# Monthly Energy





### **Monthly Energy Review**

The *Monthly Energy Review (MER)* is the Energy Information Administration's (EIA) primary report of recent and historical energy statistics. Included are statistics on total energy production, consumption, and trade; energy prices; overviews of petroleum, natural gas, coal, electricity, nuclear energy, renewable energy, and international petroleum; and data unit conversions.

Release of the *MER* is in keeping with responsibilities given to EIA in Public Law 95–91 (Department of Energy Organization Act), which states, in part, in Section 205(a)(2), that:

"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...."

The *MER* is intended for use by Members of Congress, Federal and State agencies, energy analysts, and the general public. EIA welcomes suggestions from readers regarding the content of the *MER* and other EIA publications.

**Related publications**: Other monthly EIA reports are *Petroleum Supply Monthly*, *Petroleum Marketing Monthly*, *Natural Gas Monthly*, *Electric Power Monthly*, and *International Petroleum Monthly*. Readers of the *MER* may also be interested in EIA's *Annual Energy Review*, where many of the same data series are provided annually beginning with 1949. For more information, contact the National Energy Information Center at 202-586-8800 or InfoCtr@eia.doe.gov.

#### **Electronic Access**

The MER is available on EIA's Web site in a variety of formats at: http://www.eia.doe.gov/mer.

- Complete MER, and individual MER sections: Portable Document Format (PDF) files.
- Individual table and graph pages: PDF files.
- Data files for individual tables: Excel (XLS) files and ASCII comma-delimited (CSV) files. Note: PDF files display selected annual and monthly data. Excel and CSV files display all available annual and monthly data, often at a greater level of precision than the PDF files.

#### **Cover Photographs**



**Timing of release:** *MER* updates are usually posted electronically by the third-to-the-last workday of each month.

Released: March 26, 2008

# **Monthly Energy Review**

# March 2008

Energy Information Administration
Office of Energy Markets and End Use
U.S. Department of Energy
Washington, DC 20585

This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the U.S. Department of Energy. The information contained herein should be attributed to the Energy Information Administration and should not be construed as advocating or reflecting any policy of the Department of Energy or any other organization.

#### **Contacts**

The *Monthly Energy Review* is prepared by the Energy Information Administration, Office of Energy Markets and End Use, Integrated Energy Statistics Division, Domestic Energy Statistics Team, under the direction of Katherine E. Seiferlein, 202-586-5695 (kitty.seiferlein@eia.doe.gov). Questions and comments specifically related to the *Monthly Energy Review* may be addressed to Michelle Burch, 202-586-5850 (michelle.burch@eia.doe.gov).

For assistance in acquiring data, please contact the **National Energy Information Center at 202-586-8800 or infoctr@eia.doe.gov**. Questions about the collection, processing, or interpretation of the information may be directed to the following subject specialists:

Section	1.	Energy Overview	Dianne R. Dunn	202-586-2792
				dianne.dunn@eia.doe.gov
Section	2.	Energy Consumption by Sector	Dianne R. Dunn	202-586-2792 dianne.dunn@eia.doe.gov
Section	3.	Petroleum	Michael Conner	202-586-1795 michael.conner@eia.doe.gov
Section	4.	Natural Gas	Amy Sweeney	202-586-2627 amy.sweeney@eia.doe.gov
Section	5.	Crude Oil and Natural Gas Resource Development	Robert F. King	202-586-4787 robert.king@eia.doe.gov
Section	6.	Coal	- Mary L. Lilly	202-586-1490 mary.lilly@eia.doe.gov
Section	7.	Electricity	Ronald S. Hankey	202-586-2630 ronald.hankey@eia.doe.gov
Section	8.	Nuclear Energy	John R. Moens	202-586-1509 john.moens@eia.doe.gov
Section	9.	Energy Prices		
		Petroleum	Patricia Wells	202-586-4885 patricia.wells@eia.doe.gov
		Natural Gas	Amy Sweeney	202-586-2627 amy.sweeney@eia.doe.gov
		Average Retail Prices of Electricity		ssell 202-586-2661 ene.harris-russell@eia.doe.gov
		Cost of Fuel at Electric Generating Plants	- Stephen Scott	202-586-5140 stephen.scott@eia.doe.gov
Section	10.	Renewable Energy	- Louise Guey-Lee	202-586-1293 louise.guey-lee@eia.doe.gov
Section	11.	International Petroleum	Patricia Smith	202-586-6925 patricia.smith@eia.doe.gov

## **Contents**

			Page
Section	1.	Energy Overview.	1
Section	2.	Energy Consumption by Sector	. 23
Section	3.	Petroleum	37
Section	4.	Natural Gas	67
Section	5.	Crude Oil and Natural Gas Resource Development	75
Section	6.	Coal	. 81
Section	7.	Electricity	89
Section	8.	Nuclear Energy	. 111
Section	9.	Energy Prices.	115
Section	10.	Renewable Energy	135
Section	11.	International Petroleum	145
Appendix	A.	Thermal Conversion Factors	155
Appendix	B.	Metric and Other Physical Conversion Factors	165
Glossary			169

# **Tables**

			Page
Section	1.	Energy Overview	
1.1		Primary Energy Overview	
1.2		Primary Energy Production by Source	
1.3		Primary Energy Consumption by Source.	
1.4a		Energy Imports by Source.	10
1.4b		Energy Exports by Source and Total Net Imports.	
1.5		Merchandise Trade Value	
1.6		Cost of Fuels to End Users in Real (1982-1984) Dollars.	
1.7		Energy Consumption per Real Dollar of Gross Domestic Product	
1.8		Motor Vehicle Mileage, Fuel Consumption, and Fuel Rates.	
1.9		Heating Degree-Days by Census Division.	18
1.10		Cooling Degree-Days by Census Division.	19
Section	2.	Energy Consumption by Sector	
2.1	_,	Energy Consumption by Sector.	25
2.2		Residential Sector Energy Consumption.	
2.3		Commercial Sector Energy Consumption.	
2.4		Industrial Sector Energy Consumption.	
2.5		Transportation Sector Energy Consumption.	
2.6		Electric Power Sector Energy Consumption.	
2.0		Electric Fower Sector Energy Consumption.	33
Section	3.	Petroleum	
3.1		Petroleum Overview	
3.2		Refinery and Blender Net Inputs and Net Production	41
3.3		Petroleum Trade	
		3.3a Overview	43
		3.3b Imports and Exports by Type	45
		3.3c Imports From OPEC Countries	46
		3.3d Imports From Non-OPEC Countries	47
3.4		Petroleum Stocks.	49
3.5		Petroleum Products Supplied by Type	51
3.6		Heat Content of Petroleum Products Supplied by Type	53
3.7		Petroleum Consumption	
		3.7a Residential and Commercial Sectors	55
		3.7b Industrial Sector.	56
		3.7c Transportation and Electric Power Sectors	57
3.8		Heat Content of Petroleum Consumption	
		3.8a Residential and Commercial Sectors.	59
		3.8b Industrial Sector.	
		3.8c Transportation and Electric Power Sectors	61
Cootie-	4	Natural Gas	
Section	4.		60
4.1 4.2		Natural Gas Overview.	
		Natural Gas Trade by Country	
4.3		Natural Gas Consumption by Sector.	
4.4		Natural Gas in Underground Storage	12
Section	5.	Crude Oil and Natural Gas Resource Development	
5.1		Crude Oil and Natural Gas Drilling Activity Measurements	
5.2		Crude Oil and Natural Gas Exploratory and Development Wells	
5.3		Maximum U.S. Active Seismic Crew Counts.	79

# **Tables**

		Page
Continu	6	Coal
Section 6.1	0.	Coal Overview
6.2		Coal Consumption by Sector. 84
6.3		Coal Stocks by Sector
0.5		Coal Stocks by Sector
Section	7.	Electricity
7.1		Electricity Overview. 91
7.2		Electricity Net Generation
		7.2a Total (All Sectors)
		7.2b Electric Power Sector. 94
		7.2c Commercial and Industrial Sectors
7.3		Consumption of Combustible Fuels for Electricity Generation
		7.3a Total (All Sectors)
		7.3b Electric Power Sector
		7.3c Commercial and Industrial Sectors (Selected Fuels)
7.4		Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output
		7.4a Total (All Sectors)
		7.4b Electric Power Sector
		7.4c Commercial and Industrial Sectors (Selected Fuels)
7.5		Stocks of Coal and Petroleum: Electric Power Sector
7.6		Electricity End Use
Section	8.	Nuclear Energy
8.1		Nuclear Energy Overview
Section	9.	Energy Prices
9.1		Crude Oil Price Summary
9.2		F.O.B. Costs of Crude Oil Imports From Selected Countries
9.3		Landed Costs of Crude Oil Imports From Selected Countries
9.4		Motor Gasoline Retail Prices, U.S. City Average
9.5		Refiner Prices of Residual Fuel Oil
9.6		Refiner Prices of Petroleum Products for Resale
9.7		Refiner Prices of Petroleum Products to End Users
9.8		No. 2 Distillate Prices to Residences
		9.8a Northeastern States
		9.8b Selected South Atlantic and Midwestern States
0.0		9.8c Selected Western States and U.S. Average
9.9		Average Retail Prices of Electricity. 128
9.10 9.11		Cost of Fossil-Fuel Receipts at Electric Generating Plants
9.11		Natural Gas Frices
Section	10.	Renewable Energy
10.1		Renewable Energy Production and Consumption by Source
10.2		Renewable Energy Consumption
		10.2a Residential and Commercial Sectors
		10.2b Industrial and Transportation Sectors
		10.2c Electric Power Sector
10.3		Fuel Ethanol Overview. 141
10.4		Biodiesel Overview

# **Tables**

		Page
Section	11. International Petroleum	
11.1	World Crude Oil Production	
	11.1a OPEC Members.	146
	11.1b Persian Gulf Nations, Non-OPEC, and World	147
11.2	Petroleum Consumption in OECD Countries	
11.3	Petroleum Stocks in OECD Countries.	
Appendi	ix A. Thermal Conversion Factors	
A1.	Approximate Heat Content of Petroleum Products	155
A2.	Approximate Heat Content of Petroleum Production, Imports, and Exports	156
A3.	Approximate Heat Content of Petroleum Consumption and Biofuels Production	157
A4.	Approximate Heat Content of Natural Gas	158
A5.	Approximate Heat Content of Coal and Coal Coke	159
A6.	Approximate Heat Rates for Electricity, and Heat Content of Electricity.	160
Appendi	ix B. Metric and Other Physical Conversion Factors	
B1.	Metric Conversion Factors	166
B2.	Metric Prefixes	
B3.	Other Physical Conversion Factors	167

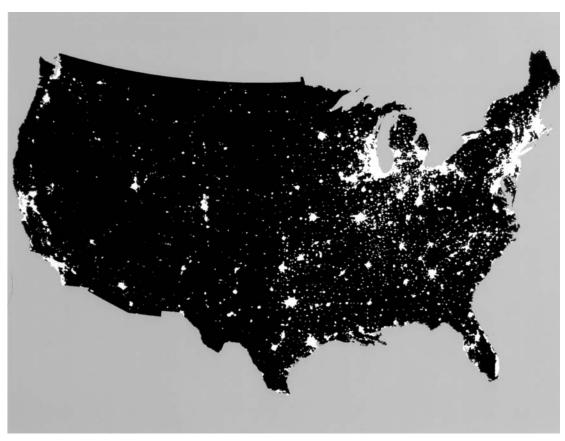
# **Figures**

		Page
Section	1.	Energy Overview
1.1		Primary Energy Overview
1.2		Primary Energy Production
1.3		Primary Energy Consumption. 6
1.4a		Energy Imports and Exports
1.4b		Energy Net Imports. 9
1.5		Merchandise Trade Value
1.6		Cost of Fuels to End Users in Real (1982-1984) Dollars
1.7		Energy Consumption per Real Dollar of Gross Domestic Product
1.8		Motor Vehicle Fuel Rates
Section	2.	Energy Consumption by Sector
2.1		Energy Consumption by Sector
2.2		Residential Sector Energy Consumption
2.3		Commercial Sector Energy Consumption
2.4		Industrial Sector Energy Consumption
2.5		Transportation Sector Energy Consumption
2.6		Electric Power Sector Energy Consumption
g	•	
Section	3.	Petroleum
3.1		Petroleum Overview
3.2		Refinery and Blender Net Inputs and Net Production
3.3		Petroleum Trade
		3.3a Overview
		3.3b Imports
3.4		Petroleum Stocks
3.5		Petroleum Products Supplied by Type
3.6		Heat Content of Petroleum Products Supplied by Type
3.7		Petroleum Consumption by Sector
3.8		Heat Content of Petroleum Consumption by Sector, Selected Products
Section	4.	Natural Gas
4.1		Natural Gas. 68
	5.	Crude Oil and Natural Gas Resource Development
5.1		Crude Oil and Natural Gas Resource Development Indicators
Section	6.	Coal
6.1		Coal
Castian	7	Electricity
Section	/.	Electricity  Floatsicity Operations
7.1		Electricity Overview
7.2		Electricity Net Generation. 92
7.3		Consumption of Selected Combustible Fuels for Electricity Generation
7.4		Consumption of Selected Combustible Fuels for Electricity Generation and
		Useful Thermal Output
7.5		Stocks of Coal and Petroleum: Electric Power Sector
7.6		Electricity End Use
Section	8.	Nuclear Energy
8.1	٠.	Nuclear Energy Overview. 112

# **Figures**

			Page
Section	9.	Energy Prices	
9.1		Petroleum Prices.	116
9.2		Average Retail Prices of Electricity	127
9.3		Cost of Fossil-Fuel Receipts at Electric Generating Plants	
9.4		Natural Gas Prices.	. 130
Section	10.	Renewable Energy	
10.1		Renewable Energy Consumption	136
Section	11.	International Petroleum	
11.1		World Crude Oil Production	
		11.1a Overview.	. 148
		11.1b By Selected Country	. 149
11.2		Petroleum Consumption in OECD Countries	
11.3		Petroleum Stocks in OECD Countries	

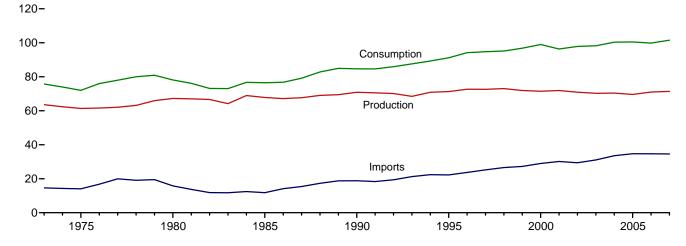
# **Energy Overview**



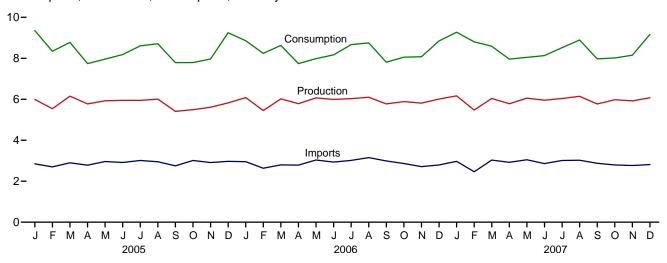
The continental United States at night from orbit. Source: National Oceanic and Atmospheric Administration satellite imagery; mosaic provided by U.S. Geological Survey.

Figure 1.1 Primary Energy Overview (Quadrillion Btu)

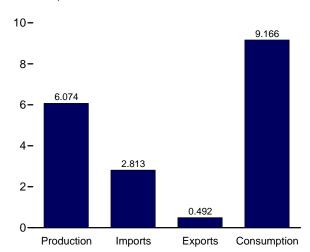
Consumption, Production, and Imports, 1973-2007



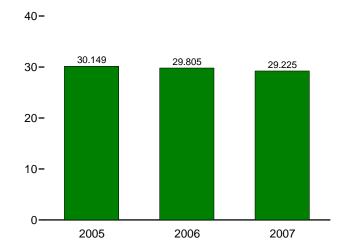
Consumption, Production, and Imports, Monthly



Overview, December 2007



Net Imports, January-December



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Sources: Tables 1.1 and 1.4b.

**Table 1.1 Primary Energy Overview** 

(Quadrillion Btu)

	Production <sup>a</sup>	Imports	Exports	Stock Change and Other <sup>b</sup>	Consumption
70 T-4-1	62.505	44.040	2 222	0.450	75 700
73 Total	63.585	14.613	2.033	-0.456	75.708
75 Total	61.357	14.032	2.323	-1.067	71.999
80 Total	67.232	15.796	3.695	-1.212	78.122
35 Total	67.799	11.781	4.196	1.107	76.491
0 Total	70.870	18.817	4.752	283	84.652
5 Total	71.319	22.260	4.511	2.104	91.173
6 Total	72.641	23.702	4.633	2.466	94.175
7 Total	72.634	25,215	4.514	1.430	94,765
8 Total	73.041	26.581	4.299	139	95.183
9 Total	71.907	27.252	3.715	1.373	96.817
0 Total	71.490	28.973	4.006	2.518	98.975
	71.892			-1.952	
1 Total		30.157	3.770		96.326
2 Total	70.936	29.407	3.668	1.184	97.858
3 Total	70.270	31.060	4.054	.932	98.209
4 Total	70.394	33.543	4.433	.847	100.351
<b>5</b> January	5.992	2.848	.366	.882	9.356
February	5.540	2.700	.376	.477	8.341
March	6.153	2.900	.415	.136	8.774
April	5.774	2.781	.402	413	7.740
May	5.925	2.962	.443	483	7.961
June	5.949	2.915	.462	220	8.183
July	5.944	3.012	.395	.048	8.610
August	6.007	2.950	.399	.153	8.711
		2.749	.309	061	7.788
September	5.408				
October	5.491	3.012	.312	400	7.791
November	5.610	2.910	.302	256	7.962
December	5.826	2.970	.380	.832	9.248
Total	69.620	34.710	4.561	.696	100.465
6 January	6.081	2.953	.360	.183	8.857
February	5.448	2.632	.339	.501	8.242
March	6.017	2.799	.383	.196	8.628
April	5.786	2.787	.383	448	R 7.743
May	R 6.066	3.037	.436	683	R 7.985
June	R 5.991	2.935	.419	341	R 8.166
	R 6.030	3.018	.403	.020	R 8.665
July					R 8.752
August	R 6.097	3.152	.419	078	
September	R 5.774	2.989	.460	494	R 7.809
October	R 5.888	2.863	.436	259	R 8.055
November	<sup>R</sup> 5.814	2.712	.435	R014	<sup>R</sup> 8.076
December	<sup>R</sup> 6.013	2.795	.394	.433	R 8.848
Total	<sup>R</sup> 71.005	34.673	4.868	<sup>R</sup> 982	<sup>R</sup> 99.828
<b>7</b> January	<sup>R</sup> 6.167	R 2.968	R .452	<sup>R</sup> .587	<sup>R</sup> 9.270
February	<sup>R</sup> 5.471	R 2.461	R .353	R 1.223	R 8.802
March	R 6.040	R 3.034	R .417	R069	R 8.588
April	R 5.779	R 2.923	R .408	R335	R 7.960
	R 6.054	R 3.048	R .437	R619	<sup>R</sup> 8.047
May					
June	R 5.952	R 2.859	R .421	R260	R 8.130
July	R 6.037	R 3.014	R .498	R <sub>-</sub> .037	<sup>R</sup> 8.517
August	<sup>R</sup> 6.145	R 3.024	R .474	_ <sup>R</sup> .199	_ 8.894
September	<sup>R</sup> 5.770	<sup>R</sup> 2.874	R .435	<sup>R</sup> 236	<sup>R</sup> 7.973
October	<sup>R</sup> 5.976	<sup>R</sup> 2.794	R .434	<sup>R</sup> 322	<sup>R</sup> 8.014
November	R 5.920	R 2.766	R .533	R001	R 8.152
December	6.074	2.813	.492	.771	9.166

<sup>&</sup>lt;sup>a</sup> See Note 1, "Primary Energy Production," at end of section.

b Calculated as consumption and exports minus production and imports. Includes petroleum stock change and adjustments; natural gas net storage withdrawals and balancing item; and coal stock change, losses, and unaccounted for.

for.

<sup>c</sup> See Note 2, "Primary Energy Consumption," at end of section.

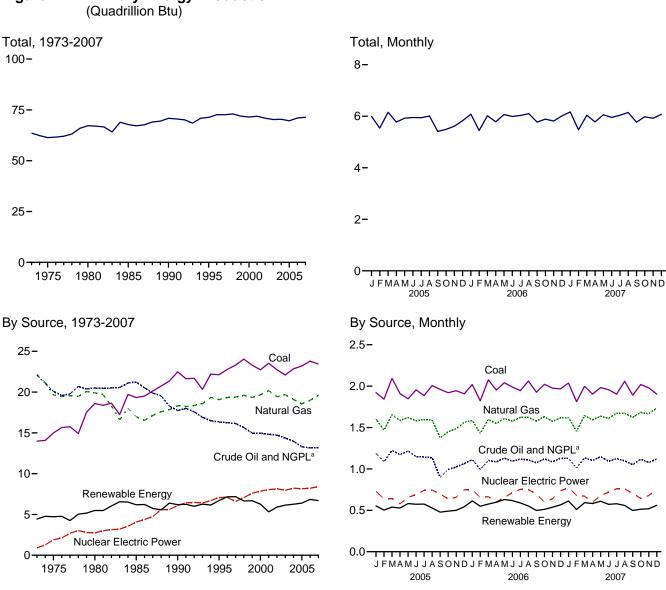
R=Revised.

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

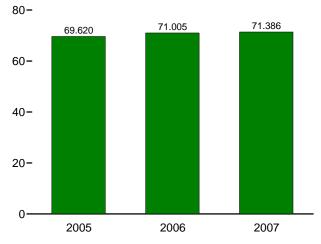
Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1973.

Sources: • Production: Table 1.2. • Imports: Table 1.4a. • Exports: Table 1.4b. • Consumption: Table 1.3.

Figure 1.2 Primary Energy Production

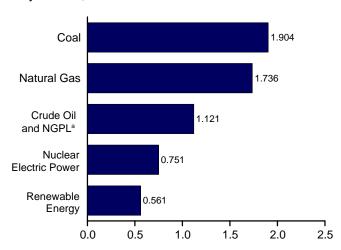


Total, January-December



<sup>a</sup> Natural gas plant liquids. Note: Because vertical scales differ, graphs should not be compared. .

By Source, December 2007



Web Page: http://www.eia.doe.gov/emeu/mer/overview.html Source: Table 1.2.

**Table 1.2 Primary Energy Production by Source** 

(Quadrillion Btu)

			Fossil Fuel	s			Renewable Energy <sup>a</sup>							
	Coal <sup>b</sup>	Natural Gas (Dry)	Crude Oil <sup>C</sup>	NGPLd	Total	Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total	
1973 Total	. 13.992	22.187	19.493	2.569	58.241	0.910	2.861	0.043	NA	NA	1.529	4.433	63.585	
1975 Total		19.640	17.729	2.374	54.733	1.900	3.155	.070	NA	NA	1.499	4.723	61.357	
1980 Total		19.908	18.249	2.254	59.008	2.739	2.900	.110	NA	NA	2.475	5.485	67.232	
1985 Total		16.980	18.992	2.241	57.539	4.076	2.970	.198	(s)	(s)	3.016	6.185	67.799	
1990 Total		18.326	15.571	2.175	58.560	6.104	3.046	.336	.060	.029	2.735	6.206	70.870	
1995 Total		19.082	13.887	2.442	57.540	7.075	3.205	.294	.070	.033	3.102	6.703	71.319	
1996 Total		19.344	13.723	2.530	58.387	7.087	3.590	.316	.071	.033	3.157	7.167	72.641	
1997 Total		19.394	13.658	2.495	58.857	6.597	3.640	.325	.070	.034	3.111	7.180	72.634	
1998 Total	. 24.045	19.613	13.235	2.420	59.314	7.068	3.297	.328	.070	.031	2.933	6.659	73.041	
1999 Total	. 23.295	19.341	12.451	2.528	57.614	7.610	3.268	.331	.069	.046	2.969	6.683	71.907	
2000 Total	. 22.735	19.662	12.358	2.611	57.366	7.862	2.811	.317	.066	.057	3.010	6.262	71.490	
2001 Total	. 23.547	20.166	12.282	2.547	58.541	8.033	2.242	.311	.065	.070	2.629	5.318	71.892	
2002 Total		19.439	12.163	2.559	56.894	8.143	2.689	.328	.064	.105	2.712	5.899	70.936	
2003 Total		19.691	12.026	2.346	56.162	7.959	2.825	.331	.064	.115	2.815	6.149	70.270	
2004 Total	. 22.862	19.093	11.503	2.466	55.924	8.222	2.690	.341	.065	.142	3.011	6.248	70.394	
<b>2005</b> January		1.602	.978	.209	4.710	.729	.243	.029	.005	.011	.265	.553	5.992	
February		1.470	.892	.195	4.401	.636	.216	.025	.005	.010	.247	.503	5.540	
March		1.656	1.007	.216	4.972	.642	.229	.028	.006	.016	.260	.539	6.153	
April		1.584	.967	.206	4.667	.579	.231	.028	.006	.017	.247	.528	5.774	
May		1.621	1.003	.213	4.686	.657	.273	.029	.006	.017	.256	.581	5.925	
June		1.582	.950	.199	4.686	.690	.268	.029	.006	.018	.252	.573	5.949	
July		1.597	.942	.202	4.627	.742	.260	.030	.006	.014	.266	.576	5.944	
August		1.589	.938	.199	4.734	.745	.216	.029	.006	.011	.266	.528	6.007	
September		1.375	.731	.167	4.234	.696	.174	.028	.006	.015	.255	.478	5.408	
October		1.448	.815	.178	4.362	.639	.180	.029	.006	.014	.261	.490	5.491	
November December		1.486 1.563	.842 .896	.181	4.454 4.534	.656 .749	.194 .221	.028 .029	.005 .005	.016	.257 .269	.500 .543	5.610 5.826	
Total		18.574	10.963	.168 <b>2.334</b>	55.069	8.160	2.703	.343	.005	.018 <b>.178</b>	3.101	6.391	69.620	
2006 January	. 2.020	1 506	010	104	4.717	750	272	.029	006	.024	202	.614	6.081	
2006 January February		1.586 1.428	.918 .819	.194 .175	4.717	.750 .653	.272 .246	.029	.006 .005	.019	.283 .253	.549	5.448	
March		1.597	.907	.176	4.778	.665	.244	.030	.006	.023	R .272	.575	6.017	
April		1.550	.892	.193	4.588	.601	.283	.027	.006	.025	R .257	.597	5.786	
May		1.609	.928	.202	4.780	.655	.306	.026	.006	.024	R .268	R .630	R 6.066	
June		1.577	.898	.196	4.659	.714	.295	.028	.006	.020	R .269	R .618	R 5.991	
July		1.622	.917	.202	4.688	.753	.252	.030	.006	.019	R .282	R .589	R 6.030	
August		1.622	.910	.199	4.793	.751	.216	.030	.006	.016	R .284	R .553	R 6.097	
September		1.579	.876	.198	4.580	.695	.171	.029	.006	.019	R .275	R .499	<sup>R</sup> 5.774	
October		1.632	.918	.204	4.776	.600	.169	.030	.006	.024	R .282	R .511	R 5.888	
November		1.574	.888	.197	4.636	.641	.201	.028	.006	.025	R .277	R .538	<sup>R</sup> 5.814	
December	. 1.967	1.616	.929	.200	4.712	.735	.214	.030	.006	.025	R .291	R .565	R 6.013	
Total	. 23.802	18.993	10.801	2.356	55.952	8.214	2.869	.343	.070	.264	R 3.293	R 6.839	<sup>R</sup> <b>71.005</b>	
2007 January	. R 2.038	E 1.619	E.934	.192	R 4.783	.772	.262	.031	.006	.024	R .289	.612	<sup>R</sup> 6.167	
February		E 1.456	E .836	.177	R 4.281	.681	.185	.028	.005	.025	.266	R .509	<sup>R</sup> 5.471	
March	. R 1.998	E 1.645	E .931	.203	R 4.777	.671	.241	.029	.006	.030	R .287	R .593	R 6.040	
April		E 1.592	E.908	R .194	R 4.599	.598	.237	.028	.006	.032	R .281	R .583	<sup>R</sup> 5.779	
May		E 1.636	E .942	R .205	R 4.767	.678	.257	.028	.006	.028	R .289	R .609	R 6.054	
June		E 1.612	E.894	R .197	R 4.659	.719	.227	.029	.006	.024	R .287	R .573	R 5.952	
July		E 1.671	E .921	R .204	4.699	.759	.224	.030	.006	.019	R .300	R .580	R 6.037	
August		E 1.671	E .895	R .201	4.826	.759	.198	.030	.006	.024	R .301	R .559	R 6.145	
September		E 1.624	E .852	R .199	R 4.567	.705	.145	.029	.006	.026	R .291	R .498	R 5.770	
October		E 1.683	E.906	.211	R 4.819	.644	.147	.030	.006	.030	R .300	R .513	R 5.976	
November		RE 1.666	E .871	R .207	R 4.724	.678	.156	.029	.006	.027	R .301	R .518	R 5.920	
December		E 1.736	E.912	.209	4.762	.751	.183	.030	.006	.028	.314	.561	6.074	
Total	. 23.449	E 19.612	<sup>E</sup> 10.802	2.400	56.263	8.415	2.463	.349	.071	.319	3.506	6.708	71.386	

<sup>&</sup>lt;sup>a</sup> Most data are estimates. See Tables 10.1-10.2c for notes on series components and estimation.

<sup>b</sup> Beginning in 1989, includes waste coal supplied. Beginning in 2001, also

may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1973.

Sources: • Coal: Tables 6.1 and A5. • Natural Gas (Dry): Tables 4.1 and A4. • Crude Oil and Natural Gas Plant Liquids: Tables 3.1 and A2. • Nuclear Electric Power: Tables 7.2a and A6 ("Nuclear Plants" heat rate).

includes a small amount of refuse recovery. See Table 6.1.

<sup>&</sup>lt;sup>c</sup> Includes lease condensate.

d Natural gas plant liquids.

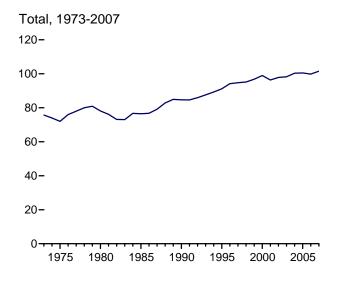
e Conventional hydroelectric power.

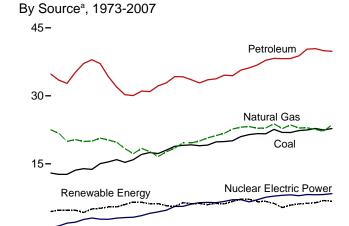
R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • See Note 1, "Primary Energy Production," at end of section. • Totals

<sup>•</sup> Renewable Energy: Table 10.1.

Figure 1.3 Primary Energy Consumption (Quadrillion Btu)





Total, January-December
125-

1990

2000

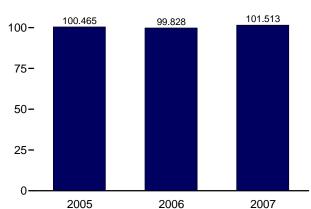
1995

2005

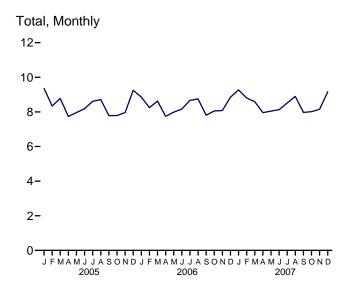
1985

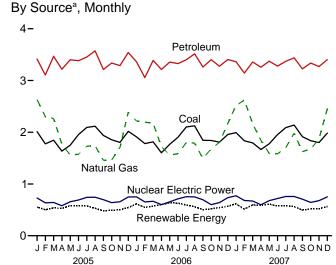
1980

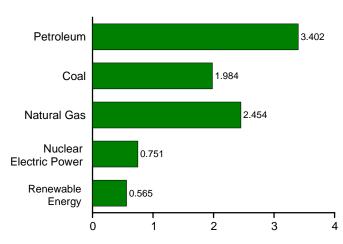
1975



<sup>&</sup>lt;sup>a</sup> Small quantities of net imports of coal coke and electricity are not shown. Note: Because vertical scales differ, graphs should not be compared.







By Source<sup>a</sup>, December 2007

Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Source: Table 1.3.

Table 1.3 Primary Energy Consumption by Source

(Quadrillion Btu)

		Fossi	l Fuels					Renewable	e Energy <sup>a</sup>			
	Coal	Natural Gas <sup>b</sup>	Petro- leum <sup>c</sup>	Totald	Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total <sup>f</sup>
4072 Tatal	42.074	22 542	24 040	70.246	0.040	2 004	0.042	NA	NIA	4 500	4 422	75 700
1973 Total		22.512	34.840	70.316	0.910	2.861	0.043	NA	NA	1.529	4.433	75.708
1975 Total		19.948	32.731	65.355	1.900	3.155	.070	NA	NA	1.499	4.723	71.999
1980 Total		20.235	34.202	69.826	2.739	2.900	.110	NA (a)	NA (a)	2.475	5.485	78.122
1985 Total		17.703	30.922	66.091	4.076	2.970	.198	(s)	(s)	3.016	6.185	76.491
1990 Total		19.603	33.553 34.437	72.333	6.104	3.046	.336	.060	.029	2.735	6.206	84.652
1995 Total		22.671		77.258	7.075	3.205	.294	.070	.033	3.104	6.705	91.173
1996 Total		23.085	35.673	79.783	7.087	3.590	.316	.071	.033	3.159	7.168	94.175
1997 Total		23.223	36.160	80.874	6.597	3.640	.325	.070	.034	3.108	7.178	94.765
1998 Total		22.830	36.817	81.370	7.068	3.297	.328	.070	.031	2.931	6.657	95.183
1999 Total		22.909	37.838	82.428	7.610	3.268	.331	.069	.046	2.967	6.681	96.817
2000 Total		23.824	38.264	84.733	7.862	2.811	.317	.066	.057	3.013	6.264	98.975
2001 Total		22.773	38.186	82.903	8.033	2.242	.311	.065	.070	2.627	5.315	96.326
2002 Total		23.558	38.227	83.750	8.143	2.689	.328	.064	.105	2.706	5.893	97.858
2003 Total		22.897	38.809	84.078	7.959	2.825	.331	.064	.115	2.817	6.150	98.209
2004 Total	22.466	22.931	40.294	85.830	8.222	2.690	.341	.065	.142	3.023	6.261	100.351
2005 January	2.011	2.632	3.414	8.068	.729	.243	.029	.005	.011	.266	.554	9.356
February	1.776	2.302	3.105	7.197	.636	.216	.025	.005	.010	.247	.502	8.341
March	1.846	2.263	3.468	7.586	.642	.229	.028	.006	.016	.259	.538	8.774
April	1.636	1.769	3.216	6.628	.579	.231	.028	.006	.017	.246	.527	7.740
May	1.749	1.562	3.400	6.716	.657	.273	.029	.006	.017	.257	.582	7.961
June	1.955	1.573	3.383	6.911	.690	.268	.029	.006	.018	.255	.576	8.183
July	2.093	1.730	3.453	7.282	.742	.260	.030	.006	.014	.267	.576	8.610
August		1.738	3.572	7.423	.745	.216	.029	.006	.011	.269	.531	8.711
September	1.938	1.458	3.214	6.607	.696	.174	.028	.006	.015	.256	.478	7.788
October		1.463	3.337	6.654	.639	.180	.029	.006	.014	.263	.492	7.791
November		1.705	3.288	6.798	.656	.194	.028	.005	.016	.259	.502	7.962
December		2.387	3.542	7.947	.749	.221	.029	.005	.018	.271	.546	9.248
Total		22.583	40.393	85.816	8.160	2.703	.343	.066	.178	3.114	6.404	100.465
2006 January	1.910	2.217	3.361	7.490	.750	.272	.029	.006	.024	.282	.612	8.857
February	1.781	2.195	3.056	7.036	.653	.246	.026	.005	.019	.251	.547	8.242
March		2.175	3.388	7.385	.665	.244	.030	.006	.023	.270	.573	8.628
April		1.720	3.212	6.538	.601	.283	.027	.006	.025	R .259	.599	R 7.743
May		1.562	3.356	6.688	.655	.306	.026	.006	.024	R .275	R .637	<sup>R</sup> 7.985
June		1.585	3.326	6.820	.714	.295	.028	.006	.020	R .278	R .628	R 8.166
July		1.799	3.401	7.306	.753	.252	.030	.006	.019	R .287	R .595	R 8.665
August		1.791	3.515	7.432	.751	.216	.030	.006	.016	R .290	R .559	R 8.752
September		1.493	3.260	6.609	.695	.171	.029	.006	.019	R .281	R .505	R 7.809
October		1.680	3.402	6.935	.600	.169	.030	.006	.024	R .289	R .519	R 8.055
November		R 1.805	3.276	R 6.889	.641	.201	.028	.006	.025	R .284	R .544	R 8.076
December		2.169	3.405	7.533	.735	.214	.030	.006	.025	R .297	R .571	R 8.848
Total		R 22.191	39.958	R <b>84.662</b>	8.214	2.869	.343	.070	.264	R 3.343	R 6.889	R 99.828
2007 Januari	R 1.993	0.547	R 3.362	<sup>R</sup> 7.875	770	200	024	006	024	204	647	<sup>R</sup> 9.270
<b>2007</b> January		2.517	R 3.144	<sup>R</sup> 7.600	.772	.262	.031	.006	.024	.294	.617	R 8.802
February		2.621			.681	.185	.028	.005	.025	.269 R .290	.512 R 506	
March		2.164	R 3.357	R 7.315	.671	.241	.029	.006	.030		<sup>R</sup> .596 <sup>R</sup> .585	R 8.588
April		1.842	R 3.258	R 6.768	.598	.237	.028	.006	.032	R .283	``.585	R 7.960
May		1.591	R 3.373	R 6.744	.678	.257	.028	.006	.028	R .291	R .611	R 8.047
June		1.584	R 3.279	R 6.824	.719	.227	.029	.006	.024	R .290	R .576	R 8.130
July		1.702	R 3.372	R 7.163	.759	.224	.030	.006	.019	R .303	R .583	R 8.517
August		1.981	R 3.438	R 7.561	.759	.198	.030	.006	.024	R .304	R .563	8.894
September		1.625	R 3.225	R 6.767	.705	.145	.029	.006	.026	R .289	R .496	R 7.973
October		R 1.673	R 3.337	<sup>R</sup> 6.847	.644	.147	.030	.006	.030	R .304	R .517	<sup>R</sup> 8.014
November		<sup>R</sup> 1.871	R 3.269	<sup>R</sup> 6.945	.678	.156	.029	.006	.027	R .303	R .520	<sup>R</sup> 8.152
December		2.454	3.402	7.844	.751	.183	.030	.006	.028	.317	.565	9.166
Total	22.786	23.625	39.818	86.253	8.415	2.463	.349	.071	.319	3.537	6.738	101.513

<sup>&</sup>lt;sup>a</sup> Most data are estimates. See Tables 10.1-10.2c for notes on series

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

components and estimation.  $$^{\rm b}$$  Natural gas only; excludes supplemental gaseous fuels. See Note 3,

<sup>&</sup>quot;Supplemental Gaseous Fuels," at end of Section 4.

C Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel. Does not include the fuel ethanol portion of motor gasoline-fuel ethanol is included in "Biomass."

d Includes coal coke net imports. See Tables 1.4a and 1.4b.

<sup>&</sup>lt;sup>e</sup> Conventional hydroelectric power.

f Includes coal coke net imports and electricity net imports, which are not separately displayed. See Tables 1.4a and 1.4b.

Notes: • See Note 2, "Primary Energy Consumption," at end of section.

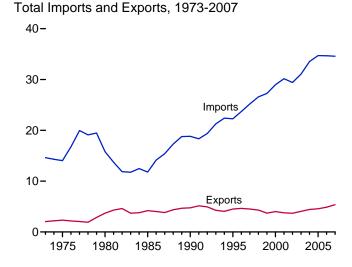
Totals may not equal sum of components due to independent rounding.

<sup>•</sup> Geographic coverage is the 50 States and the District of Columbia.

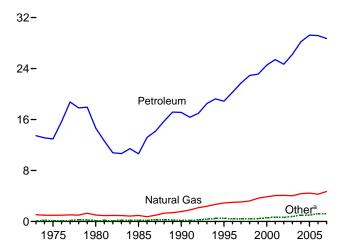
Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1973.

Sources: • Coal: Tables 6.1 and A5. • Natural Gas: Tables 4.1 and A4. Petroleum: Table 3.6. • Nuclear Electric Power: Tables 7.2a and A6 ("Nuclear Plants" heat rate). • Renewable Energy: Table 10.1. • Net Imports of Coal Coke and Electricity: Tables 1.4a and 1.4b.

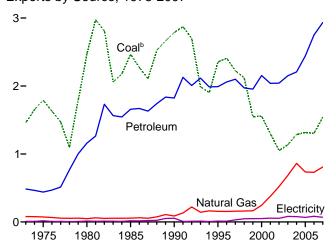
Figure 1.4a Energy Imports and Exports (Quadrillion Btu)



Imports by Source, 1973-2007



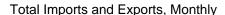
Exports by Source, 1973-2007



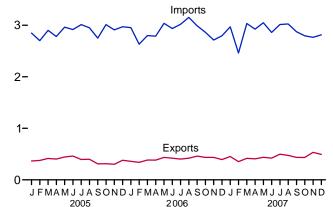
<sup>a</sup>Coal, coal coke, fuel ethanol, and electricity.

bIncludes coal coke.

Note: Because vertical scales differ, graphs should not be compared.

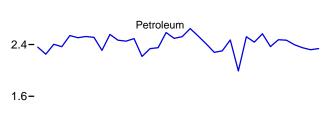


4-

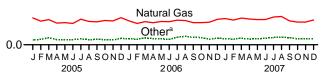


#### Imports by Source, Monthly

3.2-

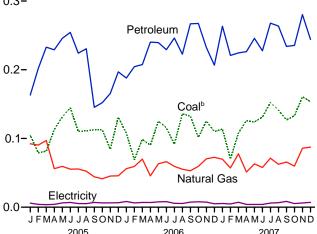


-8.0



#### Exports by Source, Monthly

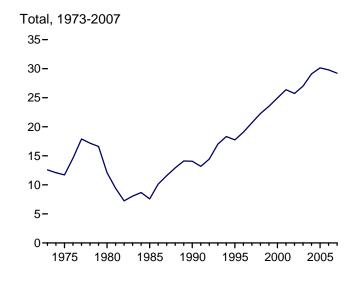
0.3-

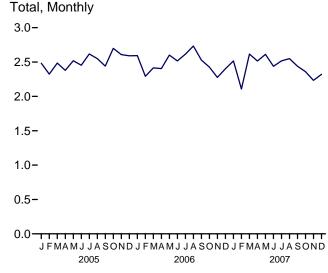


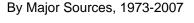
Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Sources: Tables 1.4a and 1.4b.

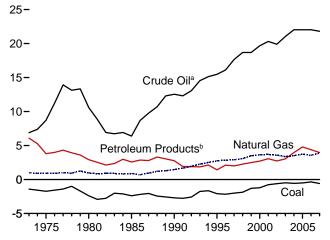
Figure 1.4b Energy Net Imports

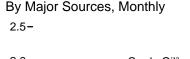
(Quadrillion Btu, Except as noted)

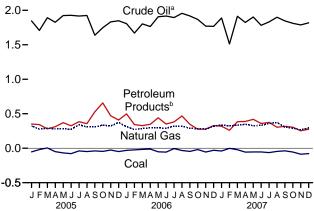




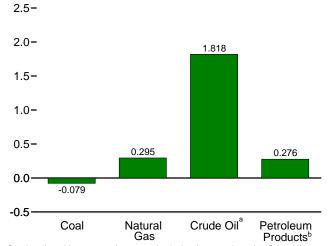




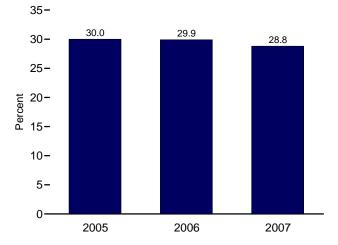




#### By Major Sources, December 2007



As Share of Consumption, January-December



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Sources: Tables 1.3, 1.4a, and 1.4b.

<sup>a</sup>Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

<sup>b</sup>Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include fuel ethanol.

Table 1.4a Energy Imports by Source

(Quadrillion Btu)

	Imports										
					Petroleum						
	Coal	Coal Coke	Natural Gas	Crude Oil <sup>a</sup>	Petroleum Products <sup>b</sup>	Total	Fuel Ethanol	Electricity	Total		
1973 Total	0.003	0.027	1.060	6.887	6.578	13.466	NA	0.057	14.613		
1975 Total	.024	.045	.978	8.721	4.227	12.948	NA NA	.038	14.032		
1980 Total	.030	.016	1.006	11.195	3.463	14.658	NA NA	.085	15.796		
1985 Total	.049	.014	.952	6.814	3.796	10.609	NA NA	.157	11.781		
1990 Total	.067	.019	1.551	12.766	4.351	17.117	NA NA	.063	18.817		
995 Total	.237	.095	2.901	15.669	3.211	18.881	.001	.146	22.260		
996 Total	.203	.063	3.002	16.341	3.943	20.284	.001	.148	23.702		
1997 Total	.187	.078	3.063	17.876	3.864	21.740	(s)	.147	25.215		
998 Total	.218	.095	3.225	18.916	3.992	22.908	(s)	.135	26.581		
1999 Total	.217	.080	3.664	18.935	4.198	23.133		.147	27.252		
	.313	.094	3.869	19.783	4.749	24.531	(s)		28.973		
2000 Total							(s)	.166			
2001 Total	.495	.063	4.068	20.348	5.051	25.398	.001	.131	30.157		
2002 Total	.422	.080	4.104	19.920	4.754	24.674	.001	.125	29.407		
2003 Total	.626	.068	4.042	21.060	5.159	26.219	.001	.104	31.060		
2004 Total	.682	.170	4.365	22.082	6.114	28.196	.013	.117	33.543		
2005 January	.050	.011	.415	1.852	.507	2.359	.001	.011	2.848		
February	.058	.016	.365	1.710	.541	2.251	(s)	.010	2.700		
March	.082	.013	.389	1.898	.506	2.404	.001	.012	2.900		
April	.059	.010	.334	1.833	.534	2.367	(s)	.010	2.781		
May	.060	.009	.342	1.933	.606	2.539	.001	.011	2.962		
June	.061	.006	.330	1.930	.576	2.506	.000	.012	2.915		
July	.067	.010	.396	1.923	.602	2.525	(s)	.015	3.012		
August	.060	(s)	.361	1.928	.584	2.511	.001	.017	2.950		
September	.069	.001	.355	1.642	.669	2.310	(s)	.014	2.749		
October	.062	.003	.375	1.750	.806	2.556	.002	.013	3.012		
November	.056	.004	.368	1.840	.627	2.467	.002	.013	2.910		
December	.077	.006	.419	1.852	.601	2.453	.002	.014	2.970		
Total	.762	.088	4.450	22.091	7.157	29.248	.011	.152	34.710		
2006 January	.076	.003	.369	1.811	.681	2.491	(s)	.013	2.953		
February	.068	.005	.329	1.672	.545	2.216	.002	.012	2.632		
March	.080	.008	.357	1.807	.530	2.337	.003	.013	2.799		
April	.076	.005	.341	1.769	.582	2.351	.003	.013	2.787		
	.069	.008	.359	1.910	.676	2.586	.002	.012	3.037		
May	.055	.010	.357	1.922	.574	2.496	.002	.013	2.935		
June		.010	.380	1.896	.625	2.522	.009		3.018		
July	.080							.016			
August	.096	.009	.374	1.958	.688	2.646	.011	.016	3.152		
September	.084	.015	.342	1.921	.611	2.532	.008	.007	2.989		
October	.080	.015	.342	1.873	.536	2.409	.007	.009	2.863		
November	.066	.005	.348	1.774	.505	2.279	.005	.010	2.712		
December	.077	.006	.393	1.771	.531	2.302	.004	.012	2.795		
Total	.906	.101	4.291	22.085	7.083	29.168	.062	.146	34.673		
2007 January	.071	.006	.405	<sup>R</sup> 1.890	R .581	R 2.471	.004	.012	R 2.968		
February	.066	.003	.382	_ 1.515	R .477	R 1.992	.003	.014	R 2.461		
March	.082	.003	.412	<sup>R</sup> 1.919	R .602	<sup>R</sup> 2.521	.003	.013	R 3.034		
April	.067	.004	.398	<sup>R</sup> 1.827	<sup>R</sup> .610	R 2.437	.003	.014	R 2.923		
May	.067	.006	.390	1.908	R .658	R 2.566	.002	.017	R 3.048		
June	.076	.007	.390	1.791	R .577	R 2.369	.003	.015	R 2.859		
July	.084	.003	.428	1.836	R .638	R 2.474	.005	.019	R 3.014		
August	.093	.005	.437	R 1.907	R .560	R 2.467	.005	.018	R 3.024		
September	.087	.005	.370	R 1.851	R .546	R 2.397	.002	.013	R 2.874		
October	.072	.005	.351	R 1.813	R .538	R 2.350	.002	.012	R 2.794		
November	.072	.003	R .351	1.790	R .529	R 2.320	.003	.012	R 2.766		
December	.072	.007	.383	1.821	.516	2.320	.001	.013	2.766		
Total	.070	.008 . <b>061</b>	.363 <b>4.696</b>	1.041	.516	2.331	.001	.014	2.013		

<sup>&</sup>lt;sup>a</sup> Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

data beginning in 1973.

Sources: • Coal: Tables 6.1 and A5. • Coal Coke: 1973-1975—U.S. Department of the Interior, Bureau of Mines, Minerals Yearbook, "Coke and Coal Chemicals" chapter. 1976-1980—Energy Information Administration (EIA), Energy Data Report, "Coke and Coal Chemicals," annual reports. 1981 forward—EIA, Quarterly Coal Report, quarterly reports. • Natural Gas: Tables 4.1 and A4. • Crude Oil and Petroleum Products: Tables 3.1, 10.3, and A2. • Fuel Ethanol: Table 10.3. • Electricity: Tables 7.1 and A6.

b Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include fuel ethanol.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

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

Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available

Table 1.4b Energy Exports by Source and Total Net Imports

(Quadrillion Btu)

				Ex	ports				Net Imports <sup>a</sup>
					Petroleum				
	Coal	Coal Coke	Natural Gas	Crude Oil <sup>b</sup>	Petroleum Products <sup>c</sup>	Total	Electricity	Total	Total
1973 Total	1.425	0.035	0.079	0.004	0.482	0.486	0.009	2.033	12.580
1975 Total	1.761	.032	.074	.012	.427	.439	.017	2.323	11.709
1980 Total	2.421	.051	.049	.609	.551	1.160	.014	3.695	12.101
1985 Total	2.438	.028	.056	.432	1.225	1.657	.017	4.196	7.584
1990 Total	2.772	.014	.087	.230	1.594	1.824	.055	4.752	14.065
1995 Total	2.318	.034	.156	.200	1.791	1.991	.012	4.511	17.750
1996 Total	2.368	.040	.155	.233	1.825	2.059	.012	4.633	19.069
1997 Total	2.193	.031	.159	.228	1.872	2.100	.031	4.514	20.701
1998 Total	2.092	.028	.161	.233	1.740	1.972	.047	4.299	22.281
1999 Total	1.525	.022	.164	.250	1.705	1.955	.049	3.715	23.537
2000 Total	1.528	.028	.245	.106	2.048	2.154	.051	4.006	24.967
2001 Total	1.265	.033	.377	.043	1.996	2.039	.056	3.770	26.386
2002 Total	1.032	.020	.520	.019	2.023	2.042	.054	3.668	25.739
2003 Total	1.117	.018	.686	.026	2.124	2.151	.082	4.054	27.007
2004 Total	1.253	.033	.862	.057	2.151	2.208	.078	4.433	29.110
2005 January	.104	.001	.092	.007	.156	.163	.006	.366	2.482
February	.077	.003	.090	.003	.199	.202	.004	.376	2.324
March	.078	.004	.097	.006	.226	.233	.004	.415	2.485
April	.109	.004	.056	.008	.221	.229	.004	.402	2.379
May	.128	.004	.059	.010	.236	.246	.006	.443	2.519
		.004	.055	.004	.251	.254	.007		2.454
June	.140							.462	l l
July	.106	.004	.056	.006	.218	.224	.005	.395	2.617
August	.108	.004	.052	.003	.228	.231	.005	.399	2.550
September	.108	.004	.044	.004	.141	.145	.007	.309	2.440
October	.108	.004	.041	.003	.149	.152	.006	.312	2.699
November	.082	.002	.045	.008	.157	.166	.006	.302	2.608
December	.125	.006	.046	.004	.192	.197	.007	.380	2.590
Total	1.273	.043	.735	.067	2.374	2.442	.068	4.561	30.149
2006 January	.107	.001	.056	.005	.183	.188	.008	.360	2.593
February	.068	.002	.059	.002	.202	.204	.006	.339	2.293
March	.097	.002	.070	.005	.202	.208	.007	.383	2.415
April	.089	.002	.046	.005	.236	.240	.007	.383	2.405
May	.121	.005	.063	.005	.235	.240	.008	.436	2.601
June	.111	.004	.066	.006	.223	.229	.008	.419	2.516
July	.085	.007	.059	.002	.244	.246	.006	.403	2.615
	.130	.006	.055	.003	.220	.223	.005	.419	2.733
August September	.130	.002	.053	.003	.263	.267	.005	.460	2.733
									l l
October	.099	.002	.059	.007	.261	.267	.008	.436	2.427
November	.121	.004	.070	.004	.228	.232	.007	.435	2.277
December	.106	.003	.073	.005	.202	.207	.005	.394	2.401
Total	1.264	.040	.730	.052	2.699	2.751	.083	4.868	29.805
<b>2007</b> January	.111	.003	.070	.002	R .262	R .263	.005	R .452	R 2.516
February	.068	.002	.057	.004	<sup>R</sup> .217	<sup>R</sup> .221	.005	R .353	R 2.108
March	.104	.004	.078	.006	.218	.224	.007	R .417	R 2.616
April	.123	.003	.051	.003	R .223	.226	.004	R .408	R 2.515
May	.121	.003	.063	.006	R .239	R .246	.004	R .437	R 2.612
June	.130	.001	.058	.009	R .219	R .228	.004	<sup>R</sup> .421	R 2.438
July	.148	.005	.071	.005	R .263	R .268	.004	R .498	R 2.516
August	.139	.003	.062	.003	R .256	R .264	.007	R .474	R 2.550
September		.002	.062		R .228	R .234	.007	R .435	R 2.439
Octobor	.125			.006				.430 R 434	
October	.128	.006	.060	.002	.233	.235	.005	R .434	R 2.360
November	.159	.002	R .086	.003	R .277	R .280	.006	R .533	R 2.233
December	.149	.004	E.088	.004	.240	.244	.007	.492	2.321
Total	1.506	.036	E .809	.058	2.876	2.934	.069	5.353	29.225

<sup>&</sup>lt;sup>a</sup> Net imports equal imports minus exports.

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

Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available

data beginning in 1973.

Sources: • Coal: Tables 6.1 and A5. • Coal Coke: 1973-1975—U.S. Department of the Interior, Bureau of Mines, Minerals Yearbook, "Coke and Coal Chemicals" chapter. 1976-1980—Energy Information Administration (EIA), Energy Data Report, "Coke and Coal Chemicals," annual reports. 1981 forward—EIA, Quarterly Coal Report, quarterly reports. • Natural Gas: Tables 4.1 and A4. • Crude Oil and Petroleum Products: Tables 3.1 and A2. • Electricity: Tables 7.1 and A6.

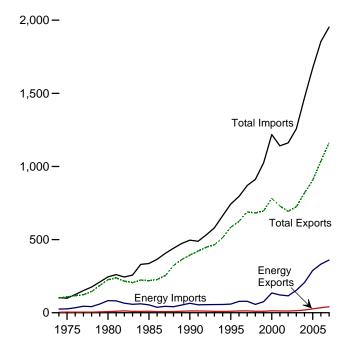
b Crude oil and lease condensate.

<sup>&</sup>lt;sup>c</sup> Petroleum products, unfinished oils, pentanes plus, and gasoline blending components.

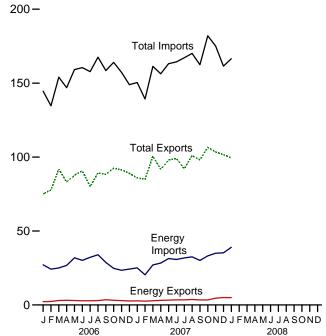
R=Revised. E=Estimate.

Figure 1.5 Merchandise Trade Value (Billion Nominal Dollars)

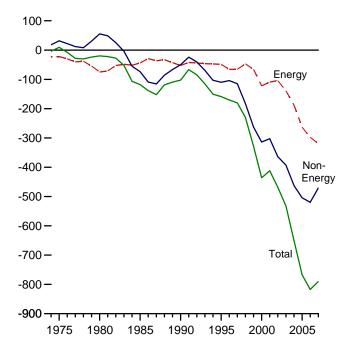
Imports and Exports, 1974-2007



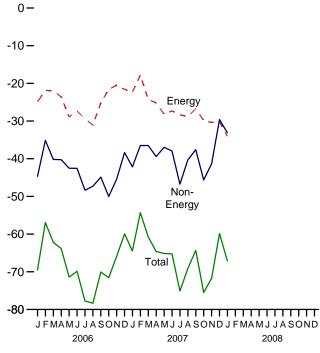
Imports and Exports, Monthly



Trade Balance, 1974-2007



Trade Balance, Monthly



Notes: • See "Nominal Price" in glossary.
• Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Source: Table 1.5.

**Table 1.5 Merchandise Trade Value** 

(Million Nominal Dollars)

		Petroleum	a		Energyb		Non-		Total Merchandi	se
	Exports	Imports	Balance	Exports	Imports	Balance	Energy Balance	Exports	Imports	Balance
974 Total	792	24,668	-23,876	3,444	25,454	-22,010	18,126	99,437	103,321	-3.884
975 Total	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551
980 Total	2,833	78,637	-75,803	7,982	82,924	-74,942	55,246	225,566	245,262	-19,696
985 Total	4.707	50.475	-45.768	9,971	53.917	-43.946	-73.765	218.815	336,526	-117,712
990 Total	6,901	61,583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496,088	-102,496
995 Total	6,321	54,368	-48.047	10,358	59,109	-48,751	-110,050	584,742	743,543	-158,801
996 Total	7,984	72,022	-64,038	12,181	78,086	-65,905	-104,309	625,075	795,289	-170,214
	8.592	71,152	-62.560	12,161				689,182	869.704	
997 Total		50,264	-43,690	10,251	78,277	-65,595 -47,072	-114,927 -182,686			-180,522 -229,758
998 Total	6,574				57,323			682,138	911,896	
999 Total	7,118	67,173	-60,055	9,880	75,803	-65,923	-262,898	695,797	1,024,618	-328,821
000 Total	10,192	119,251	-109,059	13,179	135,367	-122,188	-313,916	781,918	1,218,022	-436,104
001 Total	8,868	102,747	-93,879	12,494	121,923	-109,429	-302,470	729,100	1,140,999	-411,899
002 Total	8,569	102,663	-94,094	11,541	115,748	-104,207	-364,056	693,103	1,161,366	-468,263
003 Total	10,209	132,433	-122,224	13,768	153,298	-139,530	-392,820	724,771	1,257,121	-532,350
004 Total	13,130	179,266	-166,136	18,642	206,660	-188,018	-462,912	818,775	1,469,704	-650,930
<b>005</b> January	1,076	15,702	-14,626	1,791	18,582	-16,791	-39,781	66,328	122,900	-56,572
February	1,475	15,375	-13,900	1,982	18,042	-16,060	-37,733	68,441	122,233	-53,793
March	1,757	18,333	-16,576	2,309	21,223	-18,914	-36,582	79,954	135,451	-55,496
April	1,769	19,590	-17,821	2,466	22,268	-19,802	-39,230	76,424	135,456	-59,032
May	1,948	19,280	-17,332	2,704	21,857	-19,153	-40,965	76,073	136,191	-60,118
June	1,804	20,447	-18,643	2,531	22,850	-20,319	-43,055	78,052	141,426	-63,374
July	1,696	21,598	-19,902	2,196	24,555	-22,359	-43,547	70,609	136,515	-65,906
August	1,833	24,143	-22,310	2,364	27,367	-25,003	-44,021	77,373	146,397	-69,024
September	1,373	23,982	-22,609	1,934	27,784	-25.850	-45,985	74,381	146,216	-71.835
October	1,328	26,179	-24,851	1,888	30,818	-28,930	-47,679	79,552	156,162	-76,609
November	1,434	23,431	-21,997	1,893	27,627	-25,734	-45,632	78,879	150,245	-71,366
December	1,660	22,009	-20,349	2,431	26,750	-24,319	-40,033	79,910	144,262	-64,352
Total	19,155	250,068	-230,913	26,488	289,723	-263,235	-504,242	905,978	1,673,455	-767,477
<b>006</b> January	1,701	23,245	-21,544	2,263	27,130	-24,867	-44,655	75,040	144,562	-69,522
February	1,778	21,324	-19.546	2,358	24,201	-21,843	-35,109	77,750	134,702	-56,952
March	2,386	22,242	-19,856	3,024	25,025	-22,001	-40,175	91,864	154,040	-62,176
April	2,531	24,086	-21,555	3,150	26,732	-23,582	-40,173	83,097	146,919	-63,822
	2,331	29.182	-26,733	2,979	31,876	-28.897	-42.522	87,746	159,164	-71,419
May	2,449		-26,733 -25,433	2,979	30,176	-20,097 -27,328	-42,522 -42,537			-69,865
June		27,751						90,622	160,487	
July	2,445	29,530	-27,085	2,832	32,231	-29,399	-48,346	80,023	157,768	-77,745
August	2,387	30,934	-28,547	2,924	33,969	-31,045	-47,284	89,228	167,558	-78,329
September	3,047	26,477	-23,430	3,561	28,757	-25,196	-44,865	88,408	158,470	-70,061
October	2,650	22,671	-20,021	3,172	24,724	-21,552	-50,008	92,468	164,028	-71,560
November	2,365	20,779	-18,414	2,935	23,432	-20,497	-45,425	91,367	157,288	-65,922
December	2,114	21,492	-19,378	2,665	24,248	-21,583	-38,348	89,021	148,952	-59,931
Total	28,171	299,714	-271,543	34,711	332,500	-297,789	-519,515	1,036,635	1,853,938	-817,304
<b>007</b> January	2,195	22,632	-20,437	2,773	25,081	-22,308	-42,165	85,973	150,446	-64,473
February	2,021	17,731	-15,710	2,571	20,386	-17,815	-36,488	84,960	139,263	-54,303
March	2,244	24,124	-21,880	2,833	27,100	-24,267	-36,481	100,579	161,328	-60,748
April	2,442	25,082	-22,640	3,115	28,309	-25,194	-39,421	91,706	156,320	-64,615
May	2,503	27,968	-25,465	3,254	31,423	-28,169	-36,948	98,031	163,147	-65,117
June	2,589	27,544	-24,955	3,454	30,752	-27.298	-37,950	99,140	164,388	-65,248
July	2,790	28,613	-25,823	3,445	31,788	-28,343	-46,734	92,037	167,115	-75,077
August	3,015	29,839	-26,824	3,706	32,546	-28,840	-40,734	100,984	170,113	-69,129
	2,641	29,039	-26,624 -25,157	3,706	32,546	-26,730	-40,269 -37,597	98,125	162,452	-64,327
September										
October	2,793	30,767	-27,974	3,358	33,215	-29,857	-45,628	106,553	182,037	-75,485
November	3,878	32,615	-28,737	4,584	34,959	-30,375	-41,349	103,441	175,164	-71,724
December	4,018	32,969	-28,951	5,005	35,263	-30,258	R -29,609	R 101,656	R 161,523	R -59,867
Total	33,126	327,683	-294,557	41,456	360,910	-319,454	R -470,660	R 1,163,183	R 1,953,297	R -790,114

<sup>&</sup>lt;sup>a</sup> Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.

b Petroleum, coal, natural gas, and electricity.
R=Revised.

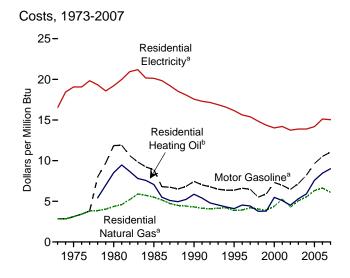
government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. • See "Nominal Price" in Glossary.

Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1075.

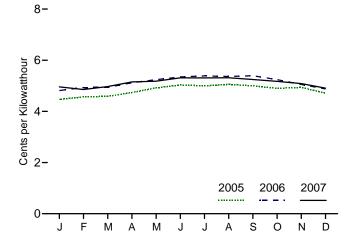
Notes: • Monthly data are not adjusted for seasonal variations. • See Note 3, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both

data beginning in 1974.
Sources: See end of section.

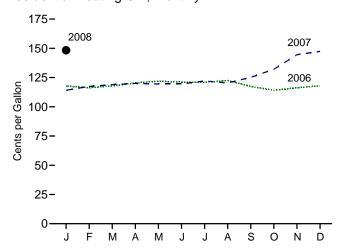
Figure 1.6 Cost of Fuels to End Users in Real (1982-1984) Dollars



#### Residential Electricity<sup>a</sup>, Monthly

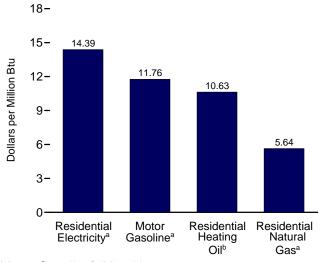


#### Residential Heating Oil<sup>b</sup>, Monthly

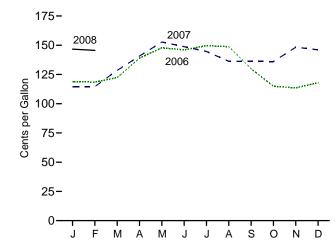


<sup>a</sup>Includes taxes. <sup>b</sup>Excludes taxes.

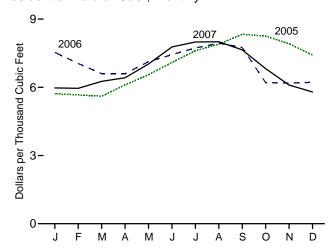
Costs, December 2007



#### Motor Gasoline<sup>a</sup>, Monthly



#### Residential Natural Gasa, Monthly



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Source: Table 1.6.

Table 1.6 Cost of Fuels to End Users in Real (1982-1984) Dollars

	Consumer Price Index (Urban) <sup>a</sup>	Motor (	Gasoline <sup>b</sup>	I .	dential ing Oil <sup>c</sup>		lential Il Gas <sup>b</sup>	Residential Electricity <sup>b</sup>	
	Index 1982-1984=100	Cents per Gallon	Dollars per Million Btu	Cents per Gallon	Dollars per Million Btu	Cents per Thousand Cubic Feet	Dollars per Million Btu	Cents per Kilowatthour	Dollars pe Million Btu
1973 Average	44.4	NA	NA	NA	NA	290.5	2.85	5.6	16.50
1975 Average		NA	NA	NA	NA	317.8	3.12	6.5	19.07
1980 Average		148.2	11.85	118.2	8.52	446.6	4.36	6.6	19.21
1985 Average		111.2	8.89	97.9	7.06	568.8	5.52	6.87	20.13
1990 Average		93.1	7.44	81.3	5.86	443.8	4.31	5.99	17.56
1995 Average		79.1	6.37	56.9	4.10	397.6	3.87	5.51	16.15
1996 Average		82.1	6.61	63.0	4.54	404.1	3.93	5.33 5.25	15.62
1997 Average		80.4 68.4	6.48 5.51	61.3 52.3	4.42 3.77	432.4 418.4	4.21 4.05	5.25 5.07	15.39 14.85
1998 Average1999 Average		73.3	5.91	52.5 52.6	3.79	401.6	3.91	4.90	14.36
2000 Average		90.8	7.32	76.1	5.49	450.6	4.39	4.79	14.02
2001 Average		86.4	6.97	70.6	5.09	543.8	5.28	4.84	14.20
2002 Average		80.1	6.46	62.8	4.52	438.6	4.26	4.69	13.75
2003 Average		89.0	7.18	73.6	5.31	523.4	5.07	4.74	13.89
2004 Average		101.8	8.20	81.9	5.91	569.1	5.54	4.74	13.89
2005 January	190.7	97.9	7.88	94.8	6.84	571.6	5.55	4.47	13.09
February		102.2	8.23	96.2	6.94	566.7	5.51	4.57	13.39
March		109.0	8.77	100.4	7.24	560.8	5.45	4.59	13.45
April		119.5	9.62	101.1	7.29	610.5	5.93	4.74	13.89
May		116.1	9.35	98.6	7.11	655.3	6.37	4.92	14.41
June		114.0	9.18	102.2	7.37	709.0	6.89	5.03	14.75
July		120.6	9.71	104.5	7.54	760.5	7.39	5.00	14.65
August		129.7	10.44	111.2	8.02	789.7	7.67	5.06	14.82
September		149.3	12.02	121.9	8.79	833.0	8.10	5.00	14.65
October		142.1 120.8	11.44 9.72	122.6	8.84	825.3 791.5	8.02	4.90 4.94	14.36 14.48
November December		113.3	9.72	117.5 117.5	8.47 8.47	791.5 741.9	7.69 7.21	4.71	13.81
Average		119.7	9.64	105.1	7.58	650.3	6.32	4.84	14.18
2006 January	198.3	119.0	9.58	117.7	8.49	753.4	7.33	4.82	14.11
February		118.5	9.54	116.4	8.39	704.6	6.85	4.93	14.46
March		122.3	9.85	117.8	8.49	660.2	6.42	4.94	14.48
April		139.0	11.19	120.4	8.68	659.6	6.42	5.12	15.01
May		147.8	11.90	121.9	8.79	712.6	6.93	5.24	15.36
June		146.0	11.75	121.1	8.73	743.7	7.23	5.35	15.67
July	203.5	149.7	12.05	120.9	8.72	773.0	7.52	5.39	15.78
August	203.9	148.7	11.97	122.6	8.84	794.0	7.72	5.37	15.73
September		130.0	10.46	117.4	8.47	775.3	7.54	5.39	15.80
October		114.9	9.25	114.1	8.23	620.4	6.04	5.24	15.37
November		113.5	9.14	116.3	8.38	618.9	6.02	5.05	14.81
December  Average		117.9 <b>130.7</b>	9.49 <b>10.52</b>	117.9 <b>117.3</b>	8.50 <b>8.46</b>	621.4 <b>682.0</b>	6.04 <b>6.63</b>	4.88 <b>5.16</b>	14.29 <b>15.12</b>
_	_								
2007 January		114.7	9.23	114.2	8.23	597.3	5.81 5.70	4.96	14.54
February March		114.6 128.5	9.23 10.34	117.4 118.9	8.47 8.57	595.6 <sup>R</sup> 626.2	5.79 6.09	4.86 4.97	14.23 14.57
April		140.7	11.33	120.0	8.65	642.0	6.25	5.15	15.10
May		R 152.7	R 12.29	119.5	8.62	R 702.6	R 6.83	5.18	15.18
June	D	148.8	11.97	R 119.6	8.62	R 777.5	7.56	5.31	15.57
July	D	144.6	11.64	122.1	8.80	799.3	7.78	5.31	15.56
August		136.3	10.97	120.4	8.68	R 800.3	7.79	<sup>R</sup> 5.31	15.58
September	R 208.490	136.2	10.96	125.1	9.02	764.5	7.44	5.25	15.38
October	R 208.936	136.1	10.95	132.1	9.52	R 682.0	R 6.63	5.17	R 15.16
November	R 210.177	<sup>R</sup> 148.4	11.94	<sup>R</sup> 144.5	R 10.42	<sup>R</sup> 610.0	5.93	5.09	14.91
December		146.1	11.76	R 147.4	<sup>R</sup> 10.63	<sup>R</sup> 579.4	<sup>R</sup> 5.64	<sup>R</sup> 4.91	R 14.39
Average	R 207.342	137.4	11.06	R <b>124.9</b>	<sup>R</sup> <b>9.01</b>	R <b>627.5</b>	<sup>R</sup> <b>6.10</b>	<sup>R</sup> <b>5.13</b>	R <b>15.04</b>
2008 January	R 211.080	146.7	11.80	RE 148.3	RE 10.70	NA	NA	NA	NA
February		145.6	11.72	NA	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>a</sup> Consumer Price Index, All Urban Consumers, All Items, not seasonally adjusted, 1982-1984 = 100.0. b Includes taxes.

Notes: • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic coverage is

the 50 States and the District of Columbia.

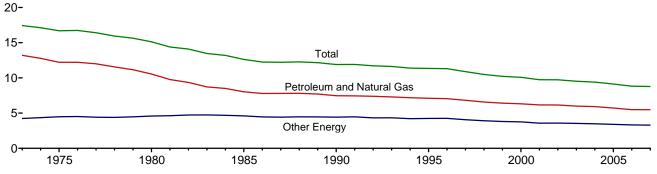
Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1973.

Sources: • Fuel Prices: Tables 9.4 (All Types), 9.8c, 9.9, and 9.11, adjusted by the CPI. • CPI: 1973-2002—Economic Report of the President, February 2008, Table B-60. 2003 forward—Council of Economic Advisers, Economic Indicators, March 2008, "Consumer Prices - All Urban Consumers." • Conversion Factors: Tables A1, A3, A4, and A6.

c Excludes taxes.

R=Revised. E=Estimate. NA=Not available.

Figure 1.7 Energy Consumption per Real Dollar of Gross Domestic Product, 1973-2007 (Thousand Btu per Chained (2000) Dollar)



Web Page: http://www.eia.doe.gov/emeu/mer/overview.html.

Source: Table 1.7.

Table 1.7 Energy Consumption per Real Dollar of Gross Domestic Product

	E	nergy Consumptio	n		Energy Consumption per Real Dollar of GDP				
	Petroleum and Natural Gas	and Other	Gross Domestic Product (GDP)	Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total			
		Quadrillion Btu		Billion Chained (2000) Dollars	Thousand Btu per Chained (2000) Dollar				
1973 Year	57.352	18.356	75.708	4,341.5	13.21	4.23	17.44		
1974 Year	55.187	18.804	73.991	4,319.6	12.78	4.35	17.13		
975 Year	52.678	19.321	71.999	4,311.2	12.22	4.48	16.70		
976 Year	55.520	20,492	76.012	4,540.9	12.23	4.51	16.74		
977 Year	57.053	20.947	78.000	4,750.5	12.01	4.41	16.42		
978 Year	57.966	22.021	79.986	5,015.0	11.56	4.39	15.95		
979 Year		23.114	80.903	5,173.4	11.17	4.47	15.64		
980 Year	54.438	23.684	78.122	5,161.7	10.55	4.59	15.13		
981 Year	51.678	24.490	76.168	5,291.7	9.77	4.63	14.39		
982 Year	48.588	24.565	73.153	5,189.3	9.36	4.73	14.10		
983 Year	47.275	25.763	73.038	5,423.8	8.72	4.75	13.47		
984 Year	49.445	27.269	76.714	5,813.6	8.51	4.69	13.20		
985 Year	48.626	27.865	76.491	6,053.7	8.03	4.60	12.64		
986 Year	48.787	27.969	76.756	6,263.6	7.79	4.47	12.25		
987 Year	50.505	28.668	79.173	6.475.1	7.80	4.43	12.23		
988 Year	52.670	30.149	82.819	6,742.7	7.81	4.47	12.28		
989 Year	53.813	31.131	84.944	6,981.4	7.71	4.46	12.17		
990 Year	53.156	31.496	84.652	7.112.5	7.71 7.47	4.43	11.90		
991 Year	52.878	31.729	84.607	7,112.5	7.47 7.45	4.47	11.92		
992 Year		31.716	85.956	7,100.5	7.39	4.32	11.72		
	54.240 54.973	32.630	87.603	7,530.6 7,532.7	7.39 7.30	4.32	11.63		
993 Year									
994 Year 995 Year	56.290 57.108	32.970 34.064	89.260 91.173	7,835.5 8,031.7	7.18 7.11	4.21 4.24	11.39 11.35		
	57.106 58.758	34.064 35.417				4.24 4.25			
996 Year			94.175	8,328.9	7.05		11.31		
997 Year	59.382	35.383	94.765	8,703.5	6.82	4.07	10.89		
998 Year	59.647 60.747	35.536 36.070	95.183	9,066.9	6.58	3.92	10.50		
999 Year	60.747		96.817	9,470.3	6.41	3.81	10.22		
000 Year	62.089	36.887	98.975	9,817.0	6.32	3.76	10.08		
001 Year	60.959	35.367	96.326	9,890.7	6.16	3.58	9.74		
002 Year	61.785	36.073	97.858	10,048.8	6.15	3.59	9.74		
003 Year	61.706	36.503	98.209	10,301.0	5.99	3.54	9.53		
004 Year	63.226	37.125	100.351	10,675.8	5.92	3.48	9.40		
2005 Year		37.488	100.465	11,003.4	5.72	3.41	9.13		
006 Year	R 62.149	R 37.679	R 99.828	11,319.4	5.49	3.33	8.82		
007 Year	63.442	38.071	101.513	11,567.2	5.48	3.29	8.78		

<sup>&</sup>lt;sup>a</sup> Coal, coal coke net imports, nuclear electric power, renewable energy, and electricity net imports.

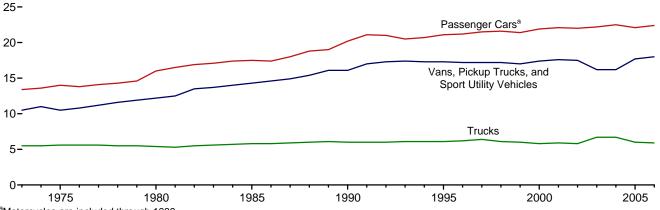
Sources: • Energy Consumption: Table 1.3. • Gross Domestic

Product: 1973-2003—U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, August 2006, Table 2A. 2004 forward—U.S. Department of Commerce, Bureau of Economic Analysis, BEA News Release, February 28, 2008, Table 3, which is available at Web site http://www.bea.gov/bea/newsrel/gdpnewsrelease.htm.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: http://www.eia.doe.gov/emeu/mer/overview.html.

Figure 1.8 Motor Vehicle Fuel Rates, 1973-2006

(Miles per Gallon)



<sup>a</sup>Motorcycles are included through 1989.

Web Page: http://www.eia.doe.gov/emeu/mer/overview.html.

Source: Table 1.8.

Table 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Rates

	1	Passenger Cars	a		ns, Pickup Truc Sport Utility Veh			Trucks <sup>c</sup>		All Motor Vehicles <sup>d</sup>		
	Mileage	Fuel	Fuel	Mileage	Fuel	Fuel	Mileage	Fuel	Fuel	Mileage	Fuel	Fuel
	(miles	Consumption	Rate	(miles	Consumption	Rate	(miles	Consumption	Rate	(miles	Consumption	Rate
	per	(gallons	(miles per	per	(gallons	(miles per	per	(gallons	(miles per	per	(gallons	(miles per
	vehicle)	per vehicle)	gallon)	vehicle)	per vehicle)	gallon)	vehicle)	per vehicle)	gallon)	vehicle)	per vehicle)	gallon)
1973	9,884	737	13.4	9,779	931	10.5	15,370	2,775	5.5	10,099	850	11.9
1974	9,221	677	13.6	9,452	862	11.0	14,995	2,708	5.5	9,493	788	12.0
1975	9,309	665	14.0	9,829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
1976	9,418	681	13.8	10,127	934	10.8	15,438	2,764	5.6	9,774	806	12.1
1977	9,517	676	14.1	10,607	947	11.2	16,700	3,002	5.6	9,978	814	12.3
1978	9,500	665	14.3	10,968	948	11.6	18,045	3,263	5.5	10,077	816	12.4
1979	9,062	620	14.6	10,802	905	11.9	18,502	3,380	5.5	9,722	776	12.5
1980	8,813	551	16.0	10,437	854	12.2	18,736	3,447	5.4	9,458	712	13.3
1981	8,873	538	16.5	10,244	819	12.5	19,016	3,565	5.3	9,477	697	13.6
1982	9,050	535	16.9	10,276	762	13.5	19,931	3,647	5.5	9,644	686	14.1
1983	9,118	534	17.1	10,497	767	13.7	21,083	3,769	5.6	9,760	686	14.2
1984	9,248	530	17.4	11,151	797	14.0	22,550	3,967	5.7	10,017	691	14.5
1985	9,419	538	17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1986	9,464	543	17.4	10,764	738	14.6	22,143	3,821	5.8	10,143	692	14.7
1987	9,720	539	18.0	11,114	744	14.9	23,349	3,937	5.9	10,453	694	15.1
1988	9,972	531	18.8	11,465	745	15.4	22,485	3,736	6.0	10,721	688	15.6
1989	<sup>a</sup> 10,157	<sup>a</sup> 533	<sup>a</sup> 19.0	11,676	724	16.1	22,926	3,776	6.1	10,932	688	15.9
1990	10,504	520	20.2	11,902	738	16.1	23,603	3,953	6.0	11,107	677	16.4
1991	10,571	501	21.1	12,245	721	17.0	24,229	4,047	6.0	11,294	669	16.9
1992	10,857	517	21.0	12,381	717	17.3	25,373	4,210	6.0	11,558	683	16.9
1993	10,804	527	20.5	12,430	714	17.4	26,262	4,309	6.1	11,595	693	16.7
1994	10,992	531	20.7	12,156	701	17.3	25,838	4,202	6.1	11,683	698	16.7
1995	11,203	530	21.1	12,018	694	17.3	26,514	4,315	6.1	11,793	700	16.8
1996	11,330	534	21.2	11,811	685	17.2	26,092	4,221	6.2	11,813	700	16.9
1997	11,581	539	21.5	12,115	703	17.2	27,032	4,218	6.4	12,107	711	17.0
1998	11,754	544	21.6	12,173	707	17.2	25,397	4,135	6.1	12,211	721	16.9
1999	11,848	553	21.4	11,957	701	17.0	26,014	4,352	6.0	12,206	732	16.7
2000	11,976	547	21.9	11,672	669	17.4	25,617	4,391	5.8	12,164	720	16.9
2001	11,831	534	22.1	11,204	636	17.6	26,602	4,477	5.9	11,887	695	17.1
2002	12,202	555	22.0	11,364	650	17.5	27,071	4,642	5.8	12,171	719	16.9
2003	12,325	556	22.2	11,287	697	16.2	28,093	4,215	6.7	12,208	718	17.0
2004	12,460	553	22.5	11,184	690	16.2	27,023	4,057	6.7	12,200	714	17.1
2005	12,510	567	22.1	10,920	617	17.7	26,235	4,385	6.0	12,082	706	17.1
2006 <sup>P</sup>	12,427	554	22.4	10,986	612	18.0	25,290	4,300	5.9	12,016	697	17.2

a Through 1989, includes motorcycles.

Note: Geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Sources: • Passenger Cars, 1990-1994: U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics* 1998, Table 4-13. • All Other Data: • 1973-1994—Federal Highway Administration (FHWA), Highway Statistics Summary to 1995, Table VM-201A. • 1995 forward—FHWA, Highway Statistics, annual reports, Table VM-1.

b Includes a small number of trucks with 2 axles and 4 tires, such as step vans.
C Single-unit trucks with 2 axles and 6 or more tires, and combination trucks.

C Single-unit trucks with 2 axles and 6 or more tires, and companied d Includes buses and motorcycles, which are not shown separately.

Table 1.9 Heating Degree-Days by Census Division

			February				Cumulative July through February			
				Percent	Change				Percent	Change
Census Divisions	Normala	2007	2008	Normal to 2008	2007 to 2008	Normala	2007	2008	Normal to 2008	2007 to 2008
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	1,094	1,244	1,052	-4	-15	4,802	4,471	4,555	-5	2
Middle Atlantic New Jersey, New York, Pennsylvania	1,015	1,190	976	-4	-18	4,364	3,968	3,939	-10	-1
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	1,095	1,347	1,185	8	-12	4,869	4,725	4,662	-4	-1
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	1,112	1,286	1,247	12	-3	5,197	5,026	5,147	-1	2
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia,	500	040	455	40	00	0.040	0.000	4.050	40	-7
West Virginia  East South Central Alabama, Kentucky, Mississippi, Tennessee	522 642	619 765	455 606	-13 -6	-26 -21	2,248	2,096 2,811	1,958 2,596	-13 -10	-8
West South Central Arkansas, Louisiana, Oklahoma, Texas	426	457	354	-17	-23	1,924	1,907	1,718	-11	-10
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	760	745	777	2	4	3,858	3,830	3,718	-4	-3
Pacific <sup>b</sup> California, Oregon, Washington	454	464	478	5	3	2,271	2,212	2,327	2	5
U.S. Average <sup>b</sup>	755	869	753	(s)	-13	3,411	3,259	3,208	-6	-2

<sup>&</sup>lt;sup>a</sup> "Normal" is based on calculations of data from 1971 through 2000.

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F. Cooling degree-days are the number of degrees that the daily average temperature rises above 65° F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days). If a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree days).

Web Pages: • See http://www.eia.doe.gov/emeu/mer/overview.html for current data. • See http://www.eia.doe.gov/emeu/aer/overview.html for

historical data.

Sources: There are several degree-day databases maintained by the National Oceanic and Atmospheric Administration. The information published here is developed by the National Weather Service Climate Prediction Center, Camp Springs, MD. The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at those weather stations is used to calculate statewide degree-day averages based on population. The State figures are then aggregated into Census Divisions and into the national average. The population weights currently used represent resident State population data estimated for the 2000 Census by the U.S. Department of Commerce, Bureau of the Census. The data provided here are available sooner than the Historical Climatology Series 5-1 (heating degree-days) developed by the National Climatic Data Center, Asheville, NC, which compiles data from some 8,000 weather stations.

b Excludes Alaska and Hawaii.

<sup>(</sup>s)=Less than 0.5 percent and greater than -0.5 percent.

Table 1.10 Cooling Degree-Days by Census Division

			February				January	Cumulative through Fo		
				Percent	Change				Percent	Change
Census Divisions	Normala	2007	2008	Normal to 2008	2007 to 2008	Normala	2007	2008	Normal to 2008	2007 to 2008
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	0	0	0	NM	NM	0	0	0	NM	NM
Middle Atlantic New Jersey, New York, Pennsylvania	0	0	0	NM	NM	0	0	0	NM	NM
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	0	0	0	NM	NM	0	0	0	NM	NM
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	0	0	0	NM	NM	0	0	0	NM	NM
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia,										
West Virginia  East South Central Alabama, Kentucky,	31	23	39	NM	NM	65	60	63	NM	NM
Mississippi, Tennessee	4	0	2	NM	NM	12	0	2	NM	NM
West South Central Arkansas, Louisiana, Oklahoma, Texas	17	12	16	NM	NM	31	16	29	NM	NM
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	3	0	0	NM	NM	4	0	0	NM	NM
Pacific <sup>b</sup> California, Oregon, Washington	1	0	0	NM	NM	3	0	0	NM	NM
U.S. Average <sup>b</sup>	9	5	9	NM	NM	18	13	15	NM	NM

<sup>&</sup>lt;sup>a</sup> "Normal" is based on calculations of data from 1971 through 2000.

NM=Not meaningful (because "Normal" is less than 100 or ratio is incalculable).

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Cooling degree-days are the number of degrees that the daily average temperature rises above 65° F. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, if a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree-days). A weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days).

Web Pages: • See http://www.eia.doe.gov/emeu/mer/overview.html for

current data. • See http://www.eia.doe.gov/emeu/aer/overview.html for historical data.

Sources: There are several degree-day databases maintained by the National Oceanic and Atmospheric Administration. The information published here is developed by the National Weather Service Climate Prediction Center, Camp Springs, MD. The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at those weather stations is used to calculate statewide degree-day averages based on population. The State figures are then aggregated into Census Divisions and into the national average. The population weights currently used represent resident State population data estimated for the 2000 Census by the U.S. Department of Commerce, Bureau of the Census. The data provided here are available sooner than the Historical Climatology Series 5-2 (cooling degree-days) developed by the National Climatic Data Center, Asheville, NC, which compiles data from some 8,000 weather stations.

<sup>&</sup>lt;sup>b</sup> Excludes Alaska and Hawaii.

#### **Energy Overview**

Note 1. Primary Energy Production. Primary energy production consists of coal production, waste coal supplied, and coal refuse recovery; crude oil and lease condensate production; natural gas plant liquids production; natural gas (dry) production; nuclear electricity net generation (converted to Btu using the nuclear plants heat rate); conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the geothermal plants heat rate), geothermal heat pump energy, and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and woodderived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; and biofuels feedstock (biomass inputs to the production of fuel ethanol and biodiesel).

Note 2. Primary Energy Consumption. Primary energy consumption consists of coal consumption; coal coke net imports; petroleum consumption (petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel, but excluding ethanol blended into motor gasoline); natural gas (excluding supplemental gaseous fuels) consumption; nuclear electricity net generation (converted to Btu using the nuclear plants heat rate); conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the geothermal plants heat rate), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossilfueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; fuel ethanol and biodiesel consumption; losses and co-products from the production of fuel ethanol and biodiesel; and electricity net imports (converted to Btu using the electricity heat content of 3,412 Btu per kilowatthour).

**Note 3.** Merchandise Trade Value. Import data presented are based on the customs value. That value does not include insurance and freight and is consequently lower than the cost, insurance, and freight (CIF) value, which is also reported by the Bureau of the Census. All export data, and import data prior to 1981, are on a free alongside ship (f.a.s.) basis.

"Balance" is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. "Energy" includes mineral

fuels, lubricants, and related material. "Non-Energy Balance" and "Total Merchandise" include foreign exports (i.e., re-exports) and nonmonetary gold and Department of Defense Grant-Aid shipments. The "Non-Energy Balance" is calculated by subtracting the "Energy" from the "Total Merchandise Balance."

"Imports" consist of government and nongovernment shipments of merchandise into the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Foreign Trade Zones. They reflect the total arrival from foreign countries of merchandise that immediately entered consumption channels, warehouses, the Foreign Trade Zones, or the Strategic Petroleum Reserve. They exclude shipments between the United States, Puerto Rico, and U.S. possessions, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, U.S. goods returned to the United States by its Armed Forces, and in-transit shipments.

#### Table 1.5 Sources

U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division:

#### **Petroleum Exports**

1974-1987: "U.S. Exports," FT410, December issues. 1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions

1990-1992: "U.S. Merchandise Trade," Final Report.

1993-2005: "U.S. International Trade in Goods and Services," Annual Revision.

2006 and 2007: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### **Petroleum Imports**

1974-1987: "U.S. Merchandise Trade," FT900, December issues, 1975-1988.

1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.

1990-1993: "U.S. Merchandise Trade," Final Report.

1994-2005: "U.S. International Trade in Goods and Services," Annual Revision.

2006 and 2007: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### **Energy Exports and Imports**

1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: January-July, monthly FT-900 supplement, 1989 issues. August-December, monthly FT-900, 1989 issues. 1989: Monthly FT-900, 1990 issues.

1990-1992: "U.S. Merchandise Trade," Final Report.

1993-2005: "U.S. International Trade in Goods and

Services," Annual Revision.

2006 and 2007: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### Petroleum, Energy, and Non-Energy Balances

Calculated by the Energy Information Administration.

#### **Total Merchandise**

1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.

1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990. 1990: "U.S. Merchandise Trade, 1990 Final Report," May 10, 1991, and "U.S. Merchandise Trade, December 1992," February 18, 1993, page 3.

1991: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.

1992-2005: "U.S. International Trade in Goods and Services," Annual Revision.

2006 and 2007: "U.S. International Trade in Goods and Services," FT-900, monthly.

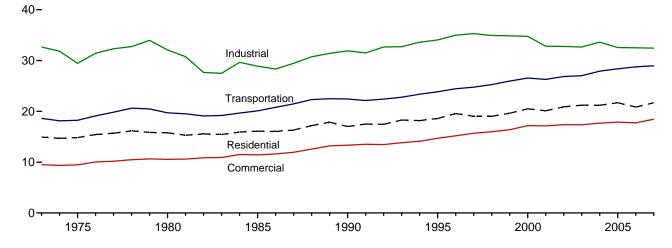
# **Energy Consumption by Sector**



Office buildings, industries, residences, and transport systems, Baltimore, Maryland; east view from the inner harbor. Source: U.S. Department of Energy.

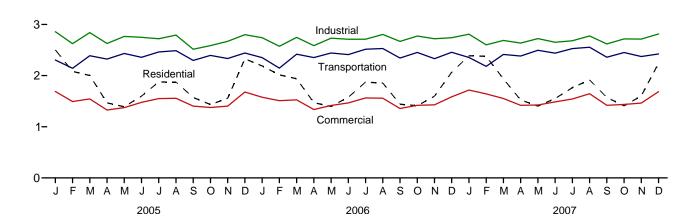
Figure 2.1 Energy Consumption by Sector (Quadrillion Btu)

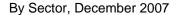
Total Consumption by End-Use Sector, 1973-2007

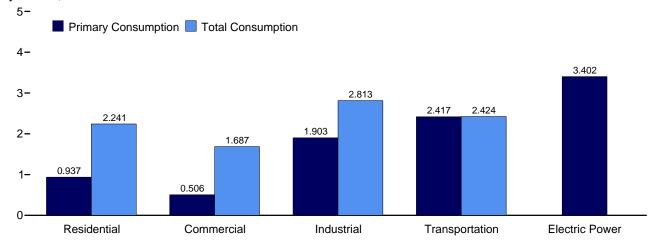


Total Consumption by End-Use Sector, Monthly

4-







Note: Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.

Source: Table 2.1.

Table 2.1 **Energy Consumption by Sector** 

(Trillion Btu)

				End-Use	Sectors				Electric		
	Resid	ential	Comm	erciala	Indus	strial <sup>b</sup>	Transpo	ortation	Power Sector <sup>c,d</sup>	Balancing	
	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primary <sup>e</sup>	Total <sup>f</sup>	Primarye	Item <sup>g</sup>	Totalh
1973 Total	8,250	14,930	4,381	9,507	24,741	32,653	18,576	18,612	19,753	7	75,708
1975 Total	8,006	14,842	4,023	9,466	21,454	29,447	18,209	18,244	20,307	1	71,999
1980 Total	7,453	15,787	4,074	10,563	22,610	32,077	19,658	19,696	24,327	-1	78,122
1985 Total	7,161	16,088	3,695	11,444	19,466	28,875	20,041	20,087	26,132	-4	76,491
1990 Total	6,570	17,015	3,858	13,333	21,206	31,894	22,366	22,420	30,660	-9	84,652
1995 Total	6,946	18,578	4,063	14,698	22,746	34,045	23,793	23,849	33,621	3	91,173
1996 Total	7,471	19,562	4,235	15,181	23,444	34,989	24,384	24,439	34,638	4	94,175
1997 Total	7,040	19,026	4,257	15,694	23,721	35,288	24,697	24,752	35,045	6	94,765
1998 Total	6,424	19,021	3,964	15,979	23,211	34,928	25,203	25,258	36,385	-3	95,183
1999 Total	6,784	19,621	4,007	16,384	22,991	34,855	25,894	25,951	37,136	6	96,817
2000 Total	7,169	20,488	4,227	17,176	22,871	34,758	26,491	26,552	38,214	2	98,975
2001 Total	6,879	20,106	4,036	17,141	21,836	32,806	26,215	26,278	37,366	-6	96,326
2002 Total	6,938	20,874	4,099	17,367	21,857	32,765	26,787	26,848	38,171	5	97,858
2003 Total	7,252	21,208	4,239	17,351	21,576	32,650	26,928	27,002	38,218	-3	98,209
2004 Total	7,020	21,179	4,179	17,663	22,455	33,609	27,820	27,899	38,876	(s)	100,351
<b>2005</b> January	1,127	2,503	582	1,690	R 1,954	R 2,857	R 2,297	R 2,304	3,394	2	9,356
February	961	2,081	<sup>R</sup> 513	_ 1,493	<sup>R</sup> 1,796	R 2,625	<sup>R</sup> 2,136	R 2,142	2,935	-1	8,341
March	877	2,003	475	<sup>R</sup> 1,544	R 1,940	R 2,840	<sup>R</sup> 2,381	R 2,388	3,102	-1	8,774
April	<sup>R</sup> 540	<sup>R</sup> 1,467	318	1,327	R 1,747	R 2,627	<sup>R</sup> 2,316	R 2,323	2,824	-4	7,740
May	400	1,389	_ 245	1,374	<sup>R</sup> 1,793	R 2,765	R 2,426	R 2,432	3,097	-1	7,961
June	_ 303	_ 1,598	R 209	1,477	R 1,770	R 2,748	<sup>R</sup> 2,351	<sup>R</sup> 2,358	3,548	2	8,183
July	R 274	R 1,875	197	1,550	R 1,740	<sup>R</sup> 2,719	R 2,455	<sup>R</sup> 2,461	3,940	4	8,610
August	<sup>R</sup> 272	<sup>R</sup> 1,872	_ 201	1,556	R 1,805	R 2,792	<sup>R</sup> 2,481	<sup>R</sup> 2,488	3,949	3	8,711
September	259	1,572	<sup>R</sup> 194	1,404	<sup>R</sup> 1,610	<sup>R</sup> 2,516	R 2,289	R 2,296	3,435	1	7,788
October	_ 357	1,435	238	1,377	<sup>R</sup> 1,685	R 2,586	R 2,388	R 2,394	3,124	-1	7,791
November	<sup>R</sup> 551	_ 1,556	321	1,404	R 1,754	R 2,670	R 2,327	R 2,333	3,011	-1	7,962
December	_ <sup>R</sup> 983	R 2,328	520	1,678	<sup>R</sup> 1,871	R 2,800	R 2,434	R 2,442	3,439	1	9,248
Total	R 6,902	R <b>21,678</b>	<sup>R</sup> <b>4,013</b>	R 17,874	R 21,467	R 32,546	R <b>28,280</b>	R 28,361	39,799	5	100,465
<b>2006</b> January	R 909	R 2,188	R 494	R 1,576	R 1,871	R 2,741	R 2,345	R 2,352	3,238	1	8,857
February	R 900	R 2,015	R 488	R 1,509	R 1,717	R 2,573	<sup>R</sup> 2,139	R 2,146	2,998	-1	8,242
March	<sup>R</sup> 817	R 1,939	R 445	R 1,525	<sup>R</sup> 1,857	R 2,747	R 2,412	R 2,419	3,099	-1	8,628
April	<sup>R</sup> 507	R 1,471	R 294	R 1,336	R 1,705	R 2,586	R 2,346	R 2,352	2,893	-2	R 7,743
May	R 347	R 1,397	R 226	R 1,415	R 1,767	R 2,730	R 2,436	R 2,442	3,210	-1	<sup>R</sup> 7,985
June	R 273	R 1,578	R 194	R 1,466	<sup>R</sup> 1,759	R 2,710	R 2,404	R 2,411	3,535	1	R 8,166
July	R 250	R 1,872	R 182	R 1,564	R 1,733	R 2,711	R 2,509	R 2,516	3,989	3	R 8,665
August	R 244	R 1,856	R 187	R 1,559	R 1,834	R 2,804	R 2,523	R 2,530	3,960	4	R 8,752
September	R 258	R 1,440	R 193	R 1,357	R 1,789	R 2,668	R 2,337	R 2,344	3,232	(s)	R 7,809
October	R 383	R 1,412	R 253	R 1,419	R 1,861	R 2,773	R 2,447	R 2,453	3,113	-2	R 8,055
November	<sup>R</sup> 564	R 1,598	R 327	R 1,429	1,841	R 2,720	R 2,324	R 2,330	3,020	-1	R 8,076
December	R 802	R 2,065	R 433	R 1,585	R 1,861	R 2,740	R 2,449	R 2,456	3,301	2	R 8,848
Total	<sup>R</sup> 6,253	<sup>R</sup> 20,832	<sup>R</sup> 3,717	<sup>R</sup> 17,738	<sup>R</sup> 21,595	<sup>R</sup> 32,504	<sup>R</sup> 28,671	R 28,750	39,589	4	R 99,828
<b>2007</b> January	R 1,003	R 2,386	<sup>R</sup> 528	R 1,718	R 1,923	R 2,809	R 2,346	R 2,354	3,467	3	R 9,270
February	R 1,100	R 2,377	R 576	R 1,643	R 1,791	R 2,601	R 2,174	R 2,181	3,160	R 1	R 8,802
March	R 803	R 1,935	R 446	R 1,553	R 1,816	R 2,687	R 2,406	R 2,413	3,117	-1	R 8,588
April	R 547	R 1,524	R 321	1,419	R 1,756	R 2,636	R 2,376	R 2,383	2,961	-1	R 7,960
May	337	R 1,403	221	R 1,426	R 1,780	R 2,724	R 2,488	R 2,494	3,222	(s)	R 8,047
June	R 260	R 1,551	R 189	1,487	R 1,710	R 2,651	R 2,432	R 2,439	3,538	2	R 8,130
July	R 241	R 1,763	R 177	R 1,542	R 1,729	R 2,681	R 2,520	R 2,527	3,845	4	R 8,517
August	R 243	R 1,914	<sup>R</sup> 186	R 1,645	R 1,770	R 2,775	R 2,548	R 2,555	4,142	5	8,894
September	R 246	R 1,573	186	1,420	R 1,741	R 2,619	R 2,353	R 2,359	3,445	2	R 7,973
October	318	1,410	225	1,436	R 1,799	R 2,718	R 2,445	R 2,451	3,228	R (s)	R 8,014
November	R 572	R 1,603	R 338	R 1,463	R 1,819	R 2,713	R 2,365	R 2,372	3,058	R (s)	R 8,152
December	937	2,241	506	1,687	1,903	2,813	2,417	2,424	3,402	2	9,166
Total	6,605	21,677	3,898	18,438	21,538	32,430	28,868	28,952	40,588	16	101,513

<sup>&</sup>lt;sup>a</sup> Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

b Industrial sector, including industrial combined-heat-and-power (CHP) and

industrial electricity-only plants.

<sup>&</sup>lt;sup>c</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to

Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

<sup>&</sup>lt;sup>e</sup> See Note 2, "Primary Energy Consumption," at end of Section 1.

f Total energy consumption in the end-use sectors consists of primary energy consumption, electricity retail sales, and electrical system energy losses. See Note 2, "Electrical System Energy Losses," at end of section.

<sup>&</sup>lt;sup>g</sup> A balancing item. The sum of primary consumption in the five energy-use sectors equals the sum of total consumption in the four end-use sectors. However, total energy consumption does not equal the sum of the sectoral components due to the use of sector-specific conversion factors for coal and natural gas.

h Primary energy consumption total. See Table 1.3.

R=Revised. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.

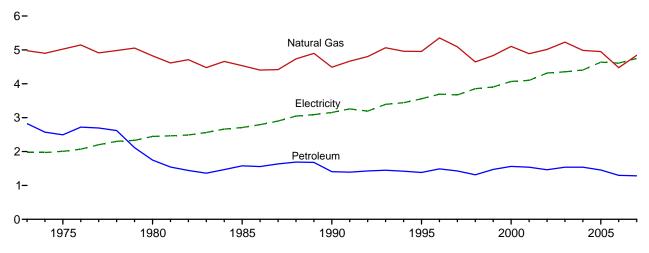
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/consump.html for all available data beginning in 1973.

Sources: Tables 1.3 and 2.2-2.6.

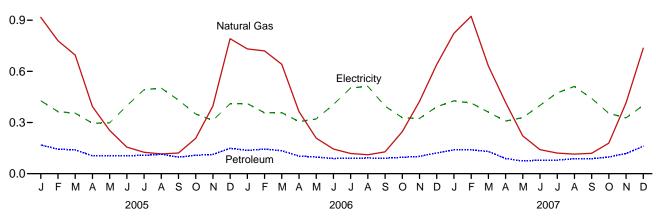
Figure 2.2 Residential Sector Energy Consumption (Quadrillion Btu)

By Major Sources, 1973-2007

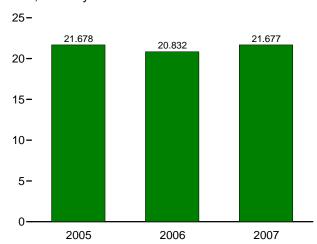


By Major Sources, Monthly

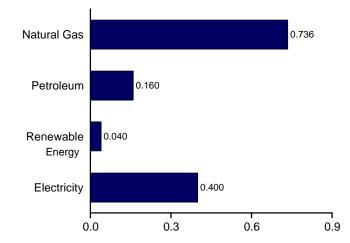
1.2-



Total, January-December



By Major Sources, December 2007



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.

Source: Table 2.2.

Table 2.2 Residential Sector Energy Consumption

(Trillion Btu)

					Prima	ry Consum	otiona						
			Fossil	Fuels			Renewal	ole Energy <sup>b</sup>				Electrical	
		Coal	Natural Gas <sup>c</sup>	Petro- leum	Total	Geo- thermal	Solar/ PV	Bio- mass	Total	Total Primary	Electricity Retail Sales <sup>d</sup>	System Energy Losses <sup>e</sup>	Total
1973 Total .		94	4,977	2,825	7,896	NA	NA	354	354	8,250	1,976	4,703	14,930
1975 Total .		63	5,023	2,495	7,580	NA	NA	425	425	8,006	2,007	4,829	14,842
1980 Total .		31	4,825	1,748	6,603	NA	NA	850	850	7,453	2,448	5,885	15,787
1985 Total .		39	4,534	1,578	6,151	NA	NA	1,010	1,010	7,161	2,709	6,219	16,088
1990 Total .		31	4,491	1,407	5,929	6	56	580	641	6,570	3,153	7,291	17,015
1995 Total .		17	4,954	1,383	6,355	7	65	520	591	6,946	3,557	8,075	18,578
1996 Total .		17	5,354	1,488	6,859	7	65	540	612	7,471	3,694	8,397	19,562
1997 Total .		16	5,093	1,428	6,537	8	65	430	503	7,040	3,671	8,315	19,026
1998 Total .		12	4,646	1,314	5,971	8	65	380	452	6,424	3,856	8,741	19,021
1999 Total .		14	4,835	1,473	6,322	9	64	390	462	6,784	3,906	8,931	19,621
2000 Total .		11	5,105	1,563	6,679	9	61	420	490	7,169	4,069	9,250	20,488
2001 Total .		12	4,889	1,539	6,440	9	60	370	439	6,879	4,100	9,127	20,106
2002 Total .		12	5,014	1,463	6,489	10	59	380	449	6,938	4,317	9,619	20,874
2003 Total .		12	5,230	1,539	6,781	13	58	400	471	7,252	4,353	9,603	21,208
2004 Total .		13	4,986	1,539	6,538	14	59	410	483	7,020	4,408	9,750	21,179
2005 Januar		1	917	168	1,086	1	5	35	41	1,127	427	948	2,503
	ary	1	779	R 144	924	1	5	31	37	961	364	756	2,081
		1	696	R 140	836	1	5	35	41	877	355	770	2,003
		1	394	R 105	R 500	1	5	34	40	R 540	296	631	R 1,467
		1	254	104	R 359	1	5	35	41	400	298	691	1,389
		1	156	106	263	1	5	34	40	303	398	898	1,598
		1	125	R 107	R 233	1	5	35	41	R 274	493	1,108	R 1,875
	t	1	115	114	230	1	5	35	41	R 272	501	1,099	R 1,872
	nber	1	121	97	219	1	5	34	40	259	432	882	1,572
	er	1	207	108	R 316	1	5	35	41	357	350	727	1,435
	ber	1	397	113 <sup>R</sup> 149	R 511	1	5	34	40	R 551	313	692	1,556
	ber	1 <b>9</b>	791 <b>4,951</b>	R <b>1,455</b>	941 R <b>6,415</b>	1 <b>16</b>	5 <b>61</b>	35 <b>410</b>	41 <b>487</b>	<sup>R</sup> 983 <sup>R</sup> <b>6,902</b>	410 <b>4,638</b>	935 <b>10,139</b>	R 2,328 R <b>21,678</b>
2006 Januar	٠٧	1	732	<sup>R</sup> 137	R 869	2	6	33	40	R 909	411	868	<sup>R</sup> 2,188
	ary	1	720	R 144	R 864	1	5	30	36	R 900	357	758	R 2,015
		i	641	R 135	R 777	2	6	33	40	<sup>R</sup> 817	358	763	R 1,939
		(s)	364	R 103	<sup>R</sup> 468	2	5	32	39	R 507	305	659	R 1,471
		(s)	209	R 97	R 306	2	6	33	40	R 347	321	730	R 1,397
		(s)	145	R 89	R 234	2	5	32	39	R 273	405	900	R 1,578
		(s)	118	R 91	R 210	2	6	33	40	R 250	503	1,119	R 1,872
	t	(s)	111	R 92	R 204	2	6	33	40	R 244	512	1,100	<sup>R</sup> 1,856
	nber	(s)	128	R 91	R 219	2	5	32	39	R 258	396	786	R 1,440
	er	ìí	246	<sup>R</sup> 96	R 343	2	6	33	40	R 383	328	701	R 1,412
	ber	1	423	R 101	R 525	2	5	32	39	<sup>R</sup> 564	324	710	<sup>R</sup> 1,598
Decem	ber	1	639	<sup>R</sup> 122	<sup>R</sup> 762	2	6	33	40	R 802	392	871	R 2,065
Total .		6	4,476	<sup>R</sup> 1,297	R <b>5,779</b>	18	65	390	474	R <b>6,253</b>	4,611	9,968	R 20,832
<b>2007</b> Januar		1	823	R 139	R 963	2	6	33	40	R 1,003	427	956	R 2,386
	ary	1	923	R 140	R 1,064	1	5	30	36	R 1,100	414	863	R 2,377
March		1	632	<sup>R</sup> 130	<sup>R</sup> 763	2	6	33	40	R 803	361	771	R 1,935
		(s)	419	R 89	<sup>R</sup> 508	2	5	32	39	<sup>R</sup> 547	308	669	<sup>R</sup> 1,524
		(s)	221	75	R 296	2	6	33	40	337	329	738	R 1,403
		(s)	141	R 80	R 221	2	5	32	39	R 260	400	891	R 1,551
		(s)	121	R 80	R 201	2	6	33	40	R 241	474	1,048	R 1,763
	t <sub></sub>	(s)	115	R 87	R 203	2	6	33	40	R 243	512	1,160	R 1,914
	nber	(s)	119	R 88	R 207	2	5	32	39	R 246	442	885	R 1,573
	er	Ř 1	179	R 98	R 277	2	6	33	40	318	354	738	1,410
	ber	1	414	R 118	R 533	2	5	32	39	R 572	327	704	R 1,603
	ıber	1	736	160	897	2	6	33	40	937	400	903	2,241
i otal .		6	4,842	1,282	6,131	18	65	390	474	6,605	4,749	10,323	21,677

<sup>&</sup>lt;sup>a</sup> See Note 2, "Primary Energy Consumption," at end of Section 1.

electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/consump.html for all available

data beginning in 1973.

Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

<sup>&</sup>lt;sup>b</sup> Data are estimates. See Table 10.2a for notes on series components.

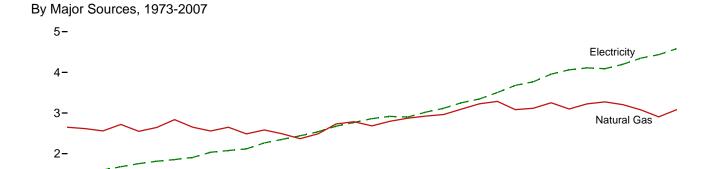
c Natural gas only; excludes the estimated portion of supplemental gaseous

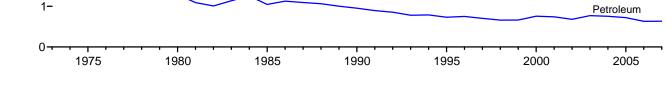
fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

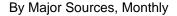
d Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

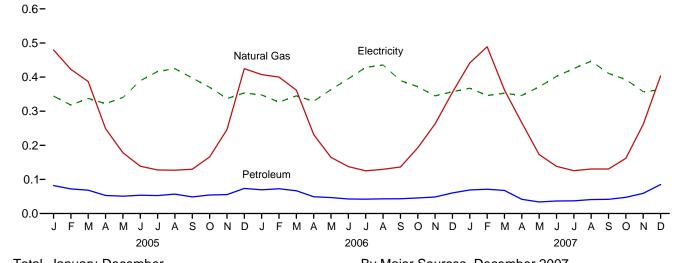
Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

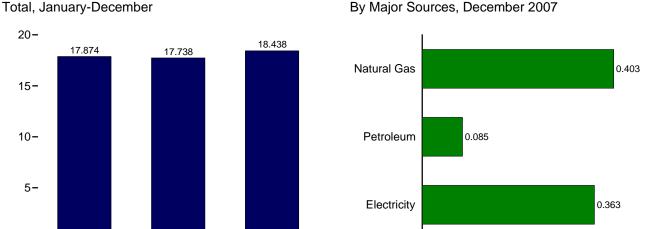
Figure 2.3 Commercial Sector Energy Consumption (Quadrillion Btu)











Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/consump.html. Source: Table 2.3.

2006

0

2005

2007

0.2

0.1

0.0

0.3

0.4

0.5

**Table 2.3 Commercial Sector Energy Consumption** 

(Trillion Btu)

					Prima	ry Consum	ption <sup>a</sup>						
			Fossil	Fuels			Renewak	ole Energy <sup>b</sup>				<b></b>	
		Coal	Natural Gas <sup>c</sup>	Petro- leum <sup>d</sup>	Total	Hydro- electric Power <sup>e</sup>	Geo- thermal	Bio- mass	Total	Total Primary	Electricity Retail Sales <sup>f</sup>	Electrical System Energy Losses <sup>9</sup>	Total
1973 Total		160	2,649	1,565	4,374	NA	NA	7	7	4,381	1,517	3,609	9,507
1975 Total		147	2,558	1,310	4,015	NA	NA	8	8	4,023	1,598	3,845	9,466
		115	2,651	1,287	4,053	NA	NA	21	21	4,074	1,906	4,582	10,563
1985 Total		137	2,488	1,045	3,670	NĄ	NA	24	24	3,695	2,351	5,398	11,444
1990 Total		124	2,682	953	3,760	1	3	94	98	3,858	2,860	6,615	13,333
		117	3,096	732	3,945	1	5	113 129	118	4,063	3,252	7,382	14,698
1996 TOtal		122 129	3,226 3,285	751 704	4,099 4,118	1	5 6	131	135 138	4,235 4,257	3,344 3,503	7,603 7,935	15,181 15,694
1997 Total		93	3,283	661	3,837	i	7	118	127	3,964	3,678	8,338	15,094
1999 Total		103	3,115	661	3,879	i	7	121	129	4,007	3,766	8,610	16,384
		92	3,252	756	4,099	1	8	119	128	4,227	3,956	8,993	17,176
		97	3,097	741	3,935	1	8	92	101	4,036	4,062	9,043	17,141
2002 Total		90	3,225	680	3,995	(s)	9	95	104	4,099	4,110	9,158	17,367
2003 Total		82	3,274	770	4,126	`1	11	101	113	4,239	4,090	9,023	17,351
2004 Total		102	3,204	755	4,061	1	12	105	118	4,179	4,198	9,286	17,663
	ary	10	479	82	572	(s)	1	9	10	_ 582	344	763	1,690
Febru	ary	9	423	72	504	(s)	1	8	9	R 513	318	661	1,493
	າ	9	387	68	R 464	(s)	1	9	10	475	338	732	R 1,544
		6	249	53	308	(s)	1	8	10	318	322	687	1,327
		6	178	51	235 <sup>R</sup> 199	(s)	1	9	10	245 R 200	340	789	1,374
		7 7	139 128	54 53		(s)	1	9 9	10 10	R 209	389	878 936	1,477
	st	7	127	53 57	187 <sup>R</sup> 190	(s) (s)	1	9	10	197 201	416 425	936	1,550 1.556
	ember	6	130	49	185	(s)	1	9	10	R 194	398	812	1,404
	er	8	166	54	R 228	(s)	i	9	10	238	370	768	1,377
	mber	9	246	R 55	311	(s)	i	9	10	321	337	746	1,404
	mber	11	425	R 73	509	(s)	1	9	10	520	353	805	1,678
		96	3,076	R <b>721</b>	R 3,893	`1	14	105	119	R 4,013	4,351	9,511	R 17,874
<b>2006</b> Janua	ary	7	407	R 69	R 484	(s)	1	9	10	R 494	348	735	R 1,576
	ıary	6	400	<sup>R</sup> 73	R 479	(s)	1	8	9	<sup>R</sup> 488	327	694	<sup>R</sup> 1,509
	າ	6	362	R 67	R 435	(s)	1	8	10	R 445	345	736	R 1,525
		4	231	R 49	R 285	(s)	1	8	10	R 294	329	712	R 1,336
		4	165	R 47	R 216	(s)	1	9	10	R 226	363	827	R 1,415
		5 5	138 125	<sup>R</sup> 42 <sup>R</sup> 42	<sup>R</sup> 185 <sup>R</sup> 172	(s)	1	<sup>R</sup> 8 9	10 10	<sup>R</sup> 194 <sup>R</sup> 182	395 428	877 954	<sup>R</sup> 1,466 <sup>R</sup> 1,564
	st	5	130	R 43	R 177	(s) (s)	1	9	10	R 187	436	934	R 1,559
	mber	4	136	R 43	R 184	(s)	1	8	10	R 193	390	774	R 1,359
	oer	6	192	R 46	R 244	(s)	i	9	10	R 253	372	793	R 1,419
	mber	6	263	R 48	R 318	(s)	i	R 8	10	R 327	345	757	R 1,429
	mber	7	355	R 60	R 423	(s)	1	9	10	R 433	357	794	R 1,585
		65	2,905	R <b>630</b>	R <b>3,600</b>	` 1	14	R 102	R 117	R 3,717	4,435	9,586	R 17,738
<b>2007</b> Janua	ary	7	442	R 69	<sup>R</sup> 517	(s)	1	9	10	R 528	367	823	R 1,718
Febru	ıary	7	489	R 71	<sup>R</sup> 567	(s)	1	8	9	<sup>R</sup> 576	346	721	R 1,643
	າ	6	362	R 68	R 436	(s)	1	9	10	R 446	353	754	R 1,553
		4	266	42	R 312	(s)	1	8	9	R 321	346	751	1,419
		4	173	34	R 211	(s)	1	9	10	221 R 400	371	834	R 1,426
		4 4	138	37 <sup>R</sup> 37	R 179	(s)	1	9	10	<sup>R</sup> 189 <sup>R</sup> 177	402	895	1,487 R 1 5 4 2
		4 5	126 130	R 41	<sup>R</sup> 167 <sup>R</sup> 176	(s)	1 1	9 9	10 10	R 186	425 447	940 1,012	<sup>R</sup> 1,542 <sup>R</sup> 1,645
	st ember	5 4	131	42	R 176	(s) (s)	1	8	10	186	447	823	1,420
Octob	er	R 6	R 162	42 47	215	(s) (s)	1	9	10	225	393	818	1,420
	mber	R7	R 262	R 59	R 328	(s)	i	9	10	R 338	357	768	R 1,463
	mber	7	403	85	496	(s)	i	9	10	506	363	818	1,687
		65	3,083	632	3,780	`1	14	104	119	3,898	4,581	9,958	18,438

electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/consump.html for all available

data beginning in 1973

Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

a See Note 2, "Primary Energy Consumption," at end of Section 1.
 b Most data are estimates. See Table 10.2a for notes on series components

and estimation.

C Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

Does not include the fuel ethanol portion of motor gasoline—fuel ethanol is

included in "Biomass."

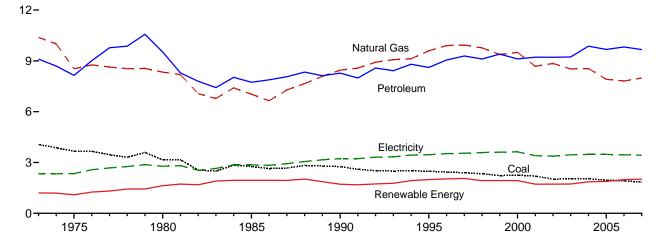
e Conventional hydroelectric power.

f Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

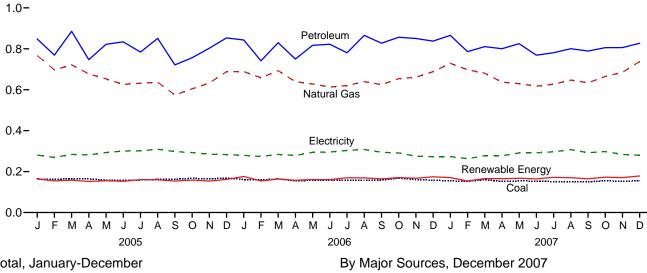
g Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

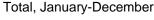
Figure 2.4 Industrial Sector Energy Consumption (Quadrillion Btu)

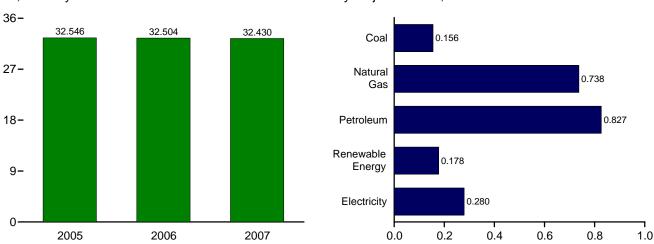




# By Major Sources, Monthly







Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.

Source: Table 2.4.

Table 2.4 Industrial Sector Energy Consumption

(Trillion Btu)

				Prima	ry Consum	ptiona						
		Fossil	Fuels			Renewal	ole Energy <sup>b</sup>				FI A. C I	
	Coal	Natural Gas <sup>c</sup>	Petro- leum <sup>d</sup>	Totale	Hydro- electric Power <sup>f</sup>	Geo- thermal	Bio- mass	Total	Total Primary	Electricity Retail Sales	Electrical System Energy Losses <sup>h</sup>	Totale
1973 Total	4,057	10,388	9,104	23,541	35	NA	1,165	1,200	24,741	2,341	5,571	32,653
1975 Total	3,667	8,532	8,146	20,359	32	NA	1,063	1,096	21,454	2,346	5,647	29,447
1980 Total	3,155	8,333	9,525	20,977	33	NA	1,600	1,633	22,610	2,781	6,686	32,077
1985 Total	2,760	7,032	7,738	17,516	33	NA	1,917	1,950	19,466	2,855	6,554	28,875
1990 Total	2,756	8,451	8,278	19,490	31	2	1,683	1,716	21,206	3,226	7,461	31,894
1995 Total	2,488	9,592	8,613	20,754	55	3	1,935	1,992	22,746	3,455	7,844	34,045
1996 Total	2,434	9,901	9,052	21,410	61	3	1,970	2,033	23,444	3,527	8,018	34,989
1997 Total	2,395	9,933	9,289	21,663	58	3	1,997	2,058	23,721	3,542	8,024	35,288
1998 Total	2,335 2,227	9,763 9,375	9,114 9,395	21,280 21,054	55 49	3 4	1,873 1,883	1,931 1,936	23,211 22,991	3,587	8,131 8,254	34,928 34,855
1999 Total 2000 Total	2,256	9,500	9,393	20,941	49 42	4	1,884	1,930	22,871	3,611 3,631	8,256	34,758
2001 Total	2,192	8,676	9,217	20,341	33	5	1,684	1,721	21,836	3,400	7,570	32,806
2002 Total	2,019	8,845	9,209	20,115	39	5	1,679	1,723	21,857	3,379	7,528	32,765
2003 Total	2.041	8,521	9,232	19.845	43	3	1,684	1,731	21,576	3,454	7,620	32,650
2004 Total	2,047	8,544	9,865	20,594	33	4	1,824	1,861	22,455	3,473	7,682	33,609
2005 January	164	767	R 848	R 1,790	3	(s)	160	164	R 1,954	281	623	R 2,857
February	162	697	R 769	R 1,642	3	(s)	152	155	R 1,796	269	560	R 2,625
March	166	722	R 885	R 1,782	3	(s)	155	158	R 1,940	284	616	R 2,840
April	164	677	R 747	R 1,595	3	(s)	149	152	R 1,747	281	600	R 2,627
May	158	653	R 822	R 1,638	3	(s)	152	155	R 1,793	293	679	R 2,765
June	157	626	<sup>R</sup> 834 <sup>R</sup> 784	R 1,617	3	(s)	149	153	R 1,770	300	677	R 2,748
July	158 162	632	<sup>1</sup> 784 R 851	<sup>R</sup> 1,580 <sup>R</sup> 1,646	3 2	(s)	157 157	160 160	<sup>R</sup> 1,740 <sup>R</sup> 1,805	302 309	678	<sup>R</sup> 2,719 <sup>R</sup> 2,792
August September	163	636 574	R 721	R 1,456	2	(s) (s)	151	154	R 1,610	298	677 608	R 2,792
October	163	604	R 756	R 1,526	2	(s)	156	154	R 1,685	293	608	R 2,586
November	164	633	R 803	R 1,601	2	(s)	151	154	R 1,754	285	631	R 2,670
December	168	688	R 853	R 1.710	3	(s)	158	162	R 1.871	283	645	R 2.800
Total	1,954	7,911	R 9,673	R 19,583	32	4	1,848	R 1,884	R 21,467	3,477	7,602	R <b>32,546</b>
2006 January	161	689	R 843	R 1,695	4	(s)	172	176	<sup>R</sup> 1,871	279	590	R 2,741
February	159	658	<sup>R</sup> 741	R 1,563	3	(s)	151	154	<sup>R</sup> 1,717	274	582	R 2,573
March	164	693	<sup>R</sup> 830	R 1,694	2	(s)	161	163	R 1,857	284	606	R 2,747
April	155	639	750	R 1,548	2	(s)	155	157	R 1,705	279	603	R 2,586
May	157	628	R 817	R 1,606	2	(s)	159	161	R 1,767	294	669	R 2,730
June	157	613	R 822	R 1,598	2	(s)	158	160	R 1,759	296	656	R 2,710
July	158	620	<sup>R</sup> 781 <sup>R</sup> 866	<sup>R</sup> 1,563 <sup>R</sup> 1,665	2	(s)	167	170	R 1,733	303 308	675	R 2,711 R 2,804
August September	158 158	639 625	R 827	R 1,624	2 2	(s) (s)	167 162	169 165	<sup>R</sup> 1,834 <sup>R</sup> 1,789	308 295	662 585	R 2,668
October	168	654	R 856	R 1,624	3	(S) (S)	162	171	R 1,769	295 291	621	R 2,773
November	161	R 661	R 850	1,673	4	(s)	164	167	1,841	275	604	R 2,720
December	158	688	R 838	R 1,686	3	(s)	171	174	R 1,861	273	606	R 2,740
Total	1,914	R 7,809	R 9,822	R 19,606	29	4	R 1,955	R 1,988	R 21,595	3,451	7,459	R 32,504
2007 January	<sup>R</sup> 155	729	R 866	R 1,753	4	(s)	<sup>R</sup> 166	<sup>R</sup> 171	R 1,923	273	612	R 2,809
February	R 152	697	<sup>R</sup> 787	R 1,637	2	(s)	R 152	<sup>R</sup> 154	R 1,791	263	547	R 2,601
March	R 160	681	R 811	R 1,650	2	(s)	R 163	R 166	R 1,816	278	593	R 2,687
April	R 152	637	R 801	R 1,591	2	(s)	R 163	R 165	R 1,756	277	602	R 2,636
May	R 154	630	R 825	R 1,612	2	(s)	R 165	R 167	R 1,780	291	653	R 2,724
June	R 154	617	R 769	R 1,545	2	(s)	R 162	R 165	R 1,710	292	650 655	R 2,651
July	151	627	<sup>R</sup> 781 <sup>R</sup> 801	R 1,558	1	(s)	R 170	R 172	R 1,729	296	655	R 2,681
August	150	647	* 801 R 789	R 1,600	2	(s)	<sup>R</sup> 168 <sup>R</sup> 163	R 170	R 1,770	308	697	R 2,775
September	150 <sup>R</sup> 156	634	<sup>N</sup> 789 R 806	<sup>R</sup> 1,576 <sup>R</sup> 1,626	1	(s)	^ 163 <sup>R</sup> 171	<sup>R</sup> 165 <sup>R</sup> 173	R 1,741 R 1,799	292 298	586	<sup>R</sup> 2,619 <sup>R</sup> 2,718
October November	R 152	665 685	R 806	R 1,648	1	(s) (s)	R 169	R 171	R 1,799	298 284	621 611	R 2,718
December	156	738	827	1,724	2	(S) (S)	176	178	1,903	284 280	631	2,813
Total	1,842	7.988	9,667	19,521	23	(S) <b>A</b>	1,990	2,017	21,538	3,432	<b>7,460</b>	32,430
10tai	1,042	1,300	3,007	13,321	23	-	1,330	2,017	21,330	3,432	7,400	32,730

<sup>&</sup>lt;sup>a</sup> See Note 2, "Primary Energy Consumption," at end of Section 1.

allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power to the Engrave Lieuwage Sectors." at end of Section 7. • See Note 1, "Energy of the Engrave Sectors." Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States

and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/consump.html for all available data beginning in 1973.

Sources: Tables 1.4a, 1.4b, 2.6, 3.8b, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

b Most data are estimates. See Table 10.2b for notes on series components

and estimation.

<sup>c</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

<sup>d</sup> Does not include the fuel ethanol portion of motor gasoline—fuel ethanol is

included in "Biomass. <sup>e</sup> Includes coal coke net imports, which are not separately displayed. See

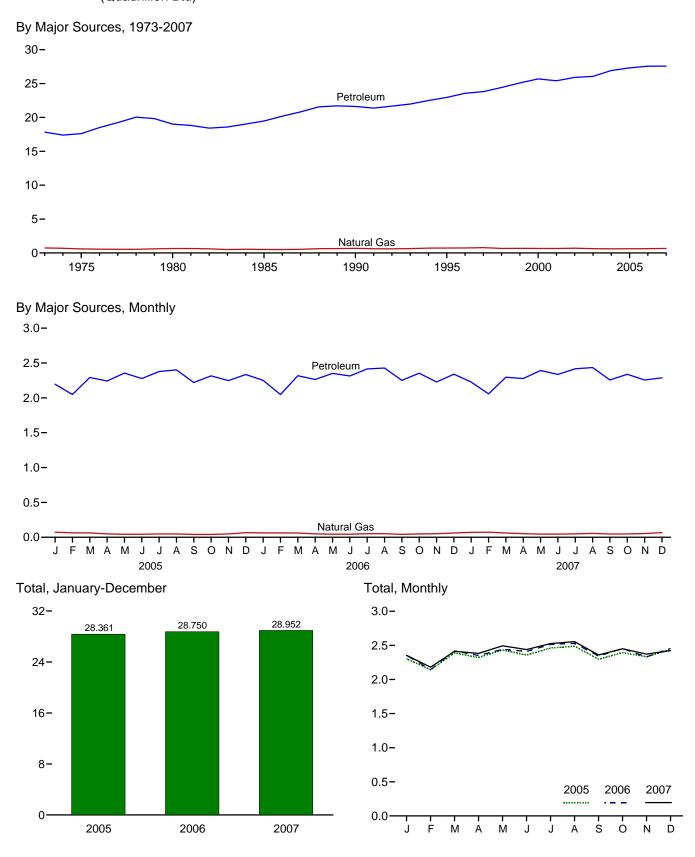
Tables 1.4a and 1.4b.

Conventional hydroelectric power.

Getricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
 Total losses are calculated as the primary energy consumed by the electric

power sector minus the energy content of electricity retail sales. Total losses are

Figure 2.5 Transportation Sector Energy Consumption (Quadrillion Btu)



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/consump.html. Source: Table 2.5.

Table 2.5 Transportation Sector Energy Consumption

(Trillion Btu)

			Primary Cor	nsumption <sup>a</sup>					
		Fossi	Fuels		Renewable Energy <sup>b</sup>	Total	Electricity Retail	Electrical System	
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total	Biomass	Primary	Sales <sup>e</sup>	Energy Losses <sup>f</sup>	Total
1973 Total	3	743	17,831	18,576	NA	18,576	11	25	18,612
1975 Total	1	595	17,614	18,209	NA	18,209	10	24	18,244
1980 Total	(g)	650	19,009	19,658	NA	19,658	11	27	19,696
1985 Total	(g)	519	19,471	19,990	51	20,041	14	32	20,087
1990 Total	(g)	680	21,625	22,305	62	22,366	16	37	22,420
1995 Total	(g)	724	22,954	23,678	115	23,793	17	39	23,849
1996 Total	(g)	737	23,565	24,302	82	24,384	17	38	24,439
1997 Total	(g)	780	23,813	24,593	104	24,697	17	38	24,752
1998 Total	(g)	666	24,422	25,088	115	25,203	17	38	25,258
1999 Total	(g)	675	25,098	25,774	120	25,894	17	40	25,951
2000 Total	(g)	672	25,682	26,354	138	26,491	18	42	26,552
2001 Total	(g)	658	25,413	26,071	145	26,215	20	43	26,278
2002 Total	(g)	702	25,913	26,615	172	26,787	19	42	26,848
2002 Total	(g)	630	26,063	26,693	235	26,928	23	51	27,002
2004 Total	(9)	603	26,922	27,525	296	27,820	25	55	27,899
2004 Total	(°)	003	·	•	230	21,020	23	33	-
2005 January	(g)	73	<sup>R</sup> 2,196	<sup>R</sup> 2,269	28	<sup>R</sup> 2,297	2	5	<sup>R</sup> 2,304
February	(g)	64	<sup>R</sup> 2,048	<sup>R</sup> 2,111	24	<sup>R</sup> 2,136	2	5	<sup>R</sup> 2,142
March	(g)	63	<sup>R</sup> 2,292	<sup>R</sup> 2,355	27	<sup>R</sup> 2,381	2	5	<sup>R</sup> 2,388
April	(g)	49	R 2,242	<sup>R</sup> 2,291	25	<sup>R</sup> 2,316	2	4	<sup>R</sup> 2,323
May	(g)	43	<sup>R</sup> 2,356	<sup>R</sup> 2,399	27	<sup>R</sup> 2,426	2	4	<sup>R</sup> 2,432
June	(g)	43	<sup>R</sup> 2,278	<sup>R</sup> 2,321	29	<sup>R</sup> 2,351	2	5	<sup>R</sup> 2,358
July	(g)	48	<sup>R</sup> 2,377	<sup>R</sup> 2,425	29	<sup>R</sup> 2,455	2	5	<sup>R</sup> 2,461
August	(g)	48	<sup>R</sup> 2,401	R 2,449	31	<sup>R</sup> 2,481	2	5	<sup>R</sup> 2,488
September	(g)	40	R 2,220	<sup>R</sup> 2,261	29	R 2,289	2	4	<sup>R</sup> 2,296
October	(g)	41	R 2,316	R 2,356	31	R 2,388	2	4	R 2,394
November	(g)	47	R 2,248	R 2,295	31	R 2,327	2	4	R 2,333
December	(g)	66	R 2,334	R 2,401	34	R 2,434	2	5	R 2,442
Total	(g)	625	R 27,309	R 27,934	R <b>346</b>	R 28,280	26	56	R 28,361
<b>2006</b> January	(9)	63	R 2,251	R 2,314	31	R 2,345	2	5	R 2,352
February	(g)	62	R 2.048	R 2.111	29	R 2.139	2	4	R 2.146
March	(g)	62	R 2,318	R 2,379	R 33	R 2,412	2	5	R 2,419
April	(g)	49	R 2,264	R 2,312	R 34	R 2.346	2	4	R 2,352
May	(g)	44	R 2,351	R 2.395	R 41	R 2.436	2	4	R 2,442
June	(g)	45	R 2,314	R 2,359	<sup>R</sup> 45	R 2,404	2	5	R 2,411
July	(9)	51	R 2,416	R 2,466	R 42	R 2,509	2	5	R 2,516
August	(g)	51	R 2,428	R 2,478	R 45	R 2,523	2	5	R 2,530
September	(9)	42	R 2,251	R 2,294	R 44	R 2,337	2	4	R 2,344
October	(9)	47	R 2.353	R 2.400	R 46	R 2,447	2	4	R 2.453
November	(9)	51	R 2,228	R 2,279	R 45	R 2,324	2	4	R 2,330
December	(9)	61	R 2,340	R 2,401	R 48	R 2,449	2	5	R 2,456
Total	(g)	626	R 27,561	R 28,188	R 483	R 28,671	25	54	R <b>28,750</b>
2007 January	(g)	70	R 2,228	R 2,298	<sup>R</sup> 48	R 2,346	2	6	R 2,354
2007 January	(9)				R 43				
February	(9)	73	R 2,058	R 2,131	R 48	R 2,174	2	5	R 2,181
March	\ /	61	R 2,296	R 2,357	<sup>R</sup> 46	R 2,406	2	5	R 2,413
April	(g)	52	R 2,278	R 2,330	``46	R 2,376	2	4	R 2,383
May	(g)	45 45	R 2,392	R 2,437	R 50	R 2,488	2	5	R 2,494
June	(g)	45	R 2,336	R 2,381	<sup>R</sup> 51	R 2,432	2	5	R 2,439
July	(g)	48	R 2,417	R 2,465	R 55	R 2,520	2	5	R 2,527
August	(9)	56	R 2,434	R 2,490	R 58	R 2,548	2	5	R 2,555
September	(g)	46	R 2,256	R 2,303	R 50	R 2,353	2	4	R 2,359
October	(g)	48	R 2,339	R 2,386	R 58	R 2,445	2	4	R 2,451
November	(g)	R 53	R 2,255	R 2,308	R 57	R 2,365	2	5	R 2,372
December	(g)	68	2,288	2,356	61	2,417	2	_5	2,424
Total	( <sup>g</sup> )	665	27,576	28,242	626	28,868	26	57	28,952

 $<sup>^{\</sup>rm a}$  See Note 2, "Primary Energy Consumption," at end of Section 1.

electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of

R=Revised. NA=Not available.

Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding.

Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/consump.html for all available data beginning in 1973.

Sources: Tables 2.6, 3.8c, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

b Data are estimates. See Table 10.2b for notes on series components.

<sup>&</sup>lt;sup>c</sup> Natural gas only; does not include supplemental gaseous fuels. See Note 3,

<sup>&</sup>quot;Supplemental Gaseous Fuels," at end of Section 4.

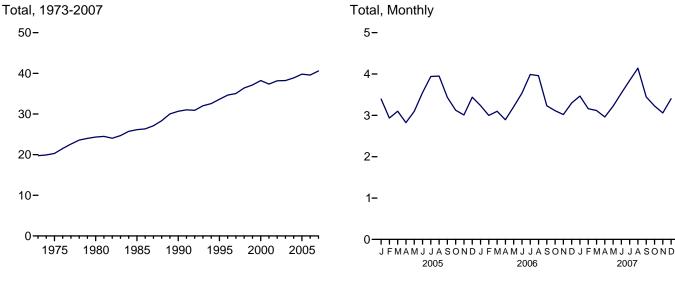
d Does not include the fuel ethanol portion of motor gasoline—fuel ethanol is included in "Biomass."

e Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

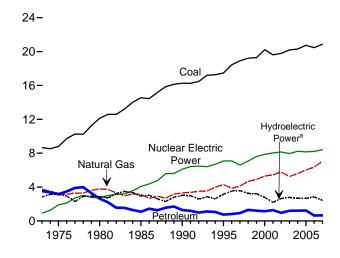
Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

<sup>&</sup>lt;sup>g</sup> Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

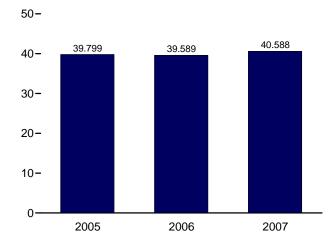
Figure 2.6 Electric Power Sector Energy Consumption (Quadrillion Btu)



By Major Sources, 1973-2007



Total, January-December

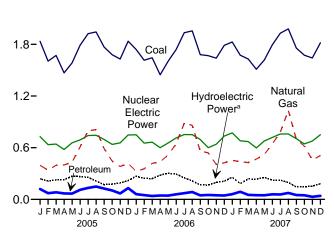


<sup>a</sup>Conventional hydroelectric power.

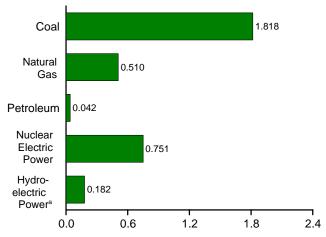
Note: Because vertical scales differ, graphs should not be compared.

By Major Sources, Monthly

2.4-



By Major Sources, December 2007



Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.

Source: Table 2.6.

**Table 2.6 Electric Power Sector Energy Consumption** 

(Trillion Btu)

						Prima	ry Consun	nptiona					
		Fossil	Fuels					Renewabl	e Energy <sup>b</sup>			Floo	
	Coal	Natural Gas <sup>c</sup>	Petro- leum	Total	Nuclear Electric Power	Hydro- electric Power <sup>d</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Elec- tricity Net Imports	Total Primary
1973 Total	8,658	3,748	3,515	15,921	910	2,827	43	NA	NA	3	2,873	49	19,753
1975 Total	8,786	3,240	3,166	15,191	1,900	3,122	70	NA	NA	2	3,194	21	20,307
1980 Total	12,123	3,778	2,634	18,534	2,739	2,867	110	NA (.)	NA (.)	4	2,982	71	24,327
1985 Total		3,135	1,090	18,767	4,076	2,937	198	<u>(s)</u>	<u>(s)</u>	14	3,150	140	26,132
1990 Total <sup>e</sup>	16,261	3,309	1,289	20,859	6,104	3,014	326	4	29	317	3,689	8	30,660
1995 Total	17,466	4,302	755	22,523	7,075	3,149	280	5 5	33	422	3,889	134	33,621
1996 Total 1997 Total	18,429 18,905	3,862 4,126	817 927	23,109 23,957	7,087 6,597	3,528 3,581	300 309	5 5	33 34	438 446	4,305 4,375	137 116	34,638 35,045
1998 Total	19,216	4,675	1,306	25,937 25,197	7,068	3,241	311	5	31	444	4,032	88	36,385
1999 Total	19,279	4,902	1,211	25,393	7,610	3,218	312	5	46	453	4,032	99	37,136
2000 Total	20,220	5,293	1,144	26,658	7,862	2,768	296	5	57	453	3,579	115	38,214
2001 Total	19,614	5,458	1,277	26,348	8,033	2,209	289	6	70	337	2,910	75	37,366
2002 Total	19,783	5,767	961	26,511	8,143	2,650	305	6	105	380	3,445	72	38,171
2003 Total	20,185	5,246	1,205	26,636	7,959	2,781	303	5	115	397	3,601	22	38,218
2004 Total	20,305	5,595	1,212	27,112	8,222	2,656	311	6	142	388	3,503	39	38,876
2005 January	1,835	395	120	2,349	729	239	26	(s)	11	34	311	5	3,394
February	1,605	339	72	2,016	636	213	22	(s)	10	31	277	6	2,935
March	1,671	396	82	2,149	642	226	25	(s)	16	34	302	8	3,102
April	1,469	400	69	1,938	579	228	25	1	17	30	300	6	2,824
May	1,585	434	68	2,086	657	270	27	1	17	33	348	5	3,097
June	1,789	608	111	2,508	690	265	26	1	18	34	344	5	3,548
July	1,924	796	133	2,853	742	257	27	1	14	37	335	10	3,940
August	1,945	811	149	2,904	745	213	26	1	11	36	288	12	3,949
September	1,769	591	126	2,486	696	171	26	1	15	34	246	7	3,435
October November	1,680 1,630	445 382	103 69	2,228 2,081	639 656	178 191	26 26	(s) (s)	14 16	32 34	251 267	6 6	3,124 3,011
December	1,836	416	132	2,384	749	218	26	(s)	18	36	299	7	3,439
Total	20,737	6,015	1,235	27,986	8,160	2,670	309	6	178	406	3,568	84	39,799
2006 January	1,740	326	61	2,128	750	268	26	(s)	24	37	355	5	3,238
February	1,615	355	50	2,020	653	243	23	(s)	19	34	319	5	2,998
March	1,644	417	39	2,101	665	242	27	(s)	23	35	327	6	3,099
April	1,446	437	46	1,928	601	281	24	1	25	30	360	5	2,893
May	1,605	517	44	2,166	655	304	23	1	24	33	384	5	3,210
June	1,740	645	59	2,444	714	293	25	1	20	34	373	5	3,535
July	1,936	885	72	2,893	753	250	27	1	19	36	333	10	3,989
August	1,957	861	86	2,904	751	214	27	1	16	37	295	10	3,960
September	1,681	561 540	47 51	2,289	695 600	169 166	26	(c)	19 24	34 34	248	(s)	3,232
October November	1,669 1,640	540 406	51 48	2,260 2,094	641	166 197	27 25	(s) (s)	24 25	34 35	252 283	1	3,113 3,020
December	1,789	425	46	2,094	735	211	23 27	(s)	25 25	36	299	8	3,301
Total	20,462	6,375	648	27,485	8,214	2,839	306	5	264	412	3,827	63	39,589
<b>2007</b> January	1,828	453	60	2,341	772	258	27	(s)	24	38	347	6	3,467
February	1,674	438	89	2,201	681	183	25	(s)	25	36	269	10	3,160
March	1,629	428	53	2,109	671	239	26	(s)	30	36	331	6	3,117
April	1,511	468	49	2,028	598	235	24	1	32	33	325	10	2,961
May	1,619	521	48	2,188	678	255	25	1	28	34	343	13	3,222
June	1,795	643	59	2,496	719	225	26	1	24	36	311	11	3,538
July	1,930	781	57	2,768	759	223	27	1	19	36	306	13	3,845
August	1,980	1,032	75 54	3,087	759 705	196	27	1	24	37	285	11	4,142
September	1,757	695	51	2,503	705	144	26	1	26	35	232	5	3,445
October	1,675	620 457	48	2,342	644	146 155	27	(s)	30	32	236	6 R 9	3,228
November	1,641 1,818	457 510	30 42	2,128	678 751	155 182	26	(s)	27	36 37	243 275	7	3,058
December  Total	20,856	7,046	42 660	2,370 <b>28,563</b>	751 <b>8,415</b>	2,440	27 <b>312</b>	(s) <b>6</b>	28 <b>319</b>	427	3,503	107	3,402 <b>40,588</b>
	20,030	7,040	000	20,303	0,413	۷,440	312	U	313	441	3,303	107	70,300

<sup>&</sup>lt;sup>a</sup> See Note 2, "Primary Energy Consumption," at end of Section 1.

output. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/consump.html for all available data beginning in 1973.

Sources: Tables 3.8c, 4.3, 6.2, 7.1, 7.2b, 10.2c, A4, A5, and A6.

b See Table 10.2c for notes on series components.

<sup>&</sup>lt;sup>c</sup> Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

<sup>&</sup>lt;sup>d</sup> Conventional hydroelectric power.

<sup>&</sup>lt;sup>e</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Data are for fuels consumed to produce electricity and useful thermal

# **Energy Consumption by Sector**

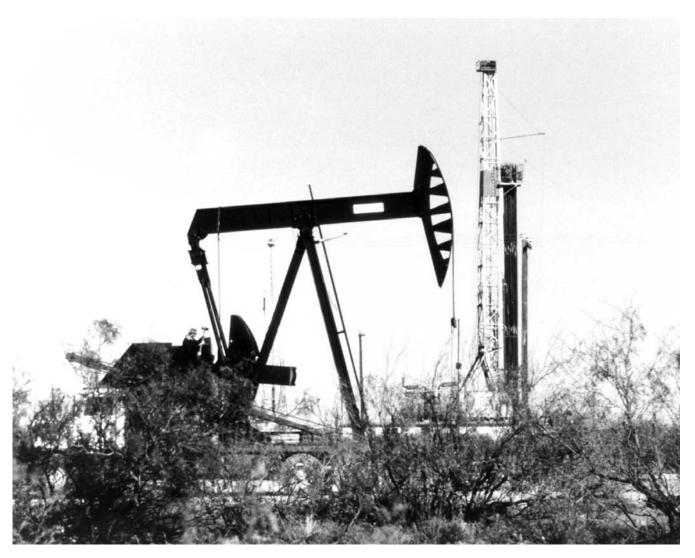
**Note 1. Energy Consumption Data and Surveys.** Most of the data in this section of the *Monthly Energy Review* (*MER*) are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the Energy Information Administration (EIA). Supply surveys are directed to suppliers and marketers of specific energy sources. They measure the quantities of specific energy sources produced, or the quantities supplied to the market, or both. The data obtained from EIA's supply surveys are integrated to yield the summary consumption statistics published in this section (and in Section 1) of the *MER*.

Users of EIA's energy consumption statistics should be aware of a second group of energy-related surveys, typically called "consumption surveys." Consumption surveys gather information on the types of energy consumed by end users of energy, along with the characteristics of those end users that can be associated with energy use. For example, the Manufacturing Energy Consumption Survey belongs to the consumption survey group because it collects information directly from end users (the manufacturing establishments). There are important differences between the supply and consumption surveys that need to be taken into account in any analysis that uses both data sources. For information on those differences, see *Energy Consumption by End-Use* 

Sector, A Comparison of Measures by Consumption and Supply Surveys, DOE/EIA-0533, Energy Information Administration, Washington, DC, April 6, 1990.

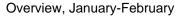
Note 2. Electrical System Energy Losses. Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector (see Table 2.6) and the total energy content of electricity retail sales (see Tables 7.6 and A6). Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steamelectric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring those thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to enduse consumers (also called "line losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, approximately 67 percent of total energy input is lost in conversion; of electricity generated, approximately 5 percent is lost in plant use and 9 percent is lost in transmission and distribution.

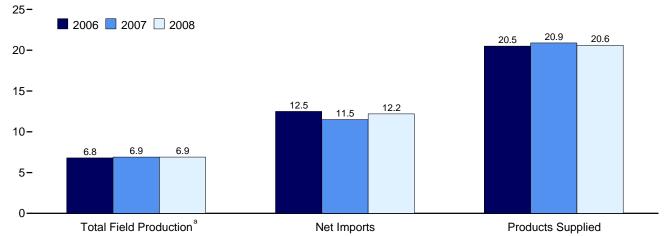
# Petroleum



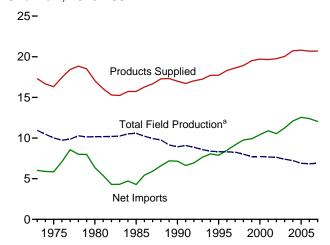
Oil pumping unit and drilling rig, Texas. Source: U.S. Department of Energy.

**Petroleum Overview** Figure 3.1 (Million Barrels per Day)

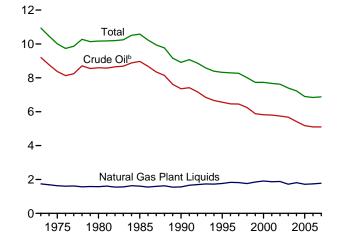




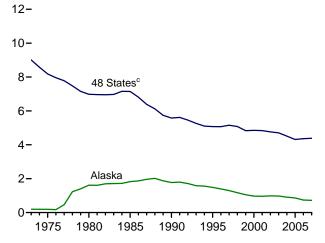
# Overview, 1973-2007



# Total Field Production, 1973-2007

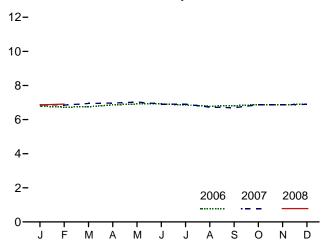


# Crude Oil<sup>b</sup> Field Production, 1973-2007



<sup>&</sup>lt;sup>a</sup>Crude oil, including lease condensate, and natural gas plant liquids field production.

# Total Field Production<sup>a</sup>, Monthly



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.1.

<sup>&</sup>lt;sup>b</sup>Includes lease condensate.

<sup>&</sup>lt;sup>c</sup>United States excluding Alaska and Hawaii.

**Table 3.1 Petroleum Overview** 

		Fie	eld Produc	tiona				Trade				
	48 States <sup>c</sup>	Crude Oil	Total	NGPL <sup>d,e</sup>	Total	Processing Gain <sup>f</sup>	Imports <sup>9</sup>	Exports <sup>e</sup>	Net Imports <sup>h</sup>	Stock Change <sup>i</sup>	Adjust- ments <sup>j</sup>	Petroleum Products Supplied
1973 Average	9,010	198	9,208	1,738	10,946	453	6,256	231	6,025	135	18	17,308
1975 Average		191	8,375	1,633	10,007	460	6,056	209	5,846	32	41	16,322
1980 Average		1,617	8,597	1,573	10,170	597	6,909	544	6,365	140	64	17,056
1985 Average		1,825	8,971	1,609	10,581	557	5,067	781	4,286	-103	200	15,726
1990 Average		1,773	7,355	1,559	8,914	683	8,018	857	7,161	107	338	16,988
1995 Average		1,484	6,560	1,762	8,322	774	8,835	949	7,886	-246	496	17,725
1996 Average	-,	1,393	6,465	1,830	8,295	837	9,478	981	8,498	-151	528	18,309
1997 Average		1,296	6.452	1,817	8,269	850	10,162	1,003	9,158	143	487	18,620
1998 Average		1,175	6.252	1,759	8.011	886	10,708	945	9.764	239	495	18,917
1999 Average	./	1,050	5,881	1,850	7,731	886	10,852	940	9,912	-422	567	19,519
2000 Average		970	5,822	1,911	7,733	948	11,459	1,040	10,419	-69	532	19,701
2001 Average		963	5.801	1,868	7,670	903	11,871	971	10,900	325	501	19,649
2002 Average	,	984	5,746	1,880	7,626	957	11,530	984	10,546	-105	527	19,761
2003 Average		974	5,681	1,719	7,400	974	12,264	1,027	11,238	56	478	20,034
2004 Average		908	5,419	1,809	7,228	1.051	13,145	1,048	12,097	209	564	20,731
2005 Average		864	5,178	1,717	6,895	989	13,714	1,165	12,549	145	513	20,802
2006 January	4,274	832	5,106	1,682	6,788	1,001	13,796	1,059	12,737	484	395	20,436
February		821	5,045	1,682	6,727	1,028	13,565	1,276	12,289	235	767	20,577
March		752	5,045	1,702	6,747	907	12,904	1,170	11,734	-905	316	20,608
April	4,328	800	5,128	1,737	6,866	944	13,438	1,398	12,039	311	663	20,201
May	4,360	801	5,161	1,755	6,916	979	14,315	1,350	12,965	743	340	20,457
June		781	5,160	1,756	6,915	968	14,253	1,334	12,918	174	353	20,982
July	4,421	681	5,102	1,759	6,861	1,000	13,984	1,387	12,596	457	740	20,740
August	4,438	621	5,059	1,732	6,792	1,077	14,697	1,255	13,442	642	765	21,434
September		655	5,037	1,776	6,814	1,026	14,491	1,554	12,937	740	522	20,559
October	4,392	714	5,106	1,773	6,879	992	13,317	1,506	11,810	-515	573	20,769
November	4,450	655	5,105	1,770	6,875	959	13,005	1,353	11,651	-798	386	20,669
December	4,381	785	5,166	1,736	6,903	1,048	12,721	1,164	11,556	-825	463	20,795
Average	4,361	741	5,102	1,739	6,841	994	13,707	1,317	12,390	60	522	20,687
<b>2007</b> January		E 772	E 5,196	1,670	E 6,866	1,058	13,623	1,478	12,145	80	569	20,559
February		E 753	E 5,147	1,706	E 6,853	959	12,168	1,373	10,795	-2,066	599	21,271
March		E 746	E 5,178	1,767	E 6,945	943	13,894	1,260	12,634	363	369	20,529
April		E 745	E 5,218	1,749	E 6,968	958	13,896	1,313	12,583	384	455	20,579
May		E 765	E 5,240	1,787	E 7,028	946	14,164	1,380	12,784	976	848	20,631
June		E 714	E 5,139	1,775	E 6,915	1,019	13,501	1,320	12,180	349	973	20,737
July		E 716	E 5,120	1,778	E 6,898	1,029	13,677	1,504	12,173	201	741	20,641
August		E 606	E 4,976	1,755	E 6,731	1,014	13,599	1,480	12,119	-554	633	21,051
September		E 639	E 4,899	1,795	E 6,694	1,005	13,639	1,357	12,282	28	432	20,385
October		E 698	E 5,038	1,837	E 6,876	994	12,950	1,322	11,628	-398	559	20,455
November		E 740	E 5,006	1,868	E 6,874	1,023	13,195	1,626	11,569	-682	559	20,708
December		RE 735	RE 5,072	R 1,823	RE 6,895	R 1,112	R 12,855	R 1,371	R 11,484	R -790	R 588	R 20,869
Average	RE <b>4,384</b>	<sup>E</sup> 719	RE <b>5</b> ,103	<sup>R</sup> 1,776	RE 6,879	R 1,005	<sup>R</sup> 13,439	R 1,399	<sup>R</sup> 12,040	R -162	<sup>R</sup> 611	R <b>20,698</b>
2008 January		E 710	E 5,020	E 1,839	E 6,859	E 977	E 13,761	E 1,266	E 12,495	E 409	E 766	E 20,688
February		E 709	E 5,045	E 1,865	E 6,910	E 966	E 13,236	E 1,342	E 11,894	E -114	E 654	E 20,538
2-Month Average	⁴ 4,323	E 710	E 5,032	E 1,852	€ 6,884	<sup>E</sup> 972	E 13,507	E 1,303	E 12,205	E 156	E 712	E 20,616
2007 2-Month Average 2006 2-Month Average		E 763 826	<sup>E</sup> 5,173 5,077	1,687 1,682	<sup>E</sup> 6,860 6,759	1,011 1,014	12,932 13,686	1,428 1,162	11,504 12,524	-938 366	583 571	20,897 20,503

<sup>&</sup>lt;sup>a</sup> Crude oil production on leases, and natural gas liquids (liquefied petroleum gases, pentanes plus, and a small amount of finished petroleum products) production at natural gas processing plants. Excludes what was previously classified as "Field Production" of finished motor gasoline, motor gasoline blending components, and other hydrocarbons and oxygenates; these are now included in "Adjustments."

distillate fuel oil stocks in the Northeast Heating Oil Reserve. See Table 3.4. Also see Note 4, "New Stock Basis," at end of section.

<sup>j</sup> An adjustment for crude oil, motor gasoline blending components, and fuel ethanol. Through 1988, also includes a small amount of distillate fuel oil production at natural gas processing plants.

R=Revised. E=Estimate.

Notes: • Totals may not equal sum of components due to independent

rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum* 

Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2006: EİA, Petroleum Supply Annual, annual reports. • 2007 and 2008: EİA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations.

Monthly Energy Review Section 3 was redesigned in the January 2008 release. See "What's New" (http://www.eia.doe.gov/emeu/mer/wni.html) for a summary of the changes.

Includes lease condensate.

<sup>&</sup>lt;sup>c</sup> United States excluding Alaska and Hawaii.

Natural gas plant liquids.

See Note 6. "Data Discrepancies." at end of section.

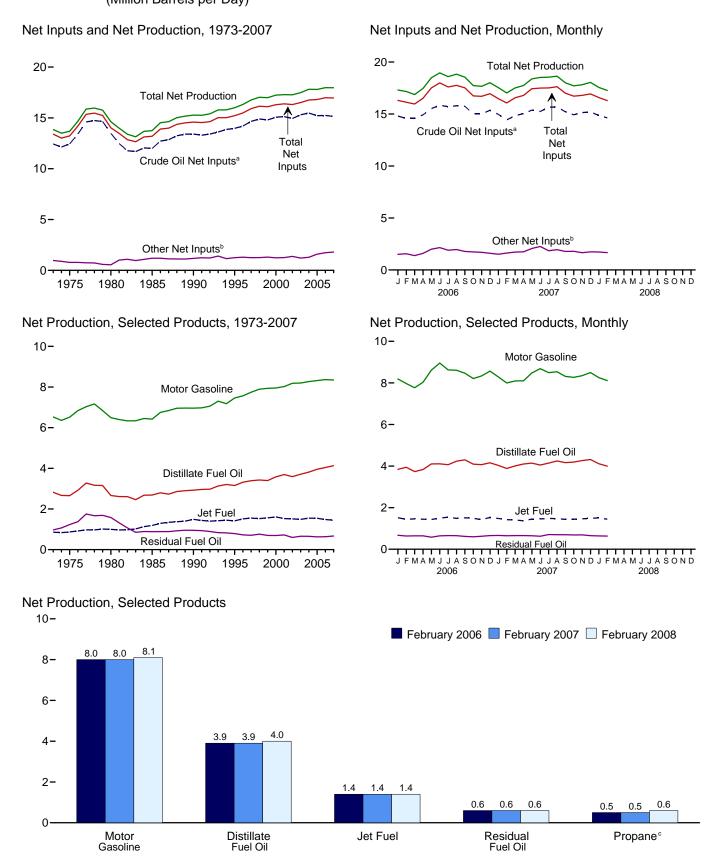
Refinery and blender net production minus refinery and blender net inputs.

<sup>&</sup>lt;sup>9</sup> Includes Strategic Petroleum Reserve imports. See Table 3.3b

Net imports equal imports minus exports.

A negative value indicates a decrease in stocks and a positive value indicates an increase. The current month stock change estimate is based on the change from the previous month's estimate, rather than the stocks values shown in Table 3.4. Includes crude oil stocks in the Strategic Petroleum Reserve, but excludes

Figure 3.2 Refinery and Blender Net Inputs and Net Production (Million Barrels per Day)



<sup>&</sup>lt;sup>a</sup>Includes lease condensate.

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.2.

<sup>&</sup>lt;sup>b</sup>Natural gas plant liquids and other liquids.

clncludes propylene.

Table 3.2 Refinery and Blender Net Inputs and Net Production

	Refin	ery and Ble	nder Net I	nputs <sup>a</sup>			Refinery	and Blen	der Net Pro	ductionb		
	Crude		Other		Distillate	Jet	LPG		Motor	Residual	Other	
	Oild	NGPLe	Liquids	Total	Fuel Oil	Fuel <sup>g</sup>	Propane <sup>h</sup>	Total	Gasoline <sup>1</sup>	Fuel Oil	Products	Total
1973 Average	12,431	815	155	13,401	2,820	859	271	375	6,527	971	2,301	13,854
1975 Average		710	72	13,225	2,653	871	234	311	6,518	1,235	2,097	13,685
1980 Average	13,481	462	81	14,025	2,661	999	269	330	6,492	1,580	2,559	14,622
1985 Average	12,002	509	681	13,192	2,686	1,189	295	391	6,419	882	2,183	13,750
1990 Average	13,409	467	713	14,589	2,925	1,488	404	499	6,959	950	2,452	15,272
1995 Average	13,973	471	775	15,220	3,155	1,416	503	654	7,459	788	2,522	15,994
1996 Average	14,195	450	843	15,487	3,316	1,515	520	662	7,565	726	2,541	16,324
1997 Average	14,662	416	832	15,909	3,392	1,554	565	691	7,743	708	2,671	16,759
1998 Average	14,889	403	853	16,144	3,424	1,526	550	674	7,892	762	2,753	17,030
1999 Average		372	927	16,103	3,399	1,565	569	684	7,934	698	2,709	16,989
2000 Average	15,067	380	849	16,295	3,580	1,606	583	705	7,951	696	2,705	17,243
2001 Average		429	825	16,382	3,695	1,530	556	667	8,022	721	2,651	17,285
2002 Average	14,947	429	941	16,316	3,592	1,514	572	671	8,183	601	2,712	17,273
2003 Average	15,304	419	791	16,513	3,707	1,488	570	658	8,194	660	2,780	17,487
2004 Average	15,475	422	866	16,762	3,814	1,547	584	645	8,265	655	2,887	17,814
2005 Average	15,220	441	1,149	16,811	3,954	1,546	540	573	8,318	628	2,782	17,800
2006 January	14,805	553	952	16,310	3,840	1,515	528	393	8,189	670	2,703	17,311
February		508	1,047	16,136	3,941	1,438	510	487	7,969	635	2,694	17,164
March		448	935	15,965	3,736	1,461	485	587	7,765	644	2,680	16,872
April		442	1,151	16,521	3,833	1,447	537	779	8,032	643	2,731	17,465
May		471	1,523	17,510	4,105	1,435	567	856	8,613	580	2,900	18,488
June		466	1,683	17,992	4,107	1,493	543	814	8,957	645	2,944	18,960
July	15,702	423	1,475	17,599	4,065	1,540	549	829	8,624	658	2,883	18,599
August		447	1,519	17,758	4,234	1,485	574	860	8,610	652	2,993	18,835
September		498	1,285	17,521	4,300	1,511	560	622	8,465	619	3,030	18,548
October		548	1,187	16,743	4,090	1,490	531	511	8,210	597	2,836	17,735
November	15,009	573	1,122	16,703	4,070	1,422	549	393	8,335	624	2,818	17,662
December		637	969	16,959	4,159	1,529	581	387	8,567	656	2,710	18,007
Average		501	1,238	16,981	4,040	1,481	543	627	8,364	635	2,827	17,975
2007 January	14,964	544	966	16,473	4,032	1,480	575	455	8,284	664	2,615	17,532
February		461	1,170	16,063	3,886	1,423	534	494	7,999	649	2,570	17,022
March		439	1,284	16,567	4,009	1,405	562	677	8,095	656	2,669	17,510
April	15,042	422	1,321	16,784	4,099	1,368	562	803	8,101	658	2,713	17,742
May		452	1,616	17,437	4,141	1,451	576	871	8,477	647	2,798	18,383
June	15,242	454	1,802	17,498	4,051	1,459	568	866	8,687	627	2,826	18,516
July	15,662	459	1,392	17,513	4,143	1,484	562	828	8,493	707	2,888	18,542
August		445	1,502	17,626	4,247	1,470	541	807	8,535	697	2,883	18,640
September		496	1,285	17,000	4,166	1,436	560	624	8,311	697	2,770	18,005
October		560	1,233	16,720	4,193	1,446	539	497	8,268	688	2,622	17,714
November		628	1,027	16,798	4,265	1,463	568	389	8,346	692	2,667	17,821
December		R 600	R 1,139	R 16,933	R 4,316	R 1,489	<sup>R</sup> 598	R 443	R 8,496	R 653	R 2,648	R 18,044
Average		R <b>497</b>	R 1,312	R 16,957	R 4,131	R 1,448	R <b>562</b>	R <b>647</b>	R <b>8,344</b>	R 670	R 2,723	R 17,963
2008 January		RF 554	RE 1,171	RF 16,583	E 4,113	E 1,505	E 580	F 457	E 8,253	E 639	RE 2,593	RE 17,560
February	E 14,629	F 495	E 1,174	F 16,298	E 3,995	E 1,445	E 564	F 520	E 8,112	E 632	E 2,560	E 17,264
2-Month Average	E 14,747	F 526	E 1,172	F 16,445	E 4,056	E 1,476	<sup>E</sup> 573	F 488	E 8,185	<sup>E</sup> 636	E 2,577	E 17,417
2007 2-Month Average		504	1,063	16,278	3,963	1,453	555	474	8,149	657	2,594	17,290
2006 2-Month Average	14,698	532	997	16,227	3,888	1,479	520	437	8,085	654	2,699	17,241

<sup>&</sup>lt;sup>a</sup> See "Refinery Input" in Glossary.

miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel. R=Revised. E=Estimate. F=Forecast.

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

Web Pages: • For all available data beginning in 1973, see

Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2006: Petroleum Supply Annual, annual reports. • 2007 and 2008: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations.

b See "Refinery Output" in Glossary.

<sup>&</sup>lt;sup>c</sup> Liquefied petroleum gases.

d Includes lease condensate.

e Natural gas plant liquids (liquefied petroleum gases and pentanes plus).

f Unfinished oils (net), other hydrocarbons, and hydrogen. Beginning in 1981, also includes aviation and motor gasoline blending components (net). Beginning in 1993, also includes oxygenates (net).

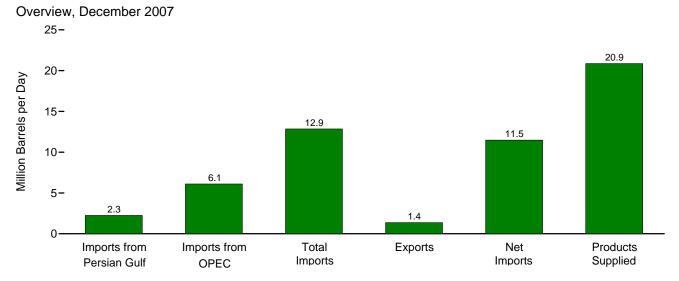
<sup>9</sup> Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other Products."

Includes propylene.

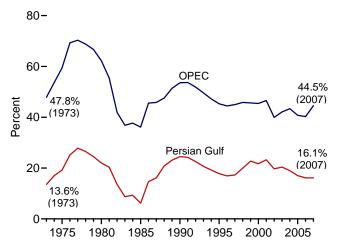
Finished motor gasoline.

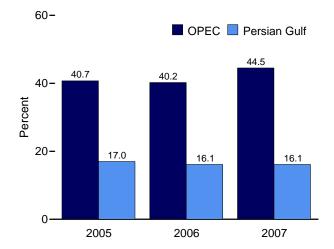
<sup>&</sup>lt;sup>j</sup> Asphalt and road oil, finished aviation gasoline, kerosene, lubricants, petrochemical feedstocks, petroleum coke, special naphthas, still gas, waxes, and

Figure 3.3a Petroleum Trade: Overview

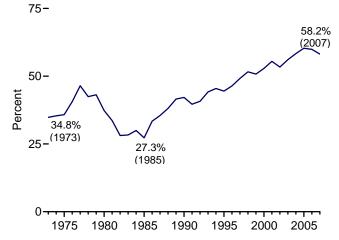


Imports from OPEC and the Persian Gulf as Share of Total Imports
1973-2007 January-December

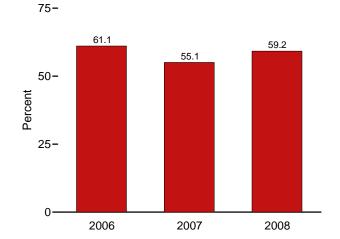




Net Imports as Share of Products Supplied 1973-2007



January-February



Notes: • OPEC=Organization of the Petroleum Exporting Countries. • Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.3a.

Table 3.3a Petroleum Trade: Overview

									are of Supplied			nare of mports
	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>	Imports	Exports	Net Imports	Products Supplied	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>	Imports	Net Imports	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>
			Thousand Ba	arrels per Da	ıy				Pe	rcent		
1973 Average	848	2,993	6,256	231	6,025	17,308	4.9	17.3	36.1	34.8	13.6	47.8
1975 Average	1,165	3,601	6,056	209	5,846	16,322	7.1	22.1	37.1	35.8	19.2	59.5
1980 Average	1,519	4,300	6,909	544	6,365	17,056	8.9	25.2	40.5	37.3	22.0	62.2
1985 Average	311	1,830	5,067	781	4,286	15,726	2.0	11.6	32.2	27.3	6.1	36.1
1990 Average	1,966	4,296	8,018	857	7,161	16,988	11.6	25.3	47.2	42.2	24.5	53.6
1995 Average	1,573	4,002	8,835	949	7,886	17,725	8.9	22.6	49.8	44.5	17.8	45.3
1996 Average	1,604	4,211	9,478	981	8,498	18,309	8.8	23.0	51.8	46.4	16.9	44.4
1997 Average	1,755	4,569	10,162	1,003	9,158	18,620	9.4	24.5	54.6	49.2	17.3	45.0
1998 Average	2,136	4,905	10,708	945	9,764	18,917	11.3	25.9	56.6	51.6	19.9	45.8
1999 Average	2,464	4,953	10,852	940	9,912	19,519	12.6	25.4	55.6	50.8	22.7	45.6
2000 Average	2,488	5,203	11,459	1,040	10,419	19,701	12.6	26.4	58.2	52.9	21.7	45.4
2001 Average	2,761	5,528	11,871	971	10,900	19,649	14.1	28.1	60.4	55.5	23.3	46.6
2002 Average	2,269	4,605	11,530	984	10,546	19,761	11.5	23.3	58.3	53.4	19.7	39.9
2003 Average	2,501	5,162	12,264	1,027	11,238	20,034	12.5	25.8	61.2	56.1	20.4	42.1
2004 Average	2,493	5,701	13,145	1,048	12,097	20,731	12.0	27.5	63.4	58.4	19.0	43.4
2005 Average	2,334	5,587	13,714	1,165	12,549	20,802	11.2	26.9	65.9	60.3	17.0	40.7
2006 January	1,994	5,596	13,796	1,059	12,737	20,436	9.8	27.4	67.5	62.3	14.5	40.6
February	2,068	5,502	13,565	1,276	12,289	20,577	10.0	26.7	65.9	59.7	15.2	40.6
March	1,958	5,088	12,904	1,170	11,734	20,608	9.5	24.7	62.6	56.9	15.2	39.4
April	2,361	5,488	13,438	1,398	12,039	20,201	11.7	27.2	66.5	59.6	17.6	40.8
May	2,389	5,819	14,315	1,350	12,965	20,457	11.7	28.4	70.0	63.4	16.7	40.7
June	2,355	5,691	14,253	1,334	12,918	20,982	11.2	27.1	67.9	61.6	16.5	39.9
July	2,078	5,509	13,984	1,387	12,596	20,740	10.0	26.6	67.4	60.7	14.9	39.4
August	2,314	5,729	14,697	1,255	13,442	21,434	10.8	26.7	68.6	62.7	15.7	39.0
September	2,481	5,842	14,491	1,554	12,937	20,559	12.1	28.4	70.5	62.9	17.1	40.3
October	2,132	5,538	13,317	1,506	11,810	20,769	10.3	26.7	64.1	56.9	16.0	41.6
November	2,339	5,181	13,005	1,353	11,651	20,669	11.3	25.1	62.9	56.4	18.0	39.8
December	2,079	5,221	12,721	1,164	11,556	20,795	10.0	25.1	61.2	55.6	16.3	41.0
Average	2,211	5,517	13,707	1,317	12,390	20,687	10.7	26.7	66.3	59.9	16.1	40.2
2007 January	2,294	6,093	13,623	1,478	12,145	20,559	11.2	29.6	66.3	59.1	16.8	44.7
February	1,716	5,342	12,168	1,373	10,795	21,271	8.1	25.1	57.2	50.7	14.1	43.9
March	2,072	6,296	13,894	1,260	12,634	20,529	10.1	30.7	67.7	61.5	14.9	45.3
April	2,192	5,977	13,896	1,313	12,583	20,579	10.7	29.0	67.5	61.1	15.8	43.0
May	2,148	6,187	14,164	1,380	12,784	20,631	10.4	30.0	68.7	62.0	15.2	43.7
June	2,372	6,119	13,501	1,320	12,180	20,737	11.4	29.5	65.1	58.7	17.6	45.3
July	2,099	5,727	13,677	1,504	12,173	20,641	10.2	27.7	66.3	59.0	15.3	41.9
August	2,171	6,106	13,599	1,480	12,119	21,051	10.3	29.0	64.6	57.6	16.0	44.9
September	2,333	6,250	13,639	1,357	12,282	20,385	11.4	30.7	66.9	60.2	17.1 16.0	45.8
October	2,077	5,606	12,950	1,322	11,628 11.569	20,455	10.2 11.0	27.4 28.7	63.3 63.7	56.8 55.9	16.0 17.3	43.3 45.0
November	2,281 R 2,253	5,941 <sup>R</sup> 6,109	13,195 R 12,855	1,626 <sup>R</sup> 1,371	R 11,484	20,708 R 20,869	R 10.8	28.7 R 29.3	63.7 R 61.6	55.9 R 55.0	17.3 R 17.5	45.0 R 47.5
December  Average	R <b>2,253</b>	R <b>5,983</b>	R <b>13,439</b>	R <b>1,371</b>	R <b>12,040</b>	R <b>20,698</b>	R 10.8	R <b>28.9</b>	64.9	<b>58.2</b>	R <b>16.1</b>	R <b>44.5</b>
2008 January	NA	NA	E 13,761	E 1,266	E 12,495	E 20,688	NA	NA	E 66.5	E 60.4	NA	NA
February	NA	NA	E 13,236	E 1,342	E 11,894	E 20,538	NA	NA	E 64.4	E 57.9	NA	NA
2-Month Average	NA	NA	E 13,507	E 1,303	E 12,205	E 20,616	NA	NA	E 65.5	E 59.2	NA	NA
2007 2-Month Average 2006 2-Month Average	2,019 2,029	5,737 5,551	12,932 13,686	1,428 1,162	11,504 12,524	20,897 20,503	9.7 9.9	27.5 27.1	61.9 66.8	55.1 61.1	15.6 14.8	44.4 40.6

<sup>&</sup>lt;sup>a</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

Notes: • Readers of this table may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 *Monthly Energy Review.* See http://www.eia.doe.gov/emeu/mer/pdf/pages/imported\_oil.pdf. • Beginning in October 1977, data include Strategic Petroleum Reserve imports. See Table 3.3b. • Annual averages may not equal average of months due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports

include receipts from U.S. territories.

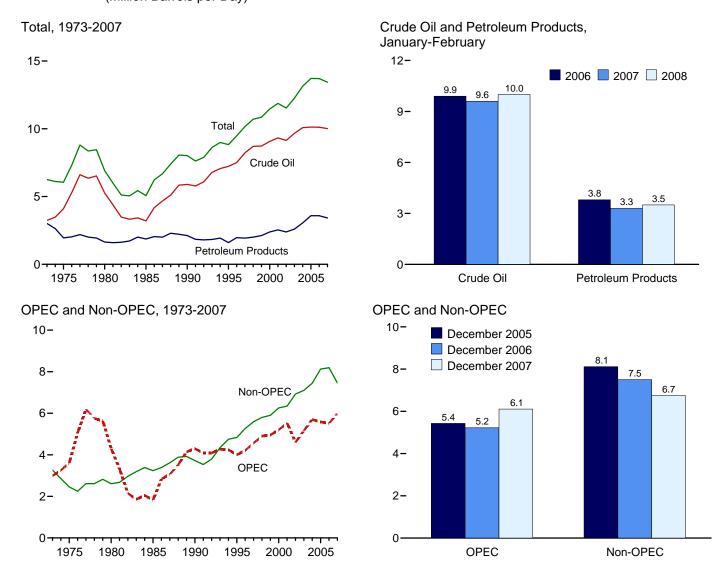
Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2006: EIA, Petroleum Supply Annual, annual reports. • 2007 and 2008: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations.

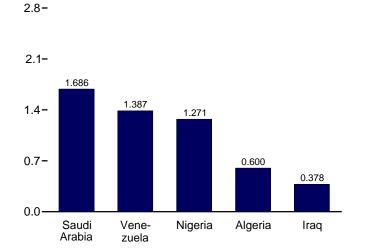
<sup>&</sup>lt;sup>b</sup> Organization of the Petroleum Exporting Countries. See Glossary.

R=Revised. E=Estimate. NA=Not available.

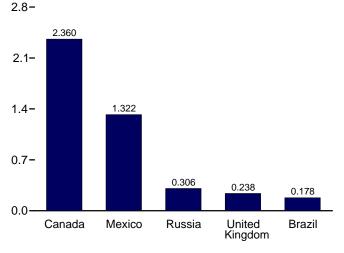
Figure 3.3b Petroleum Trade: Imports (Million Barrels per Day)



From Selected OPEC Countries, December 2007From Selected Non-OPEC Countries, December 2007



Notes: • OPEC=Organization of the Petroleum Exporting Countries. • Because vertical scales differ, graphs should not be compared.



Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Sources: Tables 3.3b-3.3d.

Table 3.3b Petroleum Trade: Imports and Exports by Type

					lmp	orts						Exports	
	Cru	de Oila	Distillate	Jet	LPC	<b>3</b> b	Motor	Residual			Crude	Petroleum	
	SPR <sup>c,d</sup>	Total	Fuel Oil	Fuele	Propane	Total	Gasoline <sup>f</sup>	Fuel Oil	Other <sup>g</sup>	Total	Oila	Products	Total
1973 Average		3,244	392	212	71	132	134	1,853	290	6,256	2	229	231
1975 Average		4,105	155	133	60	112	184	1,223	144	6,056	6	204	209
1980 Average	44	5,263	142	80	69	216	140	939	130	6,909	287	258	544
1985 Average	118	3,201 5,894	200 278	39 108	67 115	187 188	381 342	510 504	550 705	5,067	204 109	577 748	781 857
1990 Average 1995 Average	27 0	7,230	193	106	102	146	265	187	705 708	8,018 8,835	95	746 855	949
1996 Average	0	7,508	230	111	119	166	336	248	879	9,478	110	871	981
1997 Average	0	8,225	228	91	113	169	309	194	945	10,162	108	896	1,003
1998 Average	ŏ	8,706	210	124	137	194	311	275	888	10,708	110	835	945
1999 Average	8	8,731	250	128	122	182	382	237	943	10,852	118	822	940
2000 Average	8	9,071	295	162	161	215	427	352	938	11,459	50	990	1,040
2001 Average	11	9,328	344	148	145	206	454	295	1,095	11,871	20	951	971
2002 Average	16	9,140	267	107	145	183	498	249	1,085	11,530	9	975	984
2003 Average	0	9,665	333	109	168	225	518	327	1,087	12,264	12	1,014	1,027
2004 Average	77	10,088	325	127	209	263	496	426	1,419	13,145	27	1,021	1,048
2005 Average	52	10,126	329	190	233	328	603	530	1,609	13,714	32	1,133	1,165
<b>2006</b> January	0	9,766	552	180	206	287	606	553	1,852	13,796	27	1,032	1,059
February	14	9,983	388	123	206	285	631	458	1,697	13,565	15	1,261	1,276
March	32	9,750	292	118	181	233	554	359	1,598	12,904	29	1,140	1,170
April	33 23	9,859 10.303	297 437	218 230	243 174	366 309	510 511	283 308	1,904	13,438	26 27	1,372 1,323	1,398
May	23 0	10,303	437 297	190	241	372	407	306 348	2,216 1.927	14,315 14.253	33	1,323	1,350 1.334
June July	0	10,712	361	201	241	350	439	323	2.080	13,984	13	1,301	1,334
August	0	10,229	363	257	265	392	560	348	2,000	14.697	15	1,374	1,255
September	0	10,710	438	234	281	447	376	322	1,964	14,491	21	1,533	1,554
October	Ő	10,106	307	171	267	382	405	321	1,625	13,317	37	1,469	1,506
November	0	9,888	288	101	215	279	388	292	1,769	13,005	24	1,329	1,353
December	0	9,555	355	197	224	285	324	290	1,713	12,721	27	1,137	1,164
Average	8	10,118	365	186	228	332	475	350	1,881	13,707	25	1,292	1,317
<b>2007</b> January	0	10,192	352	175	240	315	356	391	1,842	13,623	9	1,469	1,478
February	0	9,049	334	227	181	224	372	314	1,648	12,168	25	1,348	1,373
March	18	10,348	360	249	174	223	361	510	1,844	13,894	34	1,226	1,260
April	0	10,181	322	316	126	195	498	380	2,003	13,896	19	1,294	1,313
May June	0	10,292 9,983	272 273	227 215	149 154	236 280	580 430	360 360	2,197 1,959	14,164 13,501	36 52	1,343 1,268	1,380 1,320
July	0	9,903	318	263	132	219	430	400	2,141	13,677	27	1,477	1,504
August	0	10,284	346	226	168	238	395	351	1,759	13,599	42	1,438	1,480
September	0	10,204	261	202	225	278	472	347	1,764	13,639	34	1,323	1,357
October	34	9,776	288	184	197	250	319	299	1,834	12,950	11	1,311	1,322
November	19	9,978	245	180	227	273	302	397	1,820	13,195	20	1,606	1,626
December	R 0	R 9,823	R 241	R 136	R 188	R 240	R 351	R 342	R 1,721	R 12,855	R 20	R 1,350	R 1,371
Average	R 6	R 10,017	R 301	R 217	R 180	R 248	R 406	R 371	R 1,880	R 13,439	R 27	R 1,371	R 1,399
2008 January	NA	E 10,233	E 283	E 136	E 235	NA	E 460	E 329	NA	E 13,761	E 26	E 1,240	E 1,266
February	NA	E 9,834	E 256	E 117	E 193	NA	E 416	E 271	NA	E 13,236	E 26	E 1,316	E 1,342
2-Month Average	NA	E 10,040	E 270	E 127	E 215	NA	<sup>E</sup> 439	<sup>E</sup> 301	NA	E 13,507	E 26	E 1,277	E 1,303
2007 2-Month Average 2006 2-Month Average	0 6	9,650 9,869	343 474	200 153	212 206	272 286	364 618	354 508	1,750 1,778	12,932 13,686	17 21	1,411 1,141	1,428 1,162

<sup>&</sup>lt;sup>a</sup> Includes lease condensate.

naphtha-type jet fuel.

R=Revised. NA=Not available. --=Not applicable. E=Estimate.

Notes: • Totals may not equal sum of components due to independent

rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2006: EIA, Petroleum Supply Annual, annual reports. • 2007 and 2008: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations.

Monthly Energy Review Section 3 was redesigned in the January 2008 release. See "What's New" (http://www.eia.doe.gov/emeu/mer/wni.html) for a summary of the changes.

b Liquefied petroleum gases.

<sup>&</sup>lt;sup>c</sup> "SPR" is the Strategic Petroleum Reserve, which began in October 1977. Through 2003, includes crude oil imports by SPR only; beginning in 2004, includes crude oil imports by SPR, and crude oil imports into SPR by others.

<sup>&</sup>lt;sup>d</sup> See Note 6, "Data Discrepancies," at end of section.

<sup>&</sup>lt;sup>e</sup> Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in

<sup>&</sup>quot;Other."

f Finished motor gasoline. Through 1980, also includes motor gasoline blending components.

g Asphalt and road oil, finished aviation gasoline, gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, special naphthas, unfinished oils, waxes, other hydrocarbons and oxygenates, and miscellaneous products. Beginning in 2005, also includes

Table 3.3c Petroleum Trade: Imports From OPEC Countries

	Algeria	Angola <sup>a</sup>	Ecuador <sup>b</sup>	Iraq	Kuwait <sup>c</sup>	Libya	Nigeria	Saudi Arabia <sup>c</sup>	Vene- zuela	Other <sup>d</sup>	Total OPEC
1973 Average	136	(a)	48	4	47	164	459	486	1,135	514	2,993
1975 Average	282	(a)	57	2	16	232	762	715	702	832	3,601
1980 Average	488	(a)	27	28	27	554	857	1,261	481	577	4,300
1985 Average	187	(a)	67	46	21	4	293	168	605	439	1,830
1990 Average	280	(a)	49	518	86	0	800	1,339	1,025	199	4,296
1995 Average	234	(a)	(b)	0	218	0	627	1,344	1,480	98	4,002
1996 Average	256	(a)	(b)	1	236	0	617	1,363	1,676	62	4,211
1997 Average	285	(a)	(b)	89	253	0	698	1,407	1,773	64	4,569
1998 Average	290	(a)	(b)	336	301	0	696	1,491	1,719	73	4,905
1999 Average	259	(a)	(b)	725	248	Ö	657	1,478	1,493	93	4,953
2000 Average	225	(a)	(b)	620	272	Ō	896	1,572	1,546	72	5,203
2001 Average	278	(a)	(b)	795	250	Ō	885	1,662	1,553	105	5,528
2002 Average	264	(a)	ζb;	459	228	Ŏ	621	1,552	1,398	83	4,605
2003 Average	382	(a)	(b)	481	220	Ŏ	867	1,774	1,376	61	5,162
2004 Average	452	(a)	(b)	656	250	20	1,140	1,558	1,554	70	5,701
2005 Average	478	(a)	(b)	531	243	56	1,166	1,537	1,529	47	5,587
2006 January	713	(a)	(b)	532	78	70	1,227	1,369	1,566	41	5,596
February	452	(a)	(b)	446	160	70	1,348	1,451	1,553	22	5,502
March	429	(a)	(b)	476	118	42	1,116	1,364	1,532	10	5,088
April	543	(a)	(b)	531	225	69	1,098	1,595	1,400	28	5,488
May	675	(a)	(b)	666	231	66	1,190	1,492	1,470	30	5,819
June	774	(a)	(b)	617	201	144	1,095	1,529	1,306	26	5,691
July	743	(a)	(b)	592	155	119	1,073	1,313	1,469	46	5,509
August	803	ìaj	(b)	620	155	111	1,035	1,514	1,439	52	5,729
September	796	(a)	(b)	655	227	73	1,078	1,564	1,386	63	5,842
October	817	ìa΄,	(b)	505	239	107	1,088	1,382	1,356	42	5,538
November	462	(a)	(b)	573	259	110	970	1,507	1,281	20	5,181
December	662	(a)	(b)	419	169	67	1,068	1,491	1,274	71	5,221
Average	657	(a)	(b)	553	185	87	1,114	1,463	1,419	38	5,517
2007 January	778	574	(b)	531	172	56	1,136	1,563	1,195	87	6,093
February	555	464	( b )	325	168	105	1,102	1,207	1,359	58	5,342
March	727	708	(b)	523	305	147	1,346	1,244	1,285	11	6,296
April	798	526	(b)	562	135	80	948	1,488	1,412	28	5,977
May	744	692	(b)	341	168	69	964	1,614	1,520	75	6,187
June	709	514	(b)	573	263	170	968	1,534	1,364	24	6,119
July	730	404	(b)	460	202	184	906	1,436	1,386	18	5.727
August	827	412	(b)	520	139	127	1,208	1,499	1,330	43	6,106
September	702	591	(b)	603	170	74	1,181	1,560	1,333	35	6,250
October	410	342	(b)	490	157	133	1,241	1,400	1,388	46	5,606
November	447	415	(b)	508	154	103	1,306	1,620	1,381	7	5,941
December	600	439	(b)	378	158	138	1,271	1,686	1,387	50	6,109
Average	67 <b>0</b>	507	(b)	485	183	116	1,132	1,489	1,362	40	5,983

Angola joined OPEC on January 1, 2007. Through 2006, imports from Angola are included under "Total Non-OPEC" on Table 3.3d.
 Ecuador withdrew from OPEC on December 31, 1992, and rejoined OPEC on

produced from Middle East crude oil.

• Includes imports for the Strategic Petroleum Reserve, which began in October 1977.

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

• U.S. geographic coverage is the 50 States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2006: EIA, Petroleum Supply Annual, annual reports.

• 2007: EIA, Petroleum Supply Monthly, monthly reports.

b Ecuador withdrew from OPEC on December 31, 1992, and rejoined OPEC on November 17, 2007. For 1993-2007, imports from Ecuador are included under "Total Non-OPEC" on Table 3.3d.

<sup>&</sup>lt;sup>c</sup> Imports from the Neutral Zone are reported as originating in either Saudi Arabia or Kuwait depending on the country reported to U.S. Customs.

<sup>&</sup>lt;sup>d</sup> Indonesia, Iran, Qatar, United Arab Emirates, and, for 1975-1994, Gabon.

Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been

Table 3.3d Petroleum Trade: Imports From Non-OPEC Countries

	Brazil	Canada	Colombia	Mexico	Nether- lands	Norway	Russia <sup>a</sup>	United Kingdom	U.S. Virgin Islands	Other	Total Non-OPEC
1973 Average	9	1,325	9	16	53	1	26	15	329	1,480	3,263
1975 Average	5	846	9	71	19	17	14	14	406	1,052	2,454
1980 Average	3	455	4	533	2	144	1	176	388	903	2,609
1985 Average	61	770	23	816	58	32	8	310	247	913	3,237
1990 Average	49	934	182	755	55	102	45	189	282	1,128	3,721
1995 Average	8	1,332	219	1,068	15	273	25	383	278	1,233	4,833
996 Average	9	1,424	234	1,244	19	313	25	308	313	1,377	5,267
1997 Average	5	1,563	271	1,385	25	309	13	226	300	1,495	5,593
1998 Average	26	1,598	354	1,351	31	236	24	250	293	1,640	5,803
1999 Average	26	1,539	468	1,324	27	304	89	365	280	1,478	5,899
2000 Average	51	1,807	342	1,373	30	343	72	366	291	1,581	6,257
2001 Average	82	1,828	296	1,440	43	341	90	324	268	1,631	6,343
2002 Average	116	1,971	260	1,547	66	393	210	478	236	1.649	6,925
2003 Average	108	2,072	195	1,623	87	270	254	440	288	1,766	7,103
2004 Average	104	2,138	176	1,665	101	244	298	380	330	2,008	7,444
2005 Average	156	2,181	196	1,662	151	233	410	396	328	2,413	8,127
2006 January	106	2,385	195	1,798	217	205	219	223	277	2,575	8,200
February	203	2,338	168	1,891	143	199	304	206	318	2,293	8,063
March	193	2,288	170	1,801	105	209	220	300	309	2,220	7,816
April	169	2,292	176	1.750	161	206	220	315	239	2.422	7,950
May	140	2.359	204	1.711	268	199	621	350	373	2,271	8,495
June	151	2,303	223	1,855	212	140	430	358	273	2,618	8,562
July	281	2,204	156	1.709	197	236	425	340	353	2,573	8,474
August	308	2,456	131	1,793	259	273	485	272	377	2,612	8,967
September	191	2,340	185	1,569	153	159	537	239	396	2,879	8,648
October	222	2,176	133	1,644	116	181	366	195	342	2,404	7,779
November	182	2,637	46	1,591	152	165	223	265	337	2,225	7,823
December	162	2,461	74	1,366	98	178	369	199	334	2,259	7,500
Average	193	2,353	155	1,705	174	196	369	272	328	2,446	8,190
2007 January	250	2,470	148	1,566	102	105	347	194	425	1,923	7,531
February	151	2,448	85	1,507	63	131	241	268	312	1,619	6,825
March	234	2,305	121	1,749	158	164	455	292	349	1,771	7,599
April	246	2,479	90	1,572	87	198	550	386	322	1,988	7,919
May	203	2,462	122	1,617	149	234	499	390	287	2,015	7,977
June	159	2,375	164	1,529	171	183	285	345	218	1,953	7,382
July	198	2,360	231	1,611	130	137	525	369	372	2,018	7,950
August	280	2,510	175	1,474	127	112	416	174	320	1,905	7,493
September	232	2,502	186	1,454	136	105	389	185	384	1.816	7,389
October	197	2,411	175	1,417	175	110	452	287	357	1,764	7,344
November	85	2,431	219	1,581	58	100	470	210	414	1,686	7,254
December	178	2,360	130	1,322	157	110	306	238	387	1,559	6,746
Average	202	2,426	154	1,533	127	141	413	278	346	1,836	7,456

<sup>&</sup>lt;sup>a</sup> Imports from other republics in the former U.S.S.R. may be included in imports from Russia for 1973-1992. See "U.S.S.R" in Glossary.

Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined produced from West European refining areas may have been produced from Middle East crude oil. • Includes imports for the Strategic Petroleum Reserve, which began in October 1977. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50

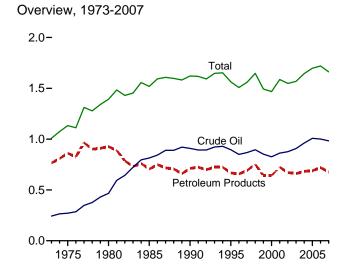
States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

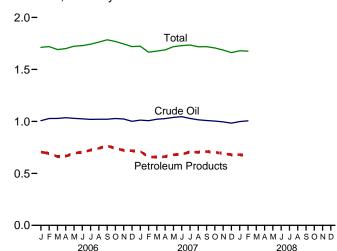
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2006: EIA, Petroleum Supply Annual, annual reports. • 2007: EIA, Petroleum Supply Monthly, monthly reports.

Figure 3.4 Petroleum Stocks

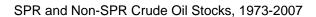
(Billion Barrels, Except as Noted)

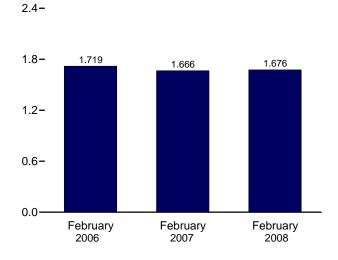


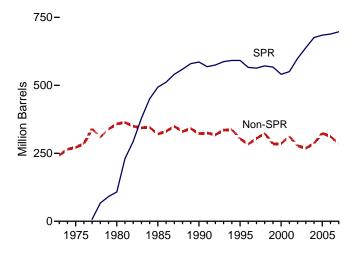
# Overview, Monthly



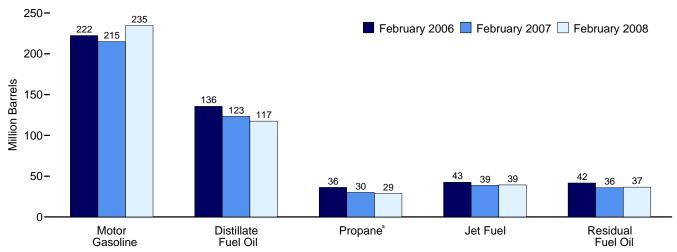
Total Stocks (Crude Oil and Petroleum Products)







### Selected Products



<sup>a</sup> Includes propylene.

Notes: • SPR= Strategic Petroleum Reserve.

Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.4.

Table 3.4 Petroleum Stocks

(Million Barrels)

		Crude Oila		<b>.</b>		LPC	<b>∋</b> b				
	SPR <sup>c</sup>	Non-SPR <sup>d,e,f</sup>	Total <sup>e,f</sup>	Distillate Fuel Oil <sup>f,g</sup>	Jet Fuel <sup>h</sup>	Propane <sup>f,i</sup>	Total <sup>f</sup>	Motor Gasoline <sup>f,j</sup>	Residual Fuel Oil <sup>f</sup>	Other <sup>k</sup>	Total <sup>f</sup>
1973 Year		242	242	196	29	65	99	209	53	179	1.008
1975 Year		271	271	209	30	82	125	235	74	188	1,133
1980 Year	108	358	466	205	42	65	120	261	92	205	1,392
1985 Year	493	321	814	144	40	39	74	223	50	174	1,519
1990 Year	586	323	908	132	52	49	98	220	49	162	1,621
1995 Year	592	303	895	130	40	43	93	202	37	165	1,563
1996 Year	566	284	850	127	40	43	86	195	46	164	1,507
1997 Year	563	305	868	138	44	44	89	210	40	169	1,560
1998 Year	571	324	895	156	45	65	115	216	45	176	1,647
1999 Year	567	284	852	125	41	43	89	193	36	157	1,493
2000 Year	541	286	826	118	45	41	83	196	36	164	1,468
2001 Year	550	312	862	145	42	66	121	210	41	166	1,586
2002 Year	599	278	877	134	39	53	106	209	31	152	1,548
2003 Year	638	269	907	137	39	50	94	207	38	147	1,568
2004 Year	676	286	961	126	40	55	104	218	42	153	1,645
2004 Tear	685	324	1.008	136	42	57	104	208	37	157	1,698
2005 Teal	003	324	1,000	130	42	31	109	200	31	137	1,030
2006 January	683	323	1,007	139	44	48	95	220	41	166	1,713
February	685	343	1,027	136	43	36	80	222	42	170	1,719
March	686	343	1,029	121	42	30	73	209	41	177	1,691
April	688	348	1,036	116	41	35	82	207	39	179	1,700
May	689	341	1,029	124	41	42	95	214	41	179	1,724
June	688	337	1,025	130	39	50	108	213	43	171	1,729
July	688	332	1,019	138	40	58	120	209	43	174	1,743
August	688	333	1.021	145	40	64	132	209	42	175	1.763
September	688	333	1,021	149	42	71	140	214	43	175	1,785
October	689	339	1,028	143	42	72	141	205	42	169	1,769
November	689	335	1,023	141	38	69	129	204	43	167	1,745
December	689	312	1,001	144	39	62	113	212	42	169	1,720
2007 January	689	324	1,012	140	39	47	91	228	42	171	1,723
	689	318	1,012	123	39	30	71	215	36	176	1,723
February	689	332	1,007	120	40	27	70	201	39	186	1,677
March	689	337	1,020	121	40	30	76	197	38	189	1,677
April			1,027			30 37	76 91	203	36 37		
May	690 690	348		125 123	41		102	203	36	183	1,719
June		355	1,045		41	44				176	1,729
July	690	339	1,029	131	42	50 55	112	205	40	177	1,735
August	690	325	1,015	133	41	55	121	194	36	177	1,718
September	693	315	1,008	134	43	58	125	199	37	173	1,719
October	694	309	1,003	134	42	61	124	196	39	169	1,707
November	696	300	995	134	40	60	111	202	39	165	1,686
December	697	286	983	134	39	52	95	215	39	157	1,662
2008 January	E 698	E 300	E 998	E 127	E 41	E 38	F 75	E 227	E 36	<sup>RE</sup> 174	E 1,679
February	E 699	E 306	E 1.005	E 117	E 39	E 29	F 62	E 235	E 37	E 181	E 1,676

<sup>&</sup>lt;sup>a</sup> Includes lease condensate.

petroleum coke, special naphthas, unfinished oils, waxes, other hydrocarbons and oxygenates, and miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel.

R=Revised. E=Estimate. F=Forecast. --=Not applicable.

Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

 For all available data beginning in 1973, see Web Pages: http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see

http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2006: Petroleum Supply Annual, annual reports. • 2007 and 2008: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations.

Monthly Energy Review Section 3 was redesigned in the January 2008 release. See "What's New" (http://www.eia.doe.gov/emeu/mer/wni.html) for a summary of the changes.

b Liquefied petroleum gases.

c "SPR" is the Strategic Petroleum Reserve, which began in October 1977.

Crude oil stocks in the SPR include non-U.S. stocks held under foreign or

commercial storage agreements.

<sup>d</sup> All crude oil stocks other than those in "SPR."

<sup>e</sup> Beginning in 1981, includes stocks of Alaskan crude oil in transit. See Note 5, "Stocks of Alaskan Crude Oil," at end of section.

See Note 4, "New Stock Basis," at end of section.

 $<sup>{\</sup>tt g}$  Does not include stocks that are held in the Northeast Heating Oil Reserve.

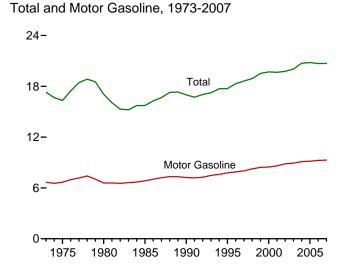
h Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in

Includes propylene.

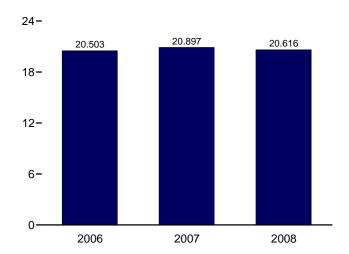
Includes finished motor gasoline, motor gasoline blending components, and gasohol; excludes oxygenates.

k Asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks,

Figure 3.5 Petroleum Products Supplied by Type (Million Barrels per Day)

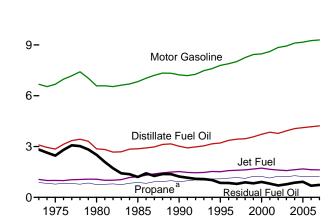


# Total, January-February

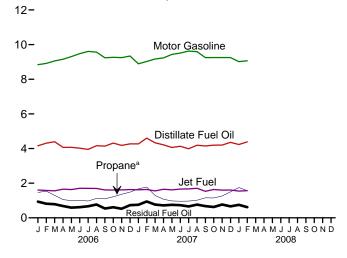


### Selected Products, 1973-2007

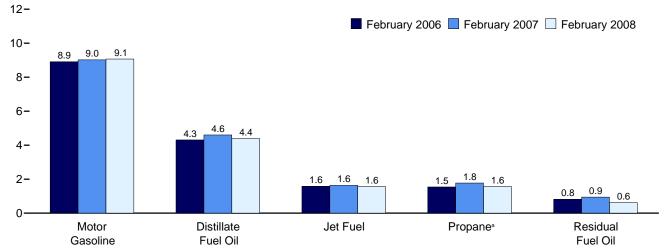
12-



### Selected Products, Monthly



#### Selected Products



<sup>a</sup> Includes propylene.

Notes: • SPR= Strategic Petroleum Reserve.

Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.5.

Table 3.5 Petroleum Products Supplied by Type

	Asphalt	A	Discillate		W	LP	<b>G</b> a			Petro-	D 1-11		
	and Road Oil	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Kero- sene	Propanec	Total	Lubri- cants	Motor Gasoline <sup>d</sup>	leum Coke	Residual Fuel Oil	Othere	Total
973 Average	522	45	3,092	1,059	216	872	1,449	162	6,674	261	2,822	1,005	17,308
975 Average	419	39	2,851	1,001	159	783	1,333	137	6,675	247	2,462	1,001	16,322
980 Average	396	35	2,866	1,068	158	754	1,469	159	6,579	237	2,508	1,581	17,056
985 Average	425	27	2,868	1,218	114	883	1,599	145	6,831	264	1,202	1,032	15,726
990 Average	483	24	3,021	1,522	43	917	1,556	164	7,235	339	1,229	1,373	16,98
995 Average	486	21	3,207	1,514	54	1,096	1,899	156	7,789	365	852	1,381	17,72
996 Average	484	20	3,365	1,578	62	1,136	2,012	151	7,891	379	848	1,518	18,309
997 Average	505	22	3,435	1,599	66	1,170	2.038	160	8.017	377	797	1,605	18,62
998 Average	521	19	3,461	1,622	78	1,120	1,952	168	8,253	447	887	1,508	18,91
999 Average	547	21	3,572	1,673	73	1,246	2,195	169	8,431	477	830	1,532	19,51
000 Average	525	20	3,722	1,725	67	1,235	2,231	166	8,472	406	909	1,458	19,70
001 Average	519	19	3,847	1,655	72	1,142	2,044	153	8,610	437	811	1,481	19,64
002 Average	512	18	3,776	1,614	43	1,248	2,163	151	8.848	463	700	1,474	19,76
003 Average	503	16	3,770	1,578	55	1,246	2,103	140	8,935	455	772	1,579	20,03
004 Average	537	17	4,058	1,630	64	1,213	2,132	141	9,105	524	865	1,657	20,73
005 Average	546	19	4,118	1,679	70	1,229	2,030	141	9,159	515	920	1,605	20,73
<b>006</b> January	295	9	4,159	1,605	76	1.465	2.128	119	8.839	490	934	1,783	20,43
February	330	16	4,308	1,582	118	1,540	2,120	199	8.911	407	816	1,765	20,57
	413	22	4,306	1,562	99	1,299	2,344	139	9,054	520	786	1,464	20,57
March	513	22			83			151		442	683		
April	633	22	4,065	1,654		1,050 993	1,967	124	9,154	489	587	1,467	20,20
May			4,072	1,633	48		1,911		9,308			1,630	20,45
June	715	18	4,019	1,704	28	1,007	1,901	148	9,478	548	618	1,805	20,98
July	662	20	3,950	1,700	38	970	1,969	134	9,607	492	667	1,502	20,74
August	743	28	4,162	1,696	29	1,119	2,011	137	9,564	535	768	1,761	21,43
September	667	18	4,141	1,608	27	1,094	1,937	119	9,236	624	538	1,644	20,55
October	592	19	4,315	1,605	30	1,216	1,998	164	9,267	514	612	1,654	20,76
November	478	13	4,180	1,613	25	1,362	2,143	122	9,244	563	525	1,762	20,66
December	199	13	4,268	1,631	48	1,483	2,182	96	9,338	633	732	1,656	20,79
Average	521	18	4,169	1,633	54	1,215	2,052	137	9,253	522	689	1,640	20,68
<b>007</b> January	351	17	4,267	1,616	48	1,676	2,446	118	8,891	438	753	1,614	20,55
February	290	13	4,601	1,636	46	1,774	2,550	96	9,025	431	944	1,639	21,27
March	372	14	4,328	1,553	35	1,290	2,099	144	9,169	558	762	1,495	20,52
April	443	20	4,212	1,651	24	1,076	2,012	144	9,232	437	717	1,689	20,57
May	498	17	4,060	1,614	12	979	1,840	155	9,429	549	750	1,706	20,63
June	621	22	4,130	1,659	11	958	1,942	133	9,510	483	733	1,492	20,73
July	647	17	3,988	1,668	7	969	1,885	146	9,622	423	656	1,582	20,64
August	641	21	4,188	1,704	28	1,018	1,925	140	9,592	541	763	1,508	21,05
September	609	17	4,150	1,531	32	1,156	1,925	128	9,244	544	675	1,530	20,38
October	590	21	4,195	1,638	28	1,148	1,977	150	9,250	437	625	1,545	20,45
November	459	15	4,200	1,600	46	1,264	2,127	138	9,249	464	767	1,644	20,70
December	R 349	11	R 4,354	R 1,603	R 58	R 1,501	R 2,278	R 128	R 9,249	R 573	R 662	R 1,605	R 20,86
Average	R 490	17	R <b>4,220</b>	1,623	R 31	R 1,231	R <b>2,081</b>	R 135	R 9,290	R <b>490</b>	R <b>732</b>	R 1,587	R 20,69
008 January	<sup>F</sup> 271	F 10	E 4,233	E 1,546	RF 96	E 1,748	RF 2,510	RF 111	E 9,015	RF 462	E 749	RE 1,685	E 20,68
February	F 288	F 12	E 4,385	E 1,567	F 77	E 1,566	F 2,442	F 114	E 9,068	F 450	E 617	E 1,519	E 20,53
2-Month Average	F 279	F 11	E 4,306	E 1,556	F 87	E 1,660	F 2,477	<sup>F</sup> 112	E 9,041	F 456	E 685	E 1,605	E 20,61
007 2-Month Average 006 2-Month Average	322 311	15 12	4,425 4,230	1,626 1,594	47 96	1,723 1,500	2,496 2,231	107 157	8,954 8,874	435 451	844 878	1,626 1,670	20,89° 20,50°

<sup>&</sup>lt;sup>a</sup> Liquified petroleum gases.

R=Revised. E=Estimate. F=Forecast.

Notes: 
• Petroleum products supplied is an approximation of petroleum

consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2006: EIA, Petroleum Supply Annual, annual reports. • 2007 and 2008: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations.

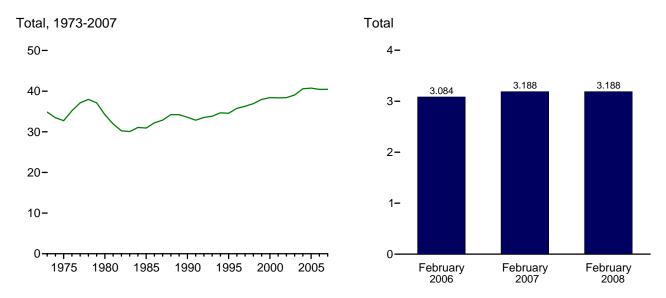
b Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other."

c Includes propylene.

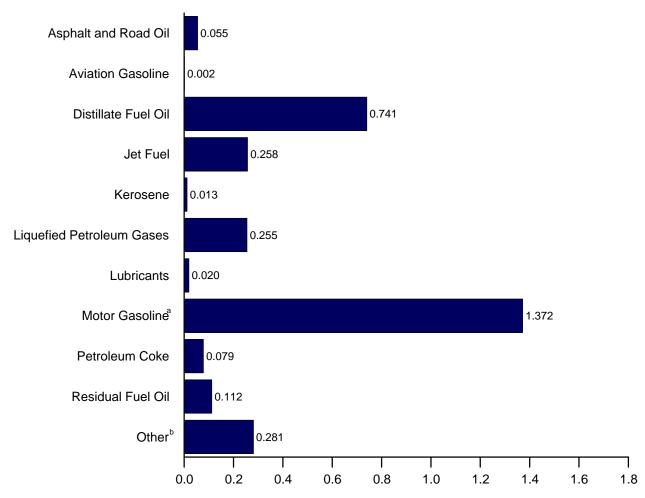
<sup>&</sup>lt;sup>d</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended into motor gasoline.

<sup>&</sup>lt;sup>e</sup> Pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

Figure 3.6 Heat Content of Petroleum Products Supplied by Type (Quadrillion Btu)



By Product, February 2008



<sup>&</sup>lt;sup>a</sup> Includes ethanol blended into motor gasoline.

<sup>b</sup> All petroleum not shown above.

Note: Because vertical scales differ, graphs should not be compared.

Web Page:  $http://www.eia.doe.gov/emeu/mer/petro.html. \\ Source: Table 3.6.$ 

Table 3.6 Heat Content of Petroleum Products Supplied by Type

(Trillion Btu)

	Asphalt	A. dada	Distillata	lat	<b>K</b>	LPC	<b>3</b> a	lb.mi	Matan	Petro-	Danishad		
	and Road Oil	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Kero- sene	Propanec	Total	Lubri- cants	Motor Gasoline <sup>d</sup>	leum Coke	Residual Fuel Oil	Othere	Total
1973 Total	1,264	83	6,575	2,167	447	1,221	1,981	359	12,797	573	6,477	2,117	34,840
1975 Total	1,014	71	6,061	2,047	329	1,097	1,807	304	12,798	542	5,649	2,107	32,731
1980 Total	962	64	6,110	2,190	329	1,059	1,976	354	12,648	522	5,772	3,275	34,202
1985 Total	1,029	50	6,098	2,497	236	1,236	2,103	322	13,098	582	2,759	2,149	30,922
1990 Total	1,170	45	6,422	3,129	88	1,284	2,059	362	13,872	745	2,820	2,840	33,553
1995 Total	1,178	40	6,818	3,132	112	1,534	2,512	346	14,825	802	1,955	2,834	34,553
1996 Total	1,176	37	7,175	3,274	128	1,594	2,660	335	15,064	837	1,952	3,119	35,757
1997 Total	1,224	40	7,304	3,308	136	1,638	2,690	354	15,254	829	1,828	3,298	36,266
1998 Total	1,263	35	7,359	3,357	162	1,568	2,575	371	15,701	982	2,036	3,093	36,934
1999 Total	1,324	39	7,595	3,462	151	1,745	2,897	375	16,036	1,048	1,905	3,128	37,960
2000 Total	1,276	36	7,935	3,580	140	1,734	2,945	369	16,155	895	2,091	2,981	38,404
2001 Total	1,257	35	8,179	3,426	150	1,598	2,697	338	16,373	961	1,861	3,056	38,333
2002 Total	1,240	34	8,028	3,340	90	1,747	2,852	334	16,819	1,018	1,605	3,041	38,401
2003 Total	1,220	30	8,349	3,265	113	1,701	2,747	309	16,981	1,000	1,772	3,260	39,047
2004 Total	1,304	31	8,652	3,383	133	1,791	2,824	313	17,379	1,156	1,990	3,429	40,594
2005 Total	1,323	35	8,755	3,475	144	1,721	2,682	312	17,444	1,133	2,111	3,320	40,735
2006 January	61	1	751	282	13	174	238	22	1,430	92	182	319	3,391
February	61	2	703	251	19	165	237	34	1,302	69	144	263	3,084
March	85	3	794	274	17	154	241	26	1,465	97	153	264	3,420
April	102	3	710	281	14	121	213	27	1,433	80	129	251	3,244
May	130	3	735	287	8	118	214	23	1,506	91	114	282	3,395
June	142	3	702	290	5	116	206	27	1,484	99	116	296	3,369
July	136	3	713	299	7	115	220	25	1,554	92	130	263	3,442
August	153	4	752	298	5	133	225	26	1,547	100	150	298	3,557
September	133	3	724	274	5	126	209	22	1,446	113	101	273	3,302
October	122	3	779	282	5	145	223	31	1,499	96	119	287	3,446
November	95	2	730	274	4	157	232	22	1,447	102	99	311	3,319
December	41	2	771	287	8	176	244	18	1,510	118	143	309	3,451
Total	1,261	33	8,864	3,379	111	1,701	2,701	303	17,622	1,148	1,581	3,416	40,420
2007 January	72	3	770	284	8	199	273	22	1,438	82	147	311	3,412
February	54	2	750	260	7	191	257	16	1,319	73	166	284	3,188
March	77	2	782	273	6	153	235	27	1,483	104	149	270	3,407
April	88	3	736	281	4	124	218	26	1,445	79	135	290	3,305
May	102	3	733	284	2	116	206	29	1,525	103	146	291	3,424
June	124	3	722	282	2	110	210	24	1,489	87	138	249	3,330
July	133	3	720	293	1	115	211	27	1,557	79	128	274	3,425
August	132	3	756	300	5	121	215	26	1,552	101	149	255	3,493
September	121	3	725	260	5	133	208	23	1,447	98	127	255	3,274
October	121	3	758	288	5	137	221	28	1,496	82	122	271	3,394
November	91 P 70	2	734	272	8 P.40	146	230	25 P 24	1,448	84 P 4 0 7	145 P 400	287 P 204	3,325
December	R 72	2	R 786	R 282	R 10	R 178	R 255	R 24	R 1,496	R 107	R 129	R 301	R 3,463
Total	R 1,188	32	<sup>R</sup> <b>8,973</b>	3,358	<sup>R</sup> <b>64</b>	<sup>R</sup> 1,724	R 2,738	R 299	R 17,694	R 1,078	<sup>R</sup> 1,681	R 3,335	R 40,440
2008 January	<sup>E</sup> 56	E <sub>2</sub>	E 764	E 272	E 17	E 208	RE 281	E 21	E 1,458	RE 86	E 146	RE 331	E 3,433
February	E 55	E 2	E 741	E 258	E 13	E 174	E 255	E 20	E 1,372	E 79	E 112	E 281	E 3,188
2-Month Total	E 111	<sup>E</sup> 3	E 1,505	<sup>E</sup> 529	E 30	<sup>E</sup> 382	<sup>E</sup> 536	E 41	E 2,830	<sup>E</sup> 165	E 258	E 612	E 6,621
2007 2-Month Total	126	4	1,521	544	16	390	531	38	2,757	155	313	595	6,600
2006 2-Month Total	122	4	1,454	533	32	340	474	56	2,732	160	326	583	6,475

a Liquefied petroleum gases.

as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

R=Revised. E=Estimate.

Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

Sources: Tables 3.5, A1, and A3.

Monthly Energy Review Section 3 was redesigned in the January 2008 release. See "What's New" (http://www.eia.doe.gov/emeu/mer/wni.html) for a summary of the changes.

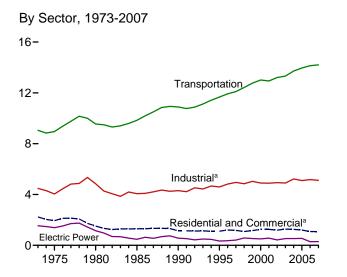
b Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in

<sup>&</sup>lt;sup>c</sup> Includes propylene. <sup>d</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended into

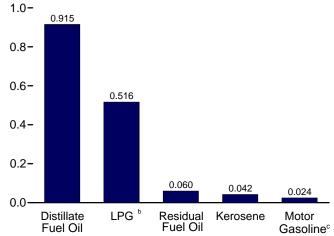
motor gasoline. Beginning in 1939, also includes entain beinden into motor gasoline.

<sup>e</sup> Pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned

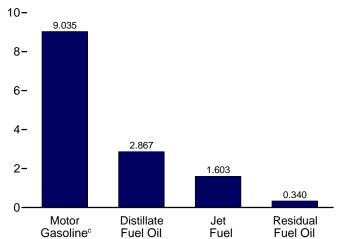
Figure 3.7 Petroleum Consumption by Sector (Million Barrels per Day)



Residential and Commercial Sectors<sup>a</sup>, Selected Products, December 2007

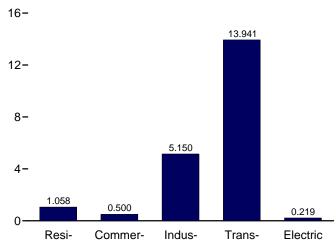


Transportation Sector, Selected Products, December 2007



<sup>&</sup>lt;sup>a</sup> Includes combined-heat-and-power plants and a small number of electricity-only plants.

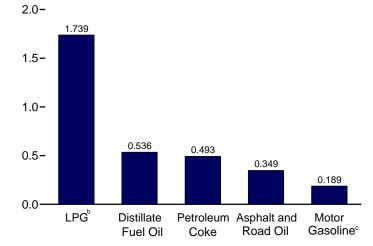
By Sector, December 2007



Industrial Sector<sup>a</sup>, Selected Products, December 2007

ciala

dential

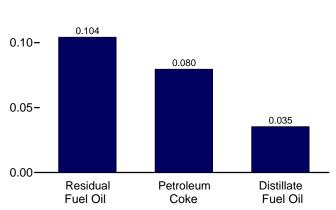


triala

portation

Power

Electric Power Sector, December 2007



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Sources: Tables 3.7a–3.7c.

0.15 -

<sup>&</sup>lt;sup>b</sup> Liquefied petroleum gases.

c Includes ethanol blended into motor gasoline.

Table 3.7a Petroleum Consumption: Residential and Commercial Sectors

		Residen	tial Sector				Com	mercial Sect	ora		
	Distillate Fuel Oil	Kero- sene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kero- sene	Liquefied Petroleum Gases	Motor Gasoline <sup>b</sup>	Petro- leum Coke	Residual Fuel Oil	Total
1973 Average	942	110	435	1,487	303	31	77	45	NA	290	746
1975 Average	850	78	389	1,316	276	24	69	46	NA	214	629
1980 Average	617	51	242	910	243	20	43	56	NA	245	606
1985 Average	514	77	249	839	297	16	44	50	NA	99	506
1990 Average	460	31	276	767	252	6	49	58	117	100	465
	400 426	36	306	767	232	11	54	10		62	361
1995 Average									(s)		
1996 Average	434	43	358	835	227	10	63	14	(s)	60	373
1997 Average	411	45	349	805	209	12	62	22	(s)	48	353
1998 Average	363	52	329	744	202	15	58	20	(s)	37	332
1999 Average	389	54	404	847	206	13	71	15	(s)	32	338
2000 Average	424	46	427	897	230	14	75	23	(s)	40	383
2001 Average	427	46	406	879	239	15	72	20	(s)	30	376
2002 Average	404	29	412	845	209	8	73	24	(s)	35	348
2003 Average	425	34	426	885	226	9	75	32	(s)	48	391
2004 Average	433	41	401	875	221	10	71	25	(s)	53	380
2005 Average	402	R <b>40</b>	R <b>391</b>	R <b>833</b>	210	R 10	R <b>69</b>	R <b>24</b>	(s)	50	365
2006 January	<sup>R</sup> 461	R 44	R 410	<sup>R</sup> 915	R 260	R 11	R 72	R 23	(s)	R 45	R 412
February	<sup>R</sup> 535	R 69	R 452	R 1,055	R 301	18	R 80	R 23	(s)	<sup>R</sup> 52	R 474
March	R 433	<sup>R</sup> 57	<sup>R</sup> 416	<sup>R</sup> 905	R 244	15	R 73	R 24	(s)	R 42	R 398
April	R 309	R 48	R 379	R 736	R 174	R 12	R 67	R 24	(-)	R 30	R 308
May	R 284	R 28	R 368	R 680	R 160	7	R 65	R 24	Ö	R 28	R 284
June	R 265	R 16	R 366	<sup>R</sup> 648	R 149	4	R 65	R 25	0	R 26	R 269
July	R 246	R 22	R 379	R 647	R 138	6	R 67	R 25	(s)	R 24	R 260
,	R 254	R 17	R 388	R 658	R 143	4	R 68	R 25	(s)	R 25	R 266
August	R 272	R 16	R 373	<sup>R</sup> 661	R 153	4	R 66	R 24		R 27	R 274
September	R 276	R 17				R 4	R 68	R 24	(s)		R 280
October			R 385	R 679	R 156				(s)	R 27	
November	R 309	R 14	R 413	R 737	R 174	4	R 73	R 24	(s)	R 30	R 306
December	R 388	R 28	R 421	R 836	R 219	7	R 74	R 24	(s)	R 38	R 363
Average	R 335	R 31	R 395	R <b>762</b>	R 189	8	R <b>70</b>	R <b>24</b>	(s)	R 33	R <b>324</b>
2007 January	R 452	R 28	R 471	<sup>R</sup> 951	R 255	7	R 83	R 23	(s)	R 46	R 414
February	R 528	R 27	<sup>R</sup> 491	R 1,046	R 297	7	<sup>R</sup> 87	R 24	(s)	<sup>R</sup> 54	R 469
March	R 452	R 20	R 404	R 876	R 255	5	<sup>R</sup> 71	R 24	(s)	R 46	R 401
April	R 255	R 14	R 388	R 657	R 144	4	<sup>R</sup> 68	R 24	(s)	R 26	R 266
May	R 187	<sup>R</sup> 7	R 355	<sup>R</sup> 549	R 105	2	R 63	R 25	0	R 19	R 214
June	R 218	7	R 374	R 599	R 123	2	R 66	R 25	0	R 22	R 238
July	R 213	4	R 363	R 580	R 120	1	<sup>R</sup> 64	R 25	0	R 22	R 232
	R 239	R 16	R 371	R 626	R 135	4	R 65	R 25	(s)	R 24	R 254
August	R 255	R 18	R 371	R 644	R 143	5	R 65	R 24		R 26	R 264
September		R 16					R 67	R 24	(s)		
October	R 291		R 381	688 R 000	R 164	4	., p/	`` 24	(s)	R 30	R 289
November	R 397	R 26	R 410	R 833	R 223	7	R 72	R 24	(s)	<sup>R</sup> 40	R 367
December	585	34	439	1,058	330	9	77	24	(s)	60	500
Average	338	18	401	757	191	5	71	24	(s)	34	R 325

<sup>&</sup>lt;sup>a</sup> Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

"petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section.

Sources: See end of section.

<sup>&</sup>lt;sup>b</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended into motor gasoline.

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

Notes: • Data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term

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

Control is any area in the 50 States and the District of Columbia.

Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

Table 3.7b Petroleum Consumption: Industrial Sector

					Industria	l Sector <sup>a</sup>				
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>c</sup>	Total
1973 Average	522	691	75	902	88	133	254	809	1,005	4,479
1975 Average	419	630	58	844	68	116	246	658	1,001	4,038
1980 Average	396	621	87	1,172	82	82	234	586	1,581	4,842
1985 Average	425	526	21	1,285	75	114	261	326	1,032	4,065
1990 Average	483	541	6	1,215	84	97	325	179	1,373	4,304
1995 Average	486	532	7	1,527	80	105	328	147	1,381	4,594
1996 Average	484	557	9	1,580	78	105	343	146	1,518	4,819
1997 Average	505	566	9	1,617	82	111	331	127	1,605	4,953
1998 Average	521	570	11	1,553	86	105	390	100	1,508	4.844
1999 Average	547	558	6	1.709	87	80	426	90	1,532	5.035
2000 Average	525	563	8	1,720	86	79	361	105	1,458	4,903
2001 Average	519	611	11	1.557	79	155	390	89	1,481	4.892
2002 Average	512	566	7	1,668	78	163	383	83	1,474	4,934
2003 Average	503	534	12	1,561	72	171	375	96	1,579	4,903
2004 Average	537	570	14	1,647	73	195	423	108	1,657	5,223
2005 Average	546	594	R 19	R 1,549	72	R 187	404	123	1,605	R 5,100
2006 January	295	R 706	R 21	R 1.625	61	R 180	380	R 203	1.783	R 5,252
February	330	<sup>R</sup> 651	R 32	R 1,789	102	R 182	298	<sup>R</sup> 177	1,546	R 5,107
March	413	R 743	R 27	R 1.646	71	R 185	427	<sup>R</sup> 181	1,464	<sup>R</sup> 5,157
April	513	R 558	R 23	R 1.502	78	R 187	345	R 150	1,467	R 4.822
May	633	R 541	R 13	R 1,459	64	R 190	401	R 127	1,630	R 5.058
June	715	R 459	R 8	R 1,451	76	R 194	446	R 117	1.805	R 5,271
July	662	R 408	R 10	R 1,503	69	<sup>R</sup> 196	383	R 118	1,502	R 4,851
August	743	R 516	R 8	R 1.536	70	R 195	432	R 125	1.761	R 5,386
September	667	R 597	R 7	R 1.479	61	R 189	529	R 111	1.644	R 5,282
October	592	R 707	R 8	R 1,525	84	R 189	421	R 124	1,654	R 5,303
November	478	R 681	R 7	R 1.636	63	R 189	478	R 109	1,762	R 5.402
December	199	R 695	R 13	R 1.666	49	R 191	548	R 166	1,656	R 5,182
Average	521	R 605	R 15	R 1,567	71	R 189	425	R 142	1,640	R 5,173
2007 January	351	<sup>R</sup> 752	<sup>R</sup> 13	<sup>R</sup> 1.868	61	<sup>R</sup> 182	348	<sup>R</sup> 176	1.614	R 5.364
February	290	R 780	<sup>R</sup> 13	R 1,947	49	R 184	353	R 185	1,639	<sup>R</sup> 5,441
March	372	R 652	R 9	R 1.602	74	R 187	488	R 183	1,495	R 5.062
April	443	R 678	R 6	R 1,536	74	R 188	366	R 173	1.689	R 5,153
May	498	R 603	3	R 1.405	79	R 193	473	R 184	1.706	R 5.145
June	621	R 546	R 3	R 1,482	69	R 194	392	R 164	1,492	R 4.964
July	647	R 443	R 2	R 1,439	75	R 196	346	R 142	1.582	R 4,872
August	641	R 514	R 8	R 1.469	72	R 196	460	R 153	1,502	R 5,020
September	609	R 591	Rg	R 1.470	66	R 189	466	R 151	1,530	R 5,020
October	590	R 593	R <sub>7</sub>	R 1,509	77	R 189	369	R 140	1,545	R 5,020
November	459	R 588	R 12	R 1,624	71	R 189	399	R 200	1,644	R 5,186
December	349	536	16	1,739	66	189	493	158	1,605	5,150
	349 <b>490</b>	605	8		70	190	493 <b>414</b>	167		
Average	490	CUO	ď	1,589	70	190	414	101	1,587	5,119

a Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
 b Finished motor gasoline. Beginning in 1993, also includes ethanol blended

R=Revised.

Notes: • Data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section.

Sources: See end of section.

Finished motor gasoline. Beginning in 1993, also includes ethanol blended into motor gasoline.
 Pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery)

<sup>&</sup>lt;sup>c</sup> Pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

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

Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

Table 3.7c Petroleum Consumption: Transportation and Electric Power Sectors

				Transportati	ion Secto	r			E	lectric Po	wer Sectora	
	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Liquefied Petroleum Gases	Lubri- cants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total	Distillate Fuel Oil <sup>d</sup>	Petro- leum Coke	Residual Fuel Oil <sup>e</sup>	Total
1973 Average	45	1,045	1,042	35	74	6,496	317	9.054	129	7	1.406	1,54
1975 Average	39	998	992	31	70	6,512	310	8,951	107	1	1,280	1,38
980 Average	35	1,311	1,062	13	77	6,441	608	9,546	79	2	1,069	1,15
985 Average	27	1,491	1,218	21	71	6,667	342	9,838	40	3	435	47
990 Average	24	1,722	1.522	16	80	7,080	443	10,888	45	14	507	56
995 Average	21	1,973	1,514	13	76	7,674	397	11,668	51	37	247	33
996 Average	20	2,096	1,578	11	73	7,772	370	11,921	51	36	273	36
997 Average	22	2,198	1,599	10	78	7,883	310	12,099	52	46	311	41
998 Average	19	2,263	1,622	13	81	8,128	294	12,420	64	56	456	57
	21	2,263	1,622	10	82	8,336	294	12,765	66	50 51	418	53
999 Average	20	2,352	1,673	8	81	8,370	290 386	13,012	82	45	378	50 50
000 Average		,	, -		74	,			80			56
001 Average	19	2,489	1,655	10		8,435	255	12,938	60	47	437	
002 Average	18	2,536	1,614	10	73	8,662	295	13,208		80	287	42
003 Average	16	2,665	1,578	12	68	8,733	249	13,321	76	79	379	53
004 Average	17	2,783	1,630	14	69	8,885	321	13,718	52	101	382	53
2005 Average	19	2,858	1,679	R <b>20</b>	68	R <b>8,948</b>	365	R 13,957	54	111	382	54
006 January	9	R 2,699	1,605	<sup>R</sup> 21	58	R 8,636	<sup>R</sup> 511	R 13,537	34	110	175	31
February	16	R 2,787	1,582	R 23	96	R 8,706	R 437	R 13,649	33	108	149	29
March	22	R 2,952	1,560	<sup>R</sup> 21	67	R 8,846	R 472	<sup>R</sup> 13,941	24	93	91	20
April	22	R 2,991	1,654	R 20	73	R 8,943	R 385	<sup>R</sup> 14,088	33	98	117	24
May	22	R 3,055	1,633	<sup>R</sup> 19	60	R 9,093	R 322	R 14,204	32	88	111	23
June	18	R 3,108	1,704	<sup>R</sup> 19	72	R 9,260	R 296	R 14,477	38	102	178	31
July	20	R 3,111	1.700	R 20	65	R 9,386	R 301	R 14,602	46	109	225	37
August	28	R 3,197	1.696	R 20	66	R 9,343	R 323	R 14,673	53	102	296	45
September	18	R 3,092	1,608	R 19	58	R 9,023	R 267	R 14,086	27	95	133	25
October	19	R 3,145	1,605	R 20	80	R 9,053	R 317	R 14,239	31	94	144	26
November	13	R 2.984	1,613	R 21	59	R 9,031	R 243	R 13,964	32	85	143	26
December	13	R 2,932	1.631	R 22	47	R 9.123	R 407	R 14,174	34	85	121	24
Average	18	R <b>3,006</b>	1,633	R <b>20</b>	67	R 9,039	R <b>357</b>	R 14,140	35	97	157	28
<b>007</b> January	17	R 2,763	1,616	R 24	57	R 8,686	R 348	R 13,512	45	90	182	31
February	13	R 2,905	1,636	R 25	46	R 8,817	R 360	R 13,803	90	78	345	51
March	14	R 2,932	1,553	R 21	70	R 8,958	R 367	R 13,914	38	70 70	167	27
April	20	R 3,104	1,651	R 20	70	R 9,019	R 353	R 14.237	30	70	165	26
				R 18	70 75		R 404		33	76	143	25
May	17 22	R 3,131 R 3.200	1,614	R 19	75 65	<sup>R</sup> 9,212 <sup>R</sup> 9,291	R 362	R 14,472 R 14,618	44		185	
June			1,659	R 19			207			90		31
July	17	R 3,170	1,668		71	R 9,401	R 312	R 14,657	43	77	180	30
August	21	R 3,234	1,704	R 19	68	R 9,371	R 339	R 14,757	67	80	247	39
September	17	R 3,126	1,531	R 19	62	R 9,031	R 336	R 14,122	35	77	163	27
October	21	R 3,112	1,638	R 20	73	R 9,037	R 307	R 14,207	36	67	149	25
November	15	R 2,962	1,600	<sup>R</sup> 21	67	R 9,036	<sup>R</sup> 455	<sup>R</sup> 14,156	29	64	71	16
December	11	2,867	1,603	23	62	9,035	340	13,941	35	80	104	21
Average	17	3,043	1,623	21	66	9,076	357	14,202	43	77	174	29

<sup>&</sup>lt;sup>a</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data

amount of fuel oil no. 4.

R=Revised.

Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding.

Sources: See end of section.

Monthly Energy Review Section 3 was redesigned in the January 2008 release. See "What's New" (http://www.eia.doe.gov/emeu/mer/wni.html) for a summary of the changes.

are for electric utilities and independent power producers.

b Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Industrial Sector, Other" on Table 3.7b.

<sup>c</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended

into motor gasoline.  $^{\rm d}$  Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small

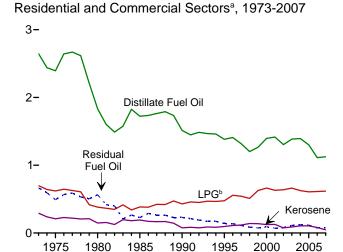
amounts of kerosene and jet fuel.

<sup>&</sup>lt;sup>e</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small

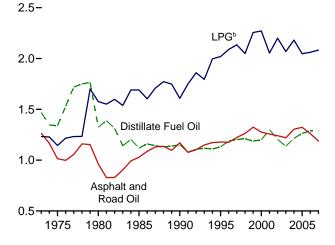
Geographic coverage is the 50 States and the District of Columbia

Web Page: See http://www.eia.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

**Heat Content of Petroleum Consumption by Sector, Selected Products** Figure 3.8 (Quadrillion Btu)

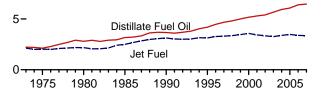


Industrial Sector<sup>a</sup>, 1973-2007



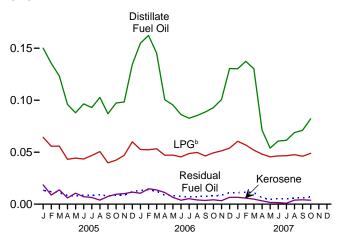
Transportation Sector, 1973-2007





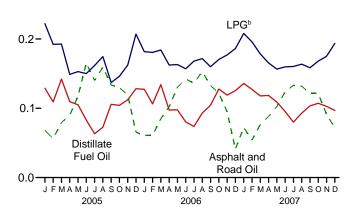
<sup>&</sup>lt;sup>a</sup> Includes combined-heat-and-power plants and a small number of electricity-only plants.

Residential and Commercial Sectors<sup>a</sup>, Monthly 0.20-



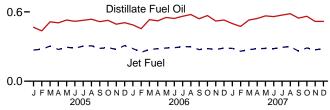
Industrial Sector<sup>a</sup>, Monthly

0.3-



Transportation Sector, Monthly 1.8-





Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.

Sources: Tables 3.8a-3.8c.

20-

<sup>&</sup>lt;sup>b</sup> Liquefied petroleum gases.

<sup>°</sup> Beginning in 1983, includes ethanol blended into motor gasoline.

Table 3.8a Heat Content of Petroleum Consumption: Residential and Commercial Sectors (Trillion Btu)

		Resident	ial Sector		Commercial Sector <sup>a</sup>								
	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	Total		
1973 Total	2.003	227	595	2,825	644	65	105	87	NA	665	1.565		
1975 Total	1,807	161	528	2,495	587	49	93	89	NA	492	1,310		
1980 Total	1,316	107	325	1,748	518	41	57	107	NA	565	1,287		
1985 Total	1.092	159	327	1,578	631	33	58	96	NA	228	1,045		
1990 Total	978	64	365	1,407	536	12	64	111	0	230	953		
1995 Total	905	74	404	1,383	479	22	71	18	(s)	141	732		
1996 Total	926	89	473	1,488	483	21	84	27	(s)	137	751		
1997 Total	874	93	473 461	,	444	25	81	43	: :	111	704		
				1,428					(s)				
1998 Total	772	108	434	1,314	429	31	77	39	(s)	85	661		
1999 Total	828	111	534	1,473	438	27	94	28	(s)	73	661		
2000 Total	905	95	564	1,563	491	30	99	45	(s)	92	756		
2001 Total	908	95	535	1,539	508	31	94	37	(s)	70	742		
2002 Total	860	60	543	1,463	444	16	96	45	(s)	80	681		
2003 Total	905	70	564	1,539	481	19	100	60	(s)	111	771		
2004 Total	924	85	531	1,539	470	20	94	49	(s)	122	756		
2005 Total	854	<sup>R</sup> <b>84</b>	<sup>R</sup> 517	<sup>R</sup> 1,455	447	22	<sup>R</sup> <b>91</b>	R 46	(s)	116	R <b>722</b>		
2006 January	R 83	8	<sup>R</sup> 46	<sup>R</sup> 137	R 47	2	8	4	(s)	R g	<sup>R</sup> 70		
February	R 87	<sup>R</sup> 11	<sup>R</sup> 46	<sup>R</sup> 144	R 49	3	8	R 3	(s)	R 9	R 73		
March	R 78	R 10	R 46	R 135	R 44	3	8	4	(s)	R 8	R 67		
April	R 54	R 8	R 41	R 103	R 30	2	7	4	0	R 6	R 49		
May	R 51	5	R 41	R 97	R 29	1	7	4	0	R 5	R 47		
June	R 46	3	R 40	R 89	R 26	1	7	4	0	R 5	R 43		
July	R 44	4	R 42	R 91	R 25	1	7	4	(s)	R 5	R 42		
August	R 46	3	R 43	R 92	R 26	1	R 8	4	(s)	R 5	R 43		
September	R 48	3	R 40	R 91	R 27	1	7	4	(s)	R 5	R 43		
	R 50	3	R 43	R 96	R 28	1	R 8	4	٠,,	R 5	R 46		
October	R 54	R 2	R 45	R 101	R 30	1	-	4	(s)	R 6	R 49		
November	R 70		R 47	" 101 R 400	N 30	•	8	4	(s)	<sup></sup> 6	R 60		
December Total	R <b>712</b>	5 R <b>64</b>	R <b>520</b>	R 122 R <b>1,297</b>	R 40 R <b>401</b>	1 <b>17</b>	8 R <b>92</b>	R <b>46</b>	(s) <b>(s)</b>	R <b>75</b>	R <b>631</b>		
	D					-			` ,	D -			
<b>2007</b> January	R 82	5	<sup>R</sup> 52	R 139	R 46	1	9	4	(s)	R 9	R 69		
February	R 86	R 4	R 49	<sup>R</sup> 140	R 49	1	9	R 3	(s)	R 9	<sup>R</sup> 71		
March	<sup>R</sup> 82	_ 4	<sup>R</sup> 45	<sup>R</sup> 130	R 46	1	8	4	(s)	<sup>R</sup> 9	<sup>R</sup> 68		
April	R 45	<sup>R</sup> 2	R 42	<sup>R</sup> 89	R 25	1	7	4	(s)	<sup>R</sup> 5	_ 42		
May	R 34	1	39	75	19	(s)	7	4	0	R 4	R 34		
June	R 38	1	<sup>R</sup> 40	R 80	21	(s)	7	4	0	<sup>R</sup> 4	R 37		
July	R 38	1	40	R 80	R 22	(s)	7	4	0	R 4	R 37		
August	R 43	3	R 41	R 87	24	`1	7	4	(s)	<sup>R</sup> 5	R 41		
September	R 44	3	R 40	R 88	R 25	1	7	4	(s)	R 5	42		
October	R 53	3	42	R 98	R 30	1	7	4	(s)	R 6	48		
November	R 69	R 4	R 44	R 118	R 39	i	8	4	(s)	R 8	R 59		
December	106	6	49	160	60	2	9	4	(s)	12	85		
Total	719	37	526	1,282	405	10	93	46	(s)	79	634		

<sup>&</sup>lt;sup>a</sup> Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

Sources: Tables 3.7a, A1, and A3.

<sup>&</sup>lt;sup>b</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended into motor gasoline.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption

Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector

(Trillion Btu)

		Industrial Sector <sup>a</sup>												
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>c</sup>	Total				
1973 Total	. 1,264	1,469	156	1,233	195	255	558	1,858	2,117	9,104				
1975 Total		1,339	119	1,144	149	223	540	1,509	2,107	8,146				
980 Total		1,324	181	1,577	182	158	516	1,349	3,275	9,525				
985 Total		1,119	44	1,690	166	218	575	748	2,149	7.738				
990 Total		1,150	12	1,608	186	185	714	411	2,840	8,278				
995 Total		1,131	15	2,019	178	200	721	337	2,834	8,614				
996 Total		1,187	18	2,089	173	200	757	335	3,119	9,053				
997 Total		1,203	19	2,134	182	212	727	291	3,298	9,290				
998 Total		1,211	22	2,048	191	199	858	230	3,093	9,116				
999 Total		1,187	13	2,256	193	152	936	207	3,128	9,396				
000 Total		1,200	16	2,271	190	150	796	241	2,981	9,120				
001 Total		1,300	23	2,054	174	295	858	203	3,056	9,220				
002 Total		1,204	14	2,200	172	309	842	190	3,041	9,213				
003 Total		1,136	24	2,266	159	324	825	220	3,260	9,237				
004 Total		1,214	28	2,181	161	372	934	249	3,429	9,872				
005 Total		1,264	R 39	R 2,047	160	R 356	889	281	3,320	R 9,680				
<b>006</b> January	. 61	<sup>R</sup> 127	R 4	<sup>R</sup> 182	11	R 29	71	R 40	319	R 844				
February	. 61	<sup>R</sup> 106	<sup>R</sup> 5	<sup>R</sup> 181	17	R 27	50	R 31	263	R 742				
March		<sup>R</sup> 134	<sup>R</sup> 5	<sup>R</sup> 184	13	R 30	80	R 35	264	R 830				
April		98	R 4	<sup>R</sup> 162	14	R 29	62	R 28	251	<sup>R</sup> 751				
May		R 98	2	R 163	12	R 31	75	R 25	282	R 818				
June		R 80	1	R 157	14	R 30	81	R 22	296	R 823				
July		R 74	R <sub>2</sub>	R 168	13	R 32	72	R 23	263	R 781				
August		R 93	1	R 172	13	R 32	81	R 24	298	R 867				
September		R 104	1	R 160	11	R 30	96	R 21	273	R 828				
October		R 128	1	R 170	16	R 31	79	R 24	287	R 857				
November		119	1	R 177	11	R 30	86	R 21	311	R 851				
December		R 125	2	<sup>R</sup> 186	9	R 31	102	R 32	309	R 839				
Total		R 1,286	R 30	R 2,062	156	R 360	934	R 326	3,416	R 9,831				
<b>007</b> January		<sup>R</sup> 136	2	R 208	11	R 29	65	R 34	R 308	R 867				
February		R 127	2	<sup>R</sup> 196	8	<sup>R</sup> 27	60	R 33	<sup>R</sup> 281	R 787				
March		<sup>R</sup> 118	R 2	<sup>R</sup> 178	14	R 30	91	R 36	R 266	R 812				
April	. 88	<sup>R</sup> 118	1	<sup>R</sup> 165	13	R 30	66	R 33	R 286	R 801				
May		R 109	<sup>R</sup> 1	<sup>R</sup> 156	15	<sup>R</sup> 31	88	R 36	R 287	R 826				
June		<sup>R</sup> 95	<sup>R</sup> 1	<sup>R</sup> 160	12	R 30	71	R 31	R 245	R 770				
July	. 133	<sup>R</sup> 80	(s)	<sup>R</sup> 160	14	R 32	65	<sup>R</sup> 28	R 270	R 782				
August		R 93	1	R 164	14	R 32	86	R 30	R 251	R 802				
September		R 103	1	R 158	12	R 30	84	R 28	R 251	R 790				
October		R 107	1	R 168	15	R 31	69	R 27	R 267	R 807				
November		R 103	2	R 175	13	R 30	72	R 38	R 283	R 807				
December		97	3	194	12	31	92	31	298	828				
Total		1,286	17	2,083	154	361	909	384	3,296	9,678				

<sup>&</sup>lt;sup>a</sup> Industrial sector fuel use, including that at industrial combined-heat-and-power

Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.9a.a. Soo Nets 7. "Petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/petro.html for all available

data beginning in 1973.

Sources: Tables 3.7b, A1, and A3.

<sup>(</sup>CHP) and industrial electricity-only plants.

b Finished motor gasoline. Beginning in 1993, also includes ethanol blended into motor gasoline.

<sup>&</sup>lt;sup>c</sup> Pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel. R=Revised. (s)=Less than 0.5 trillion Btu.

Table 3.8c Heat Content of Petroleum Consumption: Transportation and Electric Power **Sectors** (Trillion Btu)

				Transporta	tion Secto	r			Е	lectric Po	wer Sector <sup>a</sup>	
	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Liquefied Petroleum Gases	Lubri- cants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total	Distillate Fuel Oil <sup>d</sup>	Petro- leum Coke	Residual Fuel Oil <sup>e</sup>	Total
1973 Total	83	2,222	2,131	48	163	12,455	727	17,831	273	15	3,226	3,515
1975 Total	71	2,121	2,029	42	155	12,485	711	17,614	226	2	2,937	3,166
1980 Total	64	2,795	2,179	17	172	12,383	1,398	19,009	169	5	2,459	2,634
1985 Total	50	3,170	2,497	28	156	12,784	786	19,471	85	7	998	1,090
1990 Total	45	3,661	3,129	22	176	13,575	1,016	21,625	97	30	1,163	1,289
1995 Total	40	4,195	3,132	17	168	14,607	911	23,069	108	81	566	755
1996 Total	37	4,469	3,274	15	163	14,837	851	23,647	109	80	628	817
1997 Total	40	4,672	3,308	13	172	14,999	712	23,917	111	102	715	927
1998 Total	35	4,812	3,357	17	180	15,463	674	24,537	136	124	1,047	1,306
1999 Total	39	5,001	3,462	13	182	15,855	665	25,218	140	112	959	1,211
2000 Total	36	5,165	3,580	11	179	15,960	888	25,820	175	99	871	1.144
2001 Total	35	5,292	3,426	13	164	16,041	586	25,556	171	103	1,003	1,277
2002 Total	34	5,392	3,340	13	162	16,465	677	26,084	127	175	659	961
2003 Total	30	5,666	3,265	16	150	16,597	571	26,296	161	175	869	1,205
2004 Total	31	5,932	3,383	18	152	16,959	740	27,214	111	222	879	1,212
2005 Total	35	6,076	3,475	R <b>27</b>	151	R 17,043	837	R 27,644	115	243	876	1,235
2006 January	1	R 487	282	2	11	R 1.397	100	R 2,280	6	21	34	61
February	2	R 455	251	2	16	R 1,272	77	R 2,076	5	18	26	50
March	3	R 533	274	2	13	R 1.431	R 92	R 2,349	4	17	18	39
April	3	R 523	281	R 2	13	R 1,400	73	R 2,295	6	18	22	46
May	3	R 552	287	R 2	11	R 1,471	63	R 2,389	6	16	22	44
June	3	R 543	290	R 2	13	R 1.450	56	R 2,356	7	18	34	59
July	3	R 562	299	R 2	12	R 1,518	59	R 2,455	8	20	44	72
August	4	R 577	298	R 2	12	R 1,511	R 63	R 2,469	9	19	58	86
September	3	R 540	274	R 2	11	R 1,412	R 50	R 2,292	5	17	25	47
October	3	R 568	282	R 2	15	R 1,412	62	R 2,396	6	17	28	51
November	2	R 521	274	R 2	11	R 1,414	R 46	R 2,270	6	15	27	48
December	2	R 529	287	2	9	R 1,476	R 79	R 2,384	6	16	24	46
Total	33	R 6,391	3,379	R <b>27</b>	147	R 17,216	R 819	R 28,012	74	214	361	648
<b>2007</b> January	3	R 499	284	R 3	11	R 1.405	<sup>R</sup> 68	R 2,272	8	17	36	60
February	2	R 474	260	R 3	8	R 1,288	R 63	R 2,098	15	13	61	89
March	2	R 529	273	R 2	13	R 1,449	R 71	R 2,341	7	13	33	53
April	3	R 542	281	R 2	13	R 1,412	R 67	R 2,320	5	13	31	49
May	3	R 565	284	R 2	14	R 1,412	R 79	R 2,437	6	14	28	48
•	3	R 559	282	R 2	12	R 1,455	R 68	R 2.382	8	16	35	59
June July	3	R 572	293	R 2	13	R 1,455	R 61	R 2,465	8	16	35 35	59 57
August	3	R 584	300	R 2	13	R 1,516	R 66	R 2,484	12	15	48	75
•	3	R 546	260	R 2	13	<sup>11</sup> ,516	R 63	R 2,300	6	15	46 31	75 51
September October	3	R 562	288	R 2	14	R 1,414	R 60	R 2,300	6	14	29	48
		R 518		R 2		_ , -	R 86		5			
November	2		272		12	R 1,415		R 2,307		12	13	30
December	2	518	282	3	12	1,462	66	2,343	6	15	20	42
Total	32	6,469	3,358	27	145	17,290	819	28,140	92	168	399	660

<sup>&</sup>lt;sup>a</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

b Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in

R=Revised.

Notes: • Transportation sector data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

Sources: Tables 3.7c. A1, and A3,

Monthly Energy Review Section 3 was redesigned in the January 2008 release. See "What's New" (http://www.eia.doe.gov/emeu/mer/wni.html) for a summary of the changes.

<sup>2005,</sup> includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Industrial Sector Other" on Table 3.8b.
<sup>c</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended

into motor gasoline.  $^{\rm d}$  Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

e Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

# **Petroleum**

**Note 1. Survey Respondents.** The Energy Information Administration (EIA) uses a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review such industry publications as the *Oil & Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. Those sources are augmented by articles in newspapers, communications from respondents indicating changes in status, and information received from survey systems.

To supplement routine frames maintenance and to provide more thorough coverage, a comprehensive frames investigation is conducted every 3 years. This investigation results in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

In 1991, EIA conducted a frame identifier survey of companies that produce, blend, store, or import oxygenates. A summary of the results from the identification survey was published in the *Weekly Petroleum Status Report* dated February 12, 1992, and in the February 1992 issue of the *Petroleum Supply Monthly*. In order to continue to provide relevant information about U.S. and regional gasoline supply, EIA conducted a second frame identifier survey of those companies during 1992. As a result, numerous respondents were added to the monthly surveys effective in January 1993. See Explanatory Note 7, "Frames Maintenance," in the *Petroleum Supply Monthly*.

**Note 2. Motor Gasoline.** Beginning in January 1981, EIA expanded its universe to include non-refinery blenders and separated blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to describe refinery operations more accurately.

Beginning with the reporting of January 1993 data, EIA made adjustments to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by EIA through 1992 were underreported because the reporting system was (1) not collecting all fuel ethanol blending, and (2) there was a misreporting of motor gasoline blending components that were blended into finished gasoline. The adjustments are incorporated into EIA's data beginning in January 1993. To facilitate data analysis across the 1992–1993 period, EIA prepared a table of 1992 data adjusted according to the 1993 basis. See *Petroleum Supply Monthly*, March 1993, Table H3.

**Note 3. Distillate and Residual Fuel Oils.** The requirement to report crude oil in pipelines or burned on leases as either distillate or residual fuel oil was eliminated. Prior to January 1981, the refinery input of unfinished oils typically exceeded the available supply of unfinished oils.

That discrepancy was assumed to be due to the redesignation of distillate and residual fuel oils received as such but used as unfinished oil inputs by the receiving refinery. The imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of that difference was subtracted from distillate and one-third from residual. Beginning in January 1981, EIA modified its survey forms to account for redesignated product and discontinued the above-mentioned adjustment.

Prior to 1983, crude oil burned on leases and used at pipeline pump stations was reported as either distillate or residual fuel oil and was included as product supplied for these products.

**Note 4.** New Stock Basis. In January 1975, 1979, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, affecting subsequent stocks reported and stock change calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

Crude Oil: 1982—645 (Total) and 351 (Non-SPR).

Distillate Fuel Oil: 1974—224; 1980—205; and 1982—186.

Jet Fuel (Total): 1974—30; 1980—42; and 1982—39.

Liquefied Petroleum Gases: 1974—113; 1978—136; 1980—128; and 1982—102.

Propane and Propylene: 1978—86; 1980—69; and 1982—57.

Motor Gasoline (Total): 1974—225; 1980—263; 1982—244.

Residual Fuel Oil: 1974—75; 1980—91; and 1982—69. Total Petroleum: 1974—1,121; 1980—1,425; and 1982—1.461.

Stock change calculations beginning in 1975, 1979, 1981, and 1983 were made by using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream is now reported on a component basis (ethane, propane, normal butane, isobutane, and pentanes plus). This change affects stocks reported and stock change calculations. Under the new basis, 1983 end-of-year stocks, in million barrels, would have been 108 for liquefied petroleum gases, and 55 for propane and propylene.

In January 1993, changes were made in the monthly surveys to begin collecting bulk terminal and pipeline stocks of oxygenates. This change affected stocks reported and stock change calculations. However, a new basis stock level was not calculated for 1992 end-of-year stocks.

Note 5. Stocks of Alaskan Crude Oil. Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock change calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Non-SPR).

**Note 6. Data Discrepancies.** Due to differences internal to EIA data processing systems, some small discrepancies exist between data in the *Monthly Energy Review (MER)* and the *Petroleum Supply Annual (PSA)* and *Petroleum Supply Monthly (PSM)*. The data that have discrepancies are footnoted in Section 3 tables. The corresponding *PSA/PSM* values, in thousand barrels per day, are: Natural Gas Plant Liquids Production, 1976: 1,603; Total Exports, 1979: 472; Petroleum Products Exports, 1979: 237; and SPR Crude Oil Imports, 1978: 162.

Note 7. Petroleum Products Supplied and Petroleum **Consumption.** Total petroleum products supplied is the sum of the products supplied for each petroleum product, crude oil, unfinished oils, and gasoline blending components. For each of these, except crude oil, product supplied is calculated by adding refinery production, natural gas plant liquids production, new supply of other liquids, imports, and stock withdrawals, and subtracting stock additions, refinery inputs, and exports. Crude oil product supplied is the sum of crude oil burned on leases and at pipeline pump stations as reported on Form EIA-813, "Monthly Crude Oil Report." Prior to 1983, crude oil burned on leases and used at pipeline pump stations was reported as either distillate or residual fuel oil and was included as product supplied for these products. Petroleum product supplied (see Tables 3.5 and 3.6) is an approximation of petroleum consumption and is synonymous with the term "Petroleum Consumption" in Tables 3.7a-c and 3.8a-c.

#### Tables 3.7a-3.7c Sources

Petroleum consumption data in these tables are derived from data for "petroleum products supplied" from the following sources:

1973–1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual."

1976–1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual."

1981–2006: EIA, Petroleum Supply Annual.

2007: EIA, Petroleum Supply Monthly.

Energy-use allocation procedures by individual product are as follows:

**Asphalt and Road Oil**—All consumption of asphalt and road oil is assigned to the industrial sector.

**Aviation Gasoline**—All consumption of aviation gasoline is assigned to the transportation sector.

**Distillate Fuel Oil**—Distillate fuel oil consumption is assigned to the sectors as follows:

**Distillate Fuel Oil Consumed by the Electric Power Sector**—See Table 7.4b. For 1973–1979, electric utility consumption of distillate fuel oil is assumed to be the amount of petroleum (minus small amounts of kerosene and

kerosene-type jet fuel deliveries) consumed in gas turbine and internal combustion plants. For 1980–2000, electric utility consumption of distillate fuel is assumed to be the amount of light oil (fuel oil nos. 1 and 2, plus small amounts of kerosene and jet fuel) consumed.

**Distillate Fuel Oil Consumed by the End-Use Sectors, Annually**—The aggregate end-use amount is total distillate fuel oil supplied minus the amount consumed by the electric power sector. The end-use total consumed annually is allocated into the individual end-use sectors (residential, commercial, industrial, and transportation) in proportion to each sector's share of sales as reported in EIA's *Fuel Oil and Kerosene Sales* (*Sales*) report series (DOE/EIA-0535), which is based primarily on data collected by Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report" (previously Form EIA-172). Shares for the current year are based on the most recent *Sales* report.

Following are notes on the individual sector groupings:

Since 1979, the residential sector sales total is directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares.

Since 1979, the commercial sector sales total is directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares.

Since 1979, the industrial sector sales total is the sum of the sales for industrial, farm, oil company, off-highway diesel, and all other uses. Prior to 1979, each year's sales subtotal of the heating plus industrial category 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.

The transportation sector sales total is the sum of the sales for railroad, vessel bunkering, on-highway diesel, and military uses for all years.

Distillate Fuel Oil Consumed by the End-Use Sectors, Monthly—Residential sector and commercial sector monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. (For each month of the current year, the residential and commercial consumption increase from the same month in the previous year is based on the percent increase in that month's No. 2 heating oil sales from the same month in the previous year.) The years' No. 2 heating oil sales totals are from the following sources: for 1973–1980, the Ethyl Corporation, Monthly Report of Heating Oil Sales; for 1981 and 1982, the American Petroleum Institute, Monthly Report

of Heating Oil Sales; and for 1983 forward, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale.

The transportation highway use portion is allocated into the months in proportion to each month's share of the year's total sales for highway use as reported by the Federal Highway Administration's Table MF-25, "Private and Commercial Highway Use of Special Fuels by Months." After 1993, the sales-for-highway-use data are no longer available as a monthly series; the 1993 data are used for allocating succeeding year's totals into months.

A distillate fuel oil "balance" is calculated as total distillate fuel oil supplied minus the amount consumed by the electric power sector, residential sector, commercial sector, and for highway use.

Industrial sector monthly consumption is estimated by multiplying each month's distillate fuel oil "balance" by the annual industrial consumption share of the annual distillate fuel oil "balance."

Total transportation sector monthly consumption is estimated as total distillate fuel oil supplied minus the amount consumed by the residential, commercial, industrial, and electric power sectors.

Jet Fuel—Through 1982, small amounts of kerosene-type jet fuel were consumed by the electric power sector. Kerosene-type jet fuel deliveries to the electric power sector as reported on the Form FERC-423 (formerly Form FPC-423) were used as estimates of this consumption. Through 2004, all remaining jet fuel (kerosene-type and naphtha-type) is consumed by the transportation sector. Beginning in 2005, kerosene-type jet fuel is consumed by the transportation sector; while naphtha-type jet fuel is classified under "Other Petroleum Products," which is assigned to the industrial sector.

Kerosene—Kerosene product supplied is allocated into the individual end-use sectors (residential, commercial, and industrial) in proportion to each sector's share of sales as reported in EIA's Fuel Oil and Kerosene Sales (Sales) report series (DOE/EIA-0535), which is based primarily on data collected by Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report" (previously Form EIA-172).

Since 1979, the residential sector sales total is directly from the Sales reports. Prior to 1979, each year's sales category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares.

Since 1979, the commercial sector sales total is directly from the Sales reports. Prior to 1979, each year's sales category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares.

Since 1979, the industrial sector sales total is the sum of the sales for industrial, farm, and all other uses. Prior to 1979, each year's sales category called "heating" is split into residential, commercial and industrial in proportion to the 1979 shares, and this estimated industrial (including farm) portion is added to all other uses.

Liquefied Petroleum Gases (LPG)—The annual shares of LPG's total consumption that are estimated to be used by each sector are applied to each month's total LPG consumption to create monthly sector consumption estimates. The annual sector shares are calculated as described below.

Sales of LPG to the residential and commercial sector are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the sector.

The quantity of LPG sold each year for consumption in internal combustion engines is allocated between the transportation and industrial sectors on the basis of data for special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration, in Highway Statistics. The allocations of LPG sold for internal combustion engine use to the transportation sector range from a low of 20 percent (in 2001) to a high of 73 percent (in 1994).

LPG consumed annually by the industrial sector is estimated as the difference between LPG total supplied and the estimated consumption of LPG by the sum of the residential and commercial sector and the transportation sector. The industrial sector includes LPG used by chemical plants as raw materials or solvents and used in the production of synthetic rubber; refinery fuel use; use as synthetic natural gas feedstock and use in secondary recovery projects; all farm use; LPG sold to gas utility companies for distribution through the mains; and a portion of the use of LPG as an internal combustion engine fuel.

Sources of the annual sales data for creating annual energy shares are:

EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports, based primarily on data collected by Form EIA-174, "Sales of Liquefied Petroleum Gases." 1983: End-use consumption estimates for 1983 are based on 1982 end-use consumption because the collection of data under Form EIA-174 was discontinued after data year 1982. 1984 forward: American Petroleum Institute (API), "Sales of Natural Gas Liquids and Liquefied Refinery Gases," which is based on an LPG sales survey jointly sponsored by API, the Gas Processors Association, and the National Liquefied Petroleum Gas Association. EIA adjusts the data to remove quantities of pentanes plus and to estimate withheld values.

Lubricants—The consumption of lubricants is allocated to the industrial and transportation sectors for all months according to proportions developed from annual sales of

1973-1982:

lubricants to the 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**—The total monthly consumption of motor gasoline is allocated to the sectors in proportion to aggregations of annual sales categories created on the basis of 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 and miscellaneous and unclassified uses.

Industrial sales are the sum of sales for agriculture, construction, and industrial and commercial use as classified in the *Highway Statistics*.

Transportation sales are the sum of sales for highway use (minus the sales of special fuels, which are primarily diesel fuel and are accounted for in the transportation sector of distillate fuel) and sales for marine use.

**Petroleum Coke**—Portions of petroleum coke are consumed by the electric power sector (see Table 7.4b) and the commercial sector (see sources for Table 7.4c). The remaining petroleum coke is assigned to the industrial sector.

**Residual Fuel Oil**—Residual fuel oil consumption is assigned to the sectors as follows:

**Residual Fuel Oil Consumed by the Electric Power Sector**—See Table 7.4b. For 1973–1979, electric utility consumption of residual fuel oil is assumed to be the amount of petroleum consumed in steam-electric power plants. For 1980–2000, electric utility consumption of residual fuel oil is assumed to be the amount of heavy oil (fuel oil nos. 4, 5, and 6) consumed.

Residual Fuel Oil Consumed by the End-Use Sectors, Annually—The aggregate end-use amount is total residual fuel oil supplied minus the amount consumed by the electric power sector. The end-use total consumed annually is allocated into the individual end-use sectors (commercial, industrial, and transportation) in proportion to each sector's share of sales as reported in EIA's *Fuel Oil and Kerosene Sales* (*Sales*) report series (DOE/EIA-535), which is based primarily on data collected by Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report" (previously Form EIA-172). Shares for the current year are based on the most recent *Sales* report.

Following are notes on the individual sector groupings:

Since 1979, commercial sales data are directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares.

Since 1979, industrial sales data are the sum of sales for industrial, oil company, and all other uses. Prior to 1979, each year's sales subtotal of the heating plus industrial category 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 sales are the sum of sales for railroad, vessel bunkering, and military uses for all years.

Residual Fuel Oil Consumed by the End-Use Sectors, Monthly—Commercial sector monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. (For each month of the current year, the consumption increase from the same month in the previous year is based on the percent increase in that month's No. 2 heating oil sales from the same month in the previous year.) The years' No. 2 heating oil sales totals are from the following sources: for 1973–1980, the Ethyl Corporation, Monthly Report of Heating Oil Sales; for 1981 and 1982, the American Petroleum Institute, Monthly Report of Heating Oil Sales; and for 1983-1996, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale.

A residual fuel oil "balance" is calculated as total residual fuel oil supplied minus the amount consumed by the electric power sector, commercial sector, and by industrial combined-heat-and-power plants (see sources for Table 7.4c).

Transportation sector monthly consumption is estimated by multiplying each month's residual fuel oil "balance" by the annual transportation consumption share of the annual residual fuel oil "balance."

Total industrial sector monthly consumption is estimated as total residual fuel oil supplied minus the amount consumed by the commercial, transportation, and electric power sectors.

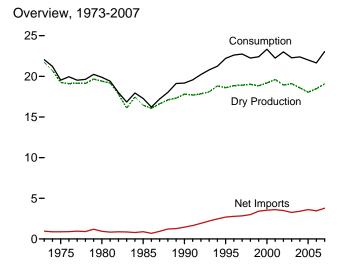
Other Petroleum Products—Consumption of all remaining petroleum products is assigned to the industrial sector. Other petroleum products include pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

# **Natural Gas**

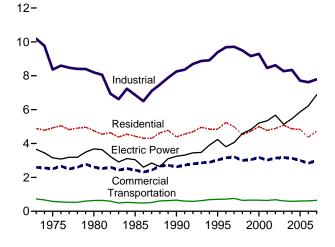


Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

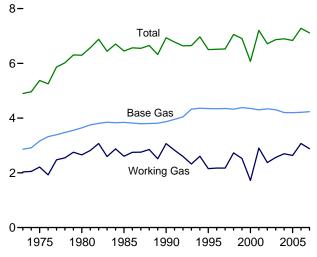
Figure 4.1 Natural Gas (Trillion Cubic Feet)



## Consumption by Sector, 1973-2007

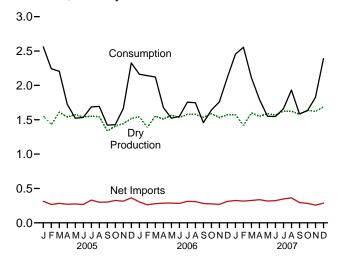


Underground Storage, End of Year, 1973-2007



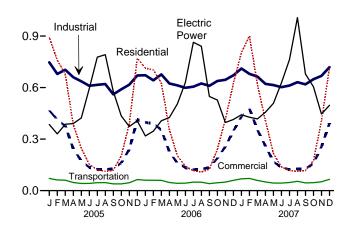
Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/natgas.html. Sources: Tables 4.1, 4.3, and 4.4.

## Overview, Monthly



## Consumption by Sector, Monthly

1.2-



# Underground Storage, End of Month

9-

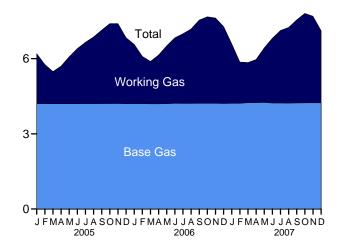


Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Gross With- drawals <sup>a</sup>	Marketed Production (Wet) <sup>b</sup>	Extraction Loss <sup>c</sup>	Dry Gas Production <sup>d</sup>	Supple- mental Gaseous Fuels <sup>e</sup>	Imports	Trade Exports	Net Imports	Net Storage With- drawals <sup>f</sup>	Balancing Item <sup>g</sup>	Consump-
	urawais	(wei)	LUSS	Froductions	rueis	illiports	Exports	illiports	urawais	Items	tion.
1973 Total	24,067	<sup>i</sup> 22,648	917	<sup>j</sup> 21,731	NA	1,033	77	956	-442	-196	22,049
1975 Total	21,104	<sup>1</sup> 20,109	872	<sup>i</sup> 19,236	NA	953	73	880	-344	-235	19,538
1980 Total	21,870	20,180	777	19,403	155	985	49	936	23	-640	19,877
1985 Total	19,607	17,270	816	16,454	126	950	55	894	235	-428	17,281
1990 Total	21,523	18,594	784	17,810	123	1,532	86	1,447	-513	307	<sup>j</sup> 19,174
1995 Total	23,744	19,506	908	18,599	110	2,841	154	2,687	415	396	22,207
1996 Total	24,114	19,812	958	18,854	109	2,937	153	2,784	2	860	22,610
1997 Total	24,213	19,866	964	18,902	103	2,994	157	2,837	24	871	22,737
1998 Total	24,108	19,961	938	19,024	102	3,152	159	2,993	-530	657	22,246
1999 Total	23,823	19,805	973	18,832	98	3,586	163	3,422	172	-119	22,405
2000 Total	24,174	20,198	1,016	19,182	90	3,782	244	3,538	829	-305	23,333
2001 Total	24,501	20,570	954	19,616	86	3,977	373	3,604	-1,166	99	22,239
2002 Total	23,941	19,885	957	18,928	68	4,015	516	3,499	468	44	23,007
2003 Total	24,119	19,974	876	19,099	68	3,944	680	3,264	-197	44	22,277
2004 Total	23,970	19,517	927	18,591	60	4,259	854	3,404	-114	448	22,389
<b>2005</b> January	2,035	1,633	76	1,557	4	405	91	314	728	-42	2,561
February	1,871	1,498	69	1,429	5	356	90	267	438	103	2,243
March	2,081	1,687	78	1,609	6	380	96	283	293	14	2,205
April	1,979	1,615	75	1,540	5	326	56	271	-222	131	1,725
May	2,011	1,652	77	1,576	4	334	59	275	-392	60	1,522
June	1,973	1,612	75 75	1,537	5	322	55	267	-333	57	1,534
July	1,984	1,627	75 75	1,552	5	386	55	331	-264	62	1,686
August	1,988	1,619	75	1,544	6	352	52	300	-221	66	1,695
September	1,767	1,401	65	1,336	5	346	44	302	-280	59	1,422
October	1,871	1,476	68	1,407	6	366	41	325	-273	-37	1,428
November	1,902	1,514	70 74	1,444	6	359	45	314	13	-114	1,663
December Total	1,996 <b>23,457</b>	1,593 <b>18,927</b>	74 <b>876</b>	1,519 <b>18,051</b>	6 <b>64</b>	409 <b>4,341</b>	45 <b>729</b>	363 <b>3,612</b>	565 <b>52</b>	-127 <b>232</b>	2,326 <b>22,011</b>
2006 January	1,982	1,618	76	1,543	6	360	56	305	271	39	2,162
February	1,801	1,458	68	1,390	6	321	59	262	495	-11	2,141
March	1,993	1,630	76	1,554	6	348	69	279	206	77	2,122
April	1,920	1,582	74	1,508	5	332	45	287	-260	139	1,678
May	1,967	1,642	77	1,566	4	351	63	288	-374	40	1,524
June	1,934	1,609	75	1,534	6	348	66	282	-317	43	1,547
July	1,980	1,655	77	1,578	5	371	59	312	-166	26	1,756
August	1,989	1,656	77	1,578	6	365	55	310	-194	48	1,748
September	1,940	1,611	<b>7</b> 5	1,536	5	334	53	281	-364	(s)	1,458
October	2,015	1,665	78	1,587	6	334	59	275	-135	-93	1,640
November	1,966	1,607	75	1,532	6	339	70	269	51	R -97	R 1,761
December	2,020	1,649	77	1,572	6	383	72	311	351	-125	2,116
Total	23,507	19,382	906	18,476	66	4,186	724	3,462	-436	R <b>85</b>	R 21,653
2007 January	2,043	E 1,644	69	E 1,575	6	395	69	326	684	-136	2,455
February	1,841	E 1,480	64	E 1,416	6	373	57	316	731	86	2,555
March	2,078	E 1,674	74	E 1,600	6	402	77	325	48	131	2,111
April	1,999	E 1,620	71	E 1,549	5	388	51	337	-120	25	1,797
May	2,078	E 1,666	75	E 1,592	4	380	62	318	-459	97	1,551
June	1,978	E 1,639	71	E 1,568	5	381	57	323	-389	39	1,546
July	2,055	E 1,700	74	E 1,626	5	418	71	347	-313	-4	1,661
August	2,059	E 1,699	73	E 1,626	5	426	62	364	-126	63	1,932
September	2,006	E 1,653	72	E 1,580	E 5	361	65	296	-298	4	1,587
October	2,107	E 1,714	77	E 1,637	E 4	342	59	283	-258	<sup>R</sup> -35	R 1,632
November	R 2,094	RE 1,696	76	RE 1,621	E 5	R 343	R 85	R 258	108	<sup>R</sup> -166	1,825
December	2,188	E 1,766	77	E 1,689	E 4	373	E 87	E 287	569	-158	2,391
Total	24,528	E 19,952	874	E 19,078	<sup>E</sup> 61	<sup>R</sup> 4,581	<sup>E</sup> 802	<sup>E</sup> 3,779	177	-53	23,042

a Gas withdrawn from natural gas and crude oil wells; excludes lease

b Gross withdrawals minus repressuring, nonhydrocarbon gases removed, and vented and flared. See Note 1, "Production," at end of section.

See Note 2, "Extraction Loss," at end of section.

d Marketed production (wet) minus extraction loss.

See Note 3, "Supplemental Gaseous Fuels," at end of section.
 Net withdrawals from underground storage. For 1980-2006, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Storage,"

at end of section.  $^{9}$  See Note 5, "Balancing Item," at end of section. Since 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

<sup>h</sup> See Note 6, "Consumption," at end of section.

i May include unknown quantities of nonhydrocarbon gases.

For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector" on Table 4.3. See Note 7, "Consumption, 1989-1992," at end of section.

E=Estimate. (s)=Less than 500 million cubic feet. NA=Not

<sup>·</sup> Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/natgas.html for all available

data beginning in 1973.

Sources: • Imports and Exports: Table 4.2. • Consumption: Table 4.3. Balancing Item: Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals. • All Other Data: 1973-2001—Energy Information Administration (EIA), Natural Gas Annual, annual reports. 2002 forward—EIA, Natural Gas Monthly, February 2008, Table 1.

Table 4.2 Natural Gas Trade by Country

(Billion Cubic Feet)

					Imports					Exports			
	Algeria <sup>a</sup>	Aus- tralia <sup>a</sup>	Canada <sup>b</sup>	Mexicob	Nigeria <sup>a</sup>	<b>Q</b> atar <sup>a</sup>	Trinidad and Tobago <sup>a</sup>	Otherc	Total	Canada <sup>b</sup>	<b>J</b> apan <sup>a</sup>	<b>Mexico</b> <sup>b</sup>	Total
1973 Total	3	0	1,028	2	0	0	0	0	1,033	15	48	14	77
1975 Total	5	Ŏ	948	ō	Ŏ	Ŏ	ŏ	Ŏ	953	10	53	9	73
1980 Total	86	Ö	797	102	Ö	Ō	Ö	Ö	985	(s)	45	4	49
1985 Total	24	0	926	0	0	0	0	0	950	(s)	53	2	55
1990 Total	84	0	1,448	0	0	0	0	0	1,532	17	53	16	86
1995 Total	18	0	2,816	7	0	0	0	0	2,841	28	65	61	154
1996 Total	35	0	2,883	14	0	0	0	5	2,937	52	68	34	153
1997 Total	66	10	2,899	17	0	0	0	2	2,994	56	62	38	157
1998 Total	69	12	3,052	15	0	0	0	5	3,152	40	66	53	159
1999 Total	76	12	3,368	55	0	20	51	5	3,586	39	64	61	163
2000 Total	47	6	3,544	12	13	46	99	15	3,782	73	66	106	244
2001 Total	65	2	3,729	10	38	23	98	12	3,977	167	66	141	373
2002 Total	27	0	3,785	2	8	35	151	8	4,015	189	63	263	516
2003 Total	53	0	3,437	0	50	14	378	11	3,944	271	66	343	680
2004 Total	120	15	3,607	0	12	12	462	31	4,259	395	62	397	854
2005 January	6	0	347	0	3	0	44	5	405	53	6	33	91
February	11	0	303	0	0	3	39	0	356	53	6	31	90
March	3	0	333	(s)	0	0	40	3	380	65	6	26	96
April	9	0	279	(s)	0	0	36	3	326	29	6	21	56
May	11	0	281	(s)	0	0	41	0	334	28	4	27	59
June	12	0	265	0	0	0	42	3	322	18	4	33	55
July	6	0	333	(s)	0	0	41	6	386	18	7	30	55
August	3	0	308	0	3	0	27	11	352	19	6	27	52
September	6	0	293	1	0	0	35	11	346	16	6	22	44
October	12	0	306	1	3	0	33	12	366	15	6	20	41
November	9	0	299	3	0	0	30	19	359	20	6	19	45
December Total	9 <b>97</b>	0 <b>0</b>	353 <b>3,700</b>	4 9	0 <b>8</b>	0 <b>3</b>	31 <b>439</b>	11 <b>84</b>	409 <b>4,341</b>	23 <b>358</b>	6 <b>65</b>	17 <b>305</b>	45 <b>729</b>
	31	U	3,700	3	· ·	3	433	04	4,541	330	03	303	123
<b>2006</b> January	3	0	320	1	3	0	30	3	360	32	6	18	56
February	3	0	282	(s)	3	0	28	5	321	33	6	20	59
March		0	314	. 1	0	0	30	0	348	37	6	26	69
April	3	0	273	(s)	6	0	36	14	332	16	6	24	45
May	0	0	283	(s)	3	0	44	20	351	21	6	36	63
June	3	0	286	0	6	0	39	14	348	23	6	37	66
July	3	0	313	0	6	0	33	15	371	17	6	37	59
August	0	0	313	0	6	0	37	9	365	17	6	32	55
September	0	0	290	3	6	0	25	9	334	23	4	26	53
October	0	0	296	1	9	0	25	3	334	30	3	25	59
November	0	0	290	1	6	0	25	17	339	45	5	20	70
December	0	0	328	4	3	0	37	11	383	47	4	21	72 <b>7</b> 24
Total	17	0	3,590	13	57	0	389	120	4,186	341	61	322	724
<b>2007</b> January	3	0	337	4	5	0	37	9	395	41	5	24	69
February	0	0	321	8	6	0	33	6	373	34	5	17	57
March	9	0	309	6	9	0	54	15	402	53	5	19	77
April	24	0	280	9	9	0	51	14	388	32	4	15	51
May		0	283	3	15	3	38	15	380	35	4	24	62
June		0	290	4	20	6	30	18	381	28	3	26	57
July		0	314	5	12	3	62	21	418	38	4	29	71
August		0	334	4	15	6	49	17	426	28	4	30	62
September	3	0	317	2	3	0	24	12	361	33	4	28	65
October		0	309 R 343	2	0	0	29	3	342 R 343	30 R 50	2	25 R 20	<sup>d</sup> 59
November		0	R 313	R3	0	0	24	3	R 343	R 56	3	R 26	R 85
December	0	0	E 352	NA	0 <b>0</b> 5	0	21	0 433	373	E 57	4	E 26	E 87
Total	74	0	E 3,760	NA	95	18	451	132	4,581	<sup>E</sup> 465	47	E 288	<sup>d E</sup> 802

<sup>&</sup>lt;sup>a</sup> As liquefied natural gas.

Notes: • See Note 8, "Imports and Exports," at end of section. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/natgas.html for all available data beginning in 1973.

Sources: • 1973-1987: Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas."
• 1988-2001: EIA, Natural Gas Annual, annual reports. • 2002 forward: EIA, Natural Gas Monthly, February 2008, Tables 4 and 5; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

<sup>&</sup>lt;sup>b</sup> By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 8, "Imports and Exports," at end of section.

 $<sup>^{\</sup>rm c}$  Brunei in 2002; Egypt in 2005-2007; Equatorial Guinea in 2007; Indonesia in 1986 and 2000; Malaysia in 1999 and 2002-2005; Oman in 2000-2005; and United Arab Emirates in 1996-2000.

d Includes 2 billion cubic feet to Russia.

R=Revised. NA=Not available. E=Estimate. (s)=Less than 500 million cubic feet.

Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
					Industrial			Tr	ansportatio	n		
	Resi-	Com-	Lease and		Other Industri	al		Pipelines <sup>d</sup> and Dis-	Vehicle		Electric Power	
	dential	merciala	Plant Fuel	CHPb	Non-CHP <sup>c</sup>	Total	Total	tributione	Fuel	Total	Sector <sup>f,g</sup>	Total
1973 Total	4,879	2,597	1,496	(h)	8,689	8,689	10,185	728	NA	728	3,660	22,049
1975 Total 1980 Total	4,924 4,752	2,508 2,611	1,396 1,026	{ i }	6,968 7,172	6,968 7,172	8,365 8,198	583 635	NA NA	583 635	3,158 3,682	19,538 19,877
1985 Total	4,433	2,432	966	}h{	5,901	5,901	6,867	504	NA	504	3,044	17,281
1990 Total	4,391	2,623	1,236	1,055	5,963	<sup>1</sup> 7,018	8,255	660		660	<sup>1</sup> 3,245	¹ 19.174
1995 Total	4,850	3,031	1,220	1,258	6,906	8,164	9,384	700	(s) 5	705	4,237	22,207
1996 Total	5,241	3,158	1,250	1,289	7,146	8,435	9,685	711	6	718	3,807	22,610
1997 Total	4,984	3,215	1,203	1,282	7,229	8,511	9,714	751	8	760	4,065	22,737
1998 Total	4,520	2,999	1,173	1,355	6,965	8,320	9,493	635	9	645	4,588	22,246
1999 Total	4,726	3,045	1,079	1,401	6,678	8,079	9,158	645	12	657	4,820	22,405
2000 Total 2001 Total	4,996 4,771	3,182 3.023	1,151 1,119	1,386 1,310	6,757 6,035	8,142 7,344	9,293 8.463	642 625	13 15	655 640	5,206 5,342	23,333 22,239
2002 Total	4,889	3,144	1,113	1,240	6,267	7,507	8,620	667	15	682	5,672	23,007
2002 Total	5.079	3,179	1,113	1,144	6.007	7,307 7,150	8,273	591	18	610	5,072	22,277
2004 Total	4,869	3,129	1,098	1,191	6,052	7,243	8,341	566	21	587	5,464	22,389
2005 January	892	467	96	92	558	651	747	69	2	71	385	2,561
February	759	412 377	88 99	84 90	507 514	591 604	679 703	60 59	2 2	62 61	331	2,243 2,205
March	678 384	377 243	99 94	90 87	514 479	566	703 660	59 46	2	47	386 390	2,205 1,725
April May	248	174	96	89	452	540	636	40	2	42	423	1,723
June	152	135	94	100	417	516	610	40	2 2	42	594	1,534
July	122	125	95	110	411	522	616	44	2	46	777	1.686
August	113	124	94	110	416	526	620	45	2	47	791	1,695
September	118	127	83	87	390	477	560	37	2	39	578	1,422
October	202	162	88	74	427	502	590	37	2	39	435	1,428
November	387	240	90	75	452	527	617	44	2	46	373	1,663
December Total	771 <b>4,827</b>	414 <b>2,999</b>	94 <b>1,112</b>	85 <b>1,084</b>	491 <b>5,514</b>	576 <b>6,597</b>	670 <b>7,709</b>	62 <b>584</b>	2 <b>23</b>	64 <b>607</b>	406 <b>5,869</b>	2,326 <b>22,011</b>
2006 January	714	397	94	91	486	577	672	59	2	61	318	2.162
February	702	390	86	83	474	556	642	59	2	60	346	2,141
March	626	353	95	91	491	581	676	58	2	60	407	2,122
April	355	226	92	84	448	532	624	45	2	47	426	1,678
May	204	161	94	92	426	518	612	41	2	43	504	1,524
June	141	134	93	94	412	506	599	41	2	43	630	1,547
July	116 108	122 127	95 95	103 104	407 424	510 528	605 624	47 47	2 2	49 49	864 840	1,756 1.748
August September	125	133	93 93	91	424 426	526 517	610	39	2	49 41	548	1,746
October	240	188	96	97	445	542	638	44	2	46	528	1,430
November	413	256	R 94	89	462	551	R 645	47	2	50	397	R 1,761
December	624	347	96	95	480	576	671	58	2	60	414	2,116
Total	4,368	2,835	<sup>R</sup> 1,124	1,115	5,380	6,495	<sup>R</sup> 7,618	584	25	609	6,222	R 21,653
<b>2007</b> January	803 900	431 477	E 95 E 86	97 88	519 506	616 594	711 680	66 69	2 2	<sup>R</sup> 69 71	442 427	2,455 2,555
February	900 617	477 354	E 97	88 89	506 478	594 567	664	69 57	2	59	42 <i>1</i> 417	2,555 2,111
March April	408	260	E 94	86	476 442	50 <i>7</i> 527	621	R 49	2	59 51	417 457	1,797
May	216	169	E 97	90	428	518	614	42	2	44	508	1,757
June	137	135	€ 95	99	408	507	602	42	2	44	627	1,546
July	118	123	E 99	109	404	513	612	45	2	47	762	1,661
August	112	127	E 99	135	398	533	631	52	2 2	54	1,007	1,932
September	117	127	E 96	109	413	523	619	43	2	45	679	_ 1,587
October	175	R 158	E 99	107	442	549	648	44	2	46	605	R 1,632
November	404	R 255	E 98	91	478	570	668	49	2	51	446	1,825
December	717	393	E 102	103	513 5 430	616	719	64	2	66	496	2,391
Total	4,724	3,008	E 1,157	1,202	5,430	6,632	7,789	621	26	647	6,874	23,042

<sup>&</sup>lt;sup>a</sup> All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Table

Notes: • Data are for natural gas, plus a small amount of supplemental gaseous fuels. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • Totals may not equal sum of components due to independent

rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/natgas.html for all available

Sources: • Residential, Commercial, Lease and Plant Fuel, Other Industrial Total and Pipelines and Distribution: 1973-2001—Energy Information Administration (EIA), Natural Gas Annual (NGA), annual reports. 2002 forward—EIA, Natural Gas Monthly (NGM), February 2008, Table 2. • Industrial CHP: Table 7.4c. • Vehicle Fuel: 1990 and 1991—EIA, NGA 2000, (November 2001), Table 95. 1992-1998—"Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4). 1999-2001—EIA, NGA, annual reports. 2002 forward—EIA, NGM, February 2008, Table 2. • Electric Power Sector: Table 7.4b.

<sup>7.4</sup>c for CHP fuel use.

b Industrial combined-heat-and-power (CHP) and a small number of industrial electrity-only plants.

C All industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."

d Natural gas consumed in the operation of pipelines, primarily in compressors.

e Natural gas used as fuel in the delivery of natural gas to consumers.

f The electric power sector comprises electricity-only and

combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

9 Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

h Included in "Non-CHP."

For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector." See Note 7, "Consumption, 1989-1992," at end of section.

R=Revised. E=Estimate. NA=Not available. (s)=Less than 500 million cubic feet.

Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	U	Natural Gas in Inderground Storage End of Period	θ,	From Sar	Vorking Gas ne Period us Year	Storage Activity		
	Base Gas	Working Gas	Totala	Volume	Percent	Withdrawals	Injections	Net <sup>b,0</sup>
973 Total	2,864	2,034	4,898	305	17.6	1,533	1,974	-442
975 Total	3,162	2,212	5,374	162	7.9	1,760	2,104	-344
	3,642	·	6,297	-99	-3.6	•	•	-344
980 Total		2,655				1,910	1,896	
985 Total	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
990 Total	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
995 Total	4,349	2,153	6,503	-453	-17.4	2,974	2,566	408
996 Total	4,341	2,173	6,513	19	.9	2,911	2,906	6
997 Total	4,350	2,175	6,525	2	.1	2,824	2,800	24
998 Total	4,326	2,730	7,056	554	25.5	2,379	2,905	-526
999 Total	4,383	2,523	6,906	-207	-7.6	2,772	2,598	174
000 Total	4,352	1,719	6,071	-806	-31.9	3,498	2,684	814
001 Total	4,301	2,904	7,204	1,185	68.9	2,309	3,464	-1,156
002 Total	4,340	2,375	6,715	-528	-18.2	3,138	2,670	468
003 Total	4,303	2,563	6,866	187	7.9	3,099	3,292	-193
004 Total	4,201	2,696	6,897	133	5.2	3,037	3,150	-113
004 Total	4,201	2,030	0,037	133	J.2	3,037	3,130	-113
<b>005</b> January	4,205	1,994	6,199	243	13.9	771	58	713
February	4,204	1,564	5,769	409	35.4	487	59	429
March	4,200	1,284	5,484	226	21.4	385	100	285
April	4,200	1,499	5,699	246	19.7	72	288	-216
May	4,200	1,875	6,076	251	15.5	57	439	-383
June	4,201	2,197	6,399	175	8.6	66	390	-324
			,	56	2.3	95	351	-256
July	4,203	2,450	6,653					
August	4,203	2,662	6,865	-80	-2.9	100	314	-214
September	4,205	2,932	7,136	-125	-4.1	87	359	-273
October	4,206	3,194	7,400	-108	-3.3	74	340	-266
November	4,209	3,189	7,398	-55	-1.7	212	203	8
December	4,200	2,635	6,835	-61	-2.3	651	99	552
Total	4,200	2,635	6,835	-61	-2.3	3,057	3,002	55
<b>006</b> January	4,202	2,371	6,573	377	18.9	374	110	264
February	4,202	1,886	6,089	322	20.6	539	54	485
March	4,197	1,692	5,889	407	31.7	331	131	200
April	4,198	1,945	6,143	447	29.8	77	332	-255
•	,		,					
May	4,202	2,310	6,512	435	23.2	52	420	-367
June	4,215	2,617	6,832	419	19.1	62	373	-311
July	4,214	2,779	6,993	329	13.4	144	305	-161
August	4,213	2,969	7,182	307	11.5	113	302	-189
September	4,215	3,323	7,539	391	13.4	37	395	-358
October	4,217	3,452	7,669	258	8.1	115	246	-131
November	4,216	3,407	7,623	217	6.8	206	159	48
December	4,211	3,070	7,281	435	16.5	443	99	343
Total	4,211	3,070	7,281	435	16.5	2,493	2,924	-431
<b>007</b> January	4,215	2,379	6,594	8	.3	740	56	684
February	4,214	1,649	5,863	-238	-12.6	782	51	731
•	4,242	1,603	5,845	-238	-5.2	269	221	48
March	,	.'	,					
April	4,246	1,720	5,966	-225	-11.6	154	274	-120
May	4,251	2,179	6,430	-131	-5.7	39	498	-459
June	4,230	2,580	6,810	-37	-1.4	48	437	-389
July	4,229	2,894	7,123	114	4.1	84	397	-313
August	4,226	3,017	7,243	48	1.6	168	294	-126
September	4,232	3,316	7,547	-7	2	73	372	-298
October	4,236	3,567	7,803	115	3.3	76	334	-258
November	4,238	3,456	7,694	49	1.5	255	148	108
December	4,234	2,879	7,113	-191	-6.2	633	64	569
Total	4,234	2,879	7,113 7,113	-191	-6.2	3,321	3,144	177
. ota	-, <u>-</u> J-	2,013	7,113	191	-0.2	J,J£ 1	J, 1 77	111

<sup>&</sup>lt;sup>a</sup> For total underground storage capacity at the end of each calendar year, see Note 4, "Storage," at end of section.

Production and Consumption 1979, Table 1. 1980-1995—EIA, Historical Natural Gas Annual 1930 Through 2000, Table 11. 1996-2001—EIA, Natural Gas Monthly (NGM), monthly issues. 2002 forward—EIA, NGM, February 2008, Table 7.

<sup>&</sup>lt;sup>b</sup> For 1980-2006, data differ from those shown on Table 4.1, which includes liquefied natural gas storage for that period.

<sup>&</sup>lt;sup>c</sup> Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 4, "Storage," at end of section.

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

Web Page: See http://www.eia.doe.gov/emeu/mer/natgas.html for all available data beginning in 1973.

Sources: • Storage Activity: 1973-1975—Energy Information Administration (EIA), Natural Gas Annual 1994, Volume 2, Table 9. 1976-1979—EIA, Natural Gas

<sup>•</sup> All Other Data: 1973 and 1974—American Gas Association (AGA), Gas Facts, 1972 Data, Table 57, Gas Facts, 1973 Data, Table 57, and Gas Facts, 1974 Data, Table 40. 1975 and 1976—Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report," 1977 and 1978—EIA, Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report." 1979-1995—EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report." 1996-2004—EIA, NGM, monthly issues. 2005 forward—EIA, NGM, February 2008, Table 7.

# **Natural Gas**

#### Note 1. Production.

Annual data—Final annual data are from the Energy Information Aministration (EIA) *Natural Gas Annual (NGA)*.

Estimated monthly data—Data for the two most recent months presented are estimated. Some of the data for earlier months are also estimated or computed. For a discussion of computation and estimation procedures, see the EIA *Natural Gas Monthly (NGM)*.

Preliminary monthly data—Monthly data are considered preliminary until after publication of the EIA *NGA*. Preliminary monthly data are gathered from reports to the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary, to a standard 14.73 psi pressure base. Unless there are major changes, data are not revised until after publication of the EIA *NGA*.

Final monthly data—Differences between annual data in the EIA *NGA* and the sum of preliminary monthly data (January–December) are allocated proportionally to the months to create final monthly data.

**Note 2. Extraction Loss.** Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Annual data are from the EIA *NGA*, where they are estimated on the basis of the type and quantity of liquid products extracted from the gas stream and the calculated volume of such products at standard conditions. For a detailed explanation of the calculations used to derive estimated extraction losses, see the EIA *NGA*.

Preliminary monthly data are estimated on the basis of extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Monthly data are revised and considered final after the publication of the EIA *NGA*. Final monthly data are estimated by allocating annual extraction loss data to the months on the basis of total natural gas marketed production data from the EIA *NGA*.

**Note 3.** Supplemental Gaseous Fuels. Supplemental gaseous fuels are any substances that, introduced into or commingled with natural gas, increase the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

Annual data beginning with 1980 are from the EIA, *NGA*. Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years.

Monthly data are considered preliminary until after the publication of the EIA *NGA*. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

Although the total amount of supplemental gaseous fuels consumed is known for 1980 forward, EIA estimates the amount consumed by each energy-use sector. assumed that supplemental gaseous fuels are commingled with natural gas consumed by the residential, commercial, other industrial, and electric power sectors, but are not commingled with natural gas used for lease and plant fuel, pipelines and distribution, or vehicle fuel. The estimated consumption of supplemental gaseous fuels by each sector (residential, commercial, other industrial, and electric power) is calculated as that sector's natural gas consumption (see Table 4.3) divided by the sum of natural gas consumption by the residential, commercial, other industrial, and electric power sectors (see Table 4.3). For estimated sectoral consumption of supplemental gaseous fuels in Btu, the residential, commercial, and other industrial values in cubic feet are multiplied by the "End-Use Sectors" conversion factors (see Table A4), and the electric power values in cubic feet are multiplied by the "Electric Power Sector" conversion factors (see Table A4). Total supplemental gaseous fuels consumption in Btu is calculated as the sum of the Btu values for the sectors.

**Note 4. Storage.** Natural gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. The difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

Total underground storage capacity at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

<b>1975</b> 6,280	<b>1986</b> 8,145	<b>1997</b> 8,332
<b>1976</b> 6,544	<b>1987</b> 8,124	<b>1998</b> 8,179
<b>1977</b> 6,678	<b>1988</b> 8,124	<b>1999</b> 8,229
<b>1978</b> 6,890	<b>1989</b> 8,120	<b>2000</b> 8,241
<b>1979</b> 6,929	<b>1990</b> 7,794	<b>2001</b> 8,415
<b>1980</b> 7,434	<b>1991</b> 7,993	<b>2002</b> 8,207
<b>1981</b> 7,805	<b>1992</b> 7,932	<b>2003</b> 8,206
<b>1982</b> 7,915	<b>1993</b> 7,989	<b>2004</b> 8,255
<b>1983</b> 7,985	<b>1994</b> 8,043	<b>2005</b> 8,268
<b>1984</b> 8,043	<b>1995</b> 7,953	<b>2006</b> 8,330
<b>1985</b> 8,087	<b>1996</b> 7,980	

Monthly underground storage data are collected from the Federal Energy Regulatory Commission (FERC) Form FERC-8 (interstate data) and EIA Form EIA-191 (intrastate data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from

the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA *NGA*.

The final monthly and annual storage and withdrawal data for 1980–2005 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

Note 5. Balancing Item. The balancing item for natural gas represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas disposition. The differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

The increase of 0.2 trillion cubic feet (Tcf) in the "Balancing Item" category in 1983, followed by a decline of 0.5 Tcf in 1984, reflected unusually large differences resulting from the use of the annual billing cycle (essentially December 15 through the following December 14) consumption data in conjunction with calendar year supply data. Record cold temperatures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For underground storage data, see Table F2 in the May 1985 EIA *NGM*, which was published in July 1985.

**Note 6. Consumption.** Consumption includes use for lease and plant fuel, pipelines and distribution, vehicle fuel, and electric power plants, as well as deliveries to residential, commercial, and other industrial customers.

Final data for series other than "Other Industrial CHP" and "Electric Power Sector" are from the EIA *NGA*. Monthly data are considered preliminary until after publication of the EIA *NGA*. For more detailed information on the methods of estimating preliminary and final monthly data, see the EIA *NGM*.

**Note 7.** Consumption, 1989-1992. Prior to 1993, deliveries to nonutility generators were not separately collected from natural gas companies on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." As a result, for 1989 through 1992, those volumes are probably included in both the industrial and electric power sectors and double-counted in total consumption. In 1993, 0.28 trillion cubic feet was reported as delivered to nonutility generators.

Note 8. Imports and Exports. The United States imports natural gas via pipeline from Canada and Mexico and imports liquefied natural gas (LNG) via tanker from Algeria, Australia, Brunei, Indonesia, Malaysia, Nigeria, Oman, Qatar, Trinidad and Tobago, and the United Arab Emirates. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico and exports LNG via tanker to Japan. Also, small amounts of LNG have gone to Mexico since 1998.

Annual and final monthly data are from the annual EIA Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be reported by month for the calendar year.

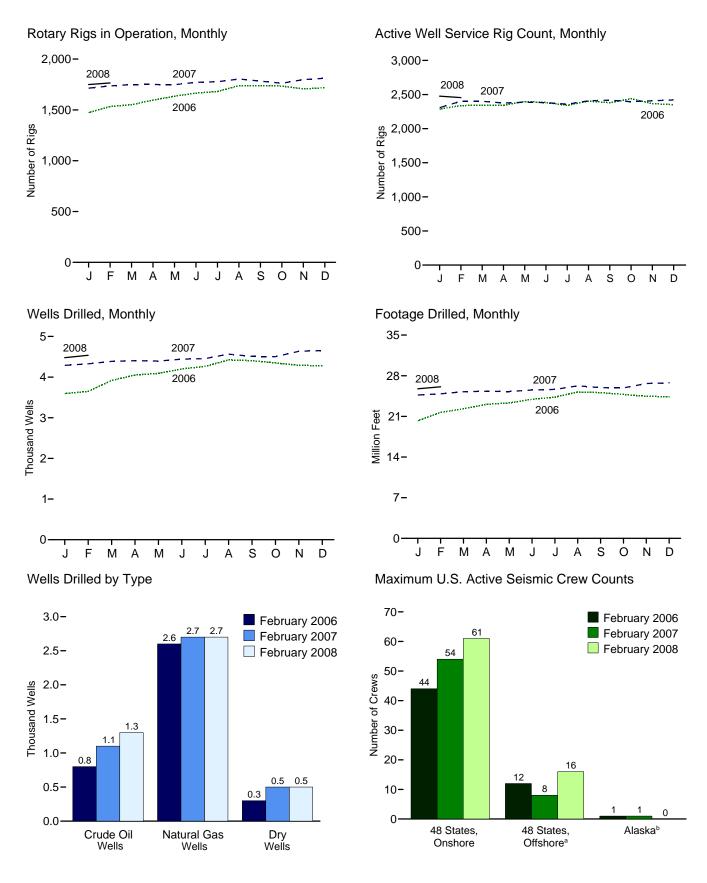
Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *NGM*. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas*.

# **Crude Oil and Natural Gas Resource Development**



Semisubmersible drilling rig in the Gulf of Mexico. Source: U.S. Department of Energy.

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators



<sup>&</sup>lt;sup>a</sup>Federal and State Jurisdiction waters of the Gulf of Mexico. <sup>b</sup>All onshore.

Web Page: http://www.eia.doe.gov/emeu/mer/resource.html. Sources: Tables 5.1-5.3.

Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements

(Number of Rigs)

		Ro	otary Rigs in Operation	n <sup>a</sup>		
	Ву	Site	Ву	Туре		Active Well Service
	Onshore	Offshore	Crude Oil	Natural Gas	Total <sup>b</sup>	Rig Count <sup>c</sup>
973 Average	1,110	84	NA	NA	1,194	2,008
975 Average	1,554	106	NA	NA	1,660	2,486
980 Average	2,678	231	NA	NA	2,909	4,089
985 Average	1,774	206	NA	NA	1,980	4,716
990 Average	902	108	532	464	1,010	3,658
995 Average	622	101	323	385	723	3,041
996 Average	671	108	306	464	779	3,445
997 Average	821	122	376	564	943	3,499
•	703	123	264	560	827	3,499
998 Average	703 519	106			625	,
999 Average			128	496		2,232
000 Average	778	140	197	720	918	2,692
001 Average	1,003	153	217	939	1,156	2,267
002 Average	717	113	137	691	830	1,830
003 Average	924	108	157	872	1,032	1,967
004 Average	1,095	97	165	1,025	1,192	2,064
005 Average	1,287	94	194	1,184	1,381	2,222
006 January	1,396	77	242	1,228	1,473	2,285
February	1,455	79	209	1,321	1,533	2,339
March	1,464	88	244	1,305	1,551	2,342
April	1,502	95	259	1,337	1,597	2,340
May	1,536	100	261	1,373	1,635	2,398
June	1,570	95	285	1,376	1,665	2,382
July	1.587	94	298	1,379	1.681	2.342
August	1,639	99	316	1,417	1.738	2,404
September	1,646	93	305	1,429	1,739	2,380
October	1,644	90	288	1,441	1,734	2,440
		90 87		,	,	, -
November	1,620		288	1,414	1,706	2,366
December Average	1,634 <b>1,559</b>	84 <b>90</b>	281 <b>274</b>	1,431 <b>1,372</b>	1,718 <b>1,649</b>	2,351 <b>2,364</b>
<b>007</b> January	1,630	84	270	1,440	1,714	2,307
February	1,651	85	266	1,466	1.736	2,401
•	1,667	81	282	1,461	,	2,401
March					1,749	,
April	1,675	75 77	285	1,461	1,750	2,375
May	1,671	77	282	1,464	1,748	2,387
June	1,692	79	283	1,483	1,771	2,381
July	1,698	79	285	1,486	1,777	2,358
August	1,731	73	306	1,492	1,804	2,408
September	1,718	65	302	1,475	1,783	2,418
October	1,713	49	321	1,435	1,762	2,395
November	1,737	61	341	1,451	1,798	2,408
December	1,749	62	338	1,468	1,811	2,420
Average	1,695	72	297	1,466	1,768	2,388
008 January	1,690	60	321	1,421	1,749	2,476
February	1,709	56	331	1,426	1,765	2,455
2-Month Average	1,700	58	327	1,424	1,758	2,466
007 2-Month Average	1,641	85	268	1,453	1,725	2,354
006 2-Month Average	1,425	78	226	1,275	1,503	2,312

<sup>&</sup>lt;sup>a</sup> Rotary rigs in operation are reported weekly. Monthly data are averages of 4or 5-week reporting periods, not calendar months. Multi-month data are averages of the reported data over the covered months, not averages of the weekly data. Annual data are averages over 52 or 53 weeks, not calendar years. Published data are rounded to the nearest whole number.

and working every day of the month.

NA=Not available.

Note: Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/resource.html for all available data beginning in 1973.

Sources: • Rotary Rigs in Operation: By Site-Baker Hughes, Inc., Houston, Texas, Rotary Rigs Running-by State. By Type-Baker Hughes, Inc., Houston, Texas, weekly phone recording. • Active Well Service Rig Count: Weatherford International, Ltd., Houston, Texas.

are rounded to the nearest whole number.

<sup>b</sup> Sum of rigs drilling for crude oil, rigs drilling for natural gas, and other rigs (not shown) drilling for miscellaneous purposes, such as service wells, injection wells, and stratigraphic tests.

and stratigraphic tests.

<sup>c</sup> The number of rigs doing true workovers (where tubing is pulled from the well), or doing rod string and pump repair operations, and that are, on average, crewed

Table 5.2 Crude Oil and Natural Gas Exploratory and Development Wells

						Wells	Drilled						
		Explor	atory			Develo	pment			То	tal		Total
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Footage Drilled
						Nun	nber						Thousand Feet
1973 Total	642	1,067	5,952	7,661	9,525	5,866	4,368	19,759	10,167	6,933	10,320	27,420	138,223
1975 Total	982	1,248	7,129	9,359	15,966	6,879	6,517	29,362	16,948	8,127	13,646	38,721	180,494
1980 Total	1,777	2,099	9,081	12,957	31,182	15,362	11,704	58,248	32,959	17,461	20,785	71,205	316,943
1985 Total	1,680 664	1,200 693	8,954 3,793	11,834 5,150	33,581 11,781	13,124	12,257 4,703	58,962 26,917	35,261	14,324 11,126	21,211 8,496	70,796 32,067	314,409 156,204
1990 Total 1995 Total		583	2,279	3,411	7,278	10,433 7,871	3,040	18,189	12,445 7,827	8,454	5,319	21,600	121,309
1996 Total	496	591	2,246	3,333	8,264	8.948	3,341	20,553	8,760	9,539	5,587	23,886	133,362
1997 Total	434	543	2,178	3,155	10,011	10,643	3,777	24,431	10,445	11,186	5,955	27,586	155,292
1998 Total		510	1,649	2,445	6,693	10,617	3,156	20,466	6,979	11,127	4,805	22,911	131,137
1999 Total	156	519	1,167	1,842	4,158	10,602	2,337	17,097	4,314	11,121	3,504	18,939	94,595
2000 Total	267	615	1,349	2,231	7,318	15,627	2,697	25,642	7,585	16,242	4,046	27,873	136,575
2001 Total	330	972	1,716	3,018	7,856	20,431	2,716	31,003	8,186	21,403	4,432	34,021	172,245
2002 Total	239	701	1,283	2,223	5,987	16,027	2,327	24,341	6,226	16,728	3,610	26,564	139,973
2003 Total	326	892	1,266	2,484	7,139	18,630	2,422	28,191	7,465	19,522	3,688	30,675	169,178
2004 Total		1,323	1,200	2,891	7,438	20,493	2,274	30,205	7,806	21,816	3,474	33,096	191,803
2005 Total	448	1,532	1,358	3,338	9,220	25,482	2,705	37,407	9,668	27,014	4,063	40,745	231,591
2006 January		136	71	267	837	2,249	242	3,328	897	2,385	313	3,595	20,235
February	48	119	89	256	727	2,446	219	3,392	775	2,565	308	3,648	21,682
March	38	118	166	322	867	2,416	312	3,595	905	2,534	478	3,917	22,327
April		121	171	338	914	2,475	323	3,712	960	2,596	494	4,050	23,085
May		128	165	336	946	2,496	313	3,755	989	2,624	478	4,091	23,319
June	47	129	169	345	1,033	2,501	322	3,856	1,080	2,630	491	4,201	23,945
July		129	171	349	1,081	2,507	327	3,915	1,130	2,636	498	4,264	24,305
August	52 50	133	177	362 361	1,146	2,575	339 337	4,060	1,198	2,708	516	4,422 4,402	25,205
September		134 139	177 173	360	1,106 1.044	2,598 2.615	337 329	4,041 3.988	1,156 1.092	2,732 2.754	514 502	4,402	25,092 24.784
October November		136	173	355	1,044	2,567	329	3,935	1,092	2,734	495	4,346	24,764
December		137	170	354	1,044	2,583	324	3,925	1,065	2,703	493	4,279	24,434
Total		1,559	1,870	4,005	11,763	30,028	3,711	45,502	12,339	31,587	5,581	49,507	282,824
2007 January	48	136	170	354	1,050	2,560	324	3.934	1,098	2,696	494	4,288	24.673
February		139	172	358	1.035	2.606	327	3.968	1.082	2,745	499	4,326	24.885
March		138	174	362	1,097	2,597	332	4,026	1,147	2,735	506	4,388	25,245
April		138	174	363	1,108	2,597	334	4,039	1,159	2,735	508	4,402	25,324
May	50	138	175	363	1,097	2,602	333	4,032	1,147	2,740	508	4,395	25,282
June	51	140	176	367	1,101	2,636	336	4,073	1,152	2,776	512	4,440	25,540
July	51	140	177	368	1,109	2,642	337	4,088	1,160	2,782	514	4,456	25,639
August		141	181	377	1,190	2,652	345	4,187	1,245	2,793	526	4,564	26,256
September		139	179	372	1,175	2,621	341	4,137	1,229	2,760	520	4,509	25,937
October		135	177	369	1,244	2,549	340	4,133	1,301	2,684	517	4,502	25,898
November		136	181	377	1,327	2,580	351	4,258	1,387	2,716	532	4,635	26,664
December Total	60 <b>634</b>	138 <b>1,658</b>	183 <b>2,119</b>	381 <b>4,411</b>	1,310 <b>13,843</b>	2,610 <b>31,252</b>	352 <b>4,052</b>	4,272 <b>49,147</b>	1,370 <b>14,477</b>	2,748 <b>32,910</b>	535 <b>6,171</b>	4,653 <b>53,558</b>	26,767 <b>308,111</b>
2008 January	57	133	175	365	1,248	2,525	339	4,112	1,305	2,658	514	4,477	25,755
February	59	134	178	371	1,287	2,535	343	4,165	1,346	2,669	521	4,536	26,094
2-Month Total	116	267	353	736	2,535	5,060	682	8,277	2,651	5,327	1,035	9,013	51,849
2007 2-Month Total	95	275	342	712	2,085	5,166	651	7,902	2,180	5,441	993	8,614	49,558
2006 2-Month Total	108	255	160	523	1,564	4,695	461	6,720	1,672	4,950	621	7,243	41,917

Notes: • These well counts include only the original drilling of a hole intended to discover or further develop already discovered crude oil or natural gas resources. Other drilling activities, such as drilling an old well deeper, drilling of laterals from the original well, drilling of service and injection wells, and drilling for resources other than crude oil or natural gas are excluded. Due to the methodology used to estimate ultimate well counts from the available partially reported data, the counts shown on this page are frequently revised. See Note, "Crude Oil and Natural Gas Exploratory and Development Wells," at end of section. • Geographic coverage is

the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/resource.html for all available data beginning in 1973.

Sources: • 1973-1994: Energy Information Administration (EIA) computations based on well reports submitted to the American Petroleum Institute. • 1995 forward: EIA computations based on well reports submitted to the Information Handling Services Energy Group, Inc.

**Maximum U.S. Active Seismic Crew Counts** 

(Number of Crews)

		48 States,	Onshore			48 States,	Offshorea			Alas	ska <sup>b</sup>	_	
		Dimensions	С		D	imensions	С		D	imensions	sc .		
	2	3	4	Totald	2	3	4	Totald	2	3	4	Totald	Total
2001 February 2002 February 2003 February	6 9 9	38 31 20	1 0 0	45 40 29	8 9 8	7 6 4	0 0 0	16 15 12	0 1 0	0 1 0	0 0 0	0 2 0	61 57 41
Pebruary February March April May June July August September October November December	8 8 9 9 9 8 8 8 8 9 9	25 27 27 27 26 30 30 31 32 34 33 32	0 0 0 0 0 0 0 0 0	33 35 35 36 35 39 38 39 40 42 42 41	5 5 5 5 5 5 4 4 4 4 4 2 1 3	5 5 4 4 4 4 4 2 2 4 4	0 0 0 0 0 0 0 0 0	10 10 10 9 9 8 8 8 6 4 5	0 0 0 0 0 0 0 0	0 0 0 0 0 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0	0 0 0 0 0 2 2 2 2 2 2 2 2	43 45 45 45 44 49 48 49 48 49 50
Pebruary	8 6 8 8 9 8 7 6 5 6	33 34 33 30 34 35 34 35 37 39 40 40	0 0 0 0 0 0 0 0	41 42 39 38 42 44 42 43 44 45 45	5 6 6 7 7 6 6 6 6 6 6 6	44666555555555	0 0 0 0 0 0 0 0	9 12 12 13 12 11 11 11 11	0 0 0 0 0 0 0 0	2 0 0 0 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0	2 0 0 0 1 1 1 1 1 1	52 53 51 50 55 57 54 55 56 57 57
2006 January	5 5 4 4 4 9 5 4 4 5 5 5 5	38 39 42 42 42 35 51 49 51 51 51	0 0 0 0 0 0 0 0	43 44 46 46 46 44 56 53 55 56 56 55	6 6 6 5 7 4 3 2 2 3 3	5666655555555	0 0 0 0 0 0 0 0	11 12 12 11 11 11 12 9 8 7 7	0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	55 57 59 58 58 57 66 62 63 64 65 64
2007 January	3 3 4 4 3 3 2 2 2 3 4 4 5	51 55 55 55 55 57 56 58 60 60 54	0 0 0 0 0 0 0 0	54 54 59 59 58 58 59 58 61 65 65 60	3 3 4 4 3 3 4 3 3 4	5 5 5 6 6 6 6 8 8 8 8 10	0 0 1 1 1 1 1 1 1 1	8 8 11 11 10 10 13 12 12 14	0 0 0 0 0 0 0 0	1 1 1 1 1 1 0 0 0 0	0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 0 0 0 0	63 68 71 70 69 69 71 73 77 79
2008 January February	6 6	55 55	0	61 61	4 4	10 11	1 1	15 16	0	0	0	0	76 77

a Federal and State Jurisdiction waters of the Gulf of Mexico.

are prone to (except, of course, along the outer faces of the cube). Four dimensional (4D) reflection seismic surveying is the exact repetition of a 3D survey at two or more time intervals. The primary application of 4D is mapping the movement of fluid interfaces in producing oil and gas reservoirs.

d Includes crews with unknown survey dimension.

Notes: • A "seismic crew" is a group of people, of varying number, engaged in a seismic surveying job. • "48 States" is the United States excluding Alaska and Hawaii. • Data are reported on the first and fifteenth of each month, except January when they are reported only on the fifteenth. When semi-monthly values differ for the month, the larger of the two values is shown here. Consequently, this table reflects the maximum number of crews at work at any time during the month.

during the month.

Web Page: See http://www.eia.doe.gov/emeu/mer/resource.html for all available data beginning in March 2000.

Source: World Geophysical News, IHS Energy Group, Denver, CO, used with permission.

All onshore.

In two-dimensional (2D) reflection seismic surveying both the sound source and the sound detectors (numbering up to a hundred or more per shot) are moved along a straight line. The resultant product can be thought of as a vertical sonic cross-section of the subsurface beneath the survey line. It is constructed by summing many compressional (pressure) wave reflections from the various sound source and sound detector locations at the halfway sound path points beneath each location (common depth point stacking). In three-dimensional (3D) reflection seismic surveying the sound detectors (numbering up to a thousand or more) are spread out over an area and the sound source is moved from location to location through the area. The resultant product can be thought of as a cube of common depth point stacked reflections. Advantages over 2D include the additional dimension, the fact that many more reflections are available for stacking at each point, which provides greatly improved resolution of subsurface features, and elimination of the "ghost" or "side swipe" reflections from nearby offline features that 2D surveys

# Crude Oil and Natural Gas Resource Development

Note. Crude Oil and Natural Gas Exploratory and Development Wells. Three well types are considered in the Monthly Energy Review (MER) drilling statistics: "completed for crude oil," "completed for natural gas," and "dry hole." Wells that productively encounter both crude oil and natural gas are categorized as "completed for crude oil." Both development wells and exploratory wells (new field wildcats, new pool tests, and extension tests) are included in the statistics. All other classes of wells drilled in connection with the search for producible hydrocarbons are excluded.

Prior to the March 1985 MER, drilling statistics consisted of

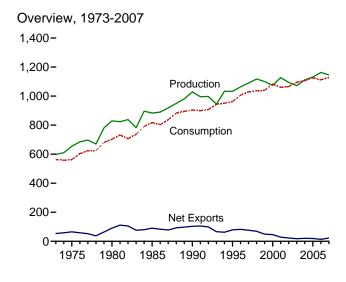
completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions proved to be an inaccurate indicator of drilling activity. During 1982, for example, as-reported well completions rose, while the number of actual completions fell. Consequently, the drilling statistics published since the March 1985 MER are Energy Information Administration (EIA) estimates produced by statistically imputing well counts and footage based on the partial data available from the API. These estimates are subject to continuous revision as new data, some of which pertain to earlier months and years, become available. Additional information about the EIA estimation methodology may be found in "Estimating Well Completions," a feature article published in the March 1985 MER.

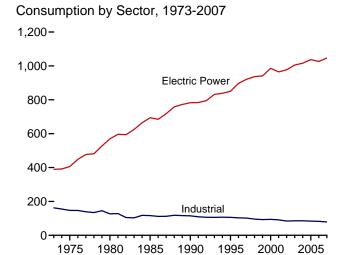
# Coal

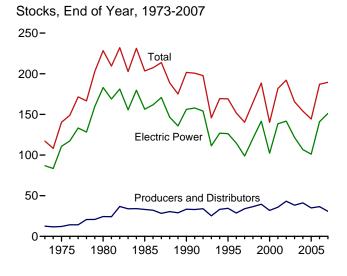


Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

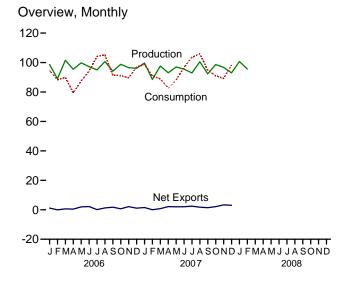
Figure 6.1 Coal (Million Short Tons)

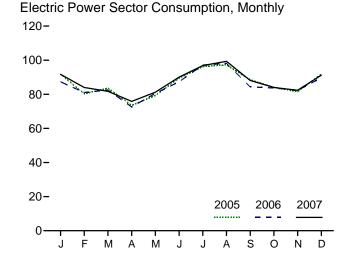


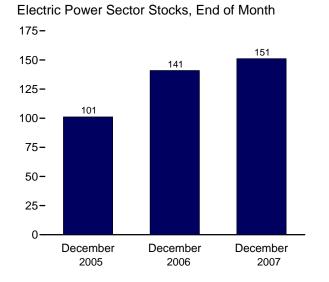




Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/coal.html. Sources: Tables 6.1, 6.2, and 6.3.







**Table 6.1 Coal Overview** 

(Thousand Short Tons)

		Waste Coal		Trade		Stock	Losses and Unaccounted	
	Production <sup>a</sup>	Supplied <sup>b</sup>	Imports	Exports	Net Imports <sup>c</sup>	Changed	fore	Consumption
973 Total	598,568	NA	127	53,587	-53,460	( <sup>f</sup> )	f-17,476	562,584
775 Total	654,641	NA NA	940	66,309	-65,369	32,154	-5,522	562,640
80 Total	829,700	NA NA	1.194	91,742	-90.548	25.595	10.827	702,730
106 Total	883,638	NA NA	1,952	92,680	-90,727	-27,934	2.796	818,049
85 Total								
90 Total	1,029,076	3,339	2,699	105,804	-103,104	26,542	-1,730	904,498
95 Total	1,032,974	8,561	9,473	88,547	-79,074	-275	632	962,104
96 Total	1,063,856	8,778	8,115	90,473	-82,357	-17,456	1,411	1,006,321
97 Total	1,089,932	8,096	7,487	83,545	-76,058	-11,253	3,678	1,029,544
98 Total	1,117,535	8,690	8,724	78,048	-69,324	24,228	-4,430	1,037,103
99 Total	1,100,431	8,683	9,089	58,476	-49,387	23,988	-2,906	1,038,647
00 Total	1,073,612	9,089	12,513	58,489	-45,976	-48,309	938	1,084,095
01 Total	1,127,689	10,085	19,787	48,666	-28,879	41,630	7,120	1,060,146
02 Total	1,094,283	9,052	16,875	39,601	-22,726	10,215	4.040	1,066,355
03 Total	1,071,753	10,016	25,044	43,014	-17,970	-26,659	-4,403	1,094,861
		11,299		47,998				1,107,255
04 Total	1,112,099	11,299	27,280	47,990	-20,718	-11,462	6,887	1,107,255
5 January	93,728 89,926	1,013 1,051	2,014 2,315	4,075 3,008	-2,061 -693	-10,166 -1,889	3,494 4,441	99,352 87,732
February								
March	102,147	1,144	3,277	3,046	231	8,324	4,010	91,190
April	93,271	948	2,376	4,294	-1,917	9,179	2,323	80,799
May	90,151	1,049	2,402	5,010	-2,607	5,306	-3,095	86,382
June	95,371	1,092	2,454	5,499	-3,045	-3,333	201	96,550
July	91,841	1,330	2,681	4,147	-1,466	-9,995	-1,699	103,400
August	97,824	1,308	2,387	4,219	-1,831	-9,370	2,142	104,529
September	95,628	1,190	2,764	4,254	-1,491	-905	494	95,739
October	93.688	1.071	2.486	4.251	-1.765	2.378	-986	91,602
November	95.021	899	2,220	3,222	-1.001	6.922	-1.060	89.057
December	92,901	1,257	3.081	4.918	-1,836	-6,152	-1.171	99,644
Total	1,131,498	13,352	30,460	49,942	-19,482	-9,702	9,092	1,125,978
<b>06</b> January	98,621	1.278	3,031	4,187	-1,155	2.671	1,451	94,621
February	89,033	1,113	2,715	2,656	60	1,938	37	88,231
March	101,490	1,223	3,211	3,817	-606	6,214	6,016	89,877
April	95.413	1.137	3.030	3.481	-451	15.539	1.141	79.419
	99.843	1,024	2,742	4,736	-1,995	6.050	5,332	87,490
May							-944	94,298
June	97,160	1,202	2,185	4,373	-2,188	2,820		
July	94,994	1,298	3,181	3,331	-150	-4,861	-3,142	104,145
August	100,654	1,349	3,849	5,093	-1,244	-6,661	2,221	105,198
September	94,144	1,140	3,370	5,115	-1,745	939	1,266	91,334
October	98,808	1,213	3,214	3,908	-694	9,325	-1,197	91,199
November	96,526	1,188	2,630	4,768	-2,139	7,176	-1,148	89,548
December	96.063	1,245	3.089	4.182	-1.093	1,493	-2.208	96,930
Total	1,162,750	14,409	36,246	49,647	-13,401	42,642	8,824	1,112,292
17 January	R 99,736	937	2,844	4,368	-1,524	R -4,354	R 4,790	R 98,713
February	R 88,537	1.096	2,656	2,685	-28	R -4,479	R 3.195	R 90,888
March	R 97,628	1,191	3,285	4,086	-801	R 7,079	R 2,020	R 88,919
April	R 93,048	1,087	2,687	4,841	-2,154	R 7,944	R 1,468	R 82,569
May	R 96,999	1.049	2,691	4,747	-2,154	R 4.416	R 3.516	R 88,061
	R 95,528	1,049	3.027	4,747 5.114		R -619	R -1,565	R 96,871
June					-2,087	019	R -1,565	90,871 R400,500
July	R 92,918	1,255	3,373	5,812	-2,438	R -9,990		R 103,528
August	R 100,532	1,315	3,716	5,471	-1,756	R -6,135	R 218	R 106,009
September	R 92,321	1,203	3,470	4,914	-1,445	R 955	R -3,662	94,787
October	R 98,635	R 1,254	2,896	5,019	-2,123	R 8,199	R <sub>-1,426</sub>	R 90,994
November	<sup>R</sup> 96,724	R 1,189	2,889	6,245	-3,355	R 4,292	R 1,047	R 89,218
December Total	R 92,963 R <b>1,145,567</b>	R 1,263 R <b>14,087</b>	2,812 <b>36,347</b>	5,861 <b>59,163</b>	-3,050 <b>-22,816</b>	<sup>R</sup> -4,810 <sup>R</sup> <b>2,497</b>	<sup>R</sup> -2,292 <sup>R</sup> <b>5.505</b>	R 98,279 R <b>1,128,836</b>
			,	•	,	•	7,	
18 January	100,712	NA	NA	NA	NA	NA	NA	NA
February 2-Month Total	95,567 <b>196,280</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>
07 2-Month Total	188.272	2.033	5,501	7.053	-1,552	-8,833	7.985	189,601

<sup>&</sup>lt;sup>a</sup> Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine, and cleaned to reduce the concentration of noncombustible materials).

b Waste coal (including fine coal, coal obtained from a refuse bank or slurry

and waste coal supplied, minus exports, stock change, and consumption.

f In 1973, stock change is included in "Losses and Unaccounted for."

R=Revised. NA=Not available.

Notes: • For methodology used to calculate production, consumption, and stocks, see Note 1, "Production," Note 2, "Consumption," and Note 3, "Stocks," at end of section. • Data values preceded by "F" are derived from the Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.doe.gov/emeu/mer/coal.html for all available data beginning in 1973.

Sources: See end of section.

dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and industrial sectors. Beginning in 1989, waste coal supplied is counted as a supply-side item to balance the same amount of waste coal included in "Consumption."

Consumption."

greater than imports.

<sup>d</sup> A negative value indicates a decrease in stocks; a positive value indicates an increase.

e "Losses and Unaccounted for" is calculated as the sum of production, imports,

**Table 6.2 Coal Consumption by Sector** 

(Thousand Short Tons)

					End-Use	Sectors						
		(	Commercia	I			Industrial					
	Resi-				Coke	0	ther Industria	al		Trans-	Electric Power	
	dential	CHPa	Other <sup>b</sup>	Total	Plants	CHPc	Non-CHPd	Total	Total	portation	Sector <sup>e,f</sup>	Total
1973 Total	4,113	( <sup>g</sup> )	7,004	7,004	94,101	( h )	68,038	68,038	162,139	116	389,212	562,584
1975 Total	2,823	(g)	6,587	6,587	83,598	(h)	63,646	63,646	147,244	24	405,962	562,640
1980 Total	1,355	(g)	5,097	5,097	66,657	(h)	60,347	60,347	127,004	(h)	569,274	702,730
1985 Total	1,711	(g)	6,068	6,068	41,056		75,372	75,372	116,429	(")	693,841	818,049
1990 Total 1995 Total	1,345 755	1,191 1,419	4,189 3,633	5,379 5,052	38,877 33,011	27,781 29,363	48,549 43,693	76,330 73,055	115,207 106,067	( '' ) ( h )	782,567 850,230	904,498 962,104
1996 Total	721	1,660	3,625	5,285	31,706	29,434	42,254	71,689	103,395	(h)	896,921	1,006,321
1997 Total	711	1,738	4,015	5.752	30,203	29.853	41.661	71,515	101,718	}h;	921,364	1.029.544
1998 Total	534	1,443	2,879	4,322	28,189	28,553	38,887	67,439	95,628	}h;	936,619	1,037,103
1999 Total	585	1,490	2,803	4,293	28,108	27,763	36,975	64,738	92,846	ìh;	940,922	1,038,647
2000 Total	454	1,547	2,126	3,673	28,939	28,031	37,177	65,208	94,147	(h)	985,821	1,084,095
2001 Total	481	1,448	2,441	3,888	26,075	25,755	39,514	65,268	91,344	(h)	964,433	1,060,146
2002 Total	533	1,405	2,506	3,912	23,656	26,232	34,515	60,747	84,403	(h)	977,507	1,066,355
2003 Total	551	1,816	1,869	3,685	24,248	24,846	36,415	61,261	85,509	(h)	1,005,116	1,094,861
2004 Total	563	1,917	2,642	4,558	23,670	26,613	35,582	62,195	85,865	( h )	1,016,268	1,107,255
2005 January	46	192	272	464	1,865	2,252	2,937	5,188	7,054	( h )	91,789	99,352
February	40	168	239	407	1,778	2,114	3,088	5,202	6,980	( h ) ( h )	80,305	87,732
March	41	173	244	417	1,941	2,222	2,968	5,190	7,131	( '' ) ( h )	83,601	91,190
April	27	135	136	271	2,208	2,023	2,768	4,791	6,999	( '' ) ( h )	73,503	80,799
May	27	136	136	272	1,931	1,990	2,856	4,847	6,778	( h )	79,306	86,382
June	31	158	158	316	1,908	2,118	2,679	4,798	6,705	( '' ) ( h )	89,498	96,550
July	30 29	166 161	134 130	300 292	1,882 2.018	2,260	2,656	4,917 4.906	6,798 6.924	( ii )	96,272	103,400
August	29	148	119	292 267	2,016	2,254 2,135	2,652 2,703	4,838	6,947	( h )	97,284 88,498	104,529 95,739
September October	36	138	229	367	2,109	2,135	3.045	5.160	7.167	( h )	84.032	95,739
November	41	157	260	416	1,832	2,115	3,045 3,121	5,160	7,167	( h )	81,531	89,057
December	50	190	315	505	1,954	2,110	2,992	5,268	7,000	( h (	91,867	99,644
Total	425	1,922	2,373	4,294	23,434	25,875	34,465	60,340	83,774	(h)	1,037,485	1,125,978
2006 January	31	186	126	312	1,879	2,217	2,866	5,083	6,961	( <sup>h</sup> )	87,317	94,621
February	28	169	115	284	1,830	2,024	3,023	5,046	6,876	(h)	81,043	88,231
March	28	170	115	285	2,005	2,115	2,945	5,060	7,065	(h j	82,499	89,877
April	19	134	54	187	1,862	2,050	2,742	4,792	6,654	( h )	72,560	79,419
May	19	139	56	195	1,968	2,059	2,735	4,794	6,762	( h )	80,515	87,490
June	20	147	59	205	1,939	2,104	2,710	4,814	6,753	( h )	87,319	94,298
July	20	163	44	206	1,933	2,202	2,671	4,872	6,806	( h ) ( h )	97,113	104,145
August	20	163	44	206	1,911	2,202	2,675	4,877	6,788	( n ) ( h )	98,183	105,198
September	17	138	37	175	1,939	2,061	2,815	4,876	6,815	( '' ) ( h )	84,327	91,334
October	25	136	115	251	2,094	2,074	3,031	5,105	7,199	( '' ) ( h )	83,724	91,199
November	29	159	134	293	1,865	2,020	3,048	5,068	6,933	( h )	82,293	89,548
December Total	33 <b>290</b>	183 <b>1,886</b>	154 <b>1,050</b>	337 <b>2,936</b>	1,733 <b>22,957</b>	2,136 <b>25,262</b>	2,949 <b>34,210</b>	5,085 <b>59,472</b>	6,818 <b>82,429</b>	(h)	89,742 <b>1,026,636</b>	96,930 <b>1,112,292</b>
2007 January	30	192	117	308	R 1,818	2.030	R 2,822	R 4.852	R 6.670	(h)	91,704	R 98.713
February	29	185	113	298	R 1,730	1,895	R 2,947	R 4.843	R 6,573	}h	83,988	R 90,888
March	27	171	104	275	R 2,027	1,968	R 2,879	R 4.847	R 6,874	}h	81,742	R 88.919
April	20	145	55	199	1,865	1,832	R 2,838	R 4,670	R 6,535	ìh΄,	75,815	R 82,569
May	20	144	55	199	1,950	1,889	R 2,783	R 4,672	R 6,622	(h j	81,221	R 88,061
June	19	137	52	189	1,921	1,906	R 2,789	R 4,695	R 6,616	(h j	90,047	R 96,871
July	19	149	45	194	1,913	1,942	R 2,635	R 4,576	R 6,489	( h )	96,826	R 103,528
August	21	160	48	207	1,883	1,999	R 2,557	R 4,557	R 6,440	( h )	99,341	R 106,009
September	18	143	43	186	1,882	1,839	<sup>R</sup> 2,717	R 4,556	R 6,438	( h )	88,144	94,787
October	<sup>R</sup> 26	146	R 112	R 258	R 1,957	1,910	R 2,827	R 4,737	R 6,694	( h )	84,016	R 90,994
November	R 30	170	<sup>R</sup> 130	R 300	R 1,810	1,790	R 2,944	R 4,733	R 6,544	( h )	82,344	R 89,218
December	32	183	140	322	1,958	3,081	1,650	4,732	6,690	( h )	91,235	98,279
Total	290	1,924	1,012	2,936	22,715	24,082	32,388	56,470	79,185	( h )	1,046,424	1,128,836

<sup>&</sup>lt;sup>a</sup> Commercial combined-heat-and-power (CHP) and a small number of commercial electricity-only plants, such as those at hospitals and universities. See note at end of Section 7.

<sup>b</sup> All commercial sector fuel use other than that in "Commercial CHP."

<sup>c</sup> Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants. See note at end of Section 7.

<sup>d</sup> All industrial sector fuel use other than that in "Coke Plants" and "Industrial CHP."

<sup>e</sup> The electric power sector comprises electricity-only and combined-heat-

<sup>&</sup>lt;sup>e</sup> The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is

to sell electricity, or electricity and heat, to the public.

f Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.

g Included in "Commercial Other."

<sup>&</sup>lt;sup>h</sup> Included in "Industrial Non-CHP."

Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are from Table 7.4b; all other monthly values are estimates derived from collected quarterly and annual data. See Note 2, "Consumption," at end of section.

• Data values preceded by "F" are derived from the Energy Information

Administration's Short-Term Integrated Forecasting System. See Note 4, "Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of

Web Page: See http://www.eia.doe.gov/emeu/mer/coal.html for all available data beginning in 1973.

Sources: See end of section.

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

			E	nd-Use Sectors				
	Producers and	Residential and		Industrial			Electric Power	
	Distributors	Commercial	Coke Plants	Othera	Total	Total	Sector <sup>b,c</sup>	Total
1973 Year	12,530	290	6,998	10,370	17,368	17,658	86,967	117,155
1975 Year	12,108	233	8,797	8,529	17,326	17,559	110,724	140,391
1980 Year	24,379	NA	9,067	11,951	21,018	21,018	183,010	228,407
1985 Year	33,133	NA	3,420	10,438	13,857	13,857	156,376	203,367
1990 Year	33,418	NA	3,329	8,716	12,044	12,044	156,166	201,629
1995 Year	34,444	NA	2,632	5,702	8,334	8,334	126,304	169,083
1996 Year	28,648	NA	2,667	5,688	8,355	8,355	114,623	151,627
1997 Year	33,973	NA	1,978	5,597	7,576	7,576	98,826	140,374
1998 Year	36,530	NA	2,026	5,545	7,571	7,571	120,501	164,602
1999 Year	39,475	NA	1,943	5,569	7,511	7,511	<sup>c</sup> 141,604	188,590
2000 Year	31,905	NA	1,494	4,587	6,081	6,081	102,296	140,282
2001 Year	35,900	NA	1,510	6,006	7,516	7,516	138,496	181,912
2002 Year	43,257	NA	1,364	5,792	7,156	7,156	141,714	192,127
2003 Year	38,277	NA	905	4,718	5,623	5,623	121,567	165,468
2004 Year	41,151	NA	1,344	4,842	6,186	6,186	106,669	154,006
2005 January	40,085	NA	1,512	4,728	6,241	6,241	97,514	143,840
February	37,596	NA	1,681	4,615	6,295	6,295	98,059	141,951
March	38,698	NA	1,849	4,501	6,350	6,350	105,226	150,275
April	36,808	NA	2,046	4,681	6,727	6,727	115,919	159,454
May	37,754	NA	2,243	4,860	7,104	7,104	119,902	164,760
June	38,422	NA	2,440	5,040	7,480	7,480	115,524	161,427
July	38,147	NA	2,447	5,206	7,653	7,653	105,631	151,432
August	35,357	NA	2,454	5,372	7,826	7,826	98,879	142,062
September	34,965	NA	2,461	5,538	7,999	7,999	98,192	141,156
October	34,251	NA	2,512	5,552	8,065	8,065	101,218	143,534
November December	35,752 <b>34,971</b>	NA <b>NA</b>	2,564 <b>2,615</b>	5,567 <b>5,582</b>	8,131 <b>8,196</b>	8,131 <b>8,196</b>	106,573 <b>101,137</b>	150,456 <b>144,304</b>
	·				,	,	,	
<b>2006</b> January	33,486	NA	2,661	5,427	8,088	8,088	105,401	146,975
February	34,947	NA	2,708	5,272	7,980	7,980	105,986	148,913
March	35,113	NA	2,754	5,118	7,872	7,872	112,141	155,126
April	37,489	NA	2,783	5,297	8,079	8,079	125,097	170,665
May	34,587	NA	2,811	5,476	8,287	8,287	133,841	176,715
June	35,307	NA	2,839	5,655	8,494	8,494	135,734	179,535
July	38,147	NA	2,817	5,816	8,633	8,633	127,894	174,674
August	35,357 33.170	NA NA	2,795 2.772	5,977	8,772 8.910	8,772 8.910	123,884 126.872	168,013 168.952
September October	33,170 34,251	NA NA	2,772	6,138 6,261	9.085	8,910 9.085	126,872	168,952
November	35,752	NA NA	2,876	6,383	9,065	9,259	140,442	185,453
December	36,548	NA NA	2,928	6,506	9,434	9,434	140,964	186,946
<b>2007</b> January	35,986	NA	2,745	<sup>R</sup> 6,256	<sup>R</sup> 9.001	<sup>R</sup> 9.001	137,606	<sup>R</sup> 182.592
February	34,450	NA NA	2,743	R 6,006	<sup>R</sup> 8,568	<sup>R</sup> 8,568	135,096	R 178,113
March	34,007	NA NA	R 2,444	R 5,756	R 8.200	R 8.200	142,986	R 185.193
April	33.695	NA NA	R 2.417	R 5.728	R 8,145	R 8.145	151.296	R 193,136
May	33,107	NA	R 2,391	R 5.700	R 8,091	R 8.091	156,354	R 197,552
June	32,484	NA	2,364	<sup>R</sup> 5,672	R 8,037	R 8,037	156,412	R 196,933
July	31,967	NA	2,211	R 5,719	R 7,929	R 7.929	147,047	R 186,943
August	30,885	NA	2.091	<sup>R</sup> 5,765	R 7,856	R 7,856	142,067	R 180,808
September	30,090	NA	1,972	R 5,811	R 7,783	R 7,783	143,890	R 181,763
October	31,112	NA	R 1,960	R 5,748	R 7,708	R 7,708	R 151,141	R 189,962
November	32,069	NA	R 1,948	R 5,686	R 7,634	R 7,634	R 154,551	R 194,254
December	30.757	NA	1,936	5,624	7,560	7,560	151,127	189,443

<sup>&</sup>lt;sup>a</sup> Through 1977, data are for stocks held by the manufacturing and ansportation sectors. Beginning in 1978, data are for stocks held at transportation sectors.

manufacturing plants only.

b The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

<sup>c</sup> Through 1998, data are for stocks at electric utilities only. Beginning in 1999,

data also include stocks at independent power producers.

R=Revised. NA=Not available.

Notes: • Stocks are at end of period. • Producers and distributors monthly values are estimates derived from collected annual data; industrial sector monthly

values are estimates derived from collected quarterly data; electric power sector monthly values are from Table 7.5. See Note 3, "Stocks," at end of section.

• Data values preceded by "F" are derived from the Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Forecast Values," at end of section.

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

Web Page: See http://www.eia.doe.gov/emeu/mer/coal.html for all available data beginning in 1973.

Sources: See end of section.

# Coal

Note 1. Production. Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the Energy Information Administration (EIA) and published in the Weekly Coal Production report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly estimates are based on Association of American Railroads data showing the number of railcars loaded with coal during the week by Class I and certain other railroads. number is converted into tons of coal by EIA by using the average number of tons of coal per railcar loaded reported in the most recent "Quarterly Freight Commodity Statistics" from the Surface Transportation Board. If an average coal tonnage per railcar loaded is not available for a specific railroad, the national average is used. To derive the estimate of total weekly production, the total rail tonnage for the week is divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years are used to derive this ratio. This method ensures that the seasonal variations are preserved in the production estimates.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figure. The adjustment procedure uses State-level production data and is explained in EIA's Quarterly Coal Report. Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first nine months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference between the estimates and the preliminary data. In any event, all quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the Monthly Energy Review in the fall of the following year.

**Note 2. Consumption.** Coal consumption data are reported by major end-use sector. Forecast data (designated by an "F") are derived from forecasted values shown in the Energy Information Administration (EIA) *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Base Case." The monthly estimates are based on the quarterly values, which are released in March, June, September, and December. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Residential and Commercial—Coal consumption by the residential and commercial sectors is reported to EIA for the two sectors combined; EIA estimates the amount consumed by the sectors individually. To create the estimates, it is first assumed that an occupied coal-heated housing unit consumes fuel at the same Btu rate as an oil-heated housing

unit. Then, for the years in which data are available on the number of occupied housing units by heating source (1973–1981 and subsequent odd-numbered years), residential consumption of coal is estimated by the following steps: a ratio is created of the number of occupied housing units heated by coal to the number of occupied housing units heated by oil; that ratio is then multiplied by the Btu quantity of oil consumed by the residential sector to derive an estimate of the Btu quantity of coal consumed by the residential sector; and, finally, the amount estimated as the residential sector consumption is subtracted from the residential and commercial sectors' combined consumption to derive the commercial sector's estimated consumption. The 2005 share is applied to 2006 and 2007, and the other missing years' shares are interpolated.

Industrial Coke Plants—Prior to 1980, monthly coke plant consumption data were taken directly from reported data. From 1980–1987, coke plant consumption estimates were derived by proportioning reported quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported. Beginning in January 1988, monthly coke plant consumption estimates are derived from the reported quarterly data by using monthly ratios of raw steel production data from the American Iron and Steel Institute. The ratios are the monthly raw steel production from open hearth and basic oxygen process furnaces as a proportion of the quarterly production from those kinds of furnaces.

Industrial Other—Prior to 1978, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. From 1980-1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthlyto-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Quarterly consumption data were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts were the greater of either reported receipts from manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, mining, and construction consumption data were included Starting in January 1988, monthly where appropriate. consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Gover-industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 333; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; nonmetallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights.

Electric Power Sector—Monthly consumption data for electric power plants are taken directly from reported data.

**Note 3. Stocks.** Coal stocks data are reported by major end-use sector. Forecast data for the most recent months (designated by an "F") are derived from forecasted values shown in the Energy Information Administration (EIA) *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Base Case." The monthly estimates are based on the quarterly values (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

Producers and Distributors—Prior to 1998, quarterly stocks at producers and distributors were taken directly from reported data. Monthly data were estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Beginning in 1998, end-of-year stocks are taken from reported data. Monthly stocks are estimated by a model.

Residential and Commercial—Prior to 1980, stock estimates for the residential and commercial sector were taken directly from reported data. Beginning in 1980, stock estimates for the sector were considered to be statistically insignificant and are no longer collected.

Industrial Coke Plants—Prior to 1980, monthly stocks at coke plants were taken directly from reported data. From 1980 forward, coke plant stocks are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Quarterly stocks are taken directly from data reported on Form EIA-5.

Industrial Other—Prior to 1978, stocks for the other industrial sector were derived by using reported data to modify baseline figures from a one-time Bureau of Mines survey of consumers. For 1978–1982, monthly estimates were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. From 1983 forward, other industrial coal stocks are estimated as indicated above for coke plants. Quarterly stocks are taken directly from data reported on Form EIA-3 and therefore include only manufacturing industries; data for agriculture, forestry, fishing, mining, and construction stocks are not available.

Electric Power Sector—Monthly stocks data at electric power plants are taken directly from reported data.

**Note 4. Forecast Values**. Data values preceded by "F" in this section are forecast values. They are derived from EIA's

Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

The STIFS model results are published monthly in EIA's *Short-Term Energy Outlook*, which is accessible on the Web at http://www.eia.doe.gov/emeu/steo/pub/contents.html.

**Note 5. Additional Information.** EIA's *Quarterly Coal Report* provides additional information about coal data and estimation procedures.

#### **Table 6.1 Sources**

#### **Production**

1973–September 1977: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977 forward: Energy Information Administration (EIA), *Weekly Coal Production*.

#### Waste Coal Supplied

1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."

2004 forward: EIA, Form EIA-906, "Power Plant Report," Form EIA-920, "Combined Heat and Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants"; and for forecast values, EIA, Short-Term Integrated Forecasting System.

# **Imports and Exports**

U.S. Department of Commerce, Bureau of the Census, Monthly Reports IM-145 (Imports) and EM-545 (Exports).

#### **Stock Change**

Calculated from data in Table 6.3.

#### Losses and Unaccounted for

Calculated as the sum of production, imports, and waste coal supplied, minus exports, stock change, and consumption.

#### Consumption

Table 6.2.

#### Table 6.2 Sources

## **Residential and Commercial Total**

Coal consumption by the residential and commercial sectors combined is reported to the Energy Information Administration (EIA). EIA estimates the sectors individually using the method described in Note 2, "Consumption," at the end of Section 6. Data for the residential and commercial sectors combined are from:

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.

January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

1980–1997: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

1998 forward: DOI, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Commercial CHP**

Table 7.4c.

#### **Commercial Other**

Calculated as "Commercial Total" minus "Commercial CHP."

#### **Industrial Coke Plants**

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual Supplement."

1981–1984: EIA, Form EIA-5/5A, "Coke Plant Report—Quarterly/Annual Supplement."

1985 forward: EIA, Form EIA-5, "Coke Plant Report-Quarterly"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Other Industrial Total**

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."

1980–1997: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.

1998 forward: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," and Form EIA-6A, "Coal Distribution Report," annual; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Other Industrial CHP**

Table 7.4c.

#### Other Industrial Non-CHP

Calculated as "Other Industrial Total" minus "Other Industrial CHP."

#### **Transportation**

1973–1976: DOI, BOM, Minerals Yearbook.

January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

October–December 1977: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

#### **Electric Power**

Table 7.4b.

#### Table 6.3 Sources

#### **Producers and Distributors**

1973–1979: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), Form 6-1419Q, "Distribution of Bituminous Coal and Lignite Shipments."

1980–1997: Energy Information Administration (EIA), Form EIA-6, "Coal Distribution Report," quarterly.

1998 forward: EIA, Form EIA-6A, "Coal Distribution Report," annual; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Residential and Commercial**

1973–1976: DOI, BOM, Minerals Yearbook.

January-September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

#### **Industrial Coke Plants**

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual."

1981–1984: EIA, Form EIA 5/5A, "Coke Plant Report—Quarterly/Annual Supplement."

1985 forward: EIA, Form EIA-5, "Coke Plant Report—Quarterly"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Industrial Other**

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."

1980 forward: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

#### **Electric Power**

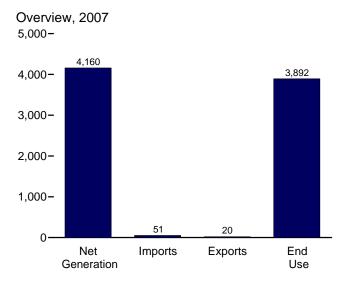
Table 7.5.

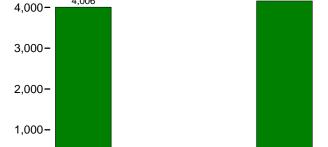
# **Electricity**



High-tension power lines and towers. Source: U.S. Department of Energy.

Figure 7.1 Electricity Overview (Billion Kilowatthours)





Commercial

145

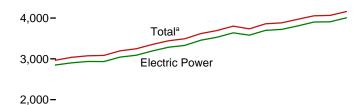
Industrial

4,160

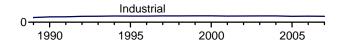
Total

Net Generation by Sector, 1989-2007

5,000-



1,000-



Net Generation by Sector, Monthly 500-

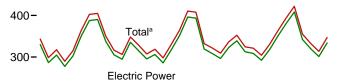
Net Generation, 2007

4,006

Electric

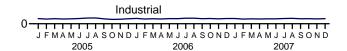
Power

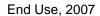
5,000-



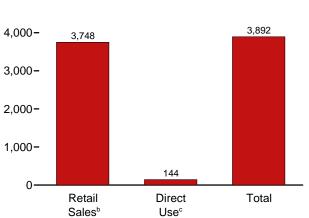
200-

100-

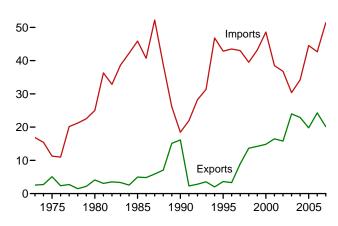




5,000-



Trade, 1973-2007



<sup>a</sup>Includes commercial sector.

<sup>b</sup>Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

°See "Direct Use" in Glossary.

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Source: Table 7.1.

Table 7.1 Electricity Overview

(Billion Kilowatthours)

		Net Gen	eration			Trade				End Use	
	Electric Power Sector <sup>a</sup>	Com- mercial Sector <sup>b</sup>	Indus- trial Sector <sup>c</sup>	Total	Imports <sup>d</sup>	Exportsd	Net Imports <sup>d</sup>	T&D Losses <sup>e</sup> and Unaccounted for <sup>f</sup>	Retail Sales <sup>9</sup>	Direct Use <sup>h</sup>	Total
1973 Total	1,861 1,918	NA NA	3	1,864 1,921	17 11	3 5	14 6	165 180	1,713 1,747	NA NA	1,713 1,747
1980 Total	2,286	NA	3	2,290	25	4	21	216	2,094	NA	2,094
1985 Total	2,470	NA	3	2,473	46	5	41	190	2,324	NA	2,324
1990 Total	2,901	6	131	3,038	18	16	2	203	2,713	125	2,837
1995 Total	3,194	8	151	3,353	43	4	39	229	3,013	151	3,164
1996 Total	3,284	9	151	3,444	43	3	40	231	3,101	153	3,254
1997 Total	3,329	9	154	3,492	43	9	34	224	3,146	156	3,302
1998 Total	3,457	9	154	3,620	40	14	26	221	3,264	161	3,425
1999 Total	3,530	9	156	3,695	43	14	29	240	3,312	172	3,484
2000 Total	3,638	8	157	3,802	49	15	34	244	3,421	171	3,592
2001 Total	3,580	7	149	3,737	39	16	22	202	3,394	163	3,557
2002 Total	3,698	7	153	3,858	37	16	21	248	3,465	166	3,632
2003 Total	3,721	7	155	3,883	30	24	6	228	3,494	168	3,662
2004 Total	3,808	8	154	3,971	34	23	11	266	3,547	168	3,716
2005 January February	330 287 305	1 1 1	12 11 12	343 299 317	3 3 3	2 1 1	1 2 2	23 9 20	309 280 287	E 13 E 12 E 13	322 291 299
March April May	277 303	1	12 12	290 315	3	1 2	2	15 31	264 274	E 12 E 12	276 286
June	350	1	13	364	4	2	2	33	319	E 13	333
July	388	1	14	402	4	2	3	35	356	E 14	370
August	390	1	14	405	5	2	4	32	363	E 14	377
September	338	1	12	350	4	2	2	9	331	E 12	343
October	305	1	11	316	4	2	2	10	298	E 11	309
November	295	1	11	306	4	2	2	22	275	E 11	286
December Total	335	1	12	348	4	2	2	30	307	E 12	320
	<b>3,902</b>	<b>8</b>	<b>145</b>	<b>4,055</b>	<b>45</b>	<b>20</b>	<b>25</b>	<b>269</b>	<b>3,661</b>	<b>150</b>	<b>3,811</b>
2006 January February	315 295	1 1	13 11	329 307	4 3	2 2	1 2	13 17	305 281	E 13 E 11	317 292
March	306	1	12	319	4	2	2	19	290	E 12	302
April	286	1	11	298	3	2	1	20	268	E 11	280
May	318	1	12	331	4	2	1	33	287	E 12	299
June	351	1	12	364	4	2	1	32	322	E 12	334
July	396	1	13	410	5	2	3	38	362	E 13	376
August	394	1	13	408	5	2	3	29	369	E 13	382
September	319	1	12	332	2	2	(s)	3	317	E 12	329
October	308	1	13	322	3	2	(s)	18	291	E 13	304
November	297	1	12	309	3	2	1	21	277	E 12	289
December	323	1	13	336	4	1	2	26	300	E 13	313
	<b>3,908</b>	8	<b>148</b>	<b>4,065</b>	<b>43</b>	<b>24</b>	18	<b>266</b>	<b>3,670</b>	147	<b>3,817</b>
2007 January	339 313	1 1	13 11	352 324	3 4	2	2	28 16	314 301	E 12 E 11	326 312
March	309	1	12	321	4	2	2	20	291	E 12	303
April	292	1	11	304	4	1	3	22	274	E 11	285
May	318	1	12	331	5	1	4	32	291	E 12	303
June	350	1	12	363	4	1	3	33	321	E 12	333
July	380	1	13	394	5	2	4	34	351	E 12	364
August	408	1	13	422	5	2	3	41	372	E 13	385
September October	342 320	1	12 12	355 333	4	2 2	1 2	8 16	336 307	E 12 E 12	348 319
November	301	1	12	314	4	2	R 3	20	284	E 12	296
December	334	1	12	347	4	2	2	30	306	E 12	318
<b>Total</b>	<b>4,006</b>	9	<b>145</b>	<b>4,160</b>	<b>51</b>	<b>20</b>	<b>31</b>	<b>299</b>	<b>3,748</b>	E <b>144</b>	<b>3,892</b>

a Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data

Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

Sources: See end of section.

are for electric utilities and independent power producers.

b Commercial combined-heat-and-power (CHP) and commercial electricity-only

plants.

<sup>c</sup> Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. Through 1988, data are for industrial hydroelectric power only.

<sup>d</sup> Electricity transmitted across U.S. borders. Net imports equal imports minus

exports.

<sup>e</sup> Transmission and distribution losses (electricity losses that occur between the point of generation and delivery to the customer). See Note 2, "Electrical System

Energy Losses," at end of Section 2.

<sup>f</sup> Data collection frame differences and nonsampling error.

<sup>&</sup>lt;sup>9</sup> Electricity retail sales to ultimate customers by electric utilities and, beginning

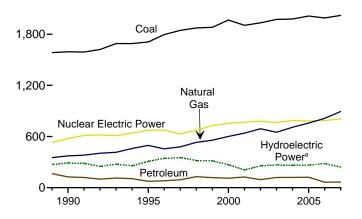
in 1996, other energy service providers.

h Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use

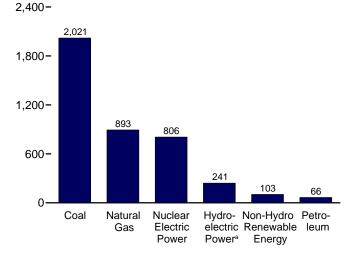
R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.5 billion kilowatthours.

Figure 7.2 Electricity Net Generation (Billion Kilowatthours)

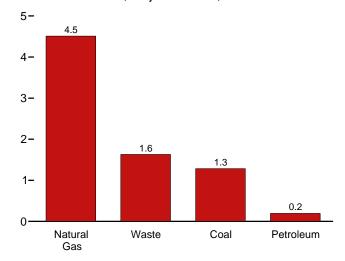
Total (All Sectors), Major Sources, 1989-2007 2,400-



Total (All Sectors), Major Sources, 2007

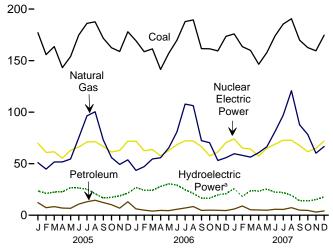


Commercial Sector, Major Sources, 2007

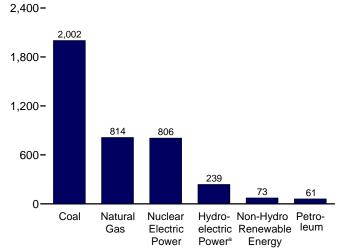


<sup>&</sup>lt;sup>a</sup>Conventional and pumped storage hydroelectric power.

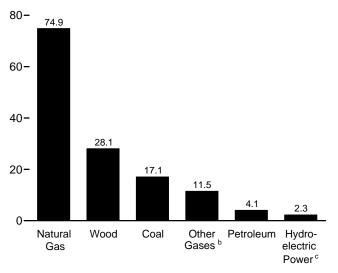
Total (All Sectors), Major Sources, Monthly



Electric Power Sector, Major Sources, 2007



Industrial Sector, Major Sources, 2007



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Sources: Tables 7.2a, 7.2b, and 7.2c.

<sup>&</sup>lt;sup>b</sup>Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

<sup>&</sup>lt;sup>©</sup>Conventional hydroelectric power.

Table 7.2a Electricity Net Generation: Total (All Sectors)

(Sum of Tables 7.2b and 7.2c; Million Kilowatthours)

		Fossil l	Fuels				Renewable Energy						
						Hydro-	Conven-	Bior	mass				
	Coala	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Nuclear Electric Power	electric Pumped Storage <sup>e</sup>	Hydro- electric Power	Wood <sup>f</sup>	Waste <sup>g</sup>	Geo- thermal	Solar/- PV <sup>h</sup>	Wind	Total <sup>i</sup>
1973 Total 1975 Total 1980 Total	852,786	314,343 289,095 245,994	340,858 299,778 346,240	NA NA NA	83,479 172,505 251,116	( <sup>j</sup> ) ( <sup>j</sup> ) ( <sup>j</sup> )	275,431 303,153 279,182	130 18 275	198 174 158	1,966 3,246 5,073	NA NA NA	NA NA NA	1,864,057 1,920,755 2,289,600
1985 Total		100,202	291,946	NA NA	383,691	83	284,311	743	640	9,325	11	6	2,473,002
1990 Total k	1,594,011	126,621	372,765	10,383	576,862	-3,508	292,866	32,522	13,260	15,434	367	2,789	3,037,988
1995 Total		74,554	496,058	13,870	673,402	-2,725	310,833	36,521	20,405	13,378	497	3,164	3,353,487
1996 Total		81,411	455,056	14,356	674,729	-3,088	347,162	36,800	20,911	14,329	521	3,234	3,444,188
1997 Total		92,555	479,399	13,351	628,644	-4,040	356,453	36,948	21,709	14,726	511	3,288	3,492,172
1998 Total		128,800	531,257	13,492	673,702	-4,467	323,336	36,338	22,448	14,774	502	3,026	3,620,295
1999 Total		118,061	556,396 601,038	14,126 13,955	728,254 753,893	-6,097 -5,539	319,536 275,573	37,041 37,595	22,572 23,131	14,827 14,093	495 493	4,488 5,593	3,694,810 3,802,105
2000 Total 2001 Total		111,221 124,880	639,129	9,039	768,826	-5,539 -8,823	216,961	35,200	14,548	13,741	543	6,737	3,736,644
2002 Total		94,567	691,006	11,463	780,064	-8,743	264,329	38,665	15,044	14,491	555	10,354	3,858,452
2003 Total		119,406	649,908	15,600	763,733	-8,535	275,806	37,529	15,812	14,424	534	11,187	3,883,185
2004 Total		120,771	708,854	16,766	788,528	-8,488	268,417	37,576	15,497	14,811	575	14,144	3,970,555
2005 January		12,236	51,049	1,390	69,828	-725	24,272	3,311	1,287	1,252	9	1,132	343,121
February		7,336	44,758	1,228	60,947	-346	21,607	3,033	1,129	1,063	13	966	298,500
March		8,349	51,674	1,431	61,539	-497	22,936	3,257	1,283	1,204	38	1,561	317,458
April		6,971	51,742	1,377	55,484 62,970	-338 -466	23,058	3,000 3,087	1,228	1,187	58 81	1,698	289,562
May June		6,738 10,789	54,546 75,313	1,471 1,483	66,144	-400 -415	27,279 26,783	3,087	1,357 1,333	1,264 1,248	88	1,746 1,797	315,062 363,672
July		13,074	96,450	1,511	71,070	-625	25,957	3,409	1,387	1,273	72	1,421	402,274
August		14,568	100,407	1,545	71,382	-623	21,566	3,410	1,355	1,254	76	1,138	404,941
September		12,308	73,092	1,399	66,739	-680	17,364	3,251	1,280	1,223	61	1,468	350,218
October		10,207	55,885	1,134	61,236	-611	18,006	3,234	1,210	1,247	38	1,446	316,398
November		6,873	49,321	1,068	62,913	-554	19,353	3,192	1,295	1,220	13	1,610	306,115
December		13,073	53,738	1,279	71,735	-678	22,141	3,337	1,335	1,257	3	1,828	348,101
Total	2,013,179	122,522	757,974	16,317	781,986	-6,558	270,321	38,681	15,479	14,692	550	17,811	4,055,423
2006 January	169,258	6,144	43,529	1,326	71,912	-533	27,437	3,426	1,391	1,230	13	2,383	328,658
February	158,648	4,934	47,152	1,260	62,616	-447	24,762	3,044	1,273	1,111	20	1,922	307,333
March		4,035	54,585	1,421	63,721	-435	24,625	3,214	1,342	1,261	33	2,359	318,730
April		4,708 4,440	55,795 65,302	1,352 1,440	57,567 62,776	-587 -444	28,556 30,818	2,968 3,024	1,228 1,371	1,129 1,096	52 71	2,472 2,459	297,858 330,616
May June	,	5,787	80,787	1,326	68,391	-423	29,757	3,126	1,328	1,199	71	2,459	364,260
July		7,024	107,862	1,374	72,186	-638	25,439	3,419	1,401	1,199	62	1,955	410,421
August		8,388	106,289	1,474	72,100	-695	21,728	3,466	1,388	1,289	83	1,655	407,763
September		4,661	72,402	1,299	66,642	-629	17,201	3,241	1,309	1,219	54	1,879	332,055
October	161,434	4,907	70,351	1,358	57,509	-507	17,055	3,193	1,336	1,275	32	2,442	321,567
November		4,760	53,161	1,216	61,392	-553	20,272	3,166	1,360	1,207	16	2,540	309,159
December		4,577	55,829	1,215	70,490	-667	21,596	3,360	1,385	1,290	3	2,472	336,283
Total	1,990,926	64,364	813,044	16,060	787,219	-6,558	289,246	38,649	16,110	14,568	508	26,589	4,064,702
2007 January		5,986	59,653	1,322	74,006	-572	26,405	3,288	1,446	1,306	13	2,459	352,369
February	163,590	8,959	58,087	1,173	65,225	-447	18,648	3,046	1,320	1,193	19	2,541	324,415
March		5,333	56,363	1,419	64,305	-458	24,272	3,100	1,465	1,216	48	3,061	321,198
April		5,056	60,729	1,337	57,301	-374	23,854	3,043	1,283	1,165	54	3,194	304,309
May June		4,882 5,762	66,469 81,185	1,341 1,361	65,025 68,923	-547 -523	25,930 22,860	3,070 3,204	1,376 1,449	1,168 1,250	84 84	2,858 2,395	330,701 363,084
July		5,762	97,046	1,366	72,729	-525	22,623	3,349	1,449	1,264	86	1,928	393,503
August		7,327	120,761	1,339	72,751	-651	20,002	3,382	1,461	1,267	75	2,446	422,053
September		4,904	87,741	1,266	67,582	-756	14,667	3,247	1,432	1,230	68	2,641	354,981
October		4,714	78,321	1,164	61,690	-786	14,826	3,223	1,261	1,278	48	3,056	332,609
November	159,525	3,042	60,159	1,168	64,969	-685	15,727	3,239	1,416	1,223	23	2,705	313,561
December		4,150	66,696	1,160	71,983	-601	18,498	3,324	1,485	1,278	3	2,859	346,731
	2,020,572	65,708	893,211	15,414	806,487	-6.994	248,312	38,515	16,885	14,839	606	32,143	4,159,514

a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

b Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other

Included in "Conventional Hydroelectric Power."

NA=Not available.

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

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

Sources: See sources for Tables 7.2b and 7.2c.

petroleum, and waste oil.

Natural gas, plus a small amount of supplemental gaseous fuels.

d Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

e Pumped storage facility production minus energy used for pumping.

f Wood and wood-derived fuels.

<sup>&</sup>lt;sup>9</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

tire-derived fuels).

h Solar thermal and photovoltaic energy.

<sup>&</sup>lt;sup>i</sup> Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

k Through 1988, all data except hydroelectric are for electric utilities only; hydroelectric data through 1988 include industrial plants as well as electric utilities. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

Table 7.2b Electricity Net Generation: Electric Power Sector

(Subset of Table 7.2a; Million Kilowatthours)

		Fossil F	Fuels						Renewabl	e Energy			
					Nuclear	Hydro- electric	Conven- tional Hydro-	Bior	nass				
	Coala	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Electric Power	Pumped Storage <sup>e</sup>	electric Power	Wood <sup>f</sup>	<b>Waste</b> <sup>g</sup>	Geo- thermal	Solar/- PV <sup>h</sup>	Wind	Total <sup>i</sup>
1973 Total	847,651	314,343	340,858	NA	83,479	( j )	272,083	130	198	1,966	NA	NA	1,860,710
1975 Total	852,786	289,095	299,778	NA	172,505	(i)	300,047	18	174	3,246	NA	NA	1,917,649
1980 Total		245,994	346,240	NA	251,116	(i)	276,021	275 743	158 640	5,073	NA 11	NA 6	2,286,439
1985 Total 1990 Total <sup>k</sup>		100,202 118,864	291,946 309,486	NA 621	383,691 576,862	-3,508	281,149 289,753	7,032	11,500	9,325 15,434	367	2,789	2,469,841 2,901,322
1995 Total		68.146	419,179	1.927	673,402	-2,725	305,410	7,032	17,986	13,378	497	3.164	3,194,230
1996 Total	1,771,973	74,783	378,757	1,341	674,729	-3,088	341,159	8,386	17,816	14,329	521	3,234	3,284,141
1997 Total	1.820.762	86,479	399,596	1,533	628,644	-4.040	350,648	8.680	18,485	14,726	511	3,288	3,329,375
	1.850.193	122,211	449,293	2,315	673,702	-4.467	317.867	8,608	19,233	14,774	502	3.026	3,457,416
1999 Total	, ,	111,539	472,996	1,607	728,254	-6,097	314,663	8,961	19,493	14,827	495	4,488	3,529,982
2000 Total		105,192	517,978	2.028	753,893	-5.539	271,338	8,916	20,307	14.093	493	5,593	3,637,529
2001 Total		119,149	554,940	586	768,826	-8,823	213,749	8,294	12,944	13,741	543	6,737	3,580,053
2002 Total	1,910,613	89,733	607,683	1,970	780,064	-8,743	260,491	9,009	13,145	14,491	555	10,354	3,698,458
2003 Total		113,697	567,303	2,647	763,733	-8,535	271,512	9,528	13,808	14,424	534	11,187	3,721,159
2004 Total	1,957,194	114,692	627,394	3,026	788,528	-8,488	265,064	9,727	13,130	14,811	575	14,144	3,808,360
2005 January	175,246	11,553	44,864	285	69,828	-725	23,922	897	1,070	1,252	9	1,132	329,896
February	154.169	6.858	39.010	267	60.947	-346	21,331	835	947	1.063	13	966	286.566
March	161,867	7,881	45,473	358	61,539	-497	22,632	907	1,082	1,204	38	1,561	304,624
April	141,464	6,510	45,901	334	55,484	-338	22,771	717	1,042	1,187	58	1,698	277,402
May	152,347	6,344	48,392	323	62,970	-466	27,003	785	1,146	1,264	81	1,746	302,523
June	173,149	10,367	68,472	349	66,144	-415	26,480	858	1,119	1,248	88	1,797	350,246
July	184,212	12,529	88,867	369	71,070	-625	25,662	980	1,169	1,273	72	1,421	387,630
August	185,729	14,067	92,719	401	71,382	-623	21,343	995	1,139	1,254	76	1,138	390,258
September	169,921	11,885	67,013	341	66,739	-680	17,143	918	1,075	1,223	61	1,468	337,681
October	160,731	9,763	50,833	310	61,236	-611	17,781	858	1,021	1,247	38	1,446	305,201
November	157,090	6,454	44,001	284	62,913	-554	19,124	861	1,096	1,220	13	1,610	294,691
December	176,135	12,557	47,771	339	71,735	-678	21,845	956	1,134	1,257	3	1,828	335,474
Total	1,992,060	116,767	683,316	3,960	781,986	-6,558	267,040	10,568	13,039	14,692	550	17,811	3,902,192
2006 January	167,478	5,706	36,940	331	71,912	-533	27,067	925	1,194	1,230	13	2,383	315,254
February	157,019	4,539	41,285	283	62,616	-447	24,469	862	1,095	1,111	20	1,922	295,333
March	159,599	3,644	48,426	335	63,721	-435	24,402	899	1,188	1,261	33	2,359	306,041
April	139,729	4,365	50,051	324	57,567	-587	28,361	686	1,054	1,129	52	2,472	285,788
May	155,291	4,094	58,671	359	62,776	-444	30,628	760	1,171	1,096	71	2,459	317,522
June	167,907	5,447	74,192	347	68,391	-423	29,571	841	1,155	1,199	70	2,052	351,360
July	185,953	6,668	100,539	285	72,186	-638	25,216	919	1,217	1,261	62	1,955	396,263
August September	187,578 159,906	7,994 4,305	98,893 65,905	394 327	72,016 66,642	-695 -629	21,546 16,996	976 866	1,211 1,135	1,289 1,219	83 54	1,655 1,879	393,589 319,181
October	159,906	4,305	63.526	324	57.509	-507	16,996	844	1,150	1,219	32	2.442	308,218
November	157,819	4,405	46,953	315	61,392	-553	19,903	852	1,173	1,273	16	2,540	296,571
December	171,812	4,154	49,062	317	70,490	-667	21,320	902	1,173	1,290	3	2,472	322,957
Total	1,969,776	59,926	734,445	3,940	787,219	-6,558	286,254	10,332	13,934	14,568	508	26,589	3,908,077
2007 January	174,363	5,581	52,809	354	74,006	-572	25,988	928	1,256	1,306	13	2,459	339,100
February	162,144	8,541	52,023	316	65,225	-447	18,433	891	1,153	1,193	19	2,541	312,564
March	158,293	4,923	50,151	338	64,305	-458	24,051	847	1,262	1,216	48	3,061	308,636
April	145,057	4,660	54,757	307	57,301	-374	23,645	711	1,135	1,165	54	3,194	292,179
May	156,280	4,493	60,109	305	65,025	-547	25,740	791	1,197	1,168	84	2,858	318,095
June	172,436	5,425	74,733	343	68,923	-523	22,637	888	1,252	1,250	84	2,395	350,467
July	183,806	5,259	90,115	331	72,729	-595	22,482	900	1,276	1,264	86	1,928	380,189
August	189,024	6,976	113,383	347	72,751	-651	19,783	942	1,266	1,267	75	2,446	408,235
September	168,307	4,636	80,961	310	67,582	-756	14,560	872	1,244	1,230	68	2,641	342,234
October	161,114	4,425	71,402	301	61,690	-786	14,707	838	1,065	1,278	48	3,056	319,740
November	158,102	2,726	53,606	315	64,969	-685	15,611	872	1,218	1,223	23	2,705	301,212
December	173,217	3,803	59,791	318	71,983	-601 - <b>6 00</b> 4	18,335	903	1,286	1,278	3 606	2,859	333,830
Total	2,002,141	61,449	813,840	3,884	806,487	-6,994	245,973	10,381	14,610	14,839	606	32,143	4,006,482

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

NA=Not available.

NA=Not available.

Notes: 
• The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

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

• Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

synfuel.

b Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

Natural gas, plus a small amount of supplemental gaseous fuels.

d Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Pumped storage facility production minus energy used for pumping. Wood and wood-derived fuels.

<sup>9</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

Solar thermal and photovoltaic energy.

Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur,

J Included in "Conventional Hydroelectric Power."

Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilites and independent power producers.

Sources: See end of section.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Subset of Table 7.2a; Million Kilowatthours)

1973 Total	Commercial Sector <sup>a</sup>						Industrial Sector <sup>b</sup>								
1975 Total 1980 Total 1980 Total 1990 Total 1995 Total 1996 Total 1996 Total 1997 Total 1998 Total 1998 Total 1998 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May June July August September October November December Total  2006 January February March April May June July August September October Total  2007 January February Pebruary March April May June July August September October Total  2007 January February Pebruary March April May June July June July August September October November December Total					Biomass			5		0.1	Hydro-	Bion	nass		
1975 Total 1980 Total 1980 Total 1990 Total 1995 Total 1996 Total 1996 Total 1997 Total 1998 Total 1998 Total 1998 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May June July August September October November December Total  2006 January February March April May June July August September October Total  2007 January February Pebruary March April May June July August September October Total  2007 January February Pebruary March April May June July June July August September October November December Total	Coalc	Coalc	Petro- I leum <sup>d</sup>	Natural Gas <sup>e</sup>	Waste <sup>f</sup>	Total	Coalc	Petro- leum <sup>d</sup>	Natural Gas <sup>e</sup>	Other Gases <sup>h</sup>	electric Power <sup>i</sup>	Wood <sup>j</sup>	Wastef	Total <sup>k</sup>	
1975 Total 1980 Total 1980 Total 1990 Total 1995 Total 1996 Total 1997 Total 1998 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May June July August September October November December Total  2006 January February March April May June July August September October Total  2007 January February February March April May June July August September October Total 2007 January February February March April May June July February March April May June July	NA	NΔ	NA	NA	NA	NA	NA	NA	NA	NA	3,347	NA	NA	3,347	
1980 Total 1985 Total 1995 Total 1996 Total 1996 Total 1997 Total 1998 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total 2006 January February March April May June July August September Cotober November December Total 2006 January February March April May June July August September Cotober November December Total 2007 January February March April May June July August September Total 2007 January February March April May June July June July August September October November December Total 2007 January February March April May June July June July June July June July	NA NA		NA NA	NA	NA NA	NA NA	NA	NA	NA NA	NA NA	3,106	NA	NA	3,106	
1985 Total 1990 Total 1995 Total 1996 Total 1996 Total 1997 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May June July August September October November December Total  2006 January February March April May June July August September October Total  2007 January February March December Total  2007 January February March April May June July August September October November December Total  2007 January February March April May June July June July June July June July June July June July	NA		NA NA	NA	NA NA	NA NA	NA	NA	NA	NA	3,161	NA	NA	3,161	
1990 Total 1995 Total 1996 Total 1997 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May June July August September October November December Total  2006 January February March April May June July August September Cotober November December Total  2007 January February March April May February December Total  2007 January February March April May June July	NA		NA NA	NA	NA NA	NA NA	NA	NA	NA	NA	3,161	NA	NA	3,161	
1995 Total 1996 Total 1997 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May June July 2007 January February February February February February February February February March April May June July August September October Total  2006 January February February February March April May June July August September October Total  2007 January February February February February February December Total  2007 January February March April May June July	796		589	3,272	812	5,837	21,107	7,169	60,007	9.641	2,975	25,379	949	130,830	
1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  May June July August September October November December Total  2006 January February March April May June July August September Total  2007 January February March April Moy August September October November December Total  2007 January February March April May June July August September October November December Total  2007 January February March April May June July	998		379	5,162	1,519	8,232	22,372	6,030	71,717	11,943	5,304	28,868	900	151,025	
1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January  February  March  April  May  June  July  August  September  October  November  December  Total  2006 January  February  March  April  May  June  July  2007 January  February  August  September  Total  2007 January  February  March  April  August  September  October  April  May  June  July  August  September  October  April  May  June  July  August  September  October  November  December  Total  2007 January  February  March  April  May  June  July	1.051		369	5.249	2.176	9.030	22,172	6.260	71,049	13.015	5,878	28,354	919	151,023	
1998 Total 1999 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May June July 2006 January February March April May June July August September October Total  2007 January February Pebruary August September October November December Total  2007 January February March April May February Pebruary March April May June July	1,040	,	427	4,725	2,342	8,701	23,214	5,649	75,078	11,814	5,685	28,225	882	154,097	
1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May  June July 2006 January February March April May June July August September Total  2007 January February February March April May June July August September October Total  2007 January February Peember Total  2007 January February March April May June July June July June July June July June July June July	985		383	4,879	2,335	8,748	22,337	6,206	77,085	11,170	5,349	27,693	880	154,132	
2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 January February March April May June July August September October November December Total  2006 January February March April May June July 2007 January February December Total 2007 January February March April May August September October November December Total 2007 January February March April May June July August September October November December Total 2007 January February March April May June July June July June July June July June July	995		434	4,607	2,393	8,563	21,474	6,088	78,793	12,519	4,758	28,060	686	156,264	
2001 Total 2002 Total 2003 Total 2004 Total 2005 January  February  March  April  May  June  July  August  September  October  November  December  Total  2006 January  February  March  April  May  June  July  2007 January  February  March  December  Total  2007 January  February  March  April  April  August  September  October  November  December  Total  2007 January  February  March  April  May  June  July  August  September  October  November  December  Total  2007 January  February  March  April  May  June  July  June  July  June  July  June  July	1,097		432	4,262	1,985	7.903	22,056	5,597	78,798	11,927	4,135	28,652	839	156,673	
2002 Total           2003 Total           2004 Total           2005 January           February           March           April           May           June           July           August           September           October           November           December           Total           2006 January           February           March           April           May           June           July           August           September           October           November           December           Total           2007 January           February           March           April           May           June           July	995		438	4,434	1,007	7,416	20,135	5,293	79,755	8,454	3,145	26,888	596	149,175	
2003 Total           2004 Total           2005 January           February           March           April           May           June           July           August           September           October           November           December           Total           2006 January           February           March           April           May           June           July           August           September           October           November           December           Total           2007 January           February           March           April           May           June           July	992		431	4,310	1,007	7,415	21,525	4.403	79,733	9,493	3,825	29,643	846	152,580	
2004 Total           2005 January           February           March           April           May           June           July           August           September           October           November           December           Total           2006 January           February           March           April           May           June           July           August           September           October           November           December           Total           2007 January           February           March           April           May           June           July	1,206		423	3,899	1,033	7,415	19,817	5,285	78,705	12,953	4,222	27,988	715	154,530	
February March April May June July August September October November December Total  2006 January February March April May June July August September Cotober Total  2007 January February February Narch April May June July August September October November December Total  2007 January February March April May June July August September October November December Joecember Joe	1,323		469	4,051	1,527	8,270	20,103	5,610	77,409	13,740	3,248	27,835	840	153,925	
February March April May June July August September October November December Total  2006 January February March April May June July August September Cotober Total  2007 January February February Narch April May June July August September October November December Total  2007 January February March April May June July August September October November December Joecember Joe	117	117	57	353	137	737	1,672	626	5,832	1,105	339	2,413	80	12,489	
March April May June July August September October November December Total  2006 January February March April May June July August September Cotober November December Total  2007 January February March April May June July August September October November December Total  2007 January February March April May June July June July June July June July June July June July	112		38	313	123	656	1,556	441	5,434	961	265	2,413	58	11,279	
April May	111		31	353	136	702	1,686	437	5,848	1,073	295	2,190	65	12,132	
May June July August September October November December Total  2006 January February March April May June July August September Cotober November December Total  2007 January February March April May June July August September October November December Total  2007 January February March April May June July June July June July	90		23	344	124	649	1,573	438	5,496	1.043	275	2,330	62	11.512	
June July August September October November December Total  2006 January February March April May June July August September October November December Total  2007 January February March April May June July August September October November December Joecember Joecemb	92		22	343	146	686	1,573	372	5,811	1,147	262	2,203	65	11,853	
July August September October November December Total  2006 January February March April May June July August September October November December Total  2007 January February March April May June July August September October November December July August August September October November July June July June July	119		28	387	149	763	1,626	393	6,454	1,147	296	2,301	65	12.662	
August	127		32	443	149	823	1,020	512	7,140	1,134	290	2,299	70	13,821	
September October November December Total  2006 January February March April May June July August September October November December Total  2007 January February March April May June July August September October November December Total	123		31	458	142	821	1,773	471	7,140	1,144	222	2,427	70 74	13,862	
October November December Total  2006 January February March April May June July August September October November December Total  2007 January February March April May June July August September October November December July August September October November July June July	1123		29	368	140	718	1,739	394	5,711	1,057	218	2,331	64	11,819	
November	101		26	320	129	644	1,630	418	4,731	825	221	2,375	60	10,553	
December	106		20	292	136	627	1,630	397	5.028	784	221	2,375	62	10,555	
Total  2006 January February March April May June July August September October November December Total  2007 January February March April May June July	117		37	303	138	665	1,735	479	5,663	941	289	2,330	63	11,962	
February March April May June July August September October November December Total  2007 January February March April May June July	1,329		375	4,279	1,650	8,492	19,791	5,380	<b>70,380</b>	12,356	3,195	28,098	<b>789</b>	144,739	
February March April May June July August September October November December Total  2007 January February March April May June July June July	117	117	26	322	139	684	1.664	411	6.266	994	357	2.500	57	12.720	
March	112		29	298	128	643	1,516	366	5,568	975	281	2,180	49	11,357	
April May June July August September October November December Total  2007 January February March April May June July	99		32	333	111	643	1,656	359	5,825	1.084	210	2,313	43	12.046	
May	86		24	306	129	625	1,641	319	5,438	1,026	185	2,281	45	11.445	
June July	98		17	363	147	713	1,662	329	6,269	1,079	182	2,262	52	12,380	
July August September October November December Total  2007 January February March April May June July	113		15	381	129	724	1.706	326	6.213	977	177	2.284	44	12,176	
August	123		18	439	130	783	1,784	338	6,884	1,087	220	2,498	54	13,375	
September	127		17	437	129	780	1,784	376	6,959	1,078	182	2,488	49	13,394	
October November December Total  2007 January February March April May June July	100		13	369	127	682	1,624	343	6,128	971	202	2,374	46	12,193	
November December Total  2007 January February March April May June July	95		11	392	133	704	1.655	291	6,433	1.032	279	2.348	54	12.645	
December	108		15	347	134	682	1,545	339	5,862	898	358	2,312	53	11,906	
Total	111		24	358	138	709	1.625	398	6.410	896	266	2.457	55	12.617	
February March April May June July	1,289		242	4,345	1,574	8,371	19,861	4,197	74,255	12,096	2,899	28,296	601	148,254	
February March April May June July	113	113	29	355	140	717	1,443	376	6,489	966	402	2,359	50	12,552	
March	114		28	349	121	676	1,332	391	5,716	856	207	2,153	46	11,176	
April	109		25	363	144	716	1,502	384	5,849	1.079	211	2,251	60	11,846	
May June July	93		21	350	109	651	1,366	375	5,621	1,028	200	2,330	39	11,478	
June July	100		13	362	132	690	1,462	377	5,998	1,035	180	2,278	47	11,916	
July	99		10	394	143	719	1,456	327	6,059	1,017	218	2,314	54	11,897	
	105		10	417	152	758	1.522	324	6.513	1.033	142	2.448	63	12.556	
	117		15	432	136	770	1,541	336	6,946	990	216	2,439	59	13,048	
September	104		10	379	132	690	1,428	258	6,402	954	107	2,374	57	12,057	
October	104		11	392	140	724	1,423	278	6,526	861	117	2,384	56	12,145	
November	110		11	351	141	683	1,312	305	6,203	852	113	2,365	57	11,666	
December	114		13	367	143	709	1,312	334	6.538	841	157	2,303	56	12,191	
Total	1,285		195	4,511	1,631	8,503	17,146	4,064	<b>74,860</b>	11,510	2,269	28,113	644	144,529	

<sup>&</sup>lt;sup>a</sup> Commercial combined-heat-and-power (CHP) and commercial electricity-only

Natural gas, plus a small amount of supplemental gaseous fuels.

NA=Not available.

Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

Sources: See end of section.

plants.

b Industrial combined-heat-and-power (CHP) and industrial electricity-only

plants.

<sup>c</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

d Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other

petroleum, and waste oil.

f Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

<sup>&</sup>lt;sup>9</sup> Includes a small amount of conventional hydroelectric power, other gases, wood, and other, which are not separately displayed.

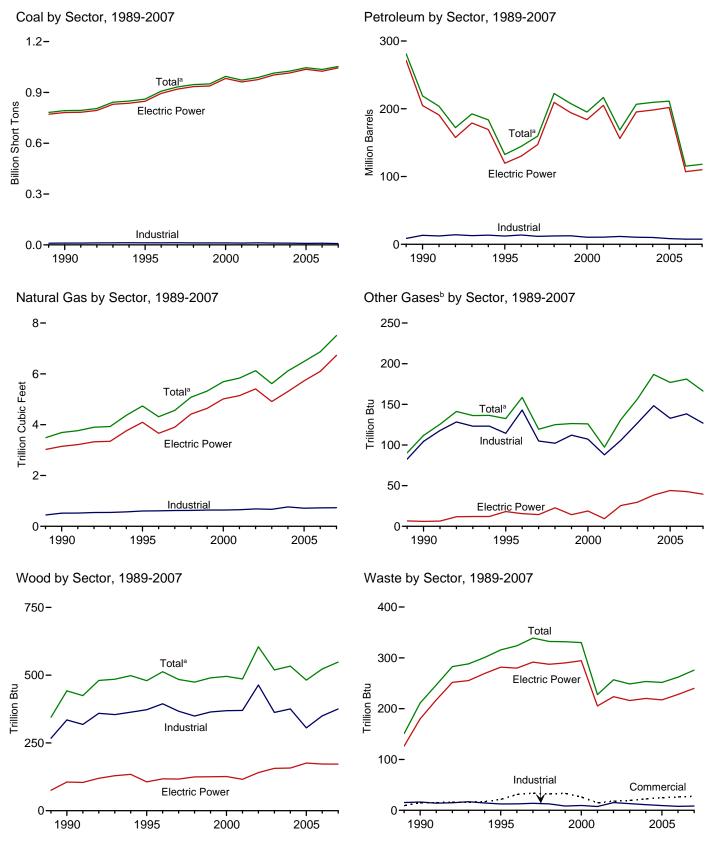
<sup>&</sup>lt;sup>h</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Conventional hydroelectric power.

Wood and wood-derived fuels.

k Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation



alnoludes commercial sector.

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Sources: Tables 7.3a, 7.3b, and 7.3c.

<sup>&</sup>lt;sup>b</sup>Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Table 7.3a Consumption of Combustible Fuels for Electricity Generation: **Total (All Sectors)** (Sum of Tables 7.3b and 7.3c)

				Petroleum					Bion	nass	Other <sup>j</sup>
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale	Natural Gas <sup>f</sup>	Other Gases <sup>9</sup>	Woodh	Waste <sup>i</sup>	
	Thousand Short Tons				Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total	389,212	47.058	513,190	NA	507	562,781	3.660	NA	1	2	NA
1975 Total	405,962	38,907	467,221	NA NA	70	506,479	3,158	NA	(s)	2	NA
1980 Total	569,274	29,051	391,163	NA	179	421,110	3,682	NA	3	2	NA
1985 Total	693,841	14,635	158,779	NA_	231	174,571	3,044	NA_	8	7	NA
1990 Total <sup>k</sup>	792,457	18,143	190,849	437	1,914	218,997	3,692	112	442	211	36
1995 Total 1996 Total	860,594 907,209	19,615 20,252	95,507 106.055	680 1.712	3,355 3,322	132,578 144.626	4,738 4.312	133 159	480 513	316 324	42 37
1997 Total	931,949	20,309	118,741	237	4,086	159,715	4,565	119	484	339	36
1998 Total	946.295	25,062	172,728	549	4,860	222,640	5.081	125	475	332	36
1999 Total	949,802	25,951	158,187	974	4,552	207,871	5,322	126	490	332	41
2000 Total	994,933	31,675	143,381	1,450	3,744	195,228	5,691	126	496	330	46
2001 Total	972,691	31,150	165,312	855	3,871	216,672	5,832	97	486	228	160
2002 Total	987,583	23,286	109,235	1,894	6,836	168,597	6,126	131	605	257	191
2003 Total	1,014,058	29,672	142,518	2,947	6,303	206,653	5,616	156	519	249	193
2004 Total	1,026,018	20,669	145,171	3,959	7,942	209,508	6,117	187	534	254	176
2005 January	92,455	3,227	13,679	722	726	21,258	437	15	42	21	13
February	80,977	962	8,164	153	664	12,600	378	16	40	18	12
March	84,319	1,097	9,396	167	704	14,178	438	19	40	21	13
April	74,179	1,116	7,482	211	646	12,040	440	14	35	20	13
May	79,933	1,216	6,724	146	720	11,688	475	14	39	22	14
June	90,200 97.040	1,510 2.297	13,198 16.077	170 345	765 758	18,703 22,509	652 843	15 15	41 44	22 22	13 15
July August	98,043	2,553	18,200	403	794	25,127	857	15	44	22	15
September	89,217	1,952	15,510	236	695	21,174	626	14	41	21	13
October	84,716	1,522	12,364	198	695	17,560	474	13	39	20	13
November	82,220	1,125	7,526	164	634	11,983	415	13	38	21	13
December	92,577	2,585	15,913	389	710	22,436	452	14	41	22	14
Total	1,045,878	21,163	144,234	3,303	8,511	211,256	6,487	177	482	252	161
2006 January	88,061	1,106	5,872	221	738	10,889	370	15	47	23	14
February	81,720	1,006	4,569	174	657	9,033	392	15	41	21	12
March	83,233	832	3,190	238	620	7,360	458	16	45	22	14
April	73,270	1,047	3,817	175	631	8,193	472	15	38	20	13
May	81,254	1,045 1.187	3,691 5.581	246 230	591 659	7,936 10.291	559 685	16 15	41 43	22 21	14
June	88,045 97,912	1,187	7,200	230 268	721	12,570	924	15	43 45	23	14 15
July August	98,970	1,683	9,414	342	679	14,836	902	17	47	23	15
September	85.051	840	4.247	225	619	8.409	603	15	43	21	14
October	84,479	996	4,714	161	621	8,973	585	15	44	22	13
November	82,938	1,011	4,607	151	554	8,538	448	14	43	22	13
December	90,415	1,123	4,118	181	584	8,341	472	13	46	23	14
Total	1,035,346	13,372	61,019	2,612	7,673	115,370	6,870	181	523	262	165
2007 January	92,245	1,465	6,057	241	605	10,790	500	14	46	24	14
February	84,496	2,609	10,041	578	484	15,650	478	11	44	22	12
March	82,300	1,230	5,544	280	492	9,514	469	15	43	24	14
April	76,357	973	5,257	331	471	8,915	507	14	41	21	13
May	81,774	1,096	4,665	307	520 507	8,667	561	13	41	23 23	14
June	90,592 97,419	1,375 1,388	5,748 5,798	308 307	597 528	10,417 10,136	682 819	15 14	42 44	23 24	14 14
July August	97,419	2.131	5,798 7.860	439	528 558	13,221	1.038	15	44	24 24	14
September	88,807	1,066	5,063	243	517	8,958	736	15	51	23	14
October	84,679	1,169	4,782	225	467	8,510	664	14	51	21	15
November	82,928	932	2,376	210	439	5,712	501	13	50	23	13
December	91,805	1,170	3,511	230	543	7,626	553	13	52	24	16
Total	1,053,346	16,605	66,701	3,699	6,222	118,115	7,507	166	548	276	169

a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

oil no. 4.

<sup>d</sup> Jet fuel, kerosene, other petroleum liquids, and waste oil.

tire-derived fuels).

NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

Sources: See sources for Tables 7.3b and 7.3c.

synfuel.

b Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data also include

small amounts of kerosene and jet fuel.

<sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of petroleum. For 1980-2000, electric utility data also include a small amount of fuel

Petroleum coke is converted from short tons to barrels by multiplying by 5.

Natural gas, plus a small amount of supplemental gaseous fuels

<sup>&</sup>lt;sup>9</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Wood and wood-derived fuels.

Mode and Wood extreme the state of the st non-renewable waste (municipal solid waste from non-biogenic sources, and

J Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

k Through 1988, data are for electric utilities only. Beginning in 1989, data are

for electric utilities, independent power producers, commercial plants, and industrial

Table 7.3b Consumption of Combustible Fuels for Electricity Generation: Electric Power Sector (Subset of Table 7.3a)

				Petroleum					Bion	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale	Natural Gas <sup>f</sup>	Other Gases <sup>9</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Ti	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total	389,212	47,058	513,190	NA	507	562,781	3,660	NA	1	2	NA
1975 Total	405,962	38,907	467,221	NA	70	506,479	3,158	NA	(s)	2	NA
1980 Total	569,274	29,051	391,163	NA	179	421,110	3,682	NA	3	2	NA
1985 Total	693,841	14,635	158,779	NA_	231	174,571	3,044	NA_	8	7	NA (a)
1990 Total <sup>k</sup> 1995 Total	781,301 847,854	16,394 18,066	183,285 88,895	25 441	1,008 2,452	204,745 119,663	3,147 4.094	6 18	106 106	180 282	(s) 2
1996 Total	894,400	18,472	98,795	567	2,467	130,168	3.660	16	117	280	2
1997 Total	919,009	18,646	112,423	130	3,201	147,202	3,903	14	117	292	1
1998 Total	934,126	23,166	165,875	411	3,999	209,447	4,416	23	125	287	2
1999 Total	937,888	23,875	151,921	514	3,607	194,345	4,644	14	125	290	1
2000 Total	982,713	29,722	138,047	403	3,155	183,946	5,014	19	126	294	1
2001 Total	961,523	29,056	159,150	374	3,308	205,119	5,142 5,408	9	116	205 224	109
2002 Total 2003 Total	975,251 1,003,036	21,810 27,441	104,577 137,361	1,243 1,937	5,705 5,719	156,154 195,336	5,408 4.909	25 30	141 156	216	137 136
2004 Total		18,927	139,806	2,702	7,357	198,220	5,306	38	157	220	136
2005 January	91,643	2,891	13,061	681	687	20,066	373	3	15	18	10
February	80,191	864	7,656	106	635	11,801	319	5	14	16	9
March	83,479	1,009	8,981	125	665	13,442	375	7	15	18	10
April		1,024	7,143	139	608	11,348	379	3	12	17	10
May	79,193	1,100	6,456	133	688	11,129	412	3	13	19	10
June	89,392 96,165	1,411 2,155	12,829 15,725	123 246	728 716	18,001 21,708	582 764	3	14 16	19 19	10 11
July August	97,181	2,133	17,822	286	716 756	24,328	704 779	3	17	19	11
September	88,398	1,856	15,132	192	657	20,466	565	3	15	18	10
October	83,920	1,404	11,956	149	658	16,798	423	3	14	17	10
November	81,429	1,020	7,183	115	594	11,288	362	3	14	18	10
December Total	91,741 <b>1,036,140</b>	2,415 <b>19,587</b>	15,432 <b>139,376</b>	338 <b>2,634</b>	673 <b>8,066</b>	21,552 <b>201,926</b>	392 <b>5,725</b>	3 <b>44</b>	16 <b>176</b>	19 <b>217</b>	10 <b>120</b>
2006 January	87,182	1,043	5.430	163	685	10.060	307	4	16	20	10
February	80,920	930	4,182	127	605	8,266	336	3	15	18	9
March	82,376	738	2,820	184	572	6,601	396	4	15	19	10
April	72,432	981	3,522	129	585	7,558	415	4	11	17	10
May	80,397	988	3,426	167	545	7,304	494	4	13	19	10
June	87,184	1,128	5,342	154 183	610 673	9,672	620	4	14	19	10 11
July August	96,995 98,053	1,429 1,625	6,951 9,162	218	633	11,928 14,172	852 829	4	15 16	20 20	11
September	84,208	798	3,987	142	572	7,785	539	3	15	19	10
October	83,616	950	4,469	121	579	8,434	517	3	14	19	10
November	82,142	947	4,293	113	508	7,895	387	3	14	19	10
December	89,602	1,056	3,739	143	525	7,562	405	3	15	20	10
Total	1,025,107	12,613	57,322	1,844	7,092	107,238	6,097	43	172	228	121
<b>2007</b> January	91,564	1,387	5,649	190	556	10,008	433	4	15	21	11
February	83,866 81 606	2,513	9,652 5 171	538 222	435 437	14,879	417 406	3	16 14	19 21	9
March April	81,606 75,721	1,167 906	5,171 4,944	222	437 421	8,743 8,177	406 447	3	14 12	21 18	10 10
May	81,099	1,026	4,437	185	469	7,992	500	3	13	20	11
June	89,914	1,310	5,541	230	541	9,787	619	4	14	20	11
July	96,714	1,335	5,591	235	475	9,537	751	3	14	21	11
August	99,220	2,068	7,652	356	498	12,565	964	4	15	21	11
September	88,034	997	4,890	196	463	8,401	670	3	14	20	10
October	83,910	1,101	4,606	168	415	7,949	595	3	13	18	11
November December	82,237 91.109	878 1,092	2,138 3,231	173 180	386 494	5,117 6,972	437 486	3	15 15	20 21	9 11
Total	- ,	1,092 15,781	63,501	2,894	5, <b>590</b>	110,127	6,725	39	172	240	124
10tai	1,077,333	13,701	03,301	2,034	3,330	110,121	0,723	39	172	240	124

a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

tire-derived fuels).

NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding.

Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available

data beginning in 1973.
Sources: See end of section.

synfuel.

b Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data also include

small amounts of kerosene and jet fuel.

<sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.

<sup>d</sup> Jet fuel, kerosene, other petroleum liquids, and waste oil.

Petroleum coke is converted from short tons to barrels by multiplying by 5.

Natural gas, plus a small amount of supplemental gaseous fuels

<sup>&</sup>lt;sup>9</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Wood and wood-derived fuels.

Model that Wood active treatment is in Model and Wood active treatment in Model and Waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

J Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

k Through 1988, data are for electric utilities only. Beginning in 1989, data are

for electric utilities and independent power producers.

Table 7.3c Consumption of Selected Combustible Fuels for Electricity Generation: Commercial and Industrial Sectors (Subset of Table 7.3a)

		Commerc	ial Sectora				Indu	strial Sector	b		
			Natural	Biomass			Natural	Other	Biom	nass	
	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Waste <sup>f</sup>	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Other Gases <sup>g</sup>	Woodh	Waste <sup>f</sup>	Other <sup>i</sup>
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillion	n Btu	
1989 Total	414	1,165	18	9	9,707	8,688	444	83	267	15	37
1990 Total	417	953	28	15	10,740	13,299	517	104	335	16	36
1995 Total	569	649	43	21	12,171	12,265	601	114	373	13	40
1996 Total	656	645	42	31	12,153	13,813	610	143	394	13	35
1997 Total	630	790	39	34	12,311	11,723	623	105	367	14	36
1998 Total	440 481	802 931	41 39	32 33	11,728 11,432	12,392 12,595	625 639	102 112	349 364	13 8	35 39
2000 Total	514	823	39 37	33 26	11,432	10,459	640	107	369	10	39 45
2001 Total	532	1.023	36	15	10.636	10,439	654	88	370	7	43
2002 Total	477	834	33	18	11,855	11,608	685	106	464	15	43
2003 Total	582	894	38	19	10,440	10.424	668	127	362	13	46
2004 Total	602	1,188	46	22	10,337	10,100	765	148	376	11	27
2005 January	69	191	4	2	744	1,001	60	12	27	1	2
February	64	87	3	2	722	712	56	11	26	1	2
March	64	76	4	2	776	660	59	12	25	1	2
April	55	56	4	2	716	635	57	11	23	1	2
May	57	55	4	2	682	505	59	12	25	1	2
June	70	66	4	2	738	636	66	12	26	1	2
July	75	68	5	2	801	734	74	12	27	1	3
August	71	63	5	2	792	737	73	11	25	1	3
September	61	63	4	2	758	644	57	11	26	1 1	2
October	55 60	65 57	4	2 2	741 731	697 638	48 49	10 9	25 24	1	2
November December	68	92	3	2	768	793	56	11	2 <del>4</del> 25	1	2
Total	770	939	48	25	8,969	<b>8,392</b>	714	133	306	9	28
2006 January	70	53	4	2	810	776	59	12	32	1	2
February	64	62	3	2	735	705	53	12	27	1	2
March	60	67	4	2	798	691	58	12	30	1	3
April	51	48	3	2	787	587	54	12	27	1	2
May	60	31	4	2	797	600	61	12	28	1	3
June		30	4	2	797	590	61	11	28	1	2
July	67	32	5	2	849	611	67	13	30	1	3
August	69	33	5	2	848	630	68	12	31	1	3
September	57	25	4	2	786	598	60	11	29	1	3
October	54 62	22 29	4 4	2 2	809 733	517 615	64 57	12 10	30 29	1 1	3
November December	62 66	29 48	4	2	733	731	57 62	10	29 30	1	3
Total	743	481	48	26	9,496	<b>7,651</b>	<b>724</b>	138	<b>350</b>	8	31
<b>2007</b> January	69	59	4	2	612	723	63	10	30	1	3
February	67	58	4	2	563	713	57	8	27	1	2
March	64	52	4	2	629	718	59	11	29	1	2
April	52	43	4	2	585	695	56	11	29	1	2
May	56	23	4	2	618	652	58	10	28	1	2
June	57	19	4	2	620	610	59	11	28	1	2
July	59	19	5	2	646	580	63	11	29	1	2
August	64	29	5	2	660	627	69	12	29	1	3
September	63	20	4	2	710	537	63	12	36	1	3
October	64	21	4	2	705	540	64	11	37	1	3
November	62	20	4	2	628	574	60	10	36	1	3
December	_68	23	_4	2	629	632	_63	10	37	1	3
Total	745	387	50	27	7,606	7,601	733	127	376	8	31

a Commercial combined-heat-and-power (CHP) and commercial electricity-only

<sup>i</sup> Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

Notes: • Data are for fuels consumed to produce electricity. Through 1988, data are not available. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States

and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1989.

Sources: • 1989-1997: Energy Information Administration (EIA), Form EIA-867,

"Annual Nonutility Power Producer Report." • 1998-2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • 2001-2003: EIA, Form EIA-906, "Power Plant Report." • 2004 forward: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

plants.

b Industrial combined-heat-and-power (CHP) and industrial electricity-only

<sup>&</sup>lt;sup>c</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

synfuel.

d Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

Natural gas, plus a small amount of supplemental gaseous fuels.

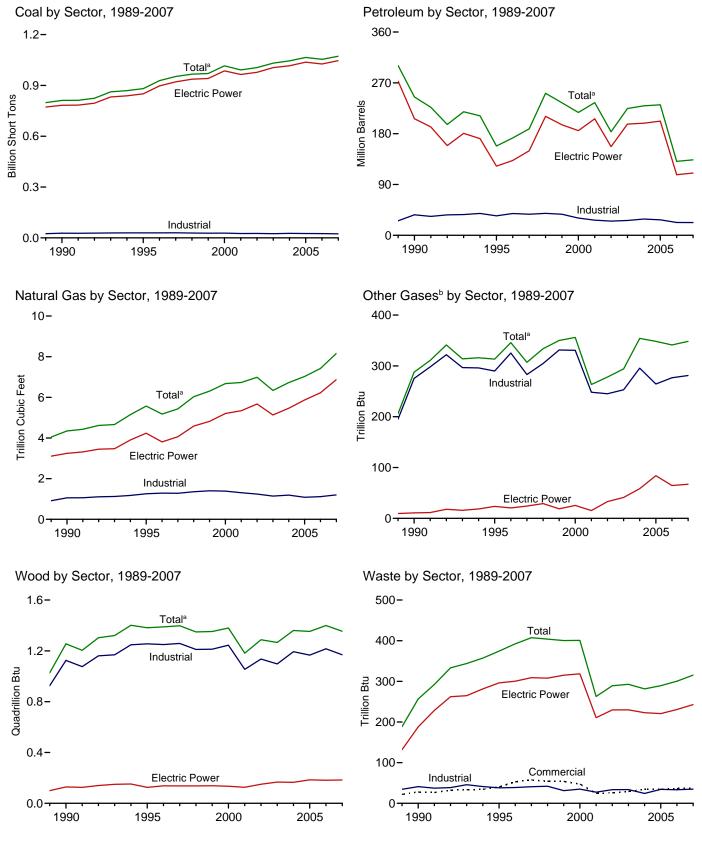
f Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

tire-derived fuels).

9 Blast furnace gas, propane gas, and other manufactured and waste gases

h Wood and wood-derived fuels.

Figure 7.4 Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output



<sup>a</sup>Includes commercial sector.

<sup>b</sup>Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Sources: Tables 7.4a, 7.4b, and 7.4c.

Table 7.4a Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Total (All Sectors) (Sum of Tables 7.4b and 7.4c)

				Petroleum					Bion	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Tł	nousand Barre	ls	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total	389,212 405,962	47,058 38.907	513,190 467,221	NA NA	507 70	562,781 506,479	3,660 3,158	NA NA	1 0	2 2	NA NA
1980 Total	569,274	29,051	391,163	NA	179	421,110	3,682	NA	3	2	NA
1985 Total	693,841	14,635	158,779	NA	231	174,571	3,044	NA	8	7	NA_
1990 Total k		20,194	209,314	1,332	2,832	244,998	4,346	288	1,256	257	86
1995 Total	881,012	21,697	112,168	1,322	4,590	158,140 172,499	5,572	313 346	1,382 1,389	374 392	97 91
1996 Total 1997 Total	928,015 952,955	22,444 22.893	124,607 134.623	2,468 526	4,596 6.095	188,517	5,178 5.433	346 307	1,369	392 407	103
1998 Total	966,615	30,006	189,267	1,230	6,196	251,486	6,030	334	1,349	404	95
1999 Total	970,175	30,616	172,319	1.812	5.989	234.694	6.305	350	1,352	400	101
2000 Total	1,015,398	34,572	156,673	2,904	4,669	217,494	6,677	356	1,380	401	109
2001 Total	991,635	33,724	177,137	1,418	4,532	234,940	6,731	263	1,182	263	229
2002 Total	1,005,144	24,749	118,637	3,257	7,353	183,409	6,986	278	1,287	289	252
2003 Total	1,031,778	31,825	152,859	4,576	7,067	224,593	6,337	294	1,266	293	262
2004 Total	1,044,798	23,520	157,478	4,764	8,721	229,364	6,727	354	1,360	281	226
<b>2005</b> January	94,232	3,745	14,991	846	779	23,479	483	30	119	24	17
February	82,588	1,116	9,131	190	705	13,963	419	33	116	21	16
March	85,995 75,664	1,278	10,485	221	754	15,754	482	37	114	24	18
April	75,661 81,432	1,290 1,386	8,424 7,479	308 211	692 761	13,484 12,881	483 517	28 30	107 110	23 25	18 18
May June	91,774	1,566	14.146	238	818	20.162	700	28	109	25 25	18
July	98,698	2,653	17,089	449	812	24,249	894	29	116	26	19
August	99,699	2,959	19,279	522	849	27,007	909	28	116	25	20
September	90,781	2,290	16,520	285	745	22,818	670	28	110	24	17
October	86,285	1,730	13,720	269	743	19,436	514	25	112	23	16
November	83,803	1,334	8,450	243	684	13,444	460	24	109	24	17
December	94,332	2,976	17,201	487	770	24,515	497	27	115	25	18
Total	1,065,281	24,446	156,915	4,270	9,113	231,193	7,028	348	1,353	289	213
2006 January	89,720	1,233	6,950	317	819	12,597	415	28	128	27	18
February	83,236 84.783	1,141 992	5,469 4.009	249 318	731 703	10,516 8,835	434 503	27 30	111 116	24 25	17 19
March April	74.743	1.147	4,009	224	703 708	9.444	503 515	29	109	23	18
May	82,713	1,148	4,324	308	668	9,121	602	31	112	26	19
June	89.570	1.273	6.146	286	740	11.403	744	28	113	24	19
July	99,478	1,589	7,784	328	803	13,715	973	30	121	26	20
August	100,548	1,785	10,004	430	762	16,030	951	31	120	26	20
September	86,525	919	4,877	280	697	9,563	645	28	116	24	19
October	85,934	1,069	5,317	193	690	10,030	631	29	118	25	19
November	84,472	1,113	5,356	208	630	9,828	491	26	115	26	19
December	92,060	1,245	5,077	254	670	9,924	515	25	121	26	19
Total	1,053,783	14,655	69,846	3,396	8,622	131,005	7,419	341	1,399	300	225
2007 January	93,925	1,643	6,987	331	689	12,407	544	30	117	28 25	19
February March	86,068 83,881	2,943 1,365	10,994 6,483	675 355	558 572	17,404 11,062	522 512	23 29	109 112	25 27	17 19
April	77.792	1,303	6.065	431	550	10.351	548	31	113	24	19
May	83,254	1,305	5,287	418	599	10,003	603	30	111	26	20
June	92,090	1,492	6,251	378	695	11,596	733	30	110	27	18
July	98,917	1,475	6,242	376	625	11,218	880	30	115	28	19
August	101,500	2,262	8,300	523	665	14,412	1,152	30	113	27	20
September	90,126	1,164	5,501	282	604	9,966	796	28	110	26	18
October	86,073	1,271	5,244	274	557	9,572	719	31	114	24	19
November	84,304	1,030	2,845	253	526	6,757	543	28	113	27	17
December	94,499	1,347	4,067	280	645	8,920	607	29	117	28	20
Total	1,072,430	18,401	74,265	4,577	7,285	133,668	8,160	348	1,354	315	226

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

tire-derived fuels).

Notes: • Data are for fuels consumed to produce electricity and useful thermal output. • Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

Sources: See sources for Tables 7.4b and 7.4c.

synfuel.

b Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>&</sup>lt;sup>c</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

Jet fuel, kerosene, other petroleum liquids, and waste oil.

Petroleum coke is converted from short tons to barrels by multiplying by 5.

Natural gas, plus a small amount of supplemental gaseous fuels.

g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Wood and wood-derived fuels.

Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

J Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

k Through 1988, data are for electric utilities only. Beginning in 1989, data are

for electric utilities, independent power producers, commercial plants, and industrial plants. NA=Not available.

Table 7.4b Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Electric Power Sector (Subset of Table 7.4a)

				Petroleum					Bion	nass	
	Coal <sup>a</sup>	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	TI	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total	389,212 405,962	47,058 38,907	513,190 467,221	NA NA	507 70	562,781 506,479	3,660 3,158	NA NA	1 (s)	2 2	NA NA
1980 Total	569,274	29,051	391,163	NA	179	421,110	3,682	NA	3	2	NA
1985 Total	693,841	14,635	158,779	NA_	231	174,571	3,044	NA_	8	7_	<u>NA</u>
1990 Total <sup>k</sup>	782,567 850,230	16,567 18,553	184,915 90.023	26 499	1,008 2,674	206,550 122,447	3,245 4,237	11 24	129 125	188 296	(s) 2
1995 Total 1996 Total	896,921	18,780	90,023 99,951	499 653	2,674 2,642	132,593	4,23 <i>1</i> 3,807	20	138	300	2
1997 Total	921,364	18,989	113,669	152	3,372	149,668	4,065	24	137	309	1
1998 Total	936,619	23,300	166.528	431	4,102	210,769	4,588	29	137	308	ż
1999 Total	940,922	24,058	152,493	544	3,735	195,769	4,820	19	138	315	<u>-</u>
2000 Total	985,821	30,016	138,513	454	3,275	185,358	5,206	25	134	318	1
2001 Total	964,433	29,274	159,504	377	3,427	206,291	5,342	15	126	211	113
2002 Total	977,507	21,876	104,773	1,267	5,816	156,996	5,672	33	150	230	143
2003 Total	1,005,116	27,632	138,279	2,026	5,799	196,932	5,135	41	167	230	140
2004 Total	1,016,268	19,107	139,816	2,713	7,372	198,498	5,464	59	165	223	138
<b>2005</b> January	91,789	2,919	13,063	702	687	20,119	385	6	16	18	10
February	80,305	866	7,659	108	635	11,809	331	12	15	16	9
March	83,601	1,012	8,983	126	667	13,454	386	13	16	18	10
April	73,503	1,028	7,147	148	609	11,369	390	6	13	17	10
May	79,306	1,104	6,460	139	688	11,143	423	6	14	19	10
June	89,498	1,414	12,834	125	730	18,021	594 777	5	15 17	19	11
July	96,272	2,161 2,443	15,728	248 287	716 757	21,719 24,338	777 791	6 5	17	20 19	11 11
August September	97,284 88,498	2,443 1.870	17,823 15,135	193	658	20.486	578	7	16	18	10
October	84,032	1,409	11,956	150	658	16,804	435	6	15	17	10
November	81,531	1.025	7,185	117	594	11,297	373	6	15	19	10
December	91,867	2,424	15,435	342	685	21,625	406	7	16	19	11
Total	1,037,485	19,675	139,409	2,685	8,083	202,184	5,869	84	185	221	123
2006 January	87,317	1,045	5,431	164	685	10,065	318	5	17	20	10
February	81,043	933	4,184	128	607	8,282	346	5	15	18	9
March	82,499	741	2,821	199	576	6,640	407	5	16	19	10
April	72,560	984	3,522	132	585	7,565	426	5	12	17	10
May	80,515	990	3,427	168 154	545 610	7,308	504 630	6 5	13	19 19	10 11
June	87,319	1,131 1,431	5,342 6,963	183	673	9,676 11,943	864	5 5	15 16	20	11
July	97,113 98.183	1,628	9.164	218	634	14,181	840	6	17	20	11
August September	84,327	802	3,987	142	572	7,791	548	5	17	19	10
October	83,724	951	4,469	121	580	8,441	528	5	15	19	10
November	82.293	951	4.293	114	509	7,901	397	5	15	20	10
December	89,742	1,060	3,741	146	525	7,573	414	5	16	20	11
Total	1,026,636	12,646	57,345	1,870	7,101	107,365	6,222	65	182	231	125
<b>2007</b> January	91,704	1,390	5,651	195	557	10,018	442	6	16	21	11
February	83,988	2,529	9,656	564	435	14,925	427	5	17	19	10
March	81,742	1,178	5,174	224	437	8,760	417	5	15	21	11
April	75,815	915	4,946	224	421	8,191	457	5	15	19	10
May	81,221	1,029	4,441	188	469	8,002	508	5	14	20	11
June	90,047	1,312	5,543	232	541	9,793	627	6	15	21	11
July	96,826	1,336	5,592	236 360	476	9,546	762 1 007	6 6	15	21	11
August	99,341 88 144	2,070 1,036	7,655 4,891	198	498 465	12,575 8,448	1,007 679	6 5	16 15	21 20	11 10
September	88,144 84.016	1,036	4,891 4.607	198	465 415	8,448 7,953	679 605	5 6	15	20 18	10
October November	84,016 82,344	1,103	4,607 2,140	173	386	7,953 5,123	605 446	5	15	21	11
December	91,235	1,096	3,232	181	494	6,979	496	6	16	22	12
Total	1,046,424	15,874	63,529	2,943	5,594	110,314	6,874	67	184	243	128
	.,0-0,727	. 3,01 4	55,525	2,545	3,034	0,0 14	3,014	01	104	2-13	.20

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

Notes: • Data are for fuels consumed to produce electricity and useful thermal output. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

Sources: See end of section.

synfuel.

b Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small

amounts of kerosene and jet fuel.

<sup>c</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

Jet fuel, kerosene, other petroleum liquids, and waste oil.

Petroleum coke is converted from short tons to barrels by multiplying by 5.

Natural gas, plus a small amount of supplemental gaseous fuels

g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Wood and wood-derived fuels.

i Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

<sup>&</sup>lt;sup>j</sup> Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers. NA=Not available. (s)=Less than 0.5 trillion Btu.

Table 7.4c Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output: Commercial and Industrial Sectors (Subset of Table 7.4a)

		Commerc	ial Sector <sup>a</sup>				Indu	strial Sector	b		
			Natural	Biomass			Natural	Other	Biom	nass	
	Coalc	Petroleum <sup>d</sup>	Gas <sup>e</sup>	Waste <sup>f</sup>	Coalc	Petroleum <sup>d</sup>	Gas <sup>e</sup>	Gases <sup>9</sup>	Woodh	Waste <sup>f</sup>	Other <sup>i</sup>
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillion	Btu	
1989 Total	1.125	1.967	30	22	24.867	25.685	914	195	926	35	85
1990 Total	1,191	2,056	46	28	27,781	36,392	1,055	275	1,125	41	86
1995 Total	1,419	1,245	78	40	29,363	34,448	1,258	290	1,255	38	95
1996 Total	1,660 1,738	1,246 1,584	82 87	53 58	29,434 29.853	38,661	1,289 1,282	325 283	1,249	39 41	89 102
1997 Total 1998 Total	1,736	1,364	87 87	56 54	29,653	37,265 38,910	1,262	203 305	1,259 1,211	41	93
1999 Total	1,490	1,613	84	54	27,763	37,312	1,401	331	1,213	31	99
2000 Total		1,615	85	47	28,031	30,520	1,386	331	1,244	35	108
2001 Total	1,448	1,832	79	25	25,755	26,817	1,310	248	1,054	27	101
2002 Total	1,405	1,250	74	26	26,232	25,163	1,240	245	1,136	34	92
2003 Total	1,816	1,449	58	29	24,846	26,212	1,144	253	1,097	34	103
2004 Total	1,917	2,009	72	34	26,613	28,857	1,191	296	1,193	24	67
<b>2005</b> January	192	308	6	3	2,252	3,053	92	24	103	3	6
February	168	158	5	3	2,114	1,996	84	21	100	3	5
March	173 135	131 83	6 6	3	2,222 2.023	2,169 2,032	90 87	24 23	98 94	3	6
April May	136	71	5	3	1.990	1.667	89	24	96	3	6
June	158	117	6	3	2.118	2.024	100	23	94	3	6
July	166	125	7	3	2,260	2,406	110	23	99	3	6
August	161	126	7	3	2,254	2,543	110	23	99	3	7
September	148	113	6	3	2,135	2,219	87	22	94	3	6
October	138	115	5	3	2,115	2,516	74	20	97	3	5
November	157	.97	12	3	2,116	2,049	75	19	94	3	5
December Total	190 <b>1,922</b>	185 <b>1,630</b>	5 <b>75</b>	3 <b>34</b>	2,275 <b>25,875</b>	2,705 <b>27,380</b>	85 <b>1,084</b>	20 <b>264</b>	98 <b>1,166</b>	3 <b>34</b>	6 <b>70</b>
2006 January	186	121	5	3	2,217	2,411	91	23	112	3	6
February	169	137	5	3	2.024	2.098	83	22	96	3	6
March	170	126	5	3	2,115	2,070	91	25	100	3	7
April	134	77	5	3	2,050	1,802	84	24	97	3	6
May	139	51	5	3	2,059	1,762	92	24	98	3	7
June	147	51	20	3	2,104	1,677	94	23	98	2	6
July	163	55	7	3	2,202	1,717	103	25	105	3	7 7
August	163 138	58 49	7 6	3	2,202 2.061	1,791 1.722	104 91	25 23	103 100	3	
September October	136	49	6	3	2,074	1,722	97	23	100	3	7 7
November	159	64	5	3	2.020	1,863	89	21	100	3	7
December	183	102	6	3	2,136	2,249	95	20	105	3	7
Total		935	82	36	25,262	22,706	1,115	277	1,216	33	79
<b>2007</b> January	192	126	6	3	2,030	2,262	97	24	100	3	7
February	185	132	7	3	1,895	2,347	88	18	92	3	6
March	171	111	6	3	1,968	2,192	89	24 26	97	3	7 7
April	145 144	81 41	5 5	3	1,832 1,889	2,078 1,960	86 90	26 25	99 97	2	7
May June	137	33	5 7	3	1,889	1,960	99	25 24	97 95	3	6
July	149	31	9	3	1,942	1,641	109	24	100	3	6
August	160	44	10	3	1,999	1,793	135	24	97	3	7
September	143	37	8	3	1,839	1,481	109	23	95	3	6
October	146	37	8	3	1,910	1,582	107	25	99	3	7
November	170	45	6	3	1,790	1,590	91	23	97	3	6
December	183	56	7	3	3,081	1,886	103	23	101	3	7
Total	1,924	774	83	37	24,082	22,580	1,202	281	1,169	35	78

a Commercial combined-heat-and-power (CHP) and commercial electricity-only

<sup>i</sup> Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

Notes: • Data are for fuels consumed to produce electricity and useful thermal output. Through 1988, data are not available. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States

and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1989.

Sources: • 1989-1997: Energy Information Administration (EIA), Form EIA-867,

"Annual Nonutility Power Producer Report." • 1998-2000: EIA, Form EIA-860B,
"Annual Electric Generator Report—Nonutility." • 2001-2003: EIA, Form EIA-906,
"Power Plant Report." • 2004 forward: EIA, Form EIA-906, "Power Plant Report,"
and Form EIA-920, "Combined Heat and Power Plant Report."

plants.

<sup>b</sup> Industrial combined-heat-and-power (CHP) and industrial electricity-only

<sup>&</sup>lt;sup>c</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

synfuel.

d Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

Natural gas, plus a small amount of supplemental gaseous fuels.

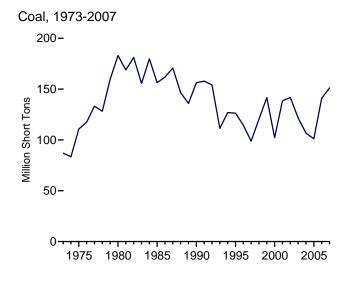
f Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

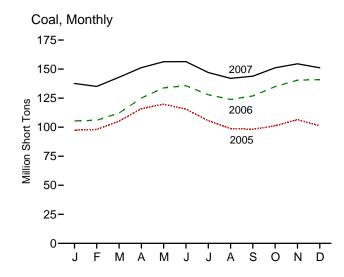
tire-derived fuels).

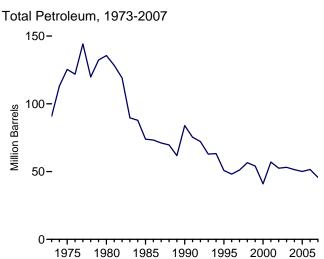
<sup>9</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels

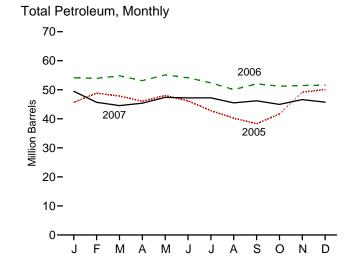
h Wood and wood-derived fuels.

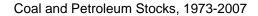
Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

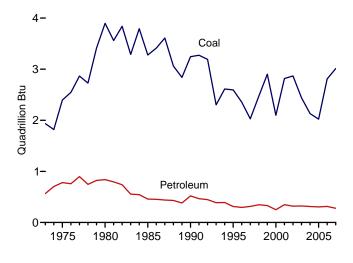




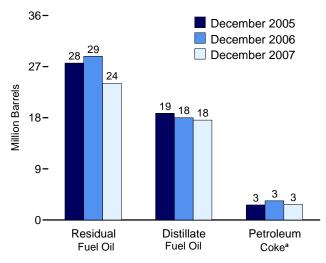








# Petroleum by Major Type, End of Month



<sup>a</sup>Converted from short tons to barrels by multiplying by five. Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Sources: Tables 7.5, A1, and A5 (column 6).

Table 7.5 Stocks of Coal and Petroleum: Electric Power Sector

				Petroleum		
	Coal <sup>a</sup>	Distillate Fuel Oilb	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale
	Thousand Short Tons		Thousand Barrels		Thousand Short Tons	Thousand Barrels
973 Year	86,967	10,095	79,121	NA	312	90,776
975 Year		16,432	108,825	NA NA	31	125,413
980 Year		30.023	105,351	NA NA	52	135.635
985 Year		16,386	57,304	NA NA	49	73,933
		16,471	67.030	NA NA	94	83.970
990 Year		-,	. ,			,
995 Year		15,392	35,102	NA	65	50,821
996 Year		15,216	32,473	NA	91	48,146
997 Year		15,456	33,336	NA	469	51,138
998 Year		16,343	37,451	NA	559	56,591
999 Year f	141,604	17,995	34,256	NA	372	54,109
000 Year	102,296	15,127	24,748	NA	211	40,932
2001 Year		20,486	34,594	NA	390	57,031
002 Year		17,413	25,723	800	1,711	52,490
003 Year		19,153	25.820	779	1,484	53,170
004 Year		19,275	26,596	879	937	51,434
005 January	97.514	17,109	23.950	790	765	45,675
February	- /-	17,597	26.392	890	796	48.860
March	/	17,358	26,111	924	690	47,844
	,	17,143	24,578	920	685	46,067
April	,			920 920		
May		17,085	26,855		633	48,024
June		17,311	24,330	921	723	46,176
July		16,876	21,277	885	757	42,824
August		17,204	19,252	867	583	40,238
September	98,192	17,021	17,611	936	550	38,316
October	101,218	17,402	20,173	1,041	612	41,677
November	106,573	18,457	26,655	1,057	602	49,180
December	101,137	18,778	27,624	1,012	530	50,062
2006 January	105,401	18,413	31,748	1,058	587	54,151
February		18,393	31,335	1,075	633	53,966
March		18,346	31,881	1,087	700	54,813
April		18.156	30.641	1.101	650	53,148
May	- /	18,156	32,462	1,094	684	55,132
June	,	18.199	31,503	1,082	665	54,110
		18,044	30,198	1,082	615	52,401
July	,	,	,	,		,
August		18,093	27,979	1,082	580	50,056
September		18,024	29,456	1,343	647	52,059
October		17,852	28,367	1,330	736	51,228
November		17,987	28,292	1,336	771	51,472
December	140,964	18,013	28,823	1,380	674	51,583
<b>007</b> January		17,465	27,107	1,390	703	49,477
February	135,096	17,137	23,569	1,342	730	45,697
March	142,986	16,875	23,145	1,303	649	44,569
April		16,721	23,935	1,309	683	45,381
May		16,739	25.980	1,327	668	47.385
June	/	16,943	26,178	1,322	552	47,201
July	,	17,020	25,503	1,316	677	47,223
	,	16,944	24,342	1,302	582	45,496
August	,					45,496 46.224
September		17,184	25,024	1,288	546	
October		R 17,673	23,274	1,308	545	R 44,981
November		R 17,629	24,632	1,305	R 610	R 46,619
December	151,127	17,579	24,081	1,325	550	45,733

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, and lignite.

R=Revised. NA=Not available.

Notes: 
• The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. 
• Stocks

are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

Sources: • 1973-September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • October 1977-1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • 1982-1988: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report." • 1989-1997: EIA, Form EIA-759, "Monthly Power Plant Report." • and Form EIA-867, "Annual Nonutility Power Producer Report." • 1998-2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report—Nonutility." • 2001-2003: Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

<sup>&</sup>lt;sup>b</sup> Fuel oil nos. 1, 2 and 4. For 1973-1979, data are for gas turbine and internal combustion plant stocks of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>&</sup>lt;sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant stocks of petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.

oil no. 4.

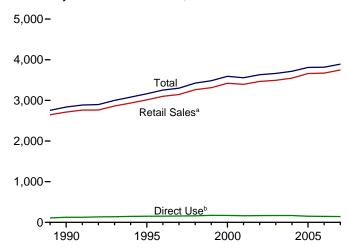
<sup>d</sup> Jet fuel and kerosene. Through 2003, data also include a small amount of waste oil

e Petroleum coke is converted from short tons to barrels by multiplying by 5.

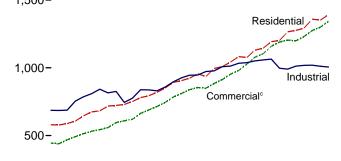
<sup>&</sup>lt;sup>f</sup> Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and independent power producers.

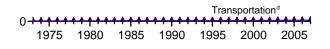
Figure 7.6 Electricity End Use (Billion Kilowatthours)

Electricity End Use Overview, 1989-2007

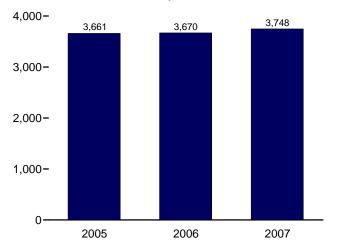


Retail Sales<sup>a</sup> by Sector, 1973-2007 1,500-



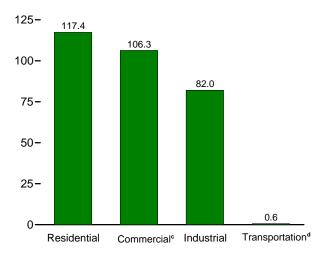


# Retail Sales<sup>a</sup> Total, January-December

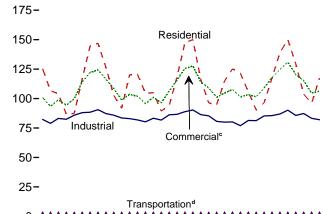


<sup>&</sup>lt;sup>a</sup>Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

# Retail Sales<sup>a</sup> by Sector, December 2007



Retail Sales<sup>a</sup> by Sector, Monthly



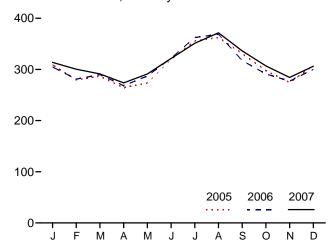
J FMAMJ JASOND J FMAMJ JASOND J FMAMJ JASOND

2006

2007

Retail Sales<sup>a</sup> Total, Monthly

2005



<sup>d</sup>Transportation sector, including sales to railroads and railways. Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Source: Table 7.6.

<sup>&</sup>lt;sup>b</sup>See "Direct Use" in Glossary.

<sup>&</sup>lt;sup>e</sup>Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.

Table 7.6 Electricity End Use

(Million Kilowatthours)

			Retail Sales <sup>a</sup>					Discont Retail Sale	
	Residential	Commercialb	Industrial <sup>c</sup>	Transpor- tation <sup>d</sup>	Total Retail Sales <sup>e</sup>	Direct Use <sup>f</sup>	Total End Use <sup>g</sup>	Commercial (Old) <sup>h</sup>	Other (Old) <sup>i</sup>
973 Total	579,231	E 444.505	686,085	E 3,087	1,712,909	NA	1,712,909	388,266	59,326
975 Total	588,140	E 468,296	687,680	E 2,974	1,747,091	NA NA	1,747,091	403,049	68,222
980 Total	717,495	558,643	815,067	3,244	2,094,449	NA	2,094,449	488,155	73,732
985 Total	793,934	689,121	836,772	4,147	2,323,974	NA NA	2,323,974	605,989	87,279
990 Total	924,019	838,263	945,522	4,751	2,712,555	124,529	2,837,084	751,027	91,988
995 Total	1,042,501	953,117	1,012,693	4,975	3,013,287	150,677	3,163,963	862,685	95,407
996 Total	1,082,512	980,061	1,033,631	4,923	3,101,127	152,638	3,253,765	887,445	97,539
997 Total	1,075,880	1,026,626	1,038,197	4,907	3,145,610	156,239	3,301,849	928,633	102,901
998 Total	1,130,109	1,077,957	1,051,203	4,962	3,264,231	160,866	3,425,097	979,401	103,518
999 Total	1,144,923	1,103,821	1,058,217	5,126	3,312,087	171,629	3,483,716	1,001,996	106,952
000 Total	1,192,446	1,159,347	1.064.239	5,382	3,421,414	170,943	3,592,357	1,055,232	109,496
001 Total	1,201,607	1,190,518	996,609	5,724	3,394,458	162,649	3,557,107	1,083,069	113,174
002 Total	1,265,180	1,204,531	990,238	5,517	3,465,466	166,184	3,631,650	1,104,497	105,552
003 Total	1,275,824	1,198,728	1,012,373	6,810	3,493,734	168,295	3,662,029	1,104,437	
004 Total	1,291,982	1,230,425	1,017,850	7,224	3,547,479	168,470	3,715,949		
				•			, ,		
<b>005</b> January	125,288	100,862	82,242	687	309,079	E 12,948	322,027		
February	106,667	93,257	78,935	655	279,514	E 11,684	291,198		
March	104,065	98,924	83,185	618	286,791	E 12,565	299,356		
April	86,749	94,439	82,389	590	264,168	<sup>E</sup> 11,905	276,073		
May	87,384	99,702	85,852	562	273,500	E 12,276	285,776		
June	116,627	114,101	88,033	620	319,381	E 13,143	332,524		
July	144,476	122,037	88,386	615	355,514	E 14,337	369,851		
August	146,905	124,436	90,536	667	362,544	E 14,375	376,918		
September	126,516	116,517	87,256	635	330,923	E 12,273	343,197		
October	102,686	108,474	85,856	610	297,626	<sup>E</sup> 10,962	308,589		
November	91,687	98,799	83,512	587	274,585	E 11,184	285,770		
December	120,177	103,531	82,974	660	307,343	E 12,362	319,705		
Total	1,359,227	1,275,079	1,019,156	7,506	3,660,969	150,016	3,810,984		
<b>006</b> January	120,419	101,933	81,865	649	304,866	E 12,574	317,440		
February	104,511	95,713	80,207	615	281,046	<sup>E</sup> 11,257	292,304		
March	104,955	101,115	83,264	636	289,970	<sup>E</sup> 11,903	301,873		
April	89,374	96,551	81,696	587	268,208	<sup>E</sup> 11,322	279,531		
May	94,000	106,442	86,179	577	287,198	<sup>E</sup> 12,283	299,481		
June	118,815	115,785	86,630	609	321,840	E 12,101	333,941		
July	147,338	125,541	88,880	627	362,387	<sup>E</sup> 13,281	375,668		
August	150,064	127,655	90,285	630	368,634	E 13,296	381,930		
September	116,072	114,231	86,364	615	317,282	E 12,077	329,360		
October	96,246	109,000	85,337	602	291,186	E 12,522	303,708		
November	94,843	101,104	80,653	582	277,182	E 11,808	288,990		
December	114,882	104,673	79,937	627	300,119	E 12,501	312,620		
Total	1,351,520	1,299,744	1,011,298	7,358	3,669,919	146,927	3,816,845		
<b>007</b> January	125,172	107,699	80,139	724	313,735	E 12,447	326,182		
February	121,440	101,435	77,001	663	300,539	<sup>E</sup> 11,118	311,657		
March	105,785	103,342	81,385	717	291,229	<sup>E</sup> 11,784	303,013		
April	90,362	101,429	81,283	602	273,677	<sup>E</sup> 11,379	285,056		
May	96,368	108,873	85,280	597	291,118	<sup>E</sup> 11,825	302,943		
June	117,340	117,878	85,514	631	321,363	E 11,835	333,198		
July	138,960	124,611	86,870	638	351,079	E 12,490	363,569		
August	149,978	130,920	90,145	643	371,686	E 12,962	384,648		
September	129,475	120,415	85,675	648	336,214	<sup>E</sup> 11,957	348,171		
October	103,770	115,095	87,330	617	306,812	E 12,072	318,884		
November	95,892	104,651	83,188	637	284,368	E 11,584	295,953		
December	117,367	106,325	82,019	619	306,330	E 12,102	318,432		
Total	1,391,911	1,342,673	1,005,828	7,738	3,748,149	E 143,556	3,891,705		

<sup>&</sup>lt;sup>a</sup> Electricity retail sales to ultimate customers reported by electric utilities and,

beginning in 1996, other energy service providers.

beginning in 1996, other energy service providers.

Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.

Conductrial sector. Through 2002, excludes agriculture and irrigation; beginning

in 2003, includes agriculture and irrigation.

d Transportation sector, including sales to railroads and railways.

e The sum of "Residential," "Commercial," "Industrial," and "Transportation."

f Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use.

g The sum of "Total Retail Sales" and "Direct Use."

h "Commercial (Old)" is a discontinued series—data are for the commercial sector, excluding public street and highway lighting, interdepartmental sales, and other sales to public authorities.

<sup>&</sup>quot;Other (Old)" is a discontinued series—data are for public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

E=Estimate. NA=Not available. --=Not applicable.

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

Web Page: See http://www.eia.doe.gov/emeu/mer/elect.html for all available data beginning in 1973.

Sources: See end of section.

# **Electricity**

Note. Classification of Power Plants Into Energy-Use Sectors. The Energy Information Administration (EIA) classifies power plants (both electricity-only and combined-heat-and-power plants) into energy-use sectors based on the North American Industry Classification System (NAICS), which replaced the Standard Industrial Classification (SIC) system in 1997. Plants with a NAICS code of 22 are assigned to the Electric Power Sector. Those with NAICS codes beginning with 11 (agriculture, forestry, fishing, and hunting); 21 (mining, including oil and gas extraction); 23 (construction); 31–33 (manufacturing); 2212 (natural gas distribution); and 22131 (water supply and irrigation systems) are assigned to the Industrial Sector. Those with all other codes are assigned to the Commercial Form EIA-860, "Annual Electric Generator Report," asks respondents to indicate the primary purpose of the facility by assigning a NAICS code from the list at: http://www.eia.doe.gov/cneaf/electricity/forms/eia860/eia860.doc.

# **Table 7.1 Sources**

**Net Generation, Electric Power Sector** Table 7.2b.

**Net Generation, Commercial and Industrial Sectors** Table 7.2c.

# Imports and Exports, Electricity Trade With Canada and Mexico, 1973–1989

1973–September 1977: Unpublished Federal Power Commission data.

October 1977–1980: Unpublished Economic Regulatory Administration (ERA) data.

1981: Department of Energy (DOE), Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).

1982 and 1983: DOE, ERA, Electricity Exchanges Across International Borders.

1984–1986: DOE, ERA, Electricity Transactions Across International Borders.

1987 and 1988: DOE, ERA, Form ERA-781R, "Annual Report of International Electrical Export/Import Data."

1989: DOE, Fossil Energy, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

# Imports and Exports, Electricity Trade with Canada, 1990 Forward

National Energy Board of Canada, data for total sales (firm and interruptible; which exclude non-revenue, inadvertent, and service) from Canada to the United States, and data for total purchases (which exclude non-revenue, inadvertent, and service) by Canada from the United States.

# Imports and Exports, Electricity Trade with Mexico, 1990 Forward

DOE, Fossil Energy, Office of Fuels Programs, Form FE-781R, "Annual Report of International Electrical Export/Import Data." For 2001 forward, data from the California Independent System Operator were used in combination with the Form FE-781R values to estimate electricity trade with Mexico.

#### T&D Losses and Unaccounted for

Calculated as the sum of total net generation and imports minus end use and exports.

## **End Use**

Table 7.6.

# **Table 7.2b Sources**

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report." 2004 forward: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

# **Table 7.2c Sources**

# Industrial Sector, Hydroelectric Power, 1973-1988

1973–September 1977: Federal Power Commission (FPC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FPC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

October 1977–1978: Federal Energy Regulatory Commission (FERC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FERC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

1979: FERC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and Energy Information Administration (EIA) estimates for all other plants.

1980–1988: Estimated by EIA as the average generation over the 6-year period of 1974–1979.

# All Data, 1989 Forward

1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report." 2004 forward: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

# **Table 7.3b Sources**

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report." 2004 forward: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

### Table 7.4b Sources

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report." 2004 forward: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

# **Table 7.6 Sources**

# Retail Sales, Residential and Industrial

1973–September 1977: Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

October 1977–February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

March 1980–1982: FERC, Form FPC-5, "Electric Utility Company Monthly Statement."

1983: Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." 1984–1992: EIA, Form EIA-861, "Annual Electric Utility Report."

1993 forward: EIA, *Electric Power Monthly*, March 2008, Table 5.1.

## Retail Sales, Commercial

1973–2002: Estimated by EIA as the sum of "Commercial (Old)" and the non-transportation portion of "Other (Old)." See estimation methodology at

http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_elec.pdf. 2003 forward: EIA, *Electric Power Monthly*, March 2008, Table 5.1

# **Retail Sales, Transportation**

1973–2002: Estimated by EIA as the transportation portion of "Other (Old)." See estimation methodology at http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_elec.pdf. 2003 forward: EIA, *Electric Power Monthly*, March 2008, Table 5.1.

# **Direct Use, Annual**

1989–1994: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1995–2006: EIA, *Electric Power Annual* 2006, October 2007, Table 7.2.

2007: Sum of monthly estimates.

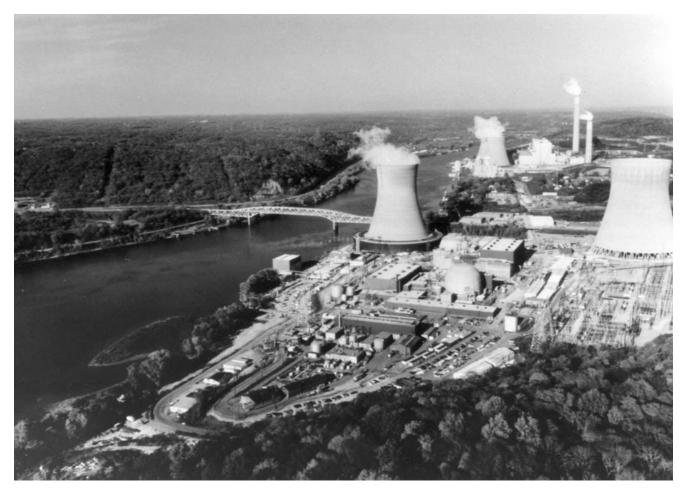
# **Direct Use, Monthly**

Annual shares are calculated as annual direct use divided by annual commercial and industrial net generation (on Table 7.1). Then monthly direct use estimates are calculated as the annual share multiplied by the monthly commercial and industrial net generation values. For 2007, the 2006 annual share is used.

# **Discontinued Retail Sales Series Commercial (Old)** and Other (Old)

1973–2002: See sources for "Residential" and "Industrial."

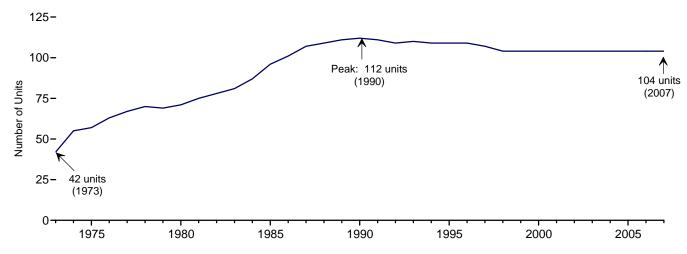
# **Nuclear Energy**



Site of Shippingport atomic power station, the first commercial nuclear power plant in the United States (rectangular reactor building and foreground); background, Beaver Valley 1 and 2 nuclear power plants and Bruce Mansfield coal-fired power plant (southwestern Pennsylvania). Source: U.S. Department of Energy.

Figure 8.1 Nuclear Energy Overview

Operable Units, End of Year, 1973-2007



Electricity Net Generation, 1973-2007

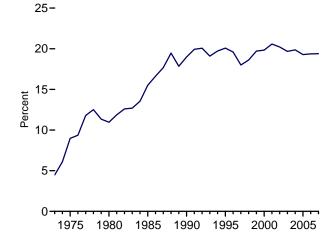
5
4SINON TOTAL

Total

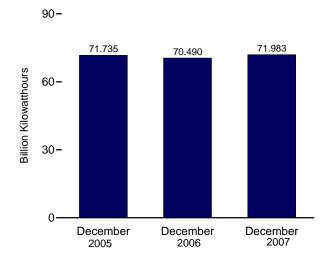
1
Nuclear Electric Power

1975 1980 1985 1990 1995 2000 2005

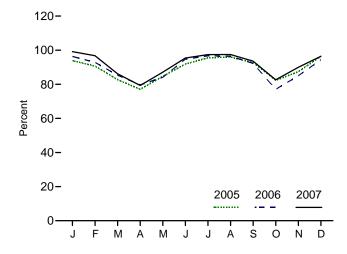
Nuclear Share of Electricity Net Generation, 1973-2007



**Nuclear Electricity Net Generation** 



Capacity Factor, Monthly



Web Page: http://www.eia.doe.gov/emeu/mer/nuclear.html. Sources: Tables 7.1 and 8.1.

**Table 8.1 Nuclear Energy Overview** 

	Total Operable Units <sup>a,b</sup>	Net Summer Capacity of Operable Units <sup>b,c</sup>	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factor
	Number	Million Kilowatts	Million Kilowatthours	Per	rcent
973 Total	42	22.683	83,479	4.5	53.5
975 Total	57	37.267	172.505	9.0	55.9
980 Total	71	51.810	251,116	11.0	56.3
985 Total	96	79.397	383,691	15.5	58.0
	112	99.624		19.0	66.0
90 Total			576,862		
95 Total	109	99.515	673,402	20.1	77.4
96 Total	109	100.784	674,729	19.6	76.2
97 Total	107	99.716	628,644	18.0	71.1
98 Total	104	97.070	673,702	18.6	78.2
99 Total	104	97.411	728,254	19.7	85.3
00 Total	104	97.860	753,893	19.8	88.1
01 Total	104	98.159	768,826	20.6	89.4
02 Total	104	98.657	780,064	20.2	90.3
03 Total	104	99.209	763,733	19.7	87.9
04 Total	104	99.628	788,528	19.9	90.1
<b>05</b> January	104	99.988	69,828	20.4	93.9
February	104	99.988	60,947	20.4	90.7
March	104	99.988	61,539	19.4	82.7
April	104	99.988	55,484	19.2	77.1
May	104	99.988	62,970	20.0	84.6
June	104	99.988	66,144	18.2	91.9
July	104	99.988	71,070	17.7	95.5
August	104	99.988	71,382	17.6	96.0
September	104	99.988	66,739	19.1	92.7
October	104	99.988	61,236	19.4	82.3
November	104	99.988	62,913	20.6	87.4
December	104	99.988	71,735	20.6	96.4
Total	104	99.988	781,986	19.3	89.3
<b>06</b> January	104	100.334	71,912	21.9	96.3
February	104	100.334	62,616	20.4	92.9
March	104	100.334	63.721	20.0	85.4
April	104	100.334	57,567	19.3	79.7
May	104	100.334	62,776	19.0	84.1
June	104	100.334	68,391	18.8	94.7
July	104	100.334	72,186	17.6	96.7
	104		72,100	17.7	96.5
August	104	100.334 100.334	66,642	20.1	96.5 92.3
September					
October	104	100.334	57,509	17.9	77.0
November	104	100.334	61,392	19.9	85.0
December	104	100.334	70,490	21.0	94.4
Total	104	100.334	787,219	19.4	89.6
<b>07</b> January	104	100.334	74,006	21.0	99.1
February	104	100.334	65,225	20.1	96.7
March	104	100.334	64,305	20.0	86.1
April	104	100.334	57,301	18.8	79.3
May	104	100.334	65,025	19.7	87.1
June	104	100.334	68,923	19.0	95.4
July	104	100.334	72.729	18.5	97.4
August	104	100.334	72,751	17.2	97.5
September	104	100.334	67,582	19.0	93.6
October	104	100.334	61,690	18.5	82.6
	104				89.9
November		100.334	64,969	20.7	
December	104	100.334	71,983	20.8	96.4
Total	104	100.334	806,487	19.4	91.8

<sup>&</sup>lt;sup>a</sup> Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at the end of the period—see Note 1 at end of section. Although Browns Ferry 1 was shut down in 1985, the unit remained fully licensed and continued to be counted as operable during the shutdown; in May 2007, the unit was restarted—see Note 1(a) at end of section. For additional information on unit was restarted—see Note 1(a) at end of section. For additional information of nuclear generating units, see Annual Energy Review 2006, June 2007, Table 9.1, http://www.eia.doe.gov/emeu/aer/nuclear.html.

b At end of period.
c For the definition of "Net Summer Capacity," see Note 2(a) at end of section.

 $<sup>^{\</sup>rm d}\,$  For an explanation of the method of calculating the capacity factor, see Note 2

<sup>For an explanation of the method of calculating the capacity factor, see Note 2 at end of section.
Notes: • See Note 1 at end of section for discussion of reactor unit coverage.
Nuclear electricity net generation totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of</sup> 

Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/nuclear.html for all available data beginning in 1973.
Sources: See end of section.

# **Nuclear Energy**

- **Note 1.** A reactor is generally defined as operable while it possessed a full-power license from the Nuclear Regulatory Commission or its predecessor the Atomic Energy Commission, or equivalent permission to operate, at the end of the year or month shown. The definition is liberal in that it does not exclude units retaining full-power licenses during long, non-routine shutdowns that for a time rendered them unable to generate electricity. Examples are:
- (a) In 1985 the five then-active Tennessee Valley Authority (TVA) units (Browns Ferry 1, 2, and 3 and Sequoyah 1 and 2) were shut down under a regulatory forced outage. All five units were idle for several years, restarting in 1991, 1995, 1988, 1988, and 2007, respectively and were counted as operable during the shutdowns.
- (b) Shippingport was shut down from 1974 through 1976 for conversion to a light-water breeder reactor, but is counted as operable from 1957 until its retirement in 1982.
- (c) Calvert Cliffs 2 was shut down in 1989 and 1990 for replacement of pressurizer heater sleeves but is counted as operable during those years.

Exceptions to the definition are Shoreham and Three Mile Island 2. Shoreham was granted a full-power license in April 1989, but was shut down two months later and never restarted. In 1991, the license was changed to Possession Only. Although not operable at the end of the year, Shoreham is counted as operable during 1989. A major accident closed Three Mile Island 2 in 1979, and although the unit retained its full-power license for several years, it is considered permanently shut down since that year.

**Note 2.** Capacity: Nuclear generating units may have more than one type of net capacity rating, including the following:

- (a) Net Summer Capacity—The steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power, as demonstrated by test at the time of summer peak demand. Auxiliary power of a typical nuclear power plant is about 5 percent of gross generation.
- (b) Net Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of a unit, specified by the utility and used for plant design.

The monthly capacity factors are computed as the actual monthly generation divided by the maximum possible generation for that month. The maximum possible generation is the number of hours in the month multiplied by the net summer capacity at the end of the month. That fraction is then multiplied by 100 to obtain a percentage. Annual capacity factors are averages of the monthly values for that year.

# **Table 8.1 Sources**

# **Total Operable Units and Net Summer Capacity of Operable Units**

1973-1982: Compiled from various sources, primarily DOE, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones." 1983 forward: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," and monthly updates as appropriate. For a list of currently operable units, see:

http://www.eia.doe.gov/cneaf/nuclear/page/nuc\_reactors/operational.xls.

# Nuclear Electricity Net Generation and Nuclear Share of Electricity Net Generation

See Table 7.2a for actual data.

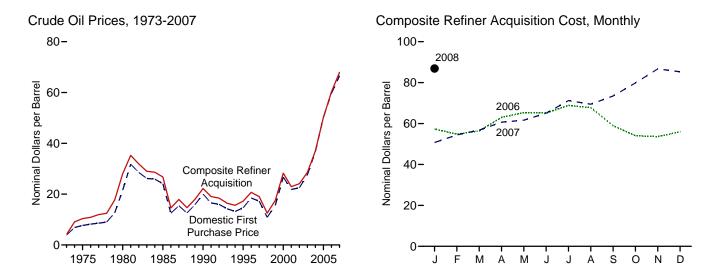
### **Capacity Factor**

EIA, Office of Coal, Nuclear, Electric and Alternate Fuels for actual data.

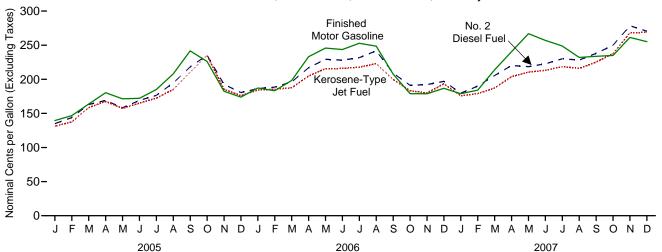
# **Energy Prices**



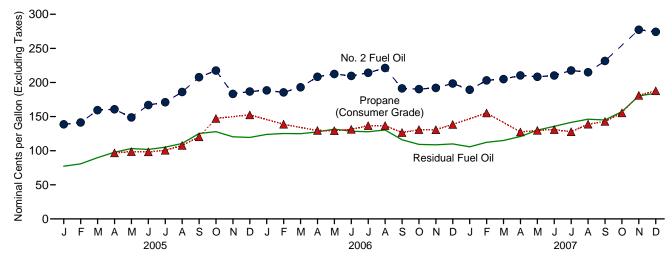
Figure 9.1 Petroleum Prices



Refiner Prices to End Users: Motor Gasoline, Diesel Fuel, and Jet Fuel, Monthly



Refiner Prices to End Users: No. 2 Fuel Oil, Propane, and Residual Fuel, Monthly



Notes: • See "Nominal Price" in Glossary. • Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/prices.html.

Sources: Tables 9.1, 9.5, and 9.7.

**Table 9.1 Crude Oil Price Summary** 

(Nominal Dollars per Barrel)

				R	efiner Acquisition Cos	st <sup>a</sup>
	Domestic First Purchase Price <sup>b</sup>	F.O.B. Cost of Imports <sup>C</sup>	Landed Cost of Imports <sup>d</sup>	Domestic	Imported	Composite
973 Average	3.89	e 5.21	<sup>e</sup> 6.41	<sup>E</sup> 4.17	<sup>E</sup> 4.08	<sup>E</sup> 4.15
975 Average	7.67	11.18	12.70	8.39	13.93	10.38
	21.59	32.37	33.67	24.23	33.89	28.07
980 Average						
985 Average	24.09	25.84	26.67	26.66	26.99	26.75
90 Average	20.03	20.37	21.13	22.59	21.76	22.22
95 Average	14.62	15.69	16.78	17.33	17.14	17.23
96 Average	18.46	19.32	20.31	20.77	20.64	20.71
97 Average	17.23	16.94	18.11	19.61	18.53	19.04
98 Average	10.87	10.76	11.84	13.18	12.04	12.52
999 Average	15.56	16.47	17.23	17.90	17.26	17.51
000 Average	26.72	26.27	27.53	29.11	27.70	28.26
01 Average	21.84	20.46	21.82	24.33	22.00	22.95
02 Average	22.51	22.63	23.91	24.65	23.71	24.10
03 Average	27.56	25.86	27.69	29.82	27.71	28.53
	36.77	33.75	36.07	38.97	35.90	36.98
004 Average	30.11	33.13	30.07	30.31	33.30	30.30
005 January	40.18	35.76	38.49	41.82	37.56	39.01
005 January						
February	42.19	39.06	40.71	43.80	39.72	41.05
March	47.56	44.29	45.95	48.87	45.73	46.78
April	47.26	43.90	45.43	49.64	45.25	46.71
May	44.03	42.88	44.51	47.91	43.19	44.84
June	49.83	48.53	49.99	52.13	49.28	50.30
July	53.35	51.87	53.85	55.80	52.79	53.83
August	58.90	57.10	58.33	60.57	58.67	59.30
September	59.64	57.87	58.26	62.84	58.79	60.18
October	56.99	52.69	54.32	60.79	55.31	57.18
November	53.20	48.82	51.03	56.52	49.97	52.13
December	53.24	50.06	52.04	55.89	50.85	52.51
Average	50.28	<b>47.60</b>	49.29	<b>52.94</b>	48.86	<b>50.24</b>
Average	30.20	47.00	43.23	32.34	40.00	30.24
006 January	57.85	53.93	55.49	60.22	55.85	57.33
February	55.69	51.34	53.25	58.97	52.80	54.82
March	55.64	54.67	56.59	58.48	55.31	56.38
April	62.52	62.09	63.40	64.06	62.41	62.98
May	64.40	62.95	64.64	67.11	64.39	65.34
•						65.13
June	64.65	61.44	64.42	67.76	63.79	
July	67.71	65.67	67.88	70.55	67.99	68.86
August	67.21	62.68	65.14	70.48	66.45	67.77
September	59.37	54.63	57.20	62.51	57.29	58.92
October	53.26	50.64	52.83	56.67	52.70	54.04
November	52.42	51.48	53.01	55.36	52.70	53.61
December	55.03	52.82	54.53	57.81	54.97	55.98
Average	59.69	57.03	59.11	62.62	59.02	60.24
<b>007</b> January	49.32	48.00	50.40	53.10	49.51	50.74
February	52.94	51.96	53.95	55.75	53.70	54.42
March	54.95	55.46	57.38	57.86	56.26	56.80
April	58.20	59.47	60.93	61.13	60.40	60.65
May	58.90	60.73	62.81	62.04	61.44	61.64
June	62.35	64.38	66.19	64.95	65.14	65.07
July	69.23	69.23	70.46	72.03	70.72	71.20
August	67.78	66.60	69.01	72.03	68.28	69.46
September	73.16	72.34	74.02	75.84	72.22	73.47
October	79.32	R 78.40	R 79.37	82.14	78.61	79.85
November	<sup>R</sup> 87.16	R 83.79	R 84.68	89.17	85.52	86.74
December	<sup>R</sup> 85.25	<sup>R</sup> 80.48	<sup>R</sup> 81.85	R 89.00	<sup>R</sup> 83.21	R 85.30
Average	66.52	65.90	67.35	69.63	67.02	67.93
71701ugu						

See Note 4 at end of section.

Notes: 

Values for Domestic First Purchase Price and Refiner Acquisition Cost for the current two months and for F.O.B. and Landed Costs of Imports for the current three months are preliminary.

F.O.B. and landed costs through 1980

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

data beginning in 1973.
Sources: See end of section.

b See Note 1 at end of section.

c See Note 2 at end of section.

 <sup>&</sup>lt;sup>d</sup> See Note 3 at end of section.
 <sup>e</sup> Based on October, November, and December data only.

R=Revised. NA=Not available. E=Estimate.

reflect the period of reporting; prices since then reflect the period of loading.

• Annual averages are the averages of the monthly prices, weighted by volume.

• Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.

• See "Nominal Price" in Glossary.

Table 9.2 F.O.B. Costs of Crude Oil Imports From Selected Countries

(Nominal Dollars per Barrel)

			Se	elected Count	ries			Di		
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>a</sup>	Total OPEC <sup>b</sup>	Total Non-OPEC
1973 Average <sup>c</sup>	w	w	_	7.81	3.25	_	5.39	3.68	5.43	4.80
1975 Average	10.97	_	11.44	11.82	10.87	_	11.04	10.88	11.34	10.62
1980 Average	33.45	W	31.06	35.93	28.17	34.36	24.81	28.92	32.21	32.85
1985 Average	26.30	_	25.33	28.04	22.04	27.64	23.64	23.31	25.67	25.96
1990 Average	20.23	20.75	19.26	22.46	20.36	23.43	19.55	18.54	20.40	20.32
1995 Average	16.58	16.73	15.64	17.40	W	16.94	13.86	W	15.36	16.02
1996 Average	20.71	21.33	19.14	21.27	19.28	19.43	17.73	19.22	18.94	19.65
1997 Average	18.81	18.85	16.72	19.43	15.16	18.59	15.33	15.24	16.26	17.51
1998 Average	12.11	12.56	10.49	12.97	8.87	12.52	9.31	9.09	10.20	11.21
1999 Average	17.46	17.20	15.89	17.32	17.65	19.14	14.33	17.15	15.90	16.84
2000 Average	27.90	29.04	25.39	28.70	24.62	27.21	24.45	24.72	25.56	26.77
2001 Average	23.25	24.25	18.89	24.85	18.98	23.30	18.01	18.89	19.73	21.04
2002 Average	24.09	24.64	21.60	25.38	23.92	24.50	20.13	23.38	22.18	22.93
2003 Average	28.22	28.89	24.83	29.40	25.03	28.76	23.81	25.17	25.36	26.21
2004 Average	37.26	37.73	31.55	38.71	34.08	37.30	31.78	33.08	33.95	33.58
2004 Average	37.20	37.73	31.33	30.71	34.00	37.30	31.70	33.00	33.33	33.30
2005 January	38.20	W	31.51	44.43	38.52	W	34.35	36.03	37.51	34.34
February	42.77	W	33.21	48.24	40.11	42.58	37.82	39.37	41.07	37.30
March	48.06	47.05	39.32	53.76	42.67	53.98	42.94	43.00	45.71	42.96
April	48.46	50.25	40.43	51.72	45.68	W	43.01	43.71	45.34	42.45
May	45.35	W	40.31	49.59	44.09	W	41.78	43.65	44.44	41.46
June	50.91	52.64	44.83	55.81	53.37	_W	47.06	50.98	51.11	46.19
July	54.88	W	46.74	59.03	W	57.71	49.28	54.95	53.46	50.37
August	62.16	55.44	50.54	65.78	W	64.87	57.54	57.34	59.86	54.70
September	60.64	63.89	52.19	63.73	W	W	62.43	W	60.70	55.52
October	54.80	W	48.62	60.89	W	60.09	51.19	49.61	54.61	51.10
November	52.01	49.49	43.22	56.11	W	W	46.98	49.88	50.88	46.93
December	53.74	55.82	45.83	59.33	W		48.22	48.77	52.26	47.67
Average	52.48	51.89	43.00	55.95	47.96	54.48	46.39	47.21	49.60	45.79
2006 January	59.28	60.78	50.21	63.73	W	W	52.56	52.65	56.14	52.32
February	57.55	53.07	48.33	60.20	W	W	50.93	53.66	54.39	49.19
March	60.07	54.10	50.16	64.05	W	63.13	56.29	55.84	58.34	51.87
April	W	62.26	57.12	71.85	W	W	62.93	61.12	65.06	59.75
May	66.95	66.17	55.62	70.83	65.35	68.98	61.70	63.45	65.31	60.81
June	67.10	63.43	55.07	69.96	65.87	69.34	60.87	63.99	64.69	59.04
July	70.81	69.24	60.24	75.63	W	W	64.60	61.76	67.61	64.23
August	68.94	65.45	59.97	72.67	54.21	-	60.48	56.14	62.58	62.76
September	56.89	55.49	52.01	62.74	53.27	W	52.02	52.13	55.87	53.58
October	54.00	52.38	47.64	58.62	52.19	W	48.97	50.62	52.73	48.86
November	57.67	56.16	48.13	61.20	48.43	W	48.54	49.57	53.07	50.26
December	58.28	53.99	50.09	62.24	52.76	W	49.13	51.89	54.26	51.68
Average	62.23	59.77	52.91	65.69	56.09	66.03	55.80	56.02	59.18	55.35
2007 January	51.80	48.98	43.22	56.03	W	53.57	44.79	49.99	50.82	45.19
February	54.61	57.10	47.54	58.32	W	<del>-</del>	49.82	52.43	53.75	50.14
March	60.34	58.44	50.21	64.88	W	62.04	52.01	56.22	57.79	52.91
April	65.45	58.26	54.36	69.73	W	W	56.48	58.82	62.26	56.40
May	65.85	62.06	55.60	71.40	W	W	57.51	63.71	63.82	57.77
June	69.63	67.21	59.91	75.67	W	W	61.06	65.45	66.98	61.27
July	74.18	70.77	64.61	78.90	W	76.35	65.82	70.75	71.93	66.48
August	68.38	70.46	61.80	73.47	w	W W	63.79	70.96	68.71	64.18
September	75.62	70.66	65.95	80.12	W	W	69.39	77.62	75.50	68.38
October	80.20	79.10	72.04	R 88.88	W	W	74.52	R 85.03	R 82.08	73.27
November	R 90.87	7 9.10 W	R 79.13	R 94.41	R 87.99	W	R 83.78	R 84.95	R 87.37	R 80.00
December	86.26	W	80.17	92.93	W .99	- V	80.52	81.46	83.45	76.83
	67.39	67.43	61.25	<b>75.06</b>	w	69.39	<b>63.93</b>	69.91	<b>69.01</b>	<b>62.44</b>
Average	07.39	07.43	01.23	73.00	VV	03.33	03.33	09.91	09.01	02.44

<sup>&</sup>lt;sup>a</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See Note 2 at end of section.

• Values for the current two months are preliminary.

• Prices through 1980 reflect

the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia. • See "Nominal Price" in Glossary.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available data beginning in 1973. Sources: See end of section.

b Organization of the Petroleum Exporting Countries. Current members are Organization of the Petitoleum Exporting Countries. Current methods are Algeria, Angola, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. Ecuador is included in the data through 1992 and Gabon through 1995. Angola is included begining in January 2007.

<sup>o</sup> Based on October, November, and December data only.

R=Revised. — =No data reported. W=Value withheld to avoid disclosure of individual component data.

individual company data.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Nominal Dollars per Barrel)

				Selected	Countries						
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>a</sup>	Total OPEC <sup>b</sup>	Total Non-OPEC
1973 Average <sup>c</sup>	w	5.33	w	_	9.08	5.37	_	5.99	5.91	6.85	5.64
1975 Average	11.81	12.84	_	12.61	12.70	12.50	_	12.36	12.64	12.70	12.70
1980 Average	34.76	30.11	w	31.77	37.15	29.80	35.68	25.92	30.59	33.56	33.99
1985 Average	27.39	25.71	_	25.63	28.96	24.72	28.36	24.43	25.50	26.86	26.53
1990 Average	21.51	20.48	22.34	19.64	23.33	21.82	22.65	20.31	20.55	21.23	20.98
1995 Average	17.66	16.65	17.45	16.19	18.25	16.84	17.91	14.81	16.78	16.61	16.95
1996 Average	21.86	19.94	22.02	19.64	21.95	20.49	20.88	18.59	20.45	20.14	20.47
1997 Average	20.24	17.63	19.71	17.30	20.64	17.52	20.64	16.35	17.44	17.73	18.45
1998 Average	13.37	11.62	13.26	11.04	14.14	11.16	13.55	10.16	11.18	11.46	12.22
1999 Average	18.37	17.54	18.09	16.12	17.63	17.48	18.26	15.58	17.37	16.94	17.51
2000 Average	29.57	26.69	29.68	26.03	30.04	26.58	29.26	26.05	26.77	27.29	27.80
2000 Average	25.13	20.72	25.88	19.37	26.55	20.98	25.32	19.81	20.73	21.52	22.17
		22.98								23.83	23.97
2002 Average	25.43		25.28	22.09 25.48	26.45 31.07	24.77	26.35	21.93	24.13		23.97 27.68
2003 Average	30.14	26.76	30.55			27.50	30.62	25.70	27.54	27.70	
2004 Average	39.62	34.51	39.03	32.25	40.95	37.11	39.28	33.79	36.53	36.84	35.29
2005 January	42.58	34.33	44.23	32.37	46.53	40.60	45.67	36.62	39.38	40.48	36.49
February	44.39	36.07	W	33.52	49.97	43.46	44.50	39.05	42.92	43.31	38.13
March	50.99	41.28	48.78	39.72	55.46	46.33	53.49	44.60	45.86	47.58	44.30
April	50.45	40.37	49.93	40.72	53.61	47.27	51.40	43.95	46.01	47.19	43.62
May	48.49	39.29	47.78	40.78	51.32	46.78	49.98	43.70	46.18	46.61	42.46
June	53.09	43.10	53.39	45.20	57.67	53.14	53.16	48.44	52.45	52.96	47.05
July	57.18	50.71	55.11	46.95	60.86	57.51	59.58	50.88	56.50	55.93	51.83
August	63.78	54.43	59.03	50.95	67.35	59.61	62.41	58.30	59.20	61.10	55.96
September	61.88	53.33	62.64	52.40	65.20	56.22	64.26	62.33	56.29	60.84	56.01
October	56.99	51.29	58.27	49.21	62.35	54.06	61.78	52.79	52.83	55.75	53.15
November	54.16	48.79	52.20	43.62	59.34	52.28	58.63	49.01	51.25	53.00	49.06
December	57.69	45.46	54.80	45.95	62.07	53.84	W	50.57	53.12	54.76	49.22
Average	54.31	44.73	53.42	43.47	57.55	50.31	55.28	47.87	49.68	51.36	47.31
2006 January	61.35	47.43	61.95	51.30	65.91	56.23	67.33	53.93	55.70	58.10	53.18
February	61.48	44.72	55.99	49.48	63.03	56.26	63.01	52.97	55.16	56.72	50.14
March	62.44	46.59	55.89	51.05	67.04	58.89	65.21	57.70	57.98	60.38	52.74
April	70.68	56.61	64.06	58.02	73.72	62.92	71.35	63.81	62.49	65.76	60.99
May	68.62	63.47	68.80	56.37	72.93	65.10	71.29	62.63	64.26	66.09	63.14
June	68.64	61.14	66.06	55.91	72.70	66.49	71.12	62.65	65.81	67.16	62.03
July	72.89	64.69	70.94	61.26	77.43	65.50	74.59	66.19	65.62	69.21	66.52
August	71.47	63.77	66.67	60.78	74.94	62.11	74.39 W	62.15	62.11	65.49	64.81
	60.38	55.22	57.25	52.78	65.21	56.29	w	53.94	55.80	57.86	56.59
September October	57.25	47.83	57.25 55.50	48.33	60.90	54.00	59.70	50.74	53.48	54.98	50.89
	59.49	47.83	56.06	48.91	62.88	52.57	58.67	50.75	52.43	54.77	51.44
November											
December Average	60.46 <b>64.85</b>	50.91 <b>53.90</b>	56.91 <b>62.13</b>	50.93 <b>53.76</b>	63.94 <b>68.26</b>	54.05 <b>59.19</b>	58.69 <b>67.44</b>	50.95 <b>57.37</b>	53.95 <b>58.92</b>	56.21 <b>61.21</b>	52.92 <b>57.14</b>
-											
<b>2007</b> January	53.25	46.74	52.22	44.27	58.15	51.20	56.41	47.20	50.64	52.66	47.48
February	57.45	50.25	59.08	48.52	60.95	54.94	59.30	51.98	54.13	55.91	51.72
March	61.91	52.60	59.37	51.07	66.37	58.22	65.96	54.34	57.49	59.54	54.72
April	67.78	54.60	61.77	55.16	71.22	61.53	65.92	58.67	60.92	63.66	57.44
May	67.51	56.46	63.19	56.40	72.99	66.15	W	60.17	65.02	66.28	58.86
June	72.40	57.66	67.87	60.68	77.04	69.51	W	63.28	68.16	69.47	61.74
July	76.73	62.66	73.15	65.46	80.72	72.37	77.73	67.73	71.28	73.56	66.95
August	70.28	64.10	72.72	62.52	76.30	74.11	W	65.64	72.79	71.65	65.76
September	77.76	66.76	79.05	66.55	81.95	80.59	79.48	70.93	78.56	77.48	69.50
October	R 82.20	R 67.23	79.74	R 72.68	<sup>R</sup> 90.14	R 84.73	81.77	<sup>R</sup> 76.48	R 84.29	R 83.58	<sup>R</sup> 73.56
November	R 92.27	R 76.57	R 80.74	R 79.63	R 94.99	R 87.26	W	R 85.38	R 86.32	R 88.51	R 80.21
December	89.06	69.61	92.09	81.25	94.52	85.69	W	82.38	84.99	86.32	77.61
Average	70.69	60.32	70.49	62.21	76.72	70.24	70.95	65.92	69.14	70.38	63.65

Notes: • See Note 3 at end of section. • Values for the current 2 months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements

whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia. • See "Nominal Price" in Glossary.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.ntml for all available data beginning in 1973.

Sources: • October 1973-September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • October 1977-December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • 1978-2006: EIA, Petroleum Marketing Annual 2006, Table 25. • 2007: EIA, Petroleum Marketing Monthly, March 2008, Table 22.

Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.
 Organization of the Petroleum Exporting Countries. Current members are Algeria, Angola, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. Ecuador is included in the data through 1992 and Gabon through 1995. Angola is included beginning in January 2007. c Based on October, November, and December data only.

R=Revised. - =No data reported. W=Value withheld to avoid disclosure of individual company data.

Table 9.4 Motor Gasoline Retail Prices, U.S. City Average

	Leaded Regular	Unleaded Regular	Unleaded Premium <sup>a</sup>	All Types <sup>b</sup>
73 Average	38.8	NA	NA	NA
75 Average	56.7	NA	NA	NA
30 Average	119.1	124.5	NA	122.1
35 Average	111.5	120.2	134.0	119.6
00 Average	114.9	116.4	134.9	121.7
95 Average	NA	114.7	133.6	120.5
96 Average	NA	123.1	141.3	128.8
7 Average	NA	123.4	141.6	129.1
98 Average	NA	105.9	125.0	111.5
99 Average	NA	116.5	135.7	122.1
00 Average	NA	151.0	169.3	156.3
01 Average	NA	146.1	165.7	153.1
02 Average	NA.	135.8	155.6	144.1
03 Average	NA.	159.1	177.7	163.8
04 Average	NA NA	188.0	206.8	192.3
-				
05 January	NA NA	182.3	201.7	186.6
February	NA	191.8	210.5	196.0
March	NA	206.5	225.1	210.7
April	NA	228.3	246.8	232.5
May	NA	221.6	240.3	225.7
June	NA	217.6	236.5	221.8
July	NA	231.6	250.2	235.7
August	NA	250.6	270.1	254.8
September	NA	292.7	313.0	296.9
October	NA	278.5	300.1	283.0
November	NA	234.3	256.0	238.7
December	NA	218.6	239.3	223.0
Average	NA	229.5	249.1	233.8
-				
<b>06</b> January	NA	231.5	252.1	235.9
February	NA	231.0	251.9	235.4
March	NA	240.1	260.3	244.4
April	NA	275.7	296.7	280.1
May	NA	294.7	316.9	299.3
June	NA	291.7	313.9	296.3
July	NA	299.9	321.9	304.6
August	NA	298.5	320.7	303.3
September	NA	258.9	281.9	263.7
October	NA	227.2	249.3	231.9
November	NA NA	224.1	245.9	228.7
	NA NA	233.4	255.0	238.0
December Average	NA NA	253.4 <b>258.9</b>	255.0 <b>280.5</b>	230.0 <b>263.5</b>
Average	IVA	236.9	280.5	203.3
<b>07</b> January	NA	227.4	250.1	232.1
February	NA	228.5	250.9	233.3
March	NA	259.2	281.8	263.9
April	NA	286.0	309.3	290.9
May	NA	313.0	334.8	317.6
June	NA	305.2	328.1	310.0
July	NA	296.1	320.0	301.3
August	NA NA	278.2	320.0	283.3
September	NA	278.9	302.1	283.9
October	NA	279.3	303.7	284.3
November	NA	306.9	330.7	311.8
December	NA	302.0	326.4	306.9
Average	NA	280.1	303.3	284.9
<b>08</b> January	NA	304.7	329.1	309.6
February	NA	303.3	327.2	308.

<sup>&</sup>lt;sup>a</sup> The 1981 average (available in Web file) is based on September through December data only.

b Also includes types of motor gasoline not shown separately.

NA=Not available.

Notes: • See Note 5 at end of section. • See "Nominal Price" in Glossary. • In September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. From September 1981 forward, gasohol is included in the average for all types, and unleaded premium is weighted

more heavily. • Geographic coverage for 1973-1977 is 56 urban areas.

Geographic coverage for 1978 forward is 85 urban areas.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

data beginning in 1973.

Sources: • Monthly Data: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Prices: Energy. • Annual Data: 1973—Platt's Oil Price Handbook and Oilmanac, 1974, 51st Edition. 1974 forward—calculated by the Energy Information Administration as the simple averages of monthly data.

Table 9.5 Refiner Prices of Residual Fuel Oil

	Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent		Sulfur	al Fuel Oil Content an 1 Percent	Ave	Average		
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users		
978 Average	29.3	31.4	24.5	27.5	26.3	29.8		
980 Average	60.8	67.5	47.9	52.3	52.8	60.7		
985 Average	61.0	64.4	56.0	58.2	57.7	61.0		
990 Average	47.2	50.5	37.2	40.0	41.3	44.4		
995 Average	38.3	43.6	33.8	37.7	36.3	39.2		
996 Average	45.6	52.6	38.9	43.3	42.0	45.5		
	41.5	48.8	36.6	40.3	38.7	42.3		
997 Average	29.9	35.4	26.9	28.7	28.0	30.5		
998 Average								
999 Average	38.2	40.5	32.9	36.2	35.4	37.4		
000 Average	62.7	70.8	51.2	56.6	56.6	60.2		
01 Average	52.3	64.2	42.8	49.2	47.6	53.1		
02 Average	54.6	64.0	50.8	54.4	53.0	56.9		
03 Average	72.8	80.4	58.8	65.1	66.1	69.8		
04 Average	76.4	83.5	60.1	69.2	68.1	73.9		
05 January	81.8	86.9	NA	70.9	72.1	77.2		
February	87.9	90.8	NA	75.3	72.2	80.7		
March	96.5	98.0	NA	82.8	82.9	89.8		
April	103.4	106.6	80.1	93.3	89.6	97.8		
May	95.0	112.2	86.6	98.4	89.1	103.1		
June	100.3	111.8	84.4	96.2	90.5	101.9		
July	113.8	116.8	87.8	97.3	101.1	105.1		
August	133.1	129.2	90.7	100.0	115.1	110.6		
September	140.2	138.4	103.6	115.8	121.9	125.2		
October	139.6	142.7	108.8	119.8	124.7	127.9		
November	126.5	134.3	99.3	111.7	111.4	120.4		
December	129.3	134.6	105.7	109.6	119.6	119.5		
Average	111.5	116.8	84.2	97.4	97.1	104.8		
<b>06</b> January	125.8	134.6	110.2	117.6	118.2	123.9		
February	122.2	137.8	115.3	119.4	119.4	125.2		
March	121.8	136.0	116.0	119.3	119.2	125.0		
April	120.2	139.7	115.8	123.5	118.0	127.5		
May	125.9	143.5	122.1	127.9	124.3	131.7		
June	125.3	148.1	113.6	123.2	116.9	128.6		
July	128.4	145.1	115.8	123.3	119.5	127.8		
August	130.9	145.1	119.2	125.5	124.6	130.3		
September	111.8	132.4	104.1	111.8	107.3	116.0		
October	107.7	120.1	98.5	105.9	102.5	109.3		
November	115.9	117.6	95.9	105.3	102.5	108.7		
December	113.3	119.9	96.3	105.3	104.3	109.9		
Average	120.2	134.2	108.5	117.3	113.6	121.8		
07 January	101.5	117.2	93.0	100.7	97.6	105.7		
07 January	117.2	121.4	100.0	100.7	107.2	112.3		
February								
March	117.1	122.1	100.8	111.4	107.6	115.0		
April	124.4	125.8	108.4	118.2	115.0	120.9		
May	131.1	135.9	120.0	128.2	123.8	130.1		
June	135.7	142.1	124.3	132.5	128.0	135.7		
July	146.1	153.9	132.1	138.3	137.8	141.5		
August	143.6	158.4	132.6	141.9	136.7	146.2		
September	147.4	161.0	133.7	141.0	139.3	145.0		
October	164.7	166.1	147.5	154.2	153.6	157.3		
November	R 183.9	183.2	R 169.2	179.6	R 174.2	180.3		
	194.8	194.8	169.2			184.2		
December				179.7	176.5			
Average	140.6	143.6	131.4	134.7	135.0	137.2		

R=Revised. NA=Not available.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at

end of section. • See "Nominal Price" in Glossary. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

data beginning in 1978.

Sources: • 1978-2006: EIA, Petroleum Marketing Annual 2006, Table 19.
• 2007: EIA, Petroleum Marketing Monthly, March 2008, Table 16.

Table 9.6 Refiner Prices of Petroleum Products for Resale

	Finished Motor Gasoline <sup>a</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consume Grade)
978 Average	43.4	53.7	38.6	40.4	36.9	36.5	23.7
980 Average	94.1	112.8	86.8	86.4	80.3	80.1	41.5
	83.5	113.0	79.4	87.4	77.6	77.2	39.8
985 Average							
990 Average	78.6	106.3	77.3	83.9	69.7	69.4	38.6
95 Average	62.6	97.5	53.9	58.0	51.1	53.8	34.4
996 Average	71.3	105.5	64.6	71.4	63.9	65.9	46.1
997 Average	70.0	106.5	61.3	65.3	59.0	60.6	41.6
998 Average	52.6	91.2	45.0	46.5	42.2	44.4	28.8
999 Average	64.5	100.7	53.3	55.0	49.3	54.6	34.2
000 Average	96.3	133.0	88.0	96.9	88.6	89.8	59.5
01 Average	88.6	125.6	76.3	82.1	75.6	78.4	54.0
02 Average	82.8	114.6	71.6	75.2	69.4	72.4	43.1
03 Average	100.2	128.8	87.1	95.5	88.1	88.3	60.7
04 Average	128.8	162.7	120.8	127.1	112.5	118.7	75.1
<b>05</b> January	128.2	160.4	131.7	145.2	131.4	130.6	NA
February	134.2	171.4	138.3	145.4	134.4	139.1	NA NA
March	153.0	189.3	158.2	164.5	153.5	158.8	NA NA
April	164.4	204.1	165.5	164.5	155.9	163.8	86.0
May	154.1	195.2	155.8	153.8	144.4	152.2	82.0
June	160.7	197.0	165.0	171.0	159.1	167.0	83.0
July	171.4	210.2	171.2	176.5	164.7	171.5	86.0
August	195.5	230.4	184.7	194.3	178.4	189.8	93.2
September	220.6	264.7	206.9	221.3	199.3	212.7	108.2
October	197.0	245.1	233.5	227.1	207.1	232.3	111.6
November	160.1	199.3	181.4	196.5	175.2	182.6	103.3
December	160.8	200.4	173.8	195.0	172.4	175.5	106.8
Average	167.0	207.6	172.3	175.7	162.3	173.7	93.3
<b>06</b> January	174.9	218.7	182.4	191.7	175.6	181.0	104.4
February	166.0	209.6	182.5	184.7	171.1	180.6	97.5
March	187.1	228.2	185.9	197.9	179.1	190.1	96.7
	219.7	265.6	203.1	218.2	197.2	212.2	102.3
April							
May	226.3	274.3	213.1	NA	201.4	218.6	102.9
June	227.9	274.6	213.2	219.4	198.4	218.7	106.7
July	239.5	287.3	217.3	225.8	199.9	225.1	110.8
August	226.0	284.1	221.5	229.3	206.2	234.0	111.3
September	180.0	231.9	194.7	203.7	179.7	191.1	103.2
October	164.1	212.0	181.3	193.5	171.6	182.7	100.3
November	166.7	213.9	177.4	194.4	169.9	186.7	101.3
December	172.8	217.2	190.6	200.7	175.3	188.6	103.3
Average	196.9	249.0	196.1	200.7	183.4	201.2	103.1
<b>07</b> January	156.9	199.5	173.0	180.6	160.6	169.8	99.5
February	171.7	218.5	176.7	194.2	172.4	182.7	103.3
March	199.6	246.1	184.6	194.3	178.1	197.9	104.9
	226.4	277.9	202.1	204.8	191.0	211.6	106.7
April							
May	249.6	304.7	207.9	207.8	194.9	210.1	111.2
June	236.1	292.4	211.4	215.7	201.4	214.7	109.4
July	230.7	299.8	216.7	226.1	207.1	222.0	115.9
August	215.2	282.8	215.1	222.2	202.1	219.3	116.7
September	219.5	283.0	225.5	244.9	213.3	232.1	124.8
October	221.8	276.9	235.1	252.5	226.0	242.6	135.2
November	245.8	302.0	265.7	285.4	256.9	269.8	147.1
December	235.7	292.7	265.4	282.4	257.0	259.9	146.0
Average	218.2	274.6	216.1	224.7	206.3	220.4	119.4

<sup>&</sup>lt;sup>a</sup> See Note 5 at end of section.

NA=Not available.

NALENOL available.

Notes: 

Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. 

Values for the current month are preliminary. • Prices prior to 1983 are Energy

Information Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

data beginning in 1978.

Sources: • 1978-2006: EIA, Petroleum Marketing Annual 2006, Table 4. • 2007: EIA, Petroleum Marketing Monthly, March 2008, Table 4.

Table 9.7 Refiner Prices of Petroleum Products to End Users

	Finished Motor Gasoline <sup>a</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consume Grade)
78 Average	48.4	51.6	38.7	42.1	40.0	37.7	33.5
80 Average	103.5	108.4	86.8	90.2	78.8	81.8	48.2
85 Average	91.2	120.1	79.6	103.0	84.9	78.9	71.7
90 Average	88.3	112.0	76.6	92.3	73.4	72.5	74.5
95 Average	76.5	100.5	54.0	58.9	56.2	56.0	49.2
96 Average	84.7	111.6	65.1	74.0	67.3	68.1	60.5
97 Average	83.9	112.8	61.3	74.5	63.6	64.2	55.2
98 Average	67.3	97.5	45.2	50.1	48.2	49.4	40.5
99 Average	78.1	105.9	54.3	60.5	55.8	58.4	45.8
000 Average	110.6	130.6	89.9	112.3	92.7	93.5	60.3
01 Average	103.2	132.3	77.5	104.5	82.9	84.2	50.6
02 Average	94.7	128.8	72.1	99.0	73.7	76.2	41.9
03 Average	115.6	149.3	87.2	122.4	93.3	94.4	57.7
04 Average	143.5	181.9	120.7	116.0	117.3	124.3	83.9
• · · · · · · · · · · · · · · · · · · ·							35.5
05 January	139.5	173.8	131.3	174.7	138.7	134.9	NA
February	146.8	186.7	137.5	169.9	141.4	144.0	NA
March	163.7	201.5	158.5	187.3	159.4	163.0	NA
April	180.3	221.7	167.6	180.4	160.7	169.1	96.8
May	171.4	212.1	157.3	172.7	148.8	158.1	98.7
June	172.1	211.6	165.1	176.7	166.9	169.0	98.3
July	185.0	223.0	172.4	178.1	171.1	176.5	100.6
August	208.0	238.6	185.3	203.2	186.1	194.6	107.7
September	241.7	280.8	210.3	231.2	207.8	218.2	120.4
October	226.2	270.8	235.2	226.2	217.5	235.4	147.2
November	182.4	218.6	185.3	210.1	183.2	192.5	NA
December	173.9	219.3	176.1	NA NA	186.8	180.6	152.5
Average	182.9	223.1	173.5	195.7	170.5	178.6	108.9
100	407.0	000.4	404.0	005.4	100.4	400.0	N/A
06 January	187.2	239.1	184.2	225.1	188.4	186.3	NA
February	183.3	232.4	185.5	219.1	185.5	188.5	138.8
March	198.3	247.4	187.5	236.7	193.0	196.1	NA
April	233.1	286.9	204.8	251.6	208.3	216.9	129.7
May	245.8	301.3	215.6	255.3	212.4	229.3	129.4
June	243.6	305.7	215.9	246.9	209.6	228.1	131.3
July	252.8	310.3	217.8	NA	214.2	231.7	136.8
August	248.6	305.8	222.9	NA	221.2	241.7	136.8
September	207.6	253.2	199.8	251.3	191.3	209.0	126.6
October	178.9	238.5	183.2	255.5	190.3	191.1	131.0
November	178.8	235.3	179.9	241.4	192.1	192.3	130.8
December	186.8	234.9	193.5	NA	198.5	197.0	138.4
Average	212.8	268.2	199.8	224.4	198.2	209.6	135.8
07 January	178.9	217.9	175.7	194.0	189.4	179.7	NA
07 January							
February	184.1	228.5	179.0	NA 222 F	203.1	189.9	155.3
March	213.8	262.7	187.2	232.5	205.0	205.5	NA 107.4
April	240.5	296.9	203.9	236.1	210.3	220.2	127.4
May	266.9	309.6	210.5	W	208.3	218.5	129.8
June	257.0	297.8	213.2	W	210.2	222.6	130.9
July	248.8	305.3	218.5	236.2	217.6	230.1	127.8
August	232.0	282.3	216.0	246.7	215.0	228.2	138.9
September	233.7	290.0	225.1	W	231.6	238.0	142.9
October	235.0	285.5	237.7	280.1	NA	249.9	155.5
November	261.4	306.7	268.3	319.7	277.3	278.5	181.1
December	255.1	297.5	268.7	330.0	274.3	270.5	187.8
Average	234.5	284.9	216.9	225.9	223.7	227.3	148.8

<sup>&</sup>lt;sup>a</sup> See Note 5 at end of section.

Notes: • Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. Sales for resale are shown in Table 9.6; they are sales made to purchasers other than ultimate consumers. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information

Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available data beginning in 1978.

Sources: • 1978-2006: EIA, Petroleum Marketing Annual 2006, Table 2.
• 2007: EIA, Petroleum Marketing Monthly, March 2008, Table 2.

NA=Not available. W=Value withheld to avoid disclosure of individual company

Table 9.8a No. 2 Distillate Prices to Residences: Northeastern States

	Maine	New Hampshire	Vermont	Massachusetts	Rhode Island	Connecticut	New York	New Jersey	Pennsylvania
1978 Average	48.6	50.3	50.8	48.8	50.7	50.1	50.1	49.6	48.8
1980 Average	96.3	100.4	101.5	97.8	101.1	98.3	98.2	97.9	96.4
1985 Average	99.7	102.4	107.7	107.0	106.7	108.0	111.3	105.9	102.3
1990 Average	98.9	102.8	107.7	107.0	108.6	109.8	111.5	103.9	102.5
1995 Average	78.7	77.9	85.3	84.4	87.4	86.4	95.5	88.8	82.6
	97.2	94.0	96.9	97.6	98.6	98.6	106.3	102.4	95.3
1996 Average		94.0 94.2	98.7	97.6 96.0	98.9	96.3			95.3 95.0
1997 Average	94.2						106.5	103.3	
1998 Average	78.8	78.8	87.3	81.8	86.8	83.1	94.8	89.2	81.4
1999 Average	81.3	77.0	85.4	83.6	85.8	85.2	96.9	91.3	81.5
2000 Average	129.7	128.1	125.5	127.3	125.9	129.1	144.2	140.4	122.4
2001 Average	121.7	125.6	126.1	122.1	123.6	123.9	136.3	131.4	115.9
2002 Average	112.9	111.9	117.2	114.1	112.4	111.8	121.8	122.0	106.4
2003 Average	131.4	131.2	130.9	138.6	134.4	135.5	143.6	148.9	130.4
2004 Average	151.1	149.7	150.5	155.9	151.1	151.8	162.7	166.2	148.9
<b>2005</b> January	174.8	175.2	172.9	182.3	175.8	179.0	187.9	194.7	174.1
February	180.2	178.8	174.3	186.3	177.3	181.0	190.6	197.9	177.0
March	186.5	185.3	183.5	196.2	185.4	188.2	200.5	209.2	185.7
April	191.4	188.0	186.4	201.6	186.3	191.1	202.1	210.2	187.5
May	186.2	182.2	183.2	196.0	187.3	191.8	199.9	203.3	182.9
June	199.9	192.3	196.8	202.8	193.2	196.9	208.6	206.9	191.4
July	209.5	201.9	210.2	212.9	NA	204.3	210.6	214.6	196.2
August	218.4	212.7	220.3	223.2	219.3	221.9	220.7	225.6	210.7
September	235.8	234.8	235.5	237.1	237.6	237.6	246.9	252.7	237.0
October	234.2	233.8	235.7	241.3	239.6	237.6	243.6	254.7	232.6
November	223.5	222.2	227.8	231.5	230.9	228.5	239.6	242.1	222.7
December	222.0	221.3	228.3	231.1	232.7	228.7	240.8	242.6	225.0
Average	198.6	197.2	198.7	206.4	200.0	201.2	210.5	216.6	197.4
2006 January	224.7	222.0	229.7	235.0	234.5	229.5	242.6	247.1	226.7
February	223.8	220.4	227.8	230.9	231.4	229.1	240.5	243.6	223.5
March	226.1	221.0	229.8	234.6	236.6	234.4	243.3	247.0	227.0
April	232.7	229.0	236.7	245.7	243.9	238.4	250.9	254.6	233.5
May	236.4	235.8	240.5	251.4	248.3	242.1	258.0	256.4	236.7
June	243.7	239.9	247.6	248.6	246.2	244.9	253.8	257.9	238.7
July	243.7	242.1	255.9	246.2	247.4	244.7	256.7	255.7	234.8
August	243.1	244.9	260.5	248.0	246.4	249.1	258.7	261.7	239.6
September	234.4	239.6	254.3	235.6	232.7	243.7	248.7	249.0	227.8
October	226.2	231.0	252.4	227.2	227.9	235.7	241.2	237.3	222.3
November	227.6	231.4	253.1	228.5	231.2	238.8	243.8	238.8	228.0
December	233.5	234.3	256.6	232.7	234.3	240.2	247.2	247.7	231.0
Average	229.4	228.3	240.8	235.5	236.0	235.7	245.8	246.7	228.6
2007 January	229.8	231.7	253.2	227.0	224.0	238.5	240.1	236.5	224.1
February	235.1	230.6	258.0	236.8	236.8	242.3	250.4	247.4	234.0
March	240.0	239.6	260.1	242.4	242.6	246.3	251.5	253.6	236.1
April	244.2	241.7	262.0	245.9	248.2	250.1	256.3	256.4	238.7
May	242.1	240.2	257.1	246.3	247.6	251.1	258.7	256.9	241.7
June	241.8	237.8	253.6	246.7	247.7	248.7	263.1	254.1	241.4
July	247.6	237.8	258.9	252.9	255.0	255.0	268.8	258.3	242.7
	250.9	237.4	255.7	247.9	252.4	250.6	260.3	257.8	238.4
August	250.9 258.2	237.4 247.7	255.7 262.6	260.3	263.8	261.2	260.3 269.6	257.8 266.5	236.4 249.4
September			262.6 270.4		263.8 276.2				249.4 261.4
October	272.5	262.7		273.3		277.2	282.9	282.1	
November	R 293.1	R 287.4	R 293.7	R 303.9	R 308.2	R 301.3	R 308.6	R 316.8	R 294.1
December	300.0	298.5	300.2	311.8	313.5	305.5	315.5	325.9	300.9
Average	254.5	250.9	268.0	257.4	260.3	261.4	268.0	266.5	250.5

R=Revised. NA=Not available.

Notes: • States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available data beginning in 1978.

Sources: • 1978-2006: EIA, Petroleum Marketing Annual 2006, Table 18. • 2007: EIA, Petroleum Marketing Monthly, March 2008, Table 15.

Table 9.8b No. 2 Distillate Prices to Residences: Selected South Atlantic and Midwestern States (Nominal Cents per Gallon, Excluding Taxes)

Delaware   District of Columbia   Maryland   Virginia   West Virginia   Ohio   Michigan   Indiana   Illinois   Virginia   Ohio   Michigan   Indiana   Illinois   Virginia   Ohio   Michigan   Indiana   Illinois   Virginia   Ohio   Michigan   Indiana   Illinois   Virginia   Ohio   Michigan   Indiana   Illinois   Virginia   Ohio   Ohio   Michigan   Indiana   Illinois   Virginia   Ohio   Ohio   Michigan   Indiana   Illinois   Virginia   Ohio   O	44.7 91.5 98.3 94.2 81.2 89.9 93.3 80.1	47.8 99.9 101.9 101.4 80.1 90.9
1980 Average	91.5 98.3 94.2 81.2 89.9 93.3 80.1	99.9 101.9 101.4 80.1
1980 Average     95.4     102.6     97.9     98.5     92.2     91.9     97.8     99.6     95.8       1985 Average     104.6     114.3     108.8     106.3     98.0     99.7     102.1     99.1     97.5	91.5 98.3 94.2 81.2 89.9 93.3 80.1	99.9 101.9 101.4 80.1
1985 Average	98.3 94.2 81.2 89.9 93.3 80.1	101.9 101.4 80.1
	94.2 81.2 89.9 93.3 80.1	101.4 80.1
1990 Average	81.2 89.9 93.3 80.1	80.1
•	89.9 93.3 80.1	
1995 Average	93.3 80.1	90.9
1996 Average 98.4 117.8 106.3 95.2 96.0 92.1 97.7 91.2 89.3	80.1	
1997 Average 98.4 117.4 105.7 94.8 96.2 91.3 94.2 86.5 87.0		89.9
1998 Average		73.8
1999 Average	84.7	77.4
2000 Average	117.1	115.6
2001 Average	118.0	112.2
2002 Average	107.3	105.1
2003 Average	126.9	121.8
	146.5	143.3
2004 Average 157.0 W 163.2 146.2 149.3 147.5 153.9 153.7 140.5	140.5	143.3
<b>2005</b> January	167.1	162.9
February	172.2	168.1
March	186.6	179.7
April	186.9	182.9
May	185.7	180.2
June	190.4	187.7
	198.4	194.4
August	215.1	216.1
September	239.3	239.5
October	NA	255.6
November	236.9	224.7
December	224.0	212.6
Average	199.3	198.7
<b>2006</b> January	219.2	210.5
·	219.2	210.3
,		
March	224.8	219.7
April	237.3	230.6
May	246.7	241.8
June	246.7	251.4
July 240.6 W 218.7 232.4 235.0 240.9 258.0 256.9 251.2	258.2	265.3
August	268.8	276.7
September	232.9	232.9
October	226.1	221.8
November	232.1	229.7
December	235.0	228.2
Average	229.7	226.8
<b>2007</b> January	219.9	216.8
February	223.7	224.5
March	239.1	241.7
April	254.3	251.7
May 245.7 W 256.2 223.8 228.5 232.7 249.1 246.1 239.8	249.7	251.8
June	251.6	249.9
July NA W 259.1 236.4 240.4 246.2 253.4 255.2 252.0	255.9	258.6
August	260.9	262.6
September	271.1	273.4
October	281.0	282.6
	R 308.3	R 305.0
	305.8	297.0
Average	255.9	258.5

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

end of section. • See "Nominal Price" in Glossary.

Notes: • States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available data beginning in 1978.

Sources: • 1978-2006: EIA, Petroleum Marketing Annual 2006, Table 18.

<sup>• 2007:</sup> EIA, Petroleum Marketing Monthly, March 2008, Table 15.

Table 9.8c No. 2 Distillate Prices to Residences: Selected Western States and U.S. Average (Nominal Cents per Gallon, Excluding Taxes)

	Idaho	Washington	Oregon	Alaska	U.S. Average
					_
978 Average	43.6	48.6	45.8	53.2	49.0
980 Average	91.6	100.8	97.3	97.8	97.4
985 Average	97.2	101.1	97.1	108.3	105.3
990 Average	97.4	102.9	97.0	110.1	106.3
995 Average	83.9	96.2	89.4	83.4	86.7
. •	93.3	108.0	98.9	90.9	98.9
996 Average					
997 Average	95.3	113.9	103.1	97.3	98.4
998 Average	78.4	97.8	86.1	85.2	85.2
999 Average	76.2	106.5	93.8	96.6	87.6
000 Average	117.0	144.5	136.8	133.7	131.1
001 Average	103.8	133.6	121.1	137.7	125.0
002 Average	91.9	120.4	106.0	108.7	112.9
003 Average	118.8	148.7	130.3	124.3	135.5
004 Average	149.5	174.9	159.4	152.4	154.8
JU4 Average	143.3	174.3	135.4	132.4	134.0
005 January	149.0	192.5	168.4	168.3	180.8
February	188.7	223.4	196.1	176.7	184.6
March	204.6	243.6	211.0	192.4	194.0
April	205.5	248.0	220.6	204.3	196.7
May	185.7	230.2	201.6	201.3	191.6
		230.2	201.6	199.9	198.8
June	193.8				
July	211.5	NA	NA	202.5	204.2
August	249.9	261.8	NA	218.0	218.4
September	276.1	280.6	259.0	242.5	242.3
October	NA	283.0	NA	250.1	244.3
November	253.3	261.3	234.8	229.7	232.1
December	218.2	248.2	219.7	219.5	231.2
Average	212.3	238.5	214.6	206.1	205.2
			/		
006 January	217.9	249.6	220.4	218.3	233.4
February	222.4	253.7	218.3	223.0	231.2
March	228.1	272.8	237.6	224.9	235.3
April	242.2	276.5	251.9	234.1	242.7
May	270.1	298.7	272.5	260.4	246.8
June	267.4	291.4	NA	261.0	245.7
July	266.2	287.2	262.2	258.1	246.0
August	297.4	293.0	282.1	266.3	249.9
September	269.7	274.0	239.3	261.3	238.3
October	235.8	248.0	225.1	228.1	230.2
November	243.2	270.3	254.9	224.2	234.3
December	257.9	284.6	259.3	235.7	238.0
Average	239.1	268.1	241.1	239.5	236.5
007 January	227.7	264.0	222.0	220.0	004.4
007 January	227.7	261.9	232.0	226.8	231.1
February	224.9	262.3	226.4	221.2	239.0
March	242.0	270.0	234.5	224.3	244.2
April	251.1	281.4	242.6	238.3	248.0
May	246.1	283.1	NA	245.0	248.5
June	271.2	276.1	245.5	247.7	249.1
July	257.9	276.4	NA NA	252.7	254.3
	257.3	276.2	266.4	256.3	250.4
August					
September	263.6	284.5	263.8	255.8	260.9
October	286.9	321.4	305.3	276.3	275.9
November	321.3	R 345.8	R 322.4	R 303.2	R 303.8
December	<sup>R</sup> 299.9	<sup>R</sup> 335.7	R 306.9	<sup>R</sup> 301.1	R 309.6
Average	260.6	290.8	258.1	251.5	259.0

R=Revised. NA=Not available. E=Estimate.

Notes: • States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

data beginning in 1978.

Sources: • 1978-2006: EIA, Petroleum Marketing Annual 2006, Table 18.
• 2007: EIA, Petroleum Marketing Monthly, March 2008, Table 15.

Figure 9.2 Average Retail Prices of Electricity (Nominal Cents per Kilowatthour)

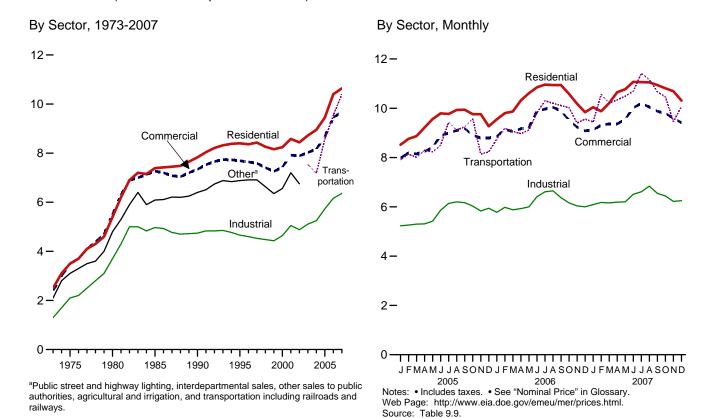


Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants

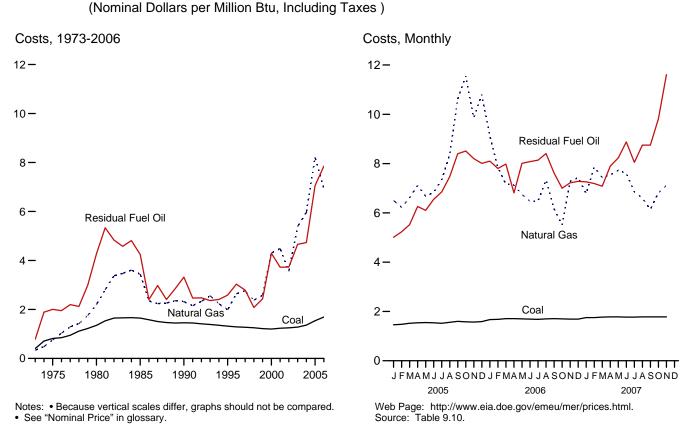


Table 9.9 Average Retail Prices of Electricity

(Nominal Cents per Kilowatthour, Including Taxes)

	Residential	Commerciala	Industrialb	Transportation <sup>c</sup>	Otherd	Total
973 Average	2.5	2.4	1.3	NA	2.1	2.0
975 Average	3.5	3.5	2.1	NA NA	3.1	2.9
980 Average	5.4	5.5	3.7	NA NA	4.8	4.7
	7.39	7.27	4.97	NA NA	6.09	6.44
985 Average						
990 Average	7.83	7.34	4.74	NA	6.40	6.57
95 Average	8.40	7.69	4.66	NA	6.88	6.89
96 Average	8.36	7.64	4.60	NA	6.91	6.86
97 Average	8.43	7.59	4.53	NA	6.91	6.85
98 Average	8.26	7.41	4.48	NA	6.63	6.74
99 Average	8.16	7.26	4.43	NA	6.35	6.64
00 Average	8.24	7.43	4.64	NA	6.56	6.81
01 Average	8.58	7.92	5.05	NA	7.20	7.29
002 Average	8.44	7.89	4.88	NA	6.75	7.20
003 Average	8.72	8.03	5.11	7.54		7.44
004 Average	8.95	8.17	5.25	7.18		7.61
104 Average	0.93	0.17	3.23	7.10		7.01
05 January	8.52	7.99	5.23	7.91		7.47
February	8.76	8.19	5.26	8.14		7.58
March	8.87	8.15	5.30	8.01		7.59
April	9.22	8.25	5.31	8.30		7.65
May	9.56	8.41	5.42	8.23		7.84
June	9.79	8.89	5.86	8.50		8.38
July	9.77	9.00	6.14	9.44		8.60
August	9.93	9.10	6.20	9.11		8.71
September	9.94	9.18	6.17	9.25		8.68
October	9.76	8.91	6.03	9.57		8.37
November	9.76	8.79	5.83	8.14		8.21
December	9.27	8.79	5.94	8.23		8.21
Average	9.45	8.67	5.73	8.57		8.14
<b>006</b> January	9.55	8.87	5.78	8.75		8.31
February	9.80	9.14	5.98	9.18		8.49
March	9.87	9.06	5.88	9.06		8.44
April	10.32	9.17	5.93	8.97		8.56
May	10.61	9.22	6.00	9.12		8.71
June	10.85	9.88	6.41	9.82		9.30
July	10.96	9.97	6.61	10.30		9.55
	10.94	10.04	6.65	10.30		9.58
August						
September	10.94	9.89	6.37	10.11		9.32
October	10.58	9.51	6.16	10.02		8.89
November	10.18	9.24	6.04	9.40		8.63
December	9.84	9.08	6.00	9.56		8.55
Average	10.40	9.46	6.16	9.54		8.90
007 January	10.04	9.13	6.09	9.44		8.72
February	9.88	9.31	6.18	10.56		8.74
March	10.21	9.37	6.16	10.21		8.78
April	10.65	9.37	6.19	10.34		8.85
May	10.77	9.55	6.20	10.49		8.97
June	11.07	10.02	6.51	10.69		9.47
July	11.06	10.20	6.61	11.42		9.65
August	11.05	10.05	6.84	11.16		9.68
September	10.94	9.88	6.55	10.67		9.44
October	10.81	9.79	6.44	10.46		9.18
November	10.69	9.60	6.22	9.46		8.98
December	10.31	9.41	6.25	10.06		8.91
Average	10.64	9.67	6.36	10.40		9.14

<sup>&</sup>lt;sup>a</sup> Commercial sector. For 1973-2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.

b Industrial sector. For 1973-2002, prices exclude agriculture and irrigation.

NA=Not available. --=Not applicable.

Notes: • Beginning in 2003, the category "Other" has been replaced by "Transportation," and the categories "Commercial" and "Industrial" have been redefined. • Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of energy service provider billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. • Prices include State and local taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments, and other miscellaneous charges applied to end-use customers during normal billing

operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods.

• See Note 7 at end of section for plant coverage, and for information on preliminary and final values.

• See "Nominal Price" in Glossary.

• Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

data beginning in 1973.
Sources: • 1973-September 1977: Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • October 1977-February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, Wonthly Statement of Electric Operating Revenues and Income." • March 1980-1982: FERC, Form FERC-5, "Electric Utility Company Monthly Statement." • 1983: Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." • 1984-1992: EIA, Form EIA-861, "Annual Electric Utility Report." • 1993 forward: EIA, Electric Power Monthly, March 2008, Table

<sup>&</sup>lt;sup>c</sup> Transportation sector, including railroads and railways.

<sup>d</sup> Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

Table 9.10 Cost of Fossil-Fuel Receipts at Electric Generating Plants

(Nominal Dollars per Million Btu, Including Taxes)

			Petrole				
	Coal	Residual Fuel Oila	Distillate Fuel Oilb	Petroleum Coke	Total <sup>c</sup>	Natural Gas <sup>d</sup>	All Fossil Fuels
1973 Average	0.41	0.79	NA	NA	0.80	0.34	0.48
1975 Average	.81	2.01	NA NA	NA.	2.02	.75	1.04
980 Average	1.35	4.27	NA	NA	4.35	2.20	1.93
985 Average	1.65	4.24	NA NA	NA NA	4.32	3.44	2.09
1990 Average	1.45	3.32	5.38	.80	3.35	2.32	1.69
1995 Average	1.32	2.59	3.99	.65	2.57	1.98	1.45
1996 Average	1.29	3.03	4.87	.78	3.03	2.64	1.52
1997 Average	1.27	2.79	4.49	.76 .91	2.73	2.76	1.52
1998 Average	1.25	2.08	3.30	.71	2.02	2.38	1.44
1999 Average	1.22	2.44	4.03	.65	2.36	2.57	1.44
2000 Average	1.20	4.29	6.65	.58	4.18	4.30	1.74
2001 Average	1.23	3.73	6.30	78	3.69	4.49	1.73
2002 Average <sup>†</sup>	1.25	3.73	5.34	.78	3.34	3.56	1.52
2003 Average	1.28	4.66	6.82	.72	4.33	5.39	2.28
2004 Average	1.36	4.73	8.02	.83	4.29	5.96	2.48
2005 January	1.46	5.01	9.73	1.10	5.00	6.50	2.64
February	1.48	5.23	9.47	1.17	4.76	6.23	2.50
March	1.52	5.52	11.11	1.12	4.94	6.61	2.60
April	1.54	6.26	10.78	1.15	5.09	7.11	2.77
May	1.55	6.10	10.09	1.13	5.30	6.68	2.77
June	1.54	6.55	10.79	1.01	5.57	6.83	3.06
July	1.52	6.85	10.76	1.07	6.03	7.34	3.47
August	1.56	7.47	11.12	1.01	7.06	8.36	3.80
September	1.60	8.40	13.55	1.11	7.82	10.62	4.05
October	1.58	8.51	15.18	1.22	7.83	11.55	3.92
November	1.57	8.20	13.12	1.12	7.62	9.86	3.42
December	1.59	8.01	12.51	1.14	7.69	10.80	3.74
Average	1.54	7.06	11.72	1.11	6.44	8.21	3.25
2006 January	1.67	8.10	13.68	1.10	7.03	9.11	3.10
February	1.68	7.80	11.69	1.17	5.44	7.84	2.95
March	1.71	7.98	12.39	1.20	5.11	7.17	2.86
April	1.71	6.81	14.48	1.26	4.91	7.13	2.90
May	1.70	8.01	14.77	1.33	6.43	6.75	2.94
June	1.69	8.08	14.45	1.32	6.41	6.47	3.05
July	1.68	8.14	13.23	1.39	6.68	6.48	3.36
August	1.70	8.41	15.52	1.47	7.38	7.33	3.54
September	1.71	7.62	10.86	1.49	5.95	6.17	2.90
October	1.70	7.00	12.06	1.34	5.05	5.51	2.65
November	1.69	7.22	12.33	1.51	5.90	7.28	2.89
December	1.69	7.28	12.90	1.42	6.20	7.43	2.95
Average	1.69	7.85	13.28	1.33	6.23	6.94	3.02
2007 January	1.75	7.26	12.00	1.54	5.89	6.78	2.93
February	1.75	7.19	12.10	1.65	6.59	7.86	3.22
March	1.77	7.08	13.19	1.51	6.54	7.44	3.00
April	1.78	7.90	14.29	1.54	6.79	7.54	3.16
May	1.78	8.23	14.44	1.58	7.28	7.73	3.31
June	1.77	8.88	14.71	1.58	8.01	7.60	3.45
July	1.77	8.05	14.88	1.44	6.69	6.85	3.42
August	1.78	8.75	14.90	1.63	7.80	6.60	3.51
September	1.78	8.75	14.47	1.59	7.52	6.14	3.13
	R 1.78	9.82	R 17.94	1.44	R 8.36	6.82	3.18
October	1.78				9.03		
November 11-Month Average	1.78 <b>1.77</b>	11.61 <b>8.35</b>	18.75 <b>14.66</b>	1.51 <b>1.55</b>	9.03 <b>7.27</b>	7.11 <b>7.06</b>	3.09 <b>3.23</b>
_	1.69	7.89	13.32	1.32	6.23	6.90	3.03
2006 11-Month Average 2005 11-Month Average	1.59	7.89 6.94	11.60	1.32	6.23 6.29	6.90 8.01	3.03 3.21

<sup>&</sup>lt;sup>a</sup> For 1973-2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and

Sources: See end of section.

For 1973-2001, electric utility data are for neavy oil (fuel oil rios. 5 and 6, and small amounts of fuel oil no. 4).
 For 1973-2001, electric utility data are for light oil (fuel oil nos. 1 and 2).
 Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil. For 1973-1982, data do not include refined motor oil, bunker oil, and liquefied petroleum gases. For 1973-1989, data do not include petroleum coke.

<sup>d</sup> Natural gas, plus a small amount of supplemental gaseous fuels. For

<sup>1973-2000,</sup> data also include a small amount of blast furnace gas and other gases derived from fossil fuels.

e Weighted average of costs shown under "Coal," "Petroleum," and "Natural

Gas."

f Through 2001, data are for electric utilities only. Beginning in 2002, data also and electric generating plants in the include independent power producers, and electric generating plants in the commercial and industrial sectors. See Note 8 at end of section for plant coverage. R=Revised. NA=Not available.

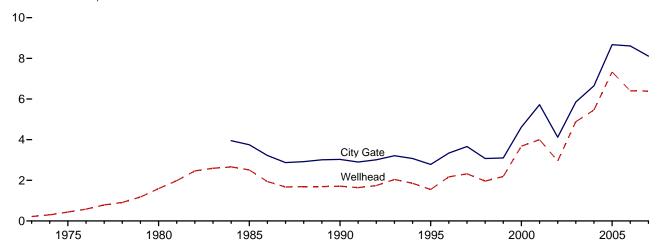
Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • Geographic coverage is the 50 States and the District of Columbia. • See "Nominal Price" in Glossary.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available data beginning in 1973.

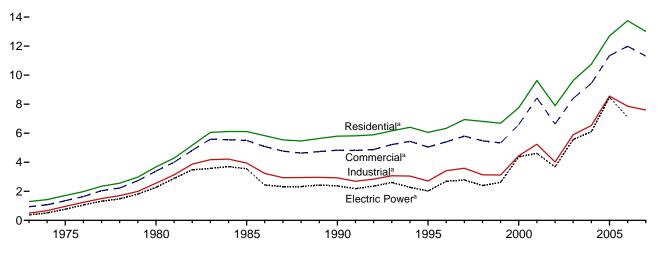
Figure 9.4 Natural Gas Prices

(Nominal Dollars per Thousand Cubic Feet)

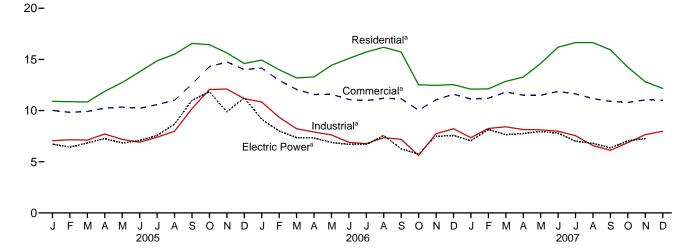
Selected Prices, 1973-2007



Consuming Sectors, 1973-2007



# Consuming Sectors, Monthly



<sup>a</sup>Includes taxes.

Notes: • Because vertical scales differ, graphs should not be compared. • See "Nominal Price" in glossary.

Web Page: http://www.eia.doe.gov/emeu/mer/prices.html. Source: Table 9.11.

**Table 9.11 Natural Gas Prices** 

(Nominal Dollars per Thousand Cubic Feet)

						Consuming	g Sectors <sup>a</sup>			
		Citv	Resi	dential	Com	mercial <sup>b</sup>	Indu	ustrial <sup>c</sup>	Electr	ic Power <sup>d</sup>
	Wellhead Price	Gate Price	Pricee	Percentage of Sector <sup>f</sup>	Price <sup>e</sup>	Percentage of Sector <sup>f</sup>	Pricee	Percentage of Sector <sup>f</sup>	Price	Percentage of Sector <sup>f</sup>
1973 Average	0.22	NA	1.29	NA	0.94	NA	0.50	NA	0.38	92.1
1975 Average	.44	NA	1.71	NA	1.35	NA	.96	NA	.77	96.1
1980 Average	1.59	NA	3.68	NA	3.39	NA	2.56	NA	2.27	96.9
1985 Average	2.51	3.75	6.12	NA	5.50	NA	3.95	68.8	3.55	94.0
1990 Average	1.71	3.03	5.80	99.2	4.83	86.6	2.93	35.2	2.38	76.8
1995 Average	1.55	2.78	6.06	99.0	5.05	76.7	2.71	24.5	2.02	71.4
1996 Average	2.17	3.34	6.34	99.0	5.40	77.6	3.42	19.4	2.69	68.4
1997 Average	2.32	3.66	6.94	98.8	5.80	70.8	3.59	18.1	2.78	68.0
1998 Average	1.96	3.07	6.82	97.7	5.48	67.0	3.14	16.1	2.40	63.7
1999 Average	2.19	3.10	6.69	95.2	5.33	66.1	3.12	18.8	2.62	58.3
2000 Average	3.68	4.62	7.76	92.6	6.59	63.9	4.45	19.8	4.38	50.5
2001 Average	4.00	5.72	9.63	92.4	8.43	66.0	5.24	20.8	4.61	40.2
2002 Average	2.95	4.12	7.89	97.9	6.63	77.4	4.02	22.7	d <b>3.68</b>	83.9
2003 Average	4.88	5.85	9.63	97.5	8.40	78.2	5.89	22.1	5.57	91.2
2004 Average	5.46	6.65	10.75	97.7	9.43	78.0	6.53	23.7	6.11	89.8
2005 January	5.80	7.05	10.90	NA	10.02	84.8	7.06	24.9	6.72	93.0
February	5.73	7.09	10.87	NA	9.83	85.0	7.15	24.3	6.42	93.4
March	5.95	7.24	10.84	NA	9.91	84.4	7.12	24.6	6.84	92.8
April	6.57	7.79	11.88	NA	10.25	82.6	7.71	23.9	7.27	92.8
May	6.25	7.51	12.74	NA	10.35	79.4	7.19	24.2	6.83	93.5
June	6.09	7.30	13.79	NA	10.22	78.2	6.91	23.7	7.08	90.8
July	6.71	7.68	14.86	NA	10.58	75.6	7.40	24.5	7.57	89.7
August	6.48	8.20	15.51	NA	11.01	76.2	7.98	24.6	8.67	89.1
September	8.95	10.26	16.56	NA	12.59	74.9	10.18	23.2	10.99	90.0
October	10.33	12.16	16.44	NA	14.29	78.9	12.06	23.2	11.84	92.1
November	9.89	11.57	15.64	NA	14.76	81.3	12.11	23.5	9.87	93.7
December	9.08	10.77	14.60	NA	14.01	84.0	11.17	23.7	11.26	90.0
Average	7.33	8.67	12.70	98.2	11.34	82.1	8.56	24.1	8.47	91.3
2006 January	8.02	10.80	14.94	NA	14.15	84.0	10.84	23.8	9.15	93.9
February	6.86	9.34	14.00	NA	12.95	84.2	9.35	23.9	8.00	95.5
March	6.44	8.81	13.19	NA	12.07	83.9	8.23	24.0	7.36	94.7
April	6.38	8.29	13.29	NA	11.57	80.8	7.91	23.6	7.32	94.7
May	6.24	7.99	14.43	NA	11.60	78.4	7.62	23.9	6.89	93.0
June	5.78	7.39	15.09	NA	11.09	75.7	6.90	23.5	6.69	93.8
July	5.92	7.40	15.73	NA	10.98	74.3	6.77	23.8	6.69	92.9
August	6.56	8.10	16.19	NA	11.20	72.4	7.35	23.8	7.56	91.9
September	6.06	7.68	15.73	NA	11.16	74.5	7.20	22.2	6.27	93.6
October	5.09	6.42	12.52	NA	10.04	77.2	5.62	23.0	5.76	92.0
November	6.72	8.47	12.47	NA	11.05	80.2	7.74	23.1	7.48	93.9
December	6.76	8.66	12.54	NA	11.61	82.6	8.23	23.5	7.57	93.7
Average	6.40	8.61	13.75	98.1	11.99	80.7	7.86	23.5	7.11	93.4
2007 January	E 5.92	7.89	12.09	NA	11.14	83.0	7.35	22.0	7.05	95.7
February	E 6.66	8.59	12.12	NA	11.21	83.8	8.25	22.1	8.16	92.5
March	E 6.56	8.81	12.86	NA	11.81	83.3	8.42	21.6	7.64	93.7
April	<sup>E</sup> 6.84	8.19	13.27	NA	11.51	81.0	8.15	21.9	7.76	94.6
May	E 6.98	8.36	14.61	NA	11.50	77.9	8.12	22.6	7.96	94.1
June	E 6.86	8.38	16.20	NA	11.87	73.6	7.99	23.3	7.80	94.1
July	E 6.19	7.94	16.65	NA	11.63	73.8	7.55	22.6	7.01	93.0
August	E 5.90	7.46	16.64	NA	11.18	71.9	6.58	22.3	6.80	88.1
September	<sup>E</sup> 5.61	6.89	15.94	NA	10.90	72.2	6.12	22.0	6.35	94.7
October	E 6.25	7.36	14.25	NA	R 10.80	R 69.2	6.87	22.3	7.04	94.7
November	E 6.37	8.05	12.82	NA	11.04	74.4	7.65	21.4	R 7.27	R 94.1
December	E 6.53	8.13	12.17	NA	11.02	78.2	7.98	22.0	NA	NA
Average	<sup>E</sup> 6.39	8.11	13.01	NA	11.31	79.1	7.60	22.2	NA	NA

<sup>&</sup>lt;sup>a</sup> See Note 9 at end of section.

are available. For details on how the percentages are derived, see Table. 9.11 Sources at end of section.

R=Revised. NA=Not available. E=Estimate.

Notes: • Prices are for natural gas, plus a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 9 at end of gaseus rules. • Frites are lifetined to liftitude all takes. See Note set end of section. • Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. • Geographic coverage is the 50 States and the District of Columbia. • See "Nominal Price" in Glossary.

Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

data beginning in 1973.

Sources: See end of section.

a See Note 9 at end of section.
 b Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of Section 7.
 c Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of Section 7.

<sup>&</sup>lt;sup>d</sup> The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers. See Note 8 at end of section for plant coverage.

f The percentage of the sector's consumption in Table 4.3 for which price data

# **Energy Prices**

**Note 1.** The average domestic first purchase price represents the average price at which all domestic crude oil is purchased. Prior to February 1976, the price represented an estimate of the average of posted prices; beginning with February 1976, the price represents an average of actual first purchase prices. The data series was previously called "Actual Domestic Wellhead Price."

**Note 2.** F.O.B. 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.

**Note 3.** The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to April 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 April 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

Note 4. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on Energy Information Administration (EIA) Form EIA-14, "Refiners' Monthly Cost Report." Those costs were previously published from data collected on Economic Regulatory Administration (ERA) Form ERA-49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report." 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. The respondents for the two forms are also 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 when comparing the data collected on the two forms.

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, "Transfer Pricing Report," or any crude oil that is not domestic oil. The composite cost is the weighted average of domestic and imported crude oil costs.

Crude oil costs and volumes reported on Form ERA-49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on Federal Energy Administration (FEA) Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report," 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.

**Note 5**. Several different series of motor gasoline prices are published in this section. U.S. city average retail prices of motor gasoline are calculated monthly by the Bureau of Labor Statistics during the development of the Consumer Price Index (CPI). These prices include all Federal, State, and local taxes paid at the time of sale. From 1974-1977, prices were collected in 56 urban areas. From 1978 forward, prices are 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).

Refiner prices of finished motor gasoline for resale and to end users are determined by the EIA in a monthly survey of refiners and gas plant operators (Form EIA-782A). The prices do not include any Federal, State, or local taxes paid at the time of sale. Estimates of prices prior to January 1983 are based on Form FEA-P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices," and also exclude all Federal, State, or local taxes paid at the time of sale. Sales for resale are those made to purchasers who are other-than-ultimate consumers. Sales to end users are sales made directly to the consumer of the product, including bulk consumers (such as agriculture, industry, and utilities) and residential and commercial consumers.

Note 6. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous series were generated for annual data 1978-1982 and for monthly data 1981 and 1982 by estimating the prices that would have been published had Form EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment was made for product and sales type matching and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale and between retail and end user. The resale category continues to include sales among resellers. However, sales to bulk consumers, such as utility, industrial, and commercial accounts previously included in the wholesale category, are now counted as made to end users. The end-user category continues to include retail sales through company-owned and operated outlets but also includes sales to the bulk consumers such as agriculture, industry, and electric utilities. Additional information may be found in "Estimated Historic Time Series for the EIA-782," a feature article by Paula Weir, printed in the December 1983 [3] *Petroleum Marketing Monthly*, published by EIA.

**Note 7**. Average annual retail prices of electricity have the following plant coverage: Through 1979, annual data are for Classes A and B privately owned electric utilities only. For 1980-1982, annual data are for selected Class A utilities whose electric operating revenues were \$100 million or more during the previous year. For 1983, annual data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, annual data also include energy service providers selling to retail customers.

Average monthly retail prices of electricity have the following plant coverage: Through 1985, monthly data are derived from selected privately owned electric utilities and, therefore, are not national averages. Beginning in 1986, monthly data are based on a sample of publicly and privately owned electric utilities. Beginning in 1996, monthly data also include energy service providers selling to retail customers.

Preliminary monthly data are from Form EIA-826, "Monthly Electric Sales and Revenue Report With State Distributions Report," which is a monthly collection of data from approximately 450 of the largest publicly and privately owned electric utilities as well as a census of energy service providers with retail sales in deregulated States; a model is then applied to the collected data to estimate for the entire universe of U.S. electric utilities. Preliminary annual data are the sum of the monthly revenues divided by the sum of the monthly sales. When final annual data become available each year from Form EIA-861, "Annual Electric Power Industry Report," their ratios to the preliminary Form EIA-826 values are used to derive adjusted final monthly values.

Note 8. Data for 1973–1982 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 25 megawatts or greater. From 1974-1982, peaking units were included in the data and counted towards the 25-megawatt-or-greater total. Data for 1983-1990 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 50 megawatts or greater. Data for 1991-2001 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units and combined-cycle units together totaled 50 megawatts or greater. Data for 2002 forward cover the aforementioned regulated generating plants plus unregulated generating plants (independent producers, as well as combined-heat-and-power generating plants and electricity-only plants in the commercial and industrial sector) whose total facility fossil-fueled nameplate generating capacity is 50 or more megawatts, regardless of unit type.

Note 9. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all Federal, State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers' bills are sometimes excluded by the reporting utilities. Delivered-to-consumers prices for 1987 forward represent natural gas delivered and sold to residential, commercial, industrial, and electric power consumers. They do not include the price of natural gas delivered to industrial and commercial consumers on behalf of third parties. Volumes of natural gas delivered on behalf of third parties are included in the consumption data shown in Table 4.3. Additional information is available in the EIA *Natural Gas Monthly*, Appendix C.

### **Table 9.1 Sources**

### **Domestic First Purchase Price**

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: Federal Energy Administration, based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report." 1978–2006: Energy Information Administration (EIA), *Petroleum Marketing Annual*, Table 1.

2007: EIA, *Petroleum Marketing Monthly*, March 2008, Table 1.

# F.O.B. and Landed Cost of Imports

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."

October–December 1977: EIA, Form FEA-F701-M-0, "Transfer Pricing Report."

1978–2006: EIA, *Petroleum Marketing Annual*, Table 1. 2007: EIA, *Petroleum Marketing Monthly*, March 2008, Table 1.

### **Refiner Acquisition Cost**

1973: EIA estimates. The domestic price was derived by adding estimated transportation costs to the reported domestic first purchase price. The imported price was derived by adding an estimated ocean transport cost to the average "Free Alongside Ship" value published by the U.S. Bureau of the Census.

1974–1976: DOI, BOM, *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: January–September, FEA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report." October–December, EIA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."

1978–2006: EIA, *Petroleum Marketing Annual*, Table 1. 2007 and 2008: EIA, *Petroleum Marketing Monthly*, March 2008, Table 1.

### Table 9.2 Sources

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." October 1977–December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report."

1978–2006: EIA, *Petroleum Marketing Annual*, Table 24. 2007: EIA, *Petroleum Marketing Monthly*, March 2008, Table 21.

# **Table 9.10 Sources**

1973–September 1977: Federal Power Commission, Form FPC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

October 1977–December 1977: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

1978 and 1979: Energy Information Administration (EIA), Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

1980–1989: EIA, *Electric Power Monthly*, May issues. 1990–2000: EIA, *Electric Power Monthly*, March 2003, Table 26.

2001 forward: EIA, *Electric Power Monthly*, March 2008, Table 4.1; Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants"; and EIA, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

# **Table 9.11 Sources**

# **All Prices Except Electric Power**

1973–2001: Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports.

2002 forward: EIA, *Natural Gas Monthly (NGM)*, February 2008, Table 3.

## **Electric Power Sector Price**

1973-1998: EIA, NGA 2000, Table 96.

1999–2002: EIA, NGM, October 2004, Table 4.

2003 forward: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants," and EIA, Form EIA-423 "Monthly Cost and Quality of Fuels for Electric Plants Report."

# Percentage of Residential Sector

1989–2006: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

# **Percentage of Commercial Sector**

1987–2001: EIA, *NGA*, annual reports. Calculated as the total amount of natural gas delivered to commercial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to commercial consumers

2002 forward: EIA, NGM, February 2008, Table 3.

#### Percentage of Industrial Sector

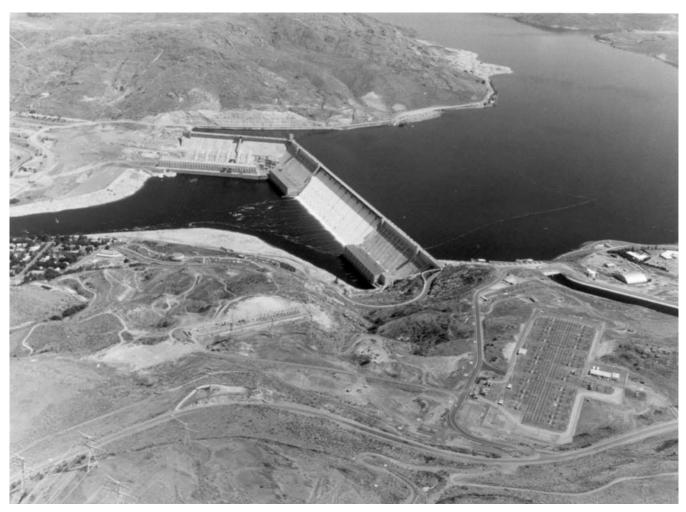
1982–2001: EIA, *NGA*, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers. 2002 forward: EIA, *NGM*, February 2008, Table 3.

# **Percentage of Electric Power Sector**

1973–2001: Calculated by EIA as the quantity of natural gas receipts by electric utilities reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants" (and predecessor forms) divided by the quantity of natural gas consumed by the electric power sector (for 1973-1988, see *Monthly Energy Review*, Table 7.3b; for 1989-2001, see *Monthly Energy Review*, Table 7.4b).

2002 forward: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants," and EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).

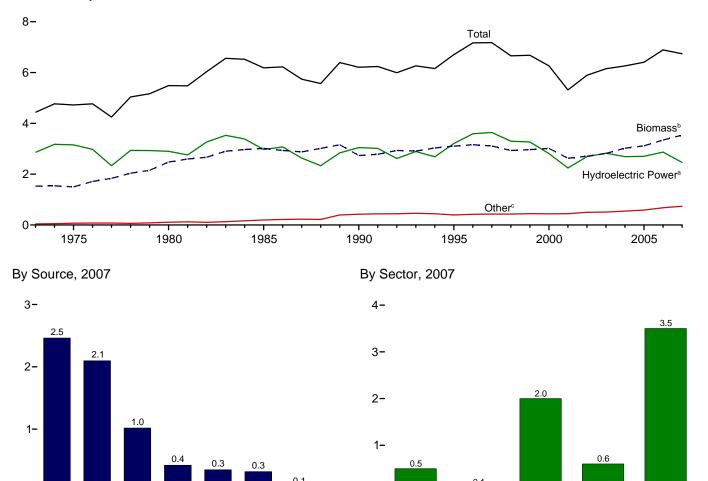
# Renewable Energy



Grand Coulee Dam, Washington State. Source: U.S. Bureau of Reclamation.

Figure 10.1 Renewable Energy Consumption (Quadrillion Btu)

Total and Major Sources, 1973-2007





Bio-

fuels<sup>b</sup>

Waste<sup>b</sup>

Geo-

thermal<sup>b</sup>

Wind<sup>b</sup>

Solar/

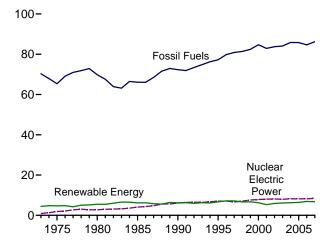
 $PV^b$ 

Hydro-

electric

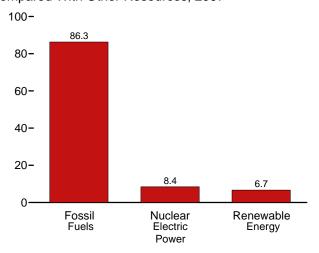
Powera

Wood<sup>b</sup>



#### Compared With Other Resources, 2007

Residential Commercial



Industrial Transportation

<sup>a</sup>Conventional hydroelectric power. <sup>b</sup>See Table 10.1 for definition. <sup>c</sup>Geothermal, solar/PV, and wind. Web Page: http://www.eia.doe.gov/emeu/mer/renew.html. Sources: Tables 1.3, 10.1, and 10.2a-c.

Table 10.1 Renewable Energy Production and Consumption by Source

(Trillion Btu)

		Production <sup>a</sup> Biomass Total						Consumpti	on			
	Bior	nass							Bion	nass		Total
	Bio- fuels <sup>b</sup>	Total <sup>c</sup>	Renew- able Energy <sup>d</sup>	Hydro- electric Power <sup>e</sup>	Geo- thermal <sup>f</sup>	Solar/ PV <sup>9</sup>	<b>Wind</b> <sup>h</sup>	Wood <sup>i</sup>	Waste <sup>j</sup>	Bio- fuels <sup>k</sup>	Total	Renew- able Energy
1973 Total	NA NA 93 111 200 143 190 206 215 238 260 315 412 501	1,529 1,499 2,475 3,016 2,735 3,102 3,157 3,111 2,933 2,969 3,010 2,629 2,712 2,815 3,011	4,433 4,723 5,485 6,185 6,206 6,703 7,167 7,180 6,659 6,683 6,262 5,318 5,899 6,149 6,248	2,861 3,155 2,900 2,970 3,046 3,205 3,590 3,640 3,297 3,268 2,811 2,242 2,689 2,825 2,690	43 70 110 198 336 294 316 325 328 331 317 311 328 331 341	NA NA (s) 60 71 70 69 66 65 64 64 65	NA NA (s) 29 33 34 31 46 57 70 105 115	1,527 1,497 2,474 2,687 2,216 2,370 2,437 2,371 2,184 2,214 2,262 2,006 1,995 2,002 2,121	2 2 2 236 408 531 577 551 542 540 511 364 402 401 389	NA NA 93 111 202 145 187 205 213 241 258 309 414 513	1,529 1,499 2,475 3,016 2,735 3,104 3,159 3,108 2,931 2,967 3,013 2,627 2,706 2,817 3,023	4,433 4,723 5,485 6,185 6,206 6,705 7,168 7,178 6,657 6,681 6,264 5,315 5,893 6,150 6,261
2005 January	47 43 47 45 46 47 50 50 49 52 52 54 582	265 247 260 247 256 252 266 266 255 261 257 269 3,101	553 503 539 528 581 573 576 528 478 490 543 <b>6,391</b>	243 216 229 231 273 268 260 216 174 180 194 221 <b>2,703</b>	29 25 28 28 29 29 30 29 28 29 28 29 343	556666666655 <b>66</b>	11 10 16 17 17 18 14 11 15 14 16 18	184 174 179 170 175 172 181 181 173 177 172 180 2,116	34 30 34 32 35 34 35 34 32 44 35 403	48 42 47 44 47 49 51 53 50 54 57 <b>595</b>	266 247 259 246 257 255 267 269 256 263 259 271 <b>3,114</b>	554 502 538 527 582 576 576 531 478 492 502 546 <b>6,404</b>
2006 January	56 53 59 55 8 59 8 62 8 63 8 66 8 65 8 67 8 72 8 745	283 253 R 272 R 257 R 268 R 269 R 282 R 284 R 275 R 282 R 277 R 291	614 549 575 597 R 630 R 618 R 589 R 553 R 499 R 511 R 538 R 565 R <b>6,839</b>	272 246 244 283 306 295 252 216 171 169 201 214 <b>2,869</b>	29 26 30 27 26 28 30 30 29 30 29 30 28 30 343	6 5 6 6 6 6 6 6 6 6 6 6 7 0	24 19 23 25 24 20 19 16 19 24 25 25 264	191 168 179 170 175 174 184 183 177 181 176 184 <b>2,142</b>	36 32 34 35 35 35 35 35 34 34 35	55 51 R 58 57 R 65 R 71 R 69 R 72 R 71 R 75 R 73 R 78 R 795	282 251 270 R 259 R 275 R 278 R 287 R 290 R 281 R 289 R 284 R 297	612 547 573 599 R 637 R 628 R 595 R 505 R 505 R 519 R 544 R 571
2007 January	73 68 75 74 R 80 R 80 R 85 R 89 R 86 R 90 R 92 96 <b>988</b>	R 289 266 R 287 R 281 R 289 R 287 R 300 R 301 R 301 R 301 R 300 R 301 314 3,506	612 R 509 R 593 R 583 R 609 R 573 R 580 R 559 R 498 R 513 R 513 R 516 6,708	262 185 241 237 257 227 224 198 145 147 156 183 <b>2,463</b>	31 28 29 28 28 29 30 30 30 29 30 29 30 349	6 5 6 6 6 6 6 6 6 6 6 6 7 1	24 25 30 32 28 24 19 24 26 30 27 28 319	180 166 175 174 174 171 178 176 171 177 174 181 <b>2,097</b>	37 33 37 32 35 36 37 36 35 33 33 36 37 <b>422</b>	78 R 70 R 79 R 76 R 82 R 83 R 88 R 92 R 83 R 94 100 1,018	294 269 R 290 R 283 R 291 R 290 R 303 R 304 R 289 R 304 R 303 317 <b>3,537</b>	617 512 R 596 R 585 R 611 R 576 R 583 R 563 R 496 R 517 R 520 565 <b>6,738</b>

a Production equals consumption for all renewable energy sources except biofuels.

b Total biomass inputs to the production of fuel ethanol and biodiesel.

cal derived fuels biomass waste, fuel ethanol, and biodiesel.

agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Most data for the residential, commercial, industrial, and transportation sectors are estimates. See notes and sources for Tables 10.2a and 10.2b. • See Note, "Renewable Energy Production and Consumption," at end of section.

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

• Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/renew.html for all available

data beginning in 1973.

Sources: Tables 10.2a-c, 10.3, and 10.4.

Wood and wood-derived fuels, biomass waste, fuel ethanol, and biodiesel.

d Hydroelectric power, geothermal, solar/photovoltaic, wind, and biomass.

e Conventional hydroelectricity net generation (converted to Btu using the

fossil-fueled plants heat rate).

Geothermal electricity net generation (converted to Btu using the geothermal

energy plants heat rate), and geothermal heat pump and direct use energy.

g Solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy.

h Wind electricity net generation (converted to Btu using the fossil-fueled plants

Wood and wood-derived fuels.

j Municipal solid waste from biogenic sources, landfill gas, sludge waste,

tire-derived fuels).

<sup>k</sup> Fuel ethanol and biodiesel consumption, plus losses and co-products from the production of fuel ethanol and biodiesel.

Table 10.2a Renewable Energy Consumption: Residential and Commercial Sectors

(Trillion Btu)

		Residen	itial Sector				Co	mmercial Se	ctora		
			Biomass		Hydro-			Bio	mass		
	Geo- thermal <sup>b</sup>	Solar/ PV <sup>c</sup>	Wood <sup>d</sup>	Total	electric Power <sup>e</sup>	Geo- thermal <sup>b</sup>	Wood <sup>d</sup>	Waste <sup>f</sup>	Fuel Ethanol <sup>g</sup>	Total	Total
1973 Total	NA	NA	354	354	NA	NA	7	NA	NA	7	7
1975 Total	NA	NA	425	425	NA.	NA	8	NA	NA	8	8
1980 Total	NA	NA	850	850	NA	NA	21	NA	NA	21	21
1985 Total	NA	NA	1,010	1,010	NA	NA	24	NA	(s)	24	24
1990 Total	6	56	580	641	1	3	66	28	ìí	94	98
1995 Total	7	65	520	591	1	5	72	40	(s)	113	118
1996 Total	7	65	540	612	1	5	76	53	(s)	129	135
1997 Total	8	65	430	503	1	6	73	58	(s)	131	138
1998 Total	8	65	380	452	1	7	64	54	(s)	118	127
1999 Total	9	64	390	462	1	7	67	54	(s)	121	129
2000 Total	9	61	420	490	1	8	71	47	(s)	119	128
2001 Total	9	60	370	439	1 1	8	67	25	(s)	92	101
2002 Total	10	59	380	449	(s)	9	69	26	(s)	95	104
2003 Total	13	58	400	471	1 1	11	71	29	1	101	113
2004 Total	14	59	410	483	i	12	70	34	1	105	118
2004 10101		•	4.0	400				0.1	•		
2005 January	1	5	35	41	(s)	1	6	3	(s)	9	10
February	1	5	31	37	(s)	1	5	3	(s)	8	9
March	1	5	35	41	(s)	1	6	3	(s)	9	10
April	1	5	34	40	(s)	1	6	3	(s)	8	10
May	1	5	35	41	(s)	1	6	3	(s)	9	10
June	1	5	34	40	(s)	1	6	3	(s)	9	10
July	1	5	35	41	(s)	1	6	3	(s)	9	10
August	1	5	35	41	(s)	1	6	3	(s)	9	10
September	1	5	34	40	(s)	1	6	3	(s)	9	10
October	1	5	35	41	(s)	1	6	3	(s)	9	10
November	1	5	34	40	(s)	1	6	3	(s)	9	10
December	1	5	35	41	(s)	1	6	3	(s)	9	10
Total	16	61	410	487	1	14	70	34	1	105	119
2006 January	2	6	33	40	(s)	1	6	3	(s)	9	10
February	1	5	30	36	(s)	1	5	3	(s)	8	9
March	2	6	33	40	(s)	1	6	3	(s)	8	10
April	2	5	32	39	(s)	1	5	3	(s)	8	10
May	2	6	33	40	(s)	1	6	3	(s)	9	10
June	2	5	32	39	(s)	1	5	3	(s)	R 8	10
July	2	6	33	40	(s)	1	6	3	(s)	9	10
August	2	6	33	40	(s)	1	6	3	(s)	9	10
September	2	5	32	39	(s)	1	5	3	(s)	8	10
October	2	6	33	40	(s)	1	6	3	(s)	9	10
November	2	5	32	39	(s)	1	5	3	(s)	R 8	10
December	2	6	33	40	(s)	i	6	3	(s)	9	10
Total	18	65	390	474	1	14	65	36	1	R 102	R 117
<b>2007</b> January	2	6	33	40	(e)	1	6	3	(e)	9	10
February	1	5	30	36	(s) (s)	1	5	3	(s) (s)	8	9
March	2	6	33	40	(s)	1	6	3	(s)	9	10
April	2	5	32	39	(s)	1	5	3	(s)	8	9
May	2	6	33	40	(s)	1	6	3	(s)	9	10
June	2	5	33 32	39		1	5	3	(S) (S)	9	10
	2	6		39 40	(s)	1	6	3		9	10
July	2		33		(s)	1		3	(s)	9	
August		6	33	40	(s)	-	6		(s)		10
September	2	5	32	39	(s)	1	5	3	(s)	8	10
October	2	6	33	40	(s)	1	6	3	(s)	9	10
November	2	5	32	39	(s)	1	5	3	(s)	9	10
December	2	6	33	40 4 <b>7</b> 4	(s)	1	6	3	(s)	9	10
Total	18	65	390	474	1	14	65	37	2	104	119

<sup>&</sup>lt;sup>a</sup> Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

non-renewable waste (municipal solid waste from non-biogenic sources, and

Sources: See end of section.

b Geothermal heat pump and direct use energy.

<sup>&</sup>lt;sup>c</sup> Solar thermal direct use energy, and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate). Includes a small amount of commercial sector use.

<sup>&</sup>lt;sup>d</sup> Wood and wood-derived fuels.

e Conventional hydroelectricity net generation (converted to Btu using the

fossil-fueled plants heat rate).

f Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes

<sup>&</sup>lt;sup>g</sup> The ethanol portion of motor fuels (such as E10) consumed by the commercial sector.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Data are estimates, except for commercial sector hydroelectric power and waste. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/renew.html for all available data beginning in 1973.

Table 10.2b Renewable Energy Consumption: Industrial and Transportation Sectors (Trillion Btu)

				Industria	I Sectora				Trans	sportation S	ector
					Biomass					Biomass	
	Hydro- electric Power <sup>b</sup>	Geo- thermal <sup>C</sup>	Wood <sup>d</sup>	Waste <sup>e</sup>	Fuel Ethanol <sup>f</sup>	Losses and Co- products <sup>g</sup>	Total	Total	Fuel Ethanol <sup>h</sup>	Bio- diesel <sup>i</sup>	Total
1973 Total	35 32 33 33 31 55 61 58 55 49 42 33 39 43	NA NA NA 2 3 3 3 4 4 5 5 3 4	1,165 1,063 1,600 1,645 1,442 1,652 1,683 1,731 1,603 1,620 1,636 1,443 1,396 1,363 1,476	NA NA 230 192 195 224 184 180 171 145 129 146 142	NA NA NA 1 1 2 1 1 1 1 1 3 3 5 6	NA NA 41 48 86 61 81 88 92 101 110 133 174 210	1,165 1,063 1,600 1,917 1,683 1,935 1,970 1,997 1,873 1,884 1,679 1,684 1,679	1,200 1,096 1,633 1,950 1,716 1,992 2,033 2,058 1,931 1,936 1,930 1,721 1,723 1,731 1,861	NA NA NA 51 62 115 82 104 115 120 138 144 171 233 292	NA NA NA NA NA NA NA 1 1 2 4	NA NA NA 51 62 115 82 104 115 120 138 145 172 235 296
2005 January	3 3 3 3 3 3 2 2 2 2 2 3 3	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	127 122 122 118 120 117 123 123 118 121 117 123 1,452	13 11 13 12 13 12 13 13 13 13 12 12 12 12	1 R (s) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 7	19 18 20 18 19 19 21 21 20 22 21 22 241	160 152 155 149 152 149 157 157 151 156 151 158 <b>1,848</b>	164 155 158 152 155 153 160 160 154 158 154 162 R 1,884	27 23 26 24 26 28 28 30 28 30 8 31 33 33	1 1 1 1 1 1 1 1 1 1 1 1 1	28 24 27 25 27 29 31 29 31 31 34 8
2006 January	4 3 2 2 2 2 2 2 2 2 3 4 3 29	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	136 118 124 121 123 122 129 128 124 127 124 129 1,505	12 11 12 11 12 11 12 12 12 11 12 12 12 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	23 22 24 22 24 25 25 8 27 26 27 27 29	172 151 161 155 159 158 167 167 162 167 164 171	176 154 163 157 161 160 170 169 165 171 167 174	29 27 31 32 38 42 39 41 41 43 43 45 <b>451</b>	2 1 2 2 8 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	31 29 R 33 R 34 R 41 R 45 R 45 R 44 R 46 R 48 R 483
Pebruary September October November December Total	4 2 2 2 2 2 1 1 2 1 1 1 1 2 2 2 2 2 2 2	(s) (s) (s) (s) (s) (s) (s) (s) (s) (s)	125 114 121 122 122 119 125 122 118 124 121 126 <b>1,458</b>	12 11 12 11 12 12 12 12 12 12 12 12 12 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R 28 R 26 R 29 R 29 R 31 R 31 R 32 R 33 R 32 R 34 R 35 37	R 166 R 152 R 163 R 163 R 165 R 162 R 170 R 168 R 163 R 171 R 169 176 <b>1,990</b>	R 171 R 154 R 166 R 165 R 167 R 165 R 172 R 170 R 165 R 173 R 171 178 2,017	45 40 44 42 45 46 48 50 44 52 52 55 564	33445578666666 63	R 48 R 43 R 48 R 46 R 50 R 51 R 55 R 58 R 50 R 58 R 57 616

<sup>&</sup>lt;sup>a</sup> Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

b Conventional hydroelectricity net generation (converted to Btu using the

production of fuel ethanol and biodiesel-these are included in the industrial sector

consumption statistics for the appropriate energy source.

<sup>h</sup> The ethanol portion of motor fuels (such as E10 and E85) consumed by the

Notes: • Data are estimates, except for industrial sector hydroelectric power in 1973-1978 and 1989 forward. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of

Web Page: See http://www.eia.doe.gov/emeu/mer/renew.html for all available data beginning in 1973.

Sources: See end of section.

Conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate).

Geothermal heat pump and direct use energy.

d Wood and wood-derived fuels.

Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

f The ethanol portion of motor fuels (such as E10) consumed by the industrial

Does not include natural gas, electricity, and other non-biomass energy used in the

transportation sector.

i "Biodiesel" is any liquid biofuel suitable as a diesel fuel substitute, additive, or extender. See "Biodiesel" in Glossary.
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Table 10.2c Renewable Energy Consumption: Electric Power Sector

(Trillion Btu)

	Hydro- electric	Geo-				Biomass		
	Powera	thermalb	Solar/PV <sup>c</sup>	Wind <sup>d</sup>	Woode	Wastef	Total	Total
1973 Total	2.827	43	NA	NA	1	2	3	2.873
1975 Total	3,122	70	NA	NA	(s)	2	2	3,194
1980 Total	2,867	110	NA	NA	3	2	4	2,982
1985 Total	2,937	198	(s)	(s)	8	7	14	3,150
1990 Total <sup>g</sup>	3,014	326	4	29	129	188	317	3,689
1995 Total	3,149	280	5	33	125	296	422	3,889
1996 Total	3,528	300	5	33	138	300	438	4,305
1997 Total	3.581	309	5	34	137	309	446	4,375
1998 Total	3,241	311	5	31	137	308	444	4,032
1999 Total	3,218	312	5	46	138	315	453	4,034
2000 Total	2,768	296	5	57	134	318	453 453	3,579
	2,768	289	6	70	126	211	337	2,910
2001 Total	2,209 2,650	269 305	6	70 105	150	230	380	2,910 3,445
2002 Total	,		-					,
2003 Total	2,781	303	5	115	167	230	397	3,601
2004 Total	2,656	311	6	142	165	223	388	3,503
2005 January	239	26	(s)	11	16	18	34	311
February	213	22	(s)	10	15	16	31	277
March	226	25	(s)	16	16	18	34	302
April	228	25	1	17	13	17	30	300
May	270	27	1	17	14	19	33	348
June	265	26	1	18	15	19	34	344
July	257	27	1	14	17	20	37	335
August	213	26	1	11	17	19	36	288
September	171	26	1	15	16	18	34	246
October	178	26	(s)	14	15	17	32	251
November	191	26	(s)	16	15	19	34	267
December	218	26	(s)	18	16	19	36	299
Total	2,670	309	6	178	185	221	406	3,568
2006 January	268	26	(s)	24	17	20	37	355
February	243	23	(s)	19	15	18	34	319
March	242	27	(s)	23	16	19	35	327
April	281	24	1	25	12	17	30	360
May	304	23	1	24	13	19	33	384
June	293	25	i	20	15	19	34	373
July	250	27	1	19	16	20	36	333
August	214	27	1	16	17	20	37	295
September	169	26	1	19	15	19	34	248
	166	26 27	(s)	24	15	19	34 34	252
October November	197	25	(s)	25	15	20	35	283
	211							
December Total	2,839	27 <b>306</b>	(s) <b>5</b>	25 <b>264</b>	16 <b>182</b>	20 <b>231</b>	36 <b>412</b>	299 <b>3,827</b>
2007 Januari	050	07	(-)	0.4	40	04	20	0.47
2007 January	258	27	(s)	24	16	21	38	347
February	183	25	(s)	25	17	19	36	269
March	239	26	(s)	30	15	21	36	331
April	235	24	1	32	15	19	33	325
May	255	25	1	28	14	20	34	343
June	225	26	1	24	15	21	36	311
July	223	27	1	19	15	21	36	306
August	196	27	1	24	16	21	37	285
September	144	26	1	26	15	20	35	232
October	146	27	(s)	30	14	18	32	236
November	155	26	(s)	27	15	21	36	243
December	182	27	(s)	28	16	22	37	275
Total	2,440	312	` <b>6</b>	319	184	243	427	3,503

<sup>&</sup>lt;sup>a</sup> Conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate).

tire-derived fuels).

NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/renew.html for all available data beginning in 1973.

Sources: • Biomass: Table 7.4b. • All Other Data: Tables 7.2b and A6.

<sup>&</sup>lt;sup>b</sup> Geothermal electricity net generation (converted to Btu using the geothermal energy plants heat rate).

<sup>&</sup>lt;sup>c</sup> Solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate).

<sup>&</sup>lt;sup>d</sup> Wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate).

e Wood and wood-derived fuels.

f Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

 $<sup>^{\</sup>rm g}$  Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

Table 10.3 Fuel Ethanol Overview

	Feed- stock <sup>a</sup>	Losses and Co- products <sup>b</sup>	Produ	ction	Net Im	ports <sup>c</sup>	Stocksd	Stock C	hange <sup>e</sup>	Consur	nption
	TBtu	TBtu	Mbbl	TBtu	Mbbl	TBtu	Mbbl	Mbbl	TBtu	Mbbl	TBtu
1981 Total 1985 Total 1995 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total	13 93 111 200 143 190 206 215 238 259 313 410 497	6 41 48 86 61 81 88 92 101 110 133 174 210	1,978 14,693 17,802 32,325 23,178 30,674 33,453 34,881 38,627 42,028 50,956 66,772 81,058	7 52 63 114 82 109 118 123 137 149 180 236	NA NA 387 313 85 66 87 116 315 306 292 3,542	NA NA NA (s) (s) (s) (s) 1 1 1	NA NA NA 2,186 2,065 2,925 3,406 4,024 3,400 4,298 6,200 5,978 6,002	NA NA NA -207 -121 860 481 618 -624 898 1,902 -222	NA NA NA -1 (s) 3 2 2 2 -2 -3 3 7 -1 (s)	1,978 14,693 17,802 32,919 23,612 29,899 33,038 34,350 39,367 41,445 49,360 67,286 84,576	7 52 63 117 84 106 117 122 139 147 175 238 299
Pebruary	46 42 46 44 45 46 49 48 51 51 53 <b>570</b>	19 18 20 18 19 19 21 21 20 22 21 22 241	7,461 6,847 7,530 7,135 7,357 7,463 8,007 8,050 7,841 8,335 8,259 8,676 <b>92,961</b>	26 24 27 25 26 26 28 28 28 29 29 31	392 13 206 81 211 0 86 201 61 690 702 591 <b>3,234</b>	1 (s) 1 (s) 0 (s) 1 (s) 2 2 2 11	6,142 6,261 6,605 6,861 6,810 6,064 5,398 5,317 5,591 5,723 5,563 <b>5,563</b>	140 119 344 256 -51 -746 -138 -528 -81 274 132 -160 <b>-439</b>	(s) (s) 1 1 (s) -3 (s) -2 (s) 1 (s) -1 -2	7,713 6,741 7,392 6,960 7,619 8,209 8,231 8,779 7,983 8,751 8,829 9,427 <b>96,634</b>	27 24 26 25 27 29 31 28 31 31 33 342
Pebruary	55 52 57 53 56 58 60 63 62 64 64 69 712	23 22 24 22 23 25 25 26 26 27 27 29 301	8,935 8,463 9,333 8,663 9,086 9,531 9,791 10,235 10,088 10,512 10,442 11,215 116,294	32 30 33 31 32 34 35 36 36 37 40 412	132 610 894 905 682 1,550 2,637 3,102 2,268 2,044 1,376 1,208 17,408	(s) 2 3 3 2 5 9 11 8 7 5 4 62	6,099 7,268 8,626 8,990 7,767 6,675 7,706 9,133 9,725 9,723 9,232 8,760 8,760	536 1,169 1,358 364 -1,223 -1,092 1,031 1,427 592 -2 -491 -472 <b>3,197</b>	2 4 5 1 -4 -4 4 5 2 (s) -2 -2 11	8,531 7,904 8,869 9,204 10,991 12,173 11,397 11,910 11,764 12,558 12,309 12,895 130,505	30 28 31 33 39 43 40 42 42 44 44 46 46
Pebruary	R 70 R 65 R 71 R 70 R 75 R 75 R 75 R 78 R 81 R 79 R 84 P 86 91	R 28 R 26 R 29 R 31 R 31 R 32 R 32 R 33 R 32 R 37	11,621 10,795 11,892 111,716 12,573 12,553 13,051 13,458 13,222 14,018 14,356 15,161 <b>154,416</b>	41 38 42 41 44 44 46 48 47 50 51 54 <b>54</b>	1,191 939 711 777 659 852 1,526 1,529 601 985 380 198 <b>10,348</b>	4 3 3 3 2 3 5 5 5 2 3 1 1 3 7	8,593 8,749 8,529 8,791 8,950 9,067 9,696 10,309 11,509 11,423 11,194 10,509	-167 156 -220 262 159 117 629 613 1,200 -86 -229 -685 1,749	-1 1 -1 1 (s) 2 2 4 (s) -1 -2 6	12,966 11,578 12,823 12,231 13,073 13,288 13,948 14,374 12,623 15,089 14,965 16,044 163,002	46 41 45 43 46 47 49 51 45 53 57 577

Total corn and other biomass inputs to the production of fuel ethanol.

Notes: • Mbbl = thousand barrels. TBtu = trillion Btu. • Through 1980, data are not available. For 1981-1992, data are estimates. Beginning in 1993, only data for feedstock and losses and co-products are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/renew.html for all available data beginning in 1981.

Sources: (Note: For production, net imports, stock change, and consumption, data in thousand barrels are converted to trillion Btu by multiplying by the approximate heat content of fuel ethanol—see Table A3.) • Feedstock: Calculated as fuel ethanol production in thousand barrels multiplied by the approximate heat content of fuel ethanol feedstock—see Table A3. • Losses and

Co-products: Calculated as fuel ethanol feedstock minus fuel ethanol production. Production: 1981-1992—Fuel ethanol production is equal to fuel ethanol consumption—see sources for "Consumption." 1993-2004—Calculated as fuel ethanol consumption plus fuel ethanol stock change minus fuel ethanol net imports. These data differ slightly from the original production data from Energy Information Administration (EIA), Form EIA-819, "Monthly Oxygenate Report," and predecessor Administration (EIA), Form EIA-819, "Monthly Oxygenate Report," and predecessor form, which were not reconciled and updated to be consistent with the final balance. 2005 forward—EIA, Form EIA-819, "Monthly Oxygenate Report." • Net Imports, Stocks, and Stock Change: 1992-2006—EIA, Petroleum Supply Annual (PSA), annual reports. 2007—EIA, Petroleum Supply Monthly (PSM), monthly reports. • Consumption: 1981-1989—EIA, Estimates of U.S. Biofuels Consumption 1990, Table 10; and EIA, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), estimates. 1990-1992—EIA, Estimates of U.S. Biomass Energy Consumption 1992, Table D2; and EIA, CNEAF, estimates. 1993-2004—EIA, PSA, annual reports, Tables 2 and 16. Calculated as ten percent of oxygenated finished motor gasoline field production (Table 2), plus fuel ethanol refinery input (Table 16). 2005 and 2006—EIA, PSA, annual reports, Tables 1 and 15. Calculated as motor gasoline blending components adjustments (Table 1), plus finished motor gasoline adjustments (Table 1), plus fuel ethanol refinery and finished motor gasoline adjustments (Table 1), plus fuel ethanol refinery and blender net inputs (Table 15). **2007**—EIA, *PSM*, monthly reports, Tables 1 and 27. Calculated as motor gasoline blending components adjustments (Table 1), plus finished motor gasoline adjustments (Table 1), plus fuel ethanol refinery and blender net inputs (Table 27)

b Losses and co-products from the production of fuel ethanol. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol—these are included in the industrial sector consumption statistics for the appropriate energy source.

<sup>C</sup> Fuel ethanol imports only. Data for fuel ethanol exports are not available.

Stocks are at end of period.

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

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

**Table 10.4 Biodiesel Overview** 

	Feedstock <sup>a</sup>	Losses and Co-products <sup>b</sup>	Produc	tion <sup>c</sup>
	Trillion Btu	Trillion Btu	Thousand Barrels	Trillion Btu
2001 Total	1	(s)	204	1
2002 Total	<u>i</u>	(s)	250	1
2003 Total	2	(s)	338	2
004 Total	4	(s) (s)	666	4
005	4	(-)	404	4
005 January	1	(s)	184	1
February	1	(s)	166	1
March	1	(s)	184	1
April	1	(s)	178	1
May	1	(s)	184	1
June	1	(s)	178	1
July	1	(s)	184	1
August	1	(s)	184	1
September	1	(s)	178	1
October	1	(s)	184	1
November	1	(s)	178	1
December	1	(s)	184	1
Total	12	(s)	2,162	12
006 January	2	(s)	<sup>R</sup> 312	2
February	1	(s)	R 269	1
March	2	(s)	R 368	2
April	2	(s)	R 385	2
May	R 3	(s)	R 531	R 3
June	R 3	(s)	<sup>R</sup> 612	R 3
July	R 3	(s)	R 540	R 3
	R 4	` '	R 689	R 4
August September	R 3	(s) (s)	R 598	R 3
October	R 3		R 549	R3
	R 3	(s)	R 520	R3
November	R3	(s)	R 590	R3
December	R <b>32</b>	(s)	R <b>5.963</b>	R <b>32</b>
Total	``32	(s)	·· 5,963	``32
<b>007</b> January	<sup>R</sup> 3	(s)	<sup>R</sup> 629	R 3
February	R 3	(s)	<sup>R</sup> 555	R 3
March	R 4	(s)	<sup>R</sup> 754	R 4
April	R 4	(s)	<sup>R</sup> 757	R 4
May	<sup>R</sup> 5	(s)	<sup>R</sup> 957	<sup>R</sup> 5
June	<sup>R</sup> 5	(s)	<sup>R</sup> 928	<sup>R</sup> 5
July	<sup>R</sup> 7	(s)	<sup>R</sup> 1,235	<sup>R</sup> 7
August	R 8	(s)	R 1,461	R 8
September	R 6	(s)	R 1.175	R 6
October	R 6	(s)	R 1,157	R 6
November	R 6	(s)	R 1,031	R 6
December	6	(S) (S)	1,052	6
Total	64	(s) 1	11,691	63

<sup>&</sup>lt;sup>a</sup> Total vegetable oil and other biomass inputs to the production of biodiesel.

R=Revised. (s)=Less than 0.5 trillion Btu.

Notes: • Through 2000, data are not available. Beginning in 2001, data are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/renew.html for all available data beginning in 2001.

Sources: • Feedstock: Calculated as biodiesel production in thousand barrels multiplied by the approximate heat content of biodiesel feedstock—see Table A3.

• Losses and Co-products: Calculated as biodiesel feedstock minus biodiesel

production. • Production (Thousand Barrels): 2001-2005—U.S. Department of Agriculture, Commodity Credit Corporation, Bioenergy Program records. Annual data are derived from quarterly data. Monthly data are estimated by dividing the annual data by the number of days in the year and then multiplying by the number of days in the month. 2006—U.S. Department of Commerce, Bureau of the Census, "M311K - Fats and Oils: Production, Consumption, and Stocks," Table 3A, data for soybean oil consumed in methyl esters (biodiesel). In addition, the Energy Information Administration (EIA), Office of Integrated Analysis and Forecasting, estimates that 14.4 million gallons of yellow grease were consumed in methyl esters (biodiesel). EIA assumes that 7.65 pounds of vegetable oil are needed to make one gallon of biodiesel. 2007—U.S. Department of Commerce, Bureau of the Census, "M311K - Fats and Oils: Production, Consumption, and Stocks," Table 3A, data for all fats and oils consumed in methyl esters (biodiesel). EIA assumes that 7.65 pounds of vegetable oil are needed to make one gallon of biodiesel. • Production (Trillion Btu): Data in thousand barrels are converted to trillion Btu

by multiplying by the approximate heat content of biodiesel—see Table A3.

Estimates for 2006 and 2007, which were based on forecasts from EIA's Short-Term Integrated Forecasting System, are revised based on actual 2006 and 2007 data from the U.S. Department of Commerce, as well as EIA estimates for biodiesel from yellow grease in 2006.

b Losses and co-products from the production of biodiesel. Does not include natural gas, electricity, and other non-biomass energy used in the production of biodiesel—these are included in the industrial sector consumption statistics for the appropriate energy source.

appropriate energy source.

<sup>c</sup> Production of biofuels for use as diesel fuel substitutes or additives. Biodiesel consumption equals biodiesel production.

#### **Renewable Energy**

#### Note. Renewable Energy Production and Consump-

In Table 10.1, renewable energy consumption consists of: conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the geothermal plants heat rate), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; fuel ethanol and biodiesel consumption; and losses and co-products from the production of fuel ethanol and biodiesel. Production is assumed to equal consumption for all renewable energy sources except biofuels (biofuels production comprises biomass inputs to the production of fuel ethanol and biodiesel).

#### **Table 10.2a Sources**

#### Residential Sector, Geothermal

Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

#### Residential Sector, Solar/PV

Energy Information Administration (EIA), Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), estimates based on Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey," and Form EIA-63B, "Annual Photovoltaic Module/Cell Manufacturers Survey." Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

#### Residential Sector, Wood

1973–1979: EIA, Estimates of U.S. Wood Energy Consumption from 1949 to 1981, Table A2.

1980 forward: EIA, Form EIA-457, "Residential Energy Consumption Survey"; and EIA, CNEAF, estimates based on Form EIA-457 and regional heating degree-day data. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

#### Commercial Sector, Hydroelectric Power

EIA, *Monthly Energy Review (MER)*, Tables 7.2a–7.2c and A6. Calculated as total conventional hydroelectric power minus conventional hydroelectric power in the electric power and industrial sectors, multiplied by the fossil-fueled plants heat rate.

#### Commercial Sector, Geothermal

Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

#### Commercial Sector, Wood

1973–1979: EIA, Estimates of U.S. Wood Energy Consumption from 1949 to 1981, Table A2.

1980–1983: EIA, Estimates of U.S. Wood Energy Consumption 1980-1983, Table ES1.

1984: EIA, CNEAF, estimate.

1985–1988: Values interpolated.

1989 forward: EIA, *MER*, Tables 7.4a–c; and EIA, CNEAF, estimates based on Form EIA-871, "Commercial Buildings Energy Consumption Survey." Data for wood consumption at commercial combined-heat-and-power (CHP) plants are calculated as total wood consumption at electricity-only and CHP plants (*MER*, Table 7.4a) minus wood consumption in the electric power sector (*MER*, Table 7.4b) and at industrial CHP plants (*MER*, Table 7.4c). Annual estimates for wood consumption at other commercial plants are based on Form EIA-871 (the annual estimate for the current year is set equal to that of the previous year); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

#### **Commercial Sector, Biomass Waste**

EIA, MER, Table 7.4c.

#### **Commercial Sector, Fuel Ethanol**

EIA, *MER*, Tables 3.5, 3.7a, and 10.3. Calculated as commercial sector motor gasoline consumption (Table 3.7a) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol consumption (Table 10.3).

#### **Table 10.2b Sources**

#### **Industrial Sector, Hydroelectric Power**

Energy Information Administration (EIA), *MER* Tables 7.2c and A6.

#### **Industrial Sector, Geothermal**

Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

#### **Industrial Sector, Wood**

1973–1979: EIA, Estimates of U.S. Wood Energy Consumption from 1949 to 1981, Table A2.

1980–1983: EIA, Estimates of U.S. Wood Energy Consumption 1980-1983, Table ES1.

1984: EIA, Estimates of U.S. Biofuels Consumption 1990, Table 1.

1985 and 1986: Values interpolated.

1987: EIA, Estimates of Biofuels Consumption in the United States During 1987, Table 2.

1988: Value interpolated.

1989 forward: EIA, *MER*, Table 7.4c; and EIA, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), estimates based on Form EIA-846, "Manufacturing Energy Consumption Survey." Data for wood consumption at industrial combined-heat-and-power (CHP) plants are from *MER*, Table 7.4c. Annual estimates for wood consumption at other industrial plants are based on Form-EIA-846 (the annual estimate for the current year is set equal to that of the previous year); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

#### **Industrial Sector, Biomass Waste**

1981: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, *MER*, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1982 and 1983: EIA, CNEAF, estimates for total waste consumption; and EIA, *MER*, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1984: EIA, Estimates of U.S. Biofuels Consumption 1990, Table 8; and EIA, MER, Table 10.2c. Estimates are

calculated as total waste consumption minus electric power sector waste consumption.

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, *MER*, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1988: Value interpolated.

1989 forward: EIA, MER, Table 7.4c; and EIA, CNEAF, estimates based on information presented in Government Advisory Associates, Resource Recovery Yearbook and Methane Recovery Yearbook, and information provided by the U.S. Environmental Protection Agency, Landfill Methane Outreach Program. Data for waste consumption at industrial CHP plants are from MER, Table 7.4c. Annual estimates for waste consumption at other industrial plants are based on the non-EIA sources listed above (the annual estimate for the current year is set equal to that of the previous year); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

#### **Industrial Sector, Fuel Ethanol**

EIA, *MER*, Tables 3.5, 3.7b, and 10.3. Calculated as industrial sector motor gasoline consumption (Table 3.7b) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol consumption (Table 10.3).

#### **Industrial Sector, Losses and Co-products**

EIA, MER, Tables 10.3 and 10.4.

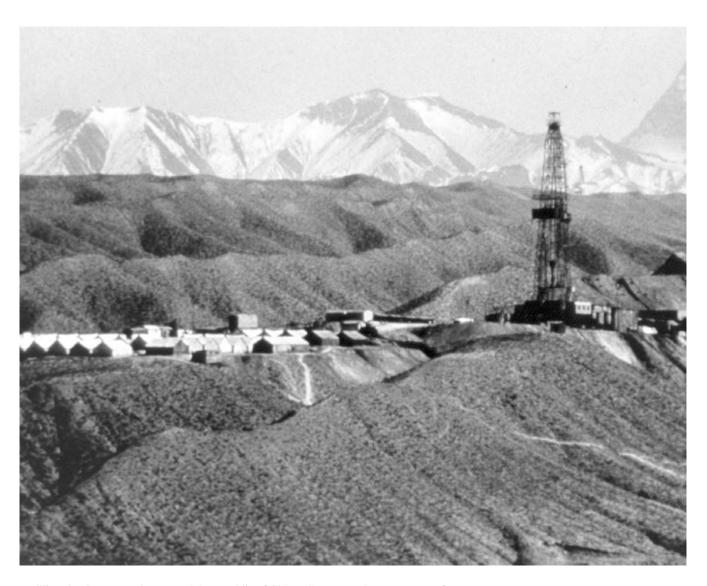
#### **Transportation Sector, Fuel Ethanol**

EIA, *MER*, Tables 3.5, 3.7c, and 10.3. Calculated as transportation sector motor gasoline consumption (Table 3.7c) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol consumption (Table 10.3).

#### **Transportation Sector, Biodiesel**

EIA, *MER*, Table 10.4. Transportation sector biodiesel consumption is set equal to biodiesel production.

# International Petroleum



Drilling rig, Gansu Province, People's Republic of China. Source: U.S. Department of Energy.

Table 11.1a World Crude Oil Production: OPEC Members

(Thousand Barrels per Day)

	Algeria	Angola	Indo- nesia	Iran	Iraq	Kuwait <sup>a</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>a</sup>	United Arab Emirates	Vene- zuela	OPEC <sup>b,c</sup>
1973 Average	1.097	162	1,339	5,861	2,018	3,020	2,175	2.054	570	7,596	1,533	3,366	30.791
1975 Average	983	165	1,307	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	26,936
1980 Average	1,106	150	1,577	1,662	2,514	1,656	1,787	2,055	472	9,900	1,709	2,168	26,756
1985 Average	1,037	231	1,325	2,250	1,433	1,023	1,059	1,495	301	3,388	1,193	1,677	16,412
1990 Average	1,175	475	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,670
1995 Average	1,202	646	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	26,650
1996 Average	1,242	709	1,547	3,686	579	2,062	1,401	2,001	510	8,218	2,278	2,938	27,170
1997 Average	1,277	714	1,520	3,664	1,155	2,007	1,446	2,132	550	8,362	2,316	3,280	28,424
1998 Average	1,246	735	1,518	3,634	2,150	2,085	1,390	2,153	696	8,389	2,345	3,167	29,509
1999 Average	1,202	745	1,472	3,557	2,508	1,898	1,319	2,130	665	7,833	2,169	2,826	28,324
2000 Average 2001 Average	1,254 1,310	746 742	1,428 1.340	3,696 3,724	2,571 2,390	2,079 1.998	1,410 1,367	2,165 2,256	737 714	8,404 8.031	2,368 2,205	3,155 3.010	30,013 29.087
2002 Average	1,316	896	1,249	3,444	2,023	1,894	1,307	2,230	679	7,634	2,203	2,604	27,249
2003 Average	1,611	903	1,155	3,743	1,308	2,136	1,421	2,275	715	8,775	2,348	2,335	28,725
2004 Average	1,677	1,052	1,096	4,001	2,011	2,376	1,515	2,329	783	9,101	2,478	2,557	30,975
2005 January	1,750	1,110	1,093	4,060	1,903	2,450	1,600	2,430	835	9,500	2,502	2,640	31,873
February	1,755	1,120	1,083	4,080	1,903	2,500	1,600	2,480	835	9,500	2,502	2,640	31,998
March	1,775	1,140	1,076	4,080	1,903	2,500	1,620	2,580	835	9,500	2,552	2,640	32,201
April	1,775	1,150	1,060	4,090	1,903	2,500	1,625	2,640	835	9,600	2,602	2,540	32,320
May	1,775	1,170	1,072	4,100	1,903	2,500	1,630	2,690	835	9,600	2,402	2,540	32,217
June	1,805	1,169	1,064	4,210	1,903	2,500	1,635	2,695	835	9,600	2,402	2,540	32,358
July	1,805 1,825	1,211 1,356	1,068 1,068	4,220 4,230	2,003 1,903	2,500 2,500	1,635 1,650	2,695 2,590	835 835	9,600 9,600	2,502 2,552	2,540 2,540	32,614 32,649
August September	1,825	1,400	1,056	4,230 4,190	2,053	2,600	1,650	2,635	835	9,600	2,552	2,540	32,649
October	1,825	1,360	1,052	4,150	1,803	2,600	1,650	2,695	835	9.500	2,602	2,540	32,612
November	1,825	1,400	1,055	4,150	1,703	2,600	1,650	2,695	835	9,500	2,602	2,540	32,555
December	1,825	1,410	1,055	4,100	1,653	2,600	1,650	2,695	835	9,500	2,602	2,540	32,465
Average	1,797	1,250	1,067	4,139	1,878	2,529	1,633	2,627	835	9,550	2,535	2,565	32,406
2006 January	1,825	1,420	1,045	4,100	1,603	2,600	1,650	2,560	835	9,400	2,602	2,540	32,180
February	1,825	1,420	1,050	4,050	1,803	2,550	1,650	2,410	835	9,500	2,602	2,540	32,235
March	1,825	1,420	1,043	4,000	1,903	2,525	1,680	2,370	835	9,350	2,602	2,540	32,093
April	1,825	1,420	1,035	4,000	1,903	2,525	1,690	2,370	835	9,350	2,602	2,540	32,095
May	1,785 1.795	1,320 1.285	1,038 1.027	3,950 4.030	1,903 2.153	2,525 2.550	1,700	2,370 2.465	835 835	9,200 9.100	2,602 2.602	2,540 2.540	31,768 32.082
June	1,795	1,460	1,027	4,030	2,153	2,550	1,700 1,700	2,465	855	9,100	2,702	2,340	32,062
July August	1,805	1,460	1,020	4,035	2,203	2,550	1,700	2,380	885	9,300	2,702	2,440	32,430
September	1,835	1,438	1,005	4,035	2,153	2,550	1,700	2,430	885	9,000	2,702	2,490	32,223
October	1,835	1,376	985	4,060	2,103	2,550	1,700	2,530	885	8,800	2,702	2,490	32,016
November	1,805	1,452	985	4,020	2,003	2,500	1,650	2,480	845	8,800	2,602	2,490	31,632
December	1,805	1,484	985	4,020	2,003	2,450	1,650	2,480	835	8,750	2,602	2,490	31,554
Average	1,814	1,413	1,019	4,028	1,996	2,535	1,681	2,440	850	9,152	2,636	2,511	32,075
<b>2007</b> January	1,838	1,584	988	4,040	1,753	2,450	1,680	2,365	835	8,750	2,613	2,380	31,277
February	1,833	1,600	984	3,900	2,003	2,420	1,680	2,390	825	8,600	2,573	2,383	31,191
March	1,829	1,640	969	3,900	2,053	2,420	1,680	2,275	825	8,600	2,612	2,445	31,247
April	1,825	1,679	965 965	3,900	2,103	2,420	1,680 1,680	2,400	825 825	8,600	2,611	2,445	31,452
May	1,821 1,828	1,695 1,680	965 958	3,900 3,900	2,103 2,003	2,420 2,420	1,680 1,680	2,240 2,230	825 835	8,600 8,600	2,611 2,610	2,444 2.444	31,304 31,189
June July	1,828	1,710	956 953	3,900	2,003	2,420	1,700	2,230	865	8,600	2,610	2,444	31,169
August	1,824	1,710	952	3,900	1,903	2,443	1,700	2,380	865	8,600	2,659	2,444	31,456
September	1,831	1,791	950	3,900	2,203	2,500	1,700	2,380	865	8,800	2,709	2,440	32,089
October	1,842	1,889	960	3,940	2,303	2,500	1,740	2,330	869	8,800	2,711	2,440	32,324
November	1,852	1,940	960	3,940	2,253	2,520	1,740	2,400	883	9,000	2,242	2,440	32,169
December	1,852	1,986	960	3,940	2,303	2,550	1,740	2,430	888	9,100	2,659	2,440	32,847
Average	1,834	1,744	964	3,922	2,086	2,464	1,702	2,350	851	8,722	2,603	2,433	31,673

<sup>&</sup>lt;sup>a</sup> Except for the period from August 1990 through May 1991, includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In December 2007, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 540 thousand barrels per day.

Description of the Petroleum Exporting Countries.

Current members of OPEC are Algeria, Angola, Indonesia, Iran, Iraq, Kuwait,

and 1994, respectively, are excluded from all OPEC totals.

Notes:

Crude oil includes lease condensate but excludes natural gas plant liquids.

Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly

data are not available.

Web Page: See http://www.eia.doe.gov/emeu/mer/inter.html for all available data beginning in 1973.

Sources: See end of section.

Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. Ecuador and Gabon, which withdrew from OPEC membership at the end of 1992

Table 11.1b World Crude Oil Production: Persian Gulf Nations, Non-OPEC, and World (Thousand Barrels per Day)

	Danaian.				Selected	l Non-OPE	Ca Produce	rs			Tatal	
	Persian Gulf Nations <sup>b</sup>	Canada	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States	Total Non- OPEC <sup>a</sup>	World
1973 Average	20,668	1,798	1,090	165	465	32	8,324	NA	2	9,208	24,888	55,679
1975 Average		1,430	1,490	235	705	189	9,523	NA	12	8,375	25,892	52,828
1980 Average	17,961	1,435	2,114	595	1,936	486	11,706	NA	1,622	8,597	32,802	59,558
1985 Average	9,630	1,471	2,505	887	2,745	773	11,585	NA	2,530	8,971	37,554	53,966
1990 Average	,	1,553	2,774	873	2,553	1,630	10,975	NA	1,820	7,355	36,822	60,492
1995 Average		1.805	2,990	920	2.618	2,766		5,995	2,489	6,560	35,735	62,385
1996 Average	,	1,837	3,131	922	2.855	3.091		5.850	2,568	6,465	36,582	63.752
1997 Average	,	1,922	3,200	856	3.023	3,142		5,920	2,518	6,452	37,320	65.744
1998 Average		1,981	3,198	834	3,070	3,011		5,854	2,616	6,252	37,456	66,966
1999 Average		1,907	3,195	852	2,906	3,019		6,079	2,684	5,881	37,599	65,922
2000 Average		1,977	3,249	768	3.012	3,222		6.479	2,275	5.822	38,482	68,495
2001 Average	,	2,029	3,300	720	3,127	3,226		6,917	2,282	5,801	39,014	68,101
ū	- ,	2,171	3,390	715	3,177	3,131		7.408	2,292	5.746	39,919	67,168
2002 Average	, -	2,306		713	3,371			,		5,681		
2003 Average			3,409			3,042		8,132	2,093		40,724	69,448
2004 Average	20,787	2,398	3,485	673	3,383	2,954		8,805	1,845	5,419	41,537	72,512
2005 January		2,330	3,561	658	3,351	2,720		8,870	1,775	5,441	41,358	73,231
February	21,355	2,298	3,570	658	3,349	2,809		8,920	1,771	5,494	41,516	73,514
March	21,405	2,172	3,594	662	3,252	2,867		8,925	1,802	5,601	41,641	73,842
April	21,565	2,300	3,584	659	3,409	2,864		8,888	1,771	5,556	41,820	74,140
May	21,375	2,360	3,611	656	3,441	2,795		8,900	1,743	5,581	42,082	74,298
June	21,485	2,330	3,646	656	3,425	2,398		9,026	1,643	5,460	41,558	73,916
July		2,339	3,654	658	3,082	2,715		8,990	1,625	5,240	41,143	73,757
August		2,372	3,668	655	3,414	2,643		9,140	1,342	5,218	41,169	73,818
September		2,262	3,623	659	3,367	2,663		9,170	1,518	4,204	40,413	73,399
October		2,462	3.649	664	3,221	2.577		9,230	1,612	4.534	40.885	73,497
November		2,548	3,621	667	3,311	2,645		9,210	1,543	4,837	41.425	73,980
December	, -	2,645	3,520	647	3,388	2,683		9,240	1,645	4,984	41,803	74,268
Average	,	2,369	3,609	658	3,334	2,698		9,043	1,649	5,178	41,401	73,807
2006 January	21.175	2,595	3.670	654	3,372	2.657		9.030	1.707	5.106	41.579	73.759
2006 January			- ,		,	,		-,	, -	-,	,	-,
February		2,504	3,662	657	3,311	2,620		9,040	1,639	5,045	41,412	73,647
March		2,411	3,710	651	3,350	2,610		9,150	1,597	5,045	41,396	73,489
April		2,531	3,680	663	3,370	2,407		9,170	1,590	5,128	41,496	73,591
May		2,341	3,712	655	3,329	2,535		9,190	1,500	5,161	41,386	73,154
June		2,336	3,700	607	3,287	2,365		9,260	1,392	5,160	40,979	73,061
July		2,512	3,716	620	3,232	2,571		9,240	1,453	5,102	41,627	74,076
August		2,543	3,660	630	3,252	2,430		9,330	1,202	5,059	41,179	73,754
September		2,601	3,649	640	3,258	2,338		9,350	1,354	5,037	41,242	73,465
October		2,602	3,650	660	3,173	2,380		9,450	1,482	5,106	41,793	73,809
November	20,805	2,658	3,672	615	3,163	2,466		9,320	1,504	5,105	41,805	73,437
December	20,695	2,669	3,592	619	2,978	2,508		9,420	1,472	5,166	41,664	73,218
Average	21,232	2,525	3,673	639	3,256	2,491		9,247	1,490	5,102	41,464	73,539
<b>2007</b> January	20.476	2,578	3,811	616	3,143	2.431		9.420	1.510	<sup>E</sup> 5.196	41.857	73,133
February	-, -	2.618	3.739	614	3.148	2,454		9.460	1.654	E 5,147	42.124	73.315
March		2,694	3,685	612	3,182	2,391		9,473	1,554	E 5,178	41,993	73,240
April		2,634	3,749	609	3,182	2,427		9,369	1,566	E 5,218	42,067	73,520
May		2,585	3,781	649	3,110	2,181		9,390	1,564	E 5.240	41,680	72,985
June	,	2,580	3,761	679	3,206	1,921		9,440	1,495	E 5,139	41,521	72,965
	,		- ,							E 5,120	R 41,666	R 73,154
July		2,572	3,643	679	3,166	2,327		9,460	1,436			
August		2,709	3,746	679	2,843	2,135		9,390	1,228	E 4,976	R 41,003	R 72,459
September		2,670	3,716	679	3,161	2,190		9,520	1,381	E 4,899	R 41,229	R 73,318
October		2,592	3,722	609	2,995	2,273		9,500	1,507	E 5,038	R 41,614	R 73,938
November		2,594	3,727	609	2,901	2,287		9,425	1,409	E 5,006	R 41,582	R 73,751
December		2,515	3,607	609	2,954	2,235		9,400	1,436	E 5,072	41,355	74,202
Average	20,682	2,611	3,729	637	3,082	2,270		9,437	1,477	<sup>E</sup> 5,103	41,637	73,310

annual totals because of rounding or because updates to the preliminary monthly data are not available.

• Data for countries may not sum to World totals due to independent rounding.

• U.S. geographic coverage is the 50 States and the District of Columbia.

 <sup>&</sup>lt;sup>a</sup> Organization of the Petroleum Exporting Countries.
 <sup>b</sup> The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

R=Revised. NA=Not available. -- =Not applicable. E=Estimate.

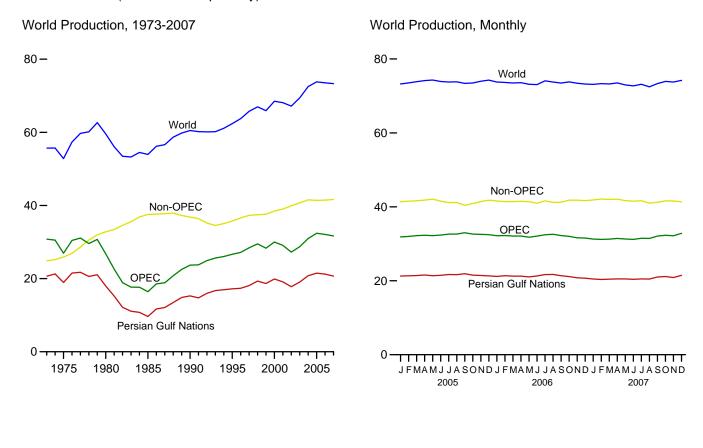
Notes: • Crude oil includes lease condensate but excludes natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the

Web Page: See http://www.eia.doe.gov/emeu/mer/inter.html for all available data beginning in 1973.

Sources: See end of section.

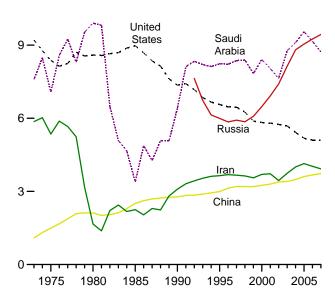
Figure 11.1a World Crude Oil Production Overview

(Million Barrels per Day)



Selected Producers, 1973-2007

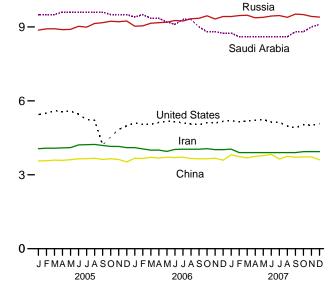
12-



Notes: • OPEC is the Organization of the Petroleum Exporting Countries.
• The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

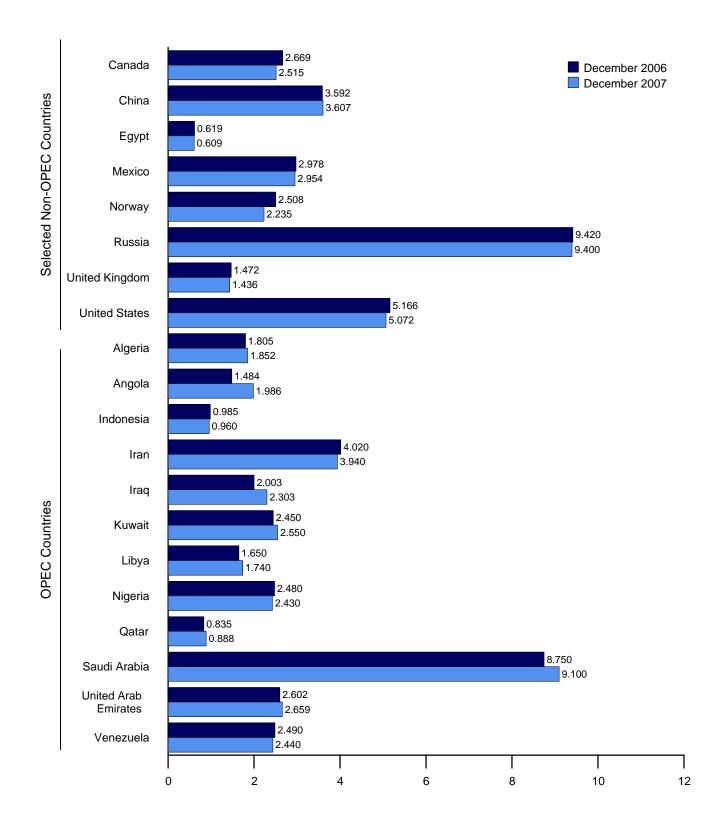
#### Selected Producers, Monthly

12**-**



• Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/inter.html. Sources: Tables 11.1a and 11.1b.

Figure 11.1b World Crude Oil Production by Selected Country (Million Barrels per Day)

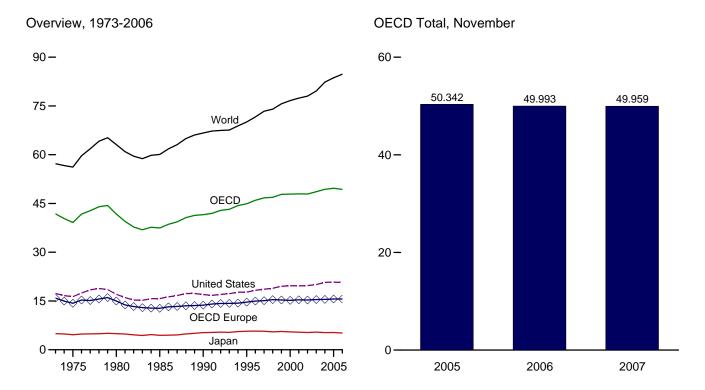


Note: OPEC is the Organization of the Petroleum Exporting Countries.

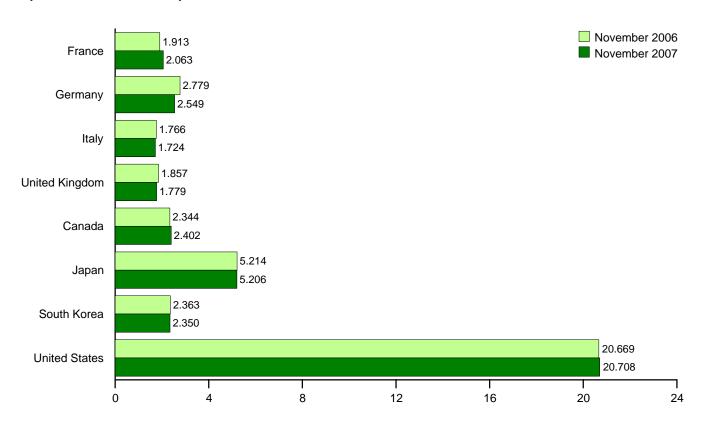
Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.

Sources: Tables 11.1a and 11.1b.

Figure 11.2 Petroleum Consumption in OECD Countries (Million Barrels per Day)



#### By Selected OECD Country



Notes: • OECD is the Organization for Economic Cooperation and Development. • Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/inter.html. Source: Table 11.2.

**Table 11.2 Petroleum Consumption in OECD Countries** 

(Thousand Barrels per Day)

				United	OECD			South	United	Other		
	France	Germanya	Italy	Kingdom	Europeb	Canada	Japan	Korea	States	OECDc	<b>OECD</b> d	World
1973 Average	2,601	3,324	2,068	2,341	15,879	1,729	4,949	281	17,308	1,658	41,804	57,237
1975 Average	2,252	2,957	1,855	1,911	14,314	1,779	4,621	311	16,322	1,794	39,141	56,198
1980 Average	2,256	3,082	1,934	1,725	14,995	1,873	4,960	537	17,056	2,342	41,763	63,114
1985 Average	1,753	2,651	1,705	1,617	12,772	1,526	4,436	552	15,726	2,469	37,481	60,085
1990 Average	1,826	2,682	1,874	1,776	13,719	1,733	5,272	1,048	16,988	2,804	41,564	66,676
1995 Average	1,919 1.949	2,882 2.922	1,942	1,816	14,664	1,811	5,694	2,008	17,725	3,001	44,902	70,067
1996 Average			1,920	1,852	14,968	1,864	5,740	2,101	18,309	2,996	45,978	71,627
1997 Average	1,969 2,040	2,917 2,923	1,934 1,941	1,804 1,792	15,106 15,419	1,952 1,943	5,697 5,498	2,255 1,917	18,620 18,917	3,091 3,192	46,721 46,886	73,372 74,004
1998 Average1999 Average	2,029	2,838	1,891	1,797	15,325	2,027	5,615	2,084	19,519	3,236	47,806	75,664
2000 Average	2,001	2,772	1,854	1,759	15,189	2,027	5,495	2,135	19,701	3,326	47,874	76,660
2001 Average	2,052	2,815	1,837	1,744	15,373	2,057	5,394	2,132	19,649	3,341	47,946	77,402
2002 Average	1,983	2,722	1,870	1,731	15,307	2,078	5,301	2,149	19,761	3,294	47,892	78,038
2003 Average	1,999	2.679	1,873	1,759	15,445	2,207	5,416	2,175	20,034	3,328	48.605	79,613
2004 Average	2,006	2,665	1,794	1,799	15,487	2,300	5,291	2,155	20,731	3,396	49,360	82,333
2005 January	1,964	2,474	1,695	1,841	15,154	2,381	5,792	2,458	20,694	3,374	49,853	NA
February	2,209	2,706	1,861	1,853	16,203	2,390	6,211	2,344	20,830	3,428	51,406	NA
March	2,120	2,543	1,839	1,857	15,848	2,291	5,991	2,453	21,009	3,450	51,042	NA
April	1,907	2,571	1,753	1,775	15,314	2,131	5,116	2,183	20,137	3,604	48,485	NA
May	1,872	2,610	1,675	1,794	15,022	2,261	4,533	1,973	20,606	3,416	47,810	NA
June	1,969	2,540	1,712	1,831	15,458	2,304	4,989	2,092	21,198	3,524	49,566	NA
July	1,934	2,615	1,761	1,806	15,211	2,251	4,926	1,929	20,939	3,289	48,547	NA
August	1,994	2,885	1,605	1,822	15,770	2,360	4,952	2,057	21,666	3,433	50,238	NA
September	2,048	2,852	1,759	1,886	16,024	2,222	5,014	2,082	20,142	3,421	48,905	NA
October	1,859	2,691	1,733	1,785	15,408	2,251	4,681	1,954	20,253	3,289	47,835	NA
November	1,993	2,770 2,519	1,807 1,871	1,878 1,886	16,110	2,421 2,306	5,270	2,282 2,500	20,623 21,495	3,636 3,635	50,342	NA NA
December Average	2,011 <b>1,988</b>	2,647	1,755	1,834	15,882 <b>15,611</b>	2,306 <b>2,297</b>	6,246 <b>5,305</b>	2,500 <b>2,191</b>	20,802	3,458	52,063 <b>49,664</b>	83,655
2006 January	2,066	2,524	1,749	1,830	15,459	2,170	5,952	2,396	20,436	3,436	49,849	NA
February	2,120	2,637	1,997	1,863	16,163	2,323	6,086	2,286	20,577	3,415	50,850	NA
March	2.084	2,650	1,928	2,034	16,268	2,286	5,662	2,199	20,608	3,554	50,578	NA
April	1,879	2,487	1,595	1,747	14,695	2,120	5,060	2,006	20,201	3,368	47,450	NA
May	1,808	2,666	1,668	1,857	15,257	2,170	4,394	2,049	20,457	3,368	47,695	NA
June	1,937	2,619	1,690	1,863	15,731	2,296	4,715	2,077	20,982	3,450	49,251	NA
July	1,947	2,601	1,711	1,757	15,363	2,308	4,941	1,908	20,740	3,317	48,577	NA
August	1,864	2,747	1,579	1,770	15,454	2,368	4,789	2,102	21,434	3,460	49,607	NA
September	1,994	2,923	1,750	1,804	15,999	2,257	4,499	2,109	20,559	3,313	48,736	NA
October	2,044	2,794	1,690	1,774	16,010	R 2,265	4,738	2,060	20,769	3,339	R 49,180	NA
November	1,913	2,779	1,766	1,857	15,932	2,344	5,214	2,363	20,669	3,471	49,993	NA
December	1,890	2,556	1,686	1,811	15,229	2,260	5,915	2,537	20,795	3,518	50,255	_ NA
Average	1,961	2,665	1,732	1,830	15,626	R 2,264	5,159	2,174	20,687	3,418	R 49,328	R 84,769
2007 January	2,033	2,314	1,614	1,827	R 15,018	2,272	5,214	2,390	20,559	3,366	R 48,818	NA
February	1,954	2,379	1,756	1,787	R 15,318	2,448	5,562	2,387	21,271	3,421	R 50,408	NA
March	1,923	2,483	1,712	1,786	R 15,316	2,307	5,404	2,282	20,529	3,530	R 49,367	NA
April	1,854	2,343	1,631	1,776	R 14,776	2,198	4,876	2,215	20,579	3,302	R 47,946	NA
May	1,788	2,393	1,704	1,801	R 14,926	2,315	4,405	2,071	20,631	3,497	R 47,845	NA
June	1,900	2,456 2,500	1,670	1,766 1,775	<sup>R</sup> 15,170 <sup>R</sup> 15,367	2,323	4,568	2,063 2,047	20,737	3,579 3,522	<sup>R</sup> 48,440 <sup>R</sup> 48,557	NA NA
July	1,941 1.908	2,500 2.581	1,687 1,552	1,775	R 15,367	2,416 R 2,398	4,564 4,597	2,047	20,641 21,051	3,522	R 48,557	NA NA
August September	1,908	2,603	1,552 1,651	1,763	R 15,607	R 2,337	4,597 4,860	2,091	20,385	3,388	R 48,507	NA NA
October	2.128	2,702	1,748	1,742	R 16,120	R 2,350	4,793	2,027	20,365	R 3,572	R 49,499	NA NA
November	2,063	2,702	1,724	1,779	15,808	2,402	5,206	2,350	20,708	3,485	49,959	NA
11-Month Average	1,947	2,483	1,677	1,774	15,333	2,342	4,908	2,192	20,682	3,451	48,908	NA
2006 11-Month Average	1,968	2,675	1,737	1,832	15,663	2,264	5,089	2,140	20,677	3,408	49,242	NA

<sup>&</sup>lt;sup>a</sup> Data are for unified Germany, i.e., the former East Germany and West

Web Page: See http://www.eia.doe.gov/emeu/mer/inter.html for all available data beginning in 1973.

Sources: • United States: Table 3.1. • U.S. Territories: 1983 forward—Energy Information Administration (EIA), International Energy Database.

• East Germany, Former Czechoslavakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries, and World: 1973-1979—EIA, International Energy Database.

1980-1983—EIA, International Energy Annual 2005, August 2007, Table 1.2. • Non-OECD Countries: 1984-2005—EIA, International Energy Annual 2005, August 2007, Table 1.2. 2006—EIA, Short Term Energy Outlook, November 2007. • World: 1984-2006—Sum of OECD and Non-OECD Countries. • All Other Data: 1973-1981—International Energy Annual 2005, August 2007, Table 3.2. 2006—EIA, Short Term Energy Outlook, November 2007. • World: 1984-2006—Sum of OECD and Non-OECD Countries. • All Other Data: 1973-1981—International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances in OECD Countries, various issues.

1982-1983—IEA, Monthly Oil and Gas Statistics Database. 1984 forward—IEA, Monthly Oil Data Service, February 13, 2008.

Germany.

b "OECD Europe" consists of Austria, Belgium, Czech Republic, Denmark,

Lupany Ireland, Ireland, Italy, Luxembourg, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

© "Other OECD" consists of Australia, Mexico, New Zealand, and the U.S.

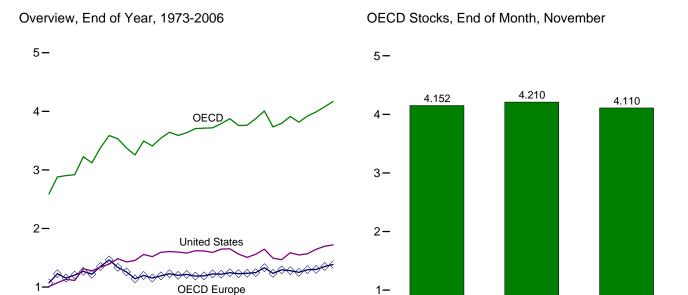
Territories.

<sup>d</sup> The Organization for Economic Cooperation and Development (OECD) consists of "OECD Europe," Canada, Japan, South Korea, the United States, and "Other OECD."

R=Revised. NA=Not available.

Notes: • Totals may not equal sum of components due to independent unding. • U.S. geographic coverage is the 50 States and the District of rounding. Columbia.

Figure 11.3 Petroleum Stocks in OECD Countries (Billion Barrels)



0.

2005

2006

2007

By Selected OECD Country, End of Month

1985

1980

1975

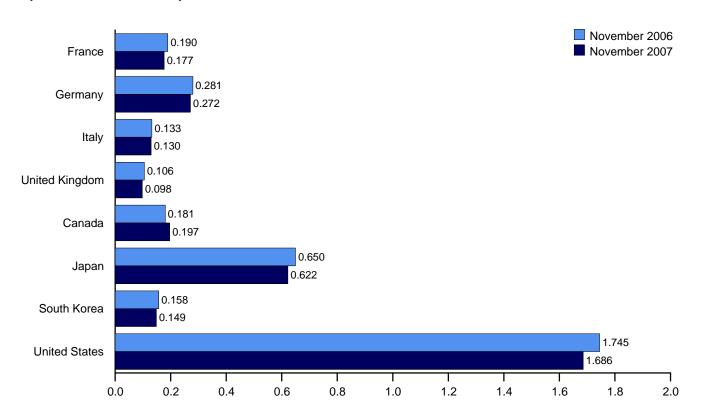
Japan

1995

2000

2005

1990



Note: OECD is the Organization for Economic Cooperation and Development.

Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.

Source: Table 11.3.

Table 11.3 Petroleum Stocks in OECD Countries

(Million Barrels)

	France	Germany <sup>a</sup>	Italy	United Kingdom	OECD Europe <sup>b</sup>	Canada	Japan	South Korea	United States	Other OECD <sup>c</sup>	<b>OECD</b> d
							_				
1973 Year	201	181	152	156	1,070	140	303	NA	1,008	67	2,588
1975 Year	225	187	143	165	1,154	174	375	NA	1,133	67	2,903
1980 Year	243	319	170	168	1,464	164	495	NA	1,392	72	3,587
1985 Year	139	277	156	131	1,154	112	500	13	1,519	110	3,408
1990 Year	143	280	143	103	1,188	143	572	64	1,621	117	3,706
1995 Year	155	302	141	101	1,228	132	631	92	1,563	113	3,758
1996 Year	154	303	135	103	1,235	127	651	123	1,507	118	3,762
1997 Year	161	299	129	100	1,246	144	685	124	1,560	115	3,875
1998 Year	169	323	135	104	1,331	139	649	129	1,647	111	4.006
1999 Year	160	290	130	101	1,233	142	629	132	1,493	105	3,733
2000 Year	170	272	140	100	1,294	144	634	140	1,468	117	3,796
2001 Year	165	273	134	113	1,281	156	634	143	1.586	112	3.912
2002 Year	175	253	138	104	1,252	157	615	140	1,548	103	3,815
2003 Year	185	273	135	100	1,296	170	636	155	1,568	96	3,921
2004 Year	186	267	136	101	1,301	160	635	149	1,645	99	3,990
2005 January	187	276	139	100	1,322	160	642	147	1,647	107	4,024
February	188	273	136	102	1,315	166	617	143	1,663	106	4.010
March	187	280	134	98	1,328	163	605	137	1,661	104	3,998
April	189	280	131	102	1,329	164	606	139	1,702	101	4,042
May	197	280	132	104	1,355	165	624	151	1,730	104	4,128
June	186	279	132	99	1,326	164	629	142	1,740	104	4,110
July	191	278	131	99	1,347	168	640	151	1,743	106	4,156
	193	276 276	136	103	1,347	168	645	151	1,743	94	4,136
August	193	276 276	137	105	1,351	168	638	145	1,716	112	4,125 4,125
September	202	279	137	106		173	649	151			
October	198	279 274			1,364				1,716	111	4,165
November  December	196 196	274 283	135 <b>132</b>	101 <b>95</b>	1,352 <b>1,351</b>	180 <b>178</b>	639 <b>612</b>	144 <b>135</b>	1,729 <b>1,698</b>	108 <b>104</b>	4,152 <b>4,078</b>
December	130	203	132	33	1,331	170	012	133	1,030	104	4,070
2006 January	197	286	128	102	1,378	180	604	138	1,713	103	4,115
February	192	283	135	104	1,377	178	600	142	1,719	104	4,120
March	196	280	132	97	1,356	171	620	137	1,691	103	4,078
April	196	283	132	102	1,361	174	618	144	1,700	108	4,106
May	194	280	130	105	1,367	170	634	152	1,724	106	4,154
June	189	283	126	99	1,356	172	627	155	1,729	108	4,146
July	192	284	131	99	1,376	177	631	158	1,743	112	4,197
August	198	281	133	98	1,375	182	641	159	1,763	107	4,227
September	188	282	134	97	1,369	185	649	160	1,785	109	4,258
October	188	282	130	103	1,363	183	654	156	1,769	110	4,235
November	190	281	133	106	1,368	181	650	158	1,745	108	4,210
December	192	283	133	109	1,387	180	631	152	1,720	103	4,172
2007 January	186	285	128	105	1,378	183	643	153	1,723	105	4,185
February	188	292	135	105	1,395	181	636	147	1,666	103	R 4,128
March	177	291	134	106	1,368	182	620	156	1,677	101	R 4,105
April	190	291	135	105	R 1,384	187	619	149	1,688	107	R 4.135
May	189	288	132	106	R 1.386	183	616	159	1,719	109	R 4,172
June	186	286	133	101	1,370	190	622	158	1,719	112	R 4.181
July	187	282	132	102	R 1.378	R 195	632	165	1,735	108	R 4,212
August	187	280	134	102	1,376	R 201	641	157	1,733	105	R 4.198
September	187	278	134	99	R 1.371	R 195	630	157	1,718	105	R 4,179
October	176	275 275	132	R 103	1,346	R 201	629	159	1,719	R 112	R 4,179
	176	275 272	132	98	1,346	197	629	149	1,707	106	4,110
November	177	212	130	90	1,330	191	022	149	1,000	100	4,110

<sup>&</sup>lt;sup>a</sup> Through December 1983, the data for Germany are for the former West Germany only. Beginning with January 1984, the data for Germany are for the

R=Revised. NA=Not available.

Notes: • Stocks are at end of period. • Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined

products. • In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, thereby affecting subsequent stocks reported. New-basis end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982. • Totals may not equal sum of components due to independent rounding. • U.S. geographic

coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/inter.html for all available data beginning in 1973.

Sources: • United States: Table 3.4. • U.S. Territories: 1983 forward—Energy Information Administration, International Energy Database.
• All Other Data: 1973-1982—International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances, various issues. 1983—IEA, Monthly Oil and Gas Statistics Database. 1984 forward—IEA, Monthly Oil Data Service, February 13,

Germany oniy. Beginning with January 1984, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

b "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom, and, for 1984 forward, Czech Republic, Hungary, Poland, and Slovakia.

c "Other OECD" consists of Australia, New Zealand, and the U.S. Territories, and, for 1984 forward, Mexico.

d The Organization for Economic Cooperation and Development (OECD) consists of "OECD Europe," Canada, Japan, South Korea, the United States, and "Other OECD."

#### **International Petroleum**

#### Tables 11.1a and 11.1b Sources

#### **United States**

See Table 3.1.

#### All Other Countries and World, Monthly Data

1973-1980: Petroleum Intelligence Weekly (PIM), Oil & Gas Journal (OGJ), and EIA adjustments.
1981-1993: PIW, OGJ, and other industry sources.
1994 forward: EIA, International Petroleum Monthly, and EMEU, International Energy Database, March 2008.

#### All Other Countries and World, Annual Data

1973–1979: Energy Information Administration (EIA), *International Energy Annual 1981*, Table 8. 1980–2007: EIA, Office of Energy Markets and End Use (EMEU), International Energy Database, March 2008.



# **Appendix**

### **Thermal Conversion Factors**

The thermal conversion factors presented in the following tables can be used to estimate the heat content in British thermal units (Btu) of a given amount of energy measured in physical units, such as barrels or cubic feet. For example, 10 barrels of asphalt has a heat content of approximately 66.36 million Btu (10 barrels x 6.636 million Btu per barrel = 66.36 million Btu).

The heat content rates (i.e., thermal conversion factors) provided in this section represent the gross (or higher or upper) energy content of the fuels. Gross heat content rates are applied in all Btu calculations for the *Monthly Energy Review* and are commonly used in energy calculations in the United States; net (or lower) heat content rates are typically used in European energy calculations. The difference between the two rates is the amount of energy that is consumed to vaporize water that is created during the combustion process. Generally, the difference ranges from 2 percent to 10 percent, depending on the specific fuel and its hydrogen content. Some fuels, such as unseasoned wood, can be more than 40 percent different in their gross

and net heat content rates. See "Heat Content" and "British Thermal Unit (Btu)" in the Glossary for more information.

Thermal conversion factors for hydrocarbon mixes (Table A1) are weighted averages of the thermal conversion factors for each hydrocarbon included in the mix. For example, in calculating the thermal conversion factor for a 60-40 butane-propane mixture, the thermal conversion factor for butane is weighted 1.5 times the thermal conversion factor for propane.

In general, the annual thermal conversion factors presented in Tables A2 through A6 are computed from final annual data or from the best available data and labeled "preliminary." Often, the previous year's factor is used as a preliminary value until data become available to calculate the factor appropriate to the year. The source of each factor is described in the section entitled "Thermal Conversion Factor Source Documentation," which follows Table A6 in this appendix.

Table A1. Approximate Heat Content of Petroleum Products (Million Btu per Barrel)

Petroleum Product	Heat Content	Petroleum Product	Heat Content
Asphalt	6.636	Natural Gasoline and Isopentane	4.620
Aviation Gasoline	5.048	Pentanes Plus	4.620
Butane	4.326	Petrochemical Feedstocks	
Butane-Propane Mixture <sup>a</sup>	4.130	Naptha Less Than 401°F	5.248
Distillate Fuel Oil	5.825	Other Oils Equal to or Greater Than 401°F	5.825
Ethane	3.082	Still Gas	6.000
Ethane-Propane Mixture <sup>b</sup>	3.308	Petroleum Coke	6.024
Isobutane	3.974	Plant Condensate	5.418
Jet Fuel, Kerosene Type	5.670	Propane	3.836
Jet Fuel, Naphtha Type	5.355	Residual Fuel Oil	6.287
Kerosene	5.670	Road Oil	6.636
Lubricants	6.065	Special Naphthas	5.248
Motor Gasoline		Still Gas	6.000
Conventional <sup>c</sup>	5.253	Unfinished Oils	5.825
Reformulated <sup>c</sup>	5.150	Unfractionated Stream	5.418
Oxygenated <sup>c</sup>	5.150	Waxes	5.537
Fuel Ethanold	3.539	Miscellaneous	5.796

<sup>&</sup>lt;sup>a</sup> 60 percent butane and 40 percent propane.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_a.html.

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

<sup>&</sup>lt;sup>b</sup> 70 percent ethane and 30 percent propane.

<sup>&</sup>lt;sup>c</sup> See Table A3 for motor gasoline annual weighted averages beginning in 1994.

<sup>&</sup>lt;sup>d</sup>Fuel ethanol, which is derived from agricultural feedstocks (primarily corn), is not a petroleum product but is blended into motor dasoline

Table A2. Approximate Heat Content of Petroleum Production, Imports, and Exports (Million Btu per Barrel)

	Pro	duction		Imports			Exports	
	Crude Oil	Natural Gas Plant Liquids	Crude Oil	Petroleum Products	Total	Crude Oil	Petroleum Products	Total
973	5.800	4.049	5.817	5.983	5.897	5.800	5.752	5.752
974	5.800	4.011	5.827	5.959	5.884	5.800	5.773	5.774
975	5.800	3.984	5.821	5.935	5.858	5.800	5.747	5.748
976	5.800	3.964	5.808	5.980	5.856	5.800	5.743	5.745
977	5.800	3.941	5.810	5.908	5.834	5.800	5.796	5.797
978	5.800	3.925	5.802	5.955	5.839	5.800	5.814	5.808
979	5.800	3.955	5.810	5.811	5.810	5.800	5.864	5.832
980	5.800	3.914	5.812	5.748	5.796	5.800	5.841	5.820
981	5.800	3.930	5.818	5.659	5.775	5.800	5.837	5.821
982	5.800	3.872	5.826	5.664	5.775	5.800	5.829	5.820
983	5.800	3.839	5.825	5.677	5.774	5.800	5.800	5.800
984	5.800	3.812	5.823	5.613	5.745	5.800	5.867	5.850
985	5.800	3.815	5.832	5.572	5.736	5.800	5.819	5.814
986	5.800	3.797	5.903	5.624	5.808	5.800	5.839	5.832
987	5.800	3.804	5.901	5.599	5.820	5.800	5.860	5.858
988	5.800	3.800	5.900	5.618	5.820	5.800	5.842	5.840
989	5.800	3.826	5.906	5.641	5.833	5.800	5.869	5.857
990	5.800	3.822	5.934	5.614	5.849	5.800	5.838	5.833
991	5.800	3.807	5.948	5.636	5.873	5.800	5.827	5.823
992	5.800	3.804	5.953	5.623	5.877	5.800	5.774	5.777
993	5.800	3.801	5.954	5.620	5.883	5.800	5.777	5.779
994	5.800	3.794	5.950	5.534	5.861	5.800	5.777	5.779
1995	5.800	3.796	5.938	5.483	5.855	5.800	5.777 5.740	5.746
	5.800	3.777	5.947	5.468	5.847	5.800	5.728	5.736
996 997	5.800	3.762	5.954	5.469	5.862	5.800	5.726	5.734
998	5.800	3.769	5.953	5.462	5.861	5.800	5.710	5.720
999	5.800	3.744	5.942	5.421	5.840	5.800	5.684	5.699
2000	5.800	3.733	5.959	5.432	5.849	5.800	5.651	5.658
2001	5.800	3.735	5.976	5.443	5.862	5.800	5.751	5.752
002	5.800	3.729	5.971	5.451	5.863	5.800	5.687	5.688
003	5.800	3.729	5.970	5.438	5.857	5.800	5.739	5.740
004	5.800	3.724	5.981	5.475	5.863	5.800	5.753	5.754
2005	5.800	3.724 3.724	5.981	5.475 5.474	5.863 5.845	5.800 5.800	5.753 5.741	5.754 5.743
		3.712					5.723	5.724
2006	5.800	8.712 R 3.701	5.980 <sup>R</sup> 5.981	5.454 <sup>R</sup> 5.500	5.842 <sup>R</sup> 5.858	5.800 5.800	5.723 R 5.745	5.724 R 5.746
2007 <sup>E</sup>	5.800	3.701	~ 5.981	., 5.500	., 5.828	5.800	5.745	5.74

R=Revised. E=Estimate.

Note: Crude oil includes lease condensate.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_a.html.

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A3. Approximate Heat Content of Petroleum Consumption and Biofuels Production (Million Btu per Barrel)

		Total Pe	troleum <sup>a</sup> C	onsumption I	Total Petroleum <sup>a</sup> Consumption by Sector							
	Resi- dential	Com- mercial <sup>b</sup>	Indus- trial <sup>b</sup>	Trans- portation <sup>b</sup>	Electric Power c,d	Totalb	Petroleum Gases Con- sumptione	Motor Gasoline Con- sumption <sup>f</sup>	Fuel Ethanol	Fuel Ethanol Feed- stock <sup>g</sup>	Biodiesel	Biodiesel Feed- stock <sup>h</sup>
1973	5.205	5.749	5.569	5.395	6.245	5.515	3.746	5.253	3.539	NA	NA NA	NA
1974	5.196	5.740	5.538	5.394	6.238	5.504	3.730	5.253	3.539	NA	NA NA	NA
1975	5.192	5.704	5.527	5.392	6.250	5.494	3.715	5.253	3.539	NA	NA NA	NA
1976	5.215	5.726	5.536	5.395	6.251	5.504	3.711	5.253	3.539	NA	NA NA	NA
1977	5.213	5.733	5.554	5.400	6.249	5.518	3.677	5.253	3.539	NA	NA	NA
1978	5.213	5.716	5.554	5.404	6.251	5.519	3.669	5.253	3.539	NA	NA NA	NA
1979	5.298	5.769	5.419	5.428	6.258	5.494	3.680	5.253	3.539	NA	NA	NA
1980	5.245	5.803	5.374	5.440	6.254	5.479	3.674	5.253	3.539	6.586	NA	NA
1981	5.191	5.751	5.312	5.432	6.258	5.448	3.643	5.253	3.539	6.486	NA	NA
1982	5.167	5.751	5.263	5.422	6.258	5.415	3.615	5.253	3.539	6.428	NA	NA
1983	5.022	5.642	5.275	5.415	6.255	5.406	3.614	5.253	3.539	6.388	NA	NA
1984	5.184	5.705	5.223	5.418	6.251	5.395	3.599	5.253	3.539	6.356	NA	NA
1985	5.153	5.661	5.215	5.422	6.247	5.387	3.603	5.253	3.539	6.331	NA	NA
1986	5.169	5.694	5.283	5.425	6.257	5.418	3.640	5.253	3.539	6.310	NA	NA
1987	5.144	5.661	5.248	5.429	6.249	5.403	3.659	5.253	3.539	6.291	NA	NA
1988	5.165	5.661	5.241	5.433	6.250	5.410	3.652	5.253	3.539	6.275	NA	NA
1989	5.105	5.621	5.234	5.438	<sup>c</sup> 6.240	5.410	3.683	5.253	3.539	6.260	NA	NA
1990	5.027	5.621	5.270	5.442	6.244	5.411	3.625	5.253	3.539	6.247	NA	NA
1991	4.968	5.599	5.186	5.440	6.246	5.384	3.614	5.253	3.539	6.235	NA	NA
1992	5.004	5.589	5.185	5.442	6.238	5.378	3.624	5.253	3.539	6.224	NA	NA
1993	4.975	<sup>b</sup> 5.580	<sup>b</sup> 5.196	<sup>b</sup> 5.436	6.230	<sup>b</sup> 5.379	3.606	5.253	3.539	6.214	NA	NA
1994	4.983	5.592	5.166	5.424	6.213	5.361	3.635	<sup>f</sup> 5.230	3.539	6.204	NA	NA
1995	4.940	5.554	5.137	5.417	6.188	5.341	3.623	5.215	3.539	6.196	NA	NA
1996	4.869	5.498	5.133	5.420	6.195	5.336	3.613	5.216	3.539	6.187	NA	NA
1997	4.859	5.459	5.138	5.416	6.199	5.336	3.616	5.213	3.539	6.180	NA	NA
1998	4.837	5.446	5.155	5.413	6.210	5.349	3.614	5.212	3.539	6.172	NA	NA
1999	4.761	5.369	5.113	5.413	6.205	5.328	3.616	5.211	3.539	6.165	NA	NA
2000	4.761	5.394	5.082	5.421	6.189	5.326	3.607	5.210	3.539	6.159	NA	NA
2001	4.796	5.403	5.164	5.412	6.199	5.345	3.614	5.210	3.539	6.152	5.359	5.433
2002	4.742	5.364	5.116	5.410	6.173	5.324	3.613	5.208	3.539	6.146	5.359	5.433
2003	4.763	5.407	5.161	5.408	6.182	5.340	3.629	5.207	3.539	6.141	5.359	5.433
2004	4.807	5.434	5.164	5.420	6.192	5.350	3.618	5.215	3.539	6.135	5.359	5.433
2005	R 4.783	<sup>R</sup> 5.427	<sup>R</sup> 5.218	<sup>R</sup> 5.426	6.188	5.365	3.620	5.218	3.539	6.130	5.359	5.433
2006	RE4.666	RE5.344	RE5.200	RE5.428	R 6.143	5.353	3.605	5.218	3.539	6.125	5.359	5.433
	RE4.639	RE <sub>5.340</sub>	RE <sub>5.241</sub>	RE <sub>5.429</sub>	<sup>R P</sup> 6.150	<sup>R P</sup> 5.347	<sup>R P</sup> 3.592	<sup>R P</sup> 5.219	3.539	<sup>R</sup> _5.987	5.359	5.433
2008	E4.639	E5.340	E5.241	E5.429	E6.150	E5.347	E3.592	E5.219	3.539	E5.986	5.359	5.433

<sup>&</sup>lt;sup>a</sup> Petroleum products supplied, including natural gas plant liquids and crude oil burned directly as fuel. Quantity-weighted averages of the petroleum products included in each category are calculated by using heat content values shown in Table A1.

R=Revised. P=Preliminary. E=Estimate. NA=Not available.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_a.html.

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

<sup>&</sup>lt;sup>b</sup> Beginning in 1993, also includes ethanol blended into motor gasoline.

<sup>&</sup>lt;sup>c</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

d Electric power sector factors are weighted average heat contents for distillate fuel oil, petroleum coke, and residual fuel oil; they exclude other liquids.

e Quantity-weighted averages of the major components of liquefied petroleum gases are calculated by using heat content values shown in Table A1.

f There is a discontinuity in this time series between 1993 and 1994; beginning in 1994, the single constant factor is replaced by a quantity-weighted factor—quantity-weighted averages of the major components of motor gasoline, including fuel ethanol, are calculated by using heat content values shown in Table A1.

<sup>&</sup>lt;sup>9</sup> Corn input to the production of fuel ethanol (million Btu corn per barrel denatured ethanol), used as the approximate heat content for total biomass inputs to the production of fuel ethanol.

h Soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel), used as the approximate heat content for total biomass inputs to the production of biodiesel.

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Produ	ction		Consumptiona			
	Marketed	Dry	End-Use Sectors	Electric Power Sector <sup>b</sup>	Total	Imports	Exports
1072	1.003	1.024	1.020	1.024	1.001	1.006	4.000
1973	1,093 1,097	1,021 1,024	1,020 1,024	1,024 1,022	1,021 1,024	1,026 1,027	1,023 1,016
1974 1975	1,097	1,024	1,024	1,022	1,024	1,027	1,016
		,	,	,	,	,	,
976	1,093	1,020	1,019	1,023	1,020	1,025	1,013
977	1,093	1,021	1,019	1,029	1,021	1,026	1,013
978	1,088	1,019	1,016	1,034	1,019	1,030	1,013
979	1,092	1,021	1,018	1,035	1,021	1,037	1,013
980	1,098	1,026	1,024	1,035	1,026	1,022	1,013
981	1,103	1,027	1,025	1,035	1,027	1,014	1,011
982	1,107	1,028	1,026	1,036	1,028	1,018	1,011
983	1,115	1,031	1,031	1,030	1,031	1,024	1,010
984	1,109	1,031	1,030	1,035	1,031	1,005	1,010
985	1,112	1,032	1,031	1,038	1,032	1,002	1,011
986	1,110	1,030	1,029	1,034	1,030	997	1,008
987	1,112	1,031	1,031	1,032	1,031	999	1,011
988	1,109	1,029	1,029	1,028	1,029	1,002	1,018
989	1,107	1,031	1,031	<sup>b</sup> 1,028	1,031	1,004	1,019
990	1,105	1,029	1,030	1,027	1,029	1,012	1,018
991	1,108	1,030	1,031	1,025	1,030	1,014	1,022
992	1,110	1,030	1,031	1,025	1,030	1,011	1,018
993	1,106	1,027	1.028	1,025	1.027	1,020	1,016
994	1,105	1,028	1,029	1,025	1,028	1,022	1,011
995	1,106	1,026	1.027	1,021	1,026	1,021	1,011
996	1,109	1,026	1,027	1,020	1,026	1,022	1,011
997	1,107	1,026	1,027	1,020	1,026	1,023	1,011
998	1,109	1,031	1,033	1,024	1,031	1,023	1,011
999	1.107	1.027	1.028	1.022	1.027	1.022	1.006
2000	1,107	1,025	1,026	1,021	1,025	1,023	1,006
001	1,105	1,028	1,029	1,026	1,028	1,023	1,010
002	1,106	1,027	1,029	1,020	1,027	1,023	1,008
003	1,106	1,027	1,029	1,025	1,027	1,025	1,008
	1,105	1,031	1,033	1,025	1,031	1,025	1,009
2004 2005	,	, -	, -	, -		,	,
	1,105	1,029	1,029	1,028	1,029	1,025	1,009
2006	1,103	1,028	1,028	1,028	1,028	1,025	1,009
2007 <sup>E</sup>	1,103	1,028	1,028	1,028	1,028	1,025	1,009

Web Page: http://www.eia.doe.gov/emeu/mer/append\_a.html.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

a Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels.
b Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

	Coal									
				C	Consumption					
			D	Industrial Sector						
	Production <sup>a</sup>	Waste Coal n <sup>a</sup> Supplied <sup>b</sup>	Residential and Commercial Sectors	Coke Plants	Other <sup>c</sup>	Electric Power Sector <sup>d,e</sup>	Total	Imports	Exports	Imports and Exports
1973	23.376	NA	22.831	26.780	22.586	22.246	23.057	25.000	26.596	24.800
1974	23.072	NA	22.479	26.778	22.419	21.781	22.677	25.000	26.700	24.800
1975	22.897	NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	24.800
1976	22.855	NA	22.774	26.781	22.530	21.679	22.498	25.000	26.601	24.800
1977	22.597	NA	22.919	26.787	22.322	21.508	22.265	25.000	26.548	24.800
1978	22.248	NA	22.466	26.789	22.207	21.275	22.017	25.000	26.478	24.800
1979	22.454	NA	22.242	26.788	22.452	21.364	22.100	25.000	26.548	24.800
1980	22.415	NA	22.543	26.790	22.690	21.295	21.947	25.000	26.384	24.800
1981	22.308	NA	22.474	26.794	22.585	21.085	21.713	25.000	26.160	24.800
982	22.239	NA	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
983	22.052	NA	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
984	22.010	NA	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
985	21.870	NA	22.646	26.798	22.020	20.959	21.366	25.000	26.307	24.800
1986	21.913	NA	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
987	21.922	NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
988	21.823	NA	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
989	21.765	10.391	23.650	26.800	b22.347	20.898	21.307	25.000	26.160	24.800
990	21.822	9.303	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
991	21.681	10.758	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
992	21.682	10.736	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
993	21.418	10.638	22.994	26.800	22.123	20.677	21.000	25.000	26.335	24.800
994	21.394	11.097	23.112	26.800	22.123	20.589	20.929	25.000	26.329	24.800
	21.394	11.722	23.112		21.950	20.543	20.929	25.000		24.800
995				26.800					26.180	24.800
1996	21.322	12.147	23.011	26.800	22.105	20.547	20.870	25.000	26.174	
1997	21.296	12.158	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
1998	21.418	12.639	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
999	21.070	12.552	23.880	27.426	22.489	20.490	20.818	25.000	26.081	24.800
2000	21.072	12.360	25.020	27.426	22.433	20.511	20.828	25.000	26.117	24.800
2001	20.772	12.169	24.909	27.426	22.622	20.337	20.671	25.000	25.998	24.800
2002	20.673	12.165	22.962	27.426	22.562	20.238	20.541	25.000	26.062	24.800
2003	20.499	12.931	22.242	27.426	22.468	20.082	20.387	25.000	25.972	24.800
2004	20.424	13.131	22.324	27.426	22.473	19.980	20.290	25.000	26.108	24.800
2005	20.347	13.158	22.342	26.279	22.178	19.988	20.245	25.000	25.494	24.800
2006	20.314	12.617	22.066	26.271	22.050	19.931	20.185	25.000	25.453	24.800
2007 <sup>E</sup>	20.314	12.617	22.066	26.271	22.050	19.931	20.185	25.000	25.453	24.800

a Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine, and cleaned to reduce the concentration of noncombustible

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

materials).

b Waste coal (including fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and state of the country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and the country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and the country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and the country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and the country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and the country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and the country dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and the country dam are consumed by the electric power and the country dam are consumed by the electric power and the country dam are consumed by the electric power and the country dam are consumed by the electric power and the country dam are consumed by the electric power and the country dam are consumed by the electric power and the country dam are consumed by the electric power and the country dam are consumed by the electric power and the country dam are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are consumed by the electric power are c

<sup>&</sup>lt;sup>c</sup> Includes transportation. Excludes coal synfuel plants.

d Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

e Electric power sector factors are for anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and, beginning in 1998, coal synfuel.

E=Estimate. NA=Not available.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_a.html.

Table A6. Approximate Heat Rates for Electricity, and Heat Content of Electricity (Btu per Kilowatthour)

	Approximate	Heat Rates for Electricity	Net Generation	
	Fossil-Fueled Plants <sup>a,b</sup>	Nuclear Plants <sup>c</sup>	Geothermal Energy Plants <sup>d</sup>	Heat Content of Electricty <sup>e</sup>
973	10.389	10.903	21.674	3,412
974	10,442	11.161	21,674	3,412
975	10,406	11,013	21,611	3,412
976	10,373	11,013	21,611	3,412
977	10,373	10.769	21,611	3,412
978	10,361	10,769	21,611	3,412
	10,353	10,941	· · · · · · · · · · · · · · · · · · ·	3,412
979			21,545	
980	10,388	10,908	21,639	3,412
981	10,453	11,030	21,639	3,412
982	10,454	11,073	21,629	3,412
983	10,520	10,905	21,290	3,412
984	10,440	10,843	21,303	3,412
985	10,447	10,622	21,263	3,412
986	10,446	10,579	21,263	3,412
987	10,419	10,442	21,263	3,412
988	10,324	10,602	21,096	3,412
989	10,432	10,583	21,096	3,412
990	10,402	10,582	21,096	3,412
991	10,436	10,484	20,997	3,412
992	10,342	10,471	20,914	3,412
993	10,309	10.504	20.914	3.412
994	10,316	10,452	20,914	3,412
995	10,312	10,507	20,914	3,412
996	10.340	10.503	20.960	3,412
997	10,213	10.494	20,960	3,412
998	10,197	10,491	21,017	3,412
999	10,226	10,450	21,017	3,412
000	10,201	10.429	21.017	3,412
001	10,333	10,429	21,017	3,412
002	10,173	10,439	21,017	3,412
003	10,173	10,439	21,017	3,412
		•	· · · · · · · · · · · · · · · · · · ·	,
004	10,022 9.999	10,427	21,017	3,412
2005	-,	10,435	21,017	3,412
2006	9,919 F 0.010	10,434	21,017	3,412
2007	<sup>E</sup> 9,919	E 10,434	E 21,017	3,412

<sup>&</sup>lt;sup>a</sup> Used as the thermal conversion factor for hydro, solar/photovoltaic, and wind electricity net generation to approximate the quantity of fossil fuels replaced by these sources. Through 2000, also used as the thermal conversion factor for wood and waste electricity net generation at electric utilities; beginning in 2001, Btu data for wood and waste at electric utilities are available from surveys.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_a.html.

Sources: See "Thermal Conversion Factor Source Documentation," which follows this table.

b Through 2000, heat rates are for fossil-fueled steam-electric plants at electric utilities. Beginning in 2001, heat rates are for all fossil-fueled plants at electric utilities and independent power producers.

<sup>&</sup>lt;sup>c</sup> Used as the thermal conversion factor for nuclear electricity net generation.

d Used as the thermal conversion factor for geothermal electricity net generation.

<sup>&</sup>lt;sup>e</sup> The value of 3,412 Btu per kilowatthour is a constant. It is used as the thermal conversion factor for electricity retail sales, and electricity imports and exports.

# Thermal Conversion Factor Source Documentation

#### **Approximate Heat Content of Petroleum and Natural Gas Plant Liquids**

**Asphalt**. The Energy Information Administration (EIA) adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

**Aviation Gasoline**. EIA adopted the thermal conversion factor of 5.048 million Btu per barrel as adopted by the Bureau of Mines from the Texas Eastern Transmission Corporation publication *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Butane**. EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Butane-Propane Mixture**. EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See **Butane** and **Propane**.

**Crude Oil Exports**. Assumed by EIA to be 5.800 million Btu per barrel or equal to the thermal conversion factor for crude oil produced in the United States. See **Crude Oil Production**.

**Crude Oil Imports.** Calculated annually by EIA as the average of the thermal conversion factors for each type of crude oil imported weighted by the quantities imported. Thermal conversion factors for each type were calculated on a foreign country basis, by determining the average American Petroleum Institute (API) gravity of crude oil imported from each foreign country from Form ERA-60 in 1977 and converting average API gravity to average Btu content by using National Bureau of Standards, Miscellaneous Publication No. 97, *Thermal Properties of Petroleum Products*, 1933.

**Crude Oil Production**. EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Distillate Fuel Oil.** EIA adopted the Bureau of Mines thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Ethane**. EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Ethane-Propane Mixture**. EIA calculation of 3.308 million Btu per barrel based on an assumed mixture of 70 percent ethane and 30 percent propane. See **Ethane** and **Propane**.

**Isobutane**. EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Jet Fuel, Kerosene-Type**. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for "Jet Fuel, Commercial" as published by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Jet Fuel, Naphtha-Type.** EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for "Jet Fuel, Military" as published by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Kerosene**. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Liquefied Petroleum Gases Consumption. Calculated annually by EIA as the average of the thermal conversion factors for all liquefied petroleum gases consumed (see Table A1) weighted by the quantities consumed. The component products of liquefied petroleum gases are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. For 1973-1980, quantities consumed are from EIA, Energy Data Reports, "Petroleum Statement, Annual," Table 1. For 1981 forward, quantities consumed are from EIA, Petroleum Supply Annual, Table 2.

**Lubricants**. EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

**Miscellaneous Products**. EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

Motor Gasoline Consumption. 1973–1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics. 1994 forward: EIA calculated national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (see Table A3). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for

previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, "Fuel Economy Impact Analysis of Reformulated Gasoline." See Fuel Ethanol (Blended Into Motor Gasoline).

**Natural Gas Plant Liquids Production**. Calculated annually by EIA as the average of the thermal conversion factors for each natural gas plant liquid produced weighted by the quantities produced.

**Natural Gasoline**. EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

**Pentanes Plus.** EIA assumed the thermal conversion factor to be 4.620 million Btu or equal to that for natural gasoline. See **Natural Gasoline**.

**Petrochemical Feedstocks, Naphtha less than 401° F.** Assumed by EIA to be 5.248 million Btu per barrel, equal to the thermal conversion factor for special naphthas. See **Special Naphthas**.

**Petrochemical Feedstocks, Other Oils equal to or greater than 401° F.** Assumed by EIA to be 5.825 million Btu per barrel, equal to the thermal conversion factor for distillate fuel oil. See **Distillate Fuel Oil**.

**Petrochemical Feedstocks, Still Gas.** Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See **Still Gas**.

**Petroleum Coke**. EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950." The Bureau of Mines calculated this factor by dividing 30.120 million Btu per short ton, as given in the referenced Bureau of Mines internal memorandum, by 5.0 barrels per short ton, as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

Petroleum Consumption, Commercial Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the commercial sector weighted by the estimated quantities consumed by the commercial sector. The quantities of petroleum products consumed by the commercial sector are estimated in the State Energy Data System—see documentation at

http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Consumption, Electric Power Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the electric power sector weighted by the quantities consumed by the electric power sector. Data are from Form

EIA-860, "Annual Electric Generator Report"; Form EIA-906, "Power Plant Report"; and predecessor forms.

**Petroleum Consumption, Industrial Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the industrial sector weighted by the estimated quantities consumed by the industrial sector. The quantities of petroleum products consumed by the industrial sector are estimated in the State Energy Data System—see documentation at http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Consumption, Residential Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential sector weighted by the estimated quantities consumed by the residential sector. The quantities of petroleum products consumed by the residential sector are estimated in the State Energy Data System—see documentation at http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Consumption, Total.** Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed weighted by the quantities consumed.

Petroleum Consumption, Transportation Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the transportation sector weighted by the estimated quantities consumed by the transportation sector. The quantities of petroleum products consumed by the transportation sector are estimated in the State Energy Data System—see documentation at

http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Products Exports.** Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported weighted by the quantities exported.

**Petroleum Products Imports.** Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product imported weighted by the quantities imported.

**Plant Condensate**. Estimated to be 5.418 million Btu per barrel by EIA from data provided by McClanahan Consultants, Inc., Houston, Texas.

**Propane**. EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Residual Fuel Oil**. EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Road Oil.** EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, which was assumed to be equal to that of asphalt (see **Asphalt**)

and was first published by the Bureau of Mines in the *Petroleum Statement*, *Annual*, 1970.

**Special Naphthas.** EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, which was assumed to be equal to that of the total gasoline (aviation and motor) factor and was first published in the *Petroleum Statement, Annual, 1970*.

**Still Gas.** EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel, first published in the *Petroleum Statement*, *Annual*, 1970.

**Total Petroleum Exports**. Calculated annually by EIA as the average of the thermal conversion factors for crude oil and each petroleum product exported weighted by the quantities exported. See **Crude Oil Exports** and **Petroleum Products Exports**.

**Total Petroleum Imports**. Calculated annually by EIA as the average of the thermal conversion factors for each type of crude oil and petroleum product imported weighted by the quantities imported. See **Crude Oil Imports** and **Petroleum Products Imports**.

**Unfinished Oils.** EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel or equal to that for distillate fuel oil (see **Distillate Fuel Oil**) and first published it in EIA's *Annual Report to Congress, Volume 3*, 1977.

**Unfractionated Stream**. EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see **Plant Condensate**) and first published it in EIA's *Annual Report to Congress, Volume 2, 1981*.

**Waxes**. EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

#### **Approximate Heat Content of Biofuels**

**Biodiesel.** EIA estimated the gross heat content (higher heating value) for biodiesel to be 5.359 million Btu per barrel.

**Biodiesel Feedstock.** EIA estimated the soybean oil input to the production of biodiesel to be 5.433 million Btu soybean oil per barrel biodiesel, which is used as the approximate gross heat content (higher heating value) for total biomass inputs to the production of biodiesel.

**Fuel Ethanol.** EIA adopted the thermal conversion factor of 3.539 million Btu per barrel published in "Oxygenate Flexibility for Future Fuels," a paper presented by William J. Piel of the ARCO Chemical Company at the National Conference on Reformulated Gasolines and Clean Air Act Implementation, Washington, D.C., October 1991.

**Fuel Ethanol Feedstock.** EIA estimated the corn input to the production of fuel ethanol (million Btu corn per barrel denatured ethanol), which is used as the approximate heat

content for total biomass inputs to the production of fuel ethanol.

# **Approximate Heat Content of Natural Gas**

Natural Gas Consumption, Electric Power Sector. Calculated annually by EIA by dividing the heat content of natural gas consumed by the electric power sector by the quantity consumed. Data are from Form EIA-860, "Annual Electric Generator Report"; Form EIA-906, "Power Plant Report"; and predecessor forms.

**Natural Gas Consumption, End-Use Sectors**. Calculated annually by EIA by dividing the heat content of natural gas consumed by the end-use sectors (residential, commercial, industrial, and transportation) by the quantity consumed. Data are from Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

**Natural Gas Consumption, Total.** 1973–1979: EIA adopted the thermal conversion factor calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual publication. 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity consumed.

**Natural Gas Exports.** Calculated annually by EIA by dividing the heat content of natural gas exported by the quantity exported. For 1973–1995, data are from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Beginning in 1996, data are from U.S. Department of Energy, Office of Fossil Energy, *Natural Gas Imports and Exports*.

**Natural Gas Imports.** Calculated annually by EIA by dividing the heat content of natural gas imported by the quantity imported. For 1973–1995, data are from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Beginning in 1996, data are from U.S. Department of Energy, Office of Fossil Energy, *Natural Gas Imports and Exports*.

**Natural Gas Production, Dry.** Assumed by EIA to be equal to the thermal conversion factor for dry natural gas consumed. See **Natural Gas Consumption, Total**.

**Natural Gas Production, Marketed**. Calculated annually by EIA by dividing the heat content of dry natural gas produced (see **Natural Gas Production, Dry**) and natural gas plant liquids produced (see **Natural Gas Plant Liquids Production**) by the total quantity of marketed natural gas produced.

# **Approximate Heat Content of Coal and Coal Coke**

**Coal Coke Imports and Exports**. EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

**Coal Consumption, Electric Power Sector**. Calculated annually by EIA by dividing the heat content of coal consumed by the electric power sector by the quantity consumed. Data are from Form EIA-860, "Annual Electric Generator Report"; Form EIA-906, "Power Plant Report"; and predecessor forms.

**Coal Consumption, End-Use Sectors**. Calculated annually by EIA by dividing the heat content of coal consumed by the end-use sectors (residential, commercial, industrial, and transportation) by the quantity consumed.

Coal Consumption, Industrial Sector, Coke Plants. Calculated annually by EIA by dividing the heat content of coal consumed by coke plants by the quantity consumed. Data are from Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants."

**Coal Consumption, Industrial Sector, Other**. Calculated annually by EIA by dividing the heat content of coal consumed by manufacturing plants by the quantity consumed. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."

Coal Consumption, Residential and Commercial Sectors. Calculated annually by EIA by dividing the heat content of coal consumed by the residential and commercial sectors by the quantity consumed. Through 1999, data are from Form EIA-6, "Coal Distribution Report." Beginning in 2000, data are for commercial combined-heat-and-power (CHP) plants from Form EIA-860, "Annual Electric Generator Report"; and Form EIA-906, "Power Plant Report."

**Coal Consumption, Total**. Calculated annually by EIA by dividing the total heat content of coal consumed by all sectors by the total quantity consumed.

**Coal Exports.** Calculated annually by EIA by dividing the heat content of steam coal and metallurgical coal exported by the quantity exported. Data are from U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

**Coal Imports**. Assumed by EIA to be 25.000 million Btu per short ton.

**Coal Production**. Calculated annually by EIA to balance the heat content of coal supply (production and imports) and the heat content of coal disposition (exports, stock change, and consumption).

Waste Coal Supplied. Calculated annually by EIA by dividing the total heat content of waste coal supplied by the quantity supplied. For 1989–1997, data are from Form EIA–867, "Annual Nonutility Power Producer Report." For 1998–2000, data are from Form EIA-860B, "Annual Electric Generator Report—Nonutility." For 2001–2003, data are from Form EIA-906, "Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption

and Quality Report—Manufacturing Plants." For 2004 forward, data are from Form EIA-906, "Power Plant Report," Form EIA-920, "Combined Heat and Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."

#### **Approximate Heat Rates for Electricity**

Electricity Net Generation, Fossil-Fueled Plants. There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydro, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA calculates a rate factor that is equal to the annual average heat rate factor for fossilfueled power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu. 1973–1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published in EIA, Electric Plant Cost and Power Production Expenses 1991, Table 9. 1989-2000: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and the generation on Form EIA-759, "Monthly Power Plant Report." The computation includes data for all electric utility steam-electric plants using fossil fuels. 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-906, "Power Plant Report." The computation includes data for all electric utilities and electricity-only independent power producers using fossil fuels.

**Electricity** Net Generation, Geothermal Energy Plants. 1973–1981: Calculated annually by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12, "Power System Statement." 1982 forward: Estimated annually by EIA on the basis of an informal survey of relevant plants.

**Electricity Net Generation, Nuclear Plants**. 1973–1984: Calculated annually by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation were reported on Form FERC-1, "Annual Report of Major Electric Utilities, Licensees, and Others"; Form EIA-412, "Annual Report of Public Electric Utilities"; and predecessor forms. For 1982, the factors were published in EIA, Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982, page 215. For 1983 and 1984, the factors were published in EIA, Electric Plant Cost and Power Production Expenses 1991, Table 13. 1985 forward: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and the generation reported on Form EIA-906, "Power Plant Report."



## **Appendix**

### **Thermal Metric and Other Conversion Factors**

Data presented in the *Monthly Energy Review* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. Customary units. For example, 500 short

tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table B2.

The conversion factors presented in Table B3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

**Table B1. Metric Conversion Factors** 

Type of Unit	U.S. Unit		Equivalent in	Metric Units
Mass	1 short ton (2,000 lb)	=	0.907 184 7	metric tons (t)
mass	1 long ton	=	1.016 047	metric tons (t)
	1 pound (lb)	=	0.453 592 37ª	kilograms (kg)
	1 pound uranium oxide (lb U <sub>3</sub> O <sub>8</sub> )	=	0.384 647 <sup>b</sup>	kilograms uranium (kgU)
	1 ounce, avoirdupois (avdp oz)	=	28.349 52	grams (g)
Volume	1 barrel of oil (bbl)	=	0.158 987 3	cubic meters (m³)
	1 cubic yard (yd³)	=	0.764 555	cubic meters (m³)
	1 cubic foot (ft <sup>3</sup> )	=	0.028 316 85	cubic meters (m³)
	1 U.S. gallon (gal)	=	3.785 412	liters (L)
	1 ounce, fluid (fl oz)	=	29.573 53	milliliters (mL)
	1 cubic inch (in³)	=	16.387 06	milliliters (mL)
Length	1 mile (mi)	=	1.609 344ª	kilometers (km)
	1 yard (yd)	=	0.914 4 <sup>a</sup>	meters (m)
	1 foot (ft)	=	0.304 8 <sup>a</sup>	meters (m)
	1 inch (in)	=	2.54ª	centimeters (cm)
Area	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi <sup>2</sup> )	=	2.589 988	square kilometers (km²)
	1 square yard (yd²)	=	0.836 127 4	square meters (m²)
	1 square foot (ft²)	=	0.092 903 04 <sup>a</sup>	square meters (m²)
	1 square inch (in²)	=	6.451 6ª	square centimeters (cm <sup>2</sup> )
Energy	1 British thermal unit (Btu) <sup>c</sup>	=	1,055.055 852 62ª	joules (J)
	1 calorie (cal)	=	4.186 8 <sup>a</sup>	joules (J)
	1 kilowatthour (kWh)	=	3.6ª	megajoules (MJ)
Temperature <sup>d</sup>	32 degrees Fahrenheit (°F)	=	O <sup>a</sup>	degrees Celsius (°C)
-	212 degrees Fahrenheit (°F)	=	100 <sup>a</sup>	degrees Celsius (°C)

<sup>&</sup>lt;sup>a</sup>Exact conversion.

<sup>&</sup>lt;sup>b</sup>Calculated by the Energy Information Administration.

<sup>&</sup>lt;sup>c</sup>The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956. <sup>d</sup>To convert degrees Fahrenheit (°F) to degrees Celsius (°C) exactly, subtract 32, then multiply by 5/9.

Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading. • Most metric units belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units. For more information about the SI units, see http://physics.nist.gov/cuu/Units/index.html.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_b.html.

Sources: • General Services Administration, Federal Standard 376B, *Preferred Metric Units for General Use by the Federal Government* (Washington, DC, January 1993), pp. 9-11, 13, and 16. • U.S. Department of Commerce, National Institute of Standards and Technology, Special Publications 330, 811, and 814. • American National Standards Institute/Institute of Electrical and Electronic Engineers, ANSI/IEEE Std 268-1992, pp. 28 and 29.

**Table B2. Metric Prefixes** 

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10 <sup>1</sup>	deka	da	10 <sup>-1</sup>	deci	d
10 <sup>2</sup>	hecto	h	10 <sup>-2</sup>	centi	С
10 <sup>3</sup>	kilo	k	10 <sup>-3</sup>	milli	m
10 <sup>6</sup>	mega	M	10 <sup>-6</sup>	micro	μ
10 <sup>9</sup>	giga	G	10 <sup>-9</sup>	nano	n
10 <sup>12</sup>	tera	Т	10 <sup>-12</sup>	pico	р
10 <sup>15</sup>	peta	Р	10 <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	Е	10 <sup>-18</sup>	atto	а
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	Z
10 <sup>24</sup>	yotta	Υ	10 <sup>-24</sup>	yocto	у

Web Page: http://www.eia.doe.gov/emeu/mer/append\_b.html.

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p.10.

**Table B3. Other Physical Conversion Factors** 

Energy Source	Original Unit		Equiva	lent in Final Units
Petroleum	1 barrel (bbl)	=	42ª	U.S. gallons (gal)
Coal	1 short ton	=	2,000ª	pounds (lb)
	1 long ton	=	2,240 <sup>a</sup>	pounds (lb)
	1 metric ton (t)	=	1,000°	kilograms (kg)
Wood	1 cord (cd)	=	1.25 <sup>b</sup>	shorts tons
	1 cord (cd)	=	128 <sup>a</sup>	cubic feet (ft3)

<sup>&</sup>lt;sup>a</sup>Exact conversion.

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B-10, C-17 and C-21.

<sup>&</sup>lt;sup>b</sup>Calculated by the Energy Information Administration.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_b.html.

## **Glossary**

**Alcohol**: The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a **hydrocarbon** plus a hydroxyl group; CH(3)-(CH(2))<sub>n</sub>-OH (e.g., **methanol**, **ethanol**, and tertiary butyl alcohol). See **Fuel Ethanol**.

Anthracite: The highest rank of coal; used primarily for residential and commercial space heating. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million Btu per short ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). *Note:* Since the 1980's, anthracite refuse or mine waste has been used for steam-electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.

**Asphalt:** A dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

**ASTM:** The American Society for Testing and Materials.

**Aviation Gasoline Blending Components:** Naphthas that will be used for blending or compounding into finished aviation gasoline (e.g., straight run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

**Aviation Gasoline, Finished:** A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

**Barrel (Petroleum):** A unit of volume equal to 42 U.S. Gallons.

**Base Gas:** The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

**Biodiesel:** Any liquid **biofuel** suitable as a diesel fuel substitute or diesel fuel additive or extender. Biodiesel fuels are typically made from oils such as soybean, rapeseed, or sunflower, or from animal tallow. Biodiesel can also be made from **hydrocarbons** derived from agricultural products such as rice hulls.

**Biofuels:** Liquid fuels and blending components produced from **biomass** (plant) feedstocks, used primarily for transportation. See **Biodiesel** and **Fuel Ethanol**.

**Biogenic**: Produced by biological processes of living organisms. Note: EIA uses the term "biogenic" to refer only to organic nonfossil material of biological origin.

Biomass: Organic non-fossil material of biological origin constituting a renewable energy source. See Biodiesel, Biofuels, Biomass Waste, Fuel Ethanol, and Wood and Wood-Derived Fuels.

Biomass Waste: Organic non-fossil material of biological origin that is a byproduct or a discarded product. "Biomass waste" includes municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural crop byproducts, straw, and other biomass solids, liquids, and gases; but excludes wood and wood-derived fuels (including black liquor), biofuels feedstock, biodiesel, and fuel ethanol. Note: EIA "biomass waste" data also include energy crops grown specifically for energy production, which would not normally constitute waste.

Bituminous Coal: A dense coal, usually black, sometimes dark brown, often with well-defined bands of bright and dull material, used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make coke. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million Btu per short ton on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Black Liquor:** A byproduct of the paper production process, alkaline spent liquor, that can be used as a source of energy. Alkaline spent liquor is removed from the digesters in the process of chemically pulping wood. After evaporation, the residual "black" liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.

**British Thermal Unit (Btu):** The quantity of heat required to raise the temperature of 1 pound of liquid water

by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit). See **Heat Content**.

Btu: See British Thermal Unit.

**Butane:** A normally gaseous straight-chain or branchedchain hydrocarbon ( $C_4H_{10}$ ). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

*Isobutane*: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

*Normal Butane*: A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

**Butylene:** An olefinic hydrocarbon ( $C_4H_8$ ) recovered from refinery processes.

**Capacity Factor:** The ratio of the electrical energy produced by a generating unit for a given period of time to the electrical energy that could have been produced at continuous full-power operation during the same period.

Chained Dollars: A measure used to express real prices. Real prices are those that have been adjusted to remove the effect of changes in the purchasing power of the dollar; they usually reflect buying power relative to a reference year. Prior to 1996, real prices were expressed in constant dollars, a measure based on the weights of goods and services in a single year, usually a recent year. In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period and is therefore subject to less distortion over time.

CIF: See Cost, Insurance, Freight.

**City Gate:** A point or measuring station at which a distribution gas utility receives gas from a natural gas pipeline company or transmission system.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and

pressure over geologic time. See Anthracite, Bituminous Coal, Lignite, Subbituminous Coal, Waste Coal, and Coal Synfuel.

Coal Coke: See Coke, Coal.

Coal Stocks: Coal quantities that are held in storage for future use and disposition. Note: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of the period.

**Coal Synfuel:** Coal-based solid fuel that has been processed by a **coal synfuel plant**; and coal-based fuels such as briquettes, pellets, or extrusions, which are formed from fresh or recycled coal and binding materials.

**Coal Synfuel Plant**: A plant engaged in the chemical transformation of **coal** into **coal synfuel**.

**Coke, Coal**: A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000° F so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke (coal) has a heating value of 24.8 million Btu per ton.

Coke, Petroleum: A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (42 U.S. gallons each) per short ton. Coke (petroleum) has a heating value of 6.024 million Btu per barrel.

**Coking Coal**: Bituminous coal suitable for making coke. See **Coke**, **Coal**.

Combined-Heat-and-Power (CHP) Plant: A plant designed to produce both heat and electricity from a single heat source. Note: This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

Commercial Sector: An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking,

and running a wide variety of other equipment. *Note*: This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments. Various EIA programs differ in sectoral coverage-for more information see

http://www.eia.doe.gov/neic/datadefinitions/Guideforwebcom.htm. See End-Use Sectors and Energy-Use Sectors.

Completion: The installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir, the definition of a well (classified as an oil well or gas well) and the definition of a completion are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a well is not synonymous with a completion.

**Conventional Gasoline**: Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. *Note*: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

**Conventional Hydroelectric Power**: Hydroelectric power generated from flowing water that is not created by **hydroelectric pumped storage**.

**Conversion Factor:** A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents. See **British Thermal Unit**.

Cost, Insurance, Freight (CIF): A sales transaction in which the seller pays for the transportation and insurance of the goods to the port of destination specified by the buyer.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include: 1) small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included; 2) small amounts of nonhydrocarbons produced with the oil, such as sulfur and various metals; and 3) drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

**Crude Oil F.O.B. Price**: The crude oil price actually charged at the oil-producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

**Crude Oil Landed Cost**: The price of crude oil at the port of discharge, including charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).

**Crude Oil Refinery Input**: The total crude oil put into processing units at refineries.

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

**Crude Oil Used Directly**: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

**Crude Oil Well:** A well completed for the production of crude oil from one or more oil zones or reservoirs. Wells producing both crude oil and natural gas are classified as oil wells.

**Cubic Foot (Natural Gas)**: A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60° F.

**Degree-Day Normals**: Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1961-1990). The averages may be simple degree-day normals or population-weighted degree-day normals.

**Degree-Days, Cooling (CDD):** A measure of how warm a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the base temperature (65 degrees) from the average of the day's high and low temperatures, with

negative values set equal to zero. Each day's cooling degree-days are summed to create a cooling degree-day measure for a specified reference period. Cooling degree-days are used in energy analysis as an indicator of air conditioning energy requirements or use.

Degree-Days, Heating (HDD): A measure of how cold a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the average of the day's high and low temperatures from the base temperature (65 degrees), with negative values set equal to zero. Each day's heating degree-days are summed to create a heating degree-day measure for a specified reference period. Heating degree-days are used in energy analysis as an indicator of space heating energy requirements or use.

Degree-Days, Population-Weighted: Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State populationweighted degree-days, each State is divided into from one to nine climatically homogeneous divisions, which are assigned weights based on the ratio of the population of the division to the total population of the State. Degreeday readings for each division are multiplied by the corresponding population weight for each division and those products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions, each comprising from three to eight States, which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and those products are then summed to arrive at the national population-weighted degree-day figure.

**Design Electrical Rating, Net**: The nominal net electrical output of a nuclear unit as specified by the electric utility for the purpose of plant design.

**Development Well**: A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

**Diesel Fuel:** A fuel composed of **distillate fuel oils** obtained in petroleum refining operation or blends of such distillate fuel oils with **residual fuel oil** used in motor vehicles. The boiling point and specific gravity are higher for diesel fuels than for gasoline.

**Direct Use**: Use of electricity that 1) is self-generated, 2) is produced by either the same entity that consumes the power or an affiliate, and 3) is used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of **station use**.

**Distillate Fuel Oil:** A general classification for one of the **petroleum** fractions produced in conventional distillation operations. It includes **diesel fuels** and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and **electricity generation**.

**Dry Hole**: An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

**Dry Natural Gas Production:** See Natural Gas (Dry) **Production.** 

**Electric Power Plant**: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Power Sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public-i.e., North American Industry Classification System 22 plants. See also Combined-Heat-and-Power (CHP) Plant, Electricity-Only Plant, Electric Utility, and Independent Power Producer.

Electric Utility: Any entity that generates, transmits, or distributes electricity and recovers the cost of its generation, transmission or distribution assets and operations, either directly or indirectly, through cost-based rates set by a separate regulatory authority (e.g., State Public Service Commission), or is owned by a governmental unit or the consumers that the entity serves. Examples of these entities include: investor-owned entities, public power districts, public utility districts, municipalities, rural electric cooperatives, and State and Federal agencies. Electric utilities may have Federal Energy Regulatory Commission approval for interconnection agreements and wholesale trade tariffs covering either cost-of-service and/or market-based rates under the authority of the Federal Power Act. See Electric Power Sector.

**Electrical System Energy Losses**: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

**Electricity**: A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.

**Electricity Generation**: The process of producing electric energy, or the amount of electric energy produced by transforming other forms of energy, commonly expressed in **kilowatthours** (kWh) or megawatthours (Mwh).

**Electricity Generation, Gross**: The total amount of electric energy produced by generating units and measured at the generating terminal in **kilowatthours** (kWh) or megawatthours (MWh).

**Electricity Generation, Net**: The amount of **gross electricity generation** less **station use** (the **electric energy** consumed at the generating station(s) for station service or auxiliaries). *Note*: Electricity required for pumping at **hydroelectric pumped-storage** plants is regarded as electricity for station service and is deducted from gross generation.

**Electricity-Only Plant**: A plant designed to produce electricity only. See also **Combined-Heat-and-Power (CHP) Plant**.

**Electricity Retail Sales**: The amount of electricity sold to customers purchasing electricity for their own use and not for resale.

End-Use Sectors: The residential, commercial, industrial, and transportation sectors of the economy.

**Energy**: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

**Energy Consumption**: The use of energy as a source of heat or power or as an input in the manufacturing process.

**Energy Service Provider**: An energy entity that provides service to a retail or end-use customer.

**Energy-Use Sectors**: A group of major energy-consuming components of U.S. society developed to measure and analyze energy use. The sectors most commonly referred to in EIA are: **residential**, **commercial**, **industrial**, **transportation**, and **electric power**.

**Ethane**: A normally gaseous straight-chain hydrocarbon  $(C_2H_6)$ . It is a colorless, paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

**Ethanol** (CH<sub>3</sub>-CH<sub>2</sub>OH): A clear, colorless, flammable oxygenated **hydrocarbon**. Ethanol is typically produced chemically from **ethylene**, or biologically from fermentation of various sugars from carbohydrates found in agricultural crops and cellulosic residues from crops or wood. It is used in the United States as a gasoline octane enhancer and **oxygenate** (blended up to 10 percent

concentration). Ethanol can also be used in high concentrations (E85) in vehicles designed for its use. See **Alcohol** and **Fuel Ethanol**.

**Ethylene**: An olefinic hydrocarbon (C2H4) recovered from refinery processes or petrochemical processes.

**Exploratory Well**: A well drilled to find and produce oil or gas in an area previously considered an unproductive area, to find a new reservoir in a known field (i.e., one previously found to be producing oil or gas in another reservoir), or to extend the limit of a known oil or gas reservoir.

**Exports:** Shipments of goods from within the 50 States and the District of Columbia to U.S. possessions and territories or to foreign countries.

**Extraction Loss**: The reduction in volume of natural gas due to the removal of natural gas liquid constituents, such as ethane, propane, and butane, at natural gas processing plants.

**Federal Energy Administration (FEA)**: A predecessor of the Energy Information Administration.

**Federal Energy Regulatory Commission (FERC)**: The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

**Federal Power Commission** (**FPC**): The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

**First Purchase Price**: The marketed first sales price of domestic crude oil, consistent with the removal price defined by the provisions of the Windfall Profits Tax on Domestic Crude Oil (Public Law 96-223, Sec. 4998 (c)).

**Flared Natural Gas**: Natural gas burned in flares on the base site or at gas processing plants.

**F.O.B.** (**Free on Board**): A sales transaction in which the seller makes the product available for pick up at a specified port or terminal at a specified price and the buyer pays for the subsequent transportation and insurance.

Footage Drilled: Total footage for wells in various categories, as reported for any specified period, includes (1)

the deepest total depth (length of well bores) of all wells drilled from the surface, (2) the total of all bypassed footage drilled in connection with reported wells, and (3) all new footage drilled for directional sidetrack wells. Footage reported for directional sidetrack wells does not include footage in the common bore, which is reported as footage for the original well. In the case of old wells drilled deeper, the reported footage is that which was drilled below the total depth of the old well.

Former U.S.S.R.: See U.S.S.R.

**Fossil Fuel**: An energy source formed in the Earth's crust from decayed organic material, such as **petroleum**, **coal**, and **natural gas**.

**Fossil-Fueled Steam-Electric Power Plant**: An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

Fuel Ethanol (CH<sub>3</sub>·CH<sub>2</sub>OH): An anhydrous, denatured aliphatic alcohol intended for motor gasoline blending. See Ethanol and Oxygenates.

**Full-Power Operation**: Operation of a nuclear generating unit at 100 percent of its design capacity. Full-power operation precedes commercial operation.

**Gasohol**: A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration between 5.7 percent and 10 percent by volume. See **Motor Gasoline, Oxygenated**.

**Gas Well**: A well completed for the production of natural gas from one or more gas zones or reservoirs. (Wells producing both crude oil and natural gas are classified as oil wells.)

**Geothermal Energy**: Hot water or steam extracted from geothermal reservoirs in the earth's crust and used for geothermal heat pumps, water heating, or electricity generation.

**Gross Domestic Product (GDP)**: The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.

**GT/IC**: Gas turbine and internal combustion plants.

**Heat Content**: The amount of heat energy available to be released by the transformation or use of a specified physical unit of an energy form (e.g., a ton of coal, a barrel of oil, a kilowatthour of electricity, a cubic foot of natural gas, or a pound of steam). The amount of heat energy is commonly expressed in **British thermal units (Btu)**. *Note*: Heat content of combustible energy forms can be

expressed in terms of either gross heat content (higher or upper heating value) or net heat content (lower heating value), depending upon whether or not the available heat energy includes or excludes the energy used to vaporize water (contained in the original energy form or created during the combustion process). The Energy Information Administration typically uses gross heat content values.

**Heat Rate**: A measure of generating station thermal efficiency commonly stated as **Btu** per **kilowatthour**. *Note:* Heat rates can be expressed as either gross or net heat rates, depending whether the electricity output is gross or net generation. Heat rates are typically expressed as net heat rates.

**Hydrocarbon**: An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from the simplest (methane, the primary constituent of natural gas) to the very heavy and very complex.

**Hydroelectric Power**: The production of electricity from the kinetic energy of falling water.

**Hydroelectric Power Plant**: A plant in which the turbine generators are driven by falling water.

**Hydroelectric Pumped Storage**: Hydroelectricity that is generated during peak load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

**Imports**: Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

**Independent Power Producer**: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an **electric utility**.

Industrial Sector: An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (NAICS codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned

industrial activities. Various EIA programs differ in sectoral coverage-for more information see

http://www.eia.doe.gov/neic/datadefinitions/Guideforwebind.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

**Injections** (Natural Gas): Natural gas injected into storage reservoirs.

**Isobutane**: A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams. See **Butane**.

**Isobutylene**: An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Isopentane**: A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Jet Fuel**: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

**Jet Fuel, Kerosene-Type**: A kerosene-based product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It issued primarily for commercial turbojet and turboprop aircraft engines.

**Jet Fuel, Naphtha-Type**: A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290° to 470° F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

**Kerosene**: A petroleum distillate having a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

**Kilowatt**: A unit of electrical power equal to 1,000 watts.

**Kilowatthour (kWh)**: A measure of electricity defined as a unit of work or energy, measured as 1 **kilowatt** (1,000 **watts**) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu. See **Watthour**.

**Landed Costs**: The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g.,

import tariffs or fees, wharfage charges, and demurrage charges).

**Lease and Plant Fuel**: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. Note: This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

**Lignite**: The lowest rank of **coal**, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Liquefied Natural Gas (LNG)**: Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260° F at atmospheric pressure.

**Liquefied Petroleum Gases** (**LPG**): Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

**Low-Power Testing**: The period of time between a nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during that period is 5 percent of the unit's design thermal rating.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Lubricant categories are paraffinic and naphthenic.

Marketed Production (Natural Gas): Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or

processing operations. Includes all quantities of gas used in field and processing operations.

**Methane**: A colorless, flammable, odorless, hydrocarbon gas (CH<sub>4</sub>) that is the principal constituent of natural gas. It is also an important source of hydrogen in various industrial processes.

**Methyl Tertiary Butyl Ether (MTBE)**: An ether, (CH<sub>3</sub>)<sub>3</sub>COCH<sub>3</sub>, intended for motor gasoline blending. See **Oxygenates**.

**Methanol**: A light, volatile alcohol (CH<sub>3</sub>OH) eligible for motor gasoline blending. See **Oxygenates**.

**Miscellaneous Petroleum Products**: All finished petroleum products not classified elsewhere-for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline Blending: Mechanical mixing of motor gasoline blending components and oxygenates as required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components: Naphtha (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note: oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Motor Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122°F to 158°F at the 10-percent recovery point to 365°F to 374°F at the 90-percent recovery point. "Motor gasoline" includes conventional gasoline, all types of oxygenated gasoline including gasohol, and reformulated gasoline, but excludes aviation gasoline. Note: Volumetric data on blending components, as well as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

**Motor Gasoline Grades**: The classification of gasoline by octane ratings. Each type of gasoline (conventional, oxygenated, and reformulated) is classified by three grades:

regular, midgrade, and premium. Note: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.

Regular Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

*Midgrade Gasoline*: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

*Premium Gasoline*: Gasoline having an antiknock index, i.e., octane rating, greater than 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Motor Gasoline, Oxygenated: Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 2.7 percent or higher by weight and required by the U.S. Environmental Protection Agency (EPA) to be sold in areas designated by EPA as carbon monoxide (CO) nonattainment areas. Note: Oxygenated gasoline excludes oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB). Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside CO nonattainment areas are included in data on oxygenated gasoline. Other data on gasohol are included in data on conventional gasoline.

Motor Gasoline, Reformulated: Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. Note: This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Motor Gasoline Retail Prices: Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). Those prices are collected in 85 urban areas selected to represent all urban consumersabout 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-service.

Motor Gasoline (Total): For stock level data, a sum including finished motor gasoline stocks plus stocks of motor

gasoline blending components but excluding stocks of oxygenates.

MTBE: See Methyl Tertiary Butyl Ether.

NAICS (North American Industry Classification System): A coding system developed jointly by the United States, Canada, and Mexico to classify businesses and industries according to the type of economic activity in which they are engaged. NAICS replaces the Standard Industrial Classification (SIC) codes. For additional information on NAICS, go to http://www.census.gov/epcd/www/naics.html.

**Naphtha**: A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400° F.

**Natural Gas**: A gaseous mixture of hydrocarbon compounds, primarily methane, used as a fuel for electricity generation and in a variety of ways in buildings, and as raw material input and fuel for industrial processes.

**Natural Gas, Dry**: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. *Note:* Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Natural Gas (Dry) Production: The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the production site include 1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and 2) gas vented and flared. Processing losses include 1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and 2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less extraction loss.

**Natural Gas Marketed Production**: Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring; nonhydrocarbon gases removed in treating and processing operations; and quantities vented and flared.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant

liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Material as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Wellhead Price: The wellhead price of natural gas is calculated by dividing the total reported value at the wellhead by the total quantity produced as reported by the appropriate agencies of individual producing States and the U.S. Minerals Management Service. The price includes all costs prior to shipment from the lease, including gathering and compression costs, in addition to State production, severance, and similar charges.

**Natural Gasoline**: A mixture of hydrocarbons (mostly pentanes and heavier) extracted from natural gas that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Net Summer Capacity**: The maximum output, commonly expressed in **kilowatts** (kW) or megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of June 1 through September 30). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

**Neutral Zone**: A 6,200 square-mile area shared equally between Kuwait and Saudi Arabia under a 1992 agreement. The Neutral Zone contains an estimated 5 billion barrels of oil and 8 trillion cubic feet of natural gas.

**Nominal Dollars**: A measure used to express **nominal price**.

**Nominal Price:** The price paid for a product or service at the time of the transaction. Nominal prices are those that have not been adjusted to remove the effect of changes in the purchasing power of the dollar; they reflect buying power in the year in which the transaction occurred.

**Non-Biomass Waste:** Material of non-biological origin that is a byproduct or a discarded product. "Non-biomass waste" includes municipal solid waste from non-biogenic sources, such as plastics, and tire-derived fuels.

**Nonhydrocarbon Gases**: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

**Nuclear Electric Power (Nuclear Power)**: Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.

**Nuclear Electric Power Plant**: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

**Nuclear Reactor**: An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

# **OECD:** See Organization for Economic Cooperation and Development.

**Offshore**: That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

Oil: See Crude Oil.

**OPEC:** See **Organization of the Petroleum Exporting Countries.** 

**Operable Unit (Nuclear)**: In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

Organization for Economic Cooperation and Development (OECD): Members are Australia, Austria, Belgium, Canada, Denmark, Faeroe Islands, Finland, France, Germany, Greece, Greenland, Hawaiian Trade Zone, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States and its territories (Guam, Puerto Rico, and the Virgin Islands). In addition, Czech Republic, Hungary, Poland, and South Korea joined the OECD in 1996.

**Organization of the Petroleum Exporting Countries** (**OPEC**): An intergovernmental organization whose stated objective is to coordinate and unify petroleum policies among member countries. It was created at the Baghdad Conference on September 10–14, 1960, by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. The five founding members were later joined by nine other members: Qatar (1961); Indonesia (1962); Libya (1962); United Arab Emirates (1967); Algeria (1969); Nigeria (1971); Ecuador (1973–1992, 2007); Gabon (1975–1994) and Angola (2007).

**Oxygenates**: Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

**PAD Districts**: Petroleum Administration for Defense Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

**Pentanes Plus**: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

**Petrochemical Feedstocks**: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics.

**Petroleum**: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: See Coke, Petroleum.

Petroleum Consumption: See Products Supplied (Petroleum).

**Petroleum Imports**: Imports of petroleum into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

**Petroleum Products**: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Petroleum Stocks, Primary**: For individual products, quantities that are held at refineries, in pipelines, and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product

retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.

**Photovoltaic Energy**: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

**Pipeline Fuel**: Gas consumed in the operation of pipelines, primarily in compressors.

**Plant Condensate**: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquid at gas inlet separators or scrubbers in processing plants.

**Prime Mover:** The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly.

**Products Supplied (Petroleum):** Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas-processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted-for crude oil (plus net receipts when calculated on a PAD District basis) minus stock change, minus crude oil losses, minus refinery inputs, and minus exports.

**Propane**: A normally gaseous straight-chain hydrocarbon ( $C_3H_8$ ). It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

**Propylene**: An olefinic hydrocarbon (C<sub>3</sub>H<sub>6</sub>) recovered from refinery or petrochemical processes.

**Real Dollars**: These are dollars that have been adjusted for inflation. See **Real Price**.

**Real Price**: A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices, which are expressed in constant dollars, usually reflect buying power relative to a base year.

**Refiner Acquisition Cost of Crude Oil**: The cost of crude oil to the refiner, including transportation and fees. The composite cost is the weighted average of domestic and imported crude oil costs.

**Refinery (Petroleum)**: An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

**Refuse Mine:** A surface site where **coal** is recovered from previously mined coal. It may also be known as a silt bank, culm bank, refuse bank, slurry dam, or dredge operation.

**Refuse Recovery:** The recapture of **coal** from a **refuse mine** or the coal recaptured by that process. The resulting product has been cleaned to reduce the concentration of noncombustible materials.

Renewable Energy: Energy obtained from sources that are essentially inexhaustible (unlike, for example, the fossil fuels, of which there is a finite supply). Renewable sources of energy include conventional hydrolectric power, biomass, geothermal, solar, and wind.

**Repressuring**: The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

Residential Sector: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. *Note:* Various EIA programs differ in sectoral coverage for more information see http://www.eia.doe.gov/neic/datadefinitions/Guideforwebres.htm. See End-Use Sectors and Energy-Use Sectors.

**Residual Fuel Oil**: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, for electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

**Road Oil:** Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

**Rotary Rig**: A machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

**Short Ton (Coal)**: A unit of weight equal to 2,000 pounds.

**SIC** (Standard Industrial Classification): A set of codes developed by the U.S. Office of Management and Budget which categorizes industries into groups with similar economic activities. Replaced by NAICS (North American Industry Classification System).

**Solar Energy**: See **Solar Thermal Energy** and **Photovoltaic Energy**.

**Solar Thermal Energy**: The radiant energy of the sun that can be converted into other forms of energy, such as heat or **electricity**.

**Special Naphthas:** All finished products within the naphtha boiling ranges that are used as paint thinner, cleaners or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

**Station Use**: Energy that is used to operate an **electric power plant**. It includes energy consumed for plant lighting, power, and auxiliary facilities, regardless of whether the energy is produced at the plant or comes from another source.

Steam Coal: All nonmetallurgical coal.

**Steam-Electric Power Plant**: A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

**Still Gas (Refinery Gas)**: Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and, petrochemical feedstock.

Stocks: See Coal Stocks, Crude Oil Stocks, or Petroleum Stocks, Primary.

**Strategic Petroleum Reserve (SPR)**: Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

**Subbituminous Coal:** A **coal** whose properties range from those of **lignite** to those of **bituminous coal** and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million **Btu** per **short ton** on a moist, mineral-matterfree basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Supplemental Gaseous Fuels**: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

**Synthetic Natural Gas (SNG)**: (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to **natural gas**, resulting from the conversion or reforming of **hydrocarbons** that may easily be substituted for or interchanged with pipeline-quality natural gas.

Thermal Conversion Factor: See Conversion Factor.

Transportation Sector: An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. Note: Various EIA programs differ in sectoral coverage-for more information see

http://www.eia.doe.gov/neic/datadefinitions/Guideforwebtrans.htm. See End-Use Sectors and Energy-Use Sectors.

**Unaccounted-for Crude Oil**: Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of **crude oil** production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

**Underground Storage**: The storage of natural gas in underground reservoirs at a different location from which it was produced.

**Unfinished Oils:** All oils requiring further refinery processing except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

**Unfractionated Stream**: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

United States: The 50 States and the District of Columbia. Note: The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

**Useful Thermal Output**: The thermal energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling

application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

U.S.S.R.: The Union of Soviet Socialist Republics consisted of 15 constituent republics: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. As a political entity, the U.S.S.R. ceased to exist as of December 31, 1991.

**Vented Natural Gas**: Gas released into the air on the production site or at processing plants.

**Vessel Bunkering**: Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

**Waste Coal:** Usable material that is a byproduct of previous **coal** processing operations. Waste coal is usually composed of mixed coal, soil, and rock (mine waste). Most waste coal is burned as-is in unconventional fluidized-bed combustors. For some uses, waste coal may be partially cleaned by removing some extraneous noncombustible constituents. Examples of waste coal include fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste.

Waste: See Biomass Waste and Non-Biomass Waste.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A watt is equal to

1/746 horsepower.

Watthour (Wh): The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.

Waxes: Solid or semisolid material derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

Wellhead Price: The value of crude oil or natural gas at the mouth of the well.

**Wind Energy**: Kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.

Wood and Wood-Derived Fuels: Wood and products derived from wood that are used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, paper pellets, railroad ties, utility poles, black liquor, red liquor, sludge wood, spent sulfite liquor, and other wood-based solids and liquids.

Working Gas: The volume of gas in a reservoir that is in addition to the base gas. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.