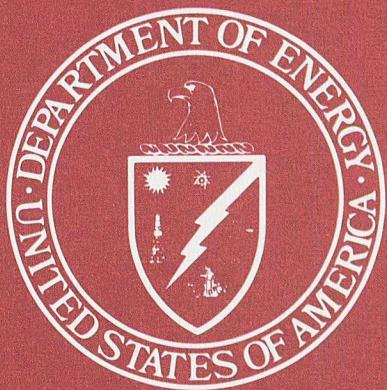


Fichman

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January 1981

Monthly Energy Review



U.S. Department of Energy
Energy Information Administration

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Short-Term Energy Supply and Demand Forecasting at FEA — October 1975

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The Department of Energy Disclosure Policy for Individually Identifiable Information Maintained by the Energy Information Administration—De-
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Part I

Executive Summary

Executive Summary

Overview

Production

Energy production during the first 10 months of 1980 totaled 54.0 quadrillion Btu, a 2.2 percent increase compared to production during the same period of 1979. This increase amounted to 1.9 percent when measured as a daily rate (a measure which removes the influence of leap year). Increases in production occurred for petroleum and coal. Petroleum production was up 0.9 percent and coal 7.4 percent (all measured as daily rates). Natural gas production decreased by 1.0 percent. All other forms of energy production combined were down by 1.5 percent, primarily due to a decline in electricity production by nuclear plants.

Consumption

During the first 10 months of 1980, energy consumption totaled 62.9 quadrillion Btu, a 3.6 percent decrease compared to con-

sumption during the same period of 1979, or 3.9 percent lower when average daily rates are compared. Decreases in the daily consumption rates of petroleum (8.8 percent) and natural gas (1.0 percent) contributed to the overall decline in energy consumption during this period. The average daily rate of coal consumption was up 4.1 percent over the level during the first 10 months of 1979.

Imports

Net imports of energy during the first 10 months of 1980 totaled 10.2 quadrillion Btu, 27.5 percent below the first 10 months of 1979. This decrease amounted to 27.8 percent when measured as a daily rate. By energy source, the decreases in net imports were petroleum, 21.2 percent; natural gas 21.9 percent; and electricity and coal coke combined, 41.3 percent (daily rates). Net exports of coal during the first 10 months of 1980 were 41.0 percent higher than the level during the same period of 1979.

ENERGY SUMMARY

(Quadrillion (10^{16}) Btu)

	October			Cumulative January through October				
	1980	1979	Percent Change	1980	1980 Daily Rate	1979	1979 Daily Rate	Percent Change*
Total Production	5.536	5.610	-1.3	54.005	0.177	52.842	0.174	+1.9
Petroleum ¹	1.722	1.746	-1.3	17.115	0.056	16.904	0.056	-0.9
Natural Gas	1.630	1.655	-1.5	16.324	0.054	16.442	0.054	-1.0
Coal	1.719	1.763	-2.5	15.755	0.052	14.626	0.048	+7.4
Other ²	0.465	0.447	+3.9	4.811	0.016	4.871	0.016	-1.5
Total Consumption	6.207	6.391	-2.9	62.900	0.206	65.260	0.215	-3.9
Petroleum ³	2.875	3.110	-7.6	28.382	0.093	31.023	0.102	-8.8
Natural Gas	1.590	1.579	+0.6	16.546	0.054	16.658	0.055	-1.0
Coal	1.267	1.234	+2.7	13.022	0.043	12.473	0.041	+4.1
Other ⁴	0.476	0.468	+1.6	4.950	0.016	5.106	0.017	-3.4
Net Imports	0.839	1.426	-41.2	10.183	0.033	14.049	0.046	-27.8
Petroleum ⁵	1.007	1.495	-32.6	11.234	0.037	14.203	0.047	-21.2
Natural Gas	0.072	0.107	-32.7	0.792	0.003	1.010	0.003	-21.9
Coal	(0.251)	(0.197)	(+27.6)	(1.982)	(0.006)	(1.400)	(0.005)	(+41.0)
Other ⁶	0.011	0.021	-46.9	0.139	0.000	0.236	0.001	-41.3

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

Parentheses indicate exports are greater than imports.

*Based on daily rates in order to remove the influence of leap year.

¹ Includes crude oil, lease condensate, and natural gas plant liquids.

² Includes hydroelectric, nuclear, and geothermal power and electricity produced from wood and waste.

³ Includes refined petroleum products and natural gas plant liquids.

⁴ Includes hydroelectric, nuclear, and geothermal power, electricity produced from wood and waste, and net imports of electricity and coal coke.

⁵ Includes crude oil, lease condensate, refined petroleum products, unfinished oils, natural gasoline, plant condensate, and imports of crude oil for the Strategic Petroleum Reserve.

⁶ Includes net imports of electricity and coal coke.

Executive Summary

Energy Summary

		Energy Production¹	Energy Consumption²	Energy Imports³	Energy Exports⁴
Quadrillion (10 ¹⁵) Btu					
1973	TOTAL	62.433	74.609	14.732	2.073
1974	TOTAL	61.229	72.759	14.417	2.243
1975	TOTAL	60.059	70.707	14.113	2.389
1976	TOTAL	60.090	74.509	16.838	2.213
1977	TOTAL	60.297	76.390	20.092	2.097
1978	TOTAL	61.208	78.154	19.262	1.951
1979	January	R5.295	R7.932	R1.789	R0.176
	February	R4.901	R7.261	R1.533	0.161
	March	R5.482	R6.995	R1.729	R0.244
	April	R5.227	R6.141	R1.521	0.237
	May	R5.441	R6.199	1.606	R0.253
	June	R5.288	R5.995	R1.599	R0.254
	July	R4.982	R6.117	R1.689	R0.269
	August	R5.470	R6.333	1.693	R0.262
	September	R5.146	R5.897	R1.540	0.222
	October	R5.610	R6.391	R1.712	R0.286
	November	R5.382	R6.540	R1.577	0.264
	December	R5.343	R7.181	R1.702	0.261
	TOTAL	R63.567	R78.980	R19.690	R2.888
1980	January	5.547	7.407	1.659	0.225
	February	5.206	7.011	1.467	0.206
	March	R5.599	6.976	1.492	0.265
	April	5.392	6.011	1.337	0.297
	May	5.497	5.838	1.281	0.348
	June	5.325	R5.715	1.293	0.366
	July	R5.198	R5.984	R1.180	0.330
	August	5.372	5.900	1.187	0.320
	September	R5.335	R5.851	R1.137	0.333
	October	5.536	6.207	1.212	0.373
	TOTAL (Year-to-date)	54.005	62.900	13.246	3.063

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

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

¹See Explanatory Note 1.

²See Explanatory Note 2.

³See Explanatory Note 3.

⁴See Explanatory Note 4.

R = Revised data.

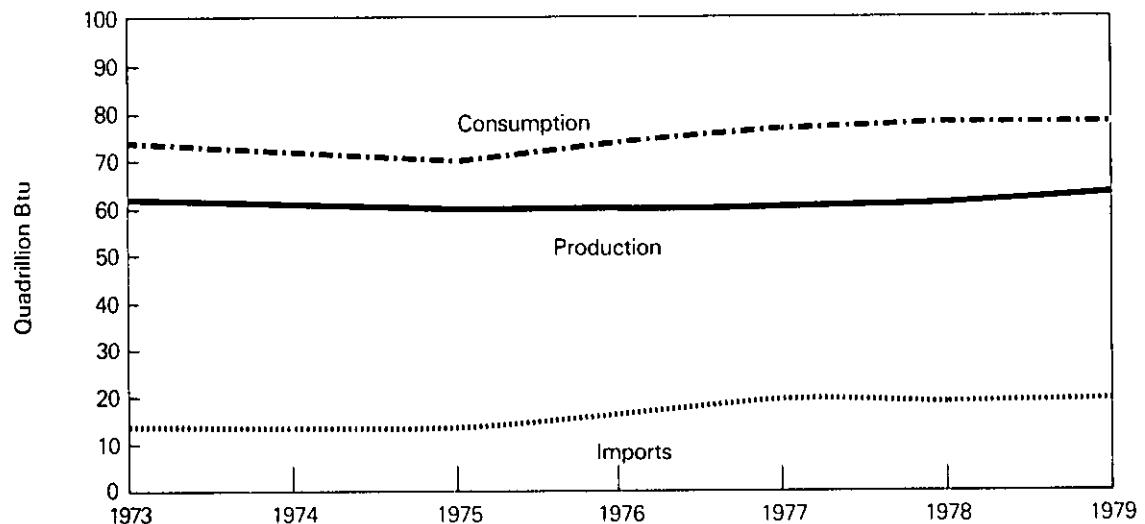
Note: The sum of domestic energy production and net imports of energy does not equal domestic energy consumption. The difference is attributed to stock changes; losses and gains in conversion, transportation and distribution; the addition of blending compounds; shipments of anthracite to U.S. Armed Forces in Europe; and adjustments to account for discrepancies between reporting systems.

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

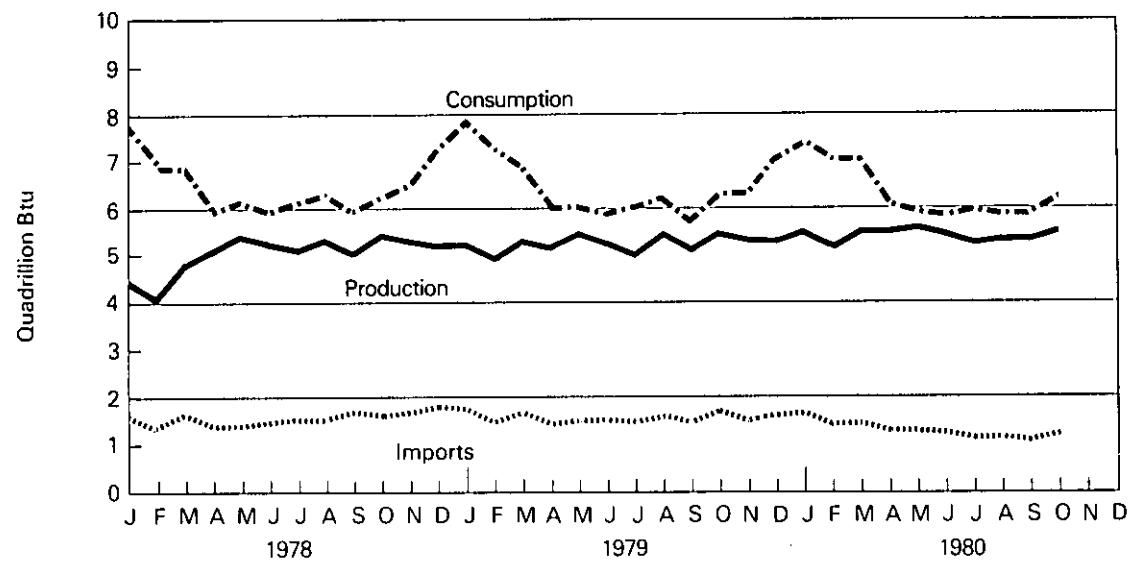
Executive Summary

Energy Summary

Yearly



Monthly



Executive Summary

Production of Energy by Type

		Coal ¹	Crude Oil ²	NGPL ³	Natural Gas (Dry)	Hydro-electric Power ⁴	Nuclear Electric Power	Others ⁵	Total Energy Produced	Yearly Cumulative Energy Produced
Quadrillion (10 ¹⁵) Btu										
1973	TOTAL	14.366	19.493	2.569	22.187	2.861	0.910	0.046	62.433	
1974	TOTAL	14.468	18.575	2.471	21.210	3.177	1.272	0.056	61.229	
1975	TOTAL	15.189	17.729	2.374	19.640	3.155	1.900	0.072	60.059	
1976	TOTAL	15.853	17.262	2.327	19.480	2.976	2.111	0.081	60.090	
1977	TOTAL	15.829	17.454	2.327	19.565	2.337	2.702	0.082	60.297	
1978	TOTAL	15.037	18.434	2.245	19.485	2.962	2.977	0.068	61.208	
1979	January	1.297	R1.524	0.186	1.718	0.264	0.299	0.007	R5.295	R5.295
	February	1.230	R1.385	0.172	1.606	0.225	0.279	0.006	R4.901	R10.196
	March	1.498	R1.546	0.188	1.706	0.274	0.262	0.008	R5.482	R15.678
	April	1.435	R1.488	0.190	1.641	0.268	0.198	0.007	R5.227	R20.905
	May	1.559	R1.546	0.191	1.670	0.305	0.162	0.007	R5.441	R26.346
	June	1.586	R1.467	0.185	1.606	0.264	0.173	0.007	R5.288	R31.634
	July	1.203	R1.504	0.190	1.613	0.241	0.224	0.007	R4.982	R36.616
	August	1.607	R1.537	0.192	1.641	0.225	0.261	0.008	R5.470	R42.086
	September	1.449	R1.483	0.184	1.587	0.201	0.235	0.007	R5.146	R47.232
	October	1.763	R1.550	0.196	1.655	0.213	0.225	0.008	R5.610	R52.842
	November	1.537	R1.524	0.197	1.671	0.237	0.207	0.008	R5.382	R58.223
	December	1.363	R1.549	0.198	1.762	0.240	0.222	0.009	R5.343	R63.567
	TOTAL	17.526	R18.104	2.269	19.875	2.957	2.748	0.089	R63.567	
1980	January	1.532	1.555	0.200	1.772	0.267	0.213	0.008	5.547	5.547
	February	1.451	1.463	0.188	1.663	0.226	0.208	0.008	5.206	10.752
	March	1.578	1.566	0.191	R1.782	0.257	0.216	0.008	R5.599	R16.351
	April	1.579	1.512	0.191	1.626	0.272	0.202	0.008	5.392	R21.742
	May	1.591	1.553	0.189	1.651	0.305	0.198	0.010	5.497	R27.239
	June	1.612	1.487	0.184	1.544	0.292	0.197	0.009	5.325	R32.564
	July	1.408	R1.538	R0.184	1.573	0.258	0.226	0.010	R5.198	R37.762
	August	1.622	1.539	0.183	1.539	0.217	0.262	0.011	5.372	R43.134
	September	1.662	1.486	0.183	R1.544	0.196	0.254	0.010	R5.335	R48.469
	October	1.719	1.541	0.182	1.630	0.189	0.264	0.011	5.536	54.005
	TOTAL	15.755	15.240	1.875	16.324	2.478	2.240	0.093	54.005	
	(Year-to-date)									

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

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

¹Includes bituminous coal, lignite, and anthracite.

²Includes lease condensate.

³Natural gas plant liquids.

⁴Includes industrial and utility production of hydropower.

⁵Includes geothermal power and electricity produced from wood and waste.

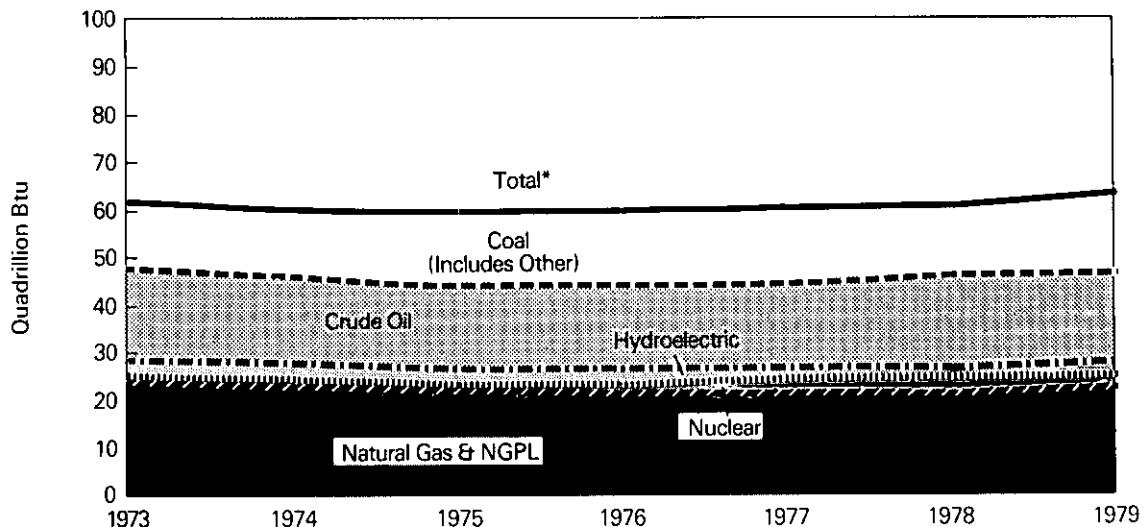
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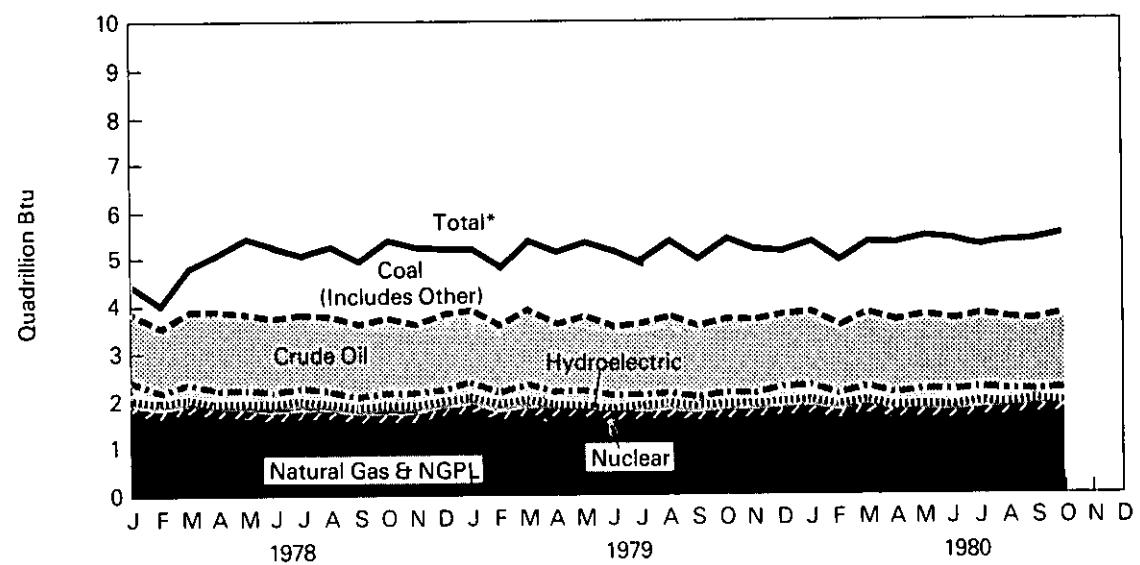
Executive Summary

Production of Energy by Type

Yearly



Monthly



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

Executive Summary

Consumption of Energy by Type

		Coal ¹	Natural Gas (Dry)	Petro-leum	Hydro-electric Power ²	Nuclear Electric Power	Net Imports of Coal Coke ³	Other ⁴	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 ¹⁵) Btu										
1973	TOTAL	13.300	22.512	34.840	3.010	0.910	(0.008)	0.046	74.609	
1974	TOTAL	12.876	21.732	33.455	3.309	1.272	0.059	0.056	72.759	
1975	TOTAL	12.823	19.948	32.731	3.219	1.900	0.014	0.072	70.707	
1976	TOTAL	13.732	20.345	35.175	3.066	2.111	0.000	0.081	74.509	
1977	TOTAL	13.965	19.931	37.176	2.519	2.702	0.015	0.082	76.390	
1978	TOTAL	13.846	20.000	37.965	3.168	2.977	0.131	0.068	78.154	
1979	January	1.355	2.463	R3.522	0.281	0.299	0.004	0.007	R7.932	R7.932
	February	1.206	2.237	R3.290	0.241	0.279	0.003	0.006	R7.261	R15.192
	March	1.215	1.912	R3.306	0.291	0.262	0.002	0.008	R6.995	R22.188
	April	1.143	1.616	R2.887	0.285	0.198	0.005	0.007	R6.141	R28.329
	May	1.196	1.454	R3.045	0.323	0.162	0.011	0.007	R6.199	R34.528
	June	1.241	1.339	R2.945	0.281	0.173	0.010	0.007	R5.995	R40.523
	July	1.337	1.348	R2.933	0.258	0.224	0.008	0.007	R6.117	R46.640
	August	1.345	1.362	R3.105	0.242	0.261	0.009	0.008	R6.333	R52.972
	September	1.201	1.347	R2.881	0.218	0.235	0.008	0.007	R5.897	R58.869
	October	1.234	1.579	R3.110	0.231	0.225	0.004	0.008	R6.391	R65.260
	November	1.240	1.792	R3.039	0.253	0.207	0.000	0.008	R6.540	R71.800
	December	1.357	2.096	R3.237	0.258	0.222	0.002	0.009	R7.181	R78.980
	TOTAL	15.070	20.546	R37.299	3.163	2.748	0.066	0.089	R78.980	
1980	January	1.409	2.323	3.167	0.284	0.213	0.003	0.008	7.407	7.407
	February	1.323	2.235	2.996	0.242	0.208	(0.001)	0.008	7.011	14.418
	March	1.304	2.220	2.956	0.275	0.216	(0.003)	0.008	6.976	21.394
	April	1.166	1.599	2.751	0.289	0.202	(0.005)	0.008	6.011	27.405
	May	1.170	1.382	2.762	0.322	0.198	(0.006)	0.010	5.838	33.243
	June	1.242	1.277	R2.684	0.309	0.197	(0.004)	0.009	R5.715	R38.958
	July	1.419	1.327	R2.731	0.275	0.226	(0.004)	0.010	R5.984	R44.942
	August	1.417	1.270	2.709	0.234	0.262	(0.003)	0.011	5.900	R50.841
	September	1.305	R1.324	2.750	0.213	0.254	(0.004)	0.010	R5.851	R56.693
	October	1.267	1.590	2.875	0.207	0.264	(0.006)	0.011	6.207	62.900
	TOTAL (Year-to-date)	13.022	16.546	28.382	2.650	2.240	(0.033)	0.093	62.900	

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

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

¹Includes bituminous coal, lignite, and anthracite.

²Includes industrial and utility production, and net imports of electricity.

³Parentheses indicate exports are greater than imports.

⁴Includes geothermal power and electricity produced from wood and waste.

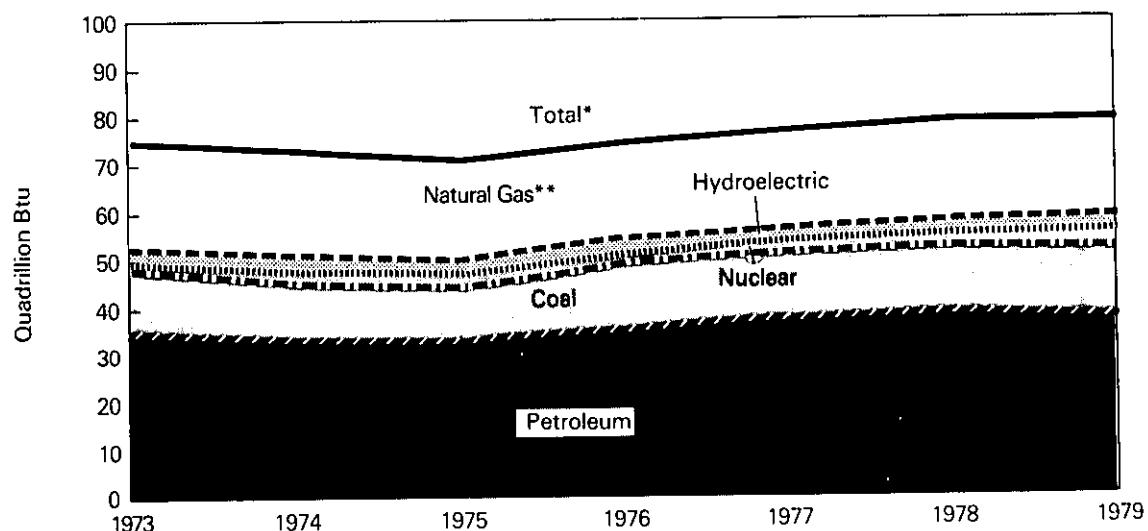
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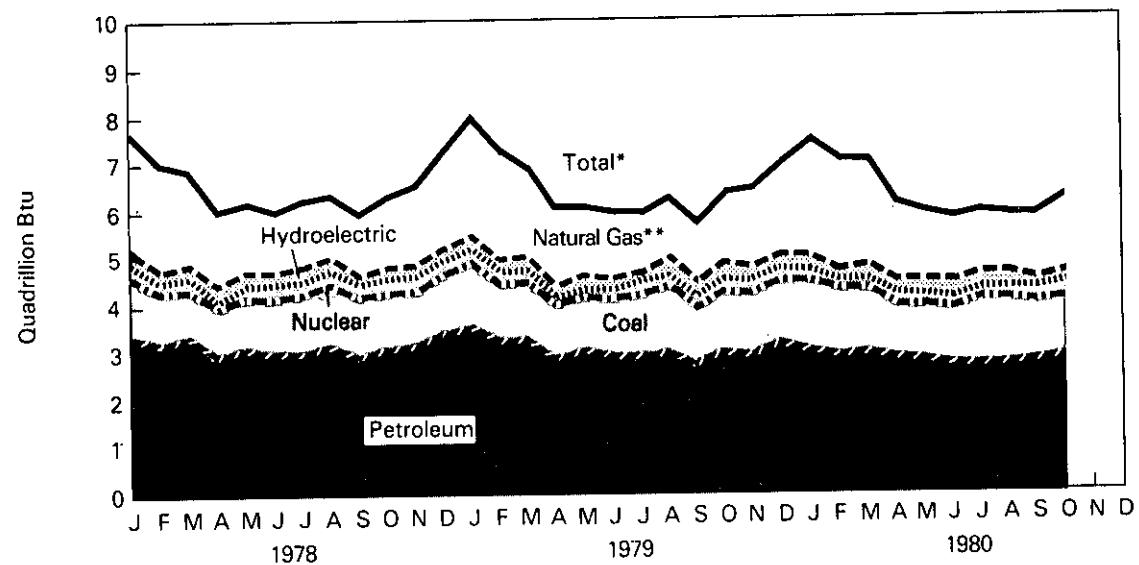
Executive Summary

Consumption of Energy by Type

Yearly



Monthly



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

**Includes net imports of coal coke and other.

Executive Summary

Net Imports of Energy by Type¹

		Coal ²	Crude Oil ³	Refined Petroleum Products ⁴	Natural Gas (Dry)	Electricity ⁵	Coal Coke	Net Imports	Yearly Cumulative Net Imports of Energy
Quadrillion (10 ¹²) Btu									
1973	TOTAL	(1.442)	6.883	6.097	0.981	0.148	(0.008)	12.659	
1974	TOTAL	(1.586)	7.389	5.273	0.907	0.133	0.059	12.174	
1975	TOTAL	(1.766)	8.708	3.800	0.904	0.064	0.014	11.725	
1976	TOTAL	(1.590)	11.221	3.982	0.922	0.089	0.000	14.625	
1977	TOTAL	(1.424)	13.921	4.321	0.981	0.182	0.015	17.995	
1978	TOTAL	(1.023)	13.125	3.932	0.941	0.206	0.131	17.311	
1979	January	(0.093)	R1.214	0.372	0.099	0.017	0.004	R1.613	R1.613
	February	(0.067)	1.013	R0.313	0.095	0.016	0.003	R1.372	R2.985
	March	(0.122)	R1.080	R0.397	0.111	0.017	0.002	R1.486	R4.471
	April	(0.138)	1.036	R0.260	0.104	0.017	0.005	R1.284	R5.755
	May	(0.165)	1.095	R0.291	0.102	0.017	0.011	R1.353	R7.108
	June	(0.156)	R1.116	R0.259	0.099	0.017	0.010	R1.345	R8.453
	July	(0.168)	R1.144	R0.318	0.101	0.017	0.008	R1.420	R9.873
	August	(0.160)	1.181	R0.289	0.096	0.017	0.009	R1.431	R11.304
	September	(0.134)	R1.088	R0.244	0.096	0.017	0.008	R1.318	R12.623
	October	(0.197)	R1.207	R0.288	0.107	0.017	0.004	R1.426	R14.049
	November	(0.163)	R1.038	R0.306	0.114	0.017	0.000	R1.313	R15.361
	December	(0.166)	R1.098	R0.380	0.109	0.017	0.002	R1.441	R16.802
	TOTAL	(1.729)	R13.309	R3.717	1.234	0.206	0.066	R16.802	
1980	January	(0.117)	1.088	0.325	0.118	0.017	0.003	1.434	1.434
	February	(0.104)	0.947	0.292	0.111	0.016	(0.001)	1.261	2.695
	March	(0.150)	0.982	0.274	0.106	0.017	(0.003)	1.228	3.923
	April	(0.202)	0.929	0.213	0.088	0.017	(0.005)	1.040	4.963
	May	(0.227)	0.857	0.225	0.066	0.017	(0.006)	0.933	5.896
	June	(0.237)	0.890	0.202	0.059	0.017	(0.004)	0.927	6.823
	July	(0.221)	0.793	R0.206	0.060	0.017	(0.004)	R0.850	R7.673
	August	(0.246)	0.826	0.215	0.057	0.017	(0.003)	0.867	R8.540
	September	(0.226)	R0.749	0.213	0.056	0.017	(0.004)	R0.804	R9.344
	October	(0.251)	0.778	0.229	0.072	0.017	(0.006)	0.839	10.183
	TOTAL (Year-to-date)	(1.982)	8.839	2.394	0.792	0.172	(0.033)	10.183	

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

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

¹Net imports = imports minus exports. Parentheses indicate exports are greater than imports.

²Includes bituminous coal, lignite, and anthracite.

³Includes crude oil, lease condensate, and imports of crude oil for the Strategic Petroleum Reserve.

⁴Includes refined petroleum products, unfinished oils, natural gasoline, and plant condensate.

⁵Only yearly totals are available for electricity imports and exports of data. Figures shown are estimates derived by dividing the yearly net import total by the number of days in the year and multiplying by the number of days in the month. Annual data for 1978 are used in estimating 1979 and 1980 data until actual annual data become available for those years.

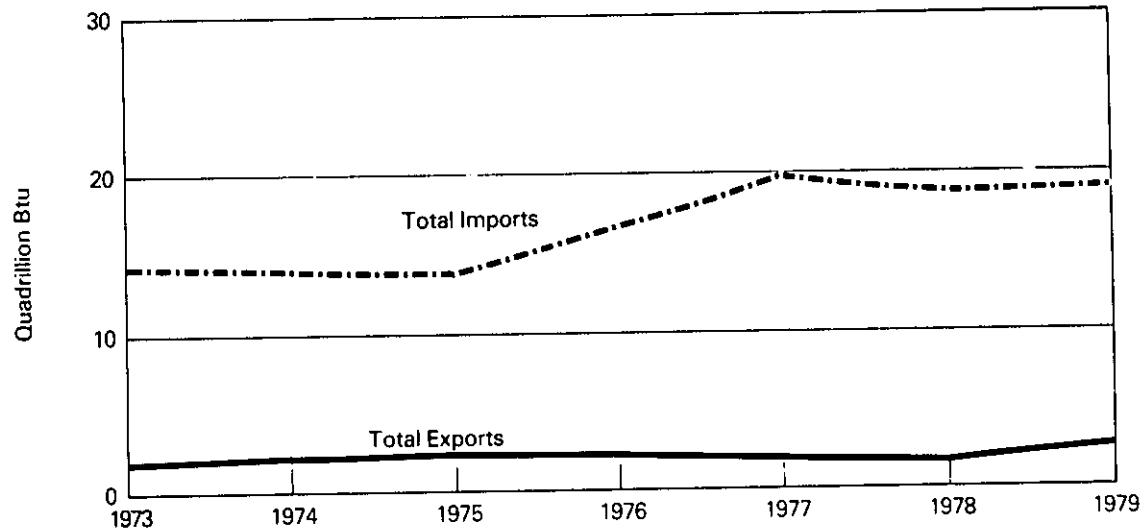
R = Revised data.

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

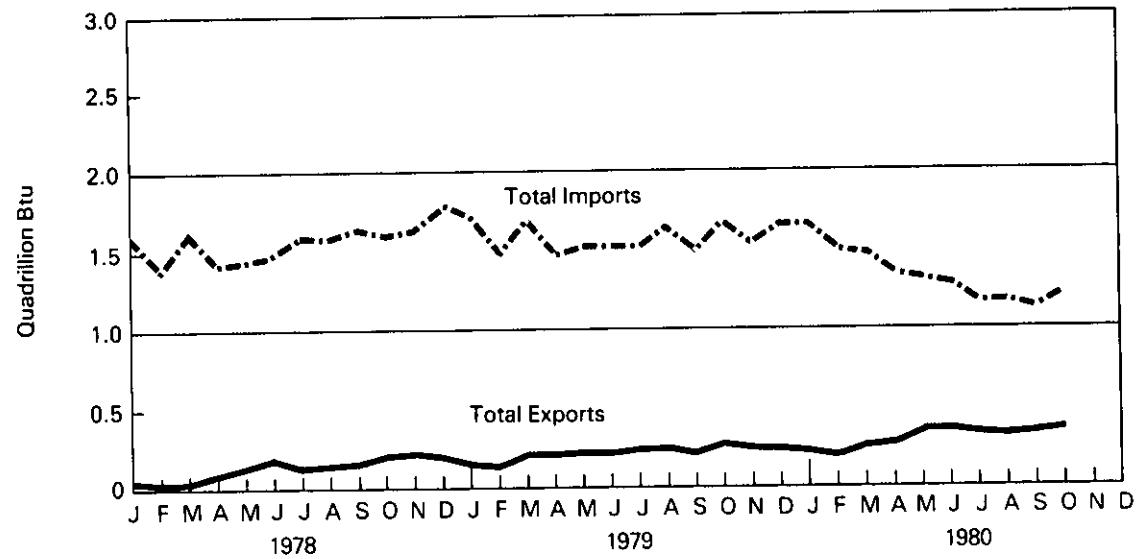
Executive Summary

Energy Imports and Exports

Yearly



Monthly



Executive Summary

Merchandise Trade Value¹

	Exports				Imports			
	Energy	Manufactured Products	Agricultural, Chemical, and Other	Total	Energy	Manufactured Products	Agricultural, Chemical, and Other	Total
		Million dollars						
1973 TOTAL	1,671	38,982	29,643	70,296	8,173	42,537	19,122	69,832
1974 TOTAL	3,444	54,704	39,085	97,233	25,454	51,205	23,989	100,648
1975 TOTAL	4,470	62,260	39,832	106,562	26,476	47,384	22,714	96,574
1976 TOTAL	4,226	67,282	42,159	113,667	33,996	60,004	27,010	121,010
1977 TOTAL	4,184	69,339	45,484	119,007	44,537	71,583	31,550	147,670
1978 TOTAL	3,881	81,850	55,310	141,041	42,096	93,887	35,996	171,979
1979 January	350	7,035	4,965	12,349	4,228	8,391	3,227	15,846
February	292	7,446	4,966	12,705	3,525	7,480	2,771	13,776
March	436	8,842	6,020	15,298	3,948	8,432	3,385	15,765
April	467	8,038	5,506	14,011	4,241	8,550	3,381	16,172
May	471	8,474	5,584	14,529	4,166	8,690	3,655	16,512
June	500	8,527	6,054	15,081	4,528	9,247	3,661	17,436
July	534	7,879	6,077	14,490	5,075	8,778	3,262	17,115
August	496	7,981	6,237	14,714	5,460	8,988	3,482	17,931
September	438	8,086	6,142	14,666	6,084	8,539	3,452	18,076
October	567	9,072	7,352	16,991	6,559	9,255	3,430	19,243
November	522	8,849	7,577	16,948	5,411	9,363	3,884	18,658
December	543	9,030	7,039	16,612	6,836	9,037	3,924	19,797
TOTAL	5,616	99,259	73,519	178,394	60,061	104,750	41,514	206,327
1980 January	481	8,837	6,696	16,015	6,559	9,772	3,801	20,132
February	436	9,684	6,556	16,675	7,742	9,226	3,671	20,639
March	567	10,870	7,865	19,302	7,392	9,801	3,848	21,041
April	631	10,481	6,691	17,803	6,346	9,543	3,737	19,626
May	737	10,574	7,079	18,390	6,895	9,791	3,818	20,503
June	730	10,570	7,000	18,300	6,938	9,745	3,837	20,520
July	707	9,669	6,491	16,867	5,792	9,797	3,736	19,324
August	703	9,974	6,947	17,624	6,237	9,195	3,428	18,859
September	710	10,158	6,632	17,500	5,831	9,443	3,806	19,080
October	755	11,271	7,483	19,509	6,231	10,067	3,970	20,268
November	785	10,415	7,044	18,244	5,880	9,862	3,792	19,533
TOTAL	7,242	112,503	76,484	196,229	71,843	106,242	41,444	219,525
(Year-to-date)								

Note: The U.S. trade statistics include the 50 States, the District of Columbia, and Puerto Rico, except data on shipments between the United States, Puerto Rico, and U.S. possessions, between U.S. possessions and foreign countries, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use and American goods returned to the United States by its Armed Forces, intratrade shipments, etc.

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

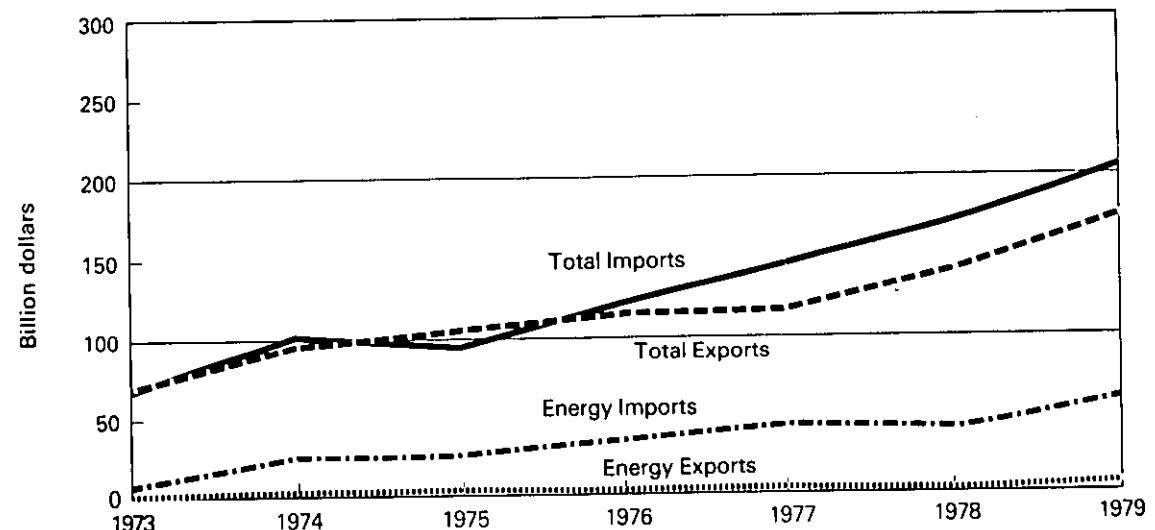
¹Data presented are free alongside ship (f.a.s.) basis and are unadjusted for seasonality and working days. Beginning January 1979, the data excludes U.S. Department of Defense Military Assistance Program Grant-Aid Shipments. Commodity categories shown above include groups of BOC sections as follows: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

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

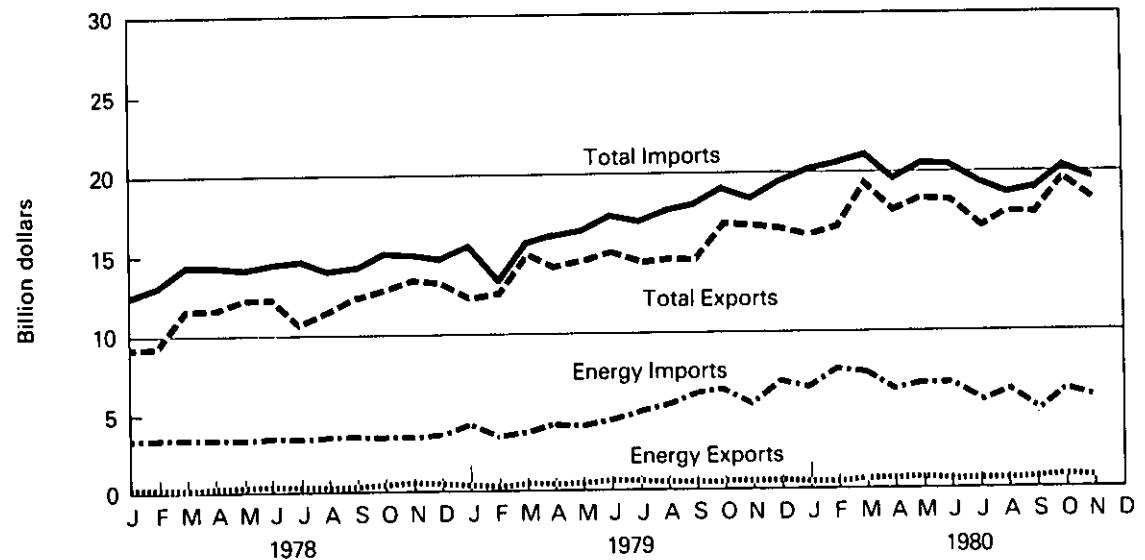
Executive Summary

Merchandise Trade Value

Yearly



Monthly



Executive Summary

Heating Degree-Days¹

Petroleum Administration For Defense (PAD) Districts	December 1 through December 28					Cumulative July 1 through December 28					
	1980		1979 ²		Normal (1941-70) ²	1980		1979 ²		Normal (1941-70) ²	
	1980	1979 ²	Normal (1941-70) ²	1980	1979 ²	Normal (1941-70) ²	1980	1979 ²	Normal (1941-70) ²		
PAD District I New England Conn., Maine, Mass., N.H., R.I., Vt.	830 1,089	662 840	(25.4) (29.6)	766 969	(8.3) (12.3)		1,768 2,415	1,475 2,007	(19.8) (20.3)	1,607 2,143	(10.0) (12.7)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	977	765	(27.8)	889	(9.9)		2,088	1,729	(20.8)	1,883	(10.9)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W. Va.	494	427	(15.6)	492	(0.4)		1,002	860	(16.4)	957	(4.7)
PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.	991	850	(16.6)	993	(-0.2)		2,262	2,093	(8.1)	2,199	(2.9)
PAD District III Ala., Ark., La., Miss., N. Mex., Tex.	435	429	(1.4)	452	(-3.9)		897	873	(2.9)	838	(7.1)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	816	871	(-6.3)	978	(-16.5)		2,115	2,282	(-7.3)	2,418	(-12.5)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	333	339	(-1.7)	430	(-22.7)		816	814	(0.2)	1,045	(-21.9)
U.S. AVERAGE³	765	655	(16.8)	761	(0.5)		1,700	1,532	(10.9)	1,650	(3.0)

¹See Explanatory Note 6 for explanation of degree-days.

²Percentage change in parentheses.

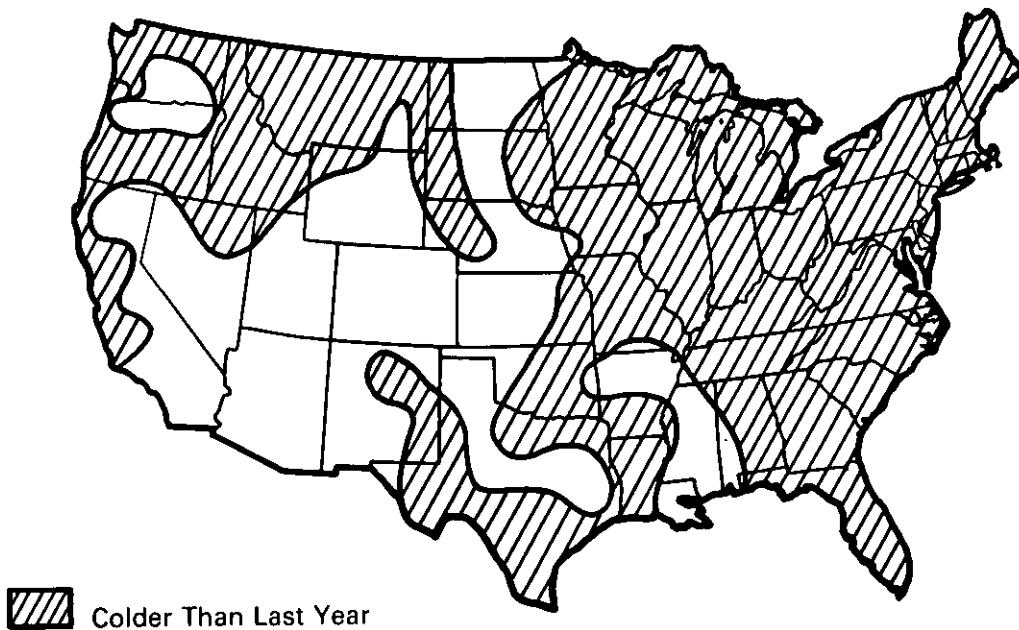
³Excludes Alaska and Hawaii.

Executive Summary

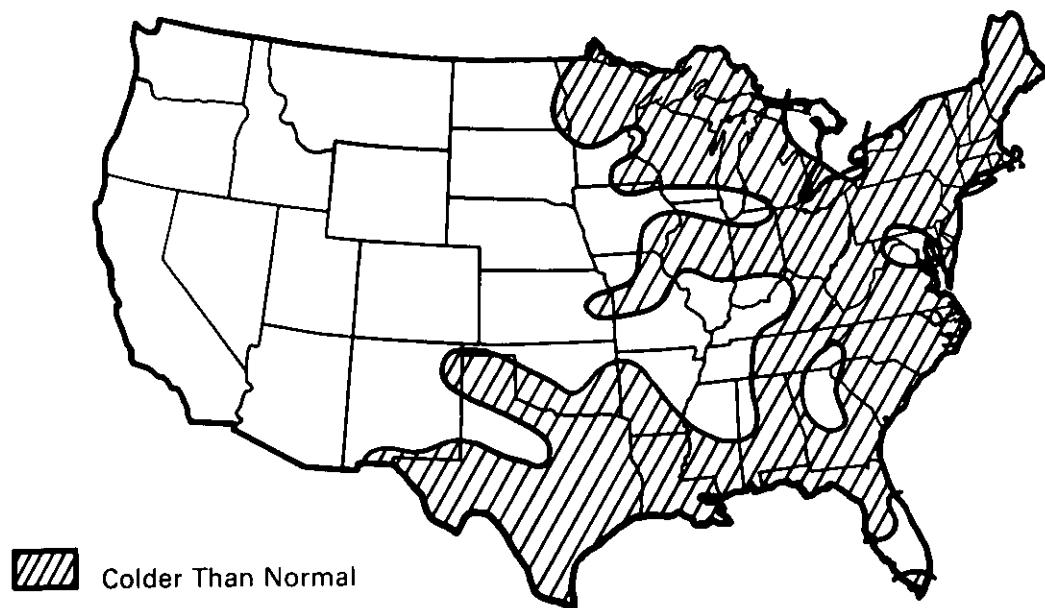
Heating Degree-Days

Heating Degree-Days Accumulated from July 1 through December 28

Departure from Last Year



Departure from Normal



Source: • Department of Commerce – NOAA.

Executive Summary

Energy Indicators—

Energy Consumption per GNP Dollar					U.S. Dependence on Petroleum Imports ³				
				Gross National Product (Annual rate)	Direct Imports				
		Energy Consumption per GNP Dollar ¹	Yearly Rate of Energy Consumption	Current Dollars	1972 Dollars ²	From Arab/OPEC Countries	From OPEC Countries	Total All Countries	Domestic Petroleum Products Supplied
ANNUAL RATE		Quadrillion Btu		Trillion dollars					Million barrels per day
1973	AVERAGE	60.4	74.609	1.307	1.235	0.91	2.99	6.26	17.31
1974	AVERAGE	59.7	72.759	1.413	1.218	0.75	3.28	6.11	16.65
1975	AVERAGE	58.8	70.707	1.529	1.202	1.38	3.60	6.06	16.32
1976	AVERAGE	58.5	74.509	1.702	1.273	2.42	5.07	7.31	17.46
1977	AVERAGE	57.0	76.390	1.900	1.341	3.19	6.19	8.81	18.43
1978	AVERAGE	55.9	78.154	2.128	1.399	2.96	5.75	8.36	18.85
1979	1st Qtr	62.9	89.940	2.292	1.431	3.24	5.87	8.81	20.35
	2nd Qtr	51.7	73.533	2.330	1.422	3.16	5.44	8.09	17.67
	3rd Qtr	50.8	72.818	2.397	1.433	2.95	5.68	8.31	17.58
	4th Qtr	55.3	79.701	2.457	1.440	2.80	5.46	8.44	18.44
	AVERAGE	55.1	78.953	2.369	1.432	3.04	5.61	8.41	18.50
1980	1st Qtr	59.5	86.046	2.521	1.445	3.00	4.97	7.90	18.16
	2nd Qtr	50.3	70.819	2.521	1.409	2.59	4.28	6.81	16.41
	3rd Qtr	49.9	70.527	2.569	1.412	2.22	3.69	6.03	16.10

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

¹Thousand Btu per 1972 constant dollar.

²Current dollars converted to 1972 constant dollars by the formula:

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

The Gross National Product deflators (1972 = 100) were determined by the Department of Commerce, Bureau of Economic Analysis. GNP rates are from the Business Conditions Digest published by the Bureau of Economic Analysis.

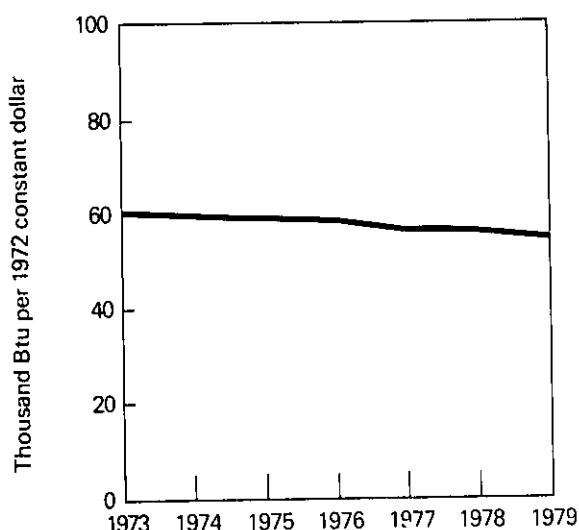
³Beginning in October 1977 Strategic Petroleum Reserve imports are included.

Note: This page is updated every quarter, during the months of March, June, September, and December. In other months, data appearing elsewhere in this publication are more current.

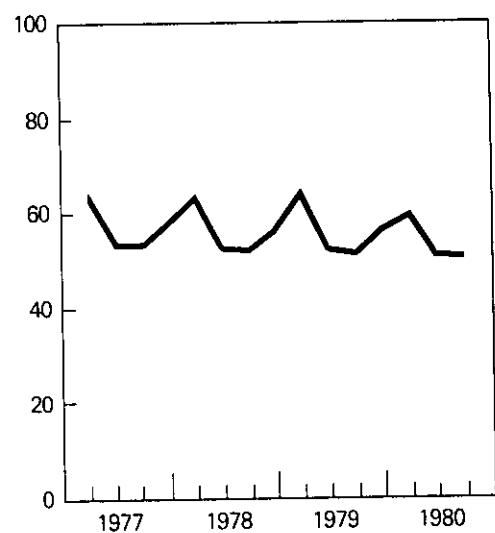
Executive Summary

Energy Consumption per GNP Dollar

Yearly

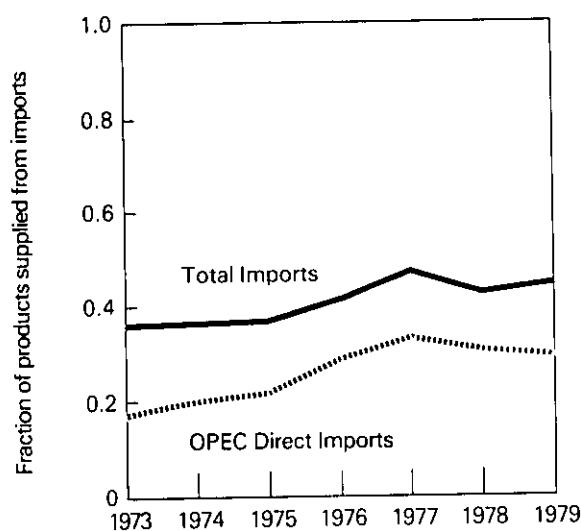


Quarterly

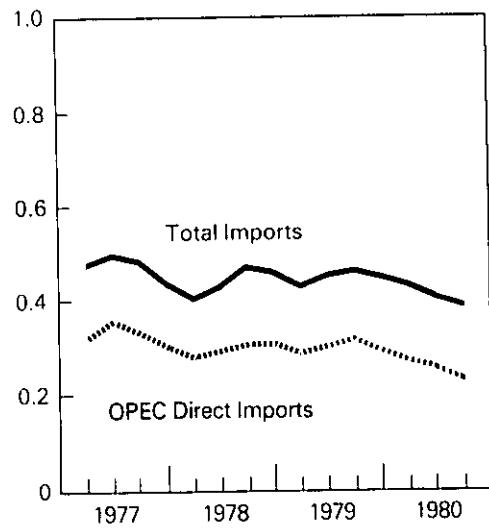


U.S. Dependence on Petroleum Imports

Yearly



Quarterly

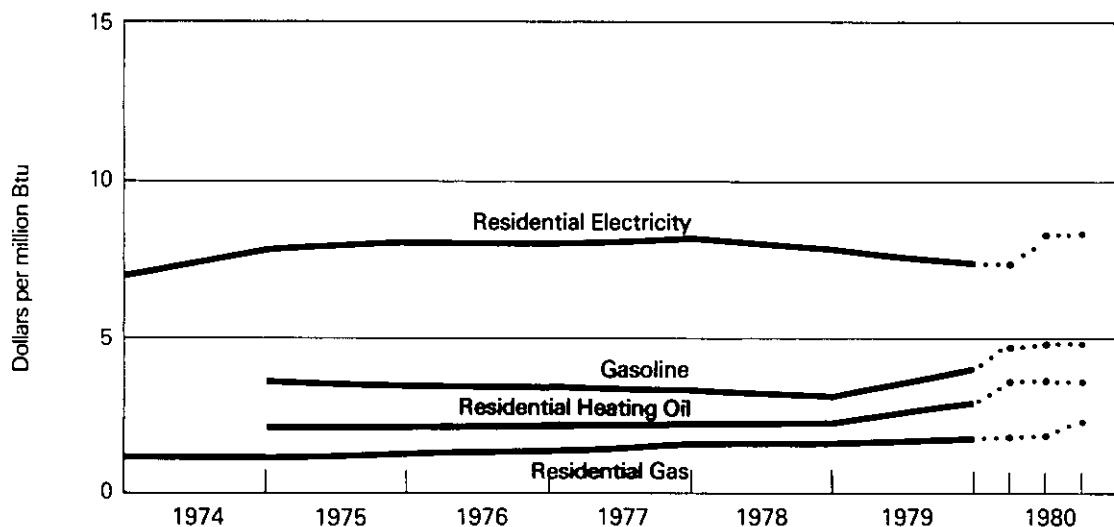


Executive Summary

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

		Leaded Regular Motor Gasoline		Residential Heating Oil		Residential Natural Gas		Residential Electricity	
		cent/gal	\$/MMBtu	cent/gal	\$/MMBtu	cent/Mcf	\$/MMBtu	cent/kWh	\$/MMBtu
1973	AVERAGE	NA	NA	NA	NA	121.2	1.19	2.39	7.00
1974	AVERAGE	45.1	3.61	29.4	2.12	121.4	1.19	2.63	7.71
1975	AVERAGE	44.1	3.53	29.3	2.11	132.8	1.30	2.73	8.00
1976	AVERAGE	43.4	3.47	30.2	2.18	145.4	1.43	2.74	8.03
1977	AVERAGE	42.9	3.43	31.2	2.25	162.2	1.59	2.80	8.20
1978	AVERAGE	40.1	3.21	31.7	2.29	164.4	1.62	2.76	8.10
1979	1st Qtr	41.5	3.32	33.8	2.44	179.4	1.77	2.51	7.36
	2nd Qtr	46.9	3.75	37.2	2.68	181.3	1.79	2.74	8.03
	3rd Qtr	53.3	4.26	44.0	3.17	189.0	1.86	2.79	8.17
	4th Qtr	54.9	4.39	46.4	3.35	193.1	1.90	2.66	7.79
	AVERAGE	49.3	3.94	40.8	2.94	185.3	1.88	2.66	7.79
1980	1st Qtr	62.3	4.98	49.8	3.59	190.8	1.88	2.53	7.42
	2nd Qtr	63.6	5.09	49.8	3.59	197.0	1.94	2.75	8.06
	3rd Qtr	60.6	4.85	49.2	3.55	207.5	2.04	2.86	8.38

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



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

NA = Not available.

Note: This page is updated every quarter, during the months of March, June, September, and December. In other months, data appearing elsewhere in this publication are more current.

Sources: • Motor Gasoline—Bureau of Labor Statistics.

• Heating Oil—1974 and 1975, Form CLC-92, "No. 2 Heating Oil Monthly Price Adjustment Report," and 1976 forward, FEA Form P112-M-1, and EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

• Natural Gas—1973 through 1979 annual numbers, Bureau of Mines and Energy Information Administration Form 1340-A, "Supply and Disposition of Natural Gas to Non-Producing Distributors;" and Form 1341-A, "Supply and Disposition of Natural Gas to Producers and Pipelines;" 1980 quarterly numbers, Bureau of Labor Statistics.

• Electricity—1973 through February 1980: FPC Form 5, "Reports of Classes A and B Privately Owned Electric Utilities"; March 1980 forward: FERC Form 5, "Electric Utility Company Monthly Statement."

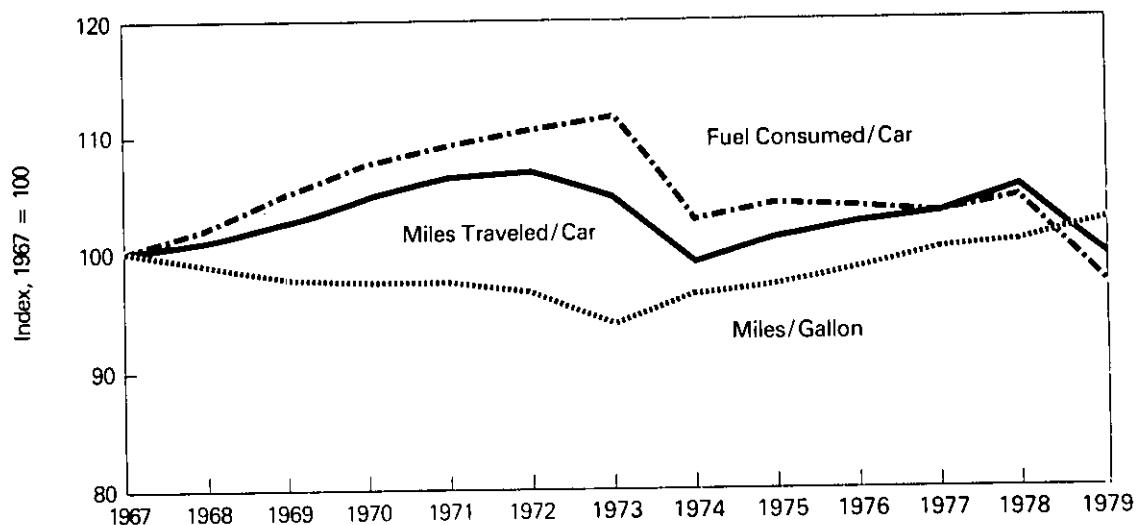
• Deflator—The Consumer Price Index.

Executive Summary

Energy Indicator — U.S. Passenger Car Efficiency

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

U.S. Passenger Car Efficiency Index



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

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

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Energy Consumption

Energy consumption in the 50 United States and the District of Columbia in October 1980 was 6.2 quadrillion Btu, 6.1 percent higher than during a month earlier. This figure was 2.9 percent lower than the October 1979 consumption level.

The Residential and Commercial Sector consumption was 2.1 quadrillion Btu in October 1980, 1.6 percent higher than September 1980 and 1.1 percent higher than the amount consumed during October 1979. The Residential and Commercial Sector consumed 34.3 percent of the total consumption for October 1980, up from the sector's 32.9 percent share in October 1979.

The Industrial Sector consumption was 2.5 quadrillion Btu in October 1980, up 10.1 percent from September 1980, and down 4.4 percent from the consumption level in October 1979. The Industrial Sector con-

sumed 40.6 percent of the October 1980 total, as compared to the 41.2 percent share of October 1979.

The Transportation Sector consumption was 1.6 quadrillion Btu in October 1980, up 6.1 percent from September 1980 and down 5.5 percent from the consumption level in October 1979. This sector consumed 25.1 percent of the October 1980 total, as compared to a 25.8 percent share in October 1979.

The Electric Utilities consumption was an estimated 2.0 quadrillion Btu of energy in October 1980, 4.7 percent lower than in the previous month, and 0.8 percent higher than the energy consumed in October 1979. Coal contributed 48.0 percent of the energy consumed by Electric Utilities in October 1980, while natural gas contributed 15.6 percent, nuclear power 13.2 percent, petroleum 12.5 percent, hydroelectric power 10.2 percent, and geothermal, wood and waste 0.5 percent.

Consumption

Energy Consumption Summary for October 1980 Quadrillion (10¹⁵) Btu

Primary Energy Source	Sector				TOTAL
	Residential and Commercial	Industrial	Transportation	Electric Utilities	
Coal	0.021	0.285	0.000	0.961	1.267
Natural Gas (dry)	0.370	0.867	0.041	0.312	1.590
Petroleum	0.555	0.552	1.517	0.250	2.875
Hydroelectric	0.000	0.003	0.000	0.204	0.207
Nuclear	0.000	0.000	0.000	0.264	0.264
Net Coke Imports	0.000	(0.006)	0.000	0.000	(0.006)
Other	0.000	0.000	0.000	0.011	0.011
TOTAL PRIMARY ENERGY	0.946	1.701	1.558	2.002	6.207
Electricity Sales	0.343	0.237	0.001	(0.580)	
Net Energy Consumption	1.289	1.938	1.559		4.786
Electrical Energy Losses	0.839	0.580	0.002	(1.421)	1.421
TOTAL ENERGY CONSUMED	2.128	2.518	1.561		6.207

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

Consumption

Consumption of Energy by the End-Use Sector¹

		Residential and Commercial	Industrial	Transportation	Total Energy Consumed
Quadrillion (10 ¹²) Btu					
1973	TOTAL	27.396	28.685	18.525	74.609
1974	TOTAL	26.699	27.998	18.057	72.759
1975	TOTAL	26.635	25.881	18.186	70.707
1976	TOTAL	27.831	27.603	19.071	74.509
1977	TOTAL	28.193	28.442	19.751	76.390
1978	TOTAL	28.807	28.715	20.627	78.154
1979	January	R3.424	R2.734	R1.773	R7.932
	February	R3.237	R2.338	R1.686	R7.261
	March	R2.816	R2.420	R1.759	R6.995
	April	R2.297	2.257	R1.586	R6.141
	May	R2.072	R2.467	R1.661	R6.199
	June	R1.991	R2.404	R1.599	R5.995
	July	R2.099	R2.422	R1.596	R6.117
	August	R2.194	R2.459	R1.679	R6.333
	September	R1.995	R2.351	R1.550	R5.897
	October	2.104	R2.634	R1.652	R6.391
	November	2.321	R2.627	R1.592	R6.540
	December	R2.778	R2.727	R1.675	R7.181
	TOTAL	R29.326	R29.841	R19.808	R78.980
1980	January	3.086	2.702	1.618	7.407
	February	3.026	2.430	1.555	7.011
	March	2.825	2.565	1.586	6.976
	April	2.252	2.220	1.538	6.011
	May	2.006	2.298	1.533	5.838
	June	R2.028	R2.208	1.478	R5.715
	July	R2.233	R2.212	R1.538	R5.984
	August	R2.255	R2.144	R1.501	5.900
	September	R2.094	R2.286	1.471	R5.851
	October	2.128	2.518	1.561	6.207
	TOTAL (Year-to-date)	23.933	23.584	15.379	62.900

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

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

¹See Explanatory Note 5 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculations is provided in the Notes and Sources on the last page of this section.

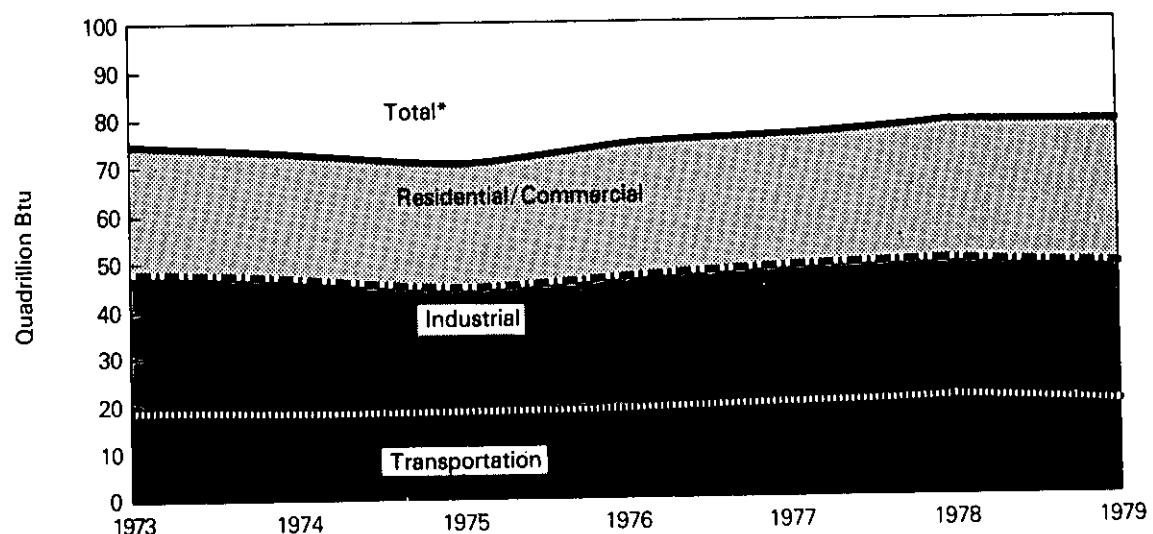
R=Revised data.

Source: •See Notes and Sources on the last page of this section.

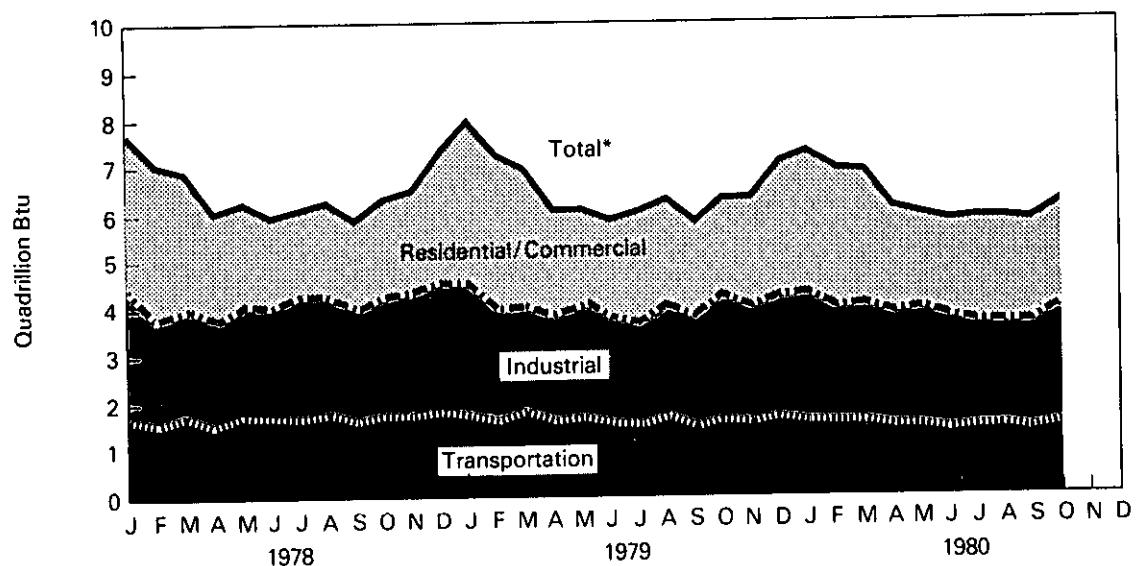
Consumption

Consumption of Energy by End-Use Sector

Yearly



Monthly



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

Consumption

Consumption of Energy by the Residential and Commercial Sector¹

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses ²	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 ¹⁵) Btu								
1973	TOTAL	0.291	7.626	7.524	3.495	8.460	27.396	
1974	TOTAL	0.293	7.518	6.865	3.475	8.548	26.699	
1975	TOTAL	0.239	7.581	6.413	3.588	8.814	26.635	
1976	TOTAL	0.227	7.866	6.919	3.729	9.089	27.831	
1977	TOTAL	0.225	7.461	6.869	3.936	9.702	28.193	
1978	TOTAL	0.250	7.624	6.916	4.100	9.918	28.807	
1979	January	0.031	1.294	R0.701	0.399	R0.998	R3.424	R3.424
	February	0.020	1.316	R0.647	0.388	R0.867	R3.237	R6.660
	March	0.015	0.982	R0.584	0.352	0.883	R2.816	R9.476
	April	0.013	0.740	R0.494	0.312	R0.739	R2.297	R11.773
	May	0.012	0.457	R0.540	0.299	R0.764	R2.072	R13.845
	June	0.013	0.316	R0.527	0.323	R0.811	R1.991	R15.836
	July	0.012	0.270	R0.533	0.366	0.918	R2.099	R17.934
	August	0.011	0.249	R0.578	0.393	R0.964	R2.194	R20.128
	September	0.014	0.260	R0.530	0.370	0.822	R1.995	R22.123
	October	0.019	0.359	0.598	0.322	R0.806	2.104	R24.227
	November	0.023	0.626	R0.567	0.315	R0.789	2.321	R26.548
	December	0.025	0.902	R0.607	R0.348	R0.895	R2.778	R29.326
	TOTAL	0.209	7.770	R6.907	R4.185	R10.255	R29.326	
1980	January	0.025	1.113	0.597	0.381	0.970	3.086	3.086
	February	0.022	1.191	0.552	0.375	0.886	3.026	6.112
	March	0.015	1.053	0.513	0.359	0.885	2.825	8.937
	April	0.014	0.716	0.433	0.319	0.770	2.252	11.189
	May	0.009	0.450	0.451	0.298	0.799	2.006	13.196
	June	0.007	0.329	R0.459	0.334	0.899	R2.028	R15.224
	July	0.014	0.258	R0.470	0.410	R1.081	R2.233	R17.457
	August	0.014	0.240	R0.493	0.439	1.069	R2.255	R19.712
	September	0.013	0.252	R0.500	0.411	0.919	R2.094	R21.806
	October	0.021	0.370	0.555	0.343	0.839	2.128	23.933
	TOTAL	0.153	5.972	5.022	3.669	9.117	23.933	
	(Year-to-date)							

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

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

¹The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. Notes on the methodology used for sector calculations are provided in the Notes and Sources on the last page of this section.

²Proportion of total electrical energy losses incurred in the generation and transmission of electricity plus plant use and unaccounted for that are attributed to this sector.

R = Revised data.

Source: * See Notes and Sources on the last page of this section.

Consumption

Consumption of Energy by the Industrial Sector¹

		Coal	Natural Gas (Dry)	Petro-leum	Hydro-electric	Net Coke Imports ²	Electricity Sales	Electrical Energy Losses ³	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 ¹²) Btu										
1973	TOTAL	4.350	10.397	5.893	0.035	(0.008)	2.341	5.676	28.685	
1974	TOTAL	4.057	10.012	5.750	0.033	0.059	2.337	5.751	27.998	
1975	TOTAL	3.801	8.531	5.530	0.032	0.014	2.304	5.669	25.881	
1976	TOTAL	3.791	8.768	6.325	0.033	0.000	2.525	6.162	27.603	
1977	TOTAL	3.494	8.642	7.106	0.037	0.015	2.635	6.513	28.442	
1978	TOTAL	3.462	8.540	7.178	0.036	0.131	2.732	6.637	28.715	
1979	January	0.315	0.869	0.726	0.003	0.004	0.233	R0.584	R2.734	R2.734
	February	0.295	0.629	R0.662	0.003	0.003	0.231	R0.516	R2.338	R5.072
	March	0.300	0.610	0.669	0.003	0.002	0.238	0.597	R2.420	R7.492
	April	0.289	0.565	R0.591	0.003	0.005	0.239	R0.565	2.257	R9.749
	May	0.290	0.674	R0.616	0.003	0.011	0.245	R0.626	R2.467	R12.216
	June	0.282	0.657	0.590	0.003	0.010	0.245	R0.616	R2.404	R14.620
	July	0.318	0.662	R0.580	0.003	0.008	0.242	0.608	R2.422	R17.042
	August	0.297	0.689	R0.614	0.003	0.009	0.246	R0.602	R2.459	R19.501
	September	0.286	0.703	R0.571	0.003	0.008	0.242	R0.538	R2.351	R21.853
	October	0.297	0.846	R0.630	0.003	0.004	0.244	R0.611	R2.634	R24.487
	November	0.301	0.850	0.638	0.003	0.000	0.238	R0.597	R2.627	R27.114
	December	0.331	0.883	R0.688	0.003	0.002	0.230	R0.591	R2.727	R29.841
	TOTAL	3.602	8.636	R7.575	0.037	0.066	2.873	R7.052	R29.841	
1980	January	0.311	0.864	0.703	0.003	0.003	0.231	0.587	2.702	2.702
	February	0.291	0.714	0.639	0.003	(0.001)	0.233	0.551	2.430	5.132
	March	0.297	0.816	0.634	0.003	(0.003)	0.236	0.582	2.565	7.698
	April	0.278	0.577	0.575	0.003	(0.005)	0.232	0.560	2.220	9.917
	May	0.272	0.605	0.579	0.003	(0.006)	0.229	0.614	2.298	12.216
	June	0.256	0.567	R0.546	0.003	(0.004)	0.228	0.613	R2.208	R14.424
	July	0.283	0.599	R0.519	0.003	(0.004)	0.224	R0.589	R2.212	R16.636
	August	0.271	0.577	R0.507	0.003	(0.003)	0.230	0.560	R2.144	R18.780
	September	R0.271	R0.669	R0.579	0.003	(0.004)	0.237	0.531	R2.286	R21.066
	October	0.285	0.867	0.552	0.003	(0.006)	0.237	0.580	2.518	23.584
	TOTAL	2.815	6.854	5.833	0.031	(0.033)	2.317	5.767	23.584	
	(Year-to-date)									

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

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

¹The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. Notes on the methodology used for sector calculations are provided in the Notes and Sources on the last page of this section.

²Net Imports = imports minus exports. Parentheses indicate exports are greater than imports.

³Proportion of total electrical energy losses incurred in the generation and transmission of electricity plus plant use and unaccounted for that are attributed to this sector.

R=Revised data.

Source: *See Notes and Sources on the last page of this section.

Consumption

Consumption of Energy by the Transportation Sector¹

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses ²	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 ¹²) Btu								
1973	TOTAL	0.003	0.743	17.751	0.009	0.020	18.525	
1974	TOTAL	0.002	0.685	17.341	0.009	0.021	18.057	
1975	TOTAL	0.001	0.595	17.557	0.010	0.024	18.186	
1976	TOTAL	(³)	0.559	18.477	0.010	0.025	19.071	
1977	TOTAL	(³)	0.543	19.173	0.010	0.024	19.751	
1978	TOTAL	(³)	0.539	20.059	0.009	0.020	20.627	
1979	January	(³)	0.064	R1.707	0.001	0.002	R1.773	R1.773
	February	(³)	0.058	R1.626	0.001	0.002	R1.686	R3.459
	March	(³)	0.049	R1.707	0.001	0.002	R1.759	R5.218
	April	(³)	0.042	R1.542	0.001	0.002	R1.586	R6.805
	May	(³)	0.038	R1.621	0.001	0.002	R1.661	R8.465
	June	(³)	0.035	R1.562	0.001	0.002	R1.599	R10.065
	July	(³)	0.035	R1.558	0.001	0.002	R1.596	R11.660
	August	(³)	0.035	R1.641	0.001	0.002	R1.679	R13.340
	September	(³)	0.035	R1.513	0.001	0.002	R1.550	R14.889
	October	(³)	0.041	R1.609	0.001	0.002	R1.652	R16.541
	November	(³)	0.046	R1.543	0.001	0.002	R1.592	R18.133
	December	(³)	0.054	R1.618	0.001	0.002	R1.675	R19.808
	TOTAL	(³)	0.530	R19.248	0.009	0.021	R19.808	
1980	January	(³)	0.060	1.555	0.001	0.002	1.618	1.618
	February	(³)	0.058	1.495	0.001	0.002	1.555	3.173
	March	(³)	0.057	1.526	0.001	0.002	1.586	4.758
	April	(³)	0.041	1.495	0.001	0.002	1.538	6.296
	May	(³)	0.036	1.495	0.001	0.002	1.533	7.829
	June	(³)	0.033	1.443	0.001	0.002	1.478	9.308
	July	(³)	0.034	R1.501	0.001	0.002	R1.538	R10.846
	August	(³)	0.033	R1.466	0.001	0.002	R1.501	R12.347
	September	(³)	0.034	1.434	0.001	0.002	1.471	R13.818
	October	(³)	0.041	1.517	0.001	0.002	1.561	15.379
	TOTAL (Year-to-date)	(³)	0.427	14.926	0.008	0.018	15.379	

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

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

¹The Transportation Sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. Notes on the methodology used for sector calculations are provided in the Notes and Sources on the last page of this section.

²Proportion of total electrical energy losses incurred in the generation and transmission of electricity plus plant use and unaccounted for that are attributed to this sector.

³Since 1976 the amount of coal consumed by the Transportation Sector has been negligible.

R = Revised data.

Source: •See Notes and Sources on the last page of this section.

Consumption

Consumption of Energy by the Electric Utilities

	Coal ¹	Natural Gas (Dry)	Petro-leum	Hydro-electric power ²	Nuclear Electric Power	Other ³	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 ¹²) Btu								
1973 TOTAL	8.655	3.746	3.671	2.975	0.910	0.046	20.004	
1974 TOTAL	8.524	3.518	3.499	3.276	1.272	0.056	20.144	
1975 TOTAL	8.783	3.241	3.231	3.187	1.900	0.072	20.414	
1976 TOTAL	9.714	3.153	3.454	3.032	2.111	0.081	21.544	
1977 TOTAL	10.245	3.285	4.028	2.482	2.702	0.082	22.825	
1978 TOTAL	10.134	3.297	3.813	3.132	2.977	0.068	23.421	
1979 January	1.009	0.236	R0.387	0.279	0.299	0.007	R2.216	R2.216
February	0.892	0.235	R0.355	0.238	0.279	0.006	R2.004	R4.220
March	0.900	0.270	R0.346	0.288	0.262	0.008	R2.074	R6.293
April	0.840	0.270	R0.260	0.282	0.198	0.007	R1.857	R8.150
May	0.894	0.286	R0.268	0.319	0.162	0.007	R1.937	R10.087
June	0.946	0.331	R0.265	0.278	0.173	0.007	R1.999	R12.086
July	1.007	0.382	0.261	0.255	0.224	0.007	R2.137	R14.222
August	1.037	0.390	R0.272	0.239	0.261	0.008	R2.207	R16.430
September	0.901	0.350	R0.267	0.215	0.235	0.007	R1.975	R18.405
October	0.917	0.334	R0.273	0.228	0.225	0.008	R1.986	R20.391
November	0.916	0.270	R0.291	0.250	0.207	0.008	R1.942	R22.333
December	1.000	0.257	R0.324	0.255	0.222	0.009	R2.067	R24.400
TOTAL	11.258	3.610	R3.569	3.125	2.748	0.089	R24.400	
1980 January	1.073	0.286	0.312	0.281	0.213	0.008	2.172	2.172
February	1.010	0.272	0.311	0.239	0.208	0.008	2.048	4.221
March	0.992	0.293	0.283	0.271	0.216	0.008	2.064	6.284
April	0.874	0.265	0.249	0.286	0.202	0.008	1.884	8.169
May	0.890	0.291	0.236	0.319	0.198	0.010	1.944	10.112
June	0.979	0.349	0.236	0.306	0.197	0.009	2.076	12.188
July	1.122	0.435	R0.241	0.272	0.226	0.010	R2.307	R14.495
August	1.133	0.420	0.244	0.231	0.262	0.011	2.301	R16.796
September	R1.021	R0.369	R0.237	0.210	0.254	0.010	2.101	R18.897
October	0.961	0.312	0.250	0.204	0.264	0.011	2.002	20.899
TOTAL (Year-to-date)	10.054	3.292	2.600	2.619	2.240	0.093	20.899	

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

¹Includes bituminous coal, lignite, and anthracite.

²Includes net imports of electricity.

³Includes geothermal power and electricity produced from wood and waste.

R=Revised data.

Source: *See Notes and Sources on the last page of this section.

Notes and Sources for the Consumption Section

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

Crude Oil and Refined Petroleum Products*

Domestic crude oil production during November 1980 is estimated at 8.5 million barrels per day. This production rate was 3.0 percent below the rate in November 1979 and 0.8 percent higher than in October 1980.

Total petroleum imports averaged 6.3 million barrels per day in November 1980, 23.5 percent less than the November 1979 rate and 4.0 percent more than in October 1980.

In November 1980, 17.4 million barrels per day of petroleum products were supplied for domestic use. Motor gasoline accounted for 37.7 percent of the total, distillate fuel oil 19.6 percent, and residual fuel oil 15.0 percent.

The average for motor gasoline supplied during November 1980 was 6.6 million barrels per day, 3.3 percent lower than the amount supplied in November 1979 and 0.8 percent lower than in October 1980.

In November 1980, 3.4 million barrels of distillate fuel oil were supplied per day, 3.7 percent higher than the amount supplied in October 1980. Distillate fuel oil stocks were 214.5 million barrels at the end of November 1980, 9.4 percent below the stock level 1 year ago and 5.0 percent lower than the previous month's level.

Residual fuel oil supplied in November 1980 averaged 2.6 million barrels per day, 7.1 percent lower than in November 1979. Residual fuel oil stocks measured 90.2 million barrels at the end of November 1980, 0.7 percent below the level a year ago and 0.6 percent lower than the previous month's level.

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

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Petroleum

Crude Oil

		Crude Input to Refineries	Total Domestic Production ^{1,2}	Alaskan Production	Crude Oil Imports ³	Strategic Petroleum Reserve (SPR) Imports	Crude Oil Exports	Primary Crude Oil Stocks ^{1,3}	Strategic Petroleum Reserve (SPR) Stocks ³
Thousand barrels per day									
1973	AVERAGE	12,431	9,208	198	3,244		2	‡242,478	
1974	AVERAGE	12,133	8,774	193	3,477		3	‡265,020	
1975	AVERAGE	12,442	8,375	191	4,105		6	‡271,354	
1976	AVERAGE	13,416	8,132	173	5,287		8	‡285,471	
1977	AVERAGE	14,602	8,245	464	6,594	21	50	‡339,857	‡7,826
1978	AVERAGE	14,739	8,707	1,229	6,195	161	158	‡309,421	‡66,860
1979	January	R14,840	R8,475	1,351	R6,721	204	177	R302,059	73,142
	February	R14,314	R8,525	R1,266	6,344	179	288	R302,374	78,166
	March	R14,260	R8,601	1,355	R6,252	122	370	R316,690	82,501
	April	R14,571	R8,553	R1,346	6,145	66	260	R319,075	83,867
	May	R14,450	R8,601	R1,349	6,163	97	171	R316,322	86,880
	June	14,806	R8,432	R1,246	R6,582	65	235	R325,860	88,567
	July	15,098	R8,364	1,405	R6,561	41	244	R312,946	90,101
	August	R14,967	R8,548	R1,433	6,774	35	R245	R320,965	91,189
	September	R14,594	R8,523	1,436	R6,426	0	175	R323,939	91,189
	October	14,423	R8,621	R1,480	R6,890	0	179	R344,854	*91,191
	November	R14,537	R8,761	R1,613	R6,228	0	264	R347,415	91,191
	December	R14,877	R8,615	R1,519	R6,318	0	R215	R339,074	91,191
	AVERAGE	R14,648	R8,552	1,401	R6,452	67	R235		
1980	January	14,147	8,648	1,634	6,359	0	311	353,611	91,191
	February	14,094	8,696	1,630	5,936	0	310	361,648	91,191
	March	13,603	8,712	1,647	5,785	0	323	361,742	91,191
	April	13,376	8,688	1,649	5,555	0	216	379,352	91,191
	May	13,326	8,640	1,628	5,071	0	308	383,902	91,191
	June	13,705	8,547	1,626	5,480	0	365	382,035	91,191
	July	R13,251	R8,555	R1,612	4,645	0	238	R379,280	91,191
	August†	13,012	8,560	1,610	4,673	0	78	388,839	91,191
	September†	13,310	8,540	1,607	4,569	54	322	376,512	92,824
	October†	R12,753	8,570	1,641	R4,503	131	309	R378,472	96,645
	November†	13,290	8,500	1,568	4,779	NA	NA	384,602	NA
	AVERAGE	13,439	8,605	1,623	5,211	NA	NA		

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

¹Includes lease condensate.

²Includes Alaskan production.

³Excludes SPR. Strategic Petroleum Reserve storage began in October 1977.

†Indicates an adjustment in reported barrels in storage.

Estimated data in italics. These are likely to be revised next month.

‡Total as of December 31.

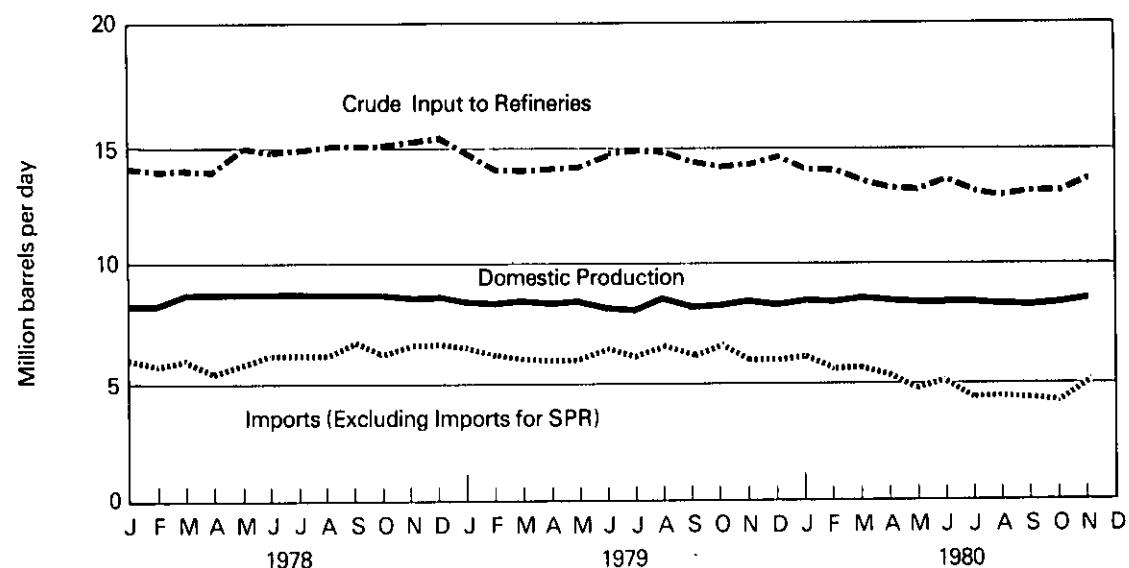
†Preliminary data. R = Revised data. NA = Not available.

Sources: •See Sources on the last page of this section.

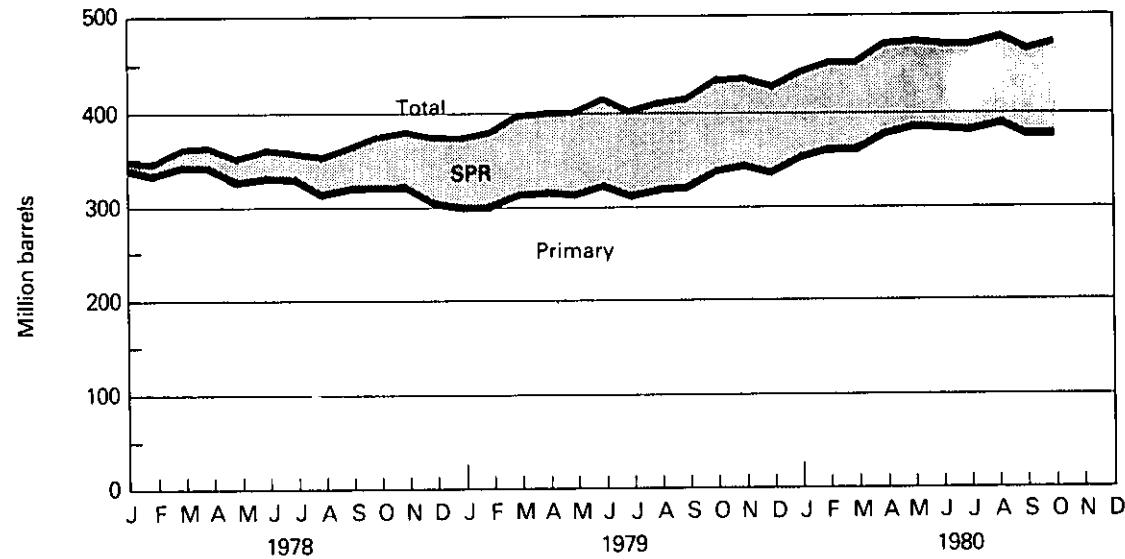
Petroleum

Crude Oil

Production, Refinery Input and Imports



Stocks



Petroleum

Total Petroleum Products ¹			Total Crude Oil and Petroleum Products Trade					
	Products Supplied ¹	Product Imports ²	Product Exports	Total Imports (Excluding SPR)	SPR Imports ³	Total Imports (Including SPR) ³	Total Exports	Net Imports
Thousand barrels per day			Thousand barrels per day					
1973 AVERAGE	17,308	3,012	229	6,256			231	6,025
1974 AVERAGE	16,653	2,635	218	6,112			221	5,892
1975 AVERAGE	16,322	1,951	204	6,056			209	5,846
1976 AVERAGE	17,461	2,026	215	7,313			223	7,090
1977 AVERAGE	18,431	2,193	193	8,787	21	8,807	243	8,565
1978 AVERAGE	18,847	2,008	204	8,202	161	8,363	362	8,002
1979 January	R20,586	R2,223	R215	R8,944	204	R9,148	R392	R8,756
February	R21,288	R2,069	R198	R8,413	179	R8,591	R486	R8,105
March	R19,322	R2,386	R241	R8,638	122	R8,760	R611	R8,150
April	R17,434	R1,682	R234	R7,828	66	R7,893	R493	R7,400
May	R17,801	R1,830	R257	R7,993	97	R8,091	R429	R7,662
June	R17,786	R1,680	R233	R8,262	65	R8,327	R468	R7,859
July	R17,144	R1,956	R242	R8,517	41	R8,559	R486	R8,072
August	R18,149	R1,781	R221	R8,555	35	R8,590	R466	R8,124
September	R17,400	R1,597	R239	R8,023	0	R8,023	R414	R7,609
October	R18,176	R1,798	R246	R8,688	0	R8,688	R425	R8,263
November	R18,355	R1,955	246	R8,183	0	R8,183	R510	R7,674
December	R18,922	R2,310	R256	R8,628	0	R8,628	R471	R8,157
AVERAGE	R18,516	R1,940	R236	R8,393	67	R8,460	R471	R7,989
1980 January	18,509	1,983	228	8,342	0	8,342	539	7,803
February	18,721	1,911	227	7,847	0	7,847	536	7,311
March	17,279	1,724	243	7,509	0	7,509	566	6,943
April	16,616	1,430	241	6,985	0	6,985	457	6,528
May	16,143	1,478	266	6,549	0	6,549	573	5,975
June	R16,214	1,413	288	6,893	0	6,893	654	6,239
July	R15,962	R1,401	R292	R6,046	0	R6,046	R530	R5,516
August†	15,836	1,402	241	6,075	0	6,075	319	5,756
September†	16,612	1,420	235	5,989	54	6,043	557	5,486
October†	R16,802	R1,522	288	R6,024	131	6,155	598	5,557
November†	17,427	1,485	NA	6,264	NA	NA	NA	NA
AVERAGE	16,911	1,560	NA	6,771	NA	NA	NA	NA

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

¹See Definitions.

²Includes plant condensate, natural gasoline and unfinished oils.

³Strategic Petroleum Reserve storage began in October 1977.

Estimated data in italics. These are likely to be revised next month.

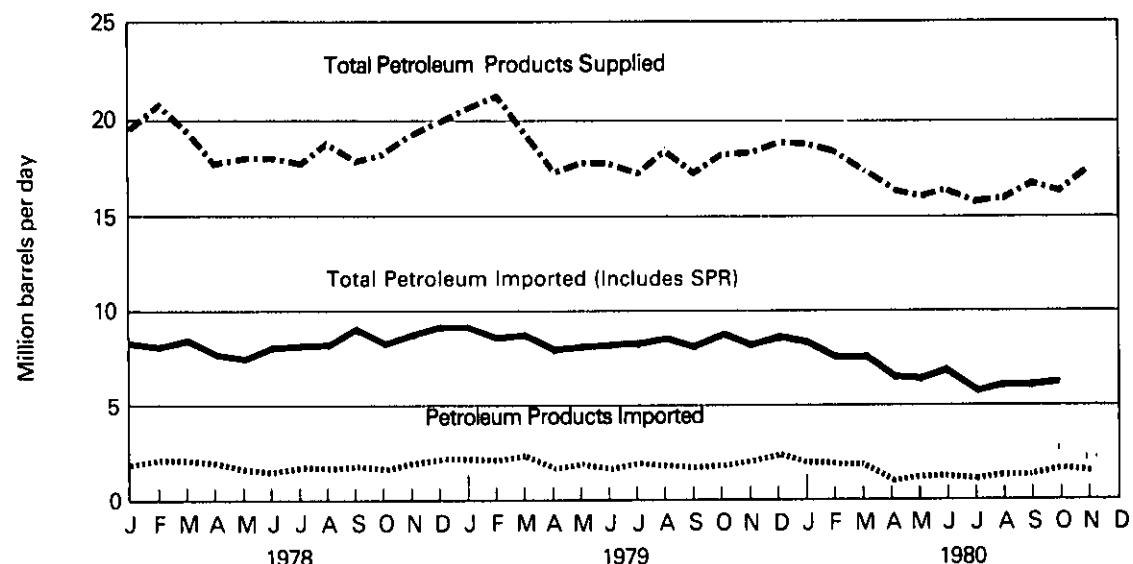
†Preliminary data. R=Revised data. NA=Not available.

Sources: •See Sources on the last page of this section.

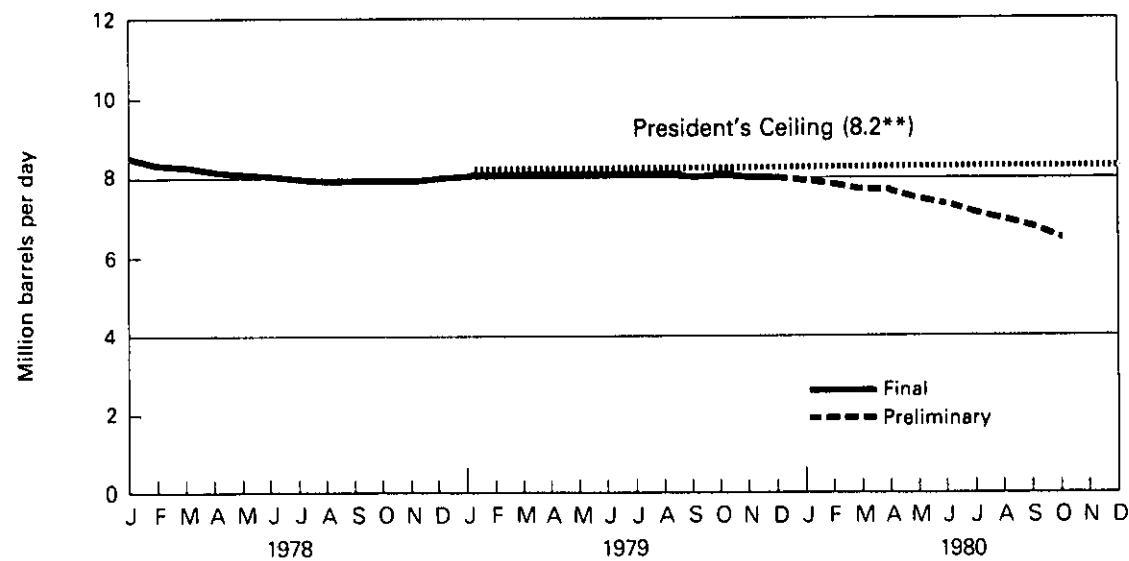
Petroleum

Products Supplied and Imports

Products Supplied and Imports



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



* Includes SPR.

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

Petroleum

Petroleum Imports from OPEC Sources

	Algeria	Indonesia	Iran	Libya	Nigeria	Saudi Arabia	United Arab Emirates	Venezuela	Other OPEC ¹	Total OPEC	Arab Members of OPEC ²
	Thousand barrels per day										
1973											
AVERAGE	136.0	213.3	222.8	164.4	458.8	485.7	70.6	1,134.9	106.4	2,992.9	914.7
1974											
AVERAGE	190.1	300.4	468.8	4.4	713.4	461.3	73.9	979.1	88.4	3,279.8	752.5
1975											
AVERAGE	282.4	389.6	280.4	231.8	761.8	714.6	116.7	702.5	121.5	3,601.3	1,382.6
1976											
AVERAGE	432.2	538.8	298.5	453.3	1,024.7	1,229.8	254.4	700.1	134.0	5,065.8	2,424.1
1977											
AVERAGE	558.6	541.0	535.0	722.6	1,143.0	1,380.4	335.3	690.4	286.7	6,193.1	3,185.1
1978											
AVERAGE	648.7	573.3	555.3	653.9	919.5	1,143.9	385.4	644.9	226.0	5,750.9	2,963.2
1979											
January	669.2	502.8	187.1	R754.0	1,158.6	1,562.9	341.4	661.0	R229.0	R6,066.0	R3,424.9
February	746.3	521.3	85.8	613.7	984.3	1,628.2	309.8	R749.4	170.8	R5,809.6	3,403.8
March	579.0	418.9	22.2	598.3	1,403.0	R1,310.3	298.4	851.4	272.5	R5,753.9	R2,950.2
April	686.8	376.1	51.6	770.8	988.9	1,483.5	285.2	619.3	129.6	5,391.8	3,311.0
May	755.5	342.5	196.5	650.5	1,117.9	1,273.4	291.9	671.2	147.5	5,447.0	3,023.7
June	R587.5	390.5	318.3	R765.2	932.0	1,258.3	281.9	609.4	363.8	R5,507.0	R3,185.1
July	591.4	R427.0	R425.5	R665.7	R999.7	R1,443.3	R272.0	R674.4	R183.0	R5,682.0	R3,082.6
August	669.3	499.1	516.0	657.2	1,183.0	1,332.4	247.1	731.0	261.5	6,096.6	3,051.7
September	510.2	358.7	372.9	R620.8	1,103.3	1,281.1	269.9	726.2	199.8	R5,442.9	R2,843.4
October	R614.7	452.2	495.6	761.6	R987.7	R1,271.1	234.0	616.7	304.4	R5,738.1	R3,086.4
November	R624.6	R351.4	548.6	R475.6	1,007.1	1,162.9	307.1	713.0	151.4	R5,341.7	R2,619.1
December	R602.8	R403.4	413.8	559.2	1,079.9	1,279.4	241.5	R680.0	130.5	R5,390.4	R2,743.2
AVERAGE	R635.9	R420.1	R304.4	R658.1	R1,080.3	R1,356.0	R281.4	R691.7	R212.3	R5,639.9	R3,058.4
1980											
January	484.2	433.0	80.5	616.8	1,054.4	1,562.1	201.6	583.3	179.1	5,195.1	3,000.7
February	638.7	317.1	9.2	603.3	1,012.6	1,398.9	304.0	543.0	140.3	4,967.1	3,016.7
March	472.0	405.4	0.0	654.1	924.2	1,389.5	370.1	352.3	174.8	4,742.3	2,978.6
April	555.9	373.6	0.0	682.7	722.3	1,294.3	150.1	339.2	227.9	4,346.0	2,866.2
May	441.0	360.1	0.0	468.4	954.9	1,149.4	172.0	405.0	132.4	4,083.1	2,314.4
June	497.3	330.9	0.0	561.2	998.3	1,327.4	178.1	409.3	105.6	4,408.1	2,597.6
July	537.0	R308.0	0.0	492.3	720.5	1,178.9	157.6	411.3	55.5	R3,861.1	2,378.1
August†	432.5	259.6	0.0	412.4	802.2	1,141.2	142.1	404.1	49.8	3,643.7	2,143.4
September†	361.3	289.5	0.0	511.8	727.8	1,096.2	106.8	424.0	77.1	3,594.6	2,128.1
October†	462.7	326.3	0.0	475.8	715.8	1,019.1	181.9	464.1	52.4	3,698.1	2,153.7
AVERAGE	487.4	340.6	9.0	547.2	862.8	1,254.9	196.2	433.2	119.2	4,250.6	2,555.0

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

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

Beginning in October 1977 Strategic Petroleum Reserve imports are included.

†Includes Ecuador, Gabon, Iraq, Kuwait and Qatar.

‡Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait and Qatar.

†Preliminary data. R = Revised data.

Sources: • See Sources on the last page of this section.

Petroleum

Petroleum Imports from Non-OPEC Sources

	Bahamas	Canada	Mexico	Netherlands Antilles	Puerto Rico	Trinidad and Tobago	Virgin Islands	Other ¹	Total
Thousand barrels per day									
1973									
AVERAGE	174.0	1,324.8	15.7	584.7	99.5	254.8	329.4	480.3	3,263.2
1974									
AVERAGE	163.8	1,069.5	8.5	511.0	90.4	250.8	391.0	347.4	2,832.4
1975									
AVERAGE	152.4	846.4	71.4	331.8	89.7	242.4	406.4	313.9	2,454.4
1976									
AVERAGE	118.5	599.3	87.2	275.4	88.1	274.3	422.3	381.7	2,246.8
1977									
AVERAGE	170.5	516.9	179.4	210.9	105.1	289.3	466.2	675.8	2,614.1
1978									
AVERAGE	159.9	466.8	317.8	229.2	93.8	253.1	428.7	663.2	2,612.5
1979									
January	159.5	R564.6	R595.5	237.9	109.1	R151.1	477.0	R787.3	R3,082.0
February	R106.0	R561.1	415.4	254.8	68.2	191.4	421.1	763.6	R2,781.7
March	93.6	R615.6	397.5	314.1	63.8	214.7	561.6	745.5	R3,006.5
April	129.4	R577.6	301.6	R178.8	64.9	R156.0	474.7	R618.5	R2,501.6
May	134.8	R557.8	402.9	R191.4	101.7	R215.6	382.0	R658.1	R2,643.8
June	138.1	R468.6	457.7	R171.6	105.7	169.5	413.7	R895.2	R2,820.0
July	193.2	R490.5	R384.2	R209.1	117.2	R168.4	451.2	R863.0	R2,876.5
August	156.6	R464.2	439.4	246.5	92.5	237.9	357.1	R499.3	R2,493.4
September	149.1	R463.6	431.3	275.8	86.2	166.2	285.7	R722.3	R2,580.1
October	150.5	R486.3	531.1	242.4	60.2	199.7	403.0	R875.5	R2,950.1
November	181.7	R583.0	R428.7	R196.1	109.7	161.1	438.4	R743.0	R2,841.6
December	178.1	R618.8	453.9	257.4	120.3	R240.0	507.5	862.1	R3,238.1
AVERAGE	R147.9	R537.7	R437.1	R231.4	91.8	R189.6	431.5	R752.8	R2,819.7
1980									
January	175.1	568.9	545.2	289.0	55.9	239.4	467.2	806.1	3,146.8
February	111.5	539.6	462.6	205.2	95.3	191.8	521.6	752.5	2,880.1
March	124.0	459.7	459.6	184.0	81.3	188.7	443.2	826.6	2,767.1
April	55.7	411.2	545.6	230.8	63.1	143.4	418.2	771.0	2,639.0
May	77.1	418.5	576.4	184.4	87.9	220.8	303.4	597.1	2,465.6
June	77.1	404.6	626.8	195.7	90.8	160.3	319.1	610.6	2,485.0
July	42.9	R378.1	R433.7	R242.1	R89.5	R179.7	365.1	R453.9	R2,185.1
August†	62.0	358.8	602.5	250.8	84.8	153.9	263.6	654.8	2,431.3
September†	57.5	392.4	511.1	210.0	51.8	202.6	336.7	686.4	2,448.4
October†	69.6	422.8	591.4	217.2	90.1	111.4	358.9	595.6	2,456.9
AVERAGE	85.3	435.1	535.7	221.1	79.0	179.2	379.0	674.8	2,589.3

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

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

Beginning in October 1977 Strategic Petroleum Reserve imports are included.

¹Includes Non-OPEC Arab, Western Europe, Angola, U.S.S.R., Rumania, other Western Hemisphere and other Eastern Hemisphere.

†Preliminary data. R=Revised data.

Sources: *See Sources on the last page of this section.

Petroleum

Motor Gasoline

Product Supplied

		Total	Unleaded	Unleaded Percent of Total	Refinery Production ¹	Imports	Exports	Stocks ¹
Thousand barrels per day								
1973	AVERAGE	6,674	NA	NA	6,527	134	4	\$209,395
1974	AVERAGE	6,537	NA	NA	6,358	204	2	\$218,346
1975	AVERAGE	6,675	NA	NA	6,518	184	2	\$234,925
1976	AVERAGE	6,978	NA	NA	6,838	131	3	\$231,387
1977	AVERAGE	7,177	1,976	27.5	7,031	217	2	\$257,578
1978	AVERAGE	7,412	2,521	34.0	7,167	190	1	\$237,956
1979	January	R6,830	2,609	R38.2	R7,246	179	R1	R256,894
	February	R7,254	2,715	37.4	R6,924	160	R1	R252,478
	March	R7,229	2,733	R37.8	6,654	168	R(s)	R240,007
	April	R7,055	2,786	R39.5	R6,770	156	1	R236,600
	May	R7,213	2,751	R38.1	R6,792	145	R(s)	R228,515
	June	R7,191	2,787	38.8	R7,001	261	R(s)	R231,014
	July	R6,902	2,789	R40.4	R7,002	222	R(s)	R241,469
	August	R7,330	2,970	40.5	6,882	R148	1	R232,734
	September	R6,881	2,815	40.9	6,626	135	R(s)	R229,542
	October	R7,020	2,802	39.9	6,483	150	R(s)	R218,065
	November	R6,791	2,928	43.1	R6,673	182	1	R220,472
	December	R6,730	2,890	42.9	R6,988	263	R(s)	R237,082
	AVERAGE	R7,034	2,798	39.8	R6,837	181	R(s)	
1980	January	6,335	2,718	42.9	6,977	141	1	262,134
	February	6,594	2,969	45.0	6,851	153	(s)	274,422
	March	6,411	3,032	47.3	6,512	154	(s)	282,688
	April	6,799	3,021	44.5	6,268	152	1	271,729
	May	6,726	2,980	44.3	6,294	132	1	262,938
	June	6,661	3,099	46.5	6,552	148	1	264,583
	July	R6,735	3,131	R46.5	6,446	R149	3	R260,711
	August†	6,584	3,135	47.6	6,434	141	1	259,203
	September†	6,515	3,054	46.9	6,368	106	7	257,948
	October†	R6,621	3,110	47.0	R6,123	R150	1	R247,171
	November†	6,568	NA	NA	6,509	94	NA	255,548
	AVERAGE	6,595	NA	NA	6,483	138	NA	

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

¹See Definitions.

Estimated data in italics. These are likely to be revised next month.

†Total as of December 31.

†Preliminary data. R = Revised data. NA = Not available.

(s) = Less than 500 barrels per day.

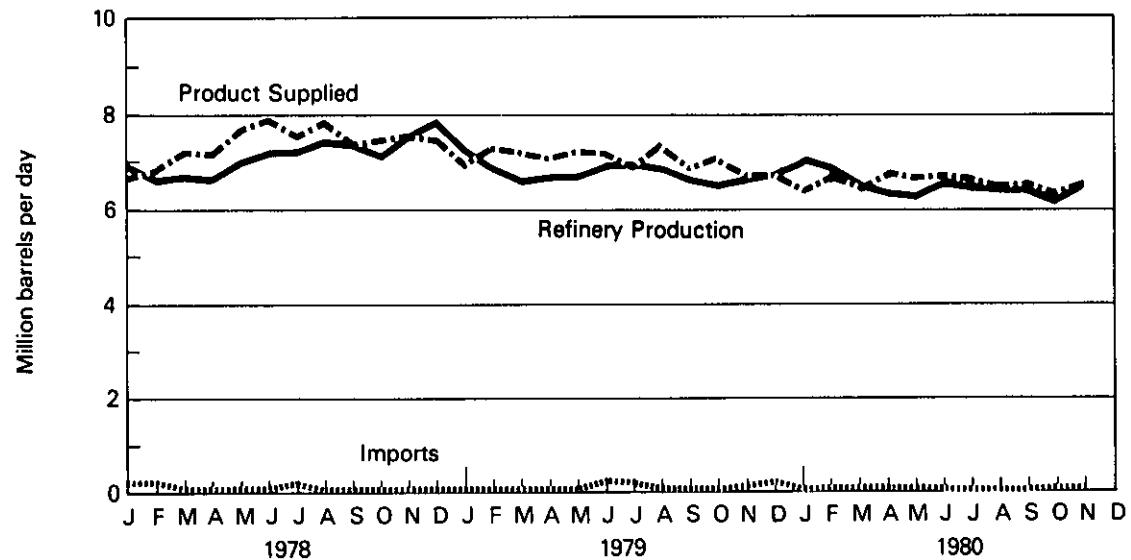
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.

Sources: *See Sources on the last page of this section.

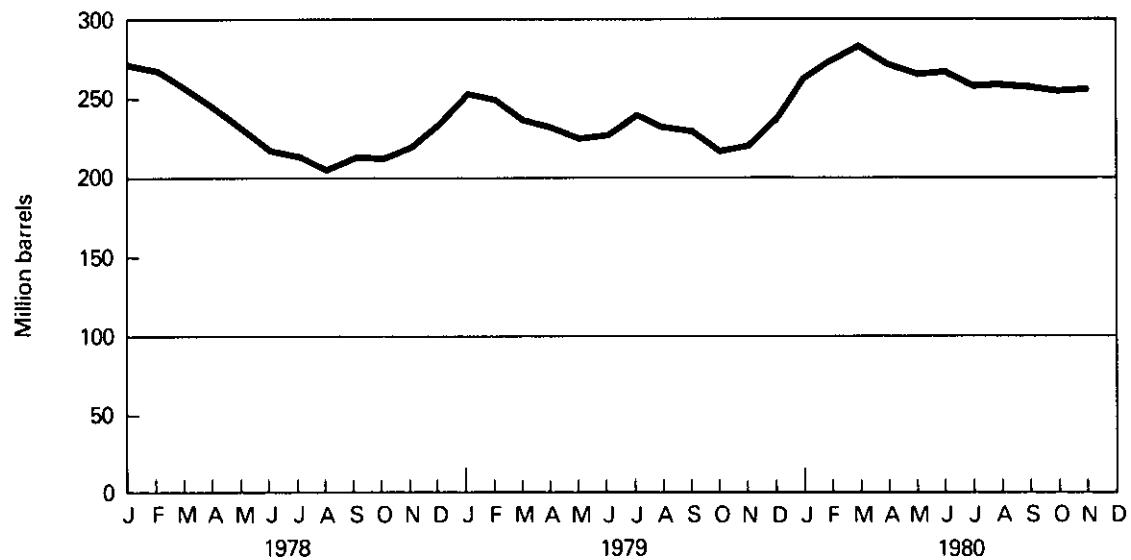
Petroleum

Motor Gasoline

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Jet Fuel

		Product Supplied	Refinery Production	Imports	Exports	Stocks
Thousand barrels per day						
1973	AVERAGE	1,059	859	212	4	\$28,544
1974	AVERAGE	993	836	163	3	\$29,435
1975	AVERAGE	1,001	871	133	2	\$30,380
1976	AVERAGE	987	918	76	2	\$32,085
1977	AVERAGE	1,039	973	75	2	\$34,548
1978	AVERAGE	1,057	970	86	1	\$33,665
1979	January	R1,096	950	97	1	R32,114
	February	R1,149	R998	R94	R1	R30,475
	March	R1,101	R1,098	61	1	R32,267
	April	R980	R1,043	R49	1	R35,581
	May	R989	R980	R78	1	R37,698
	June	R1,095	R958	57	1	R35,301
	July	R1,094	R965	90	1	R34,063
	August	R1,085	1,040	49	1	R34,136
	September	R1,099	958	84	1	R32,420
	October	R1,055	1,046	90	(s)	R34,920
	November	1,070	R1,029	83	1	R36,161
	December	R1,103	R1,072	108	R1	38,520
	AVERAGE	R1,076	R1,012	R78	1	
1980	January	1,101	1,004	95	1	38,412
	February	1,072	1,026	43	2	38,258
	March	1,116	1,031	99	2	38,661
	April	1,105	1,023	107	3	39,339
	May	1,015	1,001	79	2	41,310
	June	1,057	1,004	86	1	42,283
	July	R1,110	974	R93	2	R40,902
	August†	1,028	961	60	1	40,347
	September†	1,041	1,043	60	1	42,191
	October†	R1,013	R970	R75	1	R43,130
	November†	1,153	988	53	NA	42,000
	AVERAGE	1,073	1,002	78	NA	

Geographic coverage: the 50 United States and District of Columbia.
Estimated data in italics. These are likely to be revised next month.

†Total as of December 31.

‡Preliminary data. R=Revised data. NA=Not available.

(s)=Less than 500 barrels per day.

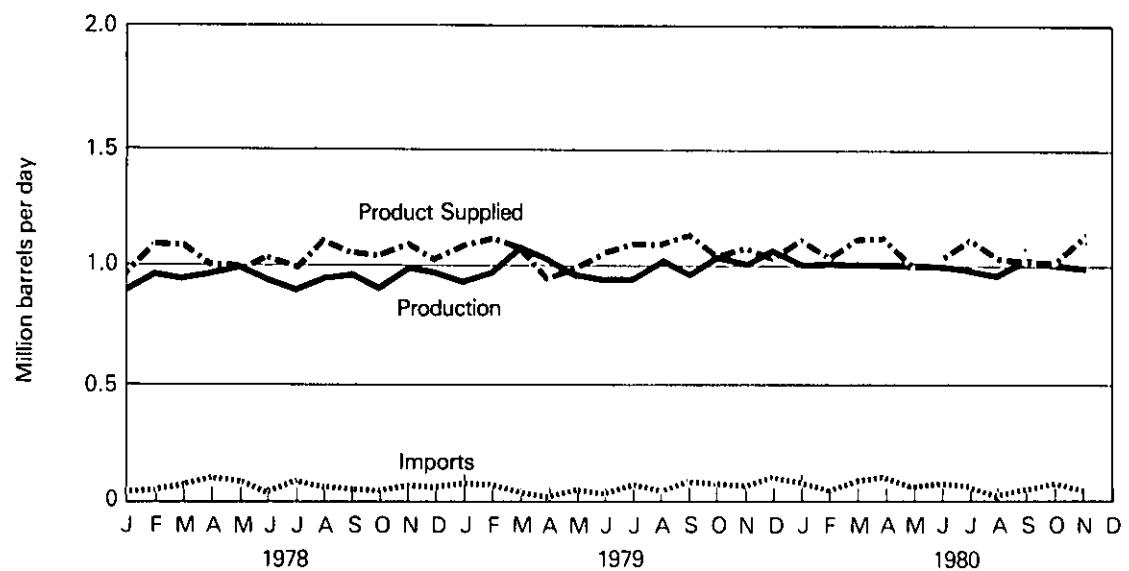
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.

Sources: *See Sources on the last page of this section.

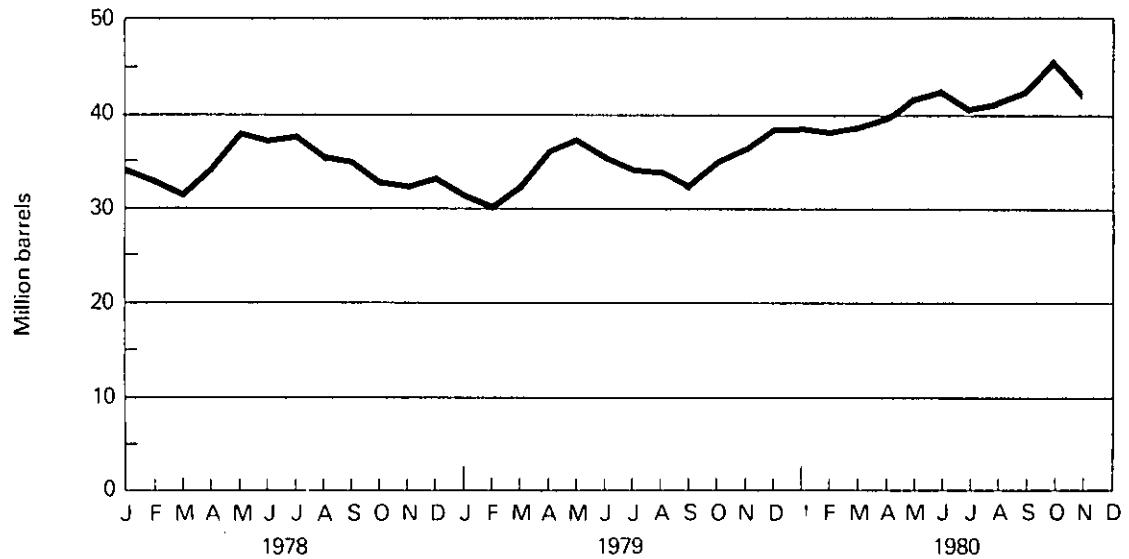
Petroleum

Jet Fuel

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Distillate Fuel Oil

		Product Supplied	Refinery Production ¹	Imports	Exports	Stocks ¹
			Thousand barrels per day			Thousand barrels
1973	AVERAGE	3,092	2,820	392	9	‡196,421
1974	AVERAGE	2,948	2,668	289	2	‡200,029
1975	AVERAGE	2,851	2,653	155	1	‡208,787
1976	AVERAGE	3,133	2,924	146	1	‡185,948
1977	AVERAGE	3,352	3,277	250	1	‡250,260
1978	AVERAGE	3,432	3,167	173	3	‡216,439
1979	January	R4,581	R3,043	226	1	R175,823
	February	R4,812	R2,888	196	7	R127,275
	March	R3,664	R3,019	176	R1	R112,275
	April	R3,016	R2,945	R150	R2	R115,124
	May	R2,998	R3,066	185	R(s)	R123,042
	June	R2,708	R3,153	180	R15	R141,367
	July	R2,563	3,305	R225	R7	R171,203
	August	R2,761	R3,321	R218	R(s)	R195,365
	September	R2,647	R3,354	126	R2	R220,377
	October	R3,119	R3,251	211	R1	R231,056
	November	R3,289	R3,239	235	(s)	R236,641
	December	R3,708	R3,221	229	R(s)	R228,712
	AVERAGE	R3,314	R3,152	R197	R3	
1980	January	3,732	3,023	179	7	212,126
	February	3,706	2,778	221	8	191,464
	March	3,171	2,564	179	19	177,659
	April	2,630	2,462	147	2	177,006
	May	2,402	2,471	126	1	183,072
	June	2,331	2,645	108	(s)	195,790
	July	R2,225	R2,688	R1117	3	R213,756
	August†	2,226	2,578	86	(s)	226,858
	September†	2,636	2,724	98	(s)	232,436
	October†	R2,983	R2,646	R125	(s)	R225,864
	November†	3,412	2,840	88	NA	214,501
	AVERAGE	2,856	2,674	134	NA	

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

¹See Definitions.

Estimated data in italics. These are likely to be revised next month.

†Total as of December 31.

‡Preliminary data. R = Revised data. NA = Not available.

(s) = Less than 500 barrels per day.

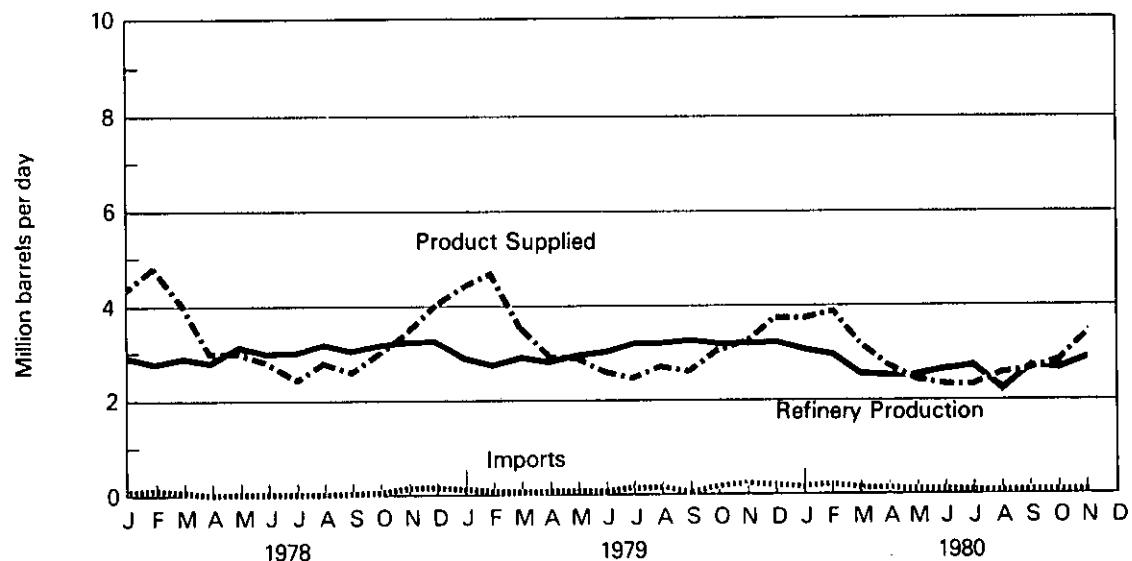
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.

Sources: *See Sources on the last page of this section.

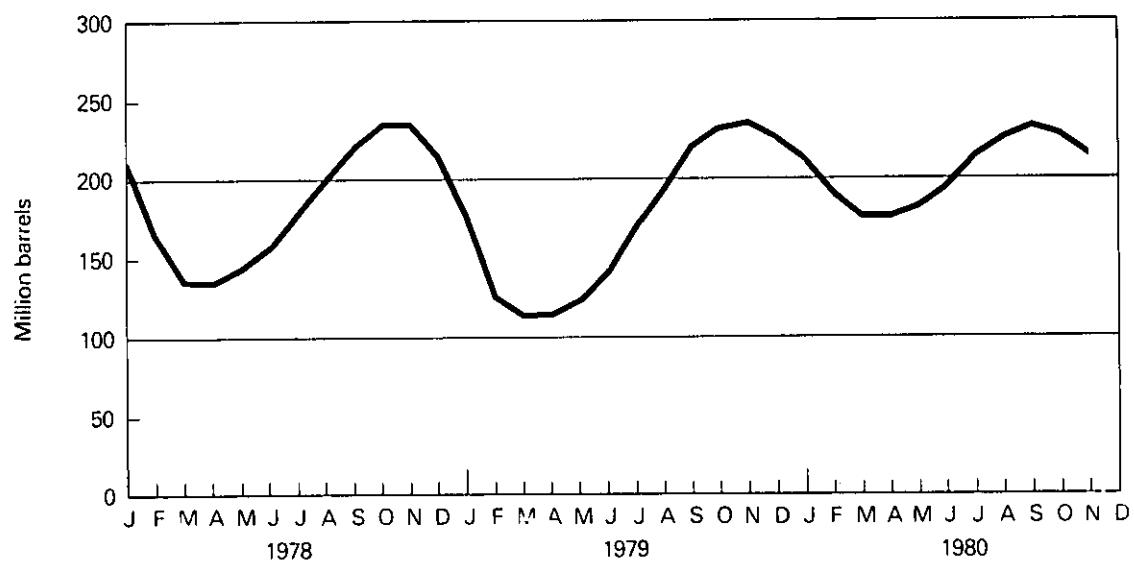
Petroleum

Distillate Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Residual Fuel Oil

		Product Supplied	Refinery Production	Imports	Exports	Stocks
				Thousand barrels per day		Thousand barrels
1973	AVERAGE	2,822	971	1,853	23	\$53,480
1974	AVERAGE	2,639	1,070	1,587	14	\$59,694
1975	AVERAGE	2,462	1,235	1,223	15	\$74,126
1976	AVERAGE	2,801	1,377	1,413	12	\$72,344
1977	AVERAGE	3,071	1,754	1,359	6	\$89,993
1978	AVERAGE	3,023	1,667	1,355	13	\$90,194
1979	January	R3,560	R1,912	1,371	6	R81,853
	February	R3,595	1,792	1,300	10	R67,899
	March	R3,239	R1,719	1,642	14	R71,652
	April	R2,507	R1,639	1,134	2	R79,959
	May	R2,503	R1,586	1,051	8	R84,261
	June	R2,583	R1,548	880	8	R79,816
	July	2,451	R1,575	1,065	R5	R85,907
	August	R2,550	R1,584	1,023	14	R87,622
	September	R2,609	R1,627	979	2	R87,789
	October	R2,540	R1,629	1,042	R18	R91,611
	November	R2,815	R1,736	R1,046	5	R90,799
	December	R3,013	R1,894	R1,278	R14	R95,598
	AVERAGE	R2,826	R1,687	R1,151	9	
1980	January	2,865	1,766	1,132	5	97,153
	February	3,099	1,770	1,119	17	90,959
	March	2,650	1,581	971	2	88,269
	April	2,434	1,591	769	40	85,219
	May	2,234	1,507	812	20	87,639
	June	2,324	1,575	749	14	87,657
	July	R2,287	R1,480	R787	60	R85,605
	August†	2,334	1,507	874	2	86,665
	September†	2,304	1,515	904	21	89,855
	October†	R2,320	R1,544	R860	70	R90,754
	November†	2,614	1,686	1,068	NA	90,174
	AVERAGE	2,494	1,592	912	NA	

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

*Beginning in April 1980, residual fuel oil exports increased due to shipments of high sulfur fuel to a Caribbean refinery to be desulfurized and returned to the United States.

Estimated data in italics. These are likely to be revised next month.

†Total as of December 31.

‡Preliminary data. R=Revised data. NA=Not available.

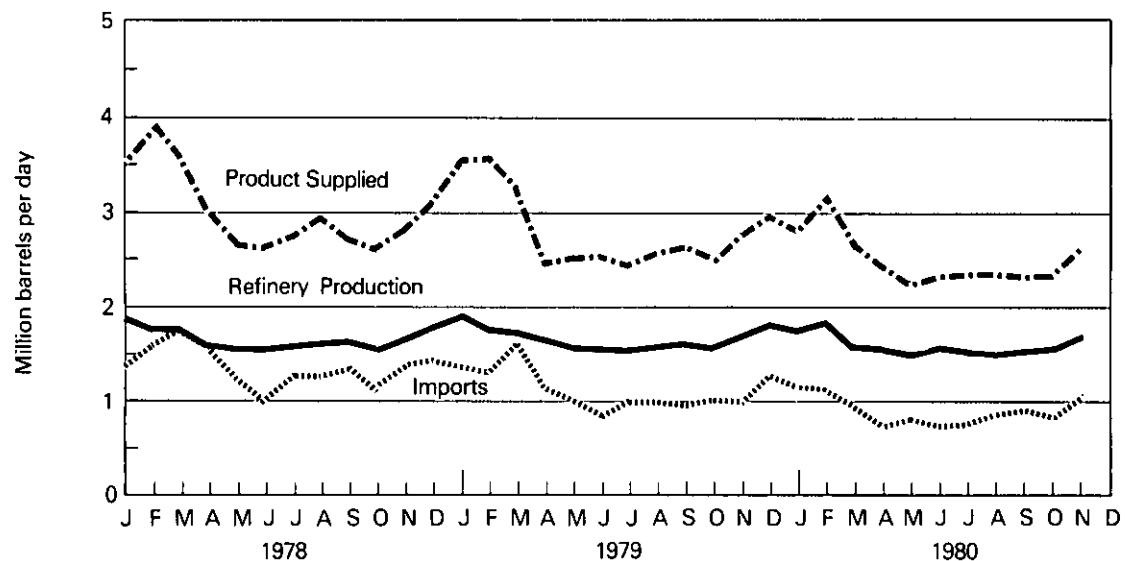
Note: Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with 1975.

Sources: *See Sources on the last page of this section.

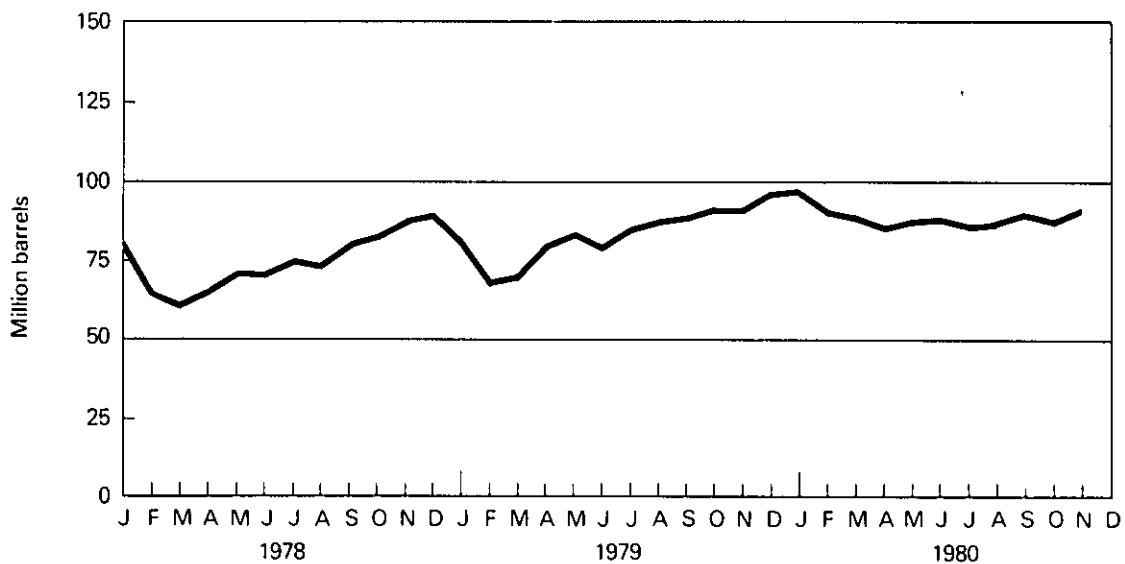
Petroleum

Residual Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



Petroleum

Natural Gas Plant Liquids, Including Liquefied Refinery Gases

	Products Supplied ¹	Production ¹		Used at Refineries ¹	Imports	Stocks ¹			
		At processing plants							
		At refineries	Thousand barrels per day						
1973	AVERAGE	1,454	1,738	375	815	239			
1974	AVERAGE	1,422	1,688	338	746	212			
1975	AVERAGE	1,352	1,633	311	710	185			
1976	AVERAGE	1,407	1,603	340	725	196			
1977	AVERAGE	1,427	1,618	352	673	203			
1978	AVERAGE	1,416	1,567	355	639	139			
1979	January	R2,158	1,530	R335	R597	256			
	February	R2,101	1,561	R316	R572	252			
	March	R1,788	1,548	R322	R538	257			
	April	R1,522	1,611	R341	R469	160			
	May	R1,471	1,570	R373	476	255			
	June	R1,379	1,571	R356	455	175			
	July	R1,408	1,564	361	444	240			
	August	R1,501	1,575	363	461	236			
	September	R1,529	1,565	323	450	194			
	October	R1,701	1,607	321	506	193			
	November	R1,880	1,676	323	586	268			
	December	R1,930	1,626	343	572	273			
	AVERAGE	R1,695	1,584	R340	R504	230			
1980	January	R2,021	1,647	338	698	282			
	February	1,843	1,651	354	572	265			
	March	1,573	1,569	342	518	224			
	April	1,212	1,626	328	507	149			
	May	1,376	1,555	325	428	187			
	June	1,385	1,559	335	386	93			
	July	R1,218	R1,513	R325	R455	R178			
	August†	1,232	1,502	360	527	172			
	September†	1,443	1,552	351	508	163			
	October†	1,338	1,492	296	501	140			
	AVERAGE	1,463	1,566	335	504	195			

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

¹See Explanatory Note 7 and Definitions.

²EIA natural gas plant coverage was expanded in January 1979 to include approximately 80 more plants. Calculated on the new basis, December 1978 closing stocks of natural gas plant liquids totaled (revised) 147,548 thousand barrels.

†Total as of December 31.

†Preliminary data. R=Revised data.

Sources: • 1973 through July 1980 are shown on last page of this section.

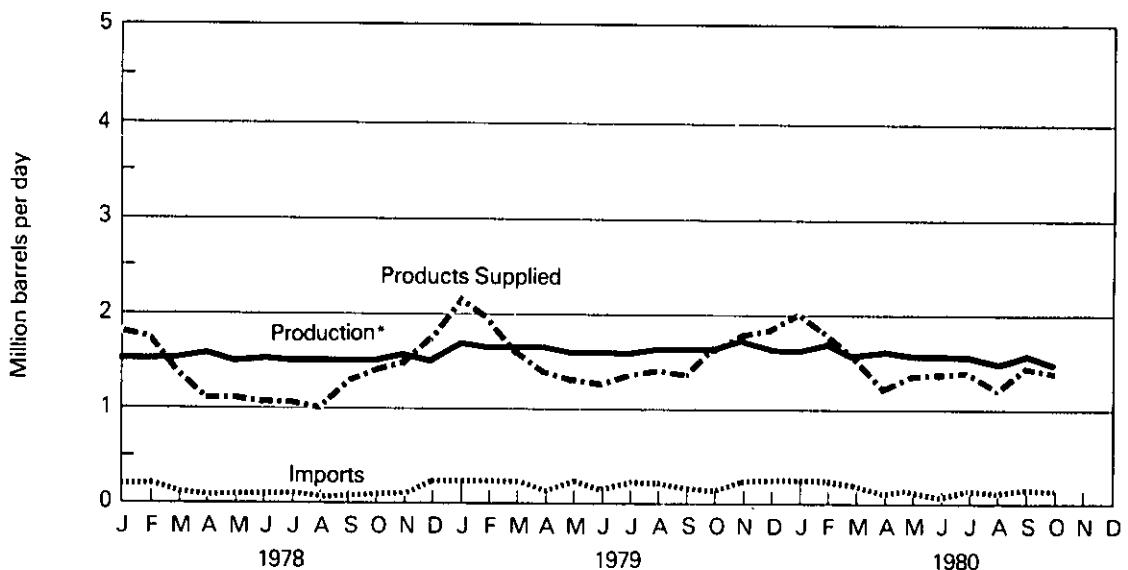
• August 1980 through October 1980: EIA estimates based on historical analyses.

• Sources for the *Energy Data Reports* are shown on the last page of this section.

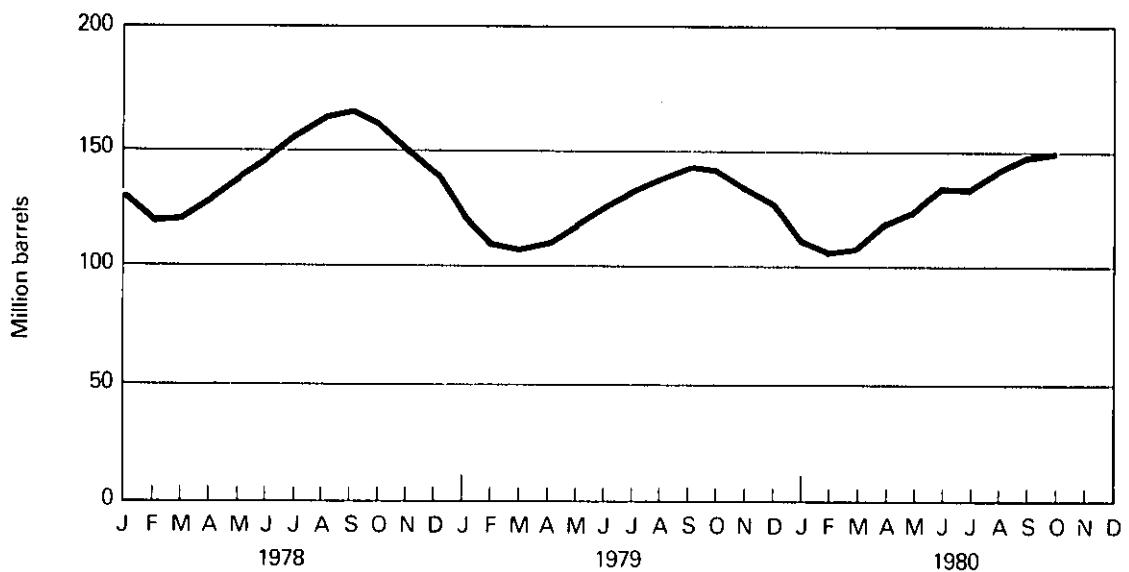
Petroleum

Natural Gas Plant Liquids

Products Supplied, Production and Imports



Stocks



*At processing plants.

Petroleum

Petroleum Primary Supply Balance

	1979				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Thousand barrels per day					
Primary Supply					
Crude oil and lease condensate production	R8,534	R8,529	R8,478	R8,664	R8,552
Natural gas plant liquids production	1,546	1,584	1,568	1,636	1,584
Other hydrocarbon supply	R33	R39	R48	R56	R44
Crude oil imported ¹	R6,610	R6,372	R6,614	R6,481	R6,519
Petroleum products imported ²	R2,231	R1,732	R1,780	R2,022	R1,940
Total new primary supply	R18,955	R18,256	R18,489	R18,859	R18,639
Processing gain	R444	R513	R569	R581	R527
Stock change—all oils ³	R-1,586	R+740	R+1,077	R+348	R+153
Total net primary supply	R20,985	R18,029	R17,981	R19,092	R19,014
Unaccounted for crude oil ⁴	R-104	R+125	R+57	R-122	R-11
Disposition					
Crude oil and petroleum products exported	R497	R463	R456	R468	R471
Crude oil losses	15	16	16	16	16
Total products supplied ⁵	R20,369	R17,675	R17,566	R18,486	R18,516
Total disposition	R20,881	18,153	R18,038	R18,970	R19,002
	1980				
	1st Qtr.	2nd Qtr.	3rd Qtr. [†]		
Primary Supply					
Crude oil and lease condensate production	8,685	8,625	R8,552		
Natural gas plant liquids production	1,622	1,580	R1,522		
Other hydrocarbon supply	56	49	44		
Crude oil imported ¹	6,029	5,366	4,647		
Petroleum products imported ²	1,872	R1,440	R1,408		
Total new primary supply	18,263	R17,059	R16,173		
Processing gain	629	567	597		
Stock change—all oils ³	-2	R+753	R+296		
Total net primary supply	18,895	R16,873	R16,474		
Unaccounted for crude oil ⁴	-175	+25	R+15		
Disposition					
Crude oil and petroleum products exported	547	562	468		
Crude oil losses	15	15	15		
Total products supplied ⁵	18,157	R16,322	R16,006		
Total disposition	18,720	R16,899	R16,489		

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

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

¹Includes crude oil imported for the Strategic Petroleum Reserve.

²Includes plant condensate, natural gasoline and unfinished oils.

³Includes petroleum stored in the Strategic Petroleum Reserve.

⁴Balancing item resulting from statistical inconsistencies.

⁵Includes international bunkers.

[†]Preliminary data. R = Revised data.

Sources: • 1979: Energy Information Administration (EIA) *Energy Data Report*, "Petroleum Statement, Annual."

• January 1980 through July 1980: Energy Information Administration (EIA) *Energy Data Reports*, "Petroleum Statement, Monthly."

• August 1980 through September 1980 EIA, "Monthly Petroleum Statistics Report" (except exports and domestic production).

• Exports for August 1980 through September 1980 are preliminary data based on the EIA-87 and the Bureau of the Census EM 522 and EM 594.

• Domestic production for August 1980 through September 1980 is based on historical data from State Conservation Agencies and the U.S. Geological Survey.

• Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are shown on the last page of this section.

Sources for the Petroleum Section

- 1973 through 1976: Bureau of Mines *Mineral Industry Surveys*, "Petroleum Statement, Annual" (except unleaded gasoline) and "PAD Districts Supply/Demand, Annual."
- Unleaded gasoline — Energy Information Administration (EIA) "Monthly Petroleum Statistics Report."
- 1977 through 1979: EIA *Energy Data Reports*, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
- January 1980 through July 1980: EIA *Energy Data Reports*, "Petroleum Statement, Monthly" and "PAD Districts Supply/Demand, Monthly."
- August 1980 through October 1980: EIA "Monthly Petroleum Statistics Report"(except domestic production and exports).
- Domestic production for the 4 most recent months are EIA estimates based on historical data from State Conservation Agencies and the U.S. Geological Survey.
- Exports for August 1980 through October 1980 are preliminary data based on Form EIA-87 and the Bureau of the Census EM 522 and EM 594.
- Data for the most recent month are estimates based on EIA weekly data.
- Sources for the *Energy Data Reports* and the "Monthly Petroleum Statistics Report" are: EIA Forms EIA-64 (Natural Gas Liquids Operations Report), EIA-87 (Refinery Report), EIA-88 (Bulk Terminals Report), EIA-89 (Pipeline Report) and EIA-90 (Crude Oil Stock Report); Economic Regulatory Administration (ERA) Forms ERA-60 (Imports) and FEA P133 (Imports from Puerto Rico); Bureau of the Census IM 145 (Imports), EM 522 (Exports), and EM 594 (Exports); U.S. Geological Survey (Crude Production) and State Conservation Agencies(Crude Production).

Natural Gas

Consumption of natural gas in the United States during November 1980 was an estimated 1.8 trillion cubic feet (Tcf). This was 13.5 percent higher than in October 1980 and 0.6 percent greater than in November 1979. Estimated consumption during the first 11 months of 1980 totaled 18.0 Tcf, 0.5 percent less than during the period January through November 1979.

Production of dry natural gas in November 1980 was an estimated 1.6 Tcf, 0.6 percent lower than in October 1980 and approximately 3.0 percent lower than in November 1979. Output during the first 11 months of 1980 totaled 17.6 Tcf, 0.9 percent less than during the comparable 1979 period.

Imports of natural gas in November 1980 were an estimated 72 billion cubic feet (Bcf), 36.8 percent less than in the previous November. Receipts of foreign gas during November 1980 included Algerian liquefied natural gas (LNG) equivalent to about 3 Bcf. Imports of natural gas during the period January through November 1980 totaled an estimated 888 Bcf, 22.3 percent less than during the first 11 months of 1979.

Domestic producer sales to major interstate pipelines in October 1980 totaled 894 Bcf, 0.7 percent above sales for the previous October. Total sales during the first 10 months of 1980 were 8.7 Tcf, 1.4 percent higher than those for the comparable 1979 period.

Stocks of working gas* in underground natural gas storage reservoirs at the end of November 1980 totaled 3.0 Tcf, according to preliminary data. This was slightly less than stocks available a year earlier. Net withdrawals from storage during November 1980 were 131 Bcf, as compared with only 24 Bcf during the previous November.

*Gas available for withdrawal.

Natural Gas

		Domestic Consumption	Production		Domestic Producer Sales to Major Interstate Pipelines	Imports	Exports
			Marketed	Dry			
			Billion cubic feet				
1973	TOTAL	22,049	22,648	21,731	12,067	1,033	77
1974	TOTAL	21,223	21,601	20,714	11,462	959	77
1975	TOTAL	19,538	20,109	19,237	10,652	953	73
1976	TOTAL	19,946	19,952	19,098	10,140	964	65
1977	TOTAL	19,521	20,025	19,163	9,883	1,011	56
1978	TOTAL	19,627	19,974	19,122	9,911	966	53
1979	January	2,417	1,761	1,686	890	102	6
	February	2,195	1,646	1,576	819	97	5
	March	1,876	1,749	1,674	907	113	5
	April	1,586	1,682	1,610	871	106	5
	May	1,427	1,712	1,639	877	104	5
	June	1,314	1,646	1,576	812	101	5
	July	1,323	1,654	1,583	851	104	6
	August	1,337	1,682	1,610	880	97	4
	September	1,322	1,626	1,557	820	98	5
	October	1,550	1,696	1,624	888	107	3
	November	1,759	1,713	1,640	921	114	3
	December	2,057	1,806	1,729	960	110	4
	TOTAL	20,163	20,373	19,504	10,496	1,253	56
1980	January	2,280	1,817	1,739	981	119	5
	February	2,193	1,705	1,632	898	111	3
	March	2,179	1,827	1,749	960	108	5
	April	1,569	1,667	1,596	897	91	6
	May	1,356	1,692	1,620	859	70	6
	June	1,253	1,583	1,515	794	62	5
	July	1,302	1,613	1,544	825	64	6
	August	1,246	1,572	1,510	828	60	5
	September	R1,299	R1,577	R1,515	800	58	4
	October	1,560	1,660	1,600	894	R73	3
	November	1,770	1,650	1,590	NA	72	3
	TOTAL	18,007	18,363	17,610	NA	888	51
	(Year-to-date)						

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

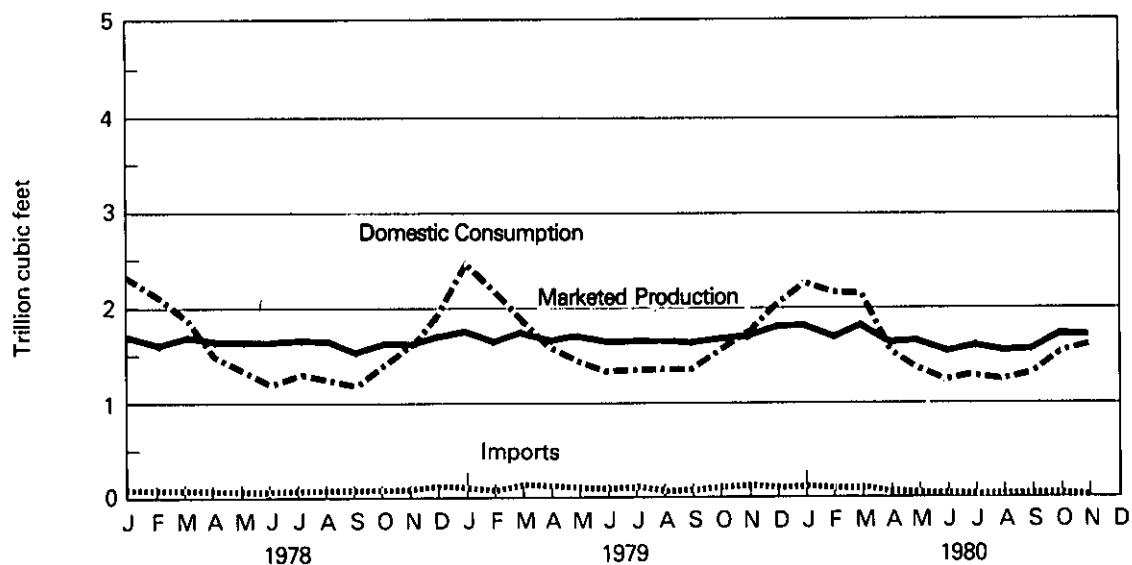
R = Revised data. NA = Not available.

Sources: • Domestic Consumption — 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Natural Gas" chapter; 1976 through 1978: Energy Information Administration (EIA) *Energy Data Report*, "Natural Gas Production and Consumption"; January 1979 forward: EIA estimates based on a supply/disposition balance calculation.

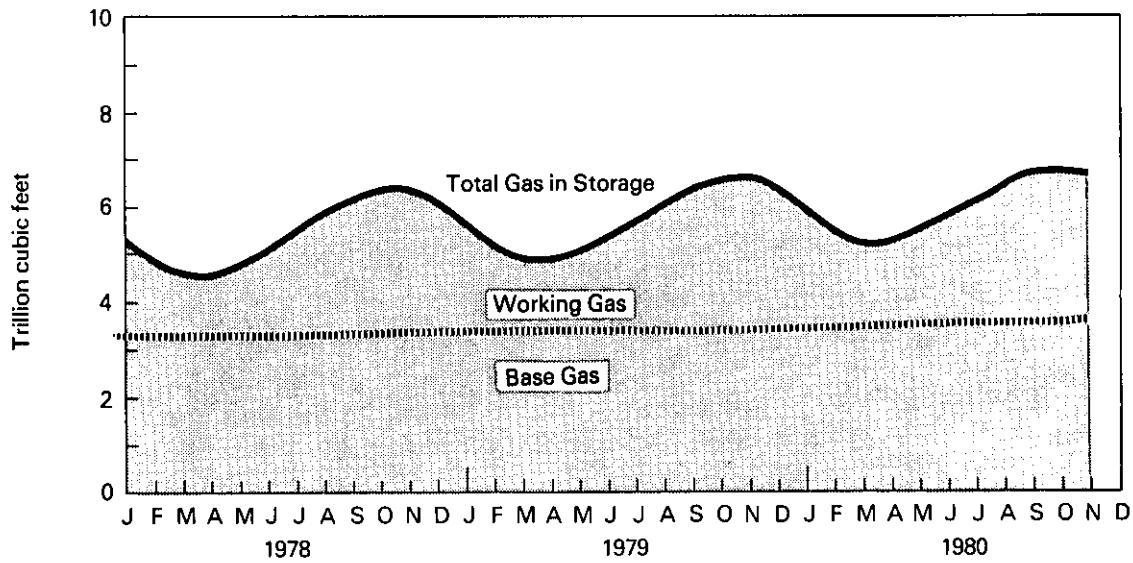
- Production — State reports to the Interstate Oil Compact Commission, data from the United States Geological Survey and EIA estimates for states that do not report monthly data on a regular or timely basis.
- Domestic Producer Sales — Federal Power Commission (FPC) Form 11, "Natural Gas Pipeline Company Monthly Statement."
- Imports — 1973 through 1979: FPC Form 14, "Imports and Exports of Natural Gas"; January 1980 forward: EIA estimates based on import data from FPC Form 11.
- Exports — 1973 through 1979: FPC Form 14; January 1980 forward: EIA estimates based primarily on historical data reported on FPC Form 14.

Natural Gas

Domestic Consumption, Marketed Production and Imports



Gas in Storage



Natural Gas

Natural Gas in Underground Storage¹

	Total Gas in Storage	Base Gas	Working Gas	Storage Injections	Storage Withdrawals	Net Storage Injections ²	
Billion cubic feet							
1975	\$5,358	\$3,150	\$2,208	NA	NA	NA	
1976	\$5,231	\$3,310	\$1,921	1,952	2,074	(122)	
1977	\$5,844	\$3,377	\$2,467	2,390	1,767	623	
1978	\$5,999	\$3,459	\$2,540	2,330	2,176	154	
1979	January February March April May June July August September October November December	5,348 4,806 4,695 4,762 5,057 5,399 5,743 6,095 6,401 6,563 6,541 6,297	3,458 3,457 3,459 3,427 3,438 3,449 3,459 3,467 3,481 3,484 3,496 3,537	1,890 1,349 1,236 1,335 1,619 1,950 2,284 2,628 2,920 3,079 3,045 2,760	21 23 94 182 308 350 361 362 326 196 108 53	673 566 205 73 13 8 19 12 14 34 132 292	(652) (543) (111) 109 295 342 342 350 312 162 (24) (239)
1980	January February March April May June July August September October November	5,865 5,397 5,131 5,227 5,538 5,841 6,127 6,444 6,692 6,782 6,650	3,535 3,536 3,542 3,547 3,553 3,560 3,564 3,594 3,596 3,598 3,620	2,330 1,861 1,589 1,680 1,985 2,281 2,563 2,850 3,096 3,184 3,030	21 24 41 174 319 316 302 328 260 141 61	465 493 307 78 8 13 18 30 11 53 192	(444) (469) (266) 96 311 303 284 298 249 88 (131)

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

¹See Explanatory Note 9.

²Net Storage Injections = storage injection minus storage withdrawal. Parentheses indicate withdrawal greater than injection.

†Total as of December 31.

†Preliminary data.

NA = Not available.

Source: • Energy Information Administration Form 191 and Federal Power Commission Form 8, "Underground Gas Storage Report."

Part
5
Oil
and
gas
Development
Gas
Resource

Oil and Gas Resource Development

The November rotary rig count of 3,220 is the highest in U.S. drilling history. The count surpassed the previous record of 3,148 rigs the month before. This represents a 30.9 percent increase over the November 1979 count of 2,460 rotary rigs.

Well completions reported in November 1980 totaled 5,335. This is a 14.9 percent increase from the number reported during November 1979.

Oil well completions reported in November 1980 (2,239 reported) were up 19.8 percent from November 1979 (1,869 reported). In November 1980, 1,498 gas well completions were reported, 18.0 percent above the November 1979 level. Dry hole completions reported increased 6.2 percent (1,598 as compared to 1,505 during the previous November). Total reported footage drilled increased 15.7 percent (25.3 million feet as compared to 21.8 million feet the year before).

There were 41 crews engaged in seismic exploratory work offshore in November 1980. This is a 32.3 percent increase from the November 1979 level. November 1980 onshore seismic activity attained a new high of 531 crews, 30.1 percent higher than activity during November 1979.

Oil and Gas Resource Development

		Rotary Rigs in Operation	Exploratory and Development Wells Completed ^{1, 2}				Total Footage of Wells Completed ³	
			Oil	Gas	Dry	Total		
		Monthly average					Thousand feet	
1973	AVERAGE	1,194	TOTAL	9,902	6,385	10,305	26,592	136,391
1974	AVERAGE	1,475	TOTAL	12,784	7,240	11,674	31,698	150,551
1975	AVERAGE	1,660	TOTAL	16,408	7,580	13,247	37,235	174,434
1976	AVERAGE	1,656	TOTAL	17,059	9,085	13,621	39,765	181,780
1977	AVERAGE	2,001	TOTAL	18,912	11,378	14,692	44,982	210,848
1978	AVERAGE	2,259	TOTAL	17,775	13,064	16,218	47,057	227,110
1979	January	2,199		1,372	996	1,278	3,646	17,963
	February	2,064		1,463	1,139	1,076	3,678	18,017
	March	1,971		1,544	1,343	1,372	4,259	21,175
	April	1,943		1,135	1,085	926	3,146	16,019
	May	1,960		1,335	1,024	1,166	3,525	17,451
	June	1,999		1,696	1,199	1,252	4,147	19,520
	July	2,094		1,535	1,090	1,131	3,756	16,910
	August	2,222		1,529	1,245	1,366	4,140	19,555
	September	2,284		1,831	1,382	1,423	4,636	22,676
	October	2,380		1,647	1,138	1,313	4,098	19,216
	November	2,460		R1,869	R1,270	R1,505	R4,644	R21,843
	December	2,552		2,383	1,739	1,886	6,008	27,010
	AVERAGE	2,177	TOTAL	19,383	14,681	15,752	49,816	238,659
1980	January	2,571		1,440	781	1,243	3,464	16,438
	February	2,613		1,632	1,007	1,311	3,950	18,988
	March	2,658		2,383	1,839	1,547	5,769	27,665
	April	2,682		1,836	1,120	1,168	4,124	18,884
	May	2,797		2,061	1,080	1,202	4,343	20,034
	June	2,850		2,232	1,296	1,463	4,991	24,640
	July	2,953		2,068	1,037	1,333	4,438	21,649
	August	3,045		2,340	1,270	1,537	5,147	24,037
	September	3,099		2,636	1,721	1,761	6,118	28,168
	October	3,148		R2,409	R1,191	R1,692	R5,292	R24,554
	November	3,220		2,239	1,498	1,598	5,335	25,273
	AVERAGE	2,876	TOTAL	23,310	13,834	15,850	52,994	250,453

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

¹These data are for well completions reported to the American Petroleum Institute during the reporting period. Excludes service wells and stratigraphic and core tests.

²Data reported for the first 2 months of each quarter cover 4 weeks of drilling activity, and data for the last month of the quarter cover 5 weeks of drilling activity.

R = Revised data.

Note: Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.

Sources: • Rotary Rigs: Hughes Tool Company, "Rotary Rigs Running—By State."

• Wells: American Petroleum Institute (API), "Monthly Drilling Report" and "Quarterly Review of Drilling Statistics for the United States."

Oil and Gas Resource Development

		Crews Engaged in Seismic Exploration			Line-Miles of Seismic Exploration		
		Offshore	Onshore	Total	Offshore ¹	Onshore ¹	Total ¹
		Monthly average			Annual total		
1973	AVERAGE	23	227	250	258,944	127,160	386,104
1974	AVERAGE	31	274	305	341,784	158,629	500,413
1975	AVERAGE	30	254	284	309,283	150,694	459,977
1976	AVERAGE	25	237	262	226,303	142,926	369,229
1977	AVERAGE	27	281	308	124,676	120,072	244,748
1978	AVERAGE	25	327	352	174,607	135,899	310,506
1979	January	28	327	355			
	February	29	321	350			
	March	32	332	364			
	April	30	330	360			
	May	28	355	383			
	June	32	372	404			
	July	31	376	407			
	August	31	393	424			
	September	30	403	433			
	October	29	407	436			
	November	31	408	439			
	December	31	419	450			
	AVERAGE	30	370	400	193,212	163,929	357,141
1980	January	29	439	468			
	February	29	440	469			
	March	29	448	477			
	April	31	465	496			
	May	34	468	502			
	June	39	496	535			
	July	42	514	556			
	August	44	521	565			
	September	44	523	567			
	October	41	530	571			
	November	41	531	572			
	AVERAGE	37	489	525			

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

¹Monthly data not available.

Sources: • Society of Exploration Geophysicists, "Monthly Seismic Crew Count" and annual reports published in their bulletin, *Geophysics*.

Part 6

Coal

Coal

Coal production in October 1980 was 76.6 million tons, 2.5 percent below the 78.6 million tons produced in October 1979. Production in the first 10 months of 1980 totaled 702.2 million tons, 7.7 percent higher than production in the first 10 months of 1979.

Imports of coal in October 1980 totaled 0.1 million tons, 13 thousand tons below the amount imported during October 1979. Exports of coal in October 1980 totaled 9.5 million tons, 2.0 million tons more than the amount exported during October 1979. During October 1980, coal exports were principally to Japan (27.2 percent) and Canada (18.9 percent).

Electric utility coal consumption in October 1980 totaled 45.1 million tons, 2.1 million tons more than consumption in October 1979. Coke plants, the second largest coal consuming sector, used 5.1 million tons in October 1980, 20.3 percent below the amount consumed in October 1979.

Electric utility stockpiles increased from 149.9 million tons at the end of October 1979 to 182.1 million tons at the end of October 1980. Coal stocks held by coke plants declined from 9.7 million tons at the end of October 1979 to 8.5 million tons at the end of October 1980.

Coal

Bituminous Coal, Lignite, and Anthracite

		Production	Domestic Consumption	Imports ¹	Exports ^{2,3}	Stocks ⁴
Thousand short tons						
1973	TOTAL	598,568	562,584	127	53,587	104,335
1974	TOTAL	610,023	558,402	2,080	60,661	96,323
1975	TOTAL	654,641	562,641	940	66,309	128,050
1976	TOTAL	684,913	603,791	1,203	60,021	134,438
1977	TOTAL	697,205	625,290	1,647	54,312	157,098
1978	TOTAL	670,164	625,225	2,953	40,691	145,551
1979	January	57,794	61,199	186	3,605	136,425
	February	54,810	54,463	252	2,726	129,042
	March	66,775	54,864	123	4,642	134,044
	April	63,937	51,601	161	5,268	142,328
	May	69,488	54,026	112	6,215	151,269
	June	70,698	56,025	209	5,975	155,406
	July	53,595	60,397	88	6,297	148,265
	August	71,616	60,750	320	6,248	152,787
	September	64,590	54,219	180	5,146	158,016
	October	78,563	55,719	152	7,446	169,633
	November	68,506	55,997	130	6,170	177,722
	December	60,762	61,263	146	6,278	181,646
	TOTAL	781,134	680,524	2,059	66,016	
1980	January	68,276	63,615	121	4,460	179,424
	February	64,678	59,761	193	4,041	176,772
	March	70,326	58,904	93	5,633	176,637
	April	70,381	52,641	63	7,563	183,956
	May	70,899	52,842	207	8,597	193,782
	June	71,850	56,107	104	8,899	199,110
	July	62,750	NA	32	8,247	NA
	August	72,295	NA	166	9,270	NA
	September	74,100	NA	2	8,364	NA
	October	76,620	NA	139	9,454	NA
	TOTAL (Year-to-date)	702,175	NA	1,120	74,528	NA

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

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

See Explanatory Note 10 for methodology used to calculate domestic consumption from 1978 forward.

¹Bituminous coal is the only type of coal imported during the years shown above.

²Data include bituminous coal and anthracite only from 1973 through 1979. 1980 includes lignite (about 2,000 short tons in October 1980).

³Excludes shipments of anthracite to U.S. Armed Forces overseas (300,000 tons in 1979).

⁴Stocks held by electric utilities, coke plants, and the other Industrial Sector at the end of period.

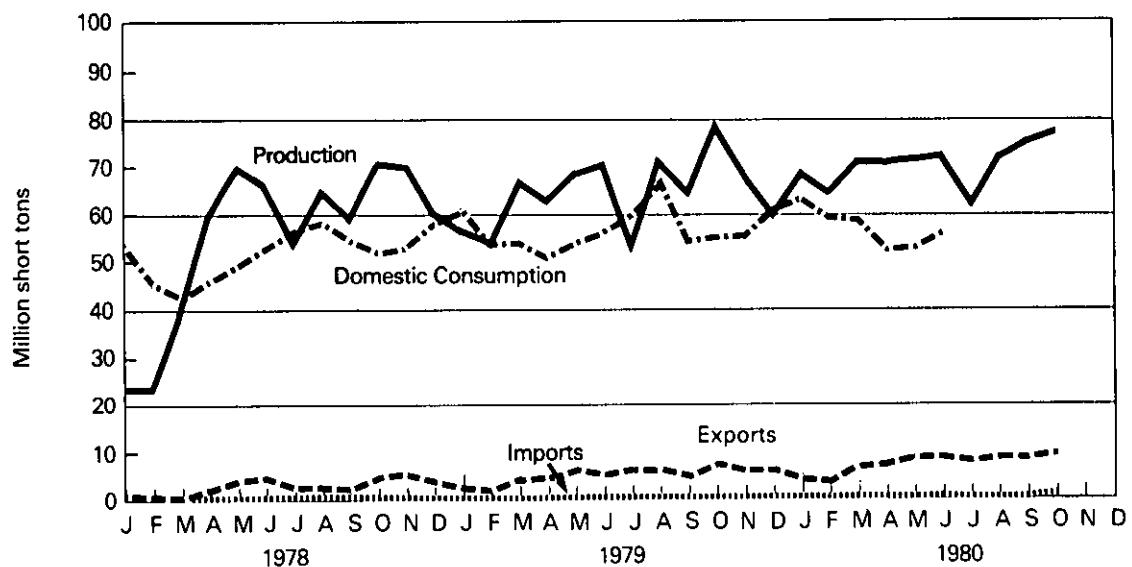
NA = Not available.

Sources: • See Sources on the last page of this section.

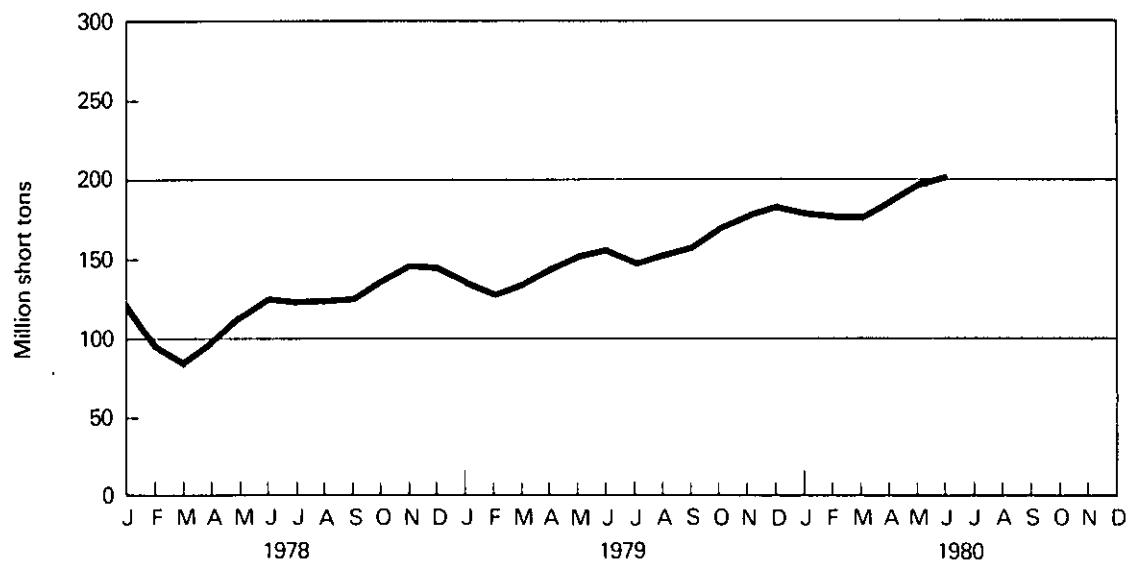
Coal

Bituminous Coal, Lignite, and Anthracite

Domestic Production, Consumption, Imports, and Exports



Stocks



Coal

Consumption — Bituminous Coal, Lignite, and Anthracite

		Industrial				Total	
		Electric Utilities	Coke Plants ¹	Other Industrial ²	Residential and Commercial		
				Including Transportation			
Thousand short tons							
1973	TOTAL	389,212	94,101	68,154	11,117	562,584	
1974	TOTAL	391,811	90,191	64,983	11,417	558,402	
1975	TOTAL	405,962	83,598	63,670	9,410	562,641	
1976	TOTAL	448,371	84,704	61,800	8,916	603,791	
1977	TOTAL	477,126	77,739	61,472	8,954	625,290	
1978	TOTAL	481,235	71,394	63,085	9,511	625,225	
1979	January	46,902	6,578	6,428	1,291	61,199	
	February	41,891	5,954	5,836	782	54,463	
	March	41,781	6,850	5,617	616	54,864	
	April	38,979	6,558	5,511	553	51,601	
	May	41,532	6,725	5,269	500	54,026	
	June	44,008	6,470	5,034	513	56,025	
	July	48,216	6,513	5,223	445	60,397	
	August	48,549	6,417	5,363	421	60,750	
	September	42,167	6,334	5,159	559	54,219	
	October	42,970	6,404	5,565	780	55,719	
	November	42,980	6,138	5,946	933	55,997	
	December	47,075	6,427	6,766	995	61,263	
	TOTAL	527,051	77,368	67,717	8,388	680,524	
1980	January	50,369	6,343	5,923	980	63,615	
	February	47,513	6,010	5,380	858	59,761	
	March	46,685	6,428	5,179	612	58,904	
	April	40,692	6,247	5,132	570	52,641	
	May	41,464	6,127	4,907	344	52,842	
	June	45,821	5,326	4,688	272	56,107	
	July	53,582	4,903	NA	NA	NA	
	August	53,214	4,878	NA	NA	NA	
	September	47,913	4,794	NA	NA	NA	
	October	45,085	5,107	NA	NA	NA	
	TOTAL (Year-to-date)	472,337	56,163	NA	NA	NA	

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

¹Bituminous coal and anthracite only. Lignite is not used at coke plants.

²See Explanatory Note 10.

NA = Not available.

Sources: • See Sources on the last page of this section.

Coal

Stocks¹—Bituminous Coal, Lignite, and Anthracite

		Industrial			
		Electric Utilities	Coke Plants ²	Other Industrial	Total
Thousand short tons					
1973		86,967	6,998	10,370	104,335
1974		83,509	6,209	6,605	96,323
1975		110,724	8,797	8,529	128,050
1976		117,436	9,902	7,100	134,438
1977		133,219	12,816	11,063	157,098
1978		128,225	8,278	9,048	145,551
1979	January	119,948	7,647	8,830	136,425
	February	114,394	6,763	7,885	129,042
	March	118,542	7,561	7,941	134,044
	April	125,776	8,482	8,070	142,328
	May	133,793	9,228	8,248	151,269
	June	136,627	10,051	8,728	155,406
	July	131,095	8,306	8,864	148,265
	August	134,257	9,021	9,509	152,787
	September	139,129	9,036	9,851	158,016
	October	149,949	9,724	9,960	169,633
	November	157,737	9,983	10,002	177,722
	December	159,714	10,155	11,777	181,646
1980	January	158,707	9,634	11,083	179,424
	February	157,120	9,263	10,389	176,772
	March	157,625	9,317	9,695	176,637
	April	164,524	9,579	9,907	184,010
	May	174,044	9,692	10,119	193,855
	June	178,959	9,913	10,238	199,110
	July	166,852	8,427	NA	NA
	August	171,891	7,866	NA	NA
	September	175,067	8,213	NA	NA
	October	182,085	8,488	NA	NA

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

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

¹Stocks held by utilities, coke plants, and general industry at end of period.

²Bituminous coal and anthracite only. Lignite is not used at coke plants.

NA = Not available.

Sources: • See Sources on the last page of this section.

Sources for the Coal Section

- 1973 through September 1977: Bureau of Mines, *Minerals Yearbook and Mineral Industry Surveys*.
- October 1977 forward: Production: Association of American Railroads, Statement CS54A; Commonwealth of Pennsylvania, Department of Environmental Resources, "Anthracite Mines—Monthly Tonnage, Manhour and Accident Report" and "Annual Report on Mining, Oil and Gas, and Land Reclamation and Conservation Activities"; Energy Information Administration (EIA) "Weekly Coal Report," "Bituminous Coal and Lignite Quarterly Distribution Report" (Form EIA-6), "Bituminous Coal and Lignite, Production and Mine Operation—Annual Report" (Form EIA-7), and Bureau of Mines Form 6-1385A, "Pennsylvania Anthracite Production, Mines Without Preparation Plants," BOM Form 6-1387A, "Pennsylvania Anthracite Production, Contractor's Report," BOM Form 6-1388A, "Pennsylvania Anthracite Production, River Coal Report"; and Various States, Annual Coal Mining Reports.
- October 1977 forward: Domestic Consumption and Stocks: EIA, "Monthly Power Plant Report" (FPC Form 4), "Monthly Fuel Consumption Report—Manufacturing Plants" (Form EIA-3), "Coke and Coal Chemicals—Monthly/Annual" (Form EIA-5/5A), "Bituminous Coal and Lignite—Quarterly Distribution Report" (Form EIA-6) and "Monthly Coal Report, Retail Dealers and Upper Lakes Docks" (Form EIA-2).
- October 1977 forward: Imports/Exports: Bureau of the Census, Monthly Reports IM 145 (Imports) and EM 522 (Exports).

Electric Utilities

October 1980 production of electricity by utilities was 178.5 billion kilowatt-hours, 0.7 percent below the October 1979 production level. Coal-fired production totaled 91.1 billion kilowatt-hours and nuclear production totaled 24.5 billion kilowatt-hours. These figures reflect increases of 4.1 and 17.1 percent, respectively, above the October 1979 output levels. Petroleum-fired production totaled 15.9 billion kilowatt-hours, natural gas-fired production totaled 28.6 billion kilowatt-hours, and hydroelectric production totaled 17.9 billion kilowatt-hours, 21.6, 6.0 and 11.4 percent, respectively, below the October 1979 levels.

Sales of electricity to all ultimate consumers in the United States in October 1980 totaled 170.1 billion kilowatt-hours, a decrease of 10.6 percent from sales of the month before and 2.5 percent above October 1979 sales. Sales to residential consumers during October 1980 were 54.0 billion kilowatt-hours, 9.1 percent above sales for the corresponding month in 1979. Commercial sales were 40.5 billion kilowatt-hours, 4.3 percent more than the amount for October 1979. Sales to industrial consumers totaled 69.4 billion kilowatt-hours in October 1980, about 2.9 percent less than the October 1979 figure. In October 1980 other sales totaled 6.2 billion kilowatt-hours, 0.4 percent above the October 1979 level.

Electric utility petroleum consumption during October 1980 was 27.0 million barrels, a 21.8 percent drop from the October 1979 level. Coal consumption for October 1980 was 45.1 million tons, 4.9 percent above the October 1979 rate. During October 1980, consumption of natural gas by electric utilities was 301.3 billion cubic feet, 6.7 percent above the October 1979 consumption level.

On October 31, 1980, utility stocks of anthracite, bituminous coal and lignite totaled 182.0 million tons. Stockpiles were 21.4 percent above the levels of October 1979.

Petroleum stocks (excluding petroleum coke) on October 31, 1980, totaled 142.6 million barrels, 10.5 percent above the levels for the same month of 1979.

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Electric Utilities

Net Electricity Production by Primary Energy Source

		Coal ¹	Petroleum ²	Natural Gas	Nuclear	Hydro	Other ³	Total
Million kilowatt-hours								
1973	TOTAL	847,651	314,343	340,858	83,479	272,083	2,294	1,860,710
1974	TOTAL	828,433	300,931	320,065	113,976	301,032	2,703	1,867,140
1975	TOTAL	852,786	289,095	299,778	172,505	300,047	3,437	1,917,649
1976	TOTAL	944,391	319,988	294,624	191,104	283,707	3,883	2,037,696
1977	TOTAL	985,219	358,179	305,505	250,883	220,475	4,063	2,124,323
1978	TOTAL	975,742	365,060	305,391	276,403	280,419	3,315	2,206,331
1979	January	94,986	39,474	22,093	27,792	25,021	326	209,692
	February	84,748	32,274	21,844	25,911	21,275	285	186,337
	March	85,220	22,076	24,916	24,335	25,921	382	182,849
	April	80,450	20,599	24,763	18,418	25,389	342	169,962
	May	86,149	21,470	26,135	15,025	28,939	350	178,069
	June	90,817	24,367	30,107	16,065	24,979	347	186,682
	July	97,879	25,750	34,676	20,825	22,761	364	202,255
	August	97,910	26,123	34,949	24,204	21,260	405	204,850
	September	85,664	22,509	31,442	21,804	18,978	354	180,751
	October	87,528	20,279	30,419	20,934	20,167	389	179,716
	November	87,456	23,380	24,661	19,255	22,367	387	177,506
	December	96,230	25,223	23,481	20,586	22,727	456	188,703
	TOTAL	1,075,037	303,525	329,485	255,155	279,783	4,387	2,247,372
1980	January	103,147	25,099	26,350	19,746	25,297	388	200,027
	February	98,148	24,784	24,748	19,277	21,378	373	188,708
	March	95,387	20,419	26,964	20,039	24,332	401	187,542
	April	83,534	16,064	24,015	18,794	25,745	410	168,562
	May	84,882	16,560	26,573	18,385	28,866	468	175,733
	June	93,690	18,034	31,282	18,322	27,656	445	189,430
	July	107,891	23,293	39,060	21,024	24,418	475	216,160
	August	107,580	24,889	37,640	24,333	20,476	517	215,435
	September	97,556	17,816	33,572	23,578	18,491	469	191,483
	October	91,147	15,893	28,592	24,510	17,866	533	178,541
	TOTAL (Year-to-date)	962,962	202,852	298,795	208,007	234,525	4,480	1,911,622

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

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

¹Includes bituminous coal, lignite, and anthracite.

²Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.

³Includes geothermal, wood and waste.

Source: •Federal Power Commission Form 4, "Monthly Power Plant Report".

Electric Utilities

Electricity Sales¹

		Residential	Commercial	Industrial	Other ²	Total
Million kilowatt-hours						
1973	TOTAL	579,231	388,266	686,085	59,326	1,712,909
1974	TOTAL	578,184	384,826	684,875	58,039	1,705,924
1975	TOTAL	584,712	401,674	675,271	68,153	1,729,810
1976	TOTAL	602,863	423,639	739,965	69,557	1,836,024
1977	TOTAL	641,134	444,931	772,291	70,489	1,928,845
1978	TOTAL	671,094	459,908	800,656	73,152	2,004,814
1979	January	69,939	40,362	68,324	6,762	185,387
	February	67,842	39,865	67,632	6,176	181,515
	March	59,314	38,123	69,783	6,029	173,249
	April	50,079	35,930	69,944	5,604	161,557
	May	45,730	36,398	71,798	5,625	159,551
	June	49,556	39,689	71,919	5,696	166,860
	July	58,606	42,773	70,984	5,976	178,339
	August	64,808	44,199	71,956	6,346	187,310
	September	59,703	42,498	71,014	6,425	179,641
	October	49,505	38,820	71,472	6,151	165,948
	November	49,617	36,711	69,780	6,163	162,271
	December	R58,120	R37,939	R67,297	R6,117	R169,473
	TOTAL	R682,819	R473,307	R841,903	R73,070	R2,071,101
1980	January	65,852	39,516	67,634	6,658	179,660
	February	64,503	39,600	68,384	6,171	178,658
	March	60,497	38,784	69,058	6,028	174,368
	April	51,749	36,436	68,007	5,510	161,703
	May	45,699	36,110	67,235	5,807	154,851
	June	52,267	40,129	66,739	5,737	164,872
	July	68,611	45,525	65,531	6,215	185,882
	August	74,893	47,679	67,377	6,255	196,205
	September	67,969	46,028	69,570	6,572	190,139
	October	54,012	40,478	69,414	6,174	170,078
	TOTAL (Year-to-date)	606,052	410,285	678,949	61,127	1,756,416

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

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

¹Electricity sales to all ultimate consumers.

²Includes street lighting and transportation uses.

R = Revised data.

Source: • 1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: Federal Energy Regulatory Commission Form 5, "Electric Utility Company Monthly Statement."

Electric Utilities

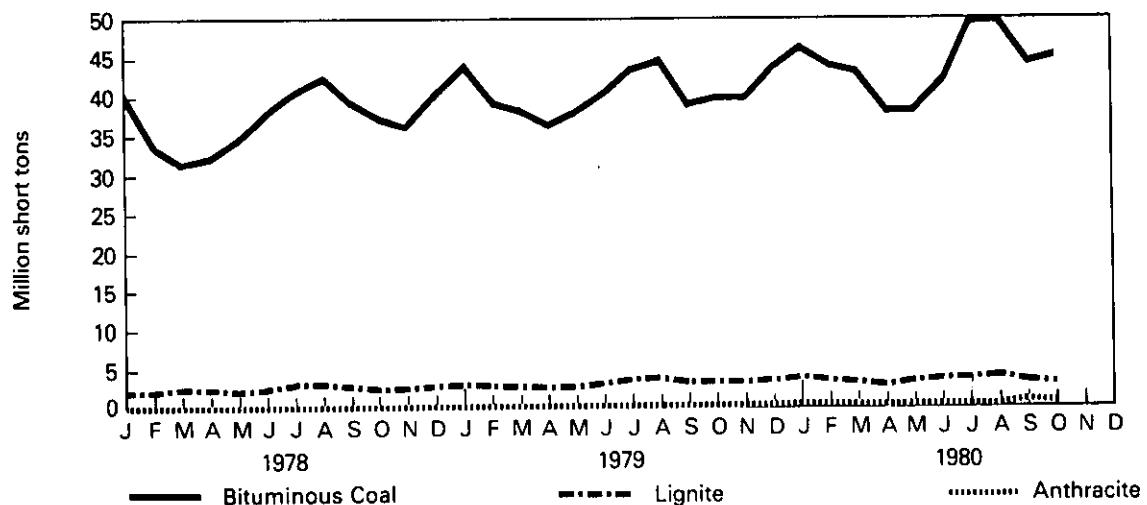
Primary Energy Consumed to Produce Electricity

		Coal				Petroleum			Natural Gas
		Anthracite	Bituminous Coal	Lignite	Total	Steam	Gas Turb./Int. Comb.	Coke	Million cubic feet
			Thousand short tons				Thousand barrels		
1973	TOTAL	1,443	376,975	10,794	389,212	513,190	47,058	507	3,660,172
1974	TOTAL	1,498	378,643	11,670	391,811	483,146	53,128	625	3,443,428
1975	TOTAL	1,480	388,523	15,960	405,962	467,221	38,907	70	3,157,669
1976	TOTAL	1,350	425,205	21,817	448,371	514,077	41,843	68	3,080,868
1977	TOTAL	1,425	451,051	24,650	477,126	574,869	48,837	98	3,191,200
1978	TOTAL	1,064	448,763	31,407	481,235	588,319	47,520	398	3,188,363
1979	January	89	43,791	3,021	46,902	62,226	6,244	33	228,479
	February	75	39,010	2,806	41,891	51,655	4,959	32	226,896
	March	65	38,865	2,852	41,781	36,371	1,872	22	260,351
	April	66	36,362	2,551	38,979	33,800	1,682	15	260,974
	May	106	38,669	2,757	41,532	35,285	2,053	23	277,318
	June	103	40,882	3,023	44,008	39,258	2,314	25	320,196
	July	96	44,391	3,730	48,216	41,895	2,413	23	369,318
	August	97	44,553	3,899	48,549	42,478	2,416	23	375,370
	September	86	38,920	3,162	42,167	36,768	1,747	17	338,308
	October	75	39,634	3,261	42,970	33,445	1,132	16	323,082
	November	92	39,571	3,317	42,980	37,822	1,954	18	260,982
	December	96	43,480	3,499	47,075	41,601	1,906	20	249,249
	TOTAL	1,046	488,129	37,876	527,051	492,606	30,691	268	3,490,523
1980	January	74	46,516	3,779	50,369	41,107	2,197	54	276,784
	February	72	43,969	3,471	47,513	40,238	1,920	21	263,709
	March	83	43,244	3,357	46,685	33,413	1,397	13	283,845
	April	71	37,971	2,651	40,692	27,030	673	7	256,606
	May	86	38,116	3,262	41,464	27,090	841	11	281,862
	June	89	42,073	3,658	45,821	29,635	1,139	11	336,894
	July	93	49,743	3,746	53,582	37,298	2,801	11	420,339
	August	80	49,077	4,057	53,214	40,165	2,832	15	405,292
	September	84	44,487	3,342	47,913	29,374	1,289	11	357,152
	October	73	41,811	3,200	45,085	26,353	689	8	301,343
	TOTAL (Year-to-date)	806	437,008	34,523	472,337	331,705	15,778	163	3,183,823

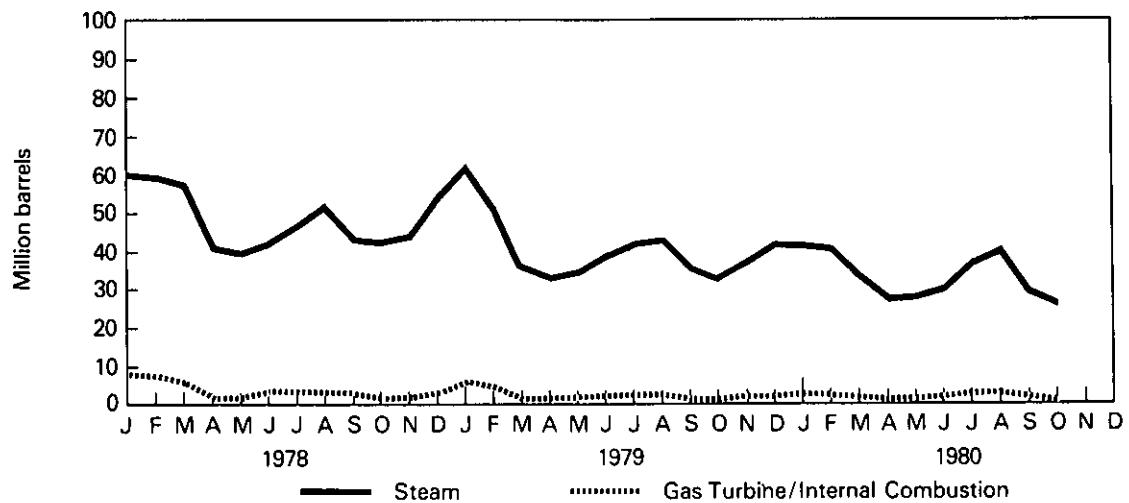
Geographic coverage: the 50 United States and District of Columbia.
 Totals may not equal sum of components due to independent rounding.
 Source: • Federal Power Commission Form 4, "Monthly Power Plant Report."

Electric Utilities

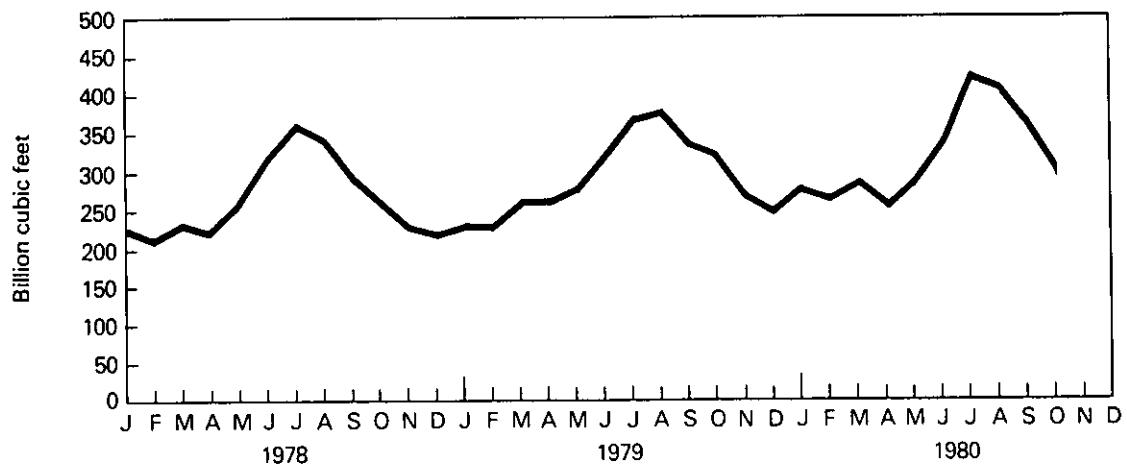
Coal Consumption



Petroleum Consumption



Natural Gas Consumption



Electric Utilities

End-of-Month Coal and Petroleum Stocks

	Coal				Petroleum			
	Anthracite	Bituminous Coal	Lignite	Total	Steam	Gas Turb./ Int. Comb.	Coke	
						Thousand short tons		
1973		\$1,066	\$84,941	\$961	\$86,967	\$79,121	\$10,095	\$312
1974		\$930	\$81,712	\$867	\$83,509	\$97,718	\$15,199	\$35
1975		\$982	\$107,927	\$1,815	\$110,724	\$108,825	\$16,432	\$31
1976		\$1,000	\$114,130	\$2,306	\$117,436	\$106,993	\$14,703	\$32
1977		\$2,321	\$128,210	\$2,688	\$133,219	\$124,750	\$19,281	\$44
1978		\$2,178	\$123,020	\$3,027	\$128,225	\$102,402	\$16,386	\$198
1979	January	2,154	114,980	2,814	119,948	89,583	15,635	181
	February	2,136	109,532	2,726	114,394	82,078	15,541	166
	March	2,170	113,669	2,704	118,542	96,033	16,386	170
	April	2,220	120,876	2,680	125,776	99,500	16,835	170
	May	2,231	128,962	2,600	133,793	106,017	16,974	159
	June	2,233	131,898	2,495	136,627	104,513	17,180	150
	July	2,290	126,328	2,478	131,095	104,170	17,578	160
	August	2,328	128,760	3,170	134,257	103,965	17,910	163
	September	2,385	133,605	3,139	139,129	104,857	18,733	164
	October	2,452	144,035	3,462	149,949	109,590	19,410	170
	November	2,496	151,848	3,393	157,737	111,072	19,714	170
	December	3,274	152,981	3,459	159,714	111,121	20,301	183
1980	January	3,371	151,881	3,455	158,707	114,007	19,607	175
	February	3,451	150,147	3,522	157,120	111,362	19,050	168
	March	3,488	151,022	3,116	157,625	116,291	18,909	154
	April	3,533	157,148	3,843	164,524	118,803	19,176	103
	May	3,725	166,339	3,980	174,044	122,832	19,463	69
	June	3,838	171,041	4,079	178,959	124,781	19,216	65
	July	3,955	159,205	3,691	166,852	121,622	20,490	65
	August	4,098	163,756	4,036	171,891	118,524	19,043	63
	September	4,291	166,515	4,262	175,067	122,235	17,818	61
	October	4,481	173,411	4,153	182,045	124,176	18,397	60

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

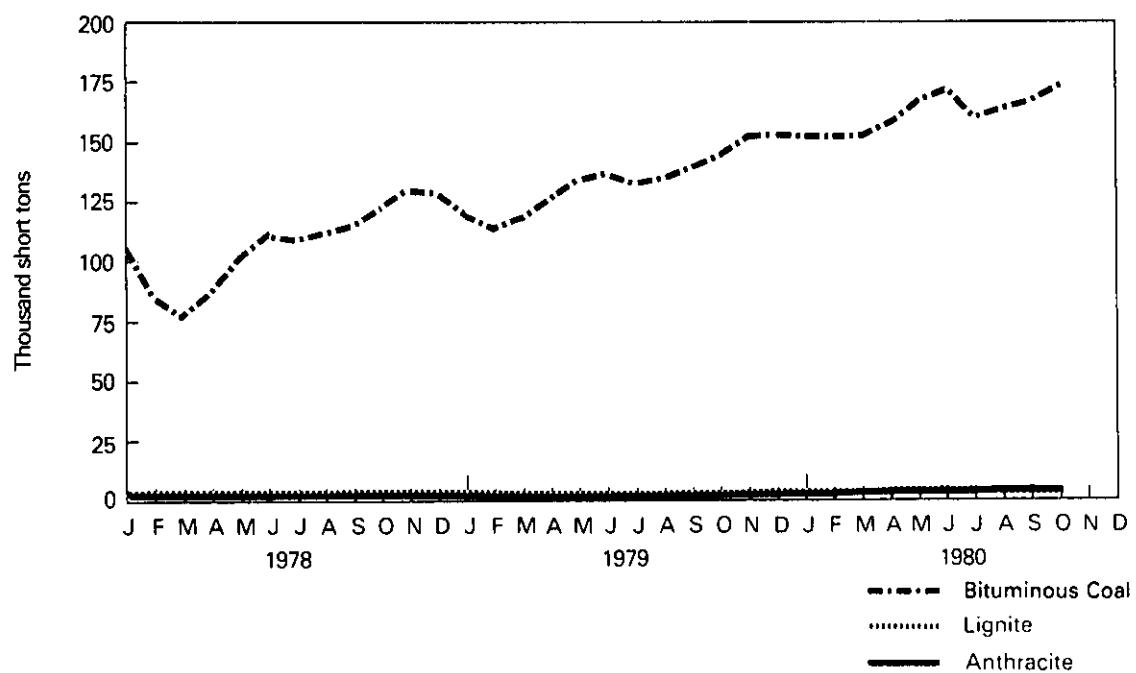
Totals may not equal sum of components due to independent rounding.

†Total as of December 31.

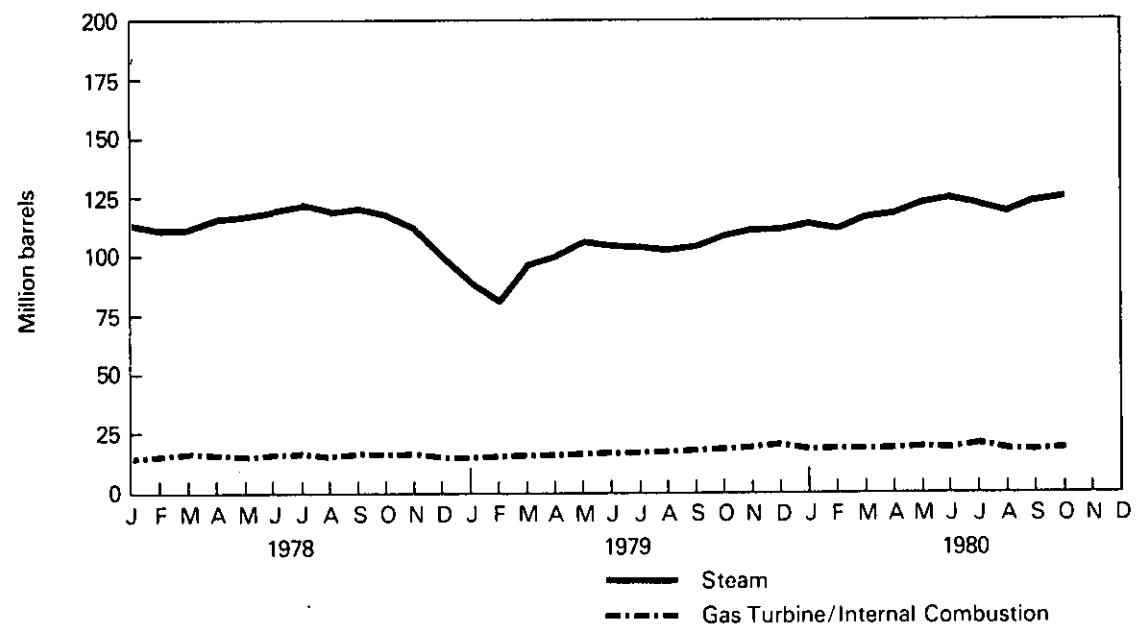
Source: • Federal Power Commission Form 4, "Monthly Power Plant Report."

Electric Utilities

Coal Stocks (Bituminous Coal, Lignite, and Anthracite)



Petroleum Stocks



Part 8

Nuclear

Nuclear

The low-power licensing of Farley-2 reactor unit on October 23 brought to 75 the number of domestic reactor units licensed for commercial operation and to four the number of low-power licenses issued by the Nuclear Regulatory Commission (NRC) since the accident at Three Mile Island-2 in March 1979. A full-power license was obtained by Sequoyah-1 in October and permission was granted Houston Lighting & Power Company to resume construction of the South Texas Project reactor unit.

As of October 31, there were 68 power reactors in commercial operation, two (Sequoyah-1 and North Anna-2) in power ascendancy and two (Farley-2 and Salem-2) in fuel loading and low-power testing stages. The operations of three additional powers reactors (Dresden-1, Humboldt Bay and Three Mile Island-2) have been indefinitely suspended for various reasons; however, they are carried in the accompanying reactor-status table.

During October the 75 reactor units generated a total of 24.5 billion net kilowatt-hours of electricity. This represents an increase of 4.0 percent with respect to September 1980 generation and a 17.1 percent increase over October 1979 output.

As of October 31, 1980, the total number of domestic reactor units planned, under construction or which have been licensed for startup or for full-power commercial operation was 176; this level has remained unchanged since March of this year but is 14 below the October 1979 level.

Nuclear

Domestic Nuclear Powerplant Operations

		Reactors Licensed For Commercial Operation ¹	Nuclear-Based Electricity Generation ²	Nuclear Portion of Domestic Electricity Generation		Maximum Dependable Capacity ³	Capacity Factor ⁴
				Million net kilowatt-hours	Percent		
1973	AVERAGE	40	83,479	4.5	13.850	63.2	
1974	AVERAGE	53	113,976	6.1	29.921	43.5	
1975	AVERAGE	56	172,505	9.0	35.671	55.2	
1976	AVERAGE	62	191,104	9.4	40.642	53.5	
1977	AVERAGE	67	250,883	11.8	45.554	62.9	
1978	AVERAGE	71	276,403	12.5	49.385	63.9	
1979	January	71	27,792	13.3	50.771	73.6	
	February	71	25,911	13.9	50.720	76.0	
	March	71	24,335	13.3	50.720	64.5	
	April	71	18,418	10.8	50.705	50.5	
	May	71	15,025	8.4	50.705	39.8	
	June	71	16,065	8.6	50.705	44.0	
	July	71	20,825	10.3	50.759	55.1	
	August	71	24,204	11.8	50.732	64.1	
	September	71	21,804	12.1	50.781	59.6	
	October	71	20,934	11.6	50.814	55.7	
	November	71	19,255	10.8	49.917	53.6	
	December	71	20,586	11.0	49.937	55.4	
	AVERAGE	71	255,155	11.4	50.604	57.6	
1980	January	71	19,746	9.9	49.945	53.1	
	February	72	19,277	10.2	51.055	54.3	
	March	72	20,039	10.7	51.031	52.8	
	April	74	18,794	11.1	53.040	49.3	
	May	74	18,385	10.5	53.040	46.6	
	June	74	18,322	9.7	53.040	48.0	
	July	74	21,024	9.7	54.064	52.3	
	August	74	24,333	11.3	53.957	60.6	
	September	74	23,578	12.3	53.855	60.8	
	October	75	24,510	13.7	54.732	60.2	
	AVERAGE	74	208,007	10.9	52.776	53.8	

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

¹From Reactor Status Table.

²Electricity generation entries represent yearly or monthly totals rather than averages.

³See Explanatory Note 11 and Definitions.

⁴Average percentage of Maximum Dependable Capacity utilized yearly or monthly.

Sources: • Capacity data for units in commercial operation or start-up testing—Nuclear Regulatory Commission.

• Nuclear Regulatory Commission Report NUREG 0020, "Operating Units Status Report."

• Federal Power Commission Form 4, "Monthly Power Plant Report."

Nuclear

Status of Nuclear Reactor Units¹

	Reactors Licensed For Commercial Operations ²	Construction Permits Granted	Construction Permits Pending	Reactor Units on Order	Reactor Units Announced	Total Reactor Units	Total Design Capacity (Million Net ³ Kilowatts)	
1973	40	51	58	48	20	217	212	
1974	53	58	80	28	16	235	234	
1975	56	69	73	19	19	236	236	
1976	62	72	66	16	19	235	236	
1977	67	80	52	13	9	221	220	
1978	71	90	32	9	4	206	204	
1979	January February March April May June July August September October November December	71 71 71 71 71 71 71 71 71 71 71 71	92 92 92 92 92 92 91 91 91 91 91 91	30 28 28 27 27 27 25 25 25 25 23 21	5 5 5 5 5 5 5 5 3 3 3 3	1 1 1 0 0 0 0 0 0 0 0 0	199 197 197 195 195 195 192 192 190 190 188 186	195 193 193 190 190 190 187 187 185 185 182 180
1980	January February March April May June July August September October	71 72 72 74 74 74 74 74 74 75	90 89 87 85 85 85 85 85 85 84	17 16 14 14 14 14 14 14 14 14	3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0	181 180 176 176 176 176 176 176 176 176	174 173 168 168 168 168 168 168 168 168

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

¹Monthly data are recorded the last day of the month. Annual data are recorded as of December 31 of each year.

²These figures include reactors in fuel-loading, power-testing, and power-ascendancy phases as well as reactors that have been licensed but which are shut down for indefinite periods, including: Dresden-1, which is undergoing major modifications; Humboldt Bay, which is shut down for seismic modifications and Three Mile Island-2, shut down due to an accident in March 1979. Also includes two Department of Energy, dual-purpose reactors (Shippingport and Hanford) which are licensed to generate electricity on a commercial basis. Does not include the Indian Point-1 reactor since it is soon to be decommissioned.

³Formerly labeled 'Gross Kilowatts.' See Explanatory Note 11.

Sources: • Compiled by the Energy Information Administration from various sources, but primarily from the Nuclear Regulatory Commission (NRC), Report NUREG 0380, "Program Summary Report."

Price

Crude Oil

The average price of domestic crude oil purchased at the wellhead was \$22.59 per barrel in September 1980. The Alaskan North Slope price increased to \$14.51 per barrel. Actual stripper price of \$33.94 per barrel was a 5.0 percent decrease from the August 1980 price. The Naval Petroleum Reserve crude oil price of \$32.45 per barrel decreased 1.5 percent below the August 1980 level. The upper tier price of \$14.79 per barrel increased by 1.3 percent above the previous month's figure, and the lower tier price of \$6.66 per barrel was 0.9 percent above the August 1980 price.

During October 1980, the composite refiner acquisition cost of crude oil was \$29.56 per barrel, \$0.60 per barrel (2.1 percent) above the previous month's price. The imported price increased \$0.17 per barrel from the September 1980 level to \$34.63 per barrel in October. This price was 0.5 percent above the previous month's level and 38.2 percent above the October 1979 level. The domestic price was \$26.21, an increase of \$0.84 per barrel (3.3 percent) above the September average.

Residual Fuel Oil

The average price, excluding taxes, for No. 6 residual fuel oil sold to utilities, industry, and other ultimate consumers in September 1980 was \$25.32 per barrel, \$0.32 above the previous month's price (1.3 percent) and 21.1 percent over the September 1979 average. The average price, excluding taxes, for No. 6 residual fuel oil sold to resellers, bulk plants, jobbers, and other wholesale accounts was \$22.44 per barrel, \$0.19 above (0.9 percent) the August 1980 average and a 14.4 percent increase over the September 1979 average.

Heating Oil

The national average price of heating oil sold to residential customers increased 0.8 cent in October 1980 to 98.9 cents per gal-

lon. This was a 0.8 percent increase above the selling price in September 1980 and a 20.2 percent increase over the October 1979 price. The average residential distributor margin in August was 15.5 cents per gallon, 4.7 percent above the margin of October 1979. Refiners' national average selling price to resellers and retailers was 80.5 cents per gallon, 17.3 percent above the October 1979 average.

Aviation Fuel

The average price, excluding taxes, for kerosene-type jet fuel sold to commercial airlines, Department of Defense, and other ultimate consumers in September 1980 was 88.7 cents per gallon, or 2.0 cents (2.2 percent) below the previous month's average and a 34.6 percent increase over the September 1979 average.

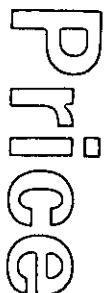
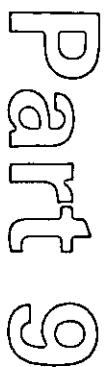
Motor Gasoline

The national average retail price for all grades and all types of motor gasoline was 122.2 cents per gallon in November 1980. Leaded regular gasoline at all types of stations sold for an average of 118.8 cents per gallon in November, unchanged from the price in October. The price for unleaded regular gasoline at all types of stations was 125.0 cents per gallon in November, also unchanged from the price in October.

Liquefied Petroleum Gases

The average wholesale price for propane during September 1980, excluding taxes, was 41.7 cents per gallon, 1.1 cents above the previous month's level, or 2.7 percent, and 25.2 percent above the September 1979 level.

In September 1980, the average wholesale price for butane, excluding taxes, was 51.6 cents per gallon, 2.8 percent below the previous month's revised price and 0.6 percent below the September 1979 average.



Price

Petroleum Price Summary

	Actual Domestic Average Wellhead Price¹	Refiner Acquisition Cost of Crude Oil²			No. 6 Residual Oil Price Average³	
		Domestic	Imported	Composite	Wholesale⁴	Retail⁵
Dollars per barrel						
1976 AVERAGE	8.19	8.84	13.48	10.89	10.72	11.49
1977 AVERAGE	8.57	9.55	14.53	11.96	11.96	13.23
1978 AVERAGE	9.00	10.61	14.57	12.46	11.51	12.75
1979						
January	9.46	11.02	15.50	13.11	12.78	14.13
February	9.69	11.34	15.88	13.42	13.72	14.68
March	9.83	11.45	16.41	13.70	14.82	15.95
April	10.33	12.06	17.58	14.52	15.51	16.61
May	10.71	12.41	19.00	15.40	15.71	17.18
June	11.70	13.24	21.03	17.00	17.81	17.97
July	13.39	14.61	23.09	18.58	19.18	19.89
August	14.00	15.73	23.98	19.75	19.00	20.33
September	14.57	16.05	25.06	20.14	19.62	20.90
October	15.11	16.93	25.05	20.68	20.88	21.59
November	15.52	17.65	27.02	22.04	22.00	22.84
December	17.03	18.84	28.91	23.63	23.55	24.44
AVERAGE	12.64	14.27	21.67	17.72	17.66	18.67
1980						
January	17.86	19.78	30.75	24.81	24.41	26.21
February	18.81	21.22	32.40	26.11	23.34	26.48
March	19.34	22.07	33.42	26.88	21.11	25.33
April	20.29	22.89	33.54	27.09	19.09	22.87
May	21.01	23.63	34.33	27.85	20.22	23.75
June	21.53	24.48	34.48	28.80	20.44	24.09
July	22.26	25.05	34.51	28.73	21.28	23.86
August	22.63	24.98	34.44	28.70	R22.25	R25.00
September	22.59	25.37	34.46	28.96	†22.44	†25.32
October	†23.08	26.21	34.63	29.56	NA	NA
November	NA	NA	NA	NA	NA	NA
AVERAGE	NA	NA	NA	NA	NA	NA

Geographic coverage: Actual domestic average wellhead prices and No. 6 residual oil prices—the 50 United States and District of Columbia. Refiner acquisition cost of crude oil—the 50 United States, District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

¹See Explanatory Note 12.

²See Explanatory Note 13. Crude oil costs and volumes reported on the Economic Regulatory Administration (ERA) Form 49 exclude unfinished oils but include Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on the FEA Form P110-M-1 include unfinished oils but exclude SPR. Imported averages derived from ERA Form 49 exclude crude oil purchased for Strategic Petroleum Reserve (SPR), whereas, the composite averages derived from the ERA Form 49 include SPR.

³Wholesale 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.

⁴Excludes tax.

⁵Preliminary data. R=Revised data. NA=Not available.

Sources: •Actual domestic average, January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report." February 1976 forward: ERA Form 182, "Domestic Crude Oil First Purchase Report."

•Refiner acquisition cost, January 1976: Form FEO 96, "Monthly Cost Allocation Report." February 1976 through June 1978: FEA Form P110-M-1, "Refiners' Monthly Cost Allocation Report." July 1978 forward: ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."

•No.6 residual oil price, FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

Petroleum Price Summary (continued)

	No. 2 Diesel Price Average ¹		No. 2 Heating Oil Price Average		Gasoline Price Average All Grades ²	Propane Price Average ³	Butane Price Average ³
	Wholesale ⁴	Retail ⁴	Wholesale	Retail	Retail	Wholesale ⁴	Wholesale ⁴
Cents per gallon							
1976 AVERAGE	31.9	34.7	32.6	40.6	NA	20.6	21.9
1977 AVERAGE	36.1	39.3	36.9	46.0	NA	25.0	25.4
1978 AVERAGE	37.1	40.2	38.7	49.4	65.2	24.0	23.0
1979							
January	39.7	43.0	42.1	53.7	69.5	22.4	24.9
February	41.8	46.1	44.5	56.3	70.7	21.8	28.5
March	44.5	47.9	47.0	58.8	73.3	21.2	32.5
April	47.7	50.6	49.3	61.1	78.0	22.0	35.4
May	53.4	56.1	52.6	64.2	82.3	24.2	39.5
June	58.7	65.0	56.9	69.1	88.0	27.9	46.9
July	62.4	68.9	61.1	73.8	93.0	29.3	51.1
August	66.0	72.3	64.6	78.4	96.7	30.8	48.0
September	69.0	71.8	67.8	81.0	99.8	33.3	51.9
October	71.1	74.8	68.1	82.3	100.6	35.2	56.1
November	70.3	72.1	69.0	83.7	101.9	37.6	57.0
December	73.0	80.7	70.8	85.8	104.2	40.4	65.8
AVERAGE	58.2	62.4	53.0	65.6	88.2	29.5	45.8
1980							
January	76.0	82.2	75.2	90.8	111.0	41.8	73.3
February	78.3	85.0	79.0	95.3	118.6	42.7	70.1
March	79.8	87.8	80.4	97.1	123.0	41.0	66.8
April	80.4	88.0	81.0	97.4	124.2	41.2	63.1
May	80.5	87.8	81.4	97.2	124.4	41.7	63.7
June	81.7	88.6	82.5	97.9	124.6	41.2	58.2
July	81.9	87.6	83.0	97.9	124.7	40.8	53.8
August	R81.6	R86.9	82.9	97.9	124.3	R40.6	R53.1
September	80.3	86.5	83.0	R98.1	123.1	41.7	51.6
October	NA	NA	†83.7	†98.9	122.3	NA	NA
November	NA	NA	NA	NA	122.2	NA	NA
AVERAGE	NA	NA	NA	NA	NA	NA	NA

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

Note: The average year-to-date gasoline price for the current year is not yet available from the Bureau of Labor Statistics.

¹Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded jobbers, unbranded jobbers, and commercial accounts. Retail refers to the price at which company-owned and operated retail dealers sell to customers.

²See Explanatory Note 16.

³Wholesale 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.

⁴Excludes tax.

[†]Preliminary data. R=Revised data. NA=Not available.

Sources: •No. 2 diesel price, FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

•No. 2 heating oil price, FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

•Gasoline price average, Bureau of Labor Statistics.

•Propane and Butane prices, FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

Domestic Prices and Percentages of Crude Oil Purchased at the Wellhead¹

	Incremental Tertiary ²	Newly Discovered ²		Marginal Property ²		Heavy Crude ²		Other Decontrolled Oil ²		Tertiary Incentive ²		
		Dollars per barrel										
		Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price
1976	AVERAGE											
1977	AVERAGE											
1978	AVERAGE											
1979	January											
	February											
	March											
	April											
	May											
	June	11.98	0.05	22.97	0.61	13.16	0.81					
	July	15.09	0.02	26.60	1.12	13.28	1.13					
	August	16.14	0.15	26.63	1.66	13.37	1.33					
	September	17.89	0.06	30.38	2.38	13.67	3.08	16.77	2.82	12.54	NA	24.89
	October	14.21	(0.01)	31.92	3.04	13.55	3.39	17.12	3.46	13.08	NA	21.07
	November	26.17	NA	33.86	3.24	13.70	3.11	18.61	3.28	11.33	NA	NA
	December	15.80	(0.03)	37.59	3.61	13.83	3.05	23.62	4.04	10.05	NA	NA
1980	January	31.14	0.01	39.04	3.86	14.01	3.16	26.43	4.24	33.37	2.15	28.18
	February	26.33	0.01	38.68	4.33	13.90	2.71	25.70	5.13	33.11	4.79	36.47
	March	29.82	0.01	38.97	4.76	14.07	2.52	25.55	5.15	32.91	7.42	39.00
	April	34.94	0.04	38.67	5.20	14.12	2.99	25.57	4.96	33.03	9.89	37.52
	May	34.46	0.03	39.07	5.53	14.21	2.79	25.42	5.38	32.97	12.52	34.60
	June	33.72	0.02	38.93	5.96	14.37	2.75	25.87	5.34	32.39	14.58	30.29
	July	21.87	0.00	38.72	6.33	14.37	2.91	25.63	5.88	32.81	16.94	30.34
	August	33.39	0.03	37.82	6.73	14.65	2.53	25.49	5.77	30.80	20.10	33.48
	September	27.75	0.15	35.95	6.79	14.83	2.18	25.45	5.58	30.57	22.24	31.53
	October†	33.06	0.15	35.73	7.48	14.85	1.93	25.36	5.78	30.19	24.58	30.36
	AVERAGE	31.30	0.05	37.99	5.69	14.30	2.65	25.63	5.32	31.61	13.46	31.78
												0.46

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

¹See Explanatory Note 12.

²See Definitions.

†Preliminary data. NA=Not available.

Note: Parentheses indicate negative adjustment to reclassify production as heavy oil.

Source: • Economic Regulatory Administration Form 182, "Domestic Crude Oil First Purchase Report."

Price

Domestic Prices and Percentages of Crude Oil Purchased at the Wellhead¹ (continued)

		Lower Tier ²		Upper Tier ²		Actual Stripper ³		Alaskan North Slope ⁴		Naval Petroleum Reserves ⁵		Actual Domestic Average
Dollars per barrel												
		Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price	Percent	Price
1976	AVERAGE	5.13	54.4	11.71	31.5	12.16	14.1	NA	NA	NA	NA	8.19
1977	AVERAGE	5.19	45.92	11.22	36.11	13.59	13.32	6.35	4.14	12.34	0.51	8.57
1978	AVERAGE	5.46	37.54	12.15	34.41	13.95	14.03	5.22	12.96	12.85	1.08	9.00
1979	January	5.75	35.51	12.66	34.25	14.55	14.14	5.79	14.88	13.10	1.20	9.46
	February	5.76	35.20	12.78	34.97	14.88	15.08	5.87	13.71	13.94	1.01	9.69
	March	5.82	34.59	12.84	34.56	14.88	14.95	6.66	14.58	13.97	1.29	9.83
	April	5.85	33.98	12.94	34.93	16.71	15.27	7.45	14.52	14.56	1.28	10.33
	May	5.91	33.55	13.02	34.77	17.53	15.62	8.47	14.71	15.85	1.32	10.71
	June	5.95	29.32	13.14	38.22	20.24	15.97	8.97	13.64	16.02	1.34	11.70
	July	5.98	26.96	13.25	37.49	24.76	16.01	13.35	15.86	20.13	1.38	13.39
	August	6.09	26.03	13.33	36.72	25.71	16.93	14.14	15.82	20.77	1.33	14.00
	September	6.09	23.52	13.53	33.89	27.09	16.55	13.09	16.08	20.85	1.57	14.57
	October	6.12	23.46	13.56	32.58	29.42	16.20	13.12	16.27	21.01	1.57	15.11
	November	6.09	23.11	13.68	32.76	30.64	15.35	13.48	17.49	26.48	1.61	15.52
	December	6.21	22.31	13.76	32.52	34.99	16.34	13.60	16.51	29.04	1.60	17.03
	AVERAGE	5.95	28.91	13.20	34.79	22.93	15.71	10.57	15.36	19.40	1.38	12.64
1980	January	6.24	21.19	13.86	31.12	36.02	15.61	13.77	17.06	28.94	1.54	17.86
	February	6.37	20.52	14.03	29.45	36.14	15.82	13.77	15.73	34.96	1.44	18.81
	March	6.35	19.83	13.99	28.22	36.26	15.18	13.77	15.30	34.67	1.55	19.34
	April	6.37	18.71	14.18	25.87	36.54	15.80	14.07	14.75	33.81	1.61	20.29
	May	6.47	17.62	14.29	25.21	36.11	15.43	14.36	13.48	34.16	1.56	21.01
	June	6.51	16.99	14.42	23.19	35.53	16.14	14.14	12.94	34.00	1.49	21.53
	July	6.55	16.39	14.57	21.88	36.26	16.02	14.26	11.35	33.27	1.58	22.26
	August	6.60	14.79	14.60	20.50	35.71	15.83	14.38	11.28	32.96	1.61	22.63
	September	6.66	14.76	14.79	19.57	33.94	15.89	14.51	10.37	32.45	1.50	22.59
	October†	6.82	14.14	14.62	17.81	33.60	16.03	14.64	9.39	32.67	1.53	23.08
	AVERAGE	6.47	17.51	14.28	24.32	35.61	15.77	14.11	13.18	33.17	1.54	20.92

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

¹See Explanatory Note 12.

²See Definitions.

³Stripper 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).

⁴Alaskan North Slope (ANS) crude oil prices are treated as Upper Tier for determining the applicable wellhead ceiling prices. ANS is included in the Actual Domestic Average price determination.

⁵The Naval Petroleum Reserves (NPR) are exempt from pricing regulations but have been reported here as Upper Tier prior to July 1977. NPR is included in the Actual Domestic Average price determination.

†Preliminary data. NA=Not available.

Sources: • January 1976: FEA Form 90, "Crude Petroleum Production Monthly Report."

• February 1976 forward: Economic Regulatory Administration Form 182, "Domestic Crude Oil First Purchase Report."

Price

FOB Cost of Crude Oil Imports from Selected Countries¹

		Algeria	Indonesia	Iran	Libya	Mexico	Nigeria	Saudi Arabia	United Arab Emirates	United Kingdom	Venezuela
Dollars per barrel											
1976	AVERAGE	13.05	12.76	11.61	12.55	NA	13.08	11.69	11.94	NA	11.32
1977	AVERAGE	14.36	13.57	12.67	13.90	13.42	14.44	12.37	12.83	NA	12.68
1978	AVERAGE	14.10	13.64	12.65	13.75	13.24	14.04	12.70	13.24	13.82	12.45
1979	January	14.87	14.06	12.55	14.60	13.94	14.84	13.26	13.98	15.41	13.69
	February	14.89	14.18	12.56	15.15	14.17	14.98	13.47	14.28	15.33	13.26
	March	15.54	14.42	19.04	16.46	14.14	15.07	13.61	15.72	16.13	13.88
	April	16.80	15.98	17.96	17.40	17.02	18.18	14.77	16.24	17.40	14.58
	May	19.14	16.84	17.27	19.13	18.56	20.02	14.62	17.38	18.39	15.76
	June	21.04	18.59	19.95	20.87	17.43	22.11	17.98	18.91	20.88	16.01
	July	22.42	20.95	21.99	23.88	22.29	24.46	18.54	21.33	23.14	18.22
	August	23.44	21.65	21.40	24.93	22.56	25.43	18.32	21.45	23.88	18.66
	September	23.60	22.11	27.27	25.17	22.32	25.77	18.72	22.93	22.93	18.14
	October	24.40	24.39	31.80	27.39	24.43	26.33	21.44	21.85	25.09	22.36
	November	26.38	23.72	28.81	29.60	24.50	28.17	23.72	24.15	27.57	19.27
	December	28.67	25.29	35.13	31.86	24.50	29.82	22.99	27.90	25.89	20.62
	AVERAGE	20.65	19.35	23.71	22.43	20.29	21.80	17.63	19.58	21.20	17.37
1980	January	33.67	29.67	29.28	35.72	29.43	31.57	26.25	29.85	30.77	25.34
	February	34.03	31.11	NA	35.71	31.77	33.39	26.62	30.95	32.66	24.82
	March	36.74	31.54	NA	35.88	30.56	35.59	26.85	29.34	34.34	24.03
	April	36.93	32.22	NA	35.30	30.24	36.11	27.78	30.38	34.15	23.85
	May	37.10	32.40	NA	36.13	30.68	36.50	28.50	32.67	34.10	24.82
	June	37.61	32.90	NA	36.83	30.76	36.99	28.95	33.34	36.28	25.56
	July	R38.40	R33.19	NA	R37.26	R31.84	R37.17	28.47	NA ²	R36.26	R24.34
	August†	37.53	33.01	NA	37.01	31.87	36.69	29.74	NA ²	34.83	25.30

Note: Prices shown for 1980 are for the month of loading; whereas prior to 1980 the prices are for the month of reporting.

¹The FOB cost excludes all costs related to insurance and transportation. See Explanatory Note 14.

²FOB cost of crude oil imports from United Arab Emirates is not published this month due to insufficient response to survey questionnaire.

NA = Not available.

†Preliminary data.

Sources: 1976 through January 1979: FEA Form 701-M-0, "Transfer Pricing Report."

• February 1979 forward: Economic Regulatory Administration Form 51, "Transfer Pricing Report."

Price

Landed Cost of Crude Oil Imports from Selected Countries¹

		Algeria	Canada	Indonesia	Iran	Libya	Mexico	Nigeria	Saudi Arabia	United Arab Emirates	United Kingdom	Venezuela
		Dollars per barrel										
1975	AVERAGE	12.72	12.72	13.79	12.21	12.35	NA	12.62	12.30	12.87	NA	11.65
1976	AVERAGE	13.81	13.57	13.82	12.82	13.58	NA	13.80	13.04	13.30	NA	11.80
1977	AVERAGE	15.20	14.21	14.63	13.80	14.87	13.75	15.25	13.61	14.04	NA	13.13
1978	AVERAGE	14.91	14.50	14.64	13.88	14.72	13.54	14.86	13.92	14.39	NA	12.83
1979	January	15.88	16.19	15.29	13.76	15.81	14.51	15.88	14.73	15.53	16.29	14.16
	February	16.18	16.68	15.62	14.25	16.49	14.76	16.13	14.88	16.05	16.07	14.17
	March	16.61	17.18	15.68	19.54	17.56	14.81	16.20	15.28	17.10	15.91	14.61
	April	17.93	17.39	17.31	19.06	18.59	17.40	19.11	16.18	17.70	18.23	15.19
	May	20.22	20.22	17.92	18.56	20.16	18.82	21.06	16.29	18.65	19.26	16.74
	June	22.52	19.12	20.11	21.27	22.21	17.85	23.23	19.49	20.42	21.64	16.80
	July	23.54	20.22	22.50	23.35	25.48	22.74	25.79	20.06	22.84	23.96	18.95
	August	24.85	22.67	23.10	22.64	26.27	23.12	26.72	19.85	23.12	25.05	19.42
	September	25.09	25.64	23.72	28.36	26.54	23.23	27.03	20.36	24.59	24.18	18.99
	October	25.59	23.54	26.36	33.17	28.56	24.98	27.41	22.99	23.98	26.39	23.05
	November	27.95	26.01	25.37	30.44	30.38	25.12	29.41	25.19	25.95	29.10	20.13
	December	29.99	26.32	26.84	36.64	33.29	25.31	31.21	24.48	29.93	27.07	21.72
	AVERAGE	21.90	20.43	20.69	25.02	23.68	20.86	22.96	19.15	21.90	22.16	18.18
1980	January	35.32	27.73	31.03	30.37	37.10	30.18	33.03	27.85	32.35	32.14	26.25
	February	35.28	28.60	32.95	NA	36.98	32.38	35.25	28.15	32.71	34.07	25.91
	March	38.54	30.75	33.04	NA	37.18	31.17	36.93	28.26	30.96	35.73	24.97
	April	38.52	30.31	33.81	NA	36.57	30.77	37.41	29.14	32.29	35.34	25.10
	May	38.54	31.16	33.73	NA	37.36	31.22	37.53	30.30	34.06	35.82	25.93
	June	38.71	31.26	34.51	NA	38.09	31.43	38.15	30.16	34.96	37.41	26.42
	July	R39.60	R31.31	R34.81	NA	38.39	R32.60	R38.23	R30.04	NA ²	R37.25	R25.47
	August†	38.60	31.44	34.81	NA	38.38	32.62	37.77	31.24	NA ²	36.20	26.37

Note: Prices shown for 1980 are for the month of loading; whereas prior to 1980 prices are for the month of reporting.

¹See Explanatory Note 15.

²Landed cost of crude oil imports from United Arab Emirates is not published this month due to insufficient response to survey questionnaire.

NA = Not available. †Preliminary data.

Sources: • 1975 through January 1979: FEA Form F701-M-0, "Transfer Pricing Report." Data provided by the Economic Regulatory Administration.

• February 1979 forward: ERA 51, "Transfer Pricing Report."

Price

Crude Oil Entitlements and Supply Ratio				Unrecouped Costs for Refined Products for 29 Largest Refineries		
	Entitlement Benefit ¹	Entitlement Price ¹	National Old Oil (or Domestic Crude Oil) Supply Ratio ¹	Motor Gasoline	Other Products ²	Total
Dollars per barrel				Million Dollars		
1979	January	1.56	8.74	0.178	836	863
	February	1.67	9.03	0.185	1,110	878
	March	1.80	9.50	0.189	1,551	837
	April	2.06	10.53	0.196	2,067	1,649
	May	2.44	11.74	0.208	2,245	1,848
	June	3.01	13.70	0.220	2,507	1,973
	July	3.54	16.01	0.221	2,990	2,089
	August	3.78	17.26	0.218	2,856	2,347
	September	3.92	17.97	0.218	3,151	2,376
	October	4.00	18.27	0.219	3,094	2,295
	November	4.39	20.12	0.218	3,492	2,302
	December	4.71	21.91	0.215	3,724	1,171
1980	January	5.28	23.53	0.224	4,115	1,189
	February	5.14	24.70	0.208	5,362	1,167
	March	5.05	25.26	0.200	6,236	1,213
	April	5.10	25.74	0.198	6,202	1,391
	May	6.22	27.39	0.227	NA	NA
	June	5.44	27.32	0.199	NA	NA
	July	5.04	27.26	0.185	NA	NA
	August	4.75	26.86	0.177	NA	NA
	September	3.52	26.07	0.135	NA	NA
	Octobert†	3.13	26.08	0.120	NA	NA

Geographic coverage: the 50 United States, District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

¹See Definitions.

²Other includes propane, butane, natural gasoline, some natural gas liquids, and aviation jet fuel in January and February 1979 when aviation jet fuel was decontrolled. From March 1979 to December 1979, it includes butane, natural gasoline, propane and some natural gas liquids. Since January 1980, when butane and natural gasoline were decontrolled, only propane and some natural gas liquids are included in this category.

†Preliminary data. NA = Not available.

Sources: • Crude oil entitlements, Economic Regulatory Administration Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."

• Unrecouped costs: EIA Form 14, "Refiners' Monthly Cost Allocation Report." Data provided by the Economic Regulatory Administration.

Price

U.S. City Average Retail Prices for Motor Gasoline¹

		Leaded Regular	Unleaded Regular	Leaded Premium	Average for All Grades
Cents per gallon, including tax					
1974	AVERAGE	53.2	NA	56.9	NA
1975	AVERAGE	56.7	NA	60.9	NA
1976	AVERAGE	59.0	61.4	63.6	NA
1977	AVERAGE	62.2	65.6	67.4	NA
1978	AVERAGE	62.6	67.0	69.4	65.2
1979	January	66.8	71.6	73.7	69.5
	February	68.1	73.0	75.0	70.7
	March	70.6	75.5	77.4	73.3
	April	75.3	80.2	82.4	78.0
	May	79.7	84.4	86.7	82.3
	June	85.6	90.1	92.0	88.0
	July	90.8	94.9	96.5	93.0
	August	94.3	98.8	100.4	96.7
	September	97.3	102.0	103.6	99.8
	October	98.2	102.8	104.6	100.6
	November	99.4	104.1	105.6	101.9
	December	101.8	106.5	108.0	104.2
	AVERAGE	85.7	90.3	92.2	88.2
1980	January	108.6	113.1	114.9	111.0
	February	115.9	120.7	123.3	118.6
	March	120.2	125.2	127.7	123.0
	April	121.2	126.4	129.2	124.2
	May	121.5	126.6	129.5	124.4
	June	121.7	126.9	130.0	124.6
	July	121.6	127.1	130.7	124.7
	August	121.0	126.7	131.0	124.3
	September	119.7	125.7	130.4	123.1
	October	118.8	125.0	130.1	122.3
	November	118.8	125.0	129.9	122.2

Geographic coverage: 85 urban areas selected to represent all urban consumers—80 percent of the total U.S. population.

¹ See Explanatory Note 16.

Source: Bureau of Labor Statistics.

Price

Aviation Fuel

		Aviation Gasoline		Naphtha-Type ¹		Kerosene-Type	
		Wholesale ²	Retail ²	Retail ²	Wholesale ²	Retail ²	
		Cents per gallon, excluding tax					
1976	AVERAGE	42.4	43.1	31.5	32.5	31.2	
1977	AVERAGE	46.7	47.7	35.0	36.7	35.8	
1978	AVERAGE	51.0	52.1	37.5	38.9	38.9	
1979	January	54.1	53.9	38.6	42.2	40.1	
	February	54.6	55.1	39.1	44.3	40.2	
	March	56.6	56.8	40.7	54.8	41.3	
	April	58.2	59.1	43.2	60.1	45.4	
	May	60.6	61.2	44.1	58.1	48.4	
	June	64.8	66.8	49.5	59.9	50.9	
	July	70.0	71.8	50.4	67.1	58.2	
	August	74.2	75.6	55.0	71.4	60.8	
	September	78.2	79.0	60.2	73.1	65.9	
	October	79.8	80.4	64.6	80.6	68.4	
	November	81.3	80.6	66.4	83.4	69.7	
	December	84.1	83.4	73.3	83.2	72.3	
	AVERAGE	68.5	69.5	52.3	66.5	55.1	
1980	January	90.6	90.0	76.0	83.4	77.0	
	February	98.5	97.8	80.1	86.2	83.0	
	March	102.9	107.0	84.1	86.6	86.3	
	April	104.8	109.6	83.2	88.4	87.4	
	May	106.2	109.7	89.1	89.0	87.6	
	June	107.7	111.4	90.0	86.1	88.6	
	July	109.3	113.4	91.4	88.3	89.7	
	August	110.2	112.9	90.6	R86.2	90.7	
	Septembert	110.8	113.3	92.9	86.5	88.7	
	AVERAGE	105.5	107.9	86.5	86.8	86.5	

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

¹Nearly all naphtha-type fuels are sold directly to the Defense Fuel Supply Center. Consequently, wholesale prices are not applicable.

²Wholesale 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.

^tPreliminary data. R = Revised data.

Source: • FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

National Average Heating Oil Prices¹

		Refiners' Average Selling Price to Resellers and Retailers	Average Purchase Price Paid by Distributors for Heating Oil ²	Average Distributor Margin on Residential Heating Oil ²	Average Selling Price to Residential Customers ²
Cents per gallon					
1976	AVERAGE	31.4	32.6	NA	40.6
1977	AVERAGE	35.7	36.9	NA	46.0
1978	AVERAGE	37.2	38.7	11.0	49.4
1979	January	40.9	42.1	11.8	53.7
	February	43.1	44.5	12.0	56.3
	March	45.8	47.0	12.0	58.8
	April	48.3	49.3	12.1	61.1
	May	53.2	52.6	12.1	64.2
	June	58.8	56.9	12.7	69.1
	July	62.5	61.1	13.0	73.8
	August	65.7	64.6	13.0	78.4
	September	69.0	67.8	13.7	81.0
	October	68.6	68.1	14.8	82.3
	November	70.0	69.0	15.1	83.7
	December	71.7	70.8	15.5	85.8
	AVERAGE	55.9	53.0	12.8	65.6
1980	January	75.0	75.2	16.2	90.8
	February	77.8	79.0	16.7	95.3
	March	78.8	80.4	17.1	97.1
	April	78.8	81.0	17.0	97.4
	May	79.3	81.4	16.3	97.2
	June	80.2	82.5	15.8	97.9
	July	79.2	83.0	15.3	97.9
	August	79.3	82.9	15.2	97.9
	September	R79.3	83.0	15.4	R98.1
	October†	80.5	83.7	15.5	98.9
	AVERAGE	79.4	79.6	16.5	95.5

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

¹See Explanatory Note 17.

²Average selling prices, purchase prices, and dealer margins represent sales for residential heating oil only.

†Preliminary data. R = Revised data. NA = Not available.

Source: • FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

Price

Residential Heating Oil Prices by Region

		DOE Region ¹ Cents per gallon									
		1	2	3	4	5	6	7	8	9	10
1979	January	55.1	54.5	53.3	51.6	51.5	NA	49.6	50.4	47.6	50.8
	February	57.7	57.3	55.5	53.2	53.7	NA	51.3	51.4	49.4	52.9
	March	60.6	59.8	57.5	54.3	56.3	NA	54.7	55.3	50.8	55.3
	April	62.8	61.9	60.0	57.3	58.8	NA	58.2	58.4	53.8	57.8
	May	65.9	64.8	63.4	61.2	62.8	NA	62.0	62.7	56.2	60.8
	June	70.5	69.7	68.4	66.2	68.5	NA	68.9	67.8	62.2	66.4
	July	75.9	73.9	72.9	70.9	73.2	NA	72.0	72.5	68.4	72.3
	August	80.1	78.6	77.7	74.8	78.5	NA	76.4	77.1	71.7	77.2
	September	83.3	81.4	80.0	79.4	81.5	NA	79.5	80.1	76.8	81.4
	October	84.1	82.5	81.7	79.1	82.6	NA	80.2	81.3	81.2	82.6
	November	85.1	83.7	82.4	80.5	83.9	NA	82.2	84.0	80.4	82.3
	December	87.2	85.7	85.1	82.9	86.1	NA	85.3	86.3	82.6	84.6
1980	January	91.8	91.0	90.2	88.6	90.4	NA	90.0	90.2	89.6	91.0
	February	96.7	95.3	94.7	93.0	93.5	NA	93.6	93.5	95.8	95.7
	March	98.7	97.2	96.5	94.8	94.3	NA	95.1	95.9	93.9	97.6
	April	99.2	97.3	96.6	94.1	94.5	NA	95.3	99.5	94.7	99.0
	May	98.7	97.3	96.4	94.2	95.8	NA	95.2	97.7	95.5	98.6
	June	99.8	97.9	96.8	95.1	95.8	NA	95.3	98.4	96.0	99.8
	July	100.3	98.1	96.6	94.2	96.2	NA	93.1	97.0	96.7	100.2
	August	100.2	97.9	96.8	94.8	95.7	NA	95.4	92.1	99.7	100.4
	September	R100.5	98.2	97.0	R94.7	R95.7	NA	R93.7	R93.0	R97.2	100.6
	October†	101.3	98.5	97.3	95.3	96.3	NA	93.7	95.2	99.0	100.8

¹DOE Regions are defined in Explanatory Note 18.

†Preliminary data.

R = Revised data.

NA = Not available. Data for Region 6 are based on a sample of less than four reporting firms.

Source: • FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

Price

Average No. 6 Residual Fuel Oil Prices

		0.0 to 0.3 percent sulfur		0.31 to 1.0 percent sulfur		Greater than 1.0 percent sulfur		Average	
		Whole-sale	Retail	Whole-sale	Retail	Whole-sale	Retail	Whole-sale	Retail
Dollars per barrel, excluding taxes									
1976	AVERAGE	12.20	12.54	10.83	11.79	9.98	10.43	10.72	11.49
1977	AVERAGE	13.45	14.36	12.09	13.45	11.31	12.27	11.96	13.23
1978	AVERAGE	12.77	14.47	11.95	12.78	10.73	11.70	11.51	12.75
1979	January	15.16	16.12	13.68	14.79	11.00	11.92	12.78	14.13
	February	16.12	17.28	15.01	15.30	11.31	12.28	13.72	14.68
	March	16.08	18.05	15.90	16.94	13.48	14.00	14.82	15.95
	April	17.79	19.09	16.34	17.44	13.70	14.59	15.51	16.61
	May	18.04	19.45	15.74	17.89	14.69	15.37	15.71	17.18
	June	20.92	19.79	18.08	18.51	15.95	16.40	17.81	17.97
	July	21.85	23.07	21.25	20.47	16.51	17.86	19.18	19.89
	August	21.05	22.63	19.49	21.28	17.51	18.32	19.00	20.33
	September	21.81	22.92	21.01	21.66	17.54	18.94	19.62	20.90
	October	23.80	23.29	22.99	22.33	18.31	19.53	20.88	21.59
	November	26.68	25.54	24.07	24.31	19.31	19.51	22.00	22.84
	December	27.09	27.78	25.83	25.01	20.67	21.05	23.55	24.44
	AVERAGE	19.87	21.21	18.33	19.33	15.89	16.44	17.66	18.67
1980	January	29.11	30.35	26.15	28.12	21.56	21.98	24.41	26.21
	February	27.07	30.32	25.82	28.15	20.21	22.22	23.34	26.48
	March	26.88	30.20	23.73	27.29	17.81	20.34	21.11	25.33
	April	25.16	28.69	20.38	24.78	16.41	18.36	19.09	22.87
	May	25.48	31.73	22.72	25.77	17.72	18.04	20.22	23.75
	June	23.14	31.37	22.35	25.44	17.72	19.27	20.44	24.09
	July	24.89	28.51	23.44	25.55	19.20	20.58	21.28	23.86
	August	R23.20	R30.93	R24.98	R26.11	R20.42	R21.45	R22.25	R25.00
	September	24.21	33.12	23.41	26.31	20.64	21.71	22.44	25.32
	AVERAGE	25.59	30.45	23.63	26.51	19.01	20.52	21.67	24.88

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

Note: Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, commercial, and residential accounts.

t Preliminary data. R = Revised data.

Source: • FEA Form P302-M-1, "Petroleum Industry Monthly Report for Product Prices."

Price

Natural Gas

		Average Wellhead Value	Delivered to Electric Plant ¹	Average Residential Heating
Cents per thousand cubic feet				
1973	AVERAGE	21.6	35.0	108.2
1974	AVERAGE	30.4	49.0	125.3
1975	AVERAGE	44.5	76.9	154.2
1976	AVERAGE	58.0	105.9	184.6
1977	AVERAGE	79.0	133.4	226.4
1978	AVERAGE	90.5	147.9	262.6
1979	January	102.0	154.7	292.9
	February	104.9	164.8	295.6
	March	109.5	168.6	300.6
	April	110.6	169.6	299.6
	May	115.0	182.2	314.9
	June	116.6	183.9	320.0
	July	119.6	184.0	328.4
	August	123.6	187.0	330.8
	September	123.5	189.4	341.4
	October	128.1	195.7	352.8
	November	128.7	186.9	347.6
	December	131.0	190.0	351.9
	AVERAGE	117.8	180.3	323.1
1980	January	134.4	201.1	354.9
	February	139.8	210.5	357.9
	March	141.6	214.7	368.1
	April	140.9	210.4	367.8
	May	142.6	218.1	393.9
	June	146.4	216.4	394.8
	July	150.3	237.3	410.6
	August	150.2	245.6	413.1
	September	153.0	245.6	417.0
	October	NA	NA	420.6

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

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

NA = Not available.

Sources: • Annual data for wellhead values are from the appropriate agencies of the individual producing states and the U.S. Geological Survey; monthly data are estimated primarily on the basis of values reported by state agencies in New Mexico, Oklahoma, and Texas.

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

• Average residential heating prices, Bureau of Labor Statistics.

Price

Electricity

Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants

Average Retail Electricity Prices¹

		Coal	Residual Oil ²	Natural Gas ³	All Fossil Fuels ²	Cents per kilowatt-hour				
						Residential	Commercial	Industrial	Other	Total ⁴
Cents per million Btu										
1973	AVERAGE	40.5	78.8	33.8	47.5	2.54	2.41	1.25	2.10	1.96
1974	AVERAGE	71.0	191.0	48.1	90.9	3.10	3.04	1.69	2.75	2.49
1975	AVERAGE	81.4	201.4	75.4	103.0	3.51	3.45	2.07	3.08	2.92
1976	AVERAGE	84.8	195.9	103.4	110.4	3.73	3.69	2.21	3.27	3.09
1977	AVERAGE	94.7	220.4	130.0	127.7	4.05	4.09	2.50	3.51	3.42
1978	AVERAGE	111.6	212.3	143.8	139.3	4.31	4.36	2.79	3.62	3.69
1979	January	115.8	228.1	150.2	150.4	4.07	4.28	2.81	3.55	3.64
	February	114.6	240.6	159.1	154.3	4.09	4.30	2.85	3.73	3.66
	March	116.8	258.8	163.0	152.3	4.28	4.44	2.91	3.87	3.76
	April	120.1	264.6	164.7	151.4	4.51	4.54	2.92	3.87	3.82
	May	121.1	274.1	177.5	158.0	4.69	4.65	2.98	3.98	3.91
	June	121.8	289.3	179.5	161.2	4.88	4.73	3.04	4.05	4.03
	July	122.2	311.8	178.9	168.7	4.92	4.77	3.13	4.22	4.15
	August	122.5	323.5	180.9	167.1	4.94	4.79	3.13	3.88	4.18
	September	125.3	333.5	183.5	167.9	4.96	4.84	3.15	4.07	4.19
	October	127.4	346.1	189.1	167.3	5.01	4.94	3.19	4.07	4.19
	November	127.7	363.1	180.3	171.5	4.84	4.92	3.19	4.14	4.14
	December	129.2	394.8	183.3	183.8	R4.71	4.90	R3.27	R4.19	R4.18
	AVERAGE	122.4	299.7	175.4	162.1	R4.64	R4.68	R3.05	R3.96	3.99
1980	January	128.7	423.5	194.8	187.3	4.69	4.90	3.29	4.19	4.19
	February	129.9	429.7	203.9	189.8	4.74	4.96	3.31	4.64	4.24
	March	130.1	411.0	207.9	184.8	4.92	5.17	3.45	4.69	4.40
	April	133.8	394.9	204.0	178.2	5.14	5.28	3.49	4.71	4.48
	May	133.3	403.1	212.0	180.3	5.41	5.44	3.59	4.97	4.63
	June	135.1	392.7	209.3	178.8	5.60	5.61	3.79	4.58	4.85
	July	137.4	394.5	228.5	199.0	5.66	5.65	3.93	4.93	5.03
	August	139.5	404.9	237.2	196.2	5.72	5.64	3.94	4.81	5.07
	September	138.9	411.3	238.7	193.5	5.71	5.73	3.88	4.95	5.03
	October	NA	NA	NA	NA	5.68	5.84	3.84	4.88	4.95

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

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

²See Explanatory Note 19.

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

⁴Average price for total sales to ultimate consumers.

NA = Not available. R = Revised data.

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

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

International

Crude Oil Production

World crude oil production during September 1980 was 58.6 million barrels per day, down 1.0 million barrels per day from the August level.

OPEC output during September declined 1.0 million barrels per day from the August level. Production levels in Nigeria, Kuwait, and Iran made up 70 percent of this decline. Average production from Arab members of OPEC declined 0.2 million barrels per day due to Iraq and Kuwait.

Production by non-OPEC nations remained at about the same level during September at 32.6 million barrels per day. Mexico registered the only notable change, increasing in September by 0.1 million barrels per day from the previous month.

Petroleum Consumption

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

Preliminary consumption data for October 1980 were available for only France, Italy, and the United States. Consumption levels for all three countries were up in October 1980 from the previous month. The size of the increases were (in millions of barrels per day): United States, 0.2; France, 0.3; and Italy, 0.1. January through July data, however indicate a significant decline in the consumption rates for the group of IEA nations, as compared to the same period last year.

Nuclear Electricity Production

As of October 1980, 18 non-Communist countries operated a total of 204 reactors which were authorized to generate commercial electricity. These units represented a combined gross electricity generating capacity of 127.1 million kilowatts, of which 58.3 million kilowatts, or about half, were attributable to the 75 U.S. licensed reactors. During October 1980, these 18 countries generated a total of 53.1 billion gross kilowatt-hours; an increase of 1.6 percent over the September 1980 level and 6.5 percent over the level in October 1979.

In October Canada's Douglas Point reactor unit received permission to resume power generation and the Finnish Olkiluoto-2 unit came on line.

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International

Crude Oil Production for Major Petroleum Exporting Countries

		Algeria	Iraq	Kuwait ¹	Libya	Qatar	Saudi Arabia ¹	United Arab Emirates	Arab Members of OPEC ²	Indonesia	Iran
Thousand barrels per day											
1973	AVERAGE	1,070	2,018	3,020	2,175	570	7,596	1,533	17,982	1,339	5,860
1974	AVERAGE	960	1,971	2,546	1,521	518	8,480	1,679	17,675	1,375	6,022
1975	AVERAGE	960	2,262	2,084	1,480	438	7,075	1,664	15,963	1,307	5,350
1976	AVERAGE	1,020	2,415	2,145	1,933	497	8,577	1,936	18,523	1,504	5,863
1977	AVERAGE	1,100	2,350	1,980	2,065	445	9,210	2,000	19,150	1,685	5,665
1978	AVERAGE	1,160	2,560	2,135	1,985	485	8,300	1,830	18,455	1,635	5,240
1979	January	1,235	3,535	2,605	2,165	550	9,790	1,840	21,720	1,600	410
	February	1,235	3,535	2,695	2,150	555	9,780	1,835	21,785	1,615	760
	March	1,235	3,535	2,580	2,070	370	9,780	1,830	21,400	1,625	2,190
	April	1,235	3,535	2,535	2,060	550	8,790	1,755	20,460	1,605	3,800
	May	1,235	3,535	2,575	2,040	540	8,780	1,860	20,565	1,565	4,100
	June	1,235	3,535	2,575	2,015	455	8,780	1,870	20,465	1,610	3,950
	July	1,035	3,335	2,540	2,070	520	9,780	1,835	21,115	1,600	3,750
	August	1,035	3,335	2,515	2,080	535	9,770	1,835	21,105	1,595	3,600
	September	1,035	3,335	2,365	2,020	455	9,780	1,840	20,830	1,575	3,600
	October	1,035	3,335	2,365	2,030	490	9,725	1,785	20,765	1,570	3,930
	November	1,035	3,335	2,435	2,085	525	9,795	1,870	21,080	1,570	3,170
	December	1,035	3,335	2,240	2,090	545	9,775	1,875	20,895	1,565	3,000
	AVERAGE	1,135	3,435	2,500	2,065	505	9,530	1,835	21,005	1,590	3,035
1980	January	1,150	3,400	2,140	2,100	495	9,785	1,740	20,810	1,565	2,295
	February	1,150	3,400	2,335	2,100	460	9,780	1,740	20,965	1,550	2,500
	March	1,150	3,400	2,090	2,000	500	9,790	1,695	20,625	1,575	2,350
	April	1,000	3,300	1,570	1,750	500	9,765	1,705	19,590	1,580	2,200
	May	1,000	3,300	1,525	1,750	480	9,775	1,765	19,595	1,550	1,700
	June	1,000	3,300	1,575	1,700	440	9,775	1,750	19,540	1,545	1,500
	July	1,000	3,100	1,365	1,680	460	9,765	1,710	19,080	1,565	1,700
	August	1,000	3,100	1,465	R1,690	465	9,765	1,665	R19,150	1,565	1,600
	September	1,000	3,000	1,340	1,700	460	9,740	1,670	18,910	1,565	1,400

Note: Data for 1980 are preliminary.

¹Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In September 1980 total production in this region amounted to approximately 480,000 barrels per day.

²Arab members of OPEC include Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates. Additional footnotes on following page.

International

Crude Oil Production for Major Petroleum Exporting Countries (continued)

		Nigeria	Vene-zuela	Total OPEC ³	Canada	Mexico	United Kingdom	United States	China	USSR	Other ⁴	World
Thousand barrels per day												
1973	AVERAGE	2,054	3,366	30,961	1,800	450	8	9,208	1,140	8,420	3,843	55,830
1974	AVERAGE	2,255	2,976	30,683	1,695	580	9	8,774	1,310	9,020	3,805	55,875
1975	AVERAGE	1,783	2,346	27,134	1,420	720	20	8,375	1,490	9,630	4,201	52,990
1976	AVERAGE	2,067	2,294	30,711	1,300	800	245	8,132	1,735	10,170	4,302	57,395
1977	AVERAGE	2,085	2,240	31,230	1,320	980	770	8,245	1,875	10,700	4,490	59,610
1978	AVERAGE	1,895	2,165	29,800	1,315	1,215	1,080	8,707	2,080	11,215	4,698	60,190
1979	January	2,440	2,265	28,880	1,450	1,395	1,465	R8,475	2,120	11,370	4,743	59,880
	February	2,430	2,345	29,380	1,575	1,400	1,505	R8,525	2,120	11,370	4,622	60,470
	March	2,440	2,425	30,515	1,405	1,310	1,335	R8,601	2,120	11,370	5,230	61,870
	April	2,420	2,385	31,095	1,510	1,400	1,460	R8,553	2,120	11,510	4,882	62,510
	May	2,400	2,385	31,445	1,465	1,405	1,645	R8,601	2,120	11,110	4,695	62,470
	June	2,420	2,245	31,115	1,465	1,440	1,745	R8,432	2,120	11,460	4,766	62,520
	July	2,380	2,325	31,515	1,520	1,440	1,710	R8,364	2,120	11,400	5,630	63,690
	August	2,185	2,325	31,230	1,450	1,460	1,640	R8,548	2,120	11,560	5,171	63,330
	September	2,115	2,365	30,895	1,490	1,475	1,675	R8,523	2,120	11,460	5,129	62,710
	October	2,135	2,370	31,180	1,545	1,515	1,615	R8,621	2,120	11,630	5,152	63,325
	November	2,150	2,390	30,770	1,525	1,620	1,520	R8,761	2,120	11,700	5,236	63,140
	December	2,150	2,410	30,430	1,545	1,660	1,545	R8,615	2,120	11,700	5,033	62,620
	AVERAGE	2,305	2,355	30,710	1,495	1,460	1,570	R8,552	2,120	11,470	5,042	62,400
1980	January	2,155	2,280	29,535	1,515	1,720	1,600	8,648	R2,115	11,560	5,042	R61,735
	February	2,160	2,200	29,805	1,475	1,725	1,660	8,696	R2,115	11,550	5,189	R62,215
	March	2,155	1,995	29,100	1,475	1,830	1,670	8,712	R2,115	11,640	5,203	R61,745
	April	2,100	2,045	27,965	1,390	1,885	1,510	8,688	2,120	11,630	5,352	60,540
	May	2,200	2,150	27,645	1,470	1,910	1,600	8,640	2,120	11,700	5,175	60,260
	June	2,110	2,050	27,175	1,535	1,905	1,625	8,547	2,120	11,630	5,203	59,740
	July	2,095	2,170	27,030	1,520	2,015	1,585	R8,555	R2,125	11,800	R4,945	R59,575
	August	2,050	2,210	R27,010	1,440	2,000	1,535	8,560	R2,130	11,800	R5,160	R59,635
	September	1,600	2,190	26,045	1,400	2,125	1,535	8,540	2,110	11,800	5,055	58,610

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

³OPEC total includes production in Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, United Arab Emirates, Indonesia, Iran, Nigeria, Venezuela, Ecuador, and Gabon.

⁴Other is a calculated total derived from the difference between world production and the nations represented above.

R = Revised data.

Note: Monthly data may not average to annual data. Data for 1980 are preliminary.

Sources: • 1973–1978 annual data for OPEC nations: *OPEC Annual Statistical Bulletin*.

• 1978 and 1979 annual data and 1980 monthly data (except U.S.): Central Intelligence Agency, *International Energy Statistical Review*.

• 1979 monthly data (except U.S.) are EIA estimates based on CIA revisions to annual data.

• 1973–1980 United States data: See sources on the last page of the Petroleum Section.

International

Petroleum Consumption for Major Free World Industrialized Countries¹

		Canada	France ²	Italy	Japan	United Kingdom	United States	West Germany	Other IEA ³	Total IEA ⁴
Thousand barrels per day										
1973	AVERAGE	1,597	2,219	1,525	5,000	1,958	17,308	2,693	4,069	34,150
1974	AVERAGE	1,630	2,094	1,521	4,872	1,829	16,653	2,408	4,047	32,960
1975	AVERAGE	1,595	1,925	1,468	4,568	1,633	16,322	2,319	3,905	31,810
1976	AVERAGE	1,647	2,075	1,503	4,786	1,601	17,461	2,507	4,265	33,770
1977	AVERAGE	1,661	1,973	1,476	5,015	1,655	18,431	2,478	4,214	34,930
1978	AVERAGE	1,701	2,077	1,551	5,115	1,683	18,847	2,596	4,387	35,880
1979	January	1,881	2,786	1,950	5,579	1,883	R20,586	2,893	5,157	40,000
	February	2,019	2,731	1,912	6,009	2,067	R21,288	2,708	5,240	41,100
	March	1,654	2,315	1,601	5,708	1,949	R19,322	2,592	4,716	37,400
	April	1,605	2,150	1,447	5,009	1,703	R17,434	2,590	4,327	34,000
	May	1,650	2,039	1,402	4,757	1,648	R17,801	2,641	4,384	34,200
	June	1,737	1,663	1,312	4,709	1,517	R17,786	2,613	4,137	33,700
	July	1,700	1,604	1,314	4,689	1,435	R17,144	2,626	4,281	33,100
	August	1,775	1,553	1,311	4,894	1,488	R18,149	2,617	4,531	34,800
	September	1,619	1,721	1,617	4,809	1,520	R17,400	2,597	4,468	33,900
	October	1,852	2,007	1,807	4,771	1,652	R18,176	2,846	4,448	35,500
	November	1,840	2,481	1,890	5,359	1,858	R18,355	2,763	4,428	36,400
	December	1,877	2,278	1,744	5,800	1,606	R18,922	2,489	4,801	R37,300
	AVERAGE	1,766	2,107	1,607	5,173	1,690	R18,516	2,664	4,569	35,900
1980	January	1,812	2,465	1,778	5,255	1,781	18,509	2,665	4,499	36,300
	February	1,925	2,444	1,864	5,722	1,621	18,721	2,393	4,653	36,900
	March	1,740	1,982	1,657	5,433	1,585	17,279	2,405	4,400	34,500
	April	1,560	2,110	1,541	4,626	1,472	16,616	2,656	4,328	32,800
	May	1,573	1,892	1,448	4,376	1,348	16,143	2,203	4,007	31,100
	June	1,621	1,848	1,493	4,224	1,286	R16,214	2,192	4,105	R31,100
	July	1,693	1,437	1,506	4,215	1,225	R15,962	2,404	4,001	R31,100
	August	NA	1,220	1,310	NA	NA	15,836	2,133	NA	NA
	September	NA	R1,740	1,640	NA	NA	16,612	NA	NA	NA
	October	NA	2,040	1,740	NA	NA	16,802	NA	NA	NA

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

¹These 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.

²Not a member of the International Energy Agency (IEA).

³Other is a calculated total derived from the difference between total IEA consumption and the IEA nations represented above.

⁴The 21 signatory nations of the International Energy Agency (IEA) are: Australia, Austria, Belgium, Canada, Denmark, West Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Australia and Portugal joined the IEA as new members in 1979 and 1980, respectively. In an effort to maintain comparability within this time series, consumption data for these two countries have been incorporated into the IEA total for all years.

R = Revised data.

NA = Not available.

Note: Data for 1980 are preliminary.

Sources: • Central Intelligence Agency, "International Energy Statistical Review," 30 December 1980 (except United States).

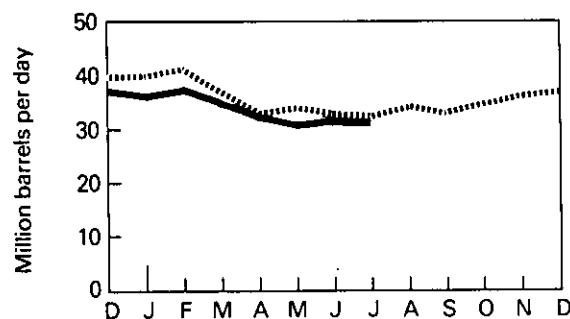
• 1973-1980 United States data: See sources on last page of the Petroleum Section.

• IEA totals for most recent months are EIA estimates.

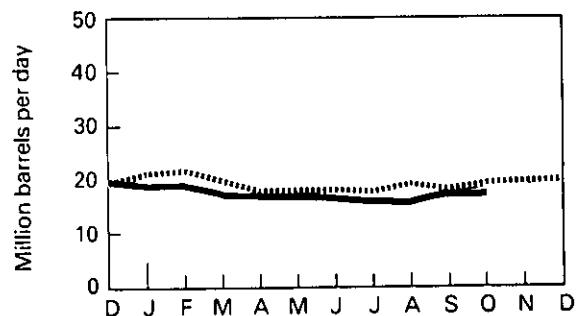
International

Petroleum Consumption

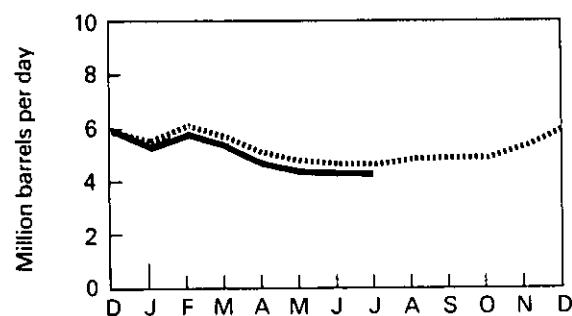
Total IEA



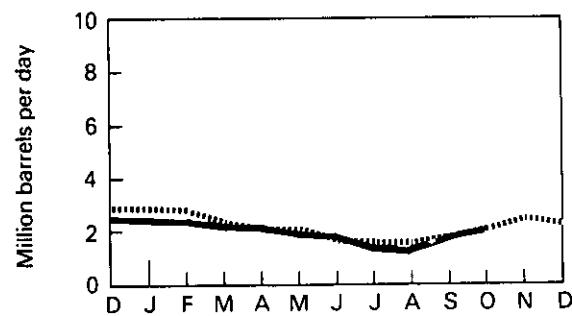
United States



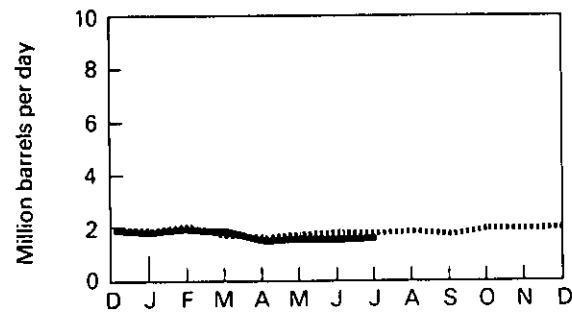
Japan*



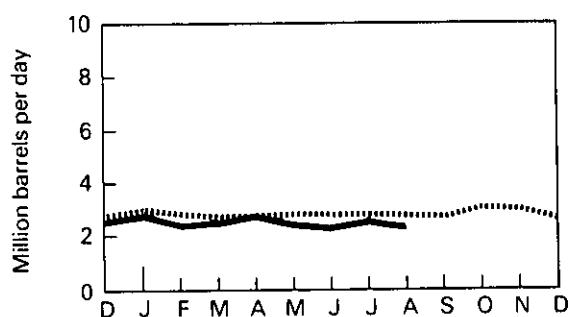
France**



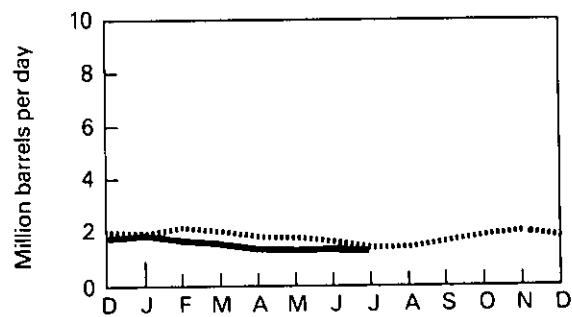
Canada



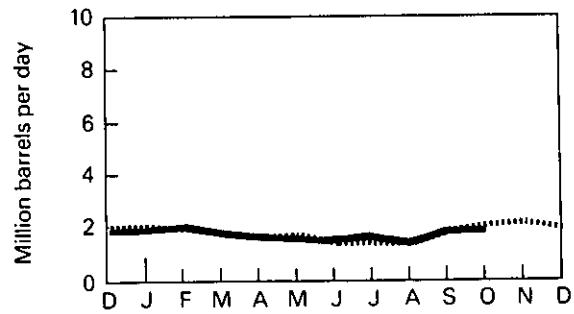
West Germany



United Kingdom



Italy***



*Excludes liquefied petroleum gases and condensates.

**Not a member of IEA.

***Principal products only.

1979
1980

International

Nuclear Electricity Generation by Non-Communist Countries¹

		Argentina	Belgium	Canada ²	Finland	France	India	Italy	Japan	Nether- lands	Pakistan
		Million gross kilowatt-hours									
1973	TOTAL	0	0	18,273	0	11,617	1,936	3,142	9,439	1,111	458
1974	TOTAL	1,036	121	15,410	0	14,703	2,475	3,410	18,097	3,277	584
1975	TOTAL	2,517	6,763	13,243	0	18,296	2,514	3,801	22,196	3,335	546
1976	TOTAL	2,572	10,011	18,016	0	15,764	3,194	3,807	36,846	3,872	487
1977	TOTAL	1,637	11,855	26,759	2,675	17,940	2,779	3,384	28,135	3,710	338
1978	TOTAL	2,896	12,490	32,925	3,288	30,548	2,264	4,428	53,186	4,060	229
1979	January	266	838	3,816	548	3,831	356	401	5,724	390	23
	February	175	559	2,945	493	3,465	248	277	4,774	352	12
	March	181	786	2,909	467	3,192	215	241	4,254	383	0
	April	261	1,047	3,104	623	3,151	218	290	3,852	222	0
	May	254	1,292	2,717	520	3,294	239	200	3,614	343	0
	June	229	1,161	3,194	394	2,963	285	132	4,470	365	0
	July	168	992	3,848	491	2,604	307	0	5,862	373	0
	August	275	558	2,820	391	2,341	266	122	6,724	254	0
	September	142	792	2,956	709	3,094	248	169	5,338	362	0
	October	247	1,119	3,316	780	3,808	314	203	6,186	267	0
	November	255	964	2,909	561	3,563	304	227	5,353	37	0
	December	239	1,263	3,849	693	4,622	209	366	5,852	140	0
	TOTAL	2,692	11,370	38,383	6,671	39,929	3,210	2,627	62,003	3,489	35
1980	January	264	1,180	3,582	822	5,519	215	156	8,013	381	0
	February	126	1,011	3,476	765	5,324	107	441	7,379	365	0
	March	0	1,006	3,678	790	5,058	163	523	7,995	385	0
	April	68	499	3,193	754	5,039	273	391	5,637	343	0
	May	179	687	2,493	314	4,184	294	294	6,033	323	0
	June	250	1,114	3,108	0	4,075	242	97	6,642	341	0
	July	162	1,292	3,559	383	4,832	228	131	7,553	369	3
	August	256	1,266	3,912	392	3,246	303	111	8,264	369	19
	September	252	1,112	3,115	R436	4,544	311	68	6,729	363	21
	October	264	946	3,342	519	5,145	216	0	5,705	307	0
	TOTAL (Year-to-date)	1,820	10,112	33,458	5,174	46,966	2,351	2,210	69,948	3,545	42

Note: In some cases, monthly figures are adjusted to reflect amended cumulative totals. Totals may not equal sum of components due to independent rounding.

¹Figures are for gross electrical generation as opposed to net electrical generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves.

²A few countries, such as Canada and the United Kingdom, assess generation at 4- or 5-week intervals, rather than by calendar month.

R = Revised data.

Source: • Nucleonics Week.

International

Nuclear Electricity Generation by Non-Communist Countries¹ (continued)

		South Korea	Spain	Sweden	Switzer-land	Taiwan	United Kingdom ²	West Germany	Non-Communist World Excluding U.S.	United States	Total Non-Communist World
Million gross kilowatt-hours											
1973	TOTAL	0	6,545	2,111	6,192	0	27,996	11,907	100,727	87,968	188,695
1974	TOTAL	0	7,223	1,647	7,037	0	34,020	12,038	121,078	104,479	225,557
1975	TOTAL	0	7,544	12,021	7,721	0	30,508	21,672	152,677	181,822	334,499
1976	TOTAL	0	7,555	15,992	7,900	0	36,806	24,524	187,346	201,555	388,891
1977	TOTAL	71	6,525	19,890	8,070	98	38,079	35,807	207,752	263,167	470,919
1978	TOTAL	2,324	7,649	23,781	8,349	2,670	36,662	35,881	263,630	292,664	556,294
1979	January	272	549	2,326	804	445	3,787	4,167	28,543	29,184	57,727
	February	355	622	1,973	725	306	3,811	3,362	24,454	27,327	51,781
	March	324	706	2,679	796	520	3,968	3,775	25,396	25,538	50,934
	April	262	637	1,449	848	565	3,210	3,767	23,506	19,320	42,826
	May	250	116	1,268	864	482	2,265	3,460	21,179	15,808	36,987
	June	300	260	1,003	744	645	3,149	3,265	22,559	17,140	39,699
	July	337	344	1,008	811	691	2,640	3,323	23,799	22,493	46,292
	August	384	663	1,099	746	646	2,409	2,873	22,571	26,174	48,745
	September	386	725	1,370	1,244	644	3,116	2,641	23,936	23,169	47,105
	October	282	676	2,048	1,388	509	2,771	3,656	27,570	22,315	49,885
	November	0	719	2,302	1,418	316	3,279	3,812	26,019	20,298	46,317
	December	0	683	2,515	1,461	559	4,070	4,074	30,594	21,933	52,527
	TOTAL	3,152	6,700	21,039	11,848	6,329	38,477	42,175	300,130	270,698	570,827
1980	January	110	719	2,512	1,505	859	3,704	4,650	34,191	21,111	55,302
	February	1	333	2,423	1,197	685	3,380	4,240	31,253	20,818	52,071
	March	351	426	2,333	1,278	799	4,217	3,383	32,385	21,038	53,423
	April	385	355	1,865	1,444	743	2,693	3,625	27,307	R19,828	R47,135
	May	379	368	1,648	1,399	436	2,559	3,501	25,091	19,612	44,703
	June	84	307	1,570	617	507	2,818	2,877	24,649	19,386	44,035
	July	411	316	1,337	577	827	2,031	3,034	27,044	22,367	49,411
	August	293	366	1,261	704	773	2,579	2,712	26,826	R25,664	R52,490
	September	379	379	1,681	1,261	784	R3,115	3,182	R27,731	24,770	R52,501
	October	402	408	2,185	1,405	764	2,745	3,053	27,408	25,697	53,105
	TOTAL	2,795	3,978	18,815	11,388	7,179	29,841	34,256	283,879	220,292	504,171
	(Year-to-date)										

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

Note: In some cases, monthly figures are adjusted to reflect amended cumulative totals. Totals may not equal sum of components due to independent rounding.

¹Figures are for gross electrical generation, as opposed to net electrical generation. Net figures are generally less than gross figures by about 5 percent, which represents the energy consumed by the generating plants themselves.

²A few countries, such as Canada and the United Kingdom, assess generation at 4- or 5-week intervals, rather than by calendar month.

R = Revised data.

Source: • Nucleonics Week.

Definitions

Anthracite

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

Average Retail Selling Price, Motor Gasoline

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

Base Production Control Level

(See Crude Oil)

Bituminous Coal

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

Ceiling Price

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

Coke (Coal)

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

Crude Oil

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

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

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

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

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

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

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

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

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

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

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

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

Crude Oil Domestic Production

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

Crude Oil Entitlement Value

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

Crude Oil Refinery Input

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

Crude Oil Stocks

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

Distillate Fuel Oil

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

Distillate Fuel Oil Production

Total production of distillate fuel by refineries, measured at the refinery outlet. Relatively small

quantities of distillate fuel are produced at natural gas processing plants, but these quantities are not included.

Electricity Production

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

Entitlement Position

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

Entitlement Price

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

Exploratory Well

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

Full Serve

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

Imports

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

Jet Fuel

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

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

Landed Cost

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

Lease Condensate

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

Line Miles of Seismic Exploration

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

Lignite

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

Lower Tier Crude Oil

(See Crude Oil, Part A.)

Major Brand

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

Maximum Dependable Capacity

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

Motor Gasoline

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

Motor Gasoline Production

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

Motor Gasoline, Regular Grade

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

Motor Gasoline, Premium Grade

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

National Domestic Crude Oil Supply Ratio

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

Natural Gas

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

Natural Gas Liquids

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

Natural Gas Plant Liquids

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

Natural Gas Production (Dry)

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

New Crude Oil

(See Crude Oil, Part B.)

Old Crude Oil

(See Crude Oil, Part A.)

Petroleum

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

Petroleum Coke

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

Petroleum Products

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

Property

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

Refined Petroleum Product Supplied

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

Refiner Acquisition Cost

The cost to the refiner, including transportation and fees, of crude oil. The composite cost is the average of domestic and imported crude oil costs, and represents

the amount of crude oil cost which refiners may pass on to their customers.

Residual Fuel Oil

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

Rotary Rig

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

Self Serve

Motor vehicle services are not provided by attendants.

Strategic Petroleum Reserves

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

Startup Test Phase of Nuclear Powerplant

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

Stocks (Refined Petroleum Product)

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

Synthetic Natural Gas (SNG)

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

Unaccounted for Crude Oil

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

Unrecouped Costs

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

Upper Tier Crude Oil

(See Crude Oil, Part B.)

Well

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

Explanatory Notes

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

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

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

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

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

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

There are two degree-day data bases maintained by the National Oceanic and Atmospheric Administration. Weekly degree-day information is based on mean daily temperatures recorded at about 200 major weather

stations around the country. Monthly data are based on readings at more than 8,000 weather stations. The temperature information recorded at these weather stations is used to calculate statewide degree-day averages based on population. The State figures are then aggregated into Petroleum Administration for Defense (PAD) Districts and into the national average, also using a population weighting method.

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

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

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

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

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

The total gas in storage is the total volume of gas (base gas plus working gas) in storage reservoirs as of the end of the month. Base gas is the volume of gas, including all native gas in place at the time of

conversion to storage, needed as a permanent inventory to maintain adequate reservoir pressures and deliverability rates throughout the withdrawal season. Base gas includes the volumes which will not be recoverable upon termination of storage operations. Working gas is the volume of gas above the designated base gas level available for withdrawal.

10. Bituminous coal and lignite production is calculated from the number of railroad cars loaded at mines, based on the assumption that approximately 60 percent of the coal produced is transported by rail. Production data are estimated by EIA from Association of American Railroads reports of carloadings.

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

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

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

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

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

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

where

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

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

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

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

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

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

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

where

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

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

11. The units used to describe power generation at nuclear plants are based on the watt, a unit of power. (Power is energy produced per unit of time.) Nuclear power plants may have more than one type of power rating, including:

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

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

13. The refiner acquisition cost of domestic crude oil is the price paid by refiners for domestic crude oil and

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

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

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

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

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

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

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

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

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Conversion Factors

Thermal Conversion Factors

Approximate Heat Content of Various Fuels		1973	1974	1975	1976	1977	1978-79-80
Anthracite							
Production	Btu/short ton	23,170,000	22,560,000	23,390,000	22,770,000	23,180,000	23,520,000
Imports and Exports	Btu/short ton	25,400,000	25,400,000	25,400,000	25,400,000	25,400,000	25,400,000
Consumption, average	Btu/short ton	22,710,000	21,950,000	21,740,000	22,150,000	22,710,000	22,970,000
Electric utility consumption	Btu/short ton	17,920,000	17,200,000	17,060,000	17,530,000	17,240,000	17,100,000
Non-utility consumption	Btu/short ton	24,340,000	23,750,000	23,650,000	23,840,000	24,990,000	25,170,000
Bituminous coal and lignite							
Production	Btu/short ton	24,010,000	23,730,000	23,200,000	23,150,000	22,700,000	22,430,000
Imports	Btu/short ton	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000
Exports	Btu/short ton	27,000,000	27,000,000	27,000,000	27,000,000	27,000,000	27,000,000
Consumption, average	Btu/short ton	23,650,000	23,070,000	22,800,000	22,750,000	22,330,000	22,140,000
Electric utility consumption	Btu/short ton	22,260,000	21,800,000	21,660,000	21,690,000	21,480,000	21,280,000
Non-utility consumption	Btu/short ton	26,840,000	26,120,000	25,810,000	25,870,000	25,130,000	25,070,000
Coal Coke							
Production	Btu/short ton	26,000,000	26,000,000	26,000,000	26,000,000	26,000,000	26,000,000
Crude petroleum¹							
Production	Btu/barrel	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000
Imports	Btu/barrel	5,817,000	5,827,000	5,821,000	5,808,000	5,810,000	5,802,000
Exports	Btu/barrel	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000
Crude petroleum and products							
Imports, average	Btu/barrel	5,897,000	5,884,000	5,858,000	5,856,000	5,834,000	5,839,000
Exports, average	Btu/barrel	5,752,000	5,774,000	5,748,000	5,745,000	5,797,000	5,808,000
Petroleum products							
Consumption, average	Btu/barrel	5,515,000	5,504,000	5,494,000	5,504,000	5,526,000	5,519,000
Residential and Commercial	Btu/barrel	5,498,000	5,494,000	5,496,000	5,517,000	5,522,000	5,530,000
Industrial	Btu/barrel	5,515,000	5,473,000	5,443,000	5,457,000	5,519,000	5,487,000
Transportation	Btu/barrel	5,395,000	5,394,000	5,392,000	5,397,000	5,402,000	5,410,000
Electric Utility	Btu/barrel	6,223,000	6,215,000	6,229,000	6,235,000	6,231,000	6,227,000
Imports	Btu/barrel	5,983,000	5,959,000	5,935,000	5,980,000	5,908,000	5,955,000
Exports	Btu/barrel	5,752,000	5,773,000	5,747,000	5,743,000	5,796,000	5,814,000
Natural gas plant liquid production							
Production	Btu/barrel	4,049,000	4,011,000	3,984,000	3,964,000	3,941,000	3,925,000
Natural gas, dry							
Production and consumption ..	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019
Electric utility consumption ..	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034
Non-utility consumption	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019	1,016
Imports	Btu/cubic foot	1,026	1,027	1,026	1,025	1,026	1,030
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013
Hydropower²							
Hydropower ²	Btu/kWh	10,389	10,442	10,406	10,373	10,435	10,435
Nuclear power²							
Nuclear power ²	Btu/kWh	10,903	11,161	11,013	11,047	10,769	10,769
Geothermal power²							
Geothermal power ²	Btu/kWh	21,674	21,674	21,611	21,611	21,611	21,611
Electricity consumption	Btu/kWh	3,412	3,412	3,412	3,412	3,412	3,412
Refined Petroleum Products:	Btu/barrel						
Asphalt		6,636,000					
Aviation gasoline		5,048,000					
Butane		4,326,000					
Butane-propane mixture ³		4,130,000					
Distillate fuel oil		5,825,000					
Ethane		3,082,000					
Isobutane		3,974,000					
Jet fuel—kerosene type		5,670,000					
Jet fuel—naphtha type		5,355,000					
Kerosene		5,670,000					
Lubricants		6,065,000					
Motor gasoline		5,253,000					
Natural gasoline		4,620,000					
Petrochemical feedstocks							
Naphtha 40°		5,248,000					
Other oils over 40°		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					

¹Includes lease condensate

²There is no generally accepted practice for measuring hydropower thermal conversion rates. The hydropower factors on this page are the prevailing heat rate factors at fossil fuel steam electric powerplants. By using the heat rate factor, it is possible to evaluate fossil fuel requirements for replacing hydropower production during periods of drought. Furthermore, it allows for better comparisons with certain other countries such as Norway where hydropower is the principal means for producing electricity. Similarly, the nuclear power and geothermal power conversion factors represent the thermal conversion equivalent of the uranium and geothermal steam consumed at powerplants. The heat content of a kilowatt-hour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatt-hour. It is not possible to determine the hydroelectric powerplant efficiency by using these factors. The efficiency factor for hydroelectric powerplants is derived by multiplying generation efficiency by turbine efficiency. The average hydroelectric powerplant efficiency in the United States is 86 percent while average generation efficiency is 97 percent and average turbine efficiency is 89 percent.

³60 percent butane and 40 percent propane.

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

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