.
Note: Parentheses indicate negative adjustment to recertify production as heavy oil.
Source: • Economic Regulatory Administration Form 182, "Domestic Crude Oil First Purchase Report."

Price

Domestic Prices and Percentages of Crude Oil Purchased at the Wellhead[1] (continued)

		Lower Tier[2]		Upper Tier[2]		Actual Stripper[3]		Alaskan North Slope[4]		Naval Petroleum Reserve[5]		Imputed Domestic Average[6]	Actual Domestic Average[6]
		Dollars per barrel											
		Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Price
1976	**AVERAGE**	**5.13**	**54.4**	**11.71**	**31.5**	**12.16**	**14.1**	**NA**	**NA**	**NA**	**NA**	**8.06**	**8.19**
1977	**AVERAGE**	**5.19**	**45.92**	**11.22**	**36.11**	**13.59**	**13.32**	**6.35**	**4.14**	**12.34**	**0.51**	**8.27**	**8.57**
1978	**AVERAGE**	**5.46**	**37.54**	**12.15**	**34.41**	**13.95**	**14.03**	**5.22**	**12.96**	**12.85**	**1.08**	**8.63**	**9.00**
1979	January	5.75	35.51	12.66	34.25	14.55	14.14	5.79	14.88	13.10	1.20	9.04	9.46
	February	5.76	35.20	12.78	34.97	14.88	15.08	5.87	13.71	13.94	1.01	9.21	9.69
	March	5.82	34.59	12.84	34.56	14.88	14.95	6.66	14.58	13.97	1.29	9.37	9.83
	April	5.85	33.98	12.94	34.93	16.71	15.27	7.45	14.52	14.56	1.28	9.60	10.33
	May	5.91	33.55	13.02	34.77	17.53	15.62	8.47	14.71	15.85	1.32	9.86	10.71
	June	5.95	29.32	13.14	38.22	20.24	15.97	8.97	13.64	16.02	1.34	10.48	11.70
	July	5.98	26.96	13.25	37.49	24.76	16.01	13.35	15.86	20.13	1.38	11.31	13.39
	August	6.09	26.03	13.33	36.72	25.71	16.93	14.14	15.82	20.77	1.33	11.88	14.00
	September	6.09	23.52	13.53	33.89	27.09	16.55	13.09	16.08	20.85	1.57	12.21	14.57
	October	6.12	23.46	13.56	32.58	29.42	16.20	13.12	16.27	21.01	1.57	12.43	15.11
	November	6.09	23.11	13.68	32.76	30.64	15.35	13.48	17.49	26.48	1.61	12.80	15.52
	December	6.21	22.31	13.76	32.52	34.99	16.34	13.60	16.51	29.04	1.60	13.44	17.03
	AVERAGE	**5.95**	**28.91**	**13.20**	**34.79**	**22.93**	**15.71**	**10.57**	**15.36**	**19.40**	**1.38**	**10.98**	**12.64**
1980	January	6.24	21.19	13.86	31.12	36.02	15.61	13.77	17.06	28.94	1.54	14.27	17.86
	February	6.37	20.52	14.03	29.45	36.14	15.82	13.77	15.73	34.96	1.44	15.18	18.81
	March	6.35	19.83	13.99	28.22	36.26	15.18	13.77	15.30	34.67	1.55	15.85	19.34
	April	R6.37	R18.71	R14.18	R25.87	R36.54	R15.80	14.07	R14.75	33.81	R1.61	16.55	R20.29
	May†	6.47	17.62	14.29	25.21	36.11	15.43	14.36	13.48	34.16	1.56	NA	21.00
	AVERAGE	**6.35**	**19.58**	**14.06**	**27.98**	**36.21**	**15.56**	**13.93**	**15.27**	**33.28**	**1.54**	**NA**	**19.46**

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 12.
[2]See Definitions.
[3]Stripper oil was exempt from price controls beginning September 1, 1976. From February through August 1976 stripper oil was subject to upper tier price ceilings. Annual average is for 12 months (January through December 1976).
[4]Alaskan North Slope (ANS) crude oil prices are treated as Upper Tier for determining the applicable wellhead ceiling prices. ANS is included in both the Actual Domestic Average and the Imputed Domestic Average price determinations.
[5]The Naval Petroleum Reserves (NPR) are exempt from pricing regulations but have been reported here as Upper Tier prior to July 1977. NPR is included in both the Actual Domestic Average and the Imputed Domestic Average price determinations.
[6]The imputed domestic average price determinations are no longer needed because the composite price limitations required under the Energy Policy and Conservation Act (P.L. 94-163) have expired. This is the last time these data will be included in this monthly publication.
†Preliminiary data. R=Revised data. NA=Not available.
Sources: • January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report."
• February 1976 forward: Economic Regulatory Administration Form 182, "Domestic Crude Oil First Purchase Report."

Price

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

		Algeria	Indonesia	Iran	Libya	Mexico	Nigeria	Saudi Arabia	United Arab Emirates	United Kingdom	Venezuela
						Dollars per barrel					
1976	**AVERAGE**	**13.05**	**12.76**	**11.61**	**12.55**	**NA**	**13.08**	**11.69**	**11.94**	**NA**	**11.32**
1977	**AVERAGE**	**14.36**	**13.57**	**12.67**	**13.90**	**13.42**	**14.44**	**12.37**	**12.83**	**NA**	**12.68**
1978	**AVERAGE**	**14.10**	**13.64**	**12.65**	**13.75**	**13.24**	**14.04**	**12.70**	**13.24**	**13.82**	**12.45**
1979	January	14.87	14.06	12.55	14.60	13.94	14.84	13.26	13.98	15.41	13.69
	February	14.89	14.18	12.56	15.15	14.17	14.98	13.47	14.28	15.33	13.26
	March	15.54	14.42	19.04	16.46	14.14	15.07	13.61	15.72	16.13	13.88
	April	16.80	15.98	17.96	17.40	17.02	18.18	14.77	16.24	17.40	14.58
	May	19.14	16.84	17.27	19.13	18.56	20.02	14.62	17.38	18.39	15.76
	June	21.04	18.59	19.95	20.87	17.43	22.11	17.98	18.91	20.88	16.01
	July	22.42	20.95	21.99	23.88	22.29	24.46	18.54	21.33	23.14	18.22
	August	23.44	21.65	21.40	24.93	22.56	25.43	18.32	21.45	23.88	18.66
	September	23.60	22.11	27.27	25.17	22.32	25.77	18.72	22.93	22.93	18.14
	October	24.40	24.39	31.80	27.39	24.43	26.33	21.44	21.85	25.09	22.36
	November	26.38	23.72	28.81	29.60	24.50	28.17	23.72	24.15	27.57	19.27
	December	28.67	25.29	35.13	31.86	24.50	29.82	22.99	27.90	25.89	20.62
	AVERAGE	**20.65**	**19.35**	**23.71**	**22.43**	**20.29**	**21.80**	**17.63**	**19.58**	**21.20**	**17.37**
1980	January	R33.67	R29.67	R29.28	R35.72	R29.43	R31.57	R26.25	R29.85	R30.77	R25.34
	February	R34.03	R31.11	NA	R35.71	R31.77	R33.39	R26.62	R30.95	R32.66	R24.82
	March	R36.74	R31.54	R32.53	R35.88	R30.56	R35.59	R26.85	R29.34	R34.34	R24.03
	April	R36.93	R32.22	NA	R35.30	R30.24	R36.11	R27.78	R30.38	R34.15	R23.85
	May†	37.10	32.40	NA	36.13	30.68	36.50	28.50	32.67	34.10	24.82

Note: Prices shown for 1980 are for the month of loading; whereas prior to 1980 the prices are for the month of reporting.
[1]The FOB cost excludes all costs related to insurance and transportation. See Explanatory Note 14.
NA = Not available.
†Preliminary data. R = Revised data.
Sources: 1976 through January 1979: FEA Form 701-M-0, "Transfer Pricing Report."
• February 1979 forward: Economic Regulatory Administration Form 51, "Transfer Pricing Report."

Price

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

		Algeria	Canada	Indonesia	Iran	Libya	Mexico	Nigeria	Saudi Arabia	United Arab Emirates	United Kingdom	Venezuela
						Dollars per barrel						
1975	**AVERAGE**	**12.72**	**12.72**	**13.79**	**12.21**	**12.35**	**NA**	**12.62**	**12.30**	**12.87**	**NA**	**11.65**
1976	**AVERAGE**	**13.81**	**13.57**	**13.82**	**12.82**	**13.58**	**NA**	**13.80**	**13.04**	**13.30**	**NA**	**11.80**
1977	**AVERAGE**	**15.20**	**14.21**	**14.63**	**13.80**	**14.87**	**13.75**	**15.25**	**13.61**	**14.04**	**NA**	**13.13**
1978	**AVERAGE**	**14.91**	**14.50**	**14.64**	**13.88**	**14.72**	**13.54**	**14.86**	**13.92**	**14.39**	**NA**	**12.83**
1979	January	15.88	16.19	15.29	13.76	15.81	14.51	15.88	14.73	15.53	16.29	14.16
	February	16.18	16.68	15.62	14.25	16.49	14.76	16.13	14.88	16.05	16.07	14.17
	March	16.61	17.18	15.68	19.54	17.56	14.81	16.20	15.28	17.10	15.91	14.61
	April	17.93	17.39	17.31	19.06	18.59	17.40	19.11	16.18	17.70	18.23	15.19
	May	20.22	20.22	17.92	18.56	20.16	18.82	21.06	16.29	18.65	19.26	16.74
	June	22.52	19.12	20.11	21.27	22.21	17.85	23.23	19.49	20.42	21.64	16.80
	July	23.54	20.22	22.50	23.35	25.48	22.74	25.79	20.06	22.84	23.96	18.95
	August	24.85	22.67	23.10	22.64	26.27	23.12	26.72	19.85	23.12	25.05	19.42
	September	25.09	25.64	23.72	28.36	26.54	23.23	27.03	20.36	24.59	24.18	18.99
	October	25.59	23.54	26.36	33.17	28.56	24.98	27.41	22.99	23.98	26.39	23.05
	November	27.95	26.01	25.37	30.44	30.38	25.12	29.41	25.19	25.95	29.10	20.13
	December	29.99	26.32	26.84	36.64	33.29	25.31	31.21	24.48	29.93	27.07	21.72
	AVERAGE	**21.90**	**20.43**	**20.69**	**25.02**	**23.68**	**20.86**	**22.96**	**19.15**	**21.90**	**22.16**	**18.18**
1980	January	R35.32	R27.73	R31.03	R30.37	R37.10	R30.18	R33.03	R27.85	R32.35	R32.14	R26.25
	February	R35.28	R28.60	R32.95	NA	R36.98	R32.38	R35.25	R28.15	R32.71	R34.07	R25.91
	March	R38.54	R30.75	R33.04	R32.53	R37.18	R31.17	R36.93	R28.26	R30.96	R35.73	R24.97
	April	R38.52	R30.31	R33.81	NA	R36.57	R30.77	R37.41	R29.14	R32.29	R35.34	R25.10
	May†	38.54	31.16	33.73	NA	37.36	31.22	37.53	30.30	34.06	35.82	25.93

Note: Prices shown for 1980 are for the month of loading; whereas prior to 1980 prices are for the month of reporting.
[1]See Explanatory Note 15.
NA = Not available. R = Revised data. †Preliminary data.
Sources: • 1975 through January 1979: FEA Form F701-M-0, "Transfer Pricing Report." Data provided by the Economic Regulatory Administration.
• February 1979 forward: ERA 51, "Transfer Pricing Report."

		Crude Oil Entitlements and Supply Ratio			Unrecouped Costs for Refined Products for 29 Largest Refiners		
		Entitlement Benefit[1]	Entitlement Price[1]	National Old Oil (or Domestic Crude Oil) Supply Ratio[1]	Motor Gasoline	Other Products[2]	Total
		Dollars per barrel			Million Dollars		
1979	January	1.56	8.74	0.178	836	863	1,699
	February	1.67	9.03	0.185	1,110	878	1,988
	March	1.80	9.50	0.189	1,551	837	2,388
	April	2.06	10.53	0.196	2,067	1,649	3,716
	May	2.44	11.74	0.208	2,245	1,848	4,093
	June	3.01	13.70	0.220	2,507	1,973	4,480
	July	3.54	16.01	0.221	2,990	2,089	5,079
	August	3.78	17.26	0.218	2,856	2,347	5,203
	September	3.92	17.97	0.218	3,151	2,376	5,527
	October	4.00	18.27	0.219	3,094	2,295	5,389
	November	4.39	20.12	0.218	3,492	2,302	5,794
	December	4.71	21.91	0.215	3,724	1,171	4,895
1980	January	5.28	23.53	0.224	4,115	1,189	5,304
	February	5.14	24.70	0.208	5,362	1,167	6,529
	March	5.05	25.26	0.200	6,236	1,213	7,445
	April	5.10	25.74	0.198	6,202	1,391	7,593
	May	6.22	27.39	0.227	NA	NA	NA
	June†	5.44	27.32	0.199	NA	NA	NA

Geographic coverage: the 50 United States, District of Columbia, Puerto Rico, Guam, and the Virgin Islands.
[1]See Definitions.
[2]Other includes propane, butane, natural gasoline, some natural gas liquids, and aviation jet fuel from January 1977 until February 1979 when aviation jet fuel was decontrolled. Since January 1980, when butane and natural gasoline were decontrolled, only propane and some natural gas liquids are included in this category.
†Preliminary data. NA = Not available.
Sources: • Crude oil entitlements, Economic Regulatory Administration Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."
• Unrecouped costs: EIA Form 14, "Refiners' Monthly Cost Allocation Report." Data provided by the Economic Regulatory Administration.

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	January	54.1	53.9	38.6	42.2	40.1
	February	54.6	55.1	39.1	44.3	40.2
	March	56.6	56.8	40.7	54.8	41.3
	April	58.2	59.1	43.2	60.1	45.4
	May	60.6	61.2	44.1	58.1	48.4
	June	64.8	66.8	49.5	59.9	50.9
	July	70.0	71.8	50.4	67.1	58.2
	August	74.2	75.6	55.0	71.4	60.8
	September	78.2	79.0	60.2	73.1	65.9
	October	79.8	80.4	64.6	80.6	68.4
	November	81.3	80.6	66.4	83.4	69.7
	December	84.1	83.4	73.3	83.2	72.3
	AVERAGE	**68.5**	**69.5**	**52.3**	**66.5**	**55.1**
1980	January	90.6	90.0	76.0	83.4	77.0
	February	98.5	97.8	80.1	86.2	83.0
	March	102.9	107.0	84.1	86.6	86.3
	April	104.8	109.6	83.2	88.4	87.4
	May†	106.2	109.7	89.1	89.2	87.5
	AVERAGE	**101.3**	**103.3**	**82.5**	**87.0**	**84.1**

Geographic coverage: the 50 United States and District of Columbia.
[1]Nearly all naphtha-type fuels are sold directly to the Defense Fuel Supply Center. Consequently, wholesale prices are not applicable.
[2]Wholesale refers to the price of aviation fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and aviation fuel distributors. Retail refers to the price of aviation fuel sold to ultimate consumers, including commercial airline and military accounts.
†Preliminary data.
Source: • FEA Form P302–M–1, "Petroleum Industry Monthly Report for Product Prices."

Price

National Average Retail Dealer Motor Gasoline Selling Prices

		Leaded Regular		Unleaded Regular		Leaded Premium		Unleaded Premium		
		Full Serve	Self Serve	Full Serve	Self Serve	Full Serve	Self Serve	Full Serve	Self Serve	Average for All Grades
		Cents per gallon, including tax								
1976	**AVERAGE**	**58.7**	**55.4**	**62.5**	**NA**	**63.8**	**60.7**	**NA**	**NA**	**NA**
1977	**AVERAGE**	**62.6**	**58.2**	**66.4**	**63.6**	**68.1**	**64.7**	**71.0**	**NA**	**NA**
1978	**AVERAGE**	**63.9**	**59.8**	**68.4**	**64.9**	**69.4**	**67.1**	**72.8**	**69.7**	**65.5**
1979	January	68.4	64.0	72.9	69.3	74.8	71.3	78.6	75.1	69.8
	February	69.9	65.4	74.5	70.4	76.2	72.8	80.8	77.0	71.0
	March	72.6	68.7	77.4	73.9	78.9	76.0	83.7	78.8	74.0
	April	76.8	73.7	81.6	78.5	83.5	81.7	86.2	82.5	78.4
	May	81.2	78.6	85.8	83.2	88.0	86.4	89.9	86.3	82.9
	June	86.3	83.8	90.9	88.3	92.9	91.8	94.5	91.3	87.9
	July	91.3	88.4	95.6	92.6	96.9	95.2	100.4	97.8	92.6
	August	95.6	92.0	100.1	96.5	101.8	99.1	105.6	101.6	96.7
	September	98.2	94.3	103.2	99.3	105.4	102.2	108.9	104.4	99.4
	October	99.5	95.1	104.3	100.0	106.5	102.9	110.1	106.1	100.5
	November	100.7	97.0	105.4	101.7	107.0	104.6	111.0	107.6	101.8
	December	103.6	99.7	108.2	104.5	110.1	107.5	113.9	109.9	104.6
	AVERAGE	**87.1**	**83.9**	**92.2**	**89.2**	**92.0**	**89.2**	**98.1**	**94.2**	**88.8**
1980	January	110.2	105.9	114.7	110.8	116.4	114.5	121.4	116.8	110.7
	February	117.9	113.2	122.5	118.4	124.2	122.9	130.3	126.2	118.3
	March	121.3	116.6	125.9	121.9	128.0	126.9	134.2	129.3	121.5
	April	121.9	117.0	126.7	122.5	129.3	127.6	134.9	129.4	122.1
	May	122.5	R117.3	R127.2	R122.8	R129.3	R127.8	R134.6	R128.7	R122.4
	AVERAGE	**118.4**	**113.9**	**123.1**	**119.2**	**124.8**	**123.6**	**130.6**	**125.6**	**118.8**

Geographic coverage: the 50 United States and District of Columbia.
R = Revised data.
NA = Not available.
Note: "Average for all grades" excludes mini-serve for January 1978 through June 1978. Mini-serve is included from July 1978 forward. No. 2 diesel fuel is included in the "Average for All Grades" beginning July 1979.
Sources: • January 1976 through December 1977: Lundberg Survey, Inc.
• January 1978 through June 1978: EIA 8, "Retail Motor Fuels Service Station Survey".
• July 1978 forward: EIA 79, "Monthly Motor Fuels Service Station Survey".

Price

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

		Leaded Regular	Unleaded Regular	Leaded Premium	Average for All Grades
		Cents per gallon, including tax			
1974	**AVERAGE**	**53.2**	**NA**	**56.9**	**NA**
1975	**AVERAGE**	**56.7**	**NA**	**60.9**	**NA**
1976	**AVERAGE**	**59.0**	**61.4**	**63.6**	**NA**
1977	**AVERAGE**	**62.2**	**65.6**	**67.4**	**NA**
1978	**AVERAGE**	**62.6**	**67.0**	**69.4**	**65.2**
1979	January	66.8	71.6	73.7	69.5
	February	68.1	73:0	75.0	70.7
	March	70.6	75.5	77.4	73.3
	April	75.3	80.2	82.4	78.0
	May	79.7	84.4	86.7	82.3
	June	85.6	90.1	92.0	88.0
	July	90.8	94.9	96.5	93.0
	August	94.3	98.8	100.4	96.7
	September	97.3	102.0	103.6	99.8
	October	98.2	102.8	104.6	100.6
	November	99.4	104.1	105.6	101.9
	December	101.8	106.5	108.0	104.2
	AVERAGE	**85.7**	**90.3**	**92.2**	**88.2**
1980	January	108.6	113.1	114.9	111.0
	February	115.9	120.7	123.3	118.6
	March	120.2	125.2	127.7	123.0
	April	121.2	126.4	129.2	124.2
	May	121.5	126.6	129.5	124.4
	June	121.7	126.9	130.0	124.6
	July	121.6	127.1	130.7	124.7

Geographic coverage: 85 urban areas selected to represent all urban consumers—80 percent of the total U.S. population.
[1] See Explanatory Note 16.
Source: Bureau of Labor Statistics.

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	January	40.9	42.1	11.8	53.7
	February	43.1	44.5	12.0	56.3
	March	45.8	47.0	12.0	58.8
	April	48.3	49.3	12.1	61.1
	May	53.2	52.6	12.1	64.2
	June	58.8	56.9	12.7	69.1
	July	62.5	61.1	13.0	73.8
	August	65.7	64.6	13.0	78.4
	September	69.0	67.8	13.7	81.0
	October	68.6	68.1	14.8	82.3
	November	70.0	69.0	15.1	83.7
	December	71.7	70.8	15.5	85.8
	AVERAGE	**55.9**	**53.0**	**12.8**	**65.6**
1980	January	75.0	75.2	16.2	90.8
	February	77.8	79.0	16.7	95.3
	March	78.8	80.4	17.1	97.1
	April	78.8	81.0	17.0	97.4
	May	R79.3	R81.4	R16.3	R97.2
	June†	80.2	82.5	15.8	97.8
	AVERAGE	**77.9**	**78.8**	**16.6**	**94.9**

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 17.
[2]Average selling prices, purchase prices, and dealer margins represent sales for residential heating oil only.
†Preliminary data.
R = Revised data.
NA = Not available.
Source: • FEA Form P112–M–1/EIA–9, "No. 2 Heating Oil Supply/Price Monitoring Report."

Price

Residential Heating Oil Prices by Region

		DOE Region[1]									
		Cents per gallon									
		1	2	3	4	5	6	7	8	9	10
1979	January	55.1	54.5	53.3	51.6	51.5	NA	49.6	50.4	47.6	50.8
	February	57.7	57.3	55.5	53.2	53.7	NA	51.3	51.4	49.4	52.9
	March	60.6	59.8	57.5	54.3	56.3	NA	54.7	55.3	50.8	55.3
	April	62.8	61.9	60.0	57.3	58.8	NA	58.2	58.4	53.8	57.8
	May	65.9	64.8	63.4	61.2	62.8	NA	62.0	62.7	56.2	60.8
	June	70.5	69.7	68.4	66.2	68.5	NA	68.9	67.8	62.2	66.4
	July	75.9	73.9	72.9	70.9	73.2	NA	72.0	72.5	68.4	72.3
	August	80.1	78.6	77.7	74.8	78.5	NA	76.4	77.1	71.7	77.2
	September	83.3	81.4	80.0	79.4	81.5	NA	79.5	80.1	76.8	81.4
	October	84.1	82.5	81.7	79.1	82.6	NA	80.2	81.3	81.2	82.6
	November	85.1	83.7	82.4	80.5	83.9	NA	82.2	84.0	80.4	82.3
	December	87.2	85.7	85.1	82.9	86.1	NA	85.3	86.3	82.6	84.6
1980	January	91.8	91.0	90.2	88.6	90.4	NA	90.0	90.2	89.6	91.0
	February	96.7	95.3	94.7	93.0	93.5	NA	93.6	93.5	95.8	95.7
	March	98.7	97.2	96.5	94.8	94.3	NA	95.1	95.9	93.9	97.6
	April	99.2	97.3	96.6	94.1	94.5	NA	95.3	99.5	94.7	99.0
	May	R98.7	R97.3	96.4	R94.2	R95.8	NA	R95.2	97.7	R95.5	98.6
	June†	99.6	97.9	96.8	95.1	95.8	NA	95.3	98.4	93.7	99.8

[1]DOE regions are defined in Explanatory Note 18.
†Preliminary data.
R = Revised data.
NA = Not available. Data for Region 6 are based on a sample of less than four reporting firms.
Source: • FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

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	January	15.16	16.12	13.68	14.79	11.00	11.92	12.78	14.13
	February	16.12	17.28	15.01	15.30	11.31	12.28	13.72	14.68
	March	16.08	18.05	15.90	16.94	13.48	14.00	14.82	15.95
	April	17.79	19.09	16.34	17.44	13.70	14.59	15.51	16.61
	May	18.04	19.45	15.74	17.89	14.69	15.37	15.71	17.18
	June	20.92	19.79	18.08	18.51	15.95	16.40	17.81	17.97
	July	21.85	23.07	21.25	20.47	16.51	17.86	19.18	19.89
	August	21.05	22.63	19.49	21.28	17.51	18.32	19.00	20.33
	September	21.81	22.92	21.01	21.66	17.54	18.94	19.62	20.90
	October	23.80	23.29	22.99	22.33	18.31	19.53	20.88	21.59
	November	26.68	25.54	24.07	24.31	19.31	19.51	22.00	22.84
	December	27.09	27.78	25.83	25.01	20.67	21.05	23.55	24.44
	AVERAGE	**19.87**	**21.21**	**18.33**	**19.33**	**15.89**	**16.44**	**17.66**	**18.67**
1980	January	29.11	30.35	26.15	28.12	21.56	21.98	24.41	26.21
	February	27.07	30.32	25.82	28.15	20.21	22.22	23.34	26.48
	March	26.88	30.20	23.73	27.29	17.81	20.34	21.11	25.33
	April	25.16	28.69	20.38	24.78	16.41	18.36	19.09	22.87
	Mayt	25.66	30.62	22.50	26.05	17.76	18.04	20.48	23.75
	AVERAGE	**26.93**	**30.08**	**23.70**	**27.04**	**18.66**	**20.35**	**21.72**	**25.09**

Geographic coverage: the 50 United States and District of Columbia.
Note: Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, commercial, and residential accounts.
† Preliminary data.
Source: • FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

Natural Gas

		Average Wellhead Value	Delivered to Electric Plant[1]	Average Residential Heating
		Cents per thousand cubic feet		
1973	**AVERAGE**	**21.6**	**34.5**	**108.2**
1974	**AVERAGE**	**30.4**	**49.5**	**125.3**
1975	**AVERAGE**	**44.5**	**77.0**	**154.2**
1976	**AVERAGE**	**58.0**	**124.1**	**184.6**
1977	**AVERAGE**	**79.0**	**132.7**	**226.4**
1978	**AVERAGE**	**90.5**	**146.5**	**262.6**
1979	January	99.5	153.1	292.9
	February	101.8	162.1	295.6
	March	106.3	166.1	300.6
	April	107.0	167.8	299.6
	May	111.6	180.9	314.9
	June	112.9	182.9	320.0
	July	116.4	182.3	328.4
	August	119.0	184.3	330.8
	September	120.6	187.0	341.4
	October	124.0	192.7	352.8
	November	125.6	183.7	347.6
	December	128.9	186.8	351.9
	AVERAGE	**114.4**	**178.7**	**323.1**
1980	January	129.1	198.5	354.9
	February	132.0	207.8	357.9
	March	132.2	211.9	368.1
	April	134.7	207.9	367.8
	May	134.3	NA	393.9

Geographic coverage: the 50 United States and District of Columbia.
[1]Includes small quantities of coke oven gas, refinery gas and blast furnace gas.
NA = Not available.
Sources: • Annual data for wellhead values are from the appropriate agencies of the individual producing states and the U.S. Geological Survey; monthly data are estimated primarily on the basis of values reported by state agencies in New Mexico, Oklahoma, and Texas.
• Interstate Pipeline Company data from Federal Power Commission Form 11, "Natural Gas Pipeline Company Monthly Statement."
• Average residential heating prices, Bureau of Labor Statistics.

Price

Electricity

		Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants				Average Retail Electricity Prices[1]				
		Coal	Residual Oil[2]	Natural Gas[3]	All Fossil Fuels[2]	Residential	Commercial	Industrial	Other	Total[4]
		Cents per million Btu				Cents per kilowatt-hour				
1973	**AVERAGE**	**40.5**	**78.8**	**33.8**	**47.5**	**2.54**	**2.41**	**1.25**	**2.10**	**1.96**
1974	**AVERAGE**	**71.0**	**191.0**	**48.1**	**90.9**	**3.10**	**3.04**	**1.69**	**2.75**	**2.49**
1975	**AVERAGE**	**81.4**	**201.4**	**75.4**	**103.0**	**3.51**	**3.45**	**2.07**	**3.08**	**2.92**
1976	**AVERAGE**	**84.8**	**195.9**	**103.4**	**110.4**	**3.73**	**3.69**	**2.21**	**3.27**	**3.09**
1977	**AVERAGE**	**94.7**	**220.4**	**130.0**	**127.7**	**4.05**	**4.09**	**2.50**	**3.51**	**3.42**
1978	**AVERAGE**	**111.6**	**212.3**	**143.8**	**139.3**	**4.31**	**4.36**	**2.79**	**3.62**	**3.69**
1979	January	115.8	228.1	150.2	150.4	4.07	4.28	2.81	3.55	3.64
	February	114.6	240.6	159.1	154.3	4.09	4.30	2.85	3.73	3.66
	March	116.8	258.8	163.0	152.3	4.28	4.44	R2.91	3.87	R3.76
	April	120.1	264.6	164.7	151.4	4.51	4.54	R2.92	R3.87	R3.82
	May	121.1	274.1	177.5	158.0	4.68	4.65	2.96	3.98	3.89
	June	121.8	289.3	179.5	161.2	4.88	4.73	3.02	4.05	4.02
	July	122.2	311.8	178.9	168.7	4.91	4.76	3.11	4.20	4.14
	August	122.5	323.5	180.9	167.1	4.94	4.79	3.11	3.89	4.17
	September	125.3	333.5	183.5	167.9	4.95	4.84	3.14	4.08	4.18
	October	127.4	346.1	189.1	167.3	4.94	4.89	3.14	3.89	4.13
	November	127.7	363.1	180.3	171.5	4.83	4.92	3.16	4.09	4.12
	December	129.2	394.8	183.3	183.8	4.71	4.90	3.23	4.18	4.15
	AVERAGE	**122.4**	**299.7**	**175.4**	**162.1**	**4.63**	**4.67**	**3.03**	**3.94**	**3.97**
1980	January	128.7	423.5	194.8	187.3	4.69	4.90	3.29	4.19	4.19
	February	129.9	429.7	203.9	189.8	4.74	4.96	3.31	4.64	4.24
	March	130.1	411.0	207.9	184.8	4.92	5.17	3.45	4.69	4.40
	April	133.8	394.9	204.0	178.2	5.14	5.28	3.49	4.71	4.48
	May	133.3	403.1	212.0	180.3	NA	NA	NA	NA	NA

Geographic coverage: Fossil Fuels—the lower 48 States and the District of Columbia. Electricity—the 50 United States and the District of Columbia.

[1]Prices are for Classes A and B privately owned electric utilities.

[2]See Explanatory Note 19.

[3]Includes small quantities of coke oven gas, refinery gas and blast furnace gas.

[4]Average price for total sale to ultimate consumers.

R = Revised data.

NA = Not available.

Sources: • Cost of Fossil Fuels, Federal Power Commission Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

• Retail Price, January 1973 thru February 1980: Federal Power Commission, Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: Federal Energy Regulatory Commission, Form 5, "Electric Utility Company Monthly Statement."

International

Crude Oil Production

World crude oil production during May 1980 rose to 60.3 million barrels per day, up just 0.1 million barrels per day from April. This represents the second lowest world production level since January 1979.

OPEC output during June declined 0.9 million barrels per day from May, averaging 26.7 million barrels per day. Kuwait was the only OPEC member showing a larger level of production. Kuwait registered a 50 thousand barrels per day increase. Iran, in June 1980, continued its production cutbacks reaching its lowest level since February 1979 at 1.5 million barrels per day. Other OPEC members showing lower production levels were Nigeria and Venezuela; both were down about 0.1 million barrels per day in June 1980 from the previous month.

Production by non-OPEC nations increased during May to 32.7 million barrels per day, up 460 thousand barrels per day from the previous month. The largest increases were seen in Canada and the United Kingdom, up 80 and 90 thousand barrels per day, respectively. Preliminary production data by non-OPEC nations for June were available for only the United Kingdom, United States, China, and the USSR. Both the United States and USSR reported slight decreases in average daily production.

Petroleum Consumption

Petroleum consumption by International Energy Agency (IEA) member nations was 31.9 million barrels per day during May 1980. This preliminary figure indicates a 0.9 million barrels per day decrease from the consumption rate during April 1980, and a 2.3 million barrels per day decrease from the May 1979 rate of 34.2 million barrels per day.

Preliminary consumption data for June 1980 were available for only France, Italy, and the United States. United States petroleum consumption was down slightly whereas Italy was up and France remained at about the same level as the previous month. While January through May data indicate a decline in the rate of consumption for all IEA nations, as compared to the same period of time during 1979, the most significant decreases were seen in France (not an IEA member), the United Kingdom, and the United States, down 9.1, 15.0 and 8.6 percent, respectively.

Nuclear Energy Production

A total of 18 non-Communist countries produced electricity commercially from nuclear power. As of June 1980, these countries had a total of 199 reactor units, including 74 in the United States. The reactors had a total capacity of 121 million kilowatts, including 53 million kilowatts for those in the United States.

During June 1980 nuclear electricity generation from these 18 nations totaled 43.9 billion gross kilowatt-hours, a decrease of 1.7 percent from May 1980 and an increase of 10.6 percent from the June 1979 totals. Nuclear electricity generated in the United States during June 1980 was 19.4 billion gross kilowatt-hours, 1.2 percent less than in May 1980 and 13.5 percent above the June 1979 total. Generation by the remaining 17 nations was 24.5 billion gross kilowatt-hours in June 1980, down 2.2 percent from the May 1980 level and 8.5 percent above the June 1979 total.

International

Crude Oil Production for Major Petroleum Exporting Countries

		Algeria	Iraq	Kuwait[1]	Libya	Qatar	Saudi Arabia[1]	United Arab Emirates	Arab OPEC	Indo-nesia	Iran
		Thousand barrels per day									
1973	**AVERAGE**	**1,070**	**2,018**	**3,020**	**2,175**	**570**	**7,596**	**1,533**	**17,982**	**1,339**	**5,860**
1974	**AVERAGE**	**960**	**1,971**	**2,546**	**1,521**	**518**	**8,480**	**1,679**	**17,675**	**1,375**	**6,022**
1975	**AVERAGE**	**960**	**2,262**	**2,084**	**1,480**	**438**	**7,075**	**1,664**	**15,963**	**1,307**	**5,350**
1976	**AVERAGE**	**1,020**	**2,415**	**2,145**	**1,933**	**497**	**8,577**	**1,936**	**18,523**	**1,504**	**5,863**
1977	**AVERAGE**	**1,100**	**2,350**	**1,980**	**2,065**	**445**	**9,210**	**2,000**	**19,150**	**1,685**	**5,665**
1978	**AVERAGE**	**1,160**	**2,560**	**2,135**	**1,985**	**485**	**8,300**	**1,830**	**18,455**	**1,635**	**5,240**
1979	January	1,235	3,535	2,605	2,165	550	9,790	1,840	21,720	1,600	410
	February	1,235	3,535	2,695	2,150	555	9,780	1,835	21,785	1,615	760
	March	1,235	3,535	2,580	2,070	370	9,780	1,830	21,400	1,625	2,190
	April	1,235	3,535	2,535	2,060	550	8,790	1,755	20,460	1,605	3,800
	May	1,235	3,535	2,575	2,040	540	8,780	1,860	20,565	1,565	4,100
	June	1,235	3,535	2,575	2,015	455	8,780	1,870	20,465	1,610	3,950
	July	1,035	3,335	2,540	2,070	520	9,780	1,835	21,115	1,600	3,750
	August	1,035	3,335	2,515	2,080	535	9,770	1,835	21,105	1,595	3,600
	September	1,035	3,335	2,365	2,020	455	9,780	1,840	20,830	1,575	3,600
	October	1,035	3,335	2,365	2,030	490	9,725	1,785	20,765	1,570	3,930
	November	1,035	3,335	2,435	2,085	525	9,795	1,870	21,080	1,570	3,170
	December	1,035	3,335	2,240	2,090	545	9,775	1,875	20,895	1,565	3,000
	AVERAGE	**1,135**	**3,435**	**2,500**	**2,065**	**505**	**9,530**	**1,835**	**21,005**	**1,590**	**3,035**
1980	January	1,150	3,400	2,140	2,100	495	9,785	1,740	20,810	1,565	2,295
	February	1,150	3,400	2,335	2,100	460	9,780	1,740	20,965	1,550	2,500
	March	1,150	3,400	2,090	2,000	500	9,790	1,695	20,625	1,575	2,350
	April†	1,000	3,300	1,570	1,750	500	9,765	1,705	19,590	1,580	2,200
	May†	1,000	3,300	1,525	1,750	480	9,775	1,765	19,595	1,550	1,700
	June†	1,000	3,300	1,575	1,700	440	9,775	1,750	19,540	1,545	1,500

[1]Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In June 1980 total production in this region amounted to approximately 545,000 barrels per day.
Additional footnotes on following page.
†Preliminary data.

International

Crude Oil Production for Major Petroleum Exporting Countries (continued)

		Nigeria	Venezuela	Total OPEC[2]	Canada	Mexico	United Kingdom	United States	China	USSR	Other[3]	World
						Thousand barrels per day						
1973	**AVERAGE**	**2,054**	**3,366**	**30,961**	**1,800**	**450**	**8**	**9,208**	**1,140**	**8,420**	**3,843**	**55,830**
1974	**AVERAGE**	**2,255**	**2,976**	**30,683**	**1,695**	**580**	**9**	**8,774**	**1,310**	**9,020**	**3,805**	**55,875**
1975	**AVERAGE**	**1,783**	**2,346**	**27,134**	**1,420**	**720**	**20**	**8,375**	**1,490**	**9,630**	**4,201**	**52,990**
1976	**AVERAGE**	**2,067**	**2,294**	**30,711**	**1,300**	**800**	**245**	**8,132**	**1,735**	**10,170**	**4,302**	**57,395**
1977	**AVERAGE**	**2,085**	**2,240**	**31,230**	**1,320**	**980**	**770**	**8,245**	**1,875**	**10,700**	**4,490**	**59,610**
1978	**AVERAGE**	**1,895**	**2,165**	**29,800**	**1,315**	**1,215**	**1,080**	**8,707**	**2,080**	**11,215**	**4,698**	**60,190**
1979	January	2,440	2,265	28,880	1,450	1,395	1,465	8,457	2,120	11,370	4,743	59,880
	February	2,430	2,345	29,380	1,575	1,400	1,505	8,498	2,120	11,370	4,622	60,470
	March	2,440	2,425	30,515	1,405	1,310	1,335	8,585	2,120	11,370	5,230	61,870
	April	2,420	2,385	31,095	1,510	1,400	1,460	8,533	2,120	11,510	4,882	62,510
	May	2,400	2,385	31,445	1,465	1,405	1,645	8,585	2,120	11,110	4,695	62,470
	June	2,420	2,245	31,115	1,465	1,440	1,745	8,409	2,120	11,460	4,766	62,520
	July	2,380	2,325	31,515	1,520	1,440	1,710	8,355	2,120	11,400	5,630	63,690
	August	2,185	2,325	31,230	1,450	1,460	1,640	8,699	2,120	11,560	5,171	63,330
	September	2,115	2,365	30,895	1,490	1,475	1,675	8,466	2,120	11,460	5,129	62,710
	October	2,135	2,370	31,180	1,545	1,515	1,615	8,568	2,120	11,630	5,152	63,325
	November	2,150	2,390	30,770	1,525	1,620	1,520	8,649	2,120	11,700	5,236	63,140
	December	2,150	2,410	30,430	1,545	1,660	1,545	8,587	2,120	11,700	5,033	62,620
	AVERAGE	**2,305**	**2,355**	**30,710**	**1,495**	**1,460**	**1,570**	**8,533**	**2,120**	**11,470**	**5,042**	**62,400**
1980	January	2,155	2,280	29,535	1,515	1,720	1,600	8,648	2,120	11,560	5,027	61,725
	February	2,160	2,200	29,805	1,475	1,725	1,660	8,696	2,120	11,550	5,004	62,035
	March	2,155	1,995	29,100	1,475	1,830	1,670	8,712	2,120	11,640	5,038	61,585
	April†	2,100	2,045	27,965	1,390	1,885	1,510	R8,688	2,120	11,630	R5,007	60,195
	May†	2,200	2,150	27,645	1,470	1,910	1,600	8,720	2,120	11,700	5,170	60,335
	June†	2,110	2,050	26,745	NA	NA	1,616	8,690	2,120	11,630	NA	NA

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

International

Petroleum Consumption for Major Free World Industrialized Countries[1]

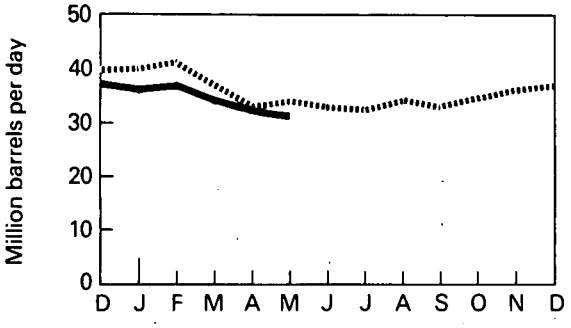
		Canada	France[2]	Italy	Japan	United Kingdom	United States	West Germany	Other IEA[3]	Total IEA[4]
					Thousand barrels per day					
1973	**AVERAGE**	**1,597**	**2,219**	**1,525**	**5,000**	**1,958**	**17,308**	**2,693**	**R4,069**	**R34,150**
1974	**AVERAGE**	**1,630**	**2,094**	**1,521**	**4,872**	**1,829**	**16,653**	**2,408**	**R4,047**	**R32,960**
1975	**AVERAGE**	**1,595**	**1,925**	**1,468**	**4,568**	**1,633**	**16,322**	**2,319**	**R3,905**	**R31,810**
1976	**AVERAGE**	**1,647**	**2,075**	**1,503**	**4,786**	**1,601**	**17,461**	**2,507**	**R4,265**	**R33,770**
1977	**AVERAGE**	**1,661**	**1,973**	**1,476**	**5,015**	**1,655**	**18,431**	**2,478**	**R4,214**	**R34,930**
1978	**AVERAGE**	**1,701**	**2,077**	**1,551**	**5,115**	**1,683**	**18,847**	**2,596**	**R4,387**	**R35,880**
1979	January	1,881	2,786	1,950	5,579	1,883	20,657	2,893	R5,157	R40,000
	February	2,019	2,731	1,912	6,009	2,067	21,145	2,708	R5,240	R41,100
	March	1,654	2,315	1,601	5,708	1,949	19,180	2,592	R4,716	R37,400
	April	1,605	2,150	1,447	5,009	1,703	17,319	2,590	R4,327	R34,000
	May	1,650	2,039	1,402	4,757	1,648	17,718	2,641	R4,384	R34,200
	June	1,737	1,663	1,312	4,709	1,517	17,675	2,613	R4,137	R33,700
	July	1,700	1,604	1,314	4,689	1,435	17,055	2,626	R4,281	R33,100
	August	1,775	1,553	1,311	4,894	1,488	18,184	2,617	R4,531	R34,800
	September	1,619	1,721	1,617	4,809	1,520	17,270	2,597	R4,468	R33,900
	October	1,852	2,007	1,807	4,771	1,652	18,124	2,846	R4,448	R35,500
	November	1,840	2,481	1,890	5,359	1,858	18,262	2,763	R4,428	R36,400
	December	1,877	2,278	1,744	5,800	1,606	18,783	2,489	R4,801	R37,100
	AVERAGE	**1,766**	**2,107**	**1,607**	**R5,173**	**1,690**	**18,434**	**2,664**	**R4,569**	**R35,900**
1980	January	1,812	R2,462	1,778	R5,255	1,769	18,509	R2,656	R4,521	R36,300
	February	1,946	R2,443	1,864	R5,722	1,620	18,721	2,393	R4,734	R37,000
	March	1,734	R1,981	R1,660	R5,403	R1,585	17,279	2,405	R4,334	R34,400
	April†	R1,550	R2,109	R1,541	R4,647	R1,470	R16,616	2,656	4,320	32,800
	May†	1,560	1,853	1,455	4,358	1,357	16,525	2,403	4,242	31,900
	June†	NA	1,849	1,493	NA	NA	16,481	NA	NA	NA

United States geographic coverage: the 50 United States and District of Columbia.
[1]These data represent inland consumption, i.e., sales of petroleum products excluding refinery fuel, refinery losses, and ocean bunkers except for the United States, where it represents domestic products supplied.
[2]Not a member of the International Energy Agency (IEA).
[3]Other is a calculated total derived from the difference between total IEA consumption and the nations represented above.
[4]The 20 signatory nations of the International Energy Agency (IEA) are: Australia, Austria, Belgium, Canada, Denmark, West Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Australia and Portugal joined the IEA as new members in 1979 and 1980, respectively. In an effort to maintain comparability within this time series, consumption data for these two countries have been incorporated into the IEA total for all years.
†Preliminary data
R = Revised data.
NA = Not available.
Sources: • Central Intelligence Agency, "International Energy Statistical Review," 30 July 1980 (except United States).
• 1973–1980 United States data: See sources on last page of the Petroleum Section.
• IEA totals for most recent months are EIA estimates.

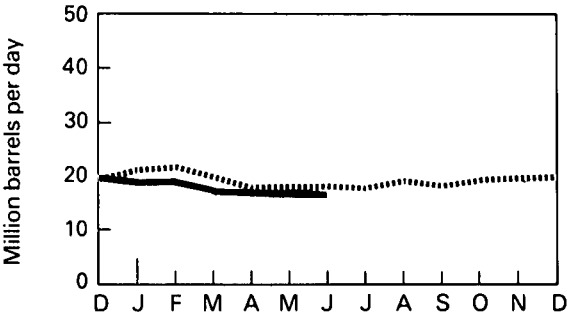
International

Petroleum Consumption

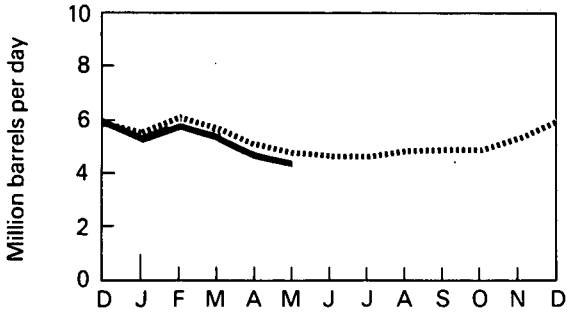
Total IEA



United States



Japan*



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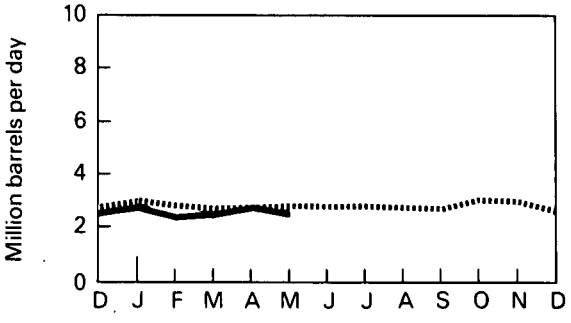
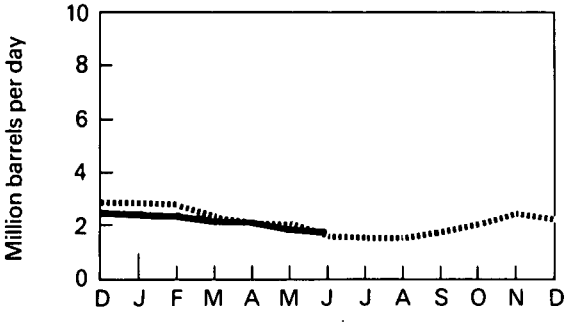
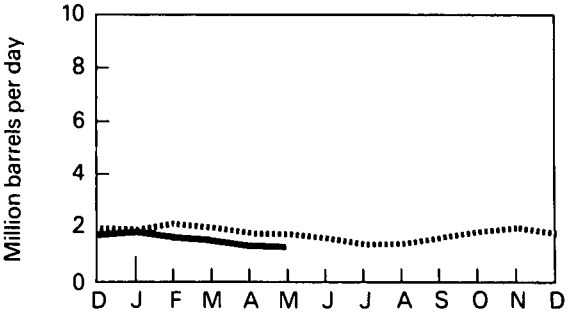


France**



United Kingdom



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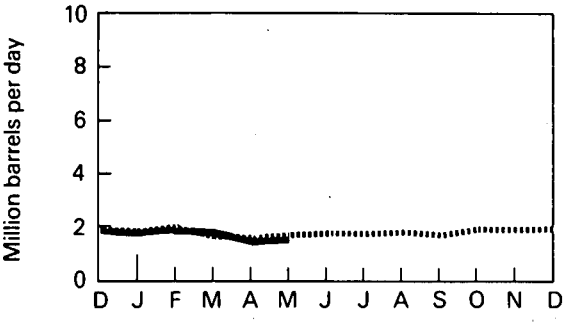
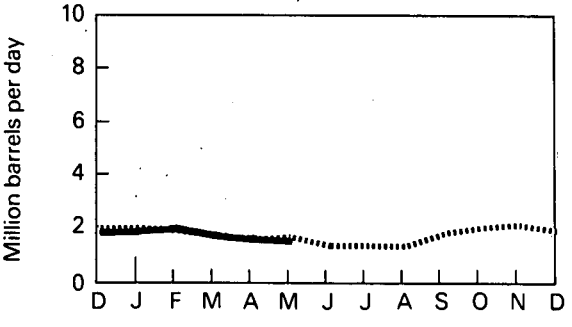


Italy***



*Excludes liquefied petroleum gases and condensates.

**Not a member of IEA.

***Principal products only.

1979

1980

International

Nuclear Power Generation by Non-Communist Countries[1,2]

		Argentina	Belgium	Canada	Finland	France	India	Italy	Japan	Nether-lands	Pakistan
		Million gross kilowatt-hours									
1973	**TOTAL**	**0**	**0**	**18,273**	**0**	**11,217**	**1,936**	**3,142**	**9,439**	**1,038**	**458**
1974	**TOTAL**	**1,035**	**121**	**15,410**	**0**	**14,703**	**2,475**	**3,410**	**18,097**	**3,349**	**584**
1975	**TOTAL**	**2,517**	**6,763**	**13,243**	**0**	**18,296**	**2,514**	**3,801**	**16,696**	**3,335**	**546**
1976	**TOTAL**	**2,572**	**10,011**	**18,016**	**0**	**15,764**	**3,194**	**3,797**	**36,689**	**3,872**	**487**
1977	**TOTAL**	**1,637**	**11,855**	**26,759**	**2,675**	**17,940**	**2,779**	**3,384**	**27,260**	**3,710**	**338**
1978	**TOTAL**	**2,896**	**12,490**	**32,925**	**3,179**	**30,547**	**2,264**	**4,429**	**50,861**	**4,060**	**229**
1979	January	266	838	3,816	320	3,831	356	401	5,471	390	23
	February	175	559	2,945	721	3,465	248	277	4,967	353	12
	March	181	786	2,909	467	3,192	215	241	4,160	383	0
	April	261	1,047	3,104	623	3,151	218	290	3,756	223	0
	May	254	1,293	2,717	520	3,294	239	200	3,864	343	0
	June	229	1,161	3,194	394	2,963	285	132	4,570	365	0
	July	168	992	3,848	491	2,604	166	0	5,862	373	0
	August	275	558	2,820	391	2,341	125	122	6,724	254	0
	September	142	792	2,956	709	3,094	248	169	5,238	362	0
	October	247	1,119	3,316	780	3,808	314	203	6,186	267	0
	November	255	964	2,909	561	3,563	304	227	5,353	37	0
	December	239	1,263	3,849	692	4,613	209	365	5,852	140	0
	TOTAL	**2,692**	**11,370**	**38,383**	**6,671**	**39,920**	**2,927**	**2,627**	**62,003**	**3,489**	**35**
1980	January	264	1,180	3,582	822	5,519	215	156	8,013	381	0
	February	126	1,011	3,476	765	5,324	107	441	7,379	365	0
	March	0	1,006	3,678	790	5,058	163	523	7,995	385	0
	April	68	499	3,193	754	5,041	273	391	5,637	343	0
	May	179	687	2,494	314	4,186	294	294	6,033	323	0
	June	250	†1,000	3,108	0	4,077	242	97	6,642	341	0
	TOTAL (Year-to-date)	**887**	**5,383**	**19,530**	**3,445**	**29,205**	**1,295**	**1,901**	**41,699**	**2,138**	**0**

Totals may not equal sum of components due to independent rounding.
[1]Figures are for gross electrical generation as opposed to net electrical generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves.
[2]In some cases, monthly figures are adjusted to reflect amended cumulative totals from *Nucleonics Week*.
†Preliminary data.
Source: • *Nucleonics Week*.

International

Nuclear Power Generation by Non-Communist Countries[1,2] (continued)

		South Korea	Spain	Sweden	Switzer-land	Taiwan	United Kingdom	West Germany	Non-Communist World Excluding U.S.	United States	Total Non-Communist World
						Million gross kilowatt-hours					
1973	**TOTAL**	**0**	**6,545**	**2,111**	**6,192**	**0**	**27,996**	**12,561**	**100,908**	**87,440**	**188,348**
1974	**TOTAL**	**0**	**7,223**	**1,647**	**7,037**	**0**	**34,020**	**11,154**	**120,265**	**119,919**	**240,184**
1975	**TOTAL**	**0**	**7,544**	**12,021**	**7,721**	**0**	**30,508**	**21,672**	**147,177**	**181,808**	**328,985**
1976	**TOTAL**	**0**	**7,555**	**15,992**	**7,900**	**0**	**36,799**	**24,524**	**187,172**	**201,570**	**388,742**
1977	**TOTAL**	**71**	**6,525**	**19,890**	**8,070**	**99**	**38,043**	**35,807**	**206,842**	**262,644**	**469,486**
1978	**TOTAL**	**2,324**	**7,649**	**23,781**	**8,349**	**2,670**	**36,642**	**32,478**	**257,772**	**292,664**	**550,436**
1979	January	272	549	2,326	804	445	3,787	3,866	27,761	29,164	56,925
	February	354	622	1,973	725	306	3,811	3,045	24,558	27,307	51,865
	March	324	706	2,679	796	521	3,969	3,300	24,829	25,517	50,346
	April	262	637	1,449	774	565	3,210	4,674	24,244	19,320	43,564
	May	250	216	1,268	714	482	2,265	3,243	21,162	15,808	36,970
	June	300	360	1,003	827	645	3,150	3,048	22,626	17,087	39,713
	July	337	444	1,008	981	691	2,731	3,094	23,790	22,481	46,271
	August	384	663	1,099	826	646	2,409	2,667	22,304	25,732	48,036
	September	386	425	1,370	1,234	644	3,116	2,441	23,326	23,352	46,678
	October	282	676	2,048	1,288	509	2,771	3,456	27,270	22,497	49,767
	November	0	719	2,302	1,418	316	3,279	3,642	25,849	20,520	46,369
	December	0	683	2,515	1,461	559	4,070	3,874	30,384	21,933	52,317
	TOTAL	**3,152**	**6,700**	**21,039**	**11,848**	**6,329**	**38,568**	**40,350**	**298,103**	**270,718**	**568,821**
1980	January	110	719	2,512	1,505	859	3,704	4,450	33,991	21,111	55,102
	February	1	333	2,423	1,197	685	3,380	3,940	30,952	20,818	51,770
	March	351	426	2,333	1,278	799	4,217	2,954	31,956	21,218	53,174
	April	385	355	1,865	1,444	743	2,693	3,625	27,309	19,631	46,940
	May	379	368	1,648	1,399	436	2,559	3,501	25,094	19,612	44,706
	June	84	307	1,570	622	507	2,818	2,877	24,542	19,386	43,928
	TOTAL (Year-to-date)	**1,310**	**2,509**	**12,351**	**7,445**	**4,029**	**19,371**	**21,346**	**173,844**	**121,776**	**295,620**

United States geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]Figures are for gross electrical generation, as opposed to net electrical generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves.
[2]In some cases monthly figures are adjusted to reflect amended cumulative totals from *Nucleonics Week*.
Source: • *Nucleonics Week*.

Definitions

Anthracite

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

Average Retail Selling Price, Motor Gasoline

The average price of sales of motor gasoline to retail customers at service stations.

Base Production Control Level

(See Crude Oil)

Bituminous Coal

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

Ceiling Price

The maximum permissible selling price, prior to February 1, 1976, for a particular grade of domestic crude oil in a particular field is the May 15, 1973, posted price, plus $1.35 per barrel.

Coke (Coal)

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

Crude Oil

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

Base Production Control Level (BPCL): Prior to February 1, 1976, BPCL means the monthly total number of barrels of crude oil produced and sold from a property in 1972 or the average monthly production as defined in Section 212.72 of the Federal Energy Guidelines. After January 31, 1976, BPCL means either the daily average number of barrels produced and sold in 1975 multiplied by the number of days in the month (in 1972) or the daily number of barrels of crude oil produced and sold from the property in 1972 (leap year) multiplied by the number of days of the month (in 1972). A detailed explanation of BPCL and adjustments thereto may be found in Section 212.72 of the Federal Energy Guidelines.

A. Lower Tier (Old) Crude Oil: (1) Prior to February 1, 1976, the total number of barrels of domestic crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month, and less the total number of barrels of *released* crude oil for that property in that month. (2) Effective February 1, 1976, the total number of barrels of domestic crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month.

B. Upper Tier (New) Crude Oil: With respect to a specific property, (1) prior to February 1, 1976, the total number of barrels of domestic crude oil produced and sold in a specified month, less (a) the base production control level for that month, and less (b) the current cumulative deficiency; (2) effective February 1, 1976, the total number of barrels of domestic crude oil produced and sold in a specific month less (a) the property's base production control level for that month and less (b) the current cumulative deficiency since February 1, 1976; and (3) that the total number of barrels of domestic crude oil shall not in either period include any number of barrels not certified as new crude oil pursuant to the provisions of 10 CFR 313.131(a)(1) within the consecutive 2-month period immediately succeeding the month in which the crude oil is produced and sold except where such recertification is explicitly required or permitted by DOE order, interpretation, or ruling.

C. Decontrolled Oil: Crude oil (exclusive of Stripper oil, Naval Petroleum Reserves oil, Newly Discovered, and Incremental Tertiary oil) which has been explicitly exempted by rule or the exception process from Federal crude oil price controls.

1. Heavy Crude Oil: Crude oil produced and sold from a property whose production of crude oil in June 1979 (or if there was no such production sold in that month, the last preceding month in which there was such production sold) had a weighted average gravity of 16° API or less corrected to 60° F based on the average gravity reported on the run tickets. Effective December 29, 1979, regulations redefined heavy crude oil as 20° API gravity, or less.

2. Incremental Tertiary Oil: Oil which is produced under a qualified tertiary enhanced recovery project certified by the Economic Regulatory Administration, DOE, and which is certified as "incremental tertiary" crude oil in accordance with 10 CFR 212.78.

3. Marginal Property Oil: Oil which is produced from a property which has qualified as a "marginal" property under the average well-completion depth and daily production qualification thresholds of 10 CFR 212.72 and which has been released for sale at upper tier prices.

4. Newly Discovered Crude Oil: Crude oil sold after May 31, 1979, which was produced from: (1) an area in the Outer Continental Shelf for which the

lease was entered into on or after January 1, 1979, and from which there was no production in calendar year 1978; or (2) an onshore property from which no crude oil was produced in calendar year 1978.

5. Stripper Oil: Crude oil which is produced from property whose average daily production per well (excluding condensate recovered in nonassociated natural gas production) did not exceed 10 barrels per day during any preceding consecutive 12-month period beginning after December 31, 1972. Stripper oil was exempt from price controls beginning September 1, 1976.

6. Tertiary Incentive Oil: Price-controlled crude oil which has been released for sale at the market-clearing prices to provide front-end money to initiate or expand qualified tertiary enhanced recovery projects and which has been certified as "tertiary incentive" oil in accordance with 10 CFR 212.78.

Crude Oil Domestic Production

Domestic crude oil production is measured at the wellhead and includes lease condensate, which is a natural gas liquid recovered from lease separators or field facilities.

Crude Oil Entitlement Value

The average value a refiner receives from the entitlement program for each incremental barrel of imported crude oil. It is calculated by multiplying the entitlement price by the National Old Oil Supply Ratio for November 1974 through January 1976, and by the National Domestic Crude Oil Supply Ratio for February 1976 forward.

Crude Oil Refinery Input

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

Crude Oil Stocks

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

Distillate Fuel Oil

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

Distillate Fuel Oil Production

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

Electricity Production

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

Entitlement Position

The monthly entitlement position of a refiner indicates whether he bought or sold entitlements in that month. An entitlement is the right to process "deemed old oil," which is the sum of a refiner's receipts of "old" oil and a fraction of his receipts of "upper tier" crude oil. This fraction is set monthly by the Economic Regulatory Administration (ERA). A refiner must purchase entitlements for the amount of his "deemed old oil" receipts in excess of the national domestic crude oil supply ratio (NDCOSR). The NDCOSR, as calculated by ERA, reflects the differences in costs to refiners of "old" oil, "upper tier" crude oil, and imported crude oil.

Entitlement Price

The price of an entitlement, fixed by ERA, is the exact differential as reported for the month between the weighted average delivered cost per barrel to refiners of both imported crude oil and stripper crude oil, and the weighted average delivered cost per barrel to refiners of "old oil".

Exploratory Well

A well drilled to 1.) find and produce oil or gas in an unproved area; 2.) find a new reservoir in a field previously found to be productive of oil or gas in another reservoir; or 3.) extend the limit of a known oil or gas reservoir.

Full Serve

Motor vehicle services are provided by an attendant, such as: pumping gas, washing windows, checking under the hood, checking tire pressure, etc.

Imports

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

Jet Fuel

Includes both naphtha-type and kerosene-type jet fuel meeting standards for use in aircraft turbine engines or

meeting ASTM Specification D1655. Although most jet fuel is used in aircraft, some is used for other purposes, such as fuel for gas turbines to produce electricity.

Landed Cost

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

Lease Condensate

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

Line Miles of Seismic Exploration

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

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.

Lower Tier Crude Oil

(See Crude Oil, Part A.)

Major Brand

Lundberg Survey, Inc., defines major brand as an integrated company that produces, refines, transports, and markets in Interstate Commerce under its own brand(s) in 10 or more states.

Maximum Dependable Capacity

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

Motor Gasoline

A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark ignition engines. Included are leaded and unleaded products and all refinery products listed in ASTM Specification D439.

Motor Gasoline Production

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

Motor Gasoline, Regular Grade

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

Motor Gasoline, Premium Grade

Volatile hydrocarbon mixture suitable for operation of an internal combustion engine and customarily marketed as "ethyl," "super," or equivalent classification.

National Domestic Crude Oil Supply Ratio

Old oil receipts adjusted for upper tier receipts, small refiner bias, and other minor adjustments, divided by crude runs to stills adjusted for residual fuel entitlements.

Natural Gas

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

Natural Gas Liquids

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

Natural Gas Plant Liquids

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

Natural Gas Production (Dry)

Derived by subtracting extraction loss from marketed production. It represents the amount of domestic natural gas production that is available to be marketed and consumed as a gas.

New Crude Oil

(See Crude Oil, Part B.)

Old Crude Oil

(See Crude Oil, Part A.)

Petroleum

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

Petroleum Coke

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

Petroleum Products

Products obtained from the processing of crude oil, unfinished oils, natural gas liquids and other miscellaneous hydrocarbon compounds. Includes aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt, road oil, still gas and other miscellaneous products.

Property

Prior to August 26, 1976, a property was defined as the right to produce domestic crude oil, which arises from a lease or from a fee interest. This definition was interpreted to apply only to a surface lease. In August 1976 the definition of a property was changed so that a producer may treat as a separate property each separate and distinct producing reservoir subject to the same right to produce crude oil, provided that such reservoir is recognized by the appropriate governmental regulatory authority as a producing formation that is separate and distinct from, and not in communication with any other producing formation. Although this new definition was not implemented until August 25, 1976, it was made effective retroactively to February 1, 1976. (F.R. 36171, August 26, 1976.)

Refined Petroleum Product Supplied

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

Refiner Acquisition Cost

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

Residual Fuel Oil

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

Rotary Rig

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

Self Serve

Motor vehicle services are not provided by attendants.

Strategic Petroleum Reserves

A plan developed to reduce the impact of interruption of imports of pertroleum. Congress enacted legislation to establish a Strategic Petroleum Reserve in Title I, Part B of the Energy Policy and Conservation Act of 1975, Public Law 94–163.

Startup Test Phase of Nuclear Powerplant

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

Stocks (Refined Petroleum Product)

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

Synthetic Natural Gas (SNG)

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

Unaccounted for Crude Oil

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

Unrecouped Costs

Costs which have not been recovered in the current month's product prices but which have been "banked" for later use.

Upper Tier Crude Oil

(See Crude Oil, Part B.)

Well

A hole drilled for the process of finding or producing crude oil or natural gas or providing services related to the production of crude oil or natural gas. Wells are classified as oil wells, gas wells, dry holes, stratigraphic tests, or service wells.

Explanatory Notes

1. Domestic production of energy includes production of coal (anthracite, bituminous, and lignite), crude oil and lease condensate, natural gas plant liquids, natural gas (dry), electric utility and industrial production of hydropower, and electricity generated from nuclear power, geothermal power, and wood and waste. The volumetric data were converted to approximate heat contents (Btu values) of these energy sources using conversion factors listed in Thermal Conversion Factors.

2. Domestic consumption of energy includes consumption of coal (anthracite, bituminous, and lignite), natural gas (dry), refined petroleum products supplied, electric utility and industrial production of hydropower, net imports of electricity produced from hydropower, net imports of coke made from coal, and electricity generated from nuclear power, geothermal power, and wood and waste. Approximate heat contents (Btu values) were derived using conversion factors listed in Thermal Conversion Factors.

3. U.S. energy imports include imports of bituminous coal, crude oil (including crude oil imported for the Strategic Petroleum Reserve), refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.

4. U.S. energy exports include bituminous coal and anthracite, crude oil, refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.

5. The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. The Transportation Sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. The Electric Utilities Sector is made up of privately- and publicly-owned establishments which generate electricity primarily for resale.

6. Degree-days relate energy consumption to outdoor air temperature. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65° F by convention. Heating degree-days are deviations of the mean daily temperature below 65° F. For example, if a weather station recorded a mean daily temperature of 78° F, cooling degree-days for that station would be 13 (and heating degree-days, 0). A weather station recording a mean daily temperature of 40° F would report 25 heating degree-days (and 0 cooling degree-days).

There are two degree-day data bases maintained by the National Oceanic and Atmospheric Administration. Weekly degree-day information is based on mean daily temperatures recorded at about 200 major weather stations around the country. Monthly data are based on readings at more than 8,000 weather stations. The temperature information recorded at these weather stations is used to calculate statewide degree-day averages based on population. The State figures are then aggregated into Petroleum Administration for Defense (PAD) Districts and into the national average, also using a population weighting method.

Weekly weather reports are available much sooner than the monthly reports, and therefore the degree-day information published in the *Monthly Energy Review* is normally derived from the weekly source.

7. Domestic products supplied figures for natural gas liquids (NGL) in this publication do not include amounts utilized by refineries for blending purposes in the production of finished products, principally gasoline. Use of NGL at refineries is reported in a separate column. The production series cited in this publication shows both NGL produced at processing plants and liquefied gases produced at refineries (LRG). NGL produced at refineries is extracted from crude oil and hence, to avoid double counting, should not be included in calculations of total U.S. production of petroleum liquids. The stock series shown in this volume includes natural gas liquids held as stocks at both natural gas processing plants and at refineries and LRG held at refineries.

8. Domestic consumption of natural gas includes the quantities sold to consumers plus the gas used for plant and pipeline fuel, after the natural gas liquids have been extracted. All monthly consumption data are estimated. Marketed production of natural gas includes gross withdrawals from the ground less the quantities used for repressuring and the amount vented and flared, before the natural gas liquids have been extracted. Dry production of natural gas is the quantity remaining after the natural gas liquids have been extracted.

9. The Federal Energy Administration and Federal Power Commission began the coordinated collection and compilation of monthly underground storage information from all underground storage operators in the United States in October 1975. Initial storage information reported was for the month of September 1975. Comparable monthly information for total U.S. storage operations is not available for prior periods.

The total gas in storage is the total volume of gas (base gas plus working gas) in storage reservoirs as of the end of the month. Base gas is the volume of gas, including all native gas in place at the time of conversion to storage, needed as a permanent inventory to maintain adequate reservoir pressures and deliverability rates throughout the withdrawal season. Base gas includes the volumes which will not be recoverable upon termination of storage operations. Working gas is the volume of gas above the designated base gas level available for withdrawal.

10. Bituminous coal and lignite production is calculated from the number of railroad cars loaded at mines, based on the assumption that approximately 60 percent

of the coal produced is transported by rail. Production data are estimated by EIA from Association of American Railroads reports of carloadings.

Bituminous coal and lignite consumption is calculated by Energy Information Administration (EIA) from information provided by the Federal Energy Regulatory Commission, Department of Commerce, and reports from selected manufacturing industries and retailers.

Domestic consumption data in this series, therefore, approximate actual consumption. This is in contrast to domestic demand reported for petroleum products, which is calculated value representing total disappearance from primary supplies.

The data sources used to compute the monthly coal consumption estimates from 1978 forward for the "Other Industrial" (i.e. Industrial except coke plants) sector are:

(a) Form EIA–3, "Monthly Fuel Consumption Report—Manufacturing Plants."
(b) Form EIA–6, "Bituminous Coal and Lignite Distribution Report."

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

$$C = S_B + R - S_E, \quad (1)$$

where

S_B = beginning stocks
R = receipts
S_E = ending stocks.

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

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

The Form EIA–6 provides complete coverage of the "Other Industrial" sector. The quarterly receipts are obtained from this form.

The Form EIA–3 does not provide total coverage of the "Other Industrial" sector, however it does contain stock change information. The impact of the stock change in the portion of the sector that is not covered by the Form EIA–3 is not substantial.

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

$$C_M = (C_{M3}/C_3) \bullet C \quad (3)$$

where

C_{M3} = the monthly consumption in the "Other Industrial" sector as reported on Form EIA–3.
C_3 = the quarterly consumption in the "Other Industrial" sector as reported on Form EIA–3.

Equation (3) insures that a) the monthly consumption estimates (C_M) sum to C over the quarter and b) the estimated seasonality for the C_M's is the same as that for the C_{M3}'s.

11. The units used to describe power generation at nuclear plants are based on the watt, which is a unit of power. (Power is energy produced per unit of time.) As with fossil-fueled plants, nuclear plants have three design power ratings. The normal rating (expressed in thermal megawatts) is the rate of heat production by the reactor core. The gross electrical rating (expressed in electrical megawatts, MWe) is the generator capacity at the stated thermal rating of the plant. The net electrical rating (also expressed in MWe) is the power available as input to the electrical grid after subtracting the power needed to operate the plant. (A typical nuclear plant needs 5 percent of its generated electricity for its own operation.)

The electrical energy produced by a plant is expressed in kilowatt-hours (kWh). This enables a more direct comparison to design capacity and to previous months' performances.

12. The actual domestic average price represents the average price at which all domestic crude oil is purchased. Prior to February 1976, the domestic crude oil wellhead price represented an estimate of the average of posted prices; after February 1976, the wellhead price represents an average of first sale prices. For the 2-year period January 1974 through January 1976, the old oil price at the wellhead was originally estimated to be $5.25 per barrel based on representative postings. This estimate was revised in July 1976 after a survey of crude oil purchasers was implemented and more complete data became available. Estimates of the average old oil price given in the table for months prior to February 1976 are based on prices for old oil reported on new leases, and were not derived from a statistically valid sample of old oil leases.

13. The refiner acquisition cost of domestic crude oil is the price paid by refiners for domestic crude oil and natural gas plant liquids and includes transportation costs from the wellhead to the refinery. The refiner acquisition cost of imported crude oil is the average landed cost of imported crude oil to the refiner and represents the amount which may be passed on to the consumer. It incorporates transportation costs and fees (including the supplemental import fees) and any other costs incurred in purchasing and shipping crude oil to the United States

14. FOB literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

15. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries which export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

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

17. The survey and method used to derive data for March 1976 forward differ from those used for prior months. Data for January 1974 through February 1976 are derived from a survey of distributors, and prices and margins are computed as unweighted averages. The average distributor purchase price and average dealer margin for March 1976 forward are for distributors only, whereas the average selling price includes both refiners and distributors. Data for March 1976 forward are computed as sales weighted averages.

18. The U.S. Department of Energy Regions are defined as follows:

Region 1 —Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island;
Region 2 —New York, New Jersey, Puerto Rico, Virgin Islands;
Region 3 —Pennsylvania, Maryland, West Virginia, Virginia, District of Columbia, Delaware;
Region 4 —Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, Florida, Canal Zone;
Region 5 —Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio;
Region 6 —Texas, New Mexico, Oklahoma, Arkansas, Louisiana;
Region 7 —Kansas, Missouri, Iowa, Nebraska;
Region 8 —Montana, North Dakota, South Dakota, Wyoming, Utah, Colorado;
Region 9 —California, Nevada, Arizona, Hawaii, Trust Territory of the Pacific Islands, American Samoa, Guam;
Region 10—Washington, Oregon, Idaho, Alaska.

19. The weighted average for all fossil fuels includes peaking fuels and distillate fuel oil delivered to utilities for the total United States, whereas the regional and total United States breakdown for residual fuel oil prices represents all heavy fuel oil prices.

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Conversion Factors

Thermal Conversion Factors

Approximate Heat Content of Various Fuels		1973	1974	1975	1976	1977	1978–79–80
Anthracite							
Production	Btu/short ton	23,170,000	22,560,000	23,390,000	22,770,000	23,180,000	23,520,000
Imports and Exports	Btu/short ton	25,400,000	25,400,000	25,400,000	25,400,000	25,400,000	25,400,000
Consumption, average	Btu/short ton	22,710,000	21,950,000	21,740,000	22,150,000	22,710,000	22,970,000
Electric utility consumption	Btu/short ton	17,920,000	17,200,000	17,060,000	17,530,000	17,240,000	17,100,000
Non-utility consumption	Btu/short ton	24,340,000	23,750,000	23,650,000	23,840,000	24,990,000	25,170,000
Bituminous coal and lignite							
Production	Btu/short ton	24,010,000	23,730,000	23,200,000	23,150,000	22,700,000	22,430,000
Imports	Btu/short ton	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000
Exports	Btu/short ton	27,000,000	27,000,000	27,000,000	27,000,000	27,000,000	27,000,000
Consumption, average	Btu/short ton	23,650,000	23,070,000	22,800,000	22,750,000	22,330,000	22,140,000
Electric utility consumption	Btu/short ton	22,260,000	21,800,000	21,660,000	21,690,000	21,480,000	21,280,000
Non-utility consumption	Btu/short ton	26,840,000	26,120,000	25,810,000	25,870,000	25,130,000	25,070,000
Coal Coke	Btu/short ton	26,000,000	26,000,000	26,000,000	26,000,000	26,000,000	26,000,000
Crude petroleum[1]							
Production	Btu/barrel	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000
Imports	Btu/barrel	5,817,000	5,827,000	5,821,000	5,808,000	5,810,000	5,802,000
Exports	Btu/barrel	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000
Crude petroleum and products							
Imports, average	Btu/barrel	5,897,000	5,884,000	5,858,000	5,856,000	5,834,000	5,839,000
Exports, average	Btu/barrel	5,752,000	5,774,000	5,748,000	5,745,000	5,797,000	5,808,000
Petroleum products							
Consumption, average	Btu/barrel	5,515,000	5,504,000	5,494,000	5,504,000	5,526,000	5,519,000
Residential and Commercial	Btu/barrel	5,498,000	5,494,000	5,496,000	5,517,000	5,522,000	5,530,000
Industrial	Btu/barrel	5,515,000	5,473,000	5,443,000	5,457,000	5,519,000	5,487,000
Transportation	Btu/barrel	5,395,000	5,394,000	5,392,000	5,397,000	5,402,000	5,410,000
Electric Utility	Btu/barrel	6,223,000	6,215,000	6,229,000	6,235,000	6,231,000	6,227,000
Imports	Btu/barrel	5,983,000	5,959,000	5,935,000	5,980,000	5,908,000	5,955,000
Exports	Btu/barrel	5,752,000	5,773,000	5,747,000	5,743,000	5,796,000	5,814,000
Natural gas plant liquid production	Btu/barrel	4,049,000	4,011,000	3,984,000	3,964,000	3,941,000	3,925,000
Natural gas, dry							
Production and consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019
Electric utility consumption	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034
Non-utility consumption	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019	1,016
Imports	Btu/cubic foot	1,026	1,027	1,026	1,025	1,026	1,030
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013
Hydropower[2]	Btu/kWh	10,389	10,442	10,406	10,373	10,435	10,435
Nuclear power[2]	Btu/kWh	10,903	11,161	11,013	11,047	10,769	10,769
Geothermal power[2]	Btu/kWh	21,674	21,674	21,611	21,611	21,611	21,611
Electricity consumption	Btu/kWh	3,412	3,412	3,412	3,412	3,412	3,412

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

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]There is no generally accepted practice for measuring hydropower thermal conversion rates. The hydropower factors on this page are the prevailing heat rate factors at fossil fuel steam electric powerplants. By using the heat rate factor, it is possible to evaluate fossil fuel requirements for replacing hydropower production during periods of drought. Furthermore, it allows for better comparisons with certain other countries such as Norway where hydropower is the principal means for producing electricity. Similarly, the nuclear power and geothermal power conversion factors represent the thermal conversion equivalent of the uranium and geothermal steam consumed at powerplants. The heat content of a kilowatt-hour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatt-hour. It is not possible to determine the hydroelectric powerplant efficiency by using these factors. The efficiency factor for hydroelectric powerplants is derived by multiplying generation efficiency by turbine efficiency. The average hydroelectric powerplant efficiency in the United States is 86 percent while average generation efficiency is 97 percent and average turbine efficiency is 89 percent.

[3] 60 percent butane and 40 percent propane.

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