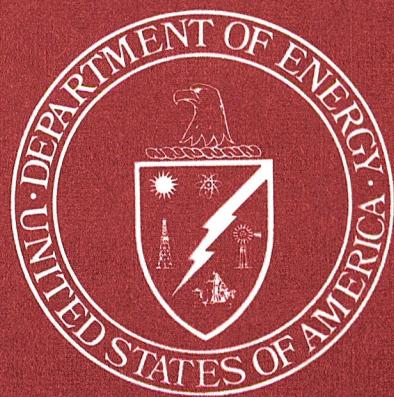


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April 1982

# Monthly Energy Review



**U.S. Department of Energy**  
Energy Information Administration

The *Monthly Energy Review* is prepared in the Statistics Branch of the Office of Energy Markets and End Use, Energy Information Administration, U.S. Department of Energy, under the direct supervision of Samuel O. Wood, Jr.

<i>Production Manager:</i>	Julia F. Hutchins	Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402
<i>Production Assistants:</i>	Barbara Fichman Howard B. Paskow	
<i>Editorial Review:</i>	Staff, Publication Services	Order Desk (202) 783-3238
<i>Executive Summary: and Consumption:</i>	Nancy Masterson Roberta Searles Dianne R. Dunn Barbara Fichman	<b>Annual Subscription—</b> Domestic—\$28.00/year-\$41.00/year 1st class Foreign—\$35.00/year
<i>Petroleum:</i>	Henry Clarius	<b>Single Copy—</b> Domestic—\$3.00/copy Foreign—\$3.75/copy
<i>Natural Gas:</i>	Gordon W. Koelling	For questions on energy statistics or information on availability of other EIA publications, contact:
<i>Resource Development:</i>	Daniel C. Adkins	
<i>Coal:</i>	Leonard Westerstrom	<b>U.S. Department of Energy</b> <b>Energy Information Administration</b> <b>National Energy Information Center, EI-20</b> <b>Forrestal Building</b> <b>Washington, D.C. 20585</b> <b>(202) 252-8800</b>
<i>Electric Utilities:</i>	Vicki Moorhead Tom F. Woods	
<i>Nuclear:</i>	Hal Steinberg	
<i>Price:</i>		
<i>Petroleum</i>	Annie P. Whatley Charles Riner	
<i>Natural Gas</i>	Gordon W. Koelling Kenneth M. McClevey Tom F. Woods	
<i>Electricity</i>	Dean Fennell Tom F. Woods	
<i>International:</i>	Louis DeMouy Hal Steinberg	

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The *Monthly Energy Review* presents current data and trends for production, consumption, stocks, imports, exports, and prices for the principal energy commodities in the United States. Also included are data on international production of crude oil, consumption of petroleum products, petroleum stocks, and production of electricity from nuclear powered facilities. This report is published to keep the public and other interested parties fully informed with respect to current energy production, consumption, stocks, and prices.

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

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

From time-to-time an article that addresses some facet of energy is included in this publication. Feature articles that have appeared in previous issues are as follows:

Energy Consumption.....	March 1975
Nuclear Power .....	April 1975
The Price of Crude Oil .....	June 1975
U.S. Coal Resources and Reserves .....	July 1975
Propane, A National Energy Resource.....	September 1975
Short-Term Energy Supply and Demand Forecasting at FEA.....	October 1975
Curtailments of Natural Gas Service .....	January 1976

Home Heating Conservation Alternatives and the Solar Collector Industry .....	March 1976
Trends in United States Petroleum Imports.....	September 1976
Crude Oil Entitlements Program .....	January 1977
Motor Gasoline Supply and Demand.....	July 1977
Short-Term Petroleum Supply and Demand .....	May 1978
The Energy Requirements of U.S. Agriculture .....	July 1979
Three Mile Island— Possible Regulatory Responses and Their Impacts on the Nation's Short-Term Electric Utility Fuel Outlook .....	October 1979
Reduction in Natural Gas Requirements Due to Fuel Switching .....	December 1979
The Solar Collector Industry and Solar Energy.....	February 1980
Trends in the Installation of Energy Using Equipment in New Residential Buildings .....	March 1980
The Energy Information Administration's Oil and Gas Reserves Program— The First Year's Report .....	June 1980
Energy From Urban Waste .....	August 1980
Natural Gas Liquids: Revisions to 1979 Data.....	October 1980
EIA Weekly Petroleum Data: Data Collection and Methods of Estimation .....	November 1980
The Department of Energy Disclosure Policy for Individually Identifiable Information Maintained by the Energy Information Administration .....	December 1980
Changes in 1981 Petroleum Data Series .....	May 1981
Information Services of the Energy Information Administration .....	September 1981
An Overview of Natural Gas Markets .....	December 1981
The Interstate and Intrastate Natural Gas Markets .....	January 1982
Natural Gas Drilling and Production Under the Natural Gas Policy Act .....	February 1982

# Part 1

## Executive Summary

### Overview

#### Production

Energy production for January 1982 totaled 5.5 quadrillion Btu, an increase of 0.3 percent\* from the January 1981 level. Decreases in production occurred for natural gas and coal. Natural gas production was down 0.8 percent and coal 3.3 percent. Petroleum production increased by 1.1 percent. All other forms of energy production combined were up by 13.0 percent.

#### Consumption

Energy consumption in January 1982 totaled 7.2 quadrillion Btu, a 2.5 percent de-

\*All percentage increases/decreases are on a daily rate basis.

crease compared to consumption for January 1981. Increases occurred in the daily consumption rates of natural gas (6.0 percent), coal (1.6 percent), and all other forms of energy (12.0 percent). The average daily rate of petroleum consumption was down 13.1 percent from the January 1981 level, accounting for the overall decline in energy consumption during this period.

#### Imports

Net imports of energy for January 1982 totaled 0.7 quadrillion Btu, 31.1 percent below the January 1981 level. By energy source, the decreases in net imports were petroleum, 29.7 percent and other (electricity and coal coke combined), 13.9 percent. Increases occurred in natural gas, 13.6 percent; and net exports of coal, 6.0 percent.

### ENERGY SUMMARY (Quadrillion (10<sup>12</sup>) Btu)

January					
	1982	1982	1981	1981	Percent
	Daily	Daily	Daily	Daily	Change*
<b>Total Production</b>	<b>5.512</b>	<b>0.178</b>	<b>5.493</b>	<b>0.177</b>	<b>+ 0.3</b>
Petroleum <sup>1</sup>	1.746	0.056	1.728	0.056	+ 1.1
Natural Gas	1.734	0.056	1.748	0.056	- 0.8
Coal	1.468	0.047	1.519	0.049	- 3.3
Other <sup>2</sup>	0.503	0.018	0.499	0.016	+ 13.0
<b>Total Consumption</b>	<b>7.209</b>	<b>0.233</b>	<b>7.383</b>	<b>0.238</b>	<b>- 2.5</b>
Petroleum <sup>3</sup>	2.699	0.087	3.106	0.100	- 13.1
Natural Gas	2.421	0.078	2.284	0.074	+ 6.0
Coal	1.509	0.049	1.485	0.048	+ 1.6
Other <sup>4</sup>	0.580	0.019	0.518	0.017	+ 12.0
<b>Net Imports</b>	<b>0.741</b>	<b>0.024</b>	<b>1.075</b>	<b>0.035</b>	<b>- 31.1</b>
Petroleum <sup>5</sup>	0.790	0.025	1.123	0.036	- 29.7
Natural Gas	0.094	0.003	0.083	0.003	+ 13.6
Coal	(0.160)	(0.005)	(0.151)	(0.005)	(+ 6.0)
Other <sup>6</sup>	0.017	0.001	0.020	0.001	- 13.9

Totals may not equal sum of components due to independent rounding.  
Parentheses indicate exports are greater than imports.  
\* Based on daily rates.

<sup>1</sup> Includes crude oil, lease condensate, and natural gas plant liquids.  
<sup>2</sup> Includes hydroelectric, nuclear, and geothermal power and electricity produced from wood and waste.  
<sup>3</sup> Includes refined petroleum products and natural gas plant liquids.  
<sup>4</sup> Includes hydroelectric, nuclear, and geothermal power, electricity produced from wood and waste, and net imports of electricity and coal coke.  
<sup>5</sup> Includes crude oil, lease condensate, refined petroleum products, unfinished oils, natural gasoline, plant condensate, and imports of crude oil for the Strategic Petroleum Reserve.  
<sup>6</sup> Includes net imports of electricity and coal coke.

# Executive Summary

## Energy Summary

		Energy Production <sup>1</sup>	Energy Consumption <sup>2</sup>	Energy Imports <sup>3</sup>	Energy Exports <sup>4</sup>
Quadrillion (10 <sup>16</sup> ) Btu					
1973	TOTAL	62.433	74.609	14.732	2.073
1974	TOTAL	61.229	72.759	14.417	2.241
1975	TOTAL	60.059	70.707	14.113	2.389
1976	TOTAL	60.091	74.510	16.838	2.213
1977	TOTAL	60.293	76.332	20.092	2.097
1978	TOTAL	61.231	78.175	19.261	1.952
1979	TOTAL	63.851	78.910	19.620	2.900
1980	January	5.668	7.426	1.695	0.227
	February	5.308	6.988	1.473	0.210
	March	5.696	6.878	1.476	0.264
	April	5.458	5.988	1.339	0.287
	May	5.591	5.815	1.281	0.344
	June	5.398	5.670	1.287	0.359
	July	5.242	5.929	1.210	0.323
	August	5.335	5.818	1.203	0.313
	September	5.301	5.773	1.168	0.330
	October	5.491	6.148	1.248	0.370
	November	5.333	6.261	1.227	0.341
	December	5.678	7.221	1.363	0.338
	TOTAL	65.499	75.913	15.971	3.706
1981	January	R5.493	R7.393	1.339	0.264
	February	R5.235	R6.314	1.205	0.278
	March	R5.732	R6.422	1.184	0.371
	April	R4.654	R5.698	1.099	0.326
	May	R4.754	R5.734	1.116	0.278
	June	R5.275	R5.798	1.035	0.249
	July	R5.597	R6.071	1.136	0.393
	August	R5.784	R5.881	1.124	0.422
	September	R5.577	R5.640	1.194	0.412
	October	R5.718	R5.966	1.174	0.469
	November	R5.399	R5.939	1.086	0.442
	December	R5.561	R6.910	1.183	0.434
	TOTAL	R64.780	R73.767	13.873	4.336
1982	January	5.512	7.209	1.066	0.325

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

<sup>1</sup>See Explanatory Note 1.

<sup>2</sup>See Explanatory Note 2.

<sup>3</sup>See Explanatory Note 3.

<sup>4</sup>See Explanatory Note 4.

R = Revised data.

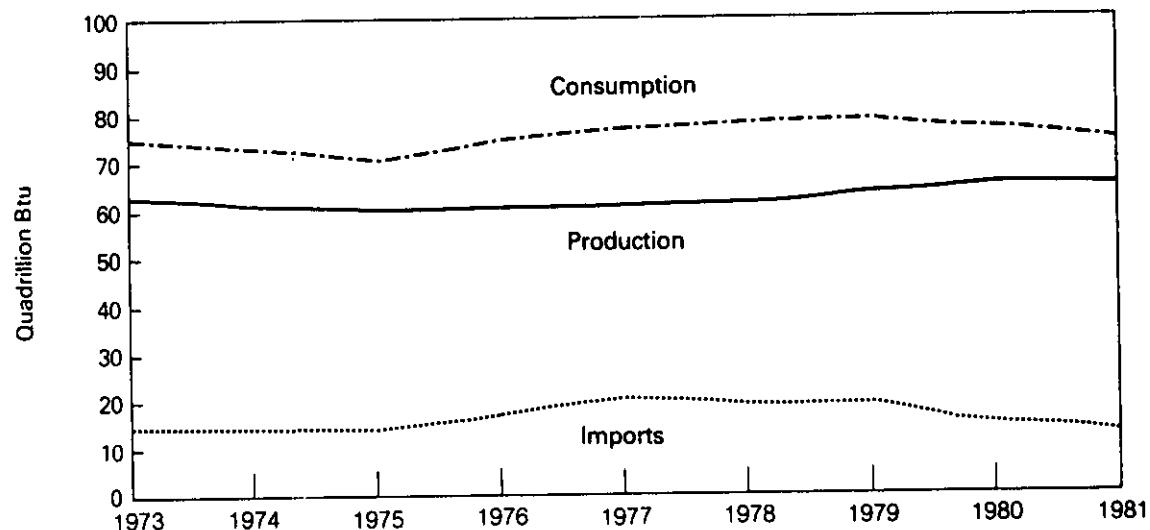
Note: The sum of domestic energy production and net imports of energy does not equal domestic energy consumption. The difference is attributed to stock changes; losses and gains in conversion, transportation and distribution; the addition of blending compounds; shipments of anthracite to U.S. Armed Forces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

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

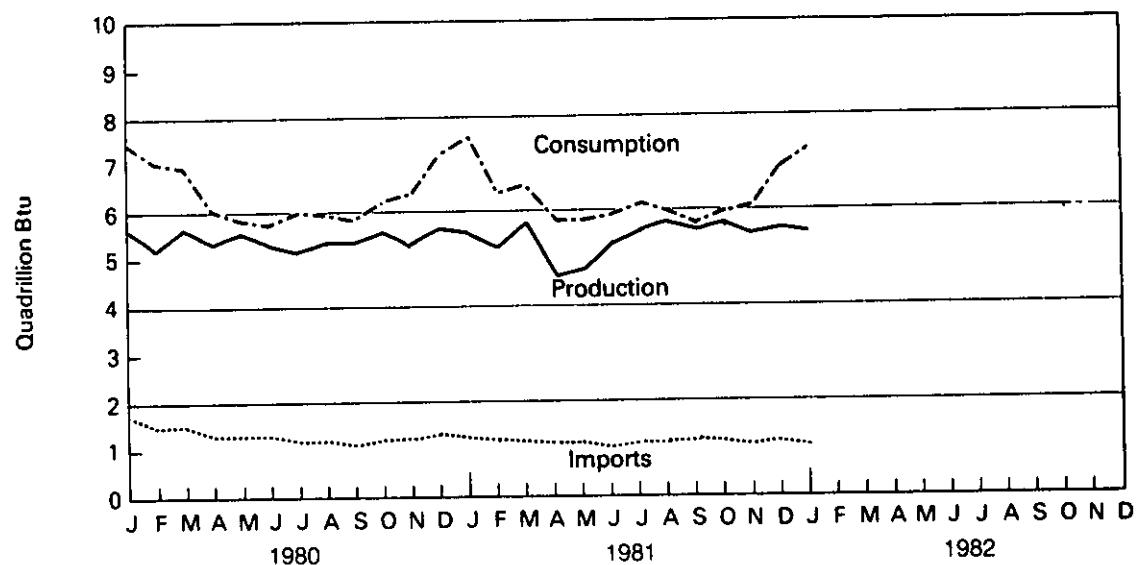
# Executive Summary

## Energy Summary

Yearly



Monthly



# Executive Summary

## Production of Energy by Type

		Coal <sup>a</sup>	Crude Oil <sup>b</sup>	NGPL <sup>c</sup>	Natural Gas (Dry)	Hydro-electric Power <sup>d</sup>	Nuclear Electric Power	Other <sup>e</sup>	Total Energy Produced	Yearly Cumulative Energy Produced
Quadrillion (10 <sup>12</sup> ) Btu										
1973	TOTAL	14.386	18.493	2.569	22.187	2.861	0.910	0.046	62.433	
1974	TOTAL	14.468	18.575	2.471	21.210	3.177	1.272	0.056	61.229	
1975	TOTAL	15.189	17.729	2.374	19.640	3.155	1.900	0.072	60.059	
1976	TOTAL	15.853	17.262	2.327	19.480	2.976	2.111	0.081	60.091	
1977	TOTAL	15.829	17.454	2.327	19.585	2.333	2.702	0.082	60.293	
1978	TOTAL	15.037	18.434	2.245	19.485	2.937	3.024	0.068	61.231	
1979	TOTAL	17.651	18.104	2.286	20.076	2.931	2.715	0.089	63.851	
1980	January	1.611	1.560	0.200	1.814	0.265	0.210	0.008	5.668	5.668
	February	1.517	1.464	0.188	1.702	0.224	0.205	0.008	5.308	10.976
	March	1.643	1.564	0.190	1.823	0.255	0.213	0.008	5.696	16.672
	April	1.613	1.511	0.191	1.664	0.270	0.200	0.008	5.458	22.130
	May	1.645	1.553	0.196	1.690	0.302	0.196	0.010	5.591	27.720
	June	1.652	1.488	0.183	1.581	0.290	0.195	0.009	5.398	33.119
	July	1.419	1.537	0.185	1.612	0.256	0.224	0.010	5.242	38.361
	August	1.584	1.513	0.184	1.571	0.214	0.259	0.011	5.335	43.696
	September	1.593	1.500	0.178	1.576	0.194	0.251	0.010	5.301	48.997
	October	1.674	1.534	0.184	1.641	0.187	0.261	0.011	5.491	54.489
	November	1.589	1.478	0.184	1.646	0.201	0.223	0.011	5.333	59.822
	December	1.670	1.547	0.189	1.792	0.233	0.235	0.011	5.678	65.499
	TOTAL	19.209	18.249	2.254	20.112	2.890	2.672	0.114	65.499	
1981	January	1.519	1.534	0.194	1.748	0.234	R0.253	0.011	R5.493	R5.493
	February	1.632	1.396	0.177	R1.569	0.221	0.230	0.010	R5.235	R10.728
	March	1.803	1.546	0.192	R1.730	0.216	0.234	0.011	R5.732	R16.461
	April	0.864	1.486	0.182	R1.673	0.218	0.220	0.010	R4.654	R21.115
	May	0.869	1.528	0.189	R1.697	0.253	0.210	0.010	R4.754	R25.869
	June	1.444	1.499	0.185	R1.634	0.276	0.225	0.010	R5.275	R31.144
	July	1.711	1.514	0.188	R1.664	0.263	0.246	0.011	R5.597	R36.741
	August	1.823	1.542	0.192	R1.703	0.226	0.287	0.011	R5.784	R42.525
	September	1.858	1.496	0.191	R1.575	0.187	0.260	0.011	R5.577	R48.102
	October	1.929	1.537	0.194	R1.640	R0.189	0.219	0.011	R5.718	R53.821
	November	1.683	1.496	0.190	R1.580	0.199	0.242	0.010	R5.399	R59.219
	December	1.587	1.551	0.195	R1.713	0.250	0.277	0.010	R5.561	R64.780
	TOTAL	18.700	18.125	2.268	R19.927	R2.732	R2.901	0.127	R64.780	
1982	January	1.468	1.559	0.188	1.734	0.282	0.273	0.009	5.512	5.512

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

<sup>a</sup>Includes bituminous coal, lignite, and anthracite.

<sup>b</sup>Includes lease condensate.

<sup>c</sup>Natural gas plant liquids.

<sup>d</sup>Includes industrial and utility production of hydropower.

<sup>e</sup>Includes geothermal power and electricity produced from wood and waste.

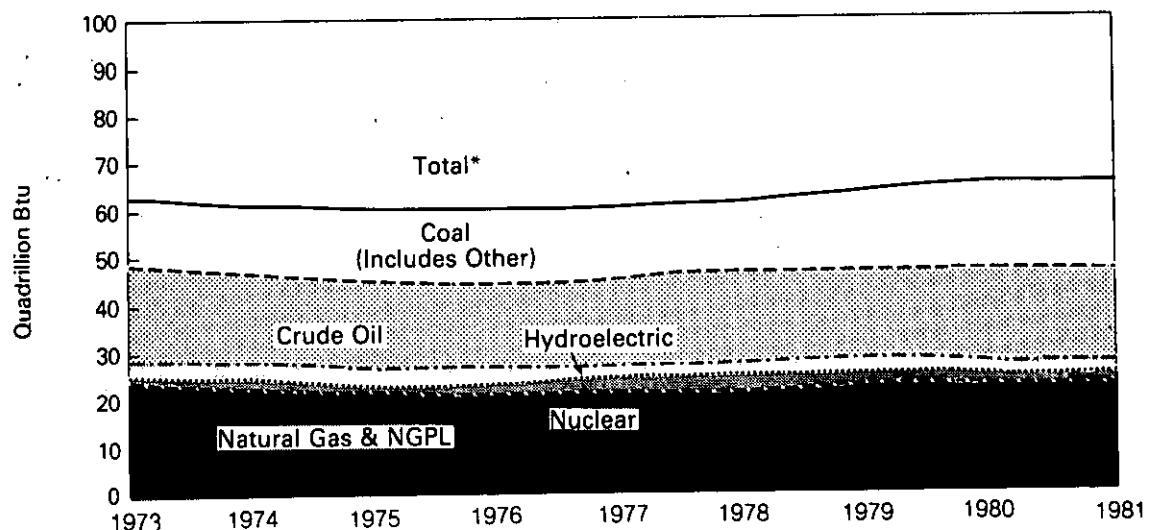
R = Revised data.

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

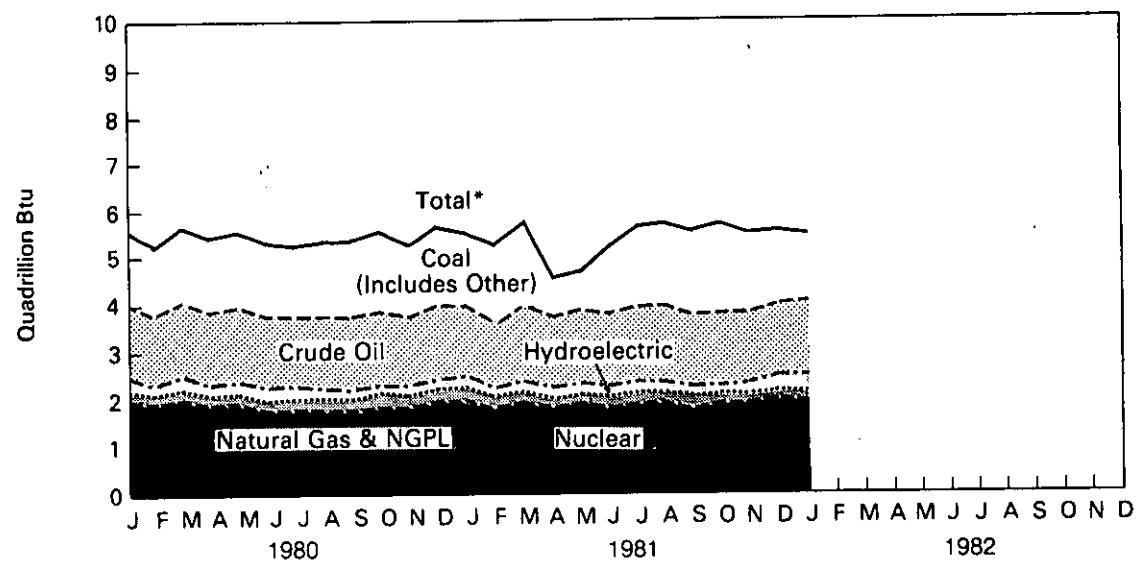
# Executive Summary

## Production of Energy by Type

Yearly



Monthly



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

# Executive Summary

## Consumption of Energy by Type

		Coal <sup>a</sup>	Natural Gas (Dry)	Petro-leum	Hydro-electric Power <sup>b</sup>	Nuclear Electric Power	Net Imports of Coal Coke <sup>c</sup>	Other <sup>d</sup>	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 <sup>12</sup> ) Btu										
1973	TOTAL	13.300	22.512	34.840	3.010	0.910	(0.008)	0.046	74.609	
1974	TOTAL	12.876	21.732	33.455	3.309	1.272	0.059	0.056	72.759	
1975	TOTAL	12.823	19.948	32.731	3.219	1.900	0.014	0.072	70.707	
1976	TOTAL	13.733	20.345	35.175	3.066	2.111	0.000	0.081	74.510	
1977	TOTAL	13.964	19.931	37.122	2.515	2.702	0.015	0.082	76.332	
1978	TOTAL	13.846	20.000	37.965	3.141	3.024	0.131	0.068	78.175	
1979	TOTAL	15.109	20.686	37.123	3.141	2.715	0.066	0.089	78.910	
1980	January	1.398	2.322	3.202	0.283	0.210	0.003	0.008	7.426	7.426
	February	1.313	2.232	2.990	0.241	0.205	(0.001)	0.008	6.988	14.413
	March	1.295	2.140	2.951	0.273	0.213	(0.003)	0.008	6.878	21.291
	April	1.158	1.580	2.759	0.287	0.200	(0.005)	0.008	5.988	27.279
	May	1.162	1.374	2.758	0.321	0.196	(0.006)	0.010	5.815	33.093
	June	1.234	1.267	2.661	0.307	0.195	(0.004)	0.009	5.670	38.763
	July	1.389	1.317	2.719	0.275	0.224	(0.004)	0.010	5.929	44.692
	August	1.381	1.263	2.676	0.232	0.259	(0.003)	0.011	5.818	50.510
	September	1.261	1.316	2.728	0.211	0.251	(0.004)	0.010	5.773	56.283
	October	1.227	1.564	2.887	0.205	0.261	(0.006)	0.011	6.148	62.431
	November	1.250	1.815	2.745	0.219	0.223	(0.002)	0.011	6.261	68.692
	December	1.394	2.204	3.127	0.252	0.235	(0.001)	0.011	7.221	75.913
	TOTAL	15.461	20.394	34.202	3.107	2.672	(0.037)	0.114	75.913	
1981	January	R1.485	2.284	3.106	0.255	R0.253	0.000	0.011	R7.393	R7.393
	February	1.310	R1.929	2.597	R0.239	0.230	(0.001)	0.010	R6.314	R13.707
	March	1.321	R1.932	2.690	0.236	0.234	(0.003)	0.011	R6.422	R20.129
	April	1.196	R1.525	2.512	0.237	0.220	(0.001)	0.010	R5.698	R25.827
	May	1.202	R1.458	2.581	0.273	0.210	0.000	0.010	R5.734	R31.561
	June	R1.307	R1.335	2.629	0.296	0.225	(0.004)	0.010	R5.798	R37.359
	July	1.476	R1.386	2.669	0.283	0.246	0.000	0.011	R6.071	R43.431
	August	R1.442	R1.307	2.588	R0.246	0.287	0.000	0.011	R5.881	R49.312
	September	1.306	R1.292	2.567	R0.206	0.260	(0.002)	0.011	R5.640	R54.952
	October	1.285	R1.553	2.690	0.210	0.219	(0.003)	0.011	R5.966	R60.918
	November	1.280	R1.640	2.549	R0.218	0.242	0.000	0.010	R5.939	R66.857
	December	1.413	R2.124	2.820	0.270	0.277	(0.003)	0.010	R6.910	R73.767
	TOTAL	R16.024	R19.764	31.998	R2.970	R2.901	(0.017)	0.127	R73.767	
1982	January	1.509	2.421	2.699	0.302	0.273	(0.003)	0.009	7.209	7.209

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

<sup>a</sup>Includes bituminous coal, lignite, and anthracite.

<sup>b</sup>Includes industrial and utility production, and net imports of electricity.

<sup>c</sup>Parentheses indicate exports are greater than imports.

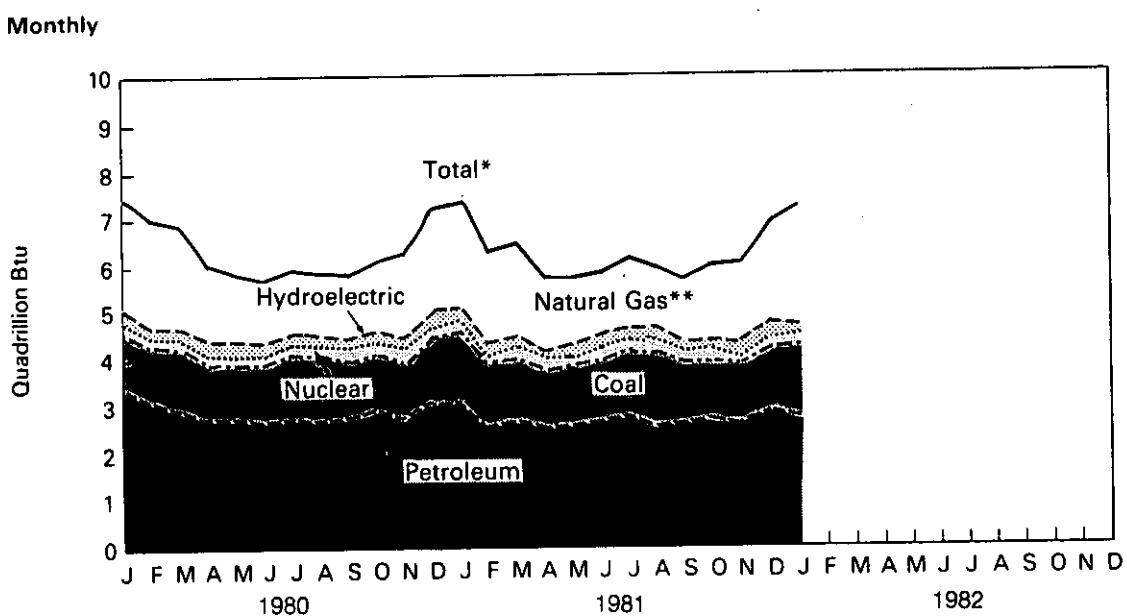
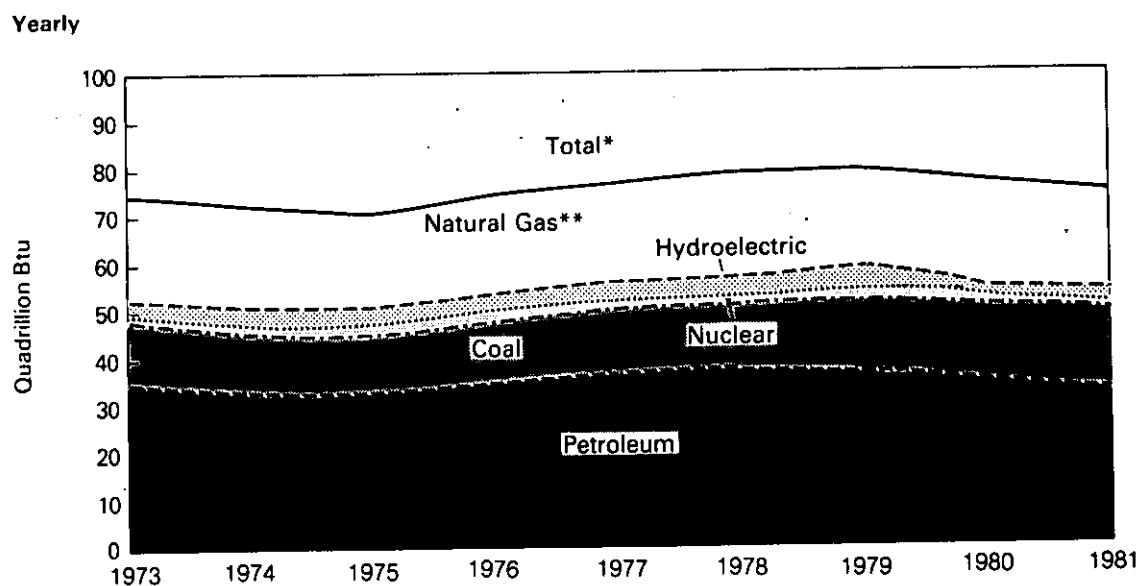
<sup>d</sup>Includes geothermal power and electricity produced from wood and waste.

R=Revised data.

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

## **Executive Summary**

### **Consumption of Energy by Type**



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

**\*\*Includes net imports of coal coke and other.**

# Executive Summary

## Net Imports of Energy by Type<sup>1</sup>

		Coal <sup>2</sup>	Crude Oil <sup>3</sup>	Refined Petroleum Products <sup>4</sup>	Natural Gas (Dry)	Electricity	Coal Coke	Net Imports	Yearly Cumulative Net Imports of Energy
Quadrillion (10 <sup>12</sup> ) Btu									
1973	TOTAL	(1.443)	6.883	6.097	0.981	0.148	(0.008)	12.659	
1974	TOTAL	(1.585)	7.389	5.273	0.907	0.133	0.059	12.175	
1975	TOTAL	(1.766)	8.708	3.800	0.904	0.064	0.014	11.725	
1976	TOTAL	(1.590)	11.221	3.982	0.922	0.089	0.000	14.625	
1977	TOTAL	(1.424)	13.921	4.321	0.981	0.182	0.015	17.995	
1978	TOTAL	(1.024)	13.125	3.932	0.941	0.204	0.131	17.309	
1979	TOTAL	(1.730)	13.328	3.603	1.243	0.211	0.066	16.720	
1980	January	(0.114)	1.096	0.349	0.115	0.018	0.003	1.468	1.468
	February	(0.101)	0.958	0.284	0.105	0.017	(0.001)	1.262	2.731
	March	(0.145)	0.967	0.269	0.106	0.018	(0.003)	1.212	3.943
	April	(0.196)	0.943	0.218	0.076	0.018	(0.005)	1.053	4.995
	May	(0.220)	0.861	0.214	0.069	0.018	(0.006)	0.937	5.933
	June	(0.230)	0.892	0.193	0.059	0.018	(0.004)	0.928	6.861
	July	(0.215)	0.830	0.199	0.059	0.018	(0.004)	0.887	7.748
	August	(0.238)	0.851	0.204	0.058	0.018	(0.003)	0.890	8.638
	September	(0.219)	0.765	0.223	0.056	0.018	(0.004)	0.839	9.477
	October	(0.244)	0.803	0.235	0.072	0.018	(0.006)	0.878	10.355
	November	(0.235)	0.766	0.252	0.087	0.018	(0.002)	0.885	11.240
	December	(0.214)	0.854	0.272	0.095	0.018	(0.001)	1.025	12.265
	TOTAL	(2.371)	10.586	2.912	0.957	0.217	(0.037)	12.265	
1981	January	(0.151)	0.826	0.297	0.083	0.020	0.000	1.075	1.075
	February	(0.175)	0.761	0.246	0.078	0.018	(0.001)	0.927	2.002
	March	(0.252)	0.777	0.200	0.071	0.020	(0.003)	0.813	2.815
	April	(0.215)	0.743	0.161	0.066	0.020	(0.001)	0.773	3.589
	May	(0.157)	0.713	0.205	0.057	0.020	0.000	0.838	4.427
	June	(0.158)	0.691	0.179	0.059	0.020	(0.004)	0.786	5.213
	July	(0.281)	0.735	0.206	0.062	0.020	0.000	0.742	5.955
	August	(0.292)	0.714	0.200	0.059	0.020	0.000	0.702	6.657
	September	(0.310)	0.788	0.221	0.064	0.020	(0.002)	0.782	7.439
	October	(0.321)	0.749	0.185	0.075	0.020	(0.003)	0.705	8.143
	November	(0.308)	0.648	0.205	0.080	0.020	0.000	0.644	8.787
	December	(0.299)	0.721	0.220	0.091	0.020	(0.003)	0.749	9.536
	TOTAL	(2.918)	8.864	2.524	0.846	0.238	(0.017)	9.536	
1982	January	(0.160)	0.614	0.175	0.094	0.020	(0.003)	0.741	0.741

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

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

<sup>1</sup>Net imports = imports minus exports. Parentheses indicate exports are greater than imports.

<sup>2</sup>Includes bituminous coal, lignite, and anthracite.

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

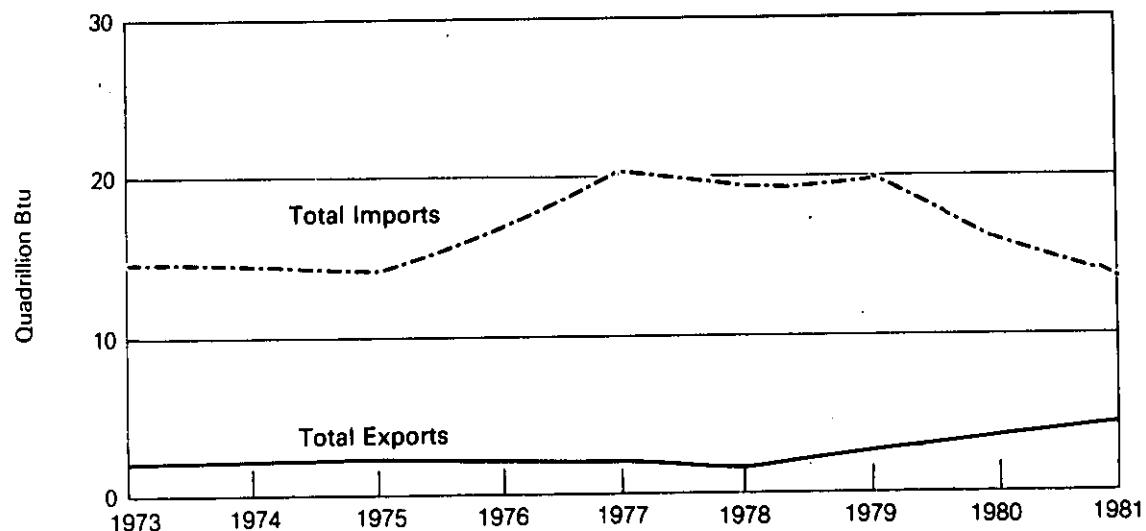
<sup>4</sup>Includes refined petroleum products, unfinished oils, natural gasoline, and plant condensate.

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

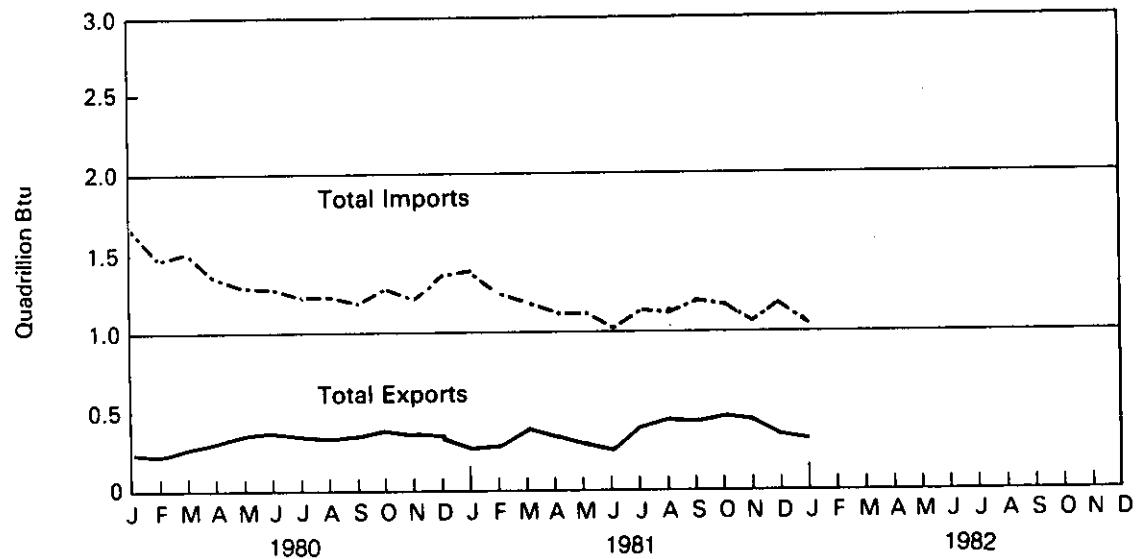
## Executive Summary

### Energy Imports and Exports

Yearly



Monthly



# Executive Summary

## Merchandise Trade Value

		Exports			Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total
		Million dollars								
1973	TOTAL	1,671	69,202	70,873	8,173	61,659	69,832	-6,502	+7,543	+1,041
1974	TOTAL	3,444	94,553	97,997	25,454	75,194	100,648	-22,010	+19,360	-2,650
1975	TOTAL	4,470	103,119	107,589	26,476	70,094	96,570	-22,006	+33,025	+11,019
1976	TOTAL	4,226	110,924	115,150	33,996	87,013	121,009	-29,770	+23,911	-5,859
1977	TOTAL	4,184	116,966	121,150	44,537	103,148	147,685	-40,353	+13,818	-26,535
1978	TOTAL	3,881	139,698	143,577	42,096	129,882	171,978	-38,215	+9,814	-28,401
1979	TOTAL	5,621	176,030	181,651	59,998	146,258	206,256	-54,377	+29,772	-24,605
1980	January	619	16,801	17,419	7,118	14,024	21,142	-6,499	+2,776	-3,723
	February	584	16,400	16,984	8,152	13,626	21,779	-7,568	+2,774	-4,794
	March	636	17,629	18,265	7,564	13,384	20,947	-6,928	+4,246	-2,682
	April	607	17,960	18,567	6,797	12,969	19,766	-6,190	+4,992	-1,198
	May	660	16,987	17,647	7,150	13,437	20,587	-6,490	+3,549	-2,941
	June	656	17,784	18,440	7,276	13,077	20,353	-6,620	+4,708	-1,912
	July	695	17,572	18,267	5,986	13,153	19,139	-5,291	+4,419	-872
	August	702	18,385	19,087	6,461	13,252	19,713	-5,759	+5,133	-626
	September	710	18,119	18,828	6,278	13,662	19,941	-5,568	+4,456	-1,112
	October	662	18,552	19,214	6,601	13,747	20,347	-5,939	+4,805	-1,134
	November	709	18,006	18,715	6,128	13,732	19,860	-5,419	+4,274	-1,145
	December	706	18,545	19,251	7,413	14,023	21,436	-6,707	+4,522	-2,185
	TOTAL	7,982	212,644	220,626	82,924	161,947	244,871	-74,942	+50,698	-24,244
1981	January	756	18,146	18,902	8,007	14,609	22,616	-7,251	+3,537	-3,714
	February	999	18,789	19,788	7,939	13,977	21,916	-6,940	+4,813	-2,127
	March	939	20,339	21,278	6,471	14,558	21,029	-5,532	+5,781	+249
	April	738	19,048	19,786	7,831	14,418	22,249	-7,093	+4,630	-2,463
	May	593	18,306	18,899	6,075	15,157	21,232	-5,482	+3,149	-2,333
	June	565	19,185	19,750	7,252	14,753	22,005	-6,687	+4,432	-2,255
	July	847	18,442	19,289	5,687	14,427	20,114	-4,840	+4,015	-825
	August	884	18,147	19,031	6,876	16,366	23,242	-5,992	+1,780	-4,212
	September	939	18,612	19,551	6,555	14,719	21,274	-5,616	+3,892	-1,724
	October	991	18,172	19,163	6,638	16,439	23,077	-5,647	+1,733	-3,914
	November	997	18,156	19,153	6,608	15,900	22,508	-5,611	+2,255	-3,356
	December	1,067	17,818	18,885	5,422	14,324	19,746	-4,355	+3,494	-861
	TOTAL	10,315	223,160	233,475	81,361	179,647	261,008	-71,046	+43,511	-27,535
1982	January	1,269	17,468	18,737	7,439	15,390	22,829	-6,170	+2,078	-4,092
	February	1,493	17,211	18,704	5,107	13,983	19,090	-3,614	+3,227	-387

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

Note: The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory which includes the 50 United States, the District of Columbia, and Puerto Rico. See Note at the end of this section.

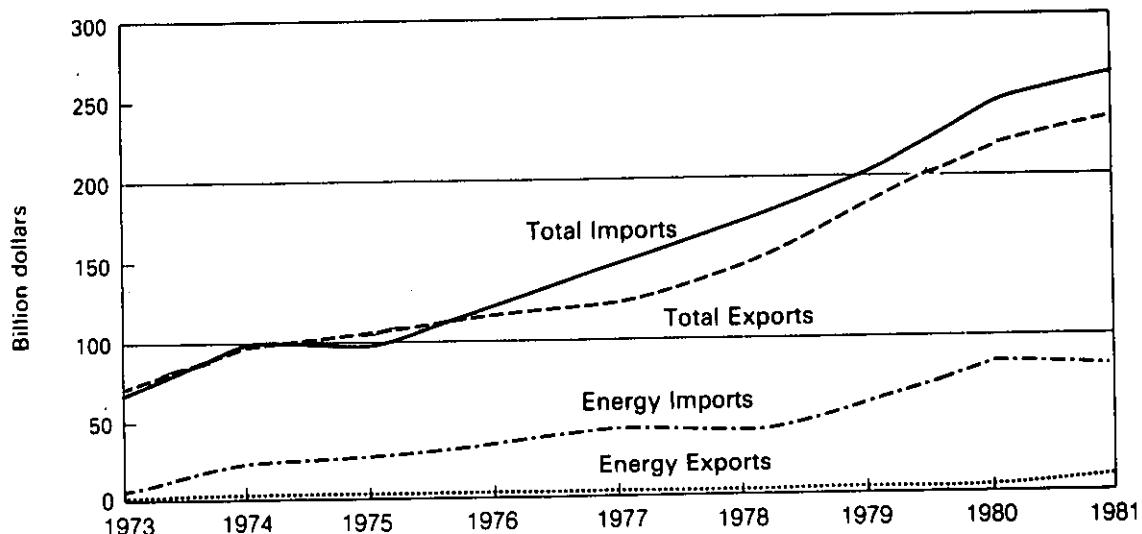
Sources: • 1973 through 1978: U.S. Department of Commerce, International Trade Administration, *Overseas Business Reports*, "United States Foreign Trade Annual", 1973-1979;

• 1979 forward: U.S. Department of Commerce, Bureau of the Census, "Summary of U.S. Export and Import Merchandise Trade," December 1980 issue for 1979 data and most recent monthly issue for 1980 and forward.

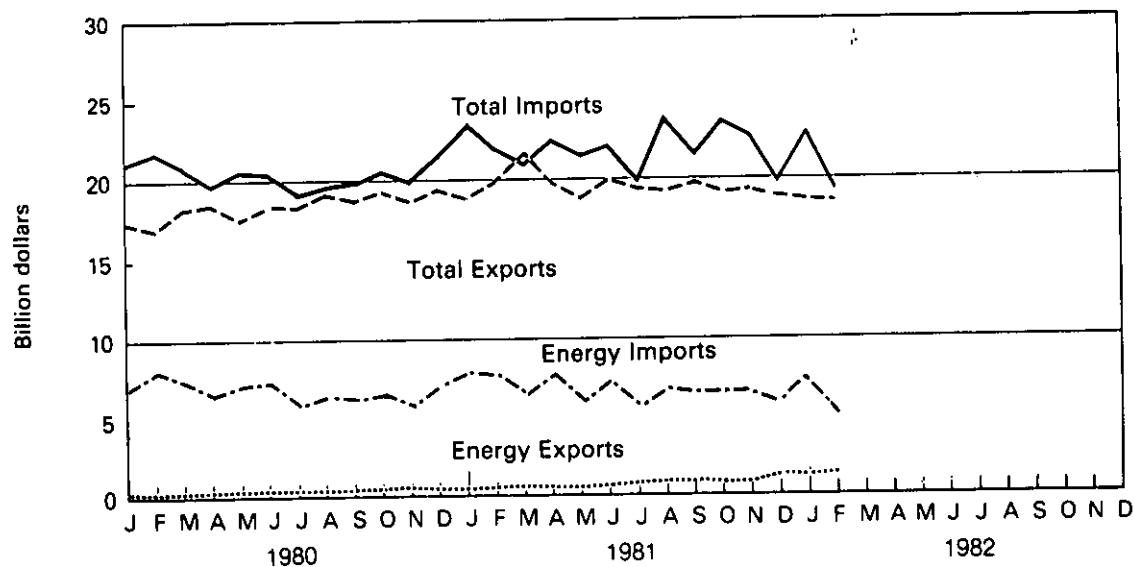
## Executive Summary

### Merchandise Trade Value

Yearly



Monthly



## Executive Summary

### Heating Degree-Days<sup>1</sup>

Petroleum Administration For Defense (PAD) Districts	March 1 through March 28					Cumulative July 1 through March 28			
	1982	1981 <sup>2</sup>	Normal (1941-70) <sup>3</sup>		1981-82	1980-81 <sup>2</sup>	Normal (1941-70) <sup>3</sup>		
PAD District I New England Conn., Maine, Mass., N.H., R.I., Vt.	581	651	(- 10.8)	616	(- 5.7)	4,236	4,311	(- 1.8)	4,013 (5.5)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	722	775	(- 6.8)	737	(- 2.0)	5,028	5,048	(- 0.4)	4,720 (6.5)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W. Va.	270	392	(- 31.1)	342	(- 21.2)	2,470	2,642	(- 6.5)	2,397 (3.0)
PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.	771	739	(4.3)	788	(- 2.2)	5,676	5,287	(7.4)	5,302 (7.0)
PAD District III Ala., Ark., La., Miss., N. Mex., Tex.	201	269	(- 25.1)	288	(- 30.0)	2,081	2,235	(- 6.9)	2,160 (- 3.7)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	692	645	(7.3)	797	(- 13.2)	5,067	4,621	(9.6)	5,409 (- 6.3)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	309	278	(11.4)	343	(- 9.9)	2,051	1,803	(13.8)	2,350 (- 12.7)
<b>U.S. AVERAGE<sup>3</sup></b>	<b>582</b>	<b>582</b>	<b>(- 3.4)</b>	<b>599</b>	<b>(- 8.2)</b>	<b>4,162</b>	<b>4,037</b>	<b>(3.1)</b>	<b>4,014 (3.7)</b>

<sup>1</sup> See Explanatory Note 6 for explanation of degree-days.

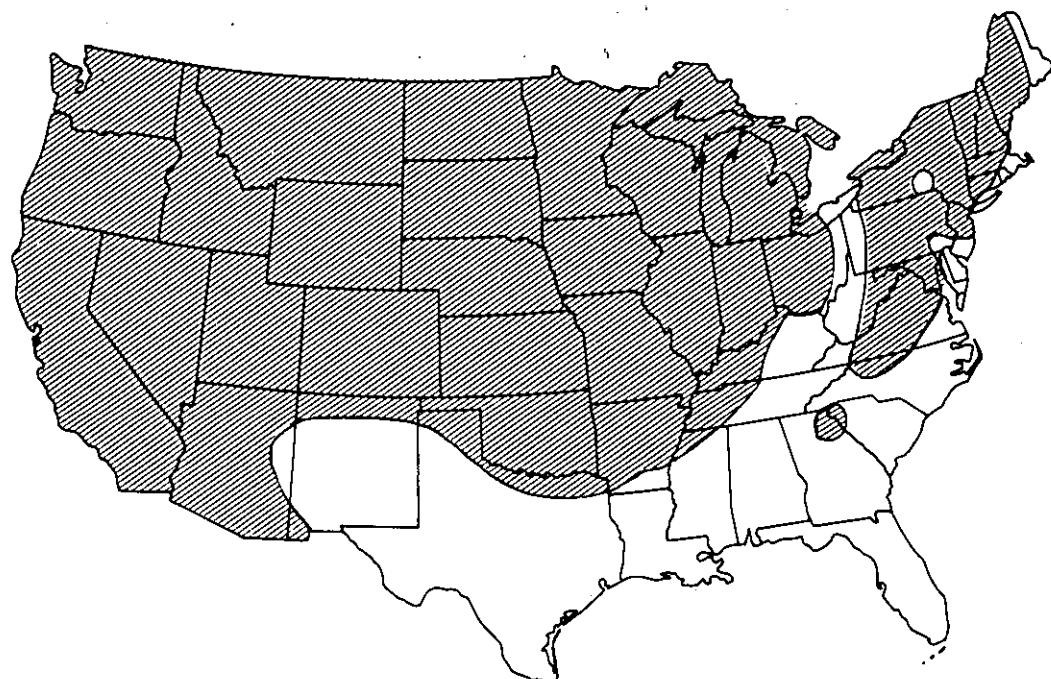
<sup>2</sup> Percentage change in parentheses.

<sup>3</sup> Excludes Alaska and Hawaii.

## **Executive Summary**

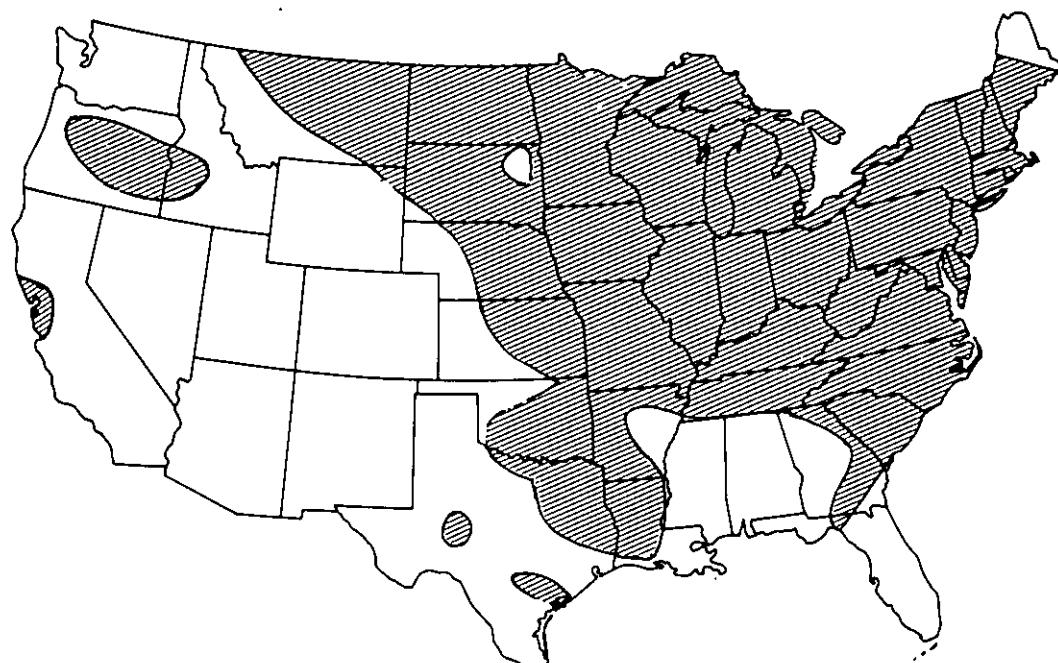
**Heating Degree-Days Accumulated from July 1, 1981, through March 28, 1982**

### **Departure from Previous Heating Season**



Colder Than Previous Heating Season

### **Departure from Normal**



Colder Than Normal

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

# Executive Summary

## Energy Indicators—

Energy Consumption per GNP Dollar						U.S. Dependence on Petroleum Imports <sup>1</sup>			
	Energy Consumption per GNP Dollar <sup>2</sup>	Yearly Rate of Energy Consumption	Gross National Product (Annual rate)		Direct Imports			Domestic Petroleum Products Supplied	
			Current Dollars	1972 Dollars <sup>3</sup>	From Arab/OPEC Countries	From OPEC Countries	Total All Countries		
<b>ANNUAL RATE</b>			Quadrillion Btu	Trillion Dollars	Million barrels per day				
1973	AVERAGE	59.4	74.609	1.326	1.255	0.92	2.99	6.26	17.31
1974	AVERAGE	58.3	72.759	1.434	1.248	0.75	3.28	6.11	16.65
1975	AVERAGE	57.3	70.707	1.549	1.234	1.38	3.60	6.06	16.32
1976	AVERAGE	57.3	74.510	1.718	1.300	2.42	5.07	7.31	17.46
1977	AVERAGE	55.6	76.332	1.918	1.372	3.19	6.19	8.81	18.43
1978	AVERAGE	54.4	78.175	2.156	1.437	2.96	5.75	8.36	18.85
1979	AVERAGE	53.2	78.910	2.414	1.483	3.06	5.64	8.46	18.51
1980	1st Qtr	57.0	85.632	2.572	1.502	2.99	5.05	8.00	18.34
	2nd Qtr	48.0	70.272	2.565	1.463	2.59	4.29	6.86	16.40
	3rd Qtr	47.3	69.699	2.637	1.472	2.28	3.80	6.23	16.11
	4th Qtr	52.6	78.093	2.731	1.486	2.35	4.06	6.56	17.38
	AVERAGE	51.3	75.913	2.626	1.481	2.55	4.30	6.91	17.06
1981	1st Qtr	53.8	81.582	2.853	1.516	2.06	3.81	6.53	17.02
	2nd Qtr	45.8	69.085	2.886	1.510	1.82	3.14	5.63	15.49
	3rd Qtr	46.2	69.985	2.965	1.516	1.85	3.18	5.95	15.52
	4th Qtr	50.1	75.123	2.995	1.498	1.67	3.15	5.82	15.99
	AVERAGE	49.0	73.915	2.925	1.510	1.85	3.32	5.98	16.00

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

<sup>1</sup>Beginning in October 1977 Strategic Petroleum Reserve imports are included.

<sup>2</sup>Thousand Btu per 1972 constant dollar.

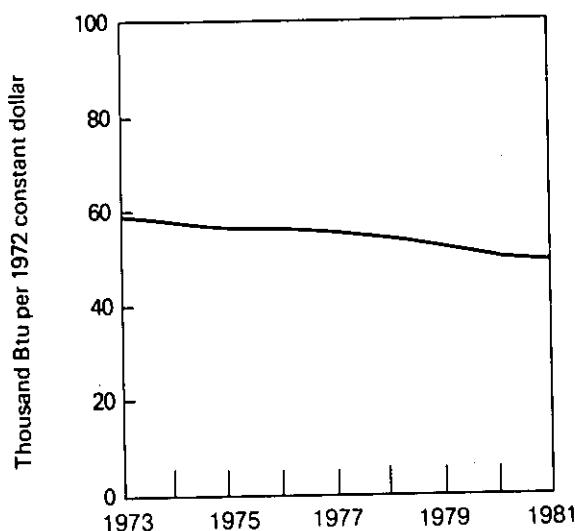
<sup>3</sup>Current dollars are converted to 1972 constant dollars by the Department of Commerce, Bureau of Economic Analysis. Gross National Product rates are from the *Business Conditions Digest* published by the Bureau of Economic Analysis.

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.

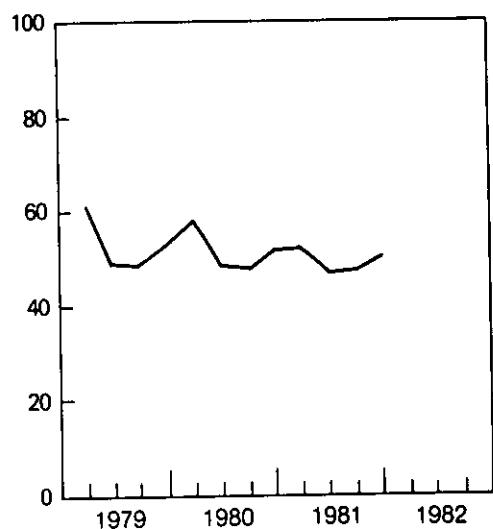
## Executive Summary

### Energy Consumption per GNP Dollar

Yearly

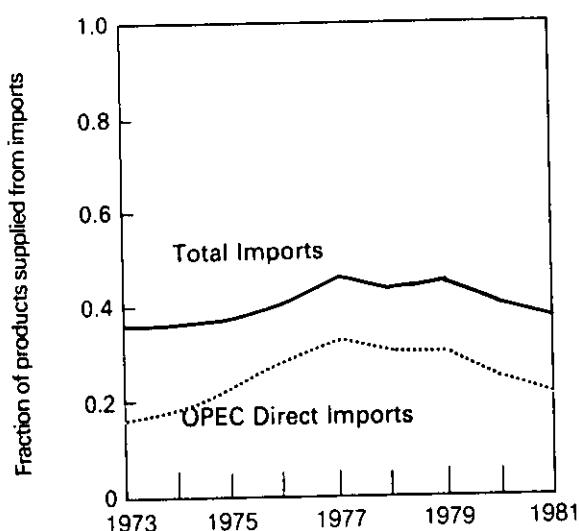


Quarterly

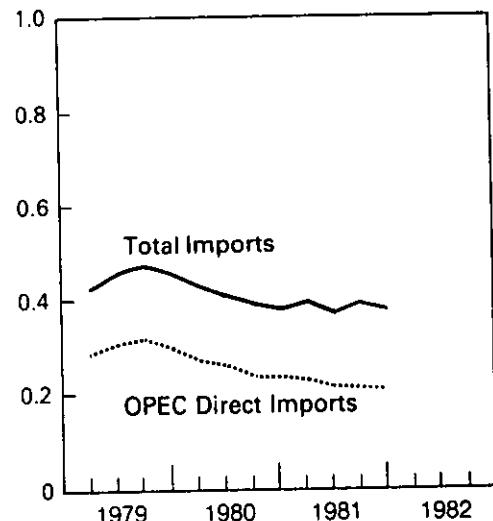


### U.S. Dependence on Petroleum Imports

Yearly



Quarterly

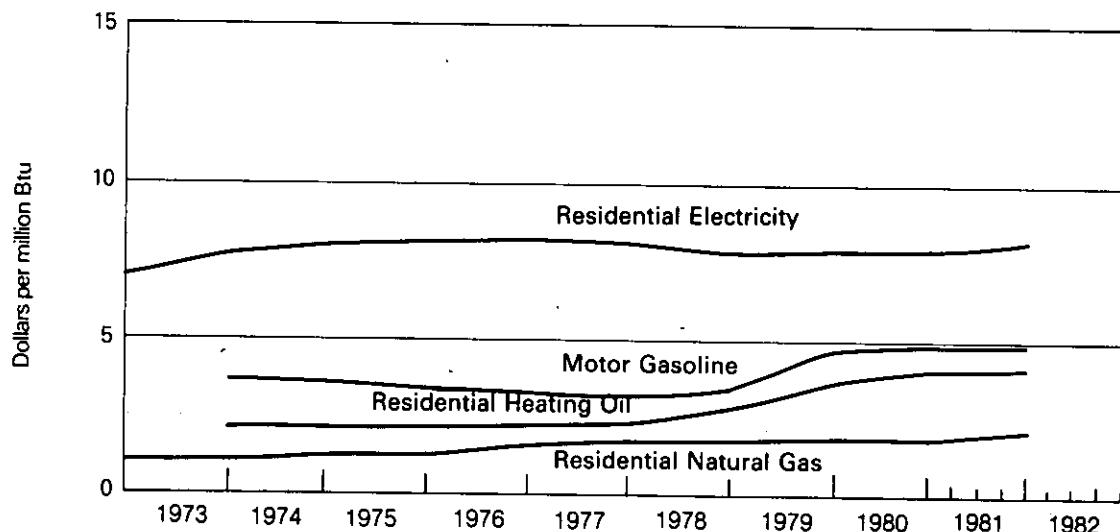


## Executive Summary

### 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	29.8	2.15	145.4	1.43	2.74	8.03
1977	AVERAGE	42.9	3.43	31.8	2.29	162.2	1.59	2.80	8.21
1978	AVERAGE	40.1	3.21	31.7	2.29	164.4	1.62	2.76	8.09
1979	AVERAGE	49.4	3.95	37.8	2.73	171.5	1.68	2.67	7.83
1980	1st Qtr	60.9	4.87	49.8	3.59	190.9	1.86	2.53	7.42
	2nd Qtr	62.1	4.97	49.8	3.59	197.2	1.93	2.75	8.06
	3rd Qtr	60.6	4.85	49.2	3.55	207.6	2.03	2.86	8.38
	4th Qtr	58.2	4.65	50.7	3.66	198.9	1.94	2.73	8.00
	AVERAGE	60.5	4.84	49.7	3.58	186.9	1.83	2.72	7.97
1981	1st Qtr	62.1	4.97	57.0	4.11	196.0	1.91	2.65	7.77
	2nd Qtr	62.1	4.97	57.2	4.12	207.5	2.03	2.91	8.53
	3rd Qtr	59.3	4.74	54.4	3.92	213.3	2.08	2.99	8.76
	4th Qtr	57.9	4.63	54.0	3.89	213.1	2.08	2.87	8.41
	AVERAGE	60.4	4.83	55.7	4.01	207.6	2.03	2.85	8.35

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"; 1976 forward: FEA Form P112-M-1 and EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report."

• Natural Gas—1973 through 1980 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 and 1981 quarterly numbers and 1981 annual numbers: Bureau of Labor Statistics.

• Electricity—1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: FERC Form 5, "Electric Utility Company Monthly Statement."

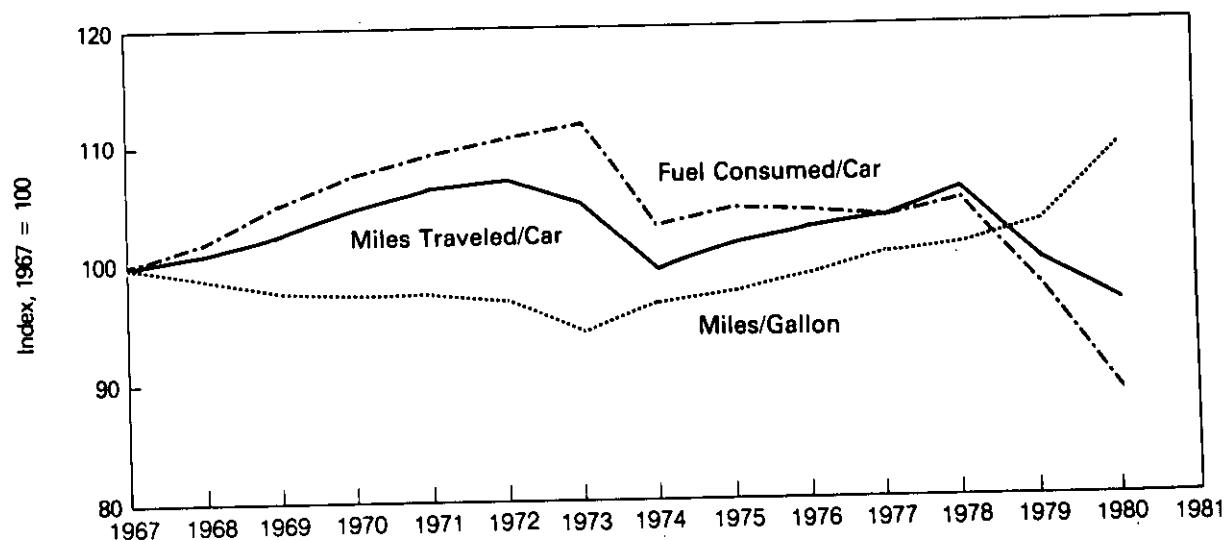
• Deflator—The Consumer Price Index.

## 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	684	97.1	9,485	99.5	14.29	102.6
1980	603	88.2	9,135	95.8	15.15	108.8

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.

## Note for the Executive Summary Section

**•Merchandise Trade Value Table:** The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory which includes the 50 United States, the District of Columbia, and Puerto Rico. The statistics exclude imports into Guam, American Samoa, and other U.S. possessions; as well as shipments between the United States and Puerto Rico, between the United States and U.S. possessions, and between any of these outlying areas. Also, U.S. Virgin Island trade with foreign countries is included in all import data and total export data beginning with January 1980 and is included in energy export data beginning with January 1981. Data presented are on a customs value basis (i.e. the value of imports as appraised by the U.S. Customs Service in accordance with the legal requirements of the Tariff Act of 1930) for 1973, 1981 and forward. Values for all other years are on a free alongside ship (f.a.s.) basis. Monthly data are adjusted for seasonal and working-day variation; annual data are unadjusted. Statistics include nonmonetary gold. Statistics exclude Department of Defense (DOD) Military Program Grant-Aid shipments. "All Other" and "Total" columns include foreign exports (i.e., reexports). The "Energy" columns include mineral fuels, lubricants, and related material. "Imports" represent general imports (i.e., entries for immediate consumption, entries into Customs bonded warehouses, and entries for the Strategic Petroleum Reserve). "Trade Balance" is exports minus imports; positive indicates surplus trade value and negative indicates deficit trade value. The "All Other" columns are calculated by subtracting "energy" from "total." Totals may not equal sum of components due to independent rounding.

# Part 2

# Consumption

## Energy Consumption

Total U.S. energy consumption in January 1982 dropped to 7.2 quadrillion Btu, 2.5 percent below January 1981 and a 4.3 percent increase from the December 1981 consumption level.

The Residential and Commercial Sector consumption was 3.2 quadrillion Btu in January 1982, 22.2 percent higher than December 1981 and 3.3 percent higher than the amount consumed during January 1981. The Residential and Commercial Sector accounted for 44.4 percent of the total consumption for January 1982, up from the sector's 42.0 percent share in January 1981.

The Industrial Sector consumption was 2.4 quadrillion Btu in January 1982, down 7.1 percent from December 1981 and down 4.8 percent from the consumption level in January 1981. The Industrial Sector consumed 33.3 percent of the January

1982 total, as compared to the 34.1 percent share in January 1981.

The Transportation Sector consumption was 1.6 quadrillion Btu in January 1982, down 6.2 percent from December 1981 and down 9.7 percent from the consumption level in January 1981. This sector consumed 22.2 percent of the January 1982 total, as compared to the 23.9 percent share in January 1981.

The Electric Utilities consumption was an estimated 2.2 quadrillion Btu of energy in January 1982, 5.2 percent higher than in the previous month, and 2.8 percent higher than the energy consumed in January 1981. Coal contributed 54.4 percent of the energy consumed by Electric Utilities in January 1982, while hydroelectric contributed 13.3 percent, nuclear power 12.2 percent, natural gas 11.0 percent, petroleum 8.8 percent, and geothermal, wood, and waste 0.4 percent.

## Consumption

### Energy Consumption Summary for January 1982 Quadrillion (10<sup>16</sup>) Btu

Primary Energy Source	Sector				TOTAL
	Residential and Commercial	Industrial	Transportation	Electric Utilities	
Coal	0.024	0.259	0.000	1.220	1.509
Natural Gas (dry)	1.358	0.738	0.077	0.246	2.421
Petroleum	0.318	0.666	1.517	0.198	2.699
Hydroelectric	0.000	0.003	0.000	0.299	0.302
Nuclear	0.000	0.000	0.000	0.273	0.273
Net Coke Imports	0.000	(0.003)	0.000	0.000	(0.003)
Other	0.000	0.000	0.000	0.009	0.009
<b>TOTAL PRIMARY ENERGY</b>	<b>1.700</b>	<b>1.663</b>	<b>1.594</b>	<b>2.243</b>	<b>7.209</b>
Electricity Sales	0.439	0.215	0.001	(0.655)	
Net Energy Consumption	2.139	1.878	1.595		5.621
Electrical Energy Losses	1.065	0.521	0.003	(1.588)	1.588
<b>TOTAL ENERGY CONSUMED</b>	<b>3.204</b>	<b>2.398</b>	<b>1.598</b>		<b>7.209</b>

Totals may not equal sum of components due to independent rounding and, in the case of coal, the use of preliminary conversion factors.  
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 End-Use Sector<sup>1</sup>

		Residential and Commercial	Industrial	Transportation	Total Energy Consumed
Quadrillion (10 <sup>12</sup> ) Btu					
1973	TOTAL	24.197	31.886	18.520	74.609
1974	TOTAL	23.774	30.943	18.035	72.759
1975	TOTAL	23.920	28.608	18.177	70.707
1976	TOTAL	25.004	30.435	19.064	74.510
1977	TOTAL	25.405	31.186	19.736	76.332
1978	TOTAL	25.990	31.570	20.614	78.175
1979	TOTAL	26.073	32.399	20.434	78.910
1980	January	2.822	2.857	1.749	7.426
	February	2.752	2.562	1.676	6.988
	March	2.568	2.618	1.694	6.878
	April	2.028	2.337	1.631	5.988
	May	1.760	2.443	1.618	5.815
	June	1.761	2.349	1.559	5.670
	July	1.966	2.332	1.624	5.929
	August	1.947	2.278	1.586	5.818
	September	1.809	2.397	1.562	5.773
	October	1.813	2.673	1.663	6.148
	November	2.028	2.674	1.559	6.261
	December	2.618	2.841	1.761	7.221
	TOTAL	25.870	30.361	19.682	75.913
1981	January	R3.102	R2.520	1.769	R7.393
	February	2.645	R2.159	R1.509	R6.314
	March	2.389	R2.422	R1.611	R6.422
	April	R1.913	R2.248	1.538	R5.698
	May	R1.769	R2.401	1.563	R5.734
	June	R1.815	R2.372	1.605	R5.798
	July	1.964	R2.468	1.634	R6.071
	August	R1.907	R2.385	1.586	R5.881
	September	1.727	R2.362	1.551	R5.640
	October	1.817	R2.540	1.607	R5.966
	November	1.995	R2.404	R1.540	R5.939
	December	2.621	R2.580	R1.704	R6.910
	TOTAL	R25.665	R28.861	R19.215	R73.767
1982	January	3.204	2.398	1.598	7.209

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

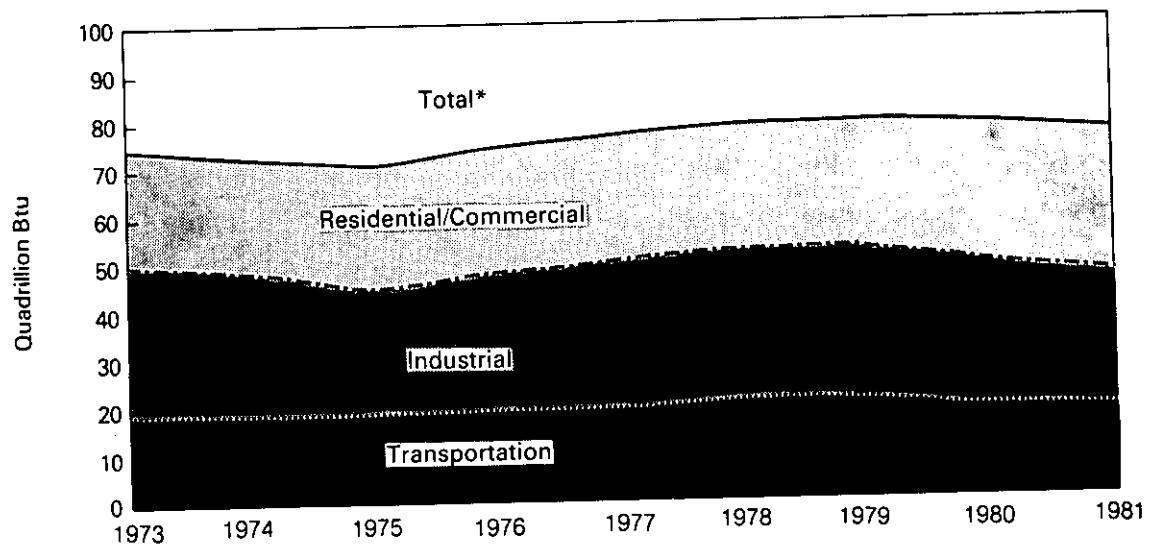
Totals may not equal sum of components due to independent rounding and the use of preliminary conversion factors after 1980.  
<sup>1</sup>See Explanatory Note 5 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculations is provided in the Notes and Sources at the end of this section.  
 R = Revised data.

Source: •See Notes and Sources at the end of this section.

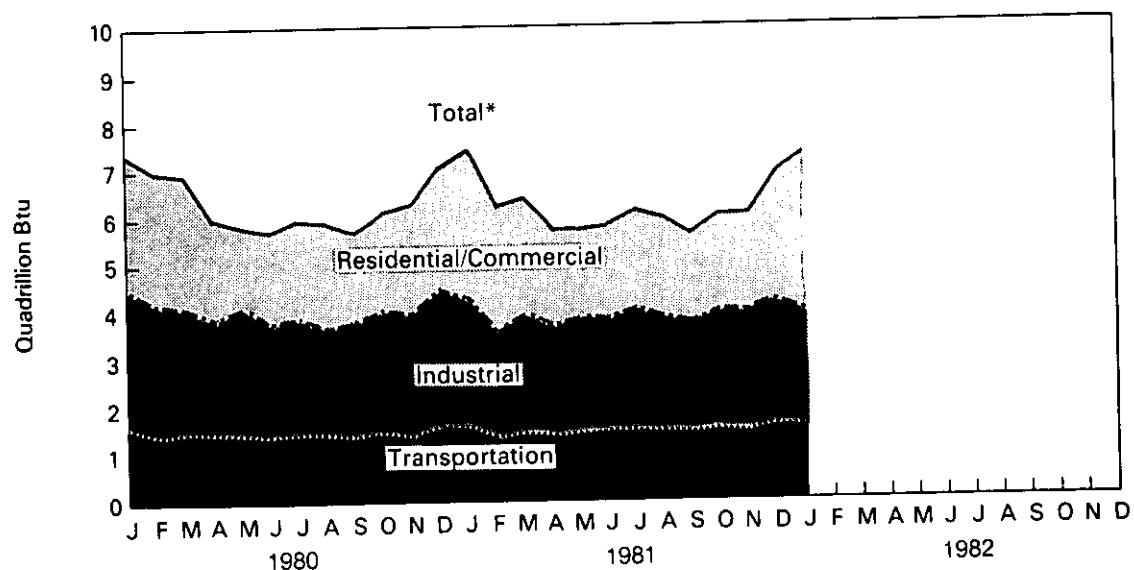
# Consumption

## Consumption of Energy by End-Use Sector

Yearly



Monthly



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

# Consumption

## Consumption of Energy by the Residential and Commercial Sector<sup>1</sup>

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses <sup>2</sup>	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 <sup>12</sup> ) Btu								
1973	TOTAL	0.291	7.626	4.321	3.495	8.464	24.197	
1974	TOTAL	0.292	7.518	3.932	3.475	8.558	23.774	
1975	TOTAL	0.238	7.581	3.760	3.604	8.736	23.920	
1976	TOTAL	0.227	7.866	4.160	3.747	9.005	25.004	
1977	TOTAL	0.225	7.461	4.148	3.955	9.615	25.405	
1978	TOTAL	0.239	7.624	4.062	4.116	9.950	25.990	
1979	TOTAL	0.210	7.891	3.687	4.184	10.101	26.073	
1980	January	0.021	1.114	0.358	0.381	0.947	2.822	2.822
	February	0.019	1.176	0.329	0.375	0.853	2.752	5.574
	March	0.013	1.040	0.300	0.358	0.857	2.568	8.142
	April	0.014	0.707	0.245	0.319	0.742	2.028	10.170
	May	0.009	0.443	0.238	0.298	0.772	1.760	11.929
	June	0.007	0.324	0.224	0.334	0.872	1.761	13.690
	July	0.008	0.255	0.225	0.410	1.068	1.966	15.656
	August	0.008	0.239	0.221	0.439	1.039	1.947	17.603
	September	0.011	0.248	0.246	0.410	0.895	1.809	19.412
	October	0.014	0.369	0.279	0.343	0.808	1.813	21.225
	November	0.015	0.634	0.271	0.322	0.785	2.028	23.252
	December	0.020	0.992	0.343	0.364	0.899	2.618	25.870
	TOTAL	0.160	7.540	3.280	4.355	10.536	25.870	
1981	January	0.021	1.292	0.373	R0.425	R0.991	R3.102	R3.102
	February	0.014	1.140	0.288	0.379	R0.824	2.645	R5.747
	March	0.012	0.929	0.270	0.344	R0.834	2.389	R8.136
	April	0.014	0.605	0.230	0.315	R0.750	R1.913	R10.050
	May	0.009	0.430	0.226	0.313	R0.791	R1.769	R11.818
	June	0.007	0.302	0.227	0.355	R0.923	R1.815	R13.634
	July	0.010	0.251	0.229	0.420	R1.055	1.964	R15.598
	August	0.010	0.243	0.222	0.421	R1.011	R1.907	R17.505
	September	0.013	0.253	0.233	0.383	0.845	1.727	R19.232
	October	0.014	0.399	0.264	0.339	R0.801	1.817	R21.049
	November	0.015	0.596	0.261	0.327	0.797	1.995	R23.044
	December	0.020	0.962	0.304	0.368	0.967	2.621	R25.665
	TOTAL	0.158	7.404	3.125	R4.388	R10.589	R25.665	
1982	January	0.024	1.358	0.318	0.439	1.065	3.204	3.204

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

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

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

<sup>2</sup>Incurred in the generation and transmission of electricity plus plant use and unaccounted for electrical energy losses that are attributed to each sector in proportion to the sector's share of total electricity sales in the United States.

R=Revised data.

Source: • See Notes and Sources at the end of this section.

# Consumption

## Consumption of Energy by the Industrial Sector<sup>1</sup>

		Coal	Natural Gas (Dry)	Petro-leum	Hydro-electric	Net Coke Imports <sup>2</sup>	Electricity Sales	Electrical Energy Losses <sup>3</sup>	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 <sup>12</sup> ) Btu										
1973	TOTAL	4.349	10.388	9.103	0.035	(0.008)	2.341	5.679	31.886	
1974	TOTAL	4.048	10.003	8.707	0.033	0.059	2.337	5.756	30.943	
1975	TOTAL	3.797	8.532	8.192	0.032	0.014	2.346	5.694	28.608	
1976	TOTAL	3.786	8.761	9.092	0.033	0.000	2.573	6.189	30.435	
1977	TOTAL	3.498	8.636	9.789	0.033	0.015	2.682	6.533	31.186	
1978	TOTAL	3.372	8.539	10.046	0.032	0.131	2.761	6.691	31.570	
1979	TOTAL	3.636	8.549	10.294	0.034	0.066	2.873	6.948	32.399	
1980	January	0.308	0.845	0.895	0.003	0.003	0.230	0.572	2.857	2.857
	February	0.286	0.710	0.798	0.003	(0.001)	0.234	0.532	2.562	5.419
	March	0.291	0.738	0.790	0.003	(0.003)	0.236	0.564	2.618	8.037
	April	0.285	0.557	0.726	0.003	(0.005)	0.232	0.539	2.337	10.373
	May	0.276	0.595	0.750	0.003	(0.006)	0.229	0.594	2.443	12.816
	June	0.250	0.556	0.721	0.003	(0.004)	0.228	0.595	2.349	15.165
	July	0.229	0.588	0.710	0.003	(0.004)	0.224	0.583	2.332	17.496
	August	0.231	0.566	0.708	0.002	(0.003)	0.230	0.544	2.278	19.774
	September	0.225	0.658	0.762	0.002	(0.004)	0.237	0.517	2.397	22.172
	October	0.253	0.833	0.796	0.002	(0.006)	0.237	0.558	2.673	24.845
	November	0.263	0.858	0.761	0.002	(0.002)	0.231	0.563	2.674	27.520
	December	0.286	0.890	0.854	0.002	(0.001)	0.234	0.577	2.841	30.361
	TOTAL	3.181	8.395	9.272	0.033	(0.037)	2.781	6.736	30.361	
1981	January	0.299	0.677	0.779	0.003	0.000	0.229	R0.534	R2.520	R2.520
	February	0.277	R0.494	0.656	0.003	(0.001)	0.230	0.501	R2.159	R4.679
	March	0.280	R0.657	0.684	0.003	(0.003)	0.234	R0.567	R2.422	R7.101
	April	0.253	R0.572	0.635	0.003	(0.001)	0.232	0.553	R2.248	R9.349
	May	0.232	R0.655	0.681	0.003	0.000	0.235	R0.594	R2.401	R11.750
	June	0.226	R0.597	0.670	0.003	(0.004)	0.244	R0.635	R2.372	R14.122
	July	0.264	R0.668	0.674	0.003	0.000	0.245	0.615	R2.468	R16.590
	August	0.267	R0.621	0.659	0.002	0.000	0.246	0.590	R2.385	R18.975
	September	0.259	R0.662	0.664	0.002	(0.002)	0.242	0.534	R2.362	R21.337
	October	0.252	R0.793	0.702	0.002	(0.003)	0.236	0.558	R2.540	R23.877
	November	0.265	R0.723	0.637	0.002	0.000	0.226	0.551	R2.404	R26.281
	December	0.259	R0.845	0.684	0.002	(0.003)	0.219	0.574	R2.580	R28.861
	TOTAL	3.134	R7.964	8.123	0.033	(0.017)	2.817	R6.806	R28.861	
1982	January	0.259	0.738	0.666	0.003	(0.003)	0.215	0.521	2.398	2.398

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

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

<sup>1</sup>The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. Notes on the methodology used for sector calculations are provided in the Notes and Sources at the end of this section.

<sup>2</sup>Net imports equals imports minus exports. Parentheses indicate exports are greater than imports.

<sup>3</sup>Incurred in the generation and transmission of electricity plus plant use and unaccounted for electrical energy losses that are attributed to each sector in proportion to the sector's share of total electricity sales in the United States.

R=Revised data.

Source: \*See Notes and Sources at the end of this section.

# Consumption

## Consumption of Energy by the Transportation Sector<sup>1</sup>

		Coal	Natural Gas (Dry)	Petroleum	Electricity Sales	Electrical Energy Losses <sup>2</sup>	Total Energy Consumed	Yearly Cumulative Energy Consumed
Quadrillion (10 <sup>15</sup> ) Btu								
1973	TOTAL	0.003	0.743	17.745	0.009	0.021	18.520	
1974	TOTAL	0.002	0.685	17.317	0.009	0.022	18.035	
1975	TOTAL	0.001	0.595	17.547	0.010	0.025	18.177	
1976	TOTAL	(*)	0.559	18.469	0.010	0.025	19.064	
1977	TOTAL	(*)	0.543	19.157	0.010	0.025	19.736	
1978	TOTAL	(*)	0.539	20.044	0.009	0.022	20.614	
1979	TOTAL	(*)	0.612	19.786	0.010	0.025	20.434	
1980	January	(*)	0.074	1.671	0.001	0.002	1.749	1.749
	February	(*)	0.071	1.602	0.001	0.002	1.676	3.424
	March	(*)	0.068	1.623	0.001	0.002	1.694	5.119
	April	(*)	0.050	1.578	0.001	0.002	1.631	6.749
	May	(*)	0.044	1.571	0.001	0.002	1.618	8.367
	June	(*)	0.040	1.516	0.001	0.002	1.559	9.927
	July	(*)	0.042	1.579	0.001	0.002	1.624	11.551
	August	(*)	0.040	1.543	0.001	0.002	1.586	13.137
	September	(*)	0.042	1.517	0.001	0.002	1.562	14.699
	October	(*)	0.050	1.610	0.001	0.002	1.663	16.361
	November	(*)	0.058	1.498	0.001	0.002	1.559	17.921
	December	(*)	0.070	1.688	0.001	0.002	1.761	19.682
	TOTAL	(*)	0.650	18.996	0.011	0.026	19.682	
1981	January	(*)	0.073	1.693	0.001	R0.003	1.769	1.769
	February	(*)	R0.061	1.445	0.001	0.002	R1.509	3.279
	March	(*)	R0.062	1.546	0.001	0.002	R1.611	4.889
	April	(*)	R0.049	1.487	0.001	0.002	1.538	R6.428
	May	(*)	R0.046	1.513	0.001	0.002	1.563	R7.990
	June	(*)	0.043	1.559	0.001	0.002	1.605	R9.595
	July	(*)	R0.044	1.586	0.001	0.002	1.634	11.229
	August	(*)	0.042	1.541	0.001	0.002	1.586	R12.814
	September	(*)	R0.041	1.506	0.001	0.002	1.551	R14.365
	October	(*)	R0.049	1.554	0.001	0.002	1.607	R15.972
	November	(*)	R0.052	1.485	0.001	0.002	R1.540	R17.512
	December	(*)	R0.068	1.632	0.001	0.002	R1.704	R19.215
	TOTAL	(*)	R0.630	18.548	0.011	0.027	R19.215	
1982	January	(*)	0.077	1.517	0.001	0.003	1.598	1.598

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

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

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

<sup>2</sup>Incurred in the generation and transmission of electricity plus plant use and unaccounted for electrical energy losses that are attributed to each sector in proportion to the sector's share of total electricity sales in the United States.

<sup>3</sup>Since 1976 the amount of coal consumed by the Transportation Sector has been negligible.

R = Revised data.

Source: \*See Notes and Sources at the end of this section.

## Consumption

### Energy Input at Electric Utilities

	Coal <sup>1</sup>	Natural Gas (Dry)	Petro-leum <sup>2</sup>	Hydro-electric power <sup>3</sup>	Nuclear Electric Power	Other <sup>4</sup>	Total Energy Input	Yearly Cumulative Energy Input
Quadrillion (10 <sup>15</sup> ) Btu								
1973 TOTAL	8.658	3.748	3.671	2.975	0.910	0.048	20.008	
1974 TOTAL	8.535	3.519	3.499	3.276	1.272	0.056	20.156	
1975 TOTAL	8.786	3.240	3.231	3.187	1.900	0.072	20.416	
1976 TOTAL	9.720	3.152	3.454	3.032	2.111	0.081	21.549	
1977 TOTAL	10.243	3.284	4.028	2.482	2.702	0.082	22.821	
1978 TOTAL	10.236	3.297	3.813	3.110	3.024	0.068	23.548	
1979 TOTAL	11.264	3.609	3.357	3.107	2.715	0.089	24.141	
1980 January	1.073	0.286	0.277	0.280	0.210	0.008	2.134	2.134
February	1.012	0.273	0.261	0.238	0.205	0.008	1.997	4.131
March	0.994	0.294	0.238	0.270	0.213	0.008	2.017	6.148
April	0.866	0.265	0.210	0.284	0.200	0.008	1.835	7.983
May	0.883	0.291	0.199	0.317	0.196	0.010	1.896	9.879
June	0.976	0.348	0.199	0.304	0.195	0.009	2.031	11.910
July	1.143	0.435	0.204	0.272	0.224	0.010	2.287	14.197
August	1.133	0.419	0.203	0.230	0.259	0.011	2.255	16.452
September	1.020	0.369	0.203	0.209	0.251	0.010	2.063	18.515
October	0.960	0.312	0.201	0.203	0.261	0.011	1.948	20.463
November	0.973	0.264	0.215	0.217	0.223	0.011	1.903	22.366
December	1.089	0.250	0.243	0.249	0.235	0.011	2.077	24.444
TOTAL	12.122	3.807	2.654	3.074	2.672	0.114	24.444	
1981 January	R1.165	0.239	0.262	0.252	R0.253	0.011	R2.182	R2.182
February	1.020	0.232	0.208	0.237	0.230	0.010	1.937	R4.118
March	1.031	R0.283	0.190	0.233	0.234	0.011	R1.982	R6.100
April	0.930	R0.299	0.160	0.234	0.220	0.010	R1.854	R7.954
May	0.958	R0.327	0.161	0.270	0.210	0.010	R1.935	R9.889
June	R1.066	R0.394	0.173	0.293	0.225	0.010	R2.161	R12.051
July	1.196	R0.425	0.180	0.280	0.246	0.011	2.337	R14.388
August	R1.160	R0.403	0.167	0.244	0.287	0.011	R2.271	R16.659
September	1.032	0.336	0.165	0.204	0.260	0.011	2.008	R18.667
October	1.018	0.312	0.170	0.208	0.219	0.011	1.937	R20.604
November	1.001	0.268	0.166	R0.216	0.242	0.010	1.903	R22.507
December	1.131	0.248	0.200	0.267	0.277	0.010	2.132	R24.639
TOTAL	R12.707	R3.764	2.202	R2.937	R2.901	0.127	R24.639	
1982 January	1.220	0.246	0.198	0.299	0.273	0.009	2.243	2.243

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

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

<sup>1</sup>Includes bituminous coal, lignite, and anthracite.

<sup>2</sup>Based on deliveries to utilities.

<sup>3</sup>Includes net imports of electricity.

<sup>4</sup>Includes geothermal power and electricity produced from wood and waste.

R=Revised data.

Source: \*See Notes and Sources at the end 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. See the inside back cover for factors applied in converting physical unit data into Btu.

2. **Coal:** Coal is anthracite, bituminous coal, 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 forward: 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 forward: DOE, EIA, *Energy Data Reports*, "Weekly Coal Report."

• Electric Utilities consumption of coal—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 Sectors consumption to the months in proportion to the American Gas Association (AGA) monthly sales to the Residential and Commercial Sectors. For incomplete years, the AGA monthly sales data are used temporarily. Monthly Transportation consumption (which is natural gas for pipeline use) for complete years is estimated by allocating the EIA annual Transportation total to the months based on each month's total natural gas consumption as a share of the annual total natural gas consumption. For incomplete years, each month's Transportation total is estimated by applying the percentage of total natural gas accounted for by the Transportation Sector in the same month a year ago to the current month's total natural gas consumption. Electric Utilities consumption of natural gas is available monthly from EIA Form 759 (formerly FPC Form 4), "Monthly Power Plant Report." Each month's Industrial Sector consumption is estimated by subtracting the Residential and Commercial, Transportation, and Electric Utilities Sectors consumption from the total natural gas consumption.

**Sources:**

- 1973 through 1975: DOI, BOM, *Minerals Yearbook*, "Natural Gas" chapter.
- 1976 forward: DOE, *Energy Data Reports*, "Natural Gas Production and Consumption."
- Electric Utilities consumption—1973 through 1976: FPC Form 4, "Monthly Power Plant Report."

1977 through 1981: DOE, EIA, FPC Form 4, "Monthly Power Plant Report."

1982 forward: DOE, EIA, EIA Form 759, "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 sector. 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 1980: DOE, EIA, *Energy Data Reports*, "Petroleum Statement, Annual."
- 1981: DOE, EIA, *Energy Data Reports*, "Petroleum Statement, Monthly."
- 1982: DOE, EIA, *Energy Data Reports*, "Petroleum Supply Monthly."

Notes regarding specific petroleum products' end-use allocations follow:

- Aviation Gasoline—All product supplied is assigned to the Transportation Sector.
- Asphalt and Road Oil—All product supplied is assigned to the Industrial Sector.
- Distillate Fuel—Total product supplied is allocated to the major end-use sectors in proportion to annual deliveries grouped into end-use sectors from EIA's "Deliveries of Fuel Oil and Kerosene" reports as follows:
  - Residential deliveries are presented for 1979 and 1980. Prior to 1979, each year's subtotal of heating plus industrial is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;
  - Commercial deliveries are presented for 1979 and 1980. Prior to 1979, each year's subtotal of heating plus industrial is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares;
  - Industrial sector deliveries for 1979 and 1980 are the sum of deliveries for industrial, farm, oil company, off-highway diesel, and all other uses. Prior to 1979, each year's heating plus industrial subtotal is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares, and this estimated industrial portion is added to oil company, off-highway diesel, and all other uses;
  - Transportation deliveries are the sum of railroad, vessel bunkering, on-highway diesel, and military uses for all years; and
  - Electric utility deliveries are presented for all years.

The 1980 shares are used as estimates for succeeding periods until deliveries for more recent periods are available.

- Jet Fuel—Small amounts in 1975 through 1977 are used by the Industrial Sector, and small amounts in all periods are consumed by the Electric Utility Sector. All remaining jet fuel is consumed by the Transportation Sector.
- Kerosene—Total product supplied is allocated to the major end-use sectors in proportion to annual deliveries grouped into end-use sectors from EIA's "Deliveries of Fuel Oil and Kerosene" reports as follows:
  - Residential deliveries are presented for 1979 and 1980. Prior to 1979, each year's category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares;
  - Commercial deliveries are presented for 1979 and 1980. Prior to 1979, each year's category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares; and
  - Industrial sector deliveries for 1979 and 1980 are the sum of deliveries for industrial, farm, and all other uses. Prior to 1979, each year's category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares, and this estimated industrial portion is added to all other uses.

The 1980 shares are used as estimates for succeeding periods until deliveries for more recent periods are available.

- Liquefied Petroleum Gases (LPG)—Total product supplied is allocated to the major end-use sectors in proportion to aggregations of sales categories formed from EIA's "Sales of Liquefied Petroleum Gases and Ethane." Year-specific categorizations are developed for 1973 through 1978 but, due to potential discontinuities with the sales data from the sales reports after 1978, the 1978 sales aggregations are continued for all following periods. Sales categories are formed as follows:
  - Residential and Commercial sales represent the Residential and Commercial Sector;
  - Industrial sales are the sum of industrial use, miscellaneous use, utility gas company use, chemical plant use, and an estimated 84 percent of the internal combustion engine fuel use; and
  - Transportation sales are estimated to be the remaining 16 percent of sales for internal combustion engine fuel use.
- Lubricants—Total product supplied is allocated to the Industrial Sector and the Transportation Sector for all months according to proportions developed from annual sales of lubricants to those two sectors from U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases." The 1973 shares are applied to 1973 and 1974; the 1975 shares are applied to 1975 and 1976; and the 1977 shares are applied to 1977 forward.
- Motor Gasoline—Total product supplied is allocated to the major end-use sectors in proportion to aggregations of sales categories formed from the U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Tables MF-21, MF-24, and MF-25, as follows:
  - Commercial sales are the sum of sales for public non-highway use, miscellaneous use, and unclassified use;

## Notes and Sources for the Consumption Section (continued)

### 4. Petroleum (continued):

- Industrial sales are the sum of sales for agriculture, construction and industrial and commercial use as classified in the *Highway Statistics*; and
- Transportation sales are the sum of sales for highway use (minus the sales of special fuels which are primarily diesel fuel and accounted for in the Transportation Sector of distillate fuel) and sales for marine use.
- Petroleum Coke—The portion consumed by the Electric Utility Sector is from EIA Form 759, "Monthly Power Plant Report" (formerly FPC Form 4). The remaining portion is assigned to the Industrial Sector.
- Residual Fuel—Total product supplied is allocated to the major end-use sectors in proportion to annual deliveries grouped into end-use sectors from EIA's "Deliveries of Fuel Oil and Kerosene" reports as follows:
  - Commercial deliveries are presented for 1979 and 1980. Prior to 1979, each year's subtotal of heating plus industrial is split into commercial and industrial in proportion to the 1979 shares;
  - Industrial sector deliveries for 1979 and 1980 are the sum of industrial, oil company, and all other uses. Prior to 1979, each year's heating plus industrial subtotal is split into commercial and industrial in proportion to the 1979 shares, and this estimated industrial portion is added to oil company and all other uses;
  - Transportation deliveries are the sum of railroad, vessel bunkering, and military uses for all years; and
  - Electric utility deliveries are presented for all years.

The 1980 shares are used as estimates for succeeding periods until deliveries for more recent periods are developed.

- All Other Petroleum Products—The product supplied of all remaining petroleum products is assigned to the Industrial Sector.

### 5. Hydroelectric: Includes electricity generated by hydropower at electric utilities, small amounts in the Industrial Sector, and net imports of electricity, which are assumed to be generated by hydropower and are included in the hydroelectricity in the Electric Utilities Sector.

#### Sources for Electric Utilities Sector:

- 1973 through 1976, FPC, Form 4, "Monthly Power Plant Report."
- 1977 through 1981: DOE, EIA, FPC Form 4, "Monthly Power Plant Report."
- 1982 forward: DOE, EIA, EIA Form 759, "Monthly Power Plant Report."

#### Sources for Industrial Sector:

- 1973 through 1978: FPC Forms 4 and 12-C.
- 1979: FPC Form 4 and EIA estimates.
- 1980 forward: EIA estimates.

Note: For 1977 forward, monthly data are not available from above sources and were estimated by seasonalizing the annual numbers in proportion to each month's hydroelectricity generation in the Electric Utility Sector.

**Sources for Imports and Exports of Electricity:** Annual data from 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. 1981 is estimated by assuming 10 percent growth over 1980, and the 1981 estimates are used temporarily as 1982 estimates.

### 6. Nuclear: Sources:

- 1973 through 1976: FPC, Form 4, "Monthly Power Plant Report."
- 1977 through 1981: DOE, EIA, FPC Form 4, "Monthly Power Plant Report."
- 1982 forward: DOE, EIA, EIA Form 759, "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 forward: 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, for Nuclear.

### 9. Electricity Sales:

From the sources cited below the following sales categories are available: residential, commercial, industrial, and other. For the end-use estimates this section, the "other" category (which is primarily sales for use in government buildings) is added to the Commercial Sector except for approximately 4.2 percent which represents the Transportation Sector use of electricity. Sales of electricity are converted into Btu at the rate of 3,412 Btu per kilowatt-hour.

**Sources of sales data:** 1973 through 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:

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



# Part 3

# Petroleum

## Crude Oil and Refined Petroleum Products\*

Domestic crude oil production during February 1982 was estimated to be 8.7 million barrels per day, 1.3 percent above the rate in February 1981 and 0.4 percent higher than estimated for January 1982.

Total petroleum imports averaged 4.6 million barrels per day in February 1982, 32.7 percent less than the February 1981 rate and 12.8 percent lower than in January 1982.

In February 1982, 16.0 million barrels per day of petroleum products were supplied

\*Estimates for the most current month are based on Energy Information Administration (EIA), weekly data (except crude production) and will be revised to conform with data from the EIA Petroleum Reporting System as available. For the most recent month, crude production is an EIA estimate based on historical and provisional data through November 1981. The total import data above include imports into the Strategic Petroleum Reserve.

for domestic use. Motor gasoline accounted for 38.0 percent of the total, distillate fuel oil 19.8 percent, and residual fuel oil 14.5 percent.

Motor gasoline supplied during February 1982 averaged 6.1 million barrels per day, 2.3 percent higher than in January 1982.

In February 1982, 3.2 million barrels of distillate fuel oil were supplied per day, 7.2 percent lower than the January 1982 rate. Distillate fuel oil stocks were 142.3 million barrels at the end of February 1982, 23.7 million barrels lower than at the end of the previous month.

Residual fuel oil supplied in February 1982 averaged 2.3 million barrels per day, 7.8 percent higher than in January 1982. Residual fuel oil stocks measured 56.2 million barrels at the end of February 1982, 12.0 million barrels lower than at the end of the previous month.

Note: The formats for presenting petroleum data beginning with this issue have been modified to conform with those in the *Petroleum Supply Monthly*, the primary source of petroleum statistics in the Energy Information Administration.

# Petroleum

## Crude Oil<sup>1</sup> and Petroleum Products Overview

		Field Production			Stock Withdrawal <sup>2</sup>			Ending Stocks	
		Total Domestic <sup>3</sup>	Crude Oil	Natural Gas Plant Production	Crude Oil <sup>4</sup>	Petroleum Products <sup>5</sup>	Petroleum Products Supplied	Crude Oil <sup>6</sup> and Petroleum Products <sup>7</sup>	
Thousand barrels per day									
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	Million barrels	
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	\$1,074	
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	\$1,133	
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	\$1,112	
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	\$1,312	
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	\$1,278	
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	\$1,341	
1980	January	10,377	8,675	1,648	-594	270	18,851	1,351	
	February	10,402	8,705	1,656	-292	563	18,817	1,343	
	March	10,303	8,698	1,568	-47	-99	17,377	1,348	
	April	10,356	8,685	1,630	-412	-229	16,784	1,367	
	May	10,298	8,635	1,615	-117	-520	16,238	1,387	
	June	10,164	8,554	1,561	65	-869	16,187	1,411	
	July	10,113	8,547	1,524	88	-556	16,008	1,425	
	August	9,974	8,414	1,519	-274	-473	15,753	1,449	
	September	10,184	8,619	1,515	307	-259	16,598	1,447	
	October	10,092	8,532	1,516	-191	756	16,995	1,430	
	November	10,109	8,495	1,571	-8	-84	16,702	1,432	
	December	10,204	8,606	1,560	304	993	18,410	1,392	
	AVERAGE	10,214	8,597	1,573	-98	-42	17,056		
1981	January	10,168	8,533	1,595	-192	1,139	18,288	1,396	
	February	10,250	8,598	1,615	-318	258	16,930	1,398	
	March	10,217	8,601	1,581	-490	235	15,838	1,405	
	April	10,133	8,543	1,551	-777	180	15,280	1,423	
	May	10,115	8,496	1,554	-354	-405	15,196	1,447	
	June	10,260	8,616	1,579	-98	396	15,996	1,438	
	July	10,021	8,422	1,547	-334	147	15,713	1,444	
	August	10,202	8,574	1,582	508	-977	15,236	1,458	
	September	10,293	8,598	1,630	-359	-385	15,619	1,481	
	October	10,212	8,547	1,601	-761	516	15,840	1,488	
	November	10,264	8,595	1,615	-352	-245	15,508	1,506	
	December	10,274	8,624	1,605	-130	698	16,602	1,489	
	AVERAGE	10,200	8,562	1,588	-304	130	16,001		
1982	January	10,257	R8,669	1,548	-236	1,129	R15,890	1,461	
	February†	NA	8,706	NA	-12	1,435	15,960	1,431	

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>Includes lease condensate.

<sup>2</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup>Includes crude oil, natural gas plant production, other hydrocarbons, and alcohol.

<sup>4</sup>Includes stocks located in the Strategic Petroleum Reserve.

<sup>5</sup>Includes plant condensate, natural gasoline, and unfinished oils.

<sup>6</sup>Ending stocks for 1973 - 1979 are totals as of December 31.

<sup>7</sup>Preliminary data. R = Revised data. NA = Not available.

Note: Beginning in January 1975, the Bureau of Mines, Dept. of Interior, expanded its stocks coverage to include an additional 100 bulk terminal operators.

Note: Estimated data are in italics and are likely to be revised.

Sources: •See Notes and Sources at the end of this section.

# Petroleum

## Crude Oil<sup>1</sup> and Petroleum Products Overview (continued)

		Imports <sup>2</sup>			Exports <sup>3</sup>			Net Imports <sup>4</sup>
		Total	Crude Oil <sup>4</sup>	Petroleum Products <sup>5</sup>	Total	Crude Oil	Petroleum Products	
		Thousand barrels per day						
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002
1979	AVERAGE	8,456	6,519	1,937	471	235	236	7,985
1980	January	8,598	6,406	2,192	550	322	228	8,048
	February	7,945	6,013	1,931	558	332	227	7,386
	March	7,452	5,695	1,757	573	330	243	6,879
	April	7,106	5,598	1,508	434	192	241	6,672
	May	6,579	5,106	1,472	591	326	266	5,987
	June	6,894	5,480	1,414	654	365	289	6,240
	July	6,257	4,843	1,414	531	238	293	5,727
	August	6,192	4,803	1,389	319	78	241	5,873
	September	6,239	4,707	1,532	557	322	235	5,682
	October	6,379	4,768	1,611	598	309	288	5,781
	November	6,408	4,680	1,728	549	289	260	5,859
	December	6,894	5,082	1,812	622	343	279	6,272
	AVERAGE	6,909	5,263	1,646	544	287	258	6,365
1981	January	6,814	4,923	1,892	558	339	219	6,257
	February	6,777	4,873	1,904	569	198	371	6,208
	March	6,026	4,521	1,505	586	210	376	5,440
	April	5,767	4,457	1,310	570	198	372	5,198
	May	5,702	4,267	1,436	595	312	283	5,107
	June	5,422	4,084	1,338	420	123	297	5,002
	July	5,809	4,336	1,473	571	257	314	5,238
	August	5,737	4,165	1,572	644	204	440	5,093
	September	6,326	4,714	1,612	519	194	325	5,807
	October	5,939	4,382	1,557	738	226	512	5,202
	November	5,610	3,992	1,619	701	278	423	4,909
	December	5,896	4,189	1,707	656	189	467	5,240
	AVERAGE	5,981	4,406	1,576	595	228	367	5,387
1982	January	R5,232	3,648	R1,585	829	238	591	4,404
	February†	4,564	2,988	1,576	NA	NA	NA	NA

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>Includes lease condensate.

<sup>2</sup>Includes shipments from the U.S. possessions and territories.

<sup>3</sup>Includes shipments to the U.S. possessions and territories.

<sup>4</sup>Includes crude oil for storage in the Strategic Petroleum Reserve.

<sup>5</sup>Includes plant condensate, natural gasoline, and unfinished oils.

<sup>6</sup>Net Imports equals Imports minus Exports.

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

Note: Estimated data are in italics and are likely to be revised.

Sources: \*See Notes and Sources at the end of this section.

# Petroleum

## Crude Oil<sup>1</sup> Supply and Disposition

		Supply						
		Field Production		Imports <sup>2</sup>			Stock Withdrawal <sup>3</sup>	
		Total Domestic	Alaskan	Total	SPR <sup>4</sup>	Other	SPR <sup>4</sup>	Other
Thousand barrels per day								
1973	AVERAGE	9,208	198	3,244		3,244		11
1974	AVERAGE	8,774	193	3,477		3,477		-62
1975	AVERAGE	8,375	191	4,105		4,105		-17
1976	AVERAGE	8,132	173	5,287		5,287		-39
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-150
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	84
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-81
1980	January	8,675	1,634	6,406	0	6,406	0	-594
	February	8,705	1,630	6,013	0	6,013	0	-292
	March	8,698	1,647	5,695	0	5,695	0	-47
	April	8,685	1,649	5,598	0	5,598	0	-412
	May	8,635	1,627	5,106	0	5,106	0	-117
	June	8,554	1,626	5,480	0	5,480	0	65
	July	8,547	1,612	4,843	0	4,843	0	88
	August	8,414	1,612	4,803	0	4,803	0	-274
	September	8,619	1,610	4,707	54	4,653	-54	361
	October	8,532	1,588	4,768	131	4,637	-123	-68
	November	8,495	1,561	4,680	142	4,538	-189	181
	December	8,606	1,602	5,082	198	4,884	-177	481
	AVERAGE	8,597	1,617	5,263	44	5,219	-45	-52
1981	January	8,533	1,606	4,923	106	4,817	-151	-41
	February	8,598	1,619	4,873	80	4,793	-127	-191
	March	8,601	1,618	4,521	140	4,382	-155	-335
	April	8,543	1,608	4,457	272	4,185	-444	-333
	May	8,496	1,580	4,267	386	3,881	-513	158
	June	8,616	1,632	4,084	318	3,766	-434	335
	July	8,422	1,605	4,336	175	4,161	-324	-10
	August	8,574	1,602	4,165	257	3,908	-372	880
	September	8,598	1,607	4,714	435	4,279	-486	126
	October	8,547	1,596	4,382	453	3,929	-501	-260
	November	8,595	1,618	3,992	271	3,720	-259	-93
	December	8,624	1,630	4,189	165	4,024	-252	122
	AVERAGE	8,562	1,610	4,406	256	4,150	-336	32
1982	January	R8,669	R1,712	3,648	R170	R3,478	-159	-77
	February	<i>8,706</i>	<i>1,717</i>	<i>2,988</i>	<i>176</i>	<i>2,813</i>	<i>-205</i>	<i>193</i>

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>Includes lease condensate.

<sup>2</sup>Includes shipments from U.S. possessions and territories.

<sup>3</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>4</sup>Strategic Petroleum Reserve.

<sup>†</sup>Preliminary data. R = Revised data. NA = Not available.

Note: Estimated data are in italics and are likely to be revised.

Sources: \*See Notes and Sources at the end of this section.

## Petroleum

### Crude Oil<sup>1</sup> Supply and Disposition (continued)

		Supply		Disposition		Ending Stocks		
		Unaccounted for Crude Oil	Crude Used Directly and Losses	Refinery Inputs	Exports <sup>2</sup>	Total	SPR <sup>3</sup>	Other Primary
						Thousand barrels per day	Million barrels	
1973	AVERAGE	3	-32	12,431	2	\$242		\$242
1974	AVERAGE	-25	-28	12,133	3	\$265		\$265
1975	AVERAGE	17	-30	12,442	6	\$271		\$271
1976	AVERAGE	77	-33	13,416	8	\$285		\$285
1977	AVERAGE	-6	-30	14,602	50	\$348	\$7	\$340
1978	AVERAGE	-57	-30	14,739	158	\$376	\$67	\$309
1979	AVERAGE	-11	-29	14,648	235	\$430	\$91	\$339
1980	January	166	-31	14,301	322	449	91	358
	February	124	-31	14,187	332	457	91	366
	March	-278	-30	13,709	330	459	91	367
	April	-165	-29	13,484	192	471	91	380
	May	55	-28	13,326	326	475	91	383
	June	1	-30	13,705	365	473	91	381
	July	52	-29	13,264	238	470	91	379
	August	147	-28	12,984	78	478	91	367
	September	27	-26	13,313	322	469	93	376
	October	-3	-25	12,772	309	475	97	379
	November	266	-26	13,119	289	475	102	373
	December	24	-26	13,648	343	466	108	358
	AVERAGE	34	-28	13,481	287			
1981	January	352	-28	13,248	339	494	112	381
	February	-29	-23	12,903	198	503	116	387
	March	-10	-29	12,383	210	518	121	397
	April	92	-27	12,090	198	541	134	407
	May	241	-28	12,309	312	552	150	402
	June	-33	-30	12,415	123	555	163	392
	July	162	-62	12,267	257	566	173	393
	August	-71	-61	12,911	204	550	185	365
	September	-184	-65	12,510	194	561	199	361
	October	190	-67	12,065	226	584	215	369
	November	371	-68	12,260	278	595	223	372
	December	-45	-67	12,383	189	599	230	369
	AVERAGE	88	-46	12,477	228			
1982	January	-138	-66	R11,638	238	606	235	R371
	February <sup>†</sup>	NA	NA	11,324	NA	624	241	383

Geographic coverage: the 50 United States and District of Columbia including adjacent areas of the outer continental shelf, excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>Includes lease condensate.

<sup>2</sup>Includes shipments to the U.S. possessions and territories.

<sup>3</sup>Strategic Petroleum Reserve.

<sup>†</sup>Ending stocks for 1973-1979 are totals as of December 31.

<sup>‡</sup>Preliminary data. R = Revised data. NA = Not available.

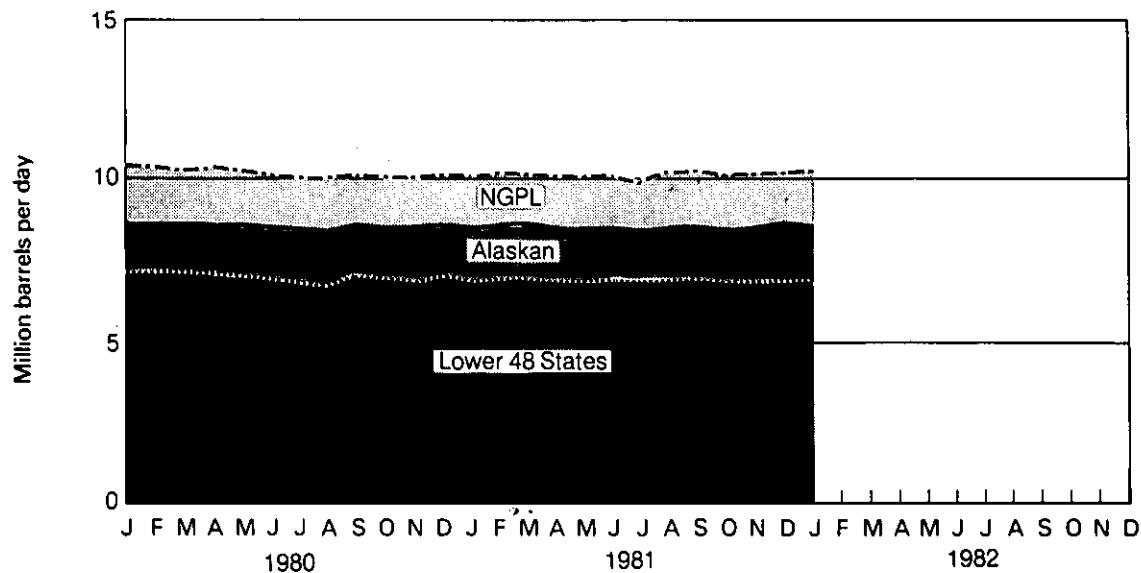
Note: Estimated data are in italics and are likely to be revised.

Sources: • See Sources at the end of this section.

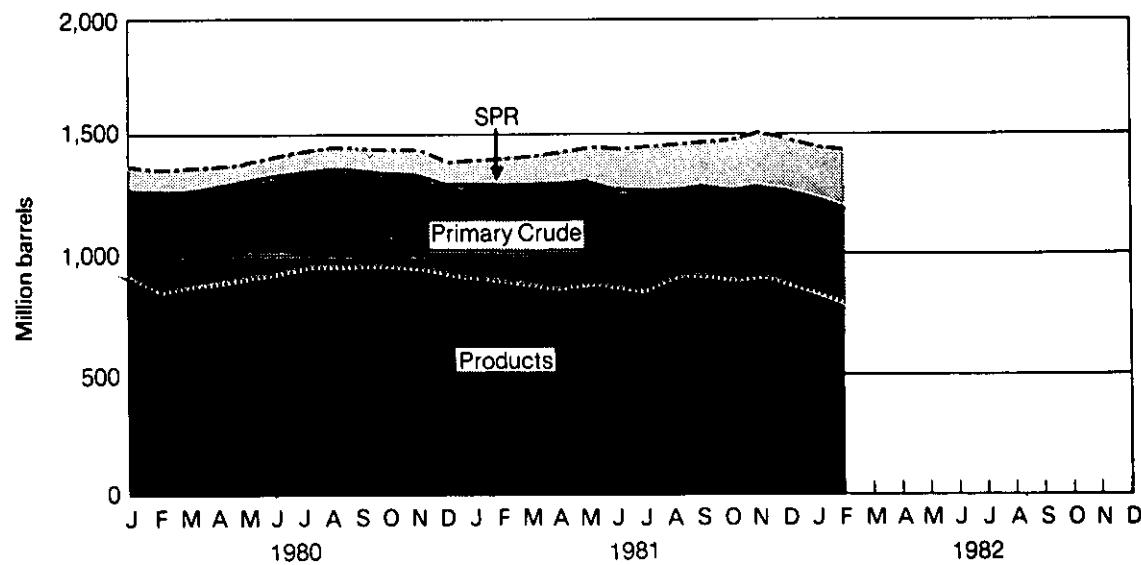
# Petroleum

## Overview

### Production of Crude Oil and Natural Gas Plant Liquids



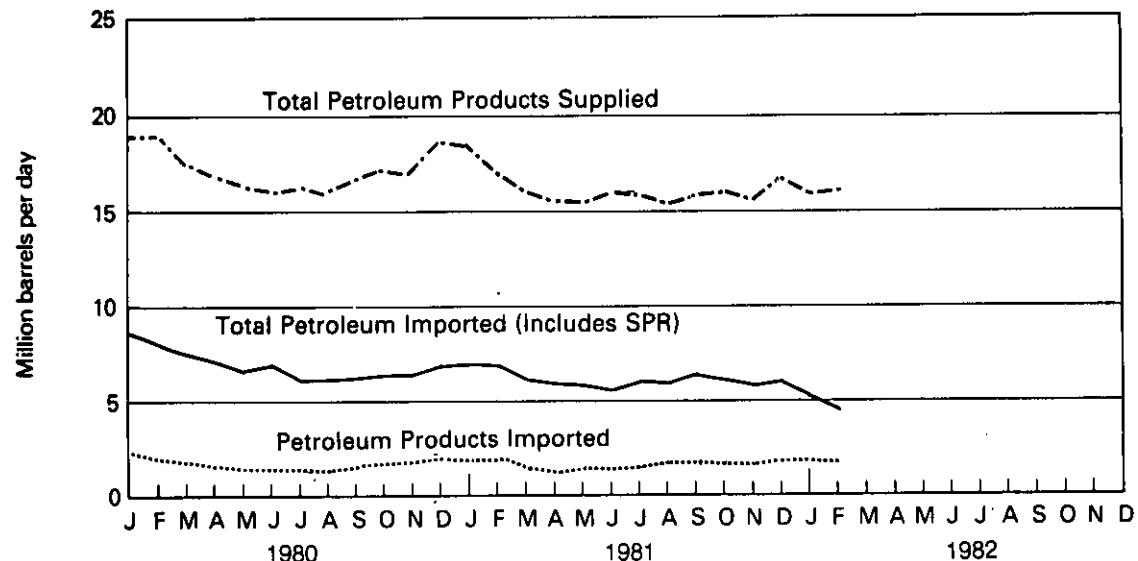
## Stocks



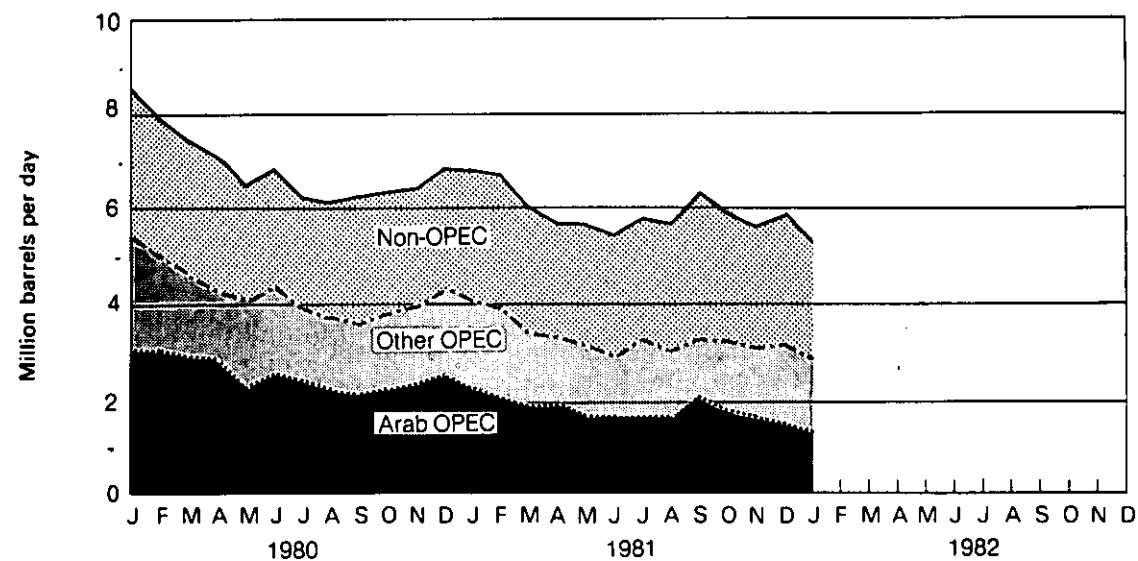
## Petroleum

## **Products Supplied and Imports**

### **Products Supplied and Imports**



## Petroleum Imports by Source



## Petroleum

### Crude Oil and Petroleum Product Imports from OPEC Sources

		Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC <sup>1</sup>	Total OPEC	Total Arab OPEC <sup>2</sup>
Thousand barrels per day												
1973	AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	915
1974	AVERAGE	190	4	461	74	300	469	713	979	88	3,280	752
1975	AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976	AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977	AVERAGE	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978	AVERAGE	649	654	1,144	385	573	555	919	645	226	5,751	2,963
1979	AVERAGE	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980	January	503	618	1,576	202	454	95	1,054	786	179	5,467	3,034
	February	656	603	1,412	304	317	9	1,036	543	152	5,031	3,058
	March	472	654	1,380	289	405	0	924	352	175	4,652	2,889
	April	546	683	1,300	150	374	0	734	343	240	4,369	2,862
	May	441	468	1,149	172	360	0	955	405	147	4,098	2,329
	June	497	561	1,328	178	331	0	998	409	106	4,408	2,598
	July	557	492	1,192	158	365	0	752	417	62	3,995	2,418
	August	432	431	1,139	142	289	0	792	406	112	3,743	2,222
	September	375	505	1,112	107	299	0	735	425	111	3,670	2,185
	October	465	478	1,044	182	348	0	728	482	95	3,821	2,226
	November	493	500	1,201	105	348	0	624	595	78	3,944	2,338
	December	423	658	1,301	83	288	0	958	610	101	4,423	2,484
	AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981	January	324	500	1,297	93	424	0	908	556	27	4,129	2,214
	February	381	468	1,122	93	407	0	866	466	92	3,895	2,064
	March	352	485	1,027	47	328	0	771	360	54	3,425	1,911
	April	263	496	1,056	85	314	0	826	237	42	3,317	1,916
	May	393	443	929	17	277	0	664	317	124	3,164	1,792
	June	390	380	865	60	355	0	519	248	118	2,934	1,736
	July	333	251	1,073	80	340	0	651	502	38	3,269	1,757
	August	348	274	1,068	61	377	0	321	514	84	3,047	1,751
	September	336	154	1,451	96	371	0	323	359	149	3,238	2,036
	October	242	147	1,342	90	427	0	412	383	172	3,214	1,820
	November	185	132	1,236	112	353	0	517	487	55	3,077	1,665
	December	176	122	1,075	158	395	0	698	415	102	3,141	1,532
	AVERAGE	310	320	1,128	83	364	0	622	404	88	3,318	1,848
1982	January	254	161	877	87	273	0	662	376	128	2,818	1,378

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

<sup>2</sup>Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Sources: •See Notes and Sources at the end of this section.

## Petroleum

### Crude Oil and Petroleum Product Imports from Non-OPEC Sources

		Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico <sup>1</sup>	Virgin Islands <sup>1</sup>	Other <sup>2</sup>	Total
Thousand barrels per day											
1973	AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974	AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975	AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976	AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977	AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978	AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979	AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980	January	175	570	545	289	239	296	57	467	492	3,131
	February	111	540	477	205	192	105	95	536	652	2,914
	March	124	460	460	184	189	232	101	449	601	2,800
	April	56	459	546	231	143	182	76	425	619	2,737
	May	77	419	576	176	221	124	88	303	496	2,481
	June	77	409	627	197	162	146	91	314	465	2,486
	July	43	378	460	242	180	115	90	378	376	2,262
	August	62	319	646	255	159	196	85	264	463	2,449
	September	58	458	550	213	205	218	52	343	473	2,569
	October	70	475	605	230	114	134	107	372	450	2,557
	November	22	470	459	264	158	157	108	391	435	2,464
	December	54	502	445	212	149	199	109	423	378	2,471
	AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981	January	39	543	401	197	150	219	89	494	553	2,686
	February	84	546	437	227	163	271	46	481	626	2,881
	March	74	471	488	227	93	263	45	370	570	2,601
	April	68	410	440	198	139	402	40	365	387	2,450
	May	122	366	522	213	105	352	58	344	455	2,538
	June	51	352	537	196	124	397	67	262	502	2,488
	July	77	381	384	212	177	558	50	206	495	2,540
	August	69	378	489	255	123	592	68	184	533	2,691
	September	111	419	708	163	169	528	72	265	653	3,088
	October	63	446	668	153	121	351	60	303	559	2,726
	November	53	540	612	168	108	253	76	294	429	2,533
	December	70	499	588	148	125	290	73	367	595	2,755
	AVERAGE	73	445	523	196	133	374	62	327	531	2,663
1982	January	28	509	426	179	106	346	62	334	425	2,415

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>U.S. possessions.

<sup>2</sup>Includes all Non-OPEC countries except those shown above.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Sources: \*See Notes and Sources at the end of this section.

# Petroleum

## Finished Motor Gasoline Supply and Disposition

		Supply			Disposition			Ending Stocks	
		Total Production	Imports <sup>a</sup>	Stock Withdrawal <sup>b</sup>	Product Supplied			Unleaded Percent of Total	Total Motor Gasoline <sup>c</sup>
					Exports	Total	Unleaded <sup>d</sup>		
Thousand barrels per day									
1973	AVERAGE	6,535	134	9	4	6,674			‡209
1974	AVERAGE	6,360	204	-24	2	6,537			‡218
1975	AVERAGE	6,520	184	-28	2	6,675			‡235
1976	AVERAGE	6,841	131	10	3	6,978			‡231
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	‡258
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	‡238
1979	AVERAGE	6,852	181	2	(s)	7,034	2,798	39.8	‡237
1980	January	6,991	141	-809	1	6,323	2,718	43.0	262
	February	6,868	154	-423	(s)	6,596	2,969	45.0	275
	March	6,519	155	-267	(s)	6,406	3,032	47.3	283
	April	6,284	155	362	1	6,800	3,021	44.4	272
	May	6,316	132	283	1	6,729	2,980	44.3	263
	June	6,569	148	-59	1	6,657	3,099	46.6	265
	July	6,465	149	-132	3	6,743	3,131	46.4	261
	August	6,452	141	56	1	6,648	3,135	47.2	259
	September	6,383	106	28	7	6,510	3,054	46.9	258
	October	6,131	152	380	1	6,662	3,110	46.7	247
	November	6,467	126	-359	(s)	6,234	3,123	50.1	257
	December	6,644	R121	-133	1	6,632	3,421	51.6	261
	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	
1981	January	6,687	138	-435	(s)	6,389	3,115	48.8	277
	February	6,282	111	-100	1	6,293	3,103	49.3	284
	March	6,213	170	-81	(s)	6,303	3,097	49.1	285
	April	6,114	174	298	(s)	6,585	3,281	49.8	272
	May	6,121	146	341	1	6,608	3,119	47.2	258
	June	6,222	161	620	1	7,001	3,421	48.9	242
	July	6,417	118	282	(s)	6,817	3,420	50.2	227
	August	6,616	125	-93	3	6,645	3,346	50.4	188
	September	6,567	169	-74	2	6,660	3,337	50.1	237
	October	6,447	143	23	3	6,598	3,253	49.3	235
	November	6,583	145	-333	1	6,395	3,203	50.1	247
	December	6,621	196	-91	11	6,715	3,444	51.3	251
	AVERAGE	6,409	150	29	2	6,586	3,262	49.5	
1982	January	R6,181	114	-358	18	R5,920	3,033	51.2	R262
	February†	5,811	NA	NA	NA	6,057	NA	NA	254
									214
									NA

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>a</sup>Beginning in 1981 excludes blending components.

<sup>b</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>c</sup>Includes gasohol.

<sup>d</sup>Includes motor gasoline blending components.

†Ending stocks for 1973 - 1979 are totals as of December 31.

‡Preliminary data. R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.

Note: Beginning in January 1981, the Energy Information Administration modified survey forms, definitions, and processing procedures. See Explanatory Note 2 at the end of this section.

Note: Beginning in January 1975, the Bureau of Mines, Dept. of Interior, expanded its stocks coverage to include an additional 100 bulk terminal operators.

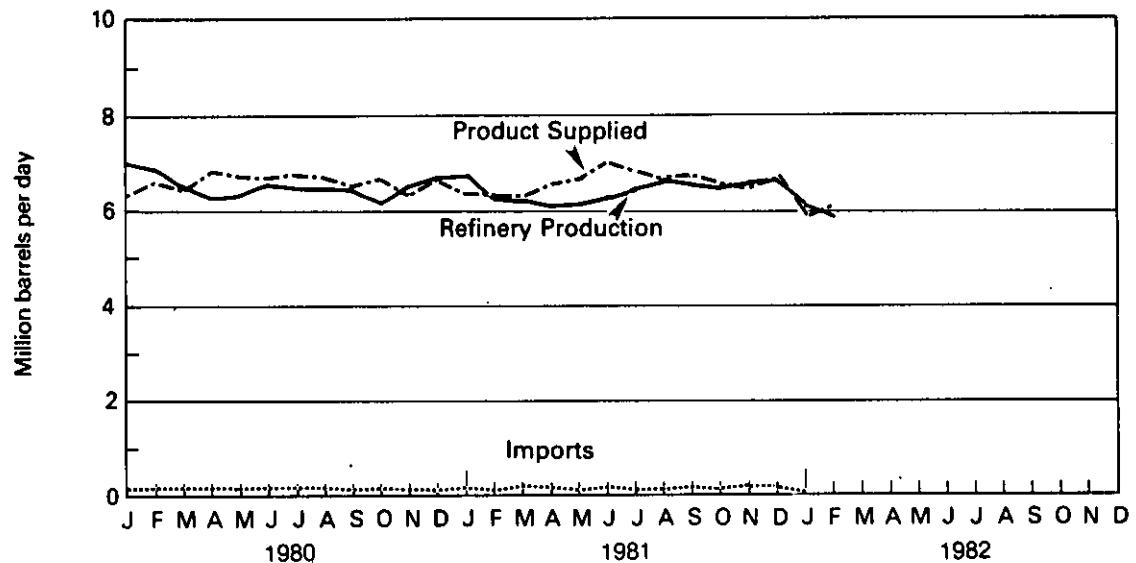
Note: Estimated data are in italics and are likely to be revised.

Sources: •See Notes and Sources at the end of this section.

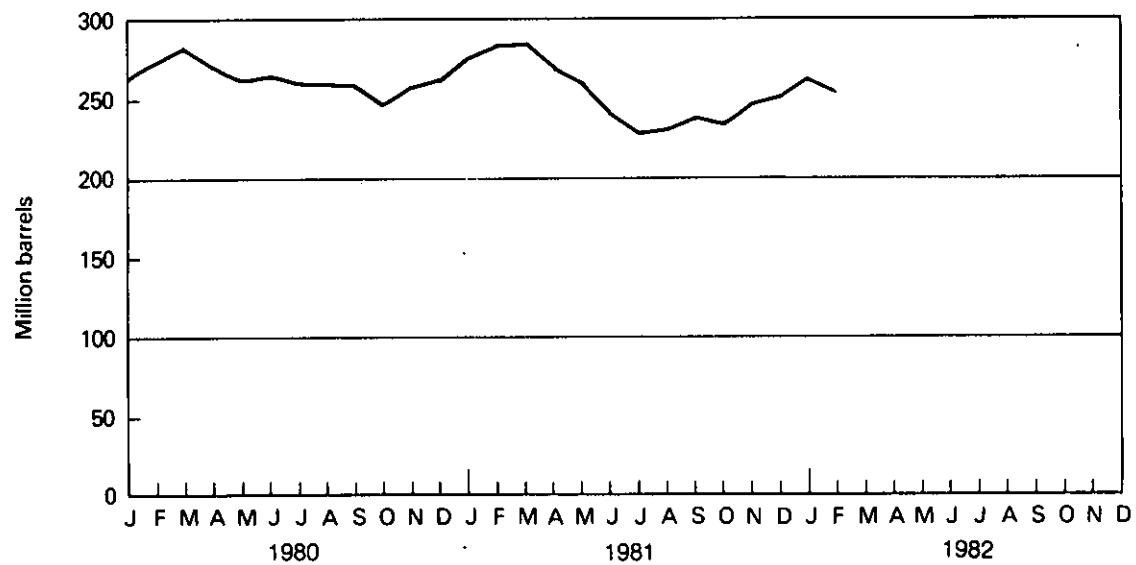
## Petroleum

### Motor Gasoline

Product Supplied, Refinery Production and Imports



### Stocks



# Petroleum

## Distillate Fuel Oil Supply and Disposition

		Supply			Disposition		Ending Stocks	
		Total Production	Imports	Stock Withdrawal	Crude Used Directly	Exports	Product Supplied	
					Thousand barrels per day		Million barrels	
1973	AVERAGE	2,822	392	-115	2	9	3,092	†196
1974	AVERAGE	2,689	289	-9	2	2	2,948	†200
1975	AVERAGE	2,654	155	40	2	1	2,851	†209
1976	AVERAGE	2,924	146	62	1	1	3,133	†186
1977	AVERAGE	3,278	250	-176	1	1	3,352	†250
1978	AVERAGE	3,167	173	93	1	3	3,432	†216
1979	AVERAGE	3,153	193	-34	1	3	3,311	†229
1980	January	3,014	179	526	1	7	3,714	212
	February	2,766	237	716	1	8	3,712	192
	March	2,558	193	445	1	19	3,179	178
	April	2,461	154	21	2	2	2,635	177
	May	2,474	126	-199	1	1	2,402	183
	June	2,647	108	-439	1	(s)	2,317	197
	July	2,690	117	-557	2	3	2,249	214
	August	2,462	77	-403	2	(s)	2,137	226
	September	2,686	101	-201	2	(s)	2,587	232
	October	2,590	115	215	1	(s)	2,920	226
	November	2,703	133	111	1	(s)	2,949	222
	December	2,891	166	556	1	(s)	3,615	205
	AVERAGE	2,662	142	64	1	3	2,866	
1981	January	2,988	273	818	11	(s)	4,090	180
	February	2,810	325	267	11	17	3,395	173
	March	2,484	144	254	9	(s)	2,891	165
	April	2,418	116	(s)	10	3	2,541	165
	May	2,454	165	-234	10	(s)	2,395	172
	June	2,502	201	-275	10	(s)	2,437	180
	July	2,403	179	-210	10	2	2,381	187
	August	2,656	159	-439	8	(s)	2,384	200
	September	2,611	129	-217	10	1	2,532	207
	October	2,490	117	182	9	5	2,792	201
	November	2,729	114	38	11	6	2,886	200
	December	2,862	95	317	11	26	3,258	190
	AVERAGE	2,616	167	42	10	5	2,830	
1982	January	R2,615	R96	780	10	90	R3,410	R166
	February†	2,430	91	724	NA	NA	3,165	142

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

\*A negative number indicates an increase in stocks and a positive number indicates a decrease.

†Ending stocks for 1973 - 1979 are totals as of December 31.

‡Preliminary data. R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.

Note: Beginning in January 1981, the Energy Information Administration modified survey forms, definitions and processing procedures. See Explanatory Note 3 at the end of this section.

Note: Beginning in January 1975, the Bureau of Mines, Dept. of Interior, expanded its stocks coverage to include an additional 100 bulk terminal operators.

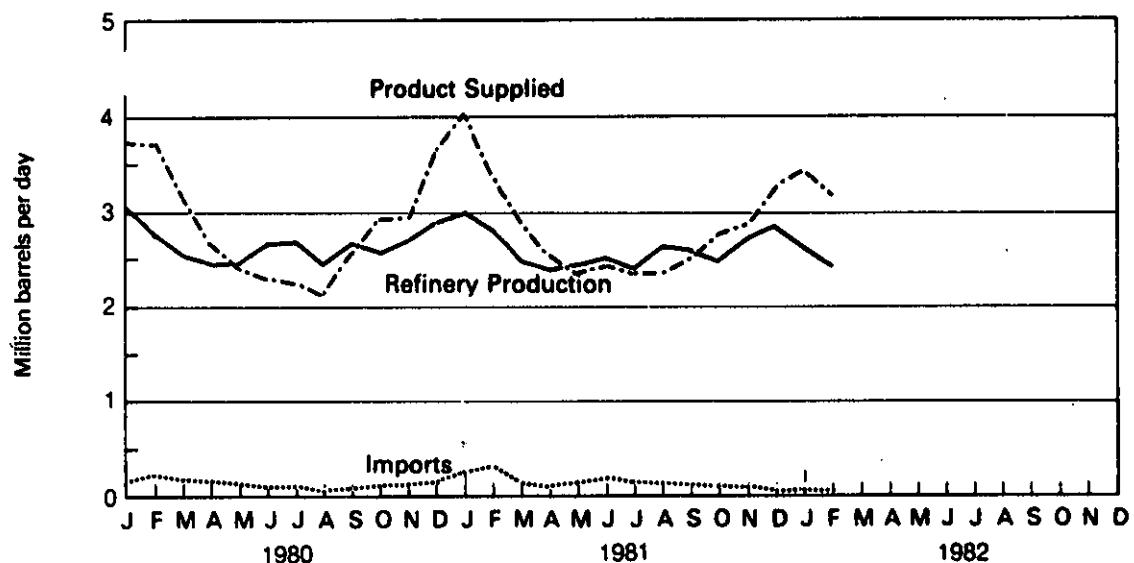
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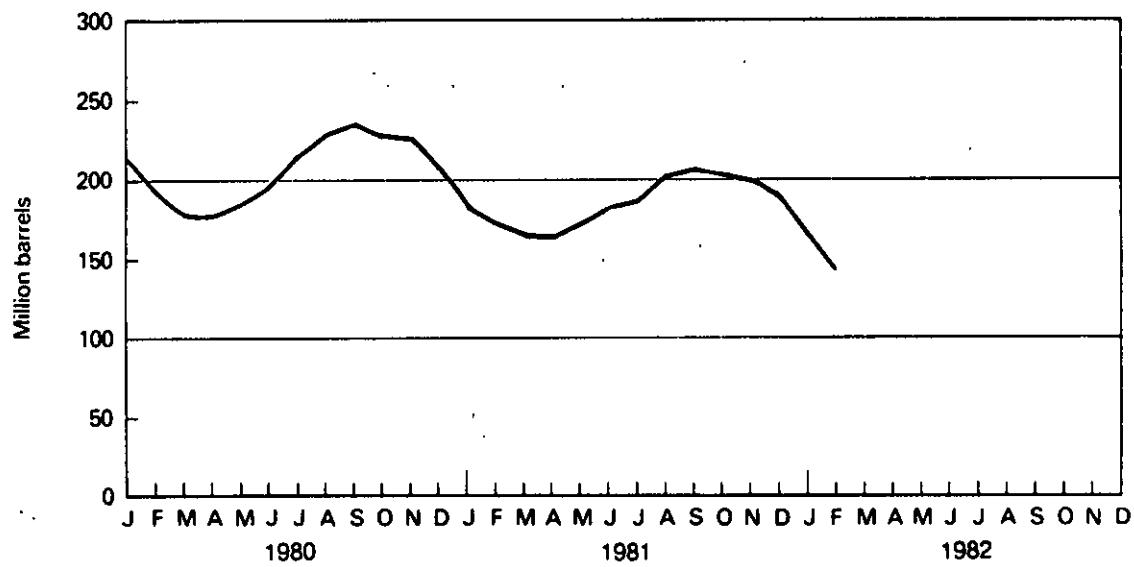
# Petroleum

## Distillate Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



# Petroleum

## Residual Fuel Oil Supply and Disposition

		Supply			Disposition		Ending Stocks	
		Total Production	Imports	Stock Withdrawal <sup>1</sup>	Crude Used Directly	Exports	Product Supplied	
		Thousand barrels per day						
1973	AVERAGE	971	1,853	5	17	23	2,822	†53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	†60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	†74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	†72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	†90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	†90
1979	AVERAGE	1,687	1,151	-15	12	9	2,826	†96
1980	January	1,771	1,338	-51	14	5	3,067	97
	February	1,773	1,122	214	14	17	3,105	91
	March	1,584	976	87	14	2	2,658	88
	April	1,595	775	102	13	40	2,444	85
	May	1,509	812	-78	12	20	2,235	88
	June	1,575	749	-4	14	14	2,321	88
	July	1,480	787	71	13	60	2,291	86
	August	1,444	875	-43	13	2	2,286	87
	September	1,495	906	-31	10	21	2,359	88
	October	1,512	875	-100	9	70	2,227	91
	November	1,579	1,024	-74	10	88	2,451	93
	December	1,660	1,025	46	10	62	2,679	92
	AVERAGE	1,580	939	10	12	33	2,508	
1981	January	1,611	1,015	298	11	65	2,870	82
	February	1,565	956	144	9	125	2,549	78
	March	1,423	699	107	14	145	2,098	75
	April	1,320	584	63	14	151	1,829	73
	May	1,222	735	-177	14	25	1,769	79
	June	1,232	540	283	14	76	1,993	70
	July	1,174	830	26	48	82	1,995	69
	August	1,230	819	-179	48	69	1,849	75
	September	1,286	841	-174	51	126	1,878	80
	October	1,232	773	8	54	202	1,865	80
	November	1,218	844	-35	53	203	1,878	81
	December	1,295	920	80	52	157	2,191	78
	AVERAGE	1,316	796	36	32	118	2,062	
1982	January	R1,183	R821	328	53	235	R2,150	R68
	February†	1,150	903	467	NA	NA	2,317	56

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

†Ending stocks for 1973 - 1979 are totals as of December 31.

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

Note: Beginning in January 1981, the Energy Information Administration modified survey forms, definitions, and processing procedures. See Explanatory Note 3 at the end of this section.

Note: Beginning in January 1975, the Bureau of Mines, Dept. of Interior, expanded its stocks coverage to include an additional 100 bulk terminal operators.

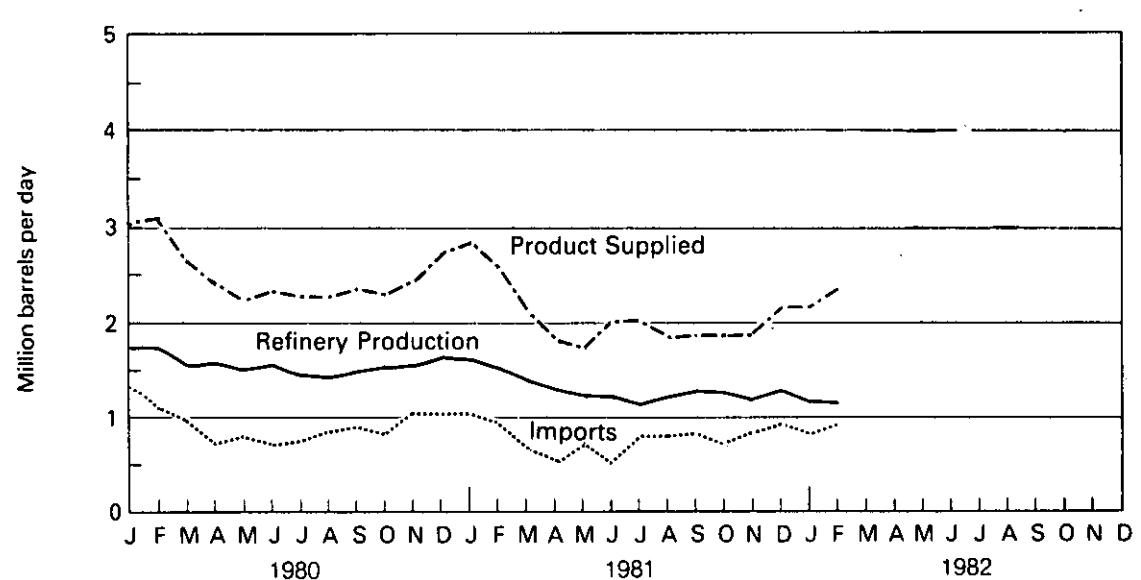
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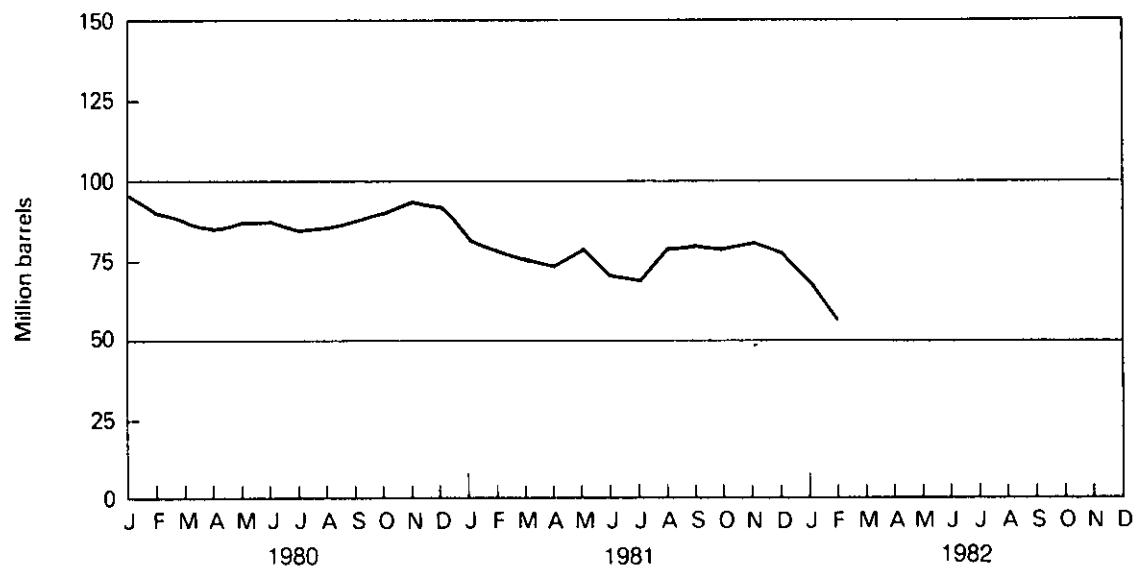
# Petroleum

## Residual Fuel Oil

Product Supplied, Refinery Production and Imports



Stocks



# Petroleum

## Liquefied Petroleum Gases and Ethane Supply and Disposition

		Supply			Disposition			Ending Stocks
		Total Production	Imports	Stock Withdrawal <sup>1</sup>	Refinery Inputs	Exports	Product Supplied	
		Thousand barrels per day						Million barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	‡99
1974	AVERAGE	1,565	123	-38	220	25	1,406	‡113
1975	AVERAGE	1,527	112	-35	246	26	1,333	‡125
1976	AVERAGE	1,535	130	24	260	25	1,404	‡116
1977	AVERAGE	1,566	161	-55	233	18	1,422	‡136
1978	AVERAGE	1,537	123	12	239	20	1,413	‡132
1979	AVERAGE	1,556	217	70	236	15	1,592	‡111
1980	January	1,560	264	461	291	30	1,963	96
	February	1,581	252	209	252	26	1,764	90
	March	1,519	214	7	211	23	1,506	90
	April	1,546	186	-339	171	19	1,203	100
	May	1,538	181	-224	182	17	1,295	107
	June	1,528	184	-319	170	18	1,205	117
	July	1,485	172	-283	209	18	1,147	126
	August	1,507	158	-296	203	17	1,149	135
	September	1,495	213	-80	228	19	1,382	137
	October	1,546	249	86	259	24	1,597	134
	November	1,549	231	82	304	23	1,535	132
	December	1,567	289	373	319	23	1,888	120
	AVERAGE	1,535	216	-27	233	21	1,469	
1981	January	1,628	306	373	352	21	1,934	116
	February	1,614	327	166	303	21	1,783	112
	March	1,570	260	-3	257	20	1,550	112
	April	1,598	214	-218	231	26	1,338	118
	May	1,608	189	-273	220	19	1,285	127
	June	1,577	206	-194	235	24	1,330	133
	July	1,526	213	-253	215	17	1,253	141
	August	1,560	195	-241	235	149	1,129	148
	September	1,620	199	-107	287	21	1,404	151
	October	1,608	287	85	317	76	1,586	149
	November	1,667	280	74	382	58	1,581	146
	December	1,610	255	303	447	50	1,671	137
	AVERAGE	1,598	244	-25	290	42	1,485	
1982	January	1,546	314	480	398	67	1,873	122

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

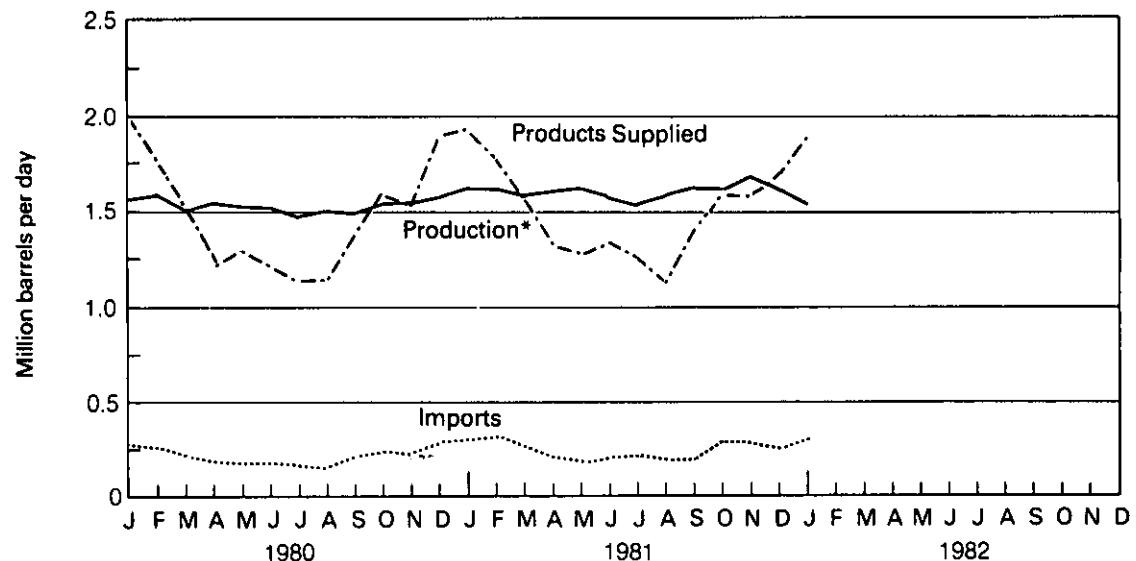
‡Ending stocks for 1973 - 1979 are totals as of December 31.

Sources: \*See Notes and Sources at the end of this section.

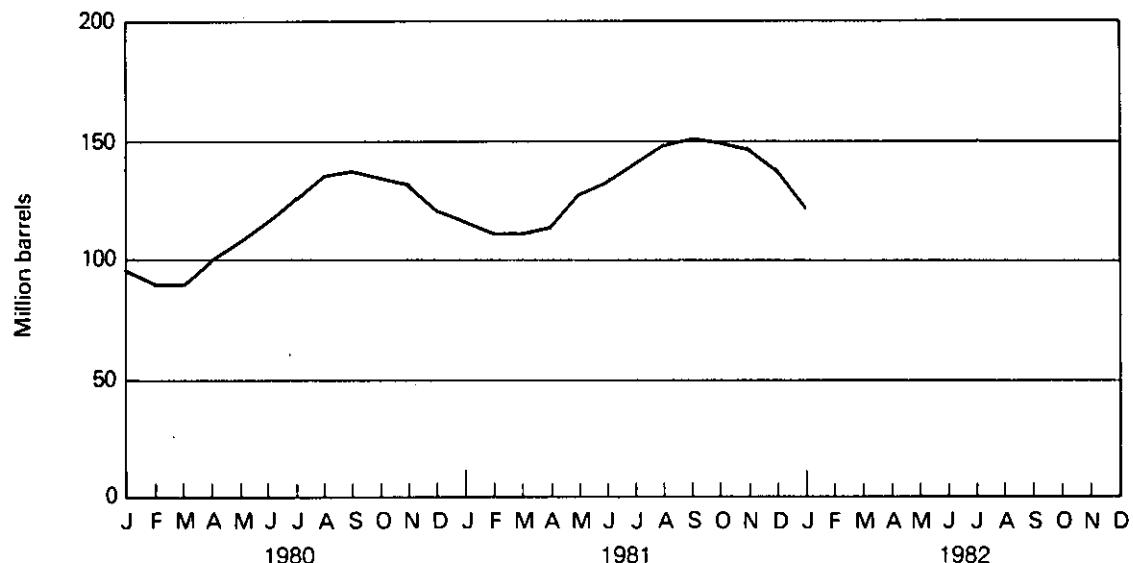
# Petroleum

## **Liquefied Petroleum Gases and Ethane**

## **Products Supplied, Production and Imports**



## Stocks



# Petroleum

## Other Petroleum Products<sup>1</sup> Supply and Disposition

		Supply		Disposition			Ending Stocks	
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Refinery Inputs	Exports	Product Supplied	
		Thousand barrels per day						
1973	AVERAGE	3,693	502	-9	750	166	3,270	‡208
1974	AVERAGE	3,558	432	-28	665	174	3,123	‡218
1975	AVERAGE	3,424	277	-2	537	160	3,002	‡219
1976	AVERAGE	3,643	206	-5	524	175	3,145	‡220
1977	AVERAGE	3,912	205	-27	514	165	3,410	‡230
1978	AVERAGE	4,046	166	14	492	167	3,568	‡225
1979	AVERAGE	4,153	195	-37	352	209	3,749	‡238
1980	January	4,157	269	135	591	186	3,785	234
	February	4,181	167	-153	380	174	3,641	239
	March	4,128	219	-370	149	200	3,627	250
	April	4,105	238	-374	86	180	3,703	261
	May	4,018	222	-301	135	227	3,577	271
	June	4,016	226	-49	250	256	3,687	272
	July	3,873	188	82	356	209	3,578	270
	August	3,753	139	212	351	221	3,532	263
	September	3,952	206	25	234	188	3,761	262
	October	3,737	220	175	351	193	3,588	257
	November	3,787	213	156	475	148	3,533	252
	December	3,792	209	151	362	194	3,596	247
	AVERAGE	3,956	210	-23	311	198	3,634	
1981	January	3,719	159	86	827	132	3,005	296
	February	3,664	185	-219	513	208	2,909	302
	March	3,660	232	-42	643	210	2,996	304
	April	3,652	223	38	733	192	2,987	302
	May	3,832	201	-61	595	238	3,139	304
	June	3,898	230	-37	659	197	3,236	305
	July	3,840	134	302	797	212	3,267	296
	August	3,875	275	-25	678	219	3,228	297
	September	3,748	273	187	887	176	3,145	291
	October	3,495	237	231	738	227	2,999	284
	November	3,503	215	12	807	154	2,768	284
	December	3,486	207	88	793	223	2,766	281
	AVERAGE	3,693	219	49	724	200	3,038	
1982	January	3,181	240	-102	602	180	2,536	284

Geographic coverage: the 50 United States and District of Columbia, including adjacent areas of the outer continental shelf but excluding the Hawaiian Foreign Trade Zone.

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

<sup>1</sup>Includes natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases and ethane.

<sup>2</sup>A negative number indicates an increase in stocks and a positive number indicates a decrease.

†Ending stocks for 1973 - 1979 are totals as of December 31.

Note: Beginning in January 1975, the Bureau of Mines, Dept. of Interior, expanded its stocks coverage to include an additional 100 bulk terminal operators.

Sources: \*See Notes and Sources at the end of this section.

## Notes and Sources for the Petroleum Section

### Notes

1. Research conducted by the Energy Information Administration (EIA) in the latter half of 1980, indicated changes had taken place in the petroleum industry which were not being adequately reflected in the EIA survey forms. First, the flows of unfinished oils and the redesignation of finished product were not being accurately described on the EIA survey forms. Second, a substantial amount of motor gasoline was being produced at non-refinery "downstream blending stations" but was not being reported. Although empirical information is not available to precisely measure the historical effects, estimates of the magnitude of the differences in the major series affected are shown in the EIA, *Energy Data Report*, "Petroleum Supply Monthly." Beginning in January 1981, the EIA modified its survey forms, changed definitions of gasoline (motor and aviation), and added the non-refinery blenders previously not reporting.
2. **Motor Gasoline:** Beginning in January 1981, the EIA expanded their universe to include non-refinery blenders; redefined motor gasoline into three categories, finished leaded, finished unleaded, and gasohol, and separated blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to more accurately describe refinery operations. For further details see the EIA, *Energy Data Report*, "Petroleum Supply Monthly."
3. **Distillate and Residual Fuel Oils:** Previous to January 1981, the refinery input of unfinished oils number typically exceeded the number for available supply of unfinished oils. This was assumed to be due to the redesignation of distillate and residual fuel oils received as such, but used as an unfinished oil input by the receiving refinery. This imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of this difference was subtracted from distillate and one-third from residual. Beginning in January 1981, the EIA modified its survey forms to account for redesignated product and discontinued the above-mentioned adjustment. For further details see the EIA, *Energy Data Report*, "Petroleum Supply Monthly."

### Sources

- 1973 through 1976: Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual" (except unleaded gasoline) and "PAD Districts Supply/Demand, Annual."
- Unleaded gasoline—1977 through 1980: Energy Information Administration (EIA), "Monthly Petroleum Statistics Report."
- 1977 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual".
- 1981: EIA, *Energy Data Reports*, "Petroleum Statement, Monthly."
- January 1982: EIA, *Energy Data Report*, "Petroleum Supply Monthly."
- Data for the most recent month are estimates based on EIA weekly data (except domestic production).
- Domestic production for the most recent month is an EIA estimate based on historical data from State Conservation Agencies and the U.S. Geological Survey.
- Sources for the *Energy Data Reports* 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).



# Part 4

## Natural Gas

### Natural Gas

Total dry natural gas production, including nonhydrocarbon gases, in the United States during February 1982 was an estimated 1.5 trillion cubic feet (Tcf). This was 9.5 percent less than in January 1982 and about the same as in February 1981.

Consumption of natural and supplemental gas in February 1982 was an estimated 2.0 Tcf, 17.4 percent lower than in January 1982 and 3.7 percent higher than in February 1981.

Imports of natural gas in February 1982 were an estimated 84 billion cubic feet (Bcf), 6.3 percent higher than in the previous February. Receipts of foreign gas in February 1982 included Algerian liquefied natural gas (LNG) equivalent to about 3 Bcf.

Domestic producer sales to major interstate pipelines in December 1981 (latest data available) totaled 1,055 Bcf, 8.9 percent higher than sales for the previous December. Total sales during 1981 were 10.9 Tcf, 3.3 percent above sales during 1980.

Stocks of working gas\* in underground natural gas storage reservoirs at the end of February 1982 totaled 1.8 Tcf, according to preliminary data. This was 2.4 percent below stocks available a year earlier. Net withdrawals from storage during February 1982 were 394 Bcf, 19.8 percent higher than during the previous February.

\*Gas available for withdrawal.

## Natural Gas

		Production					Domestic Producer Sales to Major Interstate Pipelines		
		Total Marketed <sup>1</sup>	Total Dry <sup>2</sup>	Nonhydro-carbon Gases Removed	Supplemental Gaseous Fuels	Total Domestic Consumption <sup>3</sup>	Imports	Exports	
Billion cubic feet									
1973	TOTAL	22,648	21,731	NA	NA	22,049	1,033	77	12,067
1974	TOTAL	21,601	20,713	NA	NA	21,223	959	77	11,462
1975	TOTAL	20,109	19,236	NA	NA	19,538	953	73	10,652
1976	TOTAL	19,952	19,098	NA	NA	19,946	964	65	10,140
1977	TOTAL	20,025	19,163	NA	NA	19,521	1,011	56	9,883
1978	TOTAL	19,974	19,122	NA	NA	19,627	966	53	9,911
1979	TOTAL	20,471	19,663	NA	NA	20,241	1,253	56	10,498
1980	January	1,838	1,768	45	18	2,263	118	6	981
	February	1,725	1,659	41	17	2,175	108	5	898
	March	1,847	1,777	43	16	2,086	109	5	R958
	April	1,686	1,622	41	12	1,540	77	3	R895
	May	1,712	1,647	43	10	1,339	70	3	R851
	June	1,602	1,541	40	9	1,235	61	3	R791
	July	1,633	1,571	41	10	1,284	61	3	R822
	August	1,592	1,531	40	10	1,231	60	3	R825
	September	R1,596	1,536	40	10	1,283	60	5	R797
	October	1,663	1,599	38	12	1,524	75	5	R891
	November	R1,669	1,604	40	14	1,769	88	3	R900
	December	1,816	1,747	43	17	2,148	98	5	R969
	TOTAL	20,378	19,602	495	155	19,877	985	49	R10,578
1981	January	R1,772	1,704	45	17	2,226	86	5	R962
	February	R1,590	R1,529	40	15	R1,880	79	3	R869
	March	R1,753	R1,686	43	15	R1,883	73	4	R942
	April	R1,696	R1,631	42	12	R1,486	68	3	R900
	May	1,720	R1,654	42	11	R1,421	61	5	909
	June	R1,656	R1,593	42	10	R1,301	63	5	877
	July	R1,686	R1,622	44	11	R1,351	64	3	889
	August	R1,726	R1,660	42	10	R1,274	62	4	864
	September	R1,596	R1,535	40	9	R1,259	67	4	869
	October	R1,661	R1,598	42	12	R1,514	78	5	889
	November	R1,601	R1,540	40	12	R1,598	82	4	904
	December	R1,740	R1,670	41	16	R2,070	94	5	1,055
	TOTAL	R20,197	R19,422	503	150	R19,263	877	50	10,929
1982	January	R1,760	R1,690	41	18	R2,360	R98	6	NA
	February	1,590	1,530	37	15	1,950	84	5	NA

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

<sup>1</sup>Includes nonhydrocarbon gases removed such as carbon dioxide hydrogen sulfide, helium, and nitrogen. See Explanatory Note 8.

<sup>2</sup>Total net dry marketed production is the volume of total marketed production, including nonhydrocarbon gases, remaining after the extraction of natural gas plant liquids, such as ethane, propane, butanes, etc. See Explanatory Note 8.

<sup>3</sup>Includes supplemental gaseous fuels such as synthetic natural gas, propane-air, and refinery (still) gas normally mixed with natural gas prior to consumption. See Explanatory Note 8.

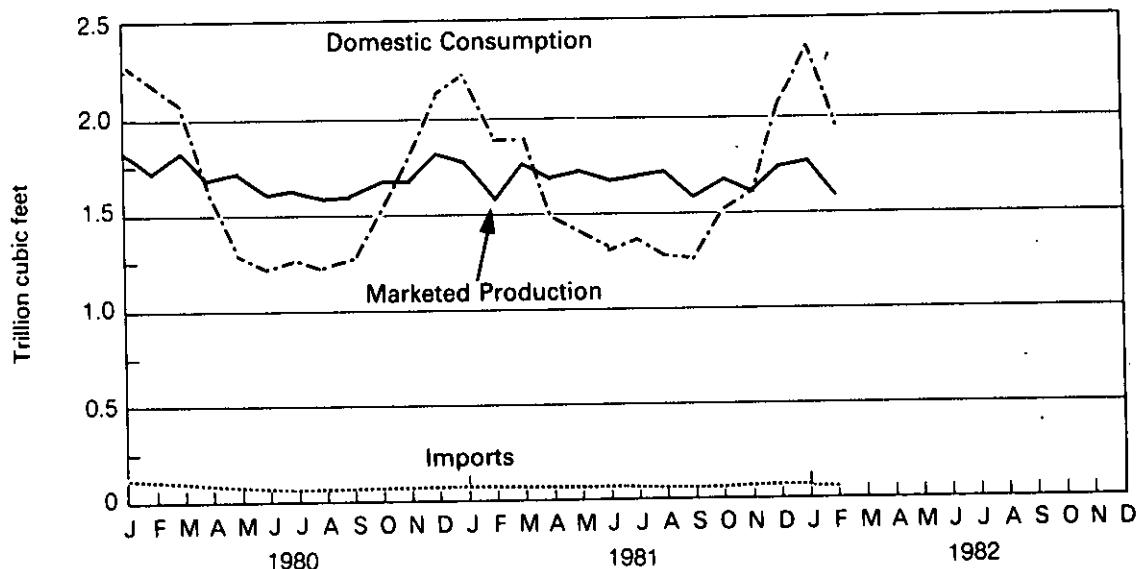
R=Revised data. NA=Not available.

Note: Estimated data are in italics and are likely to be revised.

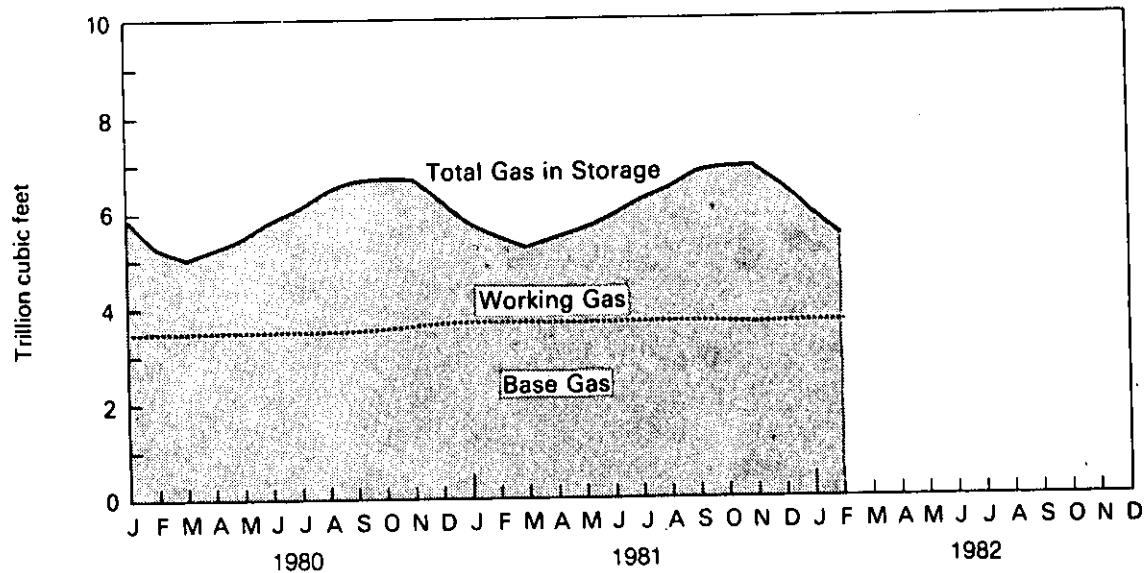
Sources: • See Sources at the end of this section.

## Natural Gas

Domestic Consumption, Marketed Production and Imports



Gas in Storage



## Natural Gas

### Natural Gas in Underground Storage<sup>1</sup>

		Total Gas In Storage	Base Gas	Working Gas	Storage Injections	Storage Withdrawals	Net Storage Injections <sup>2</sup>
Billion cubic feet							
1973	TOTAL	‡4,898	‡2,864	‡2,034	NA	NA	NA
1974	TOTAL	‡4,962	‡2,912	‡2,050	NA	NA	NA
1975	TOTAL	‡5,358	‡3,150	‡2,208	NA	NA	NA
1976	TOTAL	‡5,231	‡3,310	‡1,922	1,952	2,074	(122)
1977	TOTAL	‡5,844	‡3,377	‡2,466	2,390	1,767	623
1978	TOTAL	‡5,999	‡3,459	‡2,540	2,330	2,176	154
1979	TOTAL	‡6,297	‡3,537	‡2,761	2,384	2,041	343
1980	January	5,865	3,535	2,330	21	465	(444)
	February	5,397	3,536	1,861	24	493	(469)
	March	5,131	3,542	1,589	41	307	(266)
	April	5,227	3,547	1,680	174	78	96
	May	5,538	3,553	1,985	319	8	311
	June	5,841	3,560	2,281	316	13	303
	July	6,127	3,564	2,563	302	18	284
	August	6,444	3,594	2,850	328	30	298
	September	6,692	3,596	3,096	260	11	249
	October	6,782	3,598	3,184	141	53	88
	November	6,639	3,620	3,019	66	203	(137)
	December	6,272	3,629	2,643	34	402	(368)
1981	January	5,794	3,642	2,152	33	535	(502)
	February	5,472	3,648	1,824	59	388	(329)
	March	5,284	3,654	1,630	55	243	(188)
	April	5,434	3,670	1,764	207	58	149
	May	5,659	3,683	1,976	254	28	226
	June	5,932	3,680	2,252	314	27	287
	July	6,204	3,649	2,555	295	27	268
	August	6,591	3,709	2,882	399	19	380
	September	6,870	3,719	3,151	285	7	278
	October	6,967	3,724	3,243	149	53	96
	November	6,927	3,728	3,199	85	124	(39)
	December	6,561	3,748	2,813	31	398	(367)
1982	January	R5,927	3,747	R2,180	R20	R656	R(636)
	February†	5,529	3,748	1,781	74	468	(394)

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

<sup>1</sup>See Explanatory Note 9.

<sup>2</sup>Net storage injections are storage injections minus storage withdrawals. Parentheses indicate withdrawals greater than injections.

†Total as of December 31. †Preliminary data. R=Revised data. NA=Not available.

Source: • See Sources at the end of this section.

## Sources for the Natural Gas Section

- Domestic Consumption—1973 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Natural Gas" chapter; 1976 through 1979: Energy Information Administration (EIA), *Energy Data Report*, "Natural Gas Production and Consumption"; 1980: EIA, *Natural Gas Annual*; January 1981 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—FPC Form 11, "Natural Gas Pipeline Company Monthly Statement."
- Imports—1973 through 1980: FPC Form 14, "Imports and Exports of Natural Gas"; January 1981 forward: EIA estimates based on import data from FPC Form 11.
- Exports—1973 through 1980: FPC Form 14; January 1981 forward: EIA estimates based primarily on historical data reported on FPC Form 14.
- Underground Storage—1973 and 1974: American Gas Association, *Gas Facts*; 1975 forward: EIA, Form EIA-191 and FPC Form 8, "Underground Gas Storage Report."



# Part 5

## Oil and Gas Resource Development

### Oil and Gas Resource Development

The February 1982 rotary rig count of 4,160 was 18.8 percent higher than the February 1981 count of 3,502 but 6.2 percent less than January 1982.

Well completions reported through February 1982 totaled 12,617. This was a 37.0 percent increase from the 9,212 reported for the first 2 months of 1981.

The cumulative oil well completions in 1982 (5,839 reported) were up 37.3 percent from the 1981 figure (4,253 reported). During the first 2 months of 1982, 2,390 gas well completions were reported, 18.9 percent above the comparable 1981 period (2,010 reported). Total reported footage drilled through February of this year was 41.6 percent (60.4 million feet as compared to 42.6 million feet) above the level for the same period last year.

There were 53 crews engaged in seismic exploratory work offshore during February 1982. This was a 29.3 percent increase from the February 1981 level. February 1982 onshore seismic activity decreased slightly from the previous month's level to 625 crews, but was 11.4 percent higher than activity during February 1981. The 678 crews engaged in seismic exploration in February 1982 represented the fifth continuous monthly decline in the number of crews working and was the smallest monthly average reported since May 1981.

## Oil and Gas Resource Development

		Rotary Rigs in Operation <sup>1</sup>	Exploratory and Development Wells Completed <sup>2</sup>				Total Footage of Wells Completed <sup>2,3</sup>	
			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	1,472	TOTAL	12,784	7,240	11,674	31,698	150,551
1975	AVERAGE	1,660	TOTAL	16,408	7,580	13,247	37,235	174,434
1976	AVERAGE	1,658	TOTAL	17,059	9,085	13,621	39,765	181,780
1977	AVERAGE	2,001	TOTAL	18,912	11,378	14,692	44,982	210,848
1978	AVERAGE	2,259	TOTAL	17,775	13,064	16,218	47,057	227,110
1979	AVERAGE	2,177	TOTAL	19,383	14,681	15,752	49,816	238,659
1980	January	2,571		1,436	782	1,240	3,458	16,475
	February	2,613		1,635	1,000	1,297	3,932	18,891
	March	2,658		2,390	1,834	1,542	5,766	27,691
	April	2,682		1,841	1,121	1,158	4,120	18,855
	May	2,797		2,059	1,070	1,191	4,320	19,899
	June	2,850		2,228	1,282	1,451	4,961	24,479
	July	2,953		2,079	1,042	1,337	4,458	21,734
	August	3,045		2,357	1,275	1,539	5,171	24,112
	September	3,099		2,641	1,720	1,767	6,128	28,171
	October	3,148		2,417	1,190	1,697	5,304	24,600
	November	3,220		2,258	1,503	1,617	5,378	25,417
	December	3,286		3,685	1,910	2,257	7,852	34,161
	AVERAGE	2,909	TOTAL	27,026	15,730	18,089	60,845	284,461
1981	January	3,386		1,794	964	1,339	4,097	19,907
	February	3,502	R2,459	R1,046	R1,610	R5,115	R22,726	
	March	3,595		3,102	1,424	1,878	6,404	30,144
	April	3,728		2,905	1,600	1,546	6,051	27,836
	May	3,816		2,604	1,159	1,675	5,438	24,842
	June	3,926		3,497	1,320	2,105	6,922	31,689
	July	3,998		2,790	1,116	1,698	5,604	25,542
	August	4,131		3,137	1,266	1,867	6,270	28,886
	September	4,242		3,416	1,967	2,019	7,402	33,608
	October	4,352		3,775	1,875	2,091	7,741	35,500
	November	4,436		3,587	1,577	2,057	7,221	32,149
	December	4,520		4,581	2,572	3,055	10,208	48,275
	AVERAGE	3,970	TOTAL	R37,671	R17,894	R22,973	R78,538	R361,407
1982	January	4,436		2,790	957	2,143	5,890	28,288
	February	4,160		3,049	1,433	2,245	6,727	32,085

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

<sup>1</sup>These data are for rotary rigs operating reported by the Hughes Tool Company during the reporting period. Monthly figures are averages of a 4 or 5 week reporting period and are not calendar months.

<sup>2</sup>These data are for well completions reported to the American Petroleum Institute (API) during the reporting period. They exclude service wells and stratigraphic and core tests.

<sup>3</sup>Data reported for the first 2 months of each quarter cover 4 weeks of drilling activity, and data for the last month of the quarter cover 5 weeks of drilling activity.

R=Revised data.

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

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

• Wells: 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 <sup>1</sup>	Onshore <sup>1</sup>	Total <sup>1</sup>
		Monthly average			Annual total		
1973	AVERAGE	23	227	250	258,944	127,160	386,104
1974	AVERAGE	31	274	305	341,784	158,629	500,413
1975	AVERAGE	30	254	284	309,283	150,694	459,977
1976	AVERAGE	25	237	262	226,303	142,926	369,229
1977	AVERAGE	27	281	308	124,676	120,072	244,748
1978	AVERAGE	25	327	352	174,607	135,899	310,506
1979	AVERAGE	30	370	400	193,212	163,929	357,141
1980	January	29	439	468			
	February	29	440	469			
	March	29	448	477			
	April	31	465	496			
	May	34	468	502			
	June	39	496	535			
	July	42	514	556			
	August	44	521	565			
	September	44	523	567			
	October	41	530	571			
	November	41	531	572			
	December	40	540	580			
	AVERAGE	37	493	530	202,694	184,088	386,782
1981	January	38	553	591			
	February	41	561	602			
	March	40	570	610			
	April	40	605	645			
	May	42	619	661			
	June	44	652	696			
	July	43	668	711			
	August	46	689	735			
	September	47	697	744			
	October	52	689	741			
	November	52	681	733			
	December	47	656	703			
	AVERAGE	44	637	681			
1982	January	53	642	695			
	February	53	625	678			

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

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

<sup>1</sup>Monthly 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 February 1982 was 69.0 million short tons, 2.1 percent below the 70.5 million short tons produced in February 1981.

Electric utility coal consumption in January 1982 totaled 57.3 million short tons, 4.7 percent more than consumption in January 1981.

Electric utility coal stocks of 158.4 million short tons at the end of January 1982 were 18.6 million short tons (10.5 percent) below the level 1 year earlier.

Imports of coal in January 1982 totaled 71 thousand short tons. Exports of coal in January 1982 totaled 6.1 million short tons, 0.3 million short tons (4.8 percent) more than the amount exported during January 1981. Coal exports in January 1981 were principally to Japan (39.5 percent) and Europe (45.1 percent).

## Coal

### Bituminous Coal, Lignite, and Anthracite

		Production	Domestic Consumption	Imports <sup>1</sup>	Exports <sup>2,3</sup>	Stocks <sup>4</sup>
Thousand short tons						
1973	TOTAL	598,568	562,584	127	53,587	104,335
1974	TOTAL	610,023	558,402	2,080	60,661	96,323
1975	TOTAL	654,641	562,641	940	66,309	128,050
1976	TOTAL	684,913	603,790	1,203	60,021	134,438
1977	TOTAL	697,205	625,291	1,647	54,312	157,098
1978	TOTAL	670,164	625,225	2,953	40,714	145,551
1979	TOTAL	781,134	680,524	2,059	66,042	181,646
1980	January	69,594	63,521	121	4,460	179,450
	February	65,546	59,678	193	4,041	176,808
	March	70,953	58,851	93	5,633	176,685
	April	69,658	52,635	63	7,563	185,367
	May	71,043	52,834	207	8,597	193,920
	June	71,338	56,098	104	8,899	199,299
	July	61,285	63,122	32	8,247	187,913
	August	68,399	62,752	166	9,270	190,689
	September	68,822	57,306	2	8,364	194,467
	October	72,290	55,774	139	9,454	201,975
	November	68,655	56,800	3	8,987	204,436
	December	72,117	63,362	70	8,228	204,028
	TOTAL	829,700	702,733	1,194	91,742	
1981	January†	65,601	R67,477	35	5,795	198,603
	February†	70,498	R59,529	104	6,771	197,962
	March†	77,873	60,054	77	9,710	206,850
	April†	37,332	54,354	63	8,271	186,816
	May†	37,516	R54,645	96	6,086	166,814
	June†	62,379	R59,411	138	6,158	157,773
	July†	73,911	67,092	13	10,762	154,390
	August†	78,738	R65,537	150	11,315	156,529
	September†	80,240	59,364	69	11,900	164,222
	October†	83,309	NA	94	12,360	NA
	November†	72,676	NA	76	11,849	NA
	December†	67,672	NA	127	11,564	NA
	TOTAL	807,745	NA	1,043	112,541	NA
1982	January†	63,423	NA	71	6,177	NA
	February†	68,986	NA	NA	NA	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.

<sup>1</sup>Bituminous coal is the only type of coal imported during the years shown above.

<sup>2</sup>Includes exports of lignite beginning in 1978. Lignite prior to 1978 was combined with lignite briquets. Exports of lignite totaled 22,821 short tons in 1978; 26,389 short tons in 1979; and 65,064 short tons in 1980.

<sup>3</sup>Excludes shipments of anthracite to U.S. Armed Forces overseas (340,000 short tons in 1980).

<sup>4</sup>Stocks held by electric utilities, coke plants, and general industry at the end of period. Excludes stocks at retail dealers (which are consumed by the Residential and Commercial Sectors).

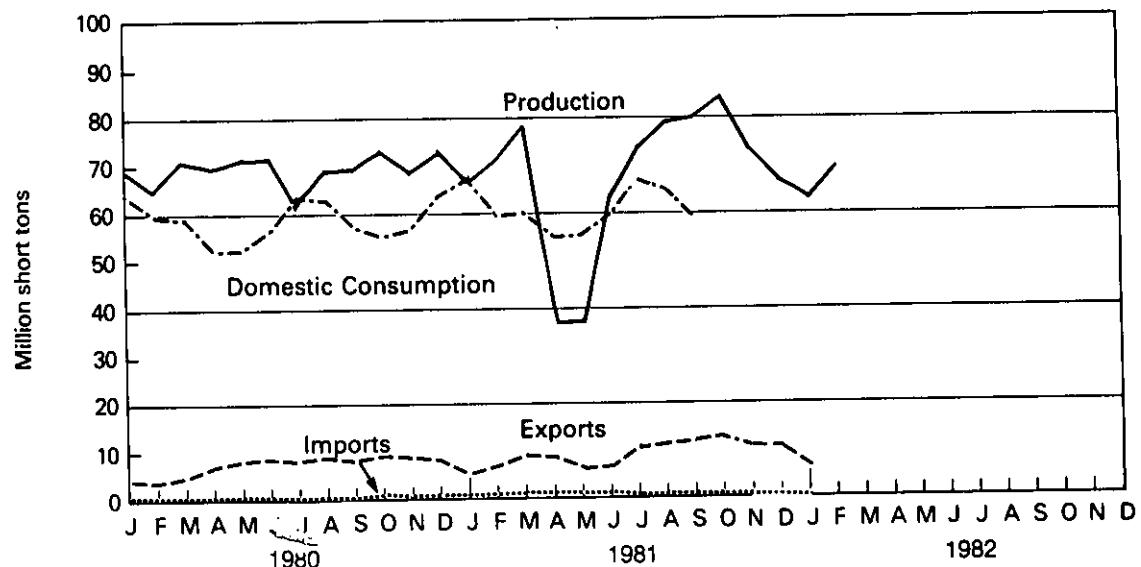
†Preliminary data. R=Revised data. NA=Not available.

Sources: • See Sources at the end of this section.

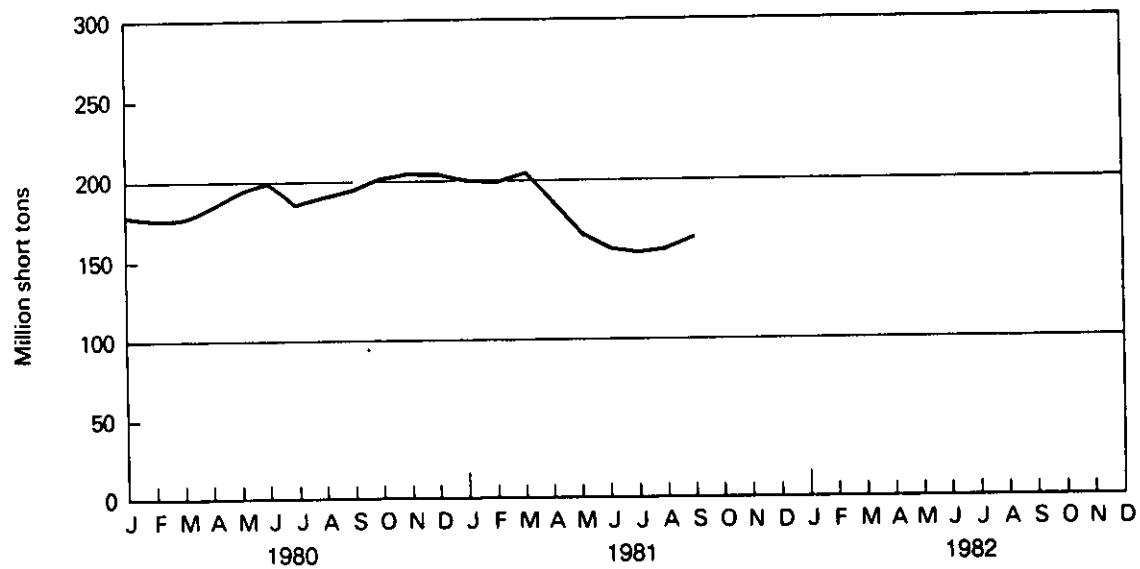
## Coal

### Bituminous Coal, Lignite, and Anthracite

#### Production, Consumption, Imports, and Exports



#### Stocks



# Coal

## Consumption—Bituminous Coal, Lignite, and Anthracite

		Industrial				
		Electric Utilities	Coke Plants <sup>1</sup>	Other Industrial <sup>2</sup> Including Transportation	Residential and Commercial	Total
					Thousand short tons	
1973	TOTAL	389,212	94,101	68,154	11,117	562,584
1974	TOTAL	391,811	90,191	64,983	11,417	558,402
1975	TOTAL	405,962	83,598	63,670	9,410	562,641
1976	TOTAL	448,371	84,704	61,799	8,916	603,790
1977	TOTAL	477,126	77,739	61,472	8,954	625,291
1978	TOTAL	481,235	71,394	63,085	9,511	625,225
1979	TOTAL	527,051	77,368	67,717	8,388	680,524
1980	January	50,371	6,342	5,944	864	63,521
	February	47,512	6,010	5,400	756	59,678
	March	46,685	6,428	5,199	539	58,851
	April	40,692	6,247	5,118	578	52,635
	May	41,464	6,127	4,894	349	52,834
	June	45,821	5,326	4,675	276	56,098
	July	53,655	4,903	4,222	342	63,122
	August	53,214	4,878	4,337	323	62,752
	September	47,913	4,794	4,170	429	57,306
	October	45,092	5,107	4,990	585	55,774
	November	45,698	5,152	5,331	619	56,800
	December	51,157	5,346	6,067	792	63,362
	TOTAL	569,274	66,660	60,347	6,452	702,733
1981	January†	R54,688	5,465	6,469	855	R67,477
	February†	47,914	5,177	5,874	565	R59,529
	March†	48,398	5,532	5,654	470	60,054
	April†	43,677	4,862	5,254	561	54,354
	May†	44,999	4,259	5,016	370	R54,645
	June†	R50,080	4,460	4,571	300	R59,411
	July†	56,144	5,440	5,092	416	67,092
	August†	R54,483	5,425	5,233	396	R65,537
	September†	48,483	5,329	5,025	527	59,364
	October†	47,800	NA	NA	NA	NA
	November†	47,014	NA	NA	NA	NA
	December†	53,116	NA	NA	NA	NA
	TOTAL	R596,797	NA	NA	NA	NA
1982	January†	57,284	NA	NA	NA	NA

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

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

<sup>1</sup>Bituminous coal and anthracite only. Lignite is not used at coke plants.

<sup>2</sup>See Explanatory Note 10.

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

Sources: \* See Sources at the end of this section.

# Coal

## Stocks<sup>1</sup>—Bituminous Coal, Lignite, and Anthracite

	Industrial				
	Electric Utilities	Coke Plants <sup>2</sup>	Other Industrial	Total <sup>3</sup>	
Thousand short tons					
1973	86,967	6,998	10,370	104,335	
1974	83,509	6,209	6,605	96,323	
1975	110,724	8,797	8,529	128,050	
1976	117,436	9,902	7,100	134,438	
1977	133,219	12,816	11,063	157,098	
1978	128,225	8,278	9,048	145,551	
1979	159,714	10,155	11,777	181,646	
1980	January	158,717	9,634	11,099	179,450
	February	157,124	9,263	10,421	176,808
	March	157,625	9,317	9,743	176,685
	April	165,817	9,579	9,971	185,367
	May	174,029	9,692	10,199	193,920
	June	178,959	9,913	10,427	199,299
	July	168,806	8,427	10,680	187,913
	August	171,891	7,866	10,932	190,689
	September	175,067	8,213	11,187	194,467
	October	182,045	8,488	11,442	201,975
	November	184,133	8,606	11,697	204,436
	December	183,010	9,067	11,951	204,028
1981	January†	176,975	9,634	11,994	198,603
	February†	175,715	10,211	12,036	197,962
	March†	183,983	10,788	12,079	206,850
	April†	R169,221	6,952	10,970	R187,143
	May†	R153,415	4,850	9,861	R168,126
	June†	144,520	4,500	8,753	157,773
	July†	R140,124	5,074	8,660	R153,858
	August†	R142,318	5,648	8,566	R156,532
	September†	149,526	6,224	8,472	164,222
	October†	159,676	NA	NA	NA
	November†	167,002	NA	NA	NA
	December†	R168,893	NA	NA	NA
1982	January†	158,371	NA	NA	NA

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

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

<sup>1</sup>Stocks held by electric utilities, coke plants, and general industry at end of period.

<sup>2</sup>Bituminous coal and anthracite only. Lignite is not used at coke plants.

<sup>3</sup>Total excludes stocks at retail dealers (which are consumed by the Residential and Commercial Sectors).

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

Sources: • See Sources at the end of this section.

## Sources for the Coal Section

- **Production:** 1973 through September 1977: Bureau of Mines, *Minerals Yearbook and Mineral Industry Surveys*; October 1977 forward: Energy Information Administration (EIA), "Weekly Coal Report," "Coal Distribution Report," (Form EIA-6), and selected State agencies.
- **Consumption and Stocks:** 1973 through September 1977: Bureau of Mines, *Minerals Yearbook and Mineral Industry Surveys*;
  - Electric Utilities—October 1977 forward: EIA, "Monthly Power Plant Report" (EIA Form 759 formerly FPC Form 4).
  - Other Industrial—October 1977 through December 1979: EIA, "Monthly Fuel Consumption Report - Manufacturing Plants" (Form EIA-3); January 1980 forward: EIA, "Quarterly Fuel Consumption Report - Manufacturing Plants" (Form EIA-3) and EIA, "Coal Distribution Report" (Form EIA-6).
  - Coke Plants—October 1977 through December 1980: EIA, "Coke and Coal Chemicals - Monthly/Annual" (Form EIA-5/5A); January 1981 forward: EIA, "Coke and Coal Chemicals - Quarterly/Annual" Form EIA-5/5A).
  - Residential and Commercial—October 1977 through December 1979: EIA, "Monthly Coal Report, Retail Dealers and Upper Lake Docks" (Form EIA-2); January 1980 forward: EIA, "Coal Distribution Report" (Form EIA-6).
- **Imports/Exports:** 1973 through September 1977: Bureau of Mines, *Minerals Yearbook and Mineral Industry Surveys*; October 1977 forward: Bureau of the Census, Monthly Reports IM 145 (Imports) and EM 522 (Exports).

# Part 7

## Electric Utilities

### Electric Utilities

January 1982 production of electricity by utilities was 210.1 billion kilowatt-hours, slightly higher than the January 1981 production level. Coal-fired production totaled 113.8 billion kilowatt-hours, 1.8 percent above the January 1981 level. Hydroelectric production totaled 26.9 billion kilowatt-hours, 20.4 percent above the January 1981 level. Nuclear production was 25.7 billion kilowatt-hours in January 1982, 8.0 percent above the January 1981 level. Natural gas-fired production increased to 22.6 billion kilowatt-hours, 2.4 percent above the level 1 year earlier. Petroleum-fired production totaled 20.7 billion kilowatt-hours, 20.4 percent below the January 1981 level.

Sales of electricity to all ultimate consumers in the United States in January 1982 totaled 192.0 billion kilowatt-hours, an increase of 11.4 percent from sales of the month before and less than 0.1 percent above January 1981 sales. Sales to residential consumers during January 1982 were 76.2 billion kilowatt-hours, 2.9 percent above sales for the corresponding month in 1981. Commercial sales were

44.9 billion kilowatt-hours, 3.9 percent more than the amount in January 1981. Sales to industrial consumers totaled 62.9 billion kilowatt-hours in January 1982, 6.2 percent less than the January 1981 figure. In December 1981 other sales totaled 7.9 billion kilowatt-hours, 4.9 percent above the January 1981 level.

Electric utility petroleum consumption (excluding petroleum coke) during January 1982 was 35.3 million barrels, a 19.6 percent drop from the January 1981 level. Coal consumption for January 1982 was 57.3 million tons, 4.7 percent above the January 1981 rate. During January 1982, consumption of natural gas by electric utilities was 237.5 billion cubic feet, 2.6 percent above the January 1981 consumption level.

On January 31, 1982, utility stocks of anthracite, bituminous coal, and lignite totaled 158.4 million tons. Stockpiles were 10.5 percent below the levels of January 1981. Petroleum stocks (excluding petroleum coke) on January 31, 1982, totaled 119.9 million barrels, 6.8 percent below the levels for the same month of 1981.

# Electric Utilities

## Net Electricity Production by Primary Energy Source

		Coal <sup>a</sup>	Petroleum <sup>b</sup>	Natural Gas	Nuclear	Hydro	Other <sup>c</sup>	Total
Million kilowatt-hours								
1973	TOTAL	847,851	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	1,887,140
1975	TOTAL	852,786	289,095	299,778	172,505	300,047	3,437	1,917,649
1976	TOTAL	944,391	319,988	294,624	191,104	283,707	3,883	2,037,696
1977	TOTAL	985,219	358,179	305,505	250,883	220,475	4,063	2,124,323
1978	TOTAL	975,742	365,060	305,391	276,403	280,419	3,315	2,206,331
1979	TOTAL	1,075,037	303,525	329,485	255,155	279,783	4,387	2,247,372
1980	January	103,258	24,986	26,349	19,746	25,278	388	200,005
	February	98,151	24,781	24,755	19,277	21,378	373	188,715
	March	95,386	20,415	26,891	20,039	24,332	401	187,464
	April	83,562	16,025	24,181	18,794	25,748	410	168,720
	May	84,884	16,545	26,587	18,385	28,865	468	175,734
	June	93,692	18,020	31,295	18,322	27,656	445	189,430
	July	108,457	23,289	39,063	21,024	24,469	475	216,776
	August	107,580	24,885	37,647	24,333	20,431	517	215,393
	September	97,557	17,815	33,580	23,572	18,491	469	191,485
	October	91,196	15,858	28,592	24,510	17,866	533	178,555
	November	93,501	19,989	24,338	20,984	19,217	520	178,550
	December	104,339	23,386	22,961	22,130	22,290	506	195,613
	TOTAL	1,161,562	245,994	346,240	251,116	276,021	5,506	2,286,439
1981 <sup>d</sup>	January	R111,765	R25,963	22,081	R23,779	R22,338	540	R206,467
	February	97,653	17,444	21,339	21,595	R22,099	483	R179,613
	March	99,482	R16,957	R25,997	22,004	20,572	541	R185,553
	April	88,109	15,106	R27,460	20,646	20,723	500	R172,545
	May	88,941	14,508	R30,070	19,723	24,081	483	R177,806
	June	R99,637	18,972	35,885	21,166	26,370	473	R202,702
	July	112,854	R20,072	R38,712	23,080	25,133	523	R220,373
	August	R108,403	R16,001	R36,918	26,946	21,615	520	R210,403
	September	97,664	15,566	30,850	24,398	R17,822	538	R186,838
	October	97,046	16,213	28,917	20,556	R18,088	531	R181,352
	November	94,841	13,847	24,670	22,783	R18,963	465	R175,570
	December	106,608	R15,772	22,877	25,997	R23,879	457	R195,590
	TOTAL	R1,203,203	R206,421	R345,777	R272,674	R260,684	6,054	R2,294,812
1982	January	113,818	20,677	22,611	25,678	26,904	411	210,098

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

<sup>a</sup>Monthly data for 1981 have been revised and finalized.

<sup>b</sup>Includes bituminous coal, lignite, and anthracite.

<sup>c</sup>Includes fuel oil No. 2, No. 4, No. 5, No. 6, crude oil, kerosene, and petroleum coke.

<sup>d</sup>Includes geothermal, wood and waste.

R=Revised data.

Source: •Energy Information Administration Form 759, "Monthly Power Plant Report."

## Electric Utilities

### Electricity Sales<sup>1</sup>

		Residential	Commercial	Industrial	Other <sup>2</sup>	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	R588,140	R403,049	R687,680	R68,222	R1,747,091
1976	TOTAL	R608,452	R425,094	R754,069	R69,631	R1,855,246
1977	TOTAL	R645,239	R446,514	R786,037	R70,571	R1,948,361
1978	TOTAL	R674,466	R461,163	R809,078	R73,215	R2,017,922
1979	TOTAL	682,819	473,307	841,903	73,070	R2,071,099
1980	January	65,841	39,578	67,532	6,634	179,585
	February	64,514	39,528	68,508	6,171	178,720
	March	60,497	38,762	69,086	6,028	174,373
	April	51,749	36,453	67,908	5,591	161,702
	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	75,020	47,763	67,415	6,266	196,464
	September	67,969	46,028	69,570	6,572	190,139
	October	54,014	40,479	69,413	6,174	170,080
	November	50,539	37,954	67,613	6,068	162,174
	December	60,775	39,846	68,517	6,469	175,807
	TOTAL	717,495	488,156	815,067	73,732	2,094,449
1981	January	R74,087	R43,229	R67,076	R7,557	R191,949
	February	64,588	40,244	67,394	6,387	178,613
	March	56,238	38,586	68,599	6,366	169,789
	April	49,624	36,975	68,136	5,953	160,688
	May	47,281	38,409	68,761	6,191	160,642
	June	54,997	43,130	71,615	6,237	175,979
	July	68,901	47,859	71,716	6,532	195,008
	August	69,224	47,842	72,021	6,553	195,640
	September	60,173	45,877	70,986	6,585	183,620
	October	51,985	41,175	69,132	6,388	168,679
	November	50,754	38,746	66,139	6,490	162,129
	December	60,826	40,782	64,130	6,637	172,375
	TOTAL	R708,678	R502,854	R825,705	R77,876	R2,115,111
1982	January	76,237	44,906	62,941	7,929	192,013

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

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

<sup>1</sup>Electricity sales to all ultimate consumers.

<sup>2</sup>Includes street lighting and transportation uses.

R=Revised data.

Source: •1973 through February 1980: FPC Form 5, "Monthly Statement of Electric Operating Revenue and Income"; March 1980 forward: FERC 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.	Total Liquids	Petroleum Coke		
										Thousand short tons	Million cubic feet
1973	TOTAL	1,443	376,975	10,794	389,212	513,190	47,058	560,248	507	3,660,172	
1974	TOTAL	1,498	378,643	11,670	391,811	483,146	53,128	536,274	625	3,443,428	
1975	TOTAL	1,480	388,523	15,960	405,962	467,221	38,907	506,128	70	3,157,689	
1976	TOTAL	1,350	425,205	21,817	448,371	514,077	41,843	555,920	68	3,080,888	
1977	TOTAL	1,425	451,051	24,650	477,126	574,869	48,837	623,705	98	3,191,200	
1978	TOTAL	1,064	448,763	31,407	481,235	588,319	47,520	635,839	398	3,188,363	
1979	TOTAL	1,046	488,129	37,876	527,051	492,606	30,691	523,297	268	3,490,523	
1980	January	74	46,518	3,779	50,371	40,695	2,197	42,892	54	276,743	
	February	72	43,969	3,471	47,512	40,231	1,919	42,150	21	263,771	
	March	83	43,244	3,357	46,685	33,406	1,379	34,785	13	283,945	
	April	71	37,971	2,651	40,692	26,867	673	27,540	7	256,606	
	May	86	38,116	3,262	41,464	26,991	840	27,831	11	281,886	
	June	89	42,073	3,658	45,821	29,551	1,138	30,689	11	336,894	
	July	93	49,815	3,746	53,655	37,297	2,791	40,088	11	420,339	
	August	80	49,077	4,057	53,214	40,019	2,833	42,852	15	405,343	
	September	84	44,487	3,342	47,913	29,367	1,286	30,653	11	357,286	
	October	73	41,819	3,200	45,092	26,269	689	26,958	8	301,266	
	November	56	42,379	3,263	45,698	32,782	1,320	34,102	7	255,559	
	December	89	47,212	3,856	51,157	38,387	1,285	39,672	9	241,957	
	TOTAL	951	526,680	41,642	569,274	401,863	18,351	420,214	179	3,681,595	
1981 <sup>1</sup>	January	81	R50,635	3,972	R54,688	R41,904	2,027	R43,931	10	231,606	
	February	58	44,583	3,272	47,914	28,948	1,049	29,997	9	224,003	
	March	75	45,168	3,155	48,398	28,492	R775	R29,267	9	R273,431	
	April	73	40,535	3,069	43,677	25,028	557	25,585	7	R289,053	
	May	91	41,405	3,503	44,999	23,958	967	24,925	14	R316,310	
	June	105	R46,503	R3,471	R50,080	30,673	R1,731	R32,404	13	R380,775	
	July	102	51,705	4,337	56,144	32,577	R1,666	R34,243	11	R410,666	
	August	133	50,010	R4,339	R54,483	R26,598	R584	R27,182	13	R389,564	
	September	98	44,557	3,828	48,483	25,762	520	26,282	13	R324,828	
	October	115	44,161	3,524	47,800	26,646	556	27,201	15	R301,670	
	November	141	43,032	3,841	47,014	22,749	R432	R23,181	12	258,811	
	December	148	48,487	4,481	53,116	R26,345	567	R26,912	12	R239,436	
	TOTAL	1,221	R550,784	R44,792	R596,797	R339,680	R11,431	R351,111	139	R3,640,154	
1982	January	128	52,433	4,723	57,284	33,774	1,567	35,341	10	237,533	

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

<sup>1</sup>Monthly data for 1981 have been revised and finalized.

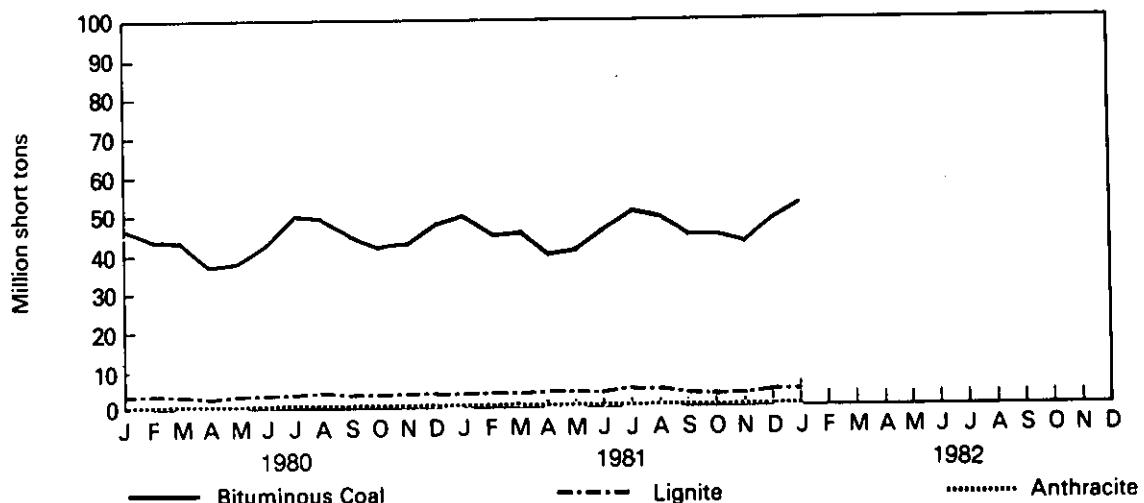
R=Revised data.

Source: \*Energy Information Administration Form 759, "Monthly Power Plant Report."

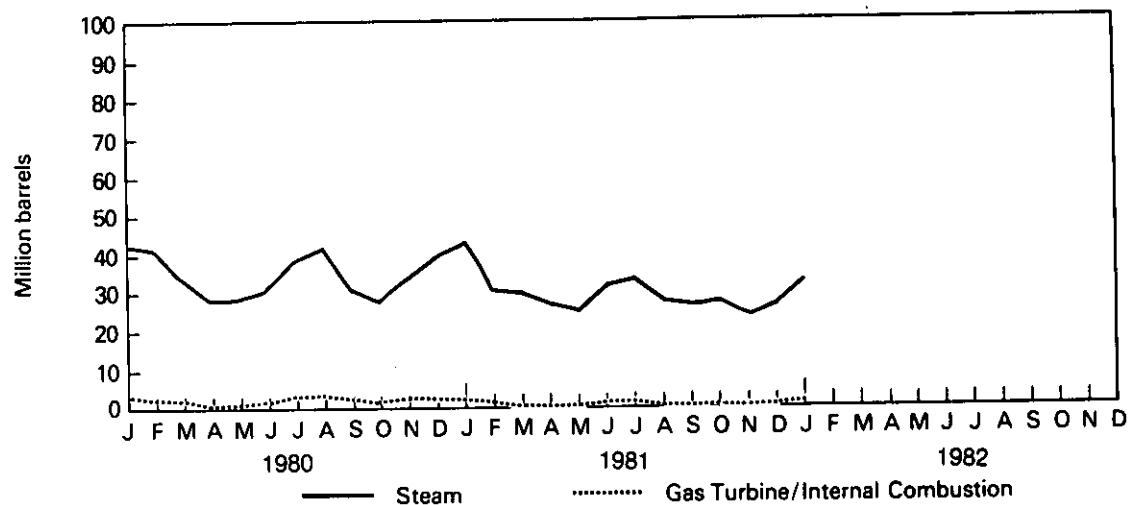
## Electric Utilities

### Primary Energy Consumed to Produce Electricity

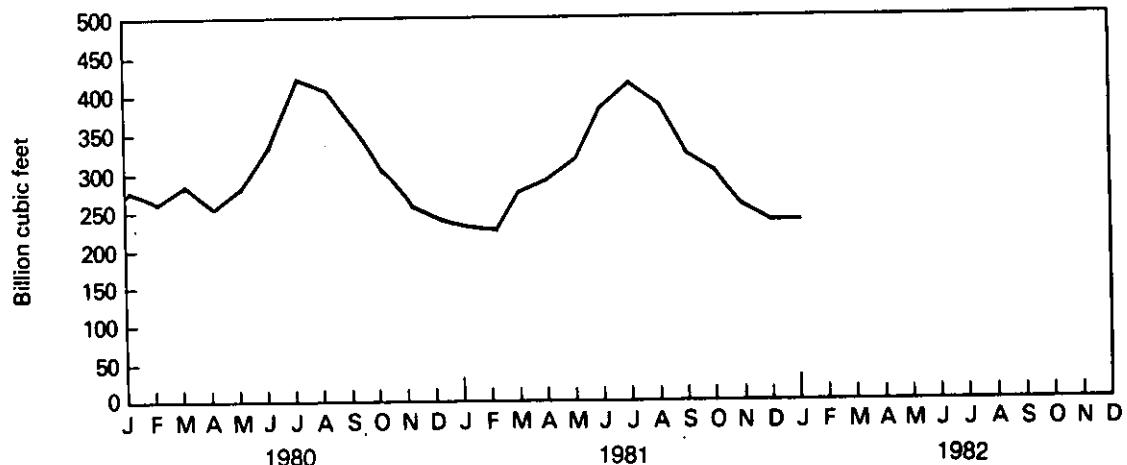
#### Coal Consumption



#### 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.	Total Liquids	Petroleum Coke
						Thousand short tons		Thousand short tons
1973		\$1,068	\$84,941	\$961	\$86,967	\$79,121	\$10,095	\$89,216
1974		\$930	\$81,712	\$867	\$83,509	\$87,718	\$15,199	\$112,917
1975		\$982	\$107,927	\$1,815	\$110,724	\$108,825	\$16,432	\$125,257
1976		\$1,000	\$114,130	\$2,306	\$117,436	\$106,993	\$14,703	\$121,696
1977		\$2,321	\$128,210	\$2,888	\$133,219	\$124,750	\$19,281	\$144,031
1978		\$2,178	\$123,020	\$3,027	\$128,225	\$102,402	\$16,386	\$118,788
1979		\$3,274	\$152,981	\$3,459	\$159,714	\$111,121	\$20,301	\$131,422
1980	January	3,371	151,891	3,455	158,717	114,313	19,597	133,909
	February	3,451	150,151	3,522	157,124	111,353	19,055	130,409
	March	3,488	151,022	3,116	157,625	116,246	18,934	135,180
	April	3,533	158,441	3,843	165,817	118,824	19,201	138,025
	May	3,725	166,325	3,980	174,029	123,043	19,485	142,529
	June	3,838	171,042	4,079	178,959	124,177	19,273	143,450
	July	3,955	161,159	3,691	168,806	121,596	18,680	140,276
	August	4,098	163,756	4,036	171,891	118,514	18,150	136,664
	September	4,291	166,515	4,262	175,067	122,240	18,064	140,304
	October	4,481	173,411	4,153	182,045	124,046	18,398	142,445
	November	4,661	175,489	3,983	184,133	119,863	18,051	137,915
	December	4,741	174,154	4,115	183,010	117,227	18,147	135,374
1981 <sup>a</sup>	January	4,824	167,884	4,267	176,975	R110,533	R18,199	R128,732
	February	4,859	166,552	4,304	175,715	R112,879	R17,315	R130,195
	March	4,951	174,554	4,478	183,983	R111,490	R17,421	R128,911
	April	5,035	R159,645	4,541	R169,221	R109,455	R17,197	R126,652
	May	5,008	R143,500	4,907	R153,415	R112,172	R17,073	R129,245
	June	5,081	134,321	5,119	144,520	R109,988	R17,957	R127,945
	July	5,269	129,684	5,171	R140,124	R110,476	R16,856	R127,332
	August	5,337	R132,072	4,909	R142,318	R114,016	R16,801	R130,817
	September	5,428	138,808	5,290	R149,526	R112,992	R16,515	R129,506
	October	5,512	148,952	5,213	R159,676	R110,900	R16,164	R127,063
	November	5,548	156,360	5,094	167,002	R110,939	R16,077	R127,016
	December	5,537	R158,258	5,098	R168,893	R112,380	R15,756	R128,136
1982	January	5,517	148,227	4,628	158,371	104,921	15,014	119,935
								39

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

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

<sup>a</sup>Monthly data for 1981 have been revised and finalized.

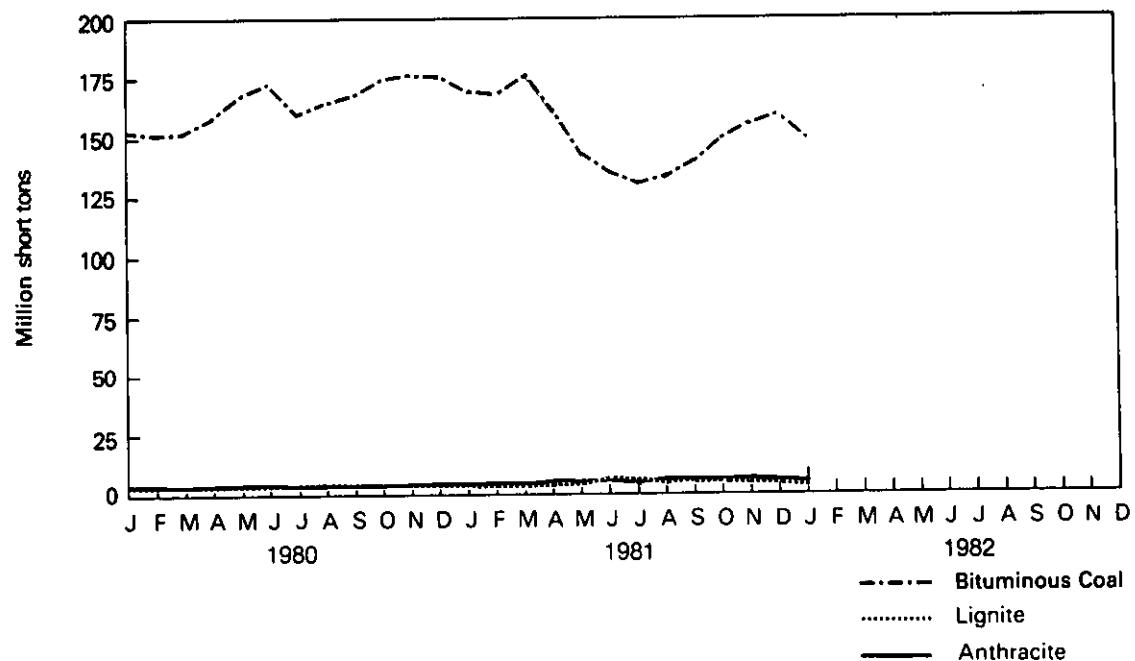
†Total as of December 31. R=Revised data.

Source: \*Energy Information Administration Form 759, "Monthly Power Plant Report."

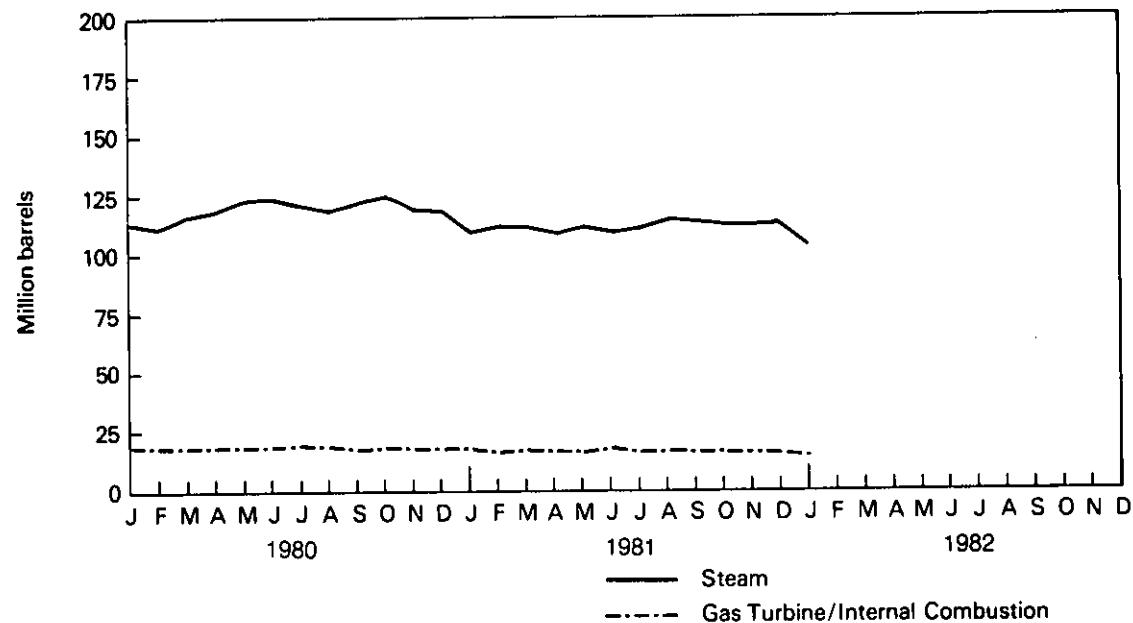
## Electric Utilities

### End-of-Month Coal and Petroleum Stocks

#### Coal Stocks (Bituminous Coal, Lignite, and Anthracite)



#### Petroleum Stocks





# Part 8

## Nuclear

### Nuclear

During January 1982, operating domestic nuclear powerplants generated a total of 25,678 million net kilowatt-hours of electricity, 1.2 percent below the December 1981 output, but 8.0 percent above the comparable January 1981 generation. Nuclear power accounted for 12.2 percent of all domestic commercial electricity generated in January 1982.

As of January 31, 1982, there were 74 licensed, operable domestic nuclear power reactor units, unchanged from the December 1981 level. The combined net maximum dependable capacity of the 74 units was 55,471 million kilowatts. Of these 74 units, two (McGuire-1 and Sequoyah-2) were in power ascension and 16 (Beaver Valley, Browns Ferry-3, Dresden-3, Farley-1, Fitzpatrick, Fort St. Vrain, Hatch-1, LaCrosse, Millstone-2, Oconee-1 and -2, Oyster Creek, Pilgrim, Salem-1, Three Mile Island-1, and Turkey Point-3) generated no electricity or operated substantially below capacity during January.

In January 1982, two nuclear plants—Washington Public Power Supply System's units -4 and -5, with planned op-

erating capacities of 1,218 megawatts and 1,240 megawatts, respectively—were cancelled. These two units—which were approximately 26 and 14 percent completed at the time they were cancelled—were each further along in construction than any other previously cancelled domestic nuclear power unit. This loss of two units with "Construction Permits Granted" (see "Status of Nuclear Reactor Units" table) reduced "Total Reactor Units" (in operation, in construction, or in planning) to 161, with a combined design electrical rating capacity of 154 million net kilowatts.

On January 25, 1982, a pipe rupture in the primary loop of one of the steam generating units of Rochester Gas & Electric's Ginna unit resulted in the spillage of about 8,500 gallons of slightly radioactive water within the reactor containment area. Radiation monitors adjacent to the reactor site also indicated a very slight rise in activity; however, by the end of the day, these monitors indicated normal background levels. Although an "emergency" status was initially declared, this was downgraded to an "alert" the evening of the same day. The reactor core did not suffer any untoward effects.

# Nuclear

## Nuclear Powerplant Operations

		Reactors Licensed For Commercial Operations <sup>1</sup>	Nuclear-Based Electricity Generation <sup>2</sup>  Million net kilowatt-hours	Nuclear Portion of Domestic Electricity Generation  Percent	Maximum Dependable Capacity <sup>3</sup>  Million net kilowatts	Capacity Factor <sup>4</sup>  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	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	23,572	12.3	53,855	60.8
	October	75	24,510	13.7	54,724	60.1
	November	75	20,984	11.8	54,737	53.2
	December	75	22,130	11.3	54,749	54.3
	AVERAGE	74	251,116	11.0	53,103	59.8
1981	January	75	R23,779	R11.5	55,853	56.2
	February	75	21,595	12.0	55,830	57.6
	March	75	22,004	11.9	55,818	53.0
	April	75	20,846	12.0	55,817	51.4
	May	75	19,723	11.1	55,841	47.5
	June	76	21,166	10.4	56,981	51.6
	July	74	23,080	10.5	55,840	55.6
	August	74	26,946	12.8	55,840	64.9
	September	75	24,398	13.1	R56,932	59.5
	October	75	20,556	11.3	R56,950	R48.4
	November	74	22,783	13.0	R55,860	R56.8
	December	74	25,997	13.3	R55,837	R62.6
	AVERAGE	75	R272,674	11.9	R56,117	R55.4
1982	January	74	25,678	12.2	55,471	62.2

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

<sup>1</sup>See next table (Status of Nuclear Reactor Units) for explanation and sources.

<sup>2</sup>Electricity generation entries represent yearly or monthly totals rather than averages.

<sup>3</sup>For most reactors the net maximum dependable capacity (MDC) is used. Where the MDC is not available, the net design electrical rating (DER) is used. Starting with January 1982, the capacity associated with those few "derated" units for which either the Nuclear Regulatory Commission or the operating utility has imposed a "power limit", this restricted capacity is used. See Explanatory Note 11 for definition of MDC and DER. As of this issue, the capacity assigned to the Hanford "N" reactor is revised from 900 MWe to 950 MWe, based on information recently obtained.

<sup>4</sup>Average percentage of the net maximum dependable capacity utilized yearly or monthly.

R=Revised data.

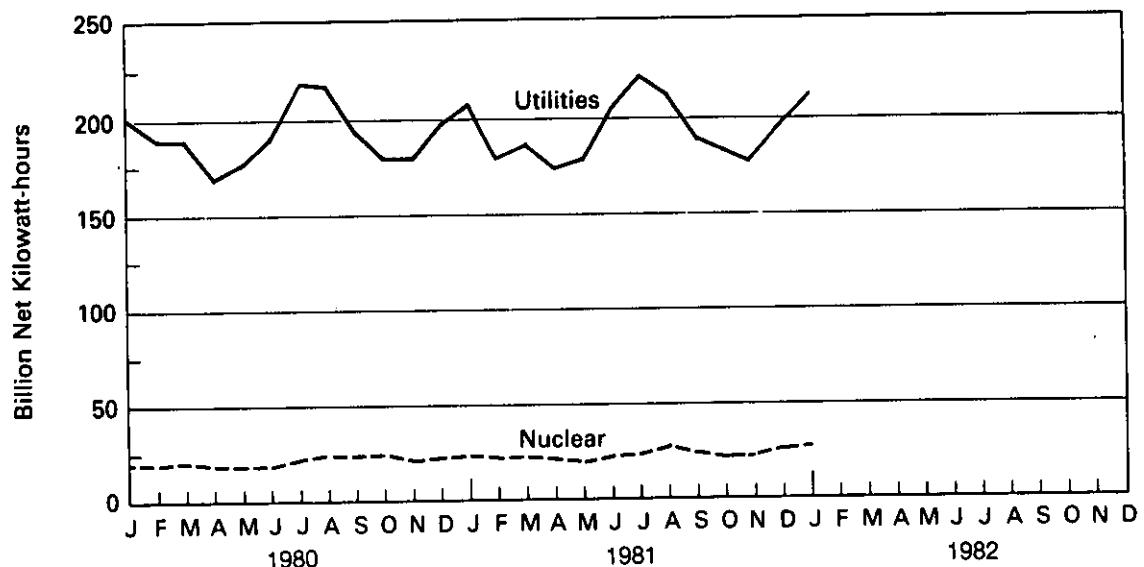
Sources: • Capacity data for units in commercial operation or start-up testing—Nuclear Regulatory Commission Report NUREG—0020, "Licensed Operating Reactors."

• Generation Data—Energy Information Administration Form 759, "Monthly Power Plant Report."

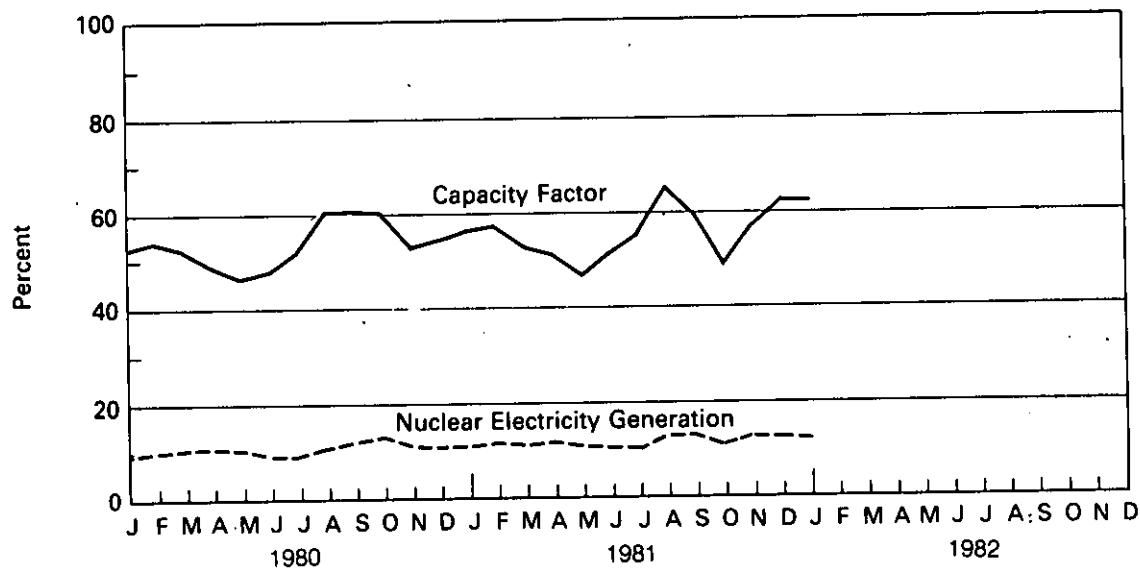
# Nuclear

## Nuclear Powerplant Operations

Electricity Generated by Utilities and by Nuclear Power-plants



Nuclear Portion of Electricity Generation and Capacity Factor\*



\*Percentage of Maximum Dependable Capacity utilized.

# Nuclear

## Status of Nuclear Reactor Units<sup>1</sup>

		Reactors Licensed For Commercial Operations <sup>2</sup>	Construction Permits Granted	Construction Permits Pending	Reactor Units on Order	Reactor Units Announced	Total Reactor Units	Total Design Capacity <sup>2</sup> (Million Net 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		71	91	21	3	0	186	180
1980	January	71	90	17	3	0	181	174
	February	72	89	16	3	0	180	173
	March	72	87	14	3	0	176	169
	April	74	85	14	3	0	176	169
	May	74	85	14	3	0	176	169
	June	74	85	14	3	0	176	169
	July	74	85	14	3	0	176	169
	August	74	85	14	3	0	176	169
	September	74	85	14	3	0	176	169
	October	75	84	14	3	0	176	169
	November	75	82	14	3	0	176	169
	December	75	82	12	3	0	174	167
							172	164
1981	January	75	81	12	3	0	171	164
	February	75	81	12	3	0	171	164
	March	75	81	12	3	0	171	164
	April	75	81	12	3	0	171	164
	May	75	81	12	3	0	171	164
	June	76	80	12	3	0	171	164
	July	74	80	12	3	0	171	164
	August	74	79	12	3	0	169	163
	September	75	78	11	3	0	168	162
	October	75	77	11	3	0	167	161
	November	74	78	11	3	0	166	160
	December	74	75	11	3	0	163	157
1982	January	74	73	11	3	0	161	154

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

<sup>1</sup>Monthly data are the status as of the last day of the month. Annual data are the status as of December 31 of each year.

<sup>2</sup>These figures include reactors in fuel-loading, power-testing, and power-ascension stages. They also include two Department of Energy, dual-purpose reactors -Shippingport (capacity=60 MWe) and Hanford (capacity=850 MWe) which, while they are not licensed by the Nuclear Regulatory Commission, do generate electricity on a commercial basis. Not included in the above table is the Experimental Breeder Reactor-2, which generates electricity but does not distribute it commercially. Three reactors that have each been inoperative for at least 2 years, were dropped from this list due to their uncertain futures: Humboldt Bay (capacity=65 MWe), which requires major seismic modifications, was dropped from the list in January 1981; Dresden-1 (capacity=200 MWe) which is undergoing major modifications, and Three Mile Island-2 (capacity=906 MWe), where operations were suspended in March 1979 due to an accident, were both dropped from the list as of July 1981.

<sup>3</sup>Entries in this column are based on design electrical ratings. See Explanatory Note 11 for a definition of this unit.

Sources: • Compiled from various sources, primarily the Nuclear Energy, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones," and from the Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternate Fuels.

# Part 9

# Price

## Price

### Crude Oil

The average price of domestic crude oil purchased at the wellhead was \$30.72 per barrel in December 1981. This was 0.8 percent below the previous month's level and 19.1 percent above the level in December 1980.

During January 1982, the composite refiner acquisition cost of crude oil was \$34.01 per barrel, \$0.32 per barrel (0.9 percent) below the previous month's price of \$34.33. The imported price decreased \$0.44 per barrel from the December 1981 level to \$35.51 per barrel in January. This price was 8.6 percent below the January 1981 level. The domestic price in January 1982 was \$33.42, a decrease of \$0.09 per barrel from the December 1981 average.

### Residual Fuel Oil

The average price, excluding taxes, for No. 6 residual fuel oil sold to utilities, industry, and other ultimate consumers in December 1981 was \$30.85 per barrel, \$0.69 per barrel (2.3 percent) above the previous month's price and 4.6 percent below the December 1980 average. The average price, excluding taxes, for No. 6 residual fuel oil sold to resellers, bulk plants, jobbers, and other wholesale accounts in December 1981 was \$27.28 per barrel, \$0.71 (2.5 percent) below the November 1981 average and an 8.3-percent decrease from the December 1980 average.

### Heating Oil

The national average price of heating oil sold to residential customers in January 1982 was 122.1 cents per gallon. This was 0.1 percent above the selling price in December 1981 and 6.7 percent above the

January 1981 price. The average distributor margin on residential heating oil in January was 18.2 cents per gallon, 20.5 percent above the margin during January 1981. The refiners' national average selling price to resellers and retailers was 99.3 cents per gallon in January 1982, 4.6 percent above the January 1981 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 December 1981 was 102.2 cents per gallon, a 0.4-percent decrease from the previous month's average but an 11.6-percent increase over the December 1980 average.

### Motor Gasoline

The national average retail price for all grades and all types of motor gasoline was 131.8 cents per gallon in February 1982. Leaded regular gasoline at all types of stations sold for an average of 126.0 cents per gallon in February, 2.5 cents lower (1.9 percent) than the price in January. The price of unleaded regular gasoline at all types of stations was 133.4 cents per gallon in February, 2.4 cents lower (1.8 percent) than the price in January.

### Liquefied Petroleum Gases

The average wholesale price for propane during December 1981, excluding taxes, was 45.5 cents per gallon, 4.2 percent below the previous month's level and 2.2 percent below the December 1980 level.

In December 1981, the average wholesale price for butane, excluding taxes, was 55.4 cents per gallon, 10.1 percent below the previous month's price and 23.8 percent below the December 1980 average.

# Price

## Petroleum Price Summary

	Actual Domestic Average Wellhead Price <sup>a</sup>	Refiner Acquisition Cost of Crude Oil <sup>b</sup>			No. 6 Residual Oil Price Average <sup>c</sup> Wholesale <sup>d</sup> Retail <sup>e</sup>	
		Domestic	Imported	Composite	Dollars per barrel	
<b>1976 AVERAGE</b>	<b>8.19</b>	<b>8.84</b>	<b>13.48</b>	<b>10.89</b>	<b>10.72</b>	<b>11.49</b>
<b>1977 AVERAGE</b>	<b>8.57</b>	<b>9.55</b>	<b>14.53</b>	<b>11.96</b>	<b>11.96</b>	<b>13.23</b>
<b>1978 AVERAGE</b>	<b>9.00</b>	<b>10.81</b>	<b>14.57</b>	<b>12.46</b>	<b>11.51</b>	<b>12.75</b>
<b>1979 AVERAGE</b>	<b>12.84</b>	<b>14.27</b>	<b>21.67</b>	<b>17.72</b>	<b>17.68</b>	<b>18.67</b>
<b>1980</b>						
January	17.88	18.78	30.75	24.81	24.41	26.21
February	18.81	21.22	32.40	26.11	23.34	26.48
March	19.34	22.07	33.42	26.88	21.11	25.33
April	20.29	22.89	33.54	27.09	19.09	22.87
May	21.01	23.63	34.33	27.85	20.22	23.75
June	21.53	24.48	34.48	28.80	20.44	24.09
July	22.26	25.05	34.51	28.73	21.28	23.86
August	22.63	24.98	34.44	28.70	22.25	25.00
September	22.59	25.37	34.46	28.96	22.47	25.31
October	23.23	26.21	34.63	29.56	24.06	26.68
November	23.82	26.51	35.09	29.79	28.12	30.10
December	25.80	28.55	35.63	31.39	29.76	32.33
<b>AVERAGE</b>	<b>21.19</b>	<b>24.23</b>	<b>33.89</b>	<b>28.07</b>	<b>23.14</b>	<b>26.09</b>
<b>1981</b>						
January	28.85	32.71	38.85	34.86	31.14	33.65
February	34.14	36.27	39.00	37.28	31.81	36.04
March	34.70	36.97	38.31	37.48	31.78	36.11
April	34.05	35.58	38.41	36.58	30.56	34.70
May	32.71	35.21	37.84	36.11	30.41	34.11
June	31.71	34.20	37.03	35.03	25.95	31.03
July	31.13	33.76	36.58	34.70	26.52	30.57
August	31.13	33.79	35.82	34.46	27.01	30.52
September	31.13	33.47	35.44	34.11	26.20	30.33
October	31.06	33.48	35.43	34.07	26.78	30.32
November	30.98	33.49	36.26	34.34	R27.99	30.16
December	†30.72	R33.51	R35.95	R34.33	†27.28	†30.85
<b>AVERAGE</b>	<b>31.77</b>	<b>34.88</b>	<b>37.14</b>	<b>35.64</b>	<b>28.87</b>	<b>32.49</b>
<b>1982</b>						
January	NA	†33.42	†35.51	†34.01	NA	NA
February	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.

<sup>a</sup>See Explanatory Note 12.

<sup>b</sup>See Explanatory Note 13.

<sup>c</sup>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.

<sup>d</sup>Excludes tax.

<sup>e</sup>Preliminary data. R=Revised data. NA=Not available.

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

\*Refiner acquisition cost—January 1976: Form FEO 98, "Monthly Cost Allocation Report"; February 1976 through June 1978: FEA Form P110-M-1, "Refiners' Monthly Cost Allocation Report"; July 1978 through December 1980: ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report"; January 1981 forward: Form EIA-14, "Refiners' Monthly Cost Report."

\*No. 6 residual oil price—FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

## Price

### Petroleum Price Summary (continued)

	No. 2 Diesel Price Average <sup>1</sup>		No. 2 Heating Oil Price Average		Gasoline Price Average All Types <sup>2</sup>	Propane Price Average <sup>3</sup>	Butane Price Average <sup>4</sup>
	Wholesale <sup>5</sup>	Retail <sup>5</sup>	Wholesale	Retail	Retail	Wholesale <sup>5</sup>	Wholesale <sup>5</sup>
Cents per gallon							
1976 AVERAGE	31.9	34.7	32.6	40.6	NA	20.6	21.9
1977 AVERAGE	36.1	39.3	36.9	46.0	NA	25.0	25.4
1978 AVERAGE	37.1	40.2	38.7	49.4	65.2	24.0	23.0
1979 AVERAGE	58.2	62.4	53.0	65.6	88.2	29.5	45.8
1980 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	68.8
April	80.4	88.0	81.0	97.4	124.2	41.2	63.1
May	80.5	87.8	81.4	97.2	124.4	41.7	63.7
June	81.7	88.6	82.5	97.9	124.6	41.2	58.2
July	81.9	87.6	83.0	97.9	124.7	40.8	53.8
August	81.6	86.9	82.9	97.9	124.3	40.6	53.1
September	80.3	86.6	83.0	98.1	123.1	41.4	51.2
October	81.5	85.9	83.7	98.7	122.3	43.2	54.3
November	83.6	88.9	86.1	101.1	122.2	45.1	65.5
December	87.5	92.4	91.3	106.5	123.1	46.5	72.7
AVERAGE	81.2	87.3	82.2	97.8	122.1	42.4	62.9
1981 January	92.5	100.9	98.6	114.4	126.9	46.5	66.1
February	99.5	106.1	106.0	123.4	135.3	48.2	63.0
March	101.7	108.8	106.3	125.5	138.8	48.3	62.1
April	101.3	107.7	105.2	123.9	138.1	49.3	60.1
May	100.8	106.8	104.0	122.7	137.0	48.6	56.8
June	99.5	106.6	103.0	120.9	136.2	46.0	52.7
July	98.8	103.8	102.7	121.0	135.3	46.0	56.5
August	97.8	105.9	102.2	119.4	134.8	47.2	60.6
September	97.6	104.8	101.6	119.7	135.8	47.7	64.6
October	97.4	105.3	101.1	118.8	135.3	47.3	64.7
November	R98.3	105.2	102.3	120.8	135.1	R47.5	R61.6
December	†98.3	†105.1	102.6	122.0	134.8	†45.5	†55.4
AVERAGE	98.5	106.0	102.6	120.5	135.3	47.2	60.4
1982 January	NA	NA	†101.5	†122.1	134.1	NA	NA
February	NA	NA	NA	NA	131.8	NA	NA

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

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

<sup>2</sup>Beginning with September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. In the average for all types category, gasohol is now included and unleaded premium is weighted more heavily. See Explanatory Note 16 for additional information on motor gasoline prices.

<sup>3</sup>Wholesale refers to the price at which refiners, resellers, retailers and gas plants sell to one another, including sales to agricultural and industrial accounts. Excludes butane/propane mixtures.

<sup>4</sup>Excludes tax.

<sup>5</sup>Preliminary data. R=Revised data. NA=Not available.

Sources: •No. 2 diesel price—FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

•No. 2 heating oil price—1976 through October 1980: FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report"; November 1980 forward: EIA-9A "No. 2 Distillate Price Monitoring Report."

•Gasoline price—Bureau of Labor Statistics.

•Propane and butane prices—FEA Form P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices."

## Price

### FOB Cost of Crude Oil Imports from Selected Countries<sup>1</sup>

		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	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	(*)	35.88	30.56	35.59	26.85	29.34	34.34	24.03
	April	36.93	32.22	(*)	35.30	30.24	36.11	27.78	30.38	34.15	23.85
	May	37.10	32.40	(*)	36.13	30.68	36.50	28.50	32.67	34.10	24.82
	June	37.61	32.90	(*)	36.83	30.78	36.99	28.95	33.34	36.28	25.56
	July	38.40	33.18	(*)	37.26	31.84	37.17	28.47	NA	36.28	24.34
	August	37.53	33.01	(*)	37.01	31.87	36.69	29.74	NA	34.83	25.30
	September	37.21	33.13	(*)	36.94	31.21	36.38	30.34	NA	35.18	24.21
	October	37.60	32.31	(*)	37.15	31.27	36.82	30.19	NA	35.68	22.71
	November	37.05	32.94	(*)	36.90	31.59	36.87	31.43	NA	35.47	28.83
	December	37.37	33.21	(*)	37.58	32.33	36.79	32.01	NA	35.00	26.66
	AVERAGE	36.57	32.37	(*)	36.41	31.11	35.82	28.53	NA	34.58	24.78
1981	January	39.37	36.54	(*)	40.52	35.88	40.11	32.39	NA	38.34	32.87
	February	40.13	36.13	(*)	40.73	36.57	40.03	32.60	NA	39.41	30.38
	March	40.30	36.40	(*)	40.25	35.60	39.85	32.73	NA	39.50	31.24
	April	39.70	36.38	(*)	40.04	33.81	39.92	32.41	NA	38.85	29.93
	May	39.57	36.09	(*)	38.91	34.45	39.11	32.13	NA	37.16	28.39
	June	39.20	36.95	(*)	39.85	30.30	38.44	32.42	NA	35.84	30.50
	July	38.06	35.47	(*)	38.70	32.72	39.25	32.07	NA	34.89	29.25
	August	39.34	35.61	(*)	39.45	31.23	39.55	31.95	NA	34.38	27.08
	September	39.60	35.82	(*)	36.74	30.37	36.04	32.09	NA	34.44	28.14
	October	36.90	35.08	(*)	36.36	30.83	35.45	33.56	NA	34.87	27.27
	November	36.55	35.53	(*)	37.15	31.80	36.41	33.49	NA	35.97	28.39
	December	R37.35	R36.08	(*)	R36.78	R31.29	R36.49	R33.70	NA	36.46	R28.02
	AVERAGE	39.09	35.93	(*)	39.44	33.13	38.53	32.48	NA	36.08	28.88
1982	January†	36.96	35.26	(*)	35.69	29.81	36.30	33.40	NA	36.20	29.48

<sup>1</sup>The Free on Board (FOB) cost excludes all costs related to insurance and transportation. See Explanatory Note 14.  
\*No crude oil has been imported from Iran since February 1980.

Note: Prices shown for 1980 are for the month of loading; whereas prior to 1980 the prices are for the month of reporting.  
†Preliminary data. NA=Not available. R=Revised data.

Sources: 1976 through January 1979: FEA Form 701-M-0, "Transfer Pricing Report";  
• February 1979 forward: Economic Regulatory Administration Form 51, "Transfer Pricing Report."

## Price

### Landed Cost of Crude Oil Imports from Selected Countries<sup>1</sup>

		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	14.88	13.92	14.39	NA	12.83
1979	AVERAGE	21.90	20.43	20.69	25.02	23.68	20.86	22.96	19.15	21.90	22.16	18.18
1980	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	(*)	37.18	31.17	36.93	28.26	30.96	35.73	24.97
	April	38.52	30.31	33.81	(*)	36.57	30.77	37.41	29.14	32.29	35.34	25.10
	May	38.54	31.16	33.73	(*)	37.36	31.22	37.53	30.30	34.06	35.82	25.93
	June	38.71	31.26	34.51	(*)	38.09	31.43	38.15	30.16	34.96	37.41	26.42
	July	39.60	31.31	34.81	(*)	38.39	32.60	38.23	30.04	NA	37.25	25.47
	August	38.60	31.44	34.81	(*)	38.38	32.62	37.77	31.24	NA	36.20	26.37
	September	38.28	30.97	34.64	(*)	38.30	31.93	37.60	31.86	NA	36.35	25.47
	October	38.77	29.22	33.65	(*)	38.53	31.96	37.75	31.73	NA	36.82	23.92
	November	38.41	28.81	34.55	(*)	38.22	32.42	37.97	32.86	NA	36.82	27.75
	December	38.63	32.72	34.64	(*)	39.04	33.76	38.11	33.40	NA	36.31	27.66
	AVERAGE	37.90	30.47	33.92	(*)	37.72	31.80	37.05	30.02	NA	35.88	25.88
1981	January	41.25	34.26	38.08	(*)	41.81	36.81	41.55	34.06	NA	39.90	33.80
	February	41.90	33.73	37.86	(*)	42.19	37.23	41.46	34.38	NA	40.69	31.20
	March	41.62	33.88	38.11	(*)	41.60	36.42	40.98	34.42	NA	40.72	32.09
	April	40.96	33.74	37.95	(*)	41.58	34.42	41.04	34.16	NA	40.02	30.97
	May	40.81	32.70	37.72	(*)	40.46	34.83	40.10	33.73	NA	38.31	29.39
	June	40.31	32.67	38.73	(*)	41.44	31.03	39.60	34.29	NA	37.04	31.46
	July	39.59	31.19	37.20	(*)	40.27	33.18	40.05	33.72	NA	35.87	29.22
	August	40.65	30.44	37.07	(*)	40.30	31.77	40.85	33.23	NA	35.40	28.11
	September	41.62	30.83	37.52	(*)	37.73	30.84	37.20	33.66	NA	35.26	29.12
	October	37.52	31.17	36.39	(*)	38.15	31.34	36.64	34.88	NA	36.00	28.27
	November	37.43	31.04	36.84	(*)	38.50	32.42	37.59	34.91	NA	36.87	29.27
	December	R38.14	R31.37	R37.31	(*)	R38.89	R31.85	R37.52	R35.37	NA	R37.44	R29.00
	AVERAGE	40.49	32.18	37.57	(*)	40.92	33.78	39.70	34.19	NA	37.24	29.87
1982	January†	38.19	31.05	36.60	(*)	36.91	30.35	37.42	34.44	NA	36.78	30.19

<sup>1</sup>See Explanatory Note 15.

No crude has been imported from Iran since February 1980.

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

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

Sources: • 1975 through January 1979: Economic Regulatory Administration (ERA), FEA Form F701-M-0, "Transfer Pricing Report."

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

## Price

### U.S. City Average Retail Prices for Motor Gasoline<sup>1</sup>

		Leaded Regular	Unleaded Regular	Leaded Premium	Average for All Types
Cents per gallon, including tax					
1974	AVERAGE	53.2	NA	56.9	NA
1975	AVERAGE	56.7	NA	60.9	NA
1976	AVERAGE	59.0	61.4	63.6	NA
1977	AVERAGE	62.2	65.6	67.4	NA
1978	AVERAGE	62.8	67.0	69.4	65.2
1979	AVERAGE	85.7	90.3	92.2	88.2
1980	January	108.6	113.1	114.9	111.0
	February	115.9	120.7	123.3	118.6
	March	120.2	125.2	127.7	123.0
	April	121.2	126.4	129.2	124.2
	May	121.5	126.6	129.5	124.4
	June	121.7	126.9	130.0	124.6
	July	121.6	127.1	130.7	124.7
	August	121.0	126.7	131.0	124.3
	September	119.7	125.7	130.4	123.1
	October	118.8	125.0	130.1	122.3
	November	118.8	125.0	129.9	122.2
	December	119.7	125.8	131.0	123.1
	AVERAGE	119.1	124.5	128.1	122.1
1981	January	123.8	129.8	133.8	126.9
	February	132.1	138.2	141.0	135.3
	March	135.2	141.7	144.9	138.8
	April	134.4	141.2	145.1	138.1
	May	133.3	140.0	144.7	137.0
	June	132.4	139.1	144.6	136.2
	July	131.5	138.2	144.6	135.3
	August	131.0	137.6	144.4	134.8
	September <sup>2</sup>	130.5	137.6	145.6	135.8
	October	129.9	137.1	145.7	135.3
	November	129.7	136.9	146.2	135.1
	December	129.3	136.5	146.0	134.8
	AVERAGE	131.1	137.8	143.9	135.3
1982	January	128.5	135.8	145.6	134.1
	February	126.0	133.4	143.8	131.8

Geographic coverage: 1974 through 1977—56 urban areas; 1978 forward—85 urban areas.  
<sup>1</sup>See Explanatory Note 16.

<sup>2</sup>Beginning with September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. In the average for all types category, gasohol is now included and unleaded premium is weighted more heavily.

NA=Not available.

Source: \*Bureau of Labor Statistics.

# Price

## Aviation Fuel

		Aviation Gasoline		Naphtha-Type <sup>1</sup>		Kerosene-Type	
		Wholesale <sup>2</sup>	Retail <sup>2</sup>	Retail <sup>2</sup>	Wholesale <sup>2</sup>	Retail <sup>2</sup>	
		Cents per gallon, excluding tax					
1976	AVERAGE	42.4	43.1	31.5	32.5	31.2	
1977	AVERAGE	46.7	47.7	35.0	36.7	35.8	
1978	AVERAGE	51.0	52.1	37.5	38.9	38.9	
1979	AVERAGE	68.5	69.5	52.3	66.5	55.1	
1980	January	90.6	90.0	78.0	83.4	77.0	
	February	98.5	97.8	80.1	86.2	83.0	
	March	102.9	107.0	84.1	86.6	86.3	
	April	104.8	109.6	83.2	88.4	87.4	
	May	106.2	109.7	89.1	89.0	87.6	
	June	107.7	111.4	90.0	86.1	88.6	
	July	109.3	113.4	91.4	88.3	89.7	
	August	110.2	112.9	90.6	86.2	90.7	
	September	110.8	113.3	92.9	86.4	88.8	
	October	110.8	113.0	91.1	87.6	88.7	
	November	112.4	113.0	92.5	89.9	91.0	
	December	115.1	117.2	94.1	91.4	91.6	
	AVERAGE	107.2	109.4	88.2	87.5	87.4	
1981	January	118.9	121.6	99.2	97.1	95.7	
	February	121.3	128.1	102.7	103.6	101.8	
	March	127.2	131.1	106.9	104.8	108.3	
	April	117.5	131.3	109.0	103.8	106.4	
	May	120.7	133.5	109.1	104.4	106.2	
	June	116.5	132.1	107.6	102.3	104.8	
	July	120.1	133.4	106.3	100.5	103.8	
	August	120.0	132.5	105.7	101.4	103.3	
	September	121.0	133.5	105.6	103.0	103.3	
	October	117.2	134.5	104.8	99.9	101.1	
	November	114.4	133.2	R104.5	101.9	102.6	
	December	116.8	131.9	103.8	101.9	102.2	
	AVERAGE	118.8	131.5	105.7	102.0	103.1	

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

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

<sup>2</sup>Wholesale refers to the price of aviation fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and aviation fuel distributors. Retail refers to the price of aviation fuel sold to ultimate consumers, including commercial airline and military accounts.

<sup>†</sup>Preliminary data. R=Revised data.

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

## Price

### National Average Heating Oil Prices<sup>1</sup>

		Refiners' Average Selling Price to Resellers and Retailers	Average Purchase Price Paid by Distributors for Heating Oil <sup>2</sup>	Average Distributor Margin on Residential Heating Oil <sup>3</sup>	Average Selling Price to Residential Customers <sup>4</sup>
Cents per gallon					
1976	AVERAGE	31.4	32.6	NA	40.6
1977	AVERAGE	35.7	36.9	NA	46.0
1978	AVERAGE	37.2	38.7	11.0	49.4
1979	AVERAGE	55.9	53.0	12.8	68.6
1980	January	75.0	75.2	16.2	90.8
	February	77.8	79.0	16.7	95.3
	March	78.8	80.4	17.1	97.1
	April	78.8	81.0	17.0	97.4
	May	79.3	81.4	16.3	97.2
	June	80.2	82.5	15.8	97.9
	July	79.2	83.0	15.3	97.9
	August	79.3	82.9	15.2	97.9
	September	79.3	83.0	15.4	98.1
	October	80.7	83.7	15.3	98.7
	November	84.0	86.1	13.8	101.1
	December	88.6	91.3	14.1	106.5
	AVERAGE	80.0	82.2	15.8	97.8
1981	January	94.9	98.6	15.1	114.4
	February	102.5	106.0	16.1	123.4
	March	102.8	106.3	17.6	125.5
	April	100.9	105.2	17.7	123.9
	May	100.7	104.0	17.8	122.7
	June	99.3	103.0	16.9	120.9
	July	98.5	102.7	17.1	121.0
	August	98.2	102.2	16.2	119.4
	September	97.8	101.6	17.2	118.7
	October	98.0	101.1	16.6	118.8
	November	100.0	102.3	17.6	120.8
	December	R100.6	102.6	18.3	122.0
	AVERAGE	99.3	102.6	16.6	120.5
1982	January†	99.3	101.5	18.2	122.1

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

<sup>1</sup>See Explanatory Note 17.

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

<sup>3</sup>Preliminary data. R=Revised data. NA=Not available.

<sup>4</sup>Source: • 1976 through October 1980: FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report" and EIA-9A, "No. 2 Distillate Price Monitoring Report"; November 1980 forward: EIA-9A, "No. 2 Distillate Price Monitoring Report."

# Price

## Residential Heating Oil Prices by Region

		Standard Federal Region <sup>1</sup>									
		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	(*)	49.6	50.4	47.6	50.8
	February	57.7	57.3	55.5	53.2	53.7	(*)	51.3	51.4	49.4	52.9
	March	60.6	59.8	57.5	54.3	56.3	(*)	54.7	55.3	50.8	55.3
	April	62.8	61.9	60.0	57.3	58.8	(*)	58.2	58.4	53.8	57.8
	May	65.9	64.8	63.4	61.2	62.8	(*)	62.0	62.7	56.2	60.8
	June	70.5	69.7	68.4	66.2	68.5	(*)	68.9	67.8	62.2	66.4
	July	75.9	73.9	72.9	70.9	73.2	(*)	72.0	72.5	68.4	72.3
	August	80.1	78.6	77.7	74.8	78.5	(*)	76.4	77.1	71.7	77.2
	September	83.3	81.4	80.0	79.4	81.5	(*)	79.5	80.1	76.8	81.4
	October	84.1	82.5	81.7	79.1	82.6	(*)	80.2	81.3	81.2	82.6
	November	85.1	83.7	82.4	80.5	83.9	(*)	82.2	84.0	80.4	82.3
	December	87.2	85.7	85.1	82.9	86.1	(*)	85.3	86.3	82.6	84.6
1980	January	91.8	91.0	90.2	88.6	90.4	(*)	90.0	90.2	89.6	91.0
	February	96.7	95.3	94.7	93.0	93.5	(*)	93.6	93.5	95.8	95.7
	March	98.7	97.2	96.5	94.8	94.3	(*)	95.1	95.9	93.9	97.6
	April	99.2	97.3	96.6	94.1	94.5	(*)	95.3	99.5	94.7	99.0
	May	98.7	97.3	96.4	94.2	95.8	(*)	95.2	97.7	95.5	98.6
	June	99.8	97.9	96.8	95.1	95.8	(*)	95.3	98.4	96.0	99.8
	July	100.3	98.1	96.6	94.2	96.2	(*)	93.1	97.0	96.7	100.2
	August	100.2	97.9	96.8	94.8	95.7	(*)	95.4	92.1	99.7	100.4
	September	100.5	98.2	97.0	94.7	95.7	(*)	93.7	93.0	97.2	100.6
	October	101.1	98.8	97.4	95.6	95.9	(*)	94.7	94.1	98.6	100.4
	November	102.5	103.0	99.9	101.5	98.8	(*)	95.2	98.5	101.0	103.1
	December	108.2	108.5	105.3	106.6	103.4	(*)	99.6	101.8	(*)	105.6
1981	January	116.2	117.1	113.2	114.0	110.4	(*)	106.3	108.6	(*)	107.5
	February	125.8	126.6	123.0	124.4	117.8	(*)	114.2	113.1	(*)	113.7
	March	127.6	128.4	125.0	125.3	119.3	(*)	115.4	119.3	111.5	116.5
	April	126.8	126.6	122.7	124.8	118.3	(*)	114.7	118.4	(*)	117.5
	May	125.5	125.6	122.1	118.8	117.3	(*)	114.5	115.1	114.1	115.6
	June	124.1	123.6	121.1	115.9	116.5	(*)	112.5	116.0	(*)	117.1
	July	123.3	122.9	120.6	120.2	116.0	(*)	115.9	116.2	(*)	118.3
	August	122.7	122.2	117.9	117.4	115.1	(*)	112.1	116.9	(*)	117.7
	September	122.7	121.4	118.5	120.5	116.2	(*)	111.6	116.8	(*)	117.8
	October	122.5	122.0	115.3	117.6	116.3	(*)	112.0	115.8	(*)	118.2
	November	123.3	123.2	119.5	118.2	116.7	(*)	114.1	115.8	(*)	118.8
	December	R124.8	R124.7	R120.7	R119.0	R117.4	(*)	R112.4	R117.1	(*)	R120.0
1982	January†	125.5	124.6	120.9	117.8	117.4	(*)	(*)	117.0	(*)	119.9

<sup>1</sup>Standard Federal Regions are defined in Explanatory Note 18.

\*Not available for publication. Data for Region 6, and occasionally Region 9, are based on a sample of less than four reporting firms.

†Preliminary data. R=Revised data.

Source: • 1979 through October 1980: FEA Form P112-M-1/EIA-9, "No. 2 Heating Oil Supply/Price Monitoring Report"; November 1980 forward: EIA-9A, "No. 2 Distillate 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	AVERAGE	19.87	21.21	18.33	19.33	18.89	18.44	17.86	18.67
1980	January	29.11	30.35	26.15	28.12	21.56	21.98	24.41	26.21
	February	27.07	30.32	25.82	28.15	20.21	22.22	23.34	26.48
	March	26.88	30.20	23.73	27.29	17.81	20.34	21.11	25.33
	April	25.16	28.69	20.38	24.78	16.41	18.36	19.09	22.87
	May	25.48	31.73	22.72	25.77	17.72	18.04	20.22	23.75
	June	23.14	31.37	22.35	25.44	17.72	19.27	20.44	24.09
	July	24.89	28.51	23.44	25.55	19.20	20.58	21.28	23.86
	August	23.20	30.93	24.98	26.11	20.42	21.45	22.25	25.00
	September	24.27	33.12	23.46	26.31	20.62	21.71	22.47	25.31
	October	25.72	31.88	25.86	28.00	22.30	23.29	24.06	26.68
	November	29.52	33.70	29.40	30.89	27.08	27.50	28.12	30.10
	December	31.69	35.76	31.29	32.61	28.39	30.03	29.76	32.33
	AVERAGE	28.41	31.13	24.91	27.59	20.77	22.11	23.14	26.09
1981	January	34.27	37.23	32.12	33.96	29.12	31.35	31.14	33.65
	February	38.04	41.60	34.96	37.32	28.96	32.02	31.81	36.04
	March	37.78	41.19	34.47	38.01	29.55	31.95	31.78	36.11
	April	35.68	41.71	33.10	35.94	28.35	30.56	30.56	34.70
	May	33.61	41.09	32.53	35.94	28.77	30.64	30.41	34.11
	June	28.01	38.30	26.71	32.38	25.33	27.16	25.95	31.03
	July	29.56	39.02	27.38	31.93	25.62	25.96	26.52	30.57
	August	30.48	36.57	27.77	32.04	26.03	26.20	27.01	30.52
	September	29.91	39.17	27.46	32.08	24.80	26.26	26.20	30.33
	October	30.26	39.90	28.64	31.88	24.96	26.18	26.78	30.32
	November	31.71	39.48	R29.63	31.02	R26.09	26.45	R27.99	30.16
	December†	30.88	37.65	28.04	32.09	25.51	26.53	27.28	30.85
	AVERAGE	32.85	39.31	30.55	33.69	27.09	28.57	28.87	32.49

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

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

†Preliminary data. R=Revised data.

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

## Price

### Natural Gas

		Average Wellhead Value	Delivered to Electric Plant*	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	AVERAGE	117.8	180.3	323.1
1980	January	138.2	201.1	R357.7
	February	143.5	210.5	R360.7
	March	148.8	214.7	R371.0
	April	155.3	210.4	R370.7
	May	157.3	218.1	R397.0
	June	157.8	216.4	R397.9
	July	165.5	237.3	R413.8
	August	165.5	245.6	R416.3
	September	170.5	245.6	R420.2
	October	172.3	253.4	R423.9
	November	177.0	238.4	R399.2
	December	175.0	232.7	R406.5
	AVERAGE	160.3	212.8	R394.6
1981	January	181.0	258.8	R410.1
	February	189.5	268.9	R412.5
	March	192.7	273.0	R420.7
	April	198.0	282.5	R425.0
	May	201.7	293.2	R460.7
	June	206.1	296.7	R461.2
	July	210.4	298.2	R464.0
	August	211.3	299.9	R470.2
	September	216.1	297.4	R490.1
	October	219.6	299.3	R491.2
	November	223.2	309.3	R487.8
	December	226.7	289.8	R474.8
	AVERAGE	206.3	291.6	R455.7

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

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

R=Revised data.

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—FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

• Average residential heating prices—Bureau of Labor Statistics.

# Price

## Electricity

**Cost of Fossil Fuels Delivered  
to Steam-Electric Utility Plants**

**Average Retail Electricity Prices  
Selected Class A Privately-Owned Utilities**

		Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants				Average Retail Electricity Prices Selected Class A Privately-Owned Utilities				
		Coal	Residual Oil <sup>1</sup>	Natural Gas <sup>2</sup>	All Fossil Fuels <sup>1</sup>	Residential	Commercial	Industrial	Other	Total <sup>3</sup>
						Cents per million Btu				Cents per kilowatt-hour
1973	AVERAGE	40.5	78.8	33.8	47.5	2.54	2.41	1.25	2.10	1.98
1974	AVERAGE	71.0	191.0	48.1	90.9	3.10	3.04	1.69	2.75	2.49
1975	AVERAGE	81.4	201.4	75.4	103.0	3.51	3.45	2.07	3.08	2.92
1976	AVERAGE	84.8	195.9	103.4	110.4	3.73	3.69	2.21	3.27	3.09
1977	AVERAGE	94.7	220.4	130.0	127.7	4.05	4.09	2.50	3.51	3.42
1978	AVERAGE	111.6	212.3	143.8	139.3	4.31	4.36	2.79	3.62	3.69
1979	AVERAGE	122.4	299.7	175.4	162.1	4.64	4.68	3.05	3.96	3.99
1980	January	128.7	423.5	194.8	187.3	4.69	4.90	3.32	4.19	4.21
	February	129.9	429.7	203.9	189.8	4.74	4.97	3.32	4.63	4.25
	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	5.69	5.73	3.89	4.95	5.03
	October	138.1	452.2	245.7	192.2	5.68	5.84	3.84	4.88	4.95
	November	139.3	496.0	231.3	200.0	5.60	5.70	3.85	5.06	4.89
	December	137.8	521.9	226.3	206.6	5.49	5.69	3.88	4.82	4.90
	AVERAGE	135.2	427.9	212.9	189.3	5.36	5.48	3.69	4.76	4.73
1981	January	142.3	540.2	254.1	221.3	R5.43	R5.72	3.94	4.92	4.96
	February	146.3	572.9	260.5	218.4	5.52	5.83	3.95	5.01	4.99
	March	148.4	583.9	263.8	215.2	5.76	6.01	4.04	5.33	5.12
	April	146.9	568.4	273.5	242.1	5.99	6.14	4.07	5.20	5.20
	May	146.7	552.8	282.7	250.8	6.27	6.30	4.17	5.49	5.37
	June	152.8	503.2	286.3	236.2	6.48	6.48	4.36	5.38	5.59
	July	156.5	502.4	288.6	227.5	6.58	6.47	4.48	5.60	5.76
	August	157.0	494.4	291.0	220.3	6.62	6.49	4.49	5.52	5.78
	September	157.3	506.7	287.6	213.2	6.63	6.48	4.49	5.65	5.74
	October	160.2	511.9	300.7	218.1	6.57	6.52	4.40	5.31	5.64
	November	159.1	520.5	300.0	215.2	6.42	6.48	4.46	5.43	5.61
	DECEMBER	151.7	505.0	291.4	215.7	6.32	R6.46	4.56	4.60	5.65
	AVERAGE	153.3	529.0	282.8	223.0	6.20	6.29	4.29	5.28	5.46
1982	January	NA	NA	NA	NA	6.22	6.49	4.66	5.42	4.32

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

<sup>1</sup>See Explanatory Note 19.

<sup>2</sup>Includes small quantities of coke oven gas, refinery gas and blast furnace gas.

<sup>3</sup>Average price for total sales to ultimate consumers.

NA=Not available.

Sources: • Cost of fossil fuels—FPC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

• Retail price—January 1973 thru 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."

# Part 10

## International

### International

#### Crude Oil Production

World crude oil production during December 1981 was 54.1 million barrels per day, up 0.7 million barrels per day (1.3 percent) from the November 1981 level. Preliminary crude oil production for the year 1981 was 55.6 million barrels per day down 6.5 percent from 1980. Organization of Petroleum Exporting Countries (OPEC) output during December 1981 averaged 21.2 million barrels per day, an increase of 0.7 million barrels per day from the previous month. Average annual production by OPEC was 22.6 million barrels per day, down 4.3 million barrels per day from the 1980 annual average. A major portion of this decrease in annual OPEC production occurred in Iraq where production declined 1.5 million barrels per day. Other significant decreases occurred in Libya, Nigeria, and Kuwait where production decreased by 0.6, 0.6, and 0.5 million barrels per day, respectively.

Among non-OPEC nations annual crude oil production declined in Canada by 0.1 million barrels per day, but rose in Mexico and the United Kingdom by 0.4 and 0.2 million barrels per day, respectively.

#### Petroleum Consumption

Preliminary petroleum consumption data for December 1981 were available for France, Italy, Japan, and the United States. The consumption levels for all of these countries, except Italy, decreased from the consumption levels in December 1980.

Petroleum consumption by International Energy Agency (IEA) member nations was 30.3 million barrels per day during September 1981 (latest data available). This preliminary average was a decrease of 1.7 million barrels per day from the average rate of 32.0 million barrels per day in September 1980. The United States decreased petroleum consumption during the same period by 1.0 million barrels per day.

#### Petroleum Stocks

Preliminary data on petroleum stocks for November 1981 were available for Canada, France, and the United States. Petroleum stocks in the United States were up from the level at the end of November 1980 by 5.0 percent. In contrast, stocks in Canada and France were down 8.1 and 11.5 percent, respectively, during the same interval. Petroleum stocks for all Organization for Economic Cooperation and Development (OECD) members stood at 3,610 million barrels at the end of September 1981 (latest data available), a decrease of 83 million barrels (2.2 percent) from stocks held at the end of September 1980. The United States held 1,481 million barrels of the September 1981 stocks (41.0 percent).

#### Nuclear Electricity Production

In January 1982, the 18 non-Communist nations with operational nuclear-power capacity generated 71.2 billion gross kilowatt-hours of nuclear-based electricity, an increase of 1.7 percent over December 1981 generation and 9.0 percent above the comparable level for January 1981. The United States produced about 38 percent (27.1 billion gross kilowatt-hours) of the nuclear-based electricity generated by the 18 non-Communist nations in January 1982.

In January, there was one new reactor added to EIA's listing—Bayernwerk's Grafenrheinfeld unit in West Germany (capacity = 1,299 gross megawatts (MWe)), while two units (one Italian and one British) were dropped. One of these dropped units, Garigliano (capacity = 160 gross MWe), was placed in a "standby" status while the British unit, Windscale (capacity = 32 gross MWe), was permanently shutdown. The net loss in January of one unit reduced the total number of non-Communist power reactors carried by EIA to 219 with a combined gross generating capacity of about 144,350 MWe. Of this capacity, 59,844 gross MWe, or 41.5 percent, was associated with the 74 U.S. units.

## International

### Crude Oil Production for Major Petroleum Producing Countries

		Algeria	Iraq	Kuwait <sup>a</sup>	Libya	Qatar	Saudi Arabia <sup>a</sup>	United Arab Emirates	Arab Members of OPEC <sup>a</sup>	Indonesia	Iran
Thousand barrels per day											
1973	AVERAGE	1,097	2,018	3,020	2,175	570	7,596	1,533	18,009	1,339	5,881
1974	AVERAGE	1,009	1,971	2,548	1,521	518	8,480	1,679	17,724	1,375	6,022
1975	AVERAGE	983	2,262	2,084	1,480	438	7,075	1,664	15,986	1,307	5,350
1976	AVERAGE	1,075	2,415	2,145	1,933	497	8,577	1,936	18,578	1,504	5,883
1977	AVERAGE	1,152	2,348	1,969	2,063	445	9,245	1,999	19,221	1,686	5,663
1978	AVERAGE	1,161	2,563	2,131	1,983	487	8,301	1,831	18,457	1,635	5,242
1979	AVERAGE	1,154	3,477	2,500	2,092	508	9,532	1,831	21,094	1,591	3,168
1980	January	1,150	3,400	2,140	2,100	495	9,785	1,740	20,810	1,565	2,295
	February	1,150	3,400	2,335	2,100	460	9,780	1,740	20,965	1,550	2,500
	March	1,150	3,400	2,090	2,000	500	9,790	1,695	20,625	1,575	2,350
	April	1,000	3,300	1,570	1,750	500	9,765	1,705	19,590	1,580	2,200
	May	1,000	3,300	1,525	1,750	480	9,775	1,765	19,595	1,550	1,700
	June	1,000	3,300	1,575	1,700	440	9,775	1,750	19,540	1,545	1,500
	July	1,000	3,100	1,365	1,680	460	9,765	1,710	19,080	1,565	1,700
	August	1,000	3,100	1,465	1,690	465	9,765	1,665	19,150	1,565	1,600
	September	1,000	3,000	1,290	1,680	460	9,740	1,670	18,840	1,565	1,400
	October	1,000	150	1,385	1,665	440	10,255	1,675	16,540	1,585	600
	November	1,000	350	1,505	1,680	475	10,265	1,695	16,930	1,630	800
	December	1,000	450	1,779	1,680	483	10,260	1,706	17,360	1,617	1,360
	AVERAGE	1,012	2,514	1,656	1,787	472	9,900	1,709	19,050	1,577	1,662
1981	January	950	600	1,765	1,600	505	10,265	1,620	17,305	1,630	1,600
	February	950	700	1,565	1,650	480	10,265	1,605	17,215	1,620	1,700
	March	950	1,000	1,560	1,600	505	10,110	1,610	17,335	1,635	1,700
	April	900	1,000	995	1,600	515	10,195	1,570	16,775	1,630	1,600
	May	900	1,000	990	1,400	435	10,140	1,550	16,415	1,600	1,500
	June	800	1,000	1,080	1,200	340	10,180	1,435	16,035	1,600	1,600
	July	725	1,100	1,200	750	380	10,170	1,415	15,740	1,600	1,600
	August	600	1,100	830	700	295	10,330	1,480	15,335	1,600	1,400
	September	550	1,100	855	700	365	9,155	1,465	14,190	1,600	1,100
	October	700	1,100	985	700	360	9,685	1,480	15,010	1,600	R920
	November	750	1,100	890	900	340	8,640	1,365	13,985	1,600	R930
	December	800	1,100	895	1,000	340	8,645	1,430	14,210	1,580	790
	AVERAGE	800	990	1,140	1,145	405	9,815	1,500	15,795	1,605	1,330

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

Monthly data may not average to annual data due to independent rounding. Data for 1981 are preliminary.

<sup>a</sup>Includes about one-half of the production in the former Kuwait-Saudi Arabia Neutral Zone. In December 1981 total production in this region amounted to approximately 290,000 barrels per day.

<sup>a</sup>Arab members of the Organization of Petroleum Exporting Countries (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 Producing Countries (continued)

		Nigeria	Vene-zuela	Total OPEC*	Canada	Mexico	United Kingdom	United States	China	USSR	Other†	World
Thousand barrels per day												
1973	AVERAGE	2,054	3,366	30,989	1,800	465	2	9,208	1,090	8,465	3,729	55,748
1974	AVERAGE	2,255	2,976	30,729	1,684	571	2	8,774	1,315	9,000	3,835	55,910
1975	AVERAGE	1,783	2,346	27,155	1,439	705	12	8,375	1,490	9,625	4,151	52,952
1976	AVERAGE	2,067	2,294	30,738	1,295	831	245	8,132	1,670	10,143	4,351	57,405
1977	AVERAGE	2,085	2,238	31,278	1,320	981	768	8,245	1,874	10,682	4,647	59,795
1978	AVERAGE	1,897	2,166	29,805	1,313	1,209	1,082	8,707	2,082	11,185	4,782	60,165
1979	AVERAGE	2,302	2,356	30,928	1,496	1,461	1,568	8,552	2,122	11,460	5,111	62,698
1980	January	2,155	2,280	29,535	1,515	1,720	1,600	8,675	2,111	11,615	5,060	61,831
	February	2,160	2,200	29,805	1,475	1,725	1,660	8,705	2,127	11,590	5,043	62,130
	March	2,155	1,995	29,100	1,475	1,830	1,670	8,698	2,119	11,615	5,020	61,527
	April	2,100	2,045	27,965	1,390	1,885	1,510	8,685	2,121	11,680	5,245	60,481
	May	2,200	2,150	27,645	1,470	1,910	1,600	8,635	2,133	11,750	4,903	60,046
	June	2,110	2,050	27,175	1,535	1,905	1,625	8,554	2,132	11,660	5,117	59,703
	July	2,095	2,170	27,030	1,520	2,015	1,585	8,547	2,124	11,825	4,865	59,511
	August	2,050	2,210	27,010	1,440	2,000	1,535	8,414	2,143	11,875	5,065	59,482
	September	1,600	2,190	25,955	1,420	2,125	1,540	8,619	2,110	11,950	4,963	58,882
	October	1,879	2,225	23,255	1,311	2,182	1,572	8,532	2,076	11,875	5,231	56,034
	November	2,062	2,230	24,065	1,467	1,901	1,731	8,495	2,088	11,930	5,101	56,778
	December	2,026	2,330	25,050	1,300	2,027	1,795	8,606	2,083	11,850	5,307	58,018
	AVERAGE	2,055	2,167	26,890	1,424	1,937	1,622	8,597	2,114	11,770	5,098	59,452
1981	January	1,900	2,220	25,025	R1,390	2,220	1,765	8,533	2,024	R11,800	R5,218	57,975
	February	1,960	2,195	25,075	R1,390	2,120	1,820	8,598	2,025	R11,800	R5,267	58,095
	March	1,875	2,240	25,190	R1,280	2,365	1,885	8,601	2,025	R11,800	R5,264	58,410
	April	1,625	2,200	24,215	R1,330	2,540	1,750	8,543	2,011	11,800	R5,236	R57,425
	May	1,295	2,200	23,380	R1,250	2,545	1,770	8,496	2,025	11,800	R5,369	56,635
	June	1,350	1,990	22,945	R1,235	2,300	1,765	8,616	2,025	11,800	R5,179	55,865
	July	770	1,760	21,620	1,270	2,095	1,750	8,422	2,010	11,800	5,393	54,360
	August	710	1,960	21,050	1,235	2,260	1,760	8,574	2,020	11,800	5,071	53,770
	September	1,065	2,080	20,385	1,265	2,480	1,830	8,598	1,990	11,800	5,272	53,620
	October	1,250	1,970	21,200	1,120	2,490	1,845	8,547	2,020	11,800	5,363	54,385
	November	1,590	2,230	20,575	1,280	2,090	1,840	8,595	2,020	11,800	5,200	53,400
	December	1,820	2,260	21,230	1,380	1,980	1,870	8,624	2,020	11,800	5,196	54,100
	AVERAGE	1,425	2,110	22,630	1,285	2,310	1,805	8,562	2,020	11,800	5,188	55,600

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

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

R=Revised data.

Sources:• 1973-1980 annual data: Energy Information Administration, 1980 *International Energy Annual*.

• 1973-1981 United States data: See sources at the end of the Petroleum Section.

• 1980 and 1981 monthly data (except U.S. and World total): Central Intelligence Agency, "International Energy Statistical Review", and other industry sources.

• 1981 monthly data for World: Sum of data for all countries using above sources.

## International

### Petroleum Consumption for Major Non-Communist Industrialized Countries<sup>1</sup>

		Canada	France <sup>2</sup>	Italy	Japan	United Kingdom	United States	West Germany	Other IEA <sup>3</sup>	Total IEA <sup>4</sup>
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	17,481	2,507	4,265	33,770
1977	AVERAGE	1,661	1,973	1,476	5,015	1,655	18,431	2,478	4,214	34,930
1978	AVERAGE	1,701	2,077	1,551	5,115	1,683	18,847	2,596	4,387	35,880
1979	AVERAGE	1,766	2,107	1,607	5,173	1,690	18,513	2,684	4,487	35,900
1980	January	1,820	2,465	1,778	5,255	1,769	18,851	2,690	4,337	36,500
	February	1,930	2,444	1,864	5,722	1,621	18,817	2,410	4,736	37,100
	March	1,720	1,982	1,657	5,433	1,585	17,377	2,430	4,398	34,600
	April	1,600	2,110	1,541	4,626	1,472	16,784	2,680	4,197	32,900
	May	1,590	1,853	1,448	4,376	1,348	16,238	2,230	3,870	31,100
	June	1,660	1,848	1,511	4,224	1,286	16,187	2,220	4,012	31,100
	July	1,680	1,450	1,537	4,250	1,217	16,008	2,420	3,988	31,100
	August	1,650	1,220	1,310	3,910	1,120	15,753	2,150	3,807	29,700
	September	1,710	1,740	1,650	4,120	1,270	16,598	2,540	4,112	32,000
	October	1,770	2,050	1,670	4,250	1,430	16,995	2,230	3,855	32,200
	November	1,720	2,040	1,530	4,550	1,440	16,702	2,110	3,948	32,000
	December	1,940	2,410	1,740	5,350	1,480	18,410	2,190	4,390	35,500
	AVERAGE	1,730	1,965	1,602	4,680	1,420	17,056	2,360	4,152	33,000
1981	January	1,760	2,310	R1,880	4,980	1,400	18,288	2,230	R4,462	35,000
	February	1,770	2,170	R2,195	5,350	1,460	16,930	2,510	R4,085	34,300
	March	1,550	1,790	R1,895	5,020	1,430	15,838	2,100	R3,567	31,400
	April	1,600	1,500	R1,785	4,140	1,290	15,280	1,810	R3,895	R29,800
	May	1,490	1,670	R1,410	3,600	1,190	15,196	1,880	R3,934	R28,700
	June	1,635	1,600	R1,510	3,915	1,210	15,996	2,155	R3,979	R30,400
	July	1,620	1,450	R1,580	R4,160	1,170	15,713	2,150	R4,107	R30,500
	August	1,630	1,160	R1,360	R4,100	1,125	15,236	2,111	R3,738	R29,300
	September	1,595	1,425	R1,715	R4,060	1,285	15,619	2,085	R3,941	R30,300
	October	1,585	1,655	R1,600	4,085	1,390	15,840	NA	NA	NA
	November	1,620	2,010	R1,650	4,595	NA	15,508	NA	NA	NA
	December	NA	2,215	1,930	5,200	NA	16,602	NA	NA	NA

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

<sup>1</sup>These data represent inland consumption, i.e., sales of petroleum products excluding refinery fuel, refinery losses, and ocean bunkers except for the United States, where it represents domestic products supplied.

<sup>2</sup>Not a member of the International Energy Agency (IEA).

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

<sup>4</sup>The 21 signatory nations of the 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.

NA = Not available. R = Revised data.

Note: Data for 1980 and 1981 are preliminary.

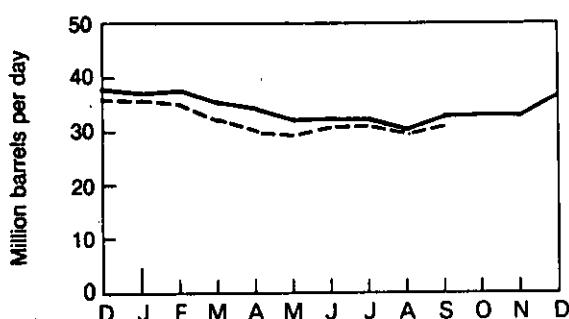
Sources: • Central Intelligence Agency, "International Energy Statistical Review", 30 March 1982 (except the United States).

• 1973-1981 United States data: See sources at the end of the Petroleum Section.

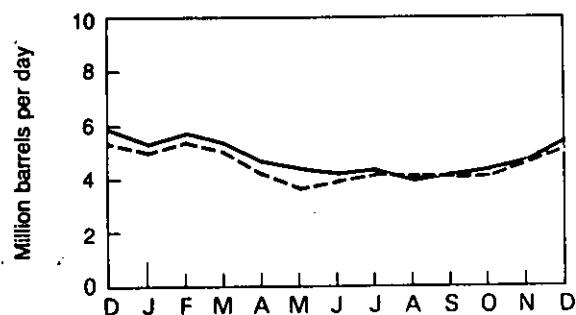
• IEA totals for latest months are Energy Information Administration estimates.

## International Petroleum Consumption

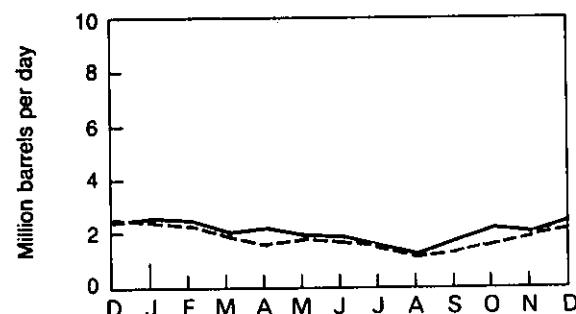
Total IEA



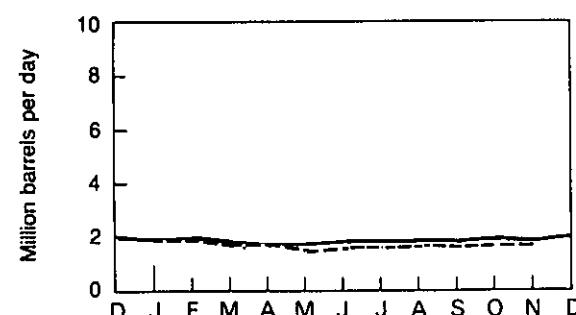
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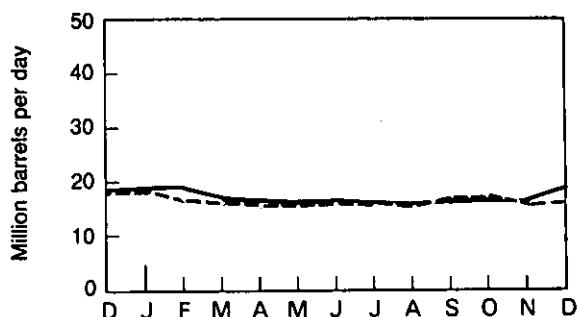
France\*\*



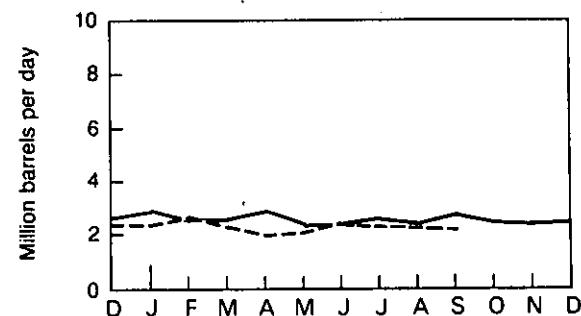
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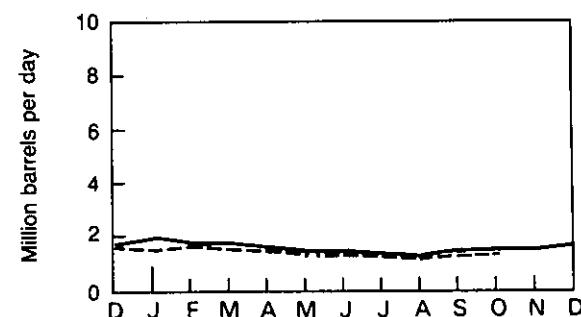
United States



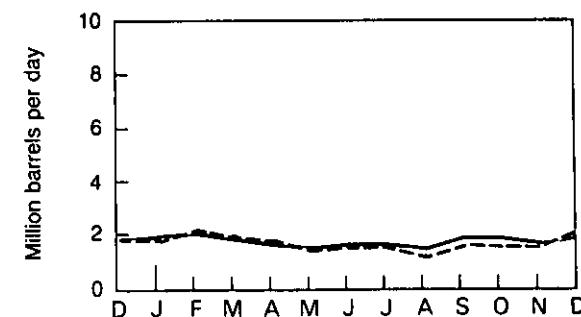
West Germany



United Kingdom



Italy\*\*\*



\*Excludes liquefied petroleum gases and condensates.

\*\*Not a member of IEA.

\*\*\*Principal products only.

— 1980  
- - - 1981

## International

### Petroleum Stocks for Major Non-Communist Industrialized Countries at End of Period<sup>1</sup>

	Canada	France	Italy	Japan	United Kingdom	United States	West Germany	Other OECD <sup>2</sup>	Total OECD <sup>2</sup>
	Million barrels								
1973	149	203	NA	303	156	1,008	NA	NA	NA
1974	164	240	169	370	191	1,074	215	NA	NA
1975	167	239	143	375	164	1,133	190	NA	NA
1976	156	231	142	394	165	1,112	214	NA	NA
1977	170	241	162	399	147	1,312	236	485	3,152
1978	148	214	153	422	147	1,278	239	487	3,089
1979	156	231	163	457	163	1,341	273	R568	R3,352
1980	January	156	228	184	445	164	1,348	282	NA
	February	153	225	153	419	162	1,339	305	NA
	March	156	233	152	427	163	1,342	299	R561
	April	161	220	155	442	160	1,366	287	NA
	May	168	233	164	463	167	1,387	300	NA
	June	171	239	165	471	174	1,410	313	R584
	July	178	247	176	494	172	1,425	308	NA
	August	184	266	186	508	176	1,449	315	NA
	September	183	264	192	508	173	1,447	306	R620
	October	178	271	186	497	169	1,430	307	NA
	November	172	260	179	488	170	1,434	313	NA
	December	171	254	173	481	169	1,395	323	R600
1981	January	169	234	155	479	168	1,391	319	NA
	February	162	235	184	457	170	1,398	312	NA
	March	165	227	158	452	164	1,405	319	R574
	April	174	235	169	484	165	1,423	322	NA
	May	176	229	173	496	162	1,447	321	NA
	June	179	225	172	484	158	1,438	314	R615
	July	174	228	177	478	153	1,444	305	NA
	August	177	233	189	483	151	1,458	308	NA
	September	177	241	188	493	151	1,481	309	R570
	October	168	238	188	500	149	1,488	NA	NA
	November	158	230	NA	NA	NA	1,506	NA	NA

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

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

<sup>1</sup>Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined products.

Petroleum stocks include all non-military petroleum held for storage regardless of ownership, within each particular country in the following facilities: bulk terminals, refinery tanks, pipeline tankage, intercoastal tankers, tankers in port, and inland ship bunkers. These data exclude oil held in pipelines (except for the United States), in rail and truck cars, in sea-going ships' bunkers, in service stations, retail stores, and in tankers at sea.

<sup>2</sup>"Other OECD" includes Organization of Economic Cooperation and Development (OECD) members not shown.

The members of OECD are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Total OECD excludes United States Territories.

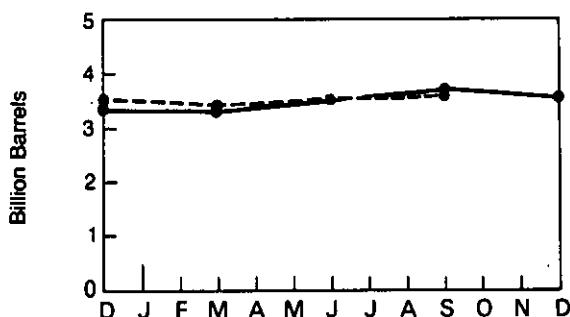
R=Revised data. NA=Not available.

Sources: • Canada: Energy, Mines and Resources Canada, *Energy Information Handbook*; Statistics Canada, *Refined Petroleum Products*. • France: Comité Professionnel du Pétrole, *Pétrole 80: Activité de L'Industrie Pétrolière et Bulletin Mensuel*. • West Germany and Italy: OECD, *Quarterly Oil Statistics* and *Monthly Oil Statistics*. • Japan: Ministry of International Trade and Industry, *Yearbook of Coal, Petroleum, and Coke Statistics 1979; Energy Production: Supply and Demand Statistics Report*. • United Kingdom: United Kingdom Department of Energy, *Digest of United Kingdom Energy Statistics 1981* and *Energy Trends*; and OECD, *Monthly Oil Statistics*. • United States: 1973 through 1979: Energy Information Administration (EIA), *Energy Data Reports*, "Petroleum Statement, Annual"; January 1980 through November 1981: EIA, "Petroleum Statement, Monthly". • Other OECD: OECD, *Quarterly Oil Statistics*. • Total OECD: Sum of data for all OECD member countries using above sources.

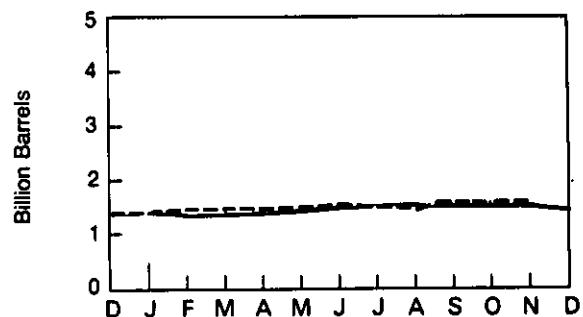
# International

## Petroleum Stocks

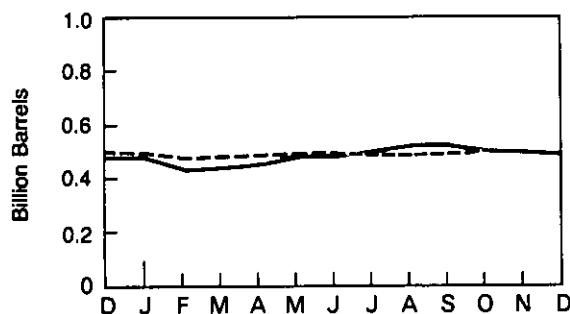
Total OECD



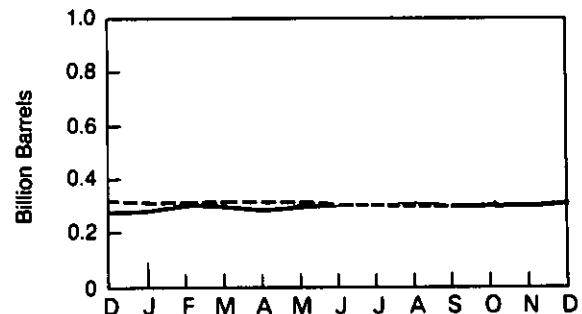
United States



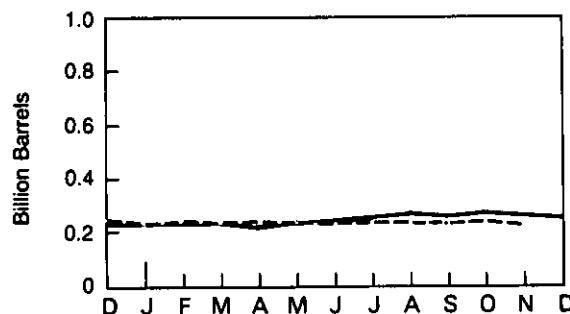
Japan



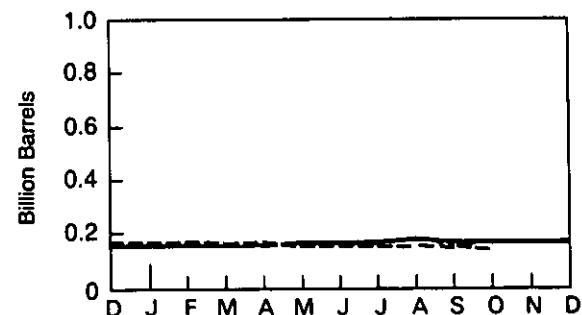
West Germany



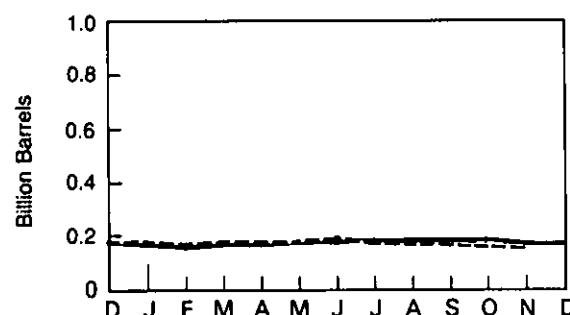
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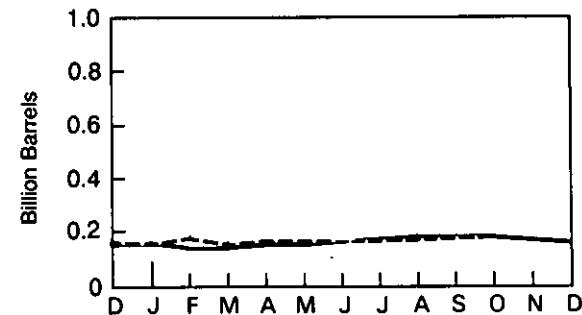
United Kingdom



Canada



Italy



— 1980

- - - 1981

95

95

## International

### Nuclear Electricity Generation by Non-Communist Countries<sup>1</sup>

		Argentina	Belgium	Canada	Finland	France	India	Italy	Japan	Nether- lands	Pakistan
Billion gross kilowatt-hours											
1973	TOTAL	0	0	18.3	0	11.6	1.9	3.1	9.4	1.1	0.5
1974	TOTAL	1.0	0.1	15.4	0	14.7	2.5	3.4	18.1	3.3	0.6
1975	TOTAL	2.5	6.8	13.2	0	18.3	2.5	3.8	22.2	3.3	0.5
1976	TOTAL	2.6	10.0	18.0	0	15.8	3.2	3.8	36.8	3.9	0.5
1977	TOTAL	1.6	11.9	26.8	2.7	17.9	2.8	3.4	28.1	3.7	0.3
1978	TOTAL	2.9	12.5	32.9	3.3	30.5	2.3	4.4	53.2	4.1	0.2
1979	TOTAL	2.7	11.4	38.4	6.7	39.9	3.2	2.6	62.0	3.5	(s)
1980	January	0.3	1.2	3.6	0.8	5.5	0.2	0.2	8.0	0.4	0
	February	0.1	1.0	3.5	0.8	5.3	0.1	0.4	7.4	0.4	0
	March	0	1.0	3.7	0.8	5.1	0.2	0.5	8.0	0.4	0
	April	0.1	0.5	3.2	0.8	5.0	0.3	0.4	5.6	0.3	0
	May	0.2	0.7	2.5	0.3	4.2	0.3	0.3	6.0	0.3	0
	June	0.2	1.1	3.1	0	4.1	0.2	0.1	6.7	0.3	0
	July	0.2	1.3	3.6	0.4	4.8	0.2	0.1	7.8	0.4	(s)
	August	0.3	1.3	3.9	0.4	3.2	0.3	0.1	8.6	0.4	(s)
	September	0.3	1.1	3.1	0.4	4.5	0.3	0.1	7.0	0.4	(s)
	October	0.3	0.9	3.3	0.5	5.1	0.2	0	6.0	0.3	0
	November	0.3	1.1	3.4	0.6	5.8	0.3	0	5.4	0.3	(s)
	December	0.3	1.2	3.5	1.2	8.5	0.2	0	6.3	0.3	(s)
	TOTAL	2.3	12.5	40.4	7.0	61.2	2.9	2.2	82.8	4.2	0.1
1981	January	0.3	1.2	3.2	1.3	9.3	0.2	0.2	8.2	0.1	(s)
	February	0.2	1.0	3.5	0.9	8.6	0.2	0.3	7.1	(s)	(s)
	March	0.3	0.6	3.9	1.4	8.8	0.3	0.1	7.8	0.3	0
	April	0.2	0.7	3.3	1.5	8.3	0.3	0.6	7.9	0.4	0
	May	0.2	1.2	3.4	1.0	8.9	0.4	0.3	8.0	0.4	(s)
	June	0.2	1.2	3.6	0.7	8.3	0.3	0.1	6.7	0.4	(s)
	July	0.3	1.3	4.0	0.8	8.4	0.3	0.3	8.3	0.4	(s)
	August	0.2	1.2	4.0	1.4	7.7	0.2	0.1	8.1	0.4	(s)
	September	0.3	0.9	3.3	1.5	8.5	0.2	0.1	5.9	0.4	(s)
	October	0.2	1.0	3.4	1.4	8.1	0.2	0.1	5.1	0.4	(s)
	November	0.2	R1.3	3.5	1.3	9.3	0.2	0.1	4.8	0.4	(s)
	December	0.2	1.3	4.1	1.2	11.0	0.3	0.4	5.6	0.3	(s)
	TOTAL	2.8	12.8	43.3	14.5	105.2	3.1	2.7	83.5	3.7	0.2
1982	January	0.3	1.3	4.0	1.5	11.0	0.2	0.6	7.9	0.4	(s)

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

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

(s)=Less than 0.05 billion gross kilowatt-hours.

Source: • Nucleonics Week.

# International

## Nuclear Electricity Generation by Non-Communist Countries<sup>1</sup> (continued)

		South Korea	Spain	Sweden	Switzer-land	Taiwan	United Kingdom <sup>2</sup>	West Germany	Non- Communist World Excluding U.S.	United States	Total Non- Communist World
Billion gross kilowatt-hours											
1973	<b>TOTAL</b>	0	6.5	2.1	6.2	0	28.0	11.9	100.7	88.0	188.7
1974	<b>TOTAL</b>	0	7.2	1.6	7.0	0	34.0	12.0	121.1	104.5	225.6
1975	<b>TOTAL</b>	0	7.5	12.0	7.7	0	30.5	21.7	152.7	181.8	334.5
1976	<b>TOTAL</b>	0	7.6	16.0	7.9	0	36.8	24.5	187.3	201.7	389.1
1977	<b>TOTAL</b>	0.1	6.5	19.9	8.1	0.1	38.1	35.8	207.8	263.3	471.0
1978	<b>TOTAL</b>	2.3	7.6	23.8	8.3	2.7	36.7	35.9	263.6	292.7	556.3
1979	<b>TOTAL</b>	3.2	6.7	21.0	11.8	6.3	38.5	42.2	300.1	270.7	570.8
1980	January	0.1	0.7	2.5	1.5	0.9	3.7	4.7	34.2	21.1	55.3
	February	(s)	0.3	2.4	1.2	0.7	3.4	4.2	31.3	21.0	52.2
	March	0.4	0.4	2.3	1.3	0.8	4.2	3.4	32.4	21.0	53.4
	April	0.4	0.4	1.9	1.4	0.7	2.7	3.6	27.3	19.8	47.1
	May	0.4	0.4	1.6	1.4	0.4	2.6	3.5	25.1	19.6	44.7
	June	0.1	0.3	1.6	0.6	0.5	2.8	2.9	24.7	19.4	44.1
	July	0.4	0.3	1.3	0.6	0.8	2.0	3.0	27.2	22.4	49.6
	August	0.3	0.4	1.3	0.7	0.8	2.6	2.7	27.2	25.7	52.9
	September	0.4	0.4	2.1	1.3	0.8	3.1	3.2	28.4	24.8	53.2
	October	0.4	0.4	2.7	1.4	0.8	2.7	3.1	28.2	25.7	53.9
	November	0.4	0.5	3.4	1.4	0.6	3.2	4.1	30.8	22.0	52.8
	December	0.3	0.7	3.6	1.5	0.5	4.2	5.3	37.5	23.1	60.7
	<b>TOTAL</b>	3.5	5.2	26.7	14.3	8.2	37.2	43.7	354.4	265.5	619.9
1981	January	0.3	0.8	3.5	1.5	0.8	3.8	5.0	39.7	25.7	65.4
	February	0	0.6	3.6	1.4	0.7	3.4	4.6	36.2	22.6	58.8
	March	0	0.7	3.7	1.5	0.8	4.2	4.9	39.1	23.1	62.2
	April	0	0.6	3.3	1.4	0.8	2.8	4.4	36.5	21.7	58.2
	May	0.2	0.8	2.8	1.4	0.8	2.5	4.3	36.6	20.9	57.4
	June	0.4	0.8	2.8	0.7	0.8	3.3	4.1	34.5	22.6	57.1
	July	0.4	1.1	1.4	0.6	0.8	2.5	5.2	36.1	24.8	60.9
	August	0.4	1.0	2.6	1.0	0.8	2.5	3.9	35.6	28.3	63.9
	September	0.3	0.6	3.0	1.3	0.8	3.1	3.2	33.4	25.7	59.1
	October	0.3	1.2	3.3	1.5	1.2	2.7	4.0	34.2	21.6	55.8
	November	0.3	0.6	3.6	1.4	1.0	3.1	4.3	35.5	24.1	59.5
	December	0.4	0.7	4.1	1.5	1.1	4.9	5.4	42.6	27.5	70.0
	<b>TOTAL</b>	2.9	9.4	37.7	15.2	10.7	38.9	53.3	439.9	288.6	728.5
1982	January	0.4	1.0	4.0	1.5	0.8	3.4	5.9	44.2	27.1	71.2

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

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

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

<sup>2</sup>The United Kingdom assesses generation at 4-, 5- or 6-week intervals, rather than by calendar month.

R=Revised data. (s)=Less than 0.05 billion gross kilowatt-hours.

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.

### **Bituminous Coal**

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

### **Coke (Coal)**

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

### **Crude Oil**

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

### **Crude Oil Refinery Input**

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

### **Crude Oil Stocks**

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

### **Distillate Fuel Oil**

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

### **Electricity Production**

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

### **Ethane**

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

### **Exports**

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

### **Full-Serve Station**

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

### **Imports**

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

### **Landed Cost of Imported Crude Oil**

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

### **Lease Condensate**

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

### **Lignite**

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

### **Liquefied Petroleum Gases**

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

### **Line Miles of Seismic Exploration**

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

### **Maximum Dependable Capacity, Net**

Represents the dependable main-unit net capacity of domestic nuclear powerplant reactors and generally varies

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

#### **Motor Gasoline**

See Motor Gasoline, Finished and Motor Gasoline, Total.

#### **Motor Gasoline, Average Retail Selling Price**

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

#### **Motor Gasoline, Finished**

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

#### **Motor Gasoline, Premium Grade**

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

#### **Motor Gasoline, Regular Grade**

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

#### **Motor Gasoline, Total**

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

#### **Natural Gas**

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

#### **Natural Gas Plant Liquids**

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

#### **Petroleum**

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

#### **Petroleum Coke**

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

#### **Petroleum Products**

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 gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt, road oil, still gas, natural gasoline, unfractionated stream, unfinished oils, and miscellaneous products.

#### **Propane**

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

#### **Refined Petroleum Product Supplied**

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

#### **Refiner Acquisition Cost**

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

#### **Residual Fuel Oil**

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

**Rotary Rig**

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

**Self-Serve Station**

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

**Startup Test Phase of Nuclear Powerplant**

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

**Stocks (Refined Petroleum Product)**

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

**Strategic Petroleum Reserve**

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

**Synthetic Natural Gas (SNG)**

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

**Unaccounted for Crude Oil**

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

**Wells, Exploratory and Development**

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

## Explanatory Notes

1. Domestic production of energy includes production of coal (anthracite, bituminous coal, and lignite), crude oil and lease condensate, natural gas plant liquids, natural gas (dry), electric utility and industrial production of hydropower, and electricity generated from nuclear power, geothermal power, and wood and waste. The volumetric data were converted to approximate heat contents (Btu values) of these energy sources using conversion factors listed in Thermal Conversion Factors.
2. Domestic consumption of energy includes consumption of coal (anthracite, bituminous coal, and lignite), natural gas (dry), refined petroleum products supplied, electric utility and industrial production of hydropower, net imports of electricity produced from hydropower, net imports of coke made from coal, and electricity generated from nuclear power, geothermal power, and wood and waste. Approximate heat contents (Btu values) were derived using conversion factors listed in Thermal Conversion Factors.
3. U.S. energy imports include imports of bituminous coal, crude oil (including crude oil imported for the Strategic Petroleum Reserve), refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.
4. U.S. energy exports include bituminous coal and anthracite, crude oil, refined petroleum products, natural gas (dry), electricity produced from hydropower, and coke made from coal.
5. The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. The Transportation Sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. The Electric Utilities Sector is made up of privately- and publicly-owned establishments that generate electricity primarily for resale.
6. Degree-days are relative measurements of outdoor air temperature. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65° F by convention. Heating degree-days are deviations of the mean daily temperature below 65° F. For example, if a weather station recorded a mean daily temperature of 78° F, cooling degree-days for that station would be 13 (and heating degree-days, 0). A weather station recording a mean daily temperature of 40° F would report 25 heating degree-days (and 0 cooling degree-days).

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

Administration for Defense (PAD) Districts and into the national average, also using a population weighting method.

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

7. Domestic products supplied figures for natural gas liquids (NGL) in this publication do not include amounts utilized by refineries for blending purposes in the production of finished products, principally gasoline. Use of NGL at refineries is reported in a separate column. The production series cited in this publication shows both NGL produced at processing plants and liquefied gases produced at refineries (LRG). The stock series shown in this volume includes natural gas liquids held as stocks at both natural gas processing plants and at refineries and LRG held at refineries.

8. Domestic consumption of natural gas includes quantities of gas delivered to consumers plus gas used for lease, plant, and pipeline fuel after natural gas liquids have been extracted. Delivered quantities include sizeable amounts of supplemental gaseous fuels (synthetic natural gas, etc.) that are not quantified for 1979 and previous years. Beginning with January 1980, the amounts of supplemental gaseous fuels included in domestic consumption are provided.

Marketed production for 1979 and previous years represents gross withdrawals (full well-stream volume excluding lease condensate separated at the lease) less gas used for repressuring and quantities vented and flared. This definition includes the nonhydrocarbon gases subsequently removed. Beginning with January 1980 data, the marketed production series were expanded into two series. They both represent gross withdrawals less gas used for repressuring and quantities vented or flared. However, one series (identified as "Total Marketed" in this publication) includes the nonhydrocarbon gases subsequently removed, and the other series excludes the nonhydrocarbon gases removed. For the purpose of maintaining a continuous series, those data that include the nonhydrocarbon gases subsequently removed are displayed, and the quantities of nonhydrocarbons subsequently removed are shown separately. Also, for the purpose of maintaining a continuous series the "Total Dry Production" displayed in this publication represents total marketed production including nonhydrocarbon gases subsequently removed less extraction loss due to removal of natural gas plant liquids.

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 that 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. Preliminary estimates of monthly coal production are based on the number of cars loaded at mines reported weekly to the Association of American Railroads by Class I railroads. The amount of coal produced and shipped by other modes of transportation is derived by employing the ratio of railroad shipments to total production for the most recent period for which this ratio is known. Final monthly and annual coal production data are derived from the Energy Information Administration (EIA) "Coal Distribution Report" (Form EIA-6) and selected State agencies.

Domestic consumption data in this series approximate actual consumption. This is in contrast to domestic products supplied reported for petroleum products, which is a 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  $\Delta S$ . 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

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

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 powerplants 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, 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.

13. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on Form EIA-14, the "Refiners' Monthly Cost Report." These prices were previously published from data collected on Form ERA-49, the "Domestic Crude Oil Entitlements Program Refiners Monthly Report." The Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. Also, the respondents for the two forms are essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken in comparing the data collected on the two forms.

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

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined.

in 43 USC Section 1331. Imported crude oil is either that oil reported on Form ERA-51, the "Transfer Pricing Report," or any crude oil that is not domestic oil.

Crude oil costs and volumes reported on Form ERA-49 excluded unfinished oils but included Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on the FEA Form P110-M-1 included unfinished oils but excluded SPR. Imported averages derived from Form ERA-49 exclude oil purchased for SPR, whereas the composite averages derived from Form ERA-49 include SPR. None of the prices derived from Form EIA-14 include either unfinished oils or SPR.

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 that export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

16. The motor gasoline prices are calculated monthly by the Bureau of Labor Statistics in conjunction with the construction of the Consumer Price Index (CPI). For the period 1974 through 1978 prices were collected in 56 urban areas. For the period 1978 forward, prices were collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI

population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-serve).

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. Standard Federal Regions are defined as follows:

- Region 1 — Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island;
- Region 2 — New York, New Jersey, Puerto Rico, Virgin Islands;
- Region 3 — Pennsylvania, Maryland, West Virginia, Virginia, 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 oils No. 4, No. 5, and No. 6, and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (fuel oil No. 2, kerosene, and jet fuel) prices.

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## Conversion Factors

### Approximate Heat Content of Various Fuels

		1973	1974	1975	1976	1977	1978	1979	1980	1981-82†
Anthracite										
Production	Thousand Btu/short ton	23,170	22,560	23,390	22,770	23,180	23,520	23,590	23,350	23,350
Imports and exports	Thousand Btu/short ton	25,400	25,400	25,400	25,400	25,400	25,400	25,400	25,400	25,400
Consumption, average	Thousand Btu/short ton	22,710	21,950	21,740	22,150	22,690	22,970	22,700	22,160	22,160
Electric utility consumption	Thousand Btu/short ton	17,920	17,200	17,060	17,530	17,240	17,100	17,450	17,650	17,650
Non-utility consumption	Thousand Btu/short ton	24,340	23,750	23,650	23,840	24,990	25,170	25,200	23,740	23,740
Bituminous coal and lignite										
Production	Thousand Btu/short ton	24,010	23,730	23,200	23,150	22,700	22,430	22,590	23,150	23,150
Imports	Thousand Btu/short ton	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Exports	Thousand Btu/short ton	27,000	27,000	27,000	27,000	27,000	27,000	27,000	26,180	26,180
Consumption, average	Thousand Btu/short ton	23,650	23,070	22,800	22,750	22,330	22,140	22,200	22,000	22,000
Electric utility consumption	Thousand Btu/short ton	22,260	21,800	21,660	21,690	21,480	21,280	21,380	21,300	21,300
Non-utility consumption	Thousand Btu/short ton	26,840	26,120	25,810	25,870	25,130	25,070	25,060	25,060	25,060
Coal Coke	Thousand Btu/short ton	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000
Crude petroleum <sup>1</sup>										
Production	Thousand Btu/barrel	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Imports	Thousand Btu/barrel	5,817	5,827	5,821	5,808	5,810	5,802	5,810	5,812	5,812
Exports	Thousand Btu/barrel	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Crude petroleum and products										
Imports, average	Thousand Btu/barrel	5,897	5,884	5,858	5,856	5,834	5,839	5,810	5,796	5,796
Exports, average	Thousand Btu/barrel	5,752	5,774	5,748	5,745	5,797	5,808	5,832	5,820	5,820
Petroleum products										
Consumption, average	Thousand Btu/barrel	5,515	5,504	5,494	5,504	5,518	5,519	5,494	5,479	5,479
Residential and Commercial	Thousand Btu/barrel	5,381	5,371	5,354	5,383	5,384	5,386	5,281	5,270	5,230
Industrial	Thousand Btu/barrel	5,559	5,531	5,522	5,534	5,546	5,553	5,485	5,443	5,512
Transportation	Thousand Btu/barrel	5,398	5,396	5,395	5,400	5,404	5,412	5,429	5,441	5,429
Electric Utility	Thousand Btu/barrel	6,223	6,215	6,229	6,235	6,231	6,227	6,243	6,249	6,244
Imports	Thousand Btu/barrel	5,983	5,959	5,935	5,980	5,908	5,955	5,811	5,748	5,748
Exports	Thousand Btu/barrel	5,752	5,773	5,747	5,743	5,796	5,814	5,864	5,841	5,841
LPG consumption average <sup>2</sup>	Thousand Btu/barrel	3,746	3,730	3,715	3,711	3,677	3,669	3,680	3,674	3,674
Natural gas plant liquid production	Thousand Btu/barrel	4,049	4,011	3,984	3,964	3,941	3,925	3,955	3,914	3,914
Natural gas, dry										
Production and consumption	Btu/cubic foot	1,021	1,024	1,021	1,020	1,021	1,019	1,021	1,026	1,026
Electric utility consumption	Btu/cubic foot	1,024	1,022	1,026	1,023	1,029	1,034	1,034	1,034	1,034
Non-utility consumption	Btu/cubic foot	1,020	1,024	1,020	1,019	1,019	1,016	1,018	1,024	1,024
Imports	Btu/cubic foot	1,026	1,027	1,026	1,025	1,026	1,030	1,037	1,022	1,022
Exports	Btu/cubic foot	1,023	1,016	1,014	1,013	1,013	1,013	1,013	1,013	1,013
Natural gas, wet										
Production	Btu/cubic foot	1,093	1,097	1,095	1,093	1,093	1,088	1,092	1,099	1,099
Hydropower <sup>3</sup>	Btu/kWh	10,389	10,442	10,406	10,373	10,435	10,361	10,353	10,353	10,353
Nuclear power <sup>3</sup>	Btu/kWh	10,903	11,161	11,013	11,047	10,769	10,941	10,640	10,640	10,640
Geothermal power <sup>3</sup>	Btu/kWh	21,674	21,674	21,611	21,611	21,611	21,611	21,553	21,629	21,629
Electricity consumption	Btu/kWh	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412	3,412

Thousand Btu barrel

## 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 <sub>3</sub> O <sub>8</sub> )	contains	0.769 metric tons of uranium
1 short ton (UF <sub>6</sub> )	contains	0.613 metric tons of uranium
1 metric ton (UF <sub>6</sub> )	contains	0.676 metric tons of uranium

<sup>1</sup> Includes lease condensate.

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

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

\* 60 percent butane and 40 percent propane.

† 70 percent ethane and 30 percent propane.

‡ Preliminary data.

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