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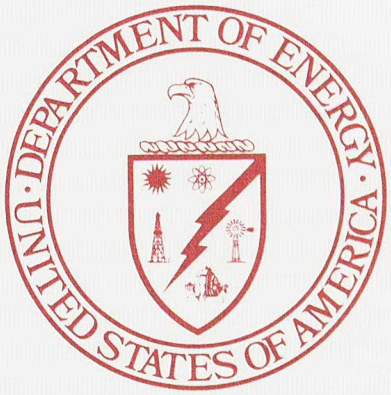
Monthly Energy Review

February 1981



Preliminary 1980 Estimates
See Executive 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

Energy Highlights in 1980

Energy imports (net) into the United States declined 28.6 percent* from the 1979 level, due primarily to a 19.7 percent decline in petroleum imports and an increase of 37.9 percent in coal exports (see page 10).

However, the value of energy imports (net) increased 30.7 percent to $71.1 billion (see page 12).

Energy production in the United States increased 1.1 percent due primarily to a 6.7 percent increase in U.S. coal production which reached a record 830 million tons.

U.S. energy consumption dropped by 4.0 percent (see page 3) due primarily to a reduction in petroleum consumption (8.4 percent) to an average of 17.0 million barrels per day (see page 32). The following products showed decreases:

- Motor gasoline consumption dropped 6.3 percent to an average of 6.6 million barrels per day (see page 36).
- Distillate fuel oil use decreased 13.4 percent, to 2.9 million barrels per day (see page 40).
- Residual fuel oil consumption fell to an average of 2.5 million barrels per day, 10.8 percent below the previous year's level (see page 42).

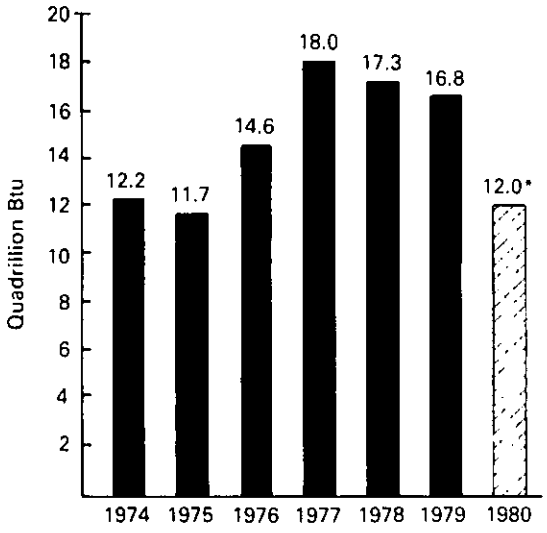
Exploration for petroleum and natural gas in the United States increased to record levels in 1980 (page 54). Drilling rigs in operation averaged 2,910 for the year, 33.7 percent above the 1979 level and 8.3 percent above the previous high of 2,686 reached in 1955.

Prices of energy continued to climb steadily in 1980, particularly in the following fuels:

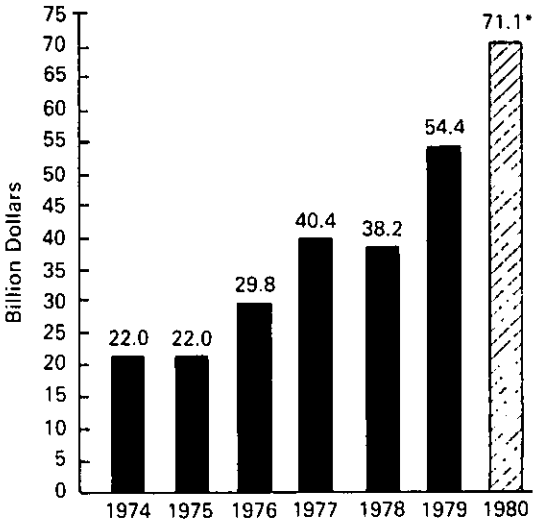
- The average retail price of a gallon of gasoline climbed from $1.11 in January to $1.23 in December (see page 77).
- Heating oil climbed from 91 cents per gallon at the beginning of the year to 99 cents per gallon in October (see page 77).
- Diesel oil rose from 82 cents per gallon in January to 86 cents per gallon in October (see page 77).
- The price of natural gas sold to residential customers rose from $3.55 per thousand cubic feet (Mcf) in January to $4.21 per Mcf in October (see page 88).

*All percentage increases/decreases in volumes are on a daily rate basis to remove impact of the 1980 leap year.

Volume of Energy Imports (Net)



Value of Energy Imports (Net)



*Preliminary data.

This issue of the Monthly Energy Review contains preliminary annual estimates for 1980.

- The average retail price of electricity climbed from 4.2 cents per kilowatt-hour in January to 4.9 cents per kilowatt-hour in November (see page 89).

Production

During 1980, total domestic energy production increased to an all-time high of 64.6 quadrillion Btu, 1.1 percent over the daily production rate of 1979. This growth was due primarily to the 6.7 percent increase in coal production. Petroleum production rose 0.3 percent to 20.5 quadrillion Btu. The increases in these fuels offset decreases in natural gas production of 2.2 percent, and energy production from all other sources combined which dropped 1.2 percent.

World crude oil production declined in 1980 (see page 93) from a record of 62.4 million barrels per day in 1979. That drop was in part due to high levels of world petroleum stocks, lower petroleum consumption, and the curtailment of crude oil production resulting from the military conflict in Iran and Iraq. Preliminary reports suggest that world crude oil production averaged approximately 59.3 million barrels per day in 1980.

Consumption

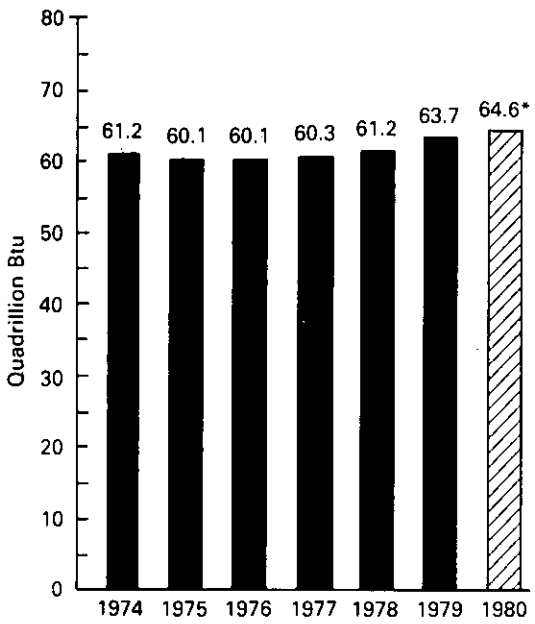
Total U.S. consumption of energy in 1980 dropped by 4.0 percent from the previous year's level, to 76.1 quadrillion Btu. Petroleum consumption dropped to 34.2 quadrillion Btu, 8.4 percent less than the daily rate in 1979. Natural gas use decreased to 20.4 quadrillion Btu in 1980, 1.4 percent below the 1979 daily rate. Coal consumption reached a level of 15.6 quadrillion Btu, 3.2 percent higher than the 1979 daily rate. Energy from other sources totaled 5.9 quadrillion Btu, 2.8 percent less than the 1979 daily average.

Imports

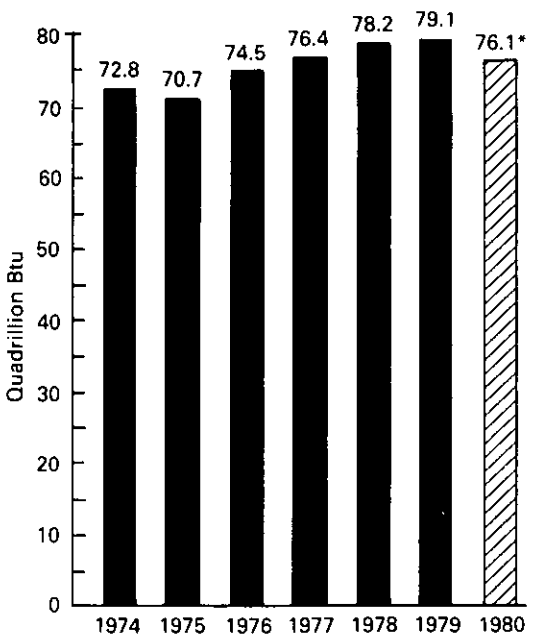
Net U.S. energy imports (total imports less exports) declined to 12.0 quadrillion Btu, a decrease of 28.6 percent. This decrease is attributed primarily to 22.0 percent declines in net imports of crude oil and refined petroleum products, and natural gas. While net imports decreased, net costs of energy imports rose to $71.1 billion, $16.7 billion higher than the 1979 level (see page 12).

Total imports of crude oil and refined petroleum products averaged 6.7 million bar-

U.S. Energy Production



U.S. Energy Consumption



*Preliminary data.

rels per day, 19.8 percent below the 1979 level. This represents the lowest level of oil imports since 1975.

Stocks of Selected Commodities

Primary crude oil stocks totaled 369.2 million barrels at the end of 1980, 8.9 percent above the previous year's total and 19.3 percent above the 1978 level (see page 30).

Motor gasoline stocks totaled 260.1 million barrels at the end of 1980, 9.7 percent above the 1979 level (see page 36). Distillate stocks totaled 202.1 million barrels at the end of December 1980, 11.7 percent below the 1979 level (see page 40). Working gas (gas available for withdrawal) in underground storage at the end of December 1980 totaled 2.6 trillion cubic feet, 4.2 percent less than the level a year earlier (see page 52). Stocks of residual fuel oil totaled 89.1 million barrels at the end of 1980, 6.8 percent below the level a year earlier (see page 42). Coal stocks as of September 1980 (the latest month for which data are available) totaled 194.3 million short tons, 23.0 percent higher than the September 1979 level (see page 58).

71 lines
Prod-end

ENERGY SUMMARY
(Quadrillion (10^{15}) Btu)

	December			Cumulative January through December				
	1980	1979	Percent Change	1980	1980 Daily Rate	1979	1979 Daily Rate	Percent Change*
Total Production	**5.560**	**5.366**	**+3.6**	**64.631**	**0.177**	**63.729**	**0.175**	**+1.1**
Petroleum[1]	1.732	1.747	−0.9	20.490	0.056	20.372	0.056	+0.3
Natural Gas	1.712	1.784	−4.1	19.655	0.054	20.037	0.055	−2.2
Coal	1.627	1.363	+19.3	18.744	0.051	17.526	0.048	+6.7
Other[2]	0.490	0.471	+4.0	5.742	0.016	5.794	0.016	−1.2
Total Consumption	**7.066**	**7.196**	**−1.8**	**76.140**	**0.208**	**79.060**	**0.217**	**−4.0**
Petroleum[3]	3.044	3.237	−6.0	34.248	0.094	37.299	0.102	−8.4
Natural Gas	2.150	2.111	+1.8	20.394	0.056	20.626	0.057	−1.4
Coal	1.366	1.357	+0.7	15.587	0.043	15.069	0.041	+3.2
Other[4]	0.506	0.491	+3.2	5.911	0.016	6.066	0.017	−2.8
Net Imports	**0.997**	**1.441**	**−30.8**	**12.038**	**0.033**	**16.802**	**0.046**	**−28.6**
Petroleum[5]	1.087	1.478	−26.4	13.323	0.036	17.026	0.047	−22.0
Natural Gas	0.093	0.109	−15.1	0.969	0.003	1.234	0.003	−21.7
Coal	(0.199)	(0.166)	(+20.5)	(2.423)	(0.007)	(1.729)	(0.005)	(+39.8)
Other[6]	0.016	0.019	−15.5	0.170	0.000	0.272	0.001	−37.8

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

Executive Summary

Energy Summary

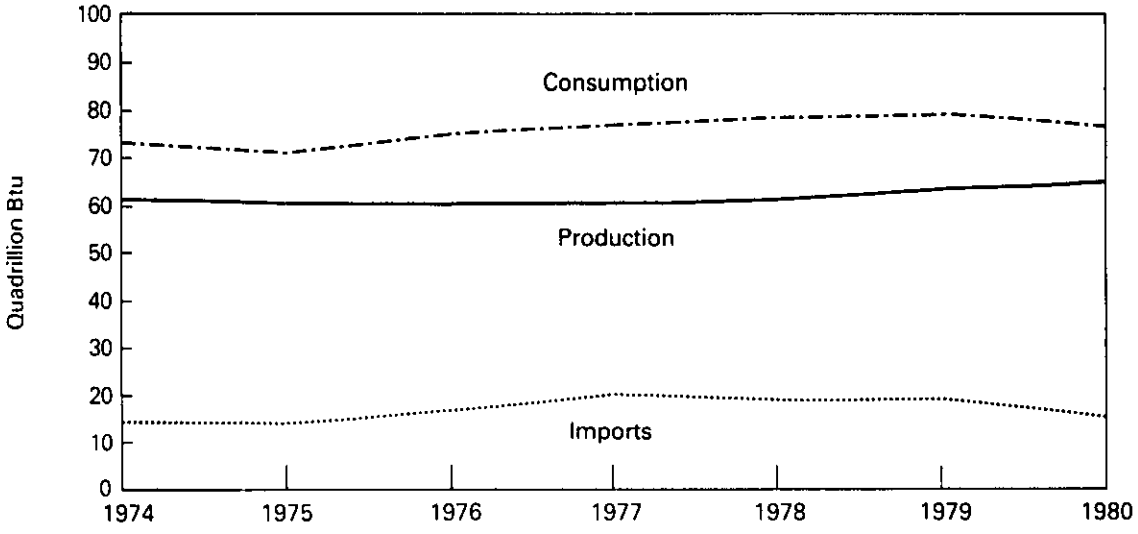
		Energy Production[1]	Energy Consumption[2]	Energy Imports[3]	Energy Exports[4]
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**62.433**	**74.609**	**14.732**	**2.073**
1974	**TOTAL**	**61.229**	**72.759**	**14.417**	**2.243**
1975	**TOTAL**	**60.059**	**70.707**	**14.113**	**2.389**
1976	**TOTAL**	**60.090**	**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	R5.311	R7.941	1.789	0.176
	February	R4.917	R7.270	1.533	0.161
	March	R5.495	R7.000	1.729	0.244
	April	R5.242	R6.149	1.521	0.237
	May	R5.450	R6.201	1.606	0.253
	June	R5.290	R5.990	1.599	0.254
	July	R4.995	R6.124	1.689	0.269
	August	R5.482	R6.338	1.693	0.262
	September	R5.159	R5.904	1.540	0.222
	October	R5.624	R6.398	1.712	0.286
	November	R5.398	R6.549	1.577	0.264
	December	R5.366	R7.196	1.702	0.261
	TOTAL	**R63.729**	**R79.060**	**19.690**	**2.888**
1980	January	R5.553	R7.431	1.659	0.225
	February	R5.212	R7.025	1.467	0.206
	March	R5.604	R6.913	1.492	0.265
	April	R5.397	R6.027	1.337	0.297
	May	R5.502	R5.837	1.281	0.348
	June	R5.330	5.715	1.293	0.366
	July	R5.169	R5.963	1.180	0.330
	August	R5.312	R5.857	R1.192	0.320
	September	R5.298	R5.818	1.137	0.333
	October	R5.509	R6.189	1.212	0.373
	November	5.186	6.299	1.200	0.346
	December	5.560	7.066	1.314	0.317
	TOTAL	**64.631**	**76.140**	**15.764**	**3.727**

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.

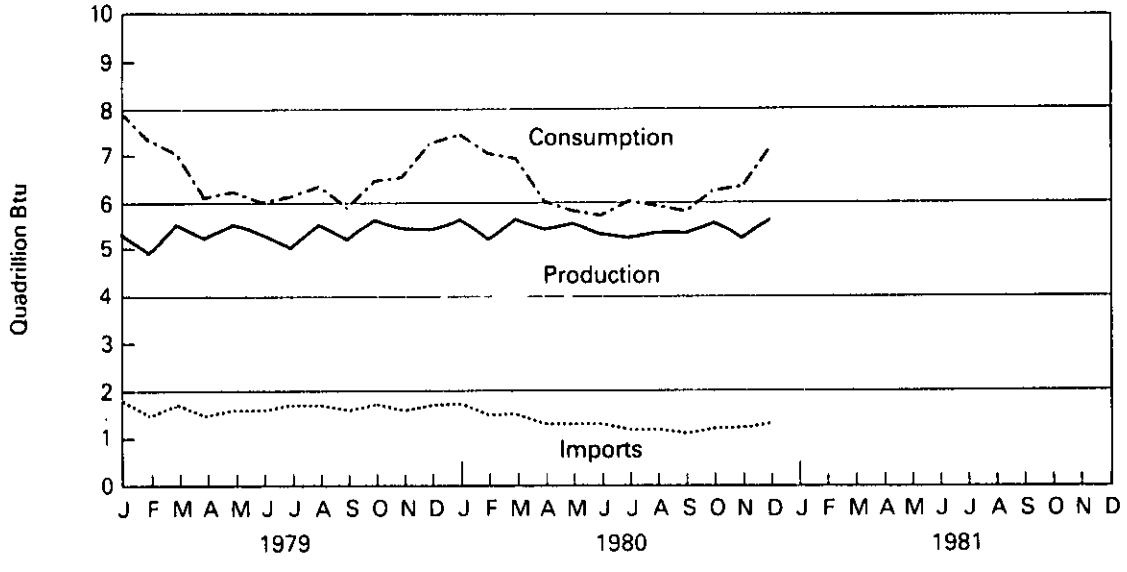
Executive Summary

Energy Summary

Yearly



Monthly



Executive Summary

Production of Energy by Type

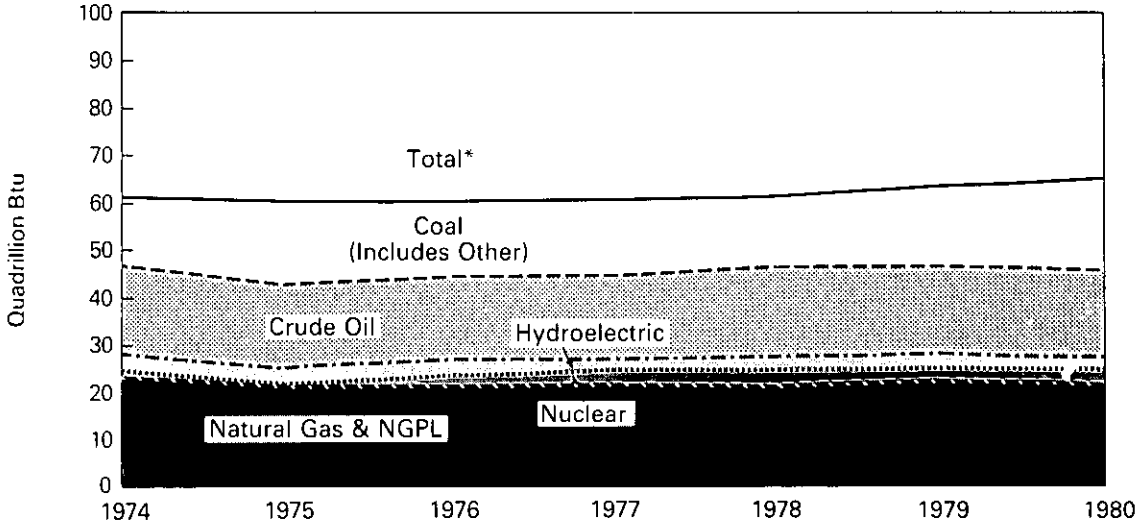
		Coal[1]	Crude Oil[2]	NGPL[3]	Natural Gas (Dry)	Hydro-electric Power[4]	Nuclear Electric Power	Other[5]	Total Energy Produced	Yearly Cumulative Energy Produced
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**14.366**	**19.493**	**2.569**	**22.187**	**2.861**	**0.910**	**0.046**	**62.433**	
1974	**TOTAL**	**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	1.297	1.524	0.186	R1.734	0.264	0.299	0.007	R5.311	R5.311
	February	1.230	1.385	0.172	R1.621	0.225	0.279	0.006	R4.917	R10.228
	March	1.498	1.546	0.188	R1.718	0.274	0.262	0.008	R5.495	R15.722
	April	1.435	1.488	0.190	R1.656	0.268	0.198	0.007	R5.242	R20.964
	May	1.559	1.546	0.191	R1.679	0.305	0.162	0.007	R5.450	R26.414
	June	1.586	1.467	0.185	R1.608	0.264	0.173	0.007	R5.290	R31.704
	July	1.203	1.504	0.190	R1.626	0.241	0.224	0.007	R4.995	R36.700
	August	1.607	1.537	0.192	R1.653	0.225	0.261	0.008	R5.482	R42.182
	September	1.449	1.483	0.184	R1.600	0.201	0.235	0.007	R5.159	R47.341
	October	1.763	1.550	0.196	R1.669	0.213	0.225	0.008	R5.624	R52.965
	November	1.537	1.524	0.197	R1.687	0.237	0.207	0.008	R5.398	R58.363
	December	1.363	1.549	0.198	R1.784	0.240	0.222	0.009	R5.366	R63.729
	TOTAL	**17.526**	**18.104**	**2.269**	**R20.037**	**2.957**	**2.748**	**0.089**	**R63.729**	
1980	January	1.532	1.555	0.200	R1.778	0.267	0.213	0.008	R5.553	R5.553
	February	1.451	1.463	0.188	R1.669	0.226	0.208	0.008	R5.212	R10.764
	March	1.578	1.566	0.191	R1.787	0.257	0.216	0.008	R5.604	R16.368
	April	1.579	1.512	0.191	R1.631	0.272	0.202	0.008	R5.397	R21.765
	May	1.591	1.553	0.189	R1.656	0.305	0.198	0.010	R5.502	R27.266
	June	1.612	1.487	0.184	R1.549	0.292	0.197	0.009	R5.330	R32.597
	July	R1.374	1.538	0.184	R1.578	0.258	0.226	0.010	R5.169	R37.766
	August	R1.585	R1.514	R0.184	1.539	0.217	0.262	0.011	R5.312	R43.078
	September	R1.626	1.486	0.183	1.544	0.196	0.254	0.010	R5.298	R48.376
	October	R1.710	1.541	0.182	R1.612	0.189	0.264	0.011	R5.509	R53.884
	November	1.479	1.479	0.188	1.600	0.204	0.226	0.011	5.186	59.071
	December	1.627	1.539	0.192	1.712	0.217	0.261	0.012	5.560	64.631
	TOTAL	**18.744**	**18.234**	**2.256**	**19.655**	**2.899**	**2.727**	**0.116**	**64.631**	

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.

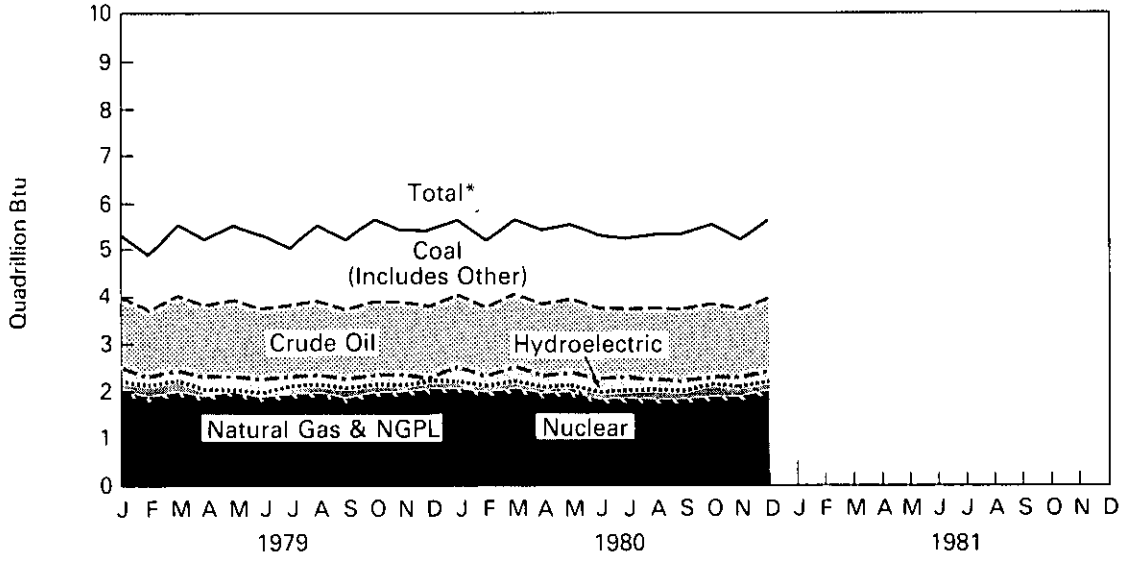
Executive Summary

Production of Energy by Type

Yearly



Monthly



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

Executive Summary

Consumption of Energy by Type

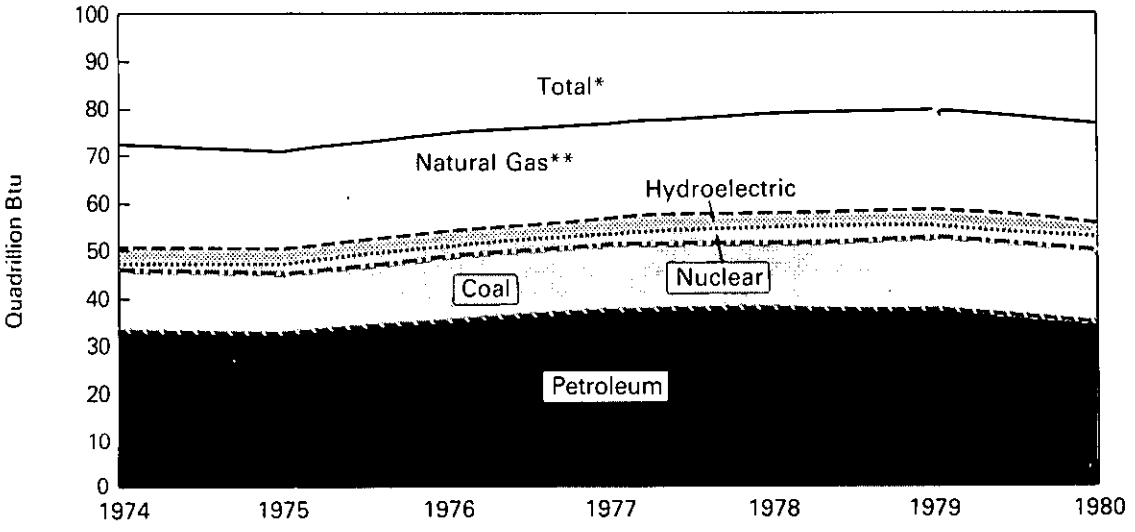
		Coal[1]	Natural Gas (Dry)	Petro-leum	Hydro-electric Power[2]	Nuclear Electric Power	Net Imports of Coal Coke[3]	Other[4]	Total Energy Consu-med	Yearly Cumulative Energy Consumed
					Quadrillion (10^{15}) Btu					
1973	**TOTAL**	**13.300**	**22.512**	**34.840**	**3.010**	**0.910**	**(0.008)**	**0.046**	**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	1.355	R2.472	3.522	0.281	0.299	0.004	0.007	R7.941	R7.941
	February	1.206	R2.246	3.290	0.241	0.279	0.003	0.006	R7.270	R15.211
	March	1.215	R1.917	3.306	0.291	0.262	0.002	0.008	R7.000	R22.211
	April	1.143	R1.624	2.887	0.285	0.198	0.005	0.007	R6.149	R28.360
	May	1.196	R1.456	3.045	0.323	0.162	0.011	0.007	R6.201	R34.562
	June	1.241	R1.334	2.945	0.281	0.173	0.010	0.007	R5.990	R40.551
	July	1.337	R1.355	2.933	0.258	0.224	0.008	0.007	R6.124	R46.675
	August	1.345	R1.367	3.105	0.242	0.261	0.009	0.008	R6.338	R53.013
	September	1.201	R1.354	2.881	0.218	0.235	0.008	0.007	R5.904	R58.917
	October	1.234	R1.587	3.110	0.231	0.225	0.004	0.008	R6.398	R65.315
	November	1.240	R1.802	3.039	0.253	0.207	0.000	0.008	R6.549	R71.864
	December	1.357	R2.111	3.237	0.258	0.222	0.002	0.009	R7.196	R79.060
	TOTAL	**15.069**	**R20.626**	**37.299**	**3.163**	**2.748**	**0.066**	**0.089**	**R79.060**	
1980	January	1.409	R2.322	R3.192	0.284	0.213	0.003	0.008	R7.431	R7.431
	February	1.323	R2.234	R3.011	0.242	0.208	(0.001)	0.008	R7.025	R14.456
	March	1.304	R2.139	R2.974	0.275	0.216	(0.003)	0.008	R6.913	R21.369
	April	1.166	R1.598	R2.769	0.289	0.202	(0.005)	0.008	R6.027	R27.396
	May	1.170	R1.381	2.762	0.322	0.198	(0.006)	0.010	R5.837	R33.234
	June	1.242	1.277	2.684	0.309	0.197	(0.004)	0.009	5.715	R38.949
	July	R1.399	R1.326	2.731	0.275	0.226	(0.004)	0.010	R5.963	R44.912
	August	R1.393	1.270	R2.691	0.234	0.262	(0.003)	0.011	R5.857	R50.768
	September	R1.272	1.324	2.750	0.213	0.254	(0.004)	0.010	R5.818	R56.587
	October	1.267	R1.571	2.875	0.207	0.264	(0.006)	0.011	R6.189	R62.775
	November	1.276	1.804	2.764	0.221	0.226	(0.002)	0.011	6.299	69.074
	December	1.366	2.150	3.044	0.234	0.261	(0.001)	0.012	7.066	76.140
	TOTAL	**15.587**	**20.394**	**34.248**	**3.105**	**2.727**	**(0.037)**	**0.116**	**76.140**	

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.

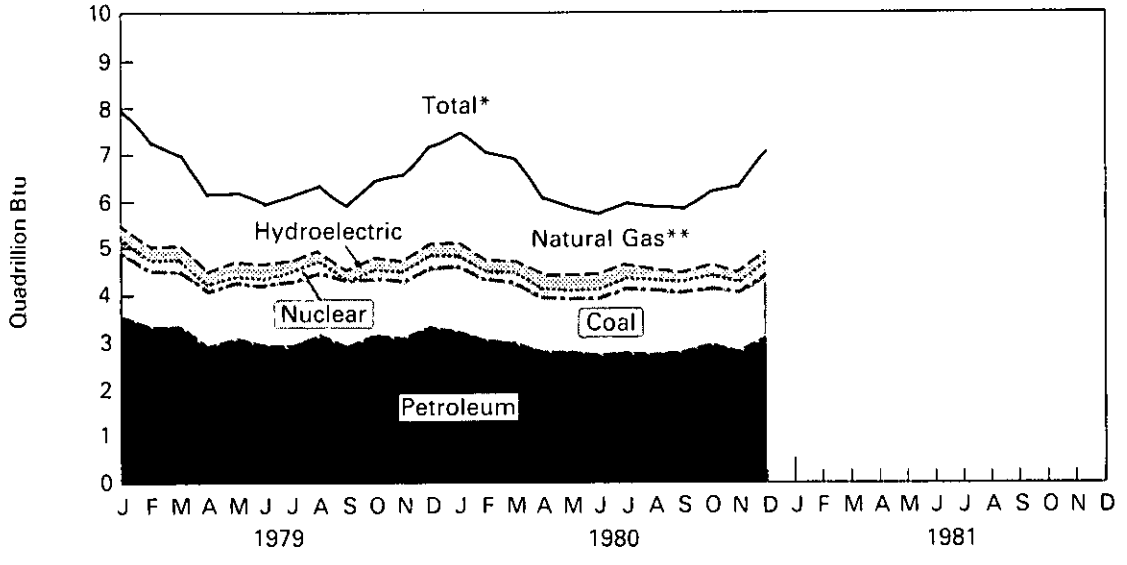
Executive Summary

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]

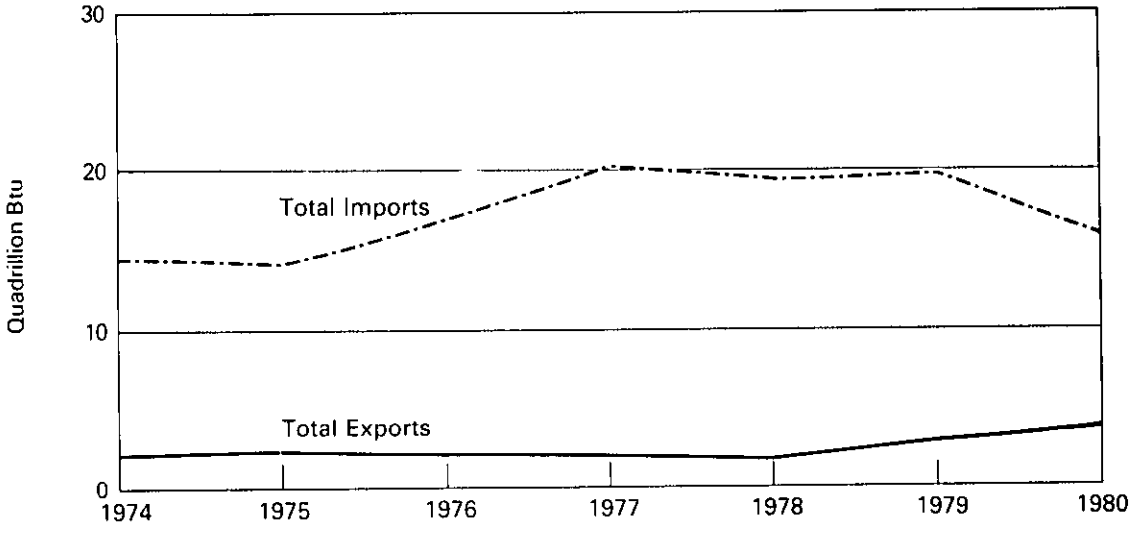
		Coal[2]	Crude Oil[3]	Refined Petroleum Products[4]	Natural Gas (Dry)	Electricity[5]	Coal Coke	Net Imports	Yearly Cumulative Net Imports of Energy
		Quadrillion (10^{15}) Btu							
1973	**TOTAL**	**(1.442)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.659**	
1974	**TOTAL**	**(1.586)**	**7.389**	**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)	1.214	0.372	0.099	0.017	0.004	1.613	1.613
	February	(0.067)	1.013	0.313	0.095	0.016	0.003	1.372	2.985
	March	(0.122)	1.080	0.397	0.111	0.017	0.002	1.486	4.471
	April	(0.138)	1.036	0.260	0.104	0.017	0.005	1.284	5.755
	May	(0.165)	1.095	0.291	0.102	0.017	0.011	1.353	7.108
	June	(0.156)	1.116	0.259	0.099	0.017	0.010	1.345	8.453
	July	(0.168)	1.144	0.318	0.101	0.017	0.008	1.420	9.873
	August	(0.160)	1.181	0.289	0.096	0.017	0.009	1.431	11.304
	September	(0.134)	1.088	0.244	0.096	0.017	0.008	1.318	12.623
	October	(0.197)	1.207	0.288	0.107	0.017	0.004	1.426	14.049
	November	(0.163)	1.038	0.306	0.114	0.017	0.000	1.313	15.361
	December	(0.166)	1.098	0.380	0.109	0.017	0.002	1.441	16.802
	TOTAL	**(1.729)**	**13.309**	**3.717**	**1.234**	**0.206**	**0.066**	**16.802**	
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	2.695
	March	(0.150)	0.982	0.274	0.106	0.017	(0.003)	1.228	3.923
	April	(0.202)	0.929	0.213	0.088	0.017	(0.005)	1.040	4.963
	May	(0.227)	0.857	0.225	0.066	0.017	(0.006)	0.933	5.896
	June	(0.237)	0.890	0.202	0.059	0.017	(0.004)	0.927	6.823
	July	(0.221)	0.793	0.206	0.060	0.017	(0.004)	0.850	7.673
	August	(0.246)	R0.836	R0.211	0.057	0.017	(0.003)	R0.872	R8.545
	September	(0.226)	0.749	0.213	0.056	0.017	(0.004)	0.804	R9.349
	October	(0.251)	0.778	0.229	0.072	0.017	(0.006)	0.839	R10.188
	November	(0.242)	0.744	0.253	0.085	0.017	(0.002)	0.853	11.041
	December	(0.199)	0.853	0.234	0.093	0.017	(0.001)	0.997	12.038
	TOTAL	**(2.423)**	**10.446**	**2.877**	**0.969**	**0.206**	**(0.037)**	**12.038**	

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.

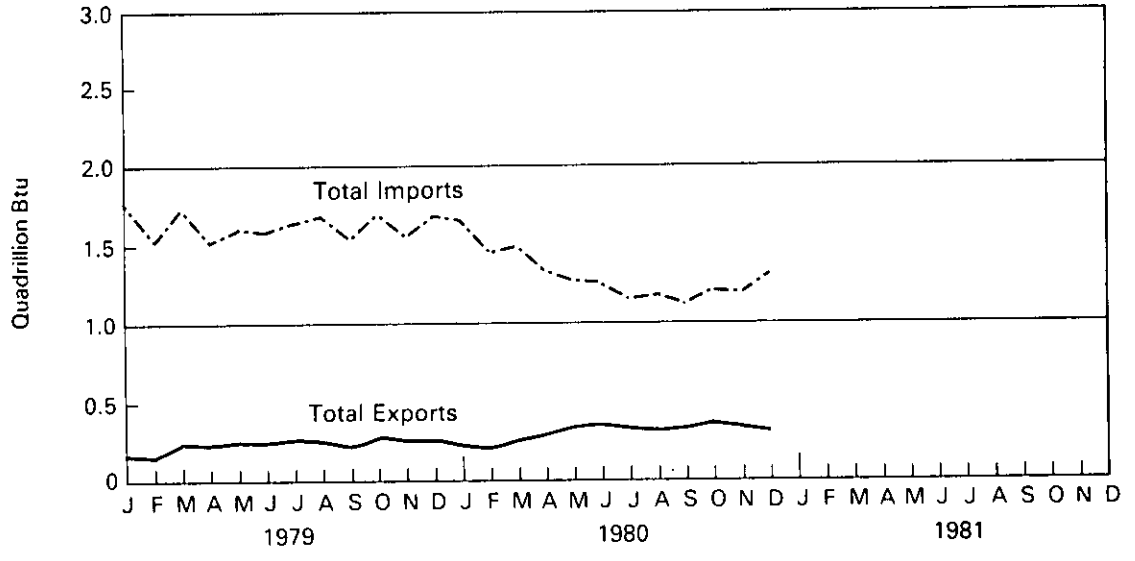
Executive Summary

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	R4,964	12,349	4,228	R8,392	3,227	R15,847
	February	292	7,446	4,966	12,705	R3,527	7,480	R2,772	R13,779
	March	436	R8,843	6,020	R15,299	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	R14,530	R4,165	8,690	3,655	R16,510
	June	500	8,527	R6,056	R15,083	4,528	9,247	R3,655	R17,429
	July	534	R7,880	R6,078	R14,492	R5,074	8,778	R3,261	R17,113
	August	R501	7,981	R6,236	R14,718	5,460	8,988	3,482	17,931
	September	438	8,086	R6,144	R14,669	6,084	8,539	R3,455	R18,078
	October	567	R9,070	R7,353	16,991	R6,549	R9,253	3,430	R19,233
	November	522	8,849	R7,578	16,948	R5,409	9,363	R3,883	R18,656
	December	543	R9,050	7,039	R16,632	R6,783	9,037	3,924	R19,744
	TOTAL	**R5,621**	**R99,279**	**R73,527**	**R178,426**	**R59,998**	**R104,748**	**R41,510**	**R206,256**
1980	January	481	8,837	6,696	16,015	6,559	9,772	3,801	20,132
	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	9,801	3,848	21,041
	April	631	10,481	R7,691	R18,803	6,346	9,543	3,737	19,626
	May	737	10,574	7,079	18,390	6,895	9,791	3,818	20,503
	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
	August	703	9,974	6,947	R17,623	R6,236	9,195	3,428	18,859
	September	710	10,158	6,632	17,500	5,831	R9,442	3,806	R19,079
	October	755	11,271	7,483	19,509	6,231	10,067	3,970	20,268
	November	785	10,415	7,044	18,244	5,880	9,862	3,792	19,533
	December	741	10,649	7,820	19,210	7,218	10,208	3,886	21,312
	TOTAL	**7,982**	**123,151**	**85,303**	**216,436**	**79,058**	**116,447**	**45,330**	**240,834**

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).

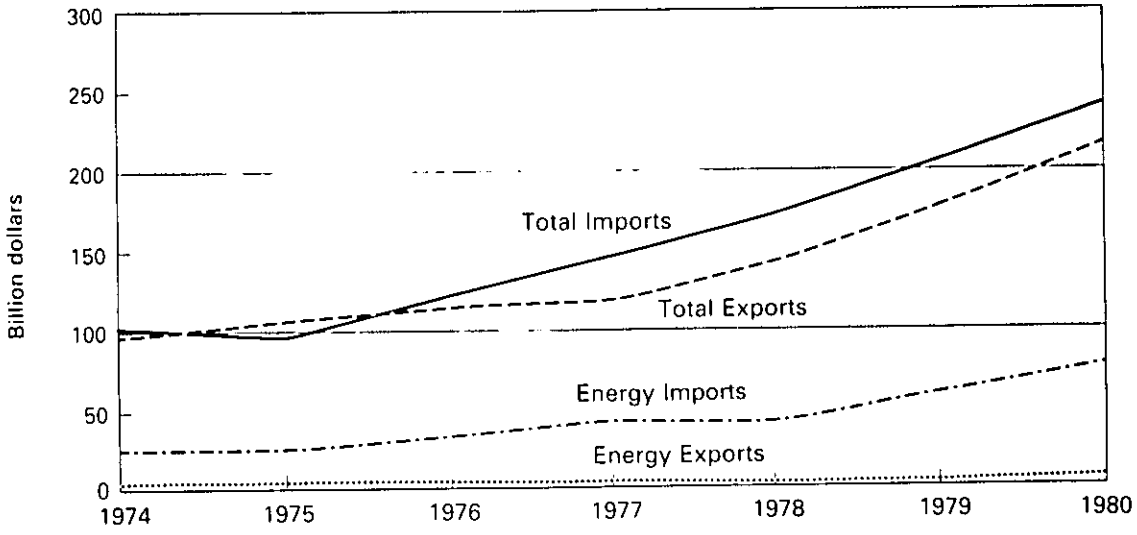
R = Revised data.

Source: • U.S. Department of Commerce, Bureau of the Census (BOC) publication FT 900, *Summary of U.S. Export and Import Merchandise Trade.*

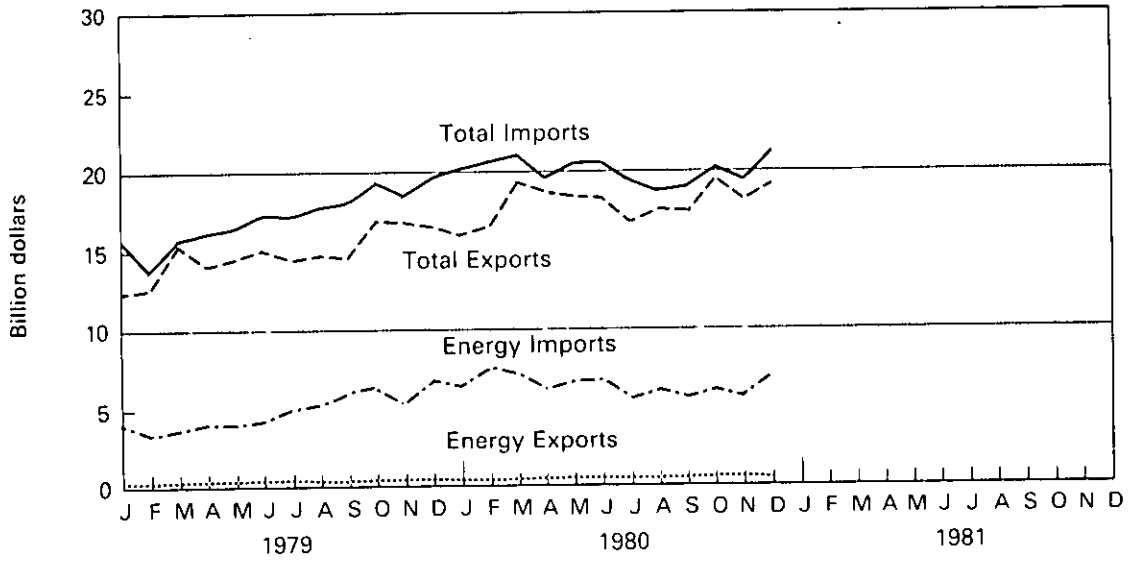
Executive Summary

Merchandise Trade Value

Yearly



Monthly



Executive Summary

Heating Degree-Days[1]

Petroleum Administration For Defense (PAD) Districts	December 29 through January 25					Cumulative July 1 through January 25				
	1980–81	1979–80[2]		Normal (1941–70)[2]		1980–81	1979–80[2]		Normal (1941–70)[2]	
PAD District I	1,041	744	(39.9)	808	(28.9)	2,809	2,219	(26.6)	2,415	(16.3)
New England	1,326	958	(38.4)	1,037	(27.9)	3,741	2,965	(26.2)	3,180	(17.6)
Conn., Maine, Mass., N.H., R.I., Vt.										
Middle Atlantic	1,189	872	(36.2)	943	(26.1)	3,277	2,601	(26.0)	2,826	(16.0)
Del., Md., N.J., N.Y., Pa.										
Lower Atlantic	695	457	(51.9)	504	(37.7)	1,696	1,318	(28.7)	1,461	(16.1)
Fla., Ga., N.C., S.C., Va., W. Va.										
PAD District II	1,118	954	(17.2)	1,064	(5.0)	3,380	3,047	(10.9)	3,263	(3.6)
Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.										
Pad District III	572	405	(41.3)	501	(14.2)	1,470	1,278	(15.0)	1,339	(9.8)
Ala., Ark., La., Miss., N. Mex., Tex.										
PAD District IV	827	952	(−13.2)	1,038	(−20.4)	2,941	3,234	(−9.1)	3,456	(−14.9)
Colo., Idaho, Mont., Utah, Wyo.										
PAD District V	311	350	(−11.2)	466	(−33.3)	1,127	1,164	(−3.2)	1,511	(−25.4)
Ariz., Calif., Nev., Oreg., Wash.										
U.S. AVERAGE[3]	**902**	**722**	**(25.0)**	**813**	**(11.0)**	**2,602**	**2,254**	**(15.4)**	**2,463**	**(5.7)**

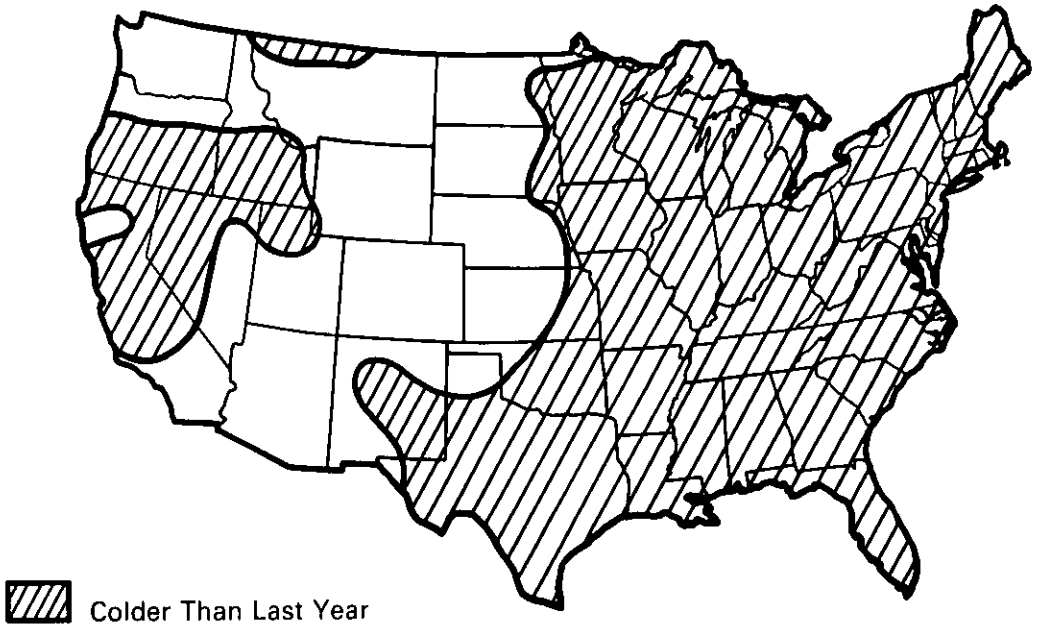
[1]See Explanatory Note 6 for explanation of degree-days.
[2]Percentage change in parentheses.
[3]Excludes Alaska and Hawaii.

Executive Summary

Heating Degree-Days

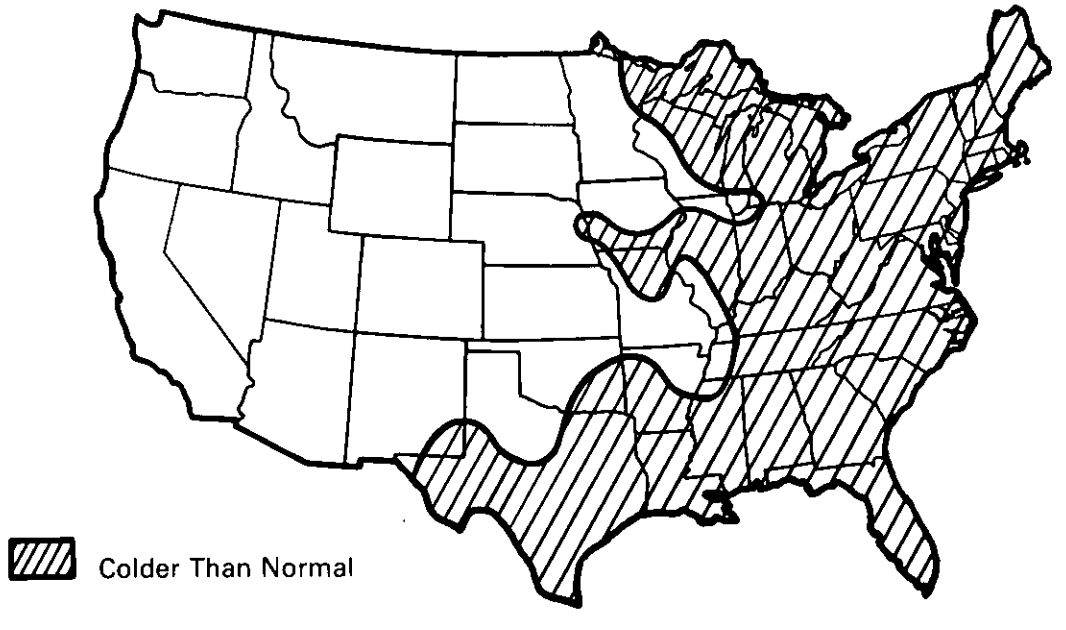
Heating Degree-Days Accumulated from July 1 through January 25

Departure from Last Year



Colder Than Last Year

Departure from Normal



Colder Than 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	3.19	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	62.9	89.940	2.292	1.431	3.24	5.87	8.81	20.35
	2nd Qtr	51.7	73.533	2.330	1.422	3.16	5.44	8.09	17.67
	3rd Qtr	50.8	72.818	2.397	1.433	2.95	5.68	8.31	17.58
	4th Qtr	55.3	79.701	2.457	1.440	2.80	5.46	8.44	18.44
	AVERAGE	55.1	78.953	2.369	1.432	3.04	5.61	8.41	18.50
1980	1st Qtr	59.5	86.046	2.521	1.445	3.00	4.97	7.90	18.16
	2nd Qtr	50.3	70.819	2.521	1.409	2.59	4.28	6.81	16.41
	3rd Qtr	49.9	70.527	2.569	1.412	2.22	3.69	6.03	16.10

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:

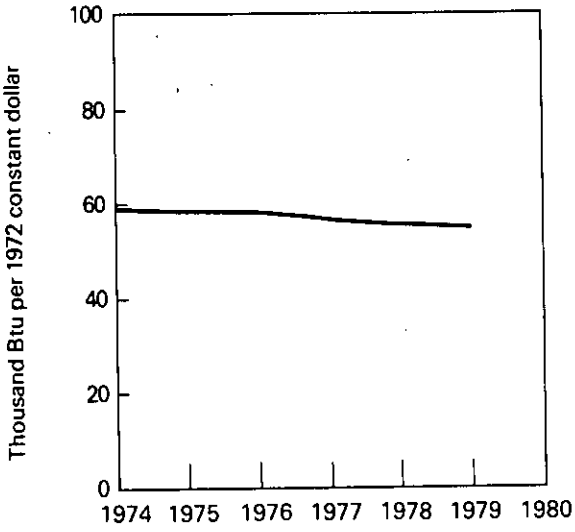
$$\text{Constant 1972 dollars} = \frac{\text{Current dollars in year N}}{\text{Gross National Product implicit price deflator in year N}} \times 100$$

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.
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.

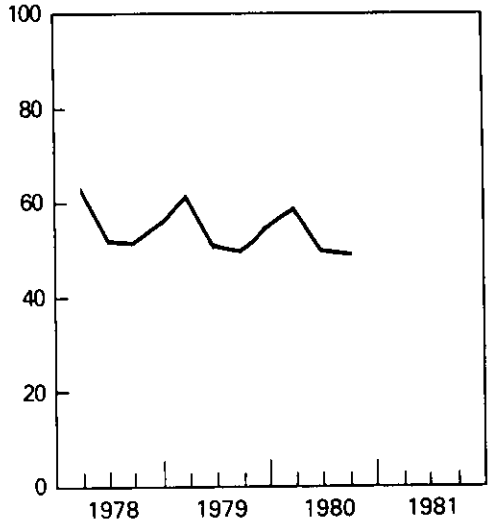
Executive Summary

Energy Consumption per GNP Dollar

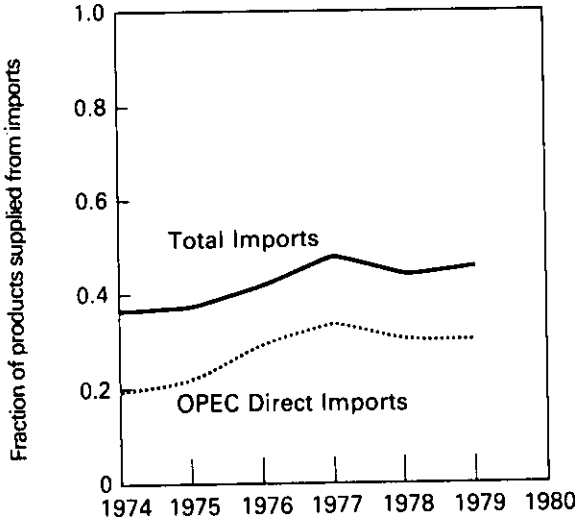
Yearly



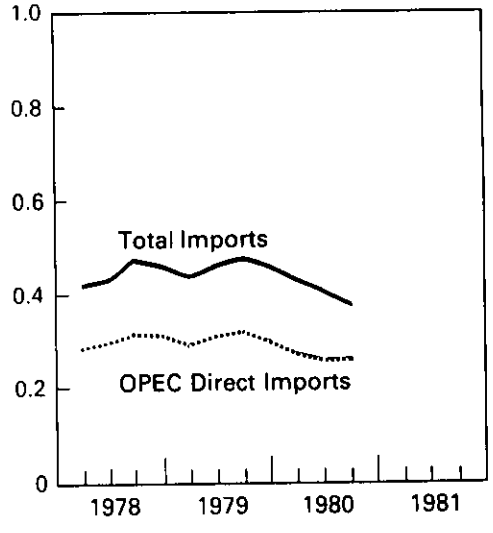
Quarterly



Yearly



Quarterly

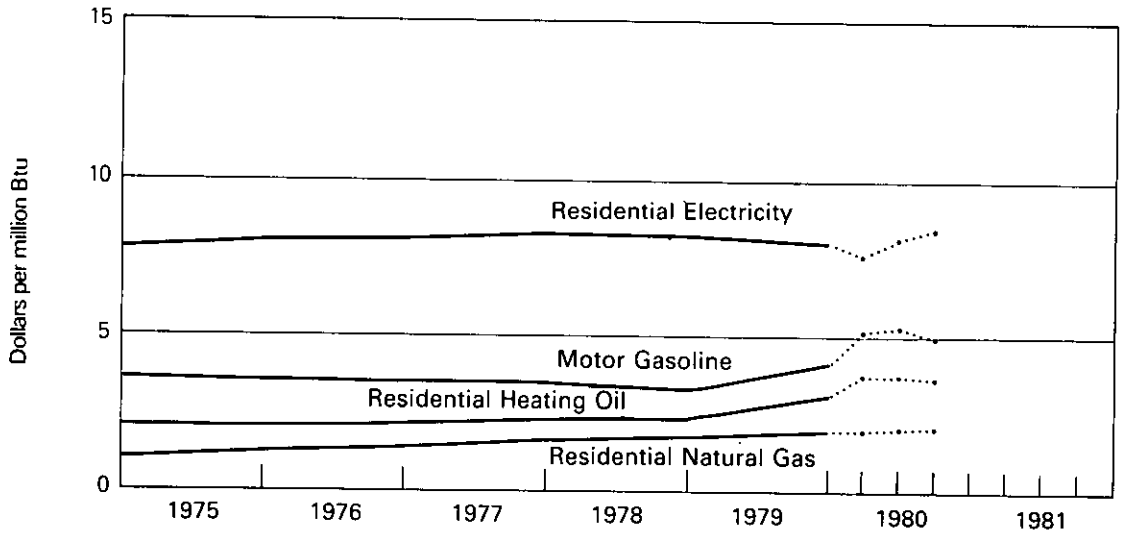


Executive Summary

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**	**45.1**	**3.61**	**29.4**	**2.12**	**121.4**	**1.19**	**2.63**	**7.71**
1975	**AVERAGE**	**44.1**	**3.53**	**29.3**	**2.11**	**132.8**	**1.30**	**2.73**	**8.00**
1976	**AVERAGE**	**43.4**	**3.47**	**30.2**	**2.18**	**145.4**	**1.43**	**2.74**	**8.03**
1977	**AVERAGE**	**42.9**	**3.43**	**31.2**	**2.25**	**162.2**	**1.59**	**2.80**	**8.20**
1978	**AVERAGE**	**40.1**	**3.21**	**31.7**	**2.29**	**164.4**	**1.62**	**2.76**	**8.10**
1979	1st Qtr	41.5	3.32	33.8	2.44	179.4	1.77	2.51	7.36
	2nd Qtr	46.9	3.75	37.2	2.68	181.3	1.79	2.74	8.03
	3rd Qtr	53.3	4.26	44.0	3.17	189.0	1.86	2.79	8.17
	4th Qtr	54.9	4.39	46.4	3.35	193.1	1.90	2.66	7.79
	AVERAGE	**49.3**	**3.94**	**40.8**	**2.94**	**185.3**	**1.88**	**2.66**	**7.79**
1980	1st Qtr	62.3	4.98	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	2.75	8.06
	3rd Qtr	60.6	4.85	49.2	3.55	207.5	2.04	2.86	8.38

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



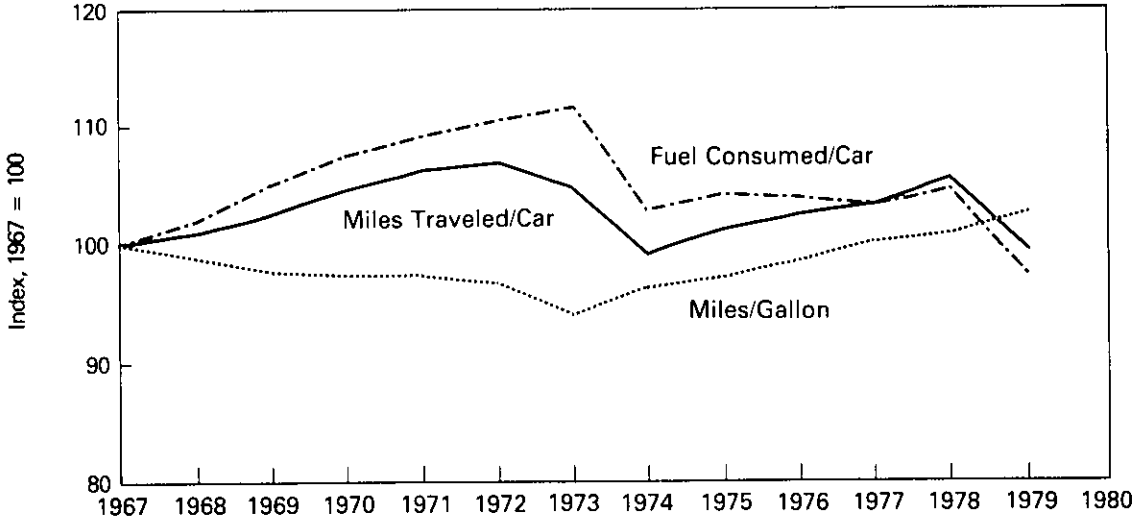
Geographic coverage: the 50 United States and District of Columbia.
NA = Not available.
Note: This page is updated every quarter, during the months of March, June, September, and December. In other months, data appearing elsewhere in this publication are more current.
Sources: • Motor Gasoline—Bureau 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.

Executive Summary

Energy Indicator — U.S. Passenger Car Efficiency

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

U.S. Passenger Car Efficiency Index



Geographic coverage: the 50 United States and District of Columbia.
Source: • U.S. Department of Transportation, Federal Highway Administration, Federal Highway Statistics Division, "Highway Statistics", Table VM-1.

Consumption

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

Primary Energy Source	Sector: Residential and Commercial	Industrial	Transportation	Electric Utilities	TOTAL
Coal	0.022	0.275	0.000	0.979	1.276
Natural Gas (dry)	0.639	0.846	0.053	0.265	1.804
Petroleum	0.498	0.593	1.421	0.251	2.764
Hydroelectric	0.000	0.003	0.000	0.217	0.221
Nuclear	0.000	0.000	0.000	0.226	0.226
Net Coke Imports	0.000	(0.002)	0.000	0.000	(0.002)
Other	0.000	0.000	0.000	0.011	0.011
TOTAL PRIMARY ENERGY	**1.160**	**1.715**	**1.475**	**1.950**	**6.299**
Electricity Sales	0.322	0.231	0.001	(0.553)	
Net Energy Consumption	1.482	1.946	1.475		4.903
Electrical Energy Losses	0.812	0.582	0.002	(1.396)	1.396
TOTAL ENERGY CONSUMED	**2.294**	**2.528**	**1.477**		**6.299**

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

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

Primary Energy Source	Sector: Residential and Commercial	Industrial	Transportation	Electric Utilities	TOTAL
Coal	0.025	0.281	0.000	1.060	1.366
Natural Gas (dry)	0.993	0.839	0.064	0.255	2.150
Petroleum	0.585	0.538	1.594	0.327	3.044
Hydroelectric	0.000	0.003	0.000	0.231	0.234
Nuclear	0.000	0.000	0.000	0.261	0.261
Net Coke Imports	0.000	(0.001)	0.000	0.000	(0.001)
Other	0.000	0.000	0.000	0.012	0.012
TOTAL PRIMARY ENERGY	**1.603**	**1.659**	**1.657**	**2.146**	**7.066**
Electricity Sales	0.364	0.226	0.001	(0.590)	
Net Energy Consumption	1.967	1.885	1.658		5.510
Electrical Energy Losses	0.959	0.595	0.002	(1.556)	1.556
TOTAL ENERGY CONSUMED	**2.925**	**2.480**	**1.660**		**7.066**

*Preliminary data.
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.

Energy Consumption

Preliminary data indicate total U.S. energy consumption in 1980 dropped to 76.1 quadrillion Btu, about 4.0 percent below 1979 and a 2.6 percent decrease from the 1978 consumption level.

The Residential and Commercial Sector consumption was 29.1 quadrillion Btu in 1980, a 0.9 percent decrease from the amount consumed both last year and in 1978. The Residential and Commercial Sector consumed 38.2 percent of the total consumption for 1980, up from the sector's 37.1 percent share in 1979.

The Industrial Sector consumption was 28.5 quadrillion Btu in 1980, down 4.6 percent from 1979, and down 0.8 percent from the consumption level in 1978. The Industrial Sector consumed 37.4 percent of the 1980 total, as compared to the 37.7 percent share in 1979.

The Transportation Sector consumption was 18.6 quadrillion Btu in 1980, down 6.6 percent from 1979 and down 9.9 percent from the consumption level in 1978. This sector consumed 24.4 percent of the 1980 total, as compared to a 25.2 percent share in 1979.

The Electric Utilities consumption was an estimated 25.0 quadrillion Btu of energy in 1980, 2.4 percent higher than in the previous year, and 6.7 percent higher than the energy consumed in 1978. Coal contributed 48.4 percent of the energy consumed by Electric Utilities in 1980, while natural gas contributed 15.3 percent, petroleum 12.7 percent, hydroelectric power 12.3 percent, nuclear power 10.9 percent, and geothermal, wood and waste 0.5 percent.

Consumption

Energy Consumption Summary for January through December 1980* Quadrillion (10^{15}) Btu

Primary Energy Source	Sector: Residential and Commercial	Industrial	Transportation	Electric Utilities	TOTAL
Coal	0.188	3.301	0.000	12.099	15.587
Natural Gas (dry)	7.604	8.374	0.604	3.812	20.394
Petroleum	6.041	7.089	17.944	3.174	34.248
Hydroelectric	0.000	0.037	0.000	3.068	3.105
Nuclear	0.000	0.000	0.000	2.727	2.727
Net Coke Imports	0.000	(0.037)	0.000	0.000	(0.037)
Other	0.000	0.000	0.000	0.116	0.116
TOTAL PRIMARY ENERGY	**13.833**	**18.764**	**18.548**	**24.996**	**76.140**
Electricity Sales	4.354	2.773	0.009	(7.136)	
Net Energy Consumption	18.187	21.537	18.557		58.281
Electrical Energy Losses	10.888	6.945	0.022	(17.855)	17.855
TOTAL ENERGY CONSUMED	**29.075**	**28.482**	**18.578**		**76.140**

*Preliminary data.
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 February

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

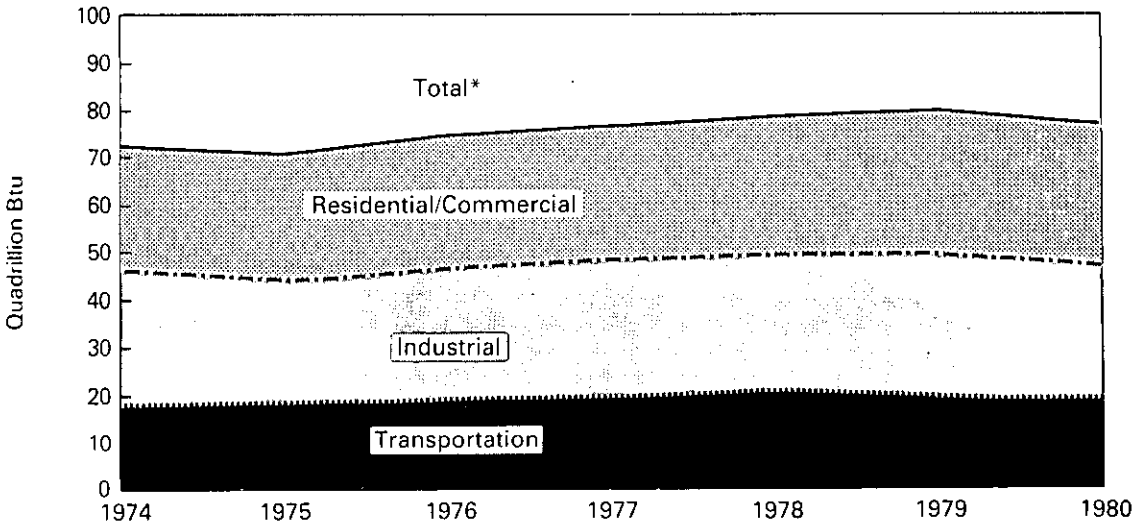
		Residential and Commercial	Industrial	Transportation	Total Energy Consumed
		Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**27.396**	**28.685**	**18.525**	**74.609**
1974	**TOTAL**	**26.699**	**27.998**	**18.057**	**72.759**
1975	**TOTAL**	**26.635**	**25.881**	**18.186**	**70.707**
1976	**TOTAL**	**27.831**	**27.603**	**19.071**	**74.509**
1977	**TOTAL**	**28.193**	**28.442**	**19.751**	**76.390**
1978	**TOTAL**	**28.807**	**28.715**	**20.627**	**78.154**
1979	January	3.424	2.734	R1.783	R7.941
	February	3.237	2.338	R1.695	R7.270
	March	2.816	R2.418	R1.766	R7.000
	April	2.297	R2.259	R1.593	R6.149
	May	2.072	R2.463	R1.666	R6.201
	June	1.991	R2.394	R1.604	R5.990
	July	2.099	R2.424	R1.601	R6.124
	August	2.194	2.459	R1.685	R6.338
	September	1.995	R2.353	R1.555	R5.904
	October	2.104	R2.635	R1.658	R6.398
	November	2.321	R2.629	R1.599	R6.549
	December	2.778	R2.734	R1.683	R7.196
	TOTAL	**29.326**	**29.841**	**R19.888**	**R79.060**
1980	January	3.086	R2.718	R1.626	R7.431
	February	3.026	R2.436	R1.563	R7.025
	March	2.825	R2.496	R1.592	R6.913
	April	2.252	R2.230	R1.544	R6.027
	May	2.006	R2.292	R1.538	R5.837
	June	2.028	R2.203	R1.483	5.715
	July	R2.229	R2.191	R1.543	R5.963
	August	R2.216	R2.130	R1.510	R5.857
	September	R2.074	R2.268	R1.475	R5.818
	October	R2.113	R2.510	R1.566	R6.189
	November	2.294	2.528	1.477	6.299
	December	2.925	2.480	1.660	7.066
	TOTAL	**29.075**	**28.482**	**18.578**	**76.140**

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.

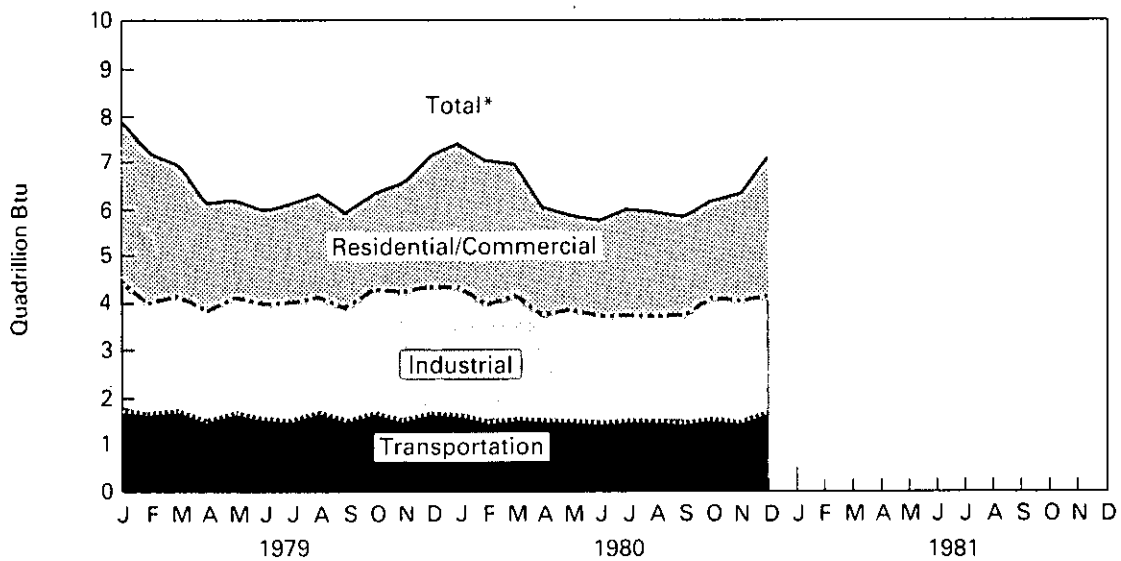
Consumption

Consumption of Energy by End-Use Sector

Yearly



Monthly



*Btu consumption for all sectors were 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	0.031	1.294	0.701	0.399	0.998	3.424	3.424
	February	0.020	1.316	0.647	0.388	0.867	3.237	6.660
	March	0.015	0.982	0.584	0.352	0.883	2.816	9.476
	April	0.013	0.740	0.494	0.312	0.739	2.297	11.773
	May	0.012	0.457	0.540	0.299	0.764	2.072	13.845
	June	0.013	0.316	0.527	0.323	0.811	1.991	15.836
	July	0.012	0.270	0.533	0.366	0.918	2.099	17.934
	August	0.011	0.249	0.578	0.393	0.964	2.194	20.128
	September	0.014	0.260	0.530	0.370	0.822	1.995	22.123
	October	0.019	0.359	0.598	0.322	0.806	2.104	24.227
	November	0.023	0.626	0.567	0.315	0.789	2.321	26.548
	December	0.025	0.902	0.607	0.348	0.895	2.778	29.326
	TOTAL	**0.209**	**7.770**	**6.907**	**4.185**	**10.255**	**29.326**	
1980	January	0.025	1.113	0.597	0.381	0.970	3.086	3.086
	February	0.022	1.191	0.552	0.375	0.886	3.026	6.112
	March	0.015	1.053	0.513	0.359	0.885	2.825	8.937
	April	0.014	0.716	0.433	0.319	0.770	2.252	11.189
	May	0.009	0.450	0.451	0.298	0.799	2.006	13.196
	June	0.007	0.329	0.459	0.334	0.899	2.028	15.224
	July	R0.009	0.258	0.470	0.410	1.081	R2.229	R17.452
	August	R0.008	0.240	R0.463	0.439	R1.066	R2.216	R19.669
	September	R0.011	0.252	R0.482	0.411	0.919	R2.074	R21.743
	October	0.021	0.370	R0.537	0.343	R0.843	R2.113	R23.856
	November	0.022	0.639	0.498	0.322	0.812	2.294	26.150
	December	0.025	0.993	0.585	0.364	0.959	2.925	29.075
	TOTAL	**0.188**	**7.604**	**6.041**	**4.354**	**10.888**	**29.075**	

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**	**7.178**	**0.036**	**0.131**	**2.732**	**6.637**	**28.715**	
1979	January	0.315	0.869	0.726	0.003	0.004	0.233	0.584	2.734	2.734
	February	0.295	0.629	0.662	0.003	0.003	0.231	0.516	2.338	5.072
	March	0.300	R0.608	0.669	0.003	0.002	0.238	0.597	R2.418	R7.490
	April	0.289	R0.566	0.591	0.003	0.005	0.239	0.565	R2.259	R9.748
	May	0.290	R0.670	0.616	0.003	0.011	0.245	0.626	R2.463	R12.211
	June	0.282	R0.647	0.590	0.003	0.010	0.245	0.616	R2.394	R14.606
	July	0.318	R0.664	0.580	0.003	0.008	0.242	0.608	R2.424	R17.030
	August	0.297	R0.688	0.614	0.003	0.009	0.246	0.602	2.459	R19.489
	September	0.286	R0.704	0.571	0.003	0.008	0.242	0.538	R2.353	R21.842
	October	0.297	R0.847	0.630	0.003	0.004	0.244	0.611	R2.635	R24.478
	November	0.301	R0.852	0.638	0.003	0.000	0.238	0.597	R2.629	R27.107
	December	0.331	R0.890	0.688	0.003	0.002	0.230	0.591	R2.734	29.841
	TOTAL	**3.602**	**R8.635**	**7.575**	**0.037**	**0.066**	**2.873**	**7.052**	**29.841**	
1980	January	0.311	R0.854	R0.728	0.003	0.003	0.231	0.587	R2.718	R2.718
	February	0.291	R0.704	R0.654	0.003	(0.001)	0.233	0.551	R2.436	R5.153
	March	0.297	R0.729	R0.653	0.003	(0.003)	0.236	0.582	R2.496	R7.649
	April	0.278	R0.569	R0.592	0.003	(0.005)	0.232	0.560	R2.230	R9.880
	May	0.272	R0.599	0.579	0.003	(0.006)	0.229	0.614	R2.292	R12.172
	June	0.256	R0.562	0.546	0.003	(0.004)	0.228	0.613	R2.203	R14.375
	July	R0.268	R0.593	0.519	0.003	(0.004)	0.224	0.589	R2.191	R16.566
	August	R0.252	R0.572	R0.518	0.003	(0.003)	0.230	R0.558	R2.130	R18.696
	September	R0.240	R0.664	R0.597	0.003	(0.004)	0.237	0.531	R2.268	R20.964
	October	0.280	R0.843	R0.571	0.003	(0.006)	0.237	0.582	R2.510	R23.474
	November	0.275	0.846	0.593	0.003	(0.002)	0.231	0.582	2.528	26.002
	December	0.281	0.839	0.538	0.003	(0.001)	0.226	0.595	2.480	28.482
	TOTAL	**3.301**	**8.374**	**7.089**	**0.037**	**(0.037)**	**2.773**	**6.945**	**28.482**	

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**	**20.059**	**0.009**	**0.020**	**20.627**	
1979	January	(3)	R0.073	1.707	0.001	0.002	R1.783	R1.783
	February	(3)	R0.066	1.626	0.001	0.002	R1.695	R3.478
	March	(3)	R0.057	1.707	0.001	0.002	R1.766	R5.244
	April	(3)	R0.048	1.542	0.001	0.002	R1.593	R6.837
	May	(3)	R0.043	1.621	0.001	0.002	R1.666	R8.503
	June	(3)	R0.039	1.562	0.001	0.002	R1.604	R10.107
	July	(3)	R0.040	1.558	0.001	0.002	R1.601	R11.708
	August	(3)	R0.040	1.641	0.001	0.002	R1.685	R13.393
	September	(3)	R0.040	1.513	0.001	0.002	R1.555	R14.948
	October	(3)	R0.047	1.609	0.001	0.002	R1.658	R16.606
	November	(3)	R0.053	1.543	0.001	0.002	R1.599	R18.205
	December	(3)	R0.063	1.618	0.001	0.002	R1.683	R19.888
	TOTAL	(3)	**R0.611**	**19.248**	**0.009**	**0.021**	**R19.888**	
1980	January	(3)	R0.069	1.555	0.001	0.002	R1.626	R1.626
	February	(3)	R0.066	1.495	0.001	0.002	R1.563	R3.190
	March	(3)	R0.063	1.526	0.001	0.002	R1.592	R4.781
	April	(3)	R0.047	1.495	0.001	0.002	R1.544	R6.326
	May	(3)	R0.041	1.495	0.001	0.002	R1.538	R7.864
	June	(3)	R0.038	1.443	0.001	0.002	R1.483	R9.347
	July	(3)	R0.039	1.501	0.001	0.002	R1.543	R10.890
	August	(3)	R0.038	R1.470	0.001	0.002	R1.510	R12.401
	September	(3)	R0.039	1.434	0.001	0.002	R1.475	R13.876
	October	(3)	R0.047	R1.516	0.001	0.002	R1.566	R15.441
	November	(3)	0.053	1.421	0.001	0.002	1.477	16.919
	December	(3)	0.064	1.594	0.001	0.002	1.660	18.578
	TOTAL	(3)	**0.604**	**17.944**	**0.009**	**0.022**	**18.578**	

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	0.387	0.279	0.299	0.007	2.216	2.216
	February	0.892	0.235	0.355	0.238	0.279	0.006	2.004	4.220
	March	0.900	0.270	0.346	0.288	0.262	0.008	2.074	6.293
	April	0.840	0.270	0.260	0.282	0.198	0.007	1.857	8.150
	May	0.894	0.286	0.268	0.319	0.162	0.007	1.937	10.087
	June	0.946	0.331	0.265	0.278	0.173	0.007	1.999	12.086
	July	1.007	0.382	0.261	0.255	0.224	0.007	2.137	14.222
	August	1.037	0.390	0.272	0.239	0.261	0.008	2.207	16.430
	September	0.901	0.350	0.267	0.215	0.235	0.007	1.975	18.405
	October	0.917	0.334	0.273	0.228	0.225	0.008	1.986	20.391
	November	0.916	0.270	0.291	0.250	0.207	0.008	1.942	22.333
	December	1.000	0.257	0.324	0.255	0.222	0.009	2.067	24.400
	TOTAL	**11.258**	**3.610**	**3.569**	**3.125**	**2.748**	**0.089**	**24.400**	
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	0.249	0.286	0.202	0.008	1.884	8.169
	May	0.890	0.291	0.236	0.319	0.198	0.010	1.944	10.112
	June	0.979	0.349	0.236	0.306	0.197	0.009	2.076	12.188
	July	1.122	0.435	0.241	0.272	0.226	0.010	2.307	14.495
	August	1.133	0.420	R0.239	0.231	0.262	0.011	R2.296	R16.791
	September	1.021	0.369	0.237	0.210	0.254	0.010	2.101	R18.892
	October	0.966	0.312	R0.251	0.204	0.264	0.011	R2.008	R20.900
	November	0.979	0.265	0.251	0.217	0.226	0.011	1.950	22.849
	December	1.060	0.255	0.327	0.231	0.261	0.012	2.146	24.996
	TOTAL	**12.099**	**3.812**	**3.174**	**3.068**	**2.727**	**0.116**	**24.996**	

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 in the Explanatory Notes Section located at the end of this publication 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 1979: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Annual."
• 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 1979: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Annual."
• 1980: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Monthly" and "Monthly Petroleum Statistics Report," and EIA estimates based on EIA weekly data.
• 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"; March 1980 forward: 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 December 1980 is estimated at 8.6 million barrels per day. This production rate was 0.6 percent below the rate in December 1979 and 0.7 percent higher than in November 1980.

Total petroleum imports averaged 6.5 million barrels per day in December 1980, 25.0 percent less than the December 1979 rate and 6.2 percent more than in November 1980.

In December 1980, 17.8 million barrels per day of petroleum products were supplied for domestic use. Motor gasoline accounted for 37.8 percent of the total, distillate fuel oil 20.4 percent, and residual fuel oil 17.1 percent.

The average for motor gasoline supplied during December 1980 was 6.7 million barrels per day, relatively unchanged from the amount supplied in December 1979 and 6.1 percent higher than in November 1980.

In December 1980, 3.6 million barrels of distillate fuel oil were supplied per day, 2.2 percent lower than the amount supplied a year ago and 25.3 percent higher than in November 1980. Distillate fuel oil stocks were 202.1 million barrels at the end of December 1980, 11.7 percent below the stock level 1 year ago and 9.5 percent lower than the previous month's level.

Residual fuel oil supplied in December 1980 averaged 3.1 million barrels per day, 1.2 percent higher than in December 1979. Residual fuel oil stocks measured 89.1 million barrels at the end of December 1980, 6.8 percent below the level a year ago and 4.5 percent lower than the previous month's level.

*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 months, crude production is an EIA estimate. The above import data excludes imports into the Strategic Petroleum Reserve.

Petroleum

Crude Oil

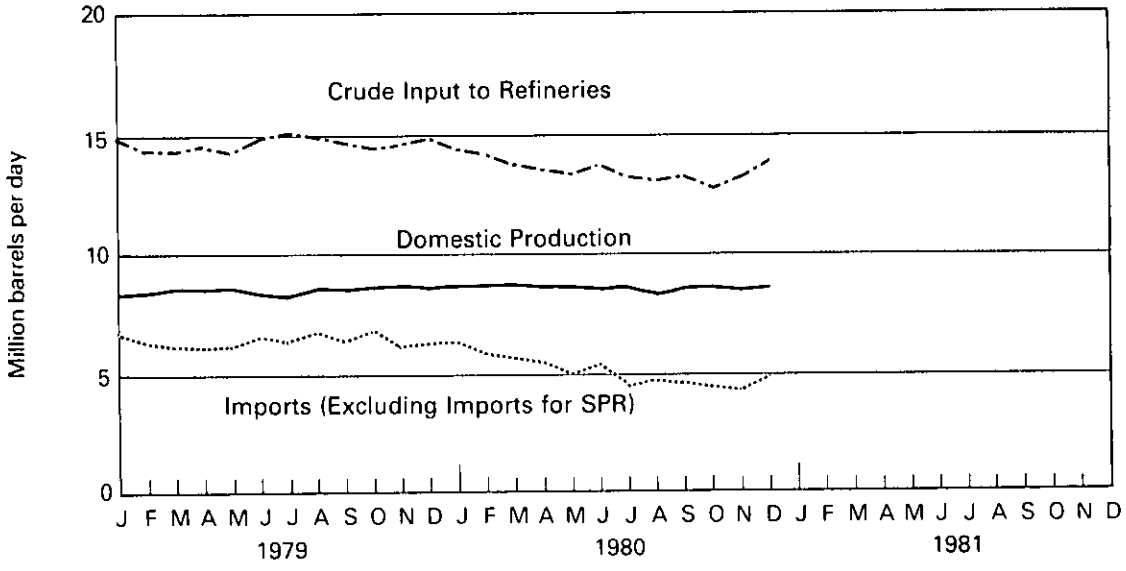
		Crude Input to Refineries	Total Domestic Production[1,2]	Alaskan Production	Crude Oil Imports[3]	Strategic Petroleum Reserve (SPR) Imports	Crude Oil Exports	Primary Crude Oil Stocks[1,3]	Strategic Petroleum Reserve (SPR) Stocks[3]
		Thousand barrels per day						Thousand barrels	
1973	**AVERAGE**	**12,431**	**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	14,840	8,475	1,351	6,721	204	177	302,059	73,142
	February	14,314	8,525	1,266	6,344	179	288	302,374	78,166
	March	14,260	8,601	1,355	6,252	122	370	316,690	82,501
	April	14,571	8,553	1,346	6,145	66	260	319,075	83,867
	May	14,450	8,601	1,349	6,163	97	171	316,322	86,880
	June	14,806	8,432	1,246	6,582	65	235	325,860	88,567
	July	15,098	8,364	1,405	6,561	41	244	312,946	90,101
	August	14,967	8,548	1,433	6,774	35	245	320,965	91,189
	September	14,594	8,523	1,436	6,426	0	175	323,939	91,189
	October	14,423	8,621	1,480	6,890	0	179	344,854	•91,191
	November	14,537	8,761	1,613	6,228	0	264	347,415	91,191
	December	14,877	8,615	1,519	6,318	0	215	339,074	91,191
	AVERAGE	**14,648**	**8,552**	**1,401**	**6,452**	**67**	**235**		
1980	January	R14,298	8,648	1,634	6,359	0	311	353,611	91,191
	February	R14,189	8,696	1,630	5,936	0	310	361,648	91,191
	March	R13,709	8,712	1,647	5,785	0	323	361,742	91,191
	April	R13,484	8,688	1,649	5,555	0	216	379,352	91,191
	May	13,326	8,640	1,628	5,071	0	308	383,902	91,191
	June	13,705	8,547	1,626	5,480	0	365	382,035	91,191
	July	13,251	8,555	1,612	4,645	0	238	379,280	91,191
	August	R13,011	R8,422	R1,612	R4,723	0	78	R387,605	91,191
	September†	13,310	*8,540*	*1,607*	4,569	54	322	376,512	92,824
	October†	12,753	*8,570*	*1,641*	4,503	131	309	378,472	96,645
	November†	R13,113	*8,500*	*R1,558*	R4,422	142	289	R372,248	102,320
	December†	*13,960*	*8,560*	*1,608*	*4,920*	NA	NA	*369,249*	NA
	AVERAGE	**13,507**	**8,589**	**1,621**	**5,162**	**NA**	**NA**		

Geographic coverage: the 50 United States and District of Columbia.
[1]Includes lease condensate.
[2]Includes Alaskan production.
[3]Excludes SPR. Strategic Petroleum Reserve storage began in October 1977.
•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.

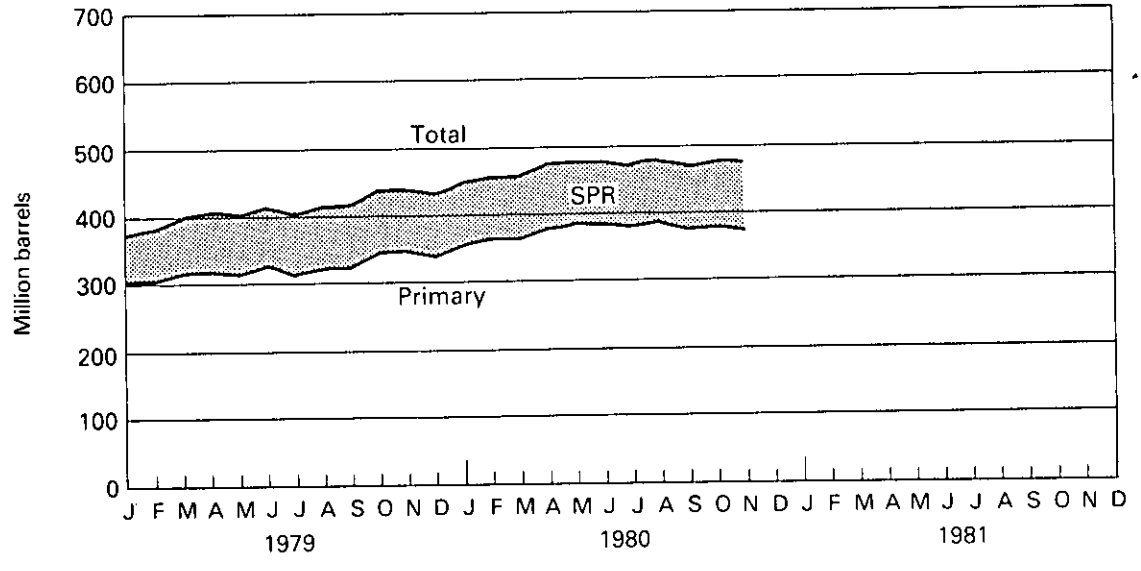
Petroleum

Crude Oil

Production, Refinery Input and Imports



Stocks



Petroleum

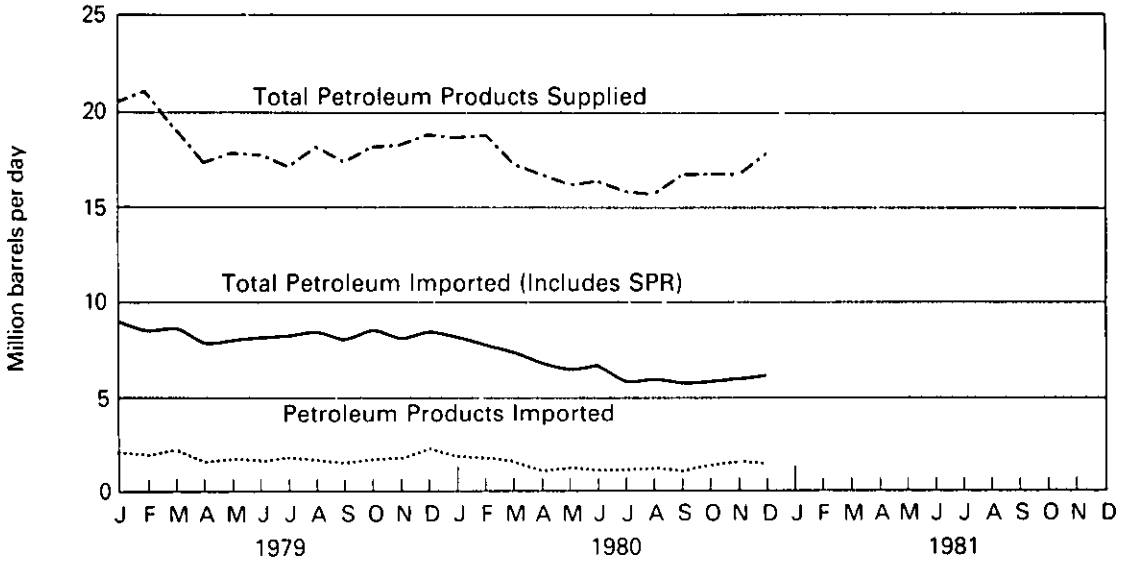
		Total Petroleum Products[1]			Total Crude Oil and Petroleum Products Trade				
		Products Supplied[1]	Product Imports[2]	Product Exports	Total Imports (Excluding SPR)	SPR Imports[3]	Total Imports (Including SPR)[3]	Total Exports	Net Imports
		Thousand barrels per day			Thousand barrels per day				
1973	**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	20,586	2,223	215	8,944	204	9,148	392	8,756
	February	21,288	2,069	198	8,413	179	8,591	486	8,105
	March	19,322	2,386	241	8,638	122	8,760	611	8,150
	April	17,434	1,682	234	7,828	66	7,893	493	7,400
	May	17,801	1,830	257	7,993	97	8,091	429	7,662
	June	17,786	1,680	233	8,262	65	8,327	468	7,859
	July	17,144	1,956	242	8,517	41	8,559	486	8,072
	August	18,149	1,781	221	8,555	35	8,590	466	8,124
	September	17,400	1,597	239	8,023	0	8,023	414	7,609
	October	18,176	1,798	246	8,688	0	8,688	425	8,263
	November	18,355	1,955	246	8,183	0	8,183	510	7,674
	December	18,922	2,310	256	8,628	0	8,628	471	8,157
	AVERAGE	**18,516**	**1,940**	**236**	**8,393**	**67**	**8,460**	**471**	**7,989**
1980	January	R18,656	1,983	228	8,342	0	8,342	539	7,803
	February	R18,815	1,911	227	7,847	0	7,847	536	7,311
	March	R17,385	1,724	243	7,509	0	7,509	566	6,943
	April	R16,724	1,430	241	6,985	0	6,985	457	6,528
	May	16,143	1,478	266	6,549	0	6,549	573	5,975
	June	16,214	1,413	288	6,893	0	6,893	654	6,239
	July	15,962	1,401	292	6,046	0	6,046	530	5,516
	August	R15,727	R1,379	241	R6,102	0	R6,102	319	R5,784
	September†	16,612	1,420	235	5,989	54	6,043	557	5,486
	October†	16,802	1,522	288	6,024	131	6,155	598	5,557
	November†	R16,696	R1,668	260	R6,090	142	6,232	549	5,683
	December†	*17,790*	*1,550*	NA	*6,470*	NA	NA	NA	NA
	AVERAGE	**16,955**	**1,572**	**NA**	**6,734**	**NA**	**NA**	**NA**	**NA**

Geographic coverage: the 50 United States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
[1]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.

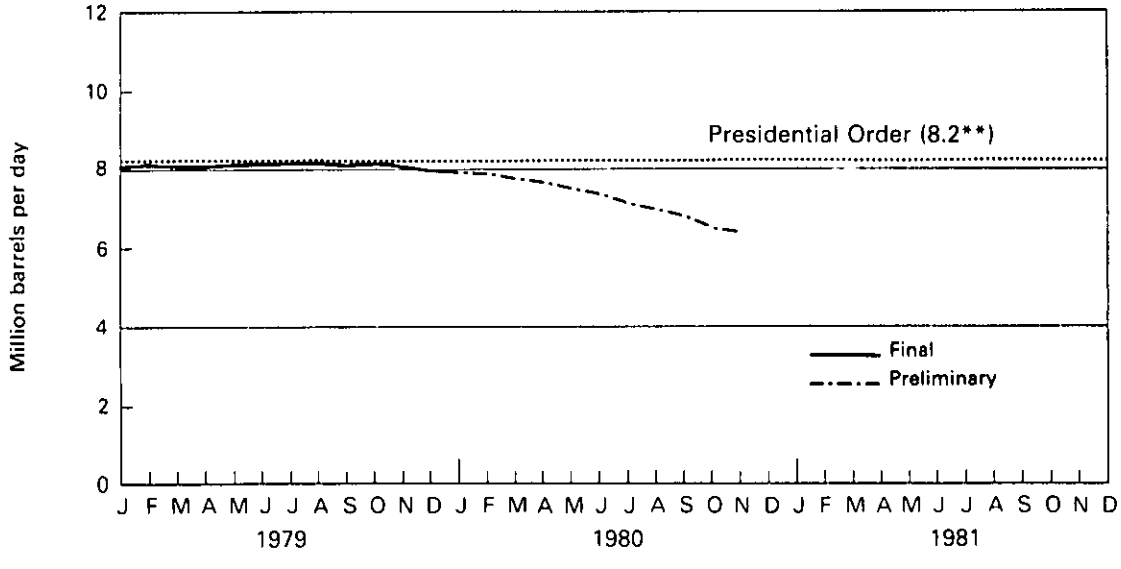
Petroleum

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, President Carter 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**	**213**	**223**	**164**	**459**	**486**	**71**	**1,135**	**106**	**2,993**	**915**
1974											
AVERAGE	**190**	**300**	**469**	**4**	**713**	**461**	**74**	**979**	**88**	**3,280**	**752**
1975											
AVERAGE	**282**	**390**	**280**	**232**	**762**	**715**	**117**	**702**	**122**	**3,601**	**1,383**
1976											
AVERAGE	**432**	**539**	**298**	**453**	**1,025**	**1,230**	**254**	**700**	**134**	**5,066**	**2,424**
1977											
AVERAGE	**559**	**541**	**535**	**723**	**1,143**	**1,380**	**335**	**690**	**287**	**6,193**	**3,185**
1978											
AVERAGE	**649**	**573**	**555**	**654**	**919**	**1,144**	**385**	**645**	**226**	**5,751**	**2,963**
1979											
January	669	503	187	754	1,159	1,563	341	661	229	6,066	3,425
February	746	521	86	614	984	1,628	310	749	171	5,810	3,404
March	579	419	22	598	1,403	1,310	298	851	272	5,754	2,950
April	687	376	52	771	989	1,484	285	619	130	5,392	3,311
May	755	343	197	651	1,118	1,273	292	671	147	5,447	3,024
June	587	391	318	765	932	1,258	282	609	364	5,507	3,185
July	591	427	425	666	1,000	1,443	272	674	183	5,682	3,083
August	669	499	516	657	1,183	1,332	247	731	261	6,097	3,052
September	510	359	373	621	1,103	1,281	270	726	200	5,443	2,843
October	615	452	496	762	988	1,271	234	617	304	5,738	3,086
November	625	351	549	476	1,007	1,163	307	713	151	5,342	2,619
December	603	403	414	559	1,080	1,279	242	680	130	5,390	2,743
AVERAGE	**636**	**420**	**304**	**658**	**1,080**	**1,356**	**281**	**692**	**212**	**5,640**	**3,058**
1980											
January	484	433	80	617	1,054	1,562	202	583	179	5,195	3,001
February	639	317	9	603	1,013	1,399	304	543	140	4,967	3,016
March	472	405	0	654	924	1,390	370	352	175	4,742	2,979
April	556	374	0	683	722	1,294	150	339	228	4,346	2,866
May	441	360	0	468	955	1,149	172	405	132	4,083	2,314
June	497	331	0	561	998	1,327	178	409	105	4,408	2,598
July	537	308	0	492	721	1,179	158	411	55	3,861	2,378
August	432	R289	0	R431	R770	R1,136	142	R397	R98	R3,695	R2,205
September†	361	290	0	512	728	1,096	107	424	77	3,595	2,128
October†	463	326	0	476	716	1,019	182	464	52	3,698	2,154
November†	468	328	0	484	595	1,186	105	593	71	3,829	2,275
AVERAGE	**486**	**342**	**8**	**543**	**836**	**1,248**	**188**	**447**	**119**	**4,218**	**2,536**

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**	**1,325**	**16**	**585**	**99**	**255**	**329**	**480**	**3,263**
1974									
AVERAGE	**164**	**1,070**	**8**	**511**	**90**	**251**	**391**	**347**	**2,832**
1975									
AVERAGE	**152**	**846**	**71**	**332**	**90**	**242**	**406**	**314**	**2,454**
1976									
AVERAGE	**118**	**599**	**87**	**275**	**88**	**274**	**422**	**382**	**2,247**
1977									
AVERAGE	**171**	**517**	**179**	**211**	**105**	**289**	**466**	**676**	**2,614**
1978									
AVERAGE	**160**	**467**	**318**	**229**	**94**	**253**	**429**	**663**	**2,613**
1979									
January	159	565	595	238	109	151	477	787	3,082
February	106	561	415	255	68	191	421	764	2,782
March	94	616	397	314	64	215	562	746	3,007
April	129	578	302	179	65	156	475	619	2,502
May	135	558	403	191	102	216	382	658	2,644
June	138	469	458	172	106	169	414	895	2,820
July	193	490	384	209	117	168	451	863	2,877
August	157	464	439	246	92	238	357	499	2,493
September	149	464	431	276	86	166	286	722	2,580
October	151	486	531	242	60	200	403	876	2,950
November	162	583	429	196	110	161	438	743	2,842
December	178	619	454	257	120	240	508	862	3,238
AVERAGE	**148**	**538**	**437**	**231**	**92**	**190**	**431**	**753**	**2,820**
1980									
January	175	569	545	289	56	239	467	806	3,147
February	111	540	463	205	95	192	522	752	2,880
March	124	460	460	184	81	189	443	827	2,767
April	56	411	546	231	63	143	418	771	2,639
May	77	419	576	184	88	221	303	597	2,466
June	77	405	627	196	91	160	319	611	2,485
July	43	378	434	242	90	180	365	454	2,185
August	62	R319	R646	R255	85	R159	R254	R627	R2,407
September†	58	392	511	210	52	203	337	686	2,448
October†	70	423	591	217	90	111	359	596	2,457
November†	22	444	431	263	101	158	391	593	2,403
AVERAGE	**80**	**432**	**530**	**225**	**81**	**178**	**379**	**665**	**2,570**

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

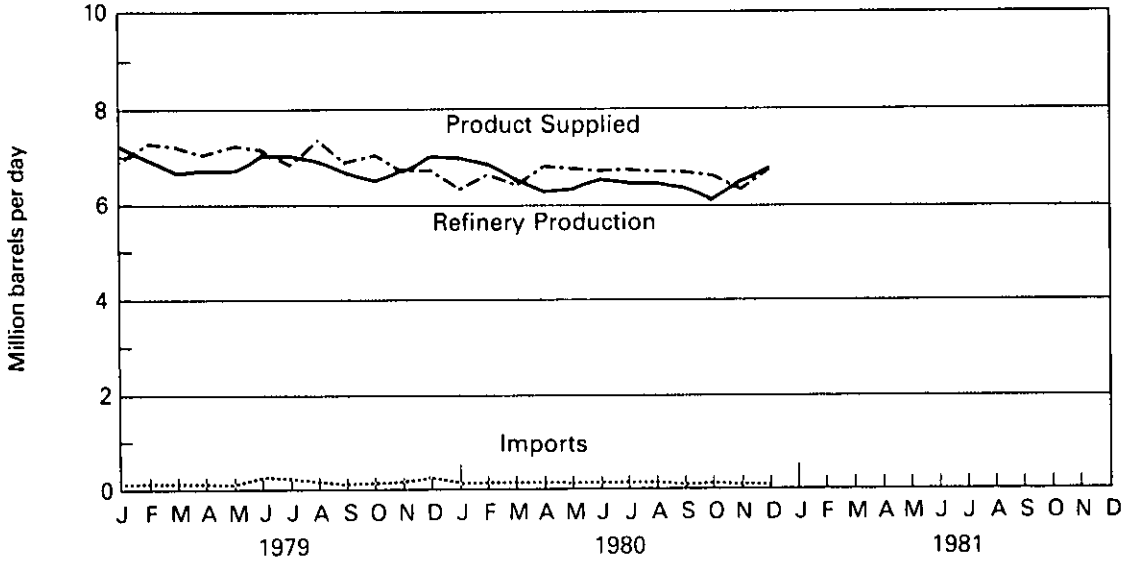
		Product Supplied						
		Total	Unleaded	Unleaded Percent of Total	Refinery Production[1]	Imports	Exports	Stocks[1]
		Thousand barrels per day						Thousand barrels
1973	**AVERAGE**	**6,674**	**NA**	**NA**	**6,527**	**134**	**4**	**‡209,395**
1974	**AVERAGE**	**6,537**	**NA**	**NA**	**6,358**	**204**	**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	6,830	2,609	38.2	7,246	179	1	256,894
	February	7,254	2,715	37.4	6,924	160	1	252,478
	March	7,229	2,733	37.8	6,654	168	(s)	240,007
	April	7,055	2,786	39.5	6,770	156	1	236,600
	May	7,213	2,751	38.1	6,792	145	(s)	228,515
	June	7,191	2,787	38.8	7,001	261	(s)	231,014
	July	6,902	2,789	40.4	7,002	222	(s)	241,469
	August	7,330	2,970	40.5	6,882	148	1	232,734
	September	6,881	2,815	40.9	6,626	135	(s)	229,542
	October	7,020	2,802	39.9	6,483	150	(s)	218,065
	November	6,791	2,928	43.1	6,673	182	1	220,472
	December	6,730	2,890	42.9	6,988	263	(s)	237,082
	AVERAGE	**7,034**	**2,798**	**39.8**	**6,837**	**181**	**(s)**	
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	6,799	3,021	44.5	6,268	152	1	271,729
	May	6,726	2,980	44.3	6,294	132	1	262,938
	June	6,661	3,099	46.5	6,552	148	1	264,583
	July	6,735	3,131	46.5	6,446	149	3	260,711
	August	R6,646	3,135	R47.2	R6,437	141	1	R259,013
	September†	6,515	3,054	46.9	6,368	106	7	257,948
	October†	6,621	3,110	47.0	6,123	150	1	247,171
	November†	R6,344	3,123	49.2	R6,458	126	(s)	R256,538
	December†	*6,732*	NA	NA	*6,781*	*99*	NA	*260,060*
	AVERAGE	**6,593**	**NA**	**NA**	**6,505**	**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.

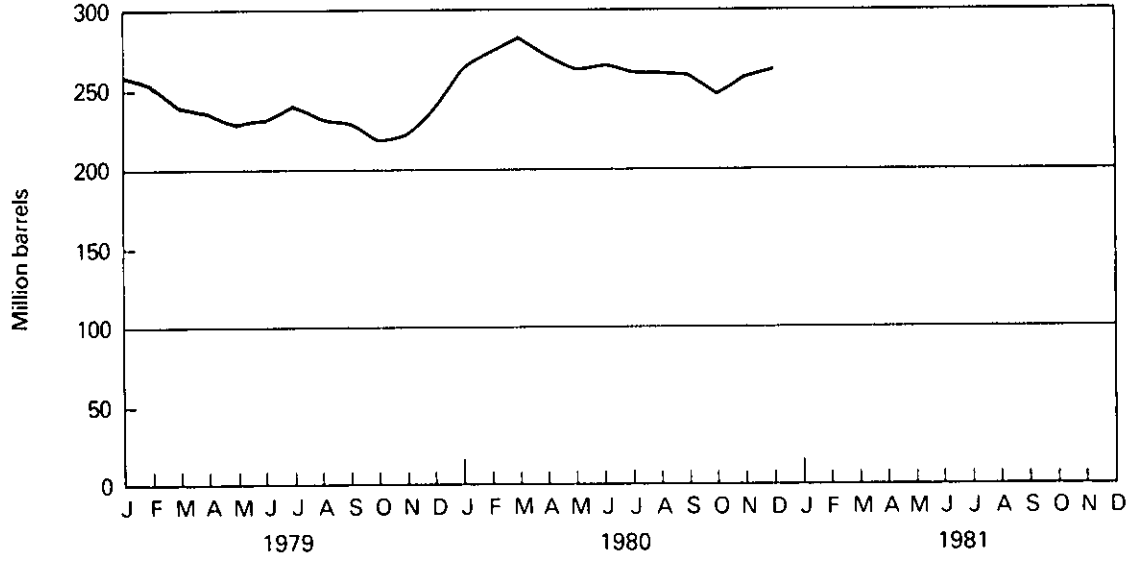
Petroleum

Motor Gasoline

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Jet Fuel

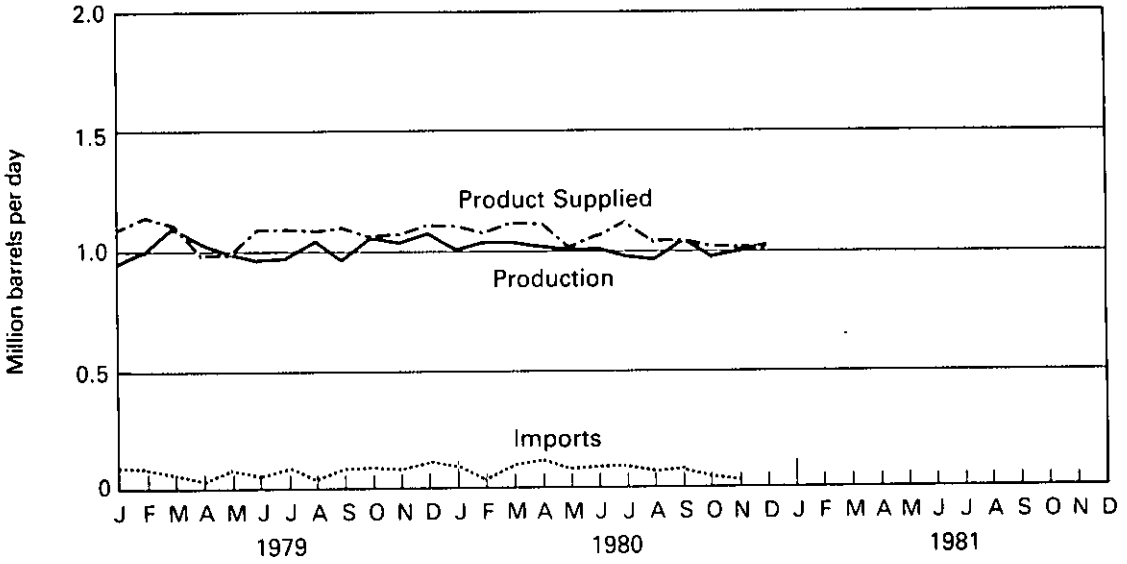
		Product Supplied	Refinery Production	Imports	Exports	Stocks
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**1,059**	**859**	**212**	**4**	**‡28,544**
1974	**AVERAGE**	**993**	**836**	**163**	**3**	**‡29,435**
1975	**AVERAGE**	**1,001**	**871**	**133**	**2**	**‡30,380**
1976	**AVERAGE**	**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	1,096	950	97	1	32,114
	February	1,149	998	94	1	30,475
	March	1,101	1,098	61	1	32,267
	April	980	1,043	49	1	35,581
	May	989	980	78	1	37,698
	June	1,095	958	57	1	35,301
	July	1,094	965	90	1	34,063
	August	1,085	1,040	49	1	34,136
	September	1,099	958	84	1	32,420
	October	1,055	1,046	90	(s)	34,920
	November	1,070	1,029	83	1	36,161
	December	1,103	1,072	108	1	38,520
	AVERAGE	**1,076**	**1,012**	**78**	**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	1,105	1,023	107	3	39,339
	May	1,015	1,001	79	2	41,310
	June	1,057	1,004	86	1	42,283
	July	1,110	974	93	2	40,902
	August	R1,043	R959	R67	1	R40,331
	September†	1,041	1,043	60	1	42,191
	October†	1,013	970	75	1	43,130
	November†	R1,010	R987	R49	1	R43,916
	December†	*1,005*	*1,016*	*34*	NA	*43,310*
	AVERAGE	**1,057**	**1,003**	**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.

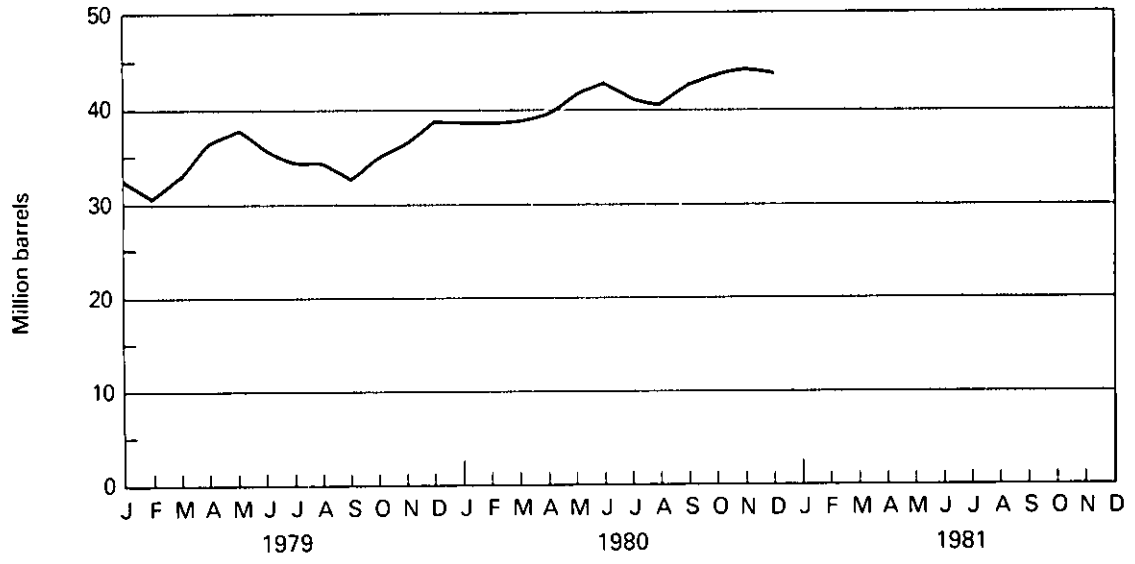
Petroleum

Jet Fuel

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Distillate Fuel Oil

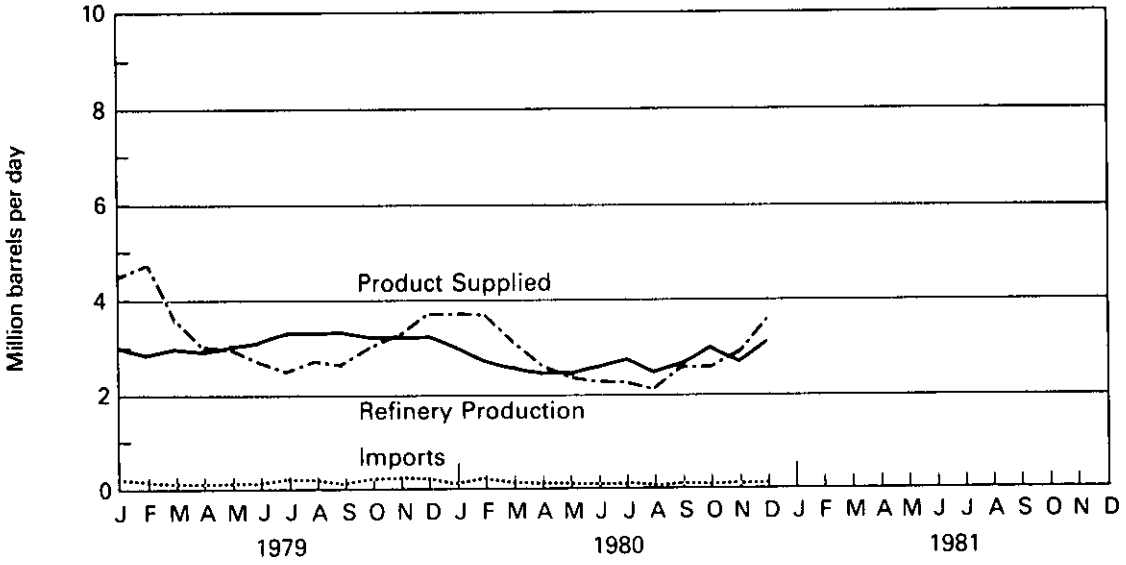
		Product Supplied	Refinery Production[1]	Imports	Exports	Stocks[1]
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**3,092**	**2,820**	**392**	**9**	**‡196,421**
1974	**AVERAGE**	**2,948**	**2,668**	**289**	**2**	**‡200,029**
1975	**AVERAGE**	**2,851**	**2,653**	**155**	**1**	**‡208,787**
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	4,581	3,043	226	1	175,823
	February	4,812	2,888	196	7	127,275
	March	3,664	3,019	176	1	112,275
	April	3,016	2,945	150	2	115,124
	May	2,998	3,066	185	(s)	123,042
	June	2,708	3,153	180	15	141,367
	July	2,563	3,305	225	7	171,203
	August	2,761	3,321	218	(s)	195,365
	September	2,647	3,354	126	2	220,377
	October	3,119	3,251	211	1	231,056
	November	3,289	3,239	235	(s)	236,641
	December	3,708	3,221	229	(s)	228,712
	AVERAGE	**3,314**	**3,152**	**197**	**3**	
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	2,630	2,462	147	2	177,006
	May	2,402	2,471	126	1	183,072
	June	2,331	2,645	108	(s)	195,790
	July	2,225	2,688	117	3	213,756
	August	R2,136	R2,462	R77	(s)	R226,305
	September†	2,636	2,724	98	(s)	232,436
	October†	2,983	2,646	125	(s)	225,864
	November†	R2,894	R2,676	R125	(s)	R223,143
	December†	*3,625*	*3,098*	*142*	NA	*202,054*
	AVERAGE	**2,871**	**2,687**	**137**	**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.

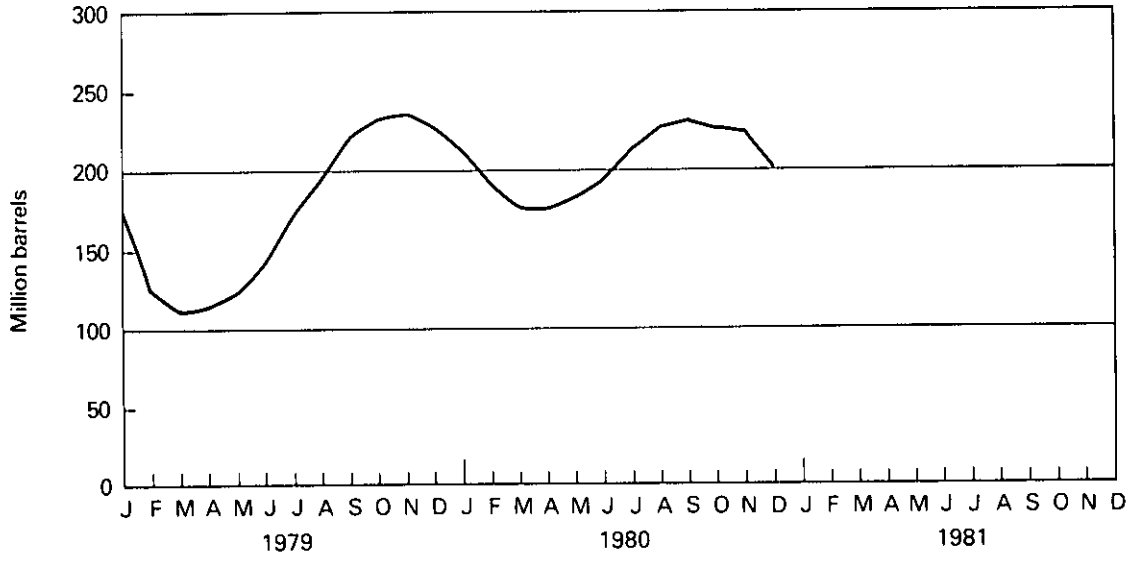
Petroleum

Distillate Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Residual Fuel Oil

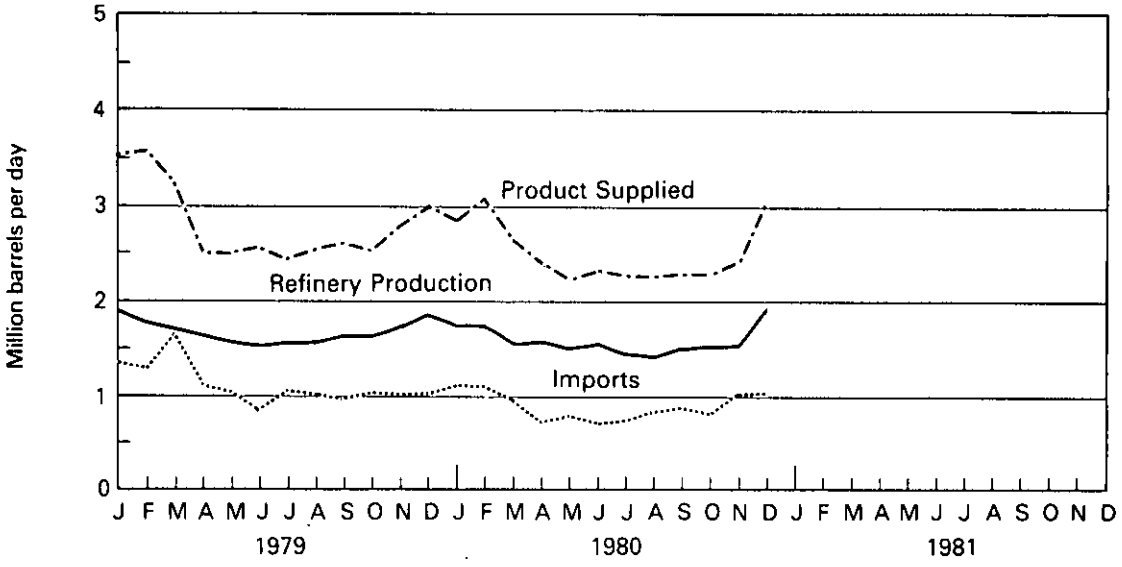
		Product Supplied	Refinery Production	Imports	Exports	Stocks
		Thousand barrels per day				Thousand barrels
1973	**AVERAGE**	**2,822**	**971**	**1,853**	**23**	**‡53,480**
1974	**AVERAGE**	**2,639**	**1,070**	**1,587**	**14**	**‡59,694**
1975	**AVERAGE**	**2,462**	**1,235**	**1,223**	**15**	**‡74,126**
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	3,560	1,912	1,371	6	81,853
	February	3,595	1,792	1,300	10	67,899
	March	3,239	1,719	1,642	14	71,652
	April	2,507	1,639	1,134	2	79,959
	May	2,503	1,586	1,051	8	84,261
	June	2,583	1,548	880	8	79,816
	July	2,451	1,575	1,065	5	85,907
	August	2,550	1,584	1,023	14	87,622
	September	2,609	1,627	979	2	87,789
	October	2,540	1,629	1,042	18	91,611
	November	2,815	1,736	1,046	5	90,799
	December	3,013	1,894	1,278	14	95,598
	AVERAGE	**2,826**	**1,687**	**1,151**	**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	2,434	1,591	769	[1]40	85,219
	May	2,234	1,507	812	20	87,639
	June	2,324	1,575	749	14	87,657
	July	2,287	1,480	787	60	85,605
	August	R2,287	R1,444	R875	2	R86,949
	September†	2,304	1,515	904	21	89,855
	October†	2,320	1,544	860	70	90,754
	November†	R2,425	R1,564	R1,017	88	R93,282
	December†	*3,050*	*1,936*	*1,070*	NA	*89,071*
	AVERAGE	**2,522**	**1,606**	**922**	**NA**	

Geographic coverage: the 50 United States and District of Columbia.
[1]Beginning 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.

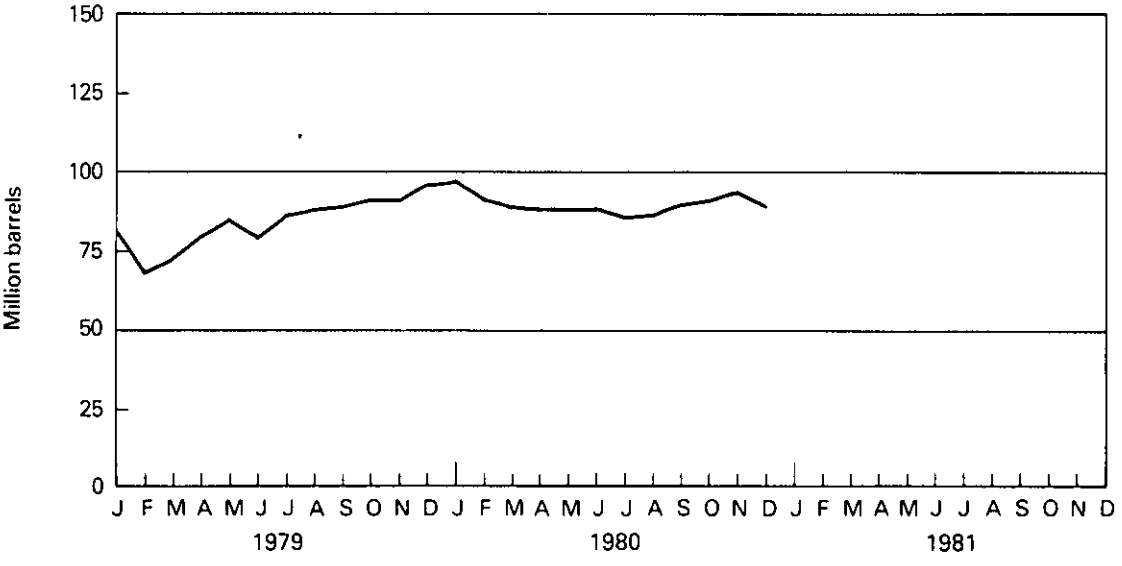
Petroleum

Residual Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Natural Gas Plant Liquids, Including Liquefied Refinery Gases

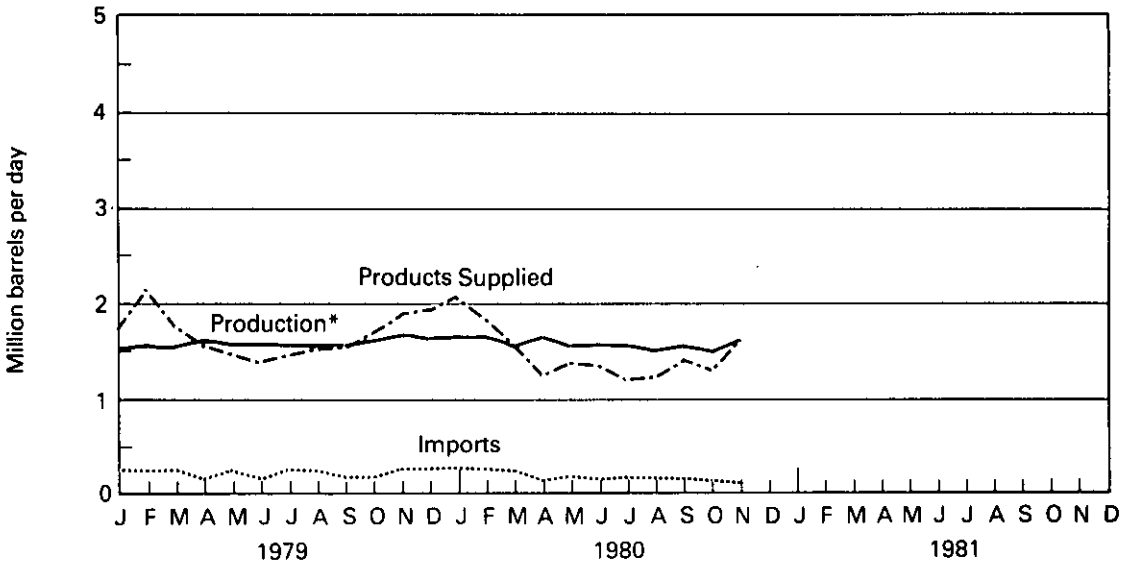
		Products Supplied[1]	Production[1]		Used at Refineries[1]	Imports	Stocks[1]
			At processing plants	At refineries			
		Thousand barrels per day					Thousand barrels
1973	**AVERAGE**	**1,454**	**1,738**	**375**	**815**	**239**	**‡106,659**
1974	**AVERAGE**	**1,422**	**1,688**	**338**	**746**	**212**	**‡120,175**
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	2,158	1,530	335	597	256	127,514
	February	2,101	1,561	316	572	252	111,824
	March	1,788	1,548	322	538	257	106,826
	April	1,522	1,611	341	469	160	110,066
	May	1,471	1,570	373	476	255	117,515
	June	1,379	1,571	356	455	175	125,231
	July	1,408	1,564	361	444	240	134,639
	August	1,501	1,575	363	461	236	140,825
	September	1,529	1,565	323	450	194	143,623
	October	1,701	1,607	321	506	193	140,533
	November	1,880	1,676	323	586	268	134,040
	December	1,930	1,626	343	572	273	125,289
	AVERAGE	**1,695**	**1,584**	**340**	**504**	**230**	
1980	January	2,021	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	1,212	1,626	328	507	149	117,006
	May	1,376	1,555	325	428	187	124,615
	June	1,385	1,559	335	386	93	133,516
	July	1,218	1,513	325	455	178	143,618
	August	R1,244	R1,514	R323	R417	R166	R153,716
	September†	1,443	1,552	351	508	163	146,000
	October†	1,338	1,492	296	501	140	148,000
	November†	1,623	1,596	315	528	109	143,371
	AVERAGE	**1,478**	**1,570**	**330**	**496**	**187**	

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 147,548 thousand barrels.
‡Total as of December 31.
†Preliminary data. R=Revised data.
Sources: • 1973 through August 1980 are shown on last page of this section.
• September 1980 through October 1980: EIA estimates based on historical analyses.
• November 1980: EIA "Monthly Petroleum Statistics Report."
• Sources for the *Energy Data Reports* are shown on the last page of this section.

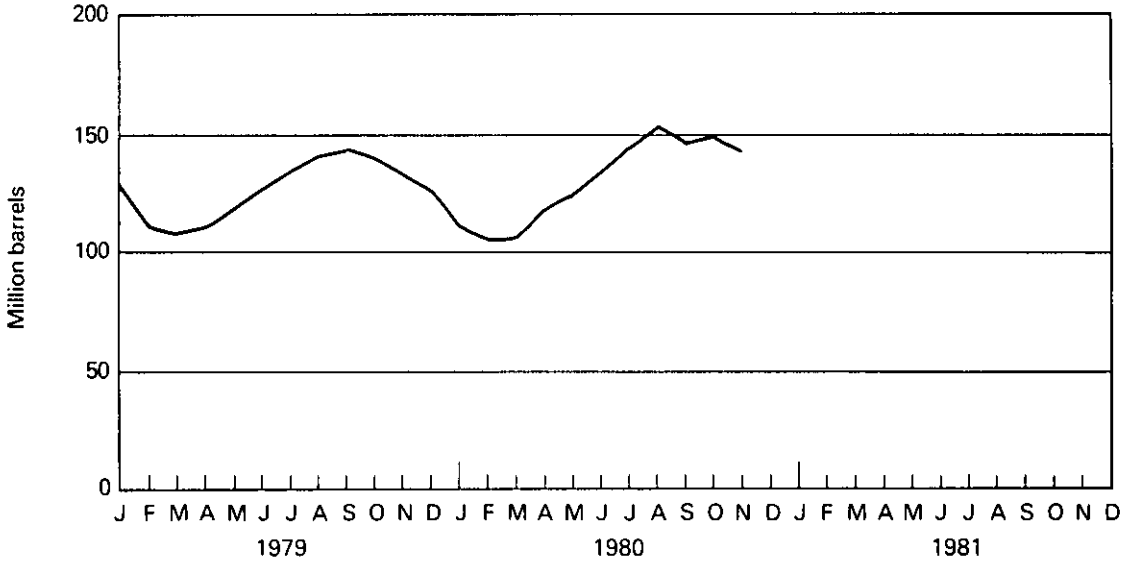
Petroleum

Natural Gas Plant Liquids

Product 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	8,534	8,529	8,478	8,664	8,552
Natural gas plant liquids production	1,546	1,584	1,568	1,636	1,584
Other hydrocarbon supply	33	39	48	56	44
Crude oil imported[1]	6,610	6,372	6,614	6,481	6,519
Petroleum products imported[2]	2,231	1,732	1,780	2,022	1,940
Total new primary supply	18,955	18,256	18,489	18,859	18,639
Processing gain	444	513	569	581	527
Stock change—all oils[3]	-1,586	+740	+1,077	+348	+153
Total net primary supply	20,985	18,029	17,981	19,092	19,014
Unaccounted for crude oil[4]	-104	+125	+57	-122	-11
Disposition					
Crude oil and petroleum products exported	497	463	456	468	471
Crude oil losses	15	16	16	16	16
Total products supplied[5]	20,369	17,675	17,566	18,486	18,516
Total disposition	20,881	18,153	18,038	18,970	19,002

	1980		
	1st Qtr.	2nd Qtr.	3rd Qtr.†
Primary Supply			
Crude oil and lease condensate production	8,685	8,625	R8,505
Natural gas plant liquids production	1,622	1,580	R1,526
Other hydrocarbon supply	56	49	44
Crude oil imported[1]	6,029	5,366	R4,664
Petroleum products imported[2]	1,872	1,440	R1,400
Total new primary supply	18,263	17,059	R16,139
Processing gain	629	567	R592
Stock change—all oils[3]	-2	+753	+296
Total net primary supply	18,895	16,873	R16,435
Unaccounted for crude oil[4]	R-57	R+61	R+141
Disposition			
Crude oil and petroleum products exported	547	562	468
Crude oil losses	15	15	R14
Total products supplied[5]	R18,274	R16,358	R16,095
Total disposition	R18,837	R16,934	R16,577

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: Energy Information Administration (EIA) *Energy Data Report*, "Petroleum Statement, Annual."
• January 1980 through August 1980: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly."
• September 1980 EIA, "Monthly Petroleum Statistics Report" (except exports and domestic production).
• Exports for September 1980 are preliminary data based on the EIA-87 and the Bureau of the Census tapes EM 522 and EM 594.
• Domestic production for September 1980 is an EIA estimate based on historical data from State Conservation Agencies and the U.S. Geological Survey.
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are shown on the 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 through 1979: EIA *Energy Data Reports,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
- January 1980 through August 1980: EIA *Energy Data Reports,* "Petroleum Statement, Monthly" and "PAD Districts Supply/Demand, Monthly."
- September 1980 through November 1980: EIA "Monthly Petroleum Statistics Report"(except domestic production and exports).
- Domestic production for the 4 most recent months are EIA estimates based on historical data from State Conservation Agencies and the U.S. Geological Survey.
- Exports for September 1980 through November 1980 are preliminary data based on form EIA-87 and the Bureau of the Census tapes 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 IM 145 (Imports), EM 522 (Exports), and EM 594 (Exports); U.S. Geological Survey (Crude Production) and State Conservation Agencies(Crude Production).

Natural Gas

Consumption of natural gas in the United States during December 1980 was an estimated 2.1 trillion cubic feet (Tcf). This was 19.2 percent higher than in November 1980 and 1.8 percent greater than in December 1979. Estimated consumption during 1980 totaled 20.0 Tcf, 1.1 percent less than the 1979 level.

Production of dry natural gas in December 1980 was an estimated 1.7 Tcf, 7.0 percent higher than in November 1980 and approximately 4.1 percent lower than in December 1979. Output during 1980 totaled 19.3 Tcf, 1.9 percent less than during the previous year.

Imports of natural gas in December 1980 were an estimated 94 billion cubic feet (Bcf), 14.5 percent less than in the previous December. Total imports of natural gas during 1980 were an estimated 995 Bcf, 20.6 percent lower than during 1979. This decline resulted from a decrease in pipeline receipts from Canada and the discontinuance, in April 1980, of most liquefied natural gas (LNG) shipments from Algeria due to an impasse in negotiations on a new pricing formula. Receipts of LNG from Algeria during 1980 totaled approximately 86 Bcf as compared with 253 Bcf in 1979. Exports of natural gas during 1980 totaled an estimated 55 Bcf, almost the same as during 1979.

Domestic producer sales to major interstate pipelines in November 1980 totaled 906 Bcf, 1.6 percent below sales for the previous November. Total sales during the first 11 months of 1980 were 9.6 Tcf, 1.1 percent higher than those for the comparable 1979 period.

Stocks of working gas* in underground natural gas storage reservoirs at the end of December 1980 totaled 2.6 Tcf, 4.2 percent less than stocks available a year earlier. Net withdrawals from storage during December 1980 were 368 Bcf, 54.0 percent higher than during the previous December.

*Gas available for withdrawal.

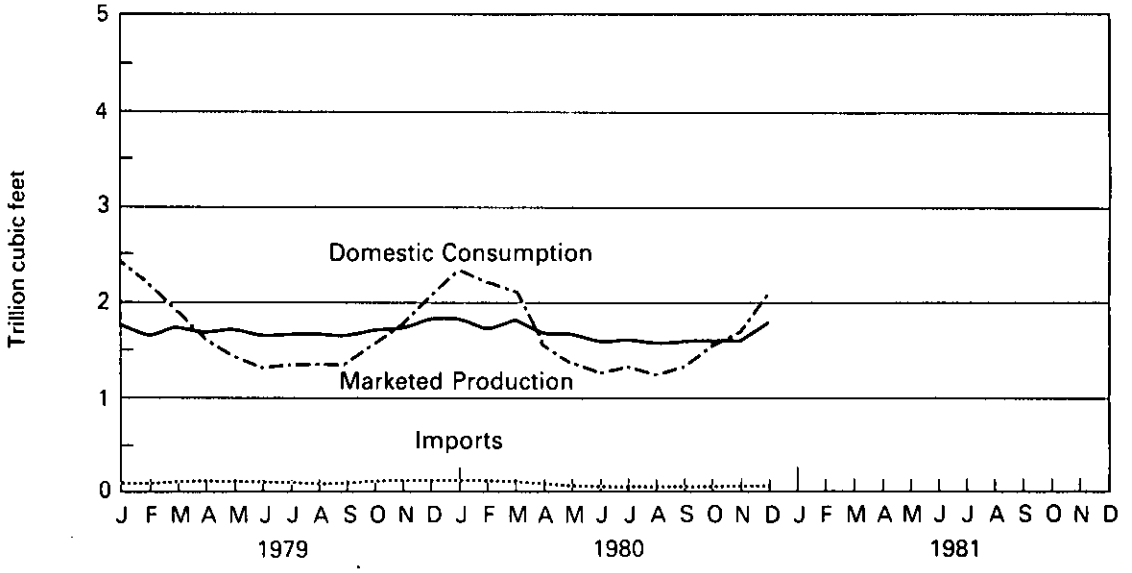
Natural Gas

		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	R2,426	R1,771	R1,702	890	102	6
	February	R2,204	R1,656	R1,591	819	97	5
	March	R1,881	R1,755	R1,686	907	113	5
	April	R1,594	R1,692	R1,625	871	106	5
	May	R1,429	R1,716	R1,648	877	104	5
	June	R1,309	R1,643	R1,578	812	101	5
	July	R1,330	R1,662	R1,596	851	104	6
	August	R1,342	R1,689	R1,622	880	97	4
	September	R1,329	R1,635	R1,570	820	98	5
	October	R1,557	R1,705	R1,638	888	107	3
	November	R1,768	R1,724	R1,656	921	114	3
	December	R2,072	R1,823	R1,751	960	110	4
	TOTAL	**R20,241**	**R20,471**	**R19,663**	**10,496**	**1,253**	**56**
1980	January	R2,279	1,817	R1,745	981	119	5
	February	R2,192	1,705	R1,638	898	111	3
	March	R2,099	1,827	R1,754	960	108	5
	April	R1,568	1,667	R1,601	897	91	6
	May	R1,355	1,692	R1,625	859	70	6
	June	1,253	1,583	R1,520	794	62	5
	July	R1,301	1,613	R1,549	825	64	6
	August	1,246	1,572	1,510	828	60	5
	September	1,299	1,577	1,515	800	58	4
	October	R1,542	R1,647	R1,582	894	73	3
	November	1,770	R1,640	R1,570	906	R85	3
	December	2,110	1,750	1,680	NA	94	4
	TOTAL	**20,014**	**20,090**	**19,289**	**NA**	**995**	**55**

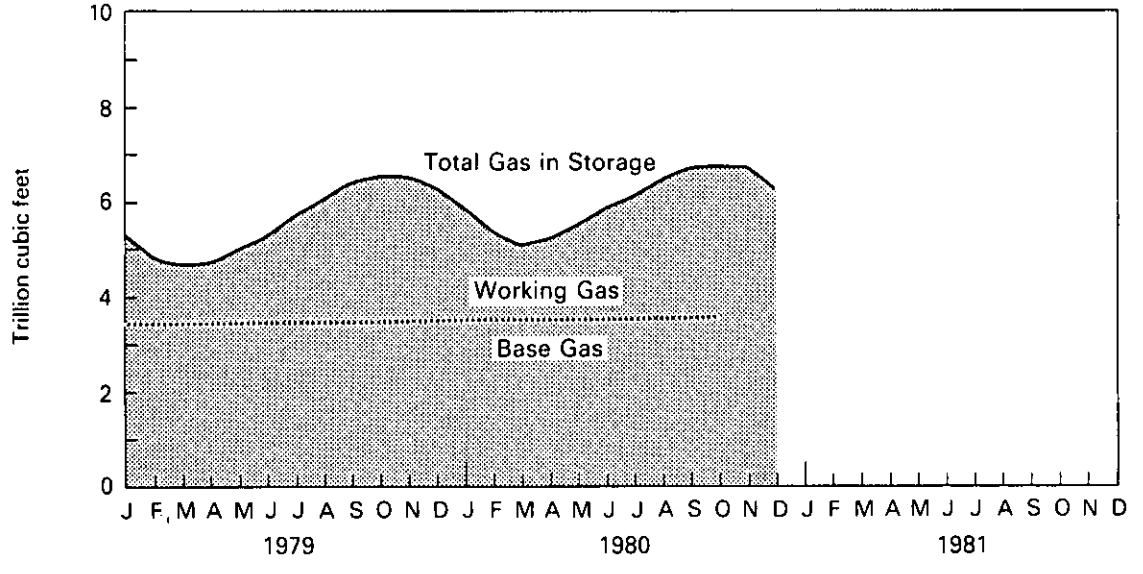
Geographic coverage: the 50 United States and District of Columbia.
R = Revised data. NA = Not available.
Sources: • Domestic Consumption — 1973 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook,* "Natural Gas" chapter; 1976 through 1979: Energy Information Administration (EIA) *Energy Data Report,* "Natural Gas Production and Consumption"; January 1980 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
	August	6,444	3,594	2,850	328	30	298
	September	6,692	3,596	3,096	260	11	249
	October	6,782	3,598	3,184	141	53	88
	November	R6,639	3,620	R3,019	R66	R203	R(137)
	December	6,272	3,629	2,643	34	402	(368)

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. R = Revised data.
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 December rotary rig count of 3,286 is the highest in U.S. drilling history. The count surpassed the previous record of 3,220 rigs the month before. This represents a 28.8 percent increase over the December 1979 count of 2,552 rotary rigs.

Well completions reported in December 1980 totaled 7,815. This is a 29.9 percent increase from the number reported during December 1979.

Oil well completions reported in December 1980 (3,675 reported) were up 53.8 percent from December 1979 (2,390 reported). In December 1980, 1,903 gas well completions were reported, 9.6 percent above the December 1979 level. Dry hole completions reported increased 18.3 percent (2,237 as compared to 1,891 during the previous December). Total reported footage drilled increased 24.8 percent (33.8 million feet as compared to 27.1 million feet the year before).

There were 40 crews engaged in seismic exploratory work offshore in December 1980. This is a 29.0 percent increase from the December 1979 level. December 1980 onshore seismic activity attained a new high of 540 crews, 28.9 percent higher than activity during December 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	1,971		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		1,535	1,090	1,131	3,756	16,910
	August	2,222		1,529	1,245	1,366	4,140	19,555
	September	2,284		1,831	1,382	1,423	4,636	22,676
	October	2,380		1,647	1,138	1,313	4,098	19,216
	November	2,460		1,869	1,270	1,505	4,644	21,843
	December	2,552		R2,390	R1,736	R1,891	R6,017	R27,098
	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
	August	3,045		2,340	1,270	1,537	5,147	24,037
	September	3,099		2,636	1,721	1,761	6,118	28,168
	October	3,148		2,409	1,191	1,692	5,292	24,554
	November	3,220		2,239	1,498	1,598	5,335	25,273
	December	3,286		3,675	1,903	2,237	7,815	33,806
	AVERAGE	**2,910**	**TOTAL**	**26,985**	**15,737**	**18,087**	**60,809**	**284,259**

Geographic coverage: the 50 United States and District of Columbia.
[1]These data are for well completions reported to the American Petroleum Institute during the reporting period. 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**	**193,212**	**163,929**	**357,141**
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			
	August	44	521	565			
	September	44	523	567			
	October	41	530	571			
	November	41	531	572			
	December	40	540	580			
	AVERAGE	**37**	**493**	**530**			

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 November 1980 was 65.9 million tons, 3.8 percent below the 68.5 million tons produced in November 1979. Production in the first 11 months of 1980 totaled 762.9 million tons, 5.9 percent higher than production in the first 11 months of 1979.

Imports of coal in November 1980 totaled 3,000 tons. In November 1979, 130,000 tons of coal were imported. Exports of coal in November 1980 totaled 9.0 million tons, 2.8 million tons more than the amount exported during November 1979. During November 1980, coal exports were principally to Japan (22.7 percent) and Canada (22.5 percent).

Electric utility coal consumption in November 1980 totaled 45.7 million tons, 2.7 million tons more than consumption in November 1979. Coke plants, the second largest coal consuming sector, used 5.2 million tons in November 1980, 16.1 percent below the amount consumed in November 1979.

Electric utility stockpiles increased from 157.7 million tons at the end of November 1979 to 184.1 million tons at the end of November 1980. Coal stocks held by coke plants declined from 10.0 million tons at the end of November 1979 to 8.6 million tons at the end of November 1980.

Coal

Bituminous Coal, Lignite, and Anthracite

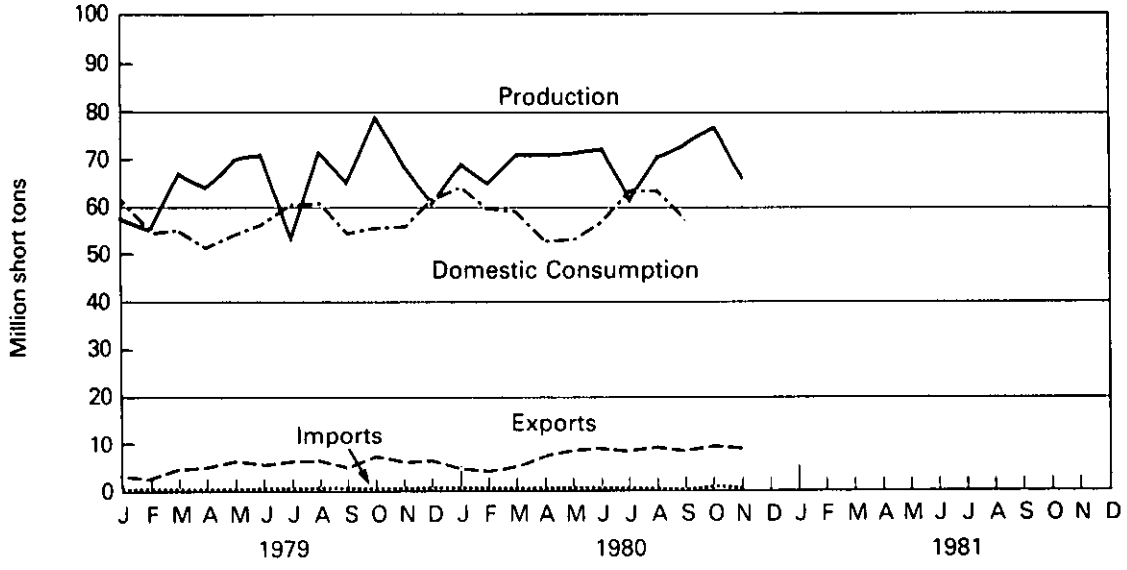
		Production	Domestic Consumption	Imports[1]	Exports[2,3]	Stocks[4]
				Thousand short tons		
1973	**TOTAL**	**598,568**	**562,584**	**127**	**53,587**	**104,335**
1974	**TOTAL**	**610,023**	**558,402**	**2,080**	**60,661**	**96,323**
1975	**TOTAL**	**654,641**	**562,641**	**940**	**66,309**	**128,050**
1976	**TOTAL**	**684,913**	**603,790**	**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	57,794	61,199	186	3,605	136,425
	February	54,810	54,463	252	2,726	129,042
	March	66,775	54,864	123	4,642	134,044
	April	63,937	51,601	161	5,268	142,328
	May	69,488	54,026	112	6,215	151,269
	June	70,698	56,025	209	5,975	155,406
	July	53,595	60,397	88	6,297	148,265
	August	71,616	60,750	320	6,248	152,787
	September	64,590	54,219	180	5,146	158,016
	October	78,563	55,719	152	7,446	169,633
	November	68,506	55,997	130	6,170	177,722
	December	60,762	61,263	146	6,278	181,646
	TOTAL	**781,134**	**680,524**	**2,059**	**66,016**	
1980	January	68,276	63,615	121	4,460	179,424
	February	64,678	59,761	193	4,041	176,772
	March	70,326	58,904	93	5,633	176,637
	April	70,381	52,641	63	7,563	183,956
	May	70,899	52,842	207	8,597	193,782
	June	71,850	56,107	104	8,899	R199,204
	July	R61,225	63,182	32	8,247	185,884
	August	R70,665	62,889	166	9,270	190,635
	September	R72,460	57,434	2	8,364	194,332
	October	R76,210	NA	139	9,454	NA
	November	65,930	NA	3	8,987	NA
	TOTAL (Year-to-date)	**762,900**	**NA**	**1,123**	**83,515**	**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 2,000 short tons in November 1980).
[3]Excludes shipments of anthracite to U.S. Armed Forces overseas (365,000 tons in 1979).
[4]Stocks held by electric utilities, coke plants, and the other Industrial Sector at the end of period.
NA = Not available. R = Revised data.
Sources: • See Sources on the last page of this section.

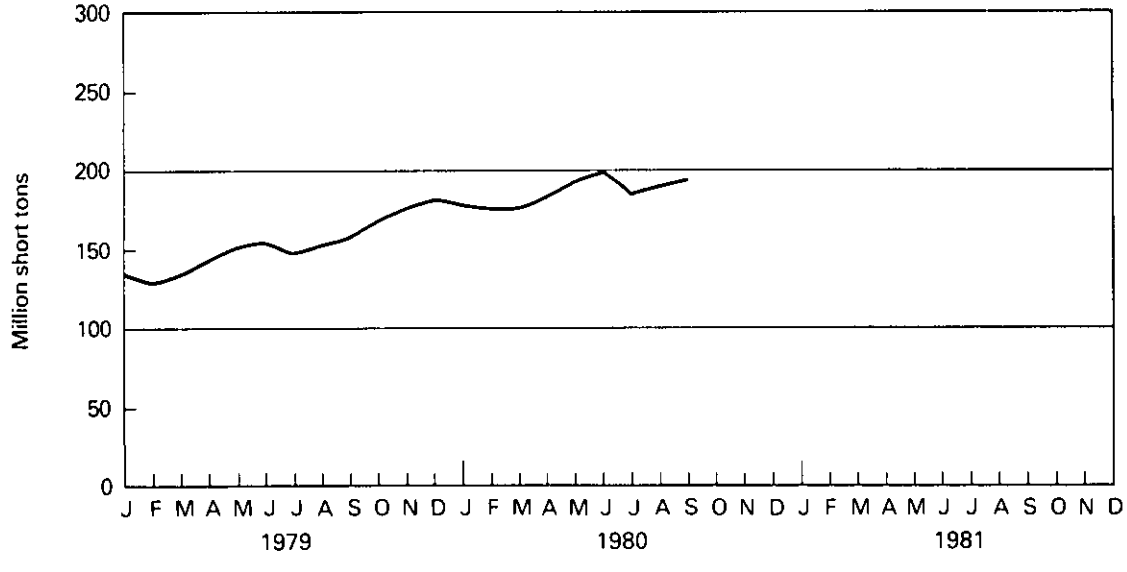
Coal

Bituminous Coal, Lignite, and Anthracite

Production, Consumption, Imports, and Exports



Stocks



Coal

Consumption — Bituminous Coal, Lignite, and Anthracite

			Industrial			
		Electric Utilities	Coke Plants[1]	Other Industrial[2] Including Transportation	Residential and Commercial	Total
			Thousand short tons			
1973	**TOTAL**	**389,212**	**94,101**	**68,154**	**11,117**	**562,584**
1974	**TOTAL**	**391,811**	**90,191**	**64,983**	**11,417**	**558,402**
1975	**TOTAL**	**405,962**	**83,598**	**63,670**	**9,410**	**562,641**
1976	**TOTAL**	**448,371**	**84,704**	**61,799**	**8,916**	**603,790**
1977	**TOTAL**	**477,126**	**77,739**	**61,472**	**8,954**	**625,290**
1978	**TOTAL**	**481,235**	**71,394**	**63,085**	**9,511**	**625,225**
1979	January	46,902	6,578	6,428	1,291	61,199
	February	41,891	5,954	5,836	782	54,463
	March	41,781	6,850	5,617	616	54,864
	April	38,979	6,558	5,511	553	51,601
	May	41,532	6,725	5,269	500	54,026
	June	44,008	6,470	5,034	513	56,025
	July	48,216	6,513	5,223	445	60,397
	August	48,549	6,417	5,363	421	60,750
	September	42,167	6,334	5,159	559	54,219
	October	42,970	6,404	5,565	780	55,719
	November	42,980	6,138	5,946	933	55,997
	December	47,075	6,427	6,766	995	61,263
	TOTAL	**527,051**	**77,368**	**67,717**	**8,388**	**680,524**
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	5,132	570	52,641
	May	41,464	6,127	4,907	344	52,842
	June	45,821	5,326	4,688	272	56,107
	July	53,582	4,903	4,369	328	63,182
	August	53,214	4,878	4,487	310	62,889
	September	47,913	4,794	4,315	412	57,434
	October	45,085	5,107	NA	NA	NA
	November	45,698	5,152	NA	NA	NA
	TOTAL (Year-to-date)	**518,035**	**61,315**	**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.
NA = Not available.
Sources: • See Sources on the last page of this section.

Coal

Stocks [1] — Bituminous Coal, 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	7,647	8,830	136,425
	February	114,394	6,763	7,885	129,042
	March	118,542	7,561	7,941	134,044
	April	125,776	8,482	8,070	142,328
	May	133,793	9,228	8,248	151,269
	June	136,627	10,051	8,728	155,406
	July	131,095	8,306	8,864	148,265
	August	134,257	9,021	9,509	152,787
	September	139,129	9,036	9,851	158,016
	October	149,949	9,724	9,960	169,633
	November	157,737	9,983	10,002	177,722
	December	159,714	10,155	11,777	181,646
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	9,907	184,010
	May	174,044	9,692	10,119	193,855
	June	178,959	9,913	R10,332	R199,204
	July	166,852	8,427	10,605	185,884
	August	171,891	7,866	10,878	190,635
	September	175,067	8,213	11,052	194,332
	October	R182,045	8,488	NA	NA
	November	184,133	8,606	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.
NA = Not available. R = Revised data.
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 522 (Exports).

Part 7 Electric Utilities

Electric Utilities

November 1980 production of electricity by utilities was 178.6 billion kilowatt-hours, 0.6 percent above the November 1979 production level. Coal-fired production totaled 93.5 billion kilowatt-hours and nuclear production totaled 21.0 billion kilowatt-hours. These figures reflect increases of 6.9 and 9.0 percent, respectively, above the November 1979 output levels. Petroleum-fired production totaled 20.0 billion kilowatt-hours, natural gas-fired production totaled 24.3 billion kilowatt-hours, and hydroelectric production totaled 19.2 billion kilowatt-hours, 14.5, 1.3 and 14.1 percent, respectively, below the November 1979 levels.

Sales of electricity to all ultimate consumers in the United States in November 1980 totaled 162.2 billion kilowatt-hours, a decrease of 4.6 percent from sales of the month before and 0.1 percent below November 1979 sales. Sales to residential consumers during November 1980 were 50.5 billion kilowatt-hours, 1.9 percent above sales for the corresponding month in 1979. Commercial sales were 38.0 billion kilowatt-hours, 3.4 percent more than the amount for November 1979. Sales to industrial consumers totaled 67.6 billion kilowatt-hours in November 1980, about 3.1 percent less than the November 1979 figure. In November 1980 other sales totaled 6.1 billion kilowatt-hours, 1.5 percent below the November 1979 level.

Electric utility petroleum consumption during November 1980 was 34.1 million barrels, a 14.3 percent drop from the November 1979 level. Coal consumption for November 1980 was 45.7 million tons, 6.3 percent above the November 1979 rate. During November 1980, consumption of natural gas by electric utilities was 255.7 billion cubic feet, 2.0 percent below the November 1979 consumption level.

On November 30, 1980, utility stocks of anthracite, bituminous coal, and lignite totaled 184.1 million tons. Stockpiles were 16.7 percent above the levels of November 1979.

Petroleum stocks (excluding petroleum coke) on November 30, 1980, totaled 137.8 million barrels, 5.4 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	23,4[illegible]	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
	July	107,891	23,293	39,060	21,024	24,418	475	216,160
	August	107,580	24,889	37,640	24,333	20,476	517	215,435
	September	97,556	17,816	33,572	23,578	18,491	469	191,483
	October	91,147	15,893	28,592	24,510	17,866	533	178,541
	November	93,501	19,988	24,343	20,984	19,217	519	178,552
	TOTAL (Year-to-date)	**1,056,463**	**222,840**	**323,138**	**228,991**	**253,742**	**4,999**	**2,090,173**

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 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	59,314	38,123	69,783	6,029	173,249
	April	50,079	35,930	69,944	5,604	161,557
	May	45,730	36,398	71,798	5,625	159,551
	June	49,556	39,689	71,919	5,696	166,860
	July	58,606	42,773	70,984	5,976	178,339
	August	64,808	44,199	71,956	6,346	187,310
	September	59,703	42,498	71,014	6,425	179,641
	October	49,505	38,820	71,472	6,151	165,948
	November	49,617	36,711	69,780	6,163	162,271
	December	58,120	37,939	67,297	6,117	169,473
	TOTAL	**682,819**	**473,307**	**841,903**	**73,070**	**2,071,101**
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
	May	45,699	36,110	67,235	5,807	154,851
	June	52,267	40,129	66,739	5,737	164,872
	July	68,611	45,525	65,531	6,215	185,882
	August	74,893	47,679	67,377	6,255	196,205
	September	67,969	46,028	69,570	6,572	190,139
	October	54,012	40,478	69,414	6,174	170,078
	November	50,539	37,954	67,613	6,068	162,174
	TOTAL (Year-to-date)	**656,591**	**448,239**	**746,562**	**67,195**	**1,918,590**

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.
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

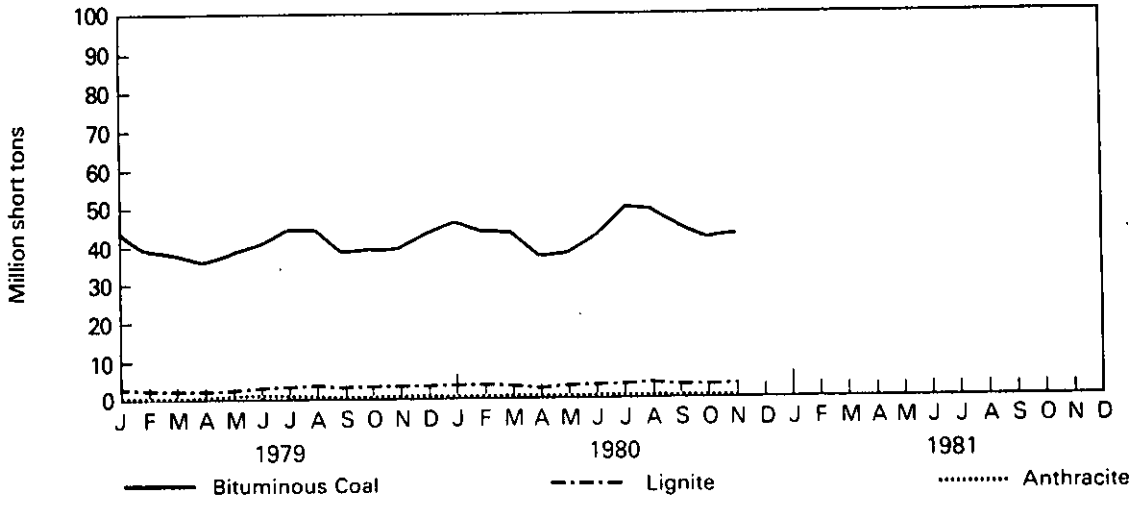
Primary Energy Consumed to Produce Electricity

		Coal				Petroleum			Natural Gas
		Anthracite	Bituminous Coal	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
	July	93	49,743	3,746	53,582	37,298	2,801	11	420,339
	August	80	49,077	4,057	53,214	40,165	2,832	15	405,292
	September	84	44,487	3,342	47,913	29,374	1,289	11	357,152
	October	73	41,811	3,200	45,085	26,353	689	8	301,343
	November	56	42,379	3,263	45,698	32,780	1,320	7	255,663
	TOTAL (Year-to-date)	**862**	**479,387**	**37,786**	**518,035**	**364,485**	**17,099**	**170**	**3,439,486**

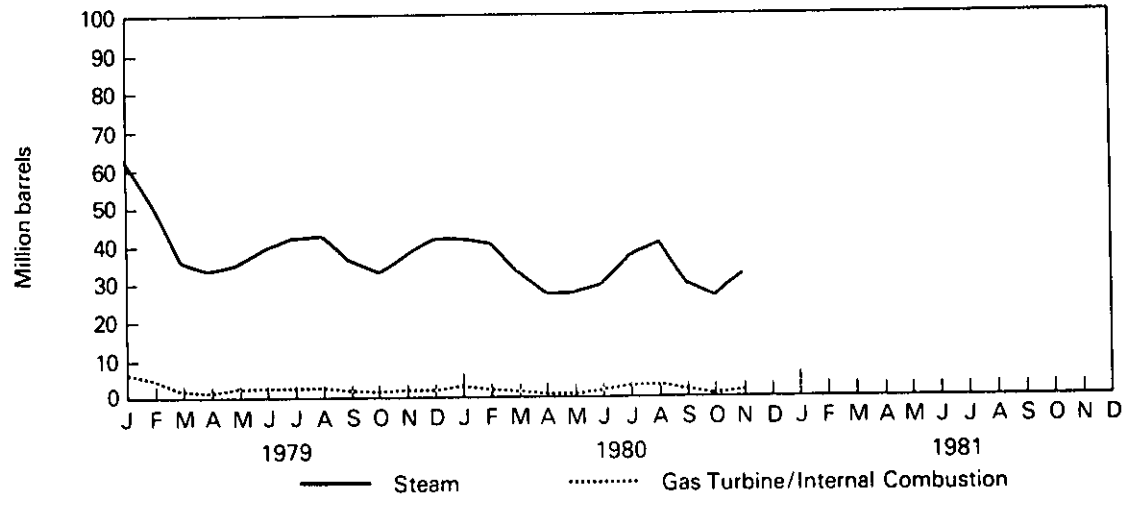
Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
Source: • Federal Power Commission Form 4, "Monthly Power Plant Report."

Electric Utilities

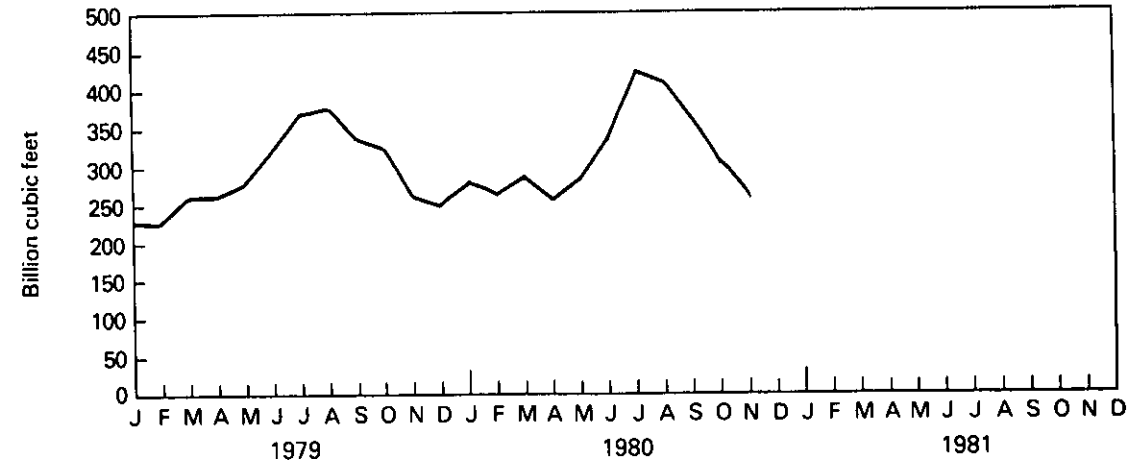
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities

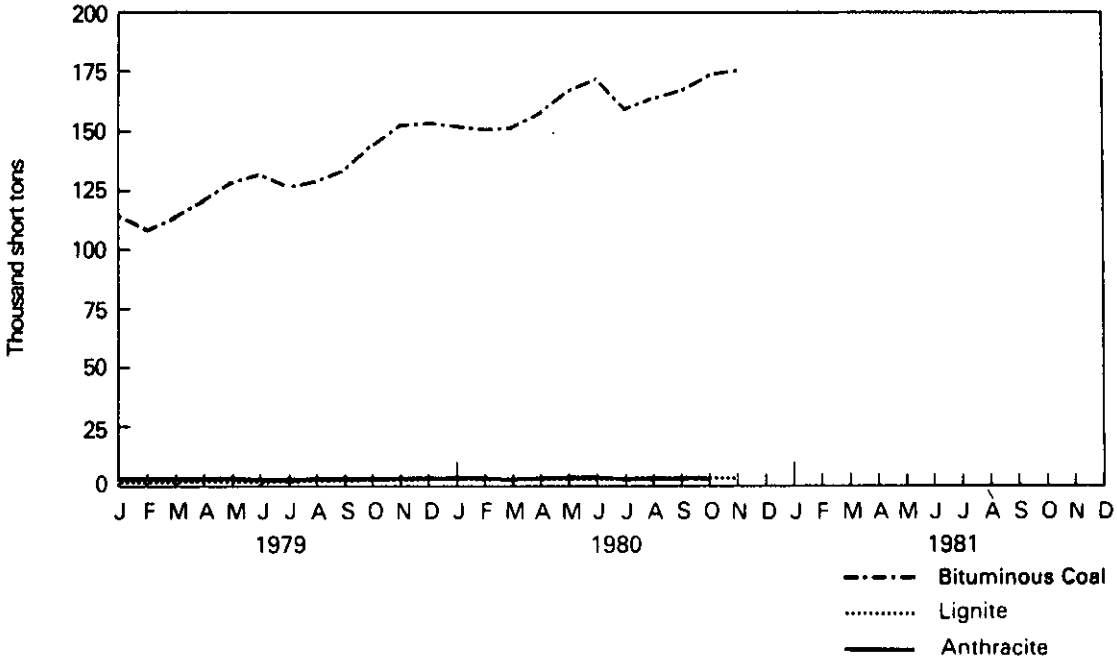
End-of-Month Coal and Petroleum Stocks

		Coal				Petroleum		
		Anthracite	Bituminous Coal	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
	July	3,955	159,205	3,691	166,852	121,622	20,490	65
	August	4,098	163,756	4,036	171,891	118,524	19,043	63
	September	4,291	166,515	4,262	175,067	122,235	17,818	61
	October	4,481	173,411	4,153	182,045	124,176	18,397	60
	November	4,661	175,489	3,983	184,133	119,802	17,998	53

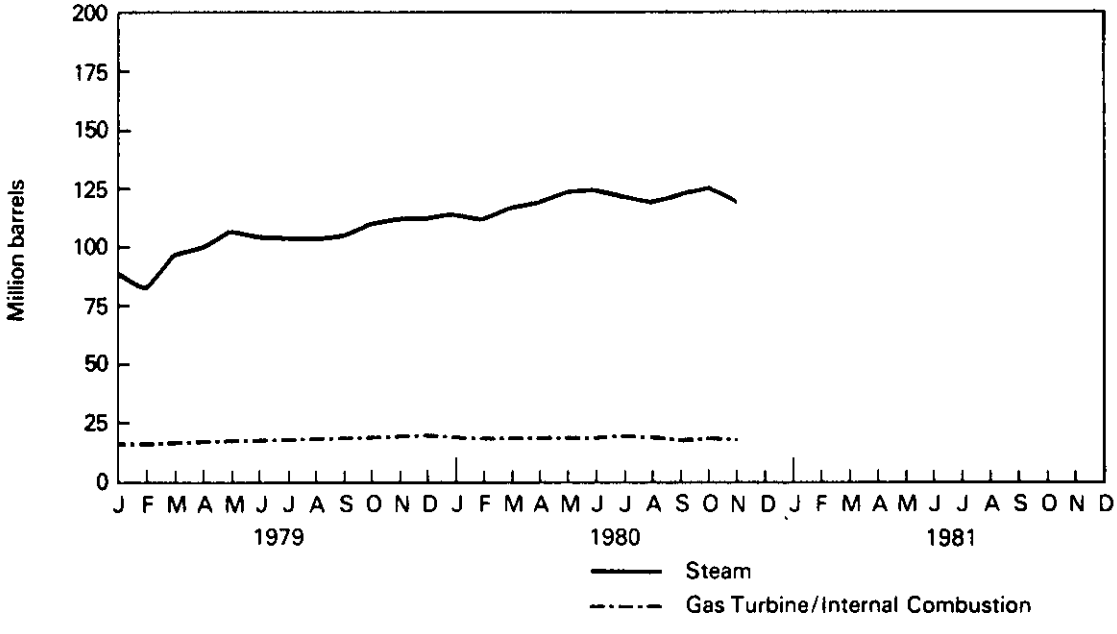
Geographic coverage: the 50 United States and District of Columbia.
Totals may not equal sum of components due to independent rounding.
‡Total as of December 31.
Source: • Federal Power Commission Form 4, "Monthly Power Plant Report."

Electric Utilities

Coal Stocks (Bituminous Coal, Lignite, and Anthracite)



Petroleum Stocks



Nuclear

As of November 30th there were 75 domestic reactor units licensed for commercial operation (unchanged from October). Of these 75 units, 3 are in indefinite suspension (Dresden-1, Humboldt Bay-3 and Three Mile Island-2); 17 were temporarily down for repairs, maintenance, refueling, safety checks, etc. (Big Rock Point, Calvert Cliffs-1, Cook-2, Ginna, Hanford-1, Hatch-2, Indian Point-2 and 3, LaCrosse, Millstone-1, Palisades, Quad Cities-1, Salem-1, San Onofre-1, Surry-1, Three Mile Island-1 and Vermont Yankee); Beaver Valley and Shippingport were returning to full power operations; Sequoyah-1 and North Anna-2 were in power ascension (prior to full-power licensing) and two units (Farley-2 and Salem-2) were in fuel-loading and low-power-testing stages.

During November, commercial nuclear reactors generated a total of 21.0 billion net kilowatt-hours of electricity, which was 14.4 percent below the October 1980 level (due to the large number of units down in November) but 9.0 percent above the level for November 1979.

The November 1980 nationwide elections included six nuclear-related State or city referendums: an initiative to stop construction of three reactors in Missouri was defeated by a 3-to-2 ratio; a referendum in Montana to ban disposal of wastes was narrowly defeated; South Dakotans narrowly defeated a bill to require voter approval for all nuclear plant construction and nuclear waste-repository operations; in Oregon an initiative that continues the existing moratorium on reactor construction and requires a State-wide vote for any new siting narrowly passed; Washington State citizens banned the importation of radioactive wastes by 3-to-1; while voters in Jacksonville, Florida voted 2-to-1 for nuclear power development.

Two reactor units that had previously received construction permits (Forked River-1 and North Anna-4) were cancelled in November, reducing from 176 to 174 the total number of domestic units planned, under construction, or which had been licensed for start-up or full-power operations. The total number of domestic reactor units at the end of November (174) was 7.4 percent below the level of 1 year ago and 15.5 percent below the level of 2 years ago. Concomitantly, the total design capacity associated with these units (167 million gross kilowatts) represented declines of 8.2 and 18.1 percent, respectively.

A strong earthquake in Northern California on November 7, 1980, did not damage the Humboldt Bay-3 reactor, according to a preliminary inspection.

Nuclear

Domestic Nuclear Powerplant Operations

		Reactors Licensed For Commercial Operation[1]	Nuclear-Based Electricity Generation[2]	Nuclear Portion of Domestic Electricity Generation	Maximum Dependable Capacity[3]	Capacity Factor[4]
			Million net kilowatt-hours	Percent	Million net kilowatts	Percent
1973	**AVERAGE**	**40**	**83,479**	**4.5**	**13.850**	**63.2**
1974	**AVERAGE**	**53**	**113,976**	**6.1**	**29.921**	**43.5**
1975	**AVERAGE**	**56**	**172,505**	**9.0**	**35.671**	**55.2**
1976	**AVERAGE**	**62**	**191,104**	**9.4**	**40.642**	**53.5**
1977	**AVERAGE**	**67**	**250,883**	**11.8**	**45.554**	**62.9**
1978	**AVERAGE**	**71**	**276,403**	**12.5**	**49.385**	**63.9**
1979	January	71	27,792	13.3	50.771	73.6
	February	71	25,911	13.9	50.720	76.0
	March	71	24,335	13.3	50.720	64.5
	April	71	18,418	10.8	50.705	50.5
	May	71	15,025	8.4	50.705	39.8
	June	71	16,065	8.6	50.705	44.0
	July	71	20,825	10.3	50.759	55.1
	August	71	24,204	11.8	50.732	64.1
	September	71	21,804	12.1	50.781	59.6
	October	71	20,934	11.6	50.814	55.7
	November	71	19,255	10.8	49.917	53.6
	December	71	20,586	11.0	49.937	55.4
	AVERAGE	**71**	**255,155**	**11.4**	**50.604**	**57.6**
1980	January	71	19,746	9.9	49.945	53.1
	February	72	19,277	10.2	51.055	54.3
	March	72	20,039	10.7	51.031	52.8
	April	74	18,794	11.1	53.040	49.3
	May	74	18,385	10.5	53.040	46.6
	June	74	18,322	9.7	53.040	48.0
	July	74	21,024	9.7	54.064	52.3
	August	74	24,333	11.3	53.957	60.6
	September	74	23,578	12.3	53.855	60.8
	October	75	24,510	13.7	R54.724	R60.1
	November	75	20,984	10.8	54.737	53.2
	AVERAGE	**74**	**228,991**	**11.0**	**52.953**	**53.7**

Geographic coverage: the 50 United States and District of Columbia.
[1]From Reactor Status Table.
[2]Electricity generation entries represent yearly or monthly totals rather than averages.
[3]See Explanatory Note 11 and Definitions.
[4]Average percentage of Maximum Dependable Capacity utilized yearly or monthly.
R = Revised data.
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

Status of Nuclear Reactor Units[1]

		Reactors Licensed For Commercial Operations[2]	Construction Permits Granted	Construction Permits Pending	Reactor Units on Order	Reactor Units Announced	Total Reactor Units	Total Design Capacity (Million Net[3] 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
	July	74	85	14	3	0	176	168
	August	74	85	14	3	0	176	168
	September	74	85	14	3	0	176	168
	October	75	84	14	3	0	176	168
	November	75	82	14	3	0	174	167

Geographic coverage: the 50 United States and District of Columbia.
[1]Monthly data are the status as of the last day of the month. Annual data are the status as of December 31 of each year.
[2]These figures include reactors in fuel-loading, power-testing, and power-ascendancy phases as well as reactors that have been licensed but which are shut down for indefinite periods, including: Dresden-1, which is undergoing major modifications; Humboldt Bay, which is shut down for seismic modifications and Three Mile Island-2, shut down due to an accident in March 1979. Also includes two Department of Energy, dual-purpose reactors (Shippingport and Hanford) which are licensed to generate electricity on a commercial basis. Does not include the Indian Point-1 reactor since it is soon to be decommissioned.
[3]Formerly labeled 'Gross Kilowatts.' See Explanatory Note 11.
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 $23.90 per barrel in November 1980. The Alaskan North Slope price increased to $14.55 per barrel. Actual stripper price of $34.38 per barrel was a 1.3 percent increase over the October 1980 price. The Naval Petroleum Reserve crude oil price of $31.50 per barrel decreased 3.6 percent below the October 1980 level. The upper tier price of $14.92 per barrel increased only slightly above the previous month's figure, and the lower tier price of $6.80 per barrel was 0.3 percent above the October 1980 price.

During November 1980, the composite refiner acquisition cost of crude oil was $29.79 per barrel, $0.23 per barrel (0.8 percent) above the previous month's price. The imported price increased $0.46 per barrel from the October 1980 level to $35.09 per barrel in November. This price was 1.3 percent above the previous month's level and 29.9 percent above the November 1979 level. The domestic price was $26.51, an increase of $0.30 per barrel (1.1 percent) above the October average.

Residual Fuel Oil

The average price, excluding taxes, for No. 6 residual fuel oil sold to utilities, industry, and other ultimate consumers in October 1980 was $26.72 per barrel, $1.41 above the previous month's price (5.6 percent) and 23.8 percent over the October 1979 average. The average price, excluding taxes, for No. 6 residual fuel oil sold to resellers, bulk plants, jobbers, and other wholesale accounts was $23.67 per barrel, $1.20 above (5.3 percent) the September 1980 average and a 13.4 percent increase over the October 1979 average.

Heating Oil

The national average price of heating oil sold to residential customers increased 0.6 cent in October 1980 to 98.7 cents per gallon. This was a 0.6 percent increase above the selling price in September 1980 and a 29.9 percent increase over the October 1979 price. The average residential distributor margin in August was 15.5 cents per gallon, 4.7 percent above the margin of October 1979. Refiners' national average selling price to resellers and retailers was 80.7 cents per gallon, 17.6 percent above the October 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 October 1980 was 88.6 cents per gallon, or 0.2 cents (0.2 percent) below the previous month's average and a 29.5 percent increase over the October 1979 average.

Motor Gasoline

The national average retail price for all grades and all types of motor gasoline was 123.1 cents per gallon in December 1980. Leaded regular gasoline at all types of stations sold for an average of 119.7 cents per gallon in November, 0.9 cents higher (0.8 percent) than the price in November. The price for unleaded regular gasoline at all types of stations was 125.8 cents per gallon in December, 0.8 cents higher (0.6 percent) than the price in November.

Liquefied Petroleum Gases

The average wholesale price for propane during October 1980, excluding taxes, was 43.2 cents per gallon, 1.8 cents above the previous month's level, or 4.4 percent, and 22.7 percent above the October 1979 level.

In October 1980, the average wholesale price for butane, excluding taxes, was 54.3 cents per gallon, 6.1 percent above the previous month's revised price and 3.2 percent below the October 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	20.29	22.89	33.54	27.09	19.09	22.87
	May	21.01	23.63	34.33	27.85	20.22	23.75
	June	21.53	24.48	34.48	28.80	20.44	24.09
	July	22.26	25.05	34.51	28.73	21.28	23.86
	August	22.63	24.98	34.44	28.70	22.25	25.00
	September	22.59	25.37	34.46	28.96	R22.47	R25.31
	October	R23.23	26.21	34.63	29.56	†23.67	†26.72
	November	†23.90	26.51	35.09	29.79	NA	NA
	December	NA	NA	NA	NA	NA	NA
	AVERAGE	**NA**	**NA**	**NA**	**NA**	**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/EIA-460, "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**	**65.2**	**24.0**	**23.0**
1979	January	39.7	43.0	42.1	53.7	69.5	22.4	24.9
	February	41.8	46.1	44.5	56.3	70.7	21.8	28.5
	March	44.5	47.9	47.0	58.8	73.3	21.2	32.5
	April	47.7	50.6	49.3	61.1	78.0	22.0	35.4
	May	53.4	56.1	52.6	64.2	82.3	24.2	39.5
	June	58.7	65.0	56.9	69.1	88.0	27.9	46.9
	July	62.4	68.9	61.1	73.8	93.0	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	99.8	33.3	51.9
	October	71.1	74.8	68.1	82.3	100.6	35.2	56.1
	November	70.3	72.1	69.0	83.7	101.9	37.6	57.0
	December	73.0	80.7	70.8	85.8	104.2	40.4	65.8
	AVERAGE	**58.2**	**62.4**	**53.0**	**65.6**	**88.2**	**29.5**	**45.8**
1980	January	76.0	82.2	75.2	90.8	111.0	41.8	73.3
	February	78.3	85.0	79.0	95.3	118.6	42.7	70.1
	March	79.8	87.8	80.4	97.1	123.0	41.0	66.8
	April	80.4	88.0	81.0	97.4	124.2	41.2	63.1
	May	80.5	87.8	81.4	97.2	124.4	41.7	63.7
	June	81.7	88.6	82.5	97.9	124.6	41.2	58.2
	July	81.9	87.6	83.0	97.9	124.7	40.8	53.8
	August	81.6	86.9	82.9	97.9	124.3	40.6	53.1
	September	80.3	R86.6	83.0	98.1	123.1	R41.4	R51.2
	October	81.5	86.2	83.7	R98.7	122.3	43.2	54.3
	November	NA	NA	NA	NA	122.2	NA	NA
	December	NA	NA	NA	NA	123.1	NA	NA
	AVERAGE	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Geographic coverage: the 50 United States and District of Columbia.
Note: The average year-to-date gasoline price for the current year is not yet available from the Bureau of Labor Statistics.
[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/EIA-460, "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/EIA-460, "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	38.67	5.20	14.12	2.99	25.57	4.96	33.03	9.89	37.52	0.12
	May	34.46	0.03	39.07	5.53	14.21	2.79	25.42	5.38	32.97	12.52	34.60	0.43
	June	33.72	0.02	38.93	5.96	14.37	2.75	25.87	5.34	32.39	14.58	30.29	0.53
	July	21.87	0.00	38.72	6.33	14.37	2.91	25.63	5.88	32.81	16.94	30.34	0.68
	August	33.39	0.03	37.82	6.73	14.65	2.53	25.49	5.77	30.80	20.10	33.48	0.78
	September	27.75	0.15	35.95	6.79	14.83	2.18	25.45	5.58	30.57	22.24	31.53	0.90
	October	R29.79	R0.04	R35.77	R7.56	R14.77	R2.00	R25.30	R5.80	R30.22	R24.76	R30.68	R1.24
	November†	32.74	0.09	35.77	8.52	14.87	1.88	25.16	5.67	30.12	27.84	31.49	1.31
	AVERAGE	**30.88**	**0.04**	**37.72**	**5.94**	**14.33**	**2.59**	**25.58**	**5.35**	**31.37**	**14.72**	**31.76**	**0.54**

Geographic coverage: the 50 United States and District of Columbia.
[1]See Explanatory Note 12.
[2]See Definitions.
†Preliminary data. NA=Not available. R=Revised data.
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]		Actual Domestic Average
		Dollars per barrel										
		Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price
1976	**AVERAGE**	**5.13**	**54.4**	**11.71**	**31.5**	**12.16**	**14.1**	**NA**	**NA**	**NA**	**NA**	**8.19**
1977	**AVERAGE**	**5.19**	**45.92**	**11.22**	**36.11**	**13.59**	**13.32**	**6.35**	**4.14**	**12.34**	**0.51**	**8.57**
1978	**AVERAGE**	**5.46**	**37.54**	**12.15**	**34.41**	**13.95**	**14.03**	**5.22**	**12.96**	**12.85**	**1.08**	**9.00**
1979	January	5.75	35.51	12.66	34.25	14.55	14.14	5.79	14.88	13.10	1.20	9.46
	February	5.76	35.20	12.78	34.97	14.88	15.08	5.87	13.71	13.94	1.01	9.69
	March	5.82	34.59	12.84	34.56	14.88	14.95	6.66	14.58	13.97	1.29	9.83
	April	5.85	33.98	12.94	34.93	16.71	15.27	7.45	14.52	14.56	1.28	10.33
	May	5.91	33.55	13.02	34.77	17.53	15.62	8.47	14.71	15.85	1.32	10.71
	June	5.95	29.32	13.14	38.22	20.24	15.97	8.97	13.64	16.02	1.34	11.70
	July	5.98	26.96	13.25	37.49	24.76	16.01	13.35	15.86	20.13	1.38	13.39
	August	6.09	26.03	13.33	36.72	25.71	16.93	14.14	15.82	20.77	1.33	14.00
	September	6.09	23.52	13.53	33.89	27.09	16.55	13.09	16.08	20.85	1.57	14.57
	October	6.12	23.46	13.56	32.58	29.42	16.20	13.12	16.27	21.01	1.57	15.11
	November	6.09	23.11	13.68	32.76	30.64	15.35	13.48	17.49	26.48	1.61	15.52
	December	6.21	22.31	13.76	32.52	34.99	16.34	13.60	16.51	29.04	1.60	17.03
	AVERAGE	**5.95**	**28.91**	**13.20**	**34.79**	**22.93**	**15.71**	**10.57**	**15.36**	**19.40**	**1.38**	**12.64**
1980	January	6.24	21.19	13.86	31.12	36.02	15.61	13.77	17.06	28.94	1.54	17.86
	February	6.37	20.52	14.03	29.45	36.14	15.82	13.77	15.73	34.96	1.44	18.81
	March	6.35	19.83	13.99	28.22	36.26	15.18	13.77	15.30	34.67	1.55	19.34
	April	6.37	18.71	14.18	25.87	36.54	15.80	14.07	14.75	33.81	1.61	20.29
	May	6.47	17.62	14.29	25.21	36.11	15.43	14.36	13.48	34.16	1.56	21.01
	June	6.51	16.99	14.42	23.19	35.53	16.14	14.14	12.94	34.00	1.49	21.53
	July	6.55	16.39	14.57	21.88	36.26	16.02	14.26	11.35	33.27	1.58	22.26
	August	6.60	14.79	14.60	20.50	35.71	15.83	14.38	11.28	32.96	1.61	22.63
	September	6.66	14.76	14.79	19.57	33.94	15.89	14.51	10.37	32.45	1.50	22.59
	October	R6.78	R14.12	R14.91	R17.41	R33.93	R16.04	14.64	R9.44	R32.68	1.53	R23.23
	November†	6.80	13.28	14.92	15.73	34.38	15.74	14.55	8.68	31.50	1.21	23.90
	AVERAGE	**6.49**	**17.15**	**14.34**	**23.54**	**35.54**	**15.77**	**14.14**	**12.80**	**33.06**	**1.51**	**21.20**

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 the Actual Domestic Average price determination.
[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 the Actual Domestic Average price determination.
†Preliminary data. NA=Not available. R=Revised data.
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	33.67	29.67	29.28	35.72	29.43	31.57	26.25	29.85	30.77	25.34
	February	34.03	31.11	NA	35.71	31.77	33.39	26.62	30.95	32.66	24.82
	March	36.74	31.54	NA	35.88	30.56	35.59	26.85	29.34	34.34	24.03
	April	36.93	32.22	NA	35.30	30.24	36.11	27.78	30.38	34.15	23.85
	May	37.10	32.40	NA	36.13	30.68	36.50	28.50	32.67	34.10	24.82
	June	37.61	32.90	NA	36.83	30.76	36.99	28.95	33.34	36.28	25.56
	July	38.40	33.19	NA	37.26	31.84	37.17	28.47	NA[2]	36.26	24.34
	August	37.53	33.01	NA	37.01	31.87	36.69	29.74	NA[2]	34.83	25.30
	September	37.21	33.13	NA	36.94	31.21	36.38	30.34	NA[2]	35.18	24.21
	October†	37.60	32.31	NA	37.15	31.27	36.82	30.19	NA[2]	35.66	22.71

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.
[2]FOB cost of crude oil imports from United Arab Emirates is not published this month due to insufficient response to survey questionnaire.
NA = Not available.
†Preliminary 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	35.32	27.73	31.03	30.37	37.10	30.18	33.03	27.85	32.35	32.14	26.25
	February	35.28	28.60	32.95	NA	36.98	32.38	35.25	28.15	32.71	34.07	25.91
	March	38.54	30.75	33.04	NA	37.18	31.17	36.93	28.26	30.96	35.73	24.97
	April	38.52	30.31	33.81	NA	36.57	30.77	37.41	29.14	32.29	35.34	25.10
	May	38.54	31.16	33.73	NA	37.36	31.22	37.53	30.30	34.06	35.82	25.93
	June	38.71	31.26	34.51	NA	38.09	31.43	38.15	30.16	34.96	37.41	26.42
	July	39.60	31.31	34.81	NA	38.39	32.60	38.23	30.04	NA[2]	37.25	25.47
	August	38.60	31.44	34.81	NA	38.38	32.62	37.77	31.24	NA[2]	36.20	26.37
	September	38.28	30.97	34.64	NA	38.30	31.93	37.60	31.86	NA[2]	36.35	25.47
	October†	38.77	29.22	33.65	NA	38.53	31.96	37.75	31.73	NA[2]	36.82	23.92

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.
[2]Landed cost of crude oil imports from United Arab Emirates is not published this month due to insufficient response to survey questionnaire.
NA = Not available. †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."

Price

		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
	July	5.04	27.26	0.185	NA	NA	NA
	August	4.75	26.86	0.177	NA	NA	NA
	September	3.52	26.07	0.135	NA	NA	NA
	October	3.13	26.08	0.120	NA	NA	NA
	November†	2.60	26.55	0.098	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 in January and February 1979 when aviation jet fuel was decontrolled. From March 1979 to December 1979, it includes butane, natural gasoline, propane and some natural gas liquids. 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

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
	August	121.0	126.7	131.0	124.3
	September	119.7	125.7	130.4	123.1
	October	118.8	125.0	130.1	122.3
	November	118.8	125.0	129.9	122.2
	December	119.7	125.8	131.0	123.1

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

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	89.0	87.6
	June	107.7	111.4	90.0	86.1	88.6
	July	109.3	113.4	91.4	88.3	89.7
	August	110.2	112.9	90.6	86.2	90.7
	September	110.8	113.3	92.9	R86.4	R88.8
	October†	110.8	113.0	91.1	87.8	88.6
	AVERAGE	**106.1**	**108.4**	**86.9**	**86.9**	**86.7**

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. R = Revised data.
Source: • FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

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	79.3	81.4	16.3	97.2
	June	80.2	82.5	15.8	97.9
	July	79.2	83.0	15.3	97.9
	August	79.3	82.9	15.2	97.9
	September	79.3	83.0	15.4	98.1
	October	R80.7	83.7	15.5	R98.7
	AVERAGE	**79.4**	**79.6**	**16.5**	**95.5**

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.
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	98.7	97.3	96.4	94.2	95.8	NA	95.2	97.7	95.5	98.6
	June	99.8	97.9	96.8	95.1	95.8	NA	95.3	98.4	96.0	99.8
	July	100.3	98.1	96.6	94.2	96.2	NA	93.1	97.0	96.7	100.2
	August	100.2	97.9	96.8	94.8	95.7	NA	95.4	92.1	99.7	100.4
	September	100.5	98.2	97.0	94.7	95.7	NA	93.7	93.0	97.2	100.6
	October	R101.1	R98.8	R97.4	R95.6	R95.9	NA	R94.7	R94.1	R98.6	R100.4

[1]DOE Regions are defined in Explanatory Note 18.
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	
		Whole-sale	Retail	Whole-sale	Retail	Whole-sale	Retail	Whole-sale	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
	May	25.48	31.73	22.72	25.77	17.72	18.04	20.22	23.75
	June	23.14	31.37	22.35	25.44	17.72	19.27	20.44	24.09
	July	24.89	28.51	23.44	25.55	19.20	20.58	21.28	23.86
	August	23.20	30.93	24.98	26.11	20.42	21.45	22.25	25.00
	September	R24.27	33.12	R23.46	26.31	R20.62	21.71	R22.47	R25.31
	October†	24.17	31.88	24.42	28.00	22.64	23.29	23.67	26.72
	AVERAGE	**25.42**	**30.57**	**23.75**	**26.62**	**19.35**	**20.76**	**21.91**	**25.03**

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. R = Revised data.
Source: • FEA Form P302-M-1/EIA–460, "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**	**35.0**	**108.2**
1974	**AVERAGE**	**30.4**	**49.0**	**125.3**
1975	**AVERAGE**	**44.5**	**76.9**	**154.2**
1976	**AVERAGE**	**58.0**	**105.9**	**184.6**
1977	**AVERAGE**	**79.0**	**133.4**	**226.4**
1978	**AVERAGE**	**90.5**	**147.9**	**262.6**
1979	January	102.0	154.7	292.9
	February	104.9	164.8	295.6
	March	109.5	168.6	300.6
	April	110.6	169.6	299.6
	May	115.0	182.2	314.9
	June	116.6	183.9	320.0
	July	119.6	184.0	328.4
	August	123.6	187.0	330.8
	September	123.5	189.4	341.4
	October	128.1	195.7	352.8
	November	128.7	186.9	347.6
	December	131.0	190.0	351.9
	AVERAGE	**117.8**	**180.3**	**323.1**
1980	January	134.4	201.1	354.9
	February	139.8	210.5	357.9
	March	141.6	214.7	368.1
	April	140.9	210.4	367.8
	May	142.6	218.1	393.9
	June	146.4	216.4	394.8
	July	150.3	237.3	410.6
	August	150.2	245.6	413.1
	September	153.0	245.6	417.0
	October	155.4	253.4	420.6

Geographic coverage: the 50 United States and District of Columbia.

[1]Includes all electric utility generating plants with a combined capacity of 25 megawatts or greater. Small quantities of coke oven gas, refinery gas and blast furnace gas are included.

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.

• Electric Plant data are from Federal Power Commission Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

• 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	2.91	3.87	3.76
	April	120.1	264.6	164.7	151.4	4.51	4.54	2.92	3.87	3.82
	May	121.1	274.1	177.5	158.0	4.69	4.65	2.98	3.98	3.91
	June	121.8	289.3	179.5	161.2	4.88	4.73	3.04	4.05	4.03
	July	122.2	311.8	178.9	168.7	4.92	4.77	3.13	4.22	4.15
	August	122.5	323.5	180.9	167.1.	4.94	4.79	3.13	3.88	4.18
	September	125.3	333.5	183.5	167.9	4.96	4.84	3.15	4.07	4.19
	October	127.4	346.1	189.1	167.3	5.01	4.94	3.19	4.07	4.19
	November	127.7	363.1	180.3	171.5	4.84	4.92	3.19	4.14	4.14
	December	129.2	394.8	183.3	183.8	4.71	4.90	3.27	4.19	4.18
	AVERAGE	**122.4**	**299.7**	**175.4**	**162.1**	**4.64**	**4.68**	**3.05**	**3.96**	**3.99**
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	5.41	5.44	3.59	4.97	4.63
	June	135.1	392.7	209.3	178.8	5.60	5.61	3.79	4.58	4.85
	July	137.4	394.5	228.5	199.0	5.66	5.65	3.93	4.93	5.03
	August	139.5	404.9	237.2	196.2	5.72	5.64	3.94	4.81	5.07
	September	138.9	411.3	238.7	193.5	5.71	5.73	3.88	4.95	5.03
	October	138.1	452.2	245.7	192.2	5.68	5.84	3.84	4.88	4.95
	November	NA	NA	NA	NA	5.61	5.71	3.85	5.06	4.89

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 sales to ultimate consumers.
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 October 1980 was 55.9 million barrels per day, down 2.6 million barrels per day from the September level.

OPEC output during October declined 2.7 million barrels per day from the September level. This decline resulted from large decreases by Iran and Iraq, because of the Iran-Iraq conflict, of 2.9 and 0.8 million barrels per day, respectively. This combined decline of 3.7 million barrels per day was partially offset by production increases from Saudi Arabia and Nigeria of 0.5 and 0.3 million barrels per day, respectively. Average production from Arab members of OPEC declined 2.3 million barrels per day.

Production by non-OPEC nations increased to 32.7 million barrels per day in October. Canada registered the only notable change, decreasing in October by 0.2 million barrels per day from the previous month's level.

Petroleum Consumption

Petroleum consumption by International Energy Agency (IEA) member nations was 31.1 million barrels per day during July 1980. This preliminary figure was at the same level as the consumption rate during June 1980, and a 2.0 million barrel per day decrease from the July 1979 rate of 33.1 million barrels per day.

Preliminary consumption data for October 1980 were available for West Germany, France, Italy, and the United States. The United States and France showed significant consumption increases during October of 0.2 and 0.3 million barrel per day, respectively. During the same period, West Germany decreased consumption by 0.3 million barrels per day while Italy remained at about the same level. January through July data, however, indicate a significant decline in the consumption rates for the group of IEA nations, as compared to the same period in 1979.

Nuclear Electricity Production

As of November 30, 1980, 18 non-Communist countries operated a total of 206 reactors that were authorized to generate commercial electricity. Two of these units (Loviisa-2, Finland and Rapp-2, India) came on line in November. These 206 reactors represented a combined gross generating capacity of 128.9 million kilowatts, of which 59.4 million gross kilowatts, or 46.1 percent, were attributable to the 75 licensed U.S. reactors. During November 1980 these 18 countries generated a total of 51.9 billion gross kilowatt-hours, a decrease of 2.2 percent from the October 1980 output but 12.1 percent over November 1979's output.

In November the French Government authorized Electricite de France (EDF) to construct four nuclear units at Plogoff. Two French reactors (Tricastin-3 and Gravelines-3) "went critical" (sustained chain reactions) at the end of November and should soon come on line. These two bring to seven the number of new French reactor units that "went critical" in 1980.

A relatively severe earthquake in Southern Italy on November 23, 1980, apparently did not damage two nuclear plants operating in the quake area. Also in November, pro-nuclear forces in Austria were successful in gathering more than double the number of signatures necessary to put the question of new reactor construction and existing unit licensing to a parlimentary vote.

International

Crude Oil Production for Major Petroleum Exporting Countries

		Algeria	Iraq	Kuwait[1]	Libya	Qatar	Saudi Arabia[1]	United Arab Emirates	Arab Members of OPEC[2]	Indonesia	Iran
		Thousand barrels per day									
1973	**AVERAGE**	**1,070**	**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	**R1,154**	**R3,477**	**2,500**	**R2,092**	**R508**	**R9,532**	**R1,831**	**R21,094**	**R1,591**	**R3,168**
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
	July	1,000	3,100	1,365	1,680	460	9,765	1,710	19,080	1,565	1,700
	August	1,000	3,100	1,465	1,690	465	9,765	1,665	19,150	1,565	1,600
	September	1,000	3,000	R1,290	R1,680	460	9,740	1,670	R18,840	1,565	1,400
	October	1,000	150	1,355	1,665	440	10,255	1,675	16,540	1,575	600

Note: Data for 1980 are preliminary.
[1]Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In October 1980 total production in this region amounted to approximately 510,000 barrels per day.
[2]Arab members of OPEC include Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.
Additional footnotes on following page.

International

Crude Oil Production for Major Petroleum Exporting Countries (continued)

		Nigeria	Venezuela	Total OPEC[3]	Canada	Mexico	United Kingdom	United States	China	USSR	Other[4]	World
						Thousand barrels per day						
1973	**AVERAGE**	**2,054**	**3,366**	**30,961**	**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	8,475	2,120	11,370	R4,725	59,880
	February	2,430	2,345	29,380	1,575	1,400	1,505	8,525	2,120	11,370	R4,595	60,470
	March	2,440	2,425	30,515	1,405	1,310	1,335	8,601	2,120	11,370	R5,214	61,870
	April	2,420	2,385	31,095	1,510	1,400	1,460	8,553	2,120	11,510	R4,862	62,510
	May	2,400	2,385	31,445	1,465	1,405	1,645	8,601	2,120	11,110	R4,679	62,470
	June	2,420	2,245	31,115	1,465	1,440	1,745	8,432	2,120	11,460	R4,743	62,520
	July	2,380	2,325	31,515	1,520	1,440	1,710	8,364	2,120	11,400	R5,621	63,690
	August	2,185	2,325	31,230	1,450	1,460	1,640	8,548	2,120	11,560	R5,322	63,330
	September	2,115	2,365	30,895	1,490	1,475	1,675	8,523	2,120	11,460	R5,072	62,710
	October	2,135	2,370	31,180	1,545	1,515	1,615	8,621	2,120	11,630	R5,099	63,325
	November	2,150	2,390	30,770	1,525	1,620	1,520	8,761	2,120	11,700	R5,124	63,140
	December	2,150	2,410	30,430	1,545	1,660	1,545	8,615	2,120	11,700	R5,005	62,620
	AVERAGE	**R2,302**	**R2,356**	**R30,928**	**1,495**	**1,460**	**1,570**	**8,552**	**2,120**	**11,470**	**R4,824**	**62,400**
1980	January	2,155	2,280	29,535	1,515	1,720	1,600	8,648	2,115	11,560	5,042	61,735
	February	2,160	2,200	29,805	1,475	1,725	1,660	8,696	2,115	11,550	5,189	62,215
	March	2,155	1,995	29,100	1,475	1,830	1,670	8,712	2,115	11,640	5,203	61,745
	April	2,100	2,045	27,965	1,390	1,885	1,510	8,688	2,120	11,630	5,352	60,540
	May	2,200	2,150	27,645	1,470	1,910	1,600	8,640	2,120	11,700	5,175	60,260
	June	2,110	2,050	27,175	1,535	1,905	1,625	8,547	2,120	11,630	5,203	59,740
	July	2,095	2,170	27,030	1,520	2,015	1,585	8,555	2,125	11,800	4,945	59,575
	August	2,050	2,210	27,010	1,440	2,000	1,535	R8,422	2,130	11,800	R5,158	R59,495
	September	1,600	2,190	R25,955	R1,420	2,125	R1,540	8,540	2,110	11,800	5,055	R58,545
	October	1,880	2,225	23,230	1,250	2,180	1,570	8,570	2,120	11,800	5,200	55,920

United States geographic coverage: the 50 United States and District of Columbia.
[3]OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates, Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon.
[4]Other is a calculated total derived from the difference between world production and the nations represented above.
R = Revised data.
Note: Monthly data may not average to annual data. Data for 1980 are preliminary.
Sources: • 1973–1979 annual data for OPEC nations: *OPEC Annual Statistical Bulletin 1979.*
• 1973–1979 annual data and 1980 monthly data (except U.S. and OPEC nations): 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]

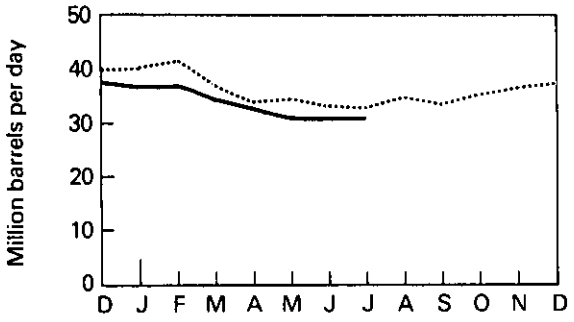
		Canada	France[2]	Italy	Japan	United Kingdom	United States	West Germany	Other IEA[3]	Total IEA[4]
		Thousand barrels per day								
1973	**AVERAGE**	**1,597**	**2,219**	**1,525**	**5,000**	**1,958**	**17,308**	**2,693**	**4,069**	**34,150**
1974	**AVERAGE**	**1,630**	**2,094**	**1,521**	**4,872**	**1,829**	**16,653**	**2,408**	**4,047**	**32,960**
1975	**AVERAGE**	**1,595**	**1,925**	**1,468**	**4,568**	**1,633**	**16,322**	**2,319**	**3,905**	**31,810**
1976	**AVERAGE**	**1,647**	**2,075**	**1,503**	**4,786**	**1,601**	**17,461**	**2,507**	**4,265**	**33,770**
1977	**AVERAGE**	**1,661**	**1,973**	**1,476**	**5,015**	**1,655**	**18,431**	**2,478**	**4,214**	**34,930**
1978	**AVERAGE**	**1,701**	**2,077**	**1,551**	**5,115**	**1,683**	**18,847**	**2,596**	**4,387**	**35,880**
1979	January	1,881	2,786	1,950	5,579	1,883	20,586	2,893	R5,228	40,000
	February	2,019	2,731	1,912	6,009	2,067	21,288	2,708	R5,097	41,100
	March	1,654	2,315	1,601	5,708	1,949	19,322	2,592	R4,574	37,400
	April	1,605	2,150	1,447	5,009	1,703	17,434	2,590	R4,212	34,000
	May	1,650	2,039	1,402	4,757	1,648	17,801	2,641	R4,301	34,200
	June	1,737	1,663	1,312	4,709	1,517	17,786	2,613	R4,026	33,700
	July	1,700	1,604	1,314	4,689	1,435	17,144	2,626	R4,192	33,100
	August	1,775	1,553	1,311	4,894	1,488	18,149	2,617	R4,566	34,800
	September	1,619	1,721	1,617	4,809	1,520	17,400	2,597	R4,338	33,900
	October	1,852	2,007	1,807	4,771	1,652	18,176	2,846	R4,396	35,500
	November	1,840	2,481	1,890	5,359	1,858	18,355	2,763	R4,335	36,400
	December	1,877	2,278	1,744	5,800	1,606	18,922	2,489	R4,862	37,300
	AVERAGE	**1,766**	**2,107**	**1,607**	**5,173**	**1,690**	**18,516**	**2,664**	**R4,484**	**35,900**
1980	January	1,812	2,465	1,778	5,255	R1,769	R18,656	2,665	R4,565	R36,500
	February	1,925	2,444	1,864	5,722	1,621	R18,815	R2,385	R4,768	R37,100
	March	1,740	1,982	1,657	5,433	1,585	R17,385	2,405	R4,395	R34,600
	April	1,560	2,110	1,541	4,626	1,472	R16,724	2,656	R4,321	R32,900
	May	1,573	1,892	1,448	4,376	1,348	16,143	2,203	R4,009	31,100
	June	R1,647	1,848	R1,511	4,224	1,286	16,214	2,192	R4,026	31,100
	July	R1,662	1,437	1,506	R4,250	R1,217	15,962	2,404	R4,099	31,100
	August	NA	1,220	1,310	R3,910	1,120	R15,727	R2,130	NA	NA
	September	NA	1,740	1,640	4,140	1,260	16,612	2,520	NA	NA
	October	NA	2,040	R1,680	NA	NA	16,802	2,230	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 IEA nations represented above.
[4]The 21 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, Portugal, 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. Data for 1979 and 1980 are rounded to the nearest hundred.
R = Revised data.
NA = Not available.
Note: Data for 1980 are preliminary.
Sources: • Central Intelligence Agency, "International Energy Statistical Review," 27 January 1981 (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.

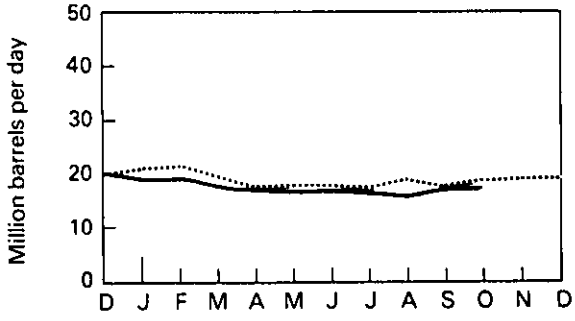
International

Petroleum Consumption

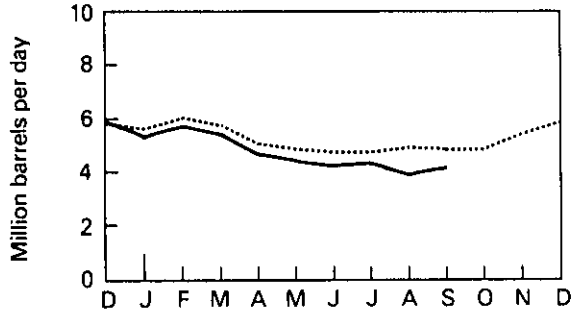
Total IEA



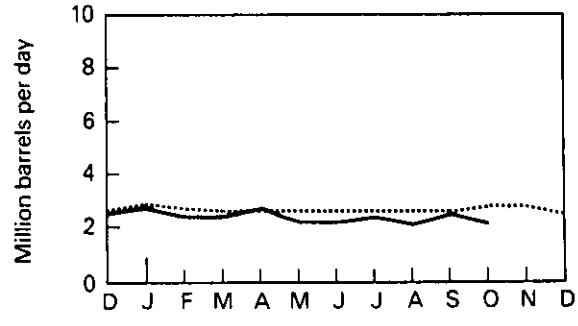
United States



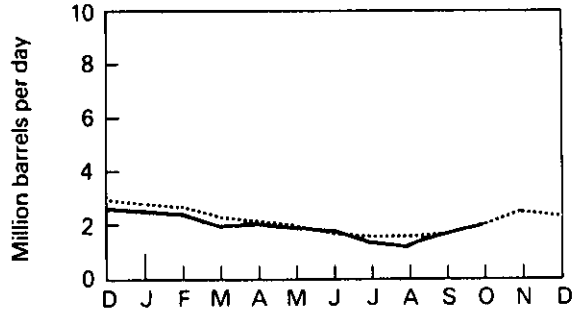
Japan*



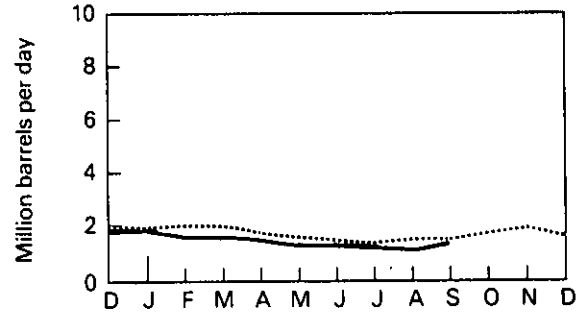
West Germany



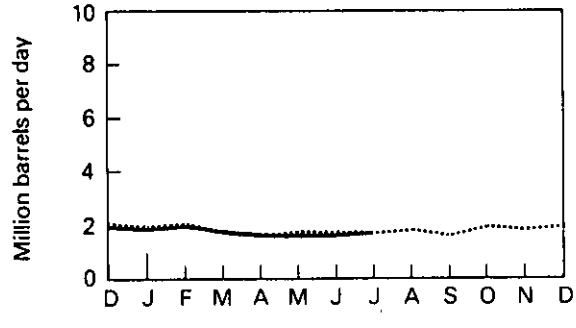
France**



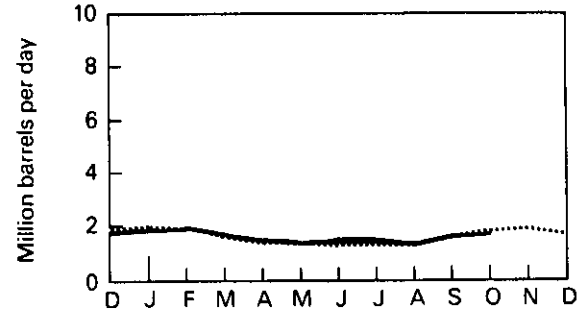
United Kingdom



Canada



Italy***



*Excludes liquefied petroleum gases and condensates.
**Not a member of IEA.

***Principal products only.

..... 1979
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International

Nuclear Electricity Generation by Non-Communist Countries[1]

		Argentina	Belgium	Canada[2]	Finland	France	India	Italy	Japan	Nether-lands	Pakistan
						Million gross kilowatt-hours					
1973	**TOTAL**	**0**	**0**	**18,273**	**0**	**11,617**	**1,936**	**3,142**	**9,439**	**1,111**	**458**
1974	**TOTAL**	**1,036**	**121**	**15,410**	**0**	**14,703**	**2,475**	**3,410**	**18,097**	**3,277**	**584**
1975	**TOTAL**	**2,517**	**6,763**	**13,243**	**0**	**18,296**	**2,514**	**3,801**	**22,196**	**3,335**	**546**
1976	**TOTAL**	**2,572**	**10,011**	**18,016**	**0**	**15,764**	**3,194**	**3,807**	**36,846**	**3,872**	**487**
1977	**TOTAL**	**1,637**	**11,855**	**26,759**	**2,675**	**17,940**	**2,779**	**3,384**	**28,135**	**3,710**	**338**
1978	**TOTAL**	**2,896**	**12,490**	**32,925**	**3,288**	**30,548**	**2,264**	**4,428**	**53,186**	**4,060**	**229**
1979	January	266	838	3,816	548	3,831	356	401	5,724	390	23
	February	175	559	2,945	493	3,465	248	277	4,774	352	12
	March	181	786	2,909	467	3,192	215	241	4,254	383	0
	April	261	1,047	3,104	623	3,151	218	290	3,852	222	0
	May	254	1,292	2,717	520	3,294	239	200	3,614	343	0
	June	229	1,161	3,194	394	2,963	285	132	4,470	365	0
	July	168	992	3,848	491	2,604	307	0	5,862	373	0
	August	275	558	2,820	391	2,341	266	122	6,724	254	0
	September	142	792	2,956	709	3,094	248	169	5,338	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	693	4,622	209	366	5,852	140	0
	TOTAL	**2,692**	**11,370**	**38,383**	**6,671**	**39,929**	**3,210**	**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	5,039	273	391	5,637	343	0
	May	179	687	2,493	314	4,184	294	294	6,033	323	0
	June	250	1,114	3,108	0	4,075	242	97	6,642	341	0
	July	162	1,292	3,559	383	4,832	228	131	R7,554	369	3
	August	256	1,266	3,912	392	3,246	303	111	8,264	369	19
	September	252	1,112	3,115	R435	4,544	311	68	6,729	363	21
	October	264	946	3,342	519	R5,136	216	0	5,705	307	0
	November	258	1,150	3,380	598	5,814	329	0	5,073	346	15
	TOTAL (Year-to-date)	**2,078**	**11,263**	**36,837**	**5,772**	**52,771**	**2,680**	**2,210**	**75,022**	**3,891**	**57**

Note: In some cases, monthly figures are adjusted to reflect amended cumulative totals. 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]A few countries, such as Canada and the United Kingdom, assess generation at 4- or 5-week intervals, rather than by calendar month.
R = Revised data.
Source: • *Nucleonics Week.*

International

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

		South Korea	Spain	Sweden	Switzer-land	Taiwan	United Kingdom[2]	West Germany	Non-Communist World Excluding U.S.	United States	Total Non-Communist World
						Million gross kilowatt-hours					
1973	**TOTAL**	**0**	**6,545**	**2,111**	**6,192**	**0**	**27,996**	**11,907**	**100,727**	**87,968**	**188,695**
1974	**TOTAL**	**0**	**7,223**	**1,647**	**7,037**	**0**	**34,020**	**12,038**	**121,078**	**104,479**	**225,557**
1975	**TOTAL**	**0**	**7,544**	**12,021**	**7,721**	**0**	**30,508**	**21,672**	**152,677**	**181,822**	**334,499**
1976	**TOTAL**	**0**	**7,555**	**15,992**	**7,900**	**0**	**36,806**	**24,524**	**187,346**	**201,555**	**388,891**
1977	**TOTAL**	**71**	**6,525**	**19,890**	**8,070**	**98**	**38,079**	**35,807**	**207,752**	**263,167**	**470,919**
1978	**TOTAL**	**2,324**	**7,649**	**23,781**	**8,349**	**2,670**	**36,662**	**35,881**	**263,630**	**292,664**	**556,294**
1979	January	272	549	2,326	804	445	3,787	4,167	28,543	29,184	57,727
	February	355	622	1,973	725	306	3,811	3,362	24,454	27,327	51,781
	March	324	706	2,679	796	520	3,968	3,775	25,396	25,538	50,934
	April	262	637	1,449	848	565	3,210	3,767	23,506	19,320	42,826
	May	250	116	1,268	864	482	2,265	3,460	21,179	15,808	36,987
	June	300	260	1,003	744	645	3,149	3,265	22,559	17,140	39,699
	July	337	344	1,008	811	691	2,640	3,323	23,799	22,493	46,292
	August	384	663	1,099	746	646	2,409	2,873	22,571	26,174	48,745
	September	386	725	1,370	1,244	644	3,116	2,641	23,936	23,169	47,105
	October	282	676	2,048	1,388	509	2,771	3,656	27,570	22,315	49,885
	November	0	719	2,302	1,418	316	3,279	3,812	26,019	20,298	46,317
	December	0	683	2,515	1,461	559	4,070	4,074	30,594	21,933	52,527
	TOTAL	**3,152**	**6,700**	**21,039**	**11,848**	**6,329**	**38,477**	**42,175**	**300,130**	**270,698**	**570,827**
1980	January	110	719	2,512	1,505	859	3,704	4,650	34,191	21,111	55,302
	February	1	333	2,423	1,197	685	3,380	4,240	31,253	R20,968	R52,221
	March	351	426	2,333	1,278	799	4,217	3,383	32,385	21,038	53,423
	April	385	355	1,865	1,444	743	2,693	3,625	27,307	19,828	47,135
	May	379	368	1,648	1,399	436	2,559	3,501	25,091	19,612	44,703
	June	84	307	1,570	617	507	2,818	2,877	24,649	19,386	44,035
	July	411	316	1,337	577	827	2,031	3,034	R27,045	22,367	R49,412
	August	293	366	1,261	704	773	2,579	2,712	26,826	25,664	52,490
	September	379	379	1,681	1,261	784	R3,115	3,182	R27,730	24,770	R52,500
	October	402	408	2,185	1,405	764	2,745	3,053	R27,399	25,697	R53,096
	November	396	490	2,759	1,447	561	3,190	4,141	29,946	21,959	51,905
	TOTAL (Year-to-date)	**3,191**	**4,468**	**21,574**	**12,834**	**7,740**	**33,032**	**38,397**	**313,822**	**242,401**	**556,222**

United States geographic coverage: the 50 United States and District of Columbia.
Note: In some cases, monthly figures are adjusted to reflect amended cumulative totals. 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]A few countries, such as Canada and the United Kingdom, assess generation at 4- or 5-week intervals, rather than by calendar month.
R = Revised data.
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 net 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 petroleum. 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 coal, and lignite), natural gas (dry), refined petroleum products supplied, electric utility and industrial production of hydropower, net imports of electricity produced from hydropower, net imports of coke made from coal, and electricity generated from nuclear power, geothermal power, and wood and waste. Approximate heat contents (Btu values) were derived using conversion factors listed 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 are relative measurements of outdoor air temperature. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65° F by convention. Heating degree-days are deviations of the mean daily temperature below 65° F. For example, if a weather station recorded a mean daily temperature of 78° F, cooling degree-days for that station would be 13 (and heating degree-days, 0). A weather station recording a mean daily temperature of 40° F would report 25 heating degree-days (and 0 cooling degree-days).

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

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). LRG 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.

Preliminary monthly estimates for 1980 production, stocks, and products supplied are obtained by multiplying the reported data for the most recent month available by an appropriate ratio derived from data for the prior 3 years. For example, if an estimate were required for June 1980 and the most recent monthly data available were for April, the preliminary estimate would be obtained by multiplying the April 1980 data by the average of the June to April ratios for the years 1977 through 1979.

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, a unit of power. (Power is energy produced per unit of time.) Nuclear power plants may have more than one type of power rating, including:

(a). Design Capacity or Design Electrical Rating (DER)—The nominal net, electrical output of the unit specified by the utility and used for the purpose of plant design.
(b). Maximum Dependable Capacity (MDC), GROSS—The gross electrical output as measured at the output terminals of the turbine generator during the most restrictive seasonal conditions (usually summer).
(c). Maximum Dependable Capacity, NET—The gross maximum dependabile capacity less the nominal station service load. (The nominal station service load for a nuclear plant is about 5 percent of its gross generation.)
(d). Thermal Capacity—The rate of heat production by the reactor core. The Nuclear Regulatory Commission authorizes a maximum thermal power rating for U.S. reactors.

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, Puertq 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. Residual fuel oil prices include fuel oil No. 4, No. 5, No. 6, crude oil and top crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (fuel oil No. 2, kerosene, and jet fuel) 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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