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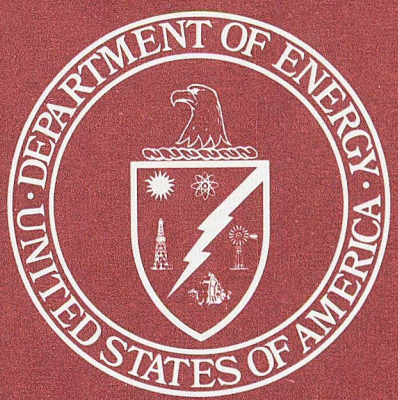
Monthly Energy Review

January 1980



U.S. Department of Energy
Energy Information Administration

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Editor: Sonya B. Ryan
Associate Editors: Joy Nealon and Mary B. Fauntleroy
Publication Coordinator and Editorial Review: Bettie Bowman
Graphics Review: Graphics Branch, Office of Administrative Services

Executive Summary: Katherine E. Seiferlein, Roberta Searles, Nancy A. Masterson
Consumption: Katherine E. Seiferlein, Roberta Searles, Nancy A. Masterson
Petroleum: Henry Clarius, Leonard L. Fanelli
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Correspondence regarding editorial matters should be addressed to:

Editor, Monthly Energy Review
Energy Information Administration Clearinghouse
U.S. Department of Energy
1726 M Street, N.W.
Washington, D.C. 20461

Feature articles appearing in previous issues:

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Part 1 Executive Summary

Overview

Domestic energy production in October 1979 was 5.5 quadrillion Btu, 7.6 percent higher than in September and 1.0 percent higher than in October 1978. In October 1979 total domestic energy was produced from the following sources: coal, 1.8 quadrillion Btu, or 31.9 percent; natural gas, 1.6 quadrillion Btu, or 28.6 percent of the total; crude oil, 1.5 quadrillion Btu, or 27.7 percent; and 0.7 quadrillion Btu, or 11.9 percent of the total from nuclear electric, hydroelectric power, natural gas plant liquids, and electricity produced from geothermal power and wood and waste.

While the United States produced a total of 5.5 quadrillion Btu of energy in October 1979, it consumed a total of 6.3 quadrillion Btu of energy. Consumption was 8.6 percent higher than in September and 0.1 percent lower than in October 1978. Petroleum consumption was 3.1 quadrillion Btu, representing 49.0 percent of the total U.S. consumption of energy. Natural gas consumption was 1.5 quadrillion Btu, or 23.7 percent of the total. Coal consumption was 1.3 quadrillion Btu, or 19.9 percent of the total. All remaining fuels provided 0.5 quadrillion Btu, or 7.4 percent of the total consumption.

Energy imports in October 1979 totaled 1.6 quadrillion Btu and supplied 24.9 percent of consumed energy in October. The October 1979 total import figure was 3.5 percent lower than during October 1978. The United States exported 0.3 quadrillion Btu of energy in October and had a domestic net import total of 1.3 quadrillion Btu. Crude oil accounted for 1.2 quadrillion Btu of the total net imports, while petroleum products accounted for 0.3 quadrillion Btu. Natural gas, electricity, and coal coke contributed small amounts to the net import total. Coal exports exceeded coal imports, causing coal to appear as a net export item of 0.2 quadrillion Btu.

Executive Summary

Domestic Energy Summary

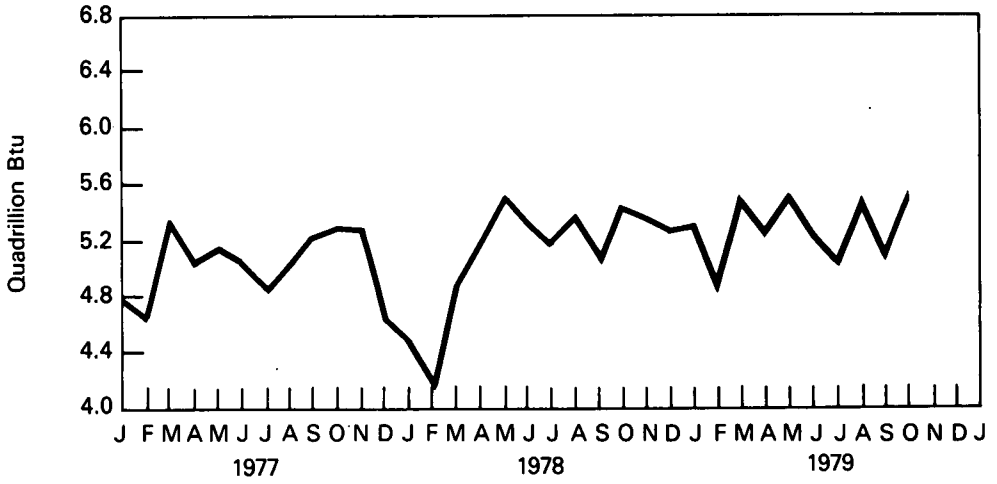
		Domestic Energy Production[1]	Domestic Energy Consumption[2]	Energy Imports[3]	Energy Exports[4]
			Quadrillion (10^{15}) Btu		
1973	**TOTAL**	**62.431**	**74.605**	**14.732**	**2.073**
1974	**TOTAL**	**61.228**	**72.756**	**14.417**	**2.241**
1975	**TOTAL**	**60.057**	**70.706**	**14.114**	**2.389**
1976	**TOTAL**	**60.091**	**74.513**	**16.840**	**2.213**
1977	**TOTAL**	**60.431**	**76.536**	**20.091**	**2.097**
1978	January	4.487	7.618	1.619	0.079
	February	4.169	6.959	1.429	0.059
	March	4.877	6.851	1.656	0.067
	April	5.192	6.038	1.476	0.135
	May	5.514	6.209	1.491	0.187
	June	5.336	6.020	1.523	0.224
	July	5.193	6.205	1.612	0.164
	August	5.388	6.352	1.613	0.180
	September	5.060	5.961	1.693	0.187
	October	5.444	6.305	1.628	0.227
	November	5.364	6.569	1.677	0.241
	December	5.312	7.355	1.815	0.213
	TOTAL	**61.337**	**R78.442**	**19.231**	**1.963**
1979	January	5.284	R7.948	1.752	0.175
	February	4.877	R7.209	1.512	0.161
	March	5.468	R6.944	1.716	0.241
	April	5.249	R6.122	1.501	0.236
	May	5.471	6.134	1.580	0.257
	June	5.176	5.933	1.586	0.253
	July	4.992	R6.032	1.578	0.272
	August	R5.504	R6.270	R1.654	R0.262
	September	5.109	R5.797	R1.371	R0.229
	October	5.498	6.298	1.571	0.292
	TOTAL (Year to date)	**52.628**	**64.687**	**15.821**	**2.378**

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

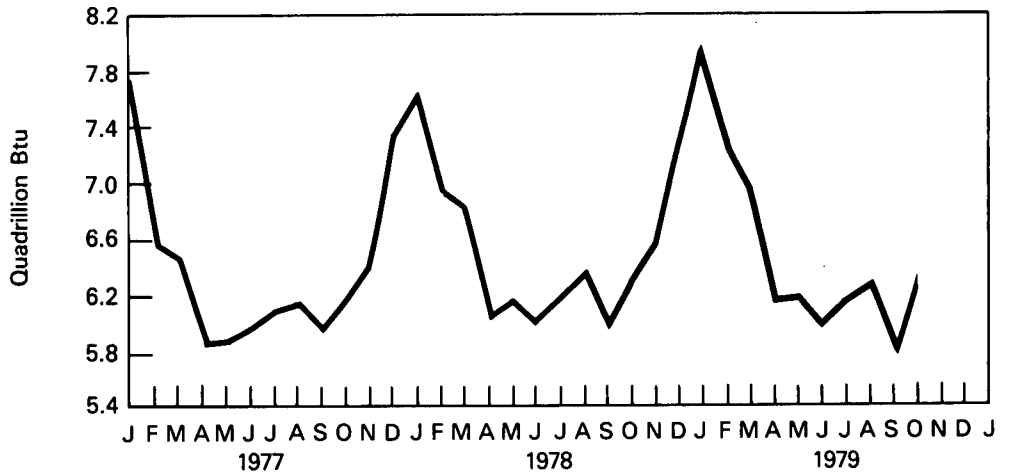
Executive Summary

Domestic Energy Summary

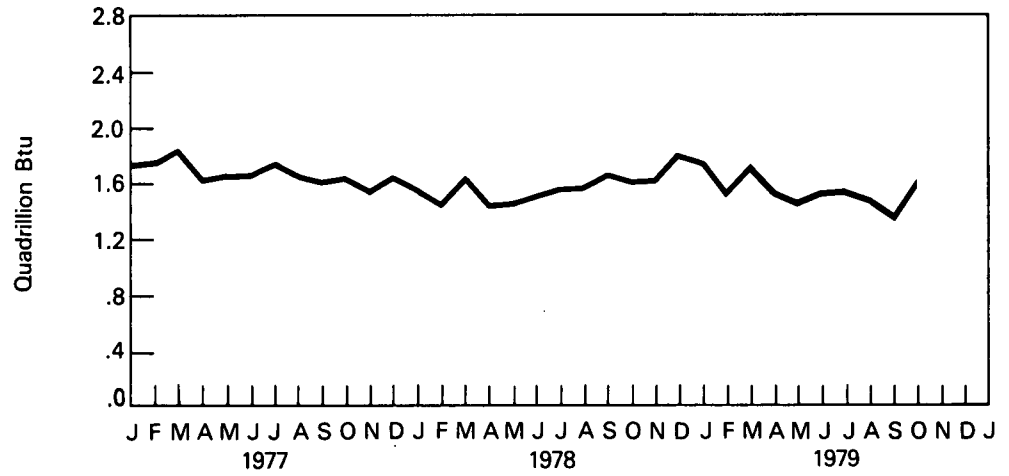
Domestic Production of Energy



Domestic Consumption of Energy



Imports of Energy



Executive Summary

Domestic Energy Production by Primary Type

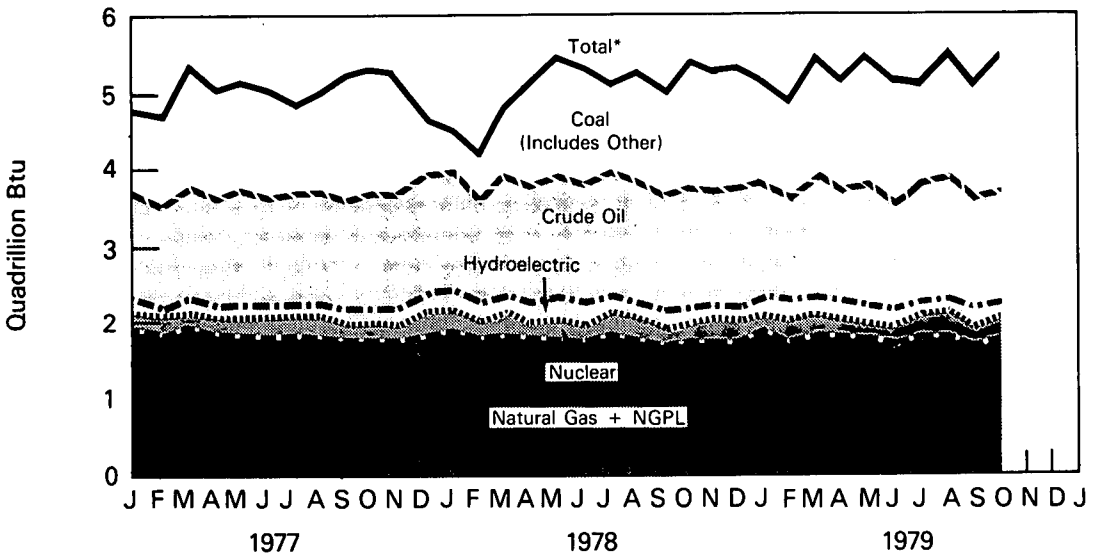
		Coal[1]	Crude Oil[2]	NGPL[3]	Natural Gas (dry)	Hydro-electric Power[4]	Nuclear Electric Power	Other[5]	Total
					Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**14.366**	**19.493**	**2.569**	**22.187**	**2.859**	**0.910**	**0.046**	**62.431**
1974	**TOTAL**	**14.468**	**18.575**	**2.471**	**21.211**	**3.175**	**1.272**	**0.056**	**61.228**
1975	**TOTAL**	**15.189**	**17.729**	**2.374**	**19.641**	**3.152**	**1.900**	**0.072**	**60.057**
1976	**TOTAL**	**15.853**	**17.262**	**2.327**	**19.480**	**2.976**	**2.111**	**0.081**	**60.091**
1977	**TOTAL**	**15.964**	**17.454**	**2.327**	**19.565**	**2.337**	**2.702**	**0.082**	**60.431**
1978	January	0.539	1.503	0.190	1.704	0.265	0.278	0.007	4.487
	February	0.546	1.360	0.172	1.612	0.237	0.235	0.006	4.169
	March	0.900	1.568	0.194	1.708	0.260	0.242	0.005	4.877
	April	1.375	1.534	0.191	1.631	0.267	0.189	0.004	5.192
	May	1.587	1.587	0.187	1.626	0.303	0.220	0.004	5.514
	June	1.516	1.537	0.187	1.587	0.265	0.239	0.005	5.336
	July	1.241	1.574	0.190	1.655	0.258	0.269	0.005	5.193
	August	1.487	1.575	0.190	1.620	0.234	0.276	0.006	5.388
	September	1.336	1.531	0.183	1.541	0.224	0.239	0.007	5.060
	October	1.614	1.586	0.188	1.598	0.206	0.248	0.005	5.444
	November	1.599	1.521	0.189	1.570	0.211	0.268	0.006	5.364
	December	1.378	1.557	0.191	1.671	0.233	0.274	0.007	5.312
	TOTAL	**15.117**	**18.434**	**2.255**	**19.524**	**2.963**	**2.977**	**0.068**	**61.337**
1979	January	1.304	1.521	0.214	1.675	0.265	0.299	0.007	5.284
	February	1.236	1.380	0.188	1.563	0.225	0.279	0.006	4.877
	March	1.510	1.544	0.211	1.659	0.274	0.262	0.008	5.468
	April	1.461	1.485	0.202	1.628	0.268	0.198	0.007	5.249
	May	1.631	1.544	0.201	1.620	0.305	0.162	0.007	5.471
	June	1.518	1.463	0.194	1.557	0.264	0.173	0.007	5.176
	July	1.257	1.502	0.201	1.560	0.241	0.224	0.007	4.992
	August	1.665	R1.564	R0.197	1.583	0.226	0.261	0.008	R5.504
	September	1.474	1.481	0.200	1.511	0.201	0.235	0.007	5.109
	October	1.752	1.521	0.203	1.572	0.215	0.227	0.008	5.498
	TOTAL (Year to date)	**14.808**	**15.004**	**2.011**	**15.930**	**2.484**	**2.320**	**0.072**	**52.628**

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.

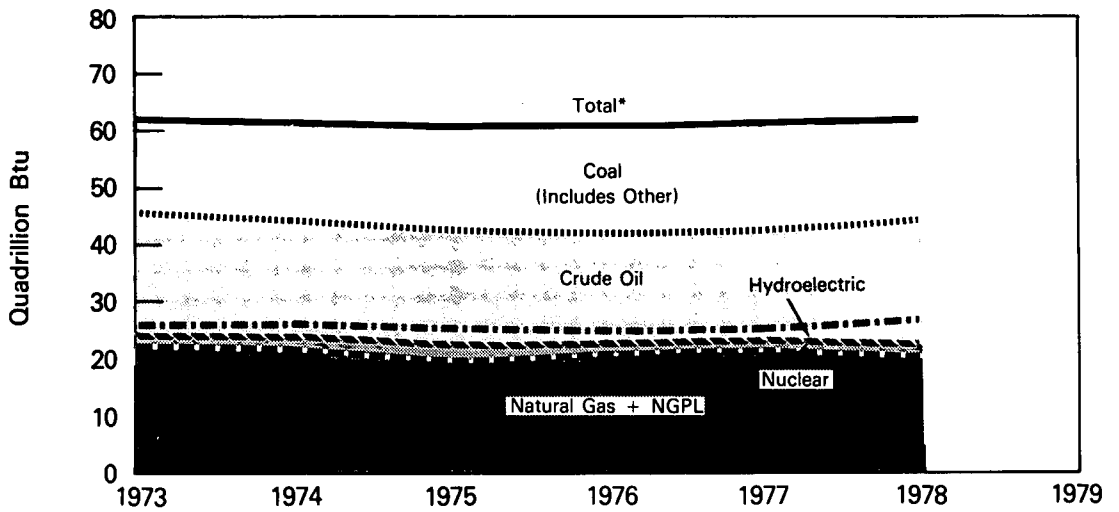
Executive Summary

Energy Production (Primary Energy Type)

Monthly



Yearly



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

Executive Summary

Domestic Energy Consumption by Primary Energy Type

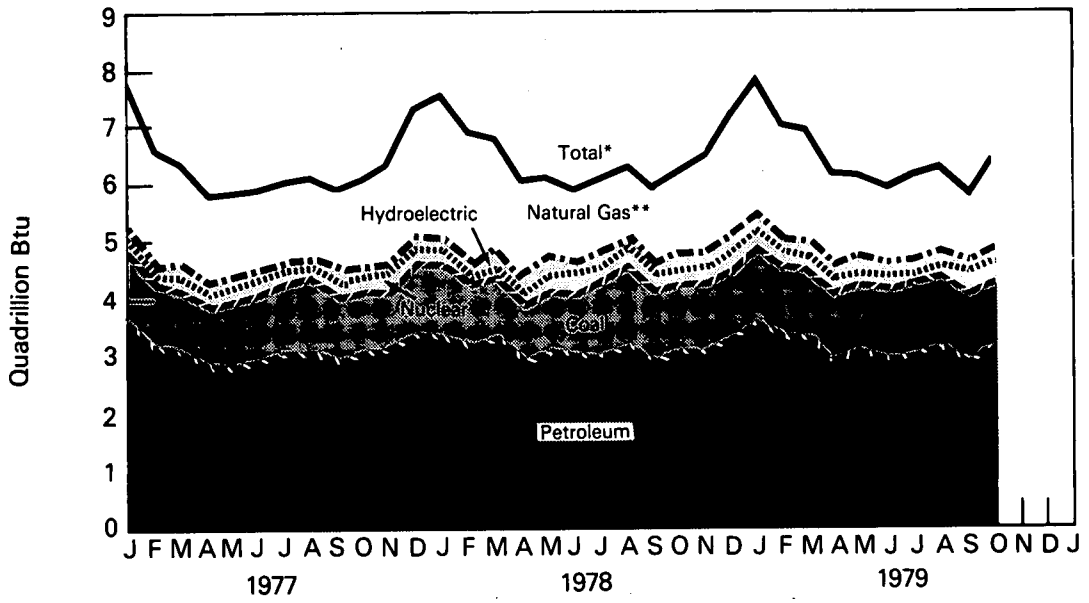
		Coal[1]	Natural Gas (dry)	Petro-leum	Hydro-electric Power[2]	Nuclear Electric Power	Net Imports of Coal Coke[3]	Other[4]	Total	Yearly Cumulative Total
		Quadrillion (10^{15}) Btu								
1973	**TOTAL**	**13.300**	**22.512**	**34.837**	**3.008**	**0.910**	**(0.008)**	**0.046**	**74.605**	
1974	**TOTAL**	**12.876**	**21.732**	**33.454**	**3.307**	**1.272**	**0.059**	**0.056**	**72.756**	
1975	**TOTAL**	**12.823**	**19.948**	**32.732**	**3.217**	**1.900**	**0.014**	**0.072**	**70.706**	
1976	**TOTAL**	**13.733**	**20.345**	**35.178**	**3.065**	**2.111**	**0.000**	**0.081**	**74.513**	
1977	**TOTAL**	**14.110**	**19.931**	**37.176**	**2.519**	**2.702**	**0.015**	**0.082**	**76.536**	
1978	January	1.236	2.432	3.384	0.280	0.278	0.001	0.007	7.618	7.618
	February	1.048	2.184	3.234	0.252	0.235	0.001	0.006	6.959	14.578
	March	0.998	1.958	3.367	0.276	0.242	0.005	0.005	6.851	21.428
	April	1.037	1.571	2.942	0.282	0.189	0.012	0.004	6.038	27.467
	May	1.110	1.409	3.123	0.319	0.220	0.025	0.004	6.209	33.676
	June	1.184	1.275	3.027	0.280	0.239	0.009	0.005	6.020	R39.695
	July	1.261	1.361	3.021	0.273	0.269	0.015	0.005	6.205	R45.900
	August	1.302	1.312	3.193	0.249	0.276	0.013	0.006	6.352	52.252
	September	1.228	1.261	2.976	0.239	0.239	0.012	0.007	5.961	R58.213
	October	1.191	1.470	3.155	0.221	0.248	0.015	0.005	6.305	64.518
	November	1.188	1.693	3.176	0.226	0.268	0.013	0.006	6.569	R71.087
	December	1.288	2.112	3.417	0.248	0.274	0.009	0.007	7.355	R78.442
	TOTAL	**R14.069**	**20.039**	**38.014**	**3.145**	**2.977**	**0.131**	**0.068**	**R78.442**	
1979	January	1.400	2.422	3.536	0.280	0.299	0.004	0.007	R7.948	R7.948
	February	R1.214	2.194	3.273	0.240	0.279	0.003	0.006	R7.209	R15.157
	March	R1.225	1.873	3.286	0.289	0.262	0.002	0.008	R6.944	R22.100
	April	R1.147	1.611	2.870	0.283	0.198	0.005	0.007	R6.122	R28.222
	May	1.203	1.398	3.032	0.321	0.162	0.011	0.007	6.134	R34.357
	June	1.243	1.291	2.930	0.279	0.173	0.010	0.007	5.933	R40.290
	July	1.341	1.299	2.896	0.256	0.224	0.008	0.007	R6.032	R46.321
	August	1.355	1.299	R3.097	0.241	0.261	0.009	0.008	R6.270	R52.591
	September	R1.215	1.276	2.840	0.216	0.235	0.008	0.007	R5.797	R58.389
	October	1.251	1.491	3.088	0.230	0.227	0.004	0.008	6.298	64.687
	TOTAL (Year to date)	**12.595**	**16.152**	**30.848**	**2.635**	**2.320**	**0.064**	**0.072**	**64.687**	

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]Parenthesis 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

Energy Consumption (Primary Energy Type)

Monthly



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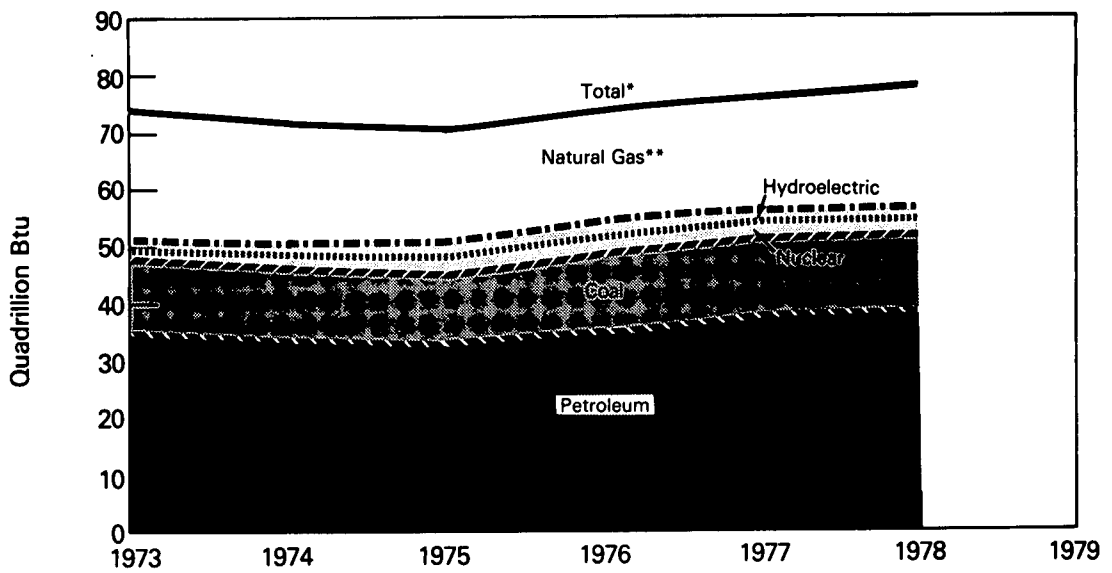


*Btu equivalents for all fuels are cumulated to create total.
**Includes net imports of coal coke and other.

Executive Summary

Domestic Energy Consumption by Economic Sector[1]

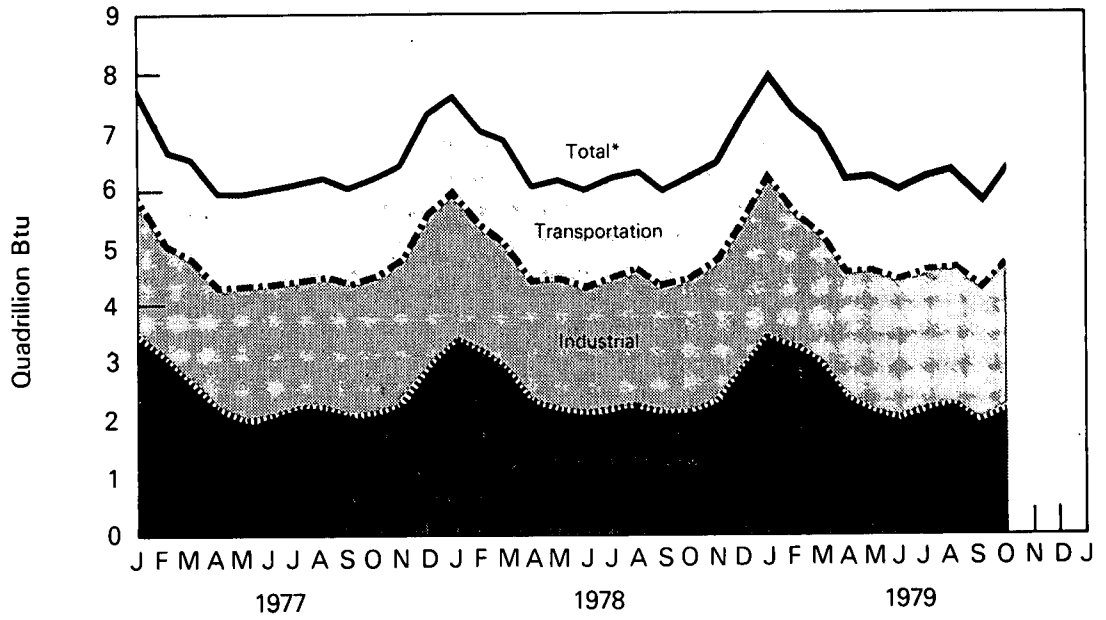
		Residential and Commercial	Industrial	Transportation	Total
			Quadrillion (10^{15}) Btu		
1973	**TOTAL**	**26.534**	**29.144**	**18.927**	**74.605**
1974	**TOTAL**	**25.912**	**28.430**	**18.414**	**72.756**
1975	**TOTAL**	**25.981**	**26.207**	**18.518**	**70.706**
1976	**TOTAL**	**27.180**	**27.924**	**19.408**	**74.513**
1977	**TOTAL**	**27.545**	**28.923**	**20.068**	**76.536**
1978	January	3.210	2.688	1.721	7.618
	February	3.064	2.261	1.634	6.959
	March	2.791	2.264	1.796	6.851
	April	2.186	2.223	1.629	6.038
	May	2.060	2.397	1.752	6.209
	June	1.986	2.322	1.712	6.020
	July	2.115	2.396	1.693	6.205
	August	2.139	2.431	1.781	6.352
	September	1.990	2.342	1.630	5.961
	October	R2.000	R2.584	1.721	6.305
	November	2.232	2.611	1.726	6.569
	December	2.809	2.727	1.819	7.355
	TOTAL	**R28.582**	**R29.247**	**20.614**	**R78.442**
1979	January	R3.432	2.731	1.784	R7.948
	February	3.207	2.317	1.685	R7.209
	March	2.800	R2.395	1.749	R6.944
	April	2.301	2.237	1.584	R6.122
	May	2.063	R2.413	1.659	6.134
	June	1.978	R2.360	1.595	5.933
	July	2.093	2.358	1.580	R6.032
	August	R2.173	R2.421	R1.676	R6.270
	September	1.965	R2.303	1.529	R5.797
	October	2.067	2.587	1.644	6.298
	TOTAL (Year to date)	**24.078**	**24.123**	**16.485**	**64.687**

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 footnotes on page 22.
R = Revised data.
Source: • See Footnotes on page 22.

Executive Summary

Energy Consumption (Economic Sector)

Monthly



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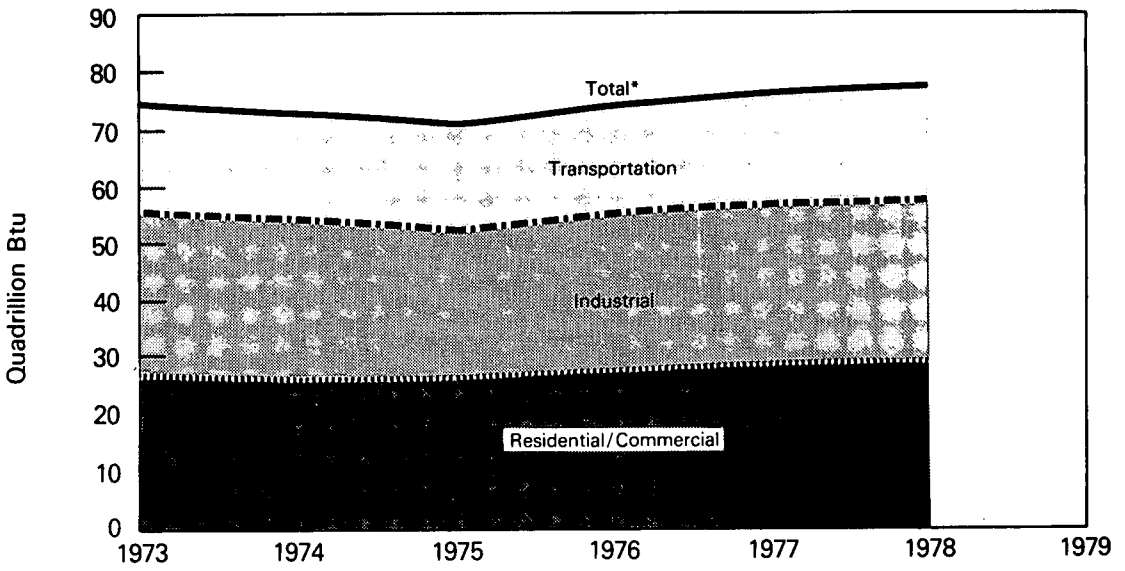


*Btu consumption for all sectors is cumulated to create total.

Executive Summary

Domestic Net Imports of Energy[1]

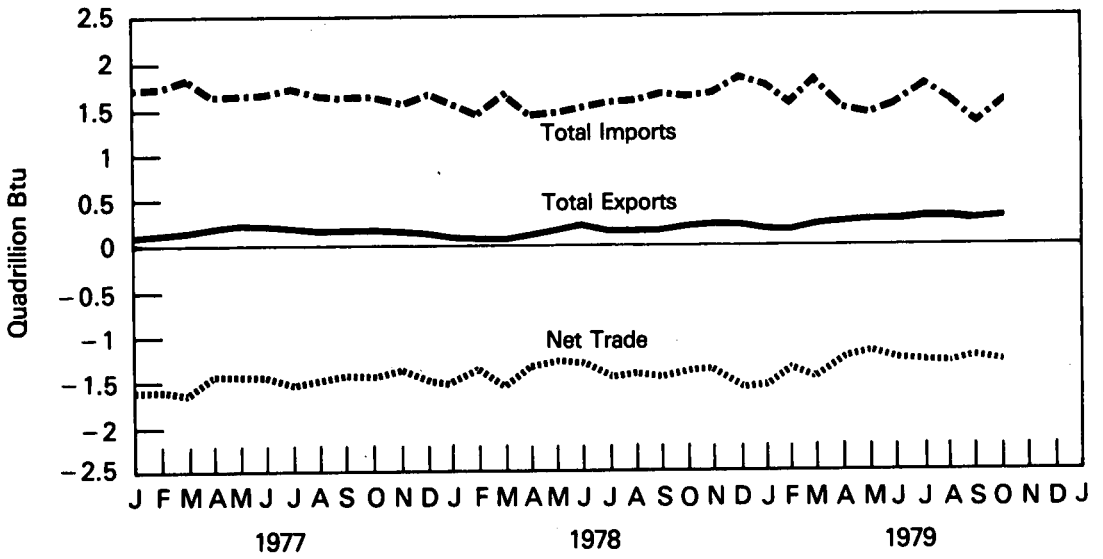
		Coal[2]	Crude Oil[3]	Refined Petroleum Products[4]	Natural Gas (Dry)	Electricity[5]	Coal Coke	Net Imports
				Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**(1.443)**	**6.883**	**6.097**	**0.981**	**0.148**	**(0.008)**	**12.659**
1974	**TOTAL**	**(1.585)**	**7.389**	**5.273**	**0.907**	**0.133**	**0.059**	**12.175**
1975	**TOTAL**	**(1.766)**	**8.709**	**3.799**	**0.904**	**0.064**	**0.014**	**11.725**
1976	**TOTAL**	**(1.590)**	**11.222**	**3.982**	**0.922**	**0.089**	**0.000**	**14.626**
1977	**TOTAL**	**(1.424)**	**13.921**	**4.320**	**0.981**	**0.182**	**0.015**	**17.995**
1978	January	(0.021)	1.106	0.355	0.083	0.015	0.001	1.540
	February	(0.012)	0.936	0.357	0.074	0.014	0.001	1.370
	March	(0.004)	1.099	0.391	0.083	0.015	0.005	1.589
	April	(0.060)	0.965	0.332	0.077	0.015	0.012	1.341
	May	(0.113)	1.009	0.296	0.071	0.015	0.025	1.304
	June	(0.139)	1.093	0.255	0.066	0.015	0.009	1.299
	July	(0.089)	1.115	0.322	0.069	0.015	0.015	1.448
	August	(0.092)	1.126	0.299	0.071	0.015	0.013	1.433
	September	(0.088)	1.186	0.312	0.069	0.015	0.012	1.505
	October	(0.127)	1.139	0.279	0.079	0.015	0.015	1.401
	November	(0.160)	1.153	0.325	0.090	0.015	0.013	1.435
	December	(0.118)	1.215	0.374	0.106	0.015	0.009	1.601
	TOTAL	**(1.023)**	**13.143**	**3.898**	**0.937**	**0.182**	**0.131**	**17.268**
1979	January	(0.093)	1.187	0.366	0.098	0.015	0.004	1.577
	February	(0.067)	0.999	0.310	0.092	0.014	0.003	1.351
	March	(0.122)	1.069	0.395	0.116	0.015	0.002	1.475
	April	(0.138)	1.020	0.254	0.109	0.015	0.005	1.265
	May	(0.165)	1.084	0.281	0.095	0.015	0.011	1.323
	June	(0.156)	1.107	0.258	0.099	0.015	0.010	1.333
	July	(0.168)	1.066	0.280	0.105	0.015	0.008	1.306
	August	(0.160)	R1.168	R0.269	0.090	0.015	0.009	R1.391
	September	(0.134)	R0.973	R0.186	R0.094	0.015	0.008	R1.142
	October	(0.200)	1.103	0.257	0.101	0.015	0.004	1.280
	TOTAL (Year to date)	**(1.403)**	**10.775**	**2.856**	**0.999**	**0.151**	**0.064**	**13.443**

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. Figures shown are estimates derived by dividing the yearly total by the number of days in the year and multiplying by the number of days in the month.
R = Revised data.
Source: • Energy Information Administration calculations based on data reported elsewhere in this publication.

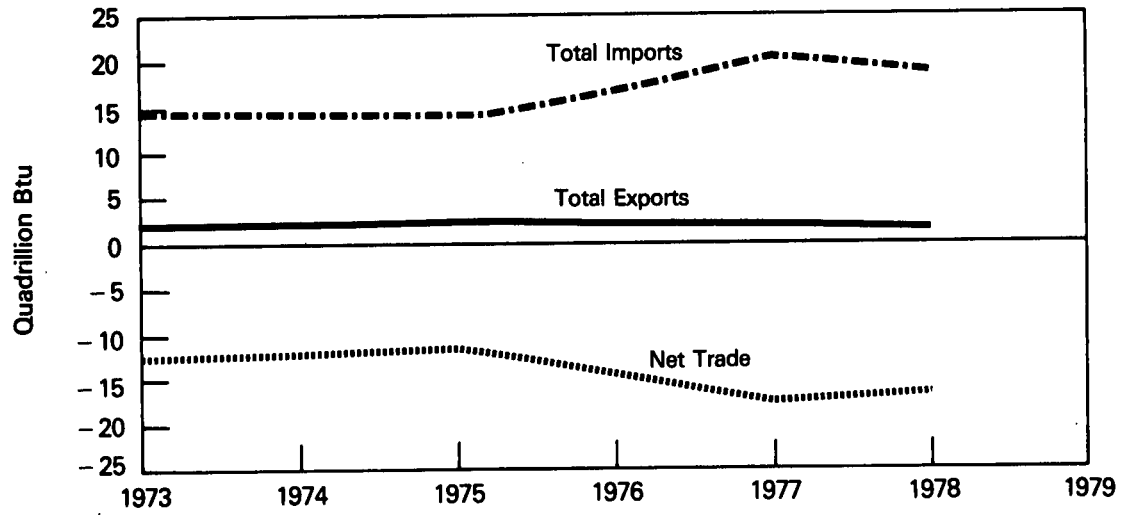
Executive Summary

Energy Imports and Exports

Monthly



Yearly



Executive Summary

Domestic 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**	**38,954**	**29,598**	**70,223**	**8,101**	**42,352**	**18,668**	**69,121**
1974	**TOTAL**	**3,444**	**54,704**	**38,996**	**97,144**	**25,454**	**51,205**	**23,592**	**100,251**
1975	**TOTAL**	**4,470**	**62,260**	**39,372**	**106,102**	**26,476**	**47,384**	**22,256**	**96,116**
1976	**TOTAL**	**4,226**	**67,282**	**41,811**	**113,319**	**33,997**	**60,005**	**26,676**	**120,678**
1977	**TOTAL**	**4,184**	**69,299**	**45,522**	**119,005**	**44,538**	**71,584**	**31,563**	**147,685**
1978	January	189	5,348	3,680	9,217	3,422	6,604	2,692	12,718
	February	141	5,480	3,721	9,342	3,502	7,062	2,722	13,286
	March	165	7,091	4,580	11,836	3,431	7,896	3,220	14,547
	April	285	6,942	4,633	11,860	3,514	7,908	3,064	14,486
	May	364	7,141	4,745	12,250	3,234	7,840	3,125	14,199
	June	424	7,025	4,823	12,272	3,472	8,085	2,958	14,515
	July	322	6,204	4,254	10,780	3,380	8,309	3,015	14,704
	August	335	6,480	4,614	11,429	3,677	7,554	2,793	14,024
	September	348	7,166	4,992	12,506	3,699	7,799	2,919	14,417
	October	422	7,661	4,843	12,926	3,492	8,466	3,160	15,118
	November	466	7,568	5,400	13,434	3,536	8,412	3,107	15,055
	December	418	7,823	5,063	13,304	3,746	7,990	3,220	14,956
	TOTAL	**3,879**	**81,929**	**55,348**	**141,156**	**42,105**	**93,925**	**35,995**	**172,025**
1979	January	350	7,035	4,965	12,350	4,228	8,391	3,227	15,846
	February	292	7,446	4,966	12,704	3,525	7,480	2,771	13,776
	March	436	8,842	6,020	15,298	3,948	8,432	3,385	15,765
	April	467	8,038	5,506	14,011	4,241	8,550	3,381	16,172
	May	471	8,474	5,584	14,529	4,166	8,690	3,655	16,512
	June	500	8,527	6,054	15,081	4,528	9,247	3,661	17,436
	July	534	7,879	6,077	14,490	5,075	8,778	3,262	17,115
	August	496	7,981	6,237	14,714	5,460	8,988	3,482	17,931
	September	438	8,086	6,142	14,666	6,084	8,539	3,452	18,076
	October	567	9,072	7,352	16,991	6,559	9,255	3,430	19,243
	November	522	8,849	7,577	16,948	5,411	9,363	3,884	18,658
	TOTAL (Year to date)	**5,073**	**90,229**	**66,480**	**161,782**	**53,225**	**95,713**	**37,590**	**186,530**

Totals may not equal sum of components due to independent rounding.

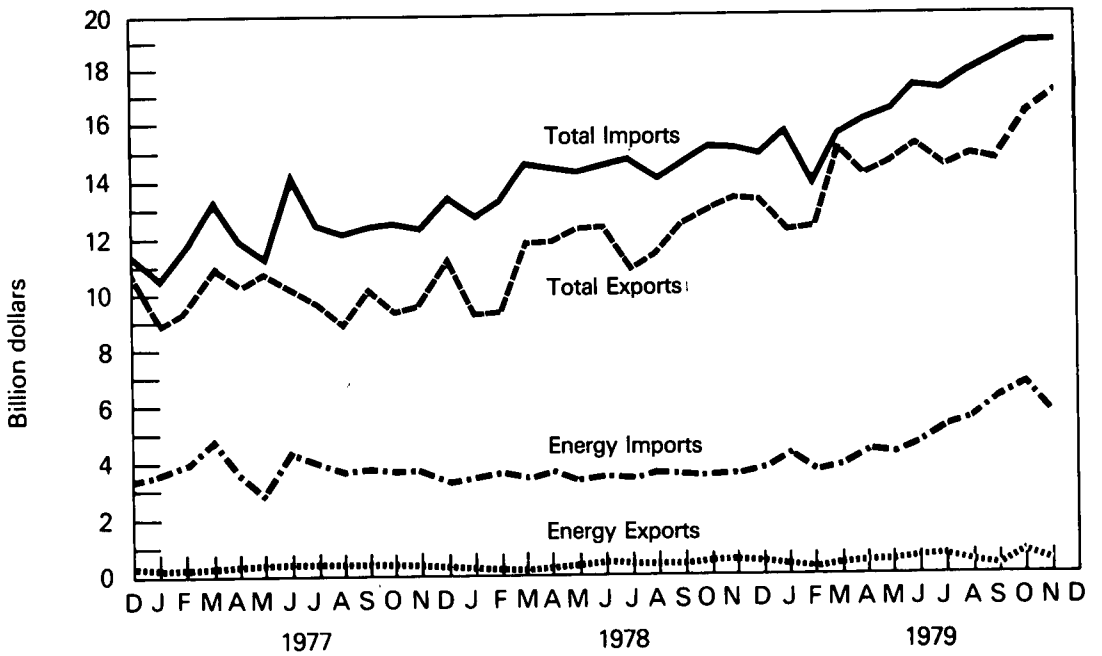
[1]Data presented are free alongside ship (f.a.s.) basis and are unadjusted for seasonality and working days. Beginning January 1979, the data excludes U.S. Department of Defense Military Assistance Program Grant-Aid Shipments. Commodity categories shown above include groups of BOC sections as follows: Energy—BOC section 3. (Mineral fuels, lubricants, and related materials). Manufactured products—BOC sections 6. (Manufactured goods classified chiefly by material), 7. (Machinery and transport equipment), and 8. (Miscellaneous manufactured articles, not elsewhere classified). Agricultural, chemical, and other—BOC sections 0. (Food and live animals), 1. (Beverages and tobacco), 2. (Crude material inedible, except fuels), 4. (Animal and vegetable fats and oils), 5. (Chemicals), and 9. (Commodities and transactions not classified according to kind).

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

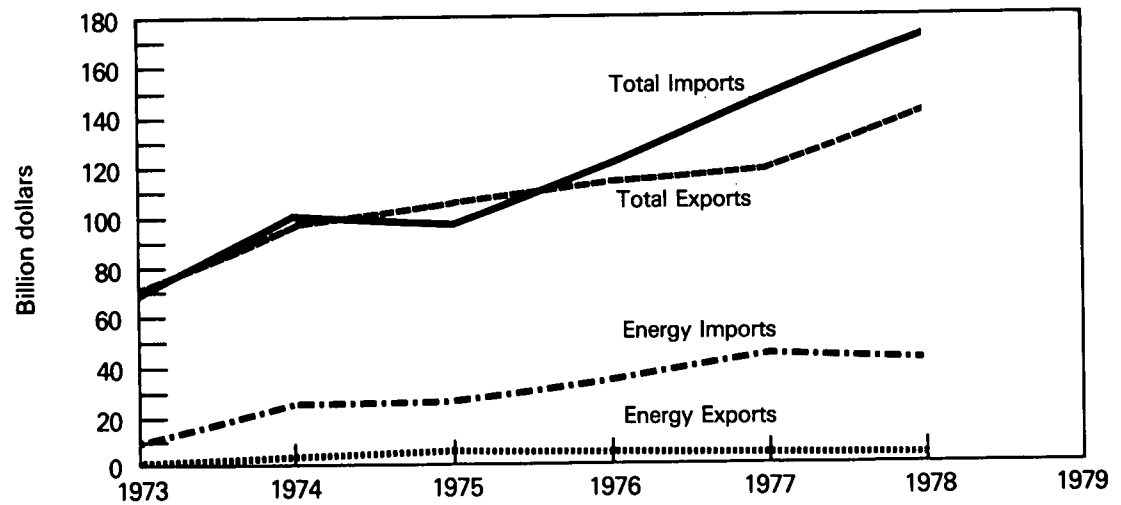
Executive Summary

Merchandise Trade Value

Monthly



Yearly



Executive Summary

Heating Degree-Days[1]

Petroleum Administration For Defense (PAD) Districts	December 3 through December 30					Cumulative July 1 through December 30				
	1979	1978[2]		Normal (1941-70)[2]		1979	1978[2]		Normal (1941-70)[2]	
PAD District I	655.2	701.6	(-6.6)	772.3	(-15.2)	1,500.6	1,576.6	(-4.8)	1,636.8	(-8.3)
New England Conn., Maine, Mass., N.H., R.I., Vt.	837.7	927.0	(-9.6)	977.4	(-14.3)	2,044.6	2,335.9	(-12.5)	2,181.1	(-6.3)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	757.8	816.6	(-7.2)	896.5	(-15.5)	1,758.5	1,880.4	(-6.5)	1,917.6	(-8.3)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W.Va.	420.8	429.7	(-2.1)	495.5	(-15.1)	874.0	786.7	(11.1)	975.5	(-10.4)
PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.	837.3	999.6	(-16.2)	995.4	(-15.9)	2,117.0	2,195.5	(-3.6)	2,216.7	(-4.5)
PAD District III Ala., Ark., La., Miss., N. Mex., Tex.	426.2	491.0	(-13.2)	456.4	(-6.6)	893.4	774.3	(15.4)	855.6	(4.4)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	877.5	1,174.0	(-25.3)	983.4	(-10.8)	2,310.6	2,721.6	(-15.1)	2,455.8	(-5.9)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	338.8	509.1	(-33.5)	433.5	(-21.8)	816.6	1,106.5	(-26.2)	1,061.6	(-23.1)
U.S. AVERAGE	**648.5**	**758.6**	**(-14.5)**	**765.1**	**(-15.2)**	**1,553.6**	**1,646.1**	**(-5.6)**	**1,672.9**	**(-7.1)**

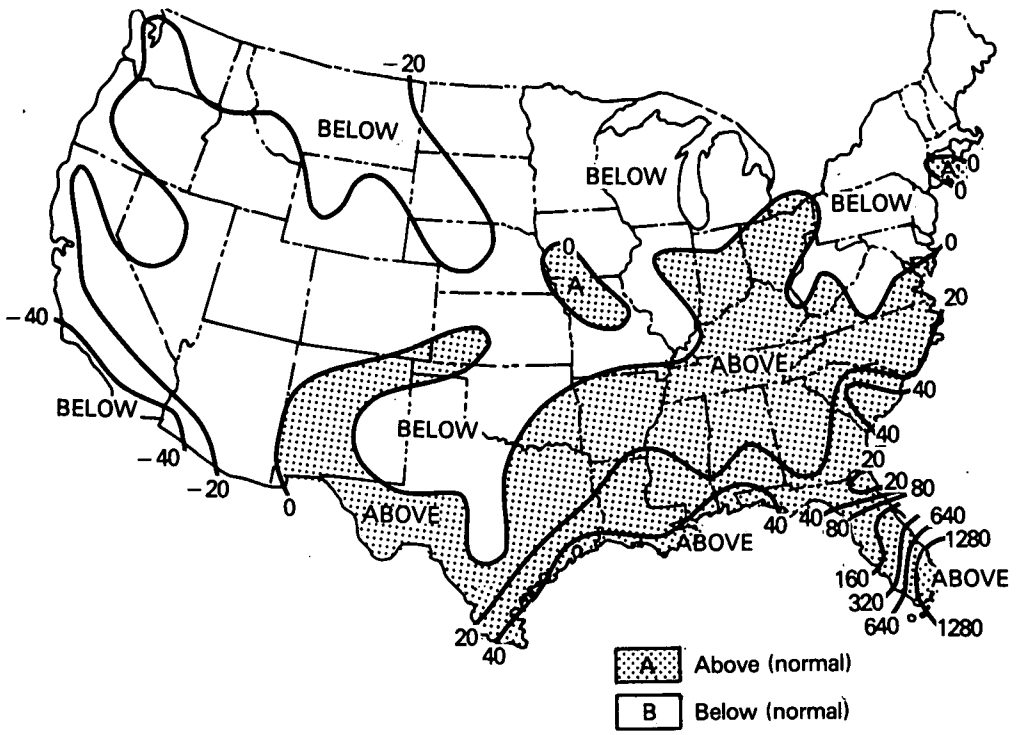
[1]See Explanatory Note 6 for explanation of degree-days.
[2]Percentage change in parentheses.

Executive Summary

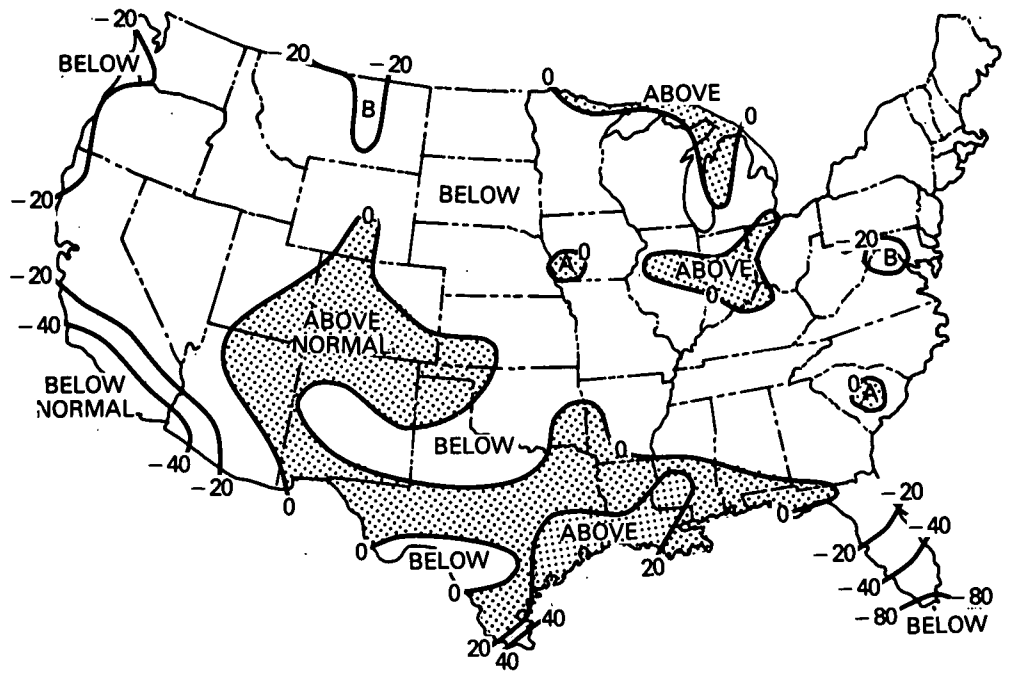
Heating Degree-Days

Heating Degree-Days Accumulated from July 1 through December 30.

Percent Departure from 1978



Percent Departure from Normal (1941-70)



Note: Above normal heating degree-days correspond to below normal temperatures.
Source: • Department of Commerce — NOAA.

Executive Summary

Energy Indicators —

		Energy Consumption per GNP Dollar				U.S. Dependence on Petroleum Imports[3]			
						Direct Imports			
		Energy Consumption per GNP Dollar[1]	Yearly Rate of Energy Consumption	Gross National Product (Annual rate) Current Dollars	Gross National Product (Annual rate) 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	74.605	1.307	1.235	0.91	2.99	6.26	17.31
1974	AVERAGE	59.9	72.756	1.413	1.214	0.75	3.28	6.11	16.65
1975	AVERAGE	59.3	70.706	1.516	1.192	1.38	3.60	6.06	16.32
1976	AVERAGE	58.6	74.513	1.700	1.271	2.42	5.07	7.31	17.46
1977	AVERAGE	57.4	76.536	1.887	1.333	3.18	6.19	8.81	18.43
1978	1st Qtr	64.2	86.902	1.992	1.354	2.90	5.75	R8.33	R20.08
	2nd Qtr	53.0	73.269	2.088	1.383	2.76	5.31	7.79	18.08
	3rd Qtr	52.8	73.468	2.136	1.391	2.98	R5.82	8.53	18.08
	4th Qtr	56.8	80.256	2.212	1.413	R3.21	R6.12	8.80	19.17
	AVERAGE	56.6	78.443	2.107	1.385	R2.96	R5.75	8.36	R18.85
1979	1st Qtr	62.3	89.620	2.265	1.416	3.23	5.81	8.73	20.30
	2nd Qtr	51.3	72.952	2.330	1.422	3.14	5.38	8.01	17.56
	3rd Qtr	50.0	71.711	2.395	1.434	2.78	5.22	7.57	17.33

[1]Thousand Btu per 1972 constant dollar.
[2]Current dollars converted to 1972 constant dollars by the formula:

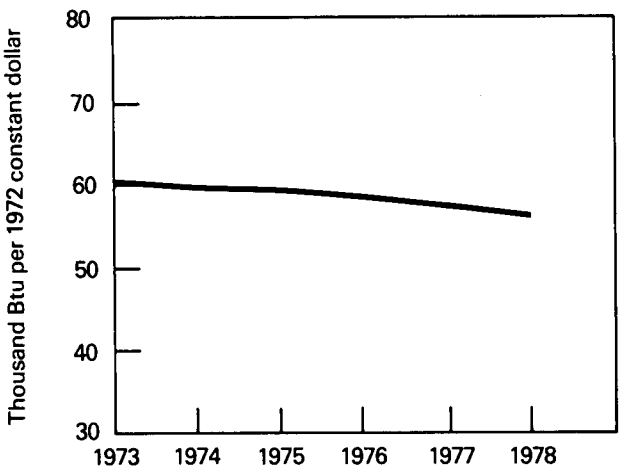
$$\text{Constant 1972 dollars} = \frac{\text{Current dollars in year N}}{\text{Gross National Product implicit price deflator in year N}} \times 100$$

The Gross National Product deflators (1972 = 100) were determined by the Department of Commerce, Bureau of Economic Analysis.
[3]Beginning in October 1977 Strategic Petroleum Reserve imports are included.
R = Revised data.

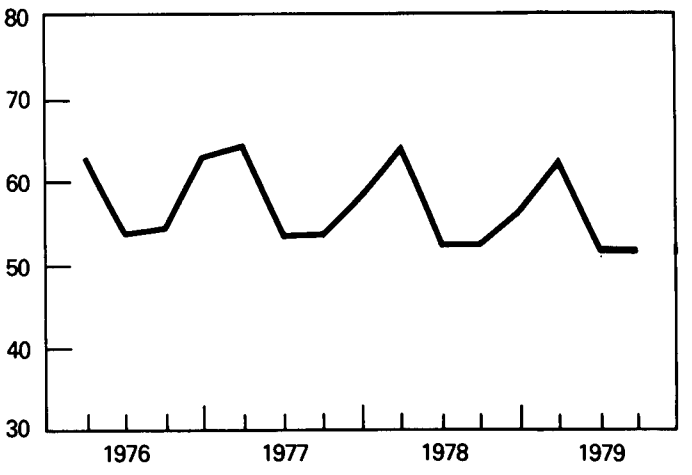
Executive Summary

Energy Consumption per GNP Dollar

Yearly

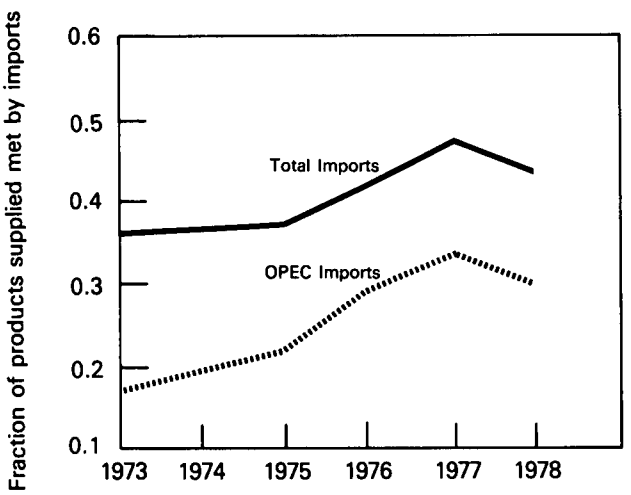


Quarterly

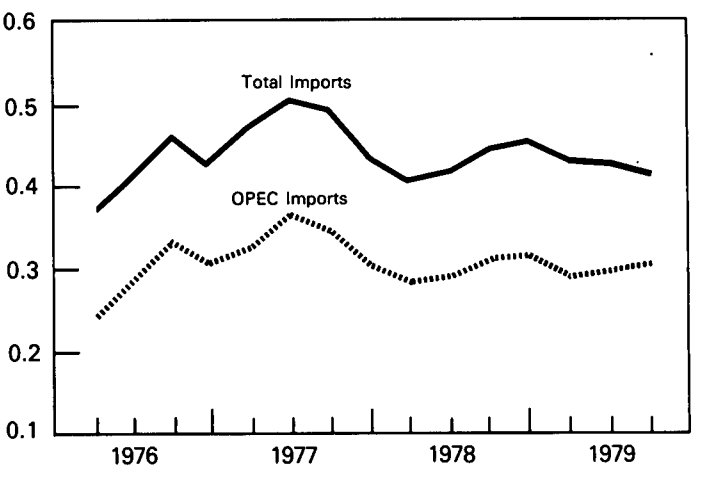


U.S. Dependence on Petroleum Imports

Yearly



Quarterly

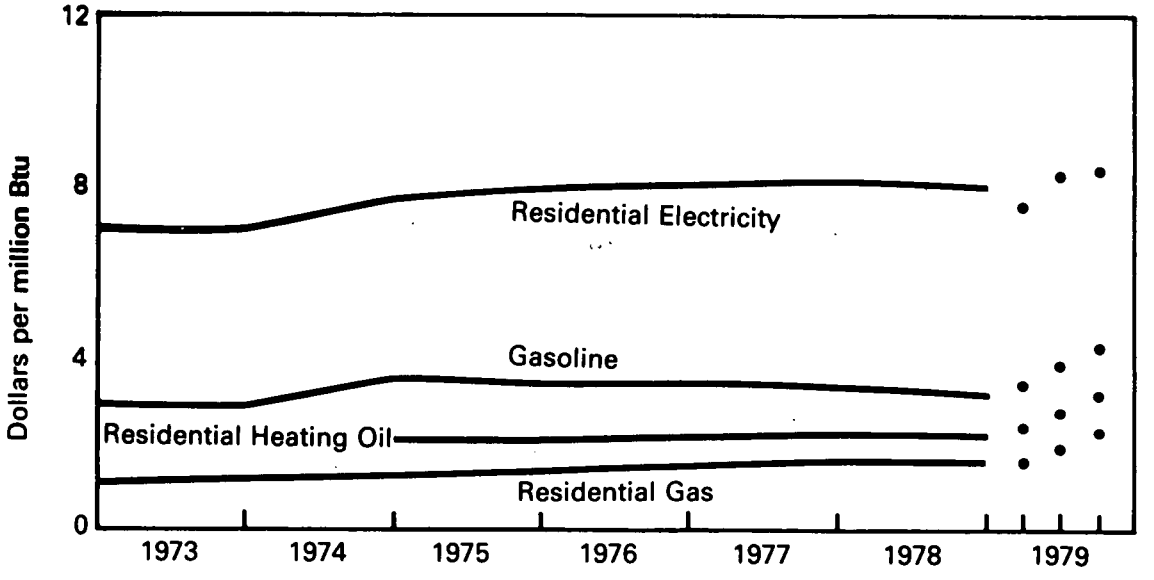


Executive Summary

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

		Leaded Regular Motor Gasoline		Residential Heating Oil		Residential Natural Gas		Residential Electricity	
		cent/gal	$/MMBtu	cent/gal	$/MMBtu	cent/Mcf	$/MMBtu	cent/kWh	$/MMBtu
1973	AVERAGE	36.5	2.92	NA	NA	121.2	1.24	2.39	7.00
1974	AVERAGE	44.8	3.59	29.4	2.12	123.4	1.23	2.63	7.71
1975	AVERAGE	43.7	3.50	29.3	2.11	132.8	1.33	2.73	7.99
1976	AVERAGE	43.1	3.46	30.2	2.18	145.4	R1.48	2.77	R8.03
1977	AVERAGE	43.2	3.46	31.2	2.25	162.2	R1.65	2.81	R8.20
1978	1st Qtr	41.0	3.28	32.3	2.33	155.0	1.58	2.65	7.76
	2nd Qtr	40.6	3.25	31.4	2.26	169.7	1.73	2.88	8.44
	3rd Qtr	41.3	3.31	30.7	2.21	196.3	2.00	2.85	8.35
	4th Qtr	41.3	3.31	32.1	2.31	164.5	1.68	2.70	7.91
	AVERAGE	41.0	3.28	31.7	2.29	R164.4	R1.68	2.76	8.10
1979	1st Qtr	42.6	3.41	33.8	2.44	158.0	1.61	2.51	R7.36
	2nd Qtr	47.5	3.80	37.2	2.68	R172.6	R1.76	R2.74	8.03
	3rd Qtr	54.9	4.39	44.0	3.17	203.4	2.07	2.79	8.17

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



NA = Not available.

Sources: • Motor Gasoline — 1973 through 1977, Lundberg Survey Inc. and 1978, U.S. Department of Energy Forms EIA-8 and EIA 79, "Retail Motor Fuels Service Station Survey".

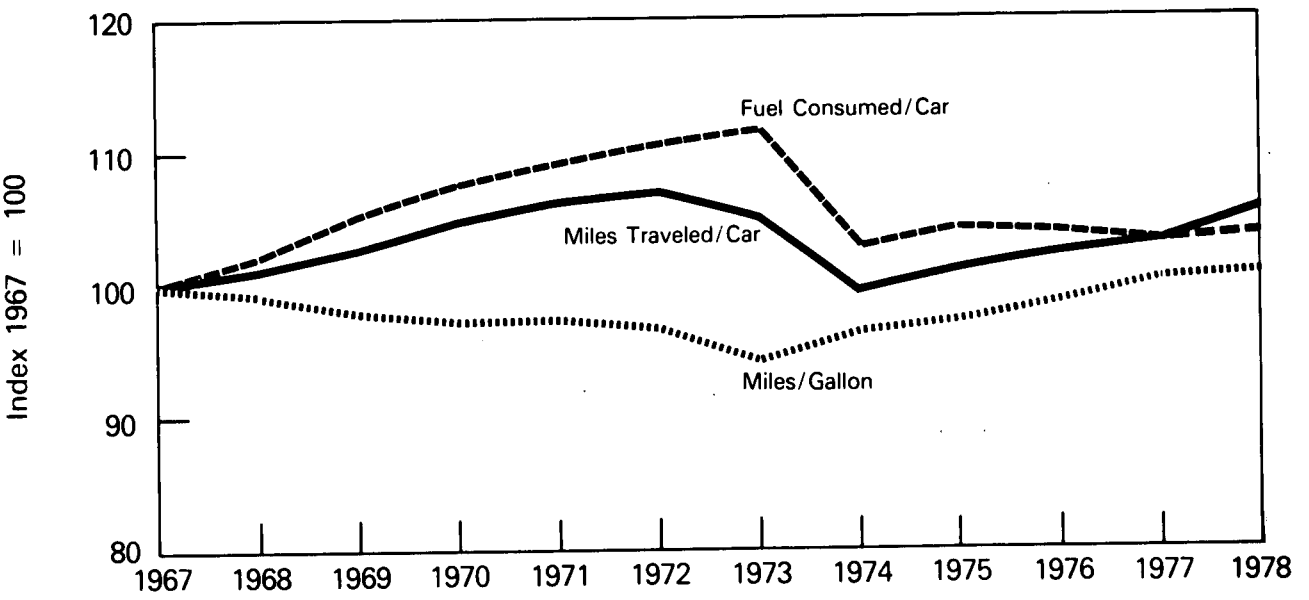
- Heating Oil — 1974 and 1975, Form CLC-92, "No. 2 Heating Oil Monthly Price Adjustment Report," and 1976 forward, FEA Form P112 M 1, and EIA 9, "No. 2 Heating Oil Supply/Price Monitoring Report."
- Natural Gas — 1973 through 1978 annual numbers, Bureau of Mines and Energy Information Administration 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;" 1978 and 1979 quarterly numbers, the American Gas Association, "Quarterly Report of Gas Industry Operations."
- Electricity — FPC Form 5, "Reports of Classes A and B Privately Owned Electric Utilities."
- 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

U.S. Passenger Car Efficiency



Source: • U.S. Department of Transportation, Federal Highway Administration, Federal Highway Statistics Division, "Highway Statistics", Table VM-1.

Energy Consumption

Domestic energy consumption in October 1979 was 6.3 quadrillion Btu, 8.6 percent higher than during a month earlier. This figure was 0.1 percent lower than the October 1978 consumption level.

The residential and commercial sector consumption was 2.1 quadrillion Btu in October 1979, 5.2 percent higher than in September and 3.4 percent higher than the amount consumed during October 1978. The residential and commercial sector consumed 32.8 percent of the total consumption for October 1979, up from the sector's 31.7 percent share in October 1978.

The industrial sector consumption was 2.6 quadrillion Btu in October 1979, up 12.3 percent from September 1979, and up 0.1 percent from the consumption level in October 1978. The industrial sector consumed 41.1 percent of the October 1979 total, as compared to the 41.0 percent share of October 1978.

The transportation sector consumption was 1.6 quadrillion Btu in October 1979, up 7.5 percent from September 1979 and down 4.5 percent from the consumption level in October 1978. This sector consumed 26.1 percent of the October 1979 total, as compared to a 27.3 percent share in October 1978.

The electric utilities consumption was an estimated 2.0 quadrillion Btu of energy in October1979, 0.5 percent higher than in the previous month, and 4.9 percent higher than the energy consumed in October 1978. Coal contributed 47.2 percent of the energy consumed by electric utilities in October 1979, while natural gas contributed 17.2 percent, petroleum 12.1 percent, nuclear power 11.6 percent, hydroelectric power 11.6 percent, and geothermal, wood and waste 0.4 perecent. Of the total energy consumed by the electric utilities in October 1979, 56.6 percent was ultimately consumed by the residential and commercial sector (including electricity distributed and losses), 43.1 percent by the industrial sector, and 0.2 percent by the transportation sector.

Consumption

Energy Consumption Summary
October 1979 [Quadrillion (10^{15}) Btu]

Primary Energy Source	Sector[1] Residential and Commercial	Industrial	Transportation	Electric Utilities	TOTAL
Coal[2]	0.022	0.303	0.000	0.926	1.251
Natural Gas (dry)[3]	0.363	0.752	0.038	0.337	1.491
Petroleum[4]	0.569	0.679	1.602	0.238	3.088
Hydroelectric[5]	0.000	0.003	0.000	0.227	0.230
Nuclear[6]	0.000	0.000	0.000	0.227	0.227
Net Coke Imports[7]	0.000	0.004	0.000	0.000	0.004
Other[8]	0.000	0.000	0.000	0.008	0.008
TOTAL PRIMARY ENERGY	**0.955**	**1.741**	**1.640**	**1.963**	**6.298**
Electricity Distributed[9]	0.320	0.244	0.001	(0.565)	
Net Energy Consumption	1.275	1.984	1.641		4.901
Electrical Energy Loss Distributed[10]	0.792	0.602	0.003	(1.397)	1.397
TOTAL ENERGY	**2.067**	**2.587**	**1.644**		**6.298**

Footnotes

Totals may not equal sum of components due to independent rounding.

[1]See Explanatory Note 5 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.

Footnotes 2 through 10 apply to the table above and provide explanations and sources for the three individual sector tables following in this publication:

[2]Bituminous coal, anthracite, and lignite. *Sources:* • Anthracite—1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook,* "Coal—Pennsylvania anthracite, Annual."
• 1977 through 1979, U.S. Department of Energy (DOE), Energy Information Administration, (EIA) *Energy Data Report,* "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 1979, DOE, EIA, *Energy Data Report,* "Weekly Coal Report."
• Electric Utility consumption of coal sources: same as footnote 6 below.

[3]Natural gas consumption by the Transportation Sector is mostly for pipeline use. It is estimated to be the following percentages of non-utility gas consumption: 1973: 3.76%; 1974: 3.56%; 1975: 3.25%; and 1976 through 1979: 3.26%. American Gas Association (AGA) data are used to estimate monthly consumption of natural gas by the Residential and Commercial Sector. In completed years, the AGA consumption in each month is taken as a portion of the AGA year's total: that fraction is multiplied by the DOE total for that year to obtain a monthly estimate. For incomplete years, the AGA Residential and Commercial Sector's monthly consumption of natural gas is used directly. In 1973, 36 percent of the AGA's "other" sector is added to the Residential and Commercial Sector; in 1974 this percent is increased to 39 percent; and from 1975 all of the "other" sector is added to the Residential and Commercial Sector. The industrial Sector consumption of natural gas is the difference between the total and the sum of the other sectors.
Sources: • 1973 through 1975: DOI, BOM, *Minerals Yearbook,* "Natural Gas" chapter.
• 1976 through 1979, 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 1979, DOE, EIA, FPC, Form 4, "Monthly Power Plant Report." Residential and Commercial Sector annual data sources are the same as for total natural gas consumption.

[4]Petroleum products are allocated to the Transportation Sector as follows: motor gasoline 100% for all years; naphtha jet fuel 100% for all years; kerosene jet fuel 1973: 98.0%; 1974: 98.2%; 1975: 98.3%; 1976: 98.3%; and 1977 and 1978: 97.6%; distillate fuel oil 1973: 32.8%; 1974: 34.1%; 1975: 34.1%; 1976: 33.7%; and 1977 through 1979: 34.0%; residual fuel oil 1973: 11.3%; 1974: 11.7%; 1975: 12.9%; 1976: 13.3%; and 1977 through 1979: 13.2%; all other petroleum products 1973: 4.6%; 1974: 4.5%; 1975: 4.2%; 1976: 4.2%; and 1977 through 1979: 3.9%. The remainder is distributed to the Residential and Commercial Sector and the Industrial Sector by applying the following percentage shares by year: Residential and Commercial Sector—1973: 51.47%; 1974: 49.75%; 1975: 49.62%; 1976: 48.49%; and 1977 through 1979: 45.59%; and industrial Sector—1973: 48.53%; 1974: 50.25%; 1975: 50.38%; 1976: 51.51%; and 1977 through 1979: 48.53%. These percentages are developed on a Btu basis from the sources listed above for the other sectors.
Sources: • 1973 through 1975: DOI, BOM, *Mineral Industry Surveys,* "Petroleum Statement, Annual."
• 1976 and 1977: DOE, EIA, *Energy Data Reports,* "Petroleum Statement. Annual."
• 1978 and 1979: DOE, EIA, *Energy Data Reports,* "Petroleum Statement, Monthly" and "Monthly Petroleum Statistics Report."
• Electric Utility consumption of petroleum sources: 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1979: DOE, FPC, Form 4, "Monthly Power Plant Report."
• Transportation Sector consumption of petroleum: 1973 through 1975, derived from DOI, BOM, *Mineral Industry Surveys,* "Fuel Oil Sales, Annual" and "Liquefied Petroleum Gas Sales, Annual."
• 1976 through 1979: DOE, *Energy Data Reports.* "Fuel Oil Sales, Annual" and "Liquefied Petroleum Gas Sales, Annual," and from the sources listed for total petroleum consumption.

[5]Industrial and electric utility generation of hydropower. *Sources:* • 1973 through 1976, FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1979: DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."
• Imports and exports of electricity— *Sources:* FPC, Form 12, "Power System Statement."

[6]*Sources:* • 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
• 1977 through 1979: DOE, EIA, FPC, Form 4, "Monthly Power Plant Report."

[7]Net coke imports is coke made from coal. *Sources:* • 1973 through 1975, DOI, BOM, *Minerals Yearbook,* "Coke and Coal Chemicals, Annual."
• 1976 through 1979: DOE, EIA, *Energy Data Reports.* "Coke and Coal Chemicals, Monthly."

[8]"Other" is electricity produced from geothermal power and from wood and waste. *Sources:* same as footnote 6 above.

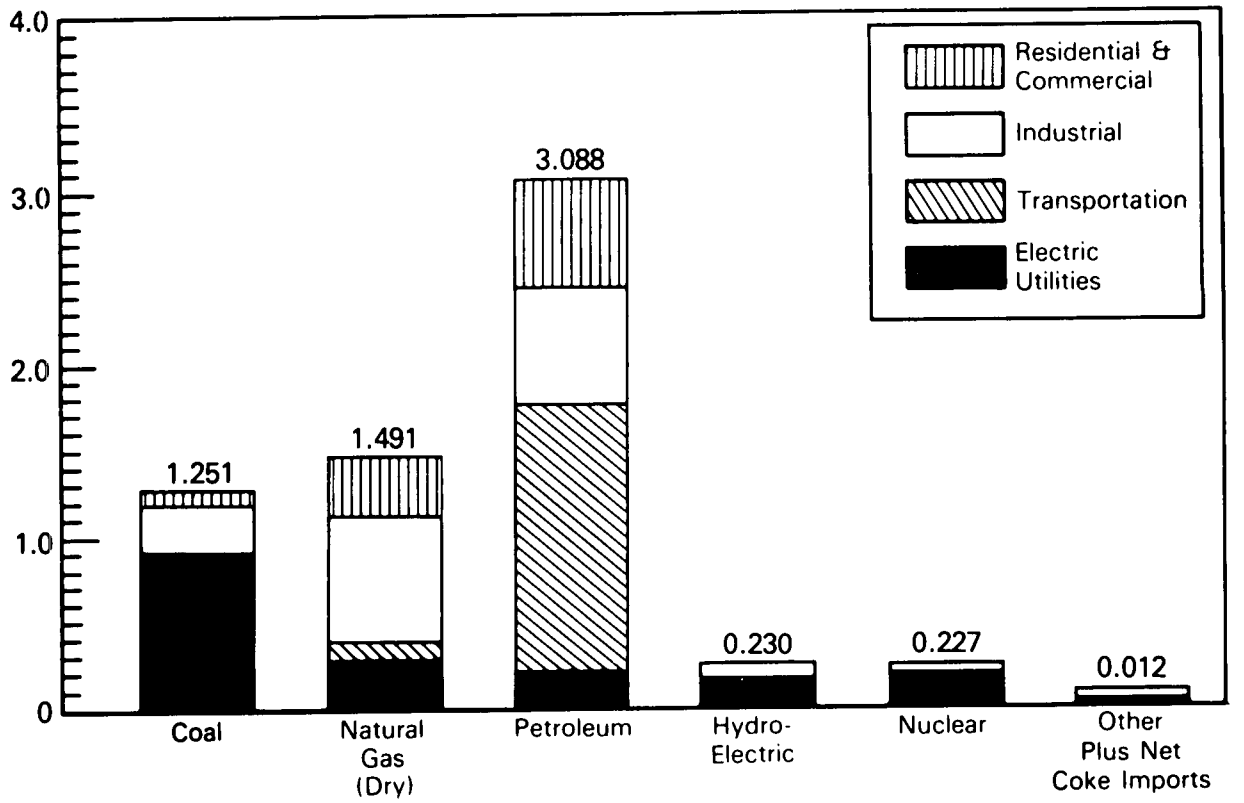
[9]Electricity was distributed using EIA data on kilowatt-hour sales to ultimate customers. Electrical energy consumed by railroads was distributed to the Transportation Sector.
All "Other" sales, largely for use in government buildings, were distributed to the Residential and Commercial Sector. *Source:* • Sales data—FPC, Form 5, "Monthly Statement of Electric Operating Revenue and income."

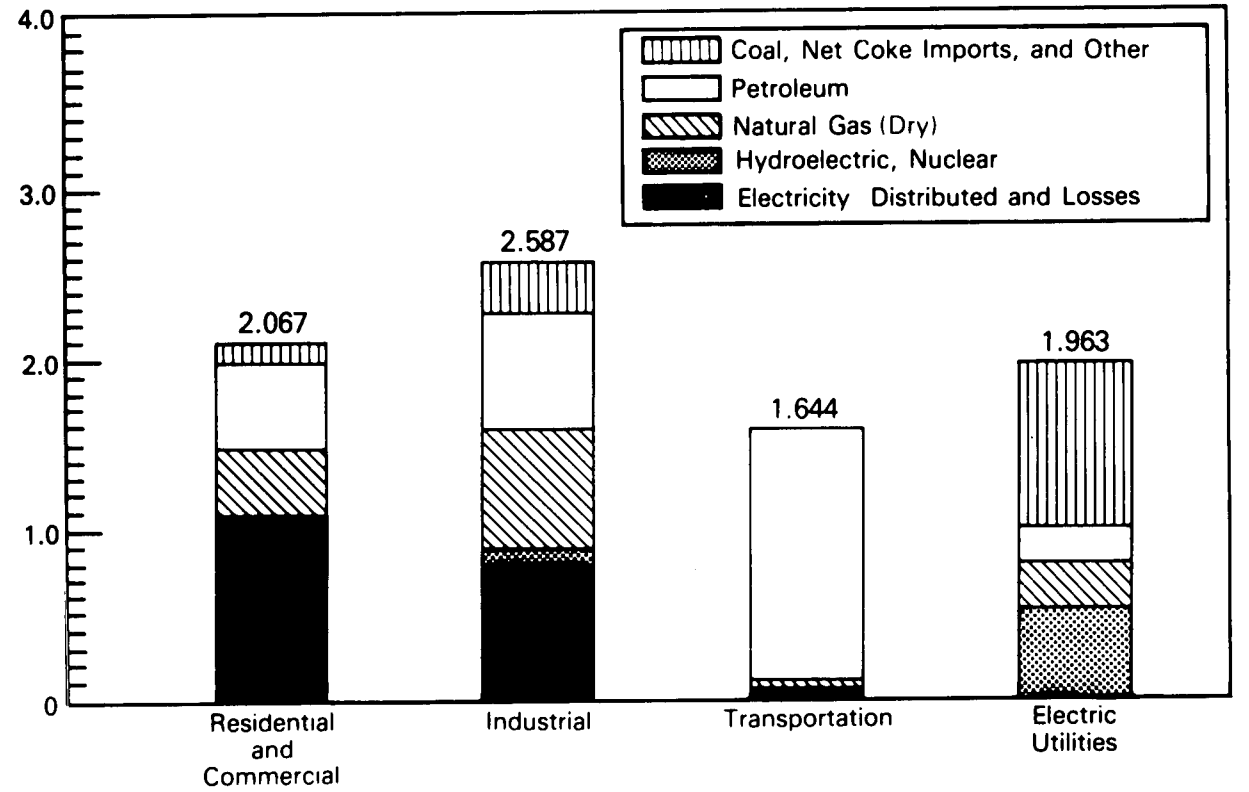
[10]In generating electricity with nuclear or fossil fuels, approximately 65 percent of the energy is lost in the form of heat. Transmission and and distribution losses consume about an additional 3 percent of the energy inputs of the utility industry. In order to fully account for all energy consumed 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.

Consumption

Energy Consumption Summary
October 1979

Quadrillion (10^{15}) Btu





Note: Totals may not equal sum of components due to independent rounding.

Consumption

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

		Coal	Natural Gas (dry)	Petroleum	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Yearly Cumulative Total Energy Use
					Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**0.293**	**7.626**	**6.831**	**3.489**	**8.295**	**26.534**	
1974	**TOTAL**	**0.292**	**7.518**	**6.214**	**3.469**	**8.419**	**25.912**	
1975	**TOTAL**	**0.248**	**7.581**	**5.839**	**3.584**	**8.729**	**25.981**	
1976	**TOTAL**	**0.239**	**7.866**	**6.290**	**3.725**	**9.060**	**27.180**	
1977	**TOTAL**	**0.234**	**7.462**	**6.327**	**3.932**	**9.589**	**27.545**	
1978	January	0.028	1.232	0.599	0.375	0.976	3.210	3.210
	February	0.029	1.257	0.573	0.367	0.838	3.064	6.274
	March	0.023	1.038	0.565	0.342	0.823	2.791	9.065
	April	0.020	0.683	0.499	0.293	0.692	2.186	11.251
	May	0.018	0.483	0.524	0.283	0.752	2.060	13.311
	June	0.017	0.313	0.485	0.324	0.846	1.986	15.297
	July	0.015	0.264	0.478	0.376	0.982	2.115	17.412
	August	0.016	0.246	0.502	0.385	0.990	2.139	19.551
	September	0.018	0.252	0.500	0.377	0.843	1.990	21.541
	October	0.026	R0.358	0.550	R0.325	R0.743	R2.000	R23.541
	November	0.027	0.602	0.554	0.301	0.749	2.232	R25.773
	December	0.029	0.966	0.594	0.340	0.880	2.809	R28.582
	TOTAL	**0.265**	**R7.692**	**6.423**	**R4.087**	**R10.114**	**R28.582**	
1979	January	0.035	1.308	0.641	0.397	1.051	R3.432	R3.432
	February	0.022	1.329	0.596	0.385	0.874	3.207	6.639
	March	0.017	0.993	0.619	0.349	0.822	2.800	9.439
	April	0.016	0.748	0.508	0.309	0.720	2.301	11.740
	May	0.015	0.462	0.539	0.297	0.751	2.063	R13.802
	June	0.015	0.320	0.507	0.321	0.815	1.978	15.781
	July	0.013	0.273	0.491	0.362	0.954	2.093	17.874
	August	0.012	0.252	R0.537	0.389	0.982	R2.173	R20.046
	September	0.016	0.263	0.505	0.368	0.813	1.965	R22.011
	October	0.022	0.363	0.569	0.320	0.792	2.067	24.078
	TOTAL (Year to date)	**0.183**	**6.313**	**5.511**	**3.498**	**8.574**	**24.078**	

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 footnotes on page 22.
R = Revised data.
Source: • See footnotes on page 22.

Consumption

Energy Consumption by the Industrial Economic Sector[1]

		Coal	Natural Gas (dry)	Petro-leum	Hydro-electric	Net Coke Imports[2]	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Yearly Cumulative Total Energy Use
						Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**4.377**	**10.397**	**6.441**	**0.033**	**(0.008)**	**2.341**	**5.564**	**29.144**	
1974	**TOTAL**	**4.047**	**10.012**	**6.277**	**0.031**	**0.059**	**2.337**	**5.668**	**28.430**	
1975	**TOTAL**	**3.786**	**8.532**	**5.929**	**0.030**	**0.014**	**2.304**	**5.613**	**26.207**	
1976	**TOTAL**	**3.773**	**8.768**	**6.682**	**0.033**	**0.000**	**2.525**	**6.144**	**27.924**	
1977	**TOTAL**	**3.612**	**8.641**	**7.552**	**0.037**	**0.015**	**2.635**	**6.431**	**28.923**	
1978	January	0.286	0.893	0.715	0.003	0.001	0.219	0.571	2.688	2.688
	February	0.246	0.645	0.684	0.003	0.001	0.208	0.475	2.261	4.949
	March	0.243	0.625	0.674	0.003	0.005	0.210	0.505	2.264	7.213
	April	0.274	0.613	0.596	0.003	0.012	0.215	0.509	2.223	9.436
	May	0.293	0.619	0.626	0.003	0.025	0.227	0.604	2.397	11.833
	June	0.287	0.599	0.579	0.003	0.009	0.234	0.610	2.322	14.155
	July	0.291	0.690	0.571	0.003	0.015	0.229	0.598	2.396	R16.551
	August	0.288	0.682	0.599	0.002	0.013	0.237	0.609	2.431	R18.982
	September	0.288	0.670	0.596	0.003	0.012	0.239	0.534	2.342	21.324
	October	0.309	R0.802	0.656	0.003	0.015	R0.243	R0.556	R2.584	R23.908
	November	0.308	0.808	0.661	0.003	0.013	0.235	0.585	2.611	R26.519
	December	0.319	0.858	0.709	0.003	0.009	0.231	0.598	2.727	R29.247
	TOTAL	**3.433**	**R8.504**	**7.666**	**0.036**	**0.131**	**R2.726**	**6.752**	**R29.247**	
1979	January	0.314	0.807	0.765	0.003	0.004	0.230	0.608	2.731	2.731
	February	R0.288	0.567	0.711	0.003	0.003	0.228	0.517	2.317	R5.049
	March	R0.307	0.557	0.738	0.003	0.002	0.235	0.552	R2.395	R7.444
	April	0.292	0.549	0.606	0.003	0.005	0.235	0.546	2.237	R9.681
	May	R0.293	0.613	0.643	0.003	0.011	0.240	0.608	R2.413	R12.094
	June	0.275	0.608	0.606	0.003	0.010	0.242	0.616	R2.360	R14.453
	July	R0.281	0.614	0.585	0.003	0.008	0.239	0.628	2.358	R16.812
	August	0.288	0.627	R0.641	0.003	0.009	0.242	0.611	R2.421	R19.233
	September	0.290	R0.633	0.602	0.003	0.008	0.239	0.529	R2.303	R21.536
	October	0.303	0.752	0.679	0.003	0.004	0.244	0.602	2.587	24.123
	TOTAL (Year to date)	**2.932**	**6.328**	**6.577**	**0.031**	**0.064**	**2.374**	**5.818**	**24.123**	

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 footnotes on page 22.
[2]Net Imports = imports minus exports. Parentheses indicate exports are greater than imports.
R = Revised data.
Source: • See footnotes on page 22.

Consumption

Energy Consumption by the Transportation Economic Sector[1]

		Coal	Natural Gas (dry)	Petroleum	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Yearly Cumulative Total Energy Use
		Quadrillion (10^{15}) Btu						
1973	**TOTAL**	**0.003**	**0.743**	**18.132**	**0.014**	**0.034**	**18.927**	
1974	**TOTAL**	**0.002**	**0.685**	**17.677**	**0.015**	**0.035**	**18.414**	
1975	**TOTAL**	**0.001**	**0.595**	**17.872**	**0.015**	**0.035**	**18.518**	
1976	**TOTAL**	**0.000**	**0.559**	**18.799**	**0.015**	**0.036**	**19.408**	
1977	**TOTAL**	**0.000**	**0.543**	**19.476**	**0.014**	**0.035**	**20.068**	
1978	January	0.000	0.072	1.644	0.001	0.004	1.721	1.721
	February	0.000	0.064	1.565	0.001	0.003	1.634	3.354
	March	0.000	0.056	1.735	0.001	0.003	1.796	5.150
	April	0.000	0.044	1.582	0.001	0.003	1.629	6.780
	May	0.000	0.037	1.711	0.001	0.003	1.752	8.532
	June	0.000	0.031	1.677	0.001	0.003	1.712	10.244
	July	0.000	0.032	1.657	0.001	0.003	1.693	11.937
	August	0.000	0.031	1.746	0.001	0.003	1.781	13.718
	September	0.000	0.031	1.595	0.001	0.003	1.630	15.348
	October	0.000	0.039	1.678	0.001	0.003	1.721	17.069
	November	0.000	0.048	1.674	0.001	0.003	1.726	18.795
	December	0.000	0.061	1.753	0.001	0.004	1.819	20.614
	TOTAL	**0.000**	**0.546**	**20.017**	**0.015**	**0.037**	**20.614**	
1979	January	0.000	0.071	1.708	0.001	0.004	1.784	1.784
	February	0.000	0.064	1.617	0.001	0.003	1.685	3.469
	March	0.000	0.052	1.692	0.001	0.003	1.749	5.218
	April	0.000	0.044	1.536	0.001	0.003	1.584	6.802
	May	0.000	0.036	1.618	0.001	0.003	1.659	8.461
	June	0.000	0.031	1.560	0.001	0.003	1.595	10.056
	July	0.000	0.030	1.546	0.001	0.003	1.580	11.636
	August	0.000	0.030	R1.642	0.001	0.003	R1.676	R13.312
	September	0.000	0.030	1.495	0.001	0.003	1.529	R14.841
	October	0.000	0.038	1.602	0.001	0.003	1.644	16.485
	TOTAL (Year to date)	**0.000**	**0.426**	**16.017**	**0.012**	**0.030**	**16.485**	

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 footnotes on page 22.
R = Revised data.
Source: • See footnotes on page 22.

Consumption

Energy Consumption by Electric Utilities

		Coal[1]	Natural Gas (dry)	Petroleum	Hydro-electric Power[2]	Nuclear Electric Power	Other[3]	Total	Yearly Cumulative Total
		Quadrillion (10^{15}) Btu							
1973	**TOTAL**	**8.627**	**3.746**	**3.433**	**2.975**	**0.910**	**0.046**	**19.738**	
1974	**TOTAL**	**8.535**	**3.518**	**3.286**	**3.276**	**1.272**	**0.056**	**19.943**	
1975	**TOTAL**	**8.788**	**3.241**	**3.092**	**3.187**	**1.900**	**0.072**	**20.280**	
1976	**TOTAL**	**9.720**	**3.153**	**3.407**	**3.032**	**2.111**	**0.081**	**21.505**	
1977	**TOTAL**	**10.264**	**3.285**	**3.821**	**2.482**	**2.702**	**0.082**	**22.636**	
1978	January	0.922	0.236	0.426	0.277	0.278	0.007	2.146	2.146
	February	0.772	0.218	0.412	0.249	0.235	0.006	1.892	4.037
	March	0.732	0.240	0.393	0.272	0.242	0.005	1.884	5.921
	April	0.743	0.231	0.265	0.279	0.189	0.004	1.712	7.634
	May	0.799	0.270	0.262	0.315	0.220	0.004	1.870	9.504
	June	0.880	0.332	0.286	0.277	0.239	0.005	2.019	11.523
	July	0.954	0.375	0.315	0.270	0.269	0.005	2.188	13.711
	August	0.998	0.353	0.346	0.247	0.276	0.006	2.225	15.937
	September	0.921	0.308	0.286	0.236	0.239	0.007	1.997	17.933
	October	0.856	0.272	0.272	0.218	0.248	0.005	1.871	19.804
	November	0.854	0.236	0.287	0.223	0.268	0.006	1.874	R21.678
	December	0.940	0.227	0.360	0.246	0.274	0.007	2.053	23.730
	TOTAL	**10.372**	**3.297**	**3.908**	**3.109**	**2.977**	**0.068**	**23.730**	
1979	January	1.051	0.236	0.422	0.277	0.299	0.007	2.291	2.291
	February	0.904	0.235	0.348	0.238	0.279	0.006	2.009	4.300
	March	0.900	0.270	0.237	0.286	0.262	0.008	1.962	R6.262
	April	0.839	0.270	0.220	0.280	0.198	0.007	1.814	R8.076
	May	0.896	0.286	0.231	0.317	0.162	0.007	1.900	R9.976
	June	R0.953	0.331	0.258	0.276	0.173	0.007	1.998	11.974
	July	1.047	0.381	0.274	0.253	0.224	0.007	2.187	R14.161
	August	1.054	0.390	0.278	0.238	0.261	0.008	2.229	R16.390
	September	R0.909	R0.350	0.238	0.213	0.235	0.007	1.953	18.343
	October	0.926	0.337	0.238	0.227	0.227	0.008	1.963	20.305
	TOTAL (Year to date)	**9.480**	**3.086**	**2.744**	**2.604**	**2.320**	**0.072**	**20.305**	

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 footnote on page 22.

Crude Oil and Refined Petroleum Products

Domestic crude oil production during November* 1979 maintained the 8.5 million barrels per day average of the first 11 months of 1979. This production rate was 2.4 percent lower than in November 1978 and 0.8 percent higher than a month ago.

Total petroleum imports** averaged 7.9 million barrels per day in November 1979, 8.5 percent less than the November 1978 rate and 0.6 percent lower than in October 1979. Imports** averaged 8.1 million barrels per day during the first 11 months of 1979.

In November 1979, 18.3 million barrels per day of petroleum products were supplied for domestic use. Motor gasoline accounted for 37.1 percent of the total, distillate fuel 20.0 percent, and residual fuel oil 15.4 percent. During the first 11 months of 1979 an average of 18.4 million barrels of petroleum products were supplied each day.

The average for motor gasoline supplied during November 1979 was 6.8 million barrels per day, 9.5 percent lower than the amount supplied in November 1978 and 3.3 percent lower than in October 1979. The January through November 1979 average was 7.1 million barrels per day.

In November 1979, 3.7 million barrels of distillate fuel oil were supplied per day, 2.0 percent higher than a year ago and 17.9 percent higher than in October. The average for the January through November 1979 period was 3.3 million barrels per day. Distillate fuel oil stocks were 240.6 million barrels at the end of November, 3.1 percent above the stock level 1 year ago and 4.7 percent higher than in October 1979.

Residual fuel oil supplied in November averaged 2.8 million barrels per day, 0.7 percent lower than in November 1978. The average over the January through November period of 1979 was 2.8 million barrels per day. Residual fuel oil stocks measured 93.2 million barrels at the end of November, 5.0 percent above the level a year ago and 2.1 percent higher than in the previous month.

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*November 1979 estimates are based on preliminary data from the American Petroleum Institute and will be revised to conform with data from the EIA Petroleum Reporting System as available. Crude production figures are EIA estimates.

**Excludes crude petroleum imported for the Strategic Petroleum Reserve.

Petroleum

Crude Oil

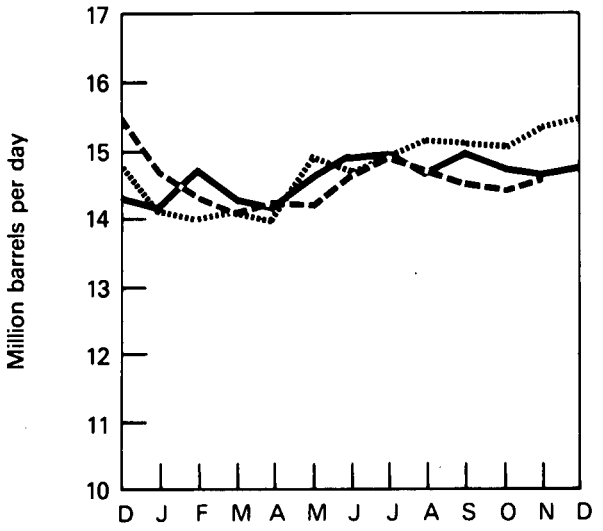
		Crude Input to Refineries	Total Domestic Production[1,2]	Alaskan Production	Crude Oil Imports[1,3]	Strategic Petroleum Reserve (SPR) Imports[5]	Exports	Crude Oil Stocks[1,4]	Strategic Petroleum Reserve (SPR) Stocks[5]
		Thousand barrels per day						Thousand barrels	
1973	**AVERAGE**	**12,431**	**9,208**	**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**	**[6]21**	**50**	**‡339,857**	**‡7,826**
1978	January	14,150	8,360	869	6,126	114	98	341,371	11,106
	February	13,969	8,377	854	5,655	109	8	335,890	14,276
	March	14,148	8,720	1,151	6,031	132	60	345,482	18,437
	April	13,886	8,818	1,289	5,519	108	92	343,363	21,825
	May	14,996	8,825	1,281	5,594	133	124	329,101	25,629
	June	14,693	8,832	1,306	6,322	146	195	333,340	30,140
	July	14,911	8,756	1,295	6,175	154	138	332,909	35,248
	August	15,196	8,758	1,316	6,251	184	182	316,866	40,968
	September	15,085	8,800	1,322	6,829	225	251	321,172	47,090
	October	15,005	8,820	1,342	6,400	195	272	325,081	53,113
	November	15,336	8,741	1,351	6,643	188	218	322,045	59,312
	December	15,421	8,662	1,347	6,751	245	251	309,421	66,860
	AVERAGE	**14,739**	**8,707**	**1,229**	**6,195**	**161**	**158**		
1979	January	14,658	8,457	1,351	6,562	204	177	302,728	73,142
	February	14,121	8,498	1,267	6,249	179	288	302,981	78,166
	March	14,062	8,585	1,355	6,180	122	370	317,432	82,501
	April	14,346	8,533	1,347	6,047	66	260	319,759	83,867
	May	14,273	8,585	1,350	6,092	97	171	316,355	86,880
	June	14,655	8,409	1,247	6,523	65	235	325,893	88,567
	July	14,977	8,355	1,405	6,120	41	244	312,852	90,101
	August	R14,827	R8,699	R1,434	R6,692	35	242	R320,745	91,189
	September†	14,564	*8,510*	*1,308*	5,821	0	NA	324,297	91,189
	October†	R14,419	*8,460*	*1,314*	R6,366	0	NA	R344,640	[7]91,191
	November†	*14,569*	*8,530*	*1,332*	*6,208*	NA	NA	*350,077*	NA
	AVERAGE	**14,500**	**8,511**	**1,338**	**6,262**	**NA**	**NA**		

[1]See Definitions.
[2]Includes Alaskan production.
[3]Excludes SPR imports.
[4]Excludes SPR stocks.
[5]Strategic Petroleum Reserve storage began in October 1977.
[6]This is an annual average. The average for 3 months is 80.
[7]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: • 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
• January 1979 through August 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
• September 1979 through October 1979: EIA "Monthly Petroleum Statistics Report" (except domestic production).
• November 1979 data are EIA estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin" (except domestic production).
• Domestic production for September, October, and November 1979 are estimates based upon the P124, "Crude Purchasers Report" and partial returns from State Conservation Agencies where available.
• Sources for the *Energy Data Report* and the "Monthly Petroleum Statistics Report" are: EIA Form 87 (Refinery Report), Form 90 (Crude Stock Report), Economic Regulatory Administration Form 60 (Imports); Bureau of Census publication EM 522 (Exports).

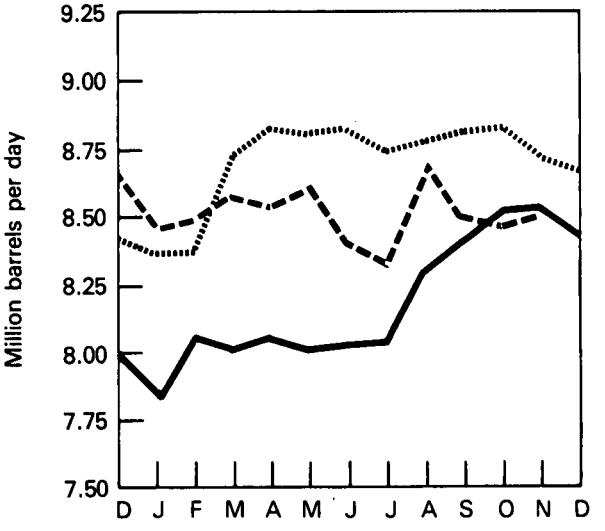
Petroleum

Crude Oil

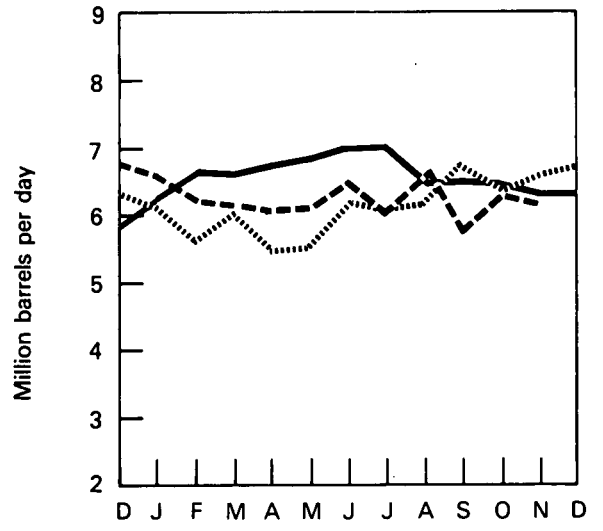
Crude Input to Refineries



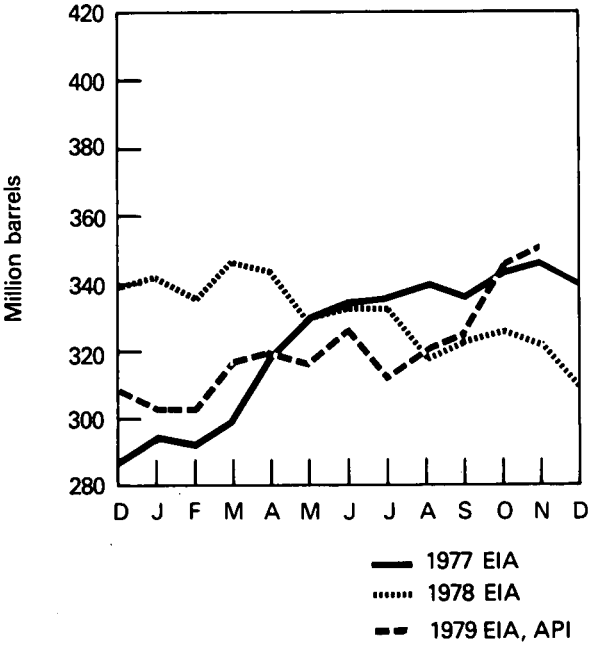
Domestic Production



Imports (Excluding Imports for SPR)



Stocks (Excluding SPR)



Petroleum

Total Petroleum Products[1]

Total Petroleum Imports (Crude Oil and Products)

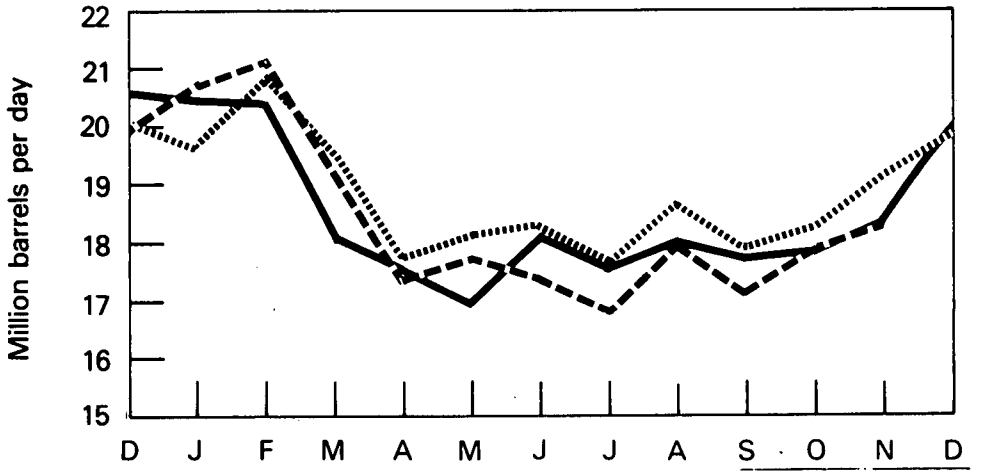
		Products Supplied	Imports	Exports	Total Imports (Excluding SPR)	SPR Imports[2]	Total Imports (Including SPR)[2]
		Thousand barrels per day			Thousand barrels per day		
1973	**AVERAGE**	**17,308**	**3,012**	**229**	**6,256**		
1974	**AVERAGE**	**16,653**	**2,635**	**218**	**6,112**		
1975	**AVERAGE**	**16,322**	**1,951**	**204**	**6,056**		
1976	**AVERAGE**	**17,461**	**2,026**	**215**	**7,313**		
1977	**AVERAGE**	**18,431**	**2,193**	**193**	**8,787**	[3]21	**8,807**
1978	January	19,752	2,092	158	8,218	114	8,332
	February	20,900	2,355	200	8,010	109	8,119
	March	19,652	2,338	209	8,369	132	8,501
	April	17,747	2,115	245	7,634	108	7,743
	May	18,230	1,804	189	7,398	133	7,531
	June	18,260	1,640	204	7,962	146	8,108
	July	17,633	1,948	192	8,123	154	8,277
	August	18,639	1,858	229	8,109	184	8,292
	September	17,954	1,983	226	8,811	225	9,036
	October	18,417	1,718	197	8,119	195	8,313
	November	19,156	2,021	191	8,664	188	8,852
	December	19,944	2,245	205	8,996	245	9,241
	AVERAGE	**18,847**	**2,008**	**204**	**8,202**	**161**	**8,363**
1979	January	20,640	2,205	212	8,767	204	8,970
	February	21,152	2,069	200	8,318	179	8,497
	March	19,180	2,385	234	8,565	122	8,687
	April	17,311	1,666	235	7,713	66	7,779
	May	17,701	1,809	278	7,901	97	7,999
	June	17,675	1,672	220	8,195	65	8,260
	July	16,906	1,783	258	7,902	41	7,943
	August	R18,081	R1,675	210	R8,367	35	R8,402
	September†	17,133	1,255	NA	7,076	0	7,076
	October†	R18,025	R1,609	NA	R7,976	0	7,976
	November†	*18,279*	*1,721*	NA	*7,929*	NA	NA
	AVERAGE	**18,355**	**1,805**	**NA**	**8,066**	**NA**	**NA**

Totals may not equal sum of components due to independent rounding.
[1]See Definitions.
[2]Strategic Petroleum Reserve storage began in October 1977.
[3]This is an annual average. The average for 3 months is 80.
Estimated data in italics. These are likely to be revised next month.
†Preliminary data.
R = Revised data.
NA = Not available.
Sources: • 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
• January 1979 through August 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
• September 1979 through October 1979: EIA "Monthly Petroleum Statistics Report."
• November 1979 data are EIA estimates based on data from the American Petroleum Institute "Weekly Statistical Bulletin."
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), Form FEA P133 (Imports from Puerto Rico), EIA Form 64 (Natural Gas Liquids Operations Report), Form 87 (Refinery Report), Form 88 (Bulk Terminal), Form 89 (Pipeline Report), Form 90 (Crude Stock Report), Form FEA P124 (First Purchasers — Crude Production); Bureau of Census publications IM 145 (Imports), EM 522 (Exports), and FT 800 (Exports); and State Conservation Agencies.

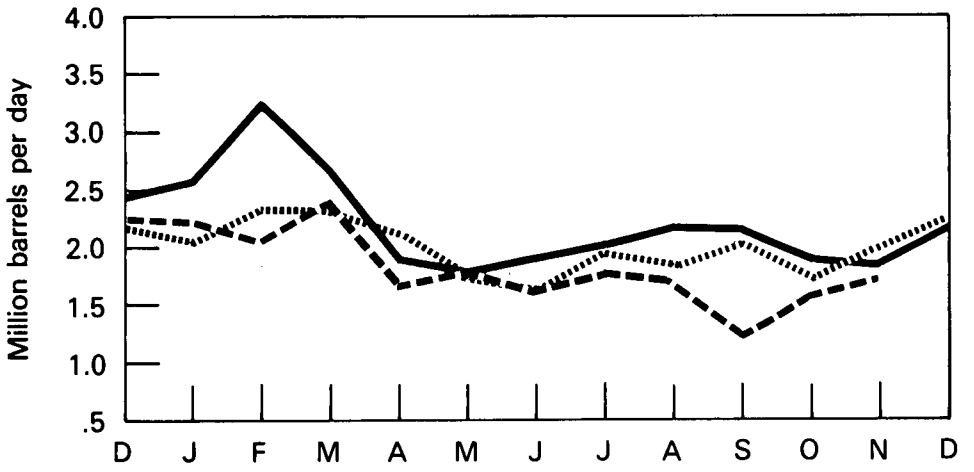
Petroleum

Total Petroleum Products Supplied and Imports

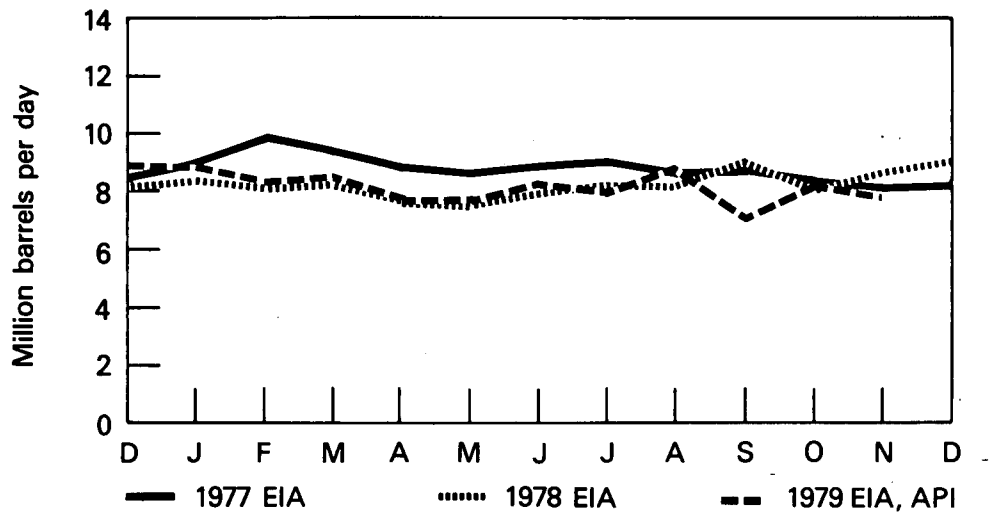
Total Petroleum Products Supplied



Products Imports



Total Petroleum Imports (Excluding Imports for SPR)



Petroleum

Petroleum Imports from OPEC Sources

	Algeria	Indonesia	Iran	Libya	Nigeria	Saudi Arabia	United Arab Emirates	Venezuela	Other OPEC[1]	Total OPEC	Arab Members of OPEC[2]
						Thousand barrels per day					
1973											
AVERAGE	**136.0**	**213.3**	**222.8**	**164.4**	**458.8**	**485.7**	**70.6**	**1,134.9**	**106.4**	**2,992.9**	**914.7**
1974											
AVERAGE	**190.1**	**300.4**	**468.8**	**4.4**	**713.4**	**461.3**	**73.9**	**979.1**	**88.4**	**3,279.8**	**752.5**
1975											
AVERAGE	**282.4**	**389.6**	**280.4**	**231.8**	**761.8**	**714.6**	**116.7**	**702.5**	**121.5**	**3,601.3**	**1,382.6**
1976											
AVERAGE	**432.2**	**538.8**	**298.5**	**453.3**	**1,024.7**	**1,229.8**	**254.4**	**700.1**	**134.0**	**5,065.8**	**2,424.1**
1977											
AVERAGE	**558.6**	**541.0**	**535.0**	**722.6**	**1,143.0**	**1,380.4**	**335.3**	**690.4**	**286.7**	**6,193.1**	**3,182.2**
1978											
January	707.5	527.9	689.6	570.9	834.6	1,206.3	348.8	643.2	227.8	5,756.5	2,969.4
February	658.2	405.7	539.2	594.4	793.0	971.4	486.1	798.1	251.5	5,497.5	2,822.4
March	715.9	603.7	535.2	583.7	960.3	1,131.7	296.2	894.6	254.0	5,975.3	2,903.7
April	597.5	532.1	441.9	612.0	584.2	1,020.5	480.5	658.7	228.2	5,155.6	2,829.7
May	701.1	549.6	746.3	498.7	779.8	786.3	418.7	556.6	84.5	5,121.7	2,445.0
June	776.1	666.1	536.0	648.7	858.0	1,107.8	345.0	494.1	219.3	5,651.3	3,029.0
July	659.0	648.0	532.5	629.3	1,003.2	1,053.2	293.8	538.3	301.3	5,658.6	2,831.4
August	464.2	575.3	574.2	798.6	942.6	1,127.6	415.9	514.0	206.6	5,619.0	2,926.0
September	615.9	634.0	590.6	762.4	1,029.6	1,247.5	389.2	650.3	261.9	6,181.5	3,184.5
October	709.7	571.5	608.2	712.6	927.7	1,173.1	397.2	524.5	112.6	5,737.2	3,034.7
November	619.2	548.6	494.7	758.4	1,188.1	1,365.2	408.6	635.1	222.1	6,240.0	3,292.5
December	561.5	604.1	368.8	676.3	1,119.6	1,524.8	356.8	841.6	345.6	6,399.1	3,292.4
AVERAGE	**648.7**	**573.3**	**555.3**	**653.9**	**919.5**	**1,143.9**	**385.4**	**644.9**	**226.0**	**5,750.9**	**2,963.2**
1979											
January	663.1	502.8	187.1	734.9	1,115.0	1,557.1	341.4	656.9	229.0	5,987.3	3,393.9
February	723.7	504.8	85.8	609.3	963.1	1,613.4	309.8	754.8	170.7	5,735.4	3,362.0
March	579.0	400.5	22.2	598.3	1,385.5	1,296.7	298.3	843.0	272.5	5,696.0	2,936.6
April	673.5	348.3	34.9	770.8	963.0	1,483.5	285.2	612.0	129.5	5,300.7	3,297.6
May	718.0	333.1	196.5	650.5	1,104.4	1,266.9	291.9	671.2	147.6	5,380.1	2,979.7
June	543.8	390.5	318.3	764.2	932.0	1,262.1	290.5	596.4	363.9	5,461.7	3,152.9
July	591.4	354.8	410.7	627.9	937.6	1,319.5	244.3	609.2	170.5	5,265.9	2,880.9
August	R666.4	R480.7	R501.7	R657.3	R1,158.4	R1,330.5	268.2	R666.5	R232.9	R5,962.6	R3,068.1
September†	409.2	305.4	301.8	601.3	1,064.3	1,314.1	267.8	593.6	144.9	5,002.5	2,706.7
October†	551.5	413.1	453.1	712.5	894.5	1,235.6	221.6	580.1	227.3	5,289.2	2,849.0
AVERAGE	**611.6**	**403.0**	**253.2**	**672.9**	**1,053.3**	**1,365.7**	**281.6**	**658.0**	**209.2**	**5,508.4**	**3,059.9**

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: • 1973 through 1976: Bureau of Mines' *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "PAD Districts Supply/Demand, Annual."
• January through August 1979: EIA *Energy Data Reports,* "PAD Districts Supply/Demand, Monthly."
• September 1979 through October 1979: EIA, "Monthly Petroleum Statistics Report."
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico); and Bureau of Census publication IM 145 (Imports).

Petroleum

Petroleum Imports from Non-OPEC Sources

	Bahamas	Canada	Mexico	Netherlands Antilles	Puerto Rico	Trinidad and Tobago	Virgin Islands	Other	Total
				Thousand barrels per day					
1973									
AVERAGE	**174.0**	**R1,324.8**	**15.7**	**584.7**	**99.5**	**254.8**	**329.4**	**480.3**	**3,263.2**
1974									
AVERAGE	**163.8**	**1,069.5**	**8.5**	**511.0**	**90.4**	**250.8**	**391.0**	**347.4**	**2,832.4**
1975									
AVERAGE	**152.4**	**846.4**	**71.4**	**331.8**	**89.7**	**242.4**	**406.4**	**313.9**	**2,454.4**
1976									
AVERAGE	**118.5**	**599.3**	**87.2**	**275.4**	**88.1**	**274.3**	**422.3**	**381.7**	**2,246.8**
1977									
AVERAGE	**170.5**	**516.9**	**179.4**	**210.9**	**105.1**	**289.3**	**466.2**	**675.8**	**2,614.1**
1978									
January	167.5	474.4	236.4	215.2	111.7	295.0	466.0	609.7	2,575.8
February	217,6	498.7	211.2	211.4	103.1	296.1	490.6	592.9	2,621.6
March	211.5	434.7	230.9	238.1	63.6	281.3	505.5	559.9	2,525.7
April	140.9	394.6	231.4	258.3	99.8	304.5	371.9	785.9	2,587.1
May	194.3	389.6	257.6	230.6	104.3	189.0	310.2	733.8	2,409.3
June	144.6	469.2	287.1	221.3	117.6	199.3	324.5	693.3	2,456.7
July	166.0	532.5	309.3	201.6	93.8	281.8	402.2	631.4	2,618.6
August	187.7	422.4	392.6	291.0	82.3	247.6	431.0	618.6	2,673.2
September	120.1	427.2	460.6	217.1	95.2	262.1	431.7	840.7	2,854.6
October	105.9	425.9	392.1	175.5	88.5	203.8	476.3	708.1	2,576.3
November	153.7	481.4	401.8	223.4	71.3	230.6	489.1	560.8	2,612.1
December	111.9	650.7	396.0	265.0	96.3	249.6	448.3	624.4	2,842.2
AVERAGE	**159.9**	**466.8**	**317.8**	**229.2**	**93.8**	**253.1**	**428.7**	**663.2**	**2,612.5**
1979									
January	159.5	564.1	560.3	227.0	109.1	116.0	477.0	770.1	2,983.1
February	103.5	561.7	415.4	254.8	68.2	191.4	421.1	745.4	2,761.5
March	93.7	614.5	397.4	314.1	63.8	214.7	561.6	731.1	2,990.9
April	129.4	576.9	301.6	175.9	64.9	144.1	474.7	610.6	2,478.1
May	134.8	554.8	389.7	183.1	101.7	216.6	382.0	655.7	2,618.4
June	138.1	468.4	457.7	171.4	105.7	169.5	413.7	874.1	2,798.6
July	120.8	488.6	357.4	208.7	117.2	169.1	451.2	764.7	2,677.5
August	R130.0	R463.1	R427.0	246.5	92.5	R237.9	357.1	R485.2	R2,439.2
September†	70.3	344.8	377.0	268.8	46.5	51.4	283.2	631.5	2,073.5
October†	142.1	422.5	450.2	242.4	60.2	199.8	403.0	766.6	2,686.8
AVERAGE	**122.5**	**505.8**	**413.7**	**229.3**	**83.2**	**171.3**	**422.8**	**703.1**	**2,651.6**

Totals may not equal sum of components due to independent rounding.
Beginning in October 1977 Strategic Petroleum Reserve imports are included.
†Preliminary data.
R = Revised data.

Sources: • 1973 through 1976: Bureau of Mines' *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "PAD Districts Supply/Demand, Annual."
• January 1979 through August 1979: EIA *Energy Data Reports,* "PAD Districts Supply/Demand, Monthly."
• September 1979 through October 1979: EIA, "Monthly Petroleum Statistics Report."
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico); and Bureau of Census publication IM 145 (Imports).

Petroleum

Motor Gasoline

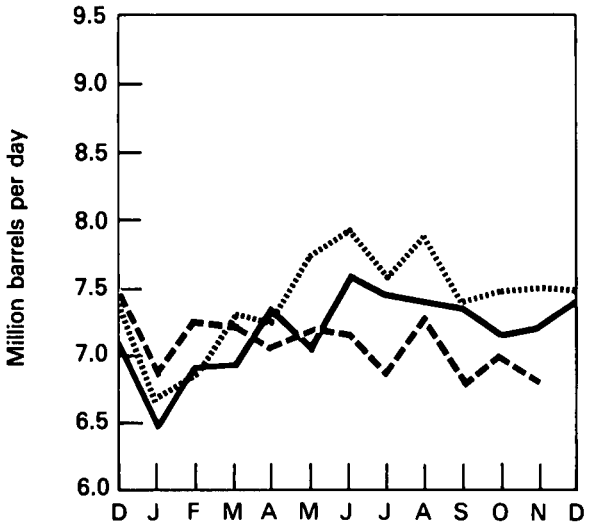
		Product Supplied						
		Total	Unleaded	Unleaded Percent of Total	Refinery Production[1]	Imports	Exports	Stocks[1]
		Thousand barrels per day						Thousand barrels
1973	**AVERAGE**	**6,674**	**NA**	**NA**	**6,527**	**134**	**4**	**‡209,395**
1974	**AVERAGE**	**6,537**	**NA**	**NA**	**6,358**	**204**	**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	January	6,681	2,097	31.4	6,933	214	1	272,064
	February	6,876	2,162	31.4	6,631	200	1	270,832
	March	7,255	2,425	33.4	6,750	141	1	259,556
	April	7,202	2,391	33.2	6,668	177	1	248,876
	May	7,724	2,343	30.3	7,059	169	2	233,471
	June	7,913	2,697	34.1	7,210	234	1	219,441
	July	7,576	2,629	34.7	7,264	212	2	216,368
	August	7,872	2,834	36.0	7,454	179	1	208,975
	September	7,399	2,607	35.2	7,399	251	2	216,500
	October	7,448	2,576	34.6	7,176	180	2	213,666
	November	7,503	2,713	36.2	7,583	147	1	220,523
	December	7,451	2,751	36.9	7,831	182	1	237,956
	AVERAGE	**7,412**	**2,521**	**34.0**	**7,167**	**190**	**1**	
1979	January	6,893	2,609	37.8	7,272	179	2	255,664
	February	7,267	2,715	37.4	6,941	160	2	251,346
	March	7,221	2,733	37.8	6,654	168	1	239,162
	April	7,068	2,786	39.4	6,765	156	1	235,192
	May	7,203	2,751	38.2	6,786	145	2	227,193
	June	7,187	2,787	38.8	6,987	261	1	229,349
	July	6,850	2,789	40.7	7,006	222	1	241,536
	August	R7,332	2,970	R40.5	R6,882	R147	1	R232,742
	September†	6,842	2,815	41.1	6,623	125	NA	229,887
	October†	R7,023	R2,802	R39.9	R6,481	R143	NA	R217,585
	November†	*6,790*	*2,890*	*42.6*	*6,748*	*150*	NA	*223,791*
	AVERAGE	**7,061**	**2,786**	**39.5**	**6,831**	**169**	**NA**	

[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.
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: • 1973 through 1976: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual" (except unleaded gasoline).
• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
• January 1979 through August 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
• September 1979 through October 1979: EIA, "Monthly Petroleum Statistics Report."
• Unleaded gasoline — October 1979 and back: EIA "Monthly Petroleum Statistics Report."
• November 1979 data are EIA estimates based on data from the American Petroleum Institute, "Weekly Statistical Bulletin."
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico); EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of Census publications IM 145 (Imports), and FT 800 (Exports).

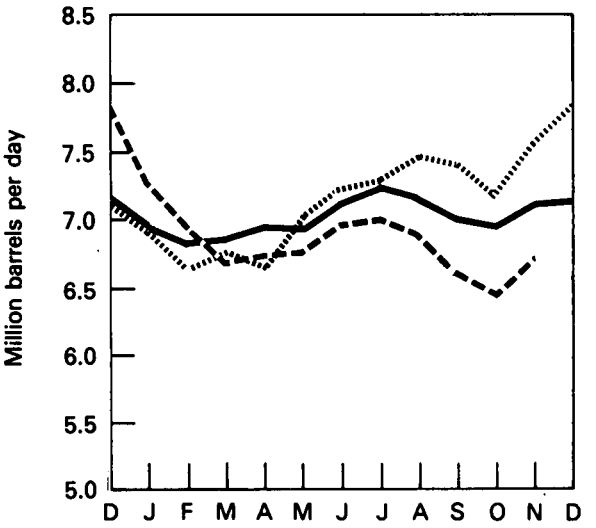
Petroleum

Motor Gasoline

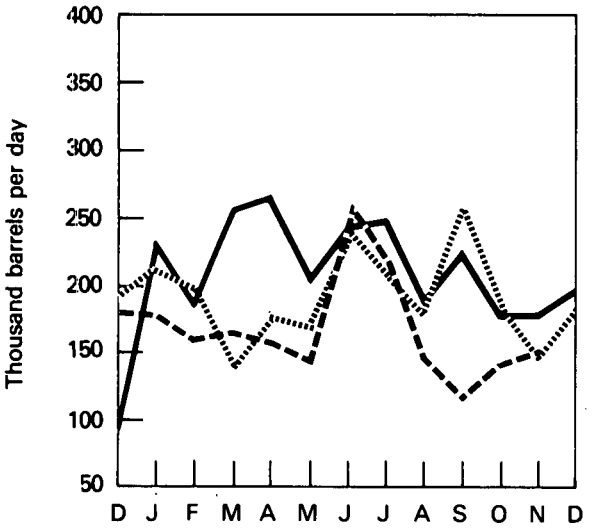
Product Supplied



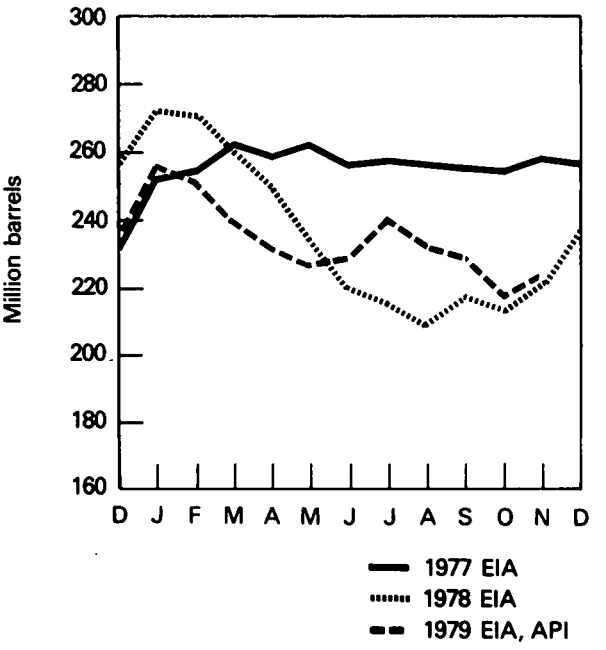
Refinery Production



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	January	980	921	60	1	34,535
	February	1,108	989	76	2	33,297
	March	1,107	967	98	2	31,950
	April	1,011	980	122	1	34,631
	May	997	1,011	108	2	38,372
	June	1,044	963	59	2	37,654
	July	1,014	923	105	2	38,050
	August	1,126	966	86	1	35,747
	September	1,077	989	75	1	35,328
	October	1,067	932	65	2	33,104
	November	1,107	1,011	89	2	32,829
	December	1,046	989	86	2	33,665
	AVERAGE	**1,057**	**970**	**86**	**1**	
1979	January	1,100	950	97	1	31,993
	February	1,137	996	88	2	30,449
	March	1,088	1,097	61	1	32,607
	April	961	1,040	43	1	36,217
	May	1,008	976	75	1	37,547
	June	1,073	956	57	1	35,741
	July	1,105	964	90	1	34,152
	August	R1,088	1,040	R49	1	R34,156
	September†	1,083	957	64	NA	32,162
	October†	R1,040	R1,046	R77	NA	R34,834
	November†	*1,025*	*994*	*72*	NA	*36,102*
	AVERAGE	**1,064**	**1,002**	**70**	**NA**	

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.
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• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
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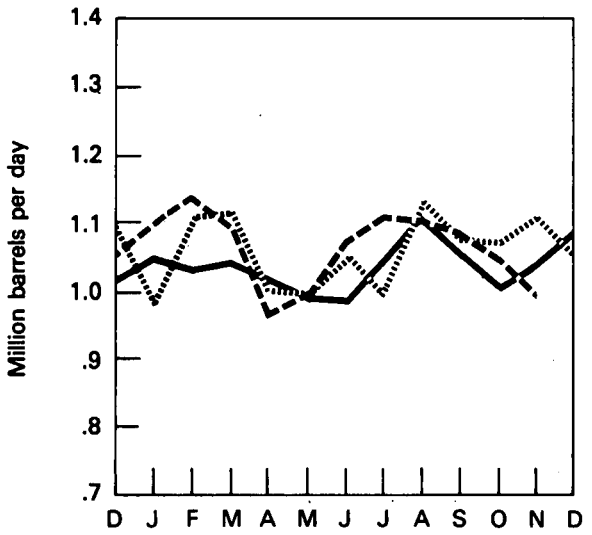
• November 1979 data are EIA estimates based on data from the American Petroleum Institute, "Weekly Statistical Bulletin."
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico), EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of Census publications IM 145 (Imports), EM 522 (Exports), and FT 800 (Exports).

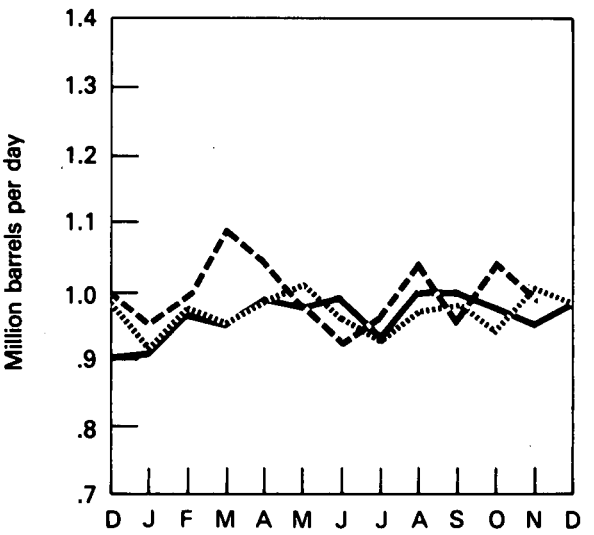
Petroleum

Jet Fuel

Product Supplied



Refinery Production



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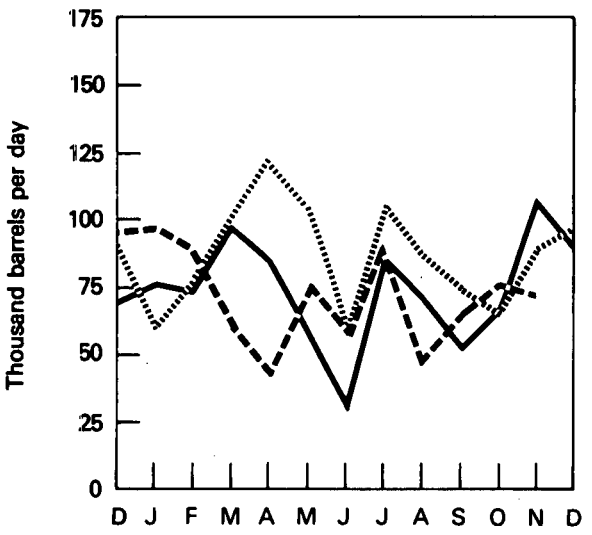
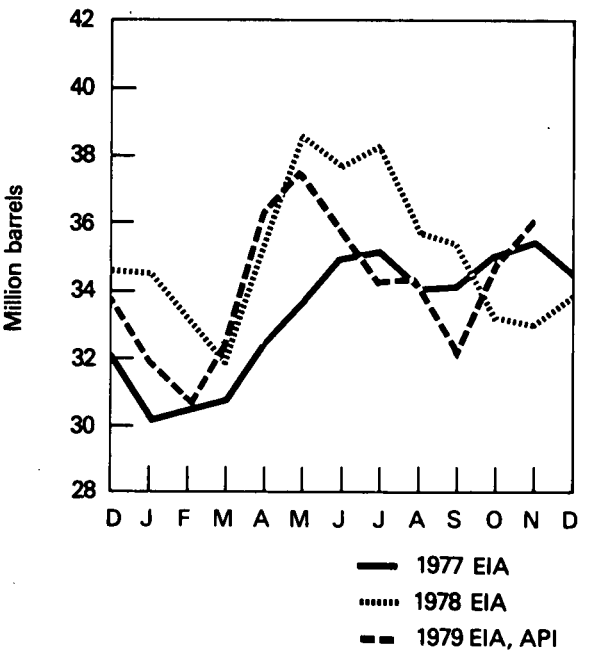


Stocks



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	January	4,458	3,067	196	1	213,245
	February	4,848	2,952	212	16	165,697
	March	4,108	3,014	193	0	137,826
	April	3,111	2,959	100	6	136,143
	May	3,103	3,250	125	1	144,619
	June	2,837	3,109	146	0	157,237
	July	2,522	3,123	149	4	180,420
	August	2,800	3,296	143	4	200,157
	September	2,664	3,185	163	2	220,687
	October	3,077	3,299	178	2	233,082
	November	3,583	3,366	223	3	233,231
	December	4,156	3,360	254	2	216,439
	AVERAGE	**3,432**	**3,167**	**173**	**3**	
1979	January	4,543	3,005	226	1	175,695
	February	4,792	2,863	196	7	127,034
	March	3,627	2,992	176	5	112,728
	April	3,006	2,935	149	4	114,989
	May	2,989	3,064	185	2	123,059
	June	2,707	3,137	180	1	141,365
	July	2,552	3,305	219	9	171,243
	August	R2,772	R3,332	R217	2	R195,339
	September†	2,554	3,296	116	NA	220,059
	October†	R3,100	R3,214	R197	NA	R229,773
	November†	*3,655*	*3,241*	*237*	NA	*240,561*
	AVERAGE	**3,290**	**3,128**	**191**	**NA**	

[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.
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.
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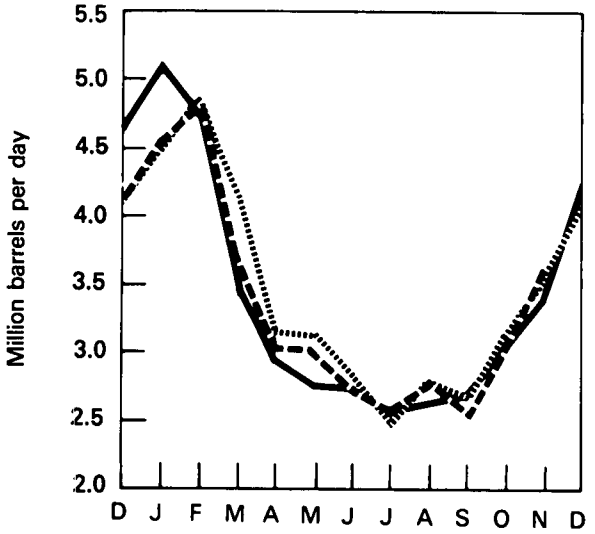
• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
• January 1979 through August 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
• September 1979 through October 1979: EIA, "Monthly Petroleum Statistics Report."
• November 1979 data are EIA estimates based on data from the American Petroleum Institute, "Weekly Statistical Bulletin."
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico), EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of Census publications IM 145 (Imports), EM 522 (Exports), and FT 800 (Exports).

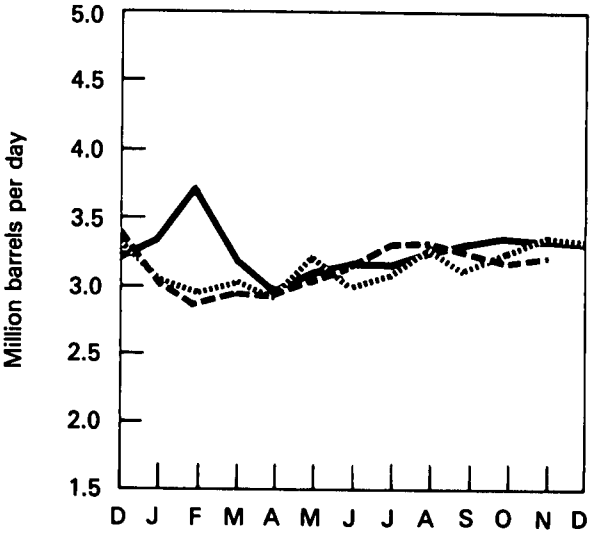
Petroleum

Distillate Fuel Oil

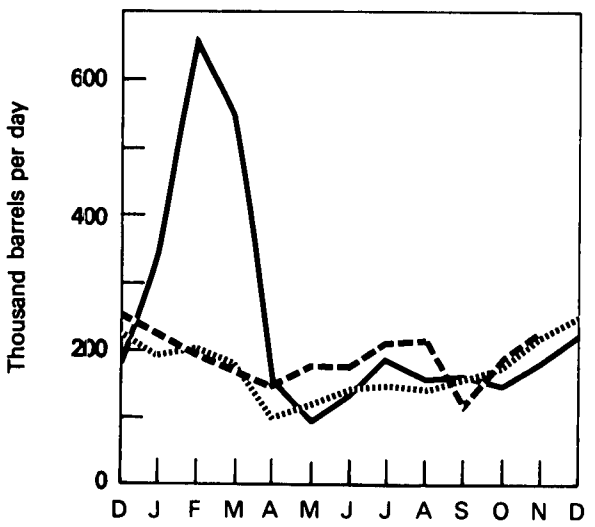
Product Supplied



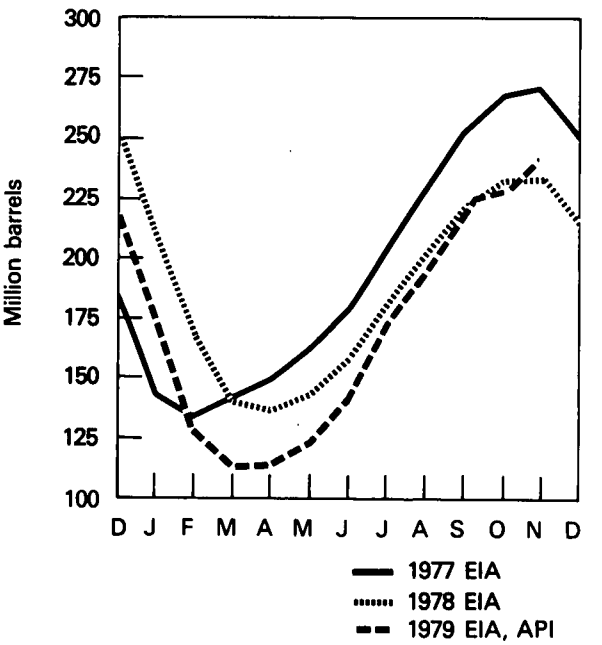
Refinery Production



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	January	3,518	1,868	1,380	13	81,657
	February	3,974	1,795	1,582	10	65,091
	March	3,540	1,751	1,710	22	62,388
	April	3,003	1,548	1,575	7	66,209
	May	2,686	1,653	1,231	16	72,233
	June	2,625	1,572	1,031	4	71,860
	July	2,772	1,586	1,295	10	75,320
	August	2,929	1,630	1,275	25	74,166
	September	2,716	1,636	1,318	12	81,314
	October	2,621	1,564	1,120	8	83,435
	November	2,845	1,662	1,352	6	88,729
	December	3,107	1,750	1,410	19	90,194
	AVERAGE	**3,023**	**1,667**	**1,355**	**13**	
1979	January	3,533	1,907	1,355	6	81,997
	February	3,596	1,792	1,307	10	68,229
	March	3,238	1,718	1,642	14	71,968
	April	2,479	1,643	1,126	2	81,002
	May	2,502	1,588	1,034	8	84,855
	June	2,552	1,534	880	8	80,893
	July	2,302	1,576	916	18	86,631
	August	R2,479	R1,590	R920	14	R87,542
	September†	2,394	1,592	838	NA	88,246
	October†	R2,429	R1,593	R947	NA	R91,318
	November†	*2,824*	*1,678*	*952*	NA	*93,205*
	AVERAGE	**2,752**	**1,655**	**1,083**	**NA**	

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.
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• 1977 and 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
• January 1979 through August 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
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• November 1979 data are EIA estimates based on data from the American Petroleum Institute, "Weekly Statistical Bulletin."
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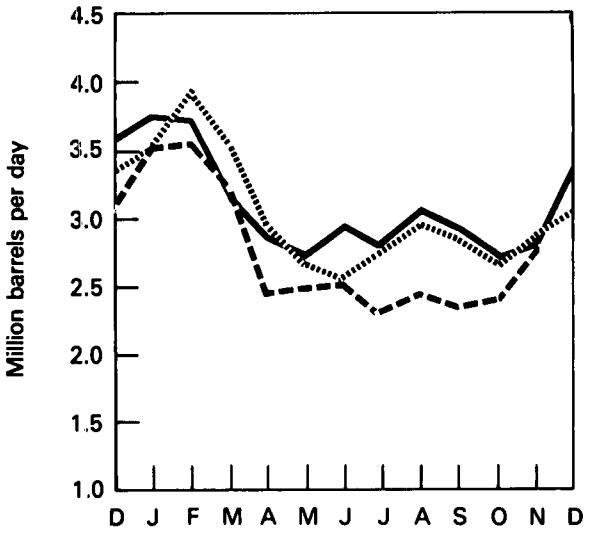
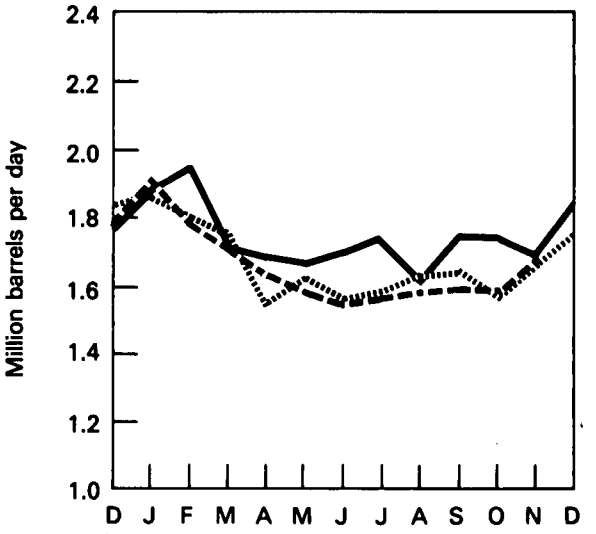
Petroleum

Residual Fuel Oil

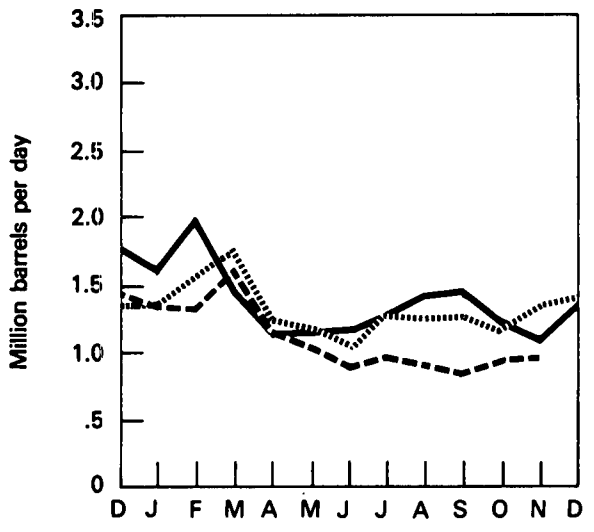
Product Supplied



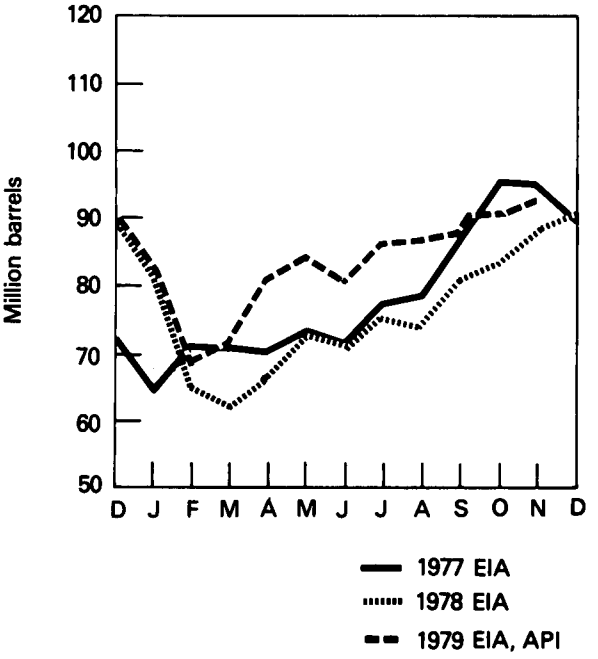
Refinery Production



Imports



Stocks



Petroleum

Natural Gas Plant Liquids, Including Liquefied Refinery Gases

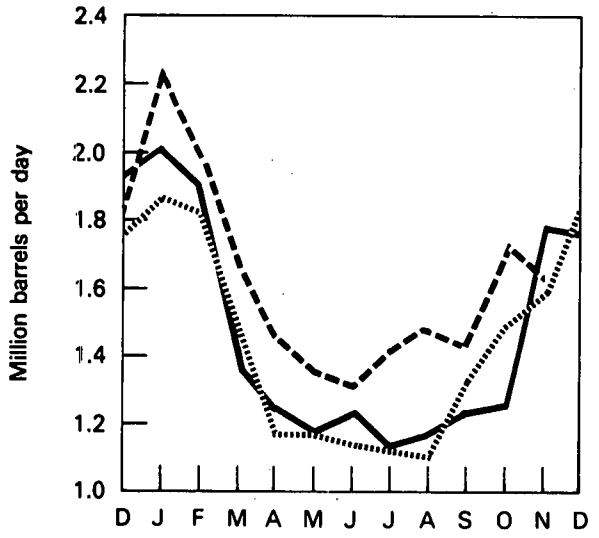
		Products Supplied[1]	Production[1]		Used at Refineries[1]	Imports	Stocks[1]
			At processing plants	At refineries			
		Thousand barrels per day					Thousand barrels
1973	**AVERAGE**	**1,454**	**1,738**	**375**	**815**	**239**	**‡106,659**
1974	**AVERAGE**	**1,422**	**1,688**	**338**	**746**	**212**	**‡120,175**
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	January	1,875	1,557	326	647	200	130,682
	February	1,803	1,562	338	657	207	120,217
	March	1,429	1,590	361	602	132	121,232
	April	1,164	1,619	352	601	101	129,870
	May	1,171	1,530	363	494	109	139,581
	June	1,125	1,583	367	649	109	147,540
	July	1,124	1,558	348	563	122	157,527
	August	1,090	1,556	351	657	93	164,537
	September	1,338	1,546	379	644	106	165,600
	October	1,481	1,540	352	658	116	161,006
	November	1,588	1,602	357	755	122	152,519
	December	1,832	1,566	363	743	258	[2]140,052
	AVERAGE	**1,416**	**1,567**	**355**	**639**	**139**	
1979	January	2,222	1,748	337	763	256	124,138
	February	1,998	1,703	325	757	252	110,412
	March	1,654	1,728	333	718	257	107,759
	April	1,449	1,708	354	679	160	110,216
	May	1,357	1,647	389	655	255	118,505
	June	1,316	1,641	382	606	175	126,468
	July	1,410	1,643	361	565	240	134,523
	August	R1,477	R1,614	R363	R599	R236	R138,491
	September	1,417	1,693	347	656	111	150,000
	October	1,728	1,661	343	682	160	142,000
	November	1,625	1,628	351	716	173	136,000
	AVERAGE	**1,603**	**1,674**	**353**	**672**	**207**	

[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, January 1979 opening stocks of natural gas plant liquids totaled R144,500 thousand barrels.
‡Total as of December 31.
R = Revised data.
Sources: 1973 through 1977: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Annual."
- 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
- January 1979 through August 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
- September through November 1979: EIA estimates based on historical analyses.
- Sources for the *Energy Data Reports* are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico), EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 88 (Bulk Terminals), Form 89 (Pipeline Report); Bureau of Census publications IM 145 (Imports), FM 522 (Exports), and FT 800 (Exports).

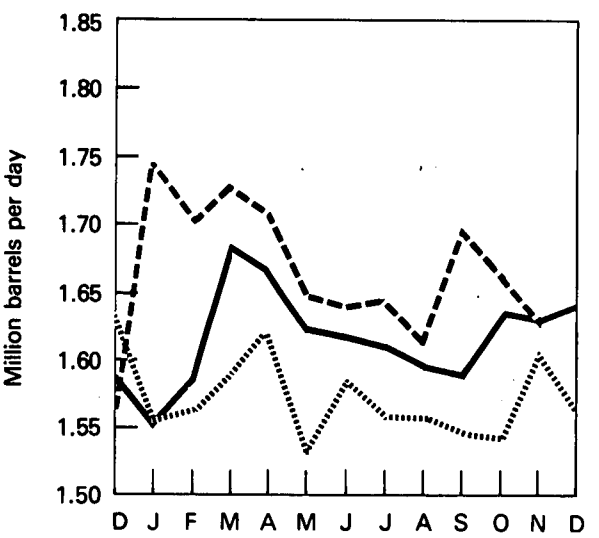
Petroleum

Natural Gas Plant Liquids

Product Supplied



Production at Processing Plants



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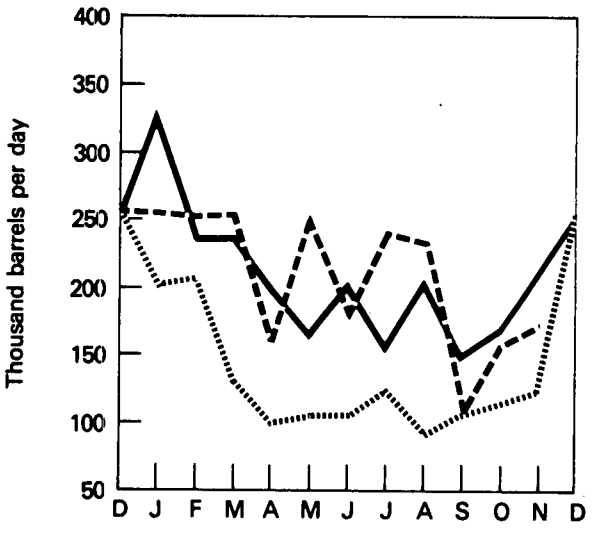
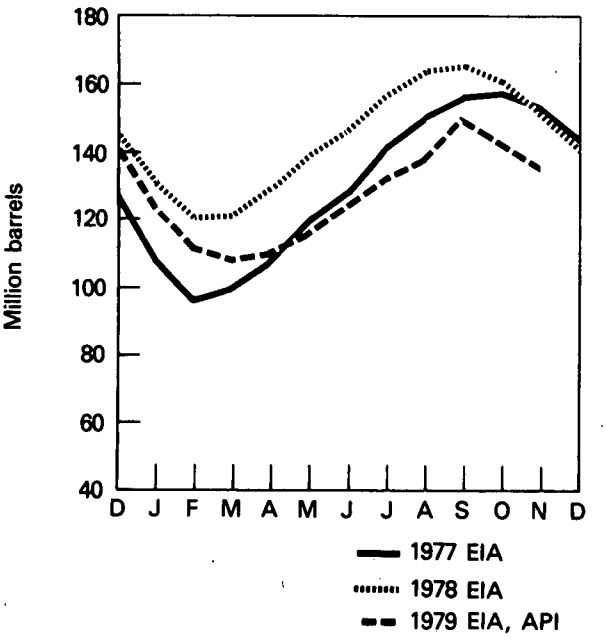


Stocks



Petroleum

Petroleum Primary Supply Balance

	1978				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
	Thousand barrels per day				
Primary Supply					
Crude oil and lease condensate production	R8,489	R8,825	R8,711	R8,741	R8,707
Natural gas plant liquids production	1,570	1,577	1,554	R1,569	1,567
Other hydrocarbon supply	R55	R47	R55	54	53
Crude oil imports[1]	R6,066	R5,938	R6,601	R6,807	R6,356
Refined products imports[2]	R2,259	R1,853	R1,929	R1,995	R2,008
Total new primary supply	R18,438	R18,240	R18,910	R19,165	R18,691
Processing gain	R491	R466	R470	R558	R496
Stock change – all oils[3]	R – 1,601	R + 190	R + 846	R + 160	R – 94
Total net primary supply	R20,531	R18,515	R18,534	R19,563	R19,281
Unaccounted for crude oil[4]	R – 194	R – 71	R – 37	R + 70	R – 57
Disposition					
Crude oil and refined products exports	246	349	R405	445	R362
Crude oil losses	15	16	16	16	16
Total products supplied[5]	R20,075	R18,081	R18,076	R19,173	R18,847
Total disposition	R20,336	R18,445	R18,498	R19,634	R19,224

	1979		
	1st Qtr.	2nd Qtr.	3rd Qtr.†
Primary Supply			
Crude oil and lease condensate production	8,514	R8,510	8,478
Natural Gas plant liquids production	1,727	R1,665	1,678
Other hydrocarbon supply	32	R38	64
Crude oil imports[1]	R6,501	R6,296	6,079
Refined products imports[2]	2,225	R1,717	1,487
Total new primary supply	R18,998	R18,225	17,786
Processing gain	458	R498	557
Stock change – all oils[3]	R – 1,512	R + 707	+ 161
Total net primary supply	R20,970	R18,016	18,182
Unaccounted for crude oil[4]	R – 163	R + 29	– 832
Disposition			
Crude oil and refined products exports	494	R466	NA
Crude oil losses	15	R15	16
Total products supplied[5]	20,297	R17,564	17,334
Total disposition	R20,805	R18,045	17,350

Totals may not equal sum of components due to independent rounding.
[1]Includes oil imported for the Strategic Petroleum Reserve.
[2]Includes plant condensate and unfinished oils.
[3]Includes petroleum stored in the Strategic Petroleum Reserve.
[4]Balancing item resulting from statistical inconsistencies.
[5]Includes international bunkers.
NA = Not available.
R = Revised data.
† Preliminary data.
Sources: • 1978: Energy Information Administration (EIA) *Energy Data Reports,* "Petroleum Statement, Annual."
• 1st and 2nd Quarters 1979: EIA *Energy Data Reports,* "Petroleum Statement, Monthly."
• 3rd Quarter 1979: EIA, "Monthly Petroleum Statistics Report and "Petroleum Statement, Monthly."
• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: Economic Regulatory Administration Form 60 (Imports), FEA P133 (Imports from Puerto Rico); EIA Form 64 (Natural Gas Liquids Operation Report), Form 87 (Refinery Report), Form 89 (Pipeline Report), Form 90 (Crude Stock Report), FEA P124 (First Purchasers – Crude Production); Bureau of the Census publications IM 145 (Imports), EM 522 (Exports), FT 800 (Exports), and State Conservation Agencies.

Natural Gas

Consumption of natural gas in the United States during November 1979 was an estimated 1,630 billion cubic feet (Bcf). This was 11.6 percent greater than in October 1979 and 1.7 percent less than in November 1978. Estimated consumption during the first 11 months of 1979 totaled 17,450 Bcf, slightly less than during the period January through November 1978.

Production of dry natural gas in November 1979 was an estimated 1,520 Bcf, 1.3 percent less than in October 1979 and approximately 1.2 percent less than in November 1978. Output during the first 11 months of 1979 totaled 17,122 Bcf, 2.1 percent less than during the comparable 1978 period.

Imports of natural gas in November 1979 were an estimated 92 Bcf, slightly higher than in the previous November. During the first 11 months of 1979 imports of natural gas totaled an estimated 1,108 Bcf, 29.0 percent higher than during the comparable 1978 period. Receipts of foreign natural gas during the period January through November 1979 included liquefied natural gas (LNG) equivalent to approximately 217 Bcf shipped to the large-scale LNG receiving terminals at Cove Point, Maryland and Elba Island, Georgia.

Domestic producer sales to major interstate pipeline companies in September 1979 totaled 820 Bcf, 2.5 percent above sales for the previous September. Total sales during the first 9 months of 1979 were 7,727 Bcf, 5.2 percent above those for the same period in 1978.

Net withdrawals of natural gas from underground storage reservoirs during November 1979 were 19 Bcf less than those of the previous November, according to preliminary data. Working gas* in storage at the end of November 1979 exceeded that available a year earlier by 3.2 percent.

*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	January	2,382	1,743	1,669	862	86	5
	February	2,139	1,649	1,579	756	77	5
	March	1,918	1,748	1,673	861	86	5
	April	1,539	1,668	1,597	836	78	3
	May	1,380	1,664	1,593	819	74	5
	June	1,249	1,623	1,554	768	68	4
	July	1,333	1,693	1,621	821	72	5
	August	1,285	1,658	1,587	821	74	5
	September	1,235	1,576	1,509	800	73	6
	October	1,440	1,635	1,565	847	80	3
	November	1,658	1,607	1,538	838	91	3
	December	2,069	1,710	1,637	882	107	4
	TOTAL	**19,627**	**19,974**	**19,122**	**9,911**	**966**	**53**
1979	January	2,372	1,714	1,641	890	100	5
	February	2,149	1,599	1,531	819	94	4
	March	1,834	1,698	1,625	907	116	3
	April	1,578	1,666	1,595	871	109	3
	May	1,369	1,658	1,587	877	97	4
	June	1,264	1,593	1,525	812	101	5
	July	1,272	1,596	1,528	851	107	5
	August	1,272	1,619	1,550	880	94	6
	September	1,250	1,550	1,480	820	R97	5
	October	1,460	1,610	1,540	NA	101	R3
	November	1,630	1,590	1,520	NA	92	3
	TOTAL (Year to date)	**17,450**	**17,893**	**17,122**	**7,727**	**1,108**	**46**

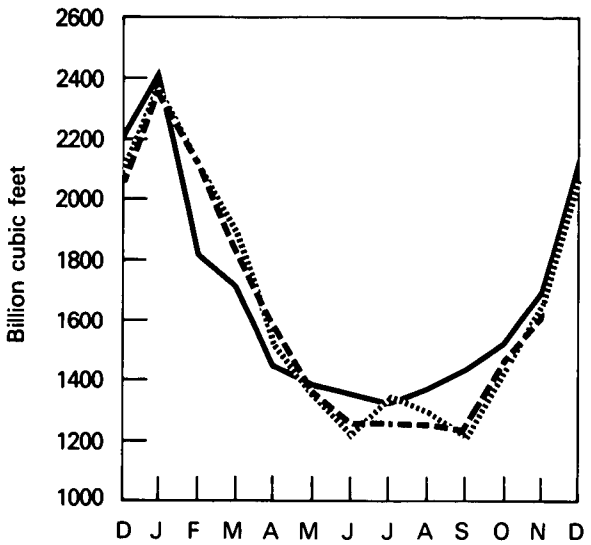
R = Revised data.
NA = Not available.

Sources: • Domestic Consumption — 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Yearbook,* "Natural Gas" chapter; January 1977 forward: EIA estimates based on a supply/disposition balance calculation.

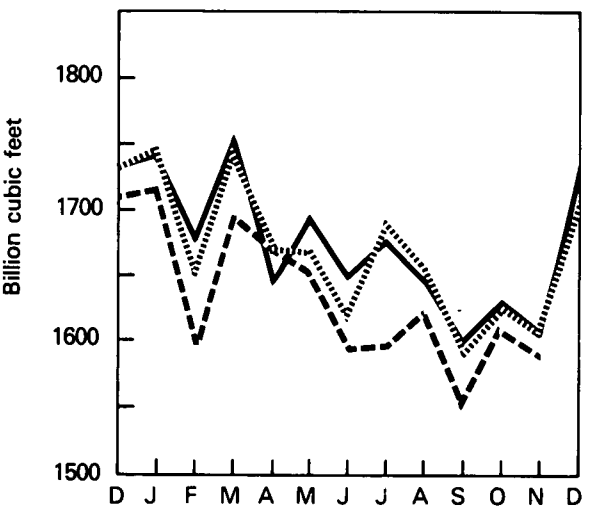
- Production — State reports to the Interstate Oil Compact Commission and EIA estimates for states that do not report monthly data on a regular or timely basis.
- Domestic Producer Sales — Federal Power Commission (FPC) Form 11, "Natural Gas Pipeline Company Monthly Statement."
- Imports — 1973 through 1978: FPC Form 14, "Imports and Exports of Natural Gas"; January 1979 forward: EIA estimates based on import data from FPC Form 11.
- Exports — 1973 through 1978: FPC Form 14; January 1979 forward: EIA estimates based primarily on historical data reported on FPC Form 14.

Natural Gas

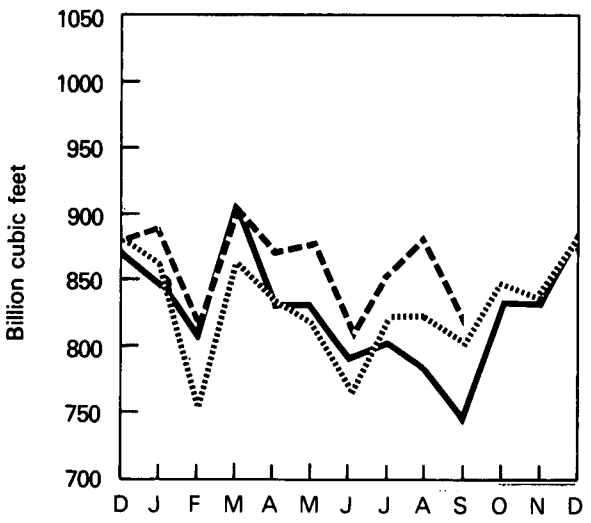
Domestic Consumption



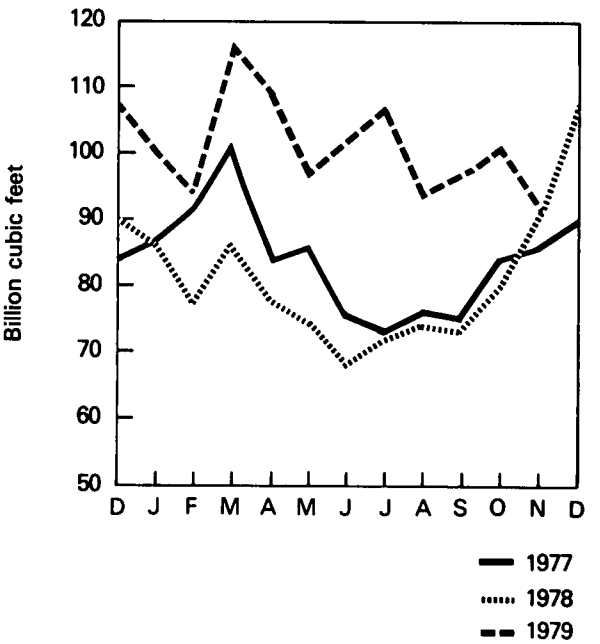
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



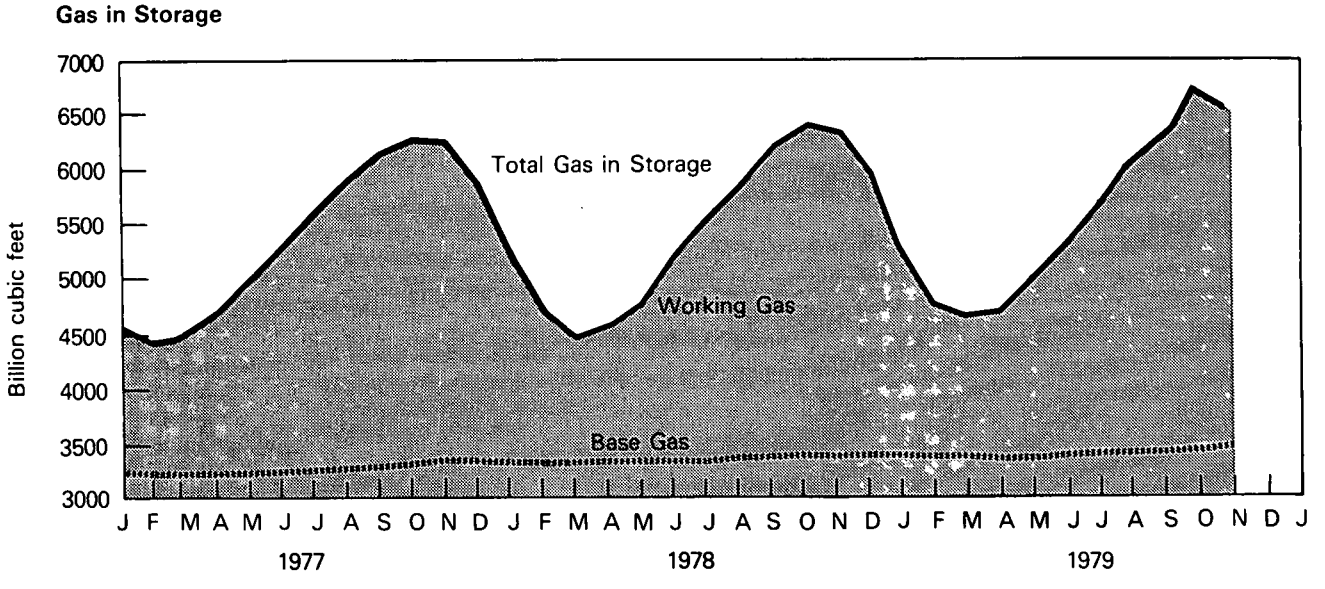
Imports



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	January	5,193	3,374	1,819	21	668	(647)
	February	4,683	3,373	1,310	21	530	(509)
	March	4,497	3,374	1,123	92	278	(186)
	April	4,608	3,377	1,231	179	68	111
	May	4,870	3,379	1,491	291	30	261
	June	5,217	3,381	1,836	365	18	347
	July	5,550	3,386	2,164	349	16	333
	August	5,904	3,403	2,501	359	12	347
	September	6,224	3,411	2,813	329	9	320
	October	6,402	3,444	2,958	209	28	181
	November	6,352	3,425	2,927	82	135	(53)
	December	5,999	3,459	2,540	33	384	(351)
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†	6,518	3,496	3,022	86	120	(34)



[1]See Explanatory Note 9.
[2]Net Storage Injections = storage injection minus storage withdrawal. Parentheses indicate withdrawal greater than injection.
†Preliminary data.
‡Total as of December 31.
NA = Not available.
Sources: • Federal Energy Administration System 8/EIA 191, (formerly Federal Energy Administration Form G-318-M-0), "Underground Gas Storage Report."

Part 5 Oil and Gas Resource Development

Oil and Gas Resource Development

The rotary rig count increased to 2,460 in November 1979, up from the 2,380 count of the month before. This represents a 4.4 percent increase over the November 1978 count of 2,356 rotary rigs.

Wells completed in November 1979 totaled 4,636. This is a 27.7 percent increase from the number completed during November 1978.

Oil well completions in November 1979 (1,867 well completions) were up 44.3 percent from November 1978 (1,294 completions). The number of gas wells completed increased. In November 1979, 1,273 gas wells were completed, 24.0 percent above the November 1978 level. Dry holes were up 14.4 percent (1,496 as compared to 1,308 during the previous November). Total footage drilled rose 22.7 percent (21.8 million feet as compared to 17.8 million feet the year before).

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	January	2,128		1,184	783	1,233	3,200	15,394
	February	2,135		1,486	851	1,239	3,576	16,933
	March	2,158		1,499	1,247	1,420	4,166	20,392
	April	2,198		1,369	971	1,112	3,452	17,559
	May	2,249		1,209	1,004	1,166	3,379	17,189
	June	2,286		1,812	1,071	1,489	4,372	21,115
	July	2,307		1,503	985	1,191	3,679	17,258
	August	2,325		1,516	1,085	1,290	3,891	18,440
	September	2,332		1,619	1,227	1,511	4,357	21,234
	October	2,346		1,395	1,102	1,441	3,938	19,109
	November	2,356		R1,294	1,027	1,308	3,629	17,805
	December	2,286		1,861	1,588	R1,828	5,277	24,108
	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	18,917
	March	1,970		1,544	1,343	1,372	4,259	21,175
	April	1,943		1,138	1,083	930	3,151	16,069
	May	1,960		1,307	992	1,130	3,429	16,974
	June	1,999		1,681	1,194	1,243	4,118	19,413
	July	2,094		1,526	1,080	1,130	3,736	16,749
	August	2,222		1,523	1,246	1,368	4,137	19,565
	September	2,284		1,819	1,374	1,428	4,621	22,590
	October	2,380		1,623	1,123	1,287	4,033	18,840
	November	2,460		1,867	1,273	1,496	4,636	21,846
	AVERAGE	**2,143**	**TOTAL**	**16,948**	**12,934**	**13,853**	**40,735**	**211,265**

[1]Excludes service wells and stratigraphic and core tests.
[2]Data reported for the first 2 months of each quarter cover 4 weeks of drilling activity, and data for the last month of the quarter cover 5 weeks of drilling activity.
Note: Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.
R = Revised data.
Sources: • Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running — By State."
• Wells: Data compiled by the American Petroleum Institute (API), from the API "Monthly Drilling Report" and API "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 average		
1973	**AVERAGE**	**23**	**227**	**250**	**21,579**	**10,597**	**[2]32,175**
1974	**AVERAGE**	**31**	**274**	**305**	**28,482**	**13,219**	**41,701**
1975	**AVERAGE**	**30**	**254**	**284**	**25,773**	**12,558**	**38,331**
1976	**AVERAGE**	**25**	**237**	**262**	**18,859**	**11,910**	**30,769**
1977	**AVERAGE**	**27**	**281**	**308**	**10,390**	**10,006**	**20,396**
1978	January	26	302	328			
	February	23	305	328			
	March	20	314	334			
	April	21	315	336			
	May	21	330	351			
	June	26	336	362			
	July	26	341	367			
	August	27	338	365			
	September	21	333	354			
	October	29	342	371			
	November	27	342	369			
	December	30	328	358			
	AVERAGE	**25**	**327**	**352**	**14,551**	**11,325**	**25,876**
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			
	AVERAGE	**30**	**366**	**396**			

[1]Monthly data not available.
[2]Total may not equal sum of components due to independent rounding.
Sources: • Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports published in their bulletin, *Geophysics.*

Coal

Coal production in November 1979 was 68.1 million tons, 11.0 percent below production in October 1979 and 2.5 percent lower than in November 1978. Production in the first 11 months of 1979 totaled 714.8 million tons, 19.1 percent above the amount produced in the first 11 months of 1978.

Domestic consumption of coal in October 1979 totaled 55.5 million tons, 3.0 percent higher than consumption in September 1979 and 5.1 percent above consumption in October 1978. In the first 10 months of 1979 coal consumption totaled 558.1 million tons, an increase of 44.4 million tons, or 8.6 percent above consumption in the same period for 1978. Electric utility coal consumption* totaled 42.9 million tons in October 1979, 7.8 percent more than in October 1978. During the first 10 months of 1979 electric utilities consumed 438.6 million tons of coal, an increase of 10.3 percent above the 397.8 million tons consumed during the same period in 1978. Coke plants, the second largest coal consuming sector, used 63.7 million tons in the first 10 months of 1979, an increase of 9.6 percent above the amount consumed during the same period in 1978. Coal consumption by general industry totaled 48.7 million tons in the first 10 months of 1979, 2.0 percent below the amount consumed in the same period of 1978. The 7.2 million tons of coal delivered to retail dealers through the first 10 months of 1979 was 12.8 percent lower than in the first 10 months of 1978.

Total stocks of bituminous coal and lignite held by consumers increased 16.3 percent during the first 10 months of 1979 to 164.6 million tons at the end of October over end-of-year 1978 stock levels. Electric utility stockpiles** increased from 126.0 million tons at the end of December 1978 to 147.3 million tons at the end of October 1979. Bituminous coal stocks held by coke plants increased from 8.2 million tons at the end of December 1978 to 9.4 million tons at the end of October 1979. General industry stockpiles of bituminous coal and lignite at the end of October 1979 totaled 7.5 million tons, 0.5 million tons above the level at the end of December 1978.

Imports of bituminous coal in the first 10 months of 1979, totaled 1.7 million tons, 1.0 million tons below the amount imported during the first 10 months of 1978. Exports of bituminous and anthracite coal through the first 10 months of 1979 totaled 53.6 million tons, 78.0 percent more than the amount of coal exported in the first 10 months of 1978. During the first 10 months of 1979 coal exports were principally to Canada (29.5 percent) and Japan (24.6 percent).

*Includes bituminous, lignite, and anthracite consumption, but excludes petroleum coke consumption.

**Stocks include bituminous coal and lignite only.

Coal

Bituminous, Lignite, and Anthracite

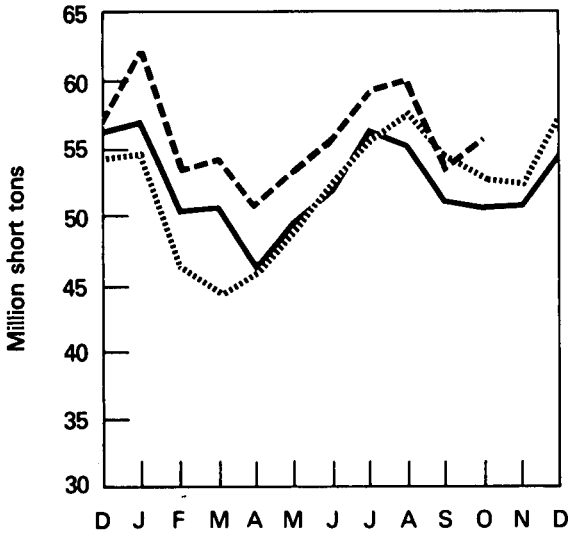
		Production	Domestic Consumption	Imports[1]	Exports[2]
			Thousand short tons		
1973	**TOTAL**	**598,568**	**562,583**	**127**	**53,587**
1974	**TOTAL**	**610,023**	**558,402**	**2,080**	**60,661**
1975	**TOTAL**	**654,641**	**562,643**	**940**	**66,309**
1976	**TOTAL**	**684,913**	**603,790**	**1,203**	**60,021**
1977	**TOTAL**	**697,205**	**625,308**	**1,647**	**54,312**
1978	January	23,545	54,758	139	894
	February	23,860	46,422	159	588
	March	39,290	R44,230	231	377
	April	60,050	R45,952	417	2,613
	May	69,300	R49,174	323	4,473
	June	66,225	R52,473	291	5,429
	July	54,195	55,876	313	3,574
	August	64,945	57,705	227	3,634
	September	58,355	54,405	196	3,454
	October	70,480	R52,775	371	5,053
	November	69,820	R52,669	98	6,030
	December	60,180	R57,070	188	4,572
	TOTAL	**660,245**	**R623,509**	**2,953**	**40,691**
1979	January	56,941	R62,056	186	3,605
	February	53,988	R53,791	252	2,726
	March	65,952	R54,265	123	4,642
	April	63,800	R50,832	161	5,268
	May	71,250	R53,334	112	6,215
	June	66,300	R55,106	209	5,975
	July	54,895	R59,442	88	6,297
	August	72,715	R60,028	320	6,248
	September	64,380	R53,832	180	5,145
	October	76,510	55,454	34	7,446
	November	68,105	NA	NA	NA
	TOTAL (Year to date)	**714,836**	**NA**	**NA**	**NA**

[1]Bituminous coal only.
[2]Bituminous coal and anthracite only.
R = Revised data.
NA = Not available.
Sources: • 1973 through September 1977, Bureau of Mines *Mineral Industry Surveys,* "Weekly Coal Report."
• October 1977 forward, Energy Information Administration (EIA) *Energy Data Reports,* "Weekly Coal Report."
• Sources for "Weekly Coal Report" are: Production — Bituminous coal and Anthracite: October estimate based on car loadings of coal reported to the Association of American Railroads (CS Form 54A). Bituminous and lignite data finalized from EIA Form 7, "Bituminous Coal and Lignite Production and Mine Operation." Anthracite data finalized from: Bureau of Mines Form 6-1385A, "Pennsylvania Anthracite Production;" BOM Form 6-1386A, "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."
• Consumption and Stocks — Federal Power Commission Form 4, "Monthly Power Plant Report;" EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks;" Form 3, "Monthly Coal Consumption Report, Manufacturing Plants;" Form 5, "Monthly Survey of Coke and Coal Chemical Materials;" Finalized coke data from Form 5A.
• Imports — Department of Commerce, Bureau of the Census: Bituminous coal: Schedules 5213120, 5213180.
• Exports — Department of Commerce, Bureau of the Census: Bituminous coal: Schedules 5213110, 5213120; Anthracite: Schedule 5213170.

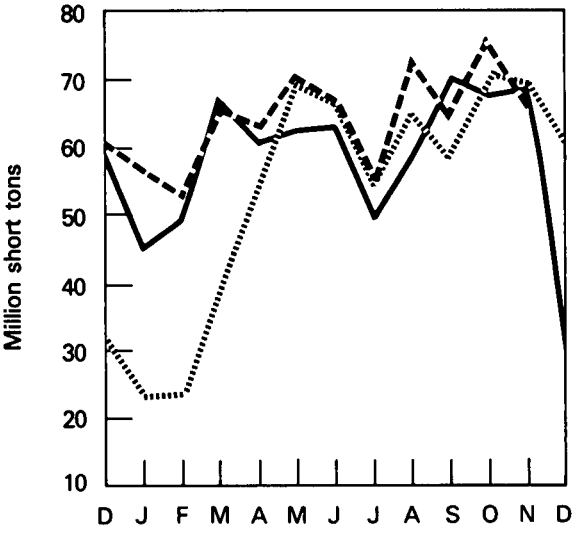
Coal

Bituminous, Lignite, and Anthracite

Domestic Consumption



Production



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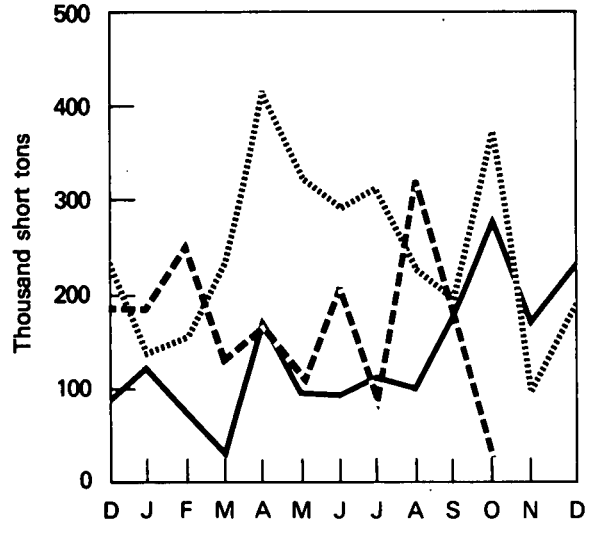

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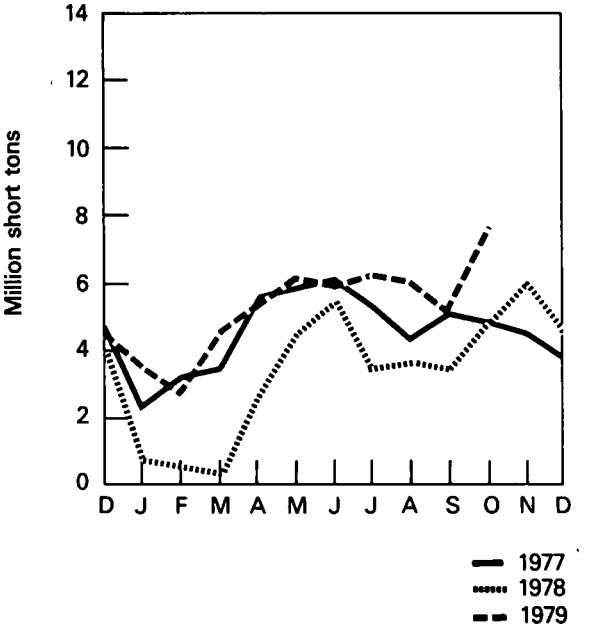


Coal

Consumption — Bituminous, Lignite, and Anthracite

			Industry and Miscellaneous			
		Electric Utilities	Coke Plants[1]	Other Industry and Miscellaneous	Retail Dealers	Total
			Thousand short tons			
1973	**TOTAL**	**389,212**	**94,101**	**68,153**	**11,117**	**562,583**
1974	**TOTAL**	**391,811**	**90,191**	**64,983**	**11,417**	**558,402**
1975	**TOTAL**	**405,962**	**83,598**	**63,673**	**9,410**	**562,643**
1976	**TOTAL**	**448,371**	**84,704**	**61,799**	**8,916**	**603,790**
1977	**TOTAL**	**477,126**	**77,369**	**61,616**	**9,197**	**625,308**
1978	January	42,708	5,425	5,531	1,094	54,758
	February	35,832	4,182	5,270	1,138	46,422
	March	34,004	R4,013	5,303	910	R44,230
	April	34,617	R5,528	5,032	775	R45,952
	May	37,199	R6,414	4,866	695	R49,174
	June	40,794	R6,385	4,619	675	R52,473
	July	44,118	6,553	4,605	600	55,876
	August	46,062	6,460	4,561	622	57,705
	September	42,646	6,417	4,642	700	54,405
	October	39,853	R6,710	5,211	1,001	R52,775
	November	39,751	R6,528	5,339	1,051	R52,669
	December	43,669	R6,763	5,513	1,125	R57,070
	TOTAL	**481,254**	**R71,378**	**60,492**	**10,386**	**R623,509**
1979	January	48,646	R6,523	5,519	1,368	R62,056
	February	41,891	R5,875	5,176	850	R53,791
	March	41,779	R6,755	5,050	680	R54,265
	April	38,977	R6,488	4,754	613	R50,832
	May	41,532	R6,609	4,620	572	R53,334
	June	44,010	R6,196	4,317	584	R55,106
	July	48,219	R6,447	4,267	509	R59,442
	August	48,550	6,167	4,829	482	60,028
	September	R42,099	R6,271	R4,835	R626	R53,832
	October	42,946	6,339	5,294	875	55,454
	TOTAL (Year to date)	**438,649**	**63,670**	**48,661**	**7,159**	**558,140**

Totals may not equal sum of components due to independent rounding.
[1]Bituminous coal and anthracite only.
R = Revised data.
Sources: • 1973 through September 1977, Bureau of Mines *Mineral Industry Surveys,* "Weekly Coal Report."
• October 1977 forward, Energy Information Administration (EIA) *Energy Data Reports,* "Weekly Coal Report."
• Sources for "Weekly Coal Report" are: Production — Bituminous coal and Anthracite: October estimate based on car loadings of coal reported to the Association of American Railroads (CS Form 54A). Bituminous and lignite data finalized from EIA Form 7, "Bituminous Coal and Lignite Production and Mine Operation." Anthracite data finalized from: Bureau of Mines Form 6-1385A, "Pennsylvania Anthracite Production;" BOM Form 6-1386A, "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."
• Consumption and Stocks — Federal Power Commission Form 4, "Monthly Power Plant Report;" EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks;" Form 3, "Monthly Coal Consumption Report, Manufacturing Plants;" Form 5, "Monthly Survey of Coke and Coal Chemical Materials;" Finalized coke data from Form 5A.
• Imports — Department of Commerce, Bureau of the Census: Bituminous coal: Schedules 5213120, 5213180.
• Exports — Department of Commerce, Bureau of the Census: Bituminous coal: Schedules 5213110, 5213120; Anthracite: Schedule 5213170.

Coal

Bituminous and Lignite

		Production[1]	Domestic Consumption[1]	Imports[2]	Exports[2]	Stocks[3]
			Thousand short tons			
1973	**TOTAL**	**591,738**	**556,912**	**127**	**52,870**	**103,412**
1974	**TOTAL**	**603,406**	**552,954**	**2,080**	**59,926**	**95,477**
1975	**TOTAL**	**648,438**	**557,535**	**940**	**65,669**	**127,150**
1976	**TOTAL**	**678,685**	**598,750**	**1,203**	**59,406**	**133,555**
1977	**TOTAL**	**691,344**	**620,505**	**1,647**	**53,687**	**152,264**
1978	January	23,115	54,418	139	870	118,294
	February	23,520	46,022	159	555	93,134
	March	38,765	R43,790	231	325	83,786
	April	59,530	R45,492	417	2,594	96,589
	May	68,760	R48,744	323	4,411	110,895
	June	65,565	R51,923	291	5,398	122,624
	July	53,640	55,426	313	3,531	119,803
	August	64,395	57,225	227	3,568	122,656
	September	57,775	53,925	196	3,338	125,704
	October	69,860	R52,275	371	4,911	133,579
	November	69,245	R52,194	98	5,930	142,701
	December	59,630	R56,640	188	4,394	141,616
	TOTAL	**653,800**	**R618,073**	**2,953**	**39,825**	
1979	January	56,486	R61,656	186	3,526	132,177
	February	53,628	R53,401	252	2,691	125,320
	March	65,492	R53,870	123	4,592	130,013
	April	63,325	R50,432	161	5,227	138,411
	May	70,720	R52,874	112	6,091	147,104
	June	65,835	R54,676	209	5,895	150,760
	July	54,495	R59,027	88	6,249	144,098
	August	72,100	59,628	320	6,089	R148,053
	September	63,895	R53,422	180	5,019	R153,652
	October	75,910	55,019	34	7,315	164,635
	November	67,560	NA	NA	NA	NA
	TOTAL (Year to date)	**709,446**	**NA**	**NA**	**NA**	

[1]See Explanatory Note 10.
[2]Bituminous coal only.
[3]Total stocks held by utilities, industrial consumers, and retail dealers at end of year or month.
R = Revised data.
NA = Not available.
Sources: • 1973 through September 1977, Bureau of Mines *Mineral Industry Surveys,* "Weekly Coal Report."
• October 1977 forward, Energy Information Administration (EIA) *Energy Data Reports,* "Weekly Coal Report."
• Sources for "Weekly Coal Report" are: Production — Bituminous coal and lignite: October estimate based on car loadings of coal reported to the Association of American Railroads (CS Form 54A). Finalized from EIA Form 7, "Bituminous Coal and Lignite Production and Mine Operation."
• Consumption and Stocks — Federal Power Commission Form 4, "Monthly Power Plant Report;" EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks;" Form 3, "Monthly Coal Consumption Report, Manufacturing Plants;" Form 5, "Monthly Survey of Coke and Coal and Chemical Materials;" Finalized coke data from Form 5A.
• Imports — Department of Commerce, Bureau of the Census: Bituminous coal: Schedules 5213120, 5313180.
• Exports — Department of Commerce, Bureau of the Census: Bituminous coal: Schedules 5213110, 5213120; Anthracite: Schedule 5213170.

Coal

Stocks[1] – Bituminous and Lignite

		Industry and Miscellaneous				
		Electric Utilities	Coke Plants[2]	General Industry and Miscellaneous	Retail Dealers	Total
		Thousand short tons				
1973		85,902	6,875	10,345	290	103,412
1974		82,579	6,037	6,580	280	95,477
1975		109,742	8,671	8,504	233	127,150
1976		116,436	9,804	7,075	240	133,555
1977		130,898	12,721	8,425	220	152,264
1978	January	102,965	8,130	7,017	182	118,294
	February	82,441	5,067	5,507	119	93,134
	March	74,925	3,750	4,997	114	83,786
	April	85,899	5,602	4,953	135	96,589
	May	98,481	7,129	5,110	175	110,895
	June	108,534	8,237	5,543	310	122,624
	July	107,455	6,604	5,454	290	119,803
	August	110,055	6,276	5,970	355	122,656
	September	112,935	6,202	6,205	362	125,704
	October	119,374	7,272	6,576	357	133,579
	November	127,176	8,520	6,625	380	142,701
	December	126,044	8,162	7,050	360	141,616
1979	January	117,755	7,437	6,620	365	132,177
	February	112,258	6,553	6,191	318	125,320
	March	116,364	7,352	6,022	275	130,013
	April	123,554	8,317	6,265	275	138,411
	May	131,550	8,854	6,385	315	147,104
	June	134,282	9,448	6,703	327	150,760
	July	128,805	8,115	6,806	372	R144,098
	August	131,904	8,583	7,154	R412	R148,053
	September	R136,747	R8,876	R7,597	R432	R153,652
	October	147,257	9,438	7,530	410	164,635

[1]Stocks held by utilities, general industry, and retail dealers at end of year or month.
[2]Bituminous coal only.
R = Revised data.
Sources: • 1973 through September 1977, Bureau of Mines *Mineral Industry Surveys,* "Weekly Coal Report."
• October 1977 forward, Energy Information Administration (EIA) *Energy Data Reports,* "Weekly Coal Report."
• Sources for "Weekly Coal Report" are: Production – Bituminous coal and Anthracite: October estimate based on car loadings of coal reported to the Association of American Railroads (CS Form 54A). Bituminous and lignite data finalized from EIA Form 7, "Bituminous Coal and Lignite Production and Mine Operation." Anthracite data finalized from: Bureau of Mines Form 6-1385A, "Pennsylvania Anthracite Production;" BOM Form 6-1386A, "Pennsylvania Anthracite Production, Mines Without Preparation Plants;" BOM Form 6-1387A, "Pennsylvania Anthracite Production, Contractor's Report;" BOM Form 1388A, "Pennsylvania Anthracite Production, River Coal Report."
• Consumption and Stocks – Federal Power Commission Form 4, "Monthly Power Plant Report;" EIA Form 2, "Monthly Coal Report, Retail Dealers and Upper Lake Docks;" Form 3, "Monthly Coal Consumption Report, Manufacturing Plants;" Form 5, "Monthly Survey of Coke and Coal Chemical Materials;" Finalized coke data from Form 5A.
• Imports – Department of Commerce, Bureau of the Census: Bituminous coal: Schedules 5213120, 5213180.
• Exports – Department of Commerce, Bureau of the Census: Bituminous coal: Schedules 5213110, 5213120; Anthracite: Schedule 5213170.

Electric Utilities

October 1979 production of electricity by utilities was 179.8 billion kilowatt-hours, 2.3 percent above the October 1978 production level. Coal-fired production totaled 87.3 billion kilowatt-hours, natural gas-fired production totaled 30.5 billion kilowatt-hours, and hydroelectric production totaled 20.3 billion kilowatt-hours. These figures reflect an increase of 6.4, 20.9, and 4.1 percent, respectively, above the October 1978 output levels. Petroleum-fired production totaled 20.3 billion kilowatt-hours, and nuclear production totaled 21.1 billion kilowatt-hours, decreases of 21.3 and 8.4 percent, respectively, below the October 1978 levels.

Sales of electricity to all ultimate consumers in the United States in October 1979 totaled 165.7 billion kilowatt-hours, a decrease of 7.0 percent from sales of the month before and a decrease of 0.6 percent from October 1978 sales. Sales to residential consumers during October 1979 were 49.4 billion kilowatt-hours, 3.3 percent below sales for the corresponding month in 1978. Commercial sales were 38.8 billion kilowatt-hours, 1.0 percent more than the amount for October 1978. Sales to industrial consumers totaled 71.4 billion kilowatt-hours in October 1979, about 0.3 percent over the October 1978 figure. In October 1979 other sales totaled 6.1 billion kilowatt-hours, 1.6 percent above the October 1978 level.

Electric utility petroleum consumption during October 1979 was 34.6 million barrels, a 21.5 percent drop from the October 1978 level. Coal consumption for October 1979 was 42.9 million tons, 7.8 percent above the October 1978 rate. During October 1979, consumption of natural gas by electric utilities was 326.0 billion cubic feet, 24.0 percent above the October 1978 consumption level.

On October 31, 1979, bituminous and lignite stocks reached 147.3 million tons and anthracite stocks reached approximately 2.5 million tons, a total of 149.7 million tons of coal. Stockpiles of bituminous coal and lignite were 7.7 percent above the previous month's level, and 23.4 percent above the level of October 1978. Anthracite stocks were 2.8 percent above the level of a month earlier, and 10.5 percent above the level of October 1978.

Petroleum stocks on October 31, 1979, totaled 129.0 million barrels, 4.5 percent below the levels for the same month of 1978.

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	January	85,003	39,263	22,310	25,833	25,068	357	197,834
	February	70,567	38,212	20,370	21,833	22,369	309	173,659
	March	66,620	36,982	22,269	22,449	24,630	264	173,214
	April	70,326	24,978	21,339	17,580	25,306	208	159,736
	May	76,430	24,368	25,075	20,416	28,757	187	175,234
	June	84,033	26,129	30,618	22,185	25,121	225	188,311
	July	89,606	29,117	34,247	25,007	24,453	250	202,681
	August	93,454	32,301	32,582	25,599	22,185	318	206,441
	September	87,041	26,640	28,205	22,189	21,177	318	185,571
	October	82,082	25,753	25,232	22,997	19,479	257	175,800
	November	81,725	27,310	22,003	24,901	19,953	282	176,172
	December	88,860	34,034	21,130	25,415	22,082	341	191,862
	TOTAL	**975,749**	**365,088**	**305,380**	**276,403**	**280,579**	**3,316**	**2,206,515**
1979	January	94,975	39,474	22,091	27,792	R25,054	326	R209,713
	February	84,745	32,274	21,845	25,911	R21,275	285	R186,336
	March	85,219	22,075	24,918	24,335	R25,921	382	R182,850
	April	80,451	20,600	24,760	18,418	R25,389	342	169,959
	May	86,155	R21,471	26,135	15,025	28,939	350	178,074
	June	90,749	24,368	30,106	16,065	24,990	347	186,625
	July	97,753	25,749	34,671	20,825	22,761	364	202,123
	August	97,854	R26,123	R34,945	24,204	21,260	405	204,791
	September	R85,530	R22,510	R31,431	21,804	18,978	354	R180,607
	October	87,304	20,268	30,493	21,068	20,269	389	179,792
	TOTAL (Year to date)	**890,736**	**254,912**	**281,396**	**215,446**	**234,836**	**3,544**	**1,880,870**

Totals may not equal sum of components due to independent rounding.
[1]Includes Bituminous, Lignite, and Anthracite.
[2]Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.
[3]Includes geothermal, wood and waste.
R = Revised data.
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**	**423,640**	**739,964**	**69,558**	**1,836,025**
1977	**TOTAL**	**641,133**	**444,932**	**772,292**	**70,488**	**1,928,844**
1978	January	65,455	38,125	64,195	6,581	174,356
	February	64,140	37,465	60,823	6,274	168,703
	March	58,391	36,282	61,506	6,032	162,212
	April	47,118	33,625	63,103	5,355	149,201
	May	43,748	33,995	66,618	5,586	149,947
	June	50,511	39,080	68,563	5,826	163,981
	July	61,327	42,839	67,081	6,359	177,607
	August	63,434	43,694	69,402	6,136	182,666
	September	61,584	42,935	70,067	6,428	181,015
	October	R51,108	R38,354	R71,259	R6,001	R166,722
	November	46,720	35,476	68,815	6,332	157,341
	December	56,391	37,244	67,577	6,268	167,479
	TOTAL	**R669,927**	**R459,114**	**R799,009**	**R73,178**	**R2,001,230**
1979	January	69,912	40,200	67,341	6,689	184,142
	February	67,470	39,670	66,847	6,192	180,179
	March	58,806	37,938	68,770	6,002	171,515
	April	49,647	35,731	68,777	5,589	159,744
	May	45,378	36,259	70,421	5,630	157,688
	June	49,109	39,474	70,968	5,705	165,256
	July	58,054	42,528	69,938	5,975	176,495
	August	64,168	43,915	71,058	6,377	185,519
	September	59,251	42,416	70,075	6,479	178,220
	October	49,430	38,750	71,444	6,098	165,721
	TOTAL (Year to date)	**571,225**	**396,881**	**695,639**	**60,736**	**1,724,479**

Totals may not equal sum of components due to independent rounding.
[1]Electricity sales to all ultimate consumers.
[2]Includes street lighting and transportation uses.
R = Revised data.
Source: • Federal Power Commission Form 5, "Monthly Statement of Electric Operating Revenue and Income."

Electric Utilities

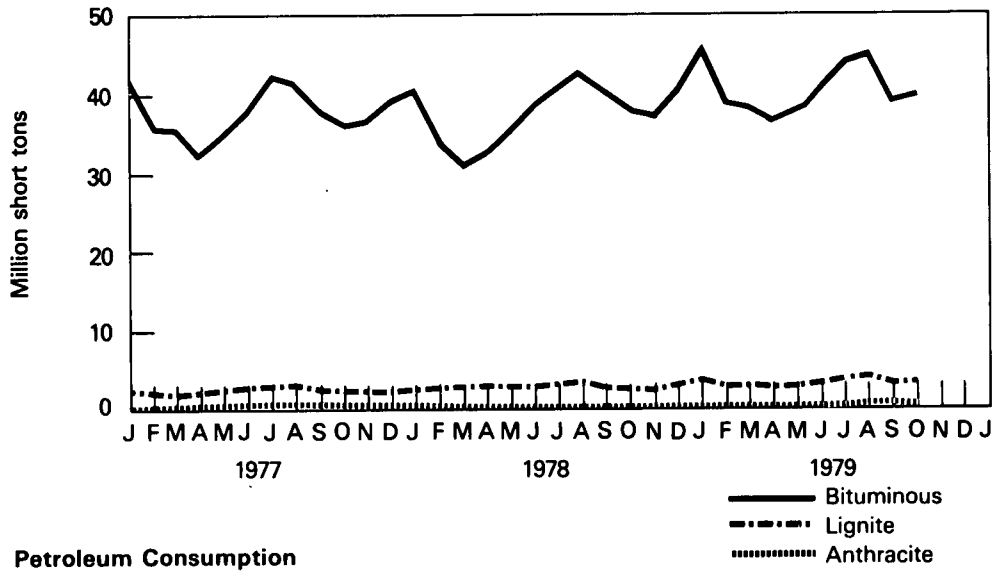
Primary Energy Resources Consumed to Produce Electricity

		Coal				Petroleum			Natural Gas
		Anthracite	Bituminous	Lignite	Total	Steam	Gas Turb./ Int. Comb.	Coke	
		Thousand short tons				Thousand barrels		Thousand short tons	Million cubic feet
1973	**TOTAL**	**1,443**	**376,975**	**10,794**	**389,212**	**513,190**	**47,058**	**507**	**3,660,172**
1974	**TOTAL**	**1,498**	**378,643**	**11,670**	**391,811**	**483,146**	**53,128**	**625**	**3,443,428**
1975	**TOTAL**	**1,480**	**388,523**	**15,960**	**405,962**	**467,221**	**38,907**	**70**	**3,157,669**
1976	**TOTAL**	**1,350**	**425,205**	**21,817**	**448,371**	**514,077**	**41,843**	**68**	**3,080,868**
1977	**TOTAL**	**1,425**	**451,051**	**24,650**	**477,126**	**574,869**	**48,837**	**98**	**3,191,200**
1978	January	101	40,506	2,101	42,708	61,271	8,256	10	229,187
	February	88	33,556	2,189	35,832	59,636	7,709	55	211,169
	March	100	31,275	2,629	34,004	58,772	5,475	64	232,198
	April	83	32,128	2,406	34,617	40,877	2,151	39	223,186
	May	73	34,902	2,224	37,199	40,244	2,293	28	260,798
	June	91	38,250	2,453	40,794	42,729	3,570	31	321,426
	July	85	40,906	3,127	44,118	47,547	3,569	32	362,192
	August	100	42,665	3,297	46,062	52,637	3,563	31	340,292
	September	86	39,835	2,725	42,646	43,114	3,300	28	296,976
	October	82	37,197	2,574	39,853	42,253	1,823	25	262,878
	November	88	36,982	2,681	39,751	44,516	2,161	27	228,001
	December	87	40,581	3,001	43,669	54,771	3,643	30	220,003
	TOTAL	**1,064**	**448,782**	**31,407**	**481,254**	**588,366**	**47,511**	**398**	**3,188,306**
1979	January	89	45,536	3,021	48,646	R62,226	R6,244	33	228,435
	February	75	39,010	2,806	41,891	R51,655	R4,959	32	226,854
	March	65	38,863	2,852	41,779	R36,371	R1,871	22	260,412
	April	66	36,360	2,551	38,977	R33,801	R1,682	15	260,944
	May	106	38,670	2,757	41,532	R35,285	R2,053	23	277,314
	June	103	40,883	3,023	44,010	R39,260	R2,318	25	320,164
	July	96	44,393	3,730	48,219	R41,895	R2,413	23	369,284
	August	97	44,554	3,899	48,550	R42,478	R2,416	23	R375,330
	September	86	R38,852	3,162	R42,099	R36,769	R1,748	17	R338,227
	October	75	39,610	3,261	42,946	33,456	1,132	16	325,982
	TOTAL (Year to date)	**859**	**406,730**	**31,060**	**438,649**	**413,197**	**26,836**	**230**	**2,982,947**

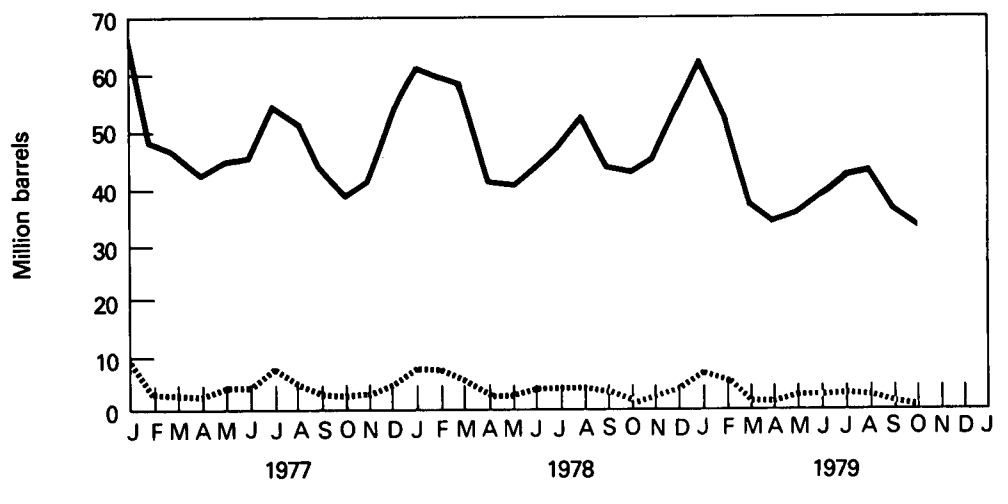
Totals may not equal sum of components due to independent rounding.
R = Revised data.
Source: • Federal Power Commission Form 4, "Monthly Power Plant Report."

Electric Utilities

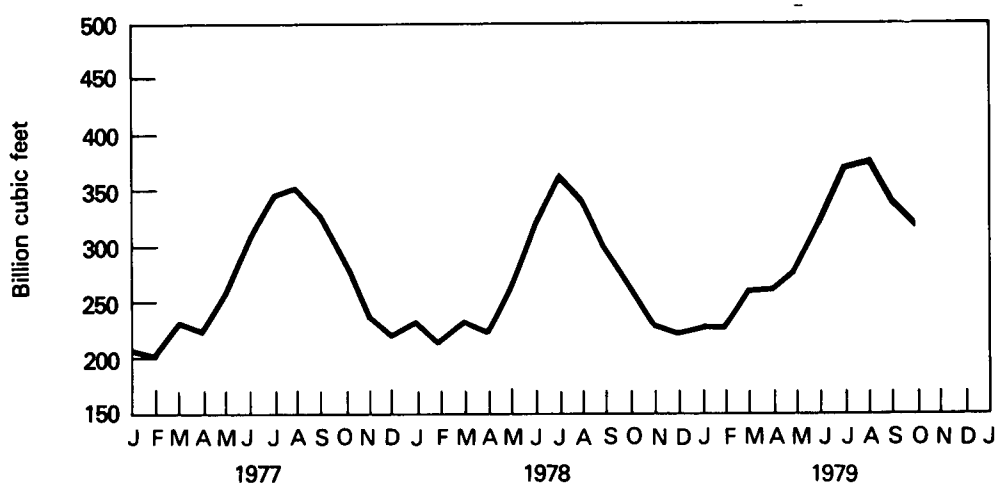
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities

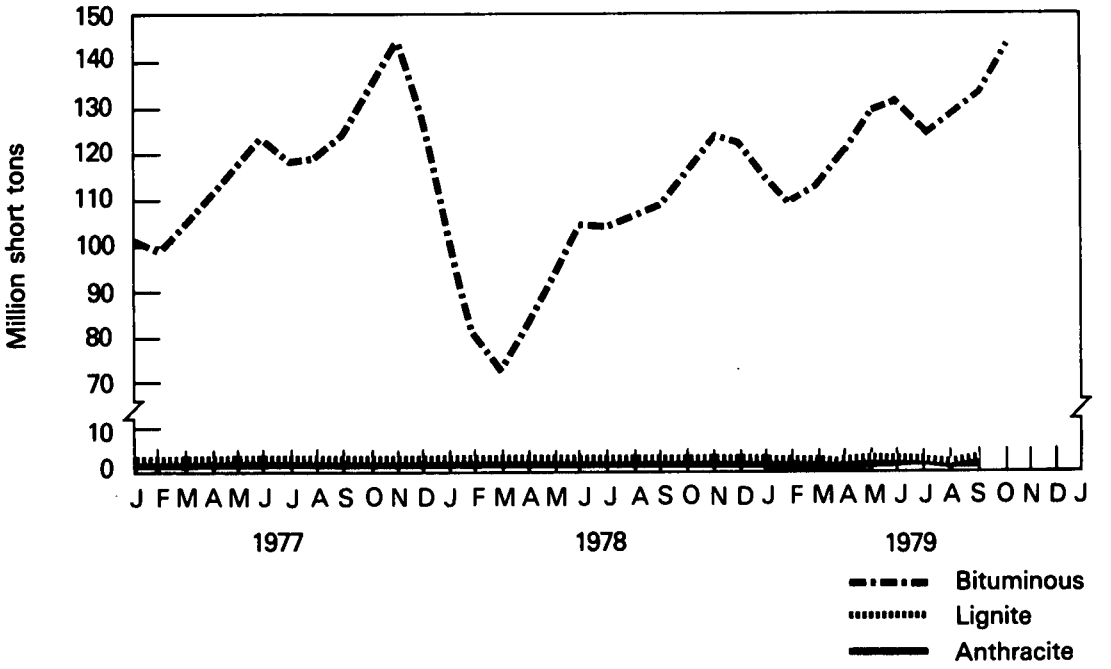
End-of-Month Coal and Petroleum Stocks

		Coal				Petroleum		
		Anthracite	Bituminous	Lignite	Total	Steam	Gas Turb./ Int. Comb.	Coke
		Thousand short tons				Thousand barrels		Thousand short tons
1973		‡1,066	‡84,941	‡961	‡86,967	‡79,121	‡10,095	‡312
1974		‡930	‡81,712	‡867	‡83,509	‡97,718	‡15,199	‡35
1975		‡982	‡107,927	‡1,815	‡110,724	‡108,825	‡16,432	‡31
1976		‡1,000	‡114,130	‡2,306	‡117,436	‡106,993	‡14,703	‡32
1977		‡2,321	‡128,210	‡2,688	‡133,219	‡124,750	‡19,281	‡44
1978	January	2,280	100,547	2,418	105,245	114,174	16,260	40
	February	2,112	80,092	2,349	84,553	111,158	17,043	197
	March	2,091	72,369	2,556	77,016	112,347	17,269	182
	April	2,083	83,287	2,612	87,982	116,101	17,386	164
	May	2,145	95,699	2,782	100,626	118,940	16,972	167
	June	2,215	105,611	2,923	110,749	120,186	17,581	167
	July	2,241	104,606	2,849	109,696	121,509	17,580	176
	August	2,208	106,915	3,140	112,263	119,358	17,389	173
	September	2,224	109,748	3,187	115,159	121,115	17,538	181
	October	2,220	115,943	3,431	121,594	117,681	17,355	189
	November	2,199	124,058	3,118	129,376	112,219	17,240	199
	December	2,178	123,017	3,027	128,222	102,401	16,385	198
1979	January	2,154	114,941	2,814	119,909	R89,473	R15,635	181
	February	2,136	109,532	2,726	114,394	R81,990	R15,541	166
	March	2,170	113,660	2,704	118,533	R95,946	R16,386	170
	April	2,220	120,874	2,680	125,774	R99,371	R16,835	170
	May	2,231	128,950	2,600	133,781	R105,883	R16,975	159
	June	2,233	131,787	2,495	136,515	R104,383	R17,180	150
	July	2,290	126,327	2,478	131,094	R104,039	R17,579	160
	August	2,328	128,734	3,170	134,231	R103,835	R17,910	163
	September	2,385	R133,608	3,139	R139,133	R104,691	R18,733	164
	October	2,452	143,795	3.462	149,709	109,554	19,420	170

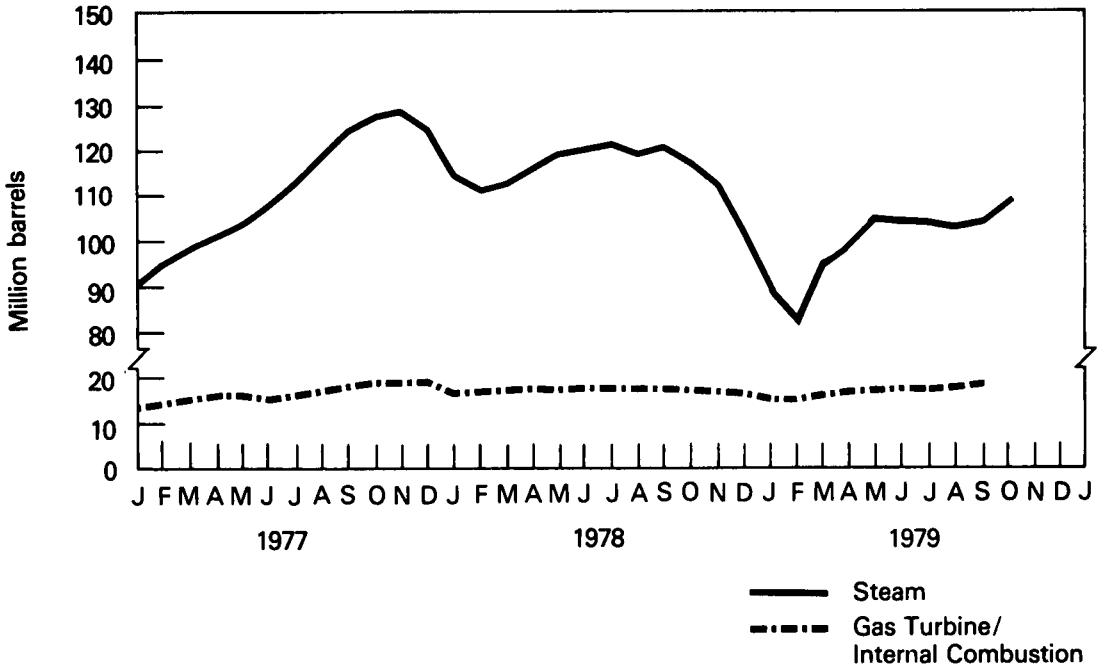
Totals may not equal sum of components due to independent rounding.
‡Total as of December 31.
R = Revised data.
Source: • Federal Power Commission Form 4, "Monthly Power Plant Report."

Electric Utilities

Coal Stocks



Petroleum Stocks



Nuclear Power

During November, the 71 operational nuclear powerplants generated 19.3 billion net kilowatt-hours* of electricity, approximately 10.7 percent of total net domestic electricity for the month. Nuclear generation for November 1979 represented decreases of 22.6 and 8.5 percent, respectively, from October 1979 and November 1978 generations.

The status of nuclear powerplants remained essentially unchanged from last month with 190 domestic nuclear reactors having a total capacity of 185 million net kilowatts in operation or various stages of planning.

In 18 noncommunist countries there were a total of 194 operable nuclear reactors during November. These reactors had a gross capacity of 115.9 million kilowatts, and during November their electricity generation totaled 46.1 billion gross kilowatt-hours.

*Preliminary data.

Nuclear Power

Domestic Nuclear Powerplant Operations

		Maximum Dependable Capacity[1]		Average Power[2]		Electricity Generation[3]	Percent of Total Domestic Electricity Generation
		All Plants[4]	Fully Operable Plants[5]	All Plants[4]	Fully Operable Plants[5]		
		Million net kilowatts				Million net kilowatt-hours	
1973	**AVERAGE**	**13.850**	**NA**	**8.760**	**NA**	**83,479**	**4.5**
1974	**AVERAGE**	**29.921**	**NA**	**13.011**	**NA**	**113,976**	**6.1**
1975	**AVERAGE**	**35.671**	**NA**	**19.692**	**NA**	**172,505**	**9.0**
1976	**AVERAGE**	**40.642**	**36.170**	**21.756**	**21.356**	**191,104**	**9.4**
1977	**AVERAGE**	**45.554**	**43.054**	**28.640**	**27.988**	**250,883**	**11.8**
1978	January	47.167	45.727	34.722	34.681	25,833	13.1
	February	48.080	45.744	32.490	32.489	21,833	12.6
	March	48.062	45.744	30.173	30.166	22,449	13.0
	April	48.926	45.746	24.451	24.106	17,580	11.0
	May	48.924	45.744	27.441	26.736	20,416	11.6
	June	49.714	46.627	30.813	30.164	22,185	11.8
	July	49.719	47.714	33.612	33.496	25,007	12.3
	August	49.815	47.810	34.407	34.396	25,599	12.4
	September	49.815	47.810	30.818	30.757	22,189	12.0
	October	50.776	47.864	30.910	30.489	22,997	13.1
	November	50.776	47.864	34.585	34.118	24,901	14.1
	December	50.774	48.742	34.160	33.676	25,415	13.2
	AVERAGE	**49.385**	**46.937**	**R31.556**	**31.280**	**276,403**	**12.5**
1979	January	50.771	48.745	37.355	37.148	27,792	13.3
	February	50.720	48.762	38.558	38.400	25,911	13.9
	March	50.720	48.762	32.708	32.708	24,335	13.3
	April	50.705	48.747	25.616	25.516	18,418	10.8
	May	50.705	48.747	20.195	20.195	15,025	8.4
	June	50.705	48.747	22.313	22.079	16,065	8.6
	July	50.759	49.131	27.990	27.329	20,825	10.3
	August	50.732	49.105	32.532	31.717	24,204	11.8
	September	50.781	49.869	30.283	30.178	21,804	12.1
	October	R50.814	R49.902	R28.279	R28.240	R21,068	R11.7
	November†	50.814	49.902	26.767	26.767	19,272	10.7
	AVERAGE	**50.749**	**49.132**	**29.274**	**29.071**	**234,730**	**11.4**

[1]See definitions.
[2]Average power represents generated electricity on an average hourly basis.
[3]Figures for 1973-1976 and annual figures for 1977-1979 represent totals rather than averages.
[4]Includes all units authorized to generate commercial electricity, including units in start-up testing (see definitions) and those owned by the Government.
[5]Units in start-up testing are not included.
†Preliminary data.
R = Revised data.
NA = Not available.
Sources: • Capacity data for units in commercial operation or start-up testing — Nuclear Regulatory Commission.
• Average power data for November 1979 computed from *Nucleonics Week* magazine.
• Nuclear Regulatory Commission Report NUREG 0020, "Operating Units Status Report."
• Remaining data from Federal Power Commission Form 4, "Monthly Power Plant Report."

Nuclear Power

Status of Nuclear Powerplants[1]

		In Operation or Startup Testing				Construction Permits Granted or Pending				Plants Ordered	Total
		Boiling Water Reactors	Pressurized Water Reactors	Other	Total[2]	Boiling Water Reactors	Pressurized Water Reactors	Other	Total[2]	All Types	All Types
1976		**‡24**	**‡37**	**‡0**	**‡62**	**‡41**	**‡93**	**‡4**	**‡138**	**‡16**	**‡235**
1977		**‡25**	**‡41**	**‡0**	**‡67**	**‡38**	**‡90**	**‡4**	**‡132**	**‡13**	**‡221**
1978	January	25	40	2	68	37	90	3	130	13	220
	February	25	41	2	69	37	89	3	129	13	220
	March	25	41	2	69	37	91	3	131	11	220
	April	25	41	2	69	37	91	3	131	11	216
	May	25	41	2	69	37	89	3	129	10	214
	June	26	41	2	70	36	89	3	128	9	214
	July	25	41	2	70	36	87	3	126	10	212
	August	26	41	2	70	36	87	3	126	10	212
	September	26	41	2	70	36	87	3	126	9	211
	October	26	41	2	71	36	87	3	126	9	211
	November	25	42	2	71	36	85	3	124	9	210
	December	26	42	2	71	36	83	3	122	9	206
1979	January	26	42	2	71	35	84	1	122	5	199
	February	26	42	2	71	35	84	1	120	5	199
	March	26	42	2	71	35	84	1	120	5	199
	April	26	42	2	71	35	83	1	119	5	198
	May	26	42	2	71	35	83	1	119	5	198
	June	26	42	2	71	35	83	1	119	5	198
	July	26	42	2	71	35	80	1	117	5	195
	August	26	42	2	71	35	80	1	116	5	192
	September	26	42	2	71	35	80	1	116	3	190
	October	26	42	2	71	35	80	1	116	3	190

[1]Monthly data are recorded the last day of the month.
[2]Includes minimal numbers of high temperature gas reactors.
‡Recorded December 31 of each year.
Sources: • Compiled by the Energy Information Administration from various sources, but primarily from the Nuclear Regulatory Commission (NRC), Report NUREG 0380, "Program Summary Report."

Nuclear Power

Domestic Uranium Enrichment

	Separative Work Performed			Cost			Product Quantity			Feed Requirements		
	Metric tons of separative work units			Million dollars			Metric tons of uranium					
	Domestic	Foreign Customers	Total	Domestic	Foreign Customers	Total	Domestic	Foreign Customers	Total	Domestic	Foreign Customers	Total
1979												
January	655.05	548.60	1,203.65	55.55	47.71	103.26	138.72	143.48	282.20	813.36	721.31	1,534.67
February	299.40	248.79	548.19	24.91	20.55	45.46	60.21	60.53	120.74	370.61	320.03	690.63
March	989.61	380.65	1,370.26	84.35	32.31	116.66	234.91	85.01	319.92	1,265.80	477.48	R1,743.27
April	508.87	100.40	609.27	R44.12	8.45	52.56	130.87	26.69	157.56	665.05	132.54	797.58
May	199.21	R150.44	349.65	17.66	13.41	31.07	71.69	40.65	112.34	291.13	199.85	490.98
June	1,608.74	623.33	2,232.07	143.21	55.48	198.69	434.33	R123.76	558.09	2,126.41	766.58	2,892.99
July	414.62	63.17	477.78	37.48	5.60	43.08	128.51	13.32	141.83	573.69	78.15	651.84
August	1,201.94	345.49	1,547.43	110.86	30.88	141.74	313.02	100.79	413.81	1,689.33	470.17	2,159.50
September	1,769.94	1,441.35	3,211.29	158.73	128.85	287.59	463.69	360.79	824.48	2,304.11	1,867.13	4,171.24
October	434.25	189.40	623.65	41.29	18.01	59.30	107.17	45.93	153.11	560.25	243.23	803.48
November	231.95	300.79	532.73	21.86	28.60	50.47	59.02	74.02	133.04	338.25	387.50	725.74

R = Revised data.
Source: • U.S. Department of Energy, Oak Ridge, Report U3341.

Nuclear Power Generation by Noncommunist Countries — November 1979

Country	Number of Reactors[1]	Capacity[1]	Electricity Generation	Percent of Design Capacity Used			
				Year[2]			November
		Thousand gross electrical kilowatts	Million gross kilowatt-hours	1976	1977	1978	1979
Asia							
Japan	22	15,120	5,353	64	40	55	49
India	3	620	304	59	51	42	68
Pakistan	1	140	0	41	28	19	0
South Korea	1	590	0	NA	NA	45	0
Taiwan	2	1,270	316	NA	21	49	35
Europe							
Belgium	3	1,740	964	65	78	82	77
England[3]	33	9,010	3,279	62	55	51	54
Finland	2	1,150	561	NA	92	81	68
France	16	8,760	3,563	59	52	59	57
Germany (FR)	11	8,350	3,642	57	64	58	61
Italy	4	1,490	227	69	61	51	21
Netherlands	2	520	37	84	81	89	10
Spain	3	1,120	719	77	67	78	89
Sweden	6	3,850	2,302	55	59	70	83
Switzerland	4	2,030	1,418	85	87	90	97
North America							
Canada[4]	9	5,590	2,892	80	76	79	77
United States	71	54,180	20,286	55	64	65	52
South America							
Argentina	1	360	255	86	55	91	99
Total	**194**	**115,890**	**46,118**	**59**	**62**	**63**	**55**

Totals may not equal sum of components due to independent rounding.
[1]Includes fully operational units and those in startup testing which generated electricity during, or prior to, the current month. Capacity and generation figures are shown as gross values, as opposed to net values shown in previous tables of this chapter.
[2]Averages are computed for those units in operation, including startup units beginning with first month of electricity generation.
[3]November figures for 22 units are based on a 4-week period; figures for remaining units are for 31 days.
[4]November figures are based on 4-week period.
R = Revised data.
NA = Not available.
Source: • Compiled from *Nucleonics Week* magazine, published by McGraw-Hill, Inc.

Nuclear Power

Summary of Monthly Fuel Cycle — September 1979

Fuel Cycle Activity	Product	Processed Material[1]	Percent Utilization of Industry Capacity	Energy Content of Processed Material[2]	Energy Consumed in Fuel Cycle Activity[3]
		MTU except where noted		Billion Btu	
Milling	Yellowcake (U_3O_8) Deliveries	708	54	257,000	389
Conversion	Uranium Hexafluoride (UF_6) Deliveries	1,227	[4]68	418,000	184
Enrichment[5]	Enriched UF_6 Deliveries	824 (3,211 MT-SWU)	NA	1,688,000	7,507
Fabrication	Finished Fuel Assemblies Shipped	147	NA	300,000	42
Powerplant Operation	Electricity Generated	21,804 (million kWh)	60	235,000	1,366 (million kWh)
Spent Fuel	Stored at Reactor Site	118	NA	NA	NA
	Stored at Non-Reactor Sites	0	0	0	0

[1]Units of measure are discussed in Explanatory Notes 11 and 12.
[2]Assumes 25,000 MWD/MTU for heat content of enriched uranium and a 6.1 feed to product ratio at the enrichment plant.
[3]Energy requirements for processing are obtained from U.S. Atomic Energy Commission Report No. WASH 1248.
[4]Figure for conversion utilization represents material shipped.
[5]Includes enriched materials for both domestic and foreign customers. See "Domestic Uranium Enrichment" Table for domestic portion of total.
NA = Not available.
Sources: • U.S. Department of Energy NMMSS Report TJ-21-MOD-5.
• Federal Power Commission Form 4, "Monthly Power Plant Report."

Price

Crude Oil

During October 1979, the composite refiner acquisition cost of crude oil was $20.68 per barrel, $.54 per barrel above the previous month's price. The imported price declined $.01 per barrel from the September level to $25.05 per barrel in October. This price was 71.2 percent above the October 1978 level. The domestic average was $16.93, an increase of $.88 per barrel above the September average.

The average price of domestic crude oil purchased at the wellhead was $14.06 per barrel in August 1979. The Alaskan North Slope price of $14.14 per barrel was 5.9 percent above the July 1979 figure. Actual stripper's price of $26.01 per barrel was a 5.0 percent increase over the July 1979 price, and Naval Petroleum Reserve crude oil price of $20.77 per barrel increased 3.2 percent over the July 1979 level. The upper tier price of $13.38 per barrel increased by 4.6 percent over the previous month's figure, and the lower tier price of $6.09 per barrel increased 1.5 percent over the July 1979 price.

Motor Gasoline

The national average retail price for all grades and all types of motor gasoline was 100.5 cents per gallon in October. Leaded regular gasoline at full serve stations sold for an average of 99.3 cents per gallon in October, 1.1 cents higher than the price in September. The price for unleaded regular gasoline at full serve stations was 104.2 cents per gallon in October, 1.0 cent higher than in September. The differential between unleaded regular and leaded regular decreased to 4.9 cents per gallon.

Heating Oil

The national average price of heating oil sold to residential customers rose 1.2 cents in October to 82.2 cents per gallon. The resulting figure was a 63.7 percent increase from the price of October 1978. The average residential distributor margin in October was 14.8 cents per gallon, 37.0 percent above the margin of October 1978. Refiner's national average selling price to resellers and retailers was 68.3 cents per gallon, 79.3 percent above the October 1978 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 1979 was $21.59 per barrel, 69 cents above the previous month's price, and 65.9 percent over the October 1978 average. The average price, excluding taxes, for No. 6 residual fuel oil sold to resellers, bulk plants, jobbers, and other wholesale accounts was $20.88 per barrel, $1.26 above the September 1979 average, and a 77.6 percent increase over the October 1978 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 1979 was 68.4 cents per gallon, or 2.5 cents over the previous month's average and a 74.0 percent increase over the October 1978 average.

Diesel Fuel

The average price, excluding taxes, for No. 2 diesel fuel sold at truck stops and other retail outlets in October 1979 was 74.6 cents per gallon, 2.8 cents higher than in the previous month. This price was 82.4 percent above the price in October 1978. The average price, excluding taxes, for No. 2 diesel fuel sold to resellers, jobbers, and other wholesale accounts was 69.1 cents per gallon, 0.1 cents above the previous month's price. This was 83.3 percent over the October 1978 average.

Liquefied Petroleum Gases

The average wholesale price for propane during October 1979, excluding taxes, was 35.2 cents per gallon, 1.9 cents above the previous month's level. This was 56.4 percent above the October 1978 level.

In October 1979, the average wholesale price for butane, excluding taxes, was 56.2 cents per gallon, a 4.3 cents above the previous month's price. This was 35.3 cents above the October 1978 average.

Part 9 Price

Price

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

		Lower Tier[2]		Upper Tier[2]		Actual Stripper[3]		Alaskan North Slope[4]		Naval Petroleum Reserve[5]		Actual Domestic Average[6]	Imputed Domestic Average[6]
		Dollars per barrel											
		Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Price
1976	**AVERAGE**	**5.13**	**54.4**	**11.71**	**31.5**	**12.16**	**14.1**	**NA**	**NA**	**NA**	**NA**	**8.19**	**8.06**
1977	January	5.17	50.6	11.44	36.7	13.27	12.7	NA	NA	NA	NA	8.50	8.28
	February	5.18	49.5	11.39	37.2	13.32	13.3	NA	NA	NA	NA	8.57	8.33
	March	5.15	49.2	11.03	37.2	13.31	13.6	NA	NA	NA	NA	8.45	8.19
	April	5.15	49.5	10.97	36.9	13.28	13.6	NA	NA	NA	NA	8.40	8.14
	May	5.18	48.4	10.98	37.6	13.26	14.0	NA	NA	NA	NA	8.49	8.23
	June	5.16	48.8	10.92	37.0	13.28	14.2	NA	NA	NA	NA	8.44	8.17
	July	5.16	46.75	11.00	36.59	13.31	13.30	6.84	2.58	12.21	0.75	8.48	8.21
	August	5.18	43.31	10.93	36.65	13.95	13.32	6.91	5.79	12.29	0.91	8.62	8.25
	September	5.20	42.78	11.20	34.07	14.01	13.14	6.98	9.06	12.33	0.91	8.63	8.26
	October	5.23	42.23	11.42	34.58	14.01	12.92	6.66	9.09	12.38	1.15	8.72	8.36
	November	5.24	41.41	11.63	34.67	13.98	13.00	5.73	9.84	12.40	1.05	8.72	8.35
	December	5.25	40.42	11.76	34.61	13.98	13.00	5.73	10.92	12.36	1.03	8.77	8.40
	AVERAGE	**5.19**	**45.92**	**11.22**	**36.11**	**13.59**	**13.32**	**6.35**	**4.14**	**12.34**	**0.51**	**8.57**	**8.27**
1978	January	5.28	41.73	11.78	34.19	13.89	12.69	5.30	10.17	12.38	1.19	8.68	8.34
	February	5.29	40.78	11.81	34.35	13.90	13.68	5.68	9.94	12.46	1.23	8.84	8.48
	March	5.34	39.24	11.87	34.06	13.97	13.98	5.00	11.76	12.60	0.92	8.80	8.41
	April	5.35	37.94	11.94	34.04	13.95	13.72	5.15	13.26	12.67	1.02	8.82	8.44
	May	5.38	38.16	11.98	34.03	13.93	13.76	4.87	13.05	12.70	0.97	8.81	8.43
	June	5.46	36.79	12.08	35.01	13.95	13.89	5.63	13.45	13.08	0.84	9.05	8.68
	July	5.46	37.61	12.16	34.39	13.95	13.55	5.26	13.46	13.07	0.97	8.96	8.62
	August	5.50	36.49	12.22	34.45	13.93	14.42	5.09	13.66	13.04	0.95	9.05	8.67
	September	5.55	35.92	12.35	34.64	13.96	14.44	5.12	13.79	13.17	1.18	9.15	8.78
	October	5.60	36.27	12.42	34.38	13.97	14.15	5.21	13.95	13.08	1.22	9.17	8.81
	November	5.65	36.22	12.53	34.56	13.94	14.02	5.12	14.08	13.00	1.09	9.20	8.85
	December	5.68	33.65	12.59	34.74	14.08	15.88	5.40	14.42	12.92	1.28	9.47	9.07
	AVERAGE	**5.46**	**37.54**	**12.15**	**34.41**	**13.95**	**14.03**	**5.22**	**12.96**	**12.85**	**1.08**	**9.00**	**8.63**
1979	January	5.75	35.51	12.66	34.25	14.55	14.14	5.79	14.88	13.10	1.20	9.46	9.04
	February	5.76	35.20	12.78	34.97	14.88	15.08	5.87	13.71	13.94	1.01	9.69	9.21
	March	5.82	34.59	12.84	34.56	14.88	14.95	6.66	14.58	13.97	1.29	9.83	9.37
	April	5.85	33.98	12.94	34.93	16.71	15.27	7.45	14.52	14.56	1.28	10.33	9.60
	May	5.91	33.53	13.02	34.78	17.53	15.62	8.47	14.71	15.85	1.32	10.71	9.86
	June	6.07	29.31	13.14	38.22	20.24	16.01	8.97	13.61	16.02	1.34	11.74	10.48
	July	6.00	26.98	12.79	37.49	24.76	16.01	13.35	15.87	20.13	1.38	13.22	11.31
	August†	6.09	22.02	13.38	36.85	26.01	16.97	14.14	15.82	20.77	1.33	14.06	11.88
	AVERAGE	**5.88**	**31.87**	**13.01**	**35.75**	**18.92**	**15.51**	**8.99**	**14.73**	**16.20**	**1.37**	**11.16**	**NA**

[1]See Explanatory Note 14.
[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 price. ANS is included in both the Actual Domestic Average and the Imputed Domestic Average price determinations.
[5]The Naval Petroleum Reserves (NPR) are exempt from pricing regulations but have been reported here as Upper Tier prior to July 1977. NPR is included in the Actual Domestic Average price determinations, but not in the Imputed Domestic Average.
[6]See Explanatory Note 15.
†Preliminary data.
NA = Not available.
Sources: • January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report."
• February 1976 through August 1976: FEA Form P124-M-0, "Domestic Crude Oil Purchasers Report" for Lower Tier percentages and EIA estimates for Upper Tier percentages.
• September 1976 forward: FEA Form P124-M-0, "Domestic Crude Oil Purchasers Report." Data provided by the Economic Regulatory Administration.

Price

FOB 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					
1976	**AVERAGE**	**13.05**	**NA**	**12.76**	**11.61**	**12.55**	**NA**	**13.08**	**11.69**	**11.94**	**NA**	**11.32**
1977	January	14.03	NA	13.41	12.03	13.64	13.39	14.11	11.92	12.53	NA	13.39
	February	14.31	NA	13.43	12.36	13.89	13.42	14.24	12.04	12.33	NA	13.30
	March	14.29	NA	13.58	12.79	13.87	13.40	14.32	12.24	12.51	NA	12.98
	April	14.34	NA	13.55	12.79	13.98	13.38	14.51	12.23	12.53	NA	12.62
	May	14.31	NA	13.57	12.78	13.93	13.42	14.56	12.23	12.56	NA	12.60
	June	14.35	NA	13.55	12.68	13.94	13.41	14.55	12.21	12.44	NA	12.53
	July	14.43	NA	13.61	12.78	13.99	13.42	14.52	12.40	12.70	NA	12.48
	August	14.48	NA	13.63	12.80	13.95	13.45	14.54	12.56	13.15	NA	12.37
	September	14.43	NA	13.64	12.73	13.99	13.43	14.56	12.72	13.20	NA	12.55
	October	14.43	NA	13.65	12.79	13.93	13.42	14.48	12.70	13.22	NA	12.72
	November	14.37	NA	13.65	12.75	13.88	13.41	14.53	12.73	13.33	NA	12.71
	December	14.44	NA	13.61	12.71	13.85	13.41	14.45	12.77	13.27	NA	12.56
1978	January	14.29	NA	13.67	12.62	13.77	13.45	14.18	12.70	13.23	NA	12.73
	February	14.21	NA	13.62	12.68	13.91	13.43	14.18	12.78	13.18	NA	12.61
	March	14.19	NA	13.62	12.68	13.75	13.44	14.13	12.80	13.20	13.80	12.86
	April	14.09	NA	13.61	12.68	13.62	13.42	13.91	12.74	13.23	13.65	12.54
	May	13.99	NA	13.51	12.65	13.59	13.42	13.90	12.71	13.05	13.64	12.13
	June	14.06	NA	13.63	12.58	13.59	13.32	13.90	12.67	13.28	13.65	12.32
	July	14.06	NA	13.63	12.70	13.67	13.13	13.89	12.65	13.26	13.72	12.66
	August	14.05	NA	13.63	12.63	13.66	13.17	13.86	12.66	13.27	13.80	12.23
	September	14.05	NA	13.69	12.63	13.66	13.13	13.97	12.76	13.27	13.74	12.38
	October	14.08	NA	13.63	12.64	13.73	13.15	14.08	12.59	13.24	14.14	12.32
	November	14.13	NA	13.79	12.62	13.97	13.17	14.12	12.63	13.29	13.85	12.46
	December	14.16	NA	13.65	12.67	14.07	13.13	14.29	12.77	13.39	14.06	12.42
1979	January	14.87	NA	14.06	12.55	14.60	13.94	14.84	13.26	13.98	15.41	13.69
	February	14.89	NA	14.18	12.56	15.15	14.17	14.98	13.47	14.28	15.33	13.26
	March	15.54	NA	14.42	19.04	16.46	14.14	15.07	13.61	15.72	16.13	13.88
	April	16.80	NA	15.98	17.96	17.40	17.02	18.18	14.77	16.24	17.40	14.58
	May	19.14	NA	16.84	17.27	19.13	18.56	20.02	14.62	17.38	18.39	15.76
	June	21.04	NA	18.59	19.95	20.87	17.43	22.11	17.98	18.91	20.88	16.01
	July	22.42	NA	20.95	21.99	23.88	22.29	24.46	18.54	21.33	23.14	18.22
	August	23.44	NA	21.65	21.40	24.93	22.56	25.43	18.32	21.45	23.88	18.66
	September	23.60	NA	22.11	27.27	25.17	22.32	25.77	18.72	22.93	22.93	18.14
	October	24.40	NA	24.39	31.80	27.39	24.43	26.33	21.44	21.85	NA	22.36

[1]The FOB cost excludes all costs related to insurance and transportation. See Explanatory Note 16.
NA = Not available.
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	January	14.80	13.92	14.42	13.16	14.64	13.78	14.97	13.22	13.56	NA	13.29
	February	15.18	13.74	14.57	13.56	15.12	13.92	15.12	13.32	13.46	NA	13.76
	March	15.08	14.34	14.64	13.94	14.88	13.77	15.13	13.50	13.80	NA	13.41
	April	15.21	14.02	14.70	13.95	15.12	13.66	15.37	13.41	13.78	NA	13.19
	May	15.20	14.94	14.59	13.94	14.91	13.80	15.40	13.49	13.85	NA	13.10
	June	15.34	14.49	14.63	13.81	14.92	13.81	15.37	13.39	13.72	NA	13.06
	July	15.29	13.91	14.75	13.84	14.88	13.87	15.39	13.64	14.20	NA	13.02
	August	15.24	14.24	14.65	13.99	14.70	13.84	15.25	13.72	14.36	NA	12.82
	September	15.29	14.14	14.62	13.77	14.99	13.72	15.34	14.01	14.41	NA	13.08
	October	15.41	14.00	14.67	13.83	14.81	13.71	15.31	13.85	14.56	NA	13.16
	November	15.05	14.52	14.73	13.88	14.73	13.79	15.23	13.94	14.19	NA	13.11
	December	15.25	14.27	14.58	13.95	14.81	13.69	15.21	13.99	14.48	NA	12.99
	AVERAGE	**15.20**	**14.21**	**14.63**	**13.80**	**14.87**	**13.75**	**15.25**	**13.61**	**14.04**	**NA**	**13.13**
1978	January	15.01	14.37	14.60	13.91	14.63	13.83	14.88	13.93	14.40	NA	13.00
	February	14.91	14.31	14.53	13.75	14.85	13.67	14.90	13.96	14.07	NA	12.93
	March	14.74	13.56	14.56	14.06	14.62	13.66	14.89	14.07	14.44	14.75	13.22
	April	14.91	13.87	14.61	13.90	14.43	13.63	14.63	13.85	14.42	14.26	12.89
	May	14.70	14.39	14.50	13.94	14.56	13.65	14.72	13.86	14.20	14.35	12.49
	June	14.80	15.07	14.58	13.92	14.45	13.51	14.61	13.86	14.48	14.19	12.72
	July	14.83	14.64	14.73	13.93	14.65	13.35	14.64	13.81	14.29	13.81	12.41
	August	14.83	14.78	14.66	13.76	14.64	13.52	14.59	13.84	14.49	14.48	12.70
	September	14.74	13.92	14.73	13.83	14.62	13.45	14.78	14.03	14.36	14.53	12.94
	October	14.90	14.73	14.68	13.89	14.81	13.39	15.03	13.89	14.61	14.85	12.78
	November	15.30	14.72	14.85	13.89	15.04	13.61	15.06	14.02	14.38	14.81	13.08
	December	15.27	14.96	14.80	13.80	15.23	13.50	15.30	14.00	14.66	15.00	13.02
	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	NA	18.59	19.95	20.87	17.42	22.11	17.98	18.91	20.88	16.01
	July	23.54	NA	22.50	23.35	25.48	22.74	25.79	20.06	22.84	23.96	18.95
	August	24.85	NA	23.10	22.64	26.27	23.12	26.72	19.85	23.12	25.05	19.42
	September	25.09	NA	23.72	28.36	26.54	23.23	27.03	20.36	24.59	24.18	18.99
	October	25.59	NA	26.36	33.17	28.56	24.98	27.41	22.99	23.98	NA	23.05

[1]See Explanatory Note 17.
NA = Not available.
Sources: 1976 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 Refiner Acquisition Cost[1]

		Domestic	Imported	Composite
		Dollars per barrel		
1976	**AVERAGE**	**8.84**	**13.48**	**10.89**
1977	January	9.23	14.11	11.64
	February	9.24	14.50	11.80
	March	9.32	14.54	11.88
	April	9.21	14.36	11.75
	May	9.21	14.62	11.87
	June	9.34	14.63	11.98
	July	9.32	14.44	11.90
	August	9.54	14.68	12.01
	September	9.75	14.50	12.01
	October	9.95	14.56	12.12
	November	10.17	14.61	12.18
	December	10.15	14.76	12.27
	AVERAGE	**9.55**	**14.53**	**11.96**
1978	January	10.14	14.52	12.13
	February	10.25	14.41	12.19
	March	10.46	14.57	12.23
	April	10.55	14.40	12.20
	May	10.60	14.51	12.35
	June	10.72	14.54	12.48
	July	10.58	14.49	12.45
	August	10.65	14.46	12.46
	September	10.65	14.53	12.57
	October	10.78	14.63	12.62
	November	10.87	14.74	12.76
	December	11.00	14.94	12.93
	AVERAGE	**10.61**	**14.57**	**12.46**
1979	January	11.02	15.50	13.11
	February	11.34	15.88	13.42
	March	11.45	16.41	13.70
	April	12.06	17.58	14.52
	May	12.41	19.00	15.40
	June	13.24	21.03	17.00
	July	14.61	23.09	18.58
	August	15.73	23.98	19.75
	September	16.05	25.06	20.14
	October	16.93	25.05	20.68
	AVERAGE	**13.48**	**20.37**	**16.61**

[1]See Explanatory Note 13.

Note: Crude oil costs and volumes reported on the ERA 49 exclude unfinished oils but include Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on the P-110-M-1 include unfinished oils but exclude SPR. Imported averages derived from the Economic Regulatory Administration (ERA) Form 49 exclude crude oil purchased as Strategic Petroleum Reserves (SPR), whereas, the composite averages derived from the ERA 49 include SPR.

Sources: • 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." Data provided by the Economic Regulatory Administration.

Price

Unrecouped Costs for Refined Products for 29 Largest Refiners[1]

		Distillate[2]	Motor Gasoline	Aviation Jet Fuel[3]	Other Products	Total
				Million dollars		
1977	January	NA	901	166	325	1,392
	February	NA	1,038	187	303	1,528
	March	NA	956	180	287	1,423
	April	NA	1,029	194	343	1,566
	May	NA	967	224	351	1,542
	June	NA	957	234	344	1,535
	July	NA	869	210	391	1,470
	August	NA	764	279	455	1,498
	September	NA	784	186	500	1,470
	October	NA	879	248	511	1,638
	November	NA	904	218	538	1,660
	December	NA	818	185	470	1,473
1978	January	NA	1,055	191	420	1,666
	February	NA	1,265	198	435	1,898
	March	NA	1,065	175	378	1,618
	April	NA	1,013	170	400	1,583
	May	NA	849	186	500	1,535
	June	NA	718	180	562	1,460
	July	NA	713	136	449	1,298
	August	NA	353	74	461	888
	September	NA	554	155	491	1,200
	October	NA	627	131	701	1,459
	November	NA	709	102	540	1,351
	December	NA	532	94	791	1,417
1979	January	NA	836	64	799	1,699
	February	NA	1,110	36	842	1,988
	March	NA	1,551	NA	837	2,388
	April	NA	2,067	NA	1,649	3,716
	May	NA	2,245	NA	1,848	4,093
	June	NA	2,737	NA	1,754	4,491
	July	NA	2,989	NA	2,087	5,076
	August	NA	2,865	NA	2,331	5,196
	September	NA	3,176	NA	2,384	5,560
	October†	NA	3,158	NA	2,303	5,461

[1]Beginning with February 1977, data for only 29 refiners are included in this table due to the merger between Skelly Oil Company and Getty Oil Company.
[2]Includes No. 2 heating oil and No. 2 diesel fuel only. After May 1976, reporting of the distillate bank is no longer required due to decontrol of middle distillates. Aviation jet fuel was decontrolled on February 26, 1979.
[3]After February 1979, reporting of aviation jet fuel bank is no longer required due to the decontrol of kerosene-base jet fuel and aviation gasoline.
†Preliminary data.
NA = Not available.
Sources: • January 1977 through June 1978: FEA Form P110-M-1, "Refiners' Monthly Cost Allocation Report."
• July 1978 forward: EIA Form 14, "Refiners' Monthly Cost Allocation Report." Data provided by the Economic Regulatory Administration.

Price

Crude Oil Entitlements and Supply Ratio

		Entitlement Price[1] Dollars	National Old Oil (or Domestic Crude Oil) Supply Ratio[1]	Entitlement Benefit[1] Dollars
1977	January	8.30	0.266	2.21
	February	8.53	0.267	2.28
	March	8.71	0.273	2.38
	April	8.69	0.285	2.48
	May	8.77	0.280	2.46
	June	8.65	0.273	2.36
	July	8.68	0.258	2.24
	August	8.75	0.266	2.33
	September	8.75	0.250	2.19
	October	8.78	0.250	2.20
	November	8.61	0.239	2.06
	December	8.65	0.233	2.02
1978	January	8.61	0.240	2.07
	February	8.48	0.230	1.95
	March	8.47	0.225	1.91
	April	8.35	0.218	1.82
	May	8.26	0.197	1.63
	June	8.19	0.191	1.56
	July	8.16	0.184	1.50
	August	8.06	0.165	1.33
	September	8.13	0.174	1.41
	October	8.11	0.178	1.44
	November	8.16	0.166	1.35
	December	8.20	0.155	1.27
1979	January	8.74	0.178	1.56
	February	9.03	0.185	1.67
	March	9.50	0.189	1.80
	April	10.53	0.196	2.06
	May	11.74	0.208	2.44
	June	13.70	0.220	3.01
	July	16.01	0.221	3.54
	August	17.26	0.218	3.78
	September	17.97	0.218	3.92
	October	18.27	0.219	4.00

[1]See Definitions.
Source: • FEA P102-M-1, "Domestic Crude Oil Entitlements Program Refiners Monthly Report." Data provided by the Economic Regulatory Administration.

Price

National Average Retail Dealer Motor Gasoline Selling Prices

		Leaded Regular		Unleaded Regular		Leaded Premium		Unleaded Premium		Average for All Grades
		Full Serve	Self Serve	Full Serve	Self Serve	Full Serve	Self Serve	Full Serve	Self Serve	
		Cents per gallon, including tax								
1976	**AVERAGE**	**58.7**	**55.4**	**62.5**	**NA**	**63.8**	**60.7**	**NA**	**NA**	**NA**
1977	January	59.9	56.2	64.0	NA	65.2	61.7	68.4	NA	NA
	February	60.7	57.1	65.0	NA	66.1	62.7	67.2	NA	NA
	March	61.3	57.7	65.4	NA	66.8	63.3	70.7	NA	NA
	April	62.2	58.4	66.1	NA	67.6	64.1	71.7	NA	NA
	May	62.9	58.9	66.7	NA	68.4	64.8	71.2	NA	NA
	June	63.4	59.3	67.2	NA	68.9	65.2	71.7	NA	NA
	July	63.4	59.2	67.3	NA	68.9	65.2	71.4	NA	NA
	August	63.4	58.8	67.0	63.7	68.9	65.8	71.4	NA	NA
	September	63.3	58.5	67.0	63.7	68.9	65.8	71.3	NA	NA
	October	63.2	58.2	67.0	63.6	68.9	65.7	71.3	NA	NA
	November	63.1	58.1	67.0	63.4	68.9	65.6	71.3	NA	NA
	December	63.3	58.2	67.2	63.6	69.1	65.8	70.6	NA	NA
	AVERAGE	**62.6**	**58.2**	**66.4**	**63.6**	**68.1**	**64.7**	**71.0**	**NA**	**NA**
1978	January	61.7	57.2	65.8	61.6	67.7	63.5	69.6	66.0	63.1
	February	61.6	57.1	65.7	61.8	67.7	64.0	NA	66.1	63.0
	March	61.7	57.0	65.8	61.8	68.0	63.9	69.7	66.0	63.0
	April	61.9	57.2	66.1	62.0	68.3	64.3	70.4	NA	63.2
	May	62.5	58.2	66.9	62.9	69.0	65.3	NA	NA	64.0
	June	63.4	59.0	67.8	64.0	70.0	66.2	NA	NA	64.8
	July	64.6	60.6	68.8	65.6	71.1	68.2	73.5	70.3	66.1
	August	65.4	61.2	69.8	66.2	72.0	68.8	74.4	71.3	66.8
	September	65.8	61.7	70.2	66.9	72.4	69.2	75.2	71.3	67.2
	October	65.9	61.5	70.2	66.7	72.5	69.3	74.8	71.8	67.2
	November	66.7	62.3	71.1	67.7	73.3	70.1	76.3	73.9	68.2
	December	67.5	63.4	71.7	68.7	73.7	71.0	77.1	74.7	68.9
	AVERAGE	**63.9**	**59.8**	**68.4**	**64.9**	**69.4**	**67.1**	**72.8**	**69.7**	**65.5**
1979	January	68.4	64.0	72.9	69.3	74.8	71.3	78.6	75.1	69.8
	February	69.9	65.4	74.5	70.4	76.2	72.8	80.8	77.0	71.0
	March	72.6	68.7	77.4	73.9	78.9	76.0	83.7	78.8	74.0
	April	76.8	73.7	81.6	78.5	83.5	81.7	86.2	82.5	78.4
	May	81.2	78.6	85.8	83.2	88.0	86.4	89.9	86.3	82.9
	June	86.3	83.8	90.9	88.3	92.9	91.8	94.5	91.3	87.9
	July	91.3	88.4	95.6	92.6	96.9	95.2	100.4	97.8	92.6
	August	95.6	92.0	100.1	96.5	101.8	99.1	105.6	101.6	96.7
	September	R98.2	R94.3	R103.2	R99.3	R105.4	R102.2	108.9	R104.4	99.4
	October†	99.3	95.2	104.2	100.3	106.1	103.4	110.1	106.1	100.5
	AVERAGE	**83.6**	**80.1**	**89.3**	**85.5**	**88.5**	**85.4**	**94.1**	**90.2**	**85.5**

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

Price

Average Retail Dealer Motor Gasoline Selling Prices for Major[1] and Nonmajor Brands — August, September and October 1979

	Full Serve			Self Serve			Full Serve			Self Serve		
	August	Sept.	Oct.†	August	Sept.	Oct.†	August	Sept.	Oct.†	August	Sept.	Oct.†
	Leaded Regular						Unleaded Regular					
	Cents per gallon, including tax											
Major	96.2	98.9	100.1	92.6	R95.3	96.3	100.6	R103.8	104.9	97.1	100.1	101.5
Nonmajor	94.1	96.3	97.3	91.2	R93.2	94.1	98.4	R100.7	101.6	95.7	R98.1	98.8
	Leaded Premium						Unleaded Premium					
Major	102.5	R106.0	106.9	99.9	R103.3	104.9	105.6	108.8	110.0	101.6	R104.4	106.0
Nonmajor	99.0	R101.8	102.0	97.9	R100.9	101.3	NA	NA	NA	NA	NA	NA

Average Retail Dealer Motor Gasoline Selling Prices by Department of Energy (DOE) Regions[2] — August, September and October 1979

DOE Region	Full Serve			Self Serve			Full Serve			Self Serve		
	August	Sept.	Oct.†	August	Sept.	Oct.†	August	Sept.	Oct.†	August	Sept.	Oct.†
	Leaded Regular						Unleaded Regular					
	Cents per gallon, including taxes											
1	96.1	R98.2	98.8	93.7	R96.3	96.9	99.6	R102.2	103.1	96.8	R100.5	101.0
2	97.0	99.5	100.5	96.3	R97.2	98.4	101.4	R103.4	104.6	101.1	R102.2	103.5
3	95.2	R97.5	98.5	92.1	95.0	95.5	98.4	R101.4	102.5	96.2	99.2	99.7
4	93.9	R96.1	97.4	90.5	R92.7	93.7	98.4	R101.2	101.9	94.6	R97.0	98.3
5	96.6	R99.5	100.8	92.3	95.9	96.7	101.1	R104.9	106.1	96.9	R101.0	101.6
6	91.2	R93.6	95.0	88.2	R89.6	90.6	95.3	97.4	98.9	92.4	R93.9	95.1
7	95.6	R97.5	99.0	93.2	94.2	95.4	99.9	R101.8	103.3	97.8	98.8	99.9
8	95.3	R98.2	99.3	91.4	R93.2	94.2	99.0	R102.2	103.5	95.8	R97.6	98.5
9	99.7	R101.9	103.0	95.7	R99.5	99.3	104.4	R108.5	109.2	100.3	R104.3	104.4
10	96.5	R99.8	100.9	96.1	R97.8	99.7	101.4	R105.2	106.1	100.7	R103.1	104.9
	Leaded Premium						Unleaded Premium					
1	100.7	103.4	104.7	97.0	R100.4	101.8	105.0	R107.4	108.1	104.1	R105.1	107.2
2	101.6	R104.7	106.2	100.4	R102.0	103.2	107.2	R109.8	110.9	108.0	R111.5	112.4
3	99.7	R102.8	103.8	97.7	100.5	103.8	104.9	R108.0	108.4	101.2	106.0	106.5
4	99.3	R101.6	102.9	95.4	R98.2	99.5	103.5	R106.9	107.5	99.8	R102.0	104.8
5	100.6	R104.7	104.5	97.1	R102.4	104.2	107.2	111.4	113.6	103.3	R107.6	109.7
6	96.7	R98.5	99.9	93.6	R95.1	96.0	100.9	R103.6	104.2	97.9	R97.3	99.4
7	99.8	R103.0	103.5	98.4	R99.6	99.8	104.0	106.8	108.3	102.8	105.4	106.3
8	100.2	102.8	105.1	97.8	98.9	99.5	104.1	108.1	109.0	R106.9	R105.4	109.0
9	105.7	R109.8	110.8	102.0	R106.1	106.9	NA	NA	NA	NA	NA	NA
10	103.1	R107.7	107.6	101.4	R105.9	106.9	NA	NA	NA	NA	NA	NA

[1]See Explanatory Note 18.
[2]DOE regions are defined in Explanatory Note 19.
†Preliminary data.
R = Revised data.
NA = Not available
Source: • EIA 79, "Monthly Motor Gasoline Service Station Survey."

Price

Aviation and Diesel Fuels

		Aviation					Diesel	
		Aviation Gasoline		Naphtha-Type[1]	Kerosene-Type		No. 2 Diesel	
		Wholesale[2]	Retail[2]	Retail[2]	Wholesale[2]	Retail[2]	Wholesale[3]	Retail[3]
		Cents per gallon, excluding tax						
1976	**AVERAGE**	**42.4**	**43.1**	**31.5**	**32.5**	**31.2**	**31.9**	**34.7**
1977	January	43.4	44.1	33.4	34.6	33.2	34.3	36.6
	February	44.7	45.0	34.0	37.1	34.1	35.3	38.2
	March	45.0	45.7	34.5	35.9	34.6	35.9	39.0
	April	46.0	47.2	34.3	35.9	34.9	36.1	39.6
	May	46.6	47.8	34.3	36.3	35.1	36.5	39.6
	June	46.7	47.6	35.1	36.8	35.7	36.3	39.6
	July	47.0	48.7	35.6	37.1	35.8	36.2	39.6
	August	47.9	50.1	35.5	36.6	36.0	36.2	39.5
	September	47.9	49.1	35.6	37.1	37.0	36.2	40.2
	October	48.1	49.0	35.7	37.3	37.3	36.5	40.3
	November	48.3	47.8	35.8	37.9	37.5	36.7	40.1
	December	47.8	48.1	36.2	37.2	37.8	36.6	39.9
	AVERAGE	**46.7**	**47.7**	**35.0**	**36.7**	**35.8**	**36.1**	**39.3**
1978	January	47.8	49.1	36.9	37.9	38.5	36.6	39.5
	February	48.3	48.4	36.5	38.3	38.2	36.6	39.8
	March	49.1	49.4	36.9	37.8	38.4	36.7	39.7
	April	49.5	51.5	36.8	38.1	38.5	36.5	39.6
	May	50.1	50.0	37.3	38.3	38.6	36.6	39.9
	June	50.4	52.8	37.2	38.9	38.9	36.7	40.1
	July	51.4	52.4	37.6	39.0	38.9	36.4	40.0
	August	52.0	54.0	37.5	38.9	39.3	36.6	40.0
	September	52.6	54.0	37.8	39.2	39.3	37.1	39.8
	October	52.5	56.1	38.5	39.7	39.3	37.7	40.9
	November	53.4	51.4	38.5	40.2	39.4	38.6	41.7
	December	53.2	54.3	38.4	40.6	39.5	39.1	42.0
	AVERAGE	**51.0**	**52.1**	**37.5**	**38.9**	**38.9**	**37.1**	**40.2**
1979	January	54.1	53.9	38.6	42.2	40.1	39.7	43.0
	February	54.6	55.1	39.1	44.3	40.2	41.8	46.1
	March	56.6	56.8	40.7	54.8	41.3	44.5	47.9
	April	58.2	59.1	43.2	60.1	45.4	47.7	50.6
	May	60.6	61.2	44.1	58.1	48.4	53.4	56.1
	June	64.8	66.8	49.5	59.9	50.9	58.7	65.0
	July	70.0	71.8	50.4	67.1	58.2	62.4	68.9
	August	74.2	75.6	55.0	71.4	60.8	66.0	72.3
	September	78.2	79.0	60.2	73.1	65.9	69.0	71.8
	October	79.8	80.4	64.6	80.6	68.4	69.1	74.6
	AVERAGE	**57.7**	**67.3**	**48.8**	**61.5**	**52.5**	**55.1**	**59.7**

[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.
[3]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 consumers.
†Preliminary data.
R = Revised data.
Source: • FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

National Average Heating Oil Prices[1]

		Refiners' Average Selling Price to Resellers and Retailers	Distributors Average Selling Price to Residential Customers[2]	Average Purchase Price Paid by Distributors for Residential Heating Oil[2]	Average Distributor Margin on Residential Heating Oil[2]
		Cents per gallon			
1976	**AVERAGE**	**31.4**	**40.6**	**32.6**	**NA**
1977	January	34.7	44.4	35.8	9.3
	February	35.4	45.3	36.7	9.4
	March	35.9	45.8	37.0	9.5
	April	35.8	45.9	37.1	9.6
	May	35.7	45.7	37.1	9.5
	June	35.7	45.7	37.1	9.3
	July	35.8	45.8	37.2	9.3
	August	35.7	46.0	37.3	9.2
	September	35.5	46.2	37.4	9.4
	October	36.0	46.7	37.5	9.8
	November	36.3	47.6	37.3	10.2
	December	36.6	47.9	37.2	10.4
	AVERAGE	**35.7**	**46.0**	**36.9**	**NA**
1978	January	36.8	48.5	38.1	10.5
	February	36.4	48.6	37.8	11.0
	March	36.2	48.6	37.6	11.1
	April	36.0	48.6	37.6	11.1
	May	36.2	48.3	37.6	11.0
	June	35.8	48.2	37.7	10.7
	July	35.9	48.2	37.7	10.7
	August	36.1	48.2	37.9	10.5
	September	36.9	49.0	38.6	10.6
	October	38.1	50.2	39.6	10.8
	November	39.4	51.5	40.5	11.2
	December	40.1	52.6	41.3	11.6
	AVERAGE	**37.2**	**49.4**	**38.7**	**11.0**
1979	January	40.9	53.7	42.1	11.8
	February	43.1	56.3	44.5	12.0
	March	45.8	58.8	47.0	12.0
	April	48.3	61.1	49.3	12.1
	May	53.2	64.2	52.6	12.1
	June	58.8	69.1	56.9	12.7
	July	62.5	73.8	61.1	13.0
	August	65.7	78.4	64.6	13.0
	September	R69.0	R81.0	67.8	R13.7
	October†	68.3	82.2	68.1	14.8
	AVERAGE	**52.3**	**61.1**	**49.0**	**12.2**

[1]See Explanatory Note 20.
[2]Average selling prices, purchase prices, and dealer margins represent sales for residential heating oil only.
†Preliminary data.
R = Revised data.
NA = Not available.
Source: • January 1976 forward: FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

Price

Residential Heating Oil Prices by Region

		Census Region								
		New England	Mid-Atlantic	South Atlantic	East North Central	East South Central	West North Central	West South Central	Mountain	Pacific
		Cents per gallon								
1977	January	45.8	44.9	44.2	43.2	43.1	43.0	36.9	43.4	44.6
	February	46.6	45.8	45.7	43.9	43.4	44.0	38.8	44.2	45.2
	March	47.1	46.3	45.5	44.4	43.8	44.6	40.2	44.7	45.9
	April	47.2	46.5	45.5	44.8	43.3	44.2	40.8	44.8	46.4
	May	47.0	46.4	45.6	44.7	43.7	43.7	40.7	44.8	46.5
	June	47.1	46.4	45.7	44.7	44.0	43.3	41.2	45.8	46.8
	July	47.1	46.4	45.7	44.7	44.2	44.2	41.2	44.2	47.9
	August	47.4	46.6	45.6	44.7	43.7	44.5	41.0	44.9	48.2
	September	47.7	46.7	45.8	45.0	44.2	44.9	41.1	44.9	47.2
	October	48.0	47.3	46.4	45.3	43.9	45.4	41.1	45.4	47.4
		DOE Region[1]								
		1	2	3	4	5	6	7	8	9	10
	November	48.5	48.1	47.0	46.1	45.7	NA	44.2	45.4	44.9	47.4
	December	48.9	48.6	47.5	46.6	46.1	NA	44.5	45.7	44.5	47.3
1978	January	49.4	49.2	48.1	47.5	46.4	NA	44.5	45.2	44.7	47.4
	February	49.5	49.3	48.4	47.6	46.4	NA	45.2	45.5	45.6	47.5
	March	49.4	49.3	48.4	47.7	46.5	NA	44.4	45.0	47.0	47.8
	April	49.3	49.2	48.2	47.1	46.4	NA	44.6	45.0	45.1	47.6
	May	49.3	49.1	47.7	46.7	46.3	NA	44.7	45.0	44.4	47.4
	June	49.2	49.1	47.8	46.8	46.0	NA	44.8	45.4	43.9	47.7
	July	49.1	49.0	47.6	46.7	46.4	NA	45.0	45.8	43.5	48.1
	August	49.1	49.0	47.6	47.4	46.3	NA	45.1	45.5	44.8	47.3
	September	50.0	49.7	48.5	46.6	46.8	NA	45.6	46.3	45.0	47.7
	October	51.2	51.0	50.0	48.1	47.6	NA	45.9	46.3	45.9	48.3
	November	52.8	52.3	51.3	49.5	49.2	NA	47.6	47.9	45.8	49.1
	December	54.0	53.4	52.3	50.4	50.2	NA	48.2	48.7	46.7	49.9
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	R81.4	80.0	R79.4	R81.5	NA	R79.5	R80.1	76.8	R81.4
	October	83.9	82.6	81.4	78.8	82.3	NA	80.2	80.0	81.2	82.6

[1]DOE regions are defined in Explanatory Note 19.
†Preliminary data.
R = Revised data.
NA = Not available. Data for Region 6 are based on a sample of less than four reporting firms.
Note: Average regional distributor purchase prices for heating oil for the period January 1975 through December 1976 are published on page 67 of the April 1978 issue of the *Monthly Energy Review.*
Source: • FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

Price

Average No. 6 Residual Fuel Oil Prices

		0.0 to 0.3 percent sulfur		0.31 to 1.0 percent sulfur		Greater than 1.0 percent sulfur		Average	
		Wholesale	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail
		Dollars per barrel, excluding taxes							
1976	**AVERAGE**	**12.20**	**12.54**	**10.83**	**11.79**	**9.98**	**10.43**	**10.72**	**11.49**
1977	January	14.06	14.34	12.79	13.68	11.51	12.32	12.45	13.32
	February	14.00	14.60	12.91	14.06	12.04	12.74	12.69	13.71
	March	14.00	14.58	13.47	14.51	11.62	12.70	12.68	13.84
	April	12.88	14.63	13.05	14.10	11.27	12.50	12.04	13.61
	May	13.56	14.48	11.90	13.73	11.05	12.15	11.64	13.42
	June	13.12	14.28	11.88	13.27	11.10	11.93	11.72	13.02
	July	13.31	14.38	11.73	13.12	11.02	12.06	11.62	13.01
	August	13.32	14.15	11.83	13.08	11.89	12.01	12.06	13.00
	September	13.35	14.33	11.79	13.11	11.78	12.19	12.03	12.94
	October	13.38	14.30	11.69	13.15	11.71	12.33	12.10	13.15
	November	12.85	14.24	11.66	12.93	11.44	12.15	11.76	12.96
	December	12.87	13.95	11.38	12.60	10.77	11.95	11.28	12.70
	AVERAGE	**13.45**	**14.36**	**12.09**	**13.45**	**11.31**	**12.27**	**11.96**	**13.23**
1978	January	12.72	14.19	11.56	12.70	10.71	12.00	11.33	12.79
	February	12.20	14.05	11.64	12.42	10.58	11.75	11.25	12.53
	March	12.73	13.99	11.94	12.75	10.48	11.70	11.36	12.63
	April	12.72	14.51	12.26	12.95	10.84	11.85	11.57	12.87
	May	12.67	14.21	12.01	12.88	10.79	11.74	11.70	12.79
	June	12.37	13.99	11.83	12.58	10.82	11.60	11.41	12.50
	July	11.26	13.93	11.29	12.01	10.51	11.48	10.86	12.21
	August	11.41	14.09	11.24	11.97	10.46	11.54	10.70	12.34
	September	12.29	14.18	11.46	12.30	10.69	11.39	11.26	12.43
	October	13.43	14.63	12.06	13.00	10.83	11.82	11.76	13.01
	November	14.12	15.55	13.26	13.77	10.87	11.54	12.36	13.34
	December	14.66	15.98	13.19	14.13	11.04	11.82	12.57	13.75
	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	R21.28	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†	24.03	23.29	22.99	22.33	18.31	19.53	20.88	21.59
	AVERAGE	**18.67**	**19.46**	**18.16**	**18.30**	**14.87**	**15.80**	**16.69**	**17.56**

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

Price

Wholesale[1] Propane and Butane

		Propane	Butane
		Cents per gallon, excluding taxes	
1976	**AVERAGE**	**20.6**	**21.9**
1977	January	22.9	23.0
	February	24.0	24.3
	March	23.7	24.9
	April	23.6	24.2
	May	24.5	25.8
	June	24.5	25.6
	July	24.9	26.2
	August	25.5	26.1
	September	25.9	27.4
	October	26.8	26.3
	November	26.5	25.8
	December	26.7	25.8
	AVERAGE	**25.0**	**25.4**
1978	January	27.0	25.9
	February	26.5	25.1
	March	25.6	24.9
	April	24.4	23.9
	May	23.7	22.8
	June	23.3	22.9
	July	23.0	22.1
	August	22.7	21.8
	September	22.6	21.8
	October	22.5	20.9
	November	22.1	22.0
	December	22.1	22.7
	AVERAGE	**24.0**	**23.0**
1979	January	22.4	24.9
	February	21.8	28.5
	March	21.2	32.5
	April	22.0	35.4
	May	24.2	39.5
	June	27.9	46.9
	July	29.3	51.1
	August	30.8	48.0
	September	33.3	51.9
	October†	35.2	56.2

[1]Wholesale refers to the price at which refiners, resellers, retailers, and gas plants sell to one another, including sales to agricultural and industrial accounts. Excludes butane/propane mixtures.
†Preliminary data.
Source: • FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

Average Wellhead Value of Natural Gas Production

		Cents per thousand cubic feet
1973	**AVERAGE**	**21.6**
1974	**AVERAGE**	**30.4**
1975	**AVERAGE**	**44.5**
1976	**AVERAGE**	**58.0**
1977	January	67.1
	February	71.0
	March	74.9
	April	77.2
	May	76.7
	June	82.3
	July	83.1
	August	82.3
	September	83.3
	October	84.0
	November	83.2
	December	84.4
	AVERAGE	**79.0**
1978	January	87.3
	February	87.9
	March	89.1
	April	88.0
	May	90.8
	June	90.7
	July	88.9
	August	91.2
	September	92.1
	October	92.0
	November	92.5
	December	96.1
	AVERAGE	**90.5**
1979	January	99.5
	February	98.5
	March	102.9
	April	103.6
	May	108.0

Average Retail Prices for Natural Gas Sold to Residential Customers for Heating Use

		Cents per thousand cubic feet
1977	January	213.8
	February	217.0
	March	219.9
	April	223.7
	May	227.0
	June	227.3
	July	229.9
	August	230.1
	September	230.4
	October	235.1
	November	238.4
	December	237.3
1978	January	241.6
	February	243.0
	March	247.0
	April	248.7
	May	255.2
	June	254.2
	July	NA
	August	NA
	September	NA
	October	NA
	November	R281.9
	December	R286.2
1979	January	R293.7
	February	R296.5
	March	R301.5
	April	300.5
	May	315.8
	June	320.9
	July	329.4
	August	331.7
	September	342.4
	October	353.8

NA = Not available.

Sources: • Annual data for wellhead values from the appropriate agencies of the individual producing states; monthly data are estimated primarily on the basis of values reported by state agencies in New Mexico, Oklahoma, and Texas.
• Average retail prices, Bureau of Labor Statistics.

Price

Natural Gas Prices Reported by Major Interstate Pipeline Companies

		Purchases			Sales		
		From Domestic Producers	From Canadian and Foreign Sources	Total Purchases	To Industrial Users[1]	To Resellers[2]	Total Sales
		Cents per thousand cubic feet					
1976	**AVERAGE**	**47.9**	**172.7**	**58.4**	**97.2**	**100.3**	**100.5**
1977	January	59.4	201.8	71.6	143.2	124.3	125.4
	February	63.4	199.7	76.4	130.6	130.4	131.0
	March	69.8	200.4	83.4	129.3	132.1	132.5
	April	65.3	190.7	76.5	128.1	131.0	131.1
	May	69.1	191.3	80.5	128.1	133.9	133.5
	June	69.2	188.6	79.6	125.3	135.1	134.2
	July	72.1	187.7	81.8	134.3	135.9	135.7
	August	71.1	185.5	81.5	133.5	134.0	133.9
	September	71.8	194.7	84.0	131.8	135.7	135.4
	October	74.2	211.9	87.4	133.9	135.6	135.6
	November	74.8	214.2	87.7	134.4	141.6	141.4
	December	73.9	216.5	86.7	138.3	132.1	133.0
	AVERAGE	**69.5**	**199.0**	**81.4**	**131.9**	**132.2**	**132.5**
1978	January	74.0	211.2	86.4	150.4	138.2	139.2
	February	76.3	211.3	89.2	158.2	141.5	142.8
	March	79.3	212.5	91.1	149.7	144.7	145.5
	April	80.7	222.0	92.9	149.9	147.7	148.2
	May	81.2	218.5	92.5	149.0	149.7	150.0
	June	82.6	220.5	93.5	148.3	153.0	152.7
	July	83.8	222.6	95.0	149.5	155.7	155.0
	August	84.2	222.5	95.6	148.9	154.9	154.0
	September	87.7	216.8	97.9	152.0	155.3	155.0
	October	R90.6	225.3	R101.3	158.5	157.4	R157.7
	November	90.1	219.3	102.3	171.0	161.0	162.1
	December	95.8	215.1	107.6	169.9	159.8	161.0
	AVERAGE	**84.1**	**218.2**	**95.8**	**154.1**	**150.7**	**151.4**
1979	January	99.5	215.7	110.4	192.1	161.0	163.1
	February	101.7	219.0	114.0	195.4	164.5	166.7
	March	106.1	224.8	118.4	186.8	171.5	173.2
	April	116.7	222.1	127.9	190.7	167.6	170.2
	May	118.3	228.6	129.5	202.5	188.8	190.5
	June	118.3	233.4	130.9	180.5	184.4	184.2
	July	119.2	232.1	131.9	198.8	190.3	191.4
	August	125.6	263.6	138.6	205.4	192.5	193.8
	September	130.5	274.1	145.8	212.4	209.4	209.8
	October	135.6	284.2	151.7	218.9	216.2	216.5
	AVERAGE	**117.1**	**239.2**	**129.9**	**199.2**	**181.8**	**183.6**

[1]Represents direct sales by pipeline companies to industrial users. Does not include sales to industrial users by resellers.
[2]Includes the cost of gas to the distributing utility at entrance of distribution system or point of receipt.
R = Revised data.
Source: • Federal Power Commission Form 11, "Natural Gas Pipeline Company Monthly Statement."

Price

Utility Fossil Fuels
Average Delivered Prices of Coal at Utilities

		Contract	Spot
		Dollars per short ton	
1976	**AVERAGE**	**17.90**	**21.33**
1977	January	17.87	21.93
	February	18.28	22.71
	March	18.75	23.27
	April	18.82	22.41
	May	18.97	23.73
	June	19.03	24.62
	July	19.35	25.13
	August	18.95	24.73
	September	19.75	26.14
	October	20.31	26.83
	November	20.51	27.01
	December	20.49	28.01
	AVERAGE	**19.25**	**24.99**
1978	January	16.94	30.27
	February	16.50	30.50
	March	18.59	31.52
	April	21.43	30.42
	May	22.23	29.62
	June	22.88	28.95
	July	22.08	28.94
	August	22.12	28.95
	September	22.66	29.06
	October	23.53	28.96
	November	24.03	29.29
	December	23.99	21.41
	AVERAGE	**21.41**	**29.63**
1979	January	24.40	27.82
	February	24.08	26.71
	March	24.82	27.64
	April	25.52	28.55
	May	26.40	27.64
	June	25.91	28.42
	July	25.13	28.36
	August	25.79	28.50
	September	26.45	28.85

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

Price

Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants

All Fossil Fuels[1]

Region	1978 AUG	SEPT	OCT	NOV	DEC	1979 JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG
	Cents per million Btu												
New England	190.4	190.9	194.9	192.9	207.5	206.8	223.3	249.2	244.9	267.4	283.6	302.9	313.0
Middle Atlantic	155.4	154.9	156.7	159.6	163.5	170.2	180.5	174.4	168.2	176.7	184.3	212.0	204.7
East North Central	128.6	125.3	130.2	132.5	137.0	142.5	146.9	143.5	140.7	145.1	144.0	150.9	146.9
West North Central	98.1	98.5	99.5	100.7	105.9	121.6	124.3	106.9	107.3	110.9	114.4	110.3	112.1
South Atlantic	147.0	148.5	148.0	147.8	154.6	158.9	163.3	168.3	168.2	172.7	185.0	197.7	187.9
East South Central	124.4	125.1	124.1	125.4	128.3	129.7	128.1	131.7	132.4	137.5	136.9	144.0	143.3
West South Central	132.8	132.3	127.3	129.4	131.7	144.4	143.6	139.6	141.7	155.7	158.7	156.5	154.0
Mountain	74.7	75.8	83.3	82.3	82.8	89.3	91.4	92.3	99.7	120.3	101.6	100.8	100.8
Pacific	225.1	232.2	237.3	245.2	245.8	245.9	243.1	234.3	240.8	242.2	250.9	263.6	274.1
NATIONAL AVG.	**135.9**	**135.8**	**138.1**	**138.8**	**142.9**	**150.4**	**154.3**	**152.3**	**151.4**	**158.0**	**161.2**	**168.7**	**167.1**
Coal													
New England	143.9	147.2	147.4	147.0	146.8	147.1	150.3	149.9	150.9	152.7	155.2	155.5	155.7
Middle Atlantic	119.4	121.4	121.1	120.6	120.3	121.2	122.6	123.7	121.9	120.4	122.8	129.6	123.8
East North Central	120.5	119.9	120.9	123.9	123.8	124.3	123.7	126.7	129.0	131.4	130.6	137.0	134.3
West North Central	91.3	92.0	93.6	95.2	95.1	96.0	95.3	95.6	98.5	100.6	106.9	103.6	98.5
South Atlantic	127.5	129.6	132.5	134.1	138.8	136.6	136.4	136.0	137.8	139.0	138.0	142.9	142.7
East South Central	118.4	119.0	119.3	120.8	122.6	122.6	121.3	125.8	129.6	132.7	131.8	134.7	134.2
West South Central	68.0	77.3	74.1	73.4	81.4	88.2	89.3	92.9	94.9	89.9	99.8	99.0	100.2
Mountain	55.1	57.8	61.5	60.2	58.7	62.6	62.9	65.0	74.0	97.8	69.3	65.4	66.8
Pacific	77.9	79.4	79.9	78.2	78.6	84.3	82.9	83.4	82.7	83.0	84.6	84.2	82.0
NATIONAL AVG.	**110.0**	**111.4**	**114.0**	**115.6**	**115.9**	**115.8**	**114.6**	**116.8**	**120.1**	**123.4**	**121.8**	**122.2**	**122.5**
Residual Fuel Oil[1]													
New England	191.0	191.9	196.8	195.6	211.3	210.6	227.8	255.8	250.8	272.7	293.2	309.1	321.0
Middle Atlantic	203.4	209.3	214.7	224.2	226.0	232.2	243.4	266.4	273.7	279.9	305.0	325.2	338.1
East North Central	271.5	253.4	247.9	260.6	261.5	282.2	295.9	302.5	307.2	320.0	321.8	352.6	383.2
West North Central	194.0	216.3	217.1	217.6	212.6	233.9	265.4	246.4	277.0	384.5	244.7	373.0	479.0
South Atlantic	192.6	196.5	207.0	211.7	215.3	224.7	233.0	255.7	266.4	270.7	288.1	312.8	320.6
East South Central	178.5	176.8	172.4	168.8	177.4	174.7	198.3	211.6	212.1	231.8	218.9	240.2	266.3
West South Central	178.8	188.3	184.1	189.8	207.0	306.8	227.3	255.1	232.4	242.8	247.1	305.8	298.6
Mountain	209.0	215.2	215.3	252.0	228.2	237.3	233.6	246.4	276.5	284.3	287.8	337.2	350.0
Pacific	258.5	260.5	266.8	270.1	266.4	262.9	267.9	265.2	283.1	277.8	283.3	307.4	323.1
NATIONAL AVG.	**205.6**	**211.2**	**219.8**	**225.6**	**228.7**	**231.8**	**245.6**	**261.4**	**268.0**	**277.7**	**289.3**	**314.7**	**328.0**
Natural Gas[2]													
New England	185.0	184.6	192.5	187.6	193.7	208.4	219.1	224.0	233.9	250.1	263.1	261.9	277.5
Middle Atlantic	169.5	178.7	223.1	190.8	180.7	179.2	183.0	179.3	190.1	192.5	210.0	226.7	241.7
East North Central	210.8	204.6	211.0	201.6	209.8	217.2	241.7	242.3	244.3	247.1	231.2	222.9	258.3
West North Central	123.6	122.3	125.5	128.1	135.2	143.0	145.5	137.6	143.8	147.1	146.1	148.8	152.1
South Atlantic	113.5	114.1	107.7	109.2	105.1	94.1	103.0	118.5	119.7	123.5	126.5	155.5	155.3
East South Central	157.3	160.3	163.1	164.5	187.3	175.6	177.9	169.1	172.3	195.0	185.6	182.0	192.2
West South Central	138.9	137.1	134.8	134.8	133.9	146.2	147.6	142.5	149.2	169.2	168.5	161.3	160.4
Mountain	146.0	145.3	150.0	160.3	177.0	178.1	174.9	196.9	182.3	193.0	198.3	205.1	216.3
Pacific	218.8	233.4	223.3	222.1	227.7	231.0	224.9	222.0	221.6	225.8	238.7	245.3	246.3
NATIONAL AVG.	**149.4**	**146.6**	**147.1**	**141.1**	**139.4**	**150.2**	**159.1**	**162.8**	**164.4**	**177.2**	**179.5**	**178.9**	**180.9**

[1]See Explanatory Note 21.
[2]Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.
Source: • Federal Power Commission Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Price

Average Retail Electricity Prices[1]

		Residential	Commercial	Industrial	Other	Total[2]
				Cents per kilowatt-hour		
1973	**AVERAGE**	**2.54**	**2.41**	**1.25**	**2.10**	**1.96**
1974	**AVERAGE**	**3.10**	**3.04**	**1.69**	**2.75**	**2.49**
1975	**AVERAGE**	**3.51**	**3.45**	**2.07**	**3.08**	**2.92**
1976	**AVERAGE**	**3.73**	**3.69**	**2.21**	**3.27**	**3.09**
1977	January	3.62	3.78	2.35	3.36	3.20
	February	3.69	3.86	2.40	3.45	3.25
	March	3.95	4.00	2.44	3.40	3.33
	April	4.07	4.04	2.43	3.46	3.34
	May	4.19	4.09	2.45	3.64	3.38
	June	4.17	4.11	2.48	3.59	3.43
	July	4.20	4.12	2.58	3.59	3.56
	August	4.35	4.37	2.64	3.69	3.69
	September	4.26	4.21	2.60	3.59	3.58
	October	4.25	4.27	2.57	3.47	3.53
	November	4.18	4.22	2.55	3.56	3.47
	December	3.97	4.11	2.52	3.34	3.41
	AVERAGE	**4.05**	**4.09**	**2.50**	**3.51**	**3.42**
1978	January	3.90	4.11	2.60	3.47	3.46
	February	3.94	4.16	2.73	3.47	3.54
	March	4.14	4.34	2.86	3.68	3.69
	April	4.34	4.41	2.82	3.75	3.70
	May	4.46	4.42	2.77	3.89	3.69
	June	4.53	4.48	2.81	3.76	3.78
	July	4.50	4.40	2.84	3.69	3.82
	August	4.51	4.40	2.81	3.72	3.80
	September	4.48	4.41	2.79	3.72	3.78
	October	4.48	4.46	2.78	3.53	3.72
	November	4.39	4.38	2.76	3.53	3.65
	December	4.20	4.31	2.76	3.54	3.63
	AVERAGE	**4.31**	**4.36**	**2.77**	**3.62**	**3.69**
1979	January	4.08	4.29	2.82	3.58	3.65
	February	4.09	4.30	2.86	3.69	3.66
	March	4.28	4.44	2.89	3.87	3.75
	April	4.51	4.54	2.90	3.88	3.81
	May	4.68	4.65	2.96	3.98	3.89
	June	4.88	4.73	3.02	4.05	4.02
	July	4.91	4.76	3.11	4.20	4.14
	August	4.94	4.79	3.11	NA	4.17
	September	4.95	4.84	3.14	4.08	4.18
	October	4.94	4.89	3.14	3.89	4.13
	AVERAGE	**4.60**	**4.63**	**3.00**	**3.90**	**3.94**

[1]Prices are for Classes A and B privately owned electric utilities.
[2]Average price for total sales to ultimate consumers.
NA = Not available.
Source: • Federal Power Commission, Form 5, "Monthly Statement of Electric Operating Revenue and Income."

International

Petroleum Consumption

Preliminary data show total petroleum consumption for August 1979 by the International Energy Agency (IEA) countries averaged 33.6 million barrels per day. This figure indicates that IEA consumption was 1.2 million barrels per day higher than during July 1979, and 100,000 barrels per day higher than during August 1978.

Crude Oil Production

The crude oil production table has been expanded beginning with this issue of the *Monthly Energy Review.* The new table includes additional monthly data and more producing countries.

Crude oil production by the OPEC nations was 30.9 million barrels per day during October 1979. While most OPEC nations remained at or near their September production levels, increases of 200,000 barrels per day in Iran and 35,000 barrels per day in Qatar led to an overall OPEC increase of 0.1 million barrels per day over the previous month.

World crude oil production in October reached 62.6 million barrels per day, a mere 0.2 percent above September 1979 levels. OPEC nations accounted for 49.4 percent of this world production.

International

Petroleum Consumption for Major Free World Industrialized Countries[1]

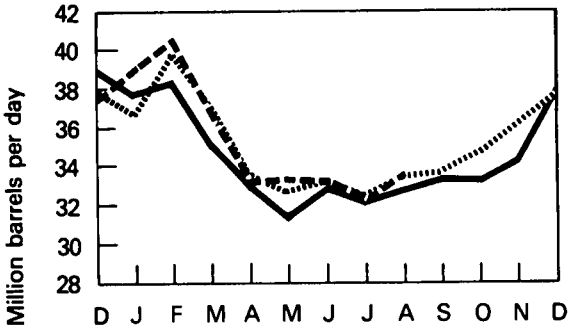
		Total IEA[2]	Japan	West Germany	France[3]	United Kingdom	Canada	Italy
				Thousand barrels per day				
1973	**AVERAGE**	**33,600**	**5,000**	**2,693**	**2,219**	**1,958**	**1,597**	**1,525**
1974	**AVERAGE**	**32,390**	**4,872**	**2,408**	**2,094**	**1,829**	**1,630**	**1,521**
1975	**AVERAGE**	**31,235**	**4,568**	**2,319**	**1,925**	**1,633**	**1,595**	**1,468**
1976	**AVERAGE**	**33,180**	**4,786**	**2,507**	**2,075**	**1,601**	**1,647**	**1,503**
1977	**AVERAGE**	**34,300**	**5,015**	**2,478**	**1,973**	**1,655**	**1,661**	**1,476**
1978	January	36,600	5,301	2,461	2,645	1,824	1,777	1,763
	February	39,900	5,981	3,014	2,598	1,899	1,956	1,906
	March	36,900	5,595	2,610	2,236	1,840	1,681	1,589
	April	33,400	4,849	2,577	2,044	1,791	1,561	1,339
	May	32,600	4,437	2,341	2,131	1,618	1,522	1,300
	June	33,300	4,502	2,611	1,687	1,499	1,622	1,354
	July	32,300	4,704	2,693	1,364	1,401	1,549	1,338
	August	33,500	4,857	2,338	1,325	1,447	1,680	1,197
	September	33,700	4,827	2,561	1,665	1,557	1,595	1,566
	October	34,700	4,847	2,633	1,997	1,676	1,749	1,573
	November	36,100	5,423	2,772	2,472	1,802	1,882	1,828
	December	37,800	6,125	2,578	2,800	1,846	1,915	1,889
	AVERAGE	**35,000**	**5,115**	**2,596**	**2,077**	**1,683**	**1,701**	**1,551**
1979	January	39,400	5,579	2,893	R2,754	1,883	1,881	1,950
	February	40,500	6,006	2,708	R2,709	2,067	2,019	1,912
	March	36,800	5,706	2,592	R2,287	1,949	1,654	1,601
	April	33,400	5,009	2,590	2,129	1,703	R1,605	1,447
	May	33,500	4,755	2,641	2,003	1,648	1,650	R1,402
	June	33,300	4,709	2,613	1,652	1,517	1,704	R1,312
	July	32,400	R4,684	2,625	R1,590	R1,435	1,695	1,285
	August†	33,600	R4,902	2,618	R1,521	1,521	1,808	1,290
	September†	NA	4,914	2,598	1,698	NA	1,703	1,617

[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. Experience has shown that the total IEA quantity is between 93 and 95 percent of total IEA consumption.
[2]The 20 signatory nations of the International Energy Agency (IEA) are: Australia, Austria, Belgium, Canada, Denmark, West Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.
[3]Not a member of IEA.
†Preliminary data.
R = Revised data.
NA = Not available.
Sources: • Central Intelligence Agency, "International Energy Statistical Review," 12 December 1979.
• Other statistics are EIA estimates based on multiple sources.

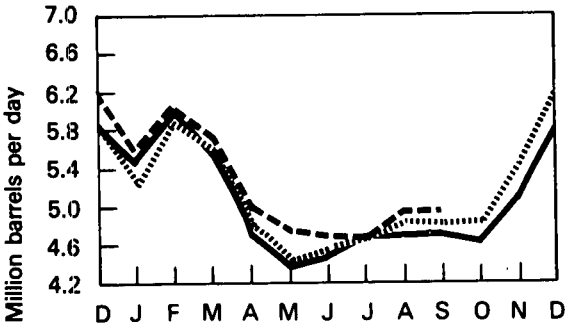
International

Petroleum Consumption

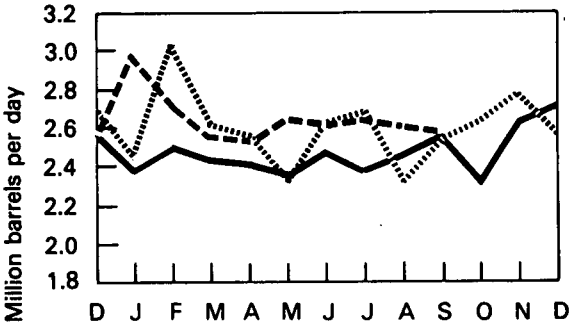
Total IEA



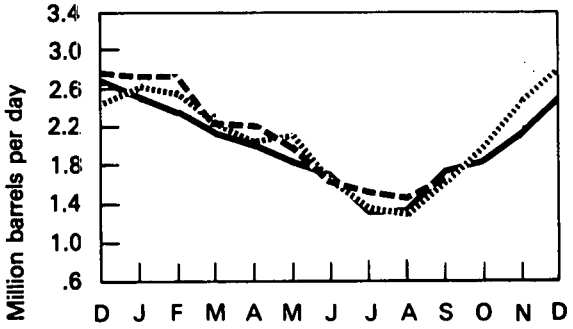
Japan*



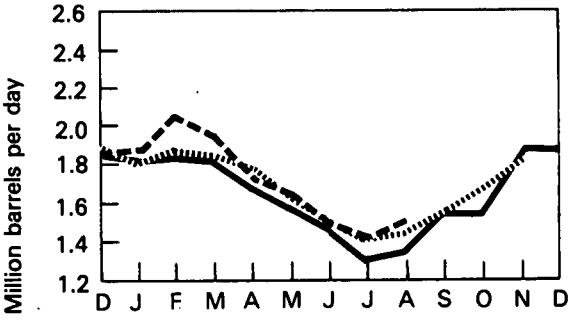
West Germany



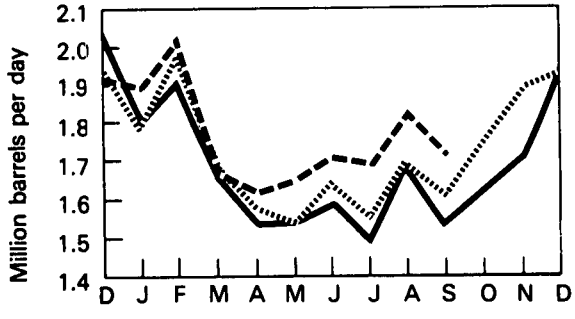
France**



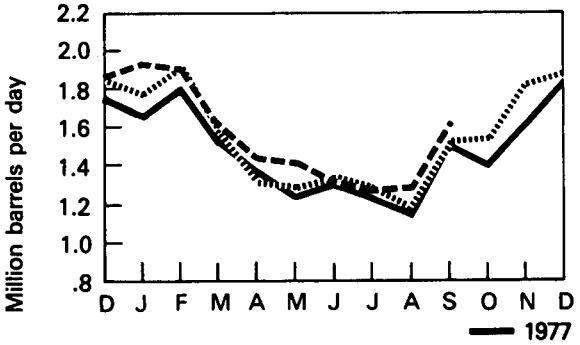
United Kingdom



Canada



Italy***



1977
1978
1979

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

International

Crude Oil Production for Major Petroleum Exporting Countries

		Algeria	Iraq	Kuwait[1]	Libya	Qatar	Saudi Arabia[1]	United Arab Emirates	Arab OPEC	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**	**980**	**2,415**	**2,145**	**1,933**	**497**	**8,577**	**1,936**	**18,483**	**1,504**	**5,863**
1977	**AVERAGE**	**1,095**	**2,495**	**1,970**	**2,065**	**445**	**9,200**	**2,000**	**19,270**	**1,685**	**5,665**
1978	January	1,100	2,130	1,720	1,790	450	7,790	1,740	16,720	1,700	5,290
	February	1,100	2,430	1,720	1,800	480	8,380	1,880	17,790	1,700	5,530
	March	1,100	2,230	2,130	1,880	420	7,690	1,850	17,300	1,710	5,600
	April	1,100	2,430	1,990	1,870	510	8,050	1,750	17,700	1,680	5,610
	May	1,100	2,130	1,813	1,930	380	7,250	1,870	16,473	1,700	5,720
	June	1,100	2,230	1,925	2,000	450	7,590	1,840	17,135	1,620	5,630
	July	1,100	2,100	1,952	2,040	490	7,410	1,830	16,922	1,580	5,800
	August	1,100	2,300	2,360	2,030	540	7,180	1,830	17,340	1,620	5,810
	September	1,100	3,000	2,591	2,020	500	8,380	1,830	19,421	1,590	6,050
	October	1,100	2,700	2,110	2,070	510	9,310	1,840	19,640	1,590	5,490
	November	1,100	3,300	2,650	2,100	470	10,250	1,840	20,710	1,590	3,490
	December	1,100	3,000	2,199	2,090	580	10,400	1,830	21,199	1,600	2,370
	AVERAGE	**1,100**	**2,515**	**2,095**	**1,975**	**480**	**8,295**	**1,831**	**18,291**	**1,635**	**5,200**
1979	January	1,100	3,500	2,615	2,175	550	9,790	1,835	21,565	1,605	410
	February	1,100	3,500	2,705	2,160	555	9,780	1,830	21,630	1,620	760
	March	1,100	3,500	2,590	2,080	370	9,780	1,825	21,245	1,630	2,190
	April	1,100	3,500	2,545	2,070	550	8,790	1,750	20,305	1,610	3,800
	May	1,100	3,500	2,585	2,050	540	8,780	1,855	20,410	1,570	4,100
	June	1,100	3,500	2,585	2,020	455	8,780	1,865	20,305	1,615	3,950
	July	900	3,300	2,550	2,080	520	9,780	1,830	20,960	1,605	3,750
	August	900	3,300	2,525	1,990	535	9,770	1,830	20,850	1,600	3,600
	September	900	3,300	2,375	2,030	455	9,780	1,835	20,675	1,580	3,600
	October†	900	3,300	2,380	2,030	490	9,730	1,783	20,613	1,575	3,800

†Preliminary data.
[1]Includes about one-half of the former Kuwait-Saudi Arabia Neutral Zone. Production in October 1979 amounted to approximately 460,000 barrels per day.
Additional footnotes on following page.

International

Crude Oil Production for Major Petroleum Exporting Countries (continued)

		Nigeria	Venezuela	Total OPEC[2]	Canada	Mexico	United Kingdom	United States	China	USSR	Other[3]	World
						Thousand barrels per day						
1973	**AVERAGE**	**2,054**	**3,366**	**30,961**	**1,800**	**450**	**8**	**9,208**	**1,090**	**8,420**	**3,843**	**55,780**
1974	**AVERAGE**	**2,255**	**2,976**	**30,683**	**1,695**	**580**	**9**	**8,775**	**1,310**	**9,020**	**3,799**	**55,870**
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**	**30,641**	**1,300**	**800**	**245**	**8,132**	**1,670**	**10,170**	**4,372**	**57,330**
1977	**AVERAGE**	**2,085**	**2,240**	**31,350**	**1,320**	**980**	**770**	**8,245**	**1,805**	**10,700**	**4,490**	**59,660**
1978	January	1,640	1,780	27,530	1,240	1,100	880	8,360	1,990	10,900	4,420	56,420
	February	1,570	1,620	28,600	1,310	1,100	950	8,377	1,990	11,000	4,493	57,820
	March	1,520	2,060	28,600	1,320	1,100	870	8,720	1,990	11,070	4,620	58,290
	April	1,690	2,230	29,330	1,100	1,140	980	8,818	1,990	11,100	4,562	59,020
	May	1,720	2,220	28,253	1,160	1,150	1,110	8,825	1,990	11,140	4,392	58,020
	June	1,890	2,320	29,015	1,500	1,170	1,110	8,832	1,990	11,120	4,573	59,310
	July	1,910	2,290	28,952	1,180	1,200	1,090	8,756	1,990	11,230	4,642	59,040
	August	2,060	2,100	29,330	1,310	1,240	1,100	8,758	1,990	11,280	4,832	59,840
	September	2,120	2,270	31,881	1,200	1,280	1,090	8,800	1,990	11,340	4,219	61,800
	October	2,110	2,260	31,520	1,390	1,300	1,160	8,820	2,010	11,440	4,650	62,290
	November	2,280	2,320	30,840	1,520	1,320	1,280	8,741	2,010	11,490	5,719	62,920
	December	2,380	2,320	30,299	1,540	1,370	1,350	8,662	2,010	11,470	4,949	61,650
	AVERAGE	**1,910**	**2,165**	**29,616**	**1,315**	**1,215**	**1,080**	**8,707**	**2,005**	**11,220**	**4,772**	**59,930**
1979	January	2,440	2,270	28,745	1,455	1,390	1,460	8,457	2,280	11,370	4,443	59,600
	February	2,430	2,350	29,245	1,580	1,395	1,500	8,498	2,280	11,370	4,322	60,190
	March	2,440	2,430	30,380	1,410	1,305	1,330	8,585	2,280	11,370	4,930	61,590
	April	2,420	2,390	30,960	1,515	1,395	1,455	8,533	2,280	11,510	4,508	62,230
	May	2,400	2,390	31,310	1,470	1,400	1,640	8,585	2,280	11,110	4,395	62,190
	June	2,420	2,250	30,980	1,470	1,435	1,740	8,409	2,280	11,460	4,466	62,240
	July	2,380	2,330	31,380	1,525	1,435	1,705	8,355	2,130	11,400	5,480	63,410
	August	2,185	2,330	30,995	1,455	1,455	1,635	8,699	2,130	11,560	5,250	63,050
	September	2,115	2,370	30,760	1,495	1,470	1,670	8,510	2,130	11,460	4,935	62,430
	October†	2,135	2,360	30,903	1,452	1,510	1,613	8,460	2,130	11,500	5,002	62,570

[2]OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates; Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon.
[3]Other is a calculated total derived from the difference between world production and the nations represented above.
†Preliminary data.
Note: Monthly data may not average to annual data.
Sources: • 1973-1976 annual data for OPEC nations: *OPEC Annual Statistical Bulletin.*
• 1973-1979 United States data: See sources on page 30.
• All other monthly and annual data: Central Intelligence Agency, *International Energy Statistical Review.*

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

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold from a particular property in the corresponding month of 1972. If domestic crude oil was not produced and sold from that property in every month of 1972, the total number of barrels of domestic crude oil produced and sold from that property in 1972, is then divided by 12.

2. Effective February 1, 1976: the total number of barrels of crude oil produced and sold from the property during calendar year 1975, divided by 365, and multiplied by the number of days in the particular month during 1975. A producer may elect to use the total number of barrels of crude oil produced and sold from the property during calendar year 1972, divided by 366, and multiplied by the number of days in the particular month during 1972.

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

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.

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 Imports

The volume of crude oil imported into the 50 States and the District of Columbia, including imports from U.S. territories, but excluding imports of crude oil into the Hawaiian Foreign Trade Zone.

Crude Oil Refinery Input

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

Crude Oil Stocks

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

Distillate Fuel Oil

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

Electricity Production

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.

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

The cost of imported crude oil equal to actual cost of the crude oil at point of origin plus transportation cost to the United States.

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 elecric power generation.

Lower Tier Crude Oil

The total number of barrels of crude oil produced and sold from a property in a specific month up to the amount of base period production. Base period production equals the lesser of 1972 or 1975 production, with a downward adjustment to take account of depletion of the oil field (see **Base Production Control Level**).

Lower Tier Ceiling Price Determination

The lower tier ceiling price for a particular grade of domestic crude oil in a particular field is the sum of (1) the highest posted price at 6 A.M., local time, May 15, 1973, for transactions in that grade of crude oil in that field; or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; and (2) the amount mandated in the Monthly Price Adjustment Schedules published by ERA in the **Federal Energy Guidelines** (Part 212.77-13847 Appendix).

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

Products obtained from lease separators, field facilities, and natural gas processing plants. Natural gas liquids include natural gas plant liquids and lease condensate.

Natural Gas Plant Liquids

Products obtained from processing natural gas at natural gas processing plants, including natural gasoline plants, cycling plants and fractions. Products obtained include ethane, liquefied petroleum gases (propanes, butanes, and propane-butane mixtures), isopentane, natural gasoline, 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 **Upper Tier Crude Oil**).

Old Crude Oil

1. Prior to February 1, 1976: the total number of barrels of 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 crude oil produced and sold from a property in a specific month, less thetotal number of barrels of new crude oil for that property in that month.

Petroleum

A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oil, 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.

Primary Stocks of Petroleum Products

Stocks held at refineries, bulk terminals, and pipelines. They do not include stocks held in secondary storage facilities, such as those held by jobbers, dealers, independent marketers, and consumers.

Product Supplied — Specific Petroleum Products

A calculated value, computed as domestic production plus net imports (imports less exports), less the net increase in primary stocks. It, therefore, represents the total disappearance of products from primary supplies. (See definition for **Product Supplied — Total Petroleum Products**).

Product Supplied — Total Petroleum Products

Total domestic products supplied is calculated as inputs to refineries, plus estimated refinery gain, plus hydrogen input, plus natural gas plant liquids production, plus direct use of crude as fuel, plus product imports, less product exports, less the net increase in product stocks. (See definition for **Product Supplied — Specific Petroleum 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 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.)

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.

Released Crude Oil

An amount of crude oil produced from a property in a particular month prior to February 1, 1976, which is equal to the total number of barrels of new crude oil produced and sold from that property in that month. The amount of released crude oil for a property in a particular month shall not exceed the base production control level for that property in that month.

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.

Separative Work Unit (SWU)

The measure of work required to produce enriched uranium from natural uranium. Enrichment plants separate natural uranium feed material into two groups, an enriched product group with a higher percentage of U-235 than the feed material and a depleted tails group with a lower percentage of U-235 than the feed material. To produce 1 kilogram of enriched uranium containing 2.8 percent U-235, and a depleted tails assay containing 0.3 percent U-235, it requires 6 kilograms of natural uranium feed and 3 kilograms of separative work units (3 SWU).

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.

Stripper Well Property

A property whose average daily production of crude oil 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.

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 imports, exports of crude oil, oil burned as fuel and losses of oil.

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

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the base production control level for that month and less the current cumulative deficiency.

2. February 1, 1976 through August 31, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the property's base production control level for that month and less the current cumulative dificiency since February 1, 1976. Includes new crude oil and crude oil produced from a stripper well property.

3. Since September 1, 1976: upper tier crude oil excludes crude oil produced from a stripper well property.

Upper Tier Ceiling Price Determination

The upper tier ceiling price for a particular grade of domestic crude oil in a particular field is (1) the highest posted price on September 30, 1975, for transactions in that grade of crude oil in that field in September 1975, or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; less (2) the amount mandated in the Monthly Price Adjustment Schedules published by ERA in the *Federal Energy Guidelines* (Part 212.77-13847 Appendix).

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) ot these energy sources using conversion factors listed in the Units of Measure.

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

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

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

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

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

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

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

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

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

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

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

10. Bituminous coal and lignite 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.

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.

11. Quantities of uranium are measured by various units at different stages in the fuel cycle. At the mill, quantities are usually expressed as pounds or short tons of U_3O_8. After the conversion stage, the units of measure are either metric tons (MT) of UF_6 or metric tons of uranium (MTU). The later designation expresses only the elemental uranium content of UF_6.

Following the enrichment stage, the same units are used, but the U-235 content has been enhanced at the expense of loss of material. At the fabrication stage, UF_6 is changed to UO_2, and the standard unit of measure is the MTU. We have chosen to present all uranium quantities as MTU; conversion factors to other units are given in the Units of Measure section.

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

The electrical energy produced by a plant is expressed either as megawatt hours (MWh) or kilowatt hours (kWh). Tables in the nuclear section show generated electricity as average electrical power. This enables a more direct comparison to design capacity and to previous months' performances. To obtain the quantity of electricity generated during a given time period (in kilowatt hours), multiply the average power level (in kilowatts) by the number of hours during that period.

The energy extracted from uranium fuel is expressed as thermal megawatt days per metric ton of uranium (MWD/MTU). The production of plutonium in the fuel rods is expressed as kilograms of plutonium per metric ton of discharged uranium (kg/MTU).

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. 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.

15. The actual domestic average price represents the average price at which all domestic crude oil, except that from Naval Petroleum Reserves, is purchased. The imputed domestic average price is the average price used to establish ceiling prices for domestic crude oil in accordance with the provisions of the Energy Conservation and Production Act. It is calculated as the weighted average of lower tier, upper tier, and an imputed stripper crude oil price. The imputed stripper crude oil price is equal to $11.63 per barrel plus the difference between the composite price of crude oil in August 1976 (excluding stripper oil) and the composite price of crude oil in the month of measurement (excluding stripper oil).

16. 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.

17. 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.

18. The major brand category includes those stations using the primary brand of a major refiner. Primary brands are the brand names or logos that are associated most commonly with the 15 integrated major refiners as defined in the Emergency Petroleum Allocation Act of 1973. These refiners are: Amoco, Atlantic Richfield, Chevron, Cities Service, Continental, Exxon, Getty, Gulf, Marathon, Mobil, Phillips, Shell, Sun, Texaco, and Union Oil of California. The nonmajor brand category includes all the other stations in the survey. Stations using secondary brands of major refiners are included in the nonmajor brand category, as these stations typically price their gasoline to compete with independent refiner and market-brand stations.

Stations owned and operated directly by refiners are not included in this survey.

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

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

20. 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.

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

Conversion Factors

Thermal Conversion Factors

Approximate Heat Content of Various Fuels		1973	1974	1975	1976	1977-78-79
Anthracite						
Production	Btu/short ton	23,170,000	22,560,000	23,390,000	22,770,000	22,500,000
Imports and Exports	Btu/short ton	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	22,000,000
Electric utility consumption	Btu/short ton	17,200,000	17,200,000	17,060,000	17,530,000	17,240,000
Non-utility consumption	Btu/short ton	24,590,000	23,750,000	23,650,000	23,840,000	23,790,000
Bituminous coal and lignite						
Production	Btu/short ton	24,010,000	23,730,000	23,200,000	23,150,000	22,900,000
Imports	Btu/short ton	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
Consumption, average	Btu/short ton	23,650,000	23,070,000	22,800,000	22,750,000	22,570,000
Electric utility consumption	Btu/short ton	22,180,000	21,800,000	21,660,000	21,690,000	21,520,000
Non-utility consumption	Btu/short ton	27,020,000	26,120,000	25,810,000	25,870,000	26,020,000
Coal Coke	Btu/short ton	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
Imports	Btu/barrel	5,817,131	5,825,768	5,821,375	5,808,452	5,809,909
Exports	Btu/barrel	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000
Crude Petroleum and Products						
Imports, average	Btu/barrel	5,897,122	5,883,985	5,857,876	5,856,076	5,834,208
Exports, average	Btu/barrel	5,752,455	5,773,577	5,748,482	5,745,450	5,796,948
Petroleum products						
Consumption, average	Btu/barrel	5,514,605	5,503,841	5,494,291	5,504,484	5,526,069
Electric utility consumption	Btu/barrel	6,128,488	6,128,058	6,109,112	6,129,283	6,126,858
Non-utility consumption	Btu/barrel	5,454,865	5,443,438	5,437,208	5,444,956	5,464,678
Imports	Btu/barrel	5,983,262	5,959,487	5,934,666	5,980,372	5,907,512
Exports	Btu/barrel	5,752,055	5,773,222	5,746,991	5,743,408	5,796,155
Natural gas plant liquid production	Btu/barrel	4,049,369	4,010,663	3,983,763	3,964,050	3,941,159
Natural gas, dry						
Production and consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021
Electric utility consumption	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029
Non-utility consumption	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019
Imports	Btu/cubic foot	1,026	1,027	1,026	1,025	1,026
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013
Hydropower[2]	Btu/kWh	10,389	10,442	10,406	10,373	10,435
Nuclear power[2]	Btu/kWh	10,903	11,161	11,013	11,047	10,769
Geothermal power[2]	Btu/kWh	21,674	21,674	21,611	21,611	21,611
Electricity consumption	Btu/kWh	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. Similarily, 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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