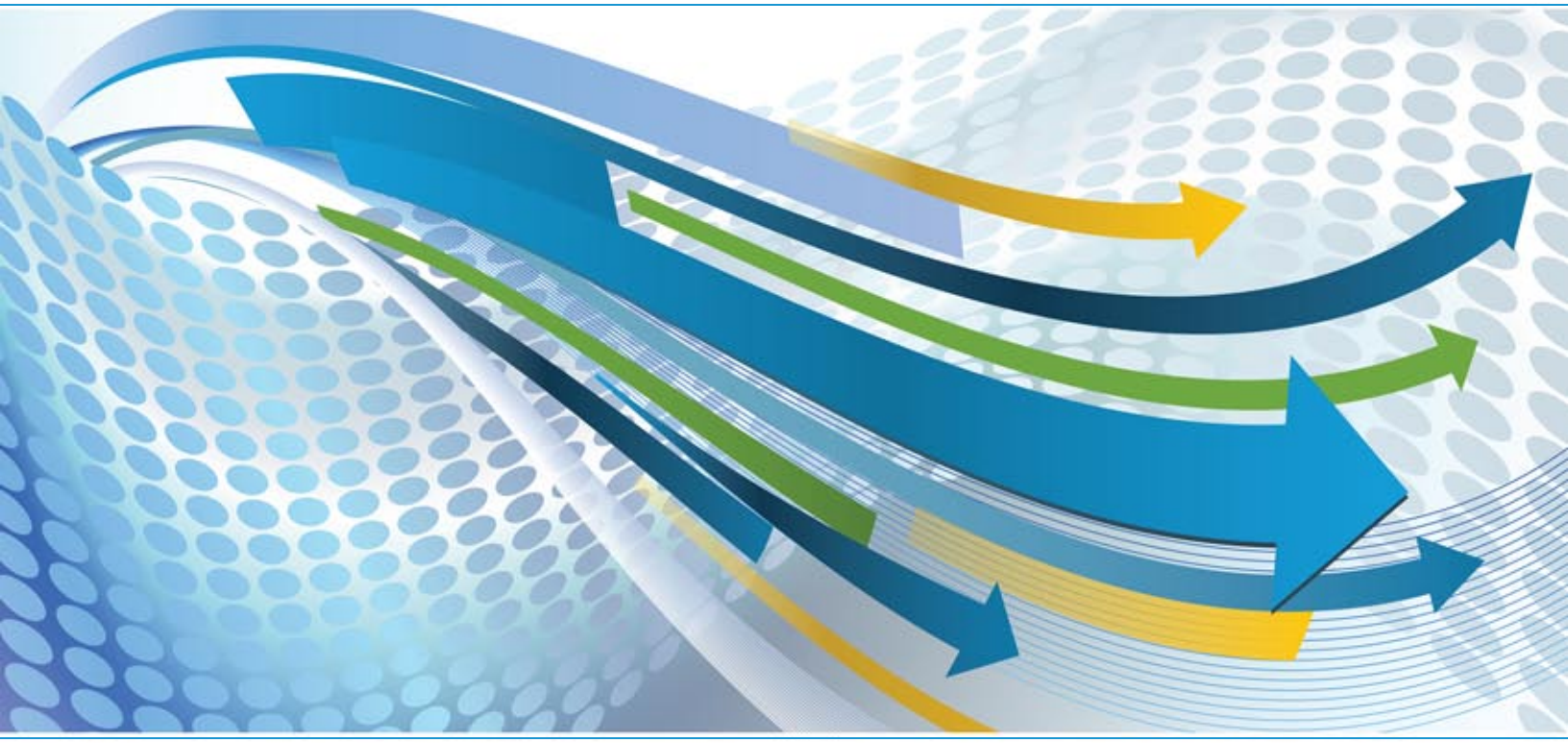
DOE/EIA-0035(2012/06)

June 2012

Monthly Energy Review



Independent Statistics & Analysis
U.S. Energy Information Administration

www.eia.gov/mer

Monthly Energy Review

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

> *"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 Monthly Publications: Other monthly EIA reports are *Petroleum Supply Monthly*, *Petroleum Marketing Monthly*, *Natural Gas Monthly*, *Electric Power Monthly*, and *International Petroleum Monthly*. For more information, contact EIA's Office of Communications via email at infoctr@eia.gov.

Important Notes About the Data

Data Displayed: For tables beginning in 1973, some annual data (usually 1974, 1976-1979, 1981-1984, 1986-1989, and 1991-1994) are not shown in the tables in Portable Document Format (PDF) files; however, all annual data are shown in the Excel and comma-separated values (CSV) files. Also, only two to three years of monthly data are displayed in the PDF files; however, for many series, monthly data beginning with January 1973 are available in the Excel and CSV files.

Comprehensive Changes: Each month, most MER tables and figures carry a new month of data, which is usually preliminary (and sometimes estimated or even forecast) and likely to be revised in the succeeding month.

Annual Data From 1949: The emphasis of the MER is on recent monthly and annual data trends. Analysts may wish to use the data in this report in conjunction with EIA's *Annual Energy Review* (*AER*) that offers annual data beginning in 1949 for many of the data series found in the MER. The AER is available at http://www.eia.gov/totalenergy/data/annual.

Electronic Access

The MER is available on EIA's website in a variety of formats at http://www.eia.gov/totalenergy/data/monthly.

- Full report and sections: PDF files
- Report tables: PDF files
- Table data (unrounded): Excel and CSV files
- Graphs: PDF 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.

Timing of Release: The MER is posted on the EIA website by the last work day of the month at http://www.eia.gov/totalenergy/data/monthly.

Released: June 27, 2012

DOE/EIA-0035(2012/06)

Monthly Energy Review

June 2012

U.S. Energy Information Administration
Office of Energy Statistics
U.S. Department of Energy
Washington, DC 20585

Contacts

The *Monthly Energy Review* is prepared by the U.S. Energy Information Administration, Office of Energy Statistics, Office of Survey Development and Statistical Integration, Integrated Energy Statistics Team, under the direction of Barbara T. Fichman, 202-586-5737 (barbara.fichman@eia.gov). Questions and comments specifically related to the *Monthly Energy Review* may be addressed to Alexander Sun, 202-287-5948 (alexander.sun@eia.gov).

For assistance in acquiring data, please contact EIA's Office of Communications at 202-586-8800 (infoctr@eia.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.gov
Section	**2.**	**Energy Consumption by Sector**	Dianne R. Dunn	202-586-2792 dianne.dunn@eia.gov
Section	**3.**	**Petroleum**	Jennifer Barrick	202-586-6254 jennifer.barrick@eia.gov
Section	**4.**	**Natural Gas**	Amy Sweeney	202-586-2627 amy.sweeney@eia.gov
Section	**5.**	**Crude Oil and Natural Gas Resource Development**	Robert F. King	202-586-4787 robert.king@eia.gov
Section	**6.**	**Coal**	Nicholas Paduano	202-287-6326 nicholas.paduano@eia.gov
Section	**7.**	**Electricity**	Ronald S. Hankey	202-586-2630 ronald.hankey@eia.gov
Section	**8.**	**Nuclear Energy**	Michael P. Mobilia	202-287-6318 michael.mobilia@eia.gov
Section	**9.**	**Energy Prices**		
		Petroleum	Maureen Klein	202-586-8013 maureen.klein@eia.gov
		Natural Gas	Amy Sweeney	202-586-2627 amy.sweeney@eia.gov
		Average Retail Prices of Electricity	Charlene Harris-Russell	202-586-2661 charlene.harris-russell@eia.gov
		Cost of Fuel at Electric Generating Plants	Rebecca Peterson	202-586-4509 rebecca.peterson@eia.gov
Section	**10.**	**Renewable Energy**	Fred Mayes	202-586-1508 fred.mayes@eia.gov
Section	**11.**	**International Petroleum**	Patricia Smith	202-586-6925 patricia.smith@eia.gov
Section	**12.**	**Environment**	Perry Lindstrom	202-586-0934 perry.lindstrom@eia.gov

Contents

			Page
Section	1.	Energy Overview	1
Section	2.	Energy Consumption by Sector	21
Section	3.	Petroleum	35
Section	4.	Natural Gas	67
Section	5.	Crude Oil and Natural Gas Resource Development	75
Section	6.	Coal	81
Section	7.	Electricity	91
Section	8.	Nuclear Energy	113
Section	9.	Energy Prices	117
Section	10.	Renewable Energy	137
Section	11.	International Petroleum	149
Section	12.	Environment	159
Appendix	A.	British Thermal Unit Conversion Factors	173
Appendix	B.	Metric Conversion Factors, Metric Prefixes, and Other Physical Conversion Factors	185
Glossary			189

Tables

Page

Section 1. Energy Overview
1.1 Primary Energy Overview. . . . 3
1.2 Primary Energy Production by Source. . . . 5
1.3 Primary Energy Consumption by Source. . . . 7
1.4a Primary Energy Imports by Source. . . . 10
1.4b Primary Energy Exports by Source and Total Net Imports. . . . 11
1.5 Merchandise Trade Value. . . . 13
1.6 Cost of Fuels to End Users in Real (1982-1984) Dollars. . . . 15
1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product. . . . 16
1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy. . . . 17
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. . . . 23
2.2 Residential Sector Energy Consumption. . . . 25
2.3 Commercial Sector Energy Consumption. . . . 27
2.4 Industrial Sector Energy Consumption. . . . 29
2.5 Transportation Sector Energy Consumption. . . . 31
2.6 Electric Power Sector Energy Consumption. . . . 33

Section 3. Petroleum
3.1 Petroleum Overview 37
3.2 Refinery and Blender Net Inputs and Net Production. . . . 39
3.3 Petroleum Trade
3.3a Overview. . . . 41
3.3b Imports and Exports by Type. . . . 43
3.3c Imports From OPEC Countries. . . . 44
3.3d Imports From Non-OPEC Countries. . . . 45
3.4 Petroleum Stocks. . . . 47
3.5 Petroleum Products Supplied by Type. . . . 49
3.6 Heat Content of Petroleum Products Supplied by Type. . . . 51
3.7 Petroleum Consumption
3.7a Residential and Commercial Sectors. . . . 53
3.7b Industrial Sector. . . . 54
3.7c Transportation and Electric Power Sectors. . . . 55
3.8 Heat Content of Petroleum Consumption
3.8a Residential and Commercial Sectors. . . . 57
3.8b Industrial Sector. . . . 58
3.8c Transportation and Electric Power Sectors. . . . 59

Section 4. Natural Gas
4.1 Natural Gas Overview. . . . 69
4.2 Natural Gas Trade by Country 70
4.3 Natural Gas Consumption by Sector. . . . 71
4.4 Natural Gas in Underground Storage. . . . 72

Section 5. Crude Oil and Natural Gas Resource Development
5.1 Crude Oil and Natural Gas Drilling Activity Measurements. . . . 77
5.2 Crude Oil and Natural Gas Exploratory and Development Wells. . . . 78

Tables

Page

Section 6. Coal
6.1 Coal Overview. . . . 83
6.2 Coal Consumption by Sector. . . . 84
6.3 Coal Stocks by Sector. . . . 85

Section 7. Electricity
7.1 Electricity Overview. . . . 93
7.2 Electricity Net Generation
7.2a Total (All Sectors). . . . 95
7.2b Electric Power Sector. . . . 96
7.2c Commercial and Industrial Sectors. . . . 97
7.3 Consumption of Combustible Fuels for Electricity Generation
7.3a Total (All Sectors). . . . 99
7.3b Electric Power Sector. . . . 100
7.3c Commercial and Industrial Sectors (Selected Fuels). . . . 101
7.4 Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output
7.4a Total (All Sectors). . . . 103
7.4b Electric Power Sector. . . . 104
7.4c Commercial and Industrial Sectors (Selected Fuels). . . . 105
7.5 Stocks of Coal and Petroleum: Electric Power Sector. . . . 107
7.6 Electricity End Use. . . . 109

Section 8. Nuclear Energy
8.1 Nuclear Energy Overview. . . . 115

Section 9. Energy Prices
9.1 Crude Oil Price Summary. . . . 119
9.2 F.O.B. Costs of Crude Oil Imports From Selected Countries. . . . 120
9.3 Landed Costs of Crude Oil Imports From Selected Countries. . . . 121
9.4 Motor Gasoline Retail Prices, U.S. City Average. . . . 122
9.5 Refiner Prices of Residual Fuel Oil. . . . 123
9.6 Refiner Prices of Petroleum Products for Resale. . . . 124
9.7 Refiner Prices of Petroleum Products to End Users. . . . 125
9.8 No. 2 Distillate Prices to Residences
9.8a Northeastern States. . . . 126
9.8b Selected South Atlantic and Midwestern States. . . . 127
9.8c Selected Western States and U.S. Average. . . . 128
9.9 Average Retail Prices of Electricity. . . . 130
9.10 Cost of Fossil-Fuel Receipts at Electric Generating Plants. . . . 131
9.11 Natural Gas Prices. . . . 133

Section 10. Renewable Energy
10.1 Renewable Energy Production and Consumption by Source. . . . 139
10.2 Renewable Energy Consumption
10.2a Residential and Commercial Sectors. . . . 140
10.2b Industrial and Transportation Sectors. . . . 141
10.2c Electric Power Sector 142
10.3 Fuel Ethanol Overview. . . . 143
10.4 Biodiesel Overview. . . . 144

Tables

Page

Section 11. International Petroleum
11.1 World Crude Oil Production
11.1a OPEC Members. . . . 152
11.1b Persian Gulf Nations, Non-OPEC, and World. . . . 153
11.2 Petroleum Consumption in OECD Countries. . . . 155
11.3 Petroleum Stocks in OECD Countries. . . . 157

Section 12. Environment
12.1 Carbon Dioxide Emissions From Energy Consumption by Source . . . 161
12.2 Carbon Dioxide Emissions From Energy Consumption: Residential Sector . . . 163
12.3 Carbon Dioxide Emissions From Energy Consumption: Commercial Sector. . . . 164
12.4 Carbon Dioxide Emissions From Energy Consumption: Industrial Sector. . . . 165
12.5 Carbon Dioxide Emissions From Energy Consumption: Transportation Sector. . . . 166
12.6 Carbon Dioxide Emissions From Energy Consumption: Electric Power Sector. . . . 167
12.7 Carbon Dioxide Emissions From Biomass Energy Consumption . . . 168

Appendix A. British Thermal Unit Conversion Factors
A1. Approximate Heat Content of Petroleum Products. . . . 173
A2. Approximate Heat Content of Petroleum Production, Imports, and Exports. . . . 174
A3. Approximate Heat Content of Petroleum Consumption and Biofuels Production. . . . 175
A4. Approximate Heat Content of Natural Gas. . . . 176
A5. Approximate Heat Content of Coal and Coal Coke. . . . 177
A6. Approximate Heat Rates for Electricity, and Heat Content of Electricity. . . . 178

Appendix B. Metric Conversion Factors, Metric Prefixes, and Other Physical Conversion Factors
B1. Metric Conversion Factors. . . . 186
B2. Metric Prefixes. . . . 187
B3. Other Physical Conversion Factors. . . . 187

Figures

		Page
Section 1.	**Energy Overview**	
1.1	Primary Energy Overview	2
1.2	Primary Energy Production	4
1.3	Primary Energy Consumption	6
1.4a	Primary Energy Imports and Exports	8
1.4b	Primary Energy Net Imports	9
1.5	Merchandise Trade Value	12
1.6	Cost of Fuels to End Users in Real (1982-1984) Dollars	14
1.7	Primary Energy Consumption per Real Dollar of Gross Domestic Product	16
1.8	Motor Vehicle Fuel Economy	17
Section 2.	**Energy Consumption by Sector**	
2.1	Energy Consumption by Sector	22
2.2	Residential Sector Energy Consumption	24
2.3	Commercial Sector Energy Consumption	26
2.4	Industrial Sector Energy Consumption	28
2.5	Transportation Sector Energy Consumption	30
2.6	Electric Power Sector Energy Consumption	32
Section 3.	**Petroleum**	
3.1	Petroleum Overview	36
3.2	Refinery and Blender Net Inputs and Net Production	38
3.3	Petroleum Trade	
	3.3a Overview	40
	3.3b Imports	42
3.4	Petroleum Stocks	46
3.5	Petroleum Products Supplied by Type	48
3.6	Heat Content of Petroleum Products Supplied by Type	50
3.7	Petroleum Consumption by Sector	52
3.8	Heat Content of Petroleum Consumption by Sector, Selected Products	56
Section 4.	**Natural Gas**	
4.1	Natural Gas	68
Section 5.	**Crude Oil and Natural Gas Resource Development**	
5.1	Crude Oil and Natural Gas Resource Development Indicators	76
Section 6.	**Coal**	
6.1	Coal	82
Section 7.	**Electricity**	
7.1	Electricity Overview	92
7.2	Electricity Net Generation	94
7.3	Consumption of Selected Combustible Fuels for Electricity Generation	98
7.4	Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output	102
7.5	Stocks of Coal and Petroleum: Electric Power Sector	106
7.6	Electricity End Use	108
Section 8.	**Nuclear Energy**	
8.1	Nuclear Energy Overview	114

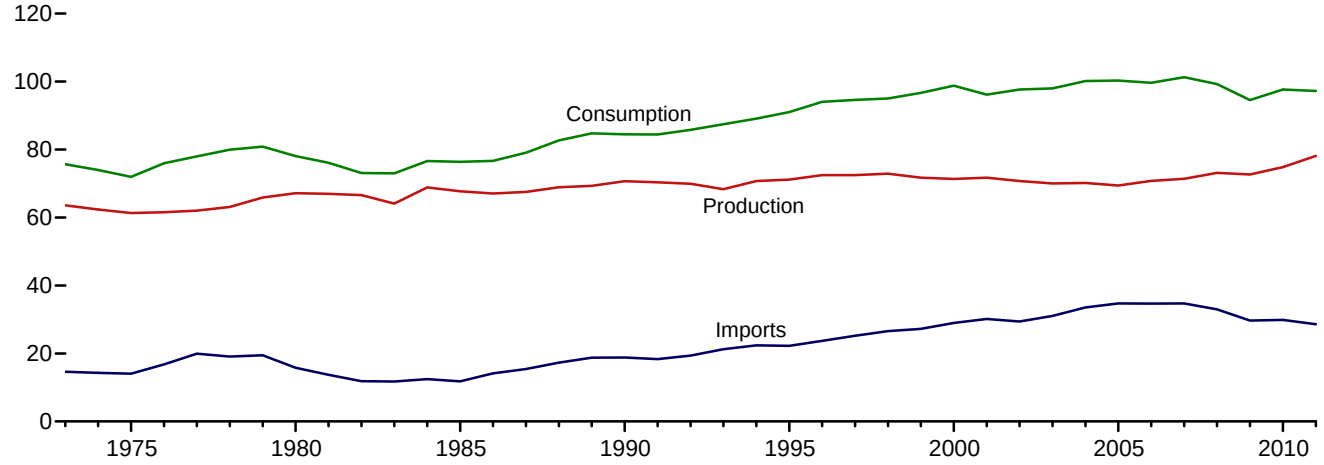
Figures

		Page
Section 9.	**Energy Prices**	
9.1	Petroleum Prices	118
9.2	Average Retail Prices of Electricity	129
9.3	Cost of Fossil-Fuel Receipts at Electric Generating Plants	129
9.4	Natural Gas Prices	132
Section 10.	**Renewable Energy**	
10.1	Renewable Energy Consumption	138
Sectionr 11.	**International Petroleum**	
11.1	World Crude Oil Production	
	11.1a Overview	150
	11.1b By Selected Country	151
11.2	Petroleum Consumption in OECD Countries	154
11.3	Petroleum Stocks in OECD Countries	156
Section 12.	**Environment**	
12.1	Carbon Dioxide Emissions From Energy Consumption by Source	160
12.2	Carbon Dioxide Emissions From Energy Consumption by Sector	162

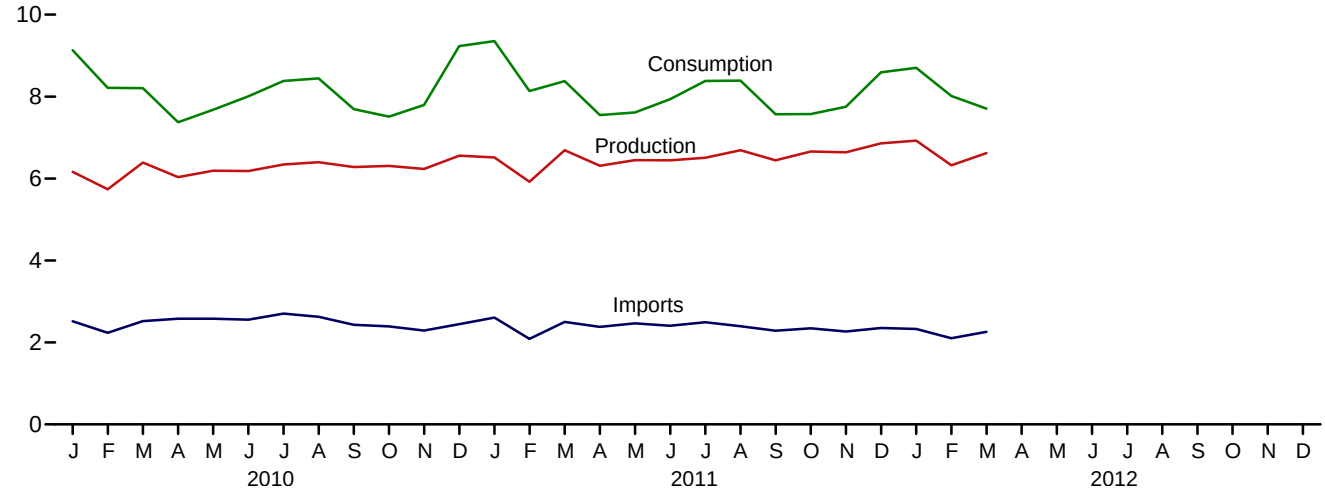
1. Energy Overview

Figure 1.1 Primary Energy Overview
(Quadrillion Btu)

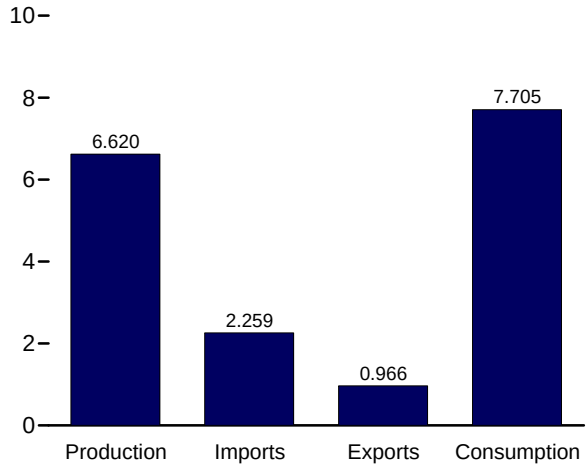
Consumption, Production, and Imports, 1973-2011



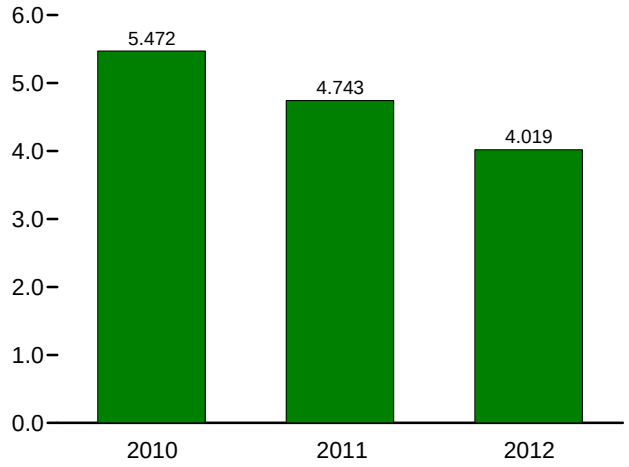
Consumption, Production, and Imports, Monthly



Overview, March 2012



Net Imports, January-March



Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.1.

Table 1.1 Primary Energy Overview

(Quadrillion Btu)

	Production				Trade			Stock Change and Other[d]	Consumption			
	Fossil Fuels[a]	Nuclear Electric Power	Renewable Energy[b]	Total	Imports	Exports	Net Imports[c]		Fossil Fuels[e]	Nuclear Electric Power	Renewable Energy[b]	Total[f]
1973 Total	**58.241**	**0.910**	**4.411**	**63.563**	**14.613**	**2.033**	**12.580**	**-0.459**	**70.314**	**0.910**	**4.411**	**75.684**
1975 Total	**54.733**	**1.900**	**4.687**	**61.320**	**14.032**	**2.323**	**11.709**	**-1.065**	**65.357**	**1.900**	**4.687**	**71.965**
1980 Total	**59.008**	**2.739**	**5.428**	**67.175**	**15.796**	**3.695**	**12.101**	**-1.210**	**69.828**	**2.739**	**5.428**	**78.067**
1985 Total	**57.539**	**4.076**	**6.084**	**67.698**	**11.781**	**4.196**	**7.584**	**1.110**	**66.093**	**4.076**	**6.084**	**76.392**
1990 Total	**58.560**	**6.104**	**6.041**	**70.705**	**18.817**	**4.752**	**14.065**	**-.284**	**72.332**	**6.104**	**6.041**	**84.485**
1995 Total	**57.540**	**7.075**	**6.558**	**71.174**	**22.260**	**4.511**	**17.750**	**2.105**	**77.259**	**7.075**	**6.560**	**91.029**
1996 Total	**58.387**	**7.087**	**7.012**	**72.486**	**23.702**	**4.633**	**19.069**	**2.468**	**79.785**	**7.087**	**7.014**	**94.022**
1997 Total	**58.857**	**6.597**	**7.018**	**72.472**	**25.215**	**4.514**	**20.701**	**1.429**	**80.873**	**6.597**	**7.016**	**94.602**
1998 Total	**59.314**	**7.068**	**6.494**	**72.876**	**26.581**	**4.299**	**22.281**	**-.140**	**81.369**	**7.068**	**6.493**	**95.018**
1999 Total	**57.614**	**7.610**	**6.517**	**71.742**	**27.252**	**3.715**	**23.537**	**1.372**	**82.427**	**7.610**	**6.516**	**96.652**
2000 Total	**57.366**	**7.862**	**6.104**	**71.332**	**28.973**	**4.006**	**24.967**	**2.515**	**84.731**	**7.862**	**6.106**	**98.814**
2001 Total	**58.541**	**8.029**	**5.164**	**71.735**	**30.157**	**3.771**	**26.386**	**-1.953**	**82.902**	**8.029**	**5.163**	**96.168**
2002 Total	**56.837**	**8.145**	**5.734**	**70.716**	**29.408**	**3.669**	**25.739**	**1.190**	**83.699**	**8.145**	**5.729**	**97.645**
2003 Total	**56.099**	**7.959**	**5.982**	**70.040**	**31.061**	**4.054**	**27.007**	**.931**	**84.014**	**7.959**	**5.983**	**97.978**
2004 Total	**55.895**	**8.222**	**6.070**	**70.188**	**33.544**	**4.434**	**29.110**	**.864**	**85.819**	**8.222**	**6.082**	**100.162**
2005 Total	**55.038**	**8.161**	**6.229**	**69.428**	**34.709**	**4.560**	**30.149**	**.705**	**85.794**	**8.161**	**6.242**	**100.282**
2006 Total	**55.968**	**8.215**	**6.599**	**70.782**	**34.679**	**4.872**	**29.806**	**-.959**	**84.702**	**8.215**	**6.649**	**99.629**
2007 Total	**56.409**	**8.455**	**6.509**	**71.373**	**34.703**	**5.482**	**29.221**	**.702**	**86.211**	**8.455**	**6.523**	**101.296**
2008 Total	**57.482**	**8.427**	**7.202**	**73.111**	**32.992**	**7.060**	**25.932**	**.231**	**83.549**	**8.427**	**7.186**	**99.275**
2009 Total	**56.685**	**8.356**	**7.616**	**72.657**	**29.706**	**6.965**	**22.741**	**-.839**	**78.488**	**8.356**	**7.600**	**94.559**
2010 January	R 4.733	.758	.672	R 6.164	2.516	.590	1.926	R 1.042	R 7.697	.758	.662	R 9.132
February	R 4.445	.682	.610	R 5.738	2.237	.556	1.681	.794	R 6.915	.682	.605	R 8.213
March	R 5.032	.676	.682	R 6.389	2.519	.654	1.865	R -.049	R 6.846	.676	.673	R 8.205
April	R 4.774	.602	.661	R 6.037	2.580	.686	1.894	R -.558	R 6.104	.602	.657	R 7.372
May	R 4.778	.697	.717	R 6.192	2.578	.704	1.874	R -.388	R 6.261	.697	.715	R 7.678
June	R 4.716	.714	.753	R 6.183	2.556	.684	1.872	R -.048	R 6.530	.714	.755	R 8.008
July	R 4.889	.752	.701	R 6.342	2.705	.716	1.989	R .052	R 6.920	.752	.701	R 8.383
August	R 4.987	.748	.662	R 6.397	2.627	.698	1.929	R .118	R 7.030	.748	.660	R 8.445
September	R 4.931	.725	.626	R 6.281	2.431	.675	1.757	R -.344	R 6.345	.725	.622	R 7.694
October	R 5.006	.656	.646	R 6.308	2.390	.714	1.676	R -.474	R 6.209	.656	.643	R 7.509
November	R 4.898	.655	.682	6.235	2.289	.760	1.529	R .033	R 6.464	.655	.676	R 7.797
December	R 5.061	.770	.726	R 6.557	2.447	.797	1.650	R 1.025	R 7.732	.770	.720	R 9.231
Total	**R 58.250**	**8.434**	**8.136**	**R 74.821**	**29.877**	**8.234**	**21.643**	**R 1.202**	**R 81.054**	**8.434**	**8.090**	**R 97.667**
2011 January	5.000	.760	.754	6.514	2.607	.832	1.776	R 1.065	R 7.847	.760	.739	R 9.355
February	R 4.527	.677	.717	R 5.921	2.087	.751	1.336	R .878	R 6.740	.677	.710	R 8.135
March	R 5.181	.686	.822	R 6.689	2.501	.869	1.631	R .056	R 6.870	.686	.811	R 8.376
April	R 4.920	.570	.821	R 6.311	2.378	.852	1.526	R -.288	R 6.160	.570	.812	R 7.549
May	R 5.011	.596	.840	R 6.448	2.466	.832	1.634	R -.467	R 6.171	.596	.835	R 7.614
June	R 4.934	.682	.828	R 6.445	2.407	.802	1.605	R -.113	R 6.417	.682	.827	R 7.937
July	R 4.953	.756	.797	R 6.506	2.493	.833	1.660	R .214	R 6.820	.756	.787	R 8.380
August	R 5.200	.746	.746	R 6.691	2.395	.893	1.502	R .196	R 6.884	.746	.744	R 8.389
September	R 5.065	.699	.680	R 6.443	2.288	.891	R 1.397	R -.272	R 6.185	.699	.673	R 7.567
October	R 5.286	.662	.711	R 6.658	2.345	.892	1.453	R -.538	R 6.200	.662	.702	R 7.573
November	R 5.222	.674	.742	R 6.639	2.269	.900	1.369	R -.256	R 6.339	.674	.730	R 7.751
December	R 5.330	.751	.779	R 6.859	R 2.354	1.008	R 1.347	R .386	R 7.064	.751	.766	R 8.592
Total	**R 60.628**	**8.259**	**9.236**	**R 78.123**	**R 28.590**	**10.356**	**R 18.234**	**R .862**	**R 79.697**	**8.259**	**9.135**	**R 97.219**
2012 January	R 5.377	.757	.792	R 6.926	R 2.330	.866	R 1.464	R .311	R 7.160	.757	.773	R 8.701
February	R 4.949	.667	.705	R 6.322	R 2.102	.839	R 1.263	R .429	R 6.642	.667	.695	R 8.014
March	5.178	.645	.797	6.620	2.259	.966	1.293	-.208	6.261	.645	.789	7.705
3-Month Total	**15.505**	**2.069**	**2.294**	**19.868**	**6.691**	**2.671**	**4.019**	**.532**	**20.064**	**2.069**	**2.256**	**24.420**
2011 3-Month Total	**14.708**	**2.124**	**2.293**	**19.124**	**7.195**	**2.452**	**4.743**	**2.000**	**21.457**	**2.124**	**2.261**	**25.867**
2010 3-Month Total	**14.210**	**2.116**	**1.964**	**18.291**	**7.272**	**1.800**	**5.472**	**1.787**	**21.458**	**2.116**	**1.940**	**25.550**

[a] Coal, natural gas (dry), crude oil, and natural gas plant liquids.
[b] See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
[c] Net imports equal imports minus exports.
[d] Includes petroleum stock change and adjustments; natural gas net storage withdrawals and balancing item; coal stock change, losses, and unaccounted for; fuel ethanol stock change; and biodiesel stock change and balancing item.
[e] Coal, coal coke net imports, natural gas, and petroleum.
[f] Also includes electricity net imports.
R=Revised.

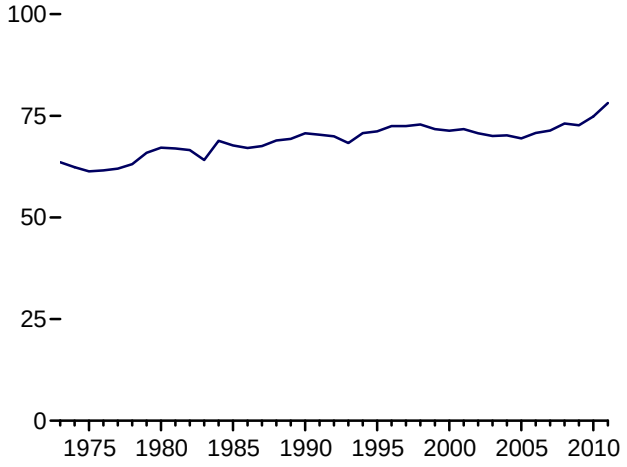
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973.

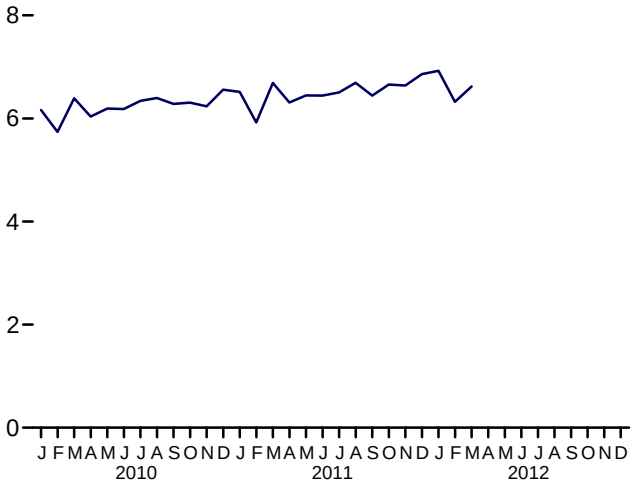
Sources: • **Production:** Table 1.2. • **Trade:** Tables 1.4a and 1.4b. • **Stock Change and Other:** Calculated as consumption minus production and net imports. • **Consumption:** Table 1.3.

Figure 1.2 Primary Energy Production
(Quadrillion Btu)

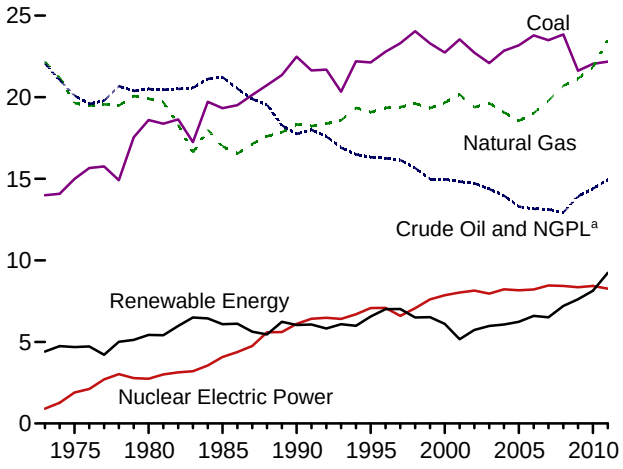
Total, 1973-2011



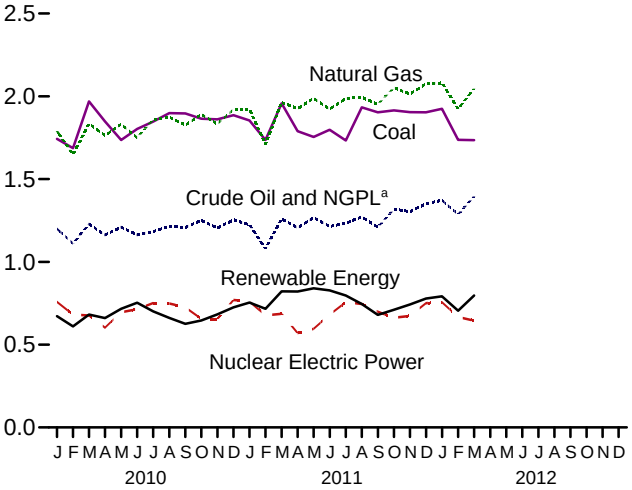
Total, Monthly



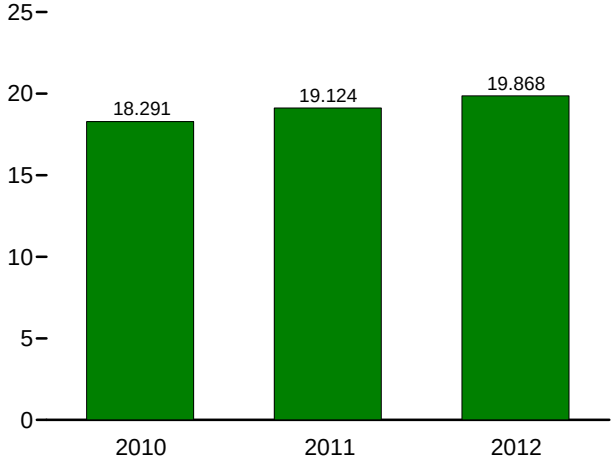
By Source, 1973-2011



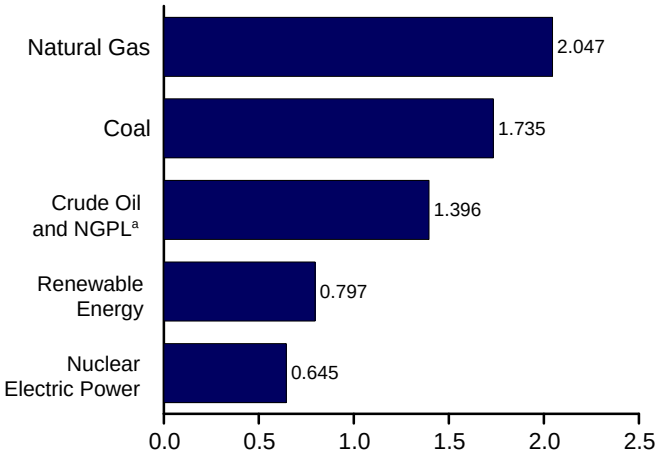
By Source, Monthly



Total, January-March



By Source, March 2012



[a] Natural gas plant liquids.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.2.

Table 1.2 Primary Energy Production by Source

(Quadrillion Btu)

	Fossil Fuels					Nuclear Electric Power	Renewable Energy[a]						Total
	Coal[b]	Natural Gas (Dry)	Crude Oil[c]	NGPL[d]	Total		Hydro-electric Power[e]	Geo-thermal	Solar/ PV	Wind	Bio-mass	Total	
1973 Total	**13.992**	**22.187**	**19.493**	**2.569**	**58.241**	**0.910**	**2.861**	**0.020**	**NA**	**NA**	**1.529**	**4.411**	**63.563**
1975 Total	**14.989**	**19.640**	**17.729**	**2.374**	**54.733**	**1.900**	**3.155**	**.034**	**NA**	**NA**	**1.499**	**4.687**	**61.320**
1980 Total	**18.598**	**19.908**	**18.249**	**2.254**	**59.008**	**2.739**	**2.900**	**.053**	**NA**	**NA**	**2.475**	**5.428**	**67.175**
1985 Total	**19.325**	**16.980**	**18.992**	**2.241**	**57.539**	**4.076**	**2.970**	**.097**	**(s)**	**(s)**	**3.016**	**6.084**	**67.698**
1990 Total	**22.488**	**18.326**	**15.571**	**2.175**	**58.560**	**6.104**	**3.046**	**.171**	**.059**	**.029**	**2.735**	**6.041**	**70.705**
1995 Total	**22.130**	**19.082**	**13.887**	**2.442**	**57.540**	**7.075**	**3.205**	**.152**	**.069**	**.033**	**3.099**	**6.558**	**71.174**
1996 Total	**22.790**	**19.344**	**13.723**	**2.530**	**58.387**	**7.087**	**3.590**	**.163**	**.070**	**.033**	**3.155**	**7.012**	**72.486**
1997 Total	**23.310**	**19.394**	**13.658**	**2.495**	**58.857**	**6.597**	**3.640**	**.167**	**.070**	**.034**	**3.108**	**7.018**	**72.472**
1998 Total	**24.045**	**19.613**	**13.235**	**2.420**	**59.314**	**7.068**	**3.297**	**.168**	**.069**	**.031**	**2.929**	**6.494**	**72.876**
1999 Total	**23.295**	**19.341**	**12.451**	**2.528**	**57.614**	**7.610**	**3.268**	**.171**	**.068**	**.046**	**2.965**	**6.517**	**71.742**
2000 Total	**22.735**	**19.662**	**12.358**	**2.611**	**57.366**	**7.862**	**2.811**	**.164**	**.066**	**.057**	**3.006**	**6.104**	**71.332**
2001 Total	**23.547**	**20.166**	**12.282**	**2.547**	**58.541**	**8.029**	**2.242**	**.164**	**.064**	**.070**	**2.624**	**5.164**	**71.735**
2002 Total	**22.732**	**19.382**	**12.163**	**2.559**	**56.837**	**8.145**	**2.689**	**.171**	**.063**	**.105**	**2.705**	**5.734**	**70.716**
2003 Total	**22.094**	**19.633**	**12.026**	**2.346**	**56.099**	**7.959**	**2.825**	**.175**	**.062**	**.115**	**2.805**	**5.982**	**70.040**
2004 Total	**22.852**	**19.074**	**11.503**	**2.466**	**55.895**	**8.222**	**2.690**	**.178**	**.063**	**.142**	**2.998**	**6.070**	**70.188**
2005 Total	**23.185**	**18.556**	**10.963**	**2.334**	**55.038**	**8.161**	**2.703**	**.181**	**.063**	**.178**	**3.104**	**6.229**	**69.428**
2006 Total	**23.790**	**19.022**	**10.801**	**2.356**	**55.968**	**8.215**	**2.869**	**.181**	**.068**	**.264**	**3.216**	**6.599**	**70.782**
2007 Total	**23.493**	**19.786**	**10.721**	**2.409**	**56.409**	**8.455**	**2.446**	**.186**	**.076**	**.341**	**3.461**	**6.509**	**71.373**
2008 Total	**23.851**	**20.703**	**10.509**	**2.419**	**57.482**	**8.427**	**2.511**	**.192**	**.089**	**.546**	**3.864**	**7.202**	**73.111**
2009 Total	**21.624**	**21.139**	**11.348**	**2.574**	**56.685**	**8.356**	**2.669**	**.200**	**.098**	**.721**	**3.928**	**7.616**	**72.657**
2010 January	1.743	1.790	R .970	.230	R 4.733	.758	.218	.018	.010	.067	.359	.672	R 6.164
February	1.687	1.648	R .900	.210	R 4.445	.682	.201	.016	.009	.053	.332	.610	R 5.738
March	1.969	1.835	R .991	.236	R 5.032	.676	.204	.018	.010	.084	.366	.682	R 6.389
April	1.848	1.763	R .936	.227	R 4.774	.602	.186	.017	.010	.095	.351	.661	R 6.037
May	1.736	1.832	R .972	.238	R 4.778	.697	.245	.018	.011	.085	.358	.717	R 6.192
June	1.802	1.751	R .937	.226	R 4.716	.714	.291	.017	.011	.079	.355	.753	R 6.183
July	1.847	1.859	R .956	.227	R 4.889	.752	.239	.017	.011	.066	.367	.701	R 6.342
August	1.898	1.874	R .980	.236	R 4.987	.748	.196	.018	.011	.065	.371	.662	R 6.397
September	1.897	1.826	R .977	.232	R 4.931	.725	.168	.017	.011	.069	.360	.626	R 6.281
October	1.864	1.892	R 1.008	.242	R 5.006	.656	.173	.017	.010	.077	.369	.646	R 6.308
November	1.860	1.833	R .969	.235	R 4.898	.655	.191	.017	.010	.095	.369	.682	6.235
December	1.886	1.920	1.012	.242	R 5.061	.770	.226	.018	.010	.088	.383	.726	R 6.557
Total	**22.038**	**21.823**	R **11.608**	**2.781**	R **58.250**	**8.434**	**2.539**	**.208**	**.126**	**.923**	**4.341**	**8.136**	R **74.821**
2011 January	1.854	E 1.922	RE .994	.230	5.000	.760	.255	.020	.012	.084	.383	.754	6.514
February	1.736	E 1.711	RE .883	.198	R 4.527	.677	.241	.018	.012	.103	.344	.717	R 5.921
March	1.958	E 1.963	RE 1.013	.247	R 5.181	.686	.310	.020	.013	.103	.377	.822	R 6.689
April	1.789	E 1.925	E .967	.238	R 4.920	.570	.309	.018	.013	.121	.359	.821	R 6.311
May	1.755	E 1.988	E 1.015	.253	R 5.011	.596	.323	.019	.014	.114	.371	.840	R 6.448
June	1.798	E 1.923	RE .974	.240	R 4.934	.682	.315	.019	.014	.106	.375	.828	R 6.445
July	1.733	E 1.987	RE .983	.250	R 4.953	.756	.308	.019	.014	.072	.384	.797	R 6.506
August	1.933	E 1.994	RE 1.021	.251	R 5.200	.746	.257	.019	.014	.072	.384	.746	R 6.691
September	1.903	E 1.952	RE .973	.237	R 5.065	.699	.210	.018	.013	.067	.371	.680	R 6.443
October	1.915	E 2.052	RE 1.059	.259	R 5.286	.662	.195	.019	.014	.104	.379	.711	R 6.658
November	1.904	E 2.014	RE 1.046	.258	R 5.222	.674	.209	.019	.012	.121	.382	.742	R 6.639
December	1.903	E 2.075	RE 1.084	.268	R 5.330	.751	.241	.019	.013	.102	.403	.779	R 6.859
Total	**22.181**	E **23.506**	RE **12.013**	**2.928**	R **60.628**	**8.259**	**3.171**	**.226**	**.158**	**1.168**	**4.511**	**9.236**	R **78.123**
2012 January	R 1.924	RE 2.081	RE 1.101	.271	R 5.377	.757	.233	.019	.015	.135	.389	.792	R 6.926
February	R 1.737	RE 1.925	E 1.033	.255	R 4.949	.667	.203	.018	.015	.108	R .362	.705	R 6.322
March	1.735	E 2.047	E 1.126	.271	5.178	.645	.256	.019	.016	.132	.372	.797	6.620
3-Month Total	**5.397**	E **6.053**	E **3.259**	**.796**	**15.505**	**2.069**	**.693**	**.057**	**.046**	**.375**	**1.123**	**2.294**	**19.868**
2011 3-Month Total	**5.548**	E **5.595**	E **2.890**	**.675**	**14.708**	**2.124**	**.806**	**.057**	**.037**	**.290**	**1.103**	**2.293**	**19.124**
2010 3-Month Total	**5.399**	**5.273**	**2.862**	**.676**	**14.210**	**2.116**	**.623**	**.052**	**.029**	**.204**	**1.057**	**1.964**	**18.291**

[a] Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.

[b] Beginning in 1989, includes waste coal supplied. Beginning in 2001, also includes a small amount of refuse recovery. See Table 6.1.

[c] 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.

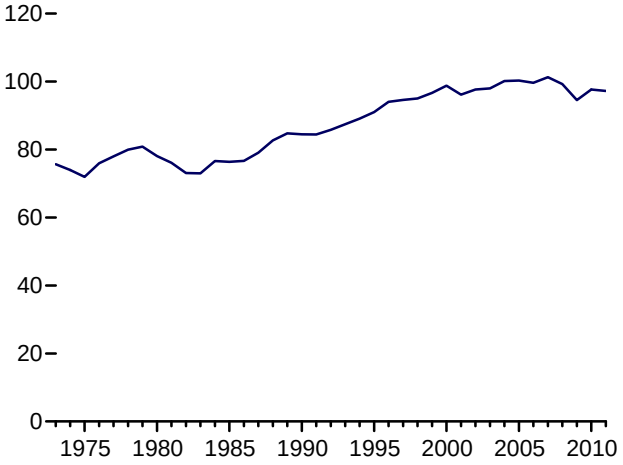
Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973.

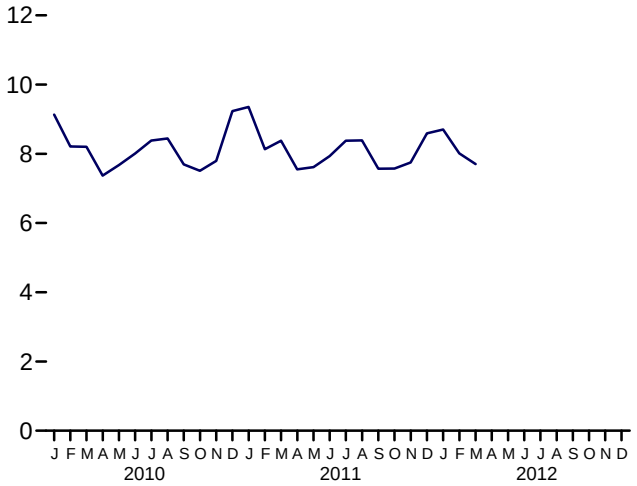
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas (Dry):** Tables 4.1 and A4. • **Crude Oil** and **Natural Gas Plant Liquids:** Tables 3.1 and A2. • **Nuclear Electric Power:** Tables 7.2a and A6 ("Nuclear Plants" heat rate). • **Renewable Energy:** Table 10.1.

Figure 1.3 Primary Energy Consumption
(Quadrillion Btu)

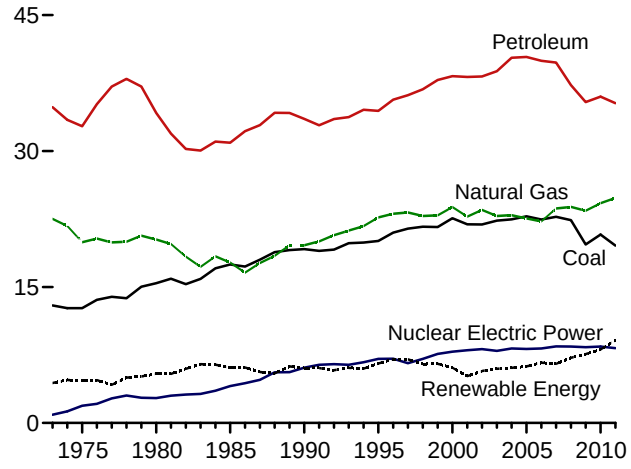
Total, 1973-2011



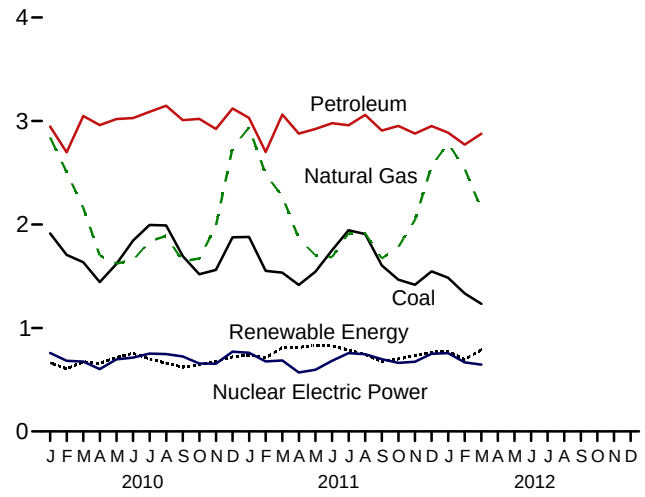
Total, Monthly



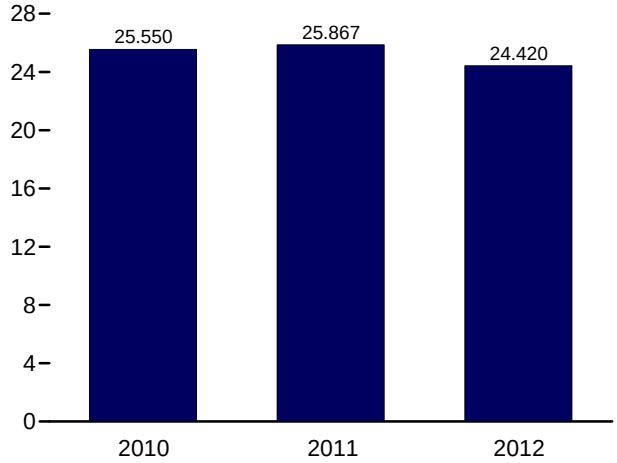
By Source,[a] 1973-2011



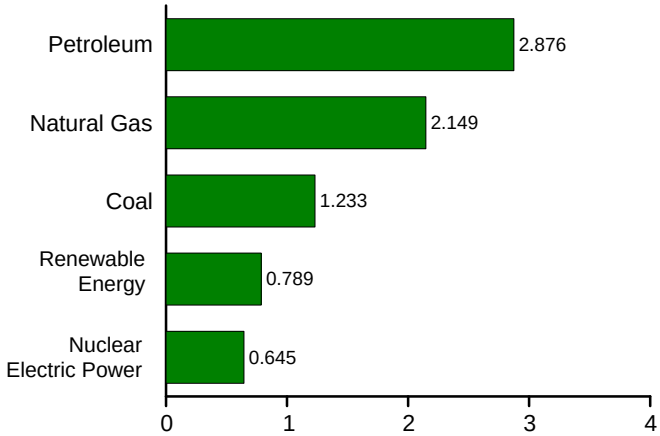
By Source,[a] Monthly



Total, January-March



By Source,[a] March 2012



[a] Small quantities of net imports of coal coke and electricity are not shown.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.3.

Table 1.3 Primary Energy Consumption by Source

(Quadrillion Btu)

	Fossil Fuels					Renewable Energy[a]						
	Coal	Natural Gas[b]	Petroleum[c]	Total[d]	Nuclear Electric Power	Hydroelectric Power[e]	Geothermal	Solar/PV	Wind	Biomass	Total	Total[f]
1973 Total	**12.971**	**22.512**	**34.837**	**70.314**	**0.910**	**2.861**	**0.020**	**NA**	**NA**	**1.529**	**4.411**	**75.684**
1975 Total	**12.663**	**19.948**	**32.732**	**65.357**	**1.900**	**3.155**	**.034**	**NA**	**NA**	**1.499**	**4.687**	**71.965**
1980 Total	**15.423**	**20.235**	**34.205**	**69.828**	**2.739**	**2.900**	**.053**	**NA**	**NA**	**2.475**	**5.428**	**78.067**
1985 Total	**17.478**	**17.703**	**30.925**	**66.093**	**4.076**	**2.970**	**.097**	**(s)**	**(s)**	**3.016**	**6.084**	**76.392**
1990 Total	**19.173**	**19.603**	**33.552**	**72.332**	**6.104**	**3.046**	**.171**	**.059**	**.029**	**2.735**	**6.041**	**84.485**
1995 Total	**20.089**	**22.671**	**34.438**	**77.259**	**7.075**	**3.205**	**.152**	**.069**	**.033**	**3.101**	**6.560**	**91.029**
1996 Total	**21.002**	**23.085**	**35.675**	**79.785**	**7.087**	**3.590**	**.163**	**.070**	**.033**	**3.157**	**7.014**	**94.022**
1997 Total	**21.445**	**23.223**	**36.159**	**80.873**	**6.597**	**3.640**	**.167**	**.070**	**.034**	**3.105**	**7.016**	**94.602**
1998 Total	**21.656**	**22.830**	**36.816**	**81.369**	**7.068**	**3.297**	**.168**	**.069**	**.031**	**2.927**	**6.493**	**95.018**
1999 Total	**21.623**	**22.909**	**37.838**	**82.427**	**7.610**	**3.268**	**.171**	**.068**	**.046**	**2.963**	**6.516**	**96.652**
2000 Total	**22.580**	**23.824**	**38.262**	**84.731**	**7.862**	**2.811**	**.164**	**.066**	**.057**	**3.008**	**6.106**	**98.814**
2001 Total	**21.914**	**22.773**	**38.186**	**82.902**	**8.029**	**2.242**	**.164**	**.064**	**.070**	**2.622**	**5.163**	**96.168**
2002 Total	**21.904**	**23.510**	**38.224**	**83.699**	**8.145**	**2.689**	**.171**	**.063**	**.105**	**2.701**	**5.729**	**97.645**
2003 Total	**22.321**	**22.831**	**38.811**	**84.014**	**7.959**	**2.825**	**.175**	**.062**	**.115**	**2.807**	**5.983**	**97.978**
2004 Total	**22.466**	**22.923**	**40.292**	**85.819**	**8.222**	**2.690**	**.178**	**.063**	**.142**	**3.010**	**6.082**	**100.162**
2005 Total	**22.797**	**22.565**	**40.388**	**85.794**	**8.161**	**2.703**	**.181**	**.063**	**.178**	**3.117**	**6.242**	**100.282**
2006 Total	**22.447**	**22.239**	**39.955**	**84.702**	**8.215**	**2.869**	**.181**	**.068**	**.264**	**3.267**	**6.649**	**99.629**
2007 Total	**22.749**	**23.663**	**39.774**	**86.211**	**8.455**	**2.446**	**.186**	**.076**	**.341**	**3.474**	**6.523**	**101.296**
2008 Total	**22.385**	**23.843**	**37.280**	**83.549**	**8.427**	**2.511**	**.192**	**.089**	**.546**	**3.849**	**7.186**	**99.275**
2009 Total	**19.692**	**23.416**	**35.403**	**78.488**	**8.356**	**2.669**	**.200**	**.098**	**.721**	**3.912**	**7.600**	**94.559**
2010 January	R 1.914	2.841	2.947	R 7.697	.758	.218	.018	.010	.067	.349	.662	R 9.132
February	R 1.706	2.507	2.698	R 6.915	.682	.201	.016	.009	.053	.326	.605	R 8.213
March	R 1.635	2.160	3.048	R 6.846	.676	.204	.018	.010	.084	.357	.673	R 8.205
April	R 1.444	1.700	2.960	R 6.104	.602	.186	.017	.010	.095	.348	.657	R 7.372
May	R 1.618	1.622	3.020	R 6.261	.697	.245	.018	.011	.085	.356	.715	R 7.678
June	R 1.844	1.656	3.029	R 6.530	.714	.291	.017	.011	.079	.357	.755	R 8.008
July	R 1.995	1.836	3.089	R 6.920	.752	.239	.017	.011	.066	.368	.701	R 8.383
August	R 1.991	1.890	3.148	R 7.030	.748	.196	.018	.011	.065	.370	.660	R 8.445
September	R 1.693	1.644	3.008	R 6.345	.725	.168	.017	.011	.069	.357	.622	R 7.694
October	R 1.519	1.671	3.020	R 6.209	.656	.173	.017	.010	.077	.366	.643	R 7.509
November	R 1.561	1.986	2.923	R 6.464	.655	.191	.017	.010	.095	.363	.676	R 7.797
December	R 1.876	2.741	3.120	R 7.732	.770	.226	.018	.010	.088	.377	.720	R 9.231
Total	R **20.794**	**24.256**	**36.010**	R **81.054**	**8.434**	**2.539**	**.208**	**.126**	**.923**	**4.294**	**8.090**	R **97.667**
2011 January	R 1.879	R 2.937	3.030	R 7.847	.760	.255	.020	.012	.084	.367	.739	R 9.355
February	R 1.552	R 2.486	2.701	R 6.740	.677	.241	.018	.012	.103	.337	.710	R 8.135
March	R 1.534	R 2.272	3.062	R 6.870	.686	.310	.020	.013	.103	.366	.811	R 8.376
April	R 1.416	1.865	2.878	R 6.160	.570	.309	.018	.013	.121	.351	.812	R 7.549
May	R 1.545	1.702	2.923	R 6.171	.596	.323	.019	.014	.114	.365	.835	R 7.614
June	R 1.752	1.685	2.979	R 6.417	.682	.315	.019	.014	.106	.374	.827	R 7.937
July	R 1.945	1.916	2.959	R 6.820	.756	.308	.019	.014	.072	.374	.787	R 8.380
August	R 1.908	1.913	3.059	R 6.884	.746	.257	.019	.014	.072	.382	.744	R 8.389
September	R 1.604	1.672	2.908	R 6.185	.699	.210	.018	.013	.067	.365	.673	R 7.567
October	R 1.467	1.780	2.953	R 6.200	.662	.195	.019	.014	.104	.370	.702	R 7.573
November	R 1.417	2.045	2.879	R 6.339	.674	.209	.019	.012	.121	.370	.730	R 7.751
December	R 1.547	2.564	2.951	R 7.064	.751	.241	.019	.013	.102	.390	.766	R 8.592
Total	R **19.565**	R **24.838**	**35.283**	R **79.697**	**8.259**	**3.171**	**.226**	**.158**	**1.168**	**4.411**	**9.135**	R **97.219**
2012 January	R 1.486	R 2.786	2.887	R 7.160	.757	.233	.019	.015	.135	.370	.773	R 8.701
February	R 1.333	R 2.537	2.772	R 6.642	.667	.203	.018	.015	.108	.351	.695	R 8.014
March	1.233	2.149	2.876	6.261	.645	.256	.019	.016	.132	.364	.789	7.705
3-Month Total	**4.052**	**7.472**	**8.535**	**20.064**	**2.069**	**.693**	**.057**	**.046**	**.375**	**1.085**	**2.256**	**24.420**
2011 3-Month Total	**4.965**	**7.696**	**8.793**	**21.457**	**2.124**	**.806**	**.057**	**.037**	**.290**	**1.071**	**2.261**	**25.867**
2010 3-Month Total	**5.254**	**7.509**	**8.693**	**21.458**	**2.116**	**.623**	**.052**	**.029**	**.204**	**1.032**	**1.940**	**25.550**

[a] Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.

[b] Natural gas only; excludes supplemental gaseous fuels. See Note 3, "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 biofuels that have been blended with petroleum—biofuels are included in "Biomass."

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

[e] 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.

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

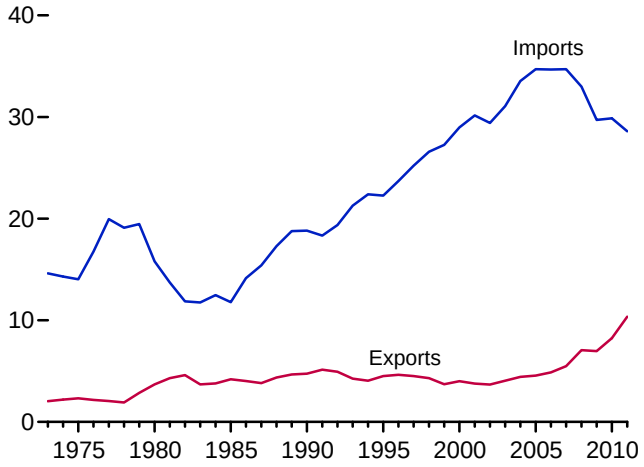
Notes: • See "Primary Energy Consumption" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973.

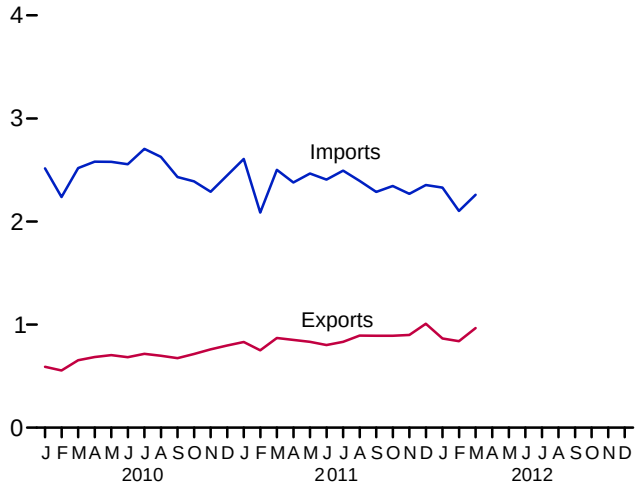
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas:** Tables 4.1 and A4. • **Petroleum:** Table 3.6. • **Nuclear Electric Power:** Tables 7.2a and A6 ("Nuclear Plants" heat rate). • **Renewable Energy:** Table 10.1. • **Net Imports of Coal Coke and Electricity:** Tables 1.4a and 1.4b.

Figure 1.4a Primary Energy Imports and Exports
(Quadrillion Btu)

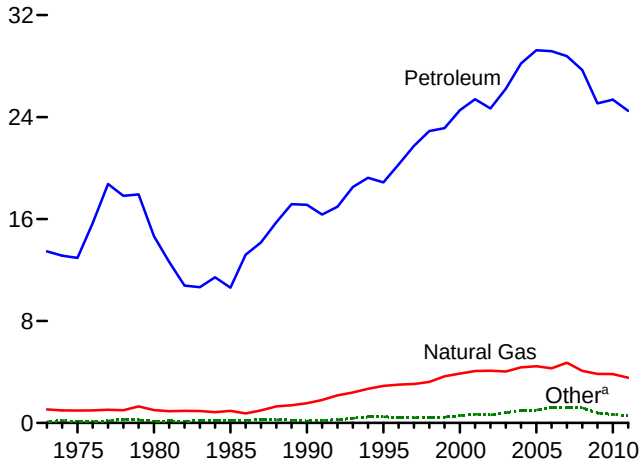
Total Imports and Exports, 1973-2011



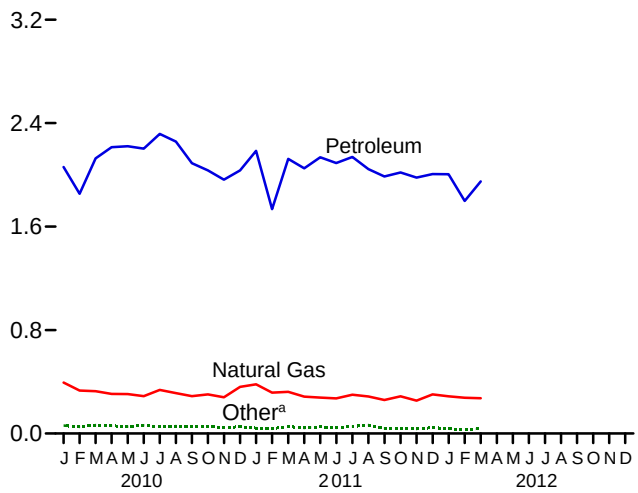
Total Imports and Exports, Monthly



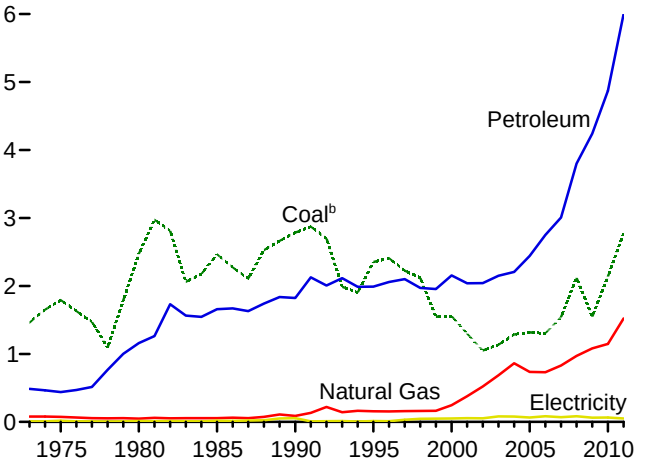
Imports by Source, 1973-2011



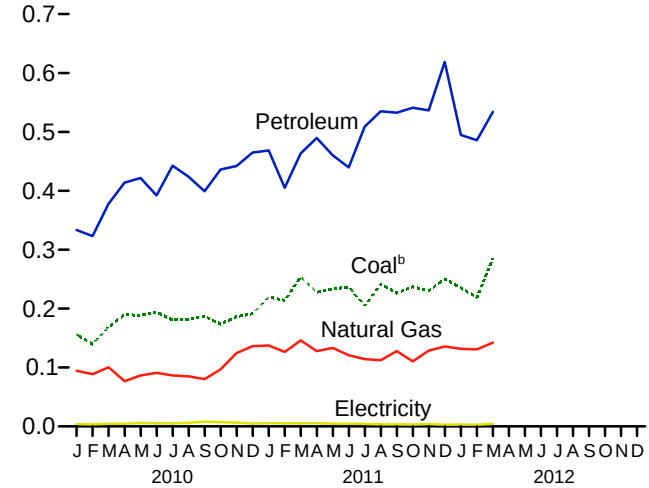
Imports by Source, Monthly



Exports by Source, 1973-2011



Exports by Major Source, Monthly



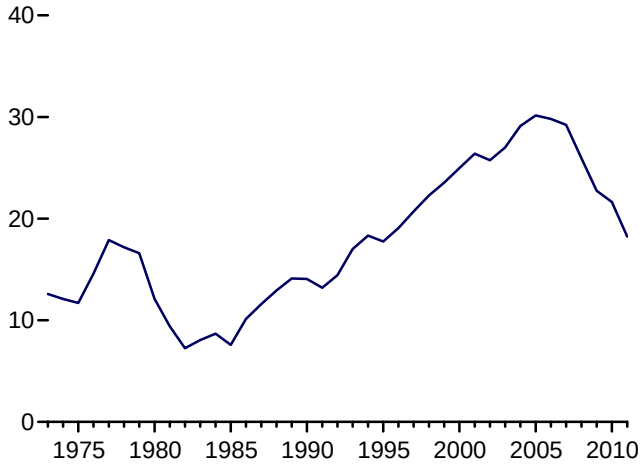
[a] Coal, coal coke, biofuels, and electricity.
[b] Includes coal coke.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Sources: Tables 1.4a and 1.4b.

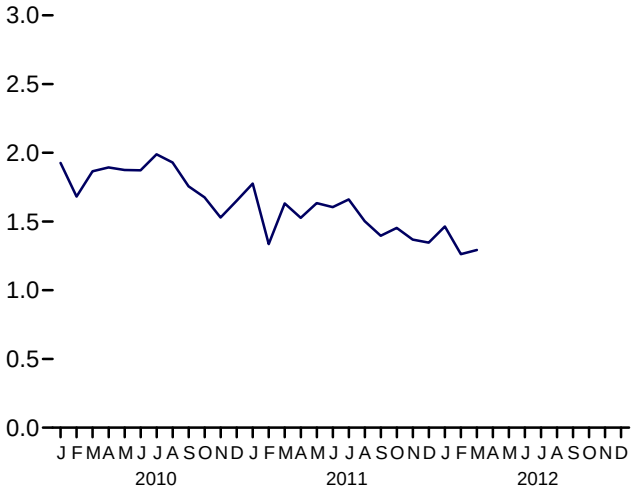
Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu, Except as noted)

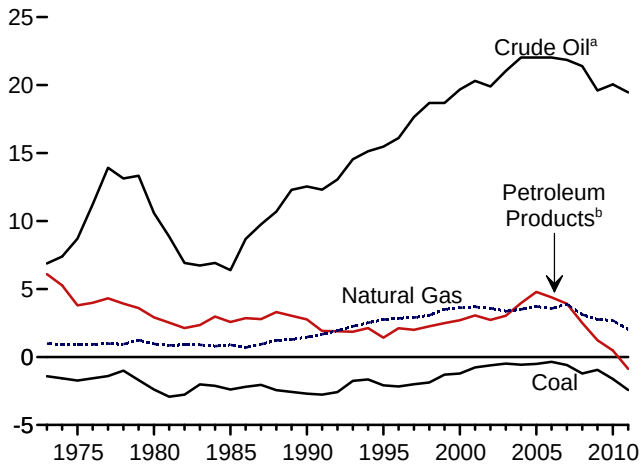
Total, 1973-2011



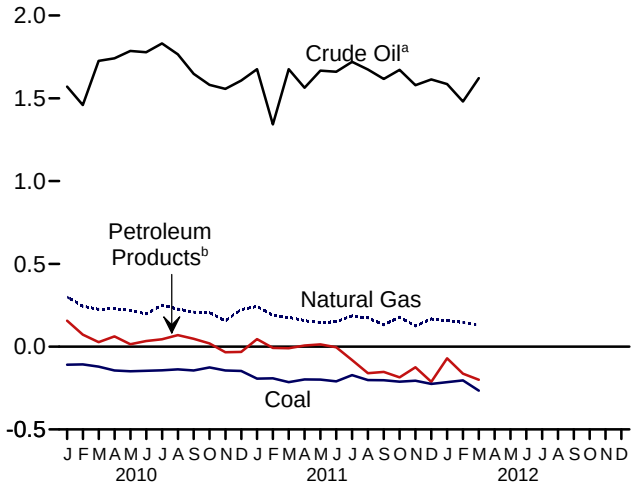
Total, Monthly



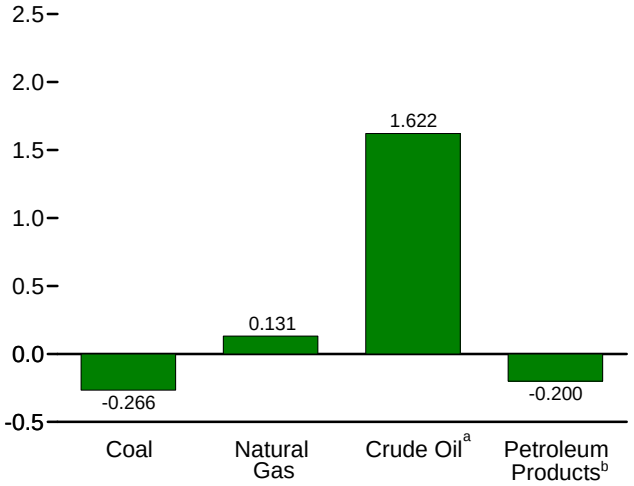
By Major Source, 1973-2011



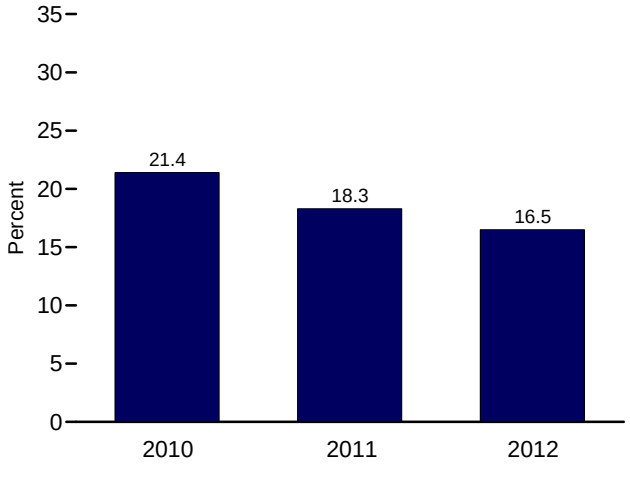
By Major Source, Monthly



By Major Source, March 2012



As Share of Consumption, January-March



[a] Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

[b] Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include biofuels.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.

Sources: Tables 1.3, 1.4a, and 1.4b.

Table 1.4a Primary Energy Imports by Source

(Quadrillion Btu)

	Imports								
				Petroleum					
	Coal	Coal Coke	Natural Gas	Crude Oil[a]	Petroleum Products[b]	Total	Biofuels[c]	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**	**.038**	**14.032**
1980 Total	**.030**	**.016**	**1.006**	**11.195**	**3.463**	**14.658**	**NA**	**.085**	**15.796**
1985 Total	**.049**	**.014**	**.952**	**6.814**	**3.796**	**10.609**	**NA**	**.157**	**11.781**
1990 Total	**.067**	**.019**	**1.551**	**12.766**	**4.351**	**17.117**	**NA**	**.063**	**18.817**
1995 Total	**.237**	**.095**	**2.901**	**15.669**	**3.211**	**18.881**	**.001**	**.146**	**22.260**
1996 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**
1998 Total	**.218**	**.095**	**3.225**	**18.916**	**3.992**	**22.908**	**(s)**	**.135**	**26.581**
1999 Total	**.227**	**.080**	**3.664**	**18.935**	**4.198**	**23.133**	**(s)**	**.147**	**27.252**
2000 Total	**.313**	**.094**	**3.869**	**19.783**	**4.749**	**24.531**	**(s)**	**.166**	**28.973**
2001 Total	**.495**	**.063**	**4.068**	**20.348**	**5.051**	**25.398**	**.002**	**.131**	**30.157**
2002 Total	**.422**	**.080**	**4.104**	**19.920**	**4.754**	**24.674**	**.002**	**.125**	**29.408**
2003 Total	**.626**	**.068**	**4.042**	**21.060**	**5.159**	**26.219**	**.002**	**.104**	**31.061**
2004 Total	**.682**	**.170**	**4.365**	**22.082**	**6.114**	**28.197**	**.013**	**.117**	**33.544**
2005 Total	**.762**	**.088**	**4.450**	**22.091**	**7.157**	**29.248**	**.012**	**.150**	**34.709**
2006 Total	**.906**	**.101**	**4.291**	**22.085**	**7.084**	**29.169**	**.066**	**.146**	**34.679**
2007 Total	**.909**	**.061**	**4.723**	**21.914**	**6.868**	**28.781**	**.054**	**.175**	**34.703**
2008 Total	**.855**	**.089**	**4.084**	**21.448**	**6.237**	**27.685**	**.084**	**.195**	**32.992**
2009 Total	**.566**	**.009**	**3.845**	**19.699**	**5.383**	**25.082**	**.026**	**.178**	**29.706**
2010 January	.042	.001	.394	1.577	.483	2.060	.001	.018	2.516
February	.031	.005	.332	1.469	.384	1.853	(s)	.015	2.237
March	.047	.003	.327	1.734	.393	2.127	.001	.015	2.519
April	.045	.001	.306	1.747	.466	2.214	(s)	.013	2.580
May	.037	.005	.305	1.793	.428	2.221	.001	.010	2.578
June	.044	.005	.289	1.784	.419	2.203	(s)	.014	2.556
July	.035	.003	.337	1.844	.472	2.316	(s)	.015	2.705
August	.043	.003	.313	1.772	.484	2.256	(s)	.012	2.627
September	.040	.002	.289	1.658	.432	2.090	(s)	.010	2.431
October	.044	.001	.302	1.585	.448	2.034	(s)	.009	2.390
November	.037	(s)	.280	1.563	.400	1.963	(s)	.009	2.289
December	.039	(s)	.361	1.614	.420	2.034	(s)	.013	2.447
Total	**.484**	**.030**	**3.834**	**20.140**	**5.231**	**25.371**	**.004**	**.154**	**29.877**
2011 January	.025	.001	.380	1.689	.497	2.186	(s)	.015	2.607
February	.021	.002	.316	1.348	.387	1.735	(s)	.013	2.087
March	.038	.004	.322	1.682	.441	2.123	(s)	.014	2.501
April	.028	.001	.285	1.570	.479	2.050	(s)	.013	2.378
May	.033	.004	.277	1.674	.462	2.135	(s)	.017	2.466
June	.024	.004	.272	1.666	.424	2.090	.001	.015	2.407
July	.030	.003	.300	1.734	.404	2.138	.001	.021	2.493
August	.039	.005	.286	1.680	.364	2.044	.002	.019	2.395
September	.021	.003	.260	1.623	.365	1.988	.003	.014	2.288
October	.023	.002	.288	1.681	.337	2.018	.002	.013	2.345
November	.020	.002	.254	1.591	.388	1.979	.002	.012	2.269
December	.024	.004	R .303	1.623	.383	2.006	.004	.015	R 2.354
Total	**.327**	**.035**	R **3.542**	**19.561**	**4.930**	**24.491**	**.016**	**.178**	R **28.590**
2012 January	.020	.003	R .288	1.596	.408	2.005	(s)	.014	R 2.330
February	.013	.002	R .277	1.491	.307	1.798	(s)	.012	R 2.102
March	.017	.004	.273	1.633	.316	1.949	.002	.014	2.259
3-Month Total	**.051**	**.009**	**.837**	**4.720**	**1.031**	**5.751**	**.002**	**.041**	**6.691**
2011 3-Month Total	**.085**	**.007**	**1.018**	**4.719**	**1.325**	**6.044**	**.001**	**.041**	**7.195**
2010 3-Month Total	**.120**	**.009**	**1.053**	**4.780**	**1.260**	**6.040**	**.001**	**.048**	**7.272**

[a] Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

[b] Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include biofuels.

[c] Fuel ethanol (minus denaturant) and biodiesel.

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

Notes: • See "Primary Energy" in Glossary. • 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.gov/totalenergy/data/monthly/#summary 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**—U.S. Energy Information Administration (EIA), *Energy Data Report,* "Coke and Coal Chemicals," annual reports. **1981 forward**—EIA, *Quarterly Coal Report,* quarterly reports and Table A5. • **Natural Gas:** Tables 4.1 and A4. • **Crude Oil** and **Petroleum Products:** Tables 3.3b, 10.3, 10.4, and A2. • **Biofuels:** Tables 10.3, 10.4 and A3. • **Electricity:** Tables 7.1 and A6.

Table 1.4b Primary Energy Exports by Source and Total Net Imports

(Quadrillion Btu)

	Exports									Net Imports[a]
				Petroleum						
	Coal	Coal Coke	Natural Gas	Crude Oil[b]	Petroleum Products[c]	Total	Biofuels[d]	Electricity	Total	Total
1973 Total	**1.425**	**0.035**	**0.079**	**0.004**	**0.482**	**0.486**	**NA**	**0.009**	**2.033**	**12.580**
1975 Total	**1.761**	**.032**	**.074**	**.012**	**.427**	**.439**	**NA**	**.017**	**2.323**	**11.709**
1980 Total	**2.421**	**.051**	**.049**	**.609**	**.551**	**1.160**	**NA**	**.014**	**3.695**	**12.101**
1985 Total	**2.438**	**.028**	**.056**	**.432**	**1.225**	**1.657**	**NA**	**.017**	**4.196**	**7.584**
1990 Total	**2.772**	**.014**	**.087**	**.230**	**1.594**	**1.824**	**NA**	**.055**	**4.752**	**14.065**
1995 Total	**2.318**	**.034**	**.156**	**.200**	**1.791**	**1.991**	**NA**	**.012**	**4.511**	**17.750**
1996 Total	**2.368**	**.040**	**.155**	**.233**	**1.825**	**2.059**	**NA**	**.011**	**4.633**	**19.069**
1997 Total	**2.193**	**.031**	**.159**	**.228**	**1.872**	**2.100**	**NA**	**.031**	**4.514**	**20.701**
1998 Total	**2.092**	**.028**	**.161**	**.233**	**1.740**	**1.972**	**NA**	**.047**	**4.299**	**22.281**
1999 Total	**1.525**	**.022**	**.164**	**.250**	**1.705**	**1.955**	**NA**	**.049**	**3.715**	**23.537**
2000 Total	**1.528**	**.028**	**.245**	**.106**	**2.048**	**2.154**	**NA**	**.051**	**4.006**	**24.967**
2001 Total	**1.265**	**.033**	**.377**	**.043**	**1.996**	**2.039**	**(s)**	**.056**	**3.771**	**26.386**
2002 Total	**1.032**	**.020**	**.520**	**.019**	**2.023**	**2.042**	**(s)**	**.054**	**3.669**	**25.739**
2003 Total	**1.117**	**.018**	**.686**	**.026**	**2.124**	**2.151**	**.001**	**.082**	**4.054**	**27.007**
2004 Total	**1.253**	**.033**	**.862**	**.057**	**2.151**	**2.208**	**.001**	**.078**	**4.434**	**29.110**
2005 Total	**1.273**	**.043**	**.735**	**.067**	**2.374**	**2.442**	**.001**	**.065**	**4.560**	**30.149**
2006 Total	**1.264**	**.040**	**.730**	**.052**	**2.699**	**2.751**	**.004**	**.083**	**4.872**	**29.806**
2007 Total	**1.507**	**.036**	**.830**	**.058**	**2.949**	**3.007**	**.035**	**.069**	**5.482**	**29.221**
2008 Total	**2.071**	**.049**	**.972**	**.061**	**3.739**	**3.800**	**.086**	**.083**	**7.060**	**25.932**
2009 Total	**1.515**	**.032**	**1.082**	**.093**	**4.147**	**4.240**	**.034**	**.062**	**6.965**	**22.741**
2010 January	.151	.006	.094	.006	.327	.332	.003	.004	.590	1.926
February	.138	.001	.089	.009	.312	.321	.003	.003	.556	1.681
March	.169	(s)	.100	.008	.366	.374	.006	.004	.654	1.865
April	.189	.001	.077	.006	.404	.411	.005	.004	.686	1.894
May	.186	.003	.086	.007	.414	.420	.003	.006	.704	1.874
June	.190	.004	.091	.005	.385	.391	.003	.005	.684	1.872
July	.178	.003	.087	.012	.428	.440	.003	.005	.716	1.989
August	.180	.002	.085	.006	.415	.421	.004	.006	.698	1.929
September	.184	.003	.080	.011	.385	.396	.004	.008	.675	1.757
October	.170	.003	.097	.004	.429	.433	.004	.007	.714	1.676
November	.180	.006	.125	.006	.433	.439	.004	.006	.760	1.529
December	.186	.005	.136	.007	.452	.459	.007	.005	.797	1.650
Total	**2.101**	**.036**	**1.147**	**.088**	**4.750**	**4.838**	**.046**	**.065**	**8.234**	**21.643**
2011 January	.218	.001	.137	.013	.451	.464	.006	.005	.832	1.776
February	.212	.002	.126	.005	.395	.400	.005	.005	.751	1.336
March	.252	.001	.146	.007	.450	.457	.008	.005	.869	1.631
April	.227	.001	.128	.007	.473	.480	.011	.005	.852	1.526
May	.232	.002	.133	.007	.448	.454	.007	.004	.832	1.634
June	.233	.003	.121	.006	.428	.434	.006	.004	.802	1.605
July	.202	.003	.114	.013	.485	.498	.011	.004	.833	1.660
August	.241	.001	.112	.006	.525	.531	.005	.003	.893	1.502
September	.224	.003	.128	.006	.518	.524	.010	.003	.891	R 1.397
October	.235	.002	.110	.009	.522	.531	.011	.003	.892	1.453
November	.226	.004	.129	.011	.513	.524	.013	.004	.900	1.369
December	.249	.001	.136	.010	.595	.604	.014	.003	1.008	R 1.347
Total	**2.751**	**.024**	**1.521**	**.100**	**5.801**	**5.901**	**.108**	**.051**	**10.356**	R **18.234**
2012 January	.234	.001	.132	.010	.478	.489	.008	.003	.866	R 1.464
February	.217	.002	.131	.010	.470	.480	.007	.003	.839	R 1.263
March	.284	.002	.142	.011	.516	.527	.008	.004	.966	1.293
3-Month Total	**.735**	**.004**	**.405**	**.031**	**1.465**	**1.495**	**.022**	**.010**	**2.671**	**4.019**
2011 3-Month Total	**.683**	**.004**	**.410**	**.024**	**1.296**	**1.321**	**.019**	**.016**	**2.452**	**4.743**
2010 3-Month Total	**.458**	**.007**	**.283**	**.023**	**1.004**	**1.028**	**.012**	**.012**	**1.800**	**5.472**

[a] Net imports equal imports minus exports.
[b] Crude oil and lease condensate.
[c] Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include biofuels.
[d] Through 2010, data are for biodiesel only. Beginning in 2011, data are for fuel ethanol (minus denaturant) and biodiesel.

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

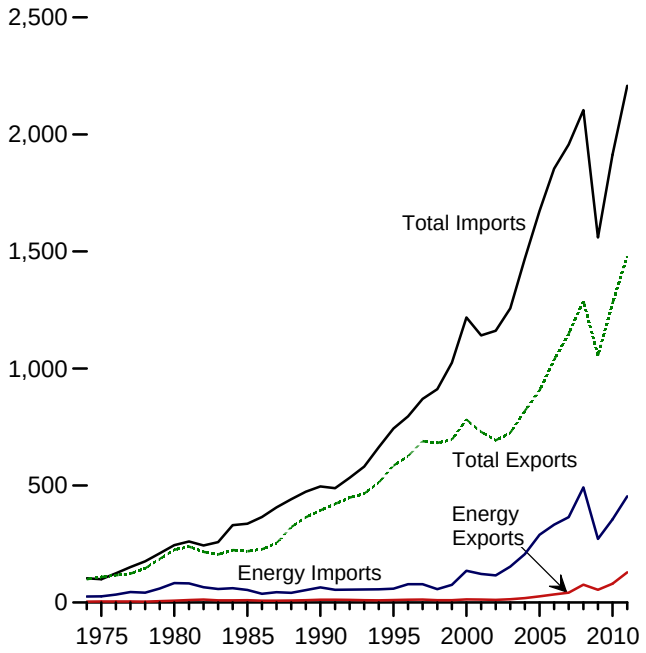
Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973.

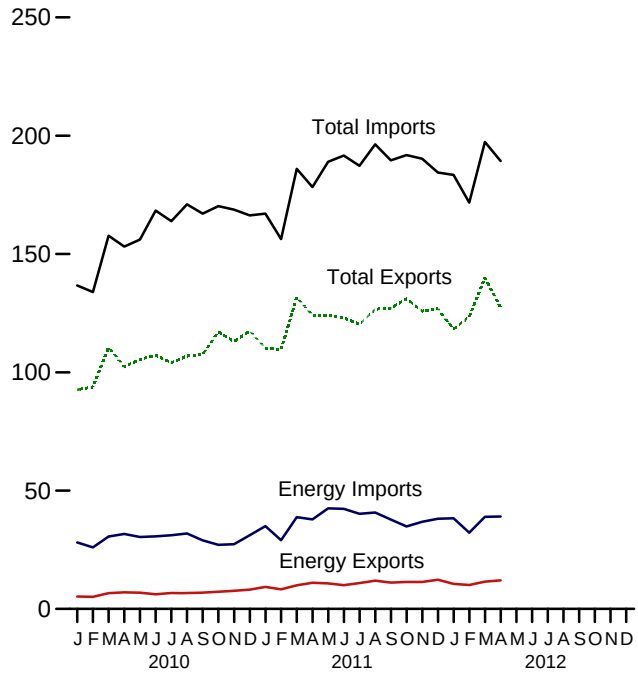
Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke: 1973-1975**—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook,* "Coke and Coal Chemicals" chapter. **1976-1980**—U.S. Energy Information Administration (EIA), *Energy Data Report,* "Coke and Coal Chemicals," annual reports. **1981 forward**—EIA, *Quarterly Coal Report,* quarterly reports and Table A5. • **Natural Gas:** Tables 4.1 and A4. • **Crude Oil** and **Petroleum Products:** Tables 3.3b, 10.4, and A2. • **Biofuels:** Tables 10.3, 10.4 and A3. • **Electricity:** Tables 7.1 and A6.

Figure 1.5 Merchandise Trade Value
(Billion Dollars[a])

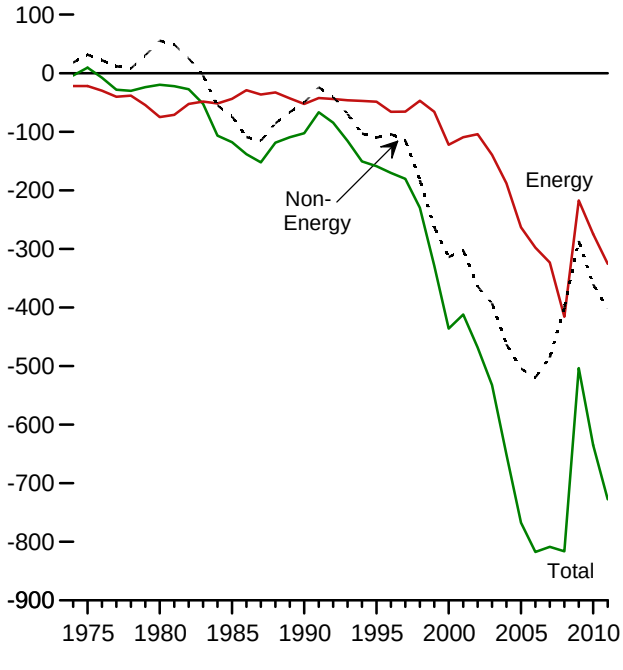
Imports and Exports, 1974-2011



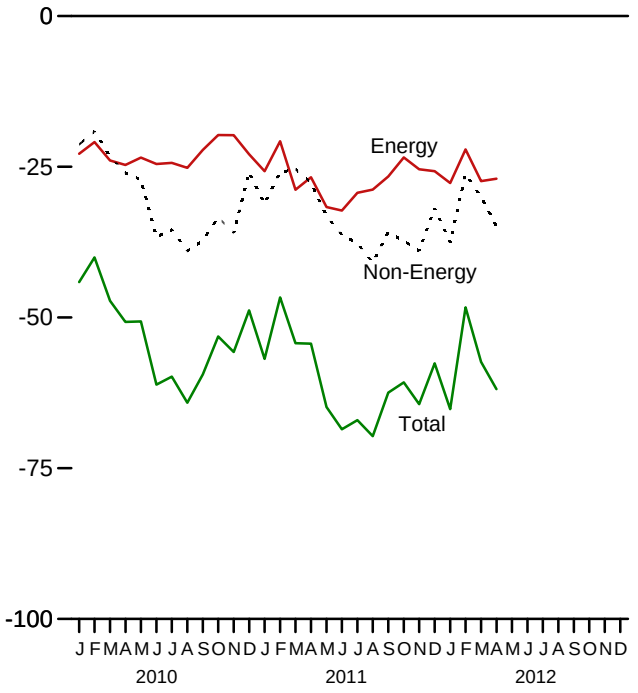
Imports and Exports, Monthly



Trade Balance, 1974-2011



Trade Balance, Monthly



[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.5.

Table 1.5 Merchandise Trade Value

(Million Dollars[a])

	Petroleum[b]			Energy[c]			Non-Energy Balance	Total Merchandise		
	Exports	Imports	Balance	Exports	Imports	Balance		Exports	Imports	Balance
1974 Total	**792**	**24,668**	**-23,876**	**3,444**	**25,454**	**-22,010**	**18,126**	**99,437**	**103,321**	**-3,884**
1975 Total	**907**	**25,197**	**-24,289**	**4,470**	**26,476**	**-22,006**	**31,557**	**108,856**	**99,305**	**9,551**
1980 Total	**2,833**	**78,637**	**-75,803**	**7,982**	**82,924**	**-74,942**	**55,246**	**225,566**	**245,262**	**-19,696**
1985 Total	**4,707**	**50,475**	**-45,768**	**9,971**	**53,917**	**-43,946**	**-73,765**	**218,815**	**336,526**	**-117,712**
1990 Total	**6,901**	**61,583**	**-54,682**	**12,233**	**64,661**	**-52,428**	**-50,068**	**393,592**	**496,088**	**-102,496**
1995 Total	**6,321**	**54,368**	**-48,047**	**10,358**	**59,109**	**-48,751**	**-110,050**	**584,742**	**743,543**	**-158,801**
1996 Total	**7,984**	**72,022**	**-64,038**	**12,181**	**78,086**	**-65,905**	**-104,309**	**625,075**	**795,289**	**-170,214**
1997 Total	**8,592**	**71,152**	**-62,560**	**12,682**	**78,277**	**-65,595**	**-114,927**	**689,182**	**869,704**	**-180,522**
1998 Total	**6,574**	**50,264**	**-43,690**	**10,251**	**57,323**	**-47,072**	**-182,686**	**682,138**	**911,896**	**-229,758**
1999 Total	**7,118**	**67,173**	**-60,055**	**9,880**	**75,803**	**-65,923**	**-262,898**	**695,797**	**1,024,618**	**-328,821**
2000 Total	**10,192**	**119,251**	**-109,059**	**13,179**	**135,367**	**-122,188**	**-313,916**	**781,918**	**1,218,022**	**-436,104**
2001 Total	**8,868**	**102,747**	**-93,879**	**12,494**	**121,923**	**-109,429**	**-302,470**	**729,100**	**1,140,999**	**-411,899**
2002 Total	**8,569**	**102,663**	**-94,094**	**11,541**	**115,748**	**-104,207**	**-364,056**	**693,103**	**1,161,366**	**-468,263**
2003 Total	**10,209**	**132,433**	**-122,224**	**13,768**	**153,298**	**-139,530**	**-392,820**	**724,771**	**1,257,121**	**-532,350**
2004 Total	**13,130**	**179,266**	**-166,136**	**18,642**	**206,660**	**-188,018**	**-462,912**	**818,775**	**1,469,704**	**-650,930**
2005 Total	**19,155**	**250,068**	**-230,913**	**26,488**	**289,723**	**-263,235**	**-504,242**	**905,978**	**1,673,455**	**-767,477**
2006 Total	**28,171**	**299,714**	**-271,543**	**34,711**	**332,500**	**-297,789**	**-519,515**	**1,036,635**	**1,853,938**	**-817,304**
2007 Total	**33,293**	**327,620**	**-294,327**	**41,725**	**364,987**	**-323,262**	**-485,501**	**1,148,199**	**1,956,962**	**-808,763**
2008 Total	**61,695**	**449,847**	**-388,152**	**76,075**	**491,885**	**-415,810**	**-400,389**	**1,287,442**	**2,103,641**	**-816,199**
2009 Total	**44,509**	**251,833**	**-207,324**	**54,536**	**271,739**	**-217,203**	**-286,379**	**1,056,043**	**1,559,625**	**-503,582**
2010 January	4,083	25,234	-21,151	5,236	28,075	-22,839	-21,285	92,601	136,725	-44,124
February	4,003	23,666	-19,663	5,115	26,018	-20,903	-19,141	93,854	133,898	-40,044
March	5,348	28,549	-23,201	6,667	30,613	-23,946	-23,271	110,511	157,728	-47,217
April	5,680	30,016	-24,336	6,970	31,657	-24,687	-26,034	102,443	153,163	-50,721
May	5,484	28,733	-23,249	6,887	30,369	-23,482	-27,165	105,477	156,124	-50,647
June	4,798	29,011	-24,213	6,170	30,698	-24,528	-36,592	107,202	168,321	-61,120
July	5,505	29,218	-23,713	6,760	31,113	-24,353	-35,451	104,057	163,861	-59,804
August	5,346	30,130	-24,784	6,744	31,907	-25,163	-38,957	106,846	170,966	-64,120
September	5,482	27,479	-21,997	6,802	28,992	-22,190	-37,244	107,644	167,078	-59,434
October	6,084	25,556	-19,472	7,318	27,056	-19,738	-33,397	117,104	170,239	-53,135
November	6,272	25,982	-19,710	7,610	27,363	-19,753	-35,966	113,046	168,765	-55,719
December	6,694	29,892	-23,198	8,182	31,107	-22,925	-25,888	117,480	166,293	-48,813
Total	**64,778**	**333,465**	**-268,687**	**80,460**	**354,968**	**-274,508**	**-360,389**	**1,278,263**	**1,913,160**	**-634,897**
2011 January	R 7,446	R 33,050	R -25,604	R 9,275	R 35,010	R -25,735	R -31,134	R 110,179	R 167,048	R -56,869
February	R 6,604	R 27,551	R -20,947	R 8,291	R 29,062	R -20,771	R -25,897	R 109,647	R 156,315	R -46,668
March	R 7,841	R 37,096	R -29,255	R 9,958	R 38,763	R -28,805	R -25,442	R 131,728	R 185,975	R -54,247
April	R 9,016	R 36,457	R -27,441	R 11,059	R 37,803	R -26,744	R -27,589	R 123,959	R 178,293	R -54,333
May	R 8,767	R 41,002	R -32,235	R 10,795	R 42,470	R -31,675	R -33,171	R 124,107	R 188,953	R -64,846
June	R 8,032	R 40,872	R -32,840	R 10,039	R 42,305	R -32,266	R -36,274	R 123,039	R 191,579	R -68,540
July	R 9,069	R 38,622	R -29,553	R 10,902	R 40,224	R -29,322	R -37,702	R 120,239	R 187,263	R -67,024
August	R 9,912	R 39,063	R -29,151	R 11,940	R 40,732	R -28,792	R -40,896	R 126,633	R 196,321	R -69,688
September	R 9,202	R 36,467	R -27,265	R 11,141	R 37,741	R -26,600	R -35,855	R 127,107	R 189,562	R -62,455
October	R 9,573	R 33,467	R -23,894	R 11,410	R 34,857	R -23,447	R -37,306	R 131,058	R 191,811	R -60,753
November	R 9,533	R 35,665	R -26,132	R 11,401	R 36,821	R -25,420	R -38,944	R 125,899	R 190,263	R -64,364
December	R 10,501	R 36,831	R -26,330	R 12,353	R 38,083	R -25,730	R -31,876	R 126,837	R 184,443	R -57,606
Total	**R 105,499**	**R 436,145**	**R -330,646**	**R 128,564**	**R 453,872**	**R -325,308**	**R -402,084**	**R 1,480,432**	**R 2,207,824**	**R -727,392**
2012 January	8,730	37,044	-28,314	10,606	38,290	-27,684	-37,519	118,209	183,411	-65,203
February	8,605	31,171	-22,566	10,124	32,250	-22,126	-26,181	123,428	171,735	-48,307
March	9,709	37,933	-28,224	11,552	38,937	-27,385	R -29,974	R 139,965	R 197,324	R -57,359
April	10,152	38,129	-27,977	12,057	39,043	-26,986	-34,879	127,415	189,280	-61,865
4-Month Total	**37,196**	**144,277**	**-107,081**	**44,339**	**148,520**	**-104,181**	**-128,553**	**509,016**	**741,751**	**-232,735**
2011 4-Month Total	**30,907**	**134,154**	**-103,247**	**38,584**	**140,638**	**-102,055**	**-110,062**	**475,513**	**687,630**	**-212,117**
2010 4-Month Total	**19,114**	**107,465**	**-88,351**	**23,988**	**116,363**	**-92,375**	**-89,731**	**399,408**	**581,514**	**-182,106**

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

[b] Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.

[c] Petroleum, coal, natural gas, and electricity.

R=Revised.

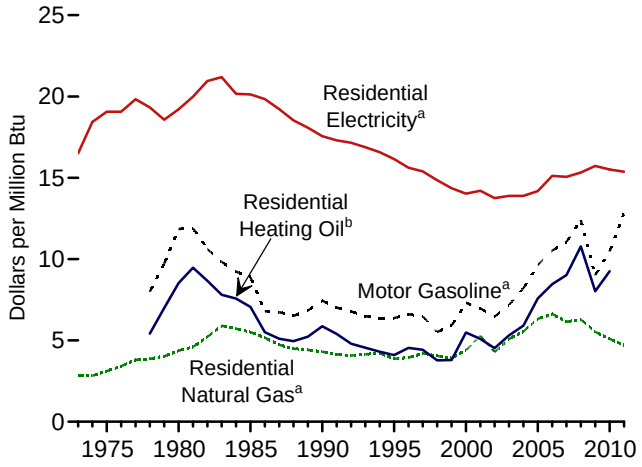
Notes: • Monthly data are not adjusted for seasonal variations. • See Note, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1974.

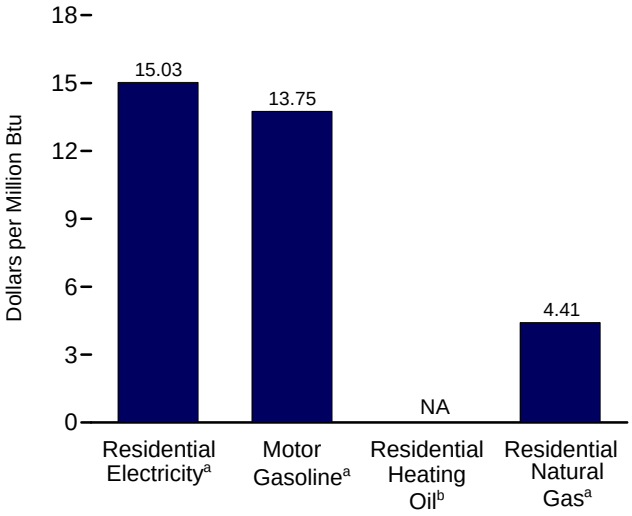
Sources: See end of section.

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

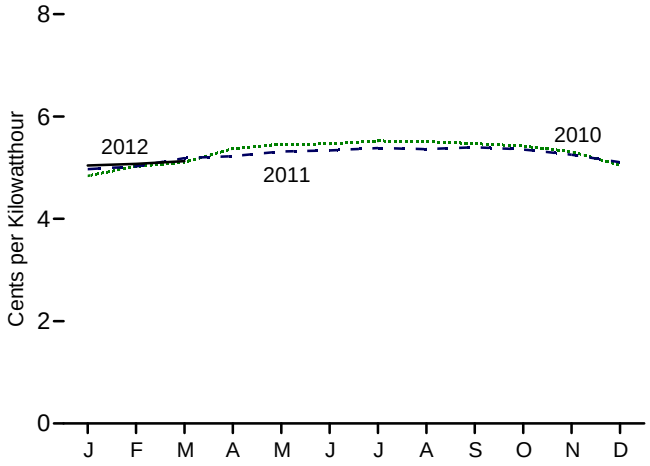
Costs, 1973-2011



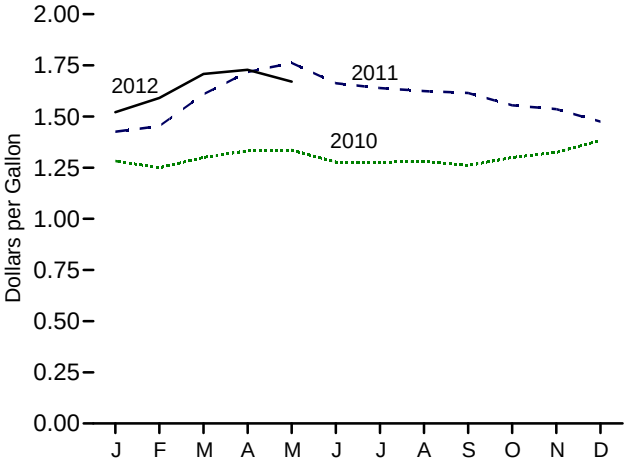
Costs, March 2012



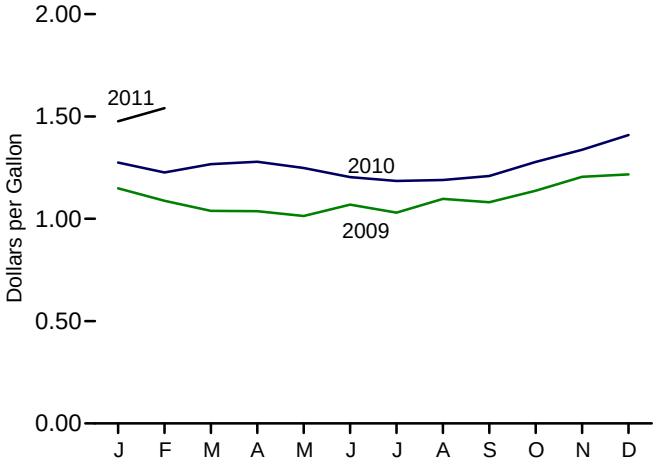
Residential Electricity,[a] Monthly



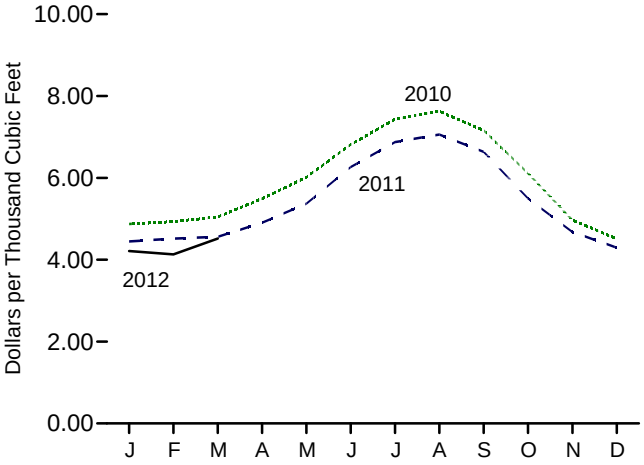
Motor Gasoline,[a] Monthly



Residential Heating Oil,[b] Monthly



Residential Natural Gas,[a] Monthly



[a] Includes taxes.
[b] Excludes taxes.
NA=Not available.

Note: See "Real Dollars" in Glossary.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.6.

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

	Consumer Price Index, All Urban Consumers[a]	Motor Gasoline[b]		Residential Heating Oil[c]		Residential Natural Gas[b]		Residential Electricity[b]	
	Index 1982-1984=100	Dollars per Gallon	Dollars per Million Btu	Dollars per Gallon	Dollars per Million Btu	Dollars per Thousand Cubic Feet	Dollars per Million Btu	Cents per Kilowatthour	Dollars per Million Btu
1973 Average	**44.4**	**NA**	**NA**	**NA**	**NA**	**2.91**	**2.85**	**5.6**	**16.50**
1975 Average	**53.8**	**NA**	**NA**	**NA**	**NA**	**3.18**	**3.12**	**6.5**	**19.07**
1980 Average	**82.4**	**1.482**	**11.85**	**1.182**	**8.52**	**4.47**	**4.36**	**6.6**	**19.21**
1985 Average	**107.6**	**1.112**	**8.89**	**0.979**	**7.06**	**5.69**	**5.52**	**6.87**	**20.13**
1990 Average	**130.7**	**0.931**	**7.44**	**0.813**	**5.86**	**4.44**	**4.31**	**5.99**	**17.56**
1995 Average	**152.4**	**0.791**	**6.37**	**0.569**	**4.10**	**3.98**	**3.87**	**5.51**	**16.15**
1996 Average	**156.9**	**0.821**	**6.61**	**0.630**	**4.54**	**4.04**	**3.94**	**5.33**	**15.62**
1997 Average	**160.5**	**0.804**	**6.48**	**0.613**	**4.42**	**4.32**	**4.21**	**5.25**	**15.39**
1998 Average	**163.0**	**0.684**	**5.51**	**0.523**	**3.77**	**4.18**	**4.05**	**5.07**	**14.85**
1999 Average	**166.6**	**0.733**	**5.91**	**0.526**	**3.79**	**4.02**	**3.91**	**4.90**	**14.36**
2000 Average	**172.2**	**0.908**	**7.32**	**0.761**	**5.49**	**4.51**	**4.39**	**4.79**	**14.02**
2001 Average	**177.1**	**0.864**	**6.97**	**0.706**	**5.09**	**5.44**	**5.28**	**4.84**	**14.20**
2002 Average	**179.9**	**0.801**	**6.46**	**0.628**	**4.52**	**4.39**	**4.28**	**4.69**	**13.75**
2003 Average	**184.0**	**0.890**	**7.18**	**0.736**	**5.31**	**5.23**	**5.09**	**4.74**	**13.89**
2004 Average	**188.9**	**1.018**	**8.20**	**0.819**	**5.91**	**5.69**	**5.55**	**4.74**	**13.89**
2005 Average	**195.3**	**1.197**	**9.64**	**1.051**	**7.58**	**6.50**	**6.33**	**4.84**	**14.18**
2006 Average	**201.6**	**1.307**	**10.52**	**1.173**	**8.46**	**6.81**	**6.63**	**5.16**	**15.12**
2007 Average	**207.342**	**1.374**	**11.06**	**1.250**	**9.01**	**6.31**	**6.14**	**5.14**	**15.05**
2008 Average	**215.303**	**1.541**	**12.40**	**1.495**	**10.78**	**6.45**	**6.28**	**5.23**	**15.33**
2009 Average	**214.537**	**1.119**	**9.01**	**1.112**	**8.02**	**5.66**	**5.52**	**5.37**	**15.72**
2010 January	216.687	1.282	10.32	1.275	9.19	4.87	4.76	4.84	14.19
February	216.741	1.250	10.06	1.226	8.84	4.93	4.82	5.02	14.73
March	217.631	1.300	10.46	1.267	9.13	5.05	4.93	5.10	14.96
April	218.009	1.333	10.73	1.278	9.22	5.49	5.37	5.37	15.74
May	218.178	1.336	10.75	1.248	9.00	6.01	5.88	5.46	16.00
June	217.965	1.277	10.28	1.203	8.68	6.82	6.66	5.46	16.01
July	218.011	1.277	10.27	1.185	8.55	7.44	7.27	5.52	16.19
August	218.312	1.280	10.31	1.190	8.58	7.63	7.46	5.51	16.15
September	218.439	1.261	10.15	1.209	8.72	7.16	7.00	5.47	16.03
October	218.711	1.300	10.46	1.278	9.21	6.11	5.98	5.42	15.89
November	218.803	1.325	10.66	1.337	9.64	4.97	4.86	5.31	15.56
December	219.179	1.383	11.13	1.409	10.16	4.51	4.41	5.05	14.79
Average	**218.056**	**1.301**	**10.47**	**1.283**	**9.25**	**5.22**	**5.11**	**5.29**	**15.51**
2011 January	220.223	1.425	11.47	1.476	10.64	4.45	4.35	4.97	14.57
February	221.309	1.453	11.69	1.540	11.11	4.52	4.42	5.02	14.73
March	223.467	1.608	12.95	NA	NA	4.56	4.46	5.19	15.20
April	224.906	1.718	13.83	NA	NA	4.90	4.79	5.22	15.31
May	225.964	1.762	14.18	NA	NA	5.37	5.25	5.32	15.58
June	225.722	1.663	13.38	NA	NA	6.26	6.12	5.34	15.65
July	225.922	1.639	13.19	NA	NA	6.87	6.72	5.38	15.77
August	226.545	1.624	13.07	NA	NA	7.06	6.90	5.36	15.72
September	226.889	1.615	13.00	NA	NA	6.64	6.49	5.40	15.82
October	226.421	1.555	12.52	NA	NA	5.50	5.37	5.36	15.70
November	226.230	1.536	12.36	NA	NA	4.68	4.57	5.25	15.39
December	225.672	1.475	11.87	NA	NA	4.29	4.20	5.10	14.96
Average	**224.939**	**1.590**	**12.80**	**NA**	**NA**	**4.80**	**4.69**	**5.25**	**15.37**
2012 January	226.665	1.521	12.24	NA	NA	4.21	4.12	5.04	14.78
February	227.663	1.591	12.81	NA	NA	4.13	4.04	5.07	14.87
March	229.392	1.708	13.75	NA	NA	R 4.52	R 4.41	R 5.13	R 15.03
April	230.085	1.728	13.91	NA	NA	NA	NA	NA	NA
May	229.815	1.670	13.45	NA	NA	NA	NA	NA	NA

[a] Data are U.S. city averages for all items, and are not seasonally adjusted.
[b] Includes taxes.
[c] Excludes taxes.
R=Revised. NA=Not available.

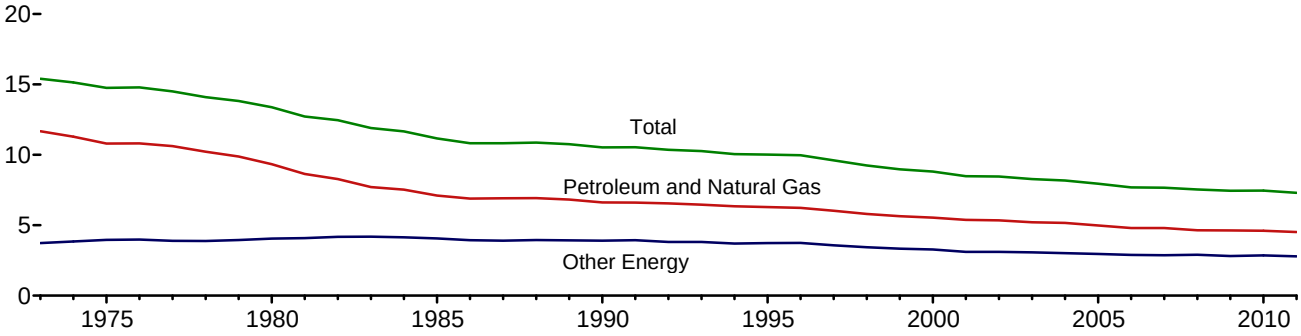
Notes: • See "Real Dollars" in Glossary. • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary 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. • **Consumer Price Index, All Urban Consumers:** U.S. Department of Labor, Bureau of Labor Statistics, series ID CUUR0000SA0. • **Conversion Factors:** Tables A1, A3, A4, and A6.

Figure 1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product, 1973-2011

(Thousand Btu per Chained (2005) Dollar)



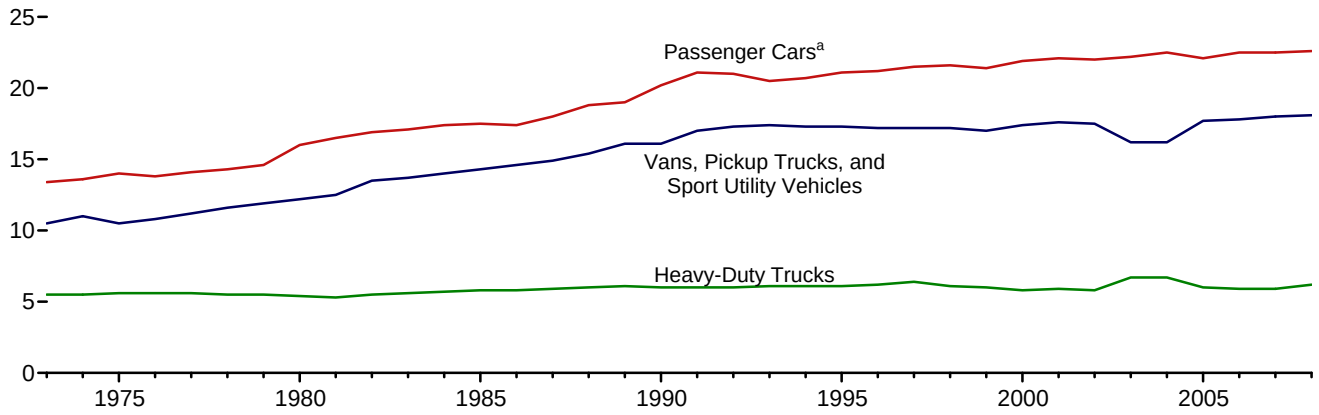
Note: See "Real Dollars" in Glossary.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.7.

Table 1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product

	Energy Consumption			Gross Domestic Product (GDP)	Energy Consumption per Real Dollar of GDP		
	Petroleum and Natural Gas	Other Energy[a]	Total		Petroleum and Natural Gas	Other Energy[a]	Total
	Quadrillion Btu			Billion Chained (2005) Dollars	Thousand Btu per Chained (2005) Dollar		
1973 Year	57.350	18.334	75.684	4,912.8	11.67	3.73	15.41
1974 Year	55.186	18.776	73.962	4,885.7	11.30	3.84	15.14
1975 Year	52.680	19.284	71.965	4,875.4	10.81	3.96	14.76
1976 Year	55.523	20.452	75.975	5,136.9	10.81	3.98	14.79
1977 Year	57.054	20.907	77.961	5,373.1	10.62	3.89	14.51
1978 Year	57.963	21.987	79.950	5,672.8	10.22	3.88	14.09
1979 Year	57.788	23.070	80.859	5,850.1	9.88	3.94	13.82
1980 Year	54.440	23.627	78.067	5,834.0	9.33	4.05	13.38
1981 Year	51.680	24.426	76.106	5,982.1	8.64	4.08	12.72
1982 Year	48.588	24.511	73.099	5,865.9	8.28	4.18	12.46
1983 Year	47.273	25.698	72.971	6,130.9	7.71	4.19	11.90
1984 Year	49.447	27.185	76.632	6,571.5	7.52	4.14	11.66
1985 Year	48.628	27.764	76.392	6,843.4	7.11	4.06	11.16
1986 Year	48.790	27.857	76.647	7,080.5	6.89	3.93	10.83
1987 Year	50.504	28.551	79.054	7,307.0	6.91	3.91	10.82
1988 Year	52.671	30.038	82.709	7,607.4	6.92	3.95	10.87
1989 Year	53.811	30.975	84.786	7,879.2	6.83	3.93	10.76
1990 Year	53.155	31.330	84.485	8,027.1	6.62	3.90	10.52
1991 Year	52.879	31.559	84.438	8,008.3	6.60	3.94	10.54
1992 Year	54.239	31.544	85.783	8,280.0	6.55	3.81	10.36
1993 Year	54.973	32.450	87.424	8,516.2	6.46	3.81	10.27
1994 Year	56.289	32.803	89.091	8,863.1	6.35	3.70	10.05
1995 Year	57.110	33.920	91.029	9,086.0	6.29	3.73	10.02
1996 Year	58.760	35.262	94.022	9,425.8	6.23	3.74	9.97
1997 Year	59.382	35.221	94.602	9,845.9	6.03	3.58	9.61
1998 Year	59.646	35.372	95.018	10,274.7	5.81	3.44	9.25
1999 Year	60.747	35.905	96.652	10,770.7	5.64	3.33	8.97
2000 Year	62.086	36.729	98.814	11,216.4	5.54	3.27	8.81
2001 Year	60.958	35.210	96.168	11,337.5	5.38	3.11	8.48
2002 Year	61.734	35.911	97.645	11,543.1	5.35	3.11	8.46
2003 Year	61.642	36.336	97.978	11,836.4	5.21	3.07	8.28
2004 Year	63.215	36.947	100.162	12,246.9	5.16	3.02	8.18
2005 Year	62.953	37.328	100.282	12,623.0	4.99	2.96	7.94
2006 Year	62.194	37.435	99.629	12,958.5	4.80	2.89	7.69
2007 Year	63.437	37.859	101.296	13,206.4	4.80	2.87	7.67
2008 Year	61.123	38.152	99.275	13,161.9	4.64	2.90	7.54
2009 Year	58.819	35.740	94.559	12,703.1	4.63	2.81	7.44
2010 Year	60.266	R 37.401	R 97.667	13,088.0	4.60	2.86	R 7.46
2011 Year	R 60.120	R 37.099	R 97.219	13,315.1	4.52	2.79	R 7.30

[a] Coal, coal coke net imports, nuclear electric power, renewable energy, and electricity net imports.
R=Revised.
Notes: • See "Primary Energy Consumption" and "Real Dollars" in Glossary. • 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.gov/totalenergy/data/monthly/#summary.
Sources: • **Energy Consumption:** Table 1.3. • **Gross Domestic Product:** U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts (May 31, 2012), Table 1.1.6.

Figure 1.8 Motor Vehicle Fuel Economy, 1973-2008
(Miles per Gallon)



[a] Motorcycles are included through 1989.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.8.

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

	Passenger Cars[a]			Vans, Pickup Trucks, and Sport Utility Vehicles[b]			Heavy-Duty Trucks[c]			All Motor Vehicles[d]		
	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per 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	[a]10,157	[a]533	[a]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	12,485	554	22.5	10,920	612	17.8	25,231	4,304	5.9	12,017	698	17.2
2007	12,304	547	22.5	10,962	609	18.0	25,152	4,275	5.9	11,920	693	17.2
2008[P]	11,788	522	22.6	10,951	605	18.1	25,254	4,075	6.2	11,619	667	17.4

[a] Through 1989, includes motorcycles.
[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.
[d] Includes buses and motorcycles, which are not shown separately.
P=Preliminary.
Note: Geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
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.

Table 1.9 Heating Degree-Days by Census Division

Census Divisions	May					Cumulative July through May				
				Percent Change					Percent Change	
	Normal[a]	2011	2012	Normal to 2012	2011 to 2012	Normal[a]	2011	2012	Normal to 2012	2011 to 2012
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	281	243	196	-30	-19	6,579	6,478	5,319	-19	-18
Middle Atlantic										
New Jersey, New York, Pennsylvania	217	158	108	-50	-32	5,904	5,756	4,699	-20	-18
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	238	230	120	-50	-48	6,481	6,510	5,178	-20	-20
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	208	250	123	-41	-51	6,735	6,834	5,386	-20	-21
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	61	49	18	NM	NM	2,861	2,930	2,220	-22	-24
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	76	98	23	NM	NM	3,616	3,618	2,787	-23	-23
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	17	43	8	NM	NM	2,298	2,212	1,791	-22	-19
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	233	281	171	-27	-39	5,150	4,869	4,588	-11	-6
Pacific[b]										
California, Oregon, Washington	182	249	132	-27	-47	3,167	3,269	3,051	-4	-7
U.S. Average[b]	**159**	**166**	**90**	**-43**	**-46**	**4,508**	**4,494**	**3,690**	**-18**	**-18**

[a] "Normal" is based on calculations of data from 1971 through 2000.
[b] Excludes Alaska and Hawaii.

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. 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.gov/totalenergy/data/monthly/#summary for current data. • See http://www.eia.gov/totalenergy/data/annual/#summary 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.

Table 1.10 Cooling Degree-Days by Census Division

Census Divisions	May					Cumulative January through May				
				Percent Change					Percent Change	
	Normal[a]	2011	2012	Normal to 2012	2011 to 2012	Normal[a]	2011	2012	Normal to 2012	2011 to 2012
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	6	37	29	NM	NM	6	42	33	NM	NM
Middle Atlantic										
New Jersey, New York, Pennsylvania	23	57	64	NM	NM	23	76	69	NM	NM
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	49	64	89	NM	NM	51	73	107	NM	NM
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	65	65	112	NM	NM	74	75	137	NM	NM
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	177	241	261	47	8	361	492	510	41	4
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	136	185	240	76	30	193	280	341	77	22
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	252	308	340	35	10	427	640	663	55	4
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	96	62	125	NM	NM	145	112	182	26	63
Pacific[b]										
California, Oregon, Washington	36	8	30	NM	NM	56	11	39	NM	NM
U.S. Average[b]	**97**	**120**	**146**	**NM**	**NM**	**163**	**219**	**246**	**51**	**12**

[a] "Normal" is based on calculations of data from 1971 through 2000.
[b] Excludes Alaska and Hawaii.
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.gov/totalenergy/data/monthly/#summary for current data. • See http://www.eia.gov/totalenergy/data/annual/#summary 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.

Note. Merchandise Trade Value. Imports data presented are based on the customs values. Those values do not include insurance and freight and are consequently lower than the cost, insurance, and freight (CIF) values, which are also reported by the Bureau of the Census. All exports data, and imports 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 U.S. 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," FT-410, December issues.
1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.
1990–1992: "U.S. Merchandise Trade," Final Report.
1993–2011: "U.S. International Trade in Goods and Services," Annual Revision.
2012: "U.S. International Trade in Goods and Services," FT-900, monthly.

Petroleum Imports
1974–1987: "U.S. Merchandise Trade," FT-900, December issues, 1975-1988.
1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.
1990–1993: "U.S. Merchandise Trade," Final Report.
1994–2011: "U.S. International Trade in Goods and Services," Annual Revision.
2012: "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.
1993–2011: "U.S. International Trade in Goods and Services," Annual Revision.
2012: "U.S. International Trade in Goods and Services," FT-900, monthly.

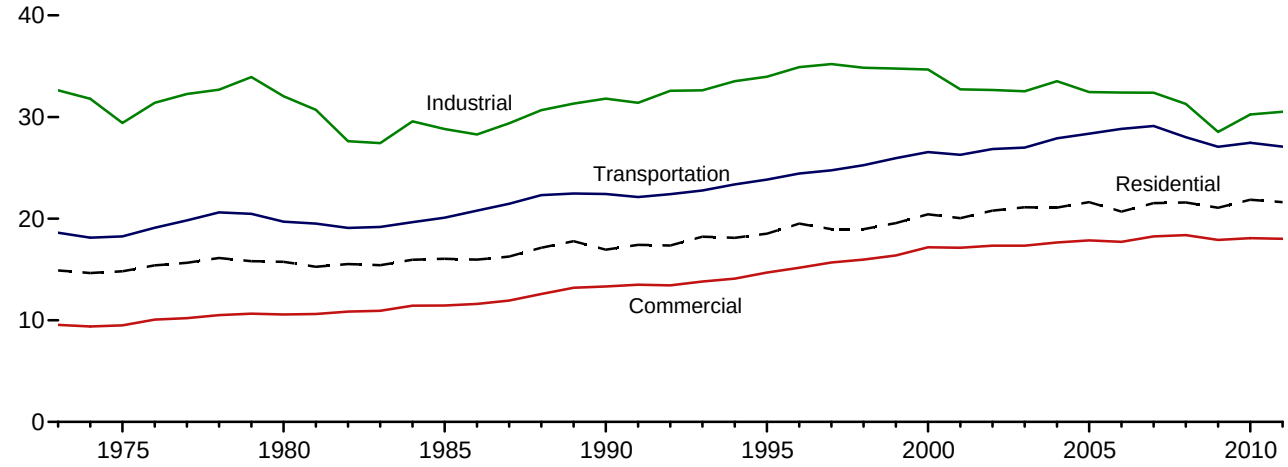
Petroleum, Energy, and Non-Energy Balances
Calculated by the U.S. Energy Information Administration.

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.
1992–2011: "U.S. International Trade in Goods and Services," Annual Revision.
2012: "U.S. International Trade in Goods and Services," FT-900, monthly.

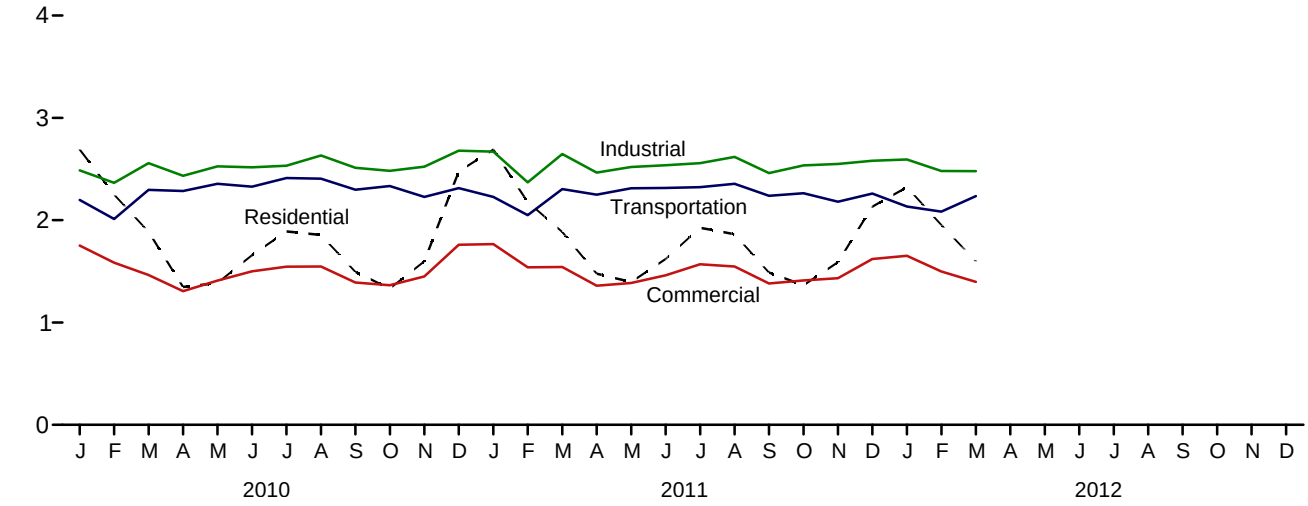
2. Energy Consumption by Sector

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

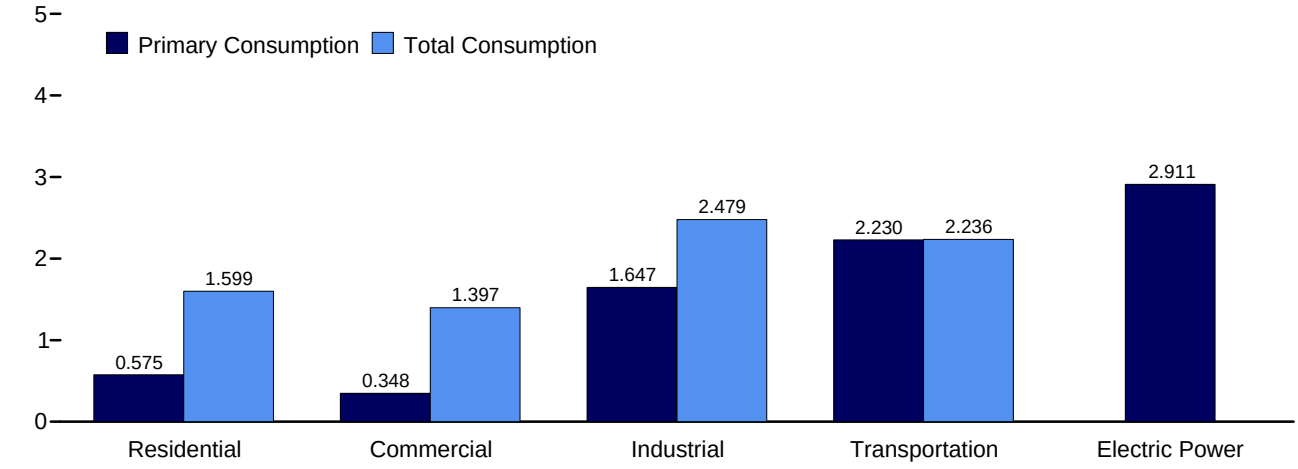
Total Consumption by End-Use Sector, 1973-2011



Total Consumption by End-Use Sector, Monthly



By Sector, March 2012



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.1.

Table 2.1 Energy Consumption by Sector

(Trillion Btu)

	End-Use Sectors								Electric Power Sector[c,d]	Balancing Item[g]	Primary Total[h]
	Residential		Commercial[a]		Industrial[b]		Transportation				
	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]		
1973 Total	**8,225**	**14,897**	**4,423**	**9,543**	**24,720**	**32,623**	**18,577**	**18,613**	**19,731**	**7**	**75,684**
1975 Total	**7,990**	**14,813**	**4,059**	**9,492**	**21,434**	**29,413**	**18,210**	**18,245**	**20,270**	**1**	**71,965**
1980 Total	**7,439**	**15,753**	**4,105**	**10,578**	**22,595**	**32,039**	**19,659**	**19,697**	**24,269**	**-1**	**78,067**
1985 Total	**7,148**	**16,041**	**3,732**	**11,451**	**19,443**	**28,816**	**20,041**	**20,088**	**26,032**	**-4**	**76,392**
1990 Total	**6,557**	**16,945**	**3,896**	**13,320**	**21,180**	**31,810**	**22,366**	**22,420**	**30,495**	**-9**	**84,485**
1995 Total	**6,936**	**18,519**	**4,101**	**14,690**	**22,719**	**33,971**	**23,791**	**23,846**	**33,479**	**3**	**91,029**
1996 Total	**7,467**	**19,504**	**4,273**	**15,172**	**23,410**	**34,904**	**24,383**	**24,437**	**34,485**	**4**	**94,022**
1997 Total	**7,033**	**18,965**	**4,295**	**15,681**	**23,686**	**35,200**	**24,695**	**24,750**	**34,886**	**6**	**94,602**
1998 Total	**6,413**	**18,955**	**4,005**	**15,968**	**23,177**	**34,843**	**25,201**	**25,256**	**36,225**	**-3**	**95,018**
1999 Total	**6,775**	**19,557**	**4,053**	**16,376**	**22,950**	**34,764**	**25,891**	**25,949**	**36,976**	**6**	**96,652**
2000 Total	**7,159**	**20,425**	**4,278**	**17,175**	**22,824**	**34,664**	**26,489**	**26,548**	**38,062**	**2**	**98,814**
2001 Total	**6,868**	**20,042**	**4,084**	**17,137**	**21,794**	**32,720**	**26,213**	**26,275**	**37,215**	**-6**	**96,168**
2002 Total	**6,912**	**20,791**	**4,132**	**17,345**	**21,799**	**32,662**	**26,781**	**26,842**	**38,016**	**5**	**97,645**
2003 Total	**7,211**	**21,110**	**4,283**	**17,343**	**21,503**	**32,532**	**26,920**	**26,994**	**38,062**	**-1**	**97,978**
2004 Total	**6,993**	**21,093**	**4,232**	**17,659**	**22,412**	**33,520**	**27,817**	**27,895**	**38,713**	**-6**	**100,162**
2005 Total	**6,909**	**21,626**	**4,051**	**17,857**	**21,411**	**32,446**	**28,272**	**28,353**	**39,638**	**(s)**	**100,282**
2006 Total	**6,168**	**20,688**	**3,747**	**17,711**	**21,536**	**32,401**	**28,751**	**28,830**	**39,428**	**(s)**	**99,629**
2007 Total	**6,598**	**21,531**	**3,922**	**18,255**	**21,370**	**32,394**	**29,029**	**29,117**	**40,377**	**-1**	**101,296**
2008 Total	**6,817**	**21,596**	**4,073**	**18,381**	**20,480**	**31,290**	**27,925**	**28,008**	**39,978**	**(s)**	**99,275**
2009 Total	**6,619**	**21,064**	**4,061**	**17,899**	**18,813**	**28,525**	**26,989**	**27,071**	**38,077**	**(s)**	**94,559**
2010 January	1,142	2,691	617	1,752	R 1,695	R 2,487	2,190	2,198	3,484	4	R 9,132
February	985	2,250	548	1,585	R 1,601	R 2,365	2,004	2,012	3,073	1	R 8,213
March	737	1,887	419	1,465	R 1,752	R 2,557	2,290	2,297	3,008	-1	R 8,205
April	439	1,347	277	1,307	R 1,624	R 2,435	2,280	2,286	2,755	R -2	R 7,372
May	328	1,386	226	1,410	R 1,612	R 2,527	2,349	2,356	3,163	R (s)	R 7,678
June	268	1,659	198	1,501	R 1,608	R 2,517	2,320	2,328	3,611	2	R 8,008
July	240	1,889	182	1,546	R 1,618	R 2,532	2,404	2,411	3,934	4	R 8,383
August	232	1,855	186	1,547	R 1,707	R 2,633	2,399	2,406	3,917	R 4	R 8,445
September	237	1,494	189	1,390	R 1,671	R 2,512	2,291	2,298	3,306	R (s)	R 7,694
October	343	1,331	256	1,364	R 1,644	R 2,482	2,327	2,333	2,942	-1	R 7,509
November	599	1,597	364	1,451	R 1,671	R 2,523	2,221	2,228	2,944	R -1	R 7,797
December	1,054	2,476	579	1,761	R 1,802	R 2,679	2,307	2,314	3,488	1	R 9,231
Total	**6,603**	**21,862**	**4,039**	**18,078**	**R 20,003**	**R 30,250**	**27,384**	**27,466**	**39,626**	**R 11**	**R 97,667**
2011 January	R 1,173	R 2,691	R 636	R 1,766	R 1,843	R 2,671	2,220	2,227	3,483	1	R 9,355
February	R 952	R 2,178	R 531	R 1,540	R 1,605	R 2,369	R 2,042	2,049	3,006	R -1	R 8,135
March	R 773	R 1,885	448	R 1,543	R 1,791	R 2,646	2,297	2,304	3,070	-3	R 8,376
April	480	1,477	298	1,359	R 1,626	R 2,465	2,243	2,249	2,905	-2	R 7,549
May	329	1,396	221	1,387	R 1,638	R 2,520	2,306	2,313	3,121	-2	R 7,614
June	261	1,622	193	1,462	R 1,643	R 2,537	2,308	2,315	3,530	1	R 7,937
July	239	1,925	185	1,569	R 1,623	R 2,558	2,316	2,323	4,012	R 5	R 8,380
August	250	1,863	202	1,548	R 1,700	R 2,619	2,350	2,356	3,885	3	R 8,389
September	264	1,488	212	1,382	R 1,629	R 2,460	2,232	2,238	3,232	-1	R 7,567
October	382	1,364	293	1,411	R 1,676	R 2,536	2,257	2,264	2,967	-2	R 7,573
November	594	1,589	367	1,434	R 1,699	R 2,550	2,175	2,181	2,919	-3	R 7,751
December	885	2,132	504	1,621	R 1,736	R 2,581	2,253	2,260	3,215	-3	R 8,592
Total	**R 6,582**	**R 21,615**	**R 4,089**	**R 18,020**	**R 20,209**	**R 30,510**	**26,999**	**27,079**	**39,346**	**R -5**	**R 97,219**
2012 January	1,008	2,323	R 560	R 1,652	R 1,776	R 2,594	R 2,126	2,133	3,232	R -2	R 8,701
February	848	1,954	R 484	R 1,499	R 1,684	R 2,481	2,077	2,083	2,924	R -3	R 8,014
March	575	1,599	348	1,397	1,647	2,479	2,230	2,236	2,911	-5	7,705
3-Month Total	**2,431**	**5,876**	**1,392**	**4,548**	**5,107**	**7,553**	**6,433**	**6,453**	**9,067**	**-10**	**24,420**
2011 3-Month Total	**2,898**	**6,754**	**1,614**	**4,849**	**5,238**	**7,686**	**6,560**	**6,580**	**9,559**	**-3**	**25,867**
2010 3-Month Total	**2,865**	**6,828**	**1,583**	**4,802**	**5,048**	**7,410**	**6,485**	**6,506**	**9,566**	**5**	**25,550**

[a] 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.

[c] 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.

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

[e] See "Primary Energy Consumption" in Glossary.

[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.

[g] 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.

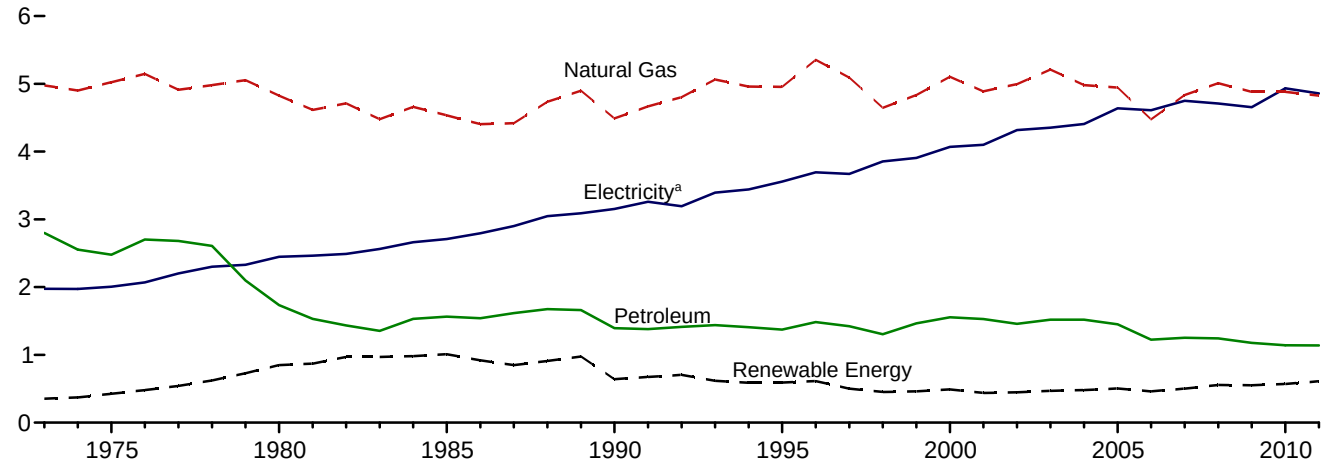
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available data beginning in 1973.

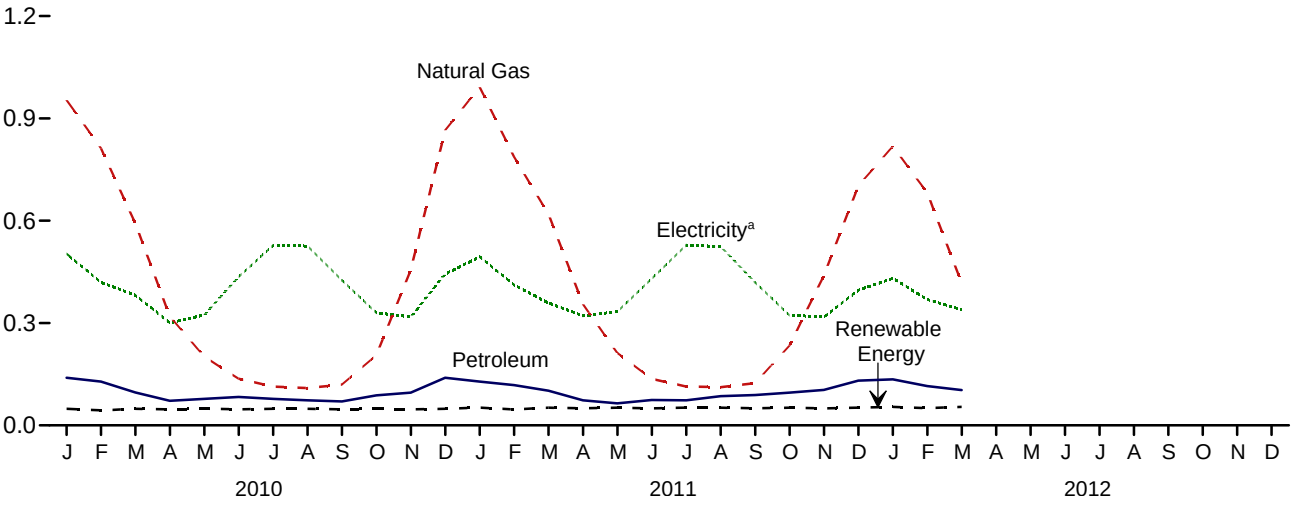
Sources: Tables 1.3 and 2.2–2.6.

Figure 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

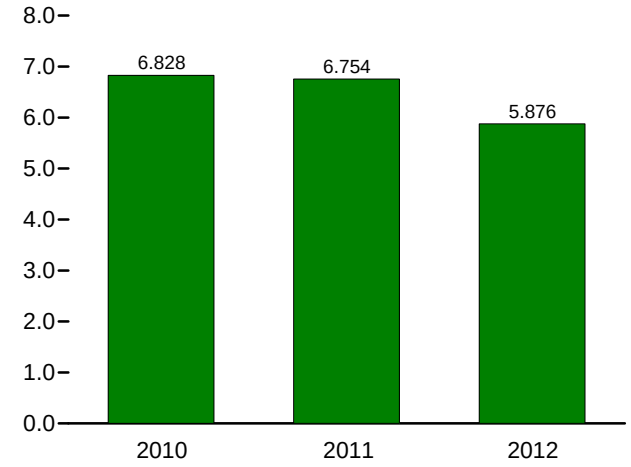
By Major Source, 1973-2011



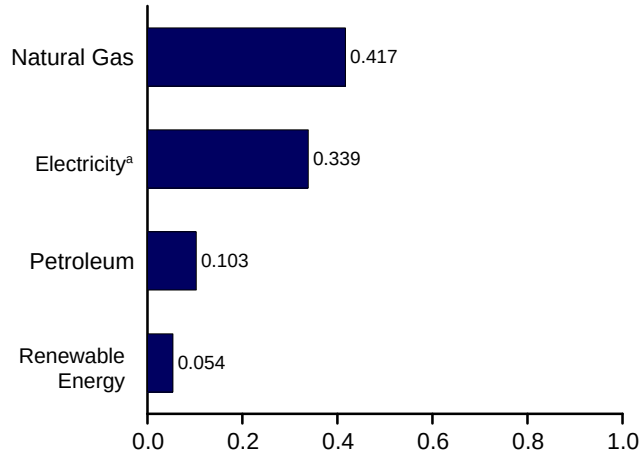
By Major Source, Monthly



Total, January-March



By Major Source, March 2012



[a] Electricity retail sales.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.2.

Table 2.2 Residential Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]											
	Fossil Fuels				Renewable Energy[b]							
	Coal	Natural Gas[c]	Petro-leum	Total	Geo-thermal	Solar/ PV	Bio-mass	Total	Total Primary	Electricity Retail Sales[d]	Electrical System Energy Losses[e]	Total
1973 Total	**94**	**4,977**	**2,800**	**7,871**	**NA**	**NA**	**354**	**354**	**8,225**	**1,976**	**4,696**	**14,897**
1975 Total	**63**	**5,023**	**2,479**	**7,564**	**NA**	**NA**	**425**	**425**	**7,990**	**2,007**	**4,817**	**14,813**
1980 Total	**31**	**4,825**	**1,734**	**6,589**	**NA**	**NA**	**850**	**850**	**7,439**	**2,448**	**5,866**	**15,753**
1985 Total	**39**	**4,534**	**1,565**	**6,138**	**NA**	**NA**	**1,010**	**1,010**	**7,148**	**2,709**	**6,184**	**16,041**
1990 Total	**31**	**4,491**	**1,394**	**5,916**	**6**	**56**	**580**	**641**	**6,557**	**3,153**	**7,235**	**16,945**
1995 Total	**17**	**4,954**	**1,374**	**6,345**	**7**	**64**	**520**	**591**	**6,936**	**3,557**	**8,026**	**18,519**
1996 Total	**17**	**5,354**	**1,484**	**6,854**	**7**	**65**	**540**	**612**	**7,467**	**3,694**	**8,344**	**19,504**
1997 Total	**16**	**5,093**	**1,422**	**6,531**	**8**	**64**	**430**	**502**	**7,033**	**3,671**	**8,261**	**18,965**
1998 Total	**12**	**4,646**	**1,304**	**5,962**	**8**	**64**	**380**	**452**	**6,413**	**3,856**	**8,686**	**18,955**
1999 Total	**14**	**4,835**	**1,465**	**6,314**	**9**	**63**	**390**	**461**	**6,775**	**3,906**	**8,875**	**19,557**
2000 Total	**11**	**5,105**	**1,554**	**6,670**	**9**	**61**	**420**	**489**	**7,159**	**4,069**	**9,197**	**20,425**
2001 Total	**12**	**4,889**	**1,529**	**6,430**	**9**	**59**	**370**	**438**	**6,868**	**4,100**	**9,074**	**20,042**
2002 Total	**12**	**4,995**	**1,457**	**6,464**	**10**	**57**	**380**	**448**	**6,912**	**4,317**	**9,562**	**20,791**
2003 Total	**12**	**5,209**	**1,519**	**6,741**	**13**	**57**	**400**	**470**	**7,211**	**4,353**	**9,546**	**21,110**
2004 Total	**11**	**4,981**	**1,520**	**6,513**	**14**	**57**	**410**	**481**	**6,993**	**4,408**	**9,691**	**21,093**
2005 Total	**8**	**4,946**	**1,451**	**6,406**	**16**	**58**	**430**	**504**	**6,909**	**4,638**	**10,079**	**21,626**
2006 Total	**6**	**4,476**	**1,224**	**5,706**	**18**	**63**	**380**	**462**	**6,168**	**4,611**	**9,909**	**20,688**
2007 Total	**8**	**4,835**	**1,254**	**6,097**	**22**	**70**	**410**	**502**	**6,598**	**4,750**	**10,182**	**21,531**
2008 Total	**8**	**5,010**	**1,243**	**6,261**	**26**	**80**	**450**	**557**	**6,817**	**4,708**	**10,071**	**21,596**
2009 Total	**8**	**4,883**	**1,176**	**6,067**	**33**	**89**	**430**	**552**	**6,619**	**4,656**	**9,789**	**21,064**
2010 January	1	953	140	1,094	3	10	36	48	1,142	503	1,045	2,691
February	1	812	128	941	3	9	32	44	985	419	846	2,250
March	1	592	96	689	3	10	36	48	737	381	768	1,887
April	(s)	320	72	392	3	9	35	47	439	300	608	1,347
May	(s)	201	78	280	3	10	36	48	328	324	734	1,386
June	1	137	83	221	3	9	35	47	268	435	956	1,659
July	1	114	78	192	3	10	36	48	240	528	1,121	1,889
August	1	109	74	183	3	10	36	48	232	526	1,098	1,855
September	(s)	120	70	190	3	9	35	47	237	425	832	1,494
October	1	206	88	294	3	10	36	48	343	330	658	1,331
November	1	456	96	552	3	9	35	47	599	318	680	1,597
December	1	865	140	1,006	3	10	36	48	1,054	444	978	2,476
Total	**7**	**4,883**	**1,142**	**6,032**	**37**	**114**	**420**	**571**	**6,603**	**4,933**	**10,326**	**21,862**
2011 January	1	R 992	129	R 1,121	3	12	37	52	R 1,173	494	1,023	R 2,691
February	1	R 787	118	R 905	3	11	33	47	R 952	412	814	R 2,178
March	1	R 619	102	R 721	3	12	37	52	R 773	358	754	R 1,885
April	(s)	355	73	429	3	12	35	50	480	321	677	1,477
May	(s)	212	64	277	3	12	37	52	329	334	733	1,396
June	(s)	136	74	211	3	12	35	50	261	430	931	1,622
July	(s)	114	73	188	3	12	37	52	239	528	1,158	1,925
August	(s)	112	86	198	3	12	37	52	250	524	1,089	1,863
September	(s)	124	89	214	3	12	35	50	264	419	806	1,488
October	(s)	234	96	330	3	12	37	52	382	323	659	1,364
November	(s)	439	104	544	3	12	35	50	594	318	678	1,589
December	(s)	702	131	834	3	12	37	52	885	396	851	2,132
Total	**6**	**R 4,826**	**1,139**	**R 5,972**	**40**	**140**	**430**	**610**	**R 6,582**	**4,858**	**10,176**	**R 21,615**
2012 January	1	818	135	954	3	14	36	54	1,008	432	884	2,323
February	1	682	115	798	3	13	34	51	848	369	737	1,954
March	(s)	417	103	521	3	14	36	54	575	339	685	1,599
3-Month Total	**2**	**1,917**	**354**	**2,272**	**10**	**42**	**107**	**159**	**2,431**	**1,139**	**2,305**	**5,876**
2011 3-Month Total	**2**	**2,398**	**348**	**2,748**	**10**	**35**	**106**	**150**	**2,898**	**1,265**	**2,591**	**6,754**
2010 3-Month Total	**2**	**2,357**	**364**	**2,724**	**9**	**28**	**104**	**141**	**2,865**	**1,304**	**2,660**	**6,828**

[a] See "Primary Energy Consumption" in Glossary.
[b] 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.
[e] 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 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.

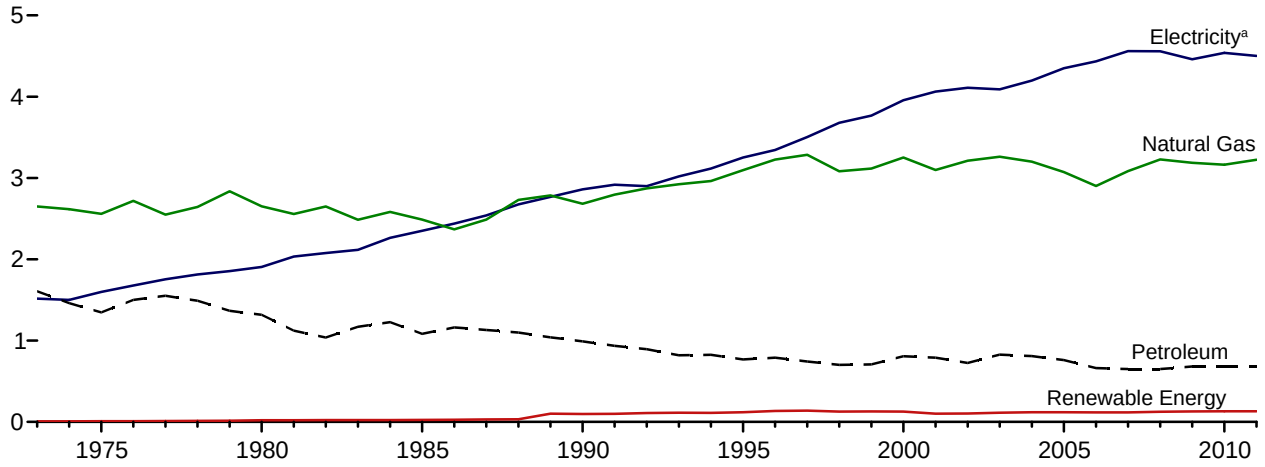
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available data beginning in 1973.

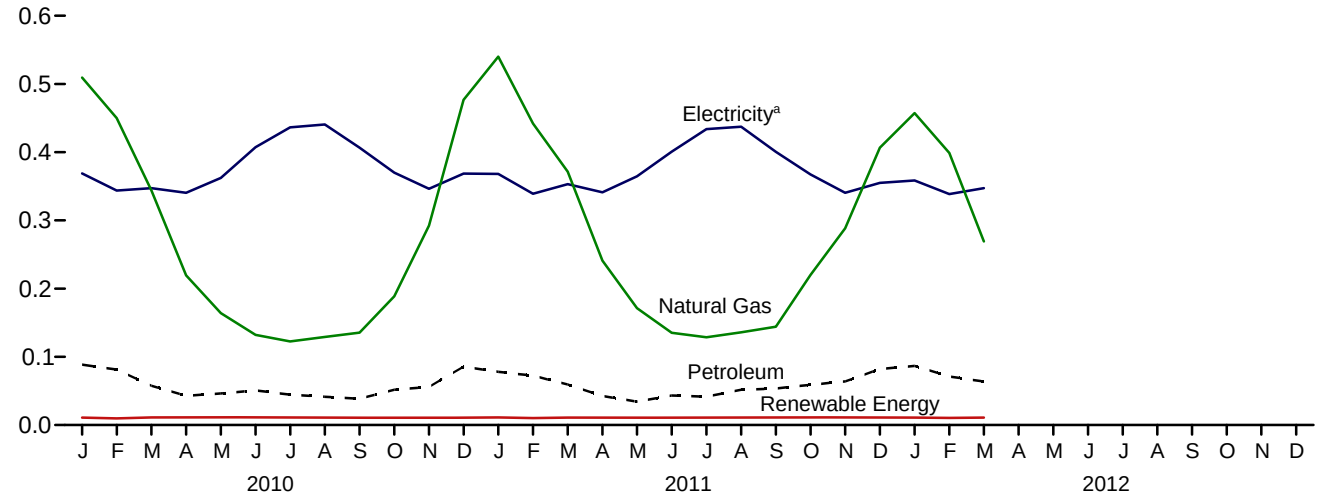
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

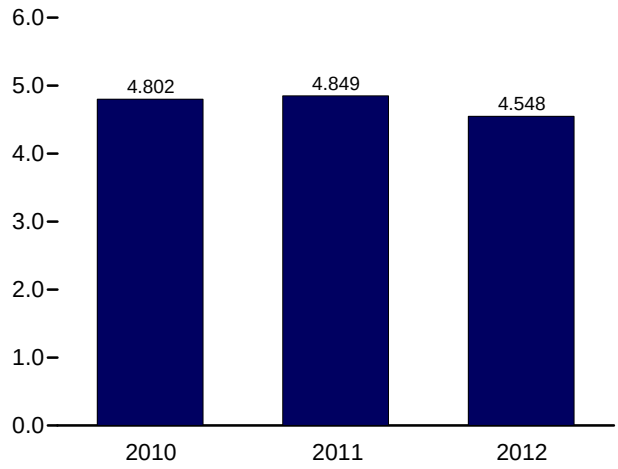
By Major Source, 1973-2011



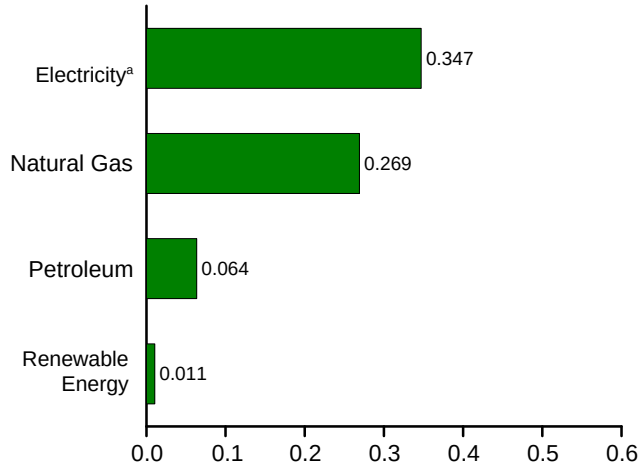
By Major Source, Monthly



Total, January-March



By Major Source, March 2012



[a] Electricity retail sales.
Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.
Source: Table 2.3.

.

Table 2.3 Commercial Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]													
	Fossil Fuels				Renewable Energy[b]									
	Coal	Natural Gas[c]	Petroleum[d]	Total	Hydroelectric Power[e]	Geothermal	Solar/PV	Wind	Biomass	Total	Total Primary	Electricity Retail Sales[f]	Electrical System Energy Losses[g]	Total
1973 Total	**160**	**2,649**	**1,607**	**4,416**	**NA**	**NA**	**NA**	**NA**	**7**	**7**	**4,423**	**1,517**	**3,604**	**9,543**
1975 Total	**147**	**2,558**	**1,346**	**4,051**	**NA**	**NA**	**NA**	**NA**	**8**	**8**	**4,059**	**1,598**	**3,835**	**9,492**
1980 Total	**115**	**2,651**	**1,318**	**4,084**	**NA**	**NA**	**NA**	**NA**	**21**	**21**	**4,105**	**1,906**	**4,567**	**10,578**
1985 Total	**137**	**2,488**	**1,083**	**3,708**	**NA**	**NA**	**NA**	**NA**	**24**	**24**	**3,732**	**2,351**	**5,368**	**11,451**
1990 Total	**124**	**2,682**	**991**	**3,798**	**1**	**3**	**–**	**–**	**94**	**98**	**3,896**	**2,860**	**6,564**	**13,320**
1995 Total	**117**	**3,096**	**769**	**3,982**	**1**	**5**	**–**	**–**	**113**	**118**	**4,101**	**3,252**	**7,338**	**14,690**
1996 Total	**122**	**3,226**	**790**	**4,138**	**1**	**5**	**–**	**–**	**129**	**135**	**4,273**	**3,344**	**7,555**	**15,172**
1997 Total	**129**	**3,285**	**743**	**4,157**	**1**	**6**	**–**	**–**	**131**	**138**	**4,295**	**3,503**	**7,883**	**15,681**
1998 Total	**93**	**3,083**	**702**	**3,878**	**1**	**7**	**–**	**–**	**118**	**127**	**4,005**	**3,678**	**8,285**	**15,968**
1999 Total	**103**	**3,115**	**707**	**3,925**	**1**	**7**	**–**	**–**	**121**	**129**	**4,053**	**3,766**	**8,557**	**16,376**
2000 Total	**92**	**3,252**	**807**	**4,150**	**1**	**8**	**–**	**–**	**119**	**128**	**4,278**	**3,956**	**8,942**	**17,175**
2001 Total	**97**	**3,097**	**790**	**3,984**	**1**	**8**	**–**	**–**	**92**	**101**	**4,084**	**4,062**	**8,990**	**17,137**
2002 Total	**90**	**3,212**	**726**	**4,028**	**(s)**	**9**	**–**	**–**	**95**	**104**	**4,132**	**4,110**	**9,104**	**17,345**
2003 Total	**82**	**3,261**	**827**	**4,170**	**1**	**11**	**–**	**–**	**101**	**113**	**4,283**	**4,090**	**8,969**	**17,343**
2004 Total	**103**	**3,201**	**809**	**4,113**	**1**	**12**	**–**	**–**	**105**	**118**	**4,232**	**4,198**	**9,229**	**17,659**
2005 Total	**97**	**3,073**	**761**	**3,932**	**1**	**14**	**–**	**–**	**105**	**120**	**4,051**	**4,351**	**9,455**	**17,857**
2006 Total	**65**	**2,902**	**663**	**3,629**	**1**	**14**	**–**	**–**	**103**	**118**	**3,747**	**4,435**	**9,529**	**17,711**
2007 Total	**70**	**3,085**	**649**	**3,805**	**1**	**14**	**–**	**–**	**103**	**118**	**3,922**	**4,560**	**9,773**	**18,255**
2008 Total	**69**	**3,228**	**651**	**3,948**	**1**	**15**	**(s)**	**–**	**109**	**125**	**4,073**	**4,558**	**9,749**	**18,381**
2009 Total	**63**	**3,187**	**682**	**3,932**	**1**	**17**	**(s)**	**(s)**	**112**	**129**	**4,061**	**4,460**	**9,378**	**17,899**
2010 January	8	509	89	606	(s)	2	(s)	(s)	9	11	617	369	766	1,752
February	7	450	81	538	(s)	1	(s)	(s)	8	10	548	344	694	1,585
March	6	344	58	407	(s)	2	(s)	(s)	9	11	419	347	699	1,465
April	4	220	43	266	(s)	2	(s)	(s)	9	11	277	340	689	1,307
May	4	164	46	214	(s)	2	(s)	(s)	10	12	226	362	822	1,410
June	4	132	51	187	(s)	2	(s)	(s)	9	11	198	407	896	1,501
July	4	123	44	171	(s)	2	(s)	(s)	9	11	182	436	927	1,546
August	4	129	41	175	(s)	2	(s)	(s)	10	11	186	441	920	1,547
September	4	135	39	178	(s)	2	(s)	(s)	9	11	189	406	795	1,390
October	5	189	52	245	(s)	2	(s)	(s)	9	11	256	370	738	1,364
November	5	292	56	353	(s)	2	(s)	(s)	9	10	364	346	741	1,451
December	6	477	85	568	(s)	2	(s)	(s)	9	11	579	369	813	1,761
Total	**60**	**3,164**	**685**	**3,908**	**1**	**19**	**(s)**	**(s)**	**111**	**130**	**4,039**	**4,539**	**9,501**	**18,078**
2011 January	7	R 540	78	R 625	(s)	2	(s)	(s)	9	11	R 636	368	762	R 1,766
February	6	R 442	72	R 521	(s)	2	(s)	(s)	9	10	R 531	339	670	R 1,540
March	6	372	60	R 437	(s)	2	(s)	(s)	9	11	448	353	742	R 1,543
April	4	241	43	287	(s)	2	(s)	(s)	9	10	298	341	720	1,359
May	4	171	34	210	(s)	2	(s)	(s)	9	11	221	365	802	1,387
June	4	135	43	182	(s)	2	(s)	(s)	9	11	193	401	868	1,462
July	3	129	42	174	(s)	2	(s)	(s)	9	11	185	434	950	1,569
August	3	136	52	191	(s)	2	(s)	(s)	9	11	202	437	908	1,548
September	3	144	54	201	(s)	2	(s)	(s)	9	11	212	401	770	1,382
October	3	220	59	282	(s)	2	(s)	(s)	9	11	293	367	751	1,411
November	4	288	64	356	(s)	2	(s)	(s)	9	11	367	340	726	1,434
December	4	406	82	493	(s)	2	(s)	(s)	10	11	504	355	762	1,621
Total	**51**	**R 3,224**	**683**	**R 3,958**	**1**	**20**	**(s)**	**(s)**	**110**	**131**	**R 4,089**	**4,501**	**9,429**	**R 18,020**
2012 January	5	R 457	87	R 549	(s)	2	(s)	(s)	9	11	R 560	359	734	R 1,652
February	R 4	399	71	R 474	(s)	2	(s)	(s)	9	10	R 484	339	676	R 1,499
March	4	269	64	337	(s)	2	(s)	(s)	9	11	348	347	702	1,397
3-Month Total	**13**	**1,125**	**222**	**1,359**	**(s)**	**5**	**(s)**	**(s)**	**27**	**32**	**1,392**	**1,045**	**2,112**	**4,548**
2011 3-Month Total	**19**	**1,354**	**210**	**1,582**	**(s)**	**5**	**(s)**	**(s)**	**27**	**32**	**1,614**	**1,060**	**2,175**	**4,849**
2010 3-Month Total	**20**	**1,303**	**227**	**1,551**	**(s)**	**5**	**(s)**	**(s)**	**27**	**32**	**1,583**	**1,060**	**2,159**	**4,802**

[a] See "Primary Energy Consumption" in Glossary.

[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.

[d] Does not include biofuels that have been blended with petroleum—biofuels are 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 electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.

R=Revised. NA=Not available. – =No data reported. (s)=Less than 0.5 trillion Btu.

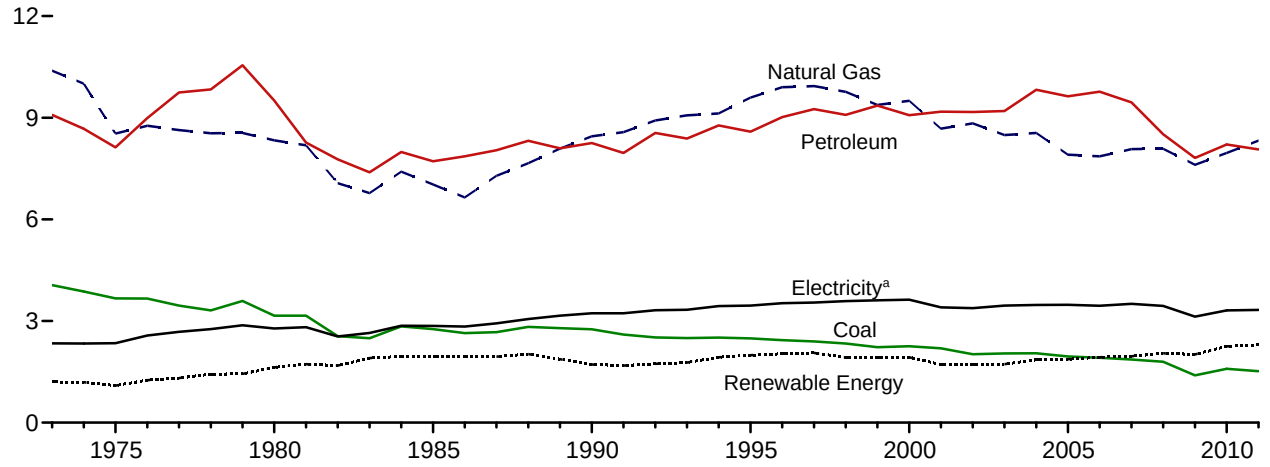
Notes: • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available data beginning in 1973.

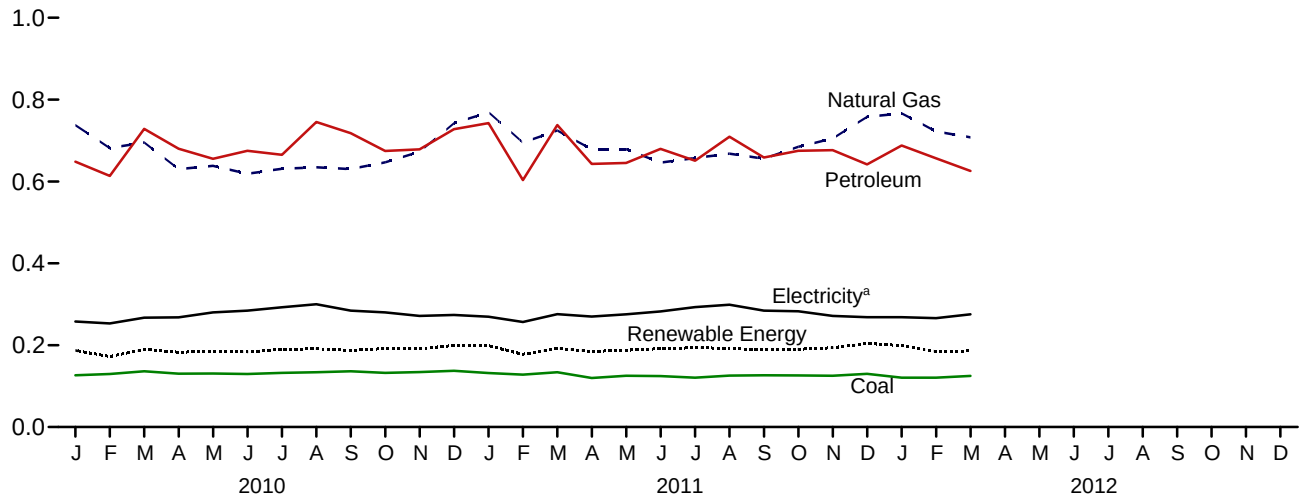
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

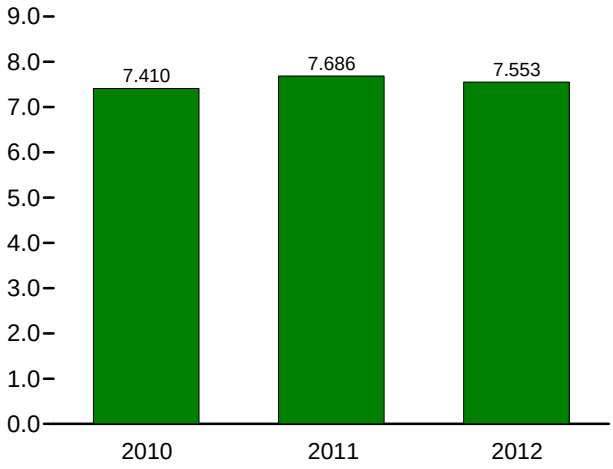
By Major Source, 1973-2011



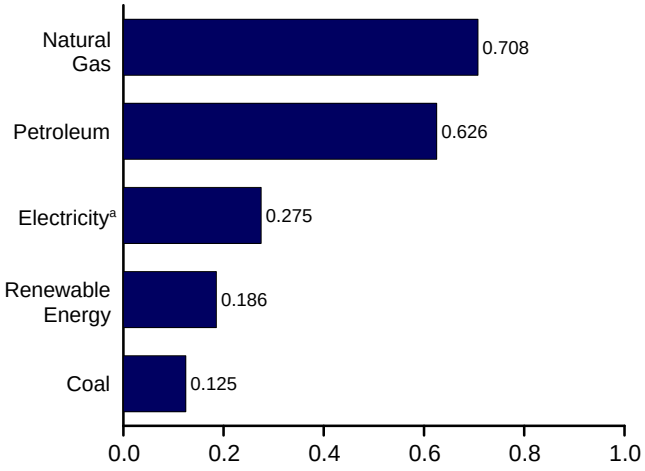
By Major Source, Monthly



Total, January-March



By Major Source, March 2012



[a] Electricity retail sales.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.4.

Table 2.4 Industrial Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]													
	Fossil Fuels				Renewable Energy[b]									
	Coal	Natural Gas[c]	Petroleum[d]	Total[e]	Hydroelectric Power[f]	Geothermal	Solar/PV	Wind	Biomass	Total	Total Primary	Electricity Retail Sales[g]	Electrical System Energy Losses[h]	Total[e]
1973 Total	**4,057**	**10,388**	**9,083**	**23,521**	**35**	**NA**	**NA**	**NA**	**1,165**	**1,200**	**24,720**	**2,341**	**5,562**	**32,623**
1975 Total	**3,667**	**8,532**	**8,127**	**20,339**	**32**	**NA**	**NA**	**NA**	**1,063**	**1,096**	**21,434**	**2,346**	**5,632**	**29,413**
1980 Total	**3,155**	**8,333**	**9,509**	**20,962**	**33**	**NA**	**NA**	**NA**	**1,600**	**1,633**	**22,595**	**2,781**	**6,664**	**32,039**
1985 Total	**2,760**	**7,032**	**7,714**	**17,492**	**33**	**NA**	**NA**	**NA**	**1,918**	**1,951**	**19,443**	**2,855**	**6,518**	**28,816**
1990 Total	**2,756**	**8,451**	**8,251**	**19,463**	**31**	**2**	**–**	**–**	**1,684**	**1,717**	**21,180**	**3,226**	**7,404**	**31,810**
1995 Total	**2,488**	**9,592**	**8,586**	**20,727**	**55**	**3**	**–**	**–**	**1,934**	**1,992**	**22,719**	**3,455**	**7,796**	**33,971**
1996 Total	**2,434**	**9,901**	**9,019**	**21,377**	**61**	**3**	**–**	**–**	**1,969**	**2,033**	**23,410**	**3,527**	**7,968**	**34,904**
1997 Total	**2,395**	**9,933**	**9,255**	**21,629**	**58**	**3**	**–**	**–**	**1,996**	**2,057**	**23,686**	**3,542**	**7,972**	**35,200**
1998 Total	**2,335**	**9,763**	**9,082**	**21,248**	**55**	**3**	**–**	**–**	**1,872**	**1,929**	**23,177**	**3,587**	**8,079**	**34,843**
1999 Total	**2,227**	**9,375**	**9,356**	**21,016**	**49**	**4**	**–**	**–**	**1,882**	**1,934**	**22,950**	**3,611**	**8,203**	**34,764**
2000 Total	**2,256**	**9,500**	**9,075**	**20,896**	**42**	**4**	**–**	**–**	**1,881**	**1,928**	**22,824**	**3,631**	**8,208**	**34,664**
2001 Total	**2,192**	**8,676**	**9,178**	**20,075**	**33**	**5**	**–**	**–**	**1,681**	**1,719**	**21,794**	**3,400**	**7,526**	**32,720**
2002 Total	**2,019**	**8,832**	**9,168**	**20,079**	**39**	**5**	**–**	**–**	**1,676**	**1,720**	**21,799**	**3,379**	**7,484**	**32,662**
2003 Total	**2,041**	**8,488**	**9,197**	**19,777**	**43**	**3**	**–**	**–**	**1,679**	**1,726**	**21,503**	**3,454**	**7,575**	**32,532**
2004 Total	**2,047**	**8,550**	**9,825**	**20,559**	**33**	**4**	**–**	**–**	**1,817**	**1,853**	**22,412**	**3,473**	**7,635**	**33,520**
2005 Total	**1,954**	**7,907**	**9,633**	**19,538**	**32**	**4**	**–**	**–**	**1,837**	**1,873**	**21,411**	**3,477**	**7,557**	**32,446**
2006 Total	**1,914**	**7,861**	**9,770**	**19,606**	**29**	**4**	**–**	**–**	**1,897**	**1,930**	**21,536**	**3,451**	**7,415**	**32,401**
2007 Total	**1,865**	**8,074**	**9,451**	**19,414**	**16**	**5**	**–**	**–**	**1,936**	**1,956**	**21,370**	**3,507**	**7,517**	**32,394**
2008 Total	**1,796**	**8,083**	**8,511**	**18,431**	**17**	**5**	**–**	**–**	**2,028**	**2,049**	**20,480**	**3,444**	**7,365**	**31,290**
2009 Total	**1,396**	**7,609**	**7,816**	**16,797**	**18**	**4**	**–**	**–**	**1,994**	**2,016**	**18,813**	**3,130**	**6,582**	**28,525**
2010 January	R 126	737	648	R 1,508	2	(s)	(s)	–	185	187	R 1,695	258	535	R 2,487
February	R 130	681	614	R 1,429	2	(s)	(s)	–	170	172	R 1,601	253	511	R 2,365
March	R 136	695	728	R 1,562	2	(s)	(s)	–	188	190	R 1,752	267	538	R 2,557
April	R 130	630	680	R 1,441	2	(s)	(s)	–	181	183	R 1,624	268	543	R 2,435
May	R 131	638	655	R 1,427	2	(s)	(s)	–	183	185	R 1,612	280	635	R 2,527
June	R 130	619	675	R 1,424	1	(s)	(s)	–	182	183	R 1,608	284	625	R 2,517
July	R 132	631	665	R 1,429	1	(s)	(s)	–	188	190	R 1,618	292	621	R 2,532
August	R 134	635	745	R 1,515	1	(s)	(s)	–	190	191	R 1,707	300	626	R 2,633
September	R 136	630	718	R 1,484	1	(s)	(s)	–	185	187	R 1,671	284	557	R 2,512
October	R 132	647	675	R 1,452	1	(s)	(s)	–	190	192	R 1,644	280	559	R 2,482
November	R 134	672	679	R 1,479	1	(s)	(s)	–	190	191	R 1,671	272	581	R 2,523
December	R 138	742	728	R 1,602	1	(s)	(s)	–	198	199	R 1,802	274	604	R 2,679
Total	**R 1,590**	**7,959**	**8,210**	**R 17,753**	**16**	**4**	**(s)**	**–**	**2,230**	**2,250**	**R 20,003**	**3,313**	**6,934**	**R 30,250**
2011 January	R 132	769	742	R 1,644	1	(s)	(s)	(s)	197	199	R 1,843	270	558	R 2,671
February	R 128	695	604	R 1,427	2	(s)	(s)	(s)	176	178	R 1,605	257	508	R 2,369
March	R 134	725	738	R 1,599	2	(s)	(s)	(s)	190	192	R 1,791	276	580	R 2,646
April	R 120	678	643	R 1,442	2	(s)	(s)	(s)	182	185	R 1,626	270	569	R 2,465
May	R 125	679	645	R 1,451	2	(s)	(s)	(s)	185	187	R 1,638	275	606	R 2,520
June	R 124	646	680	R 1,451	1	(s)	(s)	(s)	190	192	R 1,643	282	611	R 2,537
July	R 121	657	651	R 1,429	1	(s)	(s)	(s)	192	194	R 1,623	293	642	R 2,558
August	R 126	668	709	R 1,507	1	(s)	(s)	(s)	191	192	R 1,700	299	620	R 2,619
September	R 126	656	658	R 1,441	1	(s)	(s)	(s)	187	188	R 1,629	284	546	R 2,460
October	R 126	685	675	R 1,486	1	(s)	(s)	(s)	189	190	R 1,676	283	578	R 2,536
November	R 125	705	677	R 1,505	1	(s)	(s)	(s)	192	194	R 1,699	271	579	R 2,550
December	R 130	758	642	R 1,532	2	(s)	(s)	(s)	202	204	R 1,736	268	576	R 2,581
Total	**R 1,518**	**8,321**	**8,064**	**R 17,914**	**18**	**4**	**(s)**	**(s)**	**2,273**	**2,295**	**R 20,209**	**3,329**	**6,973**	**R 30,510**
2012 January	R 121	767	688	R 1,577	2	(s)	(s)	(s)	197	199	R 1,776	268	549	R 2,594
February	R 121	R 722	656	R 1,499	2	(s)	(s)	(s)	183	185	R 1,684	266	531	R 2,481
March	125	708	626	1,461	2	(s)	(s)	(s)	184	186	1,647	275	556	2,479
3-Month Total	**366**	**2,197**	**1,970**	**4,538**	**5**	**1**	**(s)**	**(s)**	**563**	**570**	**5,107**	**810**	**1,636**	**7,553**
2011 3-Month Total	**394**	**2,189**	**2,084**	**4,670**	**5**	**1**	**(s)**	**(s)**	**563**	**569**	**5,238**	**802**	**1,645**	**7,686**
2010 3-Month Total	**392**	**2,114**	**1,990**	**4,499**	**5**	**1**	**(s)**	**–**	**543**	**549**	**5,048**	**778**	**1,584**	**7,410**

[a] See "Primary Energy Consumption" in Glossary.

[b] Most data are estimates. See Table 10.2b 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.

[d] Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."

[e] Includes coal coke net imports, which are not separately displayed. See Tables 1.4a and 1.4b.

[f] Conventional hydroelectric power.

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

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

R=Revised. NA=Not available. – =No data reported. (s)=Less than 0.5 trillion Btu.

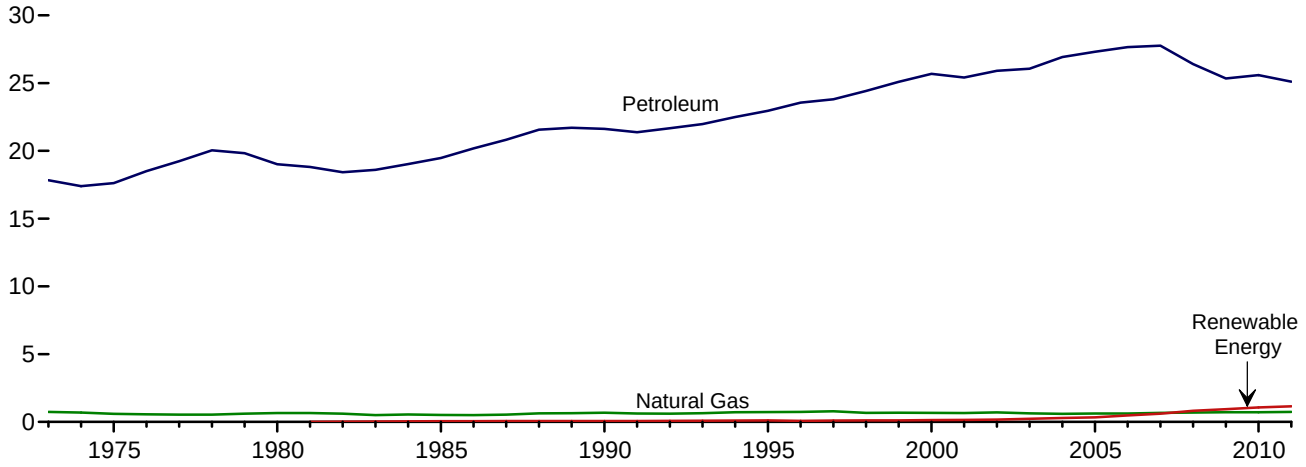
Notes: • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available data beginning in 1973.

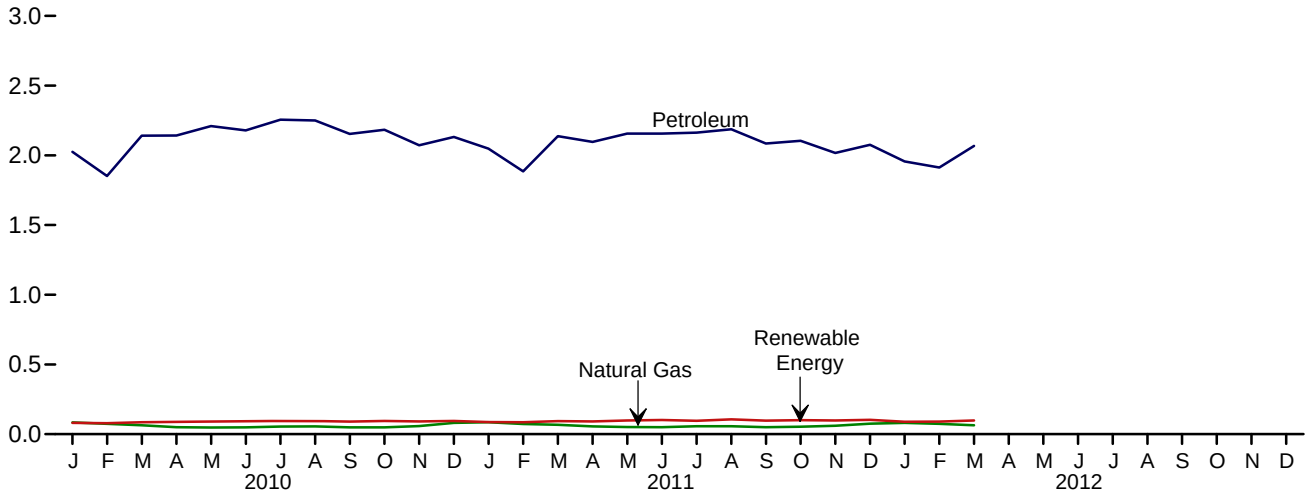
Sources: Tables 1.4a, 1.4b, 2.6, 3.8b, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

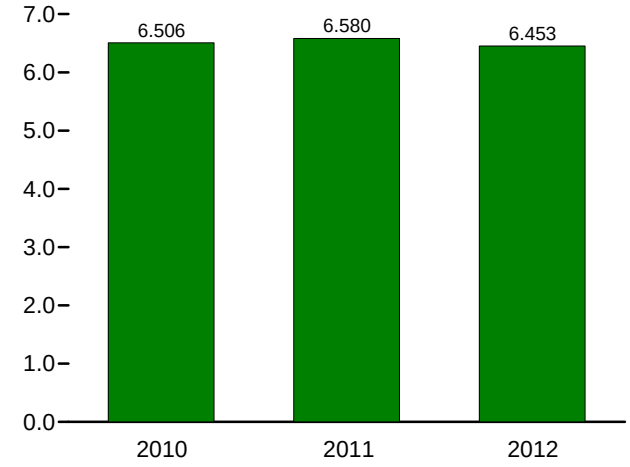
By Major Source, 1973-2011



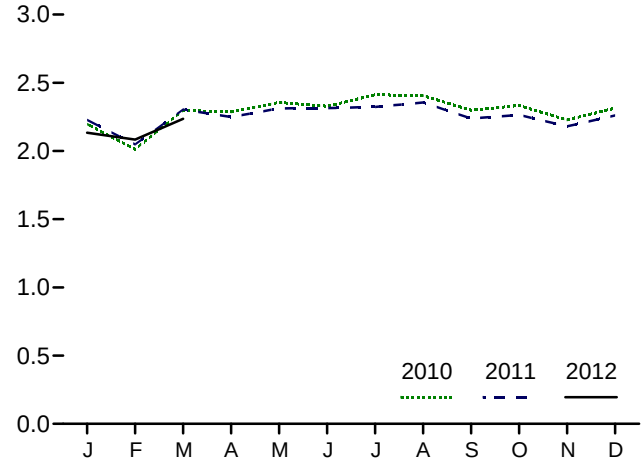
By Major Source, Monthly



Total, January-March



Total, Monthly



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.5.

.

Table 2.5 Transportation Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]						Electricity Retail Sales[e]	Electrical System Energy Losses[f]	Total
	Fossil Fuels				Renewable Energy[b]	Total Primary			
	Coal	Natural Gas[c]	Petroleum[d]	Total	Biomass				
1973 Total	**3**	**743**	**17,832**	**18,577**	**NA**	**18,577**	**11**	**25**	**18,613**
1975 Total	**1**	**595**	**17,615**	**18,210**	**NA**	**18,210**	**10**	**24**	**18,245**
1980 Total	**(g)**	**650**	**19,009**	**19,659**	**NA**	**19,659**	**11**	**27**	**19,697**
1985 Total	**(g)**	**519**	**19,472**	**19,992**	**50**	**20,041**	**14**	**32**	**20,088**
1990 Total	**(g)**	**680**	**21,626**	**22,306**	**60**	**22,366**	**16**	**37**	**22,420**
1995 Total	**(g)**	**724**	**22,955**	**23,679**	**112**	**23,791**	**17**	**38**	**23,846**
1996 Total	**(g)**	**737**	**23,565**	**24,302**	**81**	**24,383**	**17**	**38**	**24,437**
1997 Total	**(g)**	**780**	**23,813**	**24,593**	**102**	**24,695**	**17**	**38**	**24,750**
1998 Total	**(g)**	**666**	**24,422**	**25,088**	**113**	**25,201**	**17**	**38**	**25,256**
1999 Total	**(g)**	**675**	**25,098**	**25,774**	**118**	**25,891**	**17**	**40**	**25,949**
2000 Total	**(g)**	**672**	**25,682**	**26,354**	**135**	**26,489**	**18**	**42**	**26,548**
2001 Total	**(g)**	**658**	**25,412**	**26,070**	**142**	**26,213**	**20**	**43**	**26,275**
2002 Total	**(g)**	**699**	**25,913**	**26,612**	**170**	**26,781**	**19**	**42**	**26,842**
2003 Total	**(g)**	**627**	**26,063**	**26,690**	**230**	**26,920**	**23**	**51**	**26,994**
2004 Total	**(g)**	**602**	**26,925**	**27,527**	**290**	**27,817**	**25**	**54**	**27,895**
2005 Total	**(g)**	**624**	**27,309**	**27,933**	**339**	**28,272**	**26**	**56**	**28,353**
2006 Total	**(g)**	**625**	**27,651**	**28,276**	**475**	**28,751**	**25**	**54**	**28,830**
2007 Total	**(g)**	**663**	**27,763**	**28,427**	**602**	**29,029**	**28**	**60**	**29,117**
2008 Total	**(g)**	**692**	**26,407**	**27,099**	**826**	**27,925**	**26**	**56**	**28,008**
2009 Total	**(g)**	**715**	**25,339**	**26,054**	**935**	**26,989**	**27**	**56**	**27,071**
2010 January	(g)	84	2,025	2,109	81	2,190	2	5	2,198
February	(g)	74	1,851	1,926	79	2,004	2	5	2,012
March	(g)	64	2,141	2,205	85	2,290	2	5	2,297
April	(g)	50	2,142	2,193	87	2,280	2	4	2,286
May	(g)	48	2,209	2,257	92	2,349	2	5	2,356
June	(g)	49	2,179	2,228	93	2,320	2	5	2,328
July	(g)	54	2,256	2,310	94	2,404	2	5	2,411
August	(g)	56	2,250	2,306	94	2,399	2	4	2,406
September	(g)	48	2,153	2,202	90	2,291	2	4	2,298
October	(g)	49	2,184	2,233	94	2,327	2	4	2,333
November	(g)	59	2,072	2,131	91	2,221	2	4	2,228
December	(g)	81	2,132	2,213	94	2,307	2	5	2,314
Total	**(g)**	**716**	**25,595**	**26,310**	**1,074**	**27,384**	**26**	**55**	**27,466**
2011 January	(g)	86	2,048	R 2,134	86	2,220	2	5	2,227
February	(g)	73	1,884	1,957	85	R 2,042	2	4	2,049
March	(g)	67	2,137	2,204	93	2,297	2	5	2,304
April	(g)	55	2,096	2,152	91	2,243	2	4	2,249
May	(g)	51	2,156	2,207	99	2,306	2	5	2,313
June	(g)	50	2,156	2,207	102	2,308	2	5	2,315
July	(g)	57	2,163	2,220	96	2,316	2	5	2,323
August	(g)	57	2,187	2,244	106	2,350	2	4	2,356
September	(g)	50	2,085	2,135	97	2,232	2	4	2,238
October	(g)	53	2,104	2,157	100	2,257	2	4	2,264
November	(g)	61	2,017	2,077	98	2,175	2	4	2,181
December	(g)	75	2,076	2,151	102	2,253	2	5	2,260
Total	**(g)**	**735**	**25,110**	**25,845**	**1,154**	**26,999**	**26**	**54**	**27,079**
2012 January	(g)	R 81	1,956	2,038	89	R 2,126	2	5	2,133
February	(g)	74	1,912	1,986	90	2,077	2	4	2,083
March	(g)	64	2,068	2,132	98	2,230	2	4	2,236
3-Month Total	**(g)**	**219**	**5,936**	**6,156**	**277**	**6,433**	**7**	**13**	**6,453**
2011 3-Month Total	**(g)**	**226**	**6,070**	**6,295**	**265**	**6,560**	**7**	**14**	**6,580**
2010 3-Month Total	**(g)**	**222**	**6,017**	**6,239**	**245**	**6,485**	**7**	**14**	**6,506**

[a] See "Primary Energy Consumption" in Glossary.
[b] Data are estimates. See Table 10.2b for notes on series components.
[c] Natural gas only; does not include supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
[d] Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."
[e] Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
[f] 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 electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.
[g] Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

R=Revised. NA=Not available.

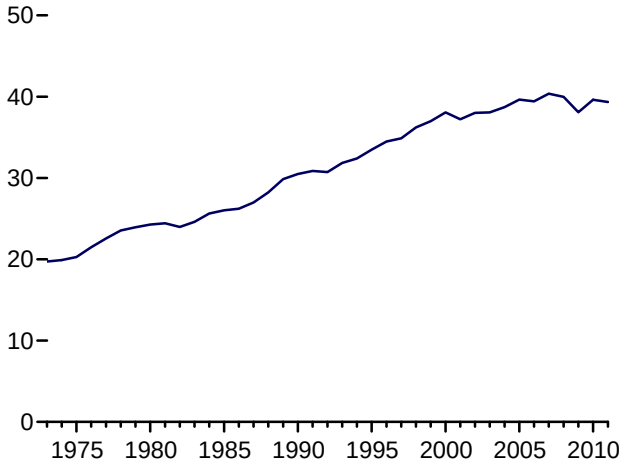
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available data beginning in 1973.

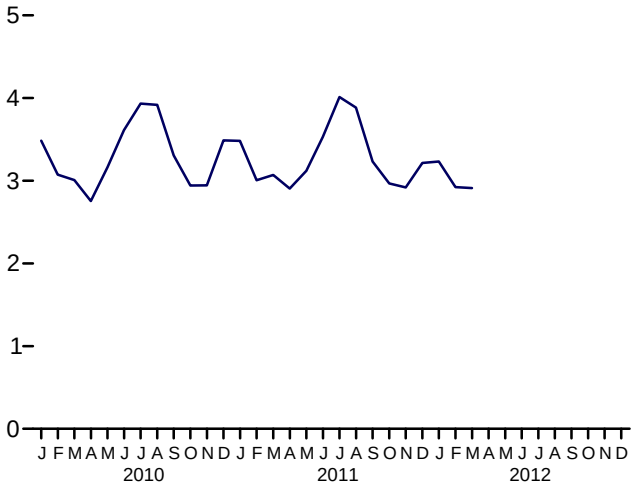
Sources: Tables 2.6, 3.8c, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

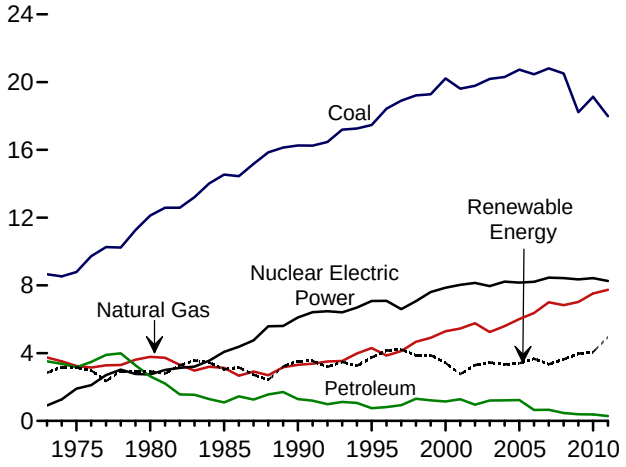
Total, 1973-2011



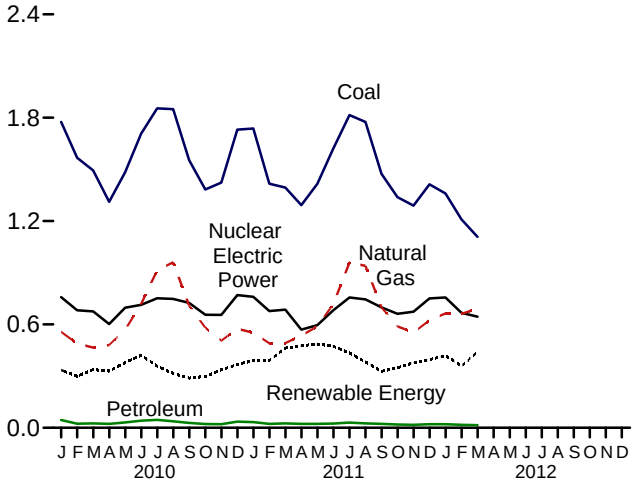
Total, Monthly



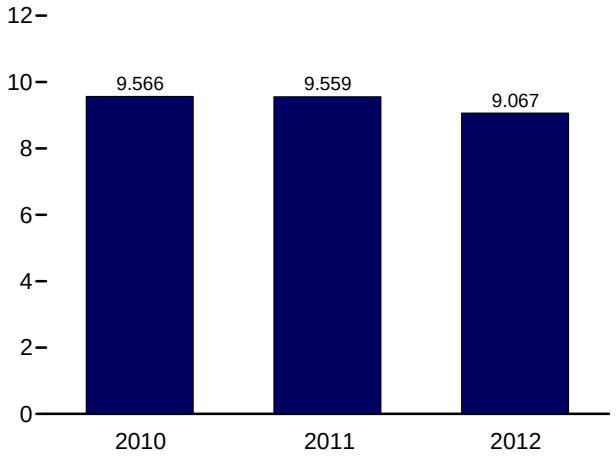
By Major Source, 1973-2011



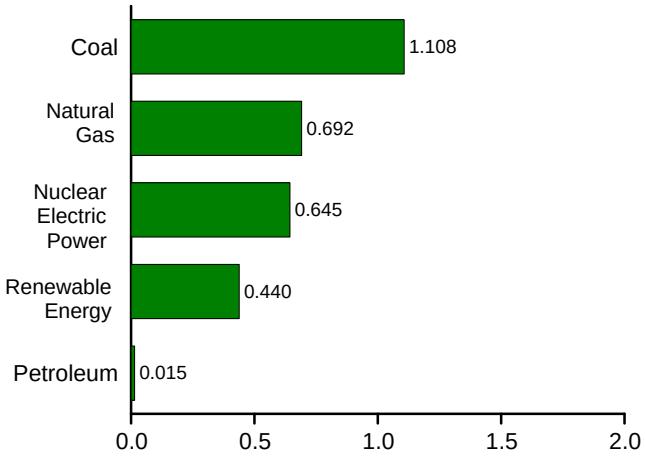
By Major Source, Monthly



Total, January-March



By Major Source, March 2012



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.6.

.

Table 2.6 Electric Power Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]												
	Fossil Fuels					Renewable Energy[b]							
	Coal	Natural Gas[c]	Petro-leum	Total	Nuclear Electric Power	Hydro-electric Power[d]	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**	**20**	**NA**	**NA**	**3**	**2,851**	**49**	**19,731**
1975 Total	**8,786**	**3,240**	**3,166**	**15,191**	**1,900**	**3,122**	**34**	**NA**	**NA**	**2**	**3,158**	**21**	**20,270**
1980 Total	**12,123**	**3,778**	**2,634**	**18,534**	**2,739**	**2,867**	**53**	**NA**	**NA**	**4**	**2,925**	**71**	**24,269**
1985 Total	**14,542**	**3,135**	**1,090**	**18,767**	**4,076**	**2,937**	**97**	**(s)**	**(s)**	**14**	**3,049**	**140**	**26,032**
1990 Total[e]	**16,261**	**3,309**	**1,289**	**20,859**	**6,104**	**3,014**	**161**	**4**	**29**	**317**	**3,524**	**8**	**30,495**
1995 Total	**17,466**	**4,302**	**755**	**22,523**	**7,075**	**3,149**	**138**	**5**	**33**	**422**	**3,747**	**134**	**33,479**
1996 Total	**18,429**	**3,862**	**817**	**23,109**	**7,087**	**3,528**	**148**	**5**	**33**	**438**	**4,153**	**137**	**34,485**
1997 Total	**18,905**	**4,126**	**927**	**23,957**	**6,597**	**3,581**	**150**	**5**	**34**	**446**	**4,216**	**116**	**34,886**
1998 Total	**19,216**	**4,675**	**1,306**	**25,197**	**7,068**	**3,241**	**151**	**5**	**31**	**444**	**3,872**	**88**	**36,225**
1999 Total	**19,279**	**4,902**	**1,211**	**25,393**	**7,610**	**3,218**	**152**	**5**	**46**	**453**	**3,874**	**99**	**36,976**
2000 Total	**20,220**	**5,293**	**1,144**	**26,658**	**7,862**	**2,768**	**144**	**5**	**57**	**453**	**3,427**	**115**	**38,062**
2001 Total	**19,614**	**5,458**	**1,277**	**26,348**	**8,029**	**2,209**	**142**	**6**	**70**	**337**	**2,763**	**75**	**37,215**
2002 Total	**19,783**	**5,767**	**961**	**26,511**	**8,145**	**2,650**	**147**	**6**	**105**	**380**	**3,288**	**72**	**38,016**
2003 Total	**20,185**	**5,246**	**1,205**	**26,636**	**7,959**	**2,781**	**148**	**5**	**115**	**397**	**3,445**	**22**	**38,062**
2004 Total	**20,305**	**5,595**	**1,212**	**27,112**	**8,222**	**2,656**	**148**	**6**	**142**	**388**	**3,340**	**39**	**38,713**
2005 Total	**20,737**	**6,015**	**1,235**	**27,986**	**8,161**	**2,670**	**147**	**6**	**178**	**406**	**3,406**	**85**	**39,638**
2006 Total	**20,462**	**6,375**	**648**	**27,485**	**8,215**	**2,839**	**145**	**5**	**264**	**412**	**3,665**	**63**	**39,428**
2007 Total	**20,808**	**7,005**	**657**	**28,470**	**8,455**	**2,430**	**145**	**6**	**341**	**423**	**3,345**	**107**	**40,377**
2008 Total	**20,513**	**6,829**	**468**	**27,810**	**8,427**	**2,494**	**146**	**9**	**546**	**435**	**3,630**	**112**	**39,978**
2009 Total	**18,225**	**7,022**	**390**	**25,638**	**8,356**	**2,650**	**146**	**9**	**721**	**441**	**3,967**	**116**	**38,077**
2010 January	1,775	557	45	2,377	758	217	13	(s)	67	39	335	14	3,484
February	1,568	489	23	2,080	682	199	11	(s)	53	36	300	12	3,073
March	1,494	466	25	1,984	676	202	13	1	84	39	338	10	3,008
April	1,312	480	23	1,815	602	184	12	1	95	36	329	9	2,755
May	1,483	570	31	2,084	697	243	13	1	85	36	378	5	3,163
June	1,708	719	41	2,468	714	290	12	2	79	39	421	9	3,611
July	1,855	914	46	2,815	752	238	12	2	66	40	358	10	3,934
August	1,849	961	37	2,847	748	195	13	2	65	41	315	6	3,917
September	1,554	709	28	2,291	725	168	12	1	69	38	288	2	3,306
October	1,383	581	22	1,986	656	171	12	1	77	37	298	1	2,942
November	1,423	506	21	1,950	655	190	12	1	95	39	337	3	2,944
December	1,731	575	36	2,341	770	225	13	(s)	88	41	367	9	3,488
Total	**19,133**	**7,527**	**378**	**27,039**	**8,434**	**2,521**	**148**	**12**	**923**	**459**	**4,064**	**89**	**39,626**
2011 January	1,737	552	33	2,323	760	254	14	(s)	84	38	391	9	3,483
February	1,417	491	23	1,931	677	239	13	1	103	35	390	8	3,006
March	1,395	491	26	1,912	686	308	14	1	103	38	463	8	3,070
April	1,293	535	23	1,851	570	307	13	2	121	33	476	7	2,905
May	1,416	589	22	2,027	596	321	14	2	113	35	486	12	3,121
June	1,621	718	25	2,364	682	313	13	2	106	38	473	11	3,530
July	1,816	959	31	2,805	756	307	13	2	72	40	434	16	4,012
August	1,776	940	25	2,741	746	256	13	2	72	39	383	16	3,885
September	1,475	699	22	2,196	699	209	13	2	67	37	327	10	3,232
October	1,339	589	19	1,946	662	194	14	2	104	36	349	10	2,967
November	1,289	553	17	1,860	674	207	13	1	120	36	377	8	2,919
December	1,413	624	20	2,057	751	239	14	1	102	39	396	12	3,215
Total	**17,986**	**7,740**	**288**	**26,014**	**8,259**	**3,153**	**163**	**18**	**1,168**	**444**	**4,945**	**127**	**39,346**
2012 January	1,360	663	21	2,045	757	232	14	1	135	38	420	11	3,232
February	1,210	661	17	1,888	667	201	13	1	108	35	359	9	2,924
March	1,108	692	15	1,816	645	255	14	2	132	37	440	10	2,911
3-Month Total	**3,678**	**2,017**	**54**	**5,749**	**2,069**	**688**	**41**	**4**	**375**	**111**	**1,218**	**31**	**9,067**
2011 3-Month Total	**4,549**	**1,535**	**82**	**6,166**	**2,124**	**801**	**42**	**2**	**290**	**110**	**1,245**	**25**	**9,559**
2010 3-Month Total	**4,836**	**1,511**	**93**	**6,441**	**2,116**	**618**	**37**	**1**	**204**	**114**	**973**	**36**	**9,566**

[a] See "Primary Energy Consumption" in Glossary.
[b] See Table 10.2c 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] Conventional hydroelectric power.
[e] 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.

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. • 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.gov/totalenergy/data/monthly/#consumption 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.

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 U.S. 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.

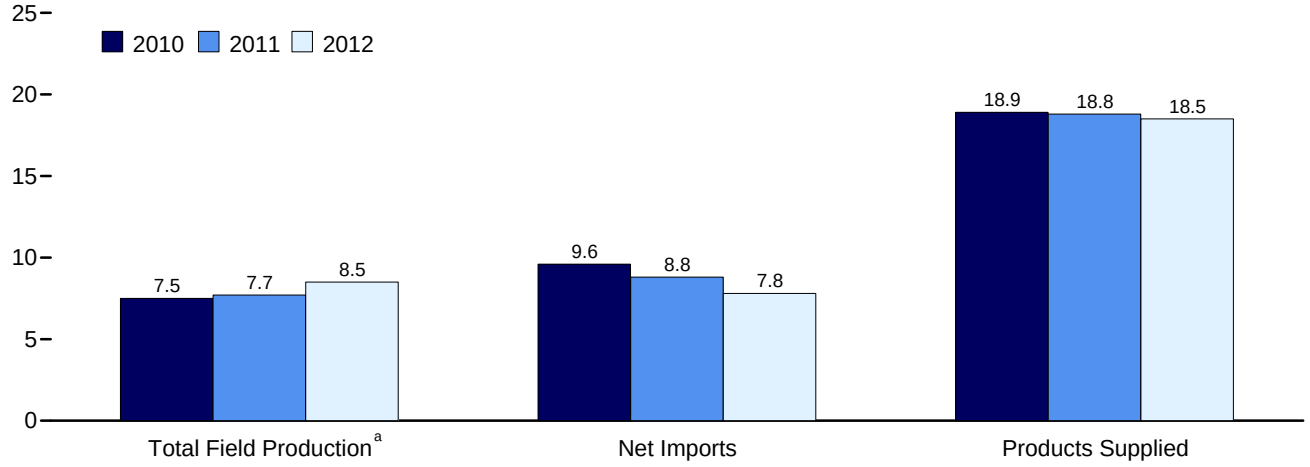
Users of EIA's energy consumption statistics should be aware of a second group of energy-related surveys, typically called "consumption surveys." Consumption surveys gather information on the types of energy consumed by end users of energy, along with the characteristics of those end users that can be 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, U.S. 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 steam-electric 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 end-use 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, about two thirds of total energy input is lost in conversion. Currently, of electricity generated, approximately 5 percent is lost in plant use and 7 percent is lost in transmission and distribution.

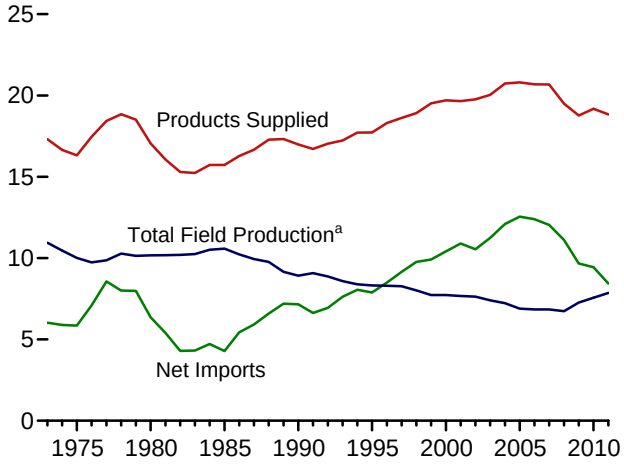
3. Petroleum

Figure 3.1 Petroleum Overview
(Million Barrels per Day)

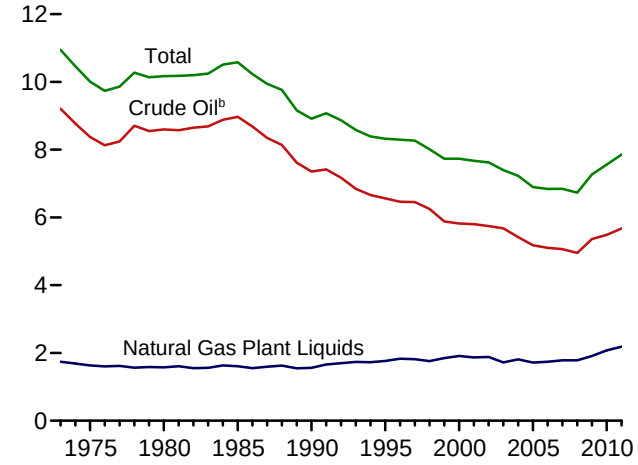
Overview, January-May



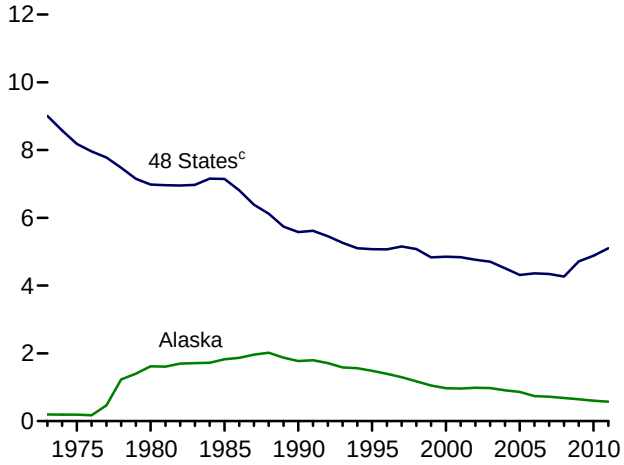
Overview, 1973-2011



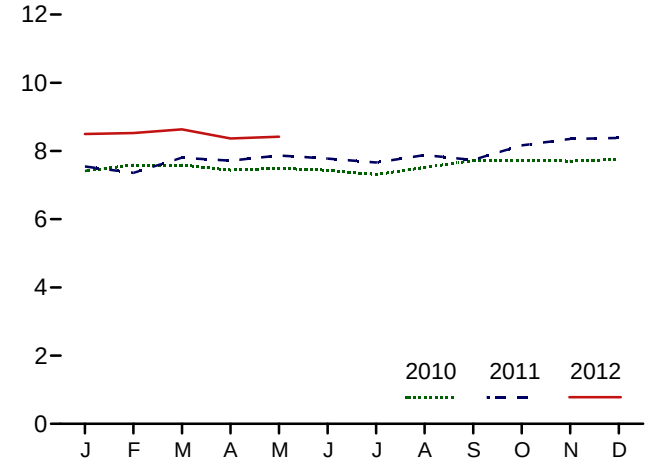
Total Field Production, 1973-2011



Crude Oil[b] Field Production, 1973-2011



Total Field Production,[a] Monthly



[a] Crude oil, including lease condensate, and natural gas plant liquids field production.
[b] Includes lease condensate.
[c] United States excluding Alaska and Hawaii.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.1.

Table 3.1 Petroleum Overview

(Thousand Barrels per Day)

	Field Production[a]					Renewable Fuels and Oxygenates[g]	Processing Gain[h]	Trade			Stock Change[k]	Adjustments[c,l]	Petroleum Products Supplied
	Crude Oil[b,c]			NGPL[e,f]	Total[c]			Imports[i]	Exports[f]	Net Imports[j]			
	48 States[d]	Alaska	Total										
1973 Average	**9,010**	**198**	**9,208**	**1,738**	**10,946**	**NA**	**453**	**6,256**	**231**	**6,025**	**135**	**18**	**17,308**
1975 Average	**8,183**	**191**	**8,375**	**1,633**	**10,007**	**NA**	**460**	**6,056**	**209**	**5,846**	**32**	**41**	**16,322**
1980 Average	**6,980**	**1,617**	**8,597**	**1,573**	**10,170**	**NA**	**597**	**6,909**	**544**	**6,365**	**140**	**64**	**17,056**
1985 Average	**7,146**	**1,825**	**8,971**	**1,609**	**10,581**	**NA**	**557**	**5,067**	**781**	**4,286**	**-103**	**200**	**15,726**
1990 Average	**5,582**	**1,773**	**7,355**	**1,559**	**8,914**	**NA**	**683**	**8,018**	**857**	**7,161**	**107**	**338**	**16,988**
1995 Average	**5,076**	**1,484**	**6,560**	**1,762**	**8,322**	**NA**	**774**	**8,835**	**949**	**7,886**	**-246**	**496**	**17,725**
1996 Average	**5,071**	**1,393**	**6,465**	**1,830**	**8,295**	**NA**	**837**	**9,478**	**981**	**8,498**	**-151**	**528**	**18,309**
1997 Average	**5,156**	**1,296**	**6,452**	**1,817**	**8,269**	**NA**	**850**	**10,162**	**1,003**	**9,158**	**143**	**487**	**18,620**
1998 Average	**5,077**	**1,175**	**6,252**	**1,759**	**8,011**	**NA**	**886**	**10,708**	**945**	**9,764**	**239**	**495**	**18,917**
1999 Average	**4,832**	**1,050**	**5,881**	**1,850**	**7,731**	**NA**	**886**	**10,852**	**940**	**9,912**	**-422**	**567**	**19,519**
2000 Average	**4,851**	**970**	**5,822**	**1,911**	**7,733**	**NA**	**948**	**11,459**	**1,040**	**10,419**	**-69**	**532**	**19,701**
2001 Average	**4,839**	**963**	**5,801**	**1,868**	**7,670**	**NA**	**903**	**11,871**	**971**	**10,900**	**325**	**501**	**19,649**
2002 Average	**4,761**	**984**	**5,746**	**1,880**	**7,626**	**NA**	**957**	**11,530**	**984**	**10,546**	**-105**	**527**	**19,761**
2003 Average	**4,706**	**974**	**5,681**	**1,719**	**7,400**	**NA**	**974**	**12,264**	**1,027**	**11,238**	**56**	**478**	**20,034**
2004 Average	**4,510**	**908**	**5,419**	**1,809**	**7,228**	**NA**	**1,051**	**13,145**	**1,048**	**12,097**	**209**	**564**	**20,731**
2005 Average	**4,314**	**864**	**5,178**	**1,717**	**6,895**	**NA**	**989**	**13,714**	**1,165**	**12,549**	**145**	**513**	**20,802**
2006 Average	**4,361**	**741**	**5,102**	**1,739**	**6,841**	**NA**	**994**	**13,707**	**1,317**	**12,390**	**60**	**522**	**20,687**
2007 Average	**4,342**	**722**	**5,064**	**1,783**	**6,847**	**NA**	**996**	**13,468**	**1,433**	**12,036**	**-148**	**653**	**20,680**
2008 Average	**4,268**	**683**	**4,950**	**1,784**	**6,734**	**NA**	**993**	**12,915**	**1,802**	**11,114**	**195**	**852**	**19,498**
2009 Average	**4,715**	**645**	**5,361**	**1,910**	**7,270**	**746**	**979**	**11,691**	**2,024**	**9,667**	**109**	**218**	**18,771**
2010 January	R 4,756	640	R 5,397	2,017	R 7,414	846	961	11,300	1,897	9,404	309	R 336	18,652
February	R 4,908	635	R 5,543	2,043	R 7,586	874	1,060	11,230	2,034	9,197	-46	R 87	18,850
March	R 4,866	646	R 5,512	2,076	R 7,588	895	1,064	11,621	2,149	9,472	77	R 157	19,099
April	R 4,740	640	R 5,379	2,061	R 7,440	878	1,028	12,526	2,432	10,093	762	R 366	19,044
May	R 4,832	571	R 5,404	2,091	R 7,494	893	1,069	12,141	2,399	9,742	661	R 329	18,866
June	R 4,853	534	R 5,387	2,046	R 7,433	905	1,085	12,444	2,304	10,140	373	R 347	19,537
July	R 4,773	545	R 5,318	1,994	R 7,312	906	1,109	12,675	2,516	10,159	440	R 274	19,319
August	R 4,910	538	R 5,448	2,071	R 7,519	911	1,123	12,356	2,410	9,946	214	R 376	19,662
September	R 4,999	614	R 5,613	2,104	R 7,717	915	1,062	11,823	2,345	9,478	-23	R 244	19,438
October	R 4,986	618	R 5,605	2,125	R 7,730	924	1,012	11,142	2,480	8,662	-451	R 194	18,974
November	R 4,962	606	R 5,568	2,136	R 7,704	967	1,051	11,096	2,598	8,498	-667	R 90	18,977
December	R 4,998	632	R 5,630	2,124	R 7,754	961	1,187	11,132	2,644	8,488	-1,068	R 264	19,722
Average	**R 4,882**	**601**	**R 5,483**	**2,074**	**R 7,557**	**907**	**1,068**	**11,793**	**2,353**	**9,441**	**49**	**R 257**	**19,180**
2011 January	RE 5,047	E 479	RE 5,526	2,022	RE 7,548	957	1,067	11,954	2,687	9,266	318	R 601	19,121
February	RE 4,825	E 611	RE 5,436	1,920	RE 7,356	941	980	10,503	2,575	7,929	-1,069	R 594	18,869
March	RE 5,003	E 631	RE 5,635	2,168	RE 7,802	956	1,027	11,593	2,660	8,933	-126	R 403	19,248
April	RE 4,953	E 606	RE 5,560	2,157	RE 7,716	941	1,001	11,592	2,903	8,689	218	R 484	18,613
May	RE 5,045	E 601	RE 5,647	2,222	RE 7,869	934	1,083	11,669	2,642	9,028	926	R 375	18,363
June	RE 5,044	E 553	RE 5,598	2,176	RE 7,774	945	1,101	11,794	2,607	9,187	96	R 367	19,277
July	RE 5,000	E 468	RE 5,468	2,193	RE 7,662	936	1,125	11,667	2,919	8,748	399	R 485	18,555
August	RE 5,136	E 544	RE 5,680	2,201	RE 7,880	958	1,132	11,145	3,071	8,074	-623	R 486	19,153
September	RE 5,007	E 585	RE 5,592	2,145	RE 7,737	937	1,132	11,209	3,158	8,051	-659	R 280	18,795
October	RE 5,308	E 585	RE 5,892	2,274	RE 8,167	944	1,106	10,994	3,104	7,890	-359	R 97	18,563
November	RE 5,419	E 593	RE 6,012	2,342	RE 8,354	992	1,117	11,166	3,182	7,985	65	R 352	18,734
December	RE 5,417	E 611	RE 6,028	2,351	RE 8,379	1,003	1,135	10,957	3,549	7,407	-654	R 160	18,738
Average	**RE 5,103**	**E 572**	**RE 5,675**	**2,183**	**RE 7,857**	**954**	**1,085**	**11,360**	**2,924**	**8,436**	**-115**	**R 389**	**18,835**
2012 January	RE 5,512	E 612	RE 6,124	2,376	RE 8,500	966	1,053	10,944	2,839	8,104	635	R 280	18,268
February	RE 5,557	E 582	RE 6,139	2,388	RE 8,528	949	1,068	10,464	2,980	7,484	-234	R 472	18,734
March	RE 5,693	RE 567	RE 6,260	R 2,375	RE 8,635	R 924	R 1,023	R 10,610	R 3,064	R 7,547	R 407	R 452	R 18,174
April	E 5,535	E 554	E 6,089	E 2,276	E 8,365	E 953	E 1,062	E 10,524	E 2,727	E 7,797	E -76	E 501	E 18,753
May	E 5,664	E 543	E 6,207	E 2,211	E 8,418	E 977	E 1,107	E 10,849	E 2,875	E 7,974	E 544	E 634	E 18,565
5-Month Average	**E 5,593**	**E 572**	**E 6,165**	**E 2,325**	**E 8,489**	**E 954**	**E 1,062**	**E 10,682**	**E 2,897**	**E 7,785**	**E 264**	**E 467**	**E 18,494**
2011 5-Month Average	**E 4,978**	**E 585**	**E 5,563**	**2,101**	**E 7,664**	**946**	**1,033**	**11,480**	**2,694**	**8,786**	**74**	**489**	**18,844**
2010 5-Month Average	**4,819**	**626**	**5,445**	**2,058**	**7,503**	**877**	**1,036**	**11,769**	**2,184**	**9,586**	**358**	**258**	**18,902**

[a] 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."

[b] Includes lease condensate.

[c] Data for crude oil production, total field production, and adjustments are revised monthly going back as far as the data year of the U.S. Energy Information Administration's (EIA) last published *Petroleum Supply Annual (PSA)*—these revisions are released at the same time as EIA's *Petroleum Supply Monthly.* Once a year, data for these series are revised going back as far as 10 years—these revisions are released at the same time as the PSA.

[d] United States excluding Alaska and Hawaii.

[e] Natural gas plant liquids.

[f] See Note 6, "Petroleum Data Discrepancies," at end of section.

[g] Renewable fuels and oxygenate plant net production.

[h] Refinery and blender net production minus refinery and blender net inputs. See Table 3.2.

[i] Includes Strategic Petroleum Reserve imports. See Table 3.3b.

[j] Net imports equal imports minus exports.

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

[l] An adjustment for crude oil, hydrogen, oxygenates, renewable fuels, other hydrocarbons, motor gasoline blending components, finished motor gasoline, and distillate fuel oil. See EIA, *Petroleum Supply Monthly,* Appendix B, "PSM Explanatory Notes," for further information.

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

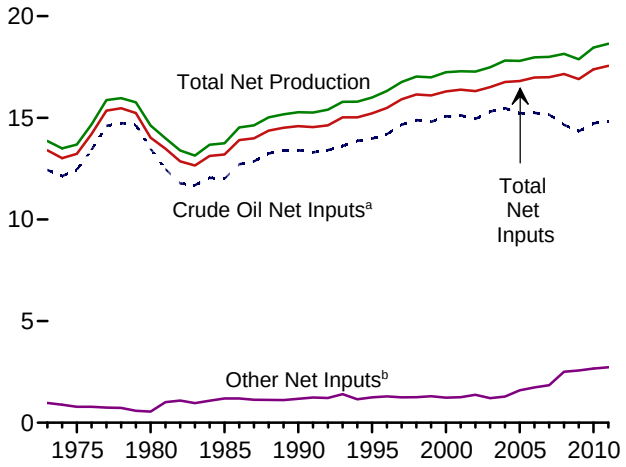
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

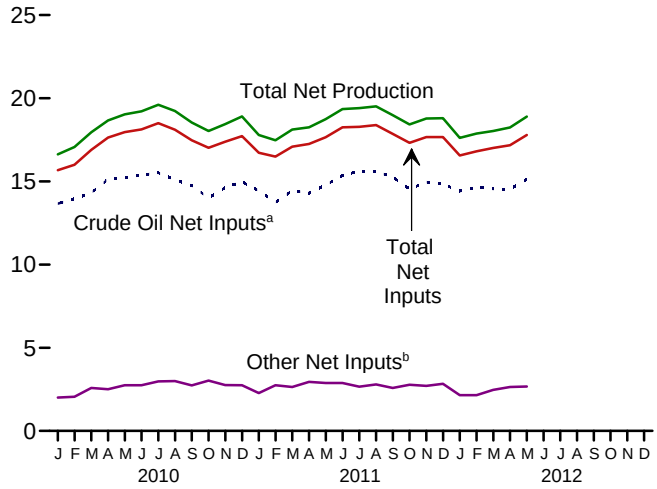
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual (PSA),* annual reports. • **2010:** EIA, PSA, annual report; and revisions to crude oil production, total field production, and adjustments at EIA's Petroleum Navigator—see http://www.eia.gov/dnav/pet/pet_sum_snd_d_nus_mbblpd_m_cur.htm and http://www.eia.gov/dnav/pet/pet_sum_crdsnd_k_m.htm. • **2011 and 2012:** EIA, *Petroleum Supply Monthly,* monthly reports; revisions to crude oil production, total field production, and adjustments at EIA's Petroleum Navigator—see http://www.eia.gov/dnav/pet/pet_sum_snd_d_nus_mbblpd_m_cur.htm and http://www.eia.gov/dnav/pet/pet_sum_crdsnd_k_m.htm; and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

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

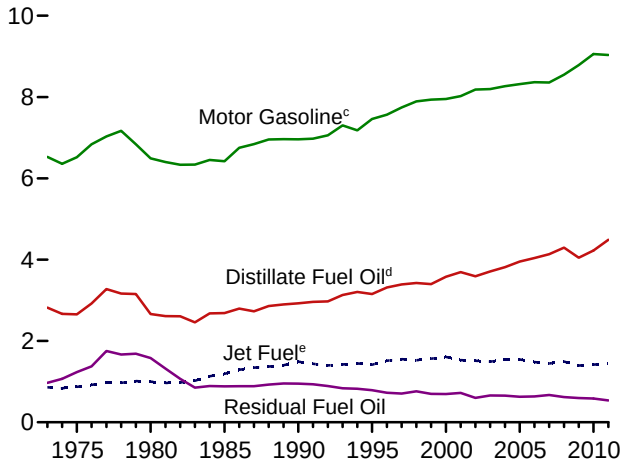
Net Inputs and Net Production, 1973-2011



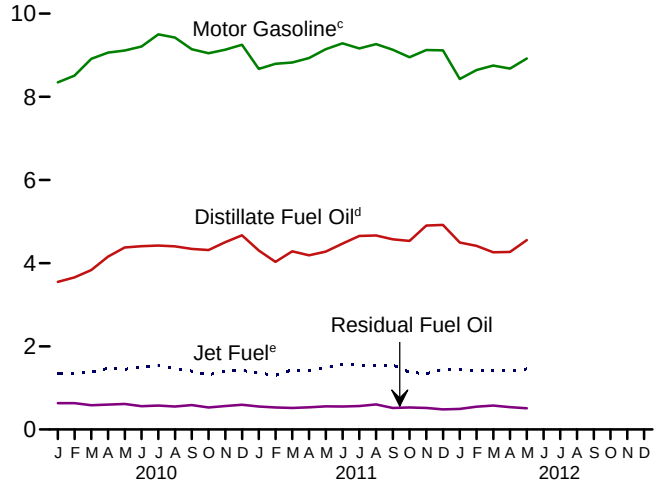
Net Inputs and Net Production, Monthly



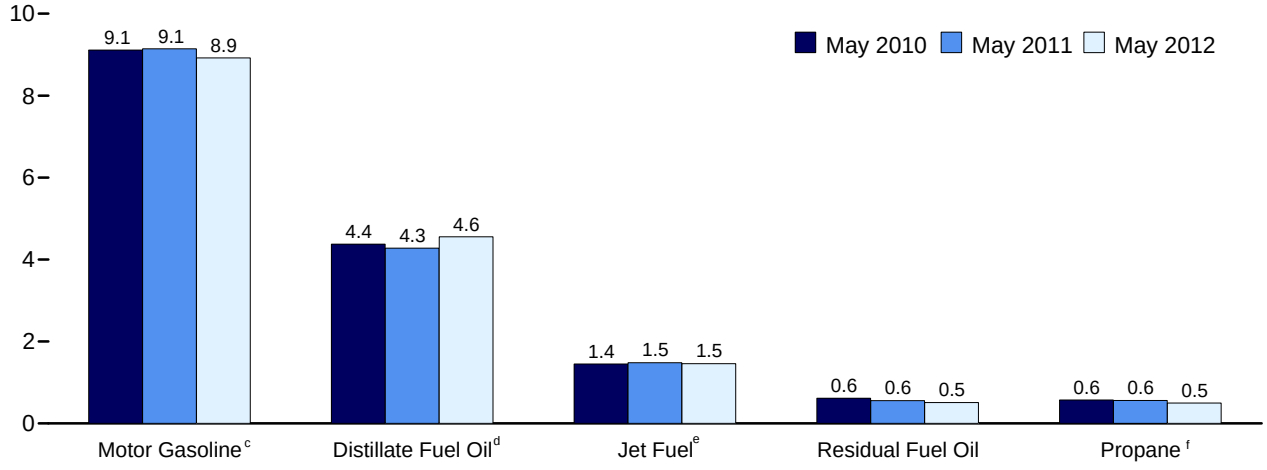
Net Production, Selected Products, 1973-2011



Net Production, Selected Products, Monthly



Net Production, Selected Products



[a] Includes lease condensate.
[b] Natural gas plant liquids and other liquids.
[c] Beginning in 1993, includes fuel ethanol blended into motor gasoline.
[d] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[e] Beginning in 2005, includes kerosene-type jet fuel only.
[f] Includes propylene.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.2.

Table 3.2 Refinery and Blender Net Inputs and Net Production

(Thousand Barrels per Day)

	Refinery and Blender Net Inputs[a]				Refinery and Blender Net Production[b]							
							LPG[c]					
	Crude Oil[d]	NGPL[e]	Other Liquids[f]	Total	Distillate Fuel Oil[g]	Jet Fuel[h]	Propane[i]	Total	Motor Gasoline[j]	Residual Fuel Oil	Other Products[k]	Total
1973 Average	**12,431**	**815**	**155**	**13,401**	**2,820**	**859**	**271**	**375**	**6,527**	**971**	**2,301**	**13,854**
1975 Average	**12,442**	**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	**14,804**	**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	**15,128**	**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 Average	**15,242**	**501**	**1,238**	**16,981**	**4,040**	**1,481**	**543**	**627**	**8,364**	**635**	**2,827**	**17,975**
2007 Average	**15,156**	**505**	**1,337**	**16,999**	**4,133**	**1,448**	**562**	**655**	**8,358**	**673**	**2,728**	**17,994**
2008 Average	**14,648**	**485**	**2,019**	**17,153**	**4,294**	**1,493**	**519**	**630**	**8,548**	**620**	**2,561**	**18,146**
2009 Average	**14,336**	**485**	**2,082**	**16,904**	**4,048**	**1,396**	**537**	**623**	**8,786**	**598**	**2,431**	**17,882**
2010 January	13,666	503	1,501	15,670	3,551	1,338	531	480	8,348	633	2,281	16,631
February	13,950	402	1,654	16,005	3,658	1,340	562	540	8,510	632	2,385	17,065
March	14,314	413	2,166	16,893	3,835	1,379	575	726	8,913	581	2,523	17,957
April	15,131	374	2,135	17,640	4,156	1,470	585	850	9,062	598	2,531	18,668
May	15,215	399	2,348	17,963	4,375	1,449	571	857	9,113	615	2,622	19,031
June	15,382	397	2,349	18,127	4,408	1,495	572	870	9,211	559	2,670	19,212
July	15,519	384	2,595	18,498	4,425	1,542	574	860	9,500	576	2,704	19,607
August	15,110	390	2,607	18,107	4,404	1,463	552	778	9,426	554	2,605	19,230
September	14,740	443	2,294	17,477	4,341	1,404	551	614	9,143	588	2,449	18,539
October	14,000	504	2,517	17,021	4,315	1,317	526	501	9,049	528	2,323	18,033
November	14,637	531	2,223	17,391	4,503	1,394	543	390	9,134	564	2,457	18,442
December	14,976	563	2,185	17,724	4,670	1,417	572	430	9,252	595	2,547	18,911
Average	**14,724**	**442**	**2,219**	**17,385**	**4,223**	**1,418**	**560**	**659**	**9,059**	**585**	**2,509**	**18,452**
2011 January	14,446	543	1,732	16,721	4,305	1,362	560	439	8,671	552	2,459	17,788
February	13,745	517	2,229	16,491	4,032	1,298	513	490	8,793	529	2,329	17,471
March	14,453	454	2,183	17,090	4,284	1,435	525	632	8,824	519	2,424	18,117
April	14,302	452	2,494	17,248	4,187	1,422	540	773	8,931	535	2,402	18,249
May	14,776	427	2,457	17,660	4,277	1,483	561	805	9,142	557	2,477	18,742
June	15,365	443	2,440	18,248	4,469	1,568	566	840	9,286	553	2,632	19,349
July	15,617	417	2,247	18,281	4,655	1,550	557	814	9,165	562	2,659	19,405
August	15,592	437	2,353	18,382	4,667	1,543	550	784	9,265	604	2,652	19,514
September	15,269	494	2,092	17,855	4,574	1,553	569	608	9,132	516	2,604	18,987
October	14,543	524	2,252	17,318	4,534	1,375	541	494	8,953	529	2,540	18,425
November	14,958	597	2,110	17,665	4,903	1,341	564	384	9,125	516	2,512	18,781
December	14,841	566	2,263	17,670	4,919	1,449	566	372	9,118	482	2,464	18,805
Average	**14,833**	**489**	**2,237**	**17,559**	**4,487**	**1,449**	**551**	**620**	**9,035**	**538**	**2,514**	**18,643**
2012 January	14,415	513	1,633	16,561	4,498	1,437	518	414	8,427	495	2,343	17,613
February	14,659	531	1,618	16,809	4,416	1,401	532	492	8,645	547	2,375	17,876
March	R 14,545	R 445	R 2,022	R 17,012	R 4,262	R 1,412	R 545	R 685	R 8,753	R 577	R 2,347	R 18,035
April	E 14,540	F 429	RE 2,209	RF 17,178	E 4,270	E 1,411	RE 550	F 766	E 8,678	E 536	RE 2,580	RE 18,240
May	E 15,126	F 430	E 2,235	F 17,791	E 4,555	E 1,458	E 499	F 803	E 8,921	E 510	E 2,650	E 18,898
5-Month Average	**E 14,658**	**E 469**	**E 1,946**	**E 17,073**	**E 4,401**	**E 1,424**	**E 529**	**E 633**	**E 8,685**	**E 533**	**E 2,459**	**E 18,135**
2011 5-Month Average	**14,357**	**478**	**2,217**	**17,052**	**4,221**	**1,402**	**540**	**630**	**8,873**	**539**	**2,420**	**18,084**
2010 5-Month Average	**14,461**	**419**	**1,966**	**16,845**	**3,919**	**1,396**	**565**	**692**	**8,793**	**611**	**2,470**	**17,881**

[a] See "Refinery and Blender Net Inputs," in Glossary.
[b] See "Refinery and Blender Net Production," in Glossary.
[c] 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), including fuel ethanol. Beginning in 2009, also includes renewable diesel fuel (including biodiesel).
[g] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[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 "Other Products."
[i] Includes propylene.
[j] Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.
[k] Asphalt and road oil, finished aviation gasoline, kerosene, lubricants, petrochemical feedstocks, petroleum coke, special naphthas, still gas, waxes, and miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel.

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

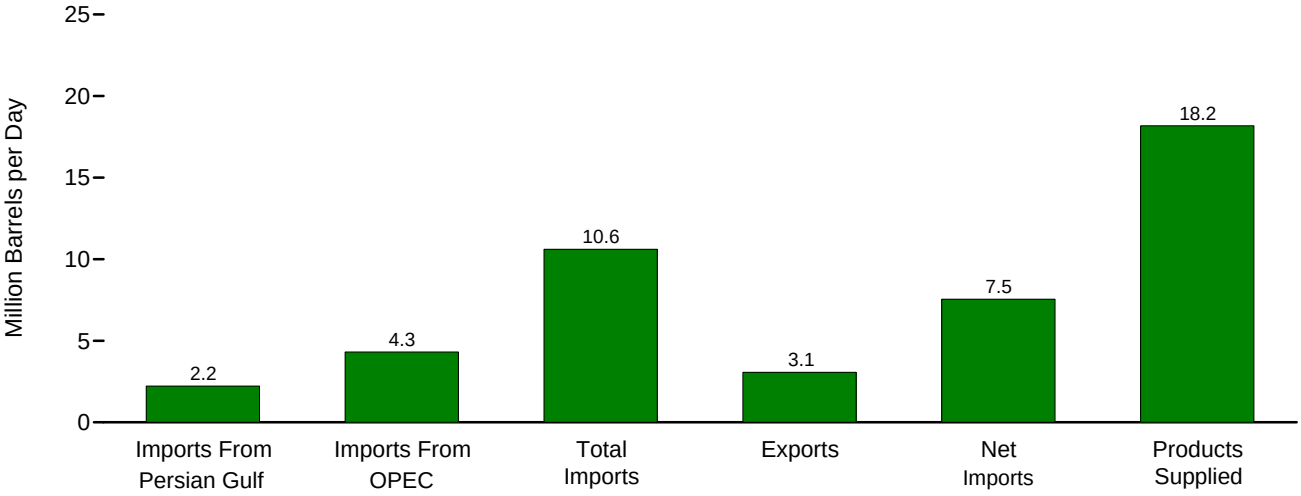
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

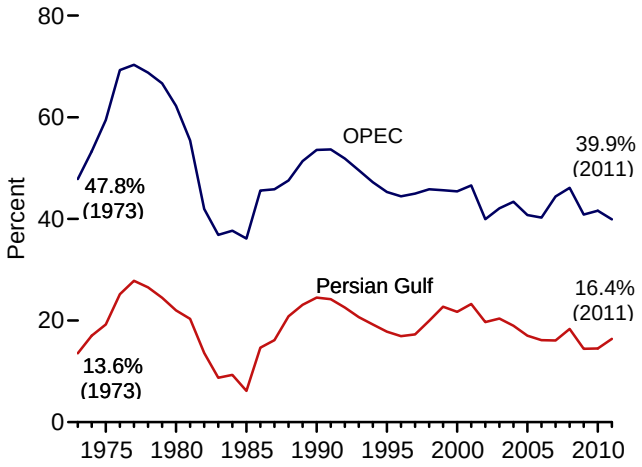
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2010:** EIA, *Petroleum Supply Annual,* annual reports. • **2011 and 2012:** 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.

Figure 3.3a Petroleum Trade: Overview

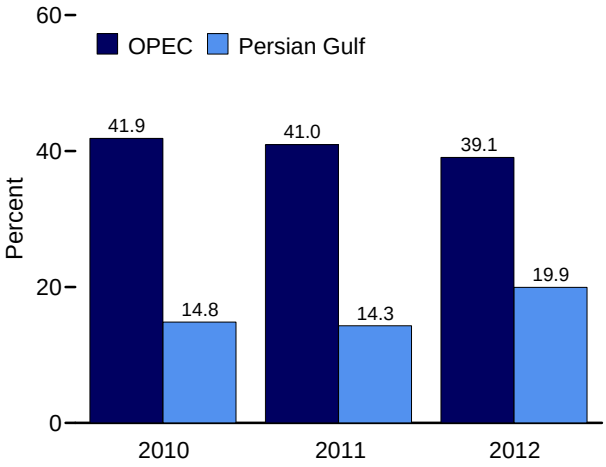
Overview, March 2012



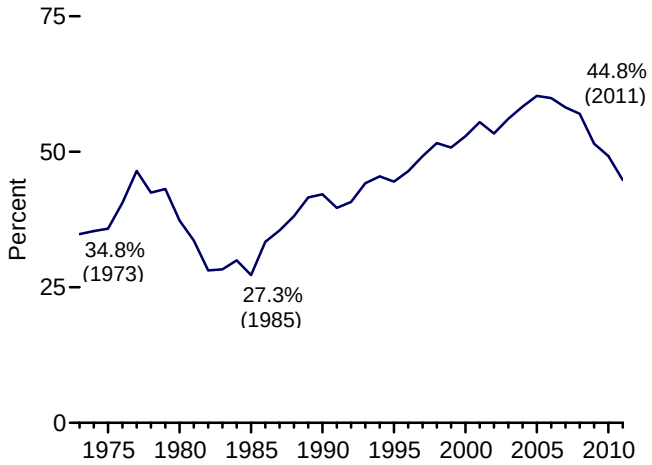
Imports From OPEC and Persian Gulf as Share of Total Imports, 1973-2011



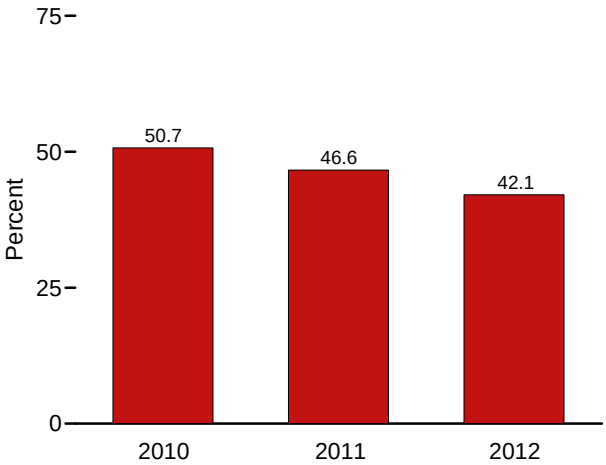
Imports From OPEC and Persian Gulf as Share of Total Imports, January-March



Net Imports as Share of Products Supplied, 1973-2011



Net Imports as Share of Products Supplied, January-May



Note: OPEC=Organization of the Petroleum Exporting Countries.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.3a.

Table 3.3a Petroleum Trade: Overview

	Imports From Persian Gulf[a]	Imports From OPEC[b]	Imports	Exports	Net Imports	Products Supplied	As Share of Products Supplied: Imports From Persian Gulf[a]	As Share of Products Supplied: Imports From OPEC[b]	As Share of Products Supplied: Imports	As Share of Products Supplied: Net Imports	As Share of Total Imports: Imports From Persian Gulf[a]	As Share of Total Imports: Imports From OPEC[b]
	Thousand Barrels per Day						Percent					
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 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 Average	**2,163**	**5,980**	**13,468**	**1,433**	**12,036**	**20,680**	**10.5**	**28.9**	**65.1**	**58.2**	**16.1**	**44.4**
2008 Average	**2,370**	**5,954**	**12,915**	**1,802**	**11,114**	**19,498**	**12.2**	**30.5**	**66.2**	**57.0**	**18.4**	**46.1**
2009 Average	**1,689**	**4,776**	**11,691**	**2,024**	**9,667**	**18,771**	**9.0**	**25.4**	**62.3**	**51.5**	**14.4**	**40.9**
2010 January	1,563	4,554	11,300	1,897	9,404	18,652	8.4	24.4	60.6	50.4	13.8	40.3
February	1,666	4,659	11,230	2,034	9,197	18,850	8.8	24.7	59.6	48.8	14.8	41.5
March	1,842	5,084	11,621	2,149	9,472	19,099	9.6	26.6	60.8	49.6	15.9	43.7
April	2,026	5,376	12,526	2,432	10,093	19,044	10.6	28.2	65.8	53.0	16.2	42.9
May	1,724	5,055	12,141	2,399	9,742	18,866	9.1	26.8	64.4	51.6	14.2	41.6
June	1,972	5,297	12,444	2,304	10,140	19,537	10.1	27.1	63.7	51.9	15.8	42.6
July	1,679	5,178	12,675	2,516	10,159	19,319	8.7	26.8	65.6	52.6	13.2	40.8
August	1,663	5,117	12,356	2,410	9,946	19,662	8.5	26.0	62.8	50.6	13.5	41.4
September	1,698	5,111	11,823	2,345	9,478	19,438	8.7	26.3	60.8	48.8	14.4	43.2
October	1,490	4,305	11,142	2,480	8,662	18,974	7.9	22.7	58.7	45.7	13.4	38.6
November	1,662	4,525	11,096	2,598	8,498	18,977	8.8	23.8	58.5	44.8	15.0	40.8
December	1,564	4,614	11,132	2,644	8,488	19,722	7.9	23.4	56.4	43.0	14.0	41.4
Average	**1,711**	**4,906**	**11,793**	**2,353**	**9,441**	**19,180**	**8.9**	**25.6**	**61.5**	**49.2**	**14.5**	**41.6**
2011 January	1,719	4,872	11,954	2,687	9,266	19,121	9.0	25.5	62.5	48.5	14.4	40.8
February	1,495	4,504	10,503	2,575	7,929	18,869	7.9	23.9	55.7	42.0	14.2	42.9
March	1,651	4,588	11,593	2,660	8,933	19,248	8.6	23.8	60.2	46.4	14.2	39.6
April	1,704	4,509	11,592	2,903	8,689	18,613	9.2	24.2	62.3	46.7	14.7	38.9
May	1,829	4,572	11,669	2,642	9,028	18,363	10.0	24.9	63.5	49.2	15.7	39.2
June	2,033	4,883	11,794	2,607	9,187	19,277	10.5	25.3	61.2	47.7	17.2	41.4
July	2,167	4,928	11,667	2,919	8,748	18,555	11.7	26.6	62.9	47.1	18.6	42.2
August	1,910	4,648	11,145	3,071	8,074	19,153	10.0	24.3	58.2	42.2	17.1	41.7
September	2,039	4,326	11,209	3,158	8,051	18,795	10.8	23.0	59.6	42.8	18.2	38.6
October	1,904	4,267	10,994	3,104	7,890	18,563	10.3	23.0	59.2	42.5	17.3	38.8
November	1,944	4,219	11,166	3,182	7,985	18,734	10.4	22.5	59.6	42.6	17.4	37.8
December	1,921	4,085	10,957	3,549	7,407	18,738	10.3	21.8	58.5	39.5	17.5	37.3
Average	**1,862**	**4,534**	**11,360**	**2,924**	**8,436**	**18,835**	**9.9**	**24.1**	**60.3**	**44.8**	**16.4**	**39.9**
2012 January	2,208	4,203	10,944	2,839	8,104	18,268	12.1	23.0	59.9	44.4	20.2	38.4
February	1,948	3,986	10,464	2,980	7,484	18,734	10.4	21.3	55.9	39.9	18.6	38.1
March	R 2,222	R 4,314	R 10,610	R 3,064	R 7,547	R 18,174	R 12.2	R 23.7	R 58.4	R 41.5	R 20.9	R 40.7
April	NA	NA	E 10,524	E 2,727	E 7,797	E 18,753	NA	NA	E 56.1	E 41.6	NA	NA
May	NA	NA	E 10,849	E 2,875	E 7,974	E 18,565	NA	NA	E 58.4	E 43.0	NA	NA
5-Month Average	**NA**	**NA**	**E 10,682**	**E 2,897**	**E 7,785**	**E 18,494**	**NA**	**NA**	**E 57.8**	**E 42.1**	**NA**	**NA**
2011 5-Month Average	**1,683**	**4,612**	**11,480**	**2,694**	**8,786**	**18,844**	**8.9**	**24.5**	**60.9**	**46.6**	**14.7**	**40.2**
2010 5-Month Average	**1,764**	**4,948**	**11,769**	**2,184**	**9,586**	**18,902**	**9.3**	**26.2**	**62.3**	**50.7**	**15.0**	**42.0**

[a] Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

[b] See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. See Table 3.3c for notes on which countries are included in the data.

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

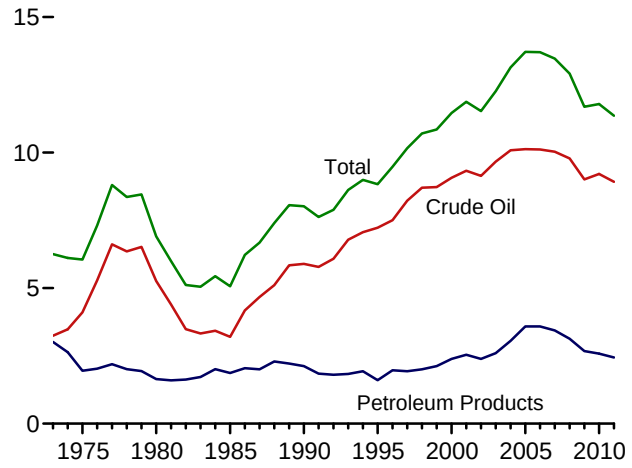
Notes: • Readers of this table may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 *Monthly Energy Review.* See http://www.eia.gov/totalenergy/data/monthly/pdf/historical/imported_oil.pdf. • Beginning in October 1977, data include Strategic 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.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

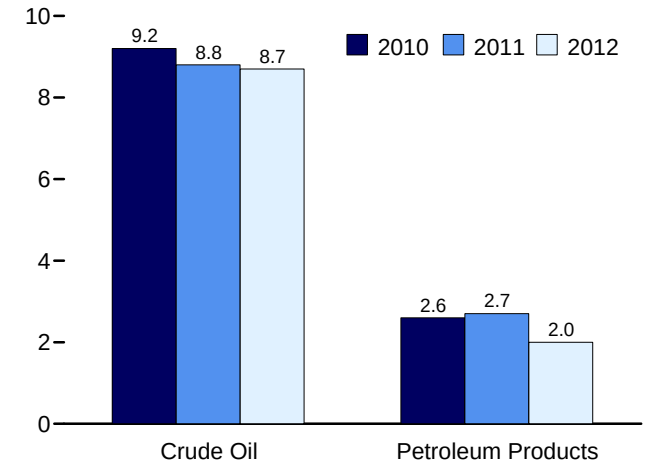
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2010:** EIA, *Petroleum Supply Annual,* annual reports. • **2011 and 2012:** 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.

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

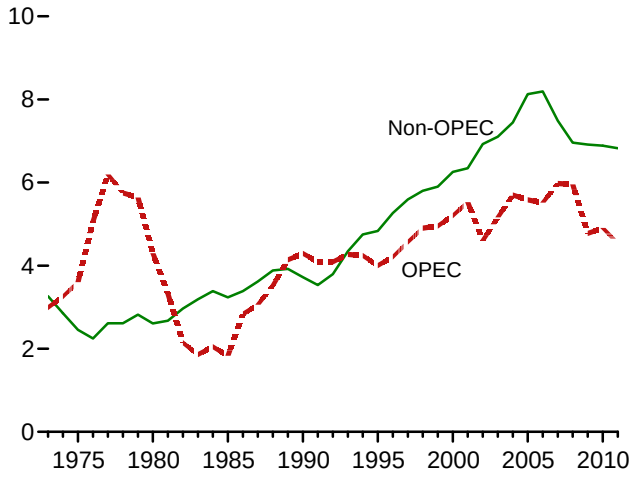
Overview, 1973-2011



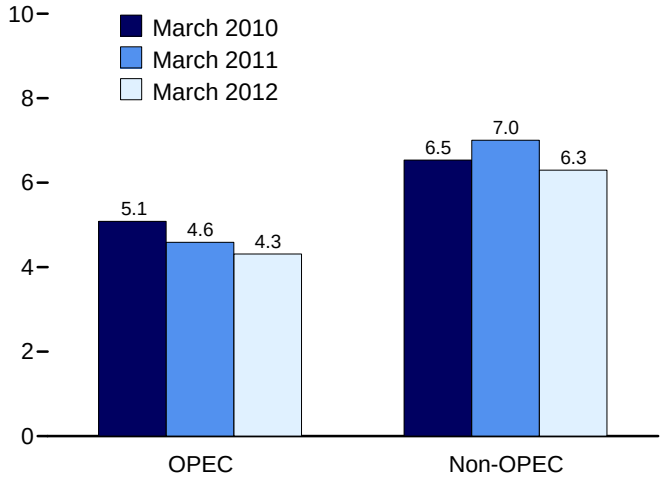
Crude Oil and Petroleum Products, January-May



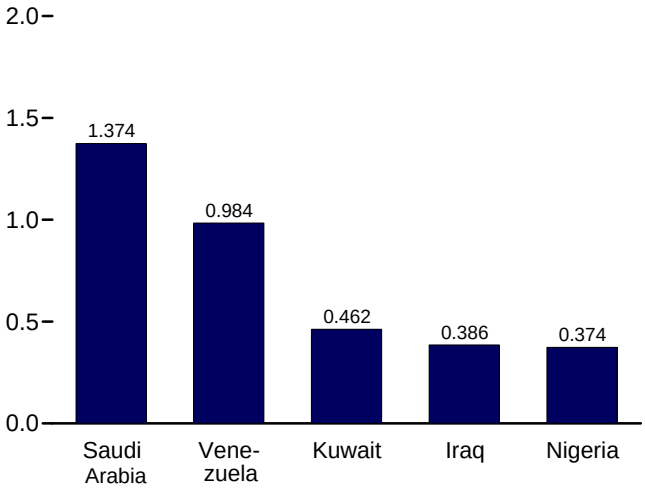
OPEC and Non-OPEC, 1973-2011



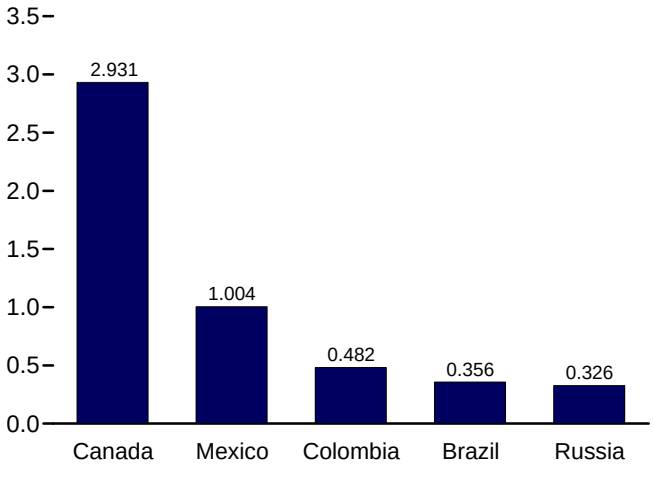
OPEC and Non-OPEC



From Selected OPEC Countries, March 2012



From Selected Non-OPEC Countries, March 2012



Note: OPEC=Organization of the Petroleum Exporting Countries.
Web Page: http http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 3.3b–3.3d.

Table 3.3b Petroleum Trade: Imports and Exports by Type

(Thousand Barrels per Day)

	Imports										Exports		
	Crude Oil[a]		Distillate Fuel Oil	Jet Fuel[e]	LPG[b]		Motor Gasoline[g]	Residual Fuel Oil	Other[h]	Total	Crude Oil[a]	Petroleum Products	Total
	SPR[c,d]	Total			Propane[f]	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**	**200**	**39**	**67**	**187**	**381**	**510**	**550**	**5,067**	**204**	**577**	**781**
1990 Average	**27**	**5,894**	**278**	**108**	**115**	**188**	**342**	**504**	**705**	**8,018**	**109**	**748**	**857**
1995 Average	**–**	**7,230**	**193**	**106**	**102**	**146**	**265**	**187**	**708**	**8,835**	**95**	**855**	**949**
1996 Average	**–**	**7,508**	**230**	**111**	**119**	**166**	**336**	**248**	**879**	**9,478**	**110**	**871**	**981**
1997 Average	**–**	**8,225**	**228**	**91**	**113**	**169**	**309**	**194**	**945**	**10,162**	**108**	**896**	**1,003**
1998 Average	**–**	**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	**–**	**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**
2006 Average	**8**	**10,118**	**365**	**186**	**228**	**332**	**475**	**350**	**1,881**	**13,707**	**25**	**1,292**	**1,317**
2007 Average	**7**	**10,031**	**304**	**217**	**182**	**247**	**413**	**372**	**1,885**	**13,468**	**27**	**1,405**	**1,433**
2008 Average	**19**	**9,783**	**213**	**103**	**185**	**253**	**302**	**349**	**1,913**	**12,915**	**29**	**1,773**	**1,802**
2009 Average	**56**	**9,013**	**225**	**81**	**147**	**182**	**223**	**331**	**1,635**	**11,691**	**44**	**1,980**	**2,024**
2010 January	–	8,492	462	131	192	225	179	376	1,435	11,300	33	1,864	1,897
February	–	8,761	293	75	217	242	196	382	1,282	11,230	58	1,976	2,034
March	–	9,341	179	79	137	155	120	376	1,370	11,621	45	2,104	2,149
April	–	9,726	220	88	79	102	178	480	1,732	12,526	37	2,396	2,432
May	–	9,655	189	81	82	108	107	404	1,599	12,141	36	2,363	2,399
June	–	9,927	237	114	73	113	163	283	1,607	12,444	31	2,273	2,304
July	–	9,932	170	113	56	104	114	400	1,841	12,675	69	2,447	2,516
August	–	9,543	246	103	62	107	129	330	1,899	12,356	36	2,374	2,410
September	–	9,229	189	122	85	124	130	367	1,662	11,823	61	2,283	2,345
October	–	8,540	163	94	131	165	86	337	1,758	11,142	23	2,457	2,480
November	–	8,699	178	101	132	165	117	345	1,491	11,096	32	2,567	2,598
December	–	8,695	219	73	214	231	99	315	1,501	11,132	40	2,604	2,644
Average	**–**	**9,213**	**228**	**98**	**121**	**153**	**134**	**366**	**1,600**	**11,793**	**42**	**2,311**	**2,353**
2011 January	–	9,069	326	65	172	204	103	456	1,733	11,954	72	2,616	2,687
February	–	8,013	206	68	172	199	119	428	1,471	10,503	30	2,544	2,575
March	–	9,033	190	65	136	165	135	468	1,538	11,593	36	2,623	2,660
April	–	8,715	186	80	94	113	138	519	1,842	11,592	41	2,862	2,903
May	–	8,988	167	91	73	100	137	299	1,887	11,669	37	2,605	2,642
June	–	9,247	126	82	58	85	130	371	1,753	11,794	36	2,571	2,607
July	–	9,310	153	95	61	84	92	246	1,686	11,667	73	2,846	2,919
August	–	9,021	148	66	72	100	106	229	1,474	11,145	34	3,037	3,071
September	–	9,006	177	58	107	130	99	276	1,463	11,209	35	3,123	3,158
October	–	9,029	127	61	93	116	66	282	1,314	10,994	51	3,054	3,104
November	–	8,826	133	72	107	127	74	340	1,594	11,166	64	3,118	3,182
December	–	8,716	174	21	149	174	60	333	1,478	10,957	53	3,496	3,549
Average	**–**	**8,921**	**176**	**69**	**108**	**133**	**105**	**353**	**1,603**	**11,360**	**47**	**2,877**	**2,924**
2012 January	–	8,572	156	6	145	168	99	305	1,637	10,944	56	2,783	2,839
February	–	8,558	142	41	125	155	46	226	1,296	10,464	59	2,921	2,980
March	–	R 8,767	R 136	R 5	R 108	R 136	R 91	R 271	R 1,205	R 10,610	R 60	R 3,004	R 3,064
April	–	E 8,754	E 91	E 30	E 70	NA	E 59	E 200	NA	E 10,524	E 39	E 2,689	E 2,727
May	–	E 8,879	E 89	E 43	E 95	NA	E 69	E 214	NA	E 10,849	E 39	E 2,836	E 2,875
5-Month Average	**–**	**E 8,708**	**E 123**	**E 25**	**E 109**	**NA**	**E 73**	**E 244**	**NA**	**E 10,682**	**E 51**	**E 2,847**	**E 2,897**
2011 5-Month Average	**–**	**8,779**	**215**	**74**	**129**	**155**	**126**	**433**	**1,697**	**11,480**	**44**	**2,651**	**2,694**
2010 5-Month Average	**–**	**9,200**	**268**	**91**	**140**	**165**	**155**	**404**	**1,486**	**11,769**	**41**	**2,142**	**2,184**

[a] Includes lease condensate.
[b] Liquefied petroleum gases.
[c] "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.
[d] See Note 6, "Petroleum Data Discrepancies," at end of section.
[e] 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."
[f] Includes propylene.
[g] Finished motor gasoline. Through 1980, also includes motor gasoline blending components.
[h] 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 naphtha-type jet fuel.

R=Revised. E=Estimate. NA=Not available. – – =Not applicable. – =No data reported.

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.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2010:** EIA, *Petroleum Supply Annual,* annual reports. • **2011 and 2012:** 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.

Table 3.3c Petroleum Trade: Imports From OPEC Countries

(Thousand Barrels per Day)

	Algeria	Angola[a]	Ecuador[b]	Iraq	Kuwait[c]	Libya	Nigeria	Saudi Arabia[c]	Vene-zuela	Other[d]	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**	**0**	**657**	**1,478**	**1,493**	**93**	**4,953**
2000 Average	**225**	**([a])**	**([b])**	**620**	**272**	**0**	**896**	**1,572**	**1,546**	**72**	**5,203**
2001 Average	**278**	**([a])**	**([b])**	**795**	**250**	**0**	**885**	**1,662**	**1,553**	**105**	**5,528**
2002 Average	**264**	**([a])**	**([b])**	**459**	**228**	**0**	**621**	**1,552**	**1,398**	**83**	**4,605**
2003 Average	**382**	**([a])**	**([b])**	**481**	**220**	**0**	**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 Average	**657**	**([a])**	**([b])**	**553**	**185**	**87**	**1,114**	**1,463**	**1,419**	**38**	**5,517**
2007 Average	**670**	**508**	**([b])**	**484**	**181**	**117**	**1,134**	**1,485**	**1,361**	**39**	**5,980**
2008 Average	**548**	**513**	**221**	**627**	**210**	**103**	**988**	**1,529**	**1,189**	**26**	**5,954**
2009 Average	**493**	**460**	**185**	**450**	**182**	**79**	**809**	**1,004**	**1,063**	**50**	**4,776**
2010 January	498	280	215	523	77	40	1,048	963	911	–	4,554
February	498	360	152	540	228	40	932	898	1,010	–	4,659
March	455	502	183	475	218	79	962	1,149	1,061	–	5,084
April	464	509	225	490	278	142	1,060	1,257	951	–	5,376
May	518	448	182	394	225	39	1,026	1,097	1,117	10	5,055
June	550	425	245	630	217	98	1,108	1,125	899	–	5,297
July	518	374	239	430	189	110	1,174	1,053	1,084	7	5,178
August	565	484	276	281	251	123	985	1,132	1,022	–	5,117
September	543	417	229	422	172	43	1,174	1,093	1,008	10	5,111
October	451	324	203	143	215	36	872	1,131	930	–	4,305
November	572	276	194	340	170	23	856	1,152	942	–	4,525
December	484	319	192	336	125	66	1,070	1,093	917	9	4,614
Average	**510**	**393**	**212**	**415**	**197**	**70**	**1,023**	**1,096**	**988**	**3**	**4,906**
2011 January	565	316	178	470	147	57	1,007	1,102	1,030	–	4,872
February	394	370	242	263	118	35	978	1,114	989	–	4,504
March	500	280	146	382	161	31	913	1,108	1,067	–	4,588
April	466	277	142	519	78	(s)	922	1,107	997	–	4,509
May	400	356	134	407	200	(s)	854	1,203	999	19	4,572
June	293	373	219	559	238	35	853	1,169	1,077	68	4,883
July	354	407	172	596	228	–	884	1,326	943	18	4,928
August	298	331	309	637	165	1	892	1,075	906	32	4,648
September	291	304	305	404	145	2	580	1,479	806	11	4,326
October	173	424	178	490	278	2	690	1,120	894	17	4,267
November	260	355	181	395	302	10	703	1,222	764	26	4,219
December	297	357	106	380	231	9	534	1,310	860	–	4,085
Average	**358**	**346**	**192**	**460**	**191**	**15**	**817**	**1,195**	**944**	**16**	**4,534**
2012 January	269	370	100	390	352	5	504	1,423	750	41	4,203
February	256	230	244	271	252	29	353	1,420	931	–	3,986
March	325	175	174	386	462	60	374	1,374	984	–	4,314
3-Month Average	**284**	**259**	**171**	**351**	**358**	**31**	**412**	**1,405**	**887**	**14**	**4,172**
2011 3-Month Average	**489**	**320**	**187**	**375**	**143**	**41**	**966**	**1,108**	**1,030**	**–**	**4,660**
2010 3-Month Average	**484**	**381**	**184**	**512**	**173**	**54**	**982**	**1,007**	**993**	**–**	**4,769**

[a] Angola joined OPEC in January 2007. For 1973-2006, Angola is included in "Total Non-OPEC" on Table 3.3d.

[b] Ecuador was a member of OPEC from 1973-1992, and rejoined OPEC in November 2007. For 1993-2007, Ecuador is included in "Total Non-OPEC" on Table 3.3d.

[c] Imports from the Neutral Zone are reported as originating in either Saudi Arabia or Kuwait depending on the country reported to U.S. Customs.

[d] For all years, includes Iran, Qatar, and United Arab Emirates. For 1973-2008, also includes Indonesia; and for 1975-1994, also includes Gabon.

– =No data reported. (s)=Less than 500 barrels per day.

Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. Petroleum imports not classified as "OPEC" on this table are included on Table 3.3d. • 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 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.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2010:** EIA, *Petroleum Supply Annual,* annual reports. • **2011 and 2012:** EIA, *Petroleum Supply Monthly,* monthly reports.

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

(Thousand Barrels per Day)

	Brazil	Canada	Colombia	Mexico	Nether-lands	Norway	Russia[a]	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**
1996 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 Average	**193**	**2,353**	**155**	**1,705**	**174**	**196**	**369**	**272**	**328**	**2,446**	**8,190**
2007 Average	**200**	**2,455**	**155**	**1,532**	**128**	**142**	**414**	**277**	**346**	**1,839**	**7,489**
2008 Average	**258**	**2,493**	**200**	**1,302**	**168**	**102**	**465**	**236**	**320**	**1,416**	**6,961**
2009 Average	**309**	**2,479**	**276**	**1,210**	**140**	**108**	**563**	**245**	**277**	**1,307**	**6,915**
2010 January	353	2,596	322	1,133	116	126	463	282	298	1,057	6,747
February	226	2,491	386	1,137	126	99	423	413	196	1,074	6,571
March	306	2,505	251	1,306	136	59	494	267	235	977	6,538
April	318	2,472	423	1,282	89	166	587	304	331	1,178	7,149
May	319	2,528	315	1,428	108	119	719	176	195	1,180	7,087
June	308	2,717	407	1,211	87	52	760	269	246	1,090	7,146
July	332	2,549	404	1,289	207	119	719	351	239	1,287	7,497
August	251	2,489	372	1,282	137	57	786	266	301	1,298	7,239
September	181	2,479	363	1,254	45	62	648	178	302	1,200	6,712
October	169	2,347	422	1,347	108	111	655	152	270	1,255	6,837
November	198	2,513	492	1,363	57	79	561	187	234	886	6,571
December	295	2,736	231	1,365	71	26	514	236	191	855	6,518
Average	**272**	**2,535**	**365**	**1,284**	**108**	**89**	**612**	**256**	**253**	**1,112**	**6,887**
2011 January	274	2,826	332	1,366	101	85	531	155	276	1,136	7,082
February	177	2,831	211	1,104	129	69	437	110	182	749	5,999
March	161	2,666	399	1,319	91	156	690	197	149	1,177	7,005
April	227	2,625	516	1,077	133	167	704	187	179	1,267	7,083
May	282	2,481	433	1,286	128	101	677	233	194	1,283	7,097
June	285	2,524	309	1,222	175	93	689	146	151	1,319	6,911
July	329	2,626	415	1,197	80	58	562	175	192	1,105	6,739
August	228	2,637	395	1,185	81	87	585	125	185	988	6,497
September	188	2,829	529	1,192	64	97	592	124	189	1,079	6,883
October	187	2,692	578	1,177	23	180	687	150	151	903	6,727
November	234	2,815	424	1,256	96	174	737	125	177	910	6,948
December	404	2,932	508	1,064	101	88	552	162	214	846	6,872
Average	**249**	**2,706**	**422**	**1,205**	**100**	**113**	**621**	**158**	**187**	**1,065**	**6,825**
2012 January	321	3,008	431	1,114	101	46	572	168	96	884	6,740
February	286	3,048	472	1,081	92	163	288	127	28	894	6,478
March	356	2,931	482	1,004	143	87	326	187	1	779	6,296
3-Month Average	**322**	**2,995**	**461**	**1,066**	**113**	**97**	**398**	**161**	**42**	**851**	**6,505**
2011 3-Month Average	**205**	**2,773**	**318**	**1,269**	**106**	**104**	**556**	**155**	**203**	**1,030**	**6,719**
2010 3-Month Average	**298**	**2,532**	**318**	**1,194**	**126**	**94**	**461**	**318**	**245**	**1,035**	**6,620**

[a] Through 1992, may include imports from republics other than Russia in the former U.S.S.R. See "Union of Soviet Socialist Republics (U.S.S.R.)" in Glossary.

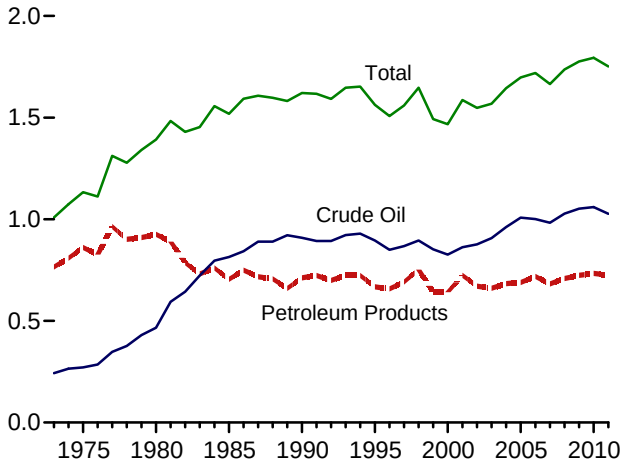
Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for membership. Petroleum imports not classified as "OPEC" on Table 3.3c are included on this table. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been 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.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

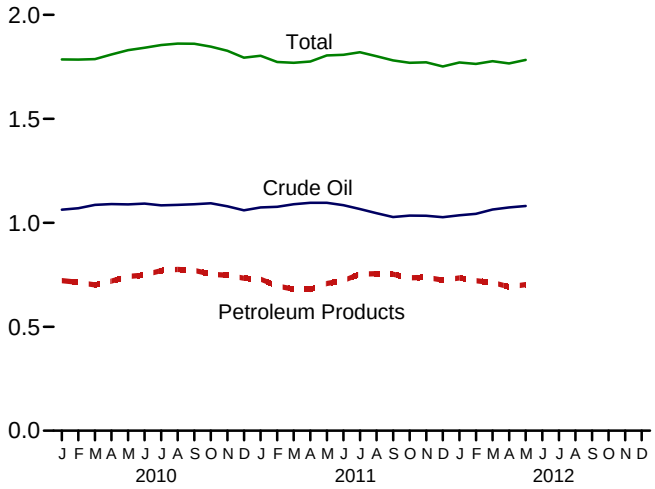
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2010:** EIA, *Petroleum Supply Annual,* annual reports. • **2011 and 2012:** EIA, *Petroleum Supply Monthly,* monthly reports.

Figure 3.4 Petroleum Stocks
(Billion Barrels, Except as Noted)

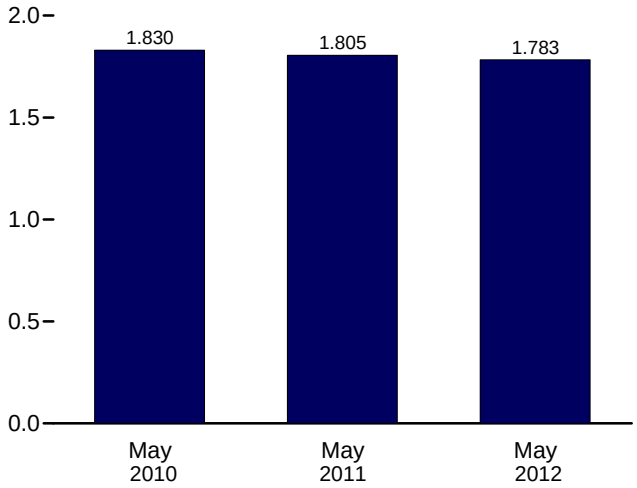
Overview, 1973-2011



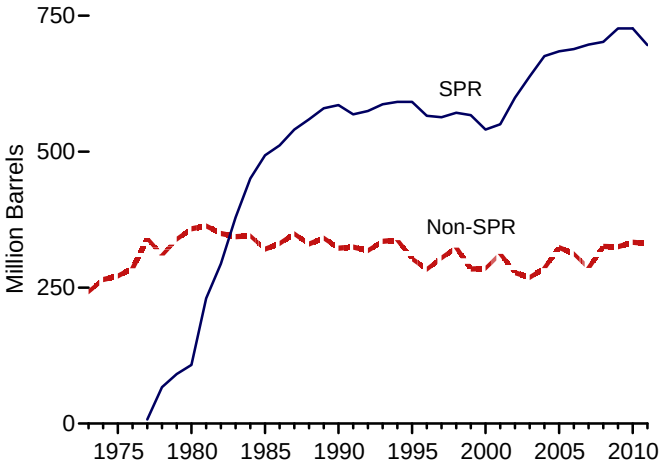
Overview, Monthly



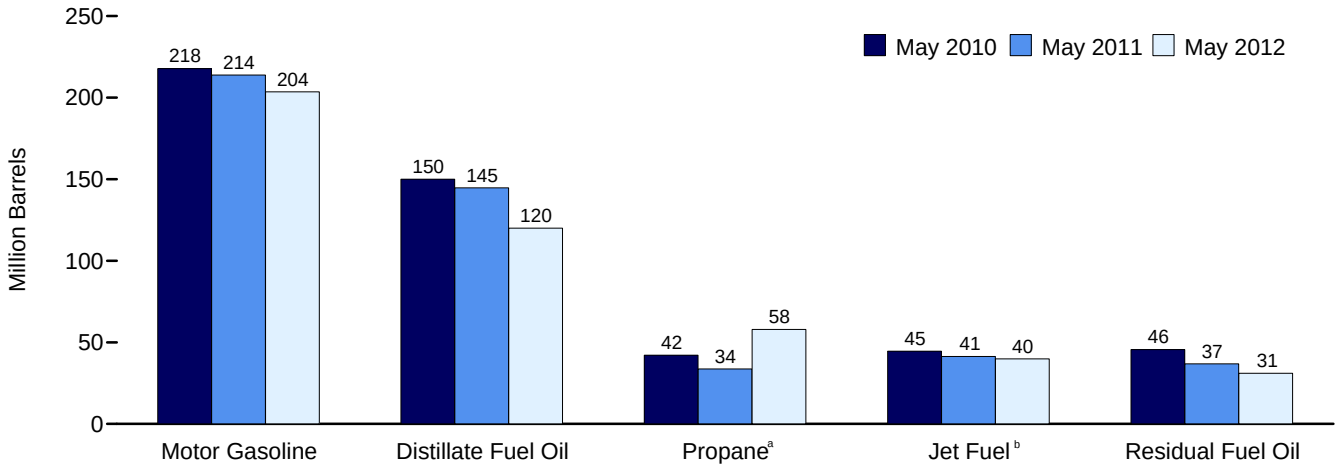
Total Stocks (Crude Oil and Petroleum Products)



SPR and Non-SPR Crude Oil Stocks, 1973-2011



Selected Products



[a] Includes propylene.
[b] Includes kerosene-type jet fuel only.
Notes: • SPR=Strategic Petroleum Reserve. • Stocks are at end of period.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.4.

Table 3.4 Petroleum Stocks

(Million Barrels)

	Crude Oil[a]			Distillate Fuel Oil[f,g]	Jet Fuel[h]	LPG[b]		Motor Gasoline[f,j]	Residual Fuel Oil[f]	Other[k]	Total[f]
	SPR[c]	Non-SPR[d,e,f]	Total[e,f]			Propane[f,i]	Total[f]				
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**
2005 Year	**685**	**324**	**1,008**	**136**	**42**	**57**	**109**	**208**	**37**	**157**	**1,698**
2006 Year	**689**	**312**	**1,001**	**144**	**39**	**62**	**113**	**212**	**42**	**169**	**1,720**
2007 Year	**697**	**286**	**983**	**134**	**39**	**52**	**96**	**218**	**39**	**156**	**1,665**
2008 Year	**702**	**326**	**1,028**	**146**	**38**	**55**	**113**	**214**	**36**	**162**	**1,737**
2009 Year	**727**	**325**	**1,052**	**166**	**43**	**50**	**102**	**223**	**37**	**153**	**1,776**
2010 January	727	337	1,063	164	44	35	80	232	40	162	1,786
February	727	343	1,070	155	44	28	70	235	41	170	1,785
March	727	359	1,086	147	42	28	73	225	41	174	1,787
April	727	363	1,090	145	44	35	89	220	44	178	1,810
May	727	362	1,089	150	45	42	105	218	46	178	1,830
June	727	365	1,092	158	45	49	120	216	43	169	1,842
July	727	358	1,084	167	47	55	130	220	41	166	1,855
August	727	359	1,086	170	47	59	139	221	39	159	1,862
September	727	363	1,089	167	47	61	141	219	40	158	1,861
October	727	368	1,094	162	44	61	138	210	41	158	1,847
November	727	352	1,079	162	44	61	131	213	41	158	1,827
December	**727**	**333**	**1,060**	**164**	**43**	**49**	**108**	**219**	**41**	**158**	**1,794**
2011 January	727	347	1,074	162	41	35	85	235	39	166	1,803
February	727	350	1,077	154	39	26	71	229	35	168	1,773
March	727	363	1,089	149	40	24	69	215	37	171	1,770
April	727	369	1,096	143	39	28	80	205	39	175	1,776
May	727	370	1,096	145	41	34	92	214	37	180	1,805
June	727	358	1,085	144	42	40	105	215	37	179	1,808
July	718	348	1,066	158	44	47	119	217	37	178	1,820
August	696	349	1,046	157	43	52	130	212	39	173	1,801
September	696	332	1,028	154	46	57	132	216	35	170	1,781
October	696	339	1,035	143	46	60	133	208	37	169	1,770
November	696	338	1,034	144	42	59	125	221	39	167	1,772
December	**696**	**331**	**1,027**	**150**	**42**	**55**	**111**	**224**	**34**	**164**	**1,751**
2012 January	696	340	1,036	149	42	48	101	235	34	174	1,771
February	696	347	1,043	139	41	43	96	231	36	179	1,764
March	696	R 368	R 1,064	R 134	R 39	45	R 102	R 219	R 36	R 183	R 1,777
April	E 696	E 378	E 1,074	E 122	E 40	E 50	RF 115	E 208	E 32	RE 175	E 1,766
May	E 696	E 385	E 1,081	E 120	E 40	E 58	F 132	E 204	E 31	E 176	E 1,783

[a] Includes lease condensate.
[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.
[d] All crude oil stocks other than those in "SPR."
[e] Beginning in 1981, includes stocks of Alaskan crude oil in transit. See Note 5, "Stocks of Alaskan Crude Oil," at end of section.
[f] See Note 4, "Petroleum New Stock Basis," at end of section.
[g] Excludes stocks in the Northeast Heating Oil Reserve. Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[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 "Other."
[i] Includes propylene.
[j] Includes finished motor gasoline and motor gasoline blending components; excludes oxygenates.
[k] Asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, special naphthas, unfinished oils, waxes, miscellaneous products, oxygenates, renewable fuels, and other hydrocarbons. Beginning in 2005, also includes naphtha-type jet fuel.

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

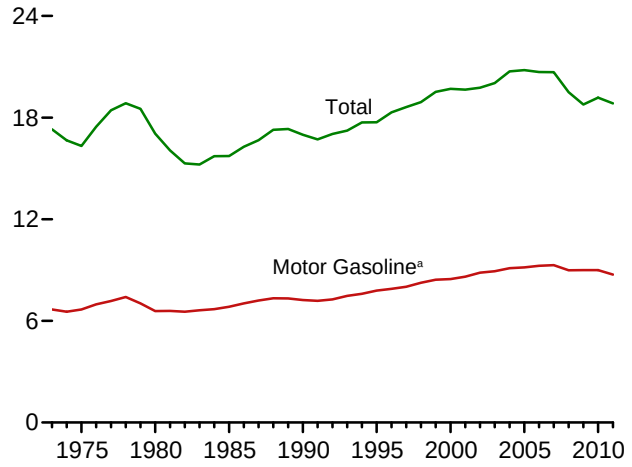
Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

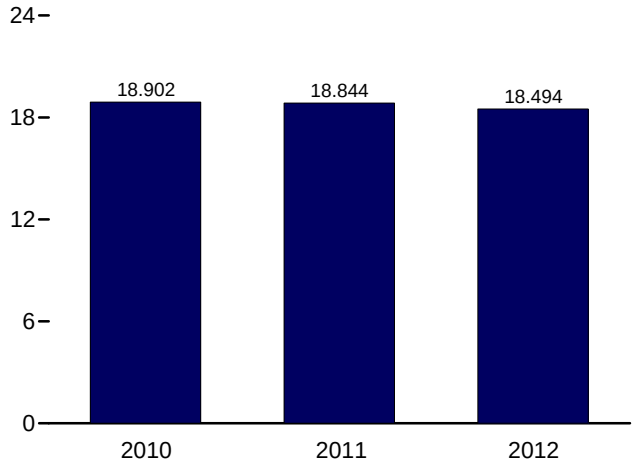
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2010:** EIA, *Petroleum Supply Annual,* annual reports. • **2011 and 2012:** 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.

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

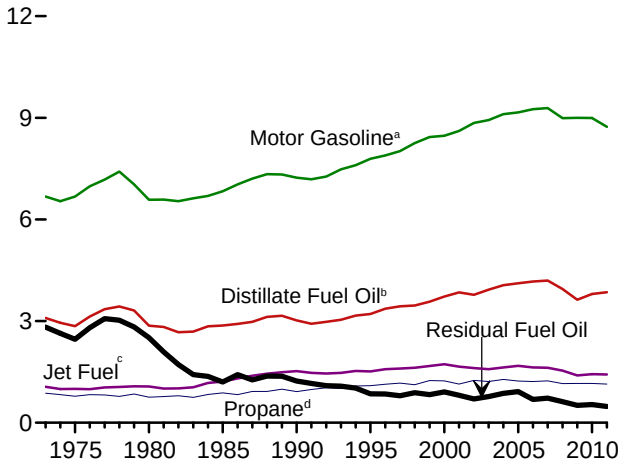
Total and Motor Gasoline, 1973-2011



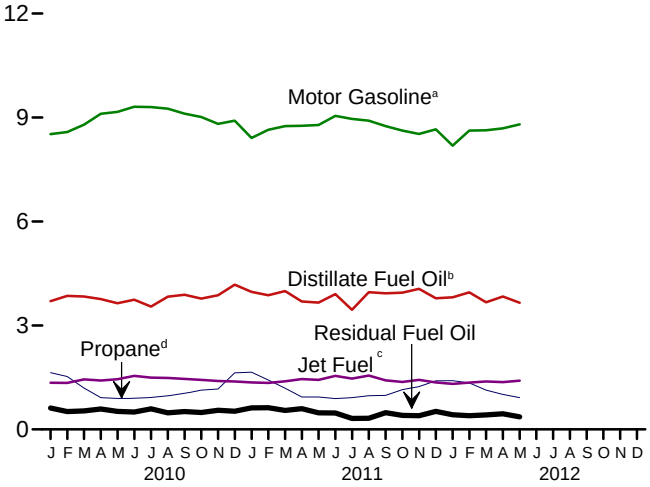
Total, January-May



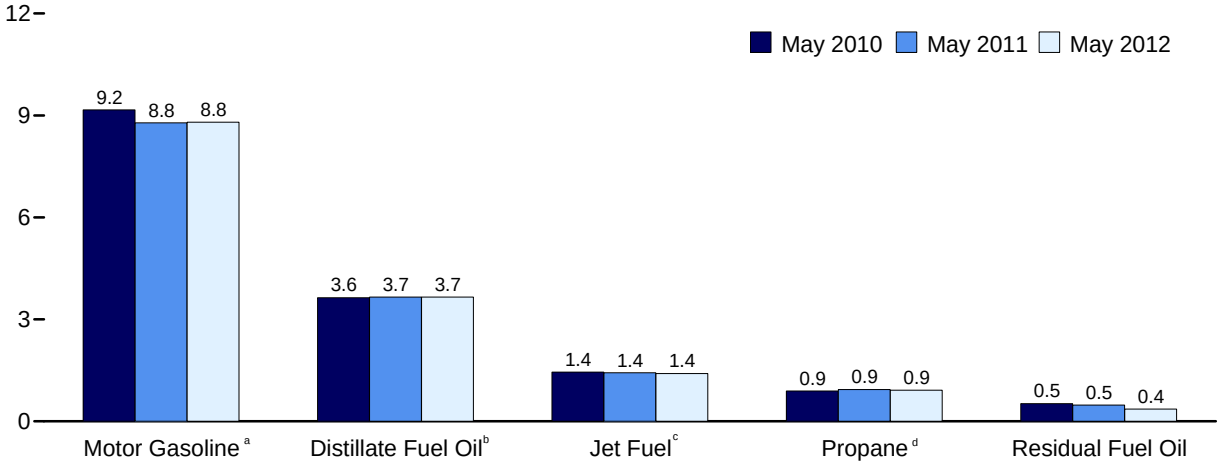
Selected Products,1973-2011



Selected Products, Monthly



Selected Products



[a] Beginning in 1993, includes fuel ethanol blended into motor gasoline.
[b] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[c] Beginning in 2005, includes kerosene-type jet fuel only.
[d] Includes propylene.
Note: SPR=Strategic Petroleum Reserve.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.5.

Table 3.5 Petroleum Products Supplied by Type

(Thousand Barrels per Day)

	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel Oil[b]	Jet Fuel[c]	Kero-sene	LPG[a]		Lubri-cants	Motor Gasoline[e]	Petro-leum Coke	Residual Fuel Oil	Other[f]	Total
						Propane[d]	Total						
1973 Average	**522**	**45**	**3,092**	**1,059**	**216**	**872**	**1,449**	**162**	**6,674**	**261**	**2,822**	**1,005**	**17,308**
1975 Average	**419**	**39**	**2,851**	**1,001**	**159**	**783**	**1,333**	**137**	**6,675**	**247**	**2,462**	**1,001**	**16,322**
1980 Average	**396**	**35**	**2,866**	**1,068**	**158**	**754**	**1,469**	**159**	**6,579**	**237**	**2,508**	**1,581**	**17,056**
1985 Average	**425**	**27**	**2,868**	**1,218**	**114**	**883**	**1,599**	**145**	**6,831**	**264**	**1,202**	**1,032**	**15,726**
1990 Average	**483**	**24**	**3,021**	**1,522**	**43**	**917**	**1,556**	**164**	**7,235**	**339**	**1,229**	**1,373**	**16,988**
1995 Average	**486**	**21**	**3,207**	**1,514**	**54**	**1,096**	**1,899**	**156**	**7,789**	**365**	**852**	**1,381**	**17,725**
1996 Average	**484**	**20**	**3,365**	**1,578**	**62**	**1,136**	**2,012**	**151**	**7,891**	**379**	**848**	**1,518**	**18,309**
1997 Average	**505**	**22**	**3,435**	**1,599**	**66**	**1,170**	**2,038**	**160**	**8,017**	**377**	**797**	**1,605**	**18,620**
1998 Average	**521**	**19**	**3,461**	**1,622**	**78**	**1,120**	**1,952**	**168**	**8,253**	**447**	**887**	**1,508**	**18,917**
1999 Average	**547**	**21**	**3,572**	**1,673**	**73**	**1,246**	**2,195**	**169**	**8,431**	**477**	**830**	**1,532**	**19,519**
2000 Average	**525**	**20**	**3,722**	**1,725**	**67**	**1,235**	**2,231**	**166**	**8,472**	**406**	**909**	**1,458**	**19,701**
2001 Average	**519**	**19**	**3,847**	**1,655**	**72**	**1,142**	**2,044**	**153**	**8,610**	**437**	**811**	**1,481**	**19,649**
2002 Average	**512**	**18**	**3,776**	**1,614**	**43**	**1,248**	**2,163**	**151**	**8,848**	**463**	**700**	**1,474**	**19,761**
2003 Average	**503**	**16**	**3,927**	**1,578**	**55**	**1,215**	**2,074**	**140**	**8,935**	**455**	**772**	**1,579**	**20,034**
2004 Average	**537**	**17**	**4,058**	**1,630**	**64**	**1,276**	**2,132**	**141**	**9,105**	**524**	**865**	**1,657**	**20,731**
2005 Average	**546**	**19**	**4,118**	**1,679**	**70**	**1,229**	**2,030**	**141**	**9,159**	**515**	**920**	**1,605**	**20,802**
2006 Average	**521**	**18**	**4,169**	**1,633**	**54**	**1,215**	**2,052**	**137**	**9,253**	**522**	**689**	**1,640**	**20,687**
2007 Average	**494**	**17**	**4,196**	**1,622**	**32**	**1,235**	**2,085**	**142**	**9,286**	**490**	**723**	**1,593**	**20,680**
2008 Average	**417**	**15**	**3,945**	**1,539**	**14**	**1,154**	**1,954**	**131**	**8,989**	**464**	**622**	**1,408**	**19,498**
2009 Average	**360**	**14**	**3,631**	**1,393**	**18**	**1,160**	**2,051**	**118**	**8,997**	**427**	**511**	**1,251**	**18,771**
2010 January	203	10	3,701	1,344	15	1,638	2,644	116	8,520	268	615	1,218	18,652
February	249	10	3,854	1,343	34	1,526	2,531	137	8,579	334	515	1,263	18,850
March	264	14	3,835	1,443	11	1,193	2,225	138	8,793	425	531	1,421	19,099
April	331	17	3,759	1,410	7	916	1,843	132	9,108	385	590	1,463	19,044
May	378	15	3,639	1,446	11	891	1,878	128	9,162	339	519	1,351	18,866
June	517	18	3,743	1,543	16	901	1,938	155	9,311	411	500	1,386	19,537
July	470	20	3,544	1,494	19	915	1,978	141	9,301	385	595	1,373	19,319
August	537	14	3,830	1,486	9	973	2,025	129	9,255	434	476	1,467	19,662
September	463	20	3,886	1,457	8	1,040	2,084	136	9,112	433	513	1,326	19,438
October	434	15	3,773	1,430	15	1,135	2,126	127	9,016	335	489	1,215	18,974
November	295	11	3,873	1,396	46	1,168	2,141	125	8,816	389	552	1,333	18,977
December	204	12	4,176	1,383	50	1,634	2,677	113	8,911	371	525	1,301	19,722
Average	**362**	**15**	**3,800**	**1,432**	**20**	**1,160**	**2,173**	**131**	**8,993**	**376**	**535**	**1,343**	**19,180**
2011 January	224	14	3,968	1,355	17	1,652	2,660	136	8,412	363	623	1,349	19,121
February	248	13	3,871	1,343	47	1,423	2,406	121	8,648	282	627	1,264	18,869
March	280	19	3,993	1,389	25	1,189	2,291	148	8,750	339	547	1,468	19,248
April	314	7	3,689	1,451	9	933	1,916	131	8,762	352	600	1,381	18,613
May	354	18	3,657	1,429	(s)	934	1,994	120	8,784	415	478	1,114	18,363
June	455	17	3,903	1,545	4	889	1,938	119	9,046	386	471	1,394	19,277
July	463	18	3,452	1,466	9	918	1,929	112	8,960	361	316	1,470	18,555
August	543	18	3,959	1,555	5	974	1,987	134	8,907	452	319	1,274	19,153
September	462	13	3,929	1,417	13	979	2,035	126	8,753	360	482	1,207	18,795
October	424	16	3,944	1,370	-4	1,147	2,140	107	8,623	410	402	1,132	18,563
November	298	12	4,055	1,427	10	1,236	2,235	124	8,527	361	395	1,291	18,734
December	191	10	3,782	1,354	12	1,400	2,525	112	8,659	313	519	1,261	18,738
Average	**355**	**15**	**3,849**	**1,425**	**12**	**1,138**	**2,171**	**124**	**8,736**	**367**	**480**	**1,300**	**18,835**
2012 January	216	12	3,811	1,313	2	1,406	2,463	129	8,187	367	420	1,349	18,268
February	218	11	3,954	1,350	23	1,343	2,421	139	8,622	297	394	1,306	18,734
March	R 236	R 14	R 3,668	R 1,382	R 2	R 1,134	R 2,226	R 111	R 8,633	R 323	R 416	R 1,163	R 18,174
April	F 304	F 15	E 3,834	E 1,363	RF 4	E 1,007	F 2,036	RF 136	E 8,687	RF 365	E 451	RE 1,557	E 18,753
May	F 364	F 15	E 3,656	E 1,405	F 9	E 918	F 2,004	F 129	E 8,802	F 399	E 362	E 1,420	E 18,565
5-Month Average	**E 268**	**E 14**	**E 3,782**	**E 1,363**	**E 8**	**E 1,160**	**E 2,229**	**E 129**	**E 8,585**	**E 351**	**E 408**	**E 1,359**	**E 18,494**
2011 5-Month Average	**284**	**14**	**3,836**	**1,394**	**19**	**1,224**	**2,253**	**131**	**8,671**	**352**	**574**	**1,316**	**18,844**
2010 5-Month Average	**285**	**13**	**3,755**	**1,398**	**15**	**1,229**	**2,221**	**130**	**8,836**	**350**	**554**	**1,344**	**18,902**

[a] Liquefied petroleum gases.

[b] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

[c] 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."

[d] Includes propylene.

[e] Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[f] 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. E=Estimate. F=Forecast. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • 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.

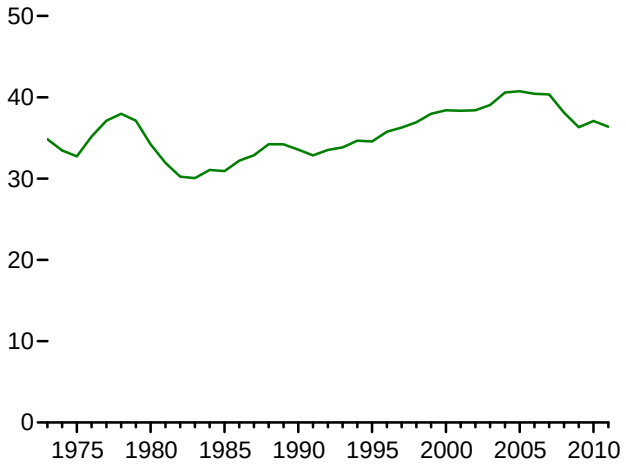
Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2010:** EIA, *Petroleum Supply Annual,* annual reports. • **2011 and 2012:** 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.

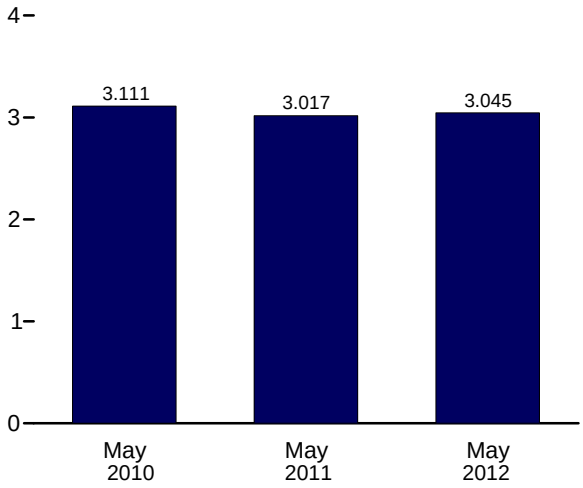
Figure 3.6 Heat Content of Petroleum Products Supplied by Type

(Quadrillion Btu)

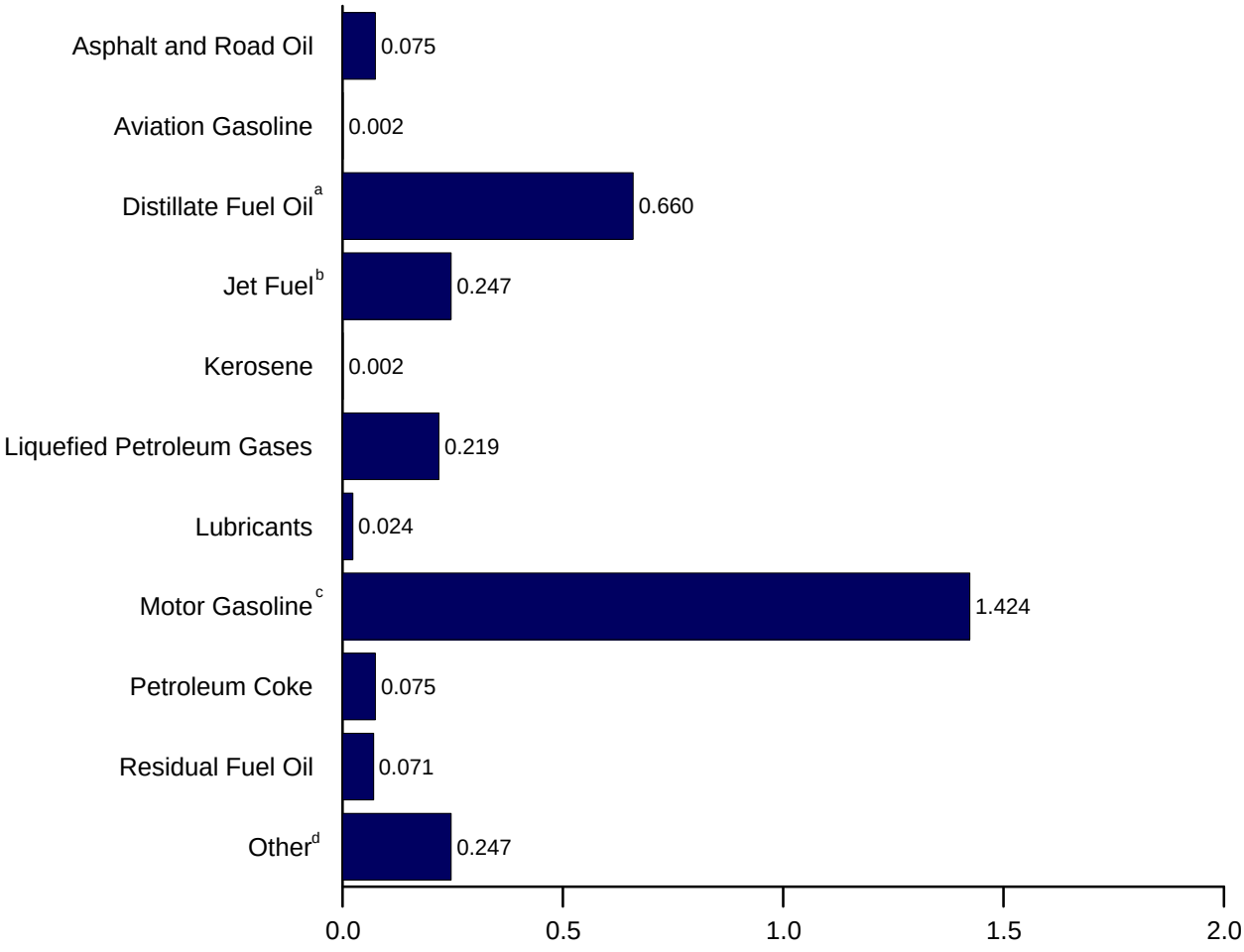
Total, 1973-2011



Total



By Product, May 2012



[a] Includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[b] Includes kerosene-type jet fuel only.
[c] Includes fuel ethanol blended into motor gasoline.
[d] All petroleum products not shown above.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.6.

Table 3.6 Heat Content of Petroleum Products Supplied by Type

(Trillion Btu)

	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel Oil[b]	Jet Fuel[c]	Kero-sene	LPG[a]		Lubri-cants	Motor Gasoline[e]	Petro-leum Coke	Residual Fuel Oil	Other[f]	Total
						Propane[d]	Total						
1973 Total	**1,264**	**83**	**6,575**	**2,167**	**447**	**1,221**	**1,981**	**359**	**12,797**	**573**	**6,477**	**2,114**	**34,837**
1975 Total	**1,014**	**71**	**6,061**	**2,047**	**329**	**1,097**	**1,807**	**304**	**12,798**	**542**	**5,649**	**2,109**	**32,732**
1980 Total	**962**	**64**	**6,110**	**2,190**	**329**	**1,059**	**1,976**	**354**	**12,648**	**522**	**5,772**	**3,278**	**34,205**
1985 Total	**1,029**	**50**	**6,098**	**2,497**	**236**	**1,236**	**2,103**	**322**	**13,098**	**582**	**2,759**	**2,152**	**30,925**
1990 Total	**1,170**	**45**	**6,422**	**3,129**	**88**	**1,284**	**2,059**	**362**	**13,872**	**745**	**2,820**	**2,839**	**33,552**
1995 Total	**1,178**	**40**	**6,818**	**3,132**	**112**	**1,534**	**2,512**	**346**	**14,825**	**802**	**1,955**	**2,837**	**34,556**
1996 Total	**1,176**	**37**	**7,175**	**3,274**	**128**	**1,594**	**2,660**	**335**	**15,064**	**837**	**1,952**	**3,121**	**35,759**
1997 Total	**1,224**	**40**	**7,304**	**3,308**	**136**	**1,638**	**2,690**	**354**	**15,254**	**829**	**1,828**	**3,298**	**36,265**
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**	**3,129**	**37,960**
2000 Total	**1,276**	**36**	**7,935**	**3,580**	**140**	**1,734**	**2,945**	**369**	**16,155**	**895**	**2,091**	**2,979**	**38,402**
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**	**3,040**	**38,400**
2003 Total	**1,220**	**30**	**8,349**	**3,265**	**113**	**1,701**	**2,748**	**309**	**16,981**	**1,000**	**1,772**	**3,264**	**39,051**
2004 Total	**1,304**	**31**	**8,652**	**3,383**	**133**	**1,791**	**2,824**	**313**	**17,379**	**1,156**	**1,990**	**3,428**	**40,593**
2005 Total	**1,323**	**35**	**8,755**	**3,475**	**144**	**1,721**	**2,682**	**312**	**17,444**	**1,133**	**2,111**	**3,318**	**40,732**
2006 Total	**1,261**	**33**	**8,864**	**3,379**	**111**	**1,701**	**2,700**	**303**	**17,622**	**1,148**	**1,581**	**3,416**	**40,420**
2007 Total	**1,197**	**32**	**8,921**	**3,358**	**67**	**1,729**	**2,733**	**313**	**17,689**	**1,077**	**1,659**	**3,313**	**40,358**
2008 Total	**1,012**	**28**	**8,411**	**3,193**	**30**	**1,620**	**2,574**	**291**	**17,168**	**1,022**	**1,432**	**2,941**	**38,101**
2009 Total	**873**	**27**	**7,720**	**2,883**	**36**	**1,624**	**2,664**	**262**	**17,135**	**938**	**1,173**	**2,611**	**36,321**
2010 January	42	2	668	236	3	195	294	22	1,378	50	120	215	3,029
February	46	1	629	213	5	164	255	23	1,253	56	91	202	2,776
March	54	2	692	254	2	142	246	26	1,422	79	103	252	3,134
April	66	3	657	240	1	105	198	24	1,426	70	111	251	3,046
May	78	2	657	254	2	106	207	24	1,482	63	101	240	3,111
June	103	3	654	263	3	104	206	28	1,458	74	94	237	3,122
July	97	3	640	263	3	109	217	27	1,504	72	116	242	3,183
August	110	2	692	261	2	116	220	24	1,497	81	93	259	3,241
September	92	3	679	248	1	120	219	25	1,426	78	97	227	3,097
October	89	2	681	251	3	135	233	24	1,458	63	95	215	3,114
November	59	2	677	238	8	134	228	23	1,380	70	104	227	3,014
December	42	2	754	243	9	194	298	21	1,441	69	102	233	3,214
Total	**878**	**27**	**8,080**	**2,963**	**41**	**1,624**	**2,821**	**291**	**17,127**	**826**	**1,228**	**2,800**	**37,082**
2011 January	46	2	717	238	3	196	295	26	1,361	68	121	239	3,116
February	46	2	631	213	7	153	241	20	1,263	48	110	202	2,784
March	58	3	721	244	4	141	251	28	1,415	63	107	259	3,152
April	63	1	645	247	1	107	201	24	1,372	64	113	234	2,965
May	73	3	660	251	(s)	111	216	23	1,421	78	93	199	3,017
June	91	3	682	263	1	102	204	22	1,416	70	89	236	3,075
July	95	3	623	258	2	109	209	21	1,449	67	62	260	3,049
August	112	3	715	273	1	116	217	25	1,441	84	62	227	3,160
September	92	2	687	241	2	113	215	23	1,370	65	91	208	2,996
October	87	3	712	241	-1	136	234	20	1,395	77	78	201	3,047
November	59	2	709	243	2	142	235	23	1,335	65	74	222	2,968
December	39	2	683	238	2	167	278	21	1,401	58	101	224	3,047
Total	**860**	**27**	**8,184**	**2,950**	**25**	**1,594**	**2,796**	**275**	**16,639**	**807**	**1,102**	**2,712**	**36,376**
2012 January	44	2	688	231	(s)	167	270	24	1,324	69	82	238	2,973
February	42	2	668	222	4	149	250	24	1,305	52	72	219	2,859
March	R 49	2	R 662	R 243	R (s)	R 135	R 245	R 21	R 1,396	R 60	R 81	R 209	R 2,969
April	F 61	F 2	E 670	E 232	F 1	E 116	F 216	RF 25	E 1,360	RF 66	E 85	RE 260	E 2,977
May	F 75	F 2	E 660	E 247	F 2	E 109	F 219	F 24	E 1,424	F 75	E 71	E 247	E 3,045
5-Month Total	**E 270**	**E 10**	**E 3,349**	**E 1,174**	**E 7**	**E 677**	**E 1,200**	**E 118**	**E 6,809**	**E 321**	**E 390**	**E 1,173**	**E 14,823**
2011 5-Month Total	**285**	**11**	**3,374**	**1,194**	**16**	**709**	**1,204**	**120**	**6,832**	**320**	**545**	**1,133**	**15,034**
2010 5-Month Total	**286**	**10**	**3,303**	**1,197**	**13**	**712**	**1,201**	**119**	**6,962**	**319**	**526**	**1,161**	**15,096**

[a] Liquefied petroleum gases.

[b] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

[c] 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."

[d] Includes propylene.

[e] Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[f] 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. E=Estimate. F=Forecast. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

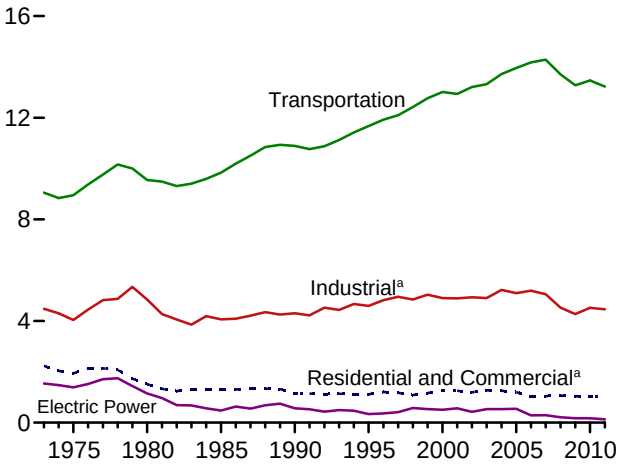
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent 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.gov/totalenergy/data/monthly/#petroleum. • For related information, see http://www.eia.gov/petroleum/.

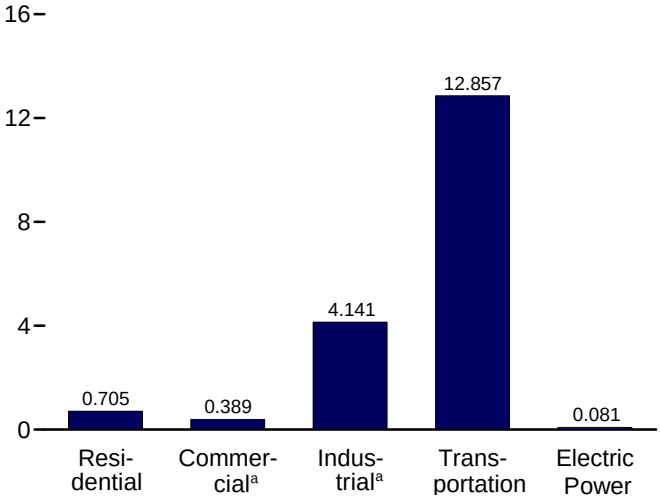
Sources: See end of section.

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

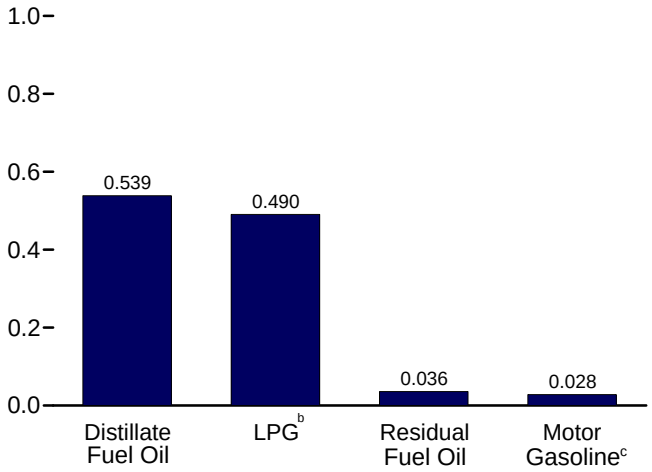
By Sector, 1973-2011



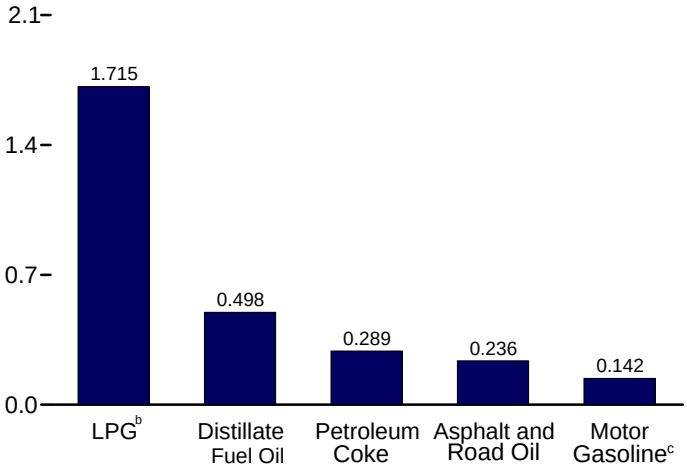
By Sector, March 2012



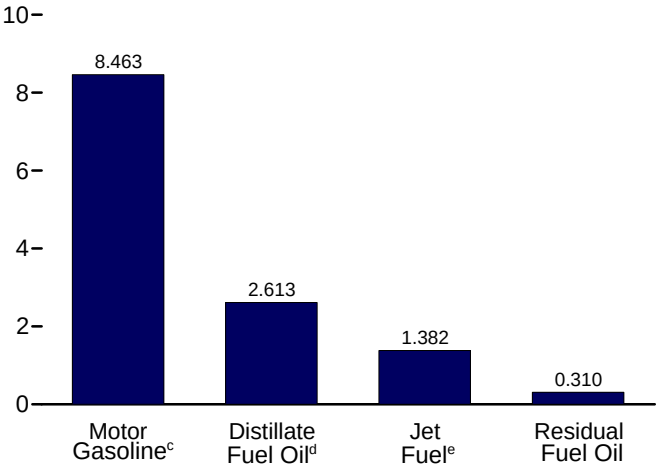
Residential and Commercial Sectors,[a] Selected Products, March 2012



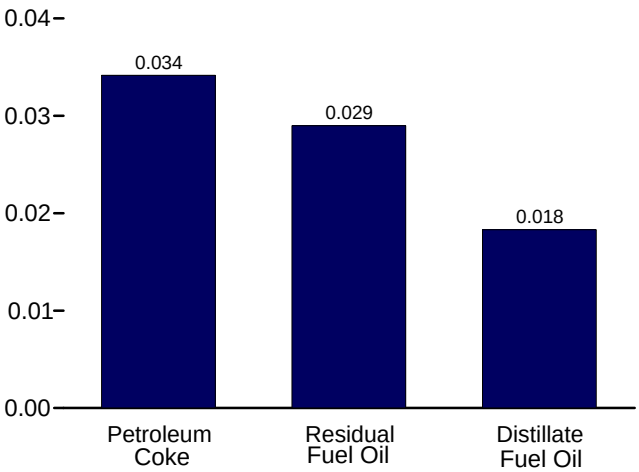
Industrial Sector,[a] Selected Products, March 2012



Transportation Sector, Selected Products, March 2012



Electric Power Sector, March 2012



[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.
[b] Liquefied petroleum gases.
[c] Includes fuel ethanol blended into motor gasoline.
[d] Includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[e] Includes kerosene-type jet fuel only.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 3.7a–3.7c.

Table 3.7a Petroleum Consumption: Residential and Commercial Sectors

(Thousand Barrels per Day)

	Residential Sector				Commercial Sector[a]						
	Distillate Fuel Oil	Kero-sene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kero-sene	Liquefied Petroleum Gases	Motor Gasoline[b]	Petro-leum Coke	Residual Fuel Oil	Total
1973 Average	**942**	**110**	**407**	**1,459**	**303**	**31**	**105**	**45**	**NA**	**290**	**774**
1975 Average	**850**	**78**	**365**	**1,293**	**276**	**24**	**92**	**46**	**NA**	**214**	**653**
1980 Average	**617**	**51**	**222**	**890**	**243**	**20**	**63**	**56**	**NA**	**245**	**626**
1985 Average	**514**	**77**	**224**	**815**	**297**	**16**	**68**	**50**	**NA**	**99**	**530**
1990 Average	**460**	**31**	**252**	**742**	**252**	**6**	**73**	**58**	**0**	**100**	**489**
1995 Average	**426**	**36**	**282**	**743**	**225**	**11**	**78**	**10**	**(s)**	**62**	**385**
1996 Average	**434**	**43**	**334**	**811**	**227**	**10**	**87**	**14**	**(s)**	**60**	**397**
1997 Average	**411**	**45**	**325**	**781**	**209**	**12**	**86**	**22**	**(s)**	**48**	**378**
1998 Average	**363**	**52**	**303**	**718**	**202**	**15**	**84**	**20**	**(s)**	**37**	**358**
1999 Average	**389**	**54**	**376**	**819**	**206**	**13**	**100**	**15**	**(s)**	**32**	**366**
2000 Average	**424**	**46**	**395**	**865**	**230**	**14**	**107**	**23**	**(s)**	**40**	**415**
2001 Average	**427**	**46**	**375**	**849**	**239**	**15**	**102**	**20**	**(s)**	**30**	**406**
2002 Average	**404**	**29**	**384**	**817**	**209**	**8**	**101**	**24**	**(s)**	**35**	**376**
2003 Average	**425**	**34**	**389**	**848**	**226**	**9**	**112**	**32**	**(s)**	**48**	**428**
2004 Average	**433**	**41**	**364**	**839**	**221**	**10**	**108**	**23**	**(s)**	**53**	**416**
2005 Average	**402**	**40**	**366**	**809**	**210**	**10**	**94**	**24**	**(s)**	**50**	**389**
2006 Average	**335**	**32**	**318**	**685**	**189**	**7**	**88**	**26**	**(s)**	**33**	**343**
2007 Average	**342**	**21**	**345**	**708**	**181**	**4**	**87**	**32**	**(s)**	**33**	**337**
2008 Average	**314**	**10**	**394**	**718**	**174**	**2**	**113**	**24**	**(s)**	**32**	**345**
2009 Average	**283**	**13**	**391**	**687**	**194**	**2**	**99**	**28**	**(s)**	**33**	**357**
2010 January	460	10	461	931	324	2	122	28	(s)	57	532
February	471	24	441	936	332	4	116	28	(s)	58	538
March	270	8	388	666	190	1	102	28	(s)	33	356
April	196	5	321	521	138	1	85	29	(s)	24	277
May	207	8	327	542	146	1	86	30	0	25	289
June	244	11	338	593	172	2	89	30	0	30	323
July	189	13	345	547	133	2	91	30	0	23	280
August	169	7	353	528	119	1	93	30	(s)	21	264
September	157	6	363	526	111	1	96	29	(s)	19	256
October	233	10	370	614	164	2	98	29	(s)	29	322
November	271	32	373	676	190	5	99	29	(s)	33	356
December	432	35	466	934	304	6	123	29	(s)	53	516
Average	**274**	**14**	**379**	**667**	**193**	**2**	**100**	**29**	**(s)**	**34**	**358**
2011 January	395	12	464	870	278	2	122	27	(s)	45	475
February	414	33	419	866	291	5	111	28	(s)	47	483
March	282	18	399	699	199	3	105	28	(s)	32	368
April	195	6	334	534	137	1	88	28	0	22	277
May	128	(s)	347	476	90	(s)	92	28	0	15	225
June	199	3	338	540	140	1	89	29	0	23	282
July	178	6	336	520	125	1	89	29	0	20	264
August	243	4	346	593	171	1	91	29	0	28	320
September	266	9	355	630	187	1	94	28	0	30	341
October	289	-3	373	659	203	(s)	99	28	0	33	362
November	331	7	389	728	233	1	103	28	(s)	38	403
December	428	8	440	876	301	1	116	28	(s)	49	496
Average	**278**	**9**	**378**	**665**	**196**	**1**	**100**	**28**	**(s)**	**32**	**357**
2012 January	463	1	429	893	326	(s)	113	26	(s)	53	519
February	389	16	422	827	274	3	111	28	(s)	44	460
March	316	1	388	705	222	(s)	102	28	(s)	36	389
3-Month Average	**389**	**6**	**413**	**808**	**274**	**1**	**109**	**27**	**(s)**	**44**	**456**
2011 3-Month Average	**362**	**21**	**428**	**810**	**255**	**3**	**113**	**28**	**(s)**	**41**	**440**
2010 3-Month Average	**398**	**14**	**429**	**842**	**280**	**2**	**113**	**28**	**(s)**	**49**	**473**

[a] Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

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

NA=Not available. (s)=Less than 500 barrels per day and greater 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 "petroleum consumption" in Tables 3.7a–3.8c. • 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.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973.

Sources: See end of section.

Table 3.7b Petroleum Consumption: Industrial Sector

(Thousand Barrels per Day)

	Industrial Sector[a]									
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline[b]	Petroleum Coke	Residual Fuel Oil	Other[c]	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**	**1,646**	**73**	**195**	**423**	**108**	**1,657**	**5,222**
2005 Average	**546**	**594**	**19**	**1,549**	**72**	**187**	**404**	**123**	**1,605**	**5,100**
2006 Average	**521**	**594**	**14**	**1,627**	**71**	**198**	**425**	**104**	**1,640**	**5,193**
2007 Average	**494**	**595**	**6**	**1,637**	**73**	**161**	**412**	**84**	**1,593**	**5,056**
2008 Average	**417**	**599**	**2**	**1,419**	**67**	**131**	**394**	**86**	**1,408**	**4,523**
2009 Average	**360**	**521**	**2**	**1,541**	**61**	**128**	**363**	**46**	**1,251**	**4,274**
2010 January	203	484	3	2,036	60	140	201	59	1,218	4,403
February	249	531	6	1,949	70	141	264	55	1,263	4,528
March	264	686	2	1,714	71	144	356	54	1,421	4,712
April	331	623	1	1,419	68	149	323	61	1,463	4,438
May	378	472	2	1,446	66	150	274	51	1,351	4,190
June	517	427	3	1,492	80	153	333	43	1,386	4,433
July	470	331	3	1,523	73	153	303	53	1,373	4,282
August	537	544	2	1,559	66	152	370	42	1,467	4,738
September	463	701	1	1,604	70	150	371	51	1,326	4,738
October	434	548	3	1,637	66	148	279	51	1,215	4,380
November	295	664	8	1,648	64	145	339	57	1,333	4,553
December	204	700	9	2,061	58	146	307	51	1,301	4,838
Average	**362**	**559**	**4**	**1,673**	**68**	**148**	**310**	**52**	**1,343**	**4,519**
2011 January	224	749	3	2,049	70	138	283	64	1,349	4,928
February	248	585	8	1,853	62	142	215	65	1,264	4,442
March	280	755	5	1,764	76	144	266	57	1,468	4,814
April	314	544	2	1,475	68	144	304	63	1,381	4,295
May	354	553	(s)	1,536	62	144	366	50	1,114	4,177
June	455	568	1	1,492	61	148	324	48	1,394	4,492
July	463	257	2	1,486	57	147	286	30	1,470	4,197
August	543	523	1	1,530	69	146	388	30	1,274	4,505
September	462	578	2	1,567	65	144	297	49	1,207	4,371
October	424	575	-1	1,648	55	141	362	42	1,132	4,378
November	298	696	2	1,721	64	140	320	39	1,291	4,571
December	191	434	2	1,945	58	142	261	52	1,261	4,346
Average	**355**	**568**	**2**	**1,672**	**64**	**143**	**307**	**49**	**1,300**	**4,460**
2012 January	216	571	(s)	1,896	66	134	311	40	1,349	4,585
February	218	731	4	1,864	71	141	250	38	1,306	4,624
March	236	498	(s)	1,715	57	142	289	41	1,163	4,141
3-Month Average	**223**	**597**	**1**	**1,824**	**65**	**139**	**284**	**40**	**1,272**	**4,446**
2011 3-Month Average	**250**	**700**	**5**	**1,890**	**70**	**141**	**256**	**62**	**1,363**	**4,737**
2010 3-Month Average	**238**	**568**	**3**	**1,898**	**67**	**142**	**274**	**56**	**1,302**	**4,548**

[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 fuel ethanol blended into motor gasoline.

[c] 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.

(s)=Less than 500 barrels per day and greater 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 "petroleum consumption" in Tables 3.7a–3.8c. • 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.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973.

Sources: See end of section.

Table 3.7c Petroleum Consumption: Transportation and Electric Power Sectors

(Thousand Barrels per Day)

	Transportation Sector								Electric Power Sector[a]			
	Aviation Gasoline	Distillate Fuel Oil[b]	Jet Fuel[c]	Liquefied Petroleum Gases	Lubricants	Motor Gasoline[d]	Residual Fuel Oil	Total	Distillate Fuel Oil[e]	Petroleum Coke	Residual Fuel Oil[f]	Total
1973 Average	**45**	**1,045**	**1,042**	**35**	**74**	**6,496**	**317**	**9,054**	**129**	**7**	**1,406**	**1,542**
1975 Average	**39**	**998**	**992**	**31**	**70**	**6,512**	**310**	**8,951**	**107**	**1**	**1,280**	**1,388**
1980 Average	**35**	**1,311**	**1,062**	**13**	**77**	**6,441**	**608**	**9,546**	**79**	**2**	**1,069**	**1,151**
1985 Average	**27**	**1,491**	**1,218**	**21**	**71**	**6,667**	**342**	**9,838**	**40**	**3**	**435**	**478**
1990 Average	**24**	**1,722**	**1,522**	**16**	**80**	**7,080**	**443**	**10,888**	**45**	**14**	**507**	**566**
1995 Average	**21**	**1,973**	**1,514**	**13**	**76**	**7,674**	**397**	**11,668**	**51**	**37**	**247**	**334**
1996 Average	**20**	**2,096**	**1,578**	**11**	**73**	**7,772**	**370**	**11,921**	**51**	**36**	**273**	**360**
1997 Average	**22**	**2,198**	**1,599**	**10**	**78**	**7,883**	**310**	**12,099**	**52**	**46**	**311**	**410**
1998 Average	**19**	**2,263**	**1,622**	**13**	**81**	**8,128**	**294**	**12,420**	**64**	**56**	**456**	**576**
1999 Average	**21**	**2,352**	**1,673**	**10**	**82**	**8,336**	**290**	**12,765**	**66**	**51**	**418**	**535**
2000 Average	**20**	**2,422**	**1,725**	**8**	**81**	**8,370**	**386**	**13,012**	**82**	**45**	**378**	**505**
2001 Average	**19**	**2,489**	**1,655**	**10**	**74**	**8,435**	**255**	**12,938**	**80**	**47**	**437**	**564**
2002 Average	**18**	**2,536**	**1,614**	**10**	**73**	**8,662**	**295**	**13,208**	**60**	**80**	**287**	**427**
2003 Average	**16**	**2,665**	**1,578**	**12**	**68**	**8,733**	**249**	**13,321**	**76**	**79**	**379**	**534**
2004 Average	**17**	**2,783**	**1,630**	**14**	**69**	**8,887**	**321**	**13,720**	**52**	**101**	**382**	**535**
2005 Average	**19**	**2,858**	**1,679**	**20**	**68**	**8,948**	**365**	**13,957**	**54**	**111**	**382**	**547**
2006 Average	**18**	**3,017**	**1,633**	**20**	**67**	**9,029**	**395**	**14,178**	**35**	**97**	**157**	**289**
2007 Average	**17**	**3,037**	**1,622**	**16**	**69**	**9,093**	**433**	**14,287**	**42**	**78**	**173**	**293**
2008 Average	**15**	**2,824**	**1,539**	**29**	**64**	**8,834**	**400**	**13,704**	**34**	**70**	**104**	**209**
2009 Average	**14**	**2,600**	**1,393**	**20**	**57**	**8,840**	**353**	**13,279**	**33**	**63**	**79**	**175**
2010 January	10	2,353	1,344	26	57	8,352	407	12,547	79	67	93	239
February	10	2,490	1,343	24	66	8,411	364	12,709	30	69	38	138
March	14	2,663	1,443	22	67	8,620	403	13,231	24	69	41	134
April	17	2,779	1,410	18	64	8,929	465	13,682	23	62	40	125
May	15	2,781	1,446	18	62	8,983	377	13,681	33	64	66	164
June	18	2,858	1,543	19	75	9,128	322	13,963	41	78	105	224
July	20	2,848	1,494	19	69	9,118	399	13,966	42	81	120	244
August	14	2,963	1,486	20	63	9,074	315	13,934	34	63	98	196
September	20	2,888	1,457	20	66	8,933	381	13,766	29	62	61	153
October	15	2,803	1,430	21	62	8,839	371	13,540	25	56	37	118
November	11	2,719	1,396	21	60	8,643	427	13,277	30	50	35	114
December	12	2,679	1,383	26	55	8,736	355	13,245	60	63	67	189
Average	**15**	**2,737**	**1,432**	**21**	**64**	**8,816**	**382**	**13,466**	**38**	**65**	**67**	**170**
2011 January	14	2,507	1,355	26	66	8,247	457	12,672	40	81	57	177
February	13	2,550	1,343	23	59	8,478	478	12,944	31	67	36	134
March	19	2,730	1,389	22	72	8,578	420	13,230	27	73	38	137
April	7	2,782	1,451	19	64	8,590	468	13,381	31	49	46	126
May	18	2,857	1,429	19	58	8,612	372	13,365	29	49	41	119
June	17	2,964	1,545	19	58	8,868	356	13,826	32	62	44	138
July	18	2,855	1,466	19	54	8,784	214	13,410	37	75	52	163
August	18	2,995	1,555	19	65	8,732	215	13,600	26	65	45	135
September	13	2,871	1,417	20	61	8,581	369	13,331	25	63	34	123
October	16	2,854	1,370	21	52	8,453	295	13,061	22	48	32	102
November	12	2,771	1,427	22	60	8,359	286	12,937	23	40	32	96
December	10	2,593	1,354	24	55	8,489	387	12,912	26	51	31	109
Average	**15**	**2,779**	**1,425**	**21**	**60**	**8,565**	**359**	**13,223**	**29**	**60**	**41**	**130**
2012 January	12	2,426	1,313	24	62	8,026	293	12,157	24	55	34	114
February	11	2,538	1,350	23	67	8,452	284	12,726	22	47	27	96
March	14	2,613	1,382	22	54	8,463	310	12,857	18	34	29	81
3-Month Average	**12**	**2,525**	**1,348**	**23**	**61**	**8,311**	**296**	**12,577**	**22**	**46**	**30**	**97**
2011 3-Month Average	**16**	**2,597**	**1,363**	**24**	**66**	**8,433**	**451**	**12,949**	**32**	**74**	**44**	**150**
2010 3-Month Average	**11**	**2,503**	**1,378**	**24**	**63**	**8,463**	**392**	**12,833**	**45**	**68**	**58**	**171**

[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 are for electric utilities and independent power producers.

[b] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

[c] 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.

[d] Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[e] Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

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

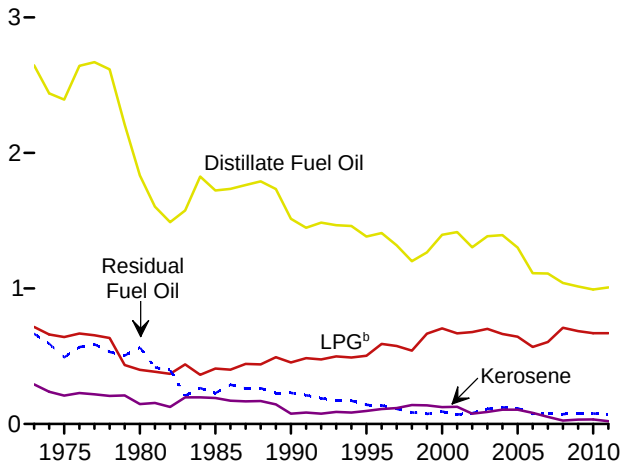
Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • 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.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973.

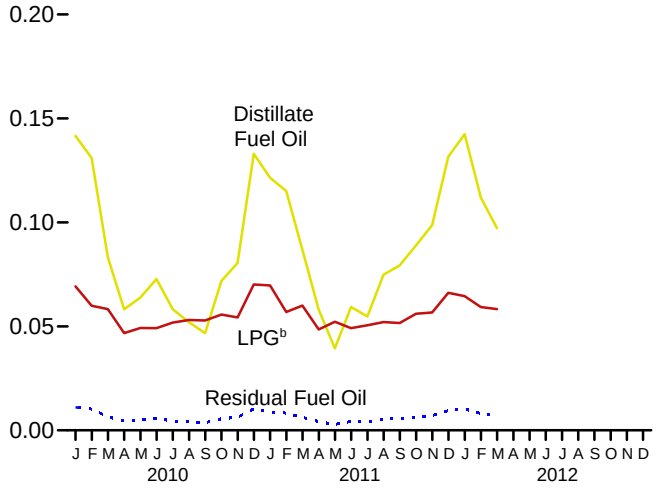
Sources: See end of section.

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

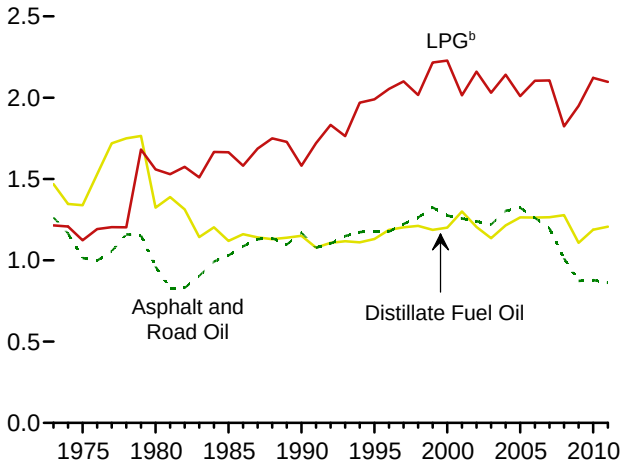
Residential and Commercial Sectors,[a] 1973-2011



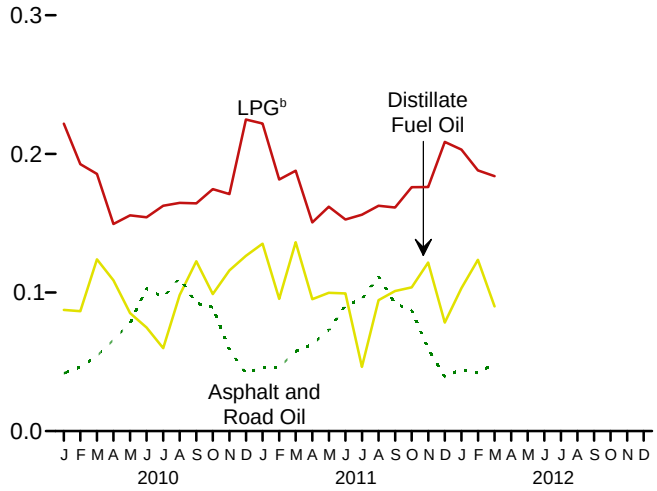
Residential and Commercial Sectors,[a] Monthly



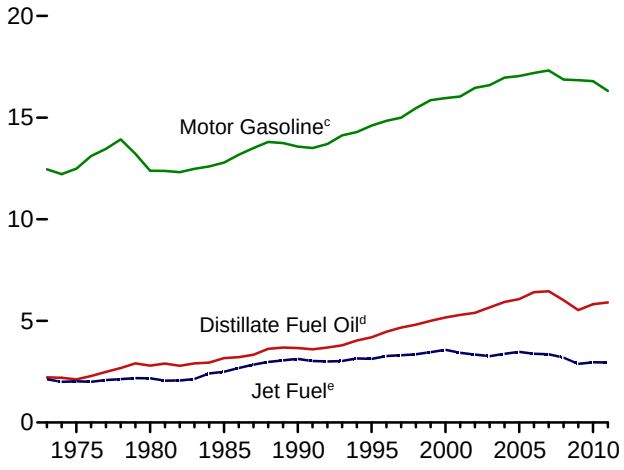
Industrial Sector,[a] 1973-2011



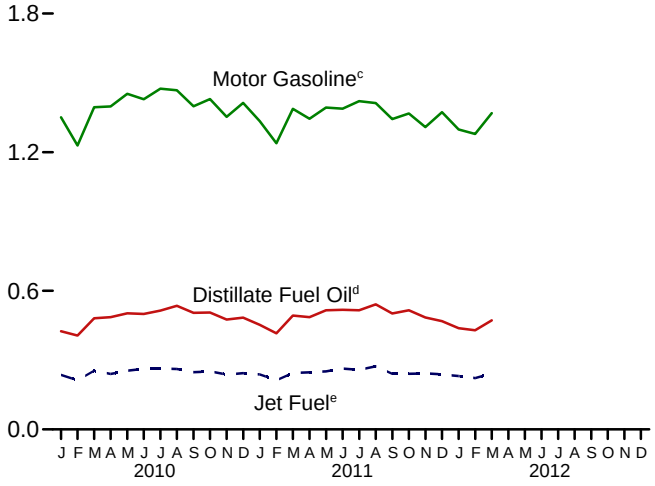
Industrial Sector,[a] Monthly



Transportation Sector, 1973-2011



Transportation Sector, Monthly



[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.
[b] Liquefied petroleum gases.
[c] Beginning in 1993, includes fuel ethanol blended into motor gasoline.
[d] Beginning in 2009, includes renewable diesel fuel (including bio-diesel) blended into distillate fuel oil.
[e] Beginning in 2005, includes kerosene-type jet fuel only.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 3.8a–3.8c.

Table 3.8a Heat Content of Petroleum Consumption: Residential and Commercial Sectors

(Trillion Btu)

	Residential Sector				Commercial Sector[a]						
	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Motor Gasoline[b]	Petroleum Coke	Residual Fuel Oil	Total
1973 Total	**2,003**	**227**	**570**	**2,800**	**644**	**65**	**147**	**87**	**NA**	**665**	**1,607**
1975 Total	**1,807**	**161**	**512**	**2,479**	**587**	**49**	**129**	**89**	**NA**	**492**	**1,346**
1980 Total	**1,316**	**107**	**311**	**1,734**	**518**	**41**	**88**	**107**	**NA**	**565**	**1,318**
1985 Total	**1,092**	**159**	**314**	**1,565**	**631**	**33**	**95**	**96**	**NA**	**228**	**1,083**
1990 Total	**978**	**64**	**352**	**1,394**	**536**	**12**	**102**	**111**	**0**	**230**	**991**
1995 Total	**905**	**74**	**395**	**1,374**	**479**	**22**	**109**	**18**	**(s)**	**141**	**769**
1996 Total	**926**	**89**	**469**	**1,484**	**483**	**21**	**122**	**27**	**(s)**	**137**	**790**
1997 Total	**874**	**93**	**455**	**1,422**	**444**	**25**	**120**	**43**	**(s)**	**111**	**743**
1998 Total	**772**	**108**	**424**	**1,304**	**429**	**31**	**118**	**39**	**(s)**	**85**	**702**
1999 Total	**828**	**111**	**526**	**1,465**	**438**	**27**	**140**	**28**	**(s)**	**73**	**707**
2000 Total	**905**	**95**	**555**	**1,554**	**491**	**30**	**150**	**45**	**(s)**	**92**	**807**
2001 Total	**908**	**95**	**526**	**1,529**	**508**	**31**	**143**	**37**	**(s)**	**70**	**790**
2002 Total	**860**	**60**	**537**	**1,457**	**444**	**16**	**141**	**45**	**(s)**	**80**	**726**
2003 Total	**905**	**70**	**544**	**1,519**	**481**	**19**	**157**	**60**	**(s)**	**111**	**828**
2004 Total	**924**	**85**	**512**	**1,520**	**470**	**20**	**152**	**45**	**(s)**	**122**	**810**
2005 Total	**854**	**84**	**513**	**1,451**	**447**	**22**	**131**	**46**	**(s)**	**116**	**762**
2006 Total	**712**	**66**	**446**	**1,224**	**401**	**15**	**123**	**49**	**(s)**	**75**	**664**
2007 Total	**726**	**44**	**484**	**1,254**	**384**	**9**	**121**	**61**	**(s)**	**75**	**651**
2008 Total	**669**	**21**	**553**	**1,243**	**372**	**4**	**158**	**46**	**(s)**	**73**	**653**
2009 Total	**602**	**28**	**547**	**1,176**	**413**	**4**	**139**	**53**	**(s)**	**76**	**685**
2010 January	83	2	55	140	58	(s)	14	4	(s)	11	89
February	77	4	47	128	54	1	13	4	(s)	10	82
March	49	1	46	96	34	(s)	12	5	(s)	6	58
April	34	1	37	72	24	(s)	10	5	(s)	5	43
May	37	1	39	78	26	(s)	10	5	0	5	47
June	43	2	39	83	30	(s)	10	5	0	6	51
July	34	2	41	78	24	(s)	11	5	0	5	45
August	31	1	42	74	21	(s)	11	5	(s)	4	42
September	27	1	42	70	19	(s)	11	5	(s)	4	39
October	42	2	44	88	30	(s)	12	5	(s)	6	52
November	47	6	43	96	33	1	11	4	(s)	6	56
December	78	6	55	140	55	1	15	5	(s)	10	86
Total	**583**	**29**	**530**	**1,142**	**410**	**5**	**140**	**55**	**(s)**	**77**	**688**
2011 January	71	2	55	129	50	(s)	15	4	(s)	9	78
February	68	5	45	118	48	1	12	4	(s)	8	73
March	51	3	47	102	36	1	13	5	(s)	6	60
April	34	1	38	73	24	(s)	10	4	0	4	43
May	23	(s)	41	64	16	(s)	11	5	0	3	35
June	35	1	39	74	24	(s)	10	5	0	4	44
July	32	1	40	73	23	(s)	11	5	0	4	42
August	44	1	41	86	31	(s)	11	5	0	5	52
September	47	2	41	89	33	(s)	11	4	0	6	54
October	52	(s)	44	96	37	(s)	12	5	0	6	59
November	58	1	45	104	41	(s)	12	4	(s)	7	64
December	77	1	52	131	54	(s)	14	5	(s)	9	82
Total	**592**	**18**	**530**	**1,139**	**417**	**3**	**140**	**54**	**(s)**	**73**	**686**
2012 January	84	(s)	51	135	59	(s)	13	4	(s)	10	87
February	66	3	47	115	46	(s)	12	4	(s)	8	71
March	57	(s)	46	103	40	(s)	12	5	(s)	7	64
3-Month Total	**206**	**3**	**144**	**354**	**145**	**1**	**38**	**13**	**(s)**	**25**	**222**
2011 3-Month Total	**190**	**11**	**148**	**348**	**134**	**2**	**39**	**13**	**(s)**	**23**	**211**
2010 3-Month Total	**209**	**7**	**148**	**364**	**147**	**1**	**39**	**13**	**(s)**	**28**	**228**

[a] Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

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

NA=Not available. (s)=Less than 0.5 trillion Btu and greater 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 and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • 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.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973.

Sources: See end of section.

Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector

(Trillion Btu)

	Industrial Sector[a]									
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline[b]	Petroleum Coke	Residual Fuel Oil	Other[c]	Total
1973 Total	**1,264**	**1,469**	**156**	**1,215**	**195**	**255**	**558**	**1,858**	**2,114**	**9,083**
1975 Total	**1,014**	**1,339**	**119**	**1,123**	**149**	**223**	**540**	**1,509**	**2,109**	**8,127**
1980 Total	**962**	**1,324**	**181**	**1,559**	**182**	**158**	**516**	**1,349**	**3,278**	**9,509**
1985 Total	**1,029**	**1,119**	**44**	**1,664**	**166**	**218**	**575**	**748**	**2,152**	**7,714**
1990 Total	**1,170**	**1,150**	**12**	**1,582**	**186**	**185**	**714**	**411**	**2,839**	**8,251**
1995 Total	**1,178**	**1,131**	**15**	**1,990**	**178**	**200**	**721**	**337**	**2,837**	**8,588**
1996 Total	**1,176**	**1,187**	**18**	**2,054**	**173**	**200**	**757**	**335**	**3,121**	**9,020**
1997 Total	**1,224**	**1,203**	**19**	**2,100**	**182**	**212**	**727**	**291**	**3,298**	**9,256**
1998 Total	**1,263**	**1,211**	**22**	**2,016**	**191**	**199**	**858**	**230**	**3,093**	**9,083**
1999 Total	**1,324**	**1,187**	**13**	**2,217**	**193**	**152**	**936**	**207**	**3,129**	**9,357**
2000 Total	**1,276**	**1,200**	**16**	**2,228**	**190**	**150**	**796**	**241**	**2,979**	**9,076**
2001 Total	**1,257**	**1,300**	**23**	**2,014**	**174**	**295**	**858**	**203**	**3,056**	**9,181**
2002 Total	**1,240**	**1,204**	**14**	**2,160**	**172**	**309**	**842**	**190**	**3,040**	**9,171**
2003 Total	**1,220**	**1,136**	**24**	**2,030**	**159**	**324**	**825**	**220**	**3,264**	**9,202**
2004 Total	**1,304**	**1,214**	**28**	**2,141**	**161**	**372**	**934**	**249**	**3,428**	**9,831**
2005 Total	**1,323**	**1,264**	**39**	**2,009**	**160**	**356**	**889**	**281**	**3,318**	**9,640**
2006 Total	**1,261**	**1,263**	**30**	**2,104**	**156**	**376**	**934**	**239**	**3,416**	**9,780**
2007 Total	**1,197**	**1,265**	**13**	**2,106**	**161**	**306**	**906**	**193**	**3,313**	**9,461**
2008 Total	**1,012**	**1,277**	**4**	**1,823**	**150**	**250**	**868**	**198**	**2,941**	**8,523**
2009 Total	**873**	**1,107**	**4**	**1,950**	**135**	**244**	**799**	**106**	**2,611**	**7,829**
2010 January	42	87	(s)	222	11	23	38	11	215	650
February	46	87	1	193	12	21	45	10	202	615
March	54	124	(s)	186	13	23	67	11	252	730
April	66	109	(s)	149	12	23	58	11	251	681
May	78	85	(s)	156	12	24	51	10	240	657
June	103	75	(s)	154	14	24	60	8	237	676
July	97	60	1	163	14	25	57	10	242	667
August	110	98	(s)	165	12	25	69	8	259	747
September	92	123	(s)	164	13	23	67	10	227	719
October	89	99	(s)	175	12	24	52	10	215	676
November	59	116	1	171	12	23	61	11	227	680
December	42	126	2	225	11	24	57	10	233	729
Total	**878**	**1,188**	**7**	**2,121**	**149**	**281**	**682**	**120**	**2,800**	**8,227**
2011 January	46	135	1	222	13	22	53	13	239	744
February	46	95	1	182	11	21	36	11	202	605
March	58	136	1	188	14	23	50	11	259	740
April	63	95	(s)	151	12	23	55	12	234	644
May	73	100	(s)	162	12	23	68	10	199	647
June	91	99	(s)	153	11	23	59	9	236	681
July	95	46	(s)	156	11	24	53	6	260	652
August	112	94	(s)	163	13	24	72	6	227	711
September	92	101	(s)	161	12	22	54	9	208	660
October	87	104	(s)	176	10	23	68	8	201	676
November	59	122	(s)	176	12	22	58	7	222	678
December	39	78	(s)	209	11	23	49	10	224	643
Total	**860**	**1,207**	**4**	**2,097**	**141**	**273**	**674**	**113**	**2,712**	**8,081**
2012 January	44	103	(s)	203	12	22	58	8	238	689
February	42	124	1	188	13	21	44	7	219	658
March	49	90	(s)	184	11	23	54	8	209	627
3-Month Total	**135**	**317**	**1**	**575**	**36**	**66**	**156**	**23**	**666**	**1,974**
2011 3-Month Total	**150**	**367**	**3**	**591**	**38**	**66**	**139**	**35**	**700**	**2,088**
2010 3-Month Total	**142**	**298**	**2**	**600**	**37**	**67**	**149**	**32**	**669**	**1,994**

[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 fuel ethanol blended into motor gasoline.

[c] 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.

(s)=Less than 0.5 trillion Btu and greater 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 and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • 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.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973.

Sources: See end of section.

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

	Transportation Sector								Electric Power Sector[a]			
	Aviation Gasoline	Distillate Fuel Oil[b]	Jet Fuel[c]	Liquefied Petroleum Gases	Lubricants	Motor Gasoline[d]	Residual Fuel Oil	Total	Distillate Fuel Oil[e]	Petroleum Coke	Residual Fuel Oil[f]	Total
1973 Total	**83**	**2,222**	**2,131**	**49**	**163**	**12,455**	**727**	**17,832**	**273**	**15**	**3,226**	**3,515**
1975 Total	**71**	**2,121**	**2,029**	**43**	**155**	**12,485**	**711**	**17,615**	**226**	**2**	**2,937**	**3,166**
1980 Total	**64**	**2,795**	**2,179**	**18**	**172**	**12,383**	**1,398**	**19,009**	**169**	**5**	**2,459**	**2,634**
1985 Total	**50**	**3,170**	**2,497**	**30**	**156**	**12,784**	**786**	**19,472**	**85**	**7**	**998**	**1,090**
1990 Total	**45**	**3,661**	**3,129**	**23**	**176**	**13,575**	**1,016**	**21,626**	**97**	**30**	**1,163**	**1,289**
1995 Total	**40**	**4,195**	**3,132**	**18**	**168**	**14,607**	**911**	**23,070**	**108**	**81**	**566**	**755**
1996 Total	**37**	**4,469**	**3,274**	**16**	**163**	**14,837**	**851**	**23,648**	**109**	**80**	**628**	**817**
1997 Total	**40**	**4,672**	**3,308**	**14**	**172**	**14,999**	**712**	**23,918**	**111**	**102**	**715**	**927**
1998 Total	**35**	**4,812**	**3,357**	**18**	**180**	**15,463**	**674**	**24,538**	**136**	**124**	**1,047**	**1,306**
1999 Total	**39**	**5,001**	**3,462**	**14**	**182**	**15,855**	**665**	**25,219**	**140**	**112**	**959**	**1,211**
2000 Total	**36**	**5,165**	**3,580**	**12**	**179**	**15,960**	**888**	**25,820**	**175**	**99**	**871**	**1,144**
2001 Total	**35**	**5,292**	**3,426**	**14**	**164**	**16,041**	**586**	**25,557**	**171**	**103**	**1,003**	**1,277**
2002 Total	**34**	**5,392**	**3,340**	**14**	**162**	**16,465**	**677**	**26,085**	**127**	**175**	**659**	**961**
2003 Total	**30**	**5,666**	**3,265**	**17**	**150**	**16,597**	**571**	**26,297**	**161**	**175**	**869**	**1,205**
2004 Total	**31**	**5,932**	**3,383**	**19**	**152**	**16,962**	**740**	**27,219**	**111**	**222**	**879**	**1,212**
2005 Total	**35**	**6,076**	**3,475**	**28**	**151**	**17,043**	**837**	**27,645**	**115**	**243**	**876**	**1,235**
2006 Total	**33**	**6,414**	**3,379**	**27**	**147**	**17,197**	**906**	**28,105**	**74**	**214**	**361**	**648**
2007 Total	**32**	**6,457**	**3,358**	**22**	**152**	**17,321**	**994**	**28,335**	**89**	**171**	**397**	**657**
2008 Total	**28**	**6,020**	**3,193**	**40**	**141**	**16,872**	**920**	**27,214**	**73**	**154**	**240**	**468**
2009 Total	**27**	**5,528**	**2,883**	**28**	**127**	**16,837**	**810**	**26,240**	**70**	**139**	**181**	**390**
2010 January	2	425	236	3	11	1,351	79	2,107	14	12	18	45
February	1	406	213	3	11	1,229	64	1,928	5	12	7	23
March	2	481	254	3	13	1,394	79	2,225	4	13	8	25
April	3	486	240	2	12	1,398	88	2,227	4	11	8	23
May	2	502	254	2	12	1,453	73	2,299	6	12	13	31
June	3	499	263	2	14	1,429	61	2,270	7	14	20	41
July	3	514	263	2	13	1,475	78	2,348	8	15	23	46
August	2	535	261	2	12	1,468	61	2,342	6	12	19	37
September	3	505	248	2	12	1,398	72	2,240	5	11	12	28
October	2	506	251	2	12	1,430	72	2,276	4	10	7	22
November	2	475	238	2	11	1,353	80	2,161	5	9	7	21
December	2	484	243	3	10	1,413	69	2,224	11	12	13	36
Total	**27**	**5,818**	**2,963**	**29**	**141**	**16,791**	**877**	**26,646**	**80**	**144**	**154**	**378**
2011 January	2	453	238	3	12	1,334	89	2,132	7	15	11	33
February	2	416	213	2	10	1,239	84	1,966	5	11	6	23
March	3	493	244	3	14	1,388	82	2,226	5	14	7	26
April	1	486	247	2	12	1,345	88	2,181	5	9	9	23
May	3	516	251	2	11	1,393	73	2,249	5	9	8	22
June	3	518	263	2	10	1,388	67	2,251	6	11	8	25
July	3	516	258	2	10	1,421	42	2,251	7	14	10	31
August	3	541	273	2	12	1,412	42	2,286	5	12	9	25
September	2	502	241	2	11	1,343	70	2,171	4	11	6	22
October	3	515	241	2	10	1,367	58	2,196	4	9	6	19
November	2	484	243	2	11	1,309	54	2,105	4	7	6	17
December	2	468	238	3	10	1,373	75	2,170	5	10	6	20
Total	**27**	**5,908**	**2,950**	**29**	**133**	**16,312**	**823**	**26,182**	**62**	**132**	**94**	**288**
2012 January	2	438	231	3	12	1,298	57	2,041	4	10	7	21
February	2	429	222	3	12	1,279	52	1,998	4	8	5	17
March	2	472	243	3	10	1,369	60	2,159	3	6	6	15
3-Month Total	**6**	**1,339**	**696**	**8**	**34**	**3,946**	**169**	**6,197**	**11**	**25**	**17**	**54**
2011 3-Month Total	**7**	**1,362**	**696**	**8**	**36**	**3,960**	**255**	**6,324**	**17**	**40**	**25**	**82**
2010 3-Month Total	**5**	**1,312**	**703**	**8**	**34**	**3,974**	**222**	**6,259**	**24**	**37**	**33**	**93**

[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 are for electric utilities and independent power producers.

[b] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

[c] 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 3.8b.

[d] Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[e] Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

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

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–3.8c. • 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.gov/totalenergy/data/monthly/#petroleum for all available data beginning in 1973.

Sources: See end of section.

Petroleum

Note 1. Petroleum Survey Respondents. The U.S. 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 (PSM).* 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 PSM, Appendix B, "Frame."

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. Petroleum 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. Petroleum Data Discrepancies. Due to differences internal to EIA data processing systems, some small discrepancies exist between data in the *Monthly Energy Review* 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–3.8c.

Table 3.6 Sources

Asphalt and Road Oil, Aviation Gasoline, Distillate Fuel Oil, Kerosene, Propane, Lubricants, Petroleum Coke, and Residual Fuel Oil
Product supplied data in thousand barrels per day for these petroleum products are from Table 3.5, and are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1.

Jet Fuel
Product supplied data in thousand barrels per day for kerosene-type jet fuel and, through 2004, naphtha-type jet fuel are from the U.S. Energy Information Administration's (EIA) *Petroleum Supply Annual (PSA)*, *Petroleum Supply Monthly (PSM)*, and earlier publications (see sources for Table 3.5). These data are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1. Total jet fuel product supplied is the sum of the data in trillion Btu for kerosene-type and naphtha-type jet fuel.

Liquefied Petroleum Gases (LPG) Total
Prior to the current two months, product supplied data in thousand barrels per day for the component products of LPG (ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene) are from the PSA, PSM, and earlier publications (see sources for Table 3.5). These data are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1. Total LPG product supplied is the sum of the data in trillion Btu for the LPG component products.

For the current two months, product supplied data in thousand barrels per day for total LPG are from Table 3.5, and are converted to trillion Btu by multiplying by the LPG heat content factors in Table A3.

Motor Gasoline
Product supplied data in thousand barrels per day for motor gasoline are from Table 3.5, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors in Table A3.

Other Petroleum Products
Prior to the current two months, product supplied data in thousand barrels per day for "other" petroleum products are from the PSA, PSM, and earlier publications (see sources for Table 3.5). "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; and beginning in 2005, also includes naphtha-type jet fuel. These data are converted to trillion Btu by multiplying by the appropriate heat content factors in MER Table A1. Total "Other" petroleum product supplied is the sum of the data in trillion Btu for the individual products.

For the current two months, total "Other" petroleum products supplied is calculated by first estimating total petroleum products supplied (product supplied data in thousand barrels per day for total petroleum from Table 3.5 are converted to trillion Btu by multiplying by the total petroleum consumption heat content factor in Table A3), and then subtracting data in trillion Btu (from Table 3.6) for asphalt and road oil, aviation gasoline, distillate fuel oil, jet fuel, kerosene, total LPG, lubricants, motor gasoline, petroleum coke, and residual fuel oil.

Total Petroleum
Total petroleum products supplied is the sum of the data in trillion Btu for the products (except "Propane") shown in Table. 3.6.

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: U.S. Energy Information Administration's (EIA), *Energy Data Reports*, "Petroleum Statement, Annual."
1981–2010: EIA, *Petroleum Supply Annual*.
2011 and 2012: 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 sources for 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 oil 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 to 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 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 to 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 allocated to the residential, commercial, and industrial sectors 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 allocated to the residential, commercial, and industrial sectors 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 allocated to the residential, commercial and industrial sectors in proportion to the 1979 shares, and the 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 sectors combined are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the combined sectors. Since 2003, residential sector LPG consumption is assumed to equal propane retail sales, with the remainder of the combined residential and commercial LPG consumption being assigned to the commercial sector. Prior to 2003, residential sector LPG consumption is based on the average of the State residential shares for 2003–2008, with the remainder of the combined residential and commercial LPG consumption being assigned to the commercial 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 78 percent (in 2008).

LPG consumed annually by the industrial sector is estimated as the difference between LPG total product supplied and the sum of the estimated LPG consumption by the residential, commercial, and transportation sectors. The industrial sector LPG consumption 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:

1973–1982: 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 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 sources for 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 sources for 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 to 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 allocated to the commercial and industrial sectors 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 allocated to the commercial and industrial sectors in proportion to the 1979 shares, and the 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 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.

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.

Table 3.8a Sources

Distillate Fuel Oil, Kerosene, Petroleum Coke, and Residual Fuel Oil
Residential and/or commercial sector consumption data in thousand barrels per day for these petroleum products are from Table 3.7a, and are converted to trillion Btu by

multiplying by the appropriate heat content factors in Table A1.

Liquefied Petroleum Gases (LPG)
Residential and commercial sector consumption data in thousand barrels per day for LPG are from Table 3.7a, and are converted to trillion Btu by multiplying by the propane heat content factor in Table A1.

Motor Gasoline
Commercial sector consumption data in thousand barrels per day for motor gasoline are from Table 3.7a, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors in Table A3.

Total Petroleum
Residential sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Residential Sector" in Table 3.8a. Commercial sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Commercial Sector" in Table 3.8a.

Table 3.8b Sources

Asphalt and Road Oil, Distillate Fuel Oil, Kerosene, Lubricants, Petroleum Coke, and Residual Fuel Oil
Industrial sector consumption data in thousand barrels per day for these petroleum products are from Table 3.7b, and are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1.

Liquefied Petroleum Gases (LPG)
Industrial sector consumption data for LPG are calculated by subtracting LPG consumption data in trillion Btu for the residential (Table 3.8a), commercial (Table 3.8a), and transportation (Table 3.8c) sectors from total LPG consumption (Table 3.6).

Motor Gasoline
Industrial sector consumption data in thousand barrels per day for motor gasoline are from Table 3.7b, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors in Table A3.

Other Petroleum Products
Industrial sector "Other" petroleum data are equal to the "Other" petroleum data in Table 3.6.

Total Petroleum
Industrial sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown in Table 3.8b.

Table 3.8c Sources

Aviation Gasoline, Distillate Fuel Oil, Lubricants, Petroleum Coke, and Residual Fuel Oil
Transportation and/or electric power sector consumption data in thousand barrels per day for these petroleum products are from Table 3.7c, and are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1.

Jet Fuel
Transportation sector consumption data in thousand barrels per day for kerosene-type jet fuel and, through 2004, naphtha-type jet fuel (see sources for Table 3.7c) are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1. Total transportation sector jet fuel consumption is the sum of the data in trillion Btu for kerosene-type and naphtha-type jet fuel.

Liquefied Petroleum Gases (LPG)
Transportation sector consumption data in thousand barrels per day for LPG are from Table 3.7c, and are converted to trillion Btu by multiplying by the propane heat content factor in Table A1.

Motor Gasoline
Transportation sector consumption data in thousand barrels per day for motor gasoline are from Table 3.7c, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors in Table A3.

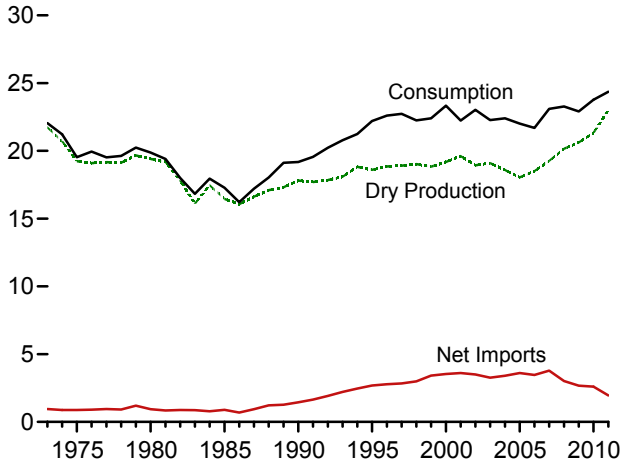
Total Petroleum
Transportation sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Transportation Sector" in Table 3.8c. Electric power sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Electric Power Sector" in Table 3.8c.

THIS PAGE INTENTIONALLY LEFT BLANK

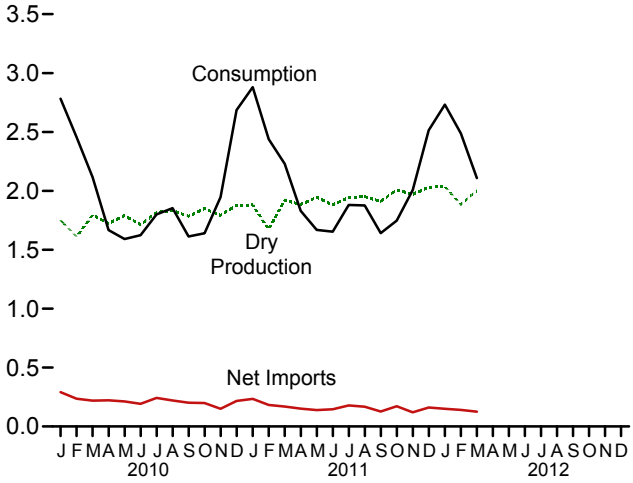
4. Natural Gas

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

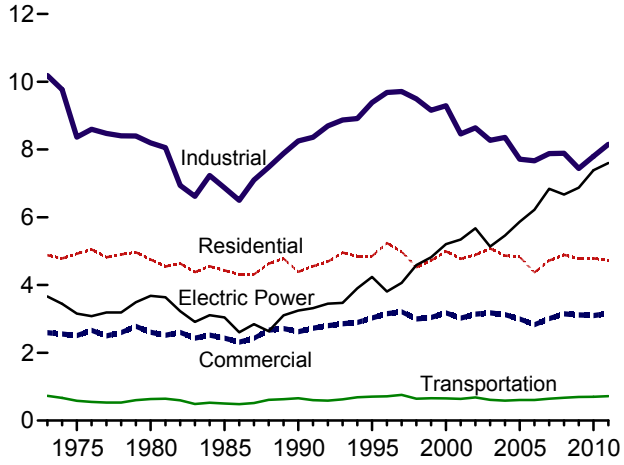
Overview, 1973-2011



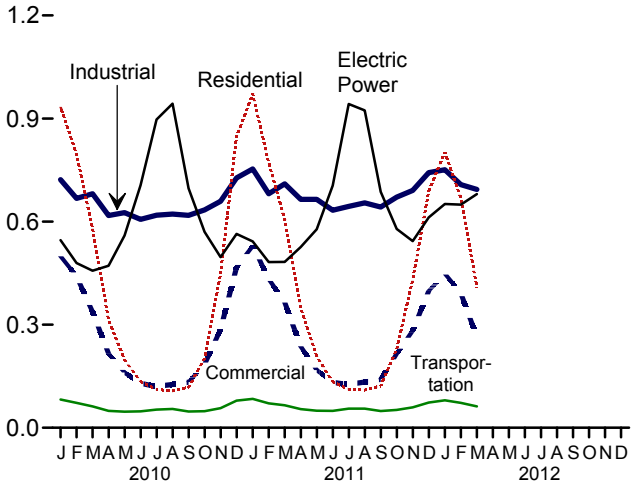
Overview, Monthly



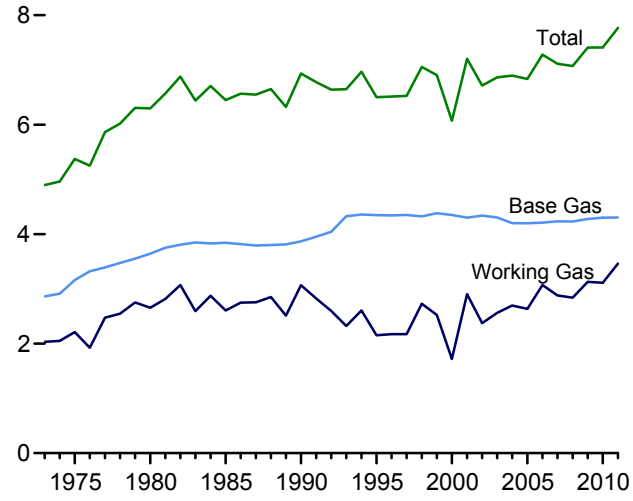
Consumption by Sector, 1973-2011



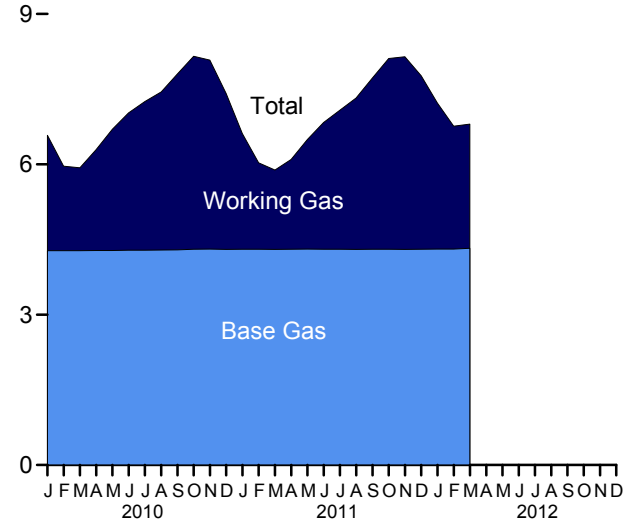
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2011



Underground Storage, End of Month



Web Page: http://www.eia.gov/totalenergy/data/monthly/#naturalgas.
Sources: Tables 4.1, 4.3, and 4.4.

Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Gross Withdrawals[a]	Marketed Production (Wet)[b]	Extraction Loss[c]	Dry Gas Production[d]	Supplemental Gaseous Fuels[e]	Trade			Net Storage Withdrawals[f]	Balancing Item[g]	Consumption[h]
						Imports	Exports	Net Imports			
1973 Total	**24,067**	[i]**22,648**	**917**	[i]**21,731**	**NA**	**1,033**	**77**	**956**	**-442**	**-196**	**22,049**
1975 Total	**21,104**	[i]**20,109**	**872**	[i]**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**	[j]**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**	**22,609**
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**	**-306**	**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**	**467**	**65**	**23,027**
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**	**461**	**22,403**
2005 Total	**23,457**	**18,927**	**876**	**18,051**	**64**	**4,341**	**729**	**3,612**	**52**	**236**	**22,014**
2006 Total	**23,535**	**19,410**	**906**	**18,504**	**66**	**4,186**	**724**	**3,462**	**-436**	**103**	**21,699**
2007 Total	**24,664**	**20,196**	**930**	**19,266**	**63**	**4,608**	**822**	**3,785**	**192**	**-203**	**23,104**
2008 Total	**25,636**	**21,112**	**953**	**20,159**	**61**	**3,984**	**963**	**3,021**	**34**	**2**	**23,277**
2009 Total	**26,057**	**21,648**	**1,024**	**20,624**	**65**	**3,751**	**1,072**	**2,679**	**-355**	**-103**	**22,910**
2010 January	2,224	1,838	88	1,750	5	385	94	291	822	-86	2,783
February	2,057	1,692	81	1,611	5	324	88	236	628	-24	2,456
March	2,296	1,884	90	1,794	5	319	100	219	34	65	2,117
April	2,187	1,810	86	1,723	5	298	76	223	-364	80	1,667
May	2,231	1,881	90	1,791	5	298	86	212	-416	-2	1,591
June	2,134	1,797	86	1,712	5	282	90	192	-326	41	1,624
July	2,221	1,908	91	1,817	6	329	86	243	-231	-35	1,800
August	2,241	1,924	92	1,832	6	305	84	221	-190	-15	1,853
September	2,251	1,874	89	1,785	5	282	79	202	-363	-16	1,612
October	2,343	1,942	93	1,849	6	295	96	199	-360	-54	1,639
November	2,266	1,882	90	1,792	5	273	124	150	77	-78	1,947
December	2,388	1,971	94	1,877	6	352	135	217	675	-89	2,685
Total	**26,836**	**22,402**	**1,070**	**21,332**	**65**	**3,741**	**1,137**	**2,604**	**-13**	**-213**	**23,775**
2011 January	2,309	[E] 1,972	92	[E] 1,880	6	371	136	235	799	[R] -40	[R] 2,880
February	2,109	[E] 1,752	79	[E] 1,674	5	308	125	183	584	[R] -8	[R] 2,438
March	2,423	[E] 2,020	99	[E] 1,921	6	314	145	170	145	[R] -12	[R] 2,229
April	2,363	[E] 1,979	95	[E] 1,884	5	278	127	152	-212	2	1,830
May	2,420	[E] 2,046	101	[E] 1,945	3	271	132	139	-398	-21	1,668
June	2,330	[E] 1,977	95	[E] 1,881	5	265	120	146	-340	-38	1,653
July	2,344	[E] 2,044	99	[E] 1,944	5	293	113	179	-244	-5	1,880
August	2,371	[E] 2,051	99	[E] 1,951	5	279	111	168	-244	-3	1,877
September	2,371	[E] 2,005	95	[E] 1,910	5	253	127	[R] 127	-398	-2	1,641
October	2,496	[E] 2,112	104	[E] 2,008	5	281	110	171	-385	-53	1,747
November	2,483	[E] 2,074	104	[E] 1,971	[R] 5	[R] 247	128	120	-37	-52	2,007
December	2,557	[E] 2,138	107	[E] 2,031	6	[R] 295	134	[R] 161	384	[R] -66	2,515
Total	**28,576**	[E] **24,170**	**1,169**	[E] **23,000**	**61**	[R] **3,456**	**1,507**	[R] **1,949**	**-348**	[R] **-297**	[R] **24,365**
2012 January	2,575	[E] 2,145	[R] 109	[RE] 2,037	6	[R] 281	130	[R] 150	545	[R] -6	[R] 2,732
February	[R] 2,380	[E] 1,986	[R] 102	[RE] 1,884	5	[R] 270	130	[R] 140	459	[R] (s)	[R] 2,488
March	2,534	[E] 2,115	113	[E] 2,003	6	266	141	125	-39	14	2,109
3-Month Total	**7,489**	[E] **6,246**	**324**	[E] **5,923**	**17**	**817**	**401**	**416**	**965**	**8**	**7,328**
2011 3-Month Total	**6,841**	[E] **5,744**	**269**	[E] **5,475**	**17**	**993**	**406**	**587**	**1,528**	**-60**	**7,548**
2010 3-Month Total	**6,576**	**5,413**	**258**	**5,155**	**16**	**1,027**	**281**	**747**	**1,485**	**-45**	**7,356**

[a] Gas withdrawn from natural gas and crude oil wells; excludes lease condensate.

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

[c] See Note 2, "Natural Gas Extraction Loss," at end of section.

[d] Marketed production (wet) minus extraction loss.

[e] See Note 3, "Supplemental Gaseous Fuels," at end of section.

[f] Net withdrawals from underground storage. For 1980-2010, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Natural Gas Storage," at end of section.

[g] See Note 5, "Natural Gas 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).

[h] See Note 6, "Natural Gas Consumption," at end of section.

[i] May include unknown quantities of nonhydrocarbon gases.

[j] 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, "Natural Gas Consumption, 1989-1992," at end of section.

R=Revised. E=Estimate. (s)=Less than 0.5 billion cubic feet and greater than -0.5 billion cubic feet. NA=Not available.

Notes:
- See Note 8, "Natural Gas Adjustments, 1993-2000," 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.gov/totalenergy/data/monthly/#naturalgas 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: 1973-2006—**U.S. Energy Information Administration (EIA), *Natural Gas Annual,* annual reports. **2007 forward—**EIA, *Natural Gas Monthly,* May 2012, Table 1.

Table 4.2 Natural Gas Trade by Country

(Billion Cubic Feet)

	Imports									Exports				
	Algeria[a]	Canada[b]	Egypt[a]	Mexico[b]	Nigeria[a]	Qatar[a]	Trinidad and Tobago[a]	Other[a,c]	Total	Canada[b]	Japan[a]	Mexico[b]	Other[a,d]	Total
1973 Total	**3**	**1,028**	**0**	**2**	**0**	**0**	**0**	**0**	**1,033**	**15**	**48**	**14**	**0**	**77**
1975 Total	**5**	**948**	**0**	**0**	**0**	**0**	**0**	**0**	**953**	**10**	**53**	**9**	**0**	**73**
1980 Total	**86**	**797**	**0**	**102**	**0**	**0**	**0**	**0**	**985**	**0**	**45**	**4**	**0**	**49**
1985 Total	**24**	**926**	**0**	**0**	**0**	**0**	**0**	**0**	**950**	**0**	**53**	**2**	**0**	**55**
1990 Total	**84**	**1,448**	**0**	**0**	**0**	**0**	**0**	**0**	**1,532**	**17**	**53**	**16**	**0**	**86**
1995 Total	**18**	**2,816**	**0**	**7**	**0**	**0**	**0**	**0**	**2,841**	**28**	**65**	**61**	**0**	**154**
1996 Total	**35**	**2,883**	**0**	**14**	**0**	**0**	**0**	**5**	**2,937**	**52**	**68**	**34**	**0**	**153**
1997 Total	**66**	**2,899**	**0**	**17**	**0**	**0**	**0**	**12**	**2,994**	**56**	**62**	**38**	**0**	**157**
1998 Total	**69**	**3,052**	**0**	**15**	**0**	**0**	**0**	**17**	**3,152**	**40**	**66**	**53**	**0**	**159**
1999 Total	**76**	**3,368**	**0**	**55**	**0**	**20**	**51**	**17**	**3,586**	**39**	**64**	**61**	**0**	**163**
2000 Total	**47**	**3,544**	**0**	**12**	**13**	**46**	**99**	**21**	**3,782**	**73**	**66**	**106**	**0**	**244**
2001 Total	**65**	**3,729**	**0**	**10**	**38**	**23**	**98**	**14**	**3,977**	**167**	**66**	**141**	**0**	**373**
2002 Total	**27**	**3,785**	**0**	**2**	**8**	**35**	**151**	**8**	**4,015**	**189**	**63**	**263**	**0**	**516**
2003 Total	**53**	**3,437**	**0**	**0**	**50**	**14**	**378**	**11**	**3,944**	**271**	**66**	**343**	**0**	**680**
2004 Total	**120**	**3,607**	**0**	**0**	**12**	**12**	**462**	**46**	**4,259**	**395**	**62**	**397**	**0**	**854**
2005 Total	**97**	**3,700**	**73**	**9**	**8**	**3**	**439**	**11**	**4,341**	**358**	**65**	**305**	**0**	**729**
2006 Total	**17**	**3,590**	**120**	**13**	**57**	**0**	**389**	**0**	**4,186**	**341**	**61**	**322**	**0**	**724**
2007 Total	**77**	**3,783**	**115**	**54**	**95**	**18**	**448**	**18**	**4,608**	**482**	**47**	**292**	**2**	**822**
2008 Total	**0**	**3,589**	**55**	**43**	**12**	**3**	**267**	**15**	**3,984**	**559**	**39**	**365**	**0**	**963**
2009 Total	**0**	**3,271**	**160**	**28**	**13**	**13**	**236**	**29**	**3,751**	**701**	**31**	**338**	**3**	**1,072**
2010 January	0	327	17	1	0	12	22	6	385	68	2	23	0	94
February	0	277	12	1	0	6	16	12	324	60	2	22	3	88
March	0	276	9	5	3	1	16	9	319	77	2	21	0	100
April	0	252	6	5	9	9	15	3	298	50	4	22	0	76
May	0	257	9	4	9	0	16	3	298	55	2	29	0	86
June	0	248	6	2	11	0	11	5	282	51	2	34	3	90
July	0	291	6	1	5	0	17	8	329	50	4	32	0	86
August	0	282	0	1	0	0	17	5	305	49	2	33	0	84
September	0	250	6	3	3	0	16	3	282	50	7	23	0	79
October	0	257	3	4	2	5	15	9	295	63	2	25	6	96
November	0	242	0	(s)	0	9	14	9	273	84	2	30	8	124
December	0	322	0	1	0	4	15	9	352	82	3	38	12	135
Total	**0**	**3,280**	**73**	**30**	**42**	**46**	**190**	**81**	**3,741**	**739**	**33**	**333**	**32**	**1,137**
2011 January	0	331	3	(s)	0	13	16	9	371	85	2	37	13	136
February	0	276	6	(s)	0	0	11	15	308	84	2	37	3	125
March	0	275	6	(s)	0	14	10	9	314	98	2	41	3	145
April	0	245	6	(s)	0	4	11	13	278	76	2	43	6	127
May	0	235	3	(s)	0	24	8	0	271	80	3	44	6	132
June	0	238	6	(s)	0	5	11	6	265	71	2	47	0	120
July	0	272	0	(s)	0	5	13	3	293	64	0	47	3	113
August	0	249	0	(s)	2	8	11	9	279	67	2	42	0	111
September	0	233	0	(s)	0	4	8	9	253	77	2	39	8	127
October	0	250	3	1	0	8	8	12	281	64	0	43	3	110
November	0	232	0	(s)	0	3	12	0	R 247	84	2	39	3	128
December	0	R 269	3	(s)	0	4	10	9	R 295	87	0	42	5	134
Total	**0**	**R 3,104**	**35**	**3**	**2**	**91**	**129**	**92**	**R 3,456**	**937**	**18**	**500**	**52**	**1,507**
2012 January	0	R 265	0	(s)	0	4	9	3	R 281	84	3	40	3	130
February	0	R 250	3	(s)	0	0	11	6	R 270	86	2	42	0	130
March	0	247	0	(s)	0	4	13	3	266	93	0	46	3	141
3-Month Total	**0**	**762**	**3**	**(s)**	**0**	**7**	**34**	**12**	**817**	**263**	**5**	**128**	**6**	**401**
2011 3-Month Total	**0**	**882**	**15**	**1**	**0**	**27**	**37**	**32**	**993**	**267**	**6**	**114**	**19**	**406**
2010 3-Month Total	**0**	**880**	**37**	**8**	**3**	**19**	**54**	**27**	**1,027**	**206**	**6**	**67**	**3**	**281**

[a] As liquefied natural gas.

[b] 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 9, "Natural Gas Imports and Exports," at end of section.

[c] Australia in 1997-2001 and 2004; Brunei in 2002; Equatorial Guinea in 2007; Indonesia in 1986 and 2000; Malaysia in 1999 and 2002-2005; Norway in 2008 forward; Oman in 2000-2005; Peru in 2010 and 2011; United Arab Emirates in 1996-2000; Yemen in 2010 forward; and Other (unassigned) in 2004.

[d] Brazil in 2010 forward; China in 2011; Chile in 2011; India in 2010 forward; Russia in 2007; South Korea in 2009-2011; Spain in 2010 and 2011; and United Kingdom in 2010 and 2011.

R=Revised. (s)=Less than 500 million cubic feet.

Notes: • See Note 9, "Natural Gas 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.gov/totalenergy/data/monthly/#naturalgas for all available data beginning in 1973.

Sources: • **1973-1987:** U.S. Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • **1988-2008:** EIA, *Natural Gas Annual,* annual reports. • **2009 forward:** EIA, *Natural Gas Monthly,* May 2012, Tables 4 and 5; and U.S. Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
			Industrial					Transportation				
				Other Industrial								
	Residential	Commercial[a]	Lease and Plant Fuel	CHP[b]	Non-CHP[c]	Total	Total	Pipelines[d] and Distribution[e]	Vehicle Fuel	Total	Electric Power Sector[f,g]	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	**4,924**	**2,508**	**1,396**	**([h])**	**6,968**	**6,968**	**8,365**	**583**	**NA**	**583**	**3,158**	**19,538**
1980 Total	**4,752**	**2,611**	**1,026**	**([h])**	**7,172**	**7,172**	**8,198**	**635**	**NA**	**635**	**3,682**	**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**	**[i] 5,963**	**[i] 7,018**	**8,255**	**660**	**(s)**	**660**	**[i] 3,245**	**[i] 19,174**
1995 Total	**4,850**	**3,031**	**1,220**	**1,258**	**6,906**	**8,164**	**9,384**	**700**	**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**	**22,609**
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	**4,996**	**3,182**	**1,151**	**1,386**	**6,757**	**8,142**	**9,293**	**642**	**13**	**655**	**5,206**	**23,333**
2001 Total	**4,771**	**3,023**	**1,119**	**1,310**	**6,035**	**7,344**	**8,463**	**625**	**15**	**640**	**5,342**	**22,239**
2002 Total	**4,889**	**3,144**	**1,113**	**1,240**	**6,287**	**7,527**	**8,640**	**667**	**15**	**682**	**5,672**	**23,027**
2003 Total	**5,079**	**3,179**	**1,122**	**1,144**	**6,007**	**7,150**	**8,273**	**591**	**18**	**610**	**5,135**	**22,277**
2004 Total	**4,869**	**3,129**	**1,098**	**1,191**	**6,066**	**7,256**	**8,354**	**566**	**21**	**587**	**5,464**	**22,403**
2005 Total	**4,827**	**2,999**	**1,112**	**1,084**	**5,518**	**6,601**	**7,713**	**584**	**23**	**607**	**5,869**	**22,014**
2006 Total	**4,368**	**2,832**	**1,142**	**1,115**	**5,412**	**6,527**	**7,669**	**584**	**24**	**608**	**6,222**	**21,699**
2007 Total	**4,722**	**3,013**	**1,226**	**1,050**	**5,604**	**6,655**	**7,881**	**621**	**25**	**646**	**6,841**	**23,104**
2008 Total	**4,892**	**3,153**	**1,220**	**955**	**5,715**	**6,670**	**7,890**	**648**	**26**	**674**	**6,668**	**23,277**
2009 Total	**4,779**	**3,119**	**1,275**	**990**	**5,178**	**6,167**	**7,443**	**670**	**27**	**697**	**6,873**	**22,910**
2010 January	934	499	106	90	526	616	722	80	3	82	546	2,783
February	796	441	98	80	490	570	667	70	2	72	480	2,456
March	580	337	109	84	488	572	681	60	3	62	457	2,117
April	313	215	104	79	435	514	618	46	3	49	471	1,667
May	198	161	107	82	437	519	626	44	3	47	560	1,591
June	134	130	102	84	420	504	607	45	3	48	706	1,624
July	111	120	107	91	420	512	619	50	3	53	897	1,800
August	107	127	108	95	419	514	622	52	3	55	943	1,853
September	117	133	107	87	424	511	618	45	3	47	697	1,612
October	202	185	112	84	438	522	634	45	3	48	570	1,639
November	447	287	108	82	469	551	659	55	3	57	497	1,947
December	848	467	114	92	521	613	727	76	3	79	564	2,685
Total	**4,787**	**3,102**	**1,282**	**1,029**	**5,488**	**6,517**	**7,800**	**669**	**31**	**700**	**7,387**	**23,775**
2011 January	[R] 972	529	[E] 113	89	551	640	753	[E] 81	[E] 3	[E] 84	542	[R] 2,880
February	[R] 771	[R] 433	[E] 100	79	501	581	681	[E] 69	[E] 3	[E] 71	482	[R] 2,438
March	[R] 607	[R] 364	[E] 116	81	513	594	710	[E] 63	[E] 3	[E] 66	483	[R] 2,229
April	348	236	[E] 113	82	469	552	665	[E] 51	[E] 3	[E] 54	526	1,830
May	208	168	[E] 117	87	461	548	665	[E] 47	[E] 3	[E] 50	578	1,668
June	133	133	[E] 113	83	437	520	633	[E] 47	[E] 3	[E] 49	705	1,653
July	112	126	[E] 117	88	439	527	644	[E] 53	[E] 3	[E] 56	942	1,880
August	110	133	[E] 117	89	448	537	655	[E] 53	[E] 3	[E] 56	923	1,877
September	122	141	[E] 115	84	444	528	643	[E] 46	[E] 3	[E] 49	686	1,641
October	229	216	[E] 121	81	469	550	671	[E] 49	[E] 3	[E] 52	578	1,747
November	431	283	[E] 119	86	487	572	691	[E] 56	[E] 3	[E] 59	543	2,007
December	688	398	[E] 122	94	527	620	742	[E] 71	[E] 3	[E] 74	612	2,515
Total	**[R] 4,731**	**[R] 3,161**	**[E] 1,383**	**1,024**	**5,746**	**6,769**	**8,153**	**[RE] 685**	**[E] 33**	**[E] 718**	**7,602**	**[R] 24,365**
2012 January	802	[R] 448	[E] 123	94	534	628	751	[E] 77	[E] 3	[E] 80	651	[R] 2,732
February	668	391	[E] 114	87	[R] 507	[R] 594	[R] 707	[E] 70	[E] 3	[E] 73	649	[R] 2,488
March	409	264	[E] 121	89	484	573	694	[E] 59	[E] 3	[E] 62	680	2,109
3-Month Total	**1,879**	**1,103**	**[E] 358**	**270**	**1,524**	**1,794**	**2,152**	**[E] 206**	**[E] 8**	**[E] 214**	**1,981**	**7,328**
2011 3-Month Total	**2,350**	**1,326**	**[E] 329**	**250**	**1,566**	**1,815**	**2,144**	**[E] 212**	**[E] 8**	**[E] 220**	**1,507**	**7,548**
2010 3-Month Total	**2,309**	**1,277**	**313**	**253**	**1,504**	**1,758**	**2,070**	**209**	**8**	**217**	**1,482**	**7,356**

[a] All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Table 7.4c for CHP fuel use.

[b] Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-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.

[g] 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."

[i] 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, "Natural Gas Consumption, 1989-1992," at end of section.

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

Notes: • Data are for natural gas, plus a small amount of supplemental gaseous fuels. • See Note 8, "Natural Gas Adjustments, 1993-2000," at end of section. • 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.gov/totalenergy/data/monthly/#naturalgas for all available data beginning in 1973.

Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total** and **Pipelines and Distribution: 1973-2006—**U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA),* annual reports and unpublished revisions. **2007 forward—**EIA, *Natural Gas Monthly (NGM),* May 2012, Table 2. • **Industrial CHP:** Table 7.4c. • **Vehicle Fuel: 1990 and 1991—**EIA, NGA 2000, (November 2001), Table 95. **1992-1998—**EIA, "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). **1999-2006—**EIA, NGA, annual reports. **2007 forward—**EIA, NGM, May 2012, Table 2. • **Electric Power Sector:** Table 7.4b.

Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period			Change in Working Gas From Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[a]	Volume	Percent	Withdrawals	Injections	Net[b,c]
1973 Total	**2,864**	**2,034**	**4,898**	**305**	**17.6**	**1,533**	**1,974**	**-442**
1975 Total	**3,162**	**2,212**	**5,374**	**162**	**7.9**	**1,760**	**2,104**	**-344**
1980 Total	**3,642**	**2,655**	**6,297**	**-99**	**-3.6**	**1,910**	**1,896**	**14**
1985 Total	**3,842**	**2,607**	**6,448**	**-270**	**-9.4**	**2,359**	**2,128**	**231**
1990 Total	**3,868**	**3,068**	**6,936**	**555**	**22.1**	**1,934**	**2,433**	**-499**
1995 Total	**4,349**	**2,153**	**6,503**	**-453**	**-17.4**	**2,974**	**2,566**	**408**
1996 Total	**4,341**	**2,173**	**6,513**	**19**	**.9**	**2,911**	**2,906**	**6**
1997 Total	**4,350**	**2,175**	**6,525**	**2**	**.1**	**2,824**	**2,800**	**24**
1998 Total	**4,326**	**2,730**	**7,056**	**554**	**25.5**	**2,379**	**2,905**	**-526**
1999 Total	**4,383**	**2,523**	**6,906**	**-207**	**-7.6**	**2,772**	**2,598**	**174**
2000 Total	**4,352**	**1,719**	**6,071**	**-806**	**-31.9**	**3,498**	**2,684**	**814**
2001 Total	**4,301**	**2,904**	**7,204**	**1,185**	**68.9**	**2,309**	**3,464**	**-1,156**
2002 Total	**4,340**	**2,375**	**6,715**	**-528**	**-18.2**	**3,138**	**2,670**	**468**
2003 Total	**4,303**	**2,563**	**6,866**	**187**	**7.9**	**3,099**	**3,292**	**-193**
2004 Total	**4,201**	**2,696**	**6,897**	**133**	**5.2**	**3,037**	**3,150**	**-113**
2005 Total	**4,200**	**2,635**	**6,835**	**-61**	**-2.3**	**3,057**	**3,002**	**55**
2006 Total	**4,211**	**3,070**	**7,281**	**435**	**16.5**	**2,493**	**2,924**	**-431**
2007 Total	**4,234**	**2,879**	**7,113**	**-191**	**-6.2**	**3,325**	**3,133**	**192**
2008 Total	**4,232**	**2,840**	**7,073**	**-39**	**-1.4**	**3,374**	**3,340**	**34**
2009 Total	**4,277**	**3,130**	**7,407**	**290**	**10.2**	**2,966**	**3,315**	**-349**
2010 January	4,276	2,304	6,580	171	8.0	873	63	811
February	4,278	1,683	5,961	-75	-4.2	657	38	619
March	4,278	1,652	5,930	-7	-.4	238	207	31
April	4,278	2,011	6,289	101	5.3	68	427	-360
May	4,279	2,420	6,699	45	1.9	53	463	-410
June	4,287	2,740	7,027	-20	-.7	64	385	-321
July	4,287	2,966	7,253	-125	-4.0	112	339	-227
August	4,290	3,153	7,443	-206	-6.1	137	323	-186
September	4,294	3,508	7,801	-138	-3.8	52	411	-359
October	4,305	3,851	8,156	41	1.1	52	407	-355
November	4,309	3,769	8,078	-69	-1.8	237	163	74
December	4,301	3,111	7,412	-19	-.6	731	66	665
Total	**4,301**	**3,111**	**7,412**	**-19**	**-.6**	**3,274**	**3,291**	**-17**
2011 January	4,306	2,308	6,614	4	.2	852	53	799
February	4,306	1,724	6,029	40	2.4	668	84	584
March	4,304	1,581	5,884	-72	-4.3	317	172	145
April	4,307	1,789	6,096	-222	-11.0	108	320	-212
May	4,308	2,188	6,495	-232	-9.6	66	464	-398
June	4,305	2,530	6,835	-210	-7.7	90	430	-340
July	4,304	2,774	7,079	-192	-6.5	124	368	-244
August	4,304	3,020	7,323	-133	-4.2	138	382	-244
September	4,305	3,416	7,721	-92	-2.6	64	462	-398
October	4,305	3,804	8,109	-46	-1.2	62	448	-385
November	4,302	3,843	8,145	74	2.0	198	235	-37
December	4,305	3,462	7,767	351	11.3	488	105	384
Total	**4,305**	**3,462**	**7,767**	**351**	**11.3**	**3,175**	**3,523**	**-348**
2012 January	4,307	2,916	7,223	608	26.4	633	88	545
February	4,307	2,455	6,762	731	42.4	526	67	459
March	4,325	2,477	6,802	896	56.7	217	256	-39
3-Month Total	– –	– –	– –	– –	– –	**1,376**	**411**	**965**
2011 3-Month Total	– –	– –	– –	– –	– –	**1,838**	**310**	**1,528**
2010 3-Month Total	– –	– –	– –	– –	– –	**1,768**	**307**	**1,461**

[a] For total underground storage capacity at the end of each calendar year, see Note 4, "Natural Gas Storage," at end of section.

[b] For 1980-2010, data differ from those shown on Table 4.1, which includes liquefied natural gas storage for that period.

[c] 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, "Natural Gas 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.gov/totalenergy/data/monthly/#naturalgas for all available data beginning in 1973.

Sources: • **Storage Activity: 1973-1975—**U.S. Energy Information Administration (EIA), *Natural Gas Annual 1994, Volume 2,* Table 9. **1976-1979—**EIA, *Natural Gas Production and Consumption 1979,* Table 1. **1980-1995—**EIA, *Historical Natural Gas Annual 1930 Through 2000,* Table 11. **1996-2006—**EIA, *Natural Gas Monthly (NGM),* monthly issues. **2007 forward—**EIA, NGM, May 2012, Table 8. • **All Other Data: 1973 and 1974—**American Gas Association, *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." **1996-2006—**EIA, NGM, monthly issues. **2007 forward—**EIA, NGM, May 2012, Table 8.

Natural Gas

Note 1. Natural Gas Production. Final annual data are from the U.S. Energy Information Administration (EIA) *Natural Gas Annual (NGA)*.

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*).

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.

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. Natural Gas 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, and 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, the amount consumed by each energy-use sector is estimated by EIA. These estimates are used to create natural gas (without supplemental gaseous fuels) data for Tables 1.3, 2.2, 2.3, 2.4, and 2.6 (note: to avoid double-counting in these tables, supplemental gaseous fuels are accounted for in their primary energy category: "Coal," "Petroleum," or "Biomass"). It is 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), and then multiplied by total supplemental gaseous fuels consumption (see Table 4.1). 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. Natural Gas 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, which includes both active and inactive fields, at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

1975	6,280	**1988**	8,124	**2001**	8,182
1976	6,544	**1989**	8,120	**2002**	8,207
1977	6,678	**1990**	7,794	**2003**	8,206
1978	6,890	**1991**	7,993	**2004**	8,255
1979	6,929	**1992**	7,932	**2005**	8,268
1980	7,434	**1993**	7,989	**2006**	8,330
1981	7,805	**1994**	8,043	**2007**	8,402
1982	7,915	**1995**	7,953	**2008**	8,499
1983	7,985	**1996**	7,980	**2009**	8,656
1984	8,043	**1997**	8,332	**2010**	8,764
1985	8,087	**1998**	8,179	**2011**	P8,776
1986	8,145	**1999**	8,229		
1987	8,124	**2000**	8,241		

P=Preliminary

Monthly underground storage data are collected from the Federal Energy Regulatory Commission 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 1980–2010 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. Natural Gas 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 that 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. Natural Gas 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. Natural Gas 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. Natural Gas Data Adjustments, 1993–2000. For 1993–2000, the original data for natural gas delivered to industrial consumers (now "Other Industrial" in Table 4.3) included deliveries to both industrial users and independent power producers (IPPs). These data were adjusted to remove the estimated consumption at IPPs from "Other Industrial" and include it with electric utilities under "Electric Power Sector." (To estimate the monthly IPP consumption, the monthly pattern for Other Industrial CHP in Table 4.3 was used.)

For 1996–2000, monthly data for several natural gas series shown in EIA's Natural Gas Navigator (see http://www.eia.gov/dnav/ng/ng_cons_sum_dcu_nus_m.htm) were not reconciled and updated to be consistent with the final annual data in EIA's NGA. In the *Monthly Energy Review*, monthly data for these series were adjusted so that the monthly data sum to the final annual values. The Table 4.1 data series (and years) that were adjusted are: Gross Withdrawals (1996, 1997), Marketed Production (1997), Extraction Loss (1997, 1998, 2000), Dry Gas Production (1996, 1997), Supplemental Gaseous Fuels (1997–2000), Balancing Item (1997–2000), and Total Consumption (1997–2000). The Table 4.3 data series (and years) that were adjusted are: Lease and Plant Fuel (1997–2000), Total Industrial (1997–2000), Pipelines and Distribution (2000), Total Transportation (2000), and Total Consumption (1997–2000).

Note 9. Natural Gas 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, Egypt, Equatorial Guinea, Indonesia, Malaysia, Nigeria, Norway, Oman, Peru, Qatar, Trinidad and Tobago, the United Arab Emirates, and Yemen. 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 Brazil, China, Chile, India, Japan, Russia, South Korea, Spain, and United Kingdom. Also, small amounts of LNG have gone to Mexico since 1998.

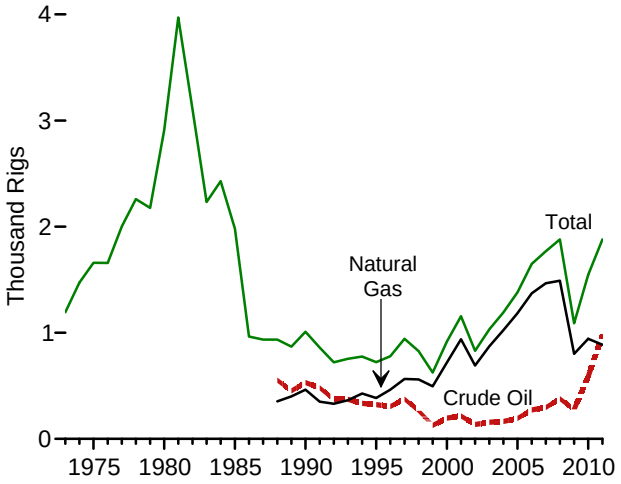
Annual and final monthly data are from the annual EIA Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be reported by month for the calendar year.

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*.

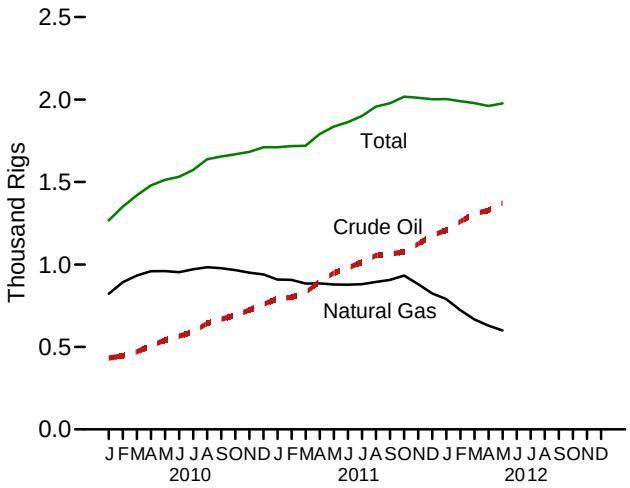
5. Crude Oil and Natural Gas Resource Development

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

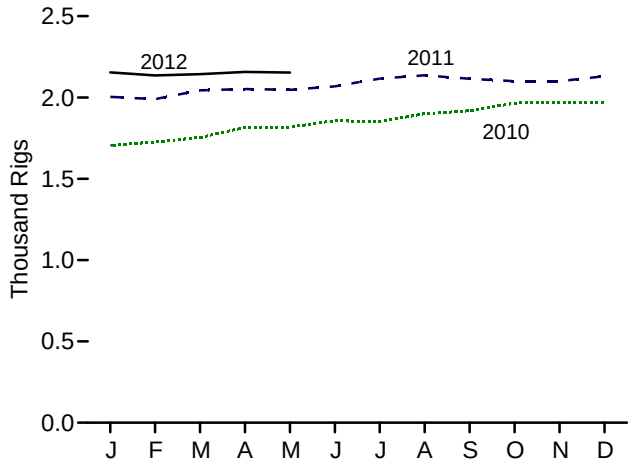
Rotary Rigs in Operation by Type, 1973-2011



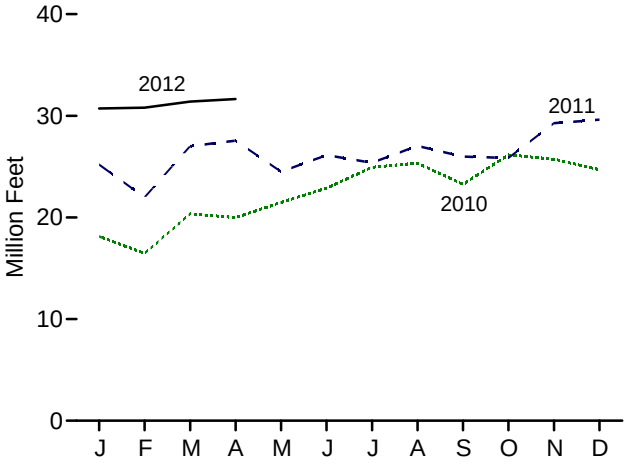
Rotary Rigs in Operation by Type, Monthly



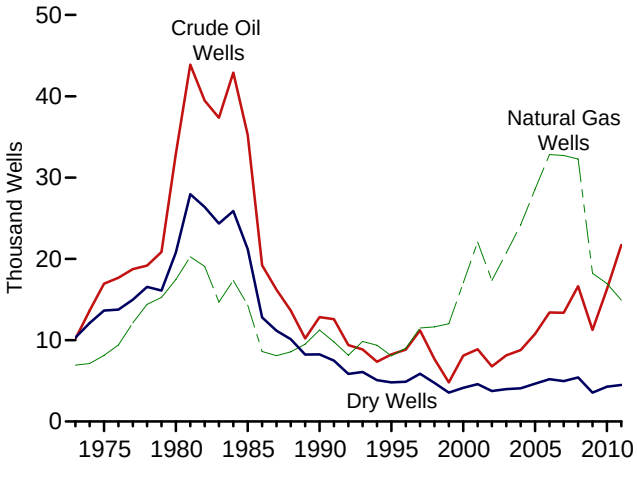
Active Well Service Rig Count, Monthly



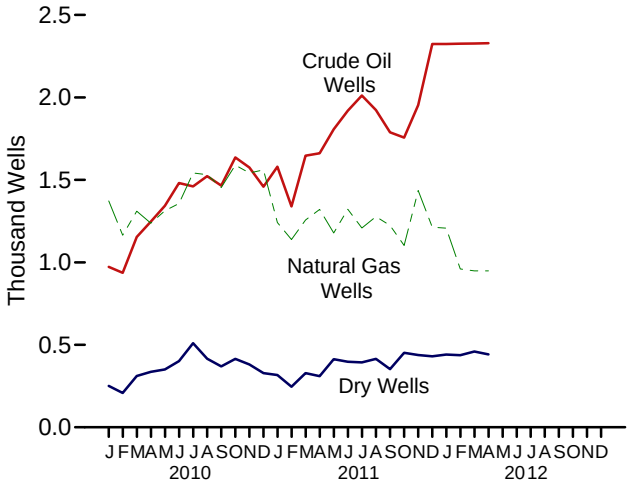
Footage Drilled, Monthly



Total Wells Drilled by Type, 1973-2011



Total Wells Drilled by Type, Monthly



Web Page: http://www.eia.gov/totalenergy/data/monthly/#crude.
Sources: Tables 5.1 and 5.2.

Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements

(Number of Rigs)

	Rotary Rigs in Operation[a]					Active Well Service Rig Count[c]
	By Site		By Type			
	Onshore	Offshore	Crude Oil	Natural Gas	Total[b]	
1973 Average	**1,110**	**84**	**NA**	**NA**	**1,194**	**2,008**
1975 Average	**1,554**	**106**	**NA**	**NA**	**1,660**	**2,486**
1980 Average	**2,678**	**231**	**NA**	**NA**	**2,909**	**4,089**
1985 Average	**1,774**	**206**	**NA**	**NA**	**1,980**	**4,716**
1990 Average	**902**	**108**	**532**	**464**	**1,010**	**3,658**
1995 Average	**622**	**101**	**323**	**385**	**723**	**3,041**
1996 Average	**671**	**108**	**306**	**464**	**779**	**3,445**
1997 Average	**821**	**122**	**376**	**564**	**943**	**3,499**
1998 Average	**703**	**123**	**264**	**560**	**827**	**3,014**
1999 Average	**519**	**106**	**128**	**496**	**625**	**2,232**
2000 Average	**778**	**140**	**197**	**720**	**918**	**2,692**
2001 Average	**1,003**	**153**	**217**	**939**	**1,156**	**2,267**
2002 Average	**717**	**113**	**137**	**691**	**830**	**1,830**
2003 Average	**924**	**108**	**157**	**872**	**1,032**	**1,967**
2004 Average	**1,095**	**97**	**165**	**1,025**	**1,192**	**2,064**
2005 Average	**1,287**	**94**	**194**	**1,184**	**1,381**	**2,222**
2006 Average	**1,559**	**90**	**274**	**1,372**	**1,649**	**2,364**
2007 Average	**1,695**	**72**	**297**	**1,466**	**1,768**	**2,388**
2008 Average	**1,814**	**65**	**379**	**1,491**	**1,879**	**2,515**
2009 Average	**1,046**	**44**	**278**	**801**	**1,089**	**1,722**
2010 January	1,225	42	433	822	1,267	1,706
February	1,305	45	446	892	1,350	1,726
March	1,368	51	471	933	1,419	1,754
April	1,426	53	508	959	1,479	1,816
May	1,464	49	541	960	1,513	1,818
June	1,511	20	566	953	1,531	1,857
July	1,558	15	591	971	1,573	1,852
August	1,619	20	644	983	1,638	1,900
September	1,635	19	668	977	1,655	1,918
October	1,647	21	693	966	1,668	1,965
November	1,662	22	723	950	1,683	1,971
December	1,687	24	759	940	1,711	1,968
Average	**1,514**	**31**	**591**	**943**	**1,546**	**1,854**
2011 January	1,686	26	793	909	1,711	2,004
February	1,692	26	801	907	1,718	1,990
March	1,694	26	830	884	1,720	2,044
April	1,762	28	896	885	1,790	2,052
May	1,804	32	948	878	1,836	2,047
June	1,829	34	979	877	1,863	2,069
July	1,865	35	1,014	880	1,900	2,116
August	1,923	35	1,055	894	1,957	2,136
September	1,946	32	1,063	907	1,978	2,115
October	1,982	35	1,077	933	2,017	2,100
November	1,974	37	1,125	880	2,011	2,100
December	1,961	42	1,177	824	2,002	2,131
Average	**1,846**	**32**	**984**	**887**	**1,879**	**2,075**
2012 January	1,961	42	1,208	790	2,003	2,154
February	1,949	42	1,261	723	1,990	2,135
March	1,935	43	1,307	667	1,979	2,143
April	1,917	44	1,329	629	1,961	2,157
May	1,931	46	1,373	600	1,977	2,153
5-Month Average	**1,938**	**43**	**1,296**	**681**	**1,982**	**2,149**
2011 5-Month Average	**1,729**	**27**	**856**	**892**	**1,757**	**2,027**
2010 5-Month Average	**1,361**	**48**	**481**	**915**	**1,409**	**1,764**

[a] Rotary rigs in operation are reported weekly. Monthly data are averages of 4- or 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.

[b] 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.

[c] 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 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.gov/totalenergy/data/monthly/#crude for all available data beginning in 1973.

Sources: • **Rotary Rigs in Operation:** Baker Hughes, Inc., Houston, TX, *Rotary Rigs Running—by State,* used with permission. See http://investor.shareholder.com/bhi/rig_counts/rc_index.cfm. • **Active Well Service Rig Count:** Cameron International Corporation, Houston, TX. See http://www.c-a-m.com/Forms/Product.aspx?prodID=cdc209c4-79a3-47e5-99c2-fdeda6d4aad6.

Table 5.2 Crude Oil and Natural Gas Exploratory and Development Wells

	Wells Drilled												Total Footage Drilled
	Exploratory				Development				Total				
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	
	Number												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**	**1,200**	**8,954**	**11,834**	**33,581**	**13,124**	**12,257**	**58,962**	**35,261**	**14,324**	**21,211**	**70,796**	**314,409**
1990 Total	**778**	**811**	**3,652**	**5,241**	**12,061**	**10,435**	**4,593**	**27,089**	**12,839**	**11,246**	**8,245**	**32,330**	**156,052**
1995 Total	**570**	**558**	**2,024**	**3,152**	**7,678**	**7,524**	**2,790**	**17,992**	**8,248**	**8,082**	**4,814**	**21,144**	**117,171**
1996 Total	**489**	**576**	**1,956**	**3,021**	**8,347**	**8,451**	**2,934**	**19,732**	**8,836**	**9,027**	**4,890**	**22,753**	**126,365**
1997 Total	**491**	**562**	**2,113**	**3,166**	**10,715**	**10,936**	**3,761**	**25,412**	**11,206**	**11,498**	**5,874**	**28,578**	**161,281**
1998 Total	**327**	**566**	**1,590**	**2,483**	**7,355**	**11,073**	**3,171**	**21,599**	**7,682**	**11,639**	**4,761**	**24,082**	**137,218**
1999 Total	**197**	**570**	**1,157**	**1,924**	**4,608**	**11,457**	**2,393**	**18,458**	**4,805**	**12,027**	**3,550**	**20,382**	**102,849**
2000 Total	**288**	**657**	**1,341**	**2,286**	**7,802**	**16,394**	**2,805**	**27,001**	**8,090**	**17,051**	**4,146**	**29,287**	**144,439**
2001 Total	**357**	**1,052**	**1,733**	**3,142**	**8,531**	**21,020**	**2,865**	**32,416**	**8,888**	**22,072**	**4,598**	**35,558**	**180,127**
2002 Total	**258**	**844**	**1,282**	**2,384**	**6,517**	**16,498**	**2,472**	**25,487**	**6,775**	**17,342**	**3,754**	**27,871**	**145,165**
2003 Total	**350**	**997**	**1,297**	**2,644**	**7,779**	**19,725**	**2,685**	**30,189**	**8,129**	**20,722**	**3,982**	**32,833**	**177,248**
2004 Total	**383**	**1,671**	**1,350**	**3,404**	**8,406**	**22,515**	**2,732**	**33,653**	**8,789**	**24,186**	**4,082**	**37,057**	**204,272**
2005 Total	**539**	**2,141**	**1,462**	**4,142**	**10,240**	**26,449**	**3,191**	**39,880**	**10,779**	**28,590**	**4,653**	**44,022**	**240,313**
2006 Total	**646**	**2,456**	**1,547**	**4,649**	**12,758**	**30,382**	**3,659**	**46,799**	**13,404**	**32,838**	**5,206**	**51,448**	**282,764**
2007 Total	**806**	**2,794**	**1,582**	**5,182**	**12,555**	**29,925**	**3,396**	**45,876**	**13,361**	**32,719**	**4,978**	**51,058**	**301,453**
2008 Total	**892**	**2,345**	**1,715**	**4,952**	**15,753**	**29,929**	**3,713**	**49,395**	**16,645**	**32,274**	**5,428**	**54,347**	**334,442**
2009 Total	**612**	**1,196**	**1,052**	**2,860**	**10,649**	**17,038**	**2,500**	**30,187**	**11,261**	**18,234**	**3,552**	**33,047**	**239,491**
2010 January	55	88	82	225	918	1,284	169	2,371	973	1,372	251	2,596	18,120
February	45	68	66	179	892	1,097	142	2,131	937	1,165	208	2,310	16,452
March	59	79	91	229	1,095	1,231	220	2,546	1,154	1,310	311	2,775	20,344
April	49	73	78	200	1,198	1,164	258	2,620	1,247	1,237	336	2,820	19,986
May	47	101	87	235	1,296	1,212	264	2,772	1,343	1,313	351	3,007	21,482
June	61	97	92	250	1,420	1,260	309	2,989	1,481	1,357	401	3,239	22,883
July	46	99	110	255	1,415	1,443	400	3,258	1,461	1,542	510	3,513	24,939
August	56	97	95	248	1,467	1,434	321	3,222	1,523	1,531	416	3,470	25,336
September	56	67	90	213	1,409	1,387	279	3,075	1,465	1,454	369	3,288	23,260
October	72	87	123	282	1,564	1,503	292	3,359	1,636	1,590	415	3,641	26,154
November	65	103	109	277	1,510	1,439	272	3,221	1,575	1,542	381	3,498	25,723
December	57	85	70	212	1,402	1,475	258	3,135	1,459	1,560	328	3,347	24,695
Total	**668**	**1,044**	**1,093**	**2,805**	**15,586**	**15,929**	**3,184**	**34,699**	**16,254**	**16,973**	**4,277**	**37,504**	**269,374**
2011 January	66	67	82	215	1,514	1,174	235	2,923	1,580	1,241	317	3,138	25,190
February	60	57	57	174	1,279	1,081	189	2,549	1,339	1,138	246	2,723	21,980
March	66	65	65	196	1,581	1,192	263	3,036	1,647	1,257	328	3,232	27,003
April	68	68	62	198	1,593	1,253	248	3,094	1,661	1,321	310	3,292	27,561
May	87	83	90	260	1,720	1,095	323	3,138	1,807	1,178	413	3,398	24,509
June	80	90	73	243	1,839	1,232	324	3,395	1,919	1,322	397	3,638	26,130
July	94	70	116	280	1,918	1,138	277	3,333	2,012	1,208	393	3,613	25,376
August	72	76	81	229	1,851	1,201	334	3,386	1,923	1,277	415	3,615	27,034
September	82	61	83	226	1,706	1,163	270	3,139	1,788	1,224	353	3,365	25,978
October	86	57	110	253	1,670	1,046	342	3,058	1,756	1,103	452	3,311	25,851
November	109	81	100	290	1,844	1,354	338	3,536	1,953	1,435	438	3,826	29,267
December	109	68	92	269	2,215	1,145	338	3,698	2,324	1,213	430	3,967	29,623
Total	**979**	**843**	**1,011**	**2,833**	**20,730**	**14,074**	**3,481**	**38,285**	**21,709**	**14,917**	**4,492**	**41,118**	**315,502**
2012 January	109	56	103	268	2,215	1,151	338	3,704	2,324	1,207	441	3,972	30,714
February	110	38	98	246	2,216	922	339	3,477	2,326	960	437	3,723	30,794
March	110	29	120	259	2,217	919	339	3,475	2,327	948	459	3,734	31,394
April	111	28	102	241	2,218	920	340	3,478	2,329	948	442	3,719	31,655
4-Month Total	**440**	**151**	**423**	**1,014**	**8,866**	**3,912**	**1,356**	**14,134**	**9,306**	**4,063**	**1,779**	**15,148**	**124,557**
2011 4-Month Total	**260**	**257**	**266**	**783**	**5,967**	**4,700**	**935**	**11,602**	**6,227**	**4,957**	**1,201**	**12,385**	**101,734**
2010 4-Month Total	**208**	**308**	**317**	**833**	**4,103**	**4,776**	**789**	**9,668**	**4,311**	**5,084**	**1,106**	**10,501**	**74,902**

Notes: • Data are estimates. • Prior to 1990, 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. After 1990, a new well is defined as the first hole in the ground whether it is lateral or not. 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.gov/totalenergy/data/monthly/#crude for all available data beginning in 1973.

Sources: • **1973–1989:** U.S. Energy Information Administration (EIA) computations based on well reports submitted to the American Petroleum Institute. • **1990 forward:** EIA computations based on well reports submitted to IHS, Inc., Denver, CO.

Table 5.2 is not updated this month.

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. If a lateral is drilled at the same time as the original hole it is not counted separately, but its footage is included.

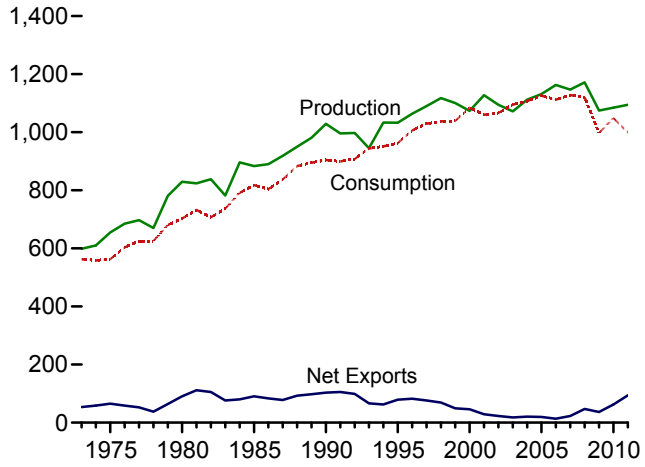
Prior to the March 1985 MER, drilling statistics consisted of completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported 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 U.S. 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.

THIS PAGE INTENTIONALLY LEFT BLANK

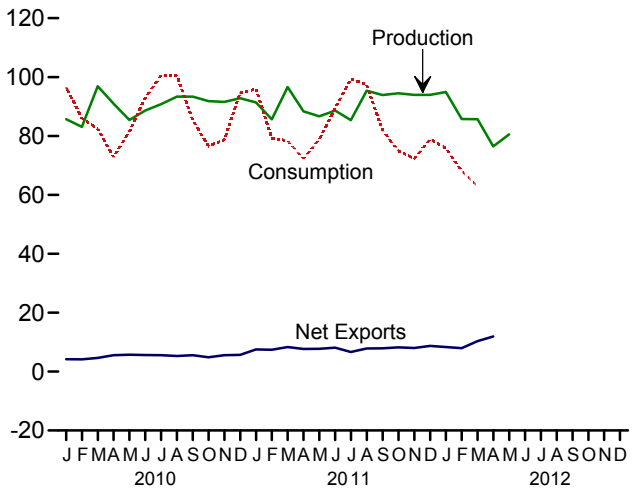
6. Coal

Figure 6.1 Coal
(Million Short Tons)

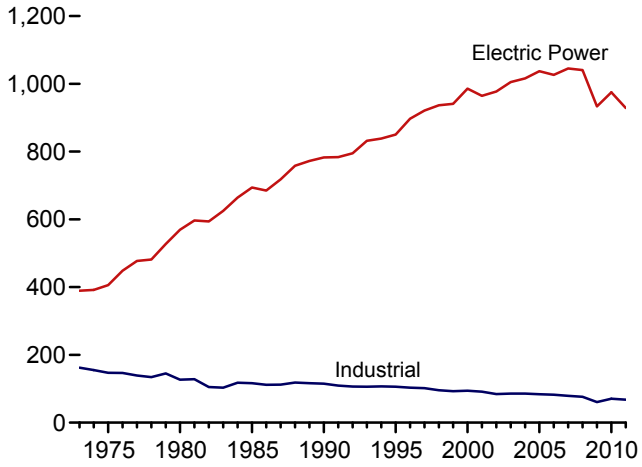
Overview, 1973-2011



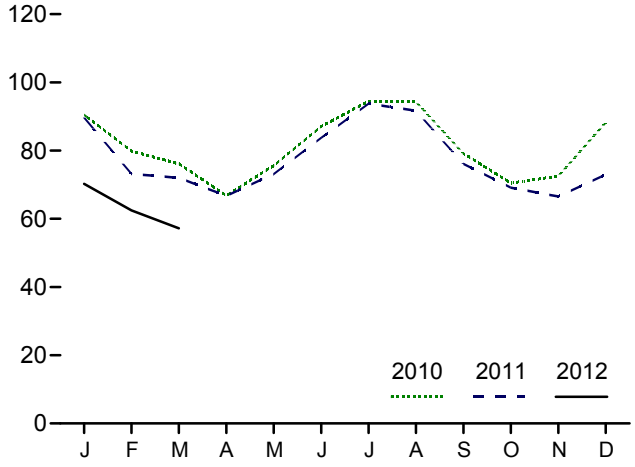
Overview, Monthly



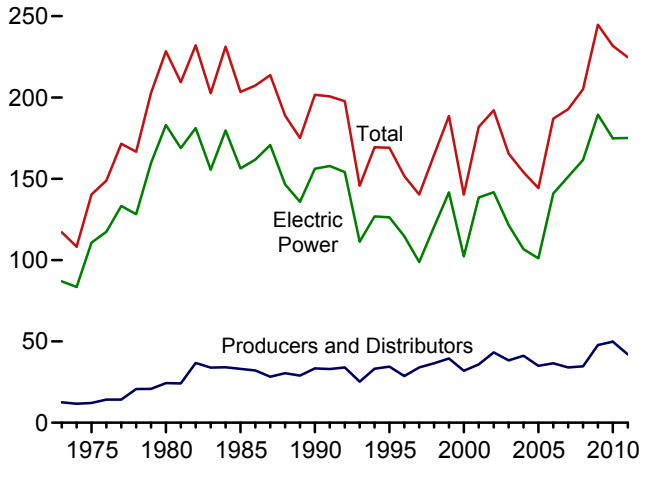
Consumption by Sector, 1973-2011



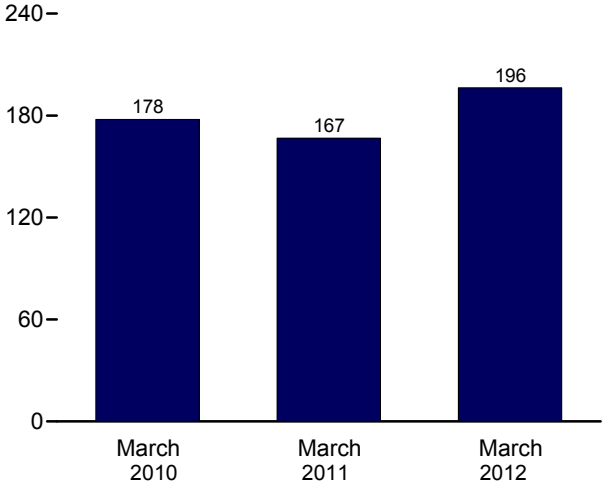
Electric Power Sector Consumption, Monthly



Stocks, End of Year, 1973-2011



Electric Power Sector Stocks, End of Month



Web Page: http://www.eia.gov/totalenergy/data/monthly/#coal.
Sources: Tables 6.1–6.3.

Table 6.1 Coal Overview

(Thousand Short Tons)

	Production[a]	Waste Coal Supplied[b]	Trade			Stock Change[d,e]	Losses and Unaccounted for[f]	Consumption
			Imports	Exports	Net Imports[c]			
1973 Total	**598,568**	**NA**	**127**	**53,587**	**-53,460**	R **402**	R **-17,878**	**562,584**
1975 Total	**654,641**	**NA**	**940**	**66,309**	**-65,369**	**32,154**	**-5,522**	**562,640**
1980 Total	**829,700**	**NA**	**1,194**	**91,742**	**-90,548**	**25,595**	**10,827**	**702,730**
1985 Total	**883,638**	**NA**	**1,952**	**92,680**	**-90,727**	**-27,934**	**2,796**	**818,049**
1990 Total	**1,029,076**	**3,339**	**2,699**	**105,804**	**-103,104**	**26,542**	**-1,730**	**904,498**
1995 Total	**1,032,974**	**8,561**	**9,473**	**88,547**	**-79,074**	**-275**	**632**	**962,104**
1996 Total	**1,063,856**	**8,778**	**8,115**	**90,473**	**-82,357**	**-17,456**	**1,411**	**1,006,321**
1997 Total	**1,089,932**	**8,096**	**7,487**	**83,545**	**-76,058**	**-11,253**	**3,678**	**1,029,544**
1998 Total	**1,117,535**	**8,690**	**8,724**	**78,048**	**-69,324**	**24,228**	**-4,430**	**1,037,103**
1999 Total	**1,100,431**	**8,683**	**9,089**	**58,476**	**-49,387**	**23,988**	**-2,906**	**1,038,647**
2000 Total	**1,073,612**	**9,089**	**12,513**	**58,489**	**-45,976**	**-48,309**	**938**	**1,084,095**
2001 Total	**1,127,689**	**10,085**	**19,787**	**48,666**	**-28,879**	**41,630**	**7,120**	**1,060,146**
2002 Total	**1,094,283**	**9,052**	**16,875**	**39,601**	**-22,726**	**10,215**	**4,040**	**1,066,355**
2003 Total	**1,071,753**	**10,016**	**25,044**	**43,014**	**-17,970**	**-26,659**	**-4,403**	**1,094,861**
2004 Total	**1,112,099**	**11,299**	**27,280**	**47,998**	**-20,718**	**-11,462**	**6,887**	**1,107,255**
2005 Total	**1,131,498**	**13,352**	**30,460**	**49,942**	**-19,482**	**-9,702**	**9,092**	**1,125,978**
2006 Total	**1,162,750**	**14,409**	**36,246**	**49,647**	**-13,401**	**42,642**	**8,824**	**1,112,292**
2007 Total	**1,146,635**	**14,076**	**36,347**	**59,163**	**-22,816**	**5,812**	**4,085**	**1,127,998**
2008 Total	**1,171,809**	**14,146**	**34,208**	**81,519**	**-47,311**	**12,354**	**5,740**	**1,120,548**
2009 Total	**1,074,923**	**13,666**	**22,639**	**59,097**	**-36,458**	**39,668**	**14,985**	**997,478**
2010 January	85,711	1,187	1,665	5,866	-4,202	R -10,695	R -3,103	R 96,494
February	83,087	908	1,239	5,386	-4,146	R -7,306	R 1,154	R 86,001
March	96,904	1,192	1,899	6,554	-4,655	R 8,127	R 2,870	R 82,444
April	90,960	1,071	1,812	7,358	-5,545	11,519	R 2,176	R 72,790
May	85,401	1,138	1,475	7,220	-5,745	2,723	R -3,500	R 81,570
June	88,621	1,219	1,771	7,387	-5,616	-9,407	R 647	R 92,983
July	90,795	1,273	1,390	6,928	-5,539	R -15,499	R 1,446	R 100,582
August	93,350	1,261	1,702	7,001	-5,299	R -8,766	R -2,316	R 100,393
September	93,360	1,102	1,588	7,145	-5,556	R 5,111	R -1,591	R 85,386
October	91,831	982	1,775	6,623	-4,849	R 11,463	R -90	R 76,591
November	91,558	1,121	1,473	7,015	-5,542	R 8,878	R -437	R 78,697
December	92,791	1,197	1,563	7,232	-5,669	R -9,187	R 2,925	R 94,582
Total	**1,084,368**	**13,651**	**19,353**	**81,716**	**-62,363**	R **-13,039**	R **182**	R **1,048,514**
2011 January	91,398	1,187	1,014	8,509	-7,496	R -11,828	R 949	R 95,968
February	85,618	1,030	843	8,275	-7,432	R -6,172	R 6,122	R 79,266
March	96,608	1,068	1,524	9,832	-8,308	R 3,658	R 7,382	R 78,327
April	88,335	910	1,136	8,843	-7,706	R 8,617	R 606	R 72,316
May	86,652	852	1,313	9,042	-7,730	R 1,917	R -1,017	R 78,874
June	88,647	1,109	970	9,102	-8,132	R -10,182	R 2,366	R 89,440
July	85,375	1,173	1,208	7,865	-6,657	R -16,060	R -3,366	R 99,317
August	95,362	1,142	1,545	9,387	-7,843	R -11,060	R 2,297	R 97,425
September	93,889	1,087	835	8,723	-7,888	R 4,740	R 431	R 81,916
October	94,513	999	917	9,159	-8,242	R 13,286	R -939	R 74,923
November	93,973	1,039	807	8,808	-8,001	R 10,170	R 4,486	R 72,355
December	93,965	934	976	9,713	-8,737	R 5,858	R 1,330	R 78,975
Total	**1,094,336**	**12,529**	**13,088**	**107,259**	**-94,171**	R **-7,056**	R **20,647**	R **999,103**
2012 January	R 94,944	R 1,068	789	9,126	-8,337	R 2,707	R 9,096	R 75,871
February	R 85,763	R 891	534	8,460	-7,927	R 6,527	R 4,140	R 68,060
March	R 85,698	R 837	699	11,055	-10,356	R 10,595	R 2,613	R 62,971
April	76,449	NA	R 623	R 12,529	R -11,905	NA	NA	NA
May	80,542	NA	NA	NA	NA	NA	NA	NA
5-Month Total	**423,395**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
2011 5-Month Total	**448,611**	**5,046**	**5,830**	**44,502**	**-38,672**	**-3,807**	**14,041**	**404,752**
2010 5-Month Total	**442,063**	**5,497**	**8,090**	**32,385**	**-24,294**	**4,368**	**-403**	**419,300**

[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 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 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."

[c] Net imports equal imports minus exports. A minus sign indicates exports are greater than imports.

[d] For 1980-2007, excludes coal stocks in the residential and commercial sectors.

[e] A negative value indicates a decrease in stocks; a positive value indicates an increase.

[f] The difference between calculated coal supply and disposition, due to coal quantities lost or to data reporting problems.

R=Revised. NA=Not available.

Notes: • For methodology used to calculate production, consumption, and stocks, see Note 1, "Coal Production," Note 2, "Coal Consumption," and Note 3, "Coal Stocks," at end of section. • Data include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal 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.gov/totalenergy/data/monthly/#coal for all available data beginning in 1973.

Sources: See end of section.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

	End-Use Sectors											
		Commercial			Industrial							
						Other Industrial						
	Resi-dential	CHP[a]	Other[b]	Total	Coke Plants	CHP[c]	Non-CHP[d]	Total	Total	Trans-portation	Electric Power Sector[e,f]	Total
1973 Total	**4,113**	**([g])**	**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**	**([h])**	**75,372**	**75,372**	**116,429**	**([h])**	**693,841**	**818,049**
1990 Total	**1,345**	**1,191**	**4,189**	**5,379**	**38,877**	**27,781**	**48,549**	**76,330**	**115,207**	**([h])**	**782,567**	**904,498**
1995 Total	**755**	**1,419**	**3,633**	**5,052**	**33,011**	**29,363**	**43,693**	**73,055**	**106,067**	**([h])**	**850,230**	**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**	**([h])**	**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	**512**	**1,917**	**2,693**	**4,610**	**23,670**	**26,613**	**35,582**	**62,195**	**85,865**	**([h])**	**1,016,268**	**1,107,255**
2005 Total	**378**	**1,922**	**2,420**	**4,342**	**23,434**	**25,875**	**34,465**	**60,340**	**83,774**	**([h])**	**1,037,485**	**1,125,978**
2006 Total	**290**	**1,886**	**1,050**	**2,936**	**22,957**	**25,262**	**34,210**	**59,472**	**82,429**	**([h])**	**1,026,636**	**1,112,292**
2007 Total	**353**	**1,927**	**1,247**	**3,173**	**22,715**	**22,537**	**34,078**	**56,615**	**79,331**	**([h])**	**1,045,141**	**1,127,998**
2008 Total	**351**	**2,021**	**1,134**	**3,155**	**22,070**	**21,902**	**32,491**	**54,393**	**76,463**	**([h])**	**1,040,580**	**1,120,548**
2009 Total	**353**	**1,798**	**1,059**	**2,857**	**15,326**	**19,766**	**25,549**	**45,314**	**60,641**	**([h])**	**933,627**	**997,478**
2010 January	43	193	156	349	1,472	2,094	R 2,084	R 4,178	R 5,650	([h])	90,452	R 96,494
February	37	167	136	303	1,584	1,978	R 2,215	R 4,193	R 5,777	([h])	79,884	R 86,001
March	33	149	121	271	1,801	2,124	R 2,106	R 4,230	R 6,030	([h])	76,110	R 82,444
April	21	117	54	171	1,786	2,220	R 1,749	R 3,969	R 5,755	([h])	66,842	R 72,790
May	21	118	55	173	1,794	2,010	R 1,975	R 3,985	R 5,779	([h])	75,597	R 81,570
June	24	135	62	197	1,772	1,898	R 2,061	R 3,959	R 5,732	([h])	87,030	R 92,983
July	24	142	48	190	1,783	2,122	R 1,944	R 4,066	R 5,849	([h])	94,519	R 100,582
August	25	152	52	203	1,814	2,194	R 1,909	R 4,103	R 5,917	([h])	94,247	R 100,393
September	22	133	45	178	1,894	1,941	R 2,174	R 4,115	R 6,010	([h])	79,176	R 85,386
October	26	121	86	207	1,731	1,958	R 2,178	R 4,136	R 5,866	([h])	70,492	R 76,591
November	27	128	90	218	1,787	1,854	R 2,297	R 4,151	R 5,938	([h])	72,514	R 78,697
December	35	165	116	281	1,874	2,246	R 1,957	R 4,203	R 6,077	([h])	88,189	R 94,582
Total	**339**	**1,720**	**1,022**	**2,742**	**21,092**	**24,638**	**R 24,650**	**R 49,289**	**R 70,381**	**([h])**	**975,052**	**R 1,048,514**
2011 January	40	178	144	322	1,746	2,320	R 1,859	R 4,178	R 5,924	([h])	89,682	R 95,968
February	37	165	133	298	1,623	2,044	R 2,108	R 4,152	R 5,775	([h])	73,156	R 79,266
March	35	158	127	285	1,819	2,088	R 2,091	R 4,179	R 5,998	([h])	72,009	R 78,327
April	23	124	63	187	1,668	1,767	R 1,930	R 3,697	R 5,365	([h])	66,741	R 72,316
May	24	128	65	193	1,878	2,126	R 1,554	R 3,680	R 5,558	([h])	73,100	R 78,874
June	23	124	63	187	1,846	2,056	R 1,628	R 3,684	R 5,530	([h])	83,700	R 89,440
July	20	134	30	165	1,670	2,208	R 1,518	R 3,726	R 5,396	([h])	93,736	R 99,317
August	19	124	28	152	1,863	2,182	R 1,541	R 3,724	R 5,587	([h])	91,667	R 97,425
September	18	121	27	149	1,874	2,100	R 1,644	R 3,743	R 5,618	([h])	76,131	R 81,916
October	20	116	48	164	1,784	2,080	R 1,765	R 3,845	R 5,629	([h])	69,109	R 74,923
November	22	123	51	174	1,772	1,835	R 1,995	R 3,831	R 5,603	([h])	66,557	R 72,355
December	24	138	57	195	1,891	1,927	R 1,967	R 3,894	R 5,784	([h])	72,971	R 78,975
Total	**305**	**1,633**	**838**	**2,471**	**21,434**	**24,733**	**R 21,601**	**R 46,334**	**R 67,768**	**([h])**	**928,558**	**R 999,103**
2012 January	R 27	154	R 68	R 222	R 1,701	2,102	R 1,587	R 3,690	R 5,390	([h])	70,231	R 75,871
February	R 24	137	R 60	R 197	R 1,687	1,890	R 1,811	R 3,701	R 5,388	([h])	62,450	R 68,060
March	23	131	57	188	1,895	1,921	1,732	3,653	5,548	([h])	57,211	62,971
3-Month Total	**75**	**422**	**185**	**607**	**5,283**	**5,914**	**5,130**	**11,044**	**16,327**	**([h])**	**189,893**	**206,902**
2011 3-Month Total	**112**	**500**	**404**	**905**	**5,188**	**6,451**	**6,058**	**12,510**	**17,697**	**([h])**	**234,847**	**253,561**
2010 3-Month Total	**114**	**509**	**413**	**923**	**4,857**	**6,195**	**6,405**	**12,600**	**17,457**	**([h])**	**246,445**	**264,939**

[a] Commercial combined-heat-and-power (CHP) and a small number of commercial electricity-only plants, such as those at hospitals and universities. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

[b] All commercial sector fuel use other than that in "Commercial CHP."

[c] Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

[d] All industrial sector fuel use other than that in "Coke Plants" and "Industrial CHP."

[e] 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."

[h] Included in "Industrial Non-CHP."

R=Revised.

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, "Coal Consumption," at end of section. • Data include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal 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.gov/totalenergy/data/monthly/#coal for all available data beginning in 1973.

Sources: See end of section.

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

	Producers and Distributors	End-Use Sectors					Electric Power Sector[b,c]	Total
		Residential and Commercial	Industrial			Total		
			Coke Plants	Other[a]	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**	[c] **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 Year	**34,971**	**NA**	**2,615**	**5,582**	**8,196**	**8,196**	**101,137**	**144,304**
2006 Year	**36,548**	**NA**	**2,928**	**6,506**	**9,434**	**9,434**	**140,964**	**186,946**
2007 Year	**33,977**	**NA**	**1,936**	**5,624**	**7,560**	**7,560**	**151,221**	**192,758**
2008 Year	**34,688**	**498**	**2,331**	**6,007**	**8,338**	**8,836**	**161,589**	**205,112**
2009 Year	**47,718**	**529**	**1,957**	**5,109**	**7,066**	**7,595**	**189,467**	**244,780**
2010 January	48,854	510	1,832	[R] 4,798	[R] 6,630	[R] 7,140	178,091	[R] 234,085
February	49,069	490	1,708	[R] 4,486	[R] 6,194	[R] 6,684	171,026	[R] 226,779
March	50,936	471	1,583	[R] 4,175	[R] 5,758	[R] 6,229	177,742	[R] 234,906
April	50,761	482	1,715	[R] 4,207	[R] 5,922	[R] 6,404	189,260	[R] 246,425
May	50,900	494	1,846	[R] 4,239	[R] 6,086	[R] 6,579	191,669	[R] 249,148
June	51,497	505	1,978	[R] 4,272	[R] 6,250	[R] 6,755	181,490	[R] 239,741
July	47,935	509	1,948	[R] 4,345	[R] 6,294	[R] 6,803	169,504	[R] 224,242
August	48,638	513	1,918	[R] 4,419	[R] 6,337	[R] 6,851	159,987	[R] 215,476
September	49,913	517	1,889	[R] 4,492	[R] 6,381	[R] 6,899	163,776	[R] 220,587
October	49,430	529	1,901	[R] 4,503	[R] 6,404	[R] 6,933	175,686	[R] 232,050
November	50,571	541	1,913	[R] 4,514	[R] 6,428	[R] 6,968	183,389	[R] 240,928
December	**49,820**	**552**	**1,925**	[R] **4,525**	[R] **6,451**	[R] **7,003**	**174,917**	[R] **231,740**
2011 January	48,295	536	1,937	[R] 4,305	[R] 6,241	[R] 6,777	164,840	[R] 219,913
February	45,750	520	1,948	[R] 4,084	[R] 6,032	[R] 6,552	161,439	[R] 213,741
March	44,336	503	1,959	[R] 3,864	[R] 5,823	[R] 6,326	166,737	[R] 217,399
April	45,585	500	1,958	[R] 3,975	[R] 5,933	[R] 6,433	173,999	[R] 226,016
May	46,775	497	1,957	[R] 4,086	[R] 6,042	[R] 6,539	174,619	[R] 227,933
June	45,398	494	1,956	[R] 4,196	[R] 6,152	[R] 6,646	165,707	[R] 217,751
July	46,926	498	2,082	[R] 4,217	[R] 6,300	[R] 6,798	147,967	[R] 201,691
August	44,445	502	2,221	[R] 4,238	[R] 6,459	[R] 6,961	139,225	[R] 190,631
September	43,763	506	2,405	[R] 4,259	[R] 6,664	[R] 7,170	144,438	[R] 195,371
October	44,415	533	2,473	[R] 4,330	[R] 6,803	[R] 7,336	156,906	[R] 208,657
November	42,971	560	2,541	[R] 4,400	[R] 6,941	[R] 7,502	168,354	[R] 218,827
December	**41,917**	**588**	**2,610**	[R] **4,471**	[R] **7,080**	[R] **7,668**	**175,100**	[R] **224,684**
2012 January	[F] 38,444	[R] 571	[R] 2,507	[R] 4,249	[R] 6,756	[R] 7,327	181,621	[R] 227,392
February	[F] 39,975	[R] 554	[R] 2,403	[R] 4,028	[R] 6,432	[R] 6,986	186,958	[R] 233,919
March	[F] 41,478	537	2,300	3,807	6,108	6,645	196,391	244,514

[a] Through 1977, data are for stocks held by the manufacturing and transportation sectors. Beginning in 1978, data are for stocks held at 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.

[c] 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. F=Forecast.

Notes: • Stocks are at end of period. • Electric power sector monthly values are from Table 7.5; producers and distributors monthly values are estimates derived from collected annual data; all other monthly values are estimates derived from collected quarterly values. • Data include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal 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.gov/totalenergy/data/monthly/#coal for all available data beginning in 1973.

Sources: See end of section.

Coal

Note 1. Coal Production. Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the U.S. 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 (AAR) data showing the number of railcars loaded with coal during the week by Class I and certain other railroads.

Prior to 2002, the weekly coal production model converted AAR data into short tons of coal by using the average number of short tons of coal per railcar loaded reported in the "Quarterly Freight Commodity Statistics" from the Surface Transportation Board. If an average coal tonnage per railcar loaded was not available for a specific railroad, the national average was used. To derive the estimate of total weekly production, the total rail tonnage for the week was divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years were used to derive this ratio. This method ensured that the seasonal variations were preserved in the production estimates.

Beginning in 2002, the weekly coal production model uses statistical autoregressive methods to estimate national coal production as a function of railcar loadings of coal, and heating degree-days and cooling degree-days. On Thursday of each week, EIA receives from the AAR data for the previous week. The latest weekly national data for heating degree-days and cooling degree-days are obtained from the National Oceanic and Atmospheric Administration's Climate Prediction Center. The weekly coal model is run and a national level coal production estimate is obtained. The weekly coal model is refit every quarter after preliminary coal data are available.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figures. 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. Coal 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 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 2007 share is applied to 2008 forward, 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. For 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. For 1980–1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Beginning in January 1988, monthly 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 Governors of the

Federal Reserve System. Indices for six major industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 311; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; non-metallic 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. Prior to 2008, quarterly consumption data for the other industrial sector were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts are 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, and construction consumption data were included where appropriate. Beginning in 2008, quarterly consumption totals for other industrial coal include data for manufacturing and mining only. Over time, surveyed coal consumption data for agriculture, forestry, fishing, and construction dwindled to about 20,000 to 30,000 tons annually. Therefore, in 2008, EIA consolidated its programs by eliminating agriculture, forestry, fishing, and construction as surveyed sectors.

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

Note 3. Coal 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 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. For 1980–2007, stock estimates were not collected. Beginning in 2008, quarterly stocks data are collected on Form EIA-3 (data for "Commercial and Institutional Coal Users").

Industrial Coke Plants—Prior to 1980, monthly stocks at coke plants were taken directly from reported data. Beginning in 1980, 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. Beginning in 1983, 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. Coal Forecast Values. Data values preceded by "F" in this section are forecast values. They are derived from EIA 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.gov/emeu/steo/pub/contents.html.

Note 5. Additional Coal 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: U.S. 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."
2004–2007: 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."
2008 forward: EIA, Form EIA-923, "Power Plant Operations Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users"; 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. (The 1973 stock change value is calculated using the 1972 total stocks value of 116,753 thousand short tons from EIA, *Annual Energy Review*, Table 7.6. The 1972 stocks value excludes stocks at producers and distributors.)

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 U.S. 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.
1998–2007: DOI, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users" (data for "Commercial and Institutional Coal Users"); and, for forecast values, EIA, Short-Term Integrated Forecasting System (STIFS).

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, STIFS.

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.
1998–2007: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," Form EIA-6A, "Coal Distribution Report," annual, and Form EIA-7A, "Coal Production Report," annual.
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users," and Form EIA-7A, "Coal Production Report," annual; and, for forecast values, EIA, STIFS.

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: U.S. Energy Information Administration

(EIA), Form EIA-6, "Coal Distribution Report," quarterly.
1998–2007: EIA, Form EIA-6A, "Coal Distribution Report," annual.
2008 forward: EIA, Form EIA-7A, "Coal Production Report," annual, and Form EIA-8A, "Coal Stocks Report," annual; and, for forecast values, EIA, Short-Term Integrated Forecasting System (STIFS).

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."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users" (data for "Commercial and Institutional Coal Users"); and, for forecast values, EIA, STIFS**.**

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, STIFS.

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."
1998–2007: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users"; and, for forecast values, EIA, STIFS.

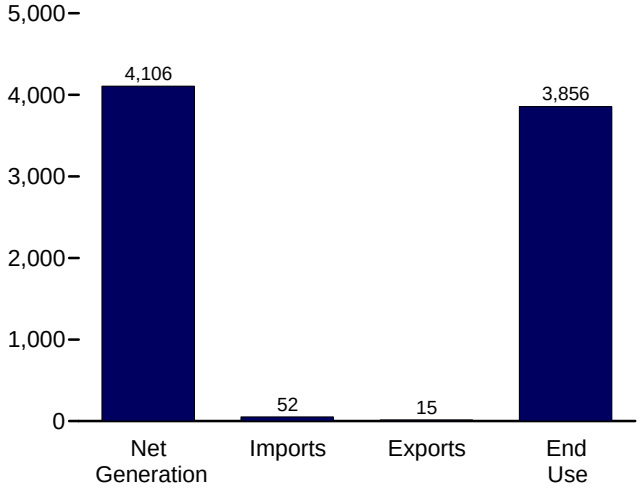
Electric Power
Table 7.5.

THIS PAGE INTENTIONALLY LEFT BLANK

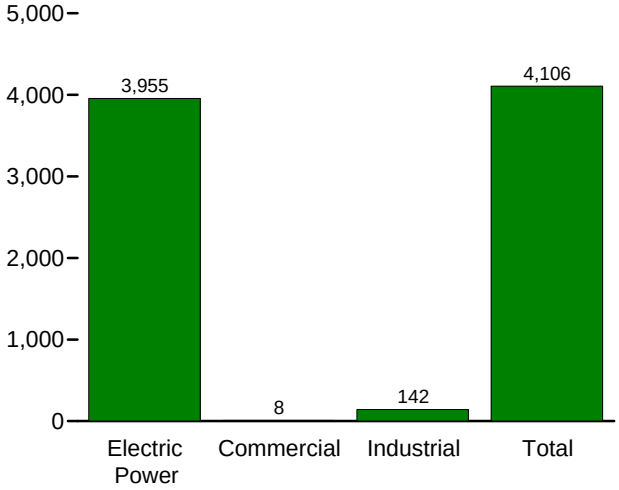
7. Electricity

Figure 7.1 Electricity Overview
(Billion Kilowatthours)

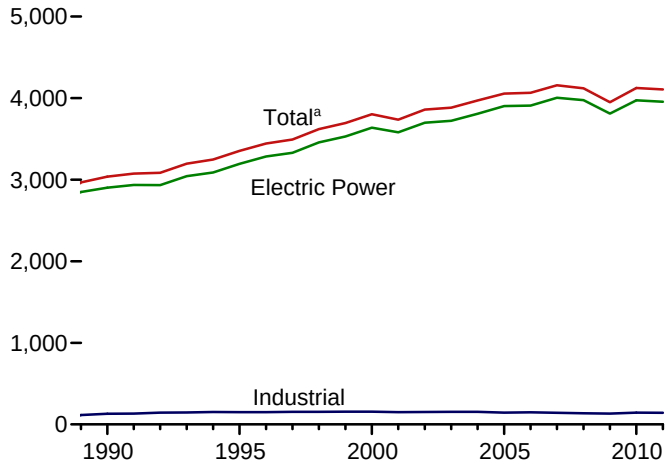
Overview, 2011



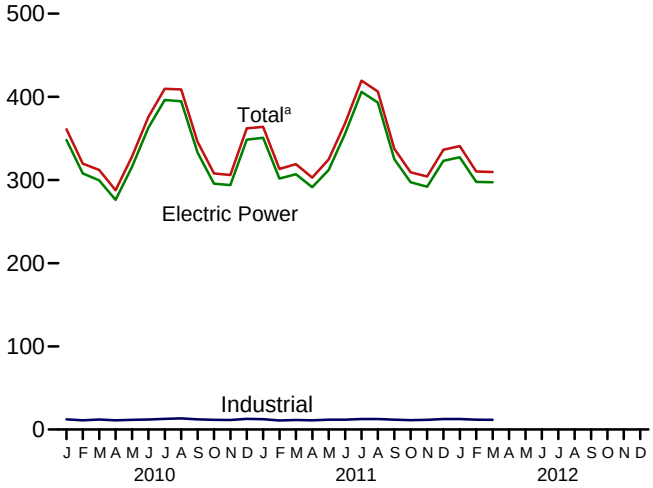
Net Generation, 2011



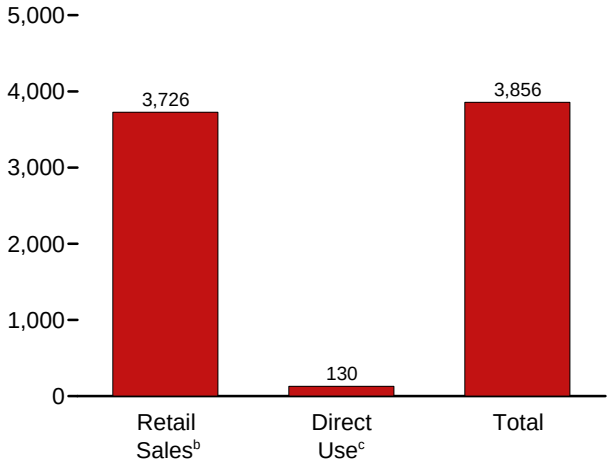
Net Generation by Sector, 1989-2011



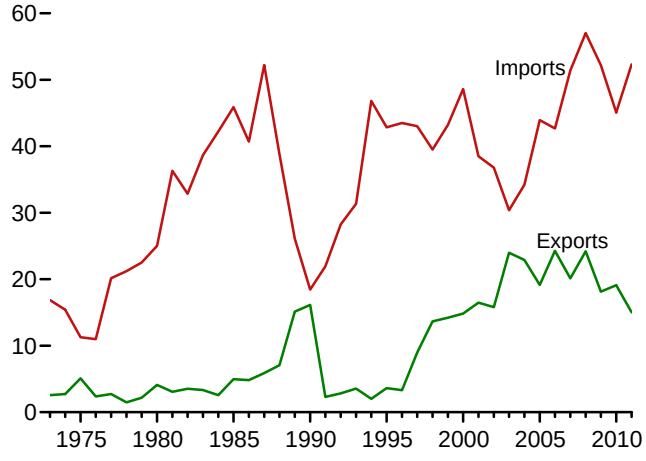
Net Generation by Sector, Monthly



End Use, 2011



Trade, 1973-2011



[a] Includes commercial sector.
[b] Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.
[c] See "Direct Use" in Glossary.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Source: Table 7.1.

Table 7.1 Electricity Overview

(Billion Kilowatthours)

	Net Generation				Trade			T&D Losses[e] and Unaccounted for[f]	End Use		
	Electric Power Sector[a]	Commercial Sector[b]	Industrial Sector[c]	Total	Imports[d]	Exports[d]	Net Imports[d]		Retail Sales[g]	Direct Use[h]	Total
1973 Total	**1,861**	**NA**	**3**	**1,864**	**17**	**3**	**14**	**165**	**1,713**	**NA**	**1,713**
1975 Total	**1,918**	**NA**	**3**	**1,921**	**11**	**5**	**6**	**180**	**1,747**	**NA**	**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 Total	**3,902**	**8**	**145**	**4,055**	**44**	**19**	**25**	**269**	**3,661**	**150**	**3,811**
2006 Total	**3,908**	**8**	**148**	**4,065**	**43**	**24**	**18**	**266**	**3,670**	**147**	**3,817**
2007 Total	**4,005**	**8**	**143**	**4,157**	**51**	**20**	**31**	**298**	**3,765**	**126**	**3,890**
2008 Total	**3,974**	**8**	**137**	**4,119**	**57**	**24**	**33**	**287**	**3,733**	**132**	**3,865**
2009 Total	**3,810**	**8**	**132**	**3,950**	**52**	**18**	**34**	**261**	**3,597**	**127**	**3,724**
2010 January	348	1	12	361	5	1	4	22	332	E 11	343
February	308	1	11	320	4	1	3	15	298	E 10	309
March	300	1	12	312	4	1	3	12	293	E 11	303
April	276	1	11	288	4	1	3	13	267	E 10	277
May	316	1	12	328	3	2	1	35	284	E 11	294
June	363	1	12	376	4	2	2	36	331	E 11	342
July	396	1	13	410	4	1	3	32	369	E 12	381
August	395	1	13	409	4	2	2	27	372	E 12	384
September	333	1	12	346	3	2	1	8	328	E 11	339
October	296	1	12	308	3	2	(s)	10	288	E 11	298
November	294	1	11	306	3	2	1	21	275	E 11	285
December	349	1	13	362	4	1	3	34	319	E 12	331
Total	**3,972**	**9**	**144**	**4,125**	**45**	**19**	**26**	**265**	**3,754**	**132**	**3,886**
2011 January	351	1	12	364	4	2	3	23	333	E 11	344
February	302	1	11	313	4	2	2	10	296	E 10	306
March	307	1	11	319	4	2	2	21	290	E 11	301
April	291	1	11	303	4	2	2	21	274	E 10	284
May	312	1	12	325	5	1	4	32	286	E 11	297
June	356	1	12	368	4	1	3	34	327	E 11	338
July	406	1	13	419	6	1	5	44	369	E 12	380
August	393	1	13	406	6	1	5	29	370	E 12	382
September	325	1	12	338	4	1	3	6	324	E 11	335
October	297	1	11	309	4	1	3	16	286	E 10	296
November	292	1	12	304	3	1	2	23	273	E 11	284
December	323	1	13	336	4	1	3	29	299	E 12	311
Total	**3,955**	**8**	**142**	**4,106**	**52**	**15**	**37**	**287**	**3,726**	**E 130**	**3,856**
2012 January	327	1	13	341	4	1	3	22	311	E 12	322
February	298	1	12	310	4	1	3	16	286	E 11	297
March	297	1	12	310	4	1	3	20	282	E 11	293
3-Month Total	**923**	**2**	**36**	**961**	**12**	**3**	**9**	**57**	**879**	**E 33**	**912**
2011 3-Month Total	**959**	**2**	**35**	**996**	**12**	**5**	**7**	**53**	**919**	**E 32**	**950**
2010 3-Month Total	**956**	**2**	**35**	**993**	**14**	**4**	**11**	**49**	**923**	**E 32**	**955**

[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 are for electric utilities and independent power producers.

[b] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[c] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. Through 1988, data are for industrial hydroelectric power only.

[d] Electricity transmitted across U.S. borders. Net imports equal imports minus exports.

[e] 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.

[f] Data collection frame differences and nonsampling error.

[g] 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.

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

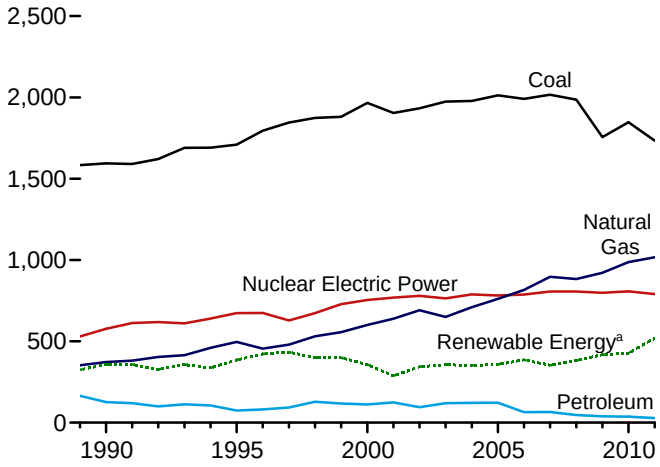
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

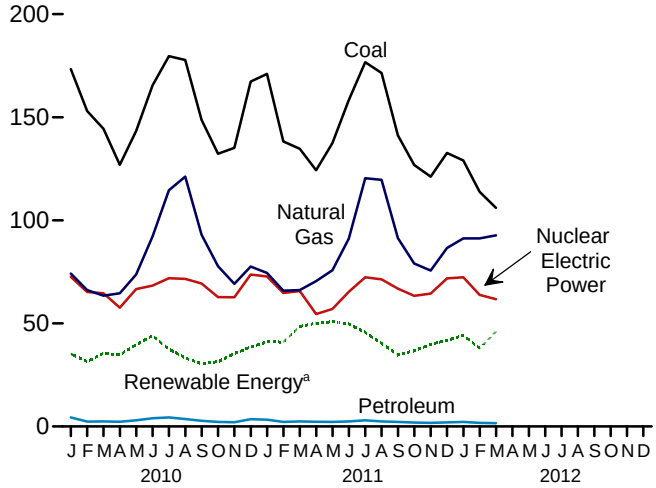
Sources: See end of section.

Figure 7.2 Electricity Net Generation
(Billion Kilowatthours)

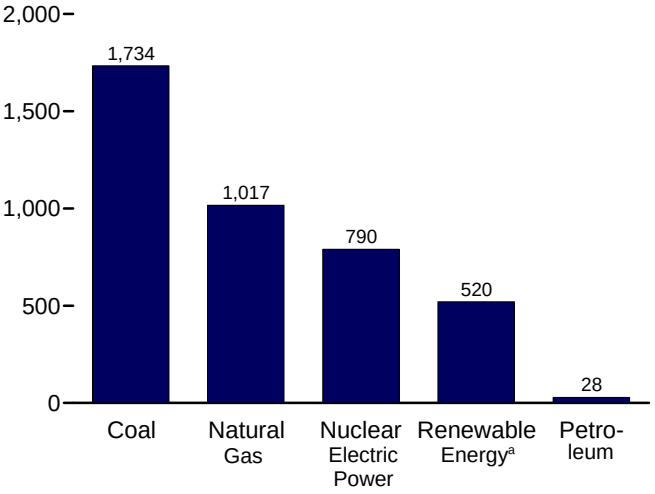
Total (All Sectors), Major Sources, 1989-2011



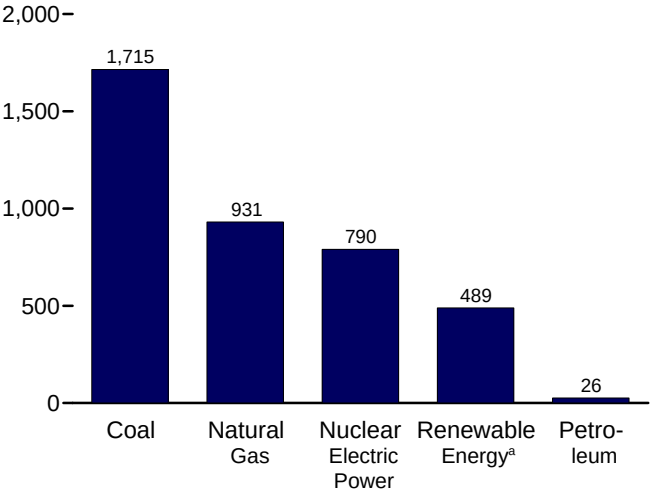
Total (All Sectors), Major Sources, Monthly



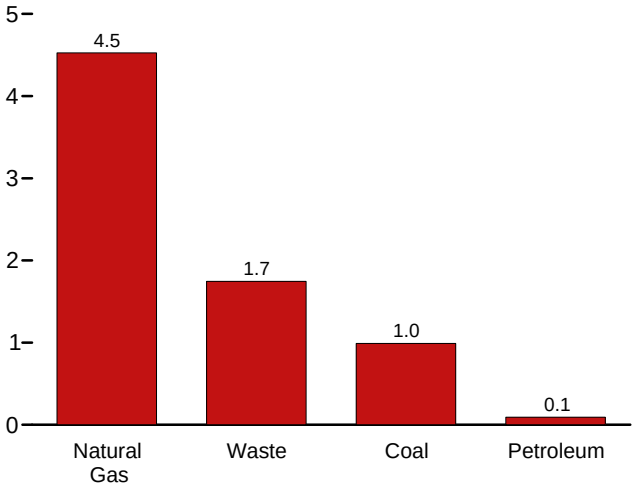
Total (All Sectors), Major Sources, 2011



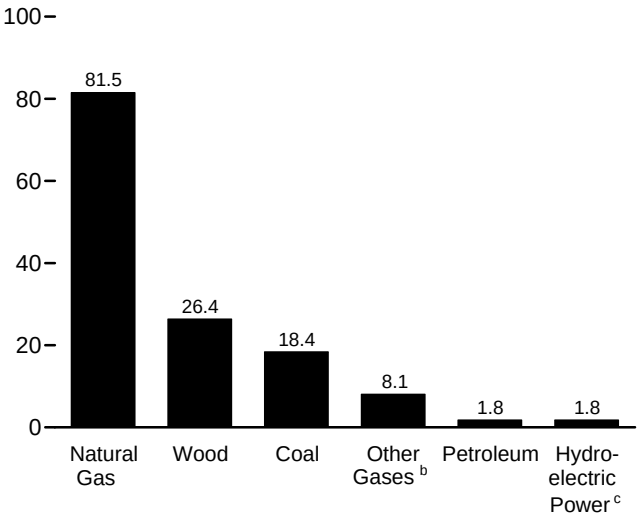
Electric Power Sector, Major Sources, 2011



Commercial Sector, Major Sources, 2011



Industrial Sector, Major Sources, 2011



[a] Conventional hydroelectric power, wood, waste, geothermal, solar/PV, and wind.
[b] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
[c] Conventional hydroelectric power.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Sources: Tables 7.2a–7.2c.

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

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

	Fossil Fuels				Nuclear Electric Power	Hydroelectric Pumped Storage[e]	Renewable Energy						
							Conventional Hydroelectric Power[f]	Biomass		Geothermal	Solar/PV[i]	Wind	Total[j]
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Gases[d]				Wood[g]	Waste[h]				
1973 Total	**847,651**	**314,343**	**340,858**	**NA**	**83,479**	**(f)**	**275,431**	**130**	**198**	**1,966**	**NA**	**NA**	**1,864,057**
1975 Total	**852,786**	**289,095**	**299,778**	**NA**	**172,505**	**(f)**	**303,153**	**18**	**174**	**3,246**	**NA**	**NA**	**1,920,755**
1980 Total	**1,161,562**	**245,994**	**346,240**	**NA**	**251,116**	**(f)**	**279,182**	**275**	**158**	**5,073**	**NA**	**NA**	**2,289,600**
1985 Total	**1,402,128**	**100,202**	**291,946**	**NA**	**383,691**	**(f)**	**284,311**	**743**	**640**	**9,325**	**11**	**6**	**2,473,002**
1990 Total[k]	**1,594,011**	**126,460**	**372,765**	**10,383**	**576,862**	**-3,508**	**292,866**	**32,522**	**13,260**	**15,434**	**367**	**2,789**	**3,037,827**
1995 Total	**1,709,426**	**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	**1,795,196**	**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	**1,845,016**	**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	**1,873,516**	**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	**1,881,087**	**118,061**	**556,396**	**14,126**	**728,254**	**-6,097**	**319,536**	**37,041**	**22,572**	**14,827**	**495**	**4,488**	**3,694,810**
2000 Total	**1,966,265**	**111,221**	**601,038**	**13,955**	**753,893**	**-5,539**	**275,573**	**37,595**	**23,131**	**14,093**	**493**	**5,593**	**3,802,105**
2001 Total	**1,903,956**	**124,880**	**639,129**	**9,039**	**768,826**	**-8,823**	**216,961**	**35,200**	**14,548**	**13,741**	**543**	**6,737**	**3,736,644**
2002 Total	**1,933,130**	**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	**1,973,737**	**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	**1,978,301**	**121,145**	**710,100**	**15,252**	**788,528**	**-8,488**	**268,417**	**38,117**	**15,421**	**14,811**	**575**	**14,144**	**3,970,555**
2005 Total	**2,012,873**	**122,225**	**760,960**	**13,464**	**781,986**	**-6,558**	**270,321**	**38,856**	**15,420**	**14,692**	**550**	**17,811**	**4,055,423**
2006 Total	**1,990,511**	**64,166**	**816,441**	**14,177**	**787,219**	**-6,558**	**289,246**	**38,762**	**16,099**	**14,568**	**508**	**26,589**	**4,064,702**
2007 Total	**2,016,456**	**65,739**	**896,590**	**13,453**	**806,425**	**-6,896**	**247,510**	**39,014**	**16,525**	**14,637**	**612**	**34,450**	**4,156,745**
2008 Total	**1,985,801**	**46,243**	**882,981**	**11,707**	**806,208**	**-6,288**	**254,831**	**37,300**	**17,734**	**14,840**	**864**	**55,363**	**4,119,388**
2009 Total	**1,755,904**	**38,937**	**920,979**	**10,632**	**798,855**	**-4,627**	**273,445**	**36,050**	**18,443**	**15,009**	**891**	**73,886**	**3,950,331**
2010 January	173,320	4,348	74,173	909	72,569	-565	22,383	3,126	1,503	1,312	10	6,854	360,957
February	153,044	2,373	66,198	825	65,245	-351	20,590	2,895	1,382	1,159	33	5,432	319,735
March	144,406	2,470	63,431	1,010	64,635	-325	20,886	3,090	1,592	1,307	76	8,589	312,168
April	126,952	2,286	64,644	943	57,611	-335	19,097	2,932	1,558	1,240	112	9,764	287,800
May	143,272	2,994	73,665	1,017	66,658	-441	25,079	2,893	1,577	1,311	153	8,698	327,936
June	165,491	3,989	92,268	964	68,301	-472	29,854	3,094	1,627	1,264	176	8,049	375,759
July	179,600	4,411	114,624	963	71,913	-557	24,517	3,308	1,640	1,274	161	6,724	409,725
August	177,745	3,575	121,151	1,061	71,574	-600	20,119	3,319	1,642	1,297	156	6,686	408,884
September	148,746	2,783	93,004	954	69,371	-421	17,265	3,157	1,575	1,253	138	7,106	346,045
October	132,270	2,228	77,738	808	62,751	-438	17,683	3,003	1,547	1,222	75	7,944	307,921
November	135,185	2,079	69,227	907	62,655	-467	19,562	3,080	1,625	1,252	77	9,748	306,010
December	167,258	3,523	77,573	952	73,683	-530	23,169	3,275	1,650	1,330	44	9,059	362,119
Total	**1,847,290**	**37,061**	**987,697**	**11,313**	**806,968**	**-5,501**	**260,203**	**37,172**	**18,917**	**15,219**	**1,212**	**94,652**	**4,125,060**
2011 January	170,983	3,268	74,458	910	72,743	-426	26,148	3,258	1,503	1,478	31	8,659	363,855
February	138,295	2,201	65,852	770	64,789	-247	24,687	2,896	1,393	1,326	80	10,528	313,351
March	134,717	2,454	66,169	955	65,662	-350	31,737	3,041	1,655	1,465	113	10,537	319,092
April	124,293	2,279	70,529	913	54,547	-467	31,629	2,788	1,619	1,337	161	12,447	302,994
May	137,493	2,198	75,769	848	57,017	-419	33,105	2,802	1,702	1,438	201	11,635	324,757
June	158,308	2,439	91,096	980	65,270	-568	32,253	3,243	1,685	1,363	257	10,887	368,184
July	176,709	3,011	120,377	1,059	72,345	-709	31,570	3,348	1,767	1,372	226	7,382	419,480
August	171,472	2,407	119,646	999	71,339	-663	26,320	3,290	1,717	1,380	236	7,342	406,450
September	141,220	2,247	91,377	958	66,849	-554	21,500	3,113	1,621	1,334	183	6,883	337,606
October	126,872	1,934	79,078	949	63,354	-572	20,036	2,876	1,669	1,393	169	10,623	309,279
November	121,197	1,723	75,637	923	64,474	-441	21,374	2,980	1,689	1,377	78	12,354	304,268
December	132,706	2,000	86,606	1,005	71,837	-496	24,715	3,311	1,765	1,439	79	10,469	336,419
Total	**1,734,265**	**28,162**	**1,016,595**	**11,269**	**790,225**	**-5,912**	**325,074**	**36,946**	**19,786**	**16,700**	**1,814**	**119,747**	**4,105,734**
2012 January	129,064	2,232	91,213	1,096	72,382	-330	23,933	3,293	1,621	1,438	70	13,823	340,743
February	113,831	1,718	91,260	1,146	63,850	-226	20,813	3,029	1,523	1,361	119	11,047	310,298
March	106,032	1,576	92,739	1,023	61,730	-268	26,287	2,832	1,637	1,438	218	13,553	309,709
3-Month Total	**348,927**	**5,525**	**275,213**	**3,264**	**197,962**	**-824**	**71,033**	**9,153**	**4,781**	**4,237**	**407**	**38,423**	**960,749**
2011 3-Month Total	**443,996**	**7,923**	**206,478**	**2,635**	**203,193**	**-1,023**	**82,572**	**9,195**	**4,552**	**4,268**	**224**	**29,724**	**996,299**
2010 3-Month Total	**470,770**	**9,192**	**203,801**	**2,744**	**202,449**	**-1,240**	**63,859**	**9,111**	**4,477**	**3,777**	**119**	**20,875**	**992,860**

[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 petroleum, and waste oil.

[c] 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] Through 1989, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."

[g] Wood and wood-derived fuels.

[h] 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).

[i] Solar thermal and photovoltaic (PV) energy.

[j] 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.

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.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

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

Table 7.2b Electricity Net Generation: Electric Power Sector

(Subset of Table 7.2a; Million Kilowatthours)

	Fossil Fuels						Renewable Energy						
								Biomass					
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Gases[d]	Nuclear Electric Power	Hydroelectric Pumped Storage[e]	Conventional Hydroelectric Power[f]	Wood[g]	Waste[h]	Geothermal	Solar/PV[i]	Wind	Total[j]
1973 Total	**847,651**	**314,343**	**340,858**	**NA**	**83,479**	**([f])**	**272,083**	**130**	**198**	**1,966**	**NA**	**NA**	**1,860,710**
1975 Total	**852,786**	**289,095**	**299,778**	**NA**	**172,505**	**([f])**	**300,047**	**18**	**174**	**3,246**	**NA**	**NA**	**1,917,649**
1980 Total	**1,161,562**	**245,994**	**346,240**	**NA**	**251,116**	**([f])**	**276,021**	**275**	**158**	**5,073**	**NA**	**NA**	**2,286,439**
1985 Total	**1,402,128**	**100,202**	**291,946**	**NA**	**383,691**	**([f])**	**281,149**	**743**	**640**	**9,325**	**11**	**6**	**2,469,841**
1990 Total[k]	**1,572,109**	**118,864**	**309,486**	**621**	**576,862**	**-3,508**	**289,753**	**7,032**	**11,500**	**15,434**	**367**	**2,789**	**2,901,322**
1995 Total	**1,686,056**	**68,146**	**419,179**	**1,927**	**673,402**	**-2,725**	**305,410**	**7,597**	**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**
1998 Total	**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	**1,858,618**	**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	**1,943,111**	**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	**1,882,826**	**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	**1,952,714**	**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	**1,957,188**	**114,678**	**627,172**	**3,568**	**788,528**	**-8,488**	**265,064**	**9,736**	**13,062**	**14,811**	**575**	**14,144**	**3,808,360**
2005 Total	**1,992,054**	**116,482**	**683,829**	**3,777**	**781,986**	**-6,558**	**267,040**	**10,570**	**13,031**	**14,692**	**550**	**17,811**	**3,902,192**
2006 Total	**1,969,737**	**59,708**	**734,417**	**4,254**	**787,219**	**-6,558**	**286,254**	**10,341**	**13,927**	**14,568**	**508**	**26,589**	**3,908,077**
2007 Total	**1,998,390**	**61,306**	**814,752**	**4,042**	**806,425**	**-6,896**	**245,843**	**10,711**	**14,294**	**14,637**	**612**	**34,450**	**4,005,343**
2008 Total	**1,968,838**	**42,881**	**802,372**	**3,200**	**806,208**	**-6,288**	**253,096**	**10,638**	**15,379**	**14,840**	**864**	**55,363**	**3,974,349**
2009 Total	**1,741,123**	**35,811**	**841,006**	**3,058**	**798,855**	**-4,627**	**271,506**	**10,738**	**15,954**	**15,009**	**891**	**73,886**	**3,809,837**
2010 January	171,660	4,111	66,847	275	72,569	-565	22,207	1,011	1,294	1,312	10	6,853	348,128
February	151,461	2,166	59,556	247	65,245	-351	20,421	926	1,207	1,159	33	5,431	307,994
March	142,665	2,299	56,492	275	64,635	-325	20,691	939	1,391	1,307	76	8,588	299,571
April	125,615	2,109	58,124	273	57,611	-335	18,898	837	1,334	1,240	112	9,763	276,121
May	141,669	2,801	66,862	279	66,658	-441	24,903	830	1,359	1,311	153	8,696	315,656
June	163,912	3,792	85,033	265	68,301	-472	29,711	955	1,409	1,264	175	8,048	362,985
July	177,778	4,199	106,961	267	71,913	-557	24,405	1,061	1,419	1,274	161	6,723	396,195
August	175,848	3,375	112,961	249	71,574	-600	20,019	1,074	1,413	1,297	156	6,685	394,651
September	147,157	2,608	85,498	240	69,371	-421	17,188	974	1,364	1,253	137	7,104	333,057
October	130,663	2,037	70,876	170	62,751	-438	17,561	887	1,330	1,222	75	7,942	295,646
November	133,815	1,879	62,305	219	62,655	-467	19,426	934	1,412	1,252	76	9,746	293,833
December	165,494	3,302	69,875	208	73,683	-530	23,024	1,018	1,443	1,330	43	9,058	348,549
Total	**1,827,738**	**34,679**	**901,389**	**2,967**	**806,968**	**-5,501**	**258,455**	**11,446**	**16,376**	**15,219**	**1,206**	**94,636**	**3,972,386**
2011 January	169,157	3,056	67,038	247	72,743	-426	26,001	986	1,293	1,478	31	8,657	350,775
February	136,752	2,042	59,187	206	64,789	-247	24,517	873	1,204	1,326	79	10,525	301,735
March	133,163	2,282	59,350	250	65,662	-350	31,537	883	1,457	1,465	112	10,534	306,932
April	123,067	2,112	63,709	250	54,547	-467	31,422	674	1,439	1,337	160	12,444	291,282
May	135,794	2,053	68,567	250	57,017	-419	32,888	753	1,467	1,438	199	11,632	312,220
June	156,677	2,276	84,032	282	65,270	-568	32,097	921	1,470	1,363	254	10,884	355,569
July	174,850	2,840	112,765	296	72,345	-709	31,442	1,042	1,537	1,372	223	7,380	406,019
August	169,572	2,243	111,991	293	71,339	-663	26,217	1,020	1,481	1,380	233	7,339	393,059
September	139,458	2,075	84,392	287	66,849	-554	21,375	896	1,395	1,334	181	6,880	325,121
October	125,200	1,792	72,407	279	63,354	-572	19,905	752	1,444	1,393	167	10,618	297,294
November	119,867	1,597	68,418	242	64,474	-441	21,222	753	1,457	1,377	77	12,348	291,954
December	131,311	1,857	78,714	266	71,837	-496	24,520	951	1,538	1,439	79	10,464	323,103
Total	**1,714,870**	**26,223**	**930,568**	**3,148**	**790,225**	**-5,912**	**323,141**	**10,504**	**17,182**	**16,700**	**1,795**	**119,704**	**3,955,065**
2012 January	127,430	1,940	83,532	422	72,382	-330	23,749	949	1,388	1,438	69	13,814	327,388
February	112,361	1,524	83,904	422	63,850	-226	20,649	875	1,295	1,361	117	11,040	297,729
March	104,552	1,375	85,611	275	61,730	-268	26,090	829	1,422	1,438	211	13,543	297,419
3-Month Total	**344,343**	**4,838**	**253,047**	**1,120**	**197,962**	**-824**	**70,488**	**2,653**	**4,104**	**4,237**	**397**	**38,397**	**922,535**
2011 3-Month Total	**439,073**	**7,381**	**185,575**	**703**	**203,193**	**-1,023**	**82,055**	**2,742**	**3,954**	**4,268**	**222**	**29,716**	**959,442**
2010 3-Month Total	**465,786**	**8,575**	**182,894**	**797**	**202,449**	**-1,240**	**63,319**	**2,877**	**3,892**	**3,777**	**118**	**20,872**	**955,692**

[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 petroleum, and waste oil.
[c] 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] Through 1989, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."
[g] Wood and wood-derived fuels.
[h] 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).
[i] Solar thermal and photovoltaic (PV) energy.
[j] 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, data are for electric utilities only. Beginning in 1989, data are for electric utilites and independent power producers.

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.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

Sources: See end of section.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Subset of Table 7.2a; Million Kilowatthours)

	Commercial Sector[a]					Industrial Sector[b]							
				Biomass							Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Total[g]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[h]	Hydroelectric Power[i]	Wood[j]	Waste[f]	Total[k]
1973 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,347**	**NA**	**NA**	**3,347**
1975 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,106**	**NA**	**NA**	**3,106**
1980 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,161**	**NA**	**NA**	**3,161**
1985 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,161**	**NA**	**NA**	**3,161**
1990 Total	**796**	**589**	**3,272**	**812**	**5,837**	**21,107**	**7,008**	**60,007**	**9,641**	**2,975**	**25,379**	**949**	**130,830**
1995 Total	**998**	**379**	**5,162**	**1,519**	**8,232**	**22,372**	**6,030**	**71,717**	**11,943**	**5,304**	**28,868**	**900**	**151,025**
1996 Total	**1,051**	**369**	**5,249**	**2,176**	**9,030**	**22,172**	**6,260**	**71,049**	**13,015**	**5,878**	**28,354**	**919**	**151,017**
1997 Total	**1,040**	**427**	**4,725**	**2,342**	**8,701**	**23,214**	**5,649**	**75,078**	**11,814**	**5,685**	**28,225**	**882**	**154,097**
1998 Total	**985**	**383**	**4,879**	**2,335**	**8,748**	**22,337**	**6,206**	**77,085**	**11,170**	**5,349**	**27,693**	**880**	**154,132**
1999 Total	**995**	**434**	**4,607**	**2,393**	**8,563**	**21,474**	**6,088**	**78,793**	**12,519**	**4,758**	**28,060**	**686**	**156,264**
2000 Total	**1,097**	**432**	**4,262**	**1,985**	**7,903**	**22,056**	**5,597**	**78,798**	**11,927**	**4,135**	**28,652**	**839**	**156,673**
2001 Total	**995**	**438**	**4,434**	**1,007**	**7,416**	**20,135**	**5,293**	**79,755**	**8,454**	**3,145**	**26,888**	**596**	**149,175**
2002 Total	**992**	**431**	**4,310**	**1,053**	**7,415**	**21,525**	**4,403**	**79,013**	**9,493**	**3,825**	**29,643**	**846**	**152,580**
2003 Total	**1,206**	**423**	**3,899**	**1,289**	**7,496**	**19,817**	**5,285**	**78,705**	**12,953**	**4,222**	**27,988**	**715**	**154,530**
2004 Total	**1,340**	**499**	**3,969**	**1,562**	**8,270**	**19,773**	**5,967**	**78,959**	**11,684**	**3,248**	**28,367**	**797**	**153,925**
2005 Total	**1,353**	**375**	**4,249**	**1,657**	**8,492**	**19,466**	**5,368**	**72,882**	**9,687**	**3,195**	**28,271**	**733**	**144,739**
2006 Total	**1,310**	**235**	**4,355**	**1,599**	**8,371**	**19,464**	**4,223**	**77,669**	**9,923**	**2,899**	**28,400**	**572**	**148,254**
2007 Total	**1,371**	**189**	**4,257**	**1,599**	**8,273**	**16,694**	**4,243**	**77,580**	**9,411**	**1,590**	**28,287**	**631**	**143,128**
2008 Total	**1,261**	**142**	**4,188**	**1,534**	**7,926**	**15,703**	**3,219**	**76,421**	**8,507**	**1,676**	**26,641**	**821**	**137,113**
2009 Total	**1,096**	**163**	**4,225**	**1,748**	**8,165**	**13,686**	**2,963**	**75,748**	**7,574**	**1,868**	**25,292**	**740**	**132,329**
2010 January	116	13	367	137	709	1,544	225	6,959	634	169	2,114	72	12,120
February	102	11	339	111	623	1,481	197	6,303	578	162	1,967	64	11,118
March	91	8	351	134	661	1,649	163	6,588	735	188	2,149	67	11,936
April	80	9	326	144	645	1,258	169	6,194	669	187	2,094	80	11,034
May	84	12	326	149	666	1,519	181	6,477	738	164	2,061	69	11,614
June	97	10	350	150	699	1,482	187	6,885	700	132	2,137	68	12,075
July	110	18	459	146	812	1,713	194	7,205	696	107	2,246	75	12,718
August	105	11	490	152	838	1,792	189	7,701	812	99	2,243	78	13,395
September	89	9	421	148	750	1,499	165	7,085	713	76	2,182	62	12,238
October	80	7	419	133	712	1,527	184	6,443	637	117	2,114	84	11,562
November	69	4	401	134	683	1,301	196	6,520	688	130	2,145	79	11,493
December	88	12	476	136	793	1,677	209	7,223	744	134	2,255	71	12,777
Total	**1,111**	**124**	**4,725**	**1,672**	**8,592**	**18,441**	**2,258**	**81,583**	**8,343**	**1,668**	**25,706**	**869**	**144,082**
2011 January	103	13	402	139	739	1,723	198	7,017	663	137	2,271	71	12,341
February	95	8	350	125	656	1,447	151	6,314	564	160	2,021	64	10,961
March	97	7	341	134	666	1,457	165	6,478	705	188	2,156	65	11,494
April	71	5	347	118	622	1,155	162	6,473	662	196	2,112	62	11,089
May	77	6	373	160	714	1,622	140	6,829	597	208	2,047	74	11,822
June	82	8	368	144	693	1,549	155	6,696	698	147	2,321	71	11,921
July	96	13	431	155	791	1,763	158	7,181	762	118	2,304	76	12,669
August	86	7	408	160	752	1,814	157	7,248	706	100	2,268	76	12,639
September	76	6	356	150	674	1,686	166	6,629	670	123	2,215	76	11,811
October	63	8	359	153	668	1,609	135	6,312	669	126	2,123	72	11,317
November	64	6	378	155	691	1,266	121	6,841	680	147	2,226	77	11,623
December	78	6	413	154	739	1,317	138	7,480	738	188	2,359	73	12,577
Total	**989**	**93**	**4,526**	**1,746**	**8,403**	**18,406**	**1,846**	**81,500**	**8,115**	**1,838**	**26,422**	**858**	**142,266**
2012 January	83	6	387	163	698	1,552	286	7,295	673	182	2,343	70	12,657
February	82	4	357	163	665	1,388	190	6,999	723	163	2,152	65	11,904
March	68	4	363	155	658	1,412	197	6,765	747	195	2,001	60	11,633
3-Month Total	**233**	**14**	**1,106**	**482**	**2,021**	**4,351**	**673**	**21,060**	**2,143**	**540**	**6,496**	**195**	**36,194**
2011 3-Month Total	**296**	**27**	**1,093**	**398**	**2,060**	**4,627**	**515**	**19,810**	**1,932**	**485**	**6,448**	**200**	**34,796**
2010 3-Month Total	**310**	**32**	**1,057**	**382**	**1,993**	**4,674**	**584**	**19,850**	**1,946**	**520**	**6,229**	**203**	**35,175**

[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

[c] 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.

[e] 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).

[g] Includes a small amount of conventional hydroelectric power, other gases, photovoltaic (PV) energy, wind, wood, and other, which are not separately displayed.

[h] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

[i] Conventional hydroelectric power.

[j] Wood and wood-derived fuels.

[k] Includes photovoltaic (PV) energy, wind, 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).

NA=Not available.

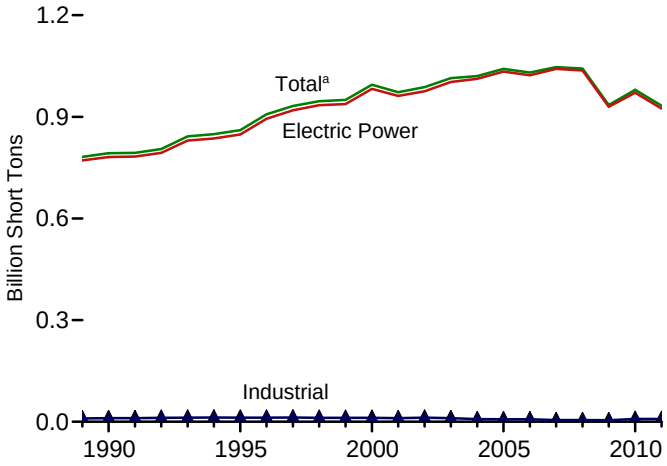
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

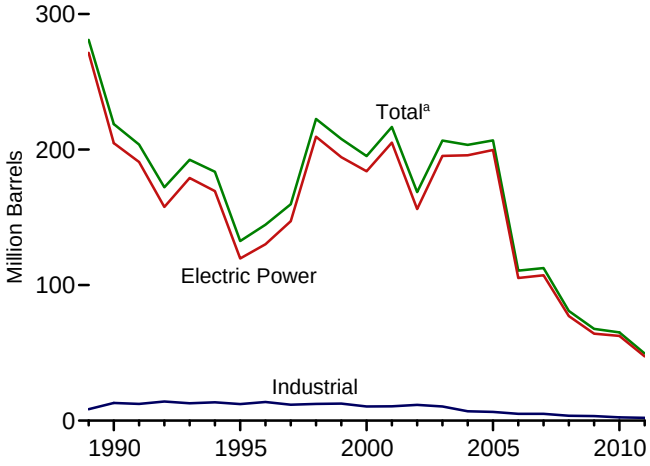
Sources: See end of section.

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation

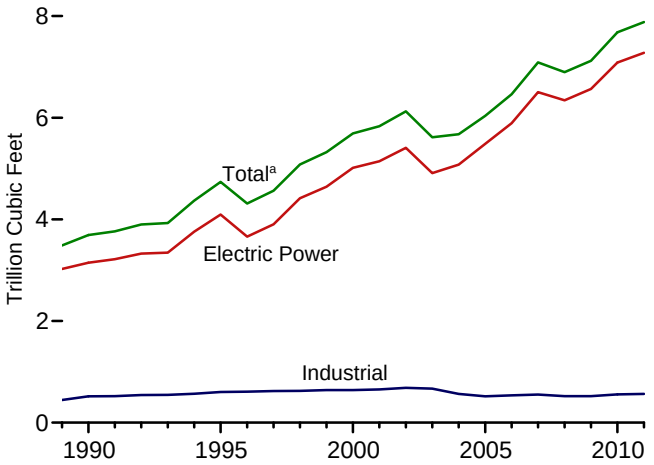
Coal by Sector, 1989-2011



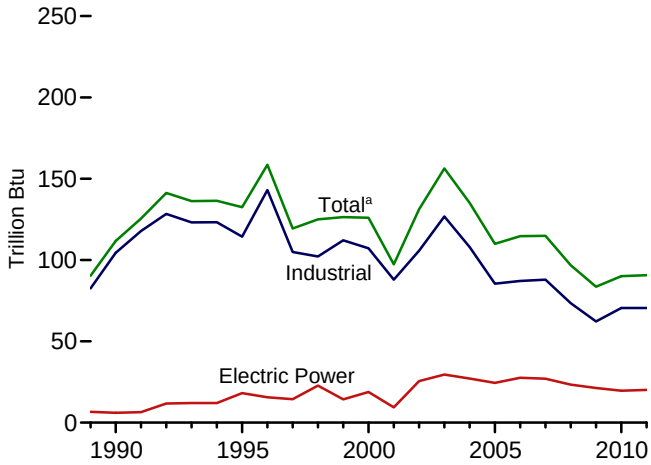
Petroleum by Sector, 1989-2011



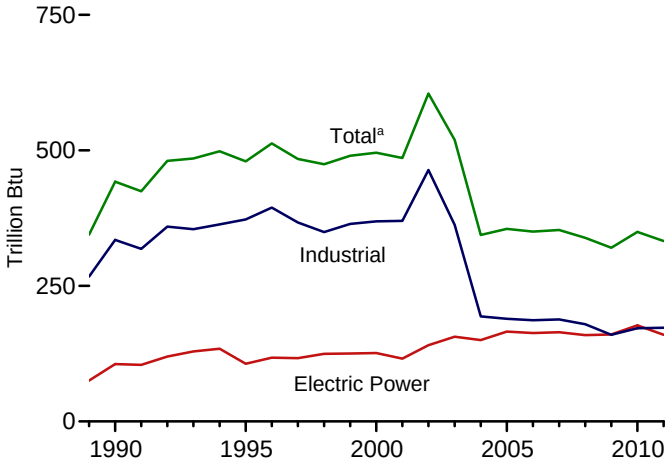
Natural Gas by Sector, 1989-2011



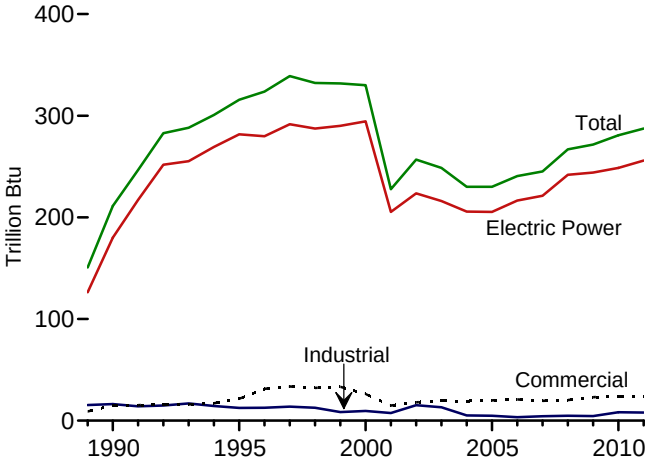
Other Gases[b] by Sector, 1989-2011



Wood by Sector, 1989-2011



Waste by Sector, 1989-2011



[a] Includes commercial sector.
[b] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Sources: Tables 7.3a–7.3c.

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

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion 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**
1990 Total[k]	**792,457**	**18,143**	**190,652**	**437**	**1,914**	**218,800**	**3,692**	**112**	**442**	**211**	**36**
1995 Total	**860,594**	**19,615**	**95,507**	**680**	**3,355**	**132,578**	**4,738**	**133**	**480**	**316**	**42**
1996 Total	**907,209**	**20,252**	**106,055**	**1,712**	**3,322**	**144,626**	**4,312**	**159**	**513**	**324**	**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	**1,020,523**	**20,163**	**142,088**	**2,856**	**7,677**	**203,494**	**5,675**	**135**	**344**	**230**	**183**
2005 Total	**1,041,448**	**20,651**	**141,518**	**2,968**	**8,330**	**206,785**	**6,036**	**110**	**355**	**230**	**173**
2006 Total	**1,030,556**	**13,174**	**58,473**	**2,174**	**7,363**	**110,634**	**6,462**	**115**	**350**	**241**	**172**
2007 Total	**1,046,795**	**15,683**	**63,833**	**2,917**	**6,036**	**112,615**	**7,089**	**115**	**353**	**245**	**168**
2008 Total	**1,042,335**	**12,832**	**38,191**	**2,822**	**5,417**	**80,932**	**6,896**	**97**	**339**	**267**	**172**
2009 Total	**934,683**	**12,658**	**28,576**	**2,328**	**4,821**	**67,668**	**7,121**	**84**	**320**	**272**	**170**
2010 January	90,767	2,485	2,860	241	433	7,751	570	7	30	22	15
February	80,209	869	1,075	212	404	4,174	502	6	28	20	13
March	76,544	785	1,245	147	438	4,370	479	8	29	24	15
April	67,037	726	1,160	126	382	3,923	494	8	27	23	15
May	76,061	1,050	1,997	121	415	5,244	582	8	27	24	15
June	87,395	1,244	3,087	154	493	6,950	731	8	29	24	16
July	94,993	1,347	3,681	200	524	7,849	923	8	31	24	16
August	94,786	1,093	2,987	164	423	6,358	972	8	32	24	16
September	79,573	905	1,789	151	394	4,813	723	8	30	23	16
October	70,918	787	1,113	129	362	3,840	594	6	28	23	15
November	72,756	876	982	143	317	3,588	519	7	29	24	15
December	88,645	1,883	2,021	266	408	6,210	591	8	31	24	16
Total	**979,684**	**14,050**	**23,997**	**2,056**	**4,994**	**65,071**	**7,680**	**90**	**350**	**281**	**184**
2011 January	90,106	1,238	1,700	231	526	5,802	564	7	30	22	12
February	73,505	854	1,007	124	387	3,919	503	6	27	21	11
March	72,340	839	1,122	133	465	4,421	504	7	28	24	14
April	66,870	957	1,328	121	304	3,924	548	7	24	23	13
May	73,511	909	1,222	110	316	3,820	603	7	25	24	14
June	84,072	969	1,261	145	388	4,316	729	8	29	25	14
July	94,214	1,161	1,542	167	479	5,265	966	8	30	26	15
August	92,177	809	1,333	122	415	4,341	948	8	30	25	14
September	76,612	778	958	162	392	3,861	710	8	28	24	13
October	69,524	711	940	124	307	3,311	600	8	26	24	13
November	66,789	715	904	135	250	3,002	568	8	26	24	13
December	73,190	835	927	134	331	3,551	639	8	30	25	14
Total	**932,911**	**10,775**	**14,246**	**1,707**	**4,561**	**49,533**	**7,880**	**91**	**333**	**287**	**162**
2012 January	70,595	772	988	135	414	3,964	676	9	30	23	14
February	62,802	649	753	108	314	3,079	672	9	28	22	12
March	57,564	579	869	120	251	2,825	704	9	26	24	13
3-Month Total	**190,961**	**2,000**	**2,610**	**363**	**979**	**9,868**	**2,052**	**26**	**85**	**69**	**39**
2011 3-Month Total	**235,952**	**2,931**	**3,830**	**488**	**1,379**	**14,142**	**1,571**	**21**	**85**	**67**	**38**
2010 3-Month Total	**247,520**	**4,140**	**5,181**	**600**	**1,275**	**16,296**	**1,551**	**22**	**86**	**66**	**43**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal 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.

[c] 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.

[d] Jet fuel, kerosene, other petroleum liquids, and waste oil.

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

[f] 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.

[h] 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 non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[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. (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.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

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

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

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion 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**
1990 Total[k]	**781,301**	**16,394**	**183,285**	**25**	**1,008**	**204,745**	**3,147**	**6**	**106**	**180**	**(s)**
1995 Total	**847,854**	**18,066**	**88,895**	**441**	**2,452**	**119,663**	**4,094**	**18**	**106**	**282**	**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**	**9**	**116**	**205**	**109**
2002 Total	**975,251**	**21,810**	**104,577**	**1,243**	**5,705**	**156,154**	**5,408**	**25**	**141**	**224**	**137**
2003 Total	**1,003,036**	**27,441**	**137,361**	**1,937**	**5,719**	**195,336**	**4,909**	**30**	**156**	**216**	**136**
2004 Total	**1,012,459**	**18,793**	**138,831**	**2,511**	**7,135**	**195,809**	**5,075**	**27**	**150**	**206**	**131**
2005 Total	**1,033,567**	**19,450**	**138,337**	**2,591**	**7,877**	**199,760**	**5,485**	**24**	**166**	**205**	**116**
2006 Total	**1,022,802**	**12,578**	**56,347**	**1,783**	**6,905**	**105,235**	**5,891**	**28**	**163**	**216**	**117**
2007 Total	**1,041,346**	**15,135**	**62,072**	**2,496**	**5,523**	**107,316**	**6,502**	**27**	**165**	**221**	**117**
2008 Total	**1,036,891**	**12,318**	**37,222**	**2,608**	**5,000**	**77,149**	**6,342**	**23**	**159**	**242**	**122**
2009 Total	**929,692**	**11,848**	**27,768**	**2,110**	**4,485**	**64,151**	**6,567**	**21**	**160**	**244**	**115**
2010 January	90,080	2,441	2,804	219	404	7,482	519	2	16	20	9
February	79,537	833	1,023	196	379	3,946	456	2	15	18	8
March	75,772	756	1,214	130	415	4,176	432	2	15	21	9
April	66,559	695	1,132	112	360	3,741	449	2	14	20	9
May	75,311	1,021	1,964	104	390	5,040	536	2	13	21	10
June	86,725	1,220	3,059	137	463	6,733	681	2	15	21	10
July	94,194	1,306	3,643	185	495	7,610	869	2	16	22	10
August	93,922	1,066	2,962	149	392	6,136	915	2	16	22	10
September	78,881	880	1,760	136	371	4,628	671	1	15	21	10
October	70,205	762	1,076	112	337	3,634	547	1	13	20	10
November	72,206	849	949	125	290	3,373	473	1	15	21	10
December	87,854	1,847	1,973	244	383	5,978	538	1	16	22	10
Total	**971,245**	**13,677**	**23,560**	**1,848**	**4,679**	**62,477**	**7,085**	**20**	**177**	**249**	**116**
2011 January	89,305	1,215	1,653	223	495	5,564	512	1	15	20	9
February	72,814	832	973	117	365	3,750	457	1	14	18	8
March	71,671	822	1,093	121	440	4,234	457	1	13	22	10
April	66,411	936	1,296	104	282	3,747	500	2	11	21	10
May	72,742	891	1,199	103	295	3,670	551	2	12	22	10
June	83,360	946	1,236	129	364	4,134	679	2	14	22	10
July	93,388	1,135	1,518	158	452	5,069	912	2	15	23	11
August	91,340	788	1,311	107	389	4,152	894	2	15	22	10
September	75,820	756	940	126	369	3,670	661	2	13	21	10
October	68,779	686	911	119	288	3,155	553	2	12	21	10
November	66,260	693	883	129	233	2,871	518	2	12	21	10
December	72,633	811	899	128	309	3,382	584	2	15	22	10
Total	**924,523**	**10,513**	**13,914**	**1,564**	**4,281**	**47,398**	**7,279**	**20**	**160**	**256**	**117**
2012 January	69,864	754	961	124	331	3,497	623	3	15	21	10
February	62,146	635	728	97	263	2,775	623	3	14	19	9
March	56,908	563	849	111	201	2,528	655	2	13	21	10
3-Month Total	**188,918**	**1,952**	**2,538**	**332**	**796**	**8,801**	**1,901**	**8**	**41**	**61**	**30**
2011 3-Month Total	**233,790**	**2,870**	**3,719**	**461**	**1,300**	**13,548**	**1,425**	**4**	**42**	**59**	**27**
2010 3-Month Total	**245,389**	**4,030**	**5,041**	**545**	**1,198**	**15,604**	**1,407**	**5**	**45**	**59**	**27**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal 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.

[c] 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.

[d] Jet fuel, kerosene, other petroleum liquids, and waste oil.

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

[f] 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.

[h] 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 non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[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.

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.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

Sources: See end of section.

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

	Commercial Sector[a]				Industrial Sector[b]						
				Biomass					Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[g]	Wood[h]	Waste[f]	Other[i]
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1989 Total	**414**	**1,165**	**18**	**9**	**9,707**	**8,482**	**444**	**83**	**267**	**15**	**37**
1990 Total	**417**	**953**	**28**	**15**	**10,740**	**13,103**	**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**	**802**	**41**	**32**	**11,728**	**12,392**	**625**	**102**	**349**	**13**	**35**
1999 Total	**481**	**931**	**39**	**33**	**11,432**	**12,595**	**639**	**112**	**364**	**8**	**39**
2000 Total	**514**	**823**	**37**	**26**	**11,706**	**10,459**	**640**	**107**	**369**	**10**	**45**
2001 Total	**532**	**1,023**	**36**	**15**	**10,636**	**10,530**	**654**	**88**	**370**	**7**	**44**
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	**377**	**766**	**33**	**19**	**7,687**	**6,919**	**566**	**108**	**194**	**5**	**41**
2005 Total	**377**	**585**	**34**	**20**	**7,504**	**6,440**	**518**	**85**	**189**	**5**	**46**
2006 Total	**347**	**333**	**35**	**21**	**7,408**	**5,066**	**536**	**87**	**187**	**3**	**45**
2007 Total	**361**	**258**	**34**	**19**	**5,089**	**5,041**	**554**	**88**	**188**	**4**	**41**
2008 Total	**369**	**166**	**33**	**20**	**5,075**	**3,617**	**520**	**73**	**179**	**5**	**39**
2009 Total	**317**	**190**	**34**	**23**	**4,674**	**3,328**	**520**	**62**	**160**	**4**	**42**
2010 January	32	18	3	2	654	252	48	5	14	1	4
February	28	16	3	2	643	212	43	5	13	1	4
March	26	12	3	2	746	182	44	6	14	1	4
April	23	11	3	2	456	171	42	6	14	1	4
May	23	14	3	2	727	190	44	6	14	1	4
June	27	13	3	2	643	204	47	6	14	1	5
July	30	26	4	2	769	213	50	6	15	1	5
August	29	15	4	2	835	207	53	7	15	1	5
September	26	13	3	2	666	171	48	6	15	1	5
October	23	11	3	2	690	195	44	5	14	1	5
November	21	7	3	2	529	208	43	6	14	1	4
December	26	15	4	2	765	217	48	6	15	1	5
Total	**314**	**172**	**39**	**24**	**8,125**	**2,422**	**555**	**70**	**172**	**8**	**55**
2011 January	30	14	3	2	771	223	49	6	15	1	2
February	28	9	3	2	663	160	44	5	13	1	2
March	28	8	3	2	641	179	44	6	14	1	3
April	22	6	3	2	437	171	45	6	14	1	3
May	23	7	3	2	746	143	48	5	13	1	3
June	24	9	3	2	688	173	47	6	15	1	3
July	28	15	4	2	798	181	50	7	15	1	3
August	26	9	3	2	811	180	50	6	15	1	3
September	23	8	3	2	769	183	46	6	14	1	2
October	20	11	3	2	725	145	44	6	14	1	3
November	20	8	3	2	509	124	47	6	15	1	3
December	24	8	3	2	533	161	51	6	16	1	3
Total	**297**	**112**	**38**	**24**	**8,091**	**2,023**	**564**	**71**	**173**	**8**	**31**
2012 January	25	7	3	2	706	460	50	6	15	1	2
February	25	5	3	2	631	299	47	6	15	1	2
March	22	6	3	2	634	291	46	7	14	1	2
3-Month Total	**72**	**18**	**9**	**6**	**1,972**	**1,050**	**143**	**19**	**44**	**2**	**7**
2011 3-Month Total	**87**	**31**	**9**	**6**	**2,076**	**563**	**137**	**16**	**42**	**2**	**7**
2010 3-Month Total	**87**	**46**	**9**	**5**	**2,044**	**646**	**135**	**16**	**41**	**2**	**12**

[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
[c] 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.
[e] 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).
[g] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
[h] Wood and wood-derived fuels.
[i] 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).

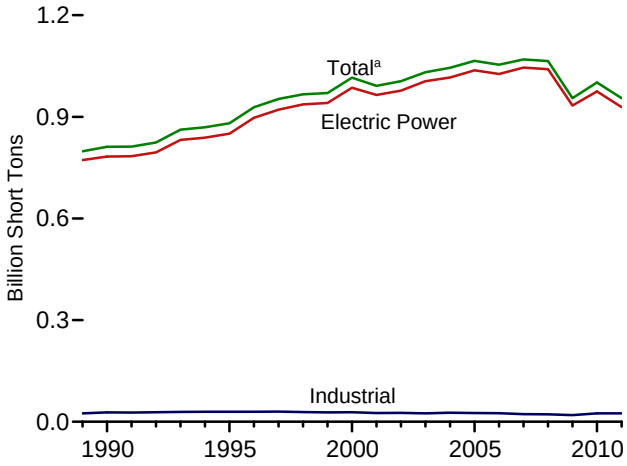
Notes: • Data are for fuels consumed to produce electricity. Through 1988, data are not available. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1989.

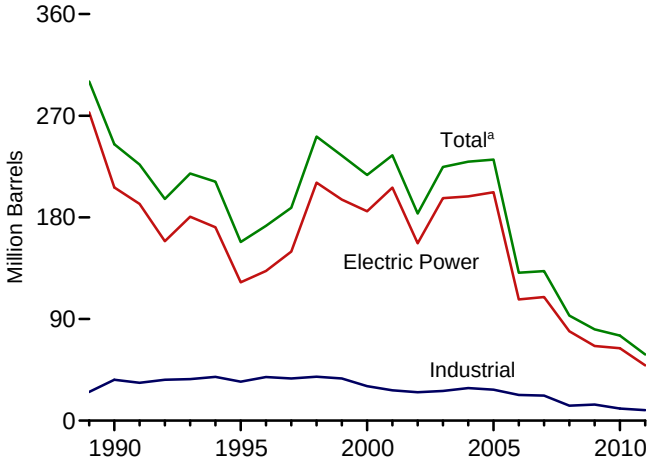
Sources: • **1989-1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 forward:** EIA, Form EIA-923, "Power Plant Operations Report."

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

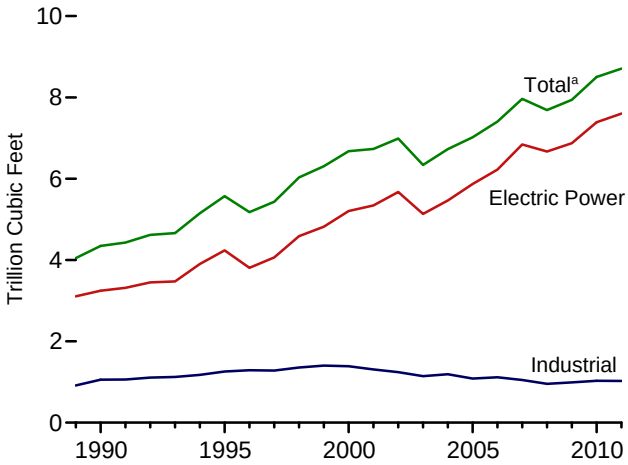
Coal by Sector, 1989-2011



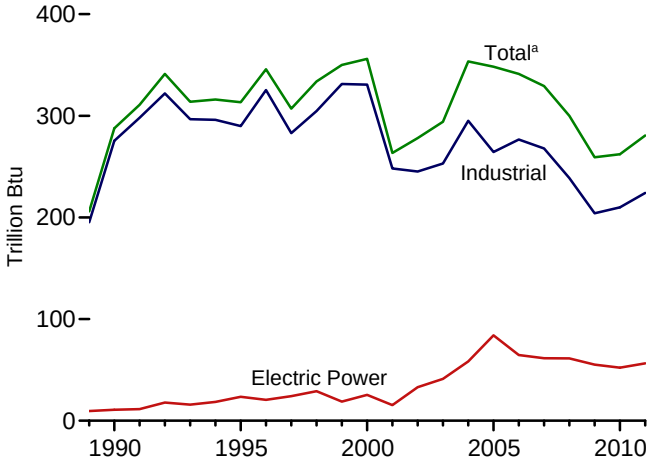
Petroleum by Sector, 1989-2011



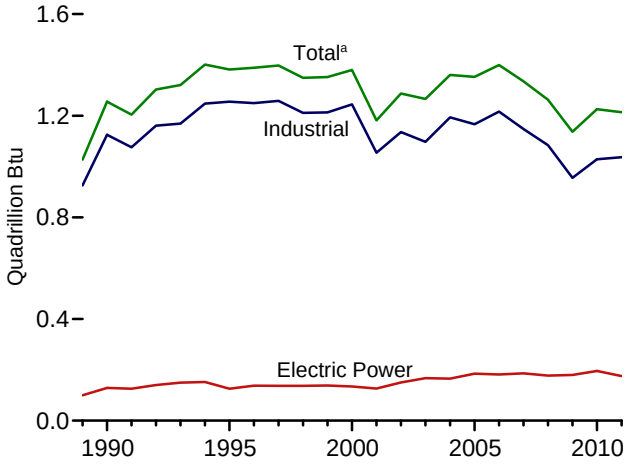
Natural Gas by Sector, 1989-2011



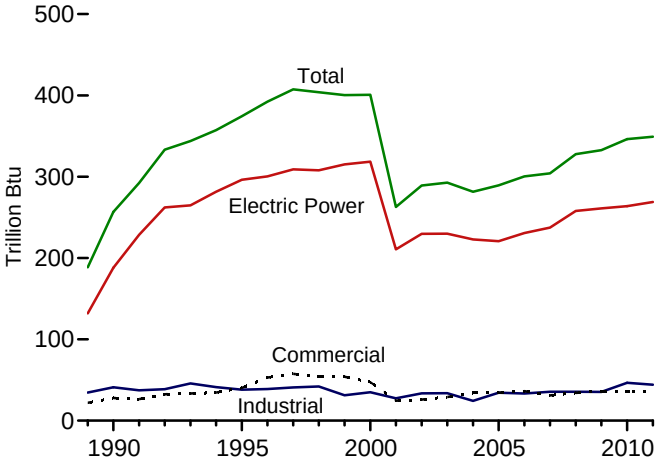
Other Gases[b] by Sector, 1989-2011



Wood by Sector, 1989-2011



Waste by Sector, 1989-2011



[a] Includes commercial sector.
[b] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Sources: Tables 7.4a–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)

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion 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**	**0**	**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[k]	**811,538**	**20,194**	**209,081**	**1,332**	**2,832**	**244,765**	**4,346**	**288**	**1,256**	**257**	**86**
1995 Total	**881,012**	**21,697**	**112,168**	**1,322**	**4,590**	**158,140**	**5,572**	**313**	**1,382**	**374**	**97**
1996 Total	**928,015**	**22,444**	**124,607**	**2,468**	**4,596**	**172,499**	**5,178**	**346**	**1,389**	**392**	**91**
1997 Total	**952,955**	**22,893**	**134,623**	**526**	**6,095**	**188,517**	**5,433**	**307**	**1,397**	**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**	**353**	**1,360**	**282**	**254**
2005 Total	**1,065,281**	**24,446**	**156,915**	**4,270**	**9,113**	**231,193**	**7,021**	**348**	**1,353**	**289**	**237**
2006 Total	**1,053,783**	**14,655**	**69,846**	**3,396**	**8,622**	**131,005**	**7,404**	**341**	**1,399**	**300**	**247**
2007 Total	**1,069,606**	**17,042**	**74,616**	**4,237**	**7,299**	**132,389**	**7,962**	**329**	**1,336**	**304**	**239**
2008 Total	**1,064,503**	**14,137**	**43,477**	**3,765**	**6,314**	**92,948**	**7,689**	**300**	**1,263**	**328**	**212**
2009 Total	**955,190**	**14,800**	**33,672**	**3,218**	**5,828**	**80,830**	**7,938**	**259**	**1,137**	**333**	**228**
2010 January	92,738	2,643	3,212	338	525	8,819	643	21	103	29	18
February	82,029	978	1,397	286	497	5,143	566	19	96	26	17
March	78,383	866	1,439	207	522	5,124	547	23	103	30	19
April	69,179	837	1,355	176	458	4,656	556	22	98	29	19
May	77,725	1,111	2,221	176	500	6,005	647	23	98	29	20
June	89,063	1,295	3,291	204	586	7,721	796	23	101	29	21
July	96,783	1,455	3,921	244	613	8,684	997	22	105	29	21
August	96,593	1,185	3,190	206	510	7,132	1,047	23	106	29	21
September	81,250	961	2,006	191	475	5,534	791	22	103	27	20
October	72,571	871	1,370	186	453	4,693	662	20	101	29	20
November	74,496	1,017	1,212	204	414	4,503	586	21	102	30	20
December	90,600	2,029	2,332	361	499	7,218	665	23	109	30	21
Total	**1,001,411**	**15,247**	**26,944**	**2,777**	**6,053**	**75,231**	**8,502**	**262**	**1,226**	**346**	**237**
2011 January	92,180	1,302	2,014	286	602	6,611	639	22	108	29	15
February	75,364	934	1,197	161	490	4,742	568	20	96	26	14
March	74,254	890	1,327	175	573	5,256	570	24	100	29	16
April	68,631	1,020	1,541	170	409	4,774	615	23	95	27	15
May	75,353	962	1,405	147	434	4,683	671	23	94	29	16
June	85,880	1,013	1,452	188	475	5,030	794	24	104	29	17
July	96,079	1,208	1,739	206	566	5,982	1,037	24	105	30	17
August	93,974	851	1,523	165	498	5,029	1,020	24	103	30	16
September	78,352	816	1,129	225	465	4,497	777	23	101	29	15
October	71,305	762	1,162	152	388	4,018	666	25	97	29	15
November	68,515	748	1,082	164	358	3,784	636	23	100	30	15
December	75,036	868	1,109	162	408	4,181	713	25	109	31	17
Total	**954,925**	**11,374**	**16,678**	**2,203**	**5,666**	**58,586**	**8,707**	**281**	**1,214**	**349**	**189**
2012 January	72,487	817	1,177	171	487	4,598	753	26	107	29	16
February	64,477	674	882	140	388	3,637	743	26	99	27	15
March	59,263	609	985	185	372	3,642	775	26	95	29	16
3-Month Total	**196,228**	**2,100**	**3,044**	**497**	**1,247**	**11,877**	**2,271**	**79**	**302**	**85**	**46**
2011 3-Month Total	**241,799**	**3,126**	**4,537**	**623**	**1,665**	**16,609**	**1,778**	**67**	**304**	**84**	**44**
2010 3-Month Total	**253,150**	**4,486**	**6,047**	**831**	**1,544**	**19,085**	**1,756**	**63**	**302**	**84**	**54**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[b] Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.
[c] Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.
[d] Jet fuel, kerosene, other petroleum liquids, and waste oil.
[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.
[f] 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.
[h] 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 non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[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.
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.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.
Sources: See sources for Tables 7.4b and 7.4c.

Table 7.4b Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Electric Power Sector (Subset of Table 7.4a)

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion 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**
1990 Total[k]	**782,567**	**16,567**	**184,915**	**26**	**1,008**	**206,550**	**3,245**	**11**	**129**	**188**	**(s)**
1995 Total	**850,230**	**18,553**	**90,023**	**499**	**2,674**	**122,447**	**4,237**	**24**	**125**	**296**	**2**
1996 Total	**896,921**	**18,780**	**99,951**	**653**	**2,642**	**132,593**	**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**	**2**
1999 Total	**940,922**	**24,058**	**152,493**	**544**	**3,735**	**195,769**	**4,820**	**19**	**138**	**315**	**1**
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**	**58**	**165**	**223**	**138**
2005 Total	**1,037,485**	**19,675**	**139,409**	**2,685**	**8,083**	**202,184**	**5,869**	**84**	**185**	**221**	**123**
2006 Total	**1,026,636**	**12,646**	**57,345**	**1,870**	**7,101**	**107,365**	**6,222**	**65**	**182**	**231**	**125**
2007 Total	**1,045,141**	**15,327**	**63,086**	**2,594**	**5,685**	**109,431**	**6,841**	**61**	**186**	**237**	**124**
2008 Total	**1,040,580**	**12,547**	**38,241**	**2,670**	**5,119**	**79,056**	**6,668**	**61**	**177**	**258**	**131**
2009 Total	**933,627**	**12,035**	**28,782**	**2,210**	**4,611**	**66,081**	**6,873**	**55**	**180**	**261**	**124**
2010 January	90,452	2,459	2,887	222	413	7,636	546	5	17	21	10
February	79,884	851	1,061	219	389	4,076	480	4	16	20	9
March	76,110	759	1,256	131	427	4,281	457	5	16	22	10
April	66,842	699	1,214	112	369	3,871	471	5	15	21	10
May	75,597	1,023	2,055	104	400	5,181	560	5	14	22	10
June	87,030	1,222	3,147	137	471	6,860	706	5	16	23	11
July	94,519	1,309	3,730	185	503	7,742	897	5	17	23	11
August	94,247	1,068	3,051	149	394	6,236	943	4	18	23	11
September	79,176	883	1,845	136	372	4,726	697	4	16	22	10
October	70,492	772	1,161	112	346	3,773	570	3	15	22	10
November	72,514	890	1,035	126	301	3,557	497	4	16	23	10
December	88,189	1,854	2,062	245	391	6,118	564	4	17	23	11
Total	**975,052**	**13,790**	**24,503**	**1,877**	**4,777**	**64,055**	**7,387**	**52**	**196**	**264**	**124**
2011 January	89,682	1,225	1,759	224	500	5,707	542	4	16	21	10
February	73,156	858	1,020	117	374	3,866	482	4	15	20	9
March	72,009	827	1,164	121	451	4,364	483	5	15	23	11
April	66,741	940	1,378	104	291	3,879	526	4	12	22	10
May	73,100	894	1,279	103	306	3,807	578	4	13	22	11
June	83,700	950	1,316	129	374	4,265	705	5	15	23	11
July	93,736	1,139	1,603	158	462	5,211	942	5	16	24	11
August	91,667	793	1,400	107	400	4,299	923	5	16	23	11
September	76,131	760	1,027	127	380	3,812	686	5	15	22	10
October	69,109	690	995	119	295	3,280	578	5	13	23	10
November	66,557	697	962	131	242	2,999	543	5	13	23	10
December	72,971	814	973	128	319	3,512	612	5	16	23	11
Total	**928,558**	**10,586**	**14,876**	**1,568**	**4,394**	**49,003**	**7,602**	**56**	**175**	**269**	**126**
2012 January	70,231	758	1,054	125	342	3,649	651	6	16	22	11
February	62,450	638	790	97	274	2,895	649	6	15	21	10
March	57,211	567	898	111	212	2,636	680	5	14	23	11
3-Month Total	**189,893**	**1,964**	**2,742**	**333**	**828**	**9,179**	**1,981**	**17**	**45**	**66**	**33**
2011 3-Month Total	**234,847**	**2,910**	**3,943**	**462**	**1,325**	**13,938**	**1,507**	**13**	**46**	**64**	**29**
2010 3-Month Total	**246,445**	**4,069**	**5,203**	**573**	**1,229**	**15,992**	**1,482**	**14**	**50**	**63**	**29**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[b] Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.
[c] Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.
[d] Jet fuel, kerosene, other petroleum liquids, and waste oil.
[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.
[f] 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.
[h] 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 non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[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.
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.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.
Sources: See end of section.

Table 7.4c Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output: Commercial and Industrial Sectors (Subset of Table 7.4a)

	Commercial Sector[a]				Industrial Sector[b]						
				Biomass					Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[g]	Wood[h]	Waste[f]	Other[i]
	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**	**25,444**	**914**	**195**	**926**	**35**	**85**
1990 Total	**1,191**	**2,056**	**46**	**28**	**27,781**	**36,159**	**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**	**1,246**	**82**	**53**	**29,434**	**38,661**	**1,289**	**325**	**1,249**	**39**	**89**
1997 Total	**1,738**	**1,584**	**87**	**58**	**29,853**	**37,265**	**1,282**	**283**	**1,259**	**41**	**102**
1998 Total	**1,443**	**1,807**	**87**	**54**	**28,553**	**38,910**	**1,355**	**305**	**1,211**	**42**	**93**
1999 Total	**1,490**	**1,613**	**84**	**54**	**27,763**	**37,312**	**1,401**	**331**	**1,213**	**31**	**99**
2000 Total	**1,547**	**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**	**295**	**1,193**	**24**	**94**
2005 Total	**1,922**	**1,630**	**68**	**34**	**25,875**	**27,380**	**1,084**	**264**	**1,166**	**34**	**94**
2006 Total	**1,886**	**935**	**68**	**36**	**25,262**	**22,706**	**1,115**	**277**	**1,216**	**33**	**102**
2007 Total	**1,927**	**752**	**70**	**31**	**22,537**	**22,207**	**1,050**	**268**	**1,148**	**36**	**98**
2008 Total	**2,021**	**671**	**66**	**34**	**21,902**	**13,222**	**955**	**239**	**1,084**	**35**	**60**
2009 Total	**1,798**	**521**	**76**	**36**	**19,766**	**14,228**	**990**	**204**	**955**	**35**	**82**
2010 January	193	55	7	3	2,094	1,128	90	17	86	4	6
February	167	47	7	3	1,978	1,021	80	15	79	4	7
March	149	26	7	3	2,124	817	84	18	86	4	7
April	117	24	6	3	2,220	761	79	18	83	5	7
May	118	28	6	4	2,010	796	82	18	83	3	7
June	135	26	6	3	1,898	835	84	18	85	3	8
July	142	59	8	3	2,122	883	91	17	88	3	8
August	152	46	9	3	2,194	849	95	19	88	3	8
September	133	27	7	3	1,941	780	87	18	87	3	8
October	121	21	7	3	1,958	899	84	17	86	5	8
November	128	22	7	3	1,854	924	82	17	86	5	8
December	165	55	8	3	2,246	1,045	92	19	91	4	8
Total	**1,720**	**437**	**86**	**36**	**24,638**	**10,740**	**1,029**	**210**	**1,029**	**47**	**91**
2011 January	178	45	8	3	2,320	858	89	18	91	4	3
February	165	24	7	3	2,044	852	79	16	81	4	3
March	158	29	6	3	2,088	862	81	20	86	3	3
April	124	15	6	3	1,767	880	82	19	83	3	3
May	128	17	7	3	2,126	859	87	18	81	4	4
June	124	22	6	3	2,056	743	83	19	89	4	4
July	134	35	7	3	2,208	737	88	19	89	4	4
August	124	20	7	3	2,182	710	89	19	86	4	3
September	121	15	6	3	2,100	670	84	18	87	4	3
October	116	19	6	3	2,080	719	81	20	84	4	3
November	123	18	7	3	1,835	767	86	19	87	4	3
December	138	23	8	3	1,927	646	94	20	93	4	4
Total	**1,633**	**282**	**81**	**36**	**24,733**	**9,302**	**1,024**	**224**	**1,037**	**44**	**40**
2012 January	154	30	7	3	2,102	919	94	21	91	4	3
February	137	16	7	3	1,890	726	87	20	84	4	3
March	131	17	6	3	1,921	989	89	21	81	3	3
3-Month Total	**422**	**64**	**20**	**9**	**5,914**	**2,634**	**270**	**62**	**257**	**11**	**9**
2011 3-Month Total	**500**	**99**	**20**	**9**	**6,451**	**2,572**	**250**	**54**	**258**	**11**	**10**
2010 3-Month Total	**509**	**128**	**20**	**9**	**6,195**	**2,966**	**253**	**49**	**251**	**12**	**20**

[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
[c] 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.
[e] 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).
[g] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
[h] Wood and wood-derived fuels.
[i] 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).

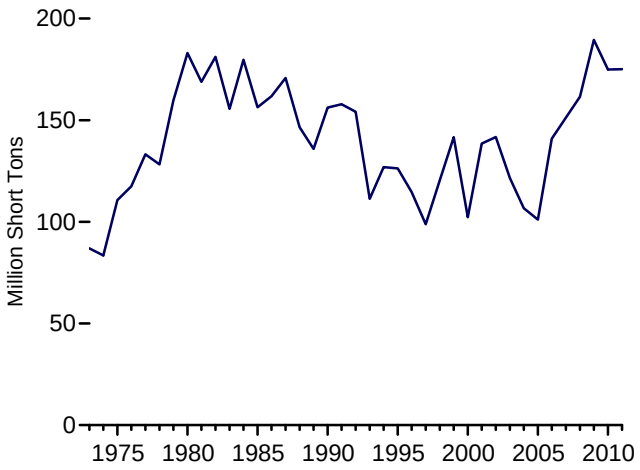
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1989.

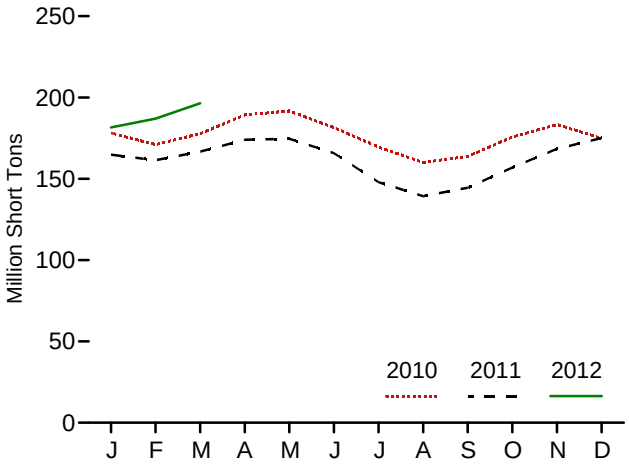
Sources: • **1989-1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 forward:** EIA, Form EIA-923, "Power Plant Operations Report."

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

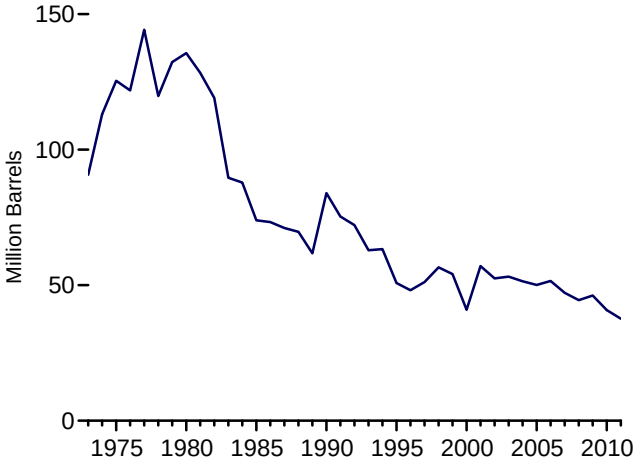
Coal, 1973-2011



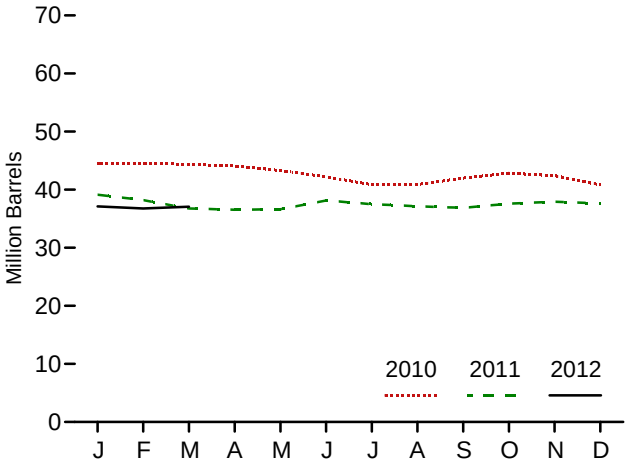
Coal, Monthly



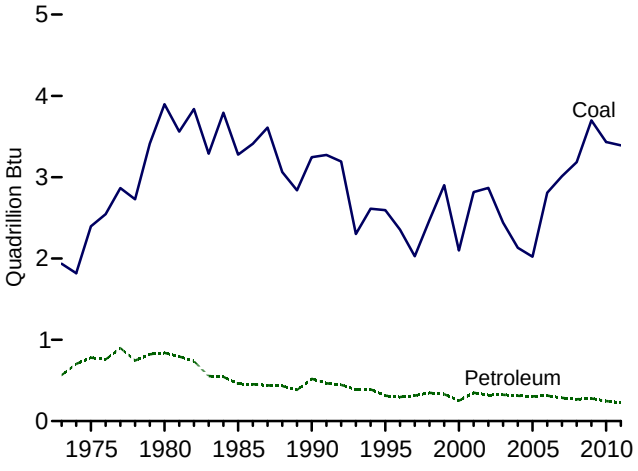
Total Petroleum, 1973-2011



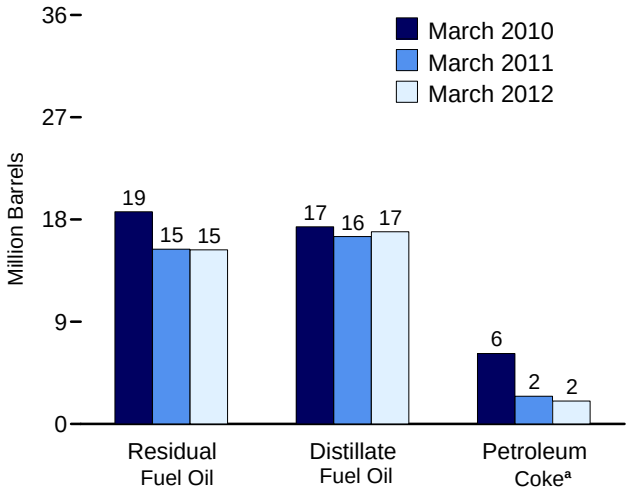
Total Petroleum, Monthly



Coal and Petroleum Stocks, 1973-2011



Petroleum by Major Type, End of Month



[a] Converted from short tons to barrels by multiplying by 5.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Sources: Tables 7.5, A1, and A5 (column 6).

Table 7.5 Stocks of Coal and Petroleum: Electric Power Sector

	Coal[a]	Petroleum				
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels
1973 Year	**86,967**	**10,095**	**79,121**	**NA**	**312**	**90,776**
1975 Year	**110,724**	**16,432**	**108,825**	**NA**	**31**	**125,413**
1980 Year	**183,010**	**30,023**	**105,351**	**NA**	**52**	**135,635**
1985 Year	**156,376**	**16,386**	**57,304**	**NA**	**49**	**73,933**
1990 Year	**156,166**	**16,471**	**67,030**	**NA**	**94**	**83,970**
1995 Year	**126,304**	**15,392**	**35,102**	**NA**	**65**	**50,821**
1996 Year	**114,623**	**15,216**	**32,473**	**NA**	**91**	**48,146**
1997 Year	**98,826**	**15,456**	**33,336**	**NA**	**469**	**51,138**
1998 Year	**120,501**	**16,343**	**37,451**	**NA**	**559**	**56,591**
1999 Year[f]	**141,604**	**17,995**	**34,256**	**NA**	**372**	**54,109**
2000 Year	**102,296**	**15,127**	**24,748**	**NA**	**211**	**40,932**
2001 Year	**138,496**	**20,486**	**34,594**	**NA**	**390**	**57,031**
2002 Year	**141,714**	**17,413**	**25,723**	**800**	**1,711**	**52,490**
2003 Year	**121,567**	**19,153**	**25,820**	**779**	**1,484**	**53,170**
2004 Year	**106,669**	**19,275**	**26,596**	**879**	**937**	**51,434**
2005 Year	**101,137**	**18,778**	**27,624**	**1,012**	**530**	**50,062**
2006 Year	**140,964**	**18,013**	**28,823**	**1,380**	**674**	**51,583**
2007 Year	**151,221**	**18,395**	**24,136**	**1,902**	**554**	**47,203**
2008 Year	**161,589**	**17,761**	**21,088**	**1,955**	**739**	**44,498**
2009 Year	**189,467**	**17,886**	**19,068**	**2,257**	**1,394**	**46,181**
2010 January	178,091	17,193	18,035	2,198	1,406	44,454
February	171,026	17,409	18,532	2,222	1,280	44,562
March	177,742	17,353	18,679	2,105	1,240	44,337
April	189,260	17,295	18,353	2,228	1,243	44,090
May	191,669	17,185	17,935	2,235	1,188	43,294
June	181,490	17,040	17,411	2,172	1,117	42,209
July	169,504	16,917	16,441	2,268	1,046	40,856
August	159,987	16,737	16,288	2,292	1,112	40,878
September	163,776	16,608	17,269	2,330	1,158	41,996
October	175,686	16,698	17,781	2,377	1,197	42,840
November	183,389	17,024	17,492	2,410	1,098	42,414
December	**174,917**	**16,758**	**16,629**	**2,319**	**1,019**	**40,800**
2011 January	164,840	16,673	16,061	2,383	801	39,123
February	161,439	16,654	15,575	2,435	707	38,200
March	166,737	16,498	15,393	2,437	489	36,776
April	173,999	16,301	15,180	2,460	522	36,551
May	174,619	16,195	15,235	2,447	548	36,617
June	165,707	16,779	16,356	2,564	491	38,152
July	147,967	16,550	16,090	2,561	462	37,510
August	139,225	16,583	15,804	2,581	435	37,144
September	144,438	16,691	15,654	2,593	389	36,884
October	156,906	16,955	15,942	2,640	413	37,601
November	168,354	17,148	15,832	2,677	453	37,923
December	**175,100**	**17,101**	**15,469**	**2,690**	**470**	**37,608**
2012 January	181,621	17,179	15,248	2,718	394	37,116
February	186,958	17,024	15,174	2,766	357	36,749
March	196,391	16,929	15,326	2,792	405	37,073

[a] Anthracite, bituminous coal, subbituminous coal, and lignite.

[b] 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.

[c] 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.

[d] 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.

[f] Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and independent power producers.

NA=Not available.

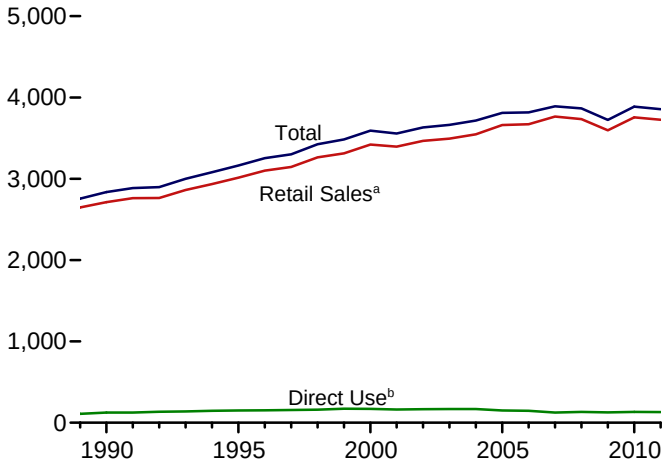
Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

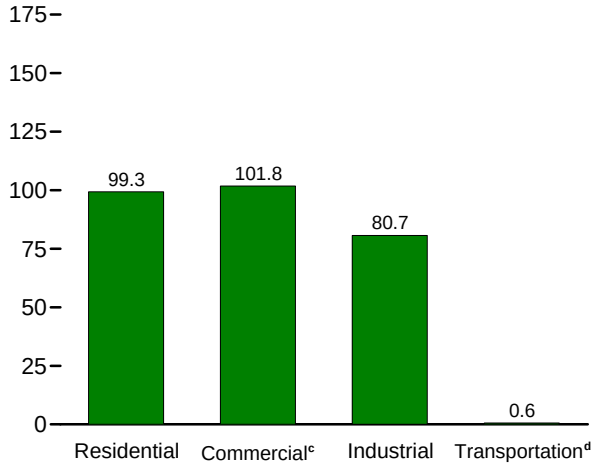
Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977-1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982-1988:** U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power 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." • **2004-2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 forward:** EIA, Form EIA-923, "Power Plant Operations Report."

Figure 7.6 Electricity End Use
(Billion Kilowatthours)

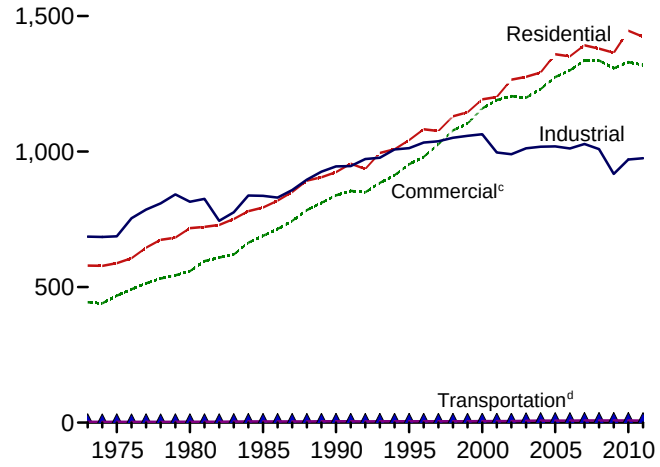
Electricity End Use Overview, 1989-2011



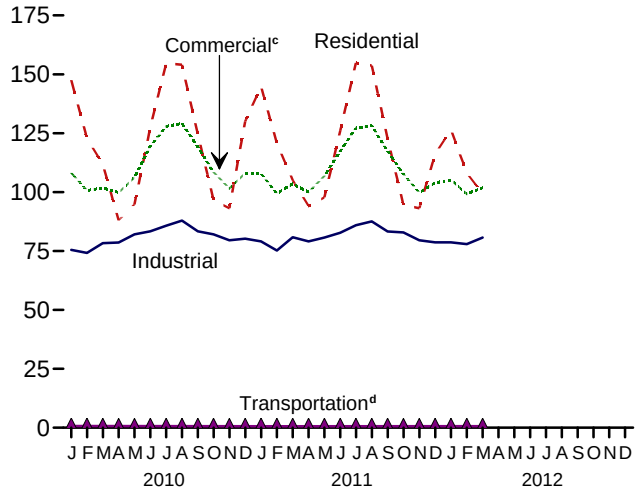
Retail Sales[a] by Sector, March 2012



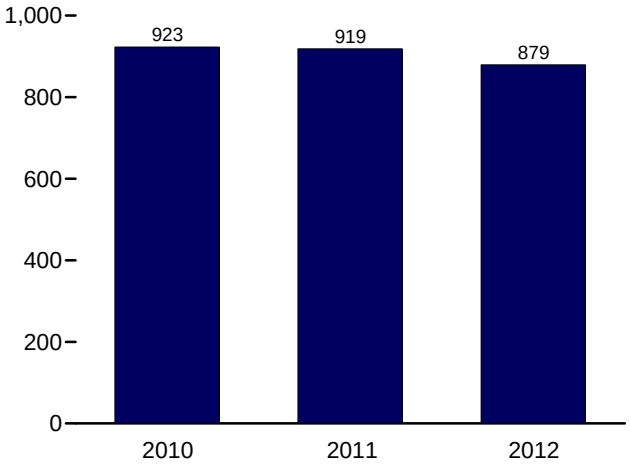
Retail Sales[a] by Sector, 1973-2011



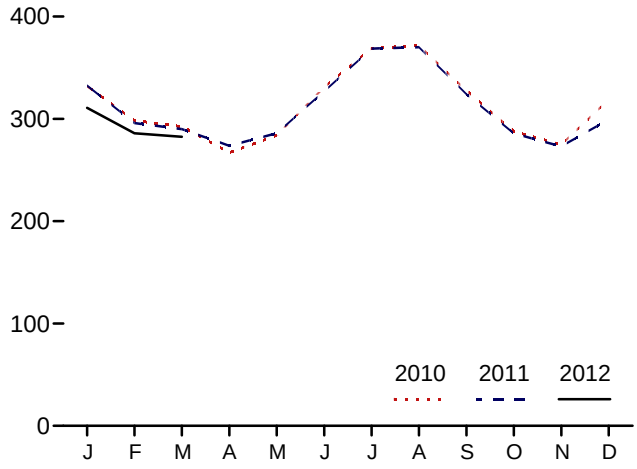
Retail Sales[a] by Sector, Monthly



Retail Sales[a] Total, January-March



Retail Sales[a] Total, Monthly



[a] Electricity retail sales to ultimate customers reported by utilities and other energy service providers.
[b] See "Direct Use" in Glossary.
[c] Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorites.
[d] Transportation sector, including sales to railroads and railways.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Source: Table 7.6.

Table 7.6 Electricity End Use

(Million Kilowatthours)

	Retail Sales[a]					Direct Use[f]	Total End Use[g]	*Discontinued Retail Sales Series*	
	Residential	Commercial[b]	Industrial[c]	Transportation[d]	Total Retail Sales[e]			*Commercial (Old)* [h]	*Other (Old)* [i]
1973 Total	**579,231**	**E 444,505**	**686,085**	**E 3,087**	**1,712,909**	**NA**	**1,712,909**	***388,266***	***59,326***
1975 Total	**588,140**	**E 468,296**	**687,680**	**E 2,974**	**1,747,091**	**NA**	**1,747,091**	***403,049***	***68,222***
1980 Total	**717,495**	**558,643**	**815,067**	**3,244**	**2,094,449**	**NA**	**2,094,449**	***488,155***	***73,732***
1985 Total	**793,934**	**689,121**	**836,772**	**4,147**	**2,323,974**	**NA**	**2,323,974**	***605,989***	***87,279***
1990 Total	**924,019**	**838,263**	**945,522**	**4,751**	**2,712,555**	**124,529**	**2,837,084**	***751,027***	***91,988***
1995 Total	**1,042,501**	**953,117**	**1,012,693**	**4,975**	**3,013,287**	**150,677**	**3,163,963**	***862,685***	***95,407***
1996 Total	**1,082,512**	**980,061**	**1,033,631**	**4,923**	**3,101,127**	**152,638**	**3,253,765**	***887,445***	***97,539***
1997 Total	**1,075,880**	**1,026,626**	**1,038,197**	**4,907**	**3,145,610**	**156,239**	**3,301,849**	***928,633***	***102,901***
1998 Total	**1,130,109**	**1,077,957**	**1,051,203**	**4,962**	**3,264,231**	**160,866**	**3,425,097**	***979,401***	***103,518***
1999 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***
2000 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***
2001 Total	**1,201,607**	**1,190,518**	**996,609**	**5,724**	**3,394,458**	**162,649**	**3,557,107**	***1,083,069***	***113,174***
2002 Total	**1,265,180**	**1,204,531**	**990,238**	**5,517**	**3,465,466**	**166,184**	**3,631,650**	***1,104,497***	***105,552***
2003 Total	**1,275,824**	**1,198,728**	**1,012,373**	**6,810**	**3,493,734**	**168,295**	**3,662,029**	**– –**	**– –**
2004 Total	**1,291,982**	**1,230,425**	**1,017,850**	**7,224**	**3,547,479**	**168,470**	**3,715,949**	**– –**	**– –**
2005 Total	**1,359,227**	**1,275,079**	**1,019,156**	**7,506**	**3,660,969**	**150,016**	**3,810,984**	**– –**	**– –**
2006 Total	**1,351,520**	**1,299,744**	**1,011,298**	**7,358**	**3,669,919**	**146,927**	**3,816,845**	**– –**	**– –**
2007 Total	**1,392,241**	**1,336,315**	**1,027,832**	**8,173**	**3,764,561**	**125,670**	**3,890,231**	**– –**	**– –**
2008 Total	**1,379,981**	**1,335,981**	**1,009,300**	**7,700**	**3,732,962**	**132,197**	**3,865,159**	**– –**	**– –**
2009 Total	**1,364,474**	**1,307,168**	**917,442**	**7,781**	**3,596,865**	**126,938**	**3,723,803**	**– –**	**– –**
2010 January	147,500	108,120	75,506	715	331,841	E 11,084	342,925	– –	– –
February	122,840	100,747	74,164	689	298,440	E 10,144	308,585	– –	– –
March	111,790	101,756	78,303	656	292,505	E 10,884	303,389	– –	– –
April	88,046	99,791	78,597	600	267,034	E 10,091	277,125	– –	– –
May	94,843	106,176	82,088	606	283,712	E 10,611	294,323	– –	– –
June	127,496	119,388	83,347	658	330,889	E 11,037	341,927	– –	– –
July	154,688	127,925	85,725	667	369,006	E 11,690	380,696	– –	– –
August	154,053	129,143	87,904	628	371,728	E 12,298	384,026	– –	– –
September	124,582	119,137	83,353	639	327,711	E 11,221	338,932	– –	– –
October	96,688	108,461	82,046	615	287,811	E 10,605	298,416	– –	– –
November	93,166	101,524	79,575	607	274,871	E 10,520	285,392	– –	– –
December	130,015	108,031	80,264	633	318,943	E 11,725	330,668	– –	– –
Total	**1,445,708**	**1,330,199**	**970,873**	**7,712**	**3,754,493**	**131,910**	**3,886,403**	**– –**	**– –**
2011 January	144,911	107,884	79,055	710	332,561	E 11,301	343,862	– –	– –
February	120,685	99,368	75,223	633	295,909	E 10,037	305,945	– –	– –
March	105,065	103,507	80,817	655	290,044	E 10,506	300,550	– –	– –
April	94,069	100,019	79,099	618	273,805	E 10,119	283,924	– –	– –
May	97,755	106,841	80,741	615	285,951	E 10,831	296,783	– –	– –
June	126,008	117,460	82,775	637	326,881	E 10,899	337,780	– –	– –
July	154,888	127,139	85,907	645	368,580	E 11,630	380,209	– –	– –
August	153,688	128,200	87,565	620	370,073	E 11,570	381,643	– –	– –
September	122,842	117,403	83,311	630	324,186	E 10,787	334,973	– –	– –
October	94,576	107,655	82,860	608	285,699	E 10,356	296,055	– –	– –
November	93,126	99,782	79,561	584	273,053	E 10,639	283,692	– –	– –
December	116,087	104,030	78,655	649	299,421	E 11,505	310,926	– –	– –
Total	**1,423,700**	**1,319,288**	**975,569**	**7,606**	**3,726,163**	**E 130,179**	**3,856,342**	**– –**	**– –**
2012 January	126,475	105,076	78,640	669	310,859	E 11,539	322,398	– –	– –
February	108,145	99,266	77,918	646	285,975	E 10,860	296,835	– –	– –
March	99,342	101,806	80,694	612	282,453	E 10,619	293,072	– –	– –
3-Month Total	**333,961**	**306,148**	**237,252**	**1,927**	**879,288**	**E 33,018**	**912,305**	**– –**	**– –**
2011 3-Month Total	**370,660**	**310,759**	**235,095**	**1,999**	**918,513**	**E 31,844**	**950,357**	**– –**	**– –**
2010 3-Month Total	**382,130**	**310,623**	**227,973**	**2,060**	**922,787**	**E 32,112**	**954,899**	**– –**	**– –**

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

[b] Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.

[c] Industrial 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.

[i] "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 independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available data beginning in 1973.

Sources: See end of section.

Electricity

Note. Classification of Power Plants Into Energy-Use Sectors. The U.S. 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 Sector. 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.gov/survey/form/eia_860/instructions_form.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: U.S. 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, Office of Electricity Delivery and Energy Reliability, Form OE-781R, "Monthly Electricity Imports and Exports Report," and predecessor form. For 2001 forward, data from the California Independent System Operator are used in combination with the Form OE-781 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: U.S. 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."
2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations 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 U.S. 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."
2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations 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: U.S. 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."
2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations 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: U.S. 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."
2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations 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: U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement."
1984–1997: EIA, Form EIA-861, "Annual Electric Utility Report."
1998 forward: EIA, *Electric Power Monthly*, May 2012, 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.gov/states/sep_use/notes/use_elec.pdf.
2003 forward: EIA, *Electric Power Monthly*, May 2012, 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.gov/states/sep_use/notes/use_elec.pdf.
2003 forward: EIA, *Electric Power Monthly*, May 2012, Table 5.1.

Direct Use, Annual

1989–1996: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1997–2010: EIA, *Electric Power Annual 2010*, November 2011, Table 7.2.
2011: 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 2011 and 2012, the 2010 annual share is used.

Discontinued Retail Sales Series Commercial (Old) and Other (Old)

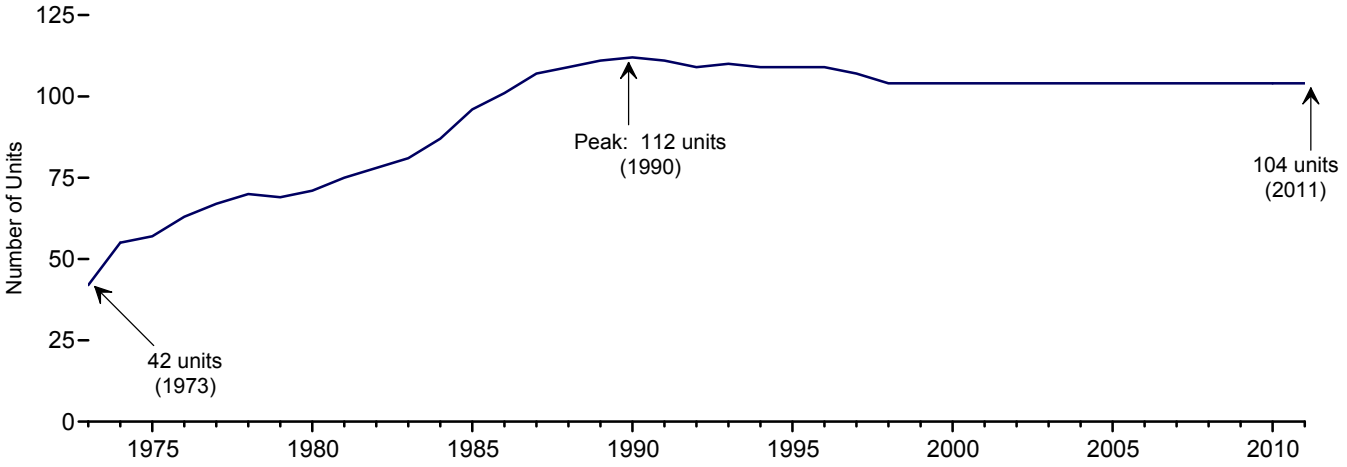
1973–2002: See sources for "Residential" and "Industrial."

THIS PAGE INTENTIONALLY LEFT BLANK

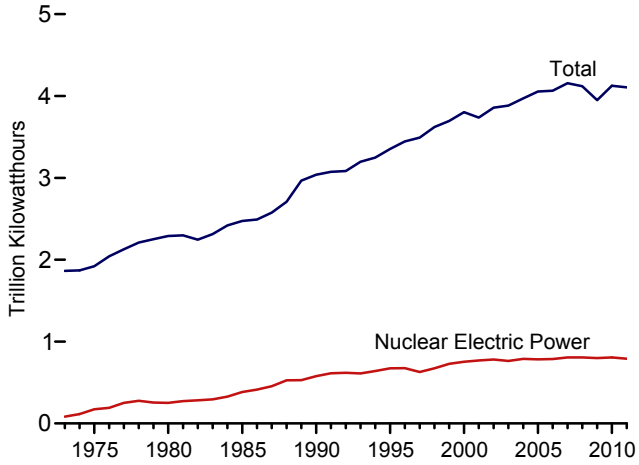
8. Nuclear Energy

Figure 8.1 Nuclear Energy Overview

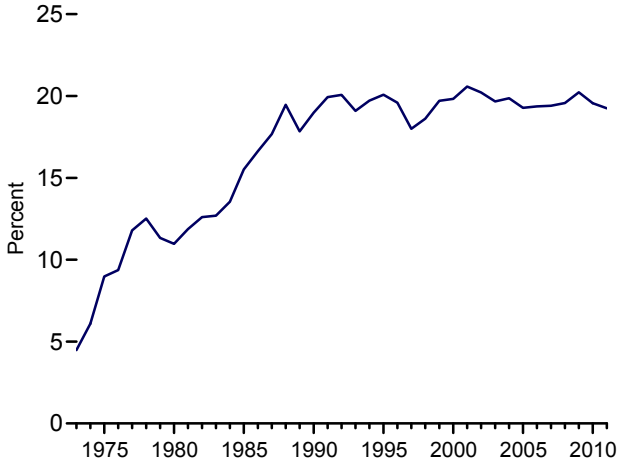
Operable Units, End of Year, 1973-2011



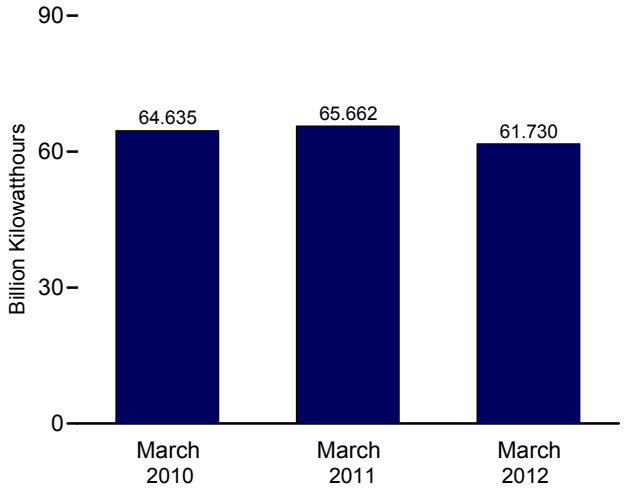
Electricity Net Generation, 1973-2011



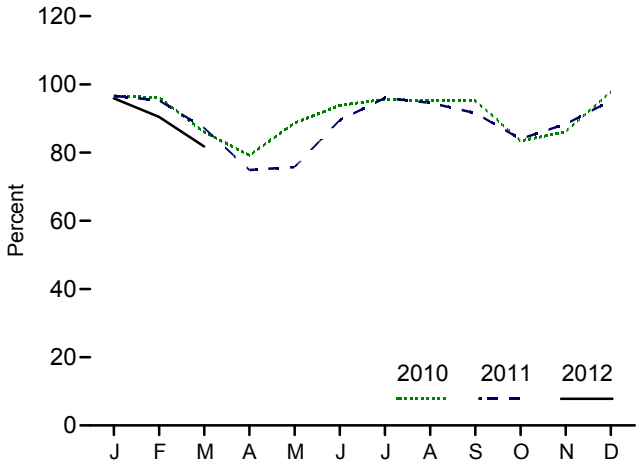
Nuclear Share of Electricity Net Generation, 1973-2011



Nuclear Electricity Net Generation



Capacity Factor, Monthly



Web Page: http://www.eia.gov/totalenergy/data/monthly/#nuclear.
Sources: Tables 7.2a and 8.1.

Table 8.1 Nuclear Energy Overview

	Total Operable Units[a,b]	Net Summer Capacity of Operable Units[b,c]	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factor[d]
	Number	Million Kilowatts	Million Kilowatthours	Percent	
1973 Total	**42**	**22.683**	**83,479**	**4.5**	**53.5**
1975 Total	**57**	**37.267**	**172,505**	**9.0**	**55.9**
1980 Total	**71**	**51.810**	**251,116**	**11.0**	**56.3**
1985 Total	**96**	**79.397**	**383,691**	**15.5**	**58.0**
1990 Total	**112**	**99.624**	**576,862**	**19.0**	**66.0**
1995 Total	**109**	**99.515**	**673,402**	**20.1**	**77.4**
1996 Total	**109**	**100.784**	**674,729**	**19.6**	**76.2**
1997 Total	**107**	**99.716**	**628,644**	**18.0**	**71.1**
1998 Total	**104**	**97.070**	**673,702**	**18.6**	**78.2**
1999 Total	**104**	**97.411**	**728,254**	**19.7**	**85.3**
2000 Total	**104**	**97.860**	**753,893**	**19.8**	**88.1**
2001 Total	**104**	**98.159**	**768,826**	**20.6**	**89.4**
2002 Total	**104**	**98.657**	**780,064**	**20.2**	**90.3**
2003 Total	**104**	**99.209**	**763,733**	**19.7**	**87.9**
2004 Total	**104**	**99.628**	**788,528**	**19.9**	**90.1**
2005 Total	**104**	**99.988**	**781,986**	**19.3**	**89.3**
2006 Total	**104**	**100.334**	**787,219**	**19.4**	**89.6**
2007 Total	**104**	**100.266**	**806,425**	**19.4**	**91.8**
2008 Total	**104**	**100.755**	**806,208**	**19.6**	**91.1**
2009 Total	**104**	**101.004**	**798,855**	**20.2**	**90.3**
2010 January	104	[e] [E] 101.002	72,569	20.1	[E] 96.6
February	104	[E] 101.000	65,245	20.4	[E] 96.1
March	104	[E] 100.998	64,635	20.7	[E] 86.0
April	104	[E] 100.996	57,611	20.0	[E] 79.2
May	104	[E] 101.063	66,658	20.3	[E] 88.7
June	104	[E] 101.094	68,301	18.2	[E] 93.8
July	104	[E] 101.092	71,913	17.6	[E] 95.6
August	104	[E] 101.090	71,574	17.5	[E] 95.2
September	104	[E] 101.088	69,371	20.0	[E] 95.3
October	104	[E] 101.104	62,751	20.4	[E] 83.4
November	104	[E] 101.129	62,655	20.5	[E] 86.0
December	104	101.167	73,683	20.3	97.9
Total	**104**	**101.167**	**806,968**	**19.6**	**91.1**
2011 January	104	[E] 101.167	72,743	20.0	[E] 96.6
February	104	[E] 101.167	64,789	20.7	[E] 95.3
March	104	[E] 101.167	65,662	20.6	[E] 87.2
April	104	[E] 101.167	54,547	18.0	[E] 74.9
May	104	[E] 101.167	57,017	17.6	[E] 75.8
June	104	[E] 101.281	65,270	17.7	[E] 89.5
July	104	[E] 101.281	72,345	17.2	[E] 96.0
August	104	[E] 101.351	71,339	17.6	[E] 94.6
September	104	[E] 101.351	66,849	19.8	[E] 91.6
October	104	[E] 101.351	63,354	20.5	[E] 84.0
November	104	[E] 101.351	64,474	21.2	[E] 88.4
December	104	[P] 101.423	71,837	21.4	[P] 95.2
Total	**104**	[P] **101.423**	**790,225**	**19.2**	[P] **89.1**
2012 January	104	[E] 101.423	72,382	21.2	[E] 95.9
February	104	[E] 101.423	63,850	20.6	[E] 90.5
March	104	[E] 101.423	61,730	19.9	[E] 81.8
3-Month Total	**104**	[E] **101.423**	**197,962**	**20.6**	[E] **89.4**
2011 3-Month Total	**104**	[E] **101.167**	**203,193**	**20.4**	[E] **93.0**
2010 3-Month Total	**104**	[E] **100.998**	**202,449**	**20.4**	[E] **92.8**

[a] Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at end of period. See Note 1, "Operable Nuclear Reactors," at end of section. For additional information on nuclear generating units, see *Annual Energy Review 2010,* October 2011, Table 9.1, http://www.eia.gov/totalenergy/data/annual/#nuclear.

[b] At end of period.

[c] For the definition of "Net Summer Capacity," see Note 2, "Nuclear Capacity," at end of section.

[d] For an explanation of the method of calculating the capacity factor, see Note 2, "Nuclear Capacity," at end of section.

[e] Beginning in 2010, monthly capacity values are estimated in two steps: 1) uprates reported on Form EIA-860M are added to specific months; and 2) the difference between the resulting year-end capacity (from data reported on Form EIA-860M) and final capacity (reported on Form EIA-860) is distributed evenly across the 12 months.

P=Preliminary. E=Estimate.

Notes: • For a discussion of nuclear reactor unit coverage, see Note 1, "Operable Nuclear Reactors," at end of section. • 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 Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#nuclear for all available data beginning in 1973.

Sources: See end of section.

Nuclear Energy

Note 1. Operable Nuclear Reactors. 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 2007, 1991, 1995, 1988, and 1988, 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. Nuclear 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 calculated as the monthly nuclear electricity net generation divided by the maximum possible nuclear electricity net generation for that month. The maximum possible nuclear electricity net generation is the number of hours in the month (assuming 24-hour days, with no adjustment for changes to or from Daylight Savings Time) multiplied by the net summer capacity of operable nuclear generating units at the end of the month. That fraction is then multiplied by 100 to obtain a percentage. Annual capacity factors are calculated as the annual nuclear electricity net generation divided by the annual maximum possible nuclear electricity net generation (the sum of the monthly values for maximum possible nuclear electricity net generation).

Table 8.1 Sources

Total Operable Units and **Net Summer Capacity of Operable Units**
1973-1982: Compiled from various sources, primarily U.S. Department of Energy, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones."

1983 forward: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," Form EIA-860M, "Monthly Update to the Annual Electric Generator Report," and monthly updates as appropriate. For a list of currently operable units, see http://www.eia.gov/nuclear/reactors/stats_table1.html**.**

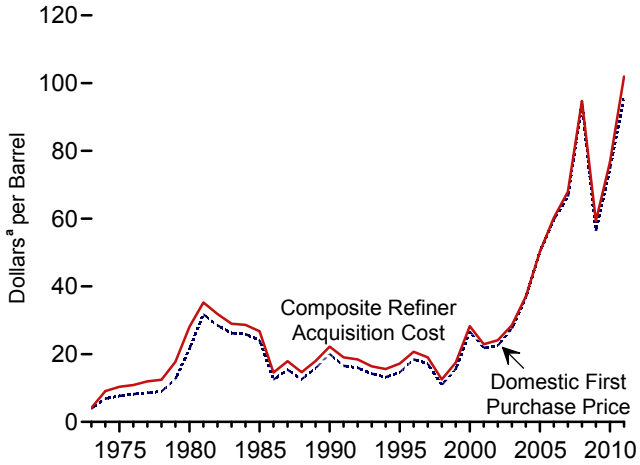
Nuclear Electricity Net Generation and **Nuclear Share of Electricity Net Generation**
See Table 7.2a.

Capacity Factor
Calculated by EIA using the method described above in Note 2.

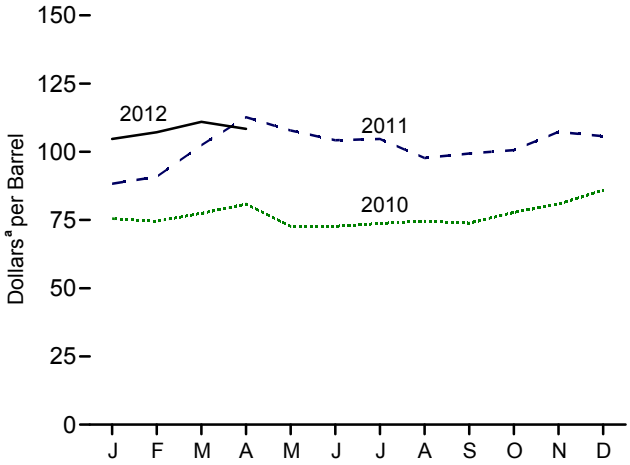
9. Energy Prices

Figure 9.1 Petroleum Prices

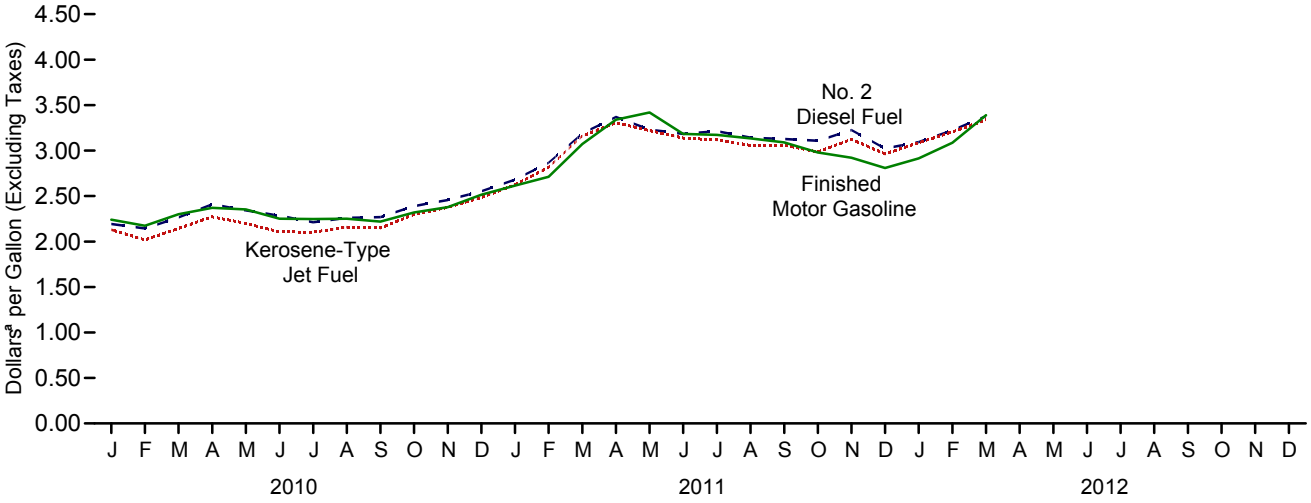
Crude Oil Prices, 1973-2011



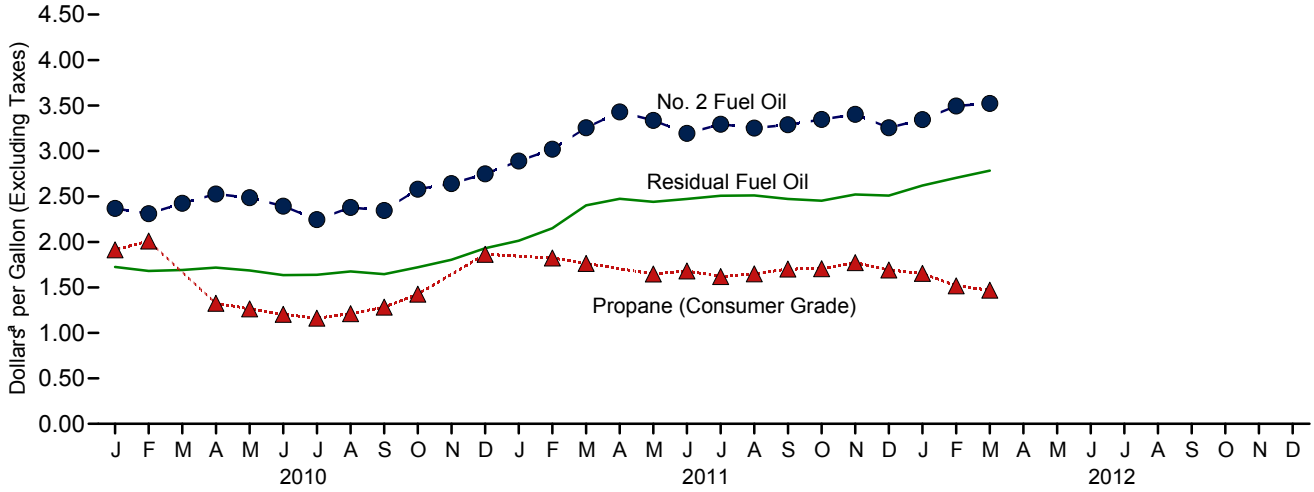
Composite Refiner Acquisition Cost, Monthly



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



[a]Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices.
Sources: Tables 9.1, 9.5, and 9.7.

Table 9.1 Crude Oil Price Summary

(Dollars[a] per Barrel)

	Domestic First Purchase Price[c]	F.O.B. Cost of Imports[d]	Landed Cost of Imports[e]	Refiner Acquisition Cost[b]		
				Domestic	Imported	Composite
1973 Average	**3.89**	**[f] 5.21**	**[f] 6.41**	**[E] 4.17**	**[E] 4.08**	**[E] 4.15**
1975 Average	**7.67**	**11.18**	**12.70**	**8.39**	**13.93**	**10.38**
1980 Average	**21.59**	**32.37**	**33.67**	**24.23**	**33.89**	**28.07**
1985 Average	**24.09**	**25.84**	**26.67**	**26.66**	**26.99**	**26.75**
1990 Average	**20.03**	**20.37**	**21.13**	**22.59**	**21.76**	**22.22**
1995 Average	**14.62**	**15.69**	**16.78**	**17.33**	**17.14**	**17.23**
1996 Average	**18.46**	**19.32**	**20.31**	**20.77**	**20.64**	**20.71**
1997 Average	**17.23**	**16.94**	**18.11**	**19.61**	**18.53**	**19.04**
1998 Average	**10.87**	**10.76**	**11.84**	**13.18**	**12.04**	**12.52**
1999 Average	**15.56**	**16.47**	**17.23**	**17.90**	**17.26**	**17.51**
2000 Average	**26.72**	**26.27**	**27.53**	**29.11**	**27.70**	**28.26**
2001 Average	**21.84**	**20.46**	**21.82**	**24.33**	**22.00**	**22.95**
2002 Average	**22.51**	**22.63**	**23.91**	**24.65**	**23.71**	**24.10**
2003 Average	**27.56**	**25.86**	**27.69**	**29.82**	**27.71**	**28.53**
2004 Average	**36.77**	**33.75**	**36.07**	**38.97**	**35.90**	**36.98**
2005 Average	**50.28**	**47.60**	**49.29**	**52.94**	**48.86**	**50.24**
2006 Average	**59.69**	**57.03**	**59.11**	**62.62**	**59.02**	**60.24**
2007 Average	**66.52**	**66.36**	**67.97**	**69.65**	**67.04**	**67.94**
2008 Average	**94.04**	**90.32**	**93.33**	**98.47**	**92.77**	**94.74**
2009 Average	**56.35**	**57.78**	**60.23**	**59.49**	**59.17**	**59.29**
2010 January	72.89	72.96	74.78	76.04	75.07	75.48
February	72.74	71.50	75.01	75.91	73.73	74.58
March	75.77	75.41	77.65	78.52	76.77	77.43
April	78.80	78.27	79.34	82.12	80.03	80.83
May	70.90	69.21	72.00	75.23	71.15	72.66
June	70.77	70.17	72.62	73.93	71.91	72.66
July	71.37	71.01	73.43	74.54	73.25	73.73
August	72.07	71.27	73.63	76.21	73.50	74.58
September	71.23	71.72	74.25	74.87	73.20	73.85
October	76.02	75.52	77.26	78.88	77.02	77.77
November	79.20	79.56	81.56	82.05	80.07	80.85
December	83.98	83.95	86.64	86.48	85.59	85.95
Average	**74.71**	**74.20**	**76.49**	**77.96**	**75.88**	**76.69**
2011 January	85.66	86.80	89.61	88.73	87.99	88.28
February	86.69	92.07	94.25	89.50	91.72	90.85
March	99.19	104.19	104.80	102.34	102.48	102.43
April	108.80	111.52	112.54	111.96	113.08	112.65
May	102.46	105.92	108.28	107.55	107.99	107.82
June	97.30	104.35	105.19	102.53	105.36	104.23
July	97.82	105.60	106.19	102.67	105.94	104.68
August	89.00	97.72	99.27	95.89	99.01	97.70
September	90.22	100.84	101.03	96.89	101.05	99.39
October	92.28	101.92	102.55	98.34	102.00	100.57
November	100.18	105.79	105.98	106.69	107.67	107.28
December	98.71	103.09	105.62	104.51	106.52	105.69
Average	**95.73**	**101.68**	**102.99**	**100.74**	**102.70**	**101.93**
2012 January	98.99	[R] 103.96	[R] 105.27	103.97	105.25	104.70
February	102.05	[R] 108.89	[R] 108.72	105.93	[R] 108.08	[R] 107.18
March	[R] 105.42	[R] 113.02	[R] 110.29	[R] 110.88	[R] 111.00	[R] 110.95
April	NA	NA	NA	[E] 109.78	[E] 107.48	[E] 108.41

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
[b] See Note 1, "Crude Oil Refinery Acquisition Costs," at end of section.
[c] See Note 2, "Crude Oil Domestic First Purchase Prices," at end of section.
[d] See Note 3, "Crude Oil F.O.B. Costs," at end of section.
[e] See Note 4, "Crude Oil Landed Costs," at end of section.
[f] Based on October, November, and December data only.
R=Revised. NA=Not available. E=Estimate.

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 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.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: See end of section.

Table 9.2 F.O.B. Costs of Crude Oil Imports From Selected Countries

(Dollars[a] per Barrel)

	Selected Countries							Persian Gulf Nations[b]	Total OPEC[c]	Total Non-OPEC[c]
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[d]	**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**
2005 Average	**52.48**	**51.89**	**43.00**	**55.95**	**47.96**	**54.48**	**46.39**	**47.21**	**49.60**	**45.79**
2006 Average	**62.23**	**59.77**	**52.91**	**65.69**	**56.09**	**66.03**	**55.80**	**56.02**	**59.18**	**55.35**
2007 Average	**67.80**	**67.93**	**61.35**	**76.64**	**W**	**69.96**	**64.10**	**69.93**	**69.58**	**62.69**
2008 Average	**95.66**	**91.17**	**84.61**	**102.06**	**93.03**	**96.33**	**88.06**	**91.44**	**93.15**	**87.15**
2009 Average	**57.07**	**57.90**	**56.47**	**64.61**	**57.87**	**65.63**	**55.58**	**59.53**	**58.53**	**57.16**
2010 January	74.62	70.08	72.96	75.91	W	–	70.86	W	73.42	72.49
February	W	68.70	69.16	76.07	W	–	68.83	71.89	71.77	71.14
March	78.11	73.90	72.76	81.27	W	–	70.88	76.10	75.83	74.91
April	84.40	74.85	75.57	85.94	W	W	72.59	80.01	78.88	77.73
May	71.86	64.32	68.30	74.28	W	–	66.37	73.60	70.45	68.24
June	72.90	67.19	67.64	75.61	W	–	66.19	72.49	71.39	69.20
July	74.77	70.00	68.53	79.63	W	–	67.25	71.76	72.16	69.87
August	77.11	69.88	69.53	75.70	W	W	68.27	72.79	72.38	70.35
September	W	69.71	69.90	80.93	74.06	–	67.59	73.34	73.24	70.24
October	W	76.06	73.93	84.59	W	–	72.10	78.28	77.55	73.80
November	85.99	78.92	77.14	86.61	W	–	75.03	80.99	80.95	78.49
December	W	81.62	81.75	93.68	W	–	77.78	W	85.72	82.40
Average	**78.18**	**72.56**	**72.46**	**80.83**	**76.44**	**W**	**70.30**	**75.65**	**75.23**	**73.24**
2011 January	95.97	83.36	84.36	99.86	W	–	81.25	W	89.74	83.92
February	W	87.23	88.77	109.07	W	–	85.11	97.25	96.01	88.67
March	113.63	101.29	102.55	117.98	W	–	97.56	107.36	106.19	102.44
April	122.52	114.17	109.90	126.05	W	–	106.56	114.82	115.15	107.71
May	113.33	106.15	105.13	117.66	W	–	101.60	110.29	108.50	103.81
June	115.13	102.78	103.43	119.13	W	–	100.59	106.39	108.22	100.42
July	114.80	100.30	104.84	119.68	W	–	100.62	109.06	110.09	100.90
August	W	95.01	98.21	115.61	W	–	97.17	106.98	104.19	93.57
September	112.49	97.45	100.28	115.43	109.99	–	95.72	108.41	105.82	97.08
October	109.74	102.37	101.48	114.46	W	–	96.93	105.62	105.20	98.65
November	112.49	106.97	107.94	115.35	W	–	105.44	106.51	108.16	104.17
December	111.26	103.10	105.96	W	W	–	105.75	104.48	106.42	100.80
Average	**111.82**	**100.19**	**100.92**	**115.35**	**107.08**	**–**	**97.23**	**106.49**	**105.34**	**98.51**
2012 January	111.10	106.69	107.79	114.12	W	–	105.08	R 107.51	R 107.51	R 101.40
February	121.45	114.47	R 110.14	R 124.31	W	–	R 110.37	111.12	R 113.85	R 103.98
March	W	118.46	115.11	127.94	W	–	113.11	118.12	117.37	108.65

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

[b] Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

[c] See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; for 1973–2008, also includes Indonesia; for 1973–1992 and again beginning in 2008, also includes Ecuador (although Ecuador rejoined OPEC in November 2007, on this table Ecuador is included in "Total Non-OPEC" for 2007); for 1974–1995, also includes Gabon (although Gabon was a member of OPEC for only 1975–1994); and beginning in 2007, also includes Angola. Data for all countries not included in "Total OPEC" are included in "Total Non-OPEC."

[d] Based on October, November, and December data only.

R=Revised. – =No data reported. W=Value withheld to avoid disclosure of individual company data.

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See "F.O.B." in Glossary, and Note 3, "Crude Oil F.O.B. Costs," 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.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: See end of section.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Dollars[a] per Barrel)

	Selected Countries								Persian Gulf Nations[b]	Total OPEC[c]	Total Non-OPEC[c]
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[d]	**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**
2001 Average	**25.13**	**20.72**	**25.88**	**19.37**	**26.55**	**20.98**	**25.32**	**19.81**	**20.73**	**21.52**	**22.17**
2002 Average	**25.43**	**22.98**	**25.28**	**22.09**	**26.45**	**24.77**	**26.35**	**21.93**	**24.13**	**23.83**	**23.97**
2003 Average	**30.14**	**26.76**	**30.55**	**25.48**	**31.07**	**27.50**	**30.62**	**25.70**	**27.54**	**27.70**	**27.68**
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 Average	**54.31**	**44.73**	**53.42**	**43.47**	**57.55**	**50.31**	**55.28**	**47.87**	**49.68**	**51.36**	**47.31**
2006 Average	**64.85**	**53.90**	**62.13**	**53.76**	**68.26**	**59.19**	**67.44**	**57.37**	**58.92**	**61.21**	**57.14**
2007 Average	**71.27**	**60.38**	**70.91**	**62.31**	**78.01**	**70.78**	**72.47**	**66.13**	**69.83**	**71.14**	**63.96**
2008 Average	**98.18**	**90.00**	**93.43**	**85.97**	**104.83**	**94.75**	**96.95**	**90.76**	**93.59**	**95.49**	**90.59**
2009 Average	**61.32**	**57.60**	**58.50**	**57.35**	**68.01**	**62.14**	**63.87**	**57.78**	**62.15**	**61.90**	**58.58**
2010 January	77.32	72.59	74.26	73.23	78.58	76.63	77.97	72.63	76.34	75.91	73.59
February	79.06	73.37	73.11	69.48	79.25	77.29	77.84	70.91	77.27	76.24	73.33
March	80.93	76.82	76.08	73.07	83.68	77.57	79.07	72.92	77.55	78.40	76.84
April	82.26	78.36	76.33	75.03	86.80	79.53	80.25	75.21	79.15	80.07	78.61
May	74.80	69.16	66.52	68.71	76.90	77.52	W	68.53	76.20	73.95	70.20
June	76.54	69.14	69.64	68.02	78.14	76.01	77.67	68.30	75.14	74.55	70.92
July	77.20	70.25	71.61	69.31	81.07	75.46	76.60	69.59	74.75	74.81	72.03
August	78.40	70.10	71.49	69.95	79.15	76.06	79.52	70.14	75.81	75.42	71.81
September	80.49	68.66	70.85	70.47	81.58	77.15	W	68.88	76.64	76.39	71.89
October	85.33	69.23	76.72	74.73	86.01	81.81	W	74.29	81.24	80.52	74.15
November	86.98	75.40	80.24	77.55	89.15	84.62	87.10	77.53	84.09	84.38	78.96
December	91.77	80.76	82.76	82.37	95.44	90.45	92.50	80.79	89.99	89.25	83.97
Average	**80.63**	**72.80**	**74.25**	**72.86**	**83.15**	**79.25**	**80.12**	**72.43**	**78.58**	**78.27**	**74.67**
2011 January	99.58	81.43	85.88	85.00	101.24	96.59	W	84.70	96.57	94.03	85.02
February	110.07	80.65	90.14	89.08	108.94	103.20	W	89.88	101.81	99.96	89.03
March	114.40	89.32	105.74	103.03	117.17	110.12	118.42	101.22	109.56	109.23	101.20
April	124.01	99.26	112.47	110.55	126.47	116.13	124.67	107.95	115.18	116.64	108.91
May	116.76	98.29	109.70	105.62	119.95	112.19	W	104.04	111.48	111.90	105.06
June	116.73	92.36	104.31	103.71	120.81	110.00	W	102.32	108.97	109.87	100.83
July	117.98	91.76	101.35	105.38	121.80	111.06	W	103.04	110.19	111.58	100.38
August	113.36	84.05	95.08	98.78	115.83	109.38	W	99.54	108.26	106.24	93.81
September	112.63	85.19	99.17	99.90	117.19	109.91	W	99.10	108.82	107.67	95.59
October	114.82	88.21	104.14	101.97	116.09	108.90	W	99.89	108.07	107.98	97.91
November	115.14	93.80	108.52	108.46	117.05	108.61	W	106.90	108.35	110.09	102.90
December	115.65	95.74	106.64	106.31	117.10	108.27	W	108.02	107.53	109.63	102.52
Average	**114.05**	**90.03**	**102.53**	**101.22**	**116.40**	**108.81**	**118.35**	**100.14**	**108.06**	**107.85**	**98.75**
2012 January	R 115.13	R 93.43	R 110.54	108.38	115.41	R 110.49	W	106.23	R 110.61	R 110.32	R 101.31
February	R 121.45	R 92.38	R 115.19	R 111.24	R 126.01	R 114.65	R W	R 111.69	R 113.60	R 115.51	R 102.95
March	W	89.75	119.37	115.47	129.93	119.90	–	114.62	118.92	118.84	104.56

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

[b] Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

[c] See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; for 1973–2008, also includes Indonesia; for 1973–1992 and again beginning in 2008, also includes Ecuador (although Ecuador rejoined OPEC in November 2007, on this table Ecuador is included in "Total Non-OPEC" for 2007); for 1974–1995, also includes Gabon (although Gabon was a member of OPEC for only 1975–1994); and beginning in 2007, also includes Angola. Data for all countries not included in "Total OPEC" are included in "Total Non-OPEC."

[d] Based on October, November, and December data only.

R=Revised. – =No data reported. W=Value withheld to avoid disclosure of individual company data.

Notes: • See "Landed Costs" in Glossary, and Note 4, "Crude Oil Landed Costs," 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.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices 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:** U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 22. • **2010 forward:** EIA, *Petroleum Marketing Monthly,* June 2012, Table 22.

Table 9.4 Motor Gasoline Retail Prices, U.S. City Average

(Dollars[a] per Gallon, Including Taxes)

	Leaded Regular	Unleaded Regular	Unleaded Premium[b]	All Types[c]
1973 Average	**0.388**	**NA**	**NA**	**NA**
1975 Average	**0.567**	**NA**	**NA**	**NA**
1980 Average	**1.191**	**1.245**	**NA**	**1.221**
1985 Average	**1.115**	**1.202**	**1.340**	**1.196**
1990 Average	**1.149**	**1.164**	**1.349**	**1.217**
1995 Average	**NA**	**1.147**	**1.336**	**1.205**
1996 Average	**NA**	**1.231**	**1.413**	**1.288**
1997 Average	**NA**	**1.234**	**1.416**	**1.291**
1998 Average	**NA**	**1.059**	**1.250**	**1.115**
1999 Average	**NA**	**1.165**	**1.357**	**1.221**
2000 Average	**NA**	**1.510**	**1.693**	**1.563**
2001 Average	**NA**	**1.461**	**1.657**	**1.531**
2002 Average	**NA**	**1.358**	**1.556**	**1.441**
2003 Average	**NA**	**1.591**	**1.777**	**1.638**
2004 Average	**NA**	**1.880**	**2.068**	**1.923**
2005 Average	**NA**	**2.295**	**2.491**	**2.338**
2006 Average	**NA**	**2.589**	**2.805**	**2.635**
2007 Average	**NA**	**2.801**	**3.033**	**2.849**
2008 Average	**NA**	**3.266**	**3.519**	**3.317**
2009 Average	**NA**	**2.350**	**2.607**	**2.401**
2010 January	NA	2.731	2.987	2.779
February	NA	2.659	2.922	2.709
March	NA	2.780	3.035	2.829
April	NA	2.858	3.113	2.906
May	NA	2.869	3.124	2.915
June	NA	2.736	3.000	2.783
July	NA	2.736	2.997	2.783
August	NA	2.745	3.015	2.795
September	NA	2.704	2.968	2.754
October	NA	2.795	3.055	2.843
November	NA	2.852	3.109	2.899
December	NA	2.985	3.234	3.031
Average	**NA**	**2.788**	**3.047**	**2.836**
2011 January	NA	3.091	3.345	3.139
February	NA	3.167	3.424	3.215
March	NA	3.546	3.807	3.594
April	NA	3.816	4.074	3.863
May	NA	3.933	4.192	3.982
June	NA	3.702	3.972	3.753
July	NA	3.654	3.915	3.703
August	NA	3.630	3.893	3.680
September	NA	3.612	3.887	3.664
October	NA	3.468	3.745	3.521
November	NA	3.423	3.700	3.475
December	NA	3.278	3.553	3.329
Average	**NA**	**3.527**	**3.792**	**3.577**
2012 January	NA	3.399	3.663	3.447
February	NA	3.572	3.840	3.622
March	NA	3.868	4.138	3.918
April	NA	3.927	4.194	3.976
May	NA	3.792	4.062	3.839

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

[b] The 1981 average (available in Web file) is based on September through December data only.

[c] Also includes types of motor gasoline not shown separately.

NA=Not available.

Notes: • See Note 5, "Motor Gasoline Prices," at end of section. • 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.gov/totalenergy/data/monthly/#prices 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 U.S. Energy Information Administration as the simple averages of monthly data.

Table 9.5 Refiner Prices of Residual Fuel Oil

(Dollars[a] per Gallon, Excluding Taxes)

	Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent		Residual Fuel Oil Sulfur Content Greater Than 1 Percent		Average	
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
1978 Average	**0.293**	**0.314**	**0.245**	**0.275**	**0.263**	**0.298**
1980 Average	**0.608**	**0.675**	**0.479**	**0.523**	**0.528**	**0.607**
1985 Average	**0.610**	**0.644**	**0.560**	**0.582**	**0.577**	**0.610**
1990 Average	**0.472**	**0.505**	**0.372**	**0.400**	**0.413**	**0.444**
1995 Average	**0.383**	**0.436**	**0.338**	**0.377**	**0.363**	**0.392**
1996 Average	**0.456**	**0.526**	**0.389**	**0.433**	**0.420**	**0.455**
1997 Average	**0.415**	**0.488**	**0.366**	**0.403**	**0.387**	**0.423**
1998 Average	**0.299**	**0.354**	**0.269**	**0.287**	**0.280**	**0.305**
1999 Average	**0.382**	**0.405**	**0.329**	**0.362**	**0.354**	**0.374**
2000 Average	**0.627**	**0.708**	**0.512**	**0.566**	**0.566**	**0.602**
2001 Average	**0.523**	**0.642**	**0.428**	**0.492**	**0.476**	**0.531**
2002 Average	**0.546**	**0.640**	**0.508**	**0.544**	**0.530**	**0.569**
2003 Average	**0.728**	**0.804**	**0.588**	**0.651**	**0.661**	**0.698**
2004 Average	**0.764**	**0.835**	**0.601**	**0.692**	**0.681**	**0.739**
2005 Average	**1.115**	**1.168**	**0.842**	**0.974**	**0.971**	**1.048**
2006 Average	**1.202**	**1.342**	**1.085**	**1.173**	**1.136**	**1.218**
2007 Average	**1.406**	**1.436**	**1.314**	**1.350**	**1.350**	**1.374**
2008 Average	**1.918**	**2.144**	**1.843**	**1.889**	**1.866**	**1.964**
2009 Average	**1.337**	**1.413**	**1.344**	**1.306**	**1.342**	**1.341**
2010 January	1.767	1.852	1.705	1.660	1.721	1.725
February	1.725	1.862	1.650	1.574	1.666	1.681
March	1.739	1.862	1.700	1.609	1.711	1.692
April	1.827	1.887	1.725	1.655	1.748	1.718
May	1.675	1.898	1.675	1.601	1.675	1.686
June	1.629	1.874	1.604	1.555	1.612	1.636
July	1.686	1.858	1.604	1.536	1.629	1.639
August	1.705	1.895	1.625	1.571	1.642	1.676
September	1.716	1.883	1.612	1.558	1.632	1.645
October	1.793	1.913	1.688	1.637	1.712	1.721
November	1.865	2.025	1.741	1.701	1.768	1.804
December	2.036	2.215	1.814	1.784	1.865	1.931
Average	**1.756**	**1.920**	**1.679**	**1.619**	**1.697**	**1.713**
2011 January	NA	2.302	1.896	1.870	1.918	2.013
February	2.100	2.451	2.079	2.019	2.086	2.150
March	2.344	2.654	2.307	2.245	2.321	2.403
April	2.555	2.741	2.427	2.370	2.448	2.475
May	2.463	2.786	2.374	2.325	2.392	2.440
June	2.467	2.905	2.377	2.312	2.402	2.473
July	2.547	2.877	2.430	2.362	2.474	2.508
August	2.394	2.896	2.392	2.342	2.392	2.512
September	2.368	2.882	2.370	2.318	2.369	2.473
October	2.512	2.891	2.375	2.276	2.406	2.454
November	2.566	2.853	2.424	2.368	2.459	2.521
December	2.473	2.891	2.335	2.348	2.371	2.509
Average	**2.389**	**2.736**	**2.316**	**2.257**	**2.336**	**2.401**
2012 January	2.591	2.965	2.480	2.452	2.512	2.620
February	2.739	3.070	R 2.632	2.556	R 2.654	2.705
March	2.921	3.159	2.717	2.601	2.772	2.784

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

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 U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 16. • **2010 forward:** EIA, *Petroleum Marketing Monthly,* June 2012, Table 16.

Table 9.6 Refiner Prices of Petroleum Products for Resale

(Dollars[a] per Gallon, Excluding Taxes)

	Finished Motor Gasoline[b]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	**0.434**	**0.537**	**0.386**	**0.404**	**0.369**	**0.365**	**0.237**
1980 Average	**0.941**	**1.128**	**0.868**	**0.864**	**0.803**	**0.801**	**0.415**
1985 Average	**0.835**	**1.130**	**0.794**	**0.874**	**0.776**	**0.772**	**0.398**
1990 Average	**0.786**	**1.063**	**0.773**	**0.839**	**0.697**	**0.694**	**0.386**
1995 Average	**0.626**	**0.975**	**0.539**	**0.580**	**0.511**	**0.538**	**0.344**
1996 Average	**0.713**	**1.055**	**0.646**	**0.714**	**0.639**	**0.659**	**0.461**
1997 Average	**0.700**	**1.065**	**0.613**	**0.653**	**0.590**	**0.606**	**0.416**
1998 Average	**0.526**	**0.912**	**0.450**	**0.465**	**0.422**	**0.444**	**0.288**
1999 Average	**0.645**	**1.007**	**0.533**	**0.550**	**0.493**	**0.546**	**0.342**
2000 Average	**0.963**	**1.330**	**0.880**	**0.969**	**0.886**	**0.898**	**0.595**
2001 Average	**0.886**	**1.256**	**0.763**	**0.821**	**0.756**	**0.784**	**0.540**
2002 Average	**0.828**	**1.146**	**0.716**	**0.752**	**0.694**	**0.724**	**0.431**
2003 Average	**1.002**	**1.288**	**0.871**	**0.955**	**0.881**	**0.883**	**0.607**
2004 Average	**1.288**	**1.627**	**1.208**	**1.271**	**1.125**	**1.187**	**0.751**
2005 Average	**1.670**	**2.076**	**1.723**	**1.757**	**1.623**	**1.737**	**0.933**
2006 Average	**1.969**	**2.490**	**1.961**	**2.007**	**1.834**	**2.012**	**1.031**
2007 Average	**2.182**	**2.758**	**2.171**	**2.249**	**2.072**	**2.203**	**1.194**
2008 Average	**2.586**	**3.342**	**3.020**	**2.851**	**2.745**	**2.994**	**1.437**
2009 Average	**1.767**	**2.480**	**1.719**	**1.844**	**1.657**	**1.713**	**0.921**
2010 January	2.097	2.759	2.121	2.282	2.075	2.078	1.332
February	2.033	2.662	1.999	2.216	1.986	2.025	1.324
March	2.197	2.906	2.129	2.219	2.100	2.163	1.179
April	2.265	2.999	2.247	2.281	2.214	2.312	1.144
May	2.152	2.945	2.186	2.110	2.129	2.177	1.098
June	2.113	2.835	2.094	2.103	2.037	2.120	1.049
July	2.113	2.891	2.100	2.046	2.001	2.098	1.012
August	2.095	2.842	2.138	2.125	2.041	2.161	1.084
September	2.088	2.805	2.131	2.163	2.093	2.190	1.151
October	2.198	2.890	2.263	2.384	2.221	2.325	1.253
November	2.243	2.868	2.342	NA	2.308	2.392	1.277
December	2.383	3.024	2.459	2.744	2.435	2.486	1.322
Average	**2.165**	**2.874**	**2.185**	**2.299**	**2.147**	**2.214**	**1.212**
2011 January	2.472	3.161	2.585	2.804	2.585	2.621	1.380
February	2.584	3.248	2.783	2.974	2.737	2.820	1.401
March	2.934	3.607	3.095	3.196	2.996	3.134	1.403
April	3.218	4.035	3.259	3.296	3.167	3.296	1.433
May	3.174	4.096	3.188	W	3.039	3.116	1.515
June	2.970	3.847	3.101	3.054	2.956	3.079	1.503
July	3.058	4.011	3.090	3.158	3.024	3.135	1.513
August	2.949	3.899	3.040	3.089	2.927	3.032	1.522
September	2.896	3.878	3.025	3.073	2.927	3.035	1.557
October	2.805	3.616	2.962	3.096	2.915	3.035	1.511
November	2.701	3.494	3.089	3.258	3.050	3.157	1.498
December	2.614	3.424	2.951	3.006	2.928	2.927	1.444
Average	**2.867**	**3.739**	**3.014**	**3.065**	**2.907**	**3.034**	**1.467**
2012 January	2.747	3.576	3.059	3.197	3.027	3.018	1.341
February	2.936	3.788	3.186	3.293	3.166	3.163	1.282
March	3.203	4.052	3.296	3.306	3.211	3.309	1.293

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
[b] See Note 5, "Motor Gasoline Prices," at end of section.

NA=Not available. W=Value withheld to avoid disclosure of individual company data.

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 U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 4. • **2010 forward:** EIA, *Petroleum Marketing Monthly,* June 2012, Table 4.

Table 9.7 Refiner Prices of Petroleum Products to End Users

(Dollars[a] per Gallon, Excluding Taxes)

	Finished Motor Gasoline[b]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	**0.484**	**0.516**	**0.387**	**0.421**	**0.400**	**0.377**	**0.335**
1980 Average	**1.035**	**1.084**	**0.868**	**0.902**	**0.788**	**0.818**	**0.482**
1985 Average	**0.912**	**1.201**	**0.796**	**1.030**	**0.849**	**0.789**	**0.717**
1990 Average	**0.883**	**1.120**	**0.766**	**0.923**	**0.734**	**0.725**	**0.745**
1995 Average	**0.765**	**1.005**	**0.540**	**0.589**	**0.562**	**0.560**	**0.492**
1996 Average	**0.847**	**1.116**	**0.651**	**0.740**	**0.673**	**0.681**	**0.605**
1997 Average	**0.839**	**1.128**	**0.613**	**0.745**	**0.636**	**0.642**	**0.552**
1998 Average	**0.673**	**0.975**	**0.452**	**0.501**	**0.482**	**0.494**	**0.405**
1999 Average	**0.781**	**1.059**	**0.543**	**0.605**	**0.558**	**0.584**	**0.458**
2000 Average	**1.106**	**1.306**	**0.899**	**1.123**	**0.927**	**0.935**	**0.603**
2001 Average	**1.032**	**1.323**	**0.775**	**1.045**	**0.829**	**0.842**	**0.506**
2002 Average	**0.947**	**1.288**	**0.721**	**0.990**	**0.737**	**0.762**	**0.419**
2003 Average	**1.156**	**1.493**	**0.872**	**1.224**	**0.933**	**0.944**	**0.577**
2004 Average	**1.435**	**1.819**	**1.207**	**1.160**	**1.173**	**1.243**	**0.839**
2005 Average	**1.829**	**2.231**	**1.735**	**1.957**	**1.705**	**1.786**	**1.089**
2006 Average	**2.128**	**2.682**	**1.998**	**2.244**	**1.982**	**2.096**	**1.358**
2007 Average	**2.345**	**2.849**	**2.165**	**2.263**	**2.241**	**2.267**	**1.489**
2008 Average	**2.775**	**3.273**	**3.052**	**3.283**	**2.986**	**3.150**	**1.892**
2009 Average	**1.888**	**2.442**	**1.704**	**2.675**	**1.962**	**1.834**	**1.220**
2010 January	2.240	2.914	2.129	2.986	2.369	2.192	1.913
February	2.173	2.855	2.018	2.974	2.310	2.144	2.009
March	2.301	3.103	2.144	2.978	2.425	2.265	NA
April	2.370	3.201	2.272	3.040	2.527	2.410	1.326
May	2.353	3.129	2.199	2.938	2.487	2.343	1.264
June	2.251	2.981	2.105	2.965	2.393	2.284	1.204
July	2.247	3.028	2.103	NA	2.246	2.212	1.162
August	2.250	2.967	2.158	2.772	2.379	2.260	1.211
September	2.219	2.893	2.148	2.898	2.346	2.269	1.283
October	2.319	3.000	2.298	3.058	2.580	2.389	1.425
November	2.378	3.095	2.374	3.130	2.641	2.457	NA
December	2.514	3.218	2.484	3.276	2.749	2.554	1.863
Average	**2.301**	**3.028**	**2.201**	**3.063**	**2.462**	**2.314**	**1.481**
2011 January	2.615	3.323	2.623	3.358	2.889	2.681	NA
February	2.712	3.374	2.818	3.506	3.020	2.867	1.823
March	3.072	3.767	3.161	3.697	3.255	3.189	1.763
April	3.340	4.132	3.306	3.796	3.430	3.370	NA
May	3.419	4.091	3.220	3.894	3.337	3.231	1.648
June	3.184	3.913	3.138	3.802	3.193	3.183	1.681
July	3.172	4.027	3.118	3.812	3.294	3.214	1.620
August	3.134	3.920	3.057	3.851	3.251	3.143	1.650
September	3.090	3.915	3.059	3.873	3.288	3.127	1.702
October	2.980	3.697	2.987	3.823	3.346	3.108	1.706
November	2.922	3.620	3.124	3.892	3.403	3.225	1.773
December	2.808	W	2.963	3.824	3.255	3.024	1.691
Average	**3.050**	**3.803**	**3.054**	**3.616**	**3.193**	**3.117**	**1.709**
2012 January	2.914	3.732	3.087	3.848	3.345	3.093	1.655
February	3.087	W	3.206	3.874	3.495	3.224	1.518
March	3.389	4.133	3.337	3.919	3.522	3.379	1.470

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
[b] See Note 5, "Motor Gasoline Prices," at end of section.

NA=Not available. W=Value withheld to avoid disclosure of individual company data.

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 U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 2. • **2010 forward:** EIA, *Petroleum Marketing Monthly,* June 2012, Table 2.

Table 9.8a No. 2 Distillate Prices to Residences: Northeastern States

(Dollars[a] per Gallon, Excluding Taxes)

	Maine	New Hampshire	Vermont	Massachusetts	Rhode Island	Connecticut	New York	New Jersey	Pennsylvania
1978 Average	**0.486**	**0.503**	**0.508**	**0.488**	**0.507**	**0.501**	**0.501**	**0.496**	**0.488**
1980 Average	**0.963**	**1.004**	**1.015**	**0.978**	**1.011**	**0.983**	**0.982**	**0.979**	**0.964**
1985 Average	**0.997**	**1.024**	**1.077**	**1.070**	**1.067**	**1.080**	**1.113**	**1.059**	**1.023**
1990 Average	**0.989**	**1.028**	**1.070**	**1.084**	**1.086**	**1.098**	**1.125**	**1.087**	**1.026**
1995 Average	**0.787**	**0.779**	**0.853**	**0.844**	**0.874**	**0.864**	**0.955**	**0.888**	**0.826**
1996 Average	**0.972**	**0.940**	**0.969**	**0.976**	**0.986**	**0.986**	**1.063**	**1.024**	**0.953**
1997 Average	**0.942**	**0.942**	**0.987**	**0.960**	**0.989**	**0.963**	**1.065**	**1.033**	**0.950**
1998 Average	**0.788**	**0.788**	**0.873**	**0.818**	**0.868**	**0.831**	**0.948**	**0.892**	**0.814**
1999 Average	**0.813**	**0.770**	**0.854**	**0.836**	**0.858**	**0.852**	**0.969**	**0.913**	**0.815**
2000 Average	**1.297**	**1.281**	**1.255**	**1.273**	**1.259**	**1.291**	**1.442**	**1.404**	**1.224**
2001 Average	**1.217**	**1.256**	**1.261**	**1.221**	**1.236**	**1.239**	**1.363**	**1.314**	**1.159**
2002 Average	**1.129**	**1.119**	**1.172**	**1.141**	**1.124**	**1.118**	**1.218**	**1.220**	**1.064**
2003 Average	**1.314**	**1.312**	**1.309**	**1.386**	**1.344**	**1.355**	**1.436**	**1.489**	**1.304**
2004 Average	**1.511**	**1.497**	**1.505**	**1.559**	**1.511**	**1.518**	**1.627**	**1.662**	**1.489**
2005 Average	**1.986**	**1.972**	**1.987**	**2.064**	**2.000**	**2.012**	**2.105**	**2.166**	**1.974**
2006 Average	**2.294**	**2.283**	**2.408**	**2.355**	**2.360**	**2.357**	**2.458**	**2.467**	**2.286**
2007 Average	**2.540**	**2.535**	**2.679**	**2.576**	**2.602**	**2.615**	**2.674**	**2.664**	**2.508**
2008 Average	**3.199**	**3.207**	**3.323**	**3.197**	**3.210**	**3.195**	**3.293**	**3.267**	**3.157**
2009 January	2.506	2.537	2.774	2.356	2.346	2.576	2.543	2.389	2.427
February	2.404	2.426	2.693	2.226	2.209	2.429	2.447	2.288	2.268
March	2.237	2.283	2.545	2.166	2.127	2.362	2.334	2.166	2.202
April	2.250	2.246	2.437	2.192	2.143	2.314	2.338	2.187	2.177
May	2.175	2.151	2.370	2.142	2.169	2.225	2.300	2.187	2.190
June	2.295	2.201	2.376	2.371	2.385	2.413	2.428	2.381	2.211
July	2.268	2.077	2.324	2.312	2.285	2.354	2.291	2.322	2.137
August	2.350	2.243	2.378	2.432	2.454	2.490	2.523	2.454	2.257
September	2.333	2.272	2.403	2.386	2.357	2.349	2.455	2.437	2.196
October	2.391	2.373	2.484	2.470	2.537	2.516	2.574	2.541	2.315
November	2.461	2.484	2.604	2.619	2.685	2.645	2.747	2.710	2.520
December	2.486	2.523	2.640	2.634	2.718	2.665	2.733	2.731	2.536
Average	**2.382**	**2.377**	**2.593**	**2.358**	**2.376**	**2.487**	**2.504**	**2.404**	**2.330**
2010 January	2.583	2.611	2.753	2.762	2.856	2.764	2.893	2.928	2.692
February	2.536	2.600	2.705	2.729	2.777	2.730	2.845	2.871	2.697
March	2.560	2.632	2.747	2.795	2.800	2.758	2.801	2.929	2.755
April	2.565	2.651	2.771	2.868	2.959	2.815	2.845	2.946	2.752
May	2.511	2.636	2.710	2.811	2.921	2.736	2.781	2.873	2.680
June	2.479	2.574	2.649	2.716	2.829	2.705	2.691	2.747	2.561
July	2.478	2.532	2.614	2.656	2.728	2.653	2.651	2.715	2.519
August	2.469	2.513	2.619	2.651	2.735	2.634	2.668	2.701	2.543
September	2.539	2.543	2.657	2.686	2.745	2.647	2.721	2.754	2.583
October	2.677	2.642	2.784	2.860	2.942	2.822	2.848	2.912	2.759
November	2.774	2.772	2.924	2.969	3.044	2.946	2.969	3.077	2.892
December	2.910	2.904	3.032	3.126	3.197	3.106	3.147	3.278	3.061
Average	**2.639**	**2.680**	**2.795**	**2.850**	**2.927**	**2.835**	**2.894**	**2.973**	**2.780**
2011 January	3.071	3.102	3.186	3.313	3.368	3.268	3.281	3.458	3.237
February	3.188	3.269	3.330	3.493	3.536	3.477	3.428	3.624	3.369

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

Notes: • States are grouped in Tables 9.8a–9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 15. • **2010 and 2011:** EIA, *Petroleum Marketing Monthly,* July 2011, Table 15.

Due to budget cuts in 2011, EIA adjusted its data programs. No. 2 distillate fuel oil prices to residences (Tables 9.8a–9.8c) will not be available for March 2011 forward.

Table 9.8b No. 2 Distillate Prices to Residences: Selected South Atlantic and Midwestern States (Dollars[a] per Gallon, Excluding Taxes)

	Delaware	District of Columbia	Maryland	Virginia	West Virginia	Ohio	Michigan	Indiana	Illinois	Wisconsin	Minnesota
1978 Average	**0.478**	**0.507**	**0.492**	**0.491**	**0.462**	**0.474**	**0.479**	**0.485**	**0.465**	**0.447**	**0.478**
1980 Average	**0.954**	**1.026**	**0.979**	**0.985**	**0.922**	**0.919**	**0.978**	**0.996**	**0.958**	**0.915**	**0.999**
1985 Average	**1.046**	**1.143**	**1.088**	**1.063**	**0.980**	**0.997**	**1.021**	**0.991**	**0.975**	**0.983**	**1.019**
1990 Average	**1.058**	**1.078**	**1.119**	**1.106**	**0.991**	**0.981**	**1.009**	**0.993**	**0.961**	**0.942**	**1.014**
1995 Average	**0.870**	**1.010**	**0.936**	**0.844**	**0.815**	**0.808**	**0.860**	**0.816**	**0.785**	**0.812**	**0.801**
1996 Average	**0.984**	**1.178**	**1.063**	**0.952**	**0.960**	**0.921**	**0.977**	**0.912**	**0.893**	**0.899**	**0.909**
1997 Average	**0.984**	**1.174**	**1.057**	**0.948**	**0.962**	**0.913**	**0.942**	**0.865**	**0.870**	**0.933**	**0.899**
1998 Average	**0.858**	**1.022**	**0.902**	**0.856**	**0.818**	**0.767**	**0.804**	**0.748**	**0.735**	**0.801**	**0.738**
1999 Average	**0.884**	**1.011**	**0.907**	**0.870**	**0.789**	**0.820**	**0.883**	**0.793**	**0.716**	**0.847**	**0.774**
2000 Average	**1.270**	**W**	**1.351**	**1.269**	**1.251**	**1.220**	**NA**	**1.207**	**1.095**	**1.171**	**1.156**
2001 Average	**1.234**	**1.431**	**1.342**	**1.202**	**1.139**	**1.160**	**NA**	**1.133**	**1.121**	**1.180**	**1.122**
2002 Average	**1.164**	**W**	**1.201**	**1.057**	**1.054**	**1.058**	**1.109**	**1.025**	**0.975**	**1.073**	**1.051**
2003 Average	**1.433**	**W**	**1.455**	**1.311**	**1.304**	**1.284**	**1.321**	**1.202**	**1.198**	**1.269**	**1.218**
2004 Average	**1.570**	**W**	**1.632**	**1.462**	**1.493**	**1.475**	**1.539**	**1.537**	**1.405**	**1.465**	**1.433**
2005 Average	**2.075**	**W**	**2.127**	**2.044**	**2.043**	**2.009**	**2.053**	**2.017**	**2.021**	**1.993**	**1.987**
2006 Average	**2.381**	**W**	**2.398**	**2.268**	**2.261**	**2.244**	**2.329**	**2.317**	**2.312**	**2.297**	**2.268**
2007 Average	**2.584**	**W**	**2.668**	**2.407**	**2.478**	**2.494**	**2.588**	**2.557**	**2.528**	**2.571**	**2.587**
2008 Average	**3.187**	**W**	**3.273**	**3.124**	**3.221**	**3.147**	**3.067**	**3.105**	**3.152**	**3.088**	**3.065**
2009 January	2.428	W	2.470	2.225	2.329	2.041	1.991	2.062	2.069	2.004	1.974
February	2.310	W	2.407	2.145	2.188	1.888	1.866	1.912	1.869	1.854	1.813
March	2.253	W	2.275	1.999	2.042	1.826	1.806	1.822	1.836	1.781	1.735
April	2.267	W	2.263	NA	2.035	1.917	1.810	1.922	1.983	1.870	1.890
May	2.253	W	2.224	1.824	2.008	1.941	1.807	1.972	NA	1.975	1.872
June	2.289	W	2.320	2.037	2.119	2.180	2.095	2.176	2.060	2.200	2.156
July	2.253	W	2.307	2.055	2.122	2.103	1.964	2.181	NA	2.166	2.092
August	2.340	W	2.397	2.140	2.217	2.279	2.153	2.321	2.147	2.284	2.297
September	2.309	W	2.396	2.118	2.253	2.205	2.179	2.318	NA	2.262	2.232
October	2.505	W	2.561	2.322	2.397	2.364	2.336	2.391	2.386	2.331	2.301
November	2.683	W	2.707	2.408	2.504	2.479	2.485	2.520	2.483	2.421	2.388
December	2.724	W	2.763	2.495	2.496	2.493	2.447	2.507	2.427	2.395	2.394
Average	**2.421**	**W**	**2.473**	**2.193**	**2.265**	**2.130**	**2.096**	**2.189**	**2.155**	**2.105**	**2.124**
2010 January	2.878	W	2.861	2.594	2.681	2.572	2.526	2.565	2.526	2.466	2.505
February	2.857	W	2.833	2.561	2.714	2.533	2.501	2.510	2.516	2.421	W
March	2.988	W	2.894	2.587	2.712	2.585	2.640	2.614	2.660	2.537	2.580
April	NA	W	2.858	NA	2.676	2.566	2.731	2.679	2.777	2.640	2.668
May	2.853	W	2.808	2.435	2.583	2.574	2.669	NA	2.783	2.567	2.581
June	2.695	W	2.705	2.356	2.501	2.436	2.505	2.482	NA	2.478	2.557
July	2.655	W	2.636	2.345	2.499	2.436	2.481	2.510	2.582	2.508	2.466
August	2.617	W	2.669	2.351	2.547	2.511	2.508	2.550	W	2.514	2.559
September	2.678	W	2.692	2.397	2.577	2.554	2.596	2.607	2.732	2.562	2.596
October	2.847	W	2.822	2.567	2.720	2.695	2.734	2.701	NA	2.702	2.719
November	NA	W	2.985	2.754	2.834	2.802	2.830	2.864	2.915	2.788	2.866
December	3.223	W	3.195	2.920	3.024	2.923	2.933	2.979	3.030	2.894	2.965
Average	**2.951**	**W**	**2.925**	**2.621**	**2.724**	**2.653**	**2.657**	**2.670**	**2.749**	**2.610**	**2.470**
2011 January	3.431	W	3.377	3.093	3.204	3.039	3.041	3.109	3.098	3.008	3.031
February	3.560	W	3.508	3.222	3.365	3.189	3.196	3.246	3.286	3.169	3.184

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • States are grouped in Tables 9.8a–9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 15. • **2010 and 2011:** EIA, *Petroleum Marketing Monthly,* July 2011, Table 15.

Due to budget cuts in 2011, EIA adjusted its data programs. No. 2 distillate fuel oil prices to residences (Tables 9.8a–9.8c) will not be available for March 2011 forward.

Table 9.8c No. 2 Distillate Prices to Residences: Selected Western States and U.S. Average (Dollars[a] per Gallon, Excluding Taxes)

	Idaho	Washington	Oregon	Alaska	U.S. Average
1978 Average	**0.436**	**0.486**	**0.458**	**0.532**	**0.490**
1980 Average	**0.916**	**1.008**	**0.973**	**0.978**	**0.974**
1985 Average	**0.972**	**1.011**	**0.971**	**1.083**	**1.053**
1990 Average	**0.974**	**1.029**	**0.970**	**1.101**	**1.063**
1995 Average	**0.839**	**0.962**	**0.894**	**0.834**	**0.867**
1996 Average	**0.933**	**1.080**	**0.989**	**0.909**	**0.989**
1997 Average	**0.953**	**1.139**	**1.031**	**0.973**	**0.984**
1998 Average	**0.784**	**0.978**	**0.861**	**0.852**	**0.852**
1999 Average	**0.762**	**1.065**	**0.938**	**0.966**	**0.876**
2000 Average	**1.170**	**1.445**	**1.368**	**1.337**	**1.311**
2001 Average	**1.038**	**1.336**	**1.211**	**1.377**	**1.250**
2002 Average	**0.919**	**1.204**	**1.060**	**1.087**	**1.129**
2003 Average	**1.188**	**1.487**	**1.303**	**1.243**	**1.355**
2004 Average	**1.495**	**1.749**	**1.594**	**1.524**	**1.548**
2005 Average	**2.123**	**2.385**	**2.146**	**2.061**	**2.052**
2006 Average	**2.391**	**2.681**	**2.411**	**2.395**	**2.365**
2007 Average	**2.598**	**2.909**	**2.500**	**2.518**	**2.592**
2008 Average	**3.078**	**3.401**	**3.060**	**3.485**	**3.219**
2009 January	1.879	2.388	1.939	2.160	2.426
February	1.762	2.253	1.819	NA	2.309
March	1.674	2.124	1.727	1.946	2.210
April	1.863	2.414	1.986	2.140	2.211
May	1.878	2.473	2.050	2.256	2.167
June	2.148	2.544	2.278	2.506	2.307
July	2.123	2.335	2.149	2.362	2.219
August	2.158	2.489	2.326	2.554	2.369
September	2.273	2.658	2.357	NA	2.334
October	2.333	2.737	2.469	NA	2.458
November	2.459	2.871	2.551	NA	2.608
December	2.354	2.830	2.475	NA	2.628
Average	**2.048**	**2.491**	**2.132**	**2.503**	**2.386**
2010 January	2.392	2.918	2.583	NA	2.763
February	2.412	2.817	2.536	2.790	2.658
March	2.569	2.924	2.664	2.884	2.757
April	2.747	3.105	2.817	2.965	2.787
May	2.675	3.053	2.685	2.958	2.723
June	NA	2.892	2.653	2.891	2.623
July	2.540	NA	NA	2.878	2.584
August	2.598	2.757	2.625	2.901	2.597
September	2.676	NA	2.760	2.944	2.641
October	2.853	3.174	2.871	3.041	2.795
November	2.937	3.195	2.935	3.070	2.926
December	2.980	3.242	2.991	3.134	3.089
Average	**2.716**	**3.039**	**2.776**	**2.951**	**2.798**
2011 January	3.005	3.350	3.079	3.210	3.251
February	3.173	3.537	3.295	3.366	3.409

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

NA=Not available.

Notes: • States are grouped in Tables 9.8a–9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section.

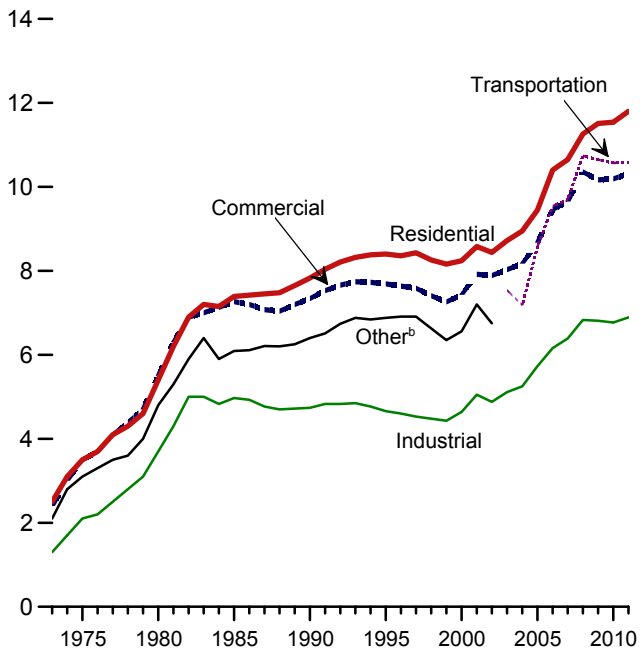
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 15. • **2010 and 2011:** EIA, *Petroleum Marketing Monthly,* July 2011, Table 15.

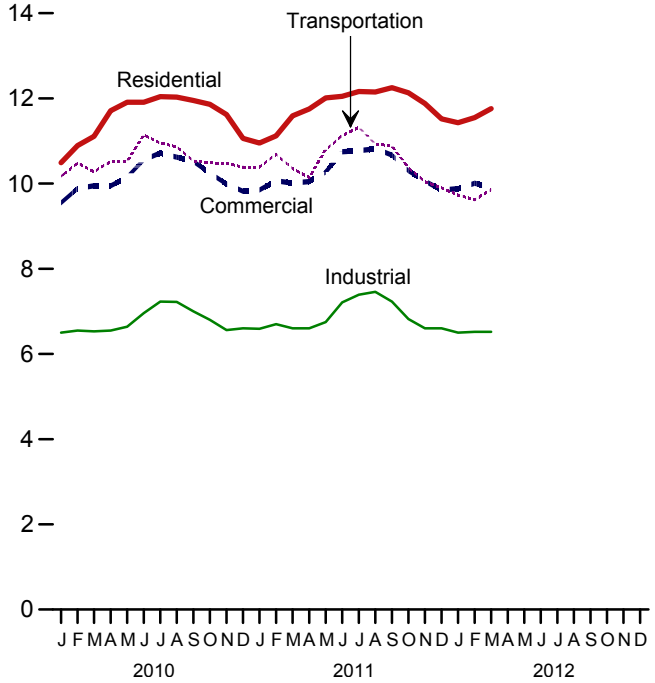
Due to budget cuts in 2011, EIA adjusted its data programs. No. 2 distillate fuel oil prices to residences (Tables 9.8a–9.8c) will not be available for March 2011 forward.

Figure 9.2 Average Retail Prices of Electricity
(Cents[a] per Kilowatthour)

By Sector, 1973-2011



By Sector, Monthly

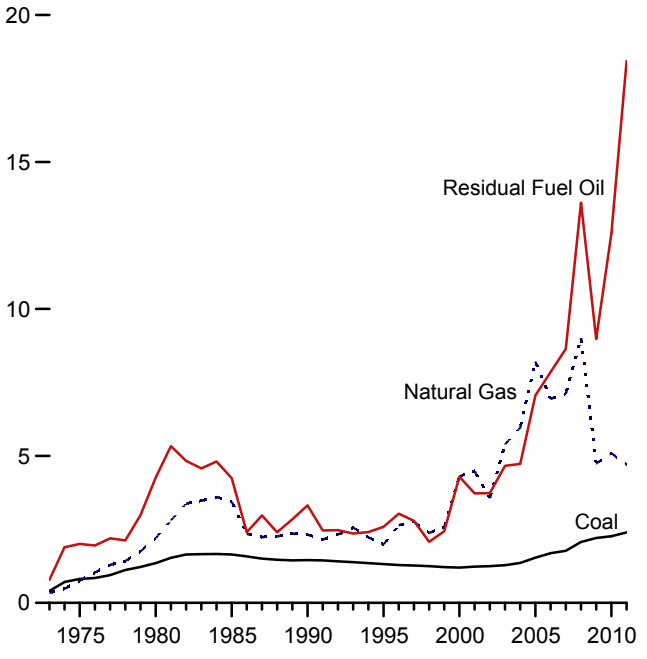


[a]Prices are not adjusted for inflation. See "Nominal Price" in Glossary.
[b]Public street and highway lighting, interdepartmental sales, other sales to public authorities, agricultural and irrigation, and transportation including railroads and railways.

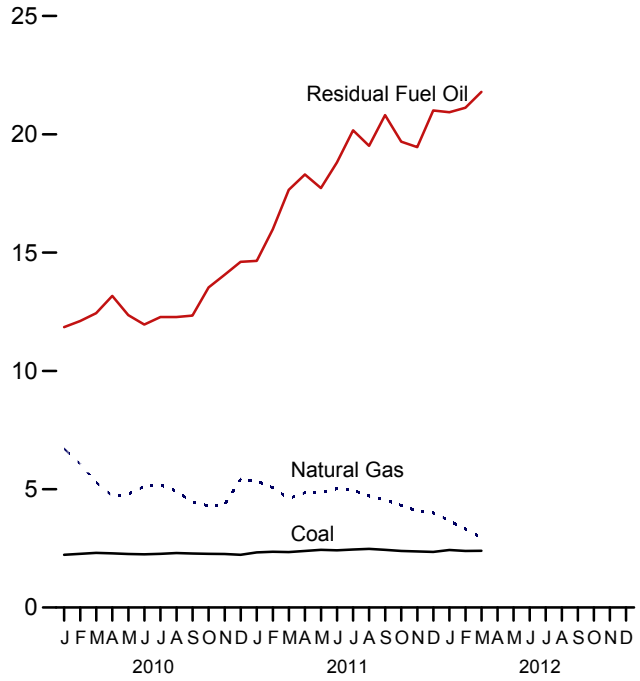
Note: Includes taxes.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices.
Source: Table 9.9.

Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants
(Dollars[a] per Million Btu, Including Taxes)

Costs, 1973-2011



Costs, Monthly



[a]Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices.
Source: Table 9.10.

Table 9.9 Average Retail Prices of Electricity

(Cents[a] per Kilowatthour, Including Taxes)

	Residential	Commercial[b]	Industrial[c]	Transportation[d]	Other[e]	Total
1973 Average	**2.50**	**2.40**	**1.30**	**NA**	**2.10**	**2.00**
1975 Average	**3.50**	**3.50**	**2.10**	**NA**	**3.10**	**2.90**
1980 Average	**5.40**	**5.50**	**3.70**	**NA**	**4.80**	**4.70**
1985 Average	**7.39**	**7.27**	**4.97**	**NA**	**6.09**	**6.44**
1990 Average	**7.83**	**7.34**	**4.74**	**NA**	**6.40**	**6.57**
1995 Average	**8.40**	**7.69**	**4.66**	**NA**	**6.88**	**6.89**
1996 Average	**8.36**	**7.64**	**4.60**	**NA**	**6.91**	**6.86**
1997 Average	**8.43**	**7.59**	**4.53**	**NA**	**6.91**	**6.85**
1998 Average	**8.26**	**7.41**	**4.48**	**NA**	**6.63**	**6.74**
1999 Average	**8.16**	**7.26**	**4.43**	**NA**	**6.35**	**6.64**
2000 Average	**8.24**	**7.43**	**4.64**	**NA**	**6.56**	**6.81**
2001 Average	**8.58**	**7.92**	**5.05**	**NA**	**7.20**	**7.29**
2002 Average	**8.44**	**7.89**	**4.88**	**NA**	**6.75**	**7.20**
2003 Average	**8.72**	**8.03**	**5.11**	**7.54**	**– –**	**7.44**
2004 Average	**8.95**	**8.17**	**5.25**	**7.18**	**– –**	**7.61**
2005 Average	**9.45**	**8.67**	**5.73**	**8.57**	**– –**	**8.14**
2006 Average	**10.40**	**9.46**	**6.16**	**9.54**	**– –**	**8.90**
2007 Average	**10.65**	**9.65**	**6.39**	**9.70**	**– –**	**9.13**
2008 Average	**11.26**	**10.36**	**6.83**	**10.74**	**– –**	**9.74**
2009 Average	**11.51**	**10.17**	**6.81**	**10.65**	**– –**	**9.82**
2010 January	10.49	9.55	6.50	10.17	– –	9.28
February	10.89	9.89	6.55	10.48	– –	9.47
March	11.11	9.95	6.53	10.28	– –	9.48
April	11.71	9.95	6.55	10.52	– –	9.53
May	11.91	10.15	6.64	10.52	– –	9.72
June	11.91	10.56	6.96	11.14	– –	10.18
July	12.04	10.72	7.23	10.95	– –	10.46
August	12.03	10.62	7.22	10.86	– –	10.40
September	11.95	10.52	7.00	10.53	– –	10.17
October	11.86	10.25	6.80	10.49	– –	9.81
November	11.62	9.99	6.56	10.47	– –	9.55
December	11.06	9.82	6.60	10.39	– –	9.52
Average	**11.54**	**10.19**	**6.77**	**10.57**	**– –**	**9.83**
2011 January	10.95	9.85	6.59	10.39	– –	9.55
February	11.12	10.07	6.70	10.69	– –	9.64
March	11.59	10.01	6.60	10.35	– –	9.64
April	11.75	10.05	6.60	10.14	– –	9.64
May	12.01	10.27	6.75	10.80	– –	9.87
June	12.05	10.75	7.21	11.12	– –	10.35
July	12.16	10.77	7.39	11.32	– –	10.57
August	12.15	10.82	7.46	10.93	– –	10.58
September	12.25	10.67	7.23	10.88	– –	10.39
October	12.13	10.30	6.82	10.37	– –	9.90
November	11.88	10.06	6.60	10.04	– –	9.67
December	11.52	9.85	6.60	9.90	– –	9.64
Average	**11.80**	**10.32**	**6.89**	**10.58**	**– –**	**9.99**
2012 January	11.43	9.88	6.50	9.73	– –	9.65
February	11.55	10.01	6.52	9.62	– –	9.64
March	11.76	9.91	6.52	9.86	– –	9.59
3-Month Average	**11.57**	**9.93**	**6.51**	**9.73**	**– –**	**9.63**
2011 3-Month Average	**11.19**	**9.97**	**6.63**	**10.47**	**– –**	**9.61**
2010 3-Month Average	**10.80**	**9.79**	**6.53**	**10.31**	**– –**	**9.40**

[a] Prices are not adjusted for inflation. See "Nominal Price" in Glossary.

[b] Commercial sector. For 1973–2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.

[c] Industrial sector. For 1973–2002, prices exclude agriculture and irrigation.

[d] Transportation sector, including railroads and railways.

[e] Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

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, "Electricity Retail Prices," at end of section for plant coverage, and for information on preliminary and final values. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices 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, "Monthly Statement of Electric Operating Revenues and Income." • **March 1980-1982:** FERC, Form FERC-5, "Electric Utility Company Monthly Statement." • **1983:** U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." • **1984-1997:** EIA, Form EIA-861, "Annual Electric Utility Report." • **1998 forward:** EIA, *Electric Power Monthly,* May 2012, Table 5.3.

Table 9.10 Cost of Fossil-Fuel Receipts at Electric Generating Plants

(Dollars[a] per Million Btu, Including Taxes)

	Coal	Petroleum				Natural Gas[e]	All Fossil Fuels[f]
		Residual Fuel Oil[b]	Distillate Fuel Oil[c]	Petroleum Coke	Total[d]		
1973 Average	**0.41**	**0.79**	**NA**	**NA**	**0.80**	**0.34**	**0.48**
1975 Average	**.81**	**2.01**	**NA**	**NA**	**2.02**	**.75**	**1.04**
1980 Average	**1.35**	**4.27**	**NA**	**NA**	**4.35**	**2.20**	**1.93**
1985 Average	**1.65**	**4.24**	**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**	**.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[g]	**1.25**	**3.73**	**5.34**	**.78**	**3.34**	**3.56**	**1.86**
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 Average	**1.54**	**7.06**	**11.72**	**1.11**	**6.44**	**8.21**	**3.25**
2006 Average	**1.69**	**7.85**	**13.28**	**1.33**	**6.23**	**6.94**	**3.02**
2007 Average	**1.77**	**8.64**	**14.85**	**1.51**	**7.17**	**7.11**	**3.23**
2008 Average	**2.07**	**13.62**	**21.46**	**2.11**	**10.87**	**9.01**	**4.12**
2009 Average	**2.21**	**8.98**	**13.22**	**1.61**	**7.02**	**4.74**	**3.04**
2010 January	2.23	11.85	15.73	1.72	9.72	6.71	3.74
February	2.27	12.11	15.69	1.80	9.51	6.07	3.45
March	2.31	12.44	16.42	2.09	8.95	5.29	3.16
April	2.29	13.17	17.10	2.18	7.95	4.71	3.01
May	2.26	12.36	16.54	2.22	9.47	4.79	3.12
June	2.25	11.96	16.12	2.15	9.26	5.12	3.34
July	2.27	12.28	15.89	2.42	9.63	5.18	3.51
August	2.30	12.28	16.24	2.65	9.18	4.92	3.39
September	2.28	12.34	16.53	2.67	9.35	4.45	3.10
October	2.27	13.53	17.14	2.43	9.13	4.30	2.94
November	2.26	14.06	17.43	2.22	10.86	4.35	2.94
December	2.23	14.61	18.56	2.57	11.29	5.43	3.32
Average	**2.27**	**12.57**	[R] **16.61**	**2.28**	**9.54**	**5.09**	**3.26**
2011 January	2.33	14.65	19.48	2.92	11.71	5.35	3.36
February	2.36	15.98	20.93	2.67	12.08	5.06	3.26
March	2.34	17.65	22.60	2.94	13.71	4.61	3.12
April	2.39	18.30	24.06	2.99	13.73	4.85	3.29
May	2.44	17.73	23.17	3.22	13.70	4.85	3.38
June	2.42	18.81	22.89	2.57	13.82	5.03	3.49
July	2.45	20.17	22.96	3.14	12.22	4.96	3.61
August	2.48	19.51	22.48	2.95	11.68	4.72	3.44
September	2.44	20.81	22.67	2.79	12.17	4.54	3.26
October	2.39	19.69	23.04	2.80	13.68	4.32	3.12
November	2.37	19.46	23.33	2.18	13.27	4.08	3.03
December	2.35	21.01	22.31	2.29	12.76	4.00	3.00
Average	**2.40**	**18.43**	**22.41**	**2.80**	**12.88**	**4.71**	**3.29**
2012 January	2.43	20.93	22.96	2.26	13.28	3.67	2.97
February	2.39	21.12	23.82	2.01	13.32	3.32	2.83
March	2.40	21.79	24.91	1.86	12.83	2.96	2.72
3-Month Average	**2.41**	**21.28**	**23.71**	**2.06**	**13.15**	**3.32**	**2.85**
2011 3-Month Average	**2.34**	**16.03**	**20.86**	**2.85**	**12.46**	**5.02**	**3.25**
2010 3-Month Average	**2.27**	**12.08**	**15.88**	**1.87**	**9.44**	**6.06**	**3.45**

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

[b] For 1973–2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).

[c] For 1973–2001, electric utility data are for light oil (fuel oil nos. 1 and 2).

[d] 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.

[e] Natural gas, plus a small amount of supplemental gaseous fuels. For 1973-2000, data also include a small amount of blast furnace gas and other gases derived from fossil fuels.

[f] Weighted average of costs shown under "Coal," "Petroleum," and "Natural Gas."

[g] Through 2001, data are for electric utilities only. Beginning in 2002, data also include independent power producers, and electric generating plants in the commercial and industrial sectors. See Note 8, "Costs of Fossil-Fuel Receipts at Electric Generating Plants," 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.

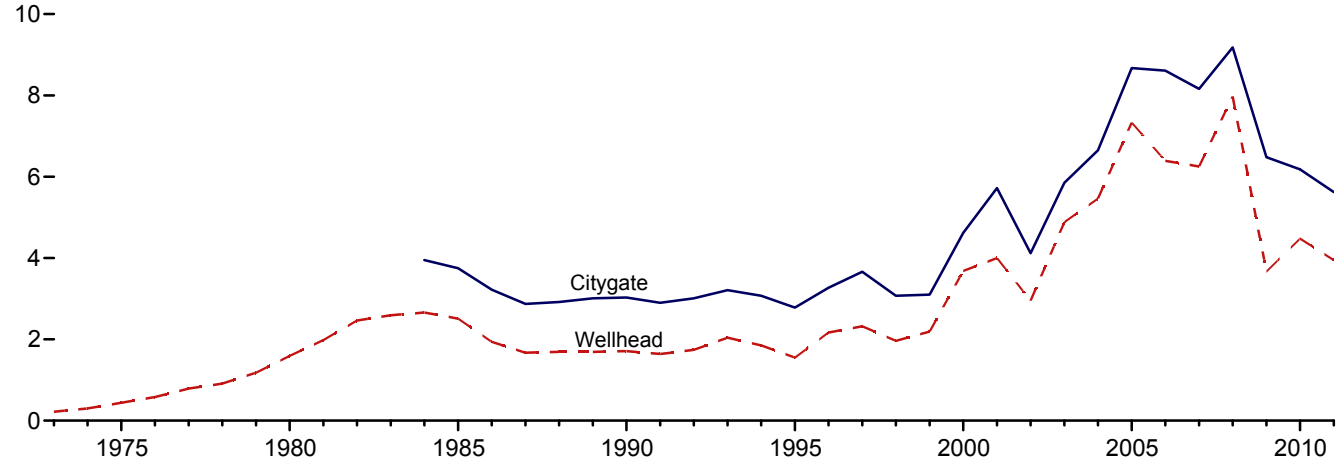
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: See end of section.

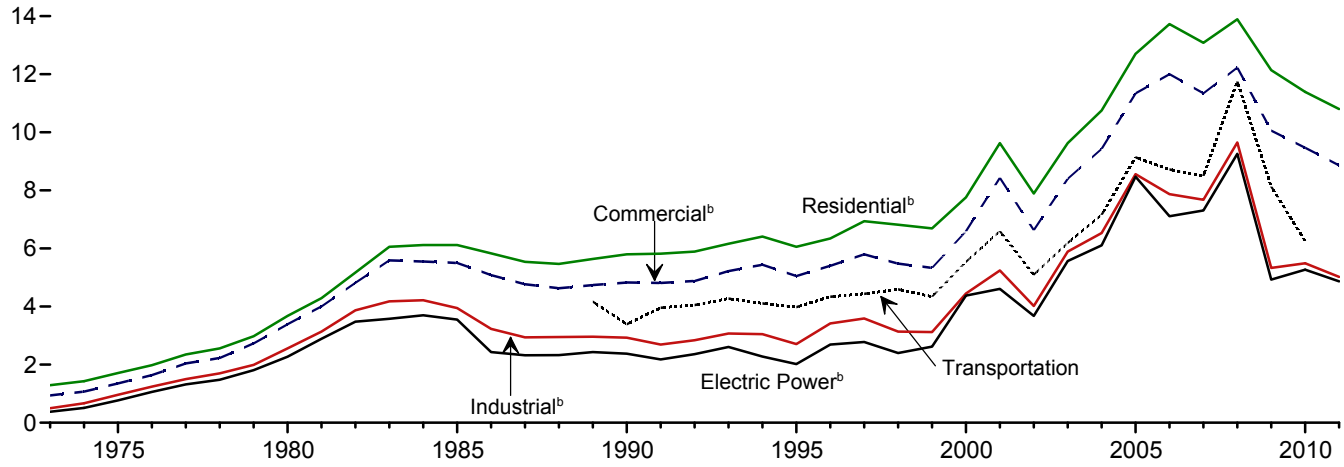
Figure 9.4 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

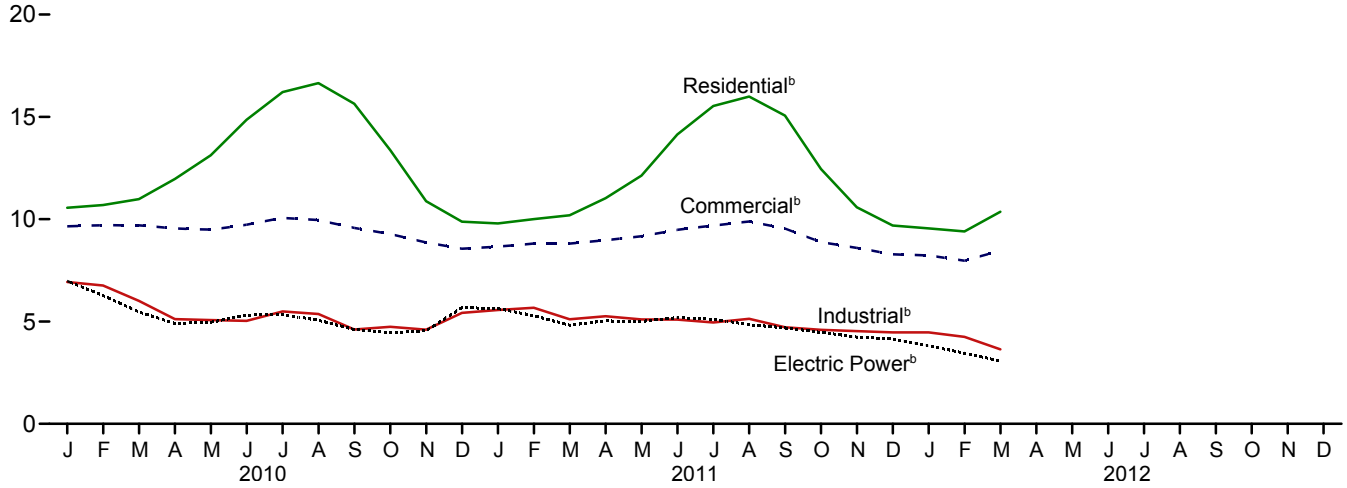
Selected Prices, 1973-2011



Consuming Sectors, 1973-2011



Consuming Sectors, Monthly



[a]Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
[b]Includes taxes.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices.
Source: Table 9.11.

Table 9.11 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

	Wellhead Price	City-gate Price	Consuming Sectors[b]								
			Residential		Commercial[c]		Industrial[d]		Transportation	Electric Power[e]	
			Price[f]	Percentage of Sector[g]	Price[f]	Percentage of Sector[g]	Price[f]	Percentage of Sector[g]	Vehicle Fuel[h] Price[f]	Price[f]	Percentage of Sector[g,i]
1973 Average	**0.22**	**NA**	**1.29**	**NA**	**0.94**	**NA**	**0.50**	**NA**	**NA**	**0.38**	**92.1**
1975 Average	**.44**	**NA**	**1.71**	**NA**	**1.35**	**NA**	**.96**	**NA**	**NA**	**.77**	**96.1**
1980 Average	**1.59**	**NA**	**3.68**	**NA**	**3.39**	**NA**	**2.56**	**NA**	**NA**	**2.27**	**96.9**
1985 Average	**2.51**	**3.75**	**6.12**	**NA**	**5.50**	**NA**	**3.95**	**68.8**	**NA**	**3.55**	**94.0**
1990 Average	**1.71**	**3.03**	**5.80**	**99.2**	**4.83**	**86.6**	**2.93**	**35.2**	**3.39**	**2.38**	**76.8**
1995 Average	**1.55**	**2.78**	**6.06**	**99.0**	**5.05**	**76.7**	**2.71**	**24.5**	**3.98**	**2.02**	**71.4**
1996 Average	**2.17**	**3.27**	**6.34**	**99.0**	**5.40**	**77.6**	**3.42**	**19.4**	**4.34**	**2.69**	**68.4**
1997 Average	**2.32**	**3.66**	**6.94**	**98.8**	**5.80**	**70.8**	**3.59**	**18.1**	**4.44**	**2.78**	**68.0**
1998 Average	**1.96**	**3.07**	**6.82**	**97.7**	**5.48**	**67.0**	**3.14**	**16.1**	**4.59**	**2.40**	**63.7**
1999 Average	**2.19**	**3.10**	**6.69**	**95.2**	**5.33**	**66.1**	**3.12**	**18.8**	**4.34**	**2.62**	**58.3**
2000 Average	**3.68**	**4.62**	**7.76**	**92.6**	**6.59**	**63.9**	**4.45**	**19.8**	**5.54**	**4.38**	**50.5**
2001 Average	**4.00**	**5.72**	**9.63**	**92.4**	**8.43**	**66.0**	**5.24**	**20.8**	**6.60**	**4.61**	**40.2**
2002 Average	**2.95**	**4.12**	**7.89**	**97.9**	**6.63**	**77.4**	**4.02**	**22.7**	**5.10**	**[e]3.68**	**83.9**
2003 Average	**4.88**	**5.85**	**9.63**	**97.5**	**8.40**	**78.2**	**5.89**	**22.1**	**6.19**	**5.57**	**91.2**
2004 Average	**5.46**	**6.65**	**10.75**	**97.7**	**9.43**	**78.0**	**6.53**	**23.6**	**7.16**	**6.11**	**89.8**
2005 Average	**7.33**	**8.67**	**12.70**	**98.1**	**11.34**	**82.1**	**8.56**	**24.0**	**9.14**	**8.47**	**91.3**
2006 Average	**6.39**	**8.61**	**13.73**	**98.1**	**12.00**	**80.8**	**7.87**	**23.4**	**8.72**	**7.11**	**93.4**
2007 Average	**6.25**	**8.16**	**13.08**	**98.0**	**11.34**	**80.4**	**7.68**	**22.2**	**8.50**	**7.31**	**92.2**
2008 Average	**7.97**	**9.18**	**13.89**	**97.5**	**12.23**	**79.9**	**9.65**	**20.5**	**11.75**	**9.26**	**101.1**
2009 Average	**3.67**	**6.48**	**12.14**	**97.4**	**10.06**	**77.8**	**5.33**	**18.8**	**8.13**	**4.93**	**101.1**
2010 January	5.69	6.84	10.56	97.4	9.65	81.2	6.93	19.0	NA	6.98	101.0
February	5.30	6.64	10.69	97.8	9.71	81.8	6.76	18.6	NA	6.27	100.5
March	4.70	6.50	10.98	97.6	9.70	79.7	6.01	18.4	NA	5.47	101.0
April	4.10	5.88	11.97	96.2	9.55	75.7	5.12	17.7	NA	4.91	100.9
May	4.24	5.81	13.12	97.1	9.49	73.0	5.07	17.9	NA	4.96	100.9
June	4.27	6.02	14.86	96.9	9.73	71.9	5.03	18.0	NA	5.31	100.6
July	4.44	6.31	16.21	96.8	10.07	70.6	5.49	18.3	NA	5.34	100.6
August	4.38	6.22	16.65	96.4	9.96	69.8	5.37	17.8	NA	5.06	100.5
September	3.83	5.72	15.64	96.7	9.57	68.5	4.61	17.5	NA	4.61	100.7
October	4.05	5.70	13.37	96.8	9.28	71.8	4.74	16.8	NA	4.45	101.3
November	4.12	5.48	10.88	97.4	8.86	77.7	4.60	17.6	NA	4.55	101.0
December	4.68	5.74	9.88	97.4	8.56	80.2	5.42	17.8	NA	5.68	101.3
Average	**4.48**	**6.18**	**11.39**	**97.4**	**9.47**	**77.5**	**5.49**	**18.0**	**6.25**	**5.27**	**100.8**
2011 January	[E]4.37	5.68	9.79	96.1	8.66	68.4	5.56	16.3	NA	5.63	101.5
February	[E]4.34	5.75	10.00	96.1	8.81	67.7	5.67	16.1	NA	5.28	102.1
March	[E]3.95	5.68	10.19	95.8	8.81	64.9	5.11	16.2	NA	4.82	101.2
April	[E]4.05	5.61	11.03	95.5	8.97	61.7	5.26	15.6	NA	5.03	101.8
May	[E]4.12	5.78	12.13	95.8	9.17	58.5	5.10	16.2	NA	5.01	101.1
June	[E]4.20	6.08	14.14	95.9	9.48	56.5	5.09	15.6	NA	5.19	101.2
July	[E]4.27	6.14	15.53	95.9	9.69	54.9	4.95	16.5	NA	5.11	100.2
August	[E]4.20	6.19	15.99	95.2	9.89	52.9	5.13	15.8	NA	4.84	100.9
September	[E]3.82	5.92	15.06	95.1	9.54	51.9	4.72	15.7	NA	4.69	101.5
October	[E]3.62	5.43	12.45	95.1	8.88	52.7	4.59	15.6	NA	4.47	101.6
November	[E]3.35	5.25	10.58	94.6	8.60	61.2	4.53	15.9	NA	4.24	101.2
December	[E]3.14	5.03	9.69	95.9	8.28	64.7	4.47	16.5	NA	4.15	101.4
Average	**[E]3.95**	**5.62**	**10.80**	**95.7**	**8.86**	**62.3**	**5.02**	**16.0**	**NA**	**4.87**	**101.2**
2012 January	[E]2.89	4.86	9.55	95.7	8.23	[R]65.1	4.47	15.5	NA	3.81	100.6
February	[E]2.46	4.75	9.40	95.6	7.97	63.4	4.25	15.6	NA	3.45	100.5
March	[E]2.25	4.84	10.36	95.6	8.46	60.8	3.64	15.7	NA	3.07	100.2
3-Month Average	**[E]2.53**	**4.81**	**9.69**	**95.6**	**8.20**	**63.4**	**4.13**	**15.6**	**NA**	**3.44**	**100.4**
2011 3-Month Average	**[E]4.22**	**5.70**	**9.97**	**96.0**	**8.75**	**67.2**	**5.45**	**16.2**	**NA**	**5.26**	**101.6**
2010 3-Month Average	**5.23**	**6.69**	**10.71**	**97.6**	**9.69**	**81.0**	**6.58**	**18.7**	**NA**	**6.29**	**100.8**

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

[b] See Note 9, "Natural Gas Prices," at end of section.

[c] 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.

[d] 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.

[e] 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, "Costs of Fossil-Fuel Receipts at Electric Generating Plants," at end of section for plant coverage.

[f] Includes taxes.

[g] The percentage of the sector's consumption in Table 4.3 for which price data are available. For details on how the percentages are derived, see Table 9.11 Sources at end of section.

[h] Much of the natural gas delivered for vehicle fuel represents deliveries to fueling stations that are used primarily or exclusively by fleet vehicles. Thus, the prices are often those associated with the cost of gas in the operation of fleet vehicles.

[i] Percentages exceed 100 percent when reported natural gas receipts are greater than reported natural gas consumption—this can occur when combined-heat-and-power plants report fuel receipts related to non-electric generating activities.

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, "Natural Gas Prices," at 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.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: See end of section.

Energy Prices

Note 1. Crude Oil Domestic First Purchase Prices. 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. Crude Oil F.O.B. Costs. 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. Crude Oil Landed Costs. 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. Crude Oil Refinery Acquisition Costs. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on U.S. 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." Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. 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. Motor Gasoline Prices. 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. Historical Petroleum Prices. 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. Electricity Retail Prices. 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. Costs of Fossil-Fuel Receipts at Electric Generating Plants. 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 power 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. 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, vehicle fuel, and electric power consumers. They do not include the price of natural gas delivered on behalf of third parties to residential, commercial, industrial, and vehicle fuel customers except for certain States in the residential and commercial sectors for 2002 forward. 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."
1978–2009: U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual 2009*, Table 1.
2010 forward: EIA, *Petroleum Marketing Monthly*, June 2012, 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."
1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 1.
2010 forward: EIA, *Petroleum Marketing Monthly*, June 2012, 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."
1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 1.
2010 forward: EIA, *Petroleum Marketing Monthly*, June 2012, 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: U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report."
1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 21.
2010 forward: EIA, *Petroleum Marketing Monthly*, June 2012, 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: U.S. 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.
2001–2007: EIA, *Electric Power Monthly*, October 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."
2008 forward: EIA, *Electric Power Monthly*, May 2012, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

Table 9.11 Sources

All Prices Except Vehicle Fuel and Electric Power
1973–2006: U.S. Energy Information Administration (EIA), *Natural Gas Annual* (*NGA*), annual reports and unpublished revisions.
2007 forward: EIA, *Natural Gas Monthly* (*NGM*), May 2012, Table 3.

Vehicle Fuel Price
EIA, NGA, annual reports.

Electric Power Sector Price
1973–1998: EIA, NGA 2000, Table 96.
1999–2002: EIA, NGM, October 2004, Table 4.
2003–2007: 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."
2008 forward: Form EIA-923, "Power Plant Operations Report."

Percentage of Residential Sector
1989–2009: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."
2010 forward: Estimated by EIA as the average of the three previous annual values.

Percentage of Commercial Sector
1987–2006: 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.
2007 forward: EIA, NGM, May 2012, Table 3.

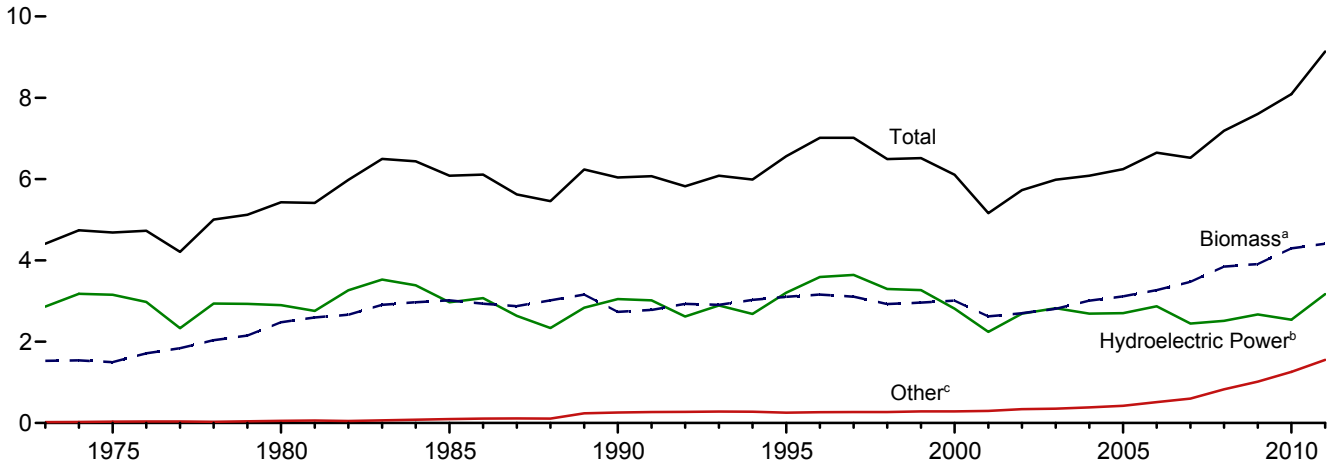
Percentage of Industrial Sector
1982–2006: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers.
2007 forward: EIA, NGM, May 2012, 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).
2002–2007: 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).
2008 forward: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form EIA-923, "Power Plant Operations Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).

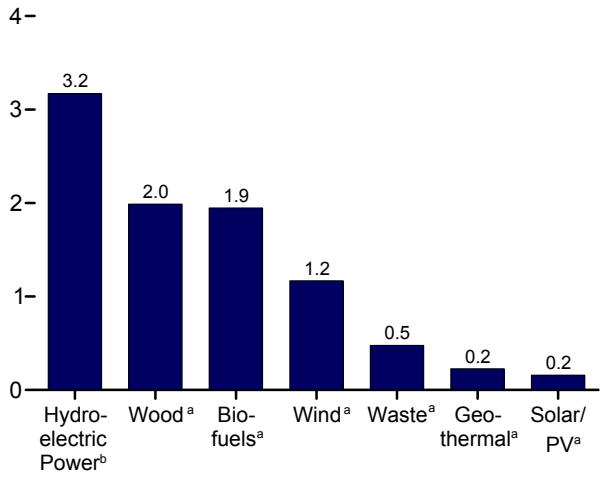
10. Renewable Energy

Figure 10.1 Renewable Energy Consumption
(Quadrillion Btu)

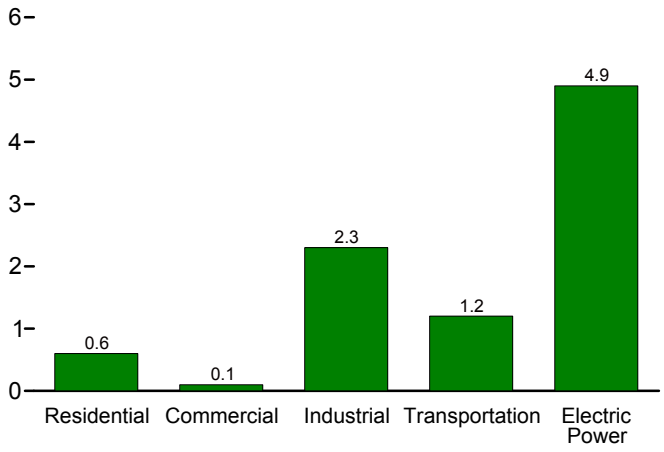
Total and Major Sources, 1973-2011



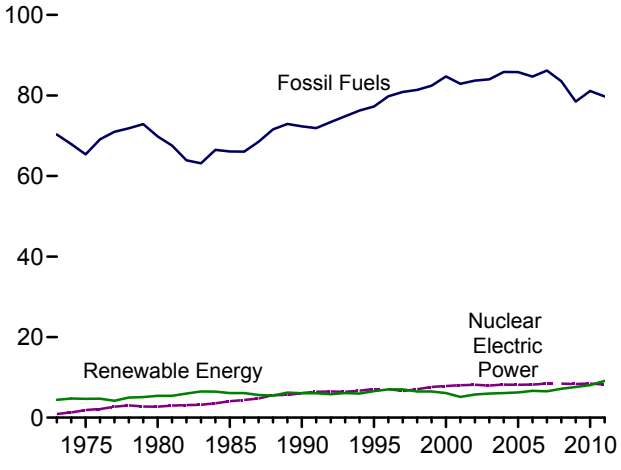
By Source, 2011



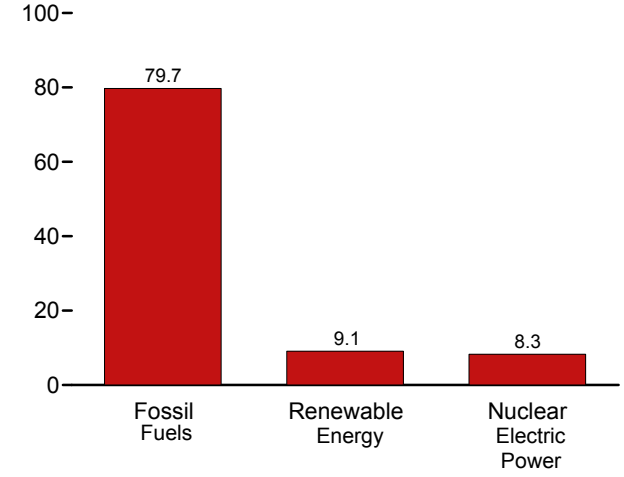
By Sector, 2011



Compared With Other Resources, 1973-2011



Compared With Other Resources, 2011



[a] See Table 10.1 for definition.
[b] Conventional hydroelectric power.
[c] Geothermal, solar/PV, and wind.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#renewable.
Sources: Tables 1.3 and 10.1–10.2c.

Table 10.1 Renewable Energy Production and Consumption by Source

(Trillion Btu)

	Production[a]			Consumption								
	Biomass		Total Renewable Energy[d]	Hydroelectric Power[e]	Geothermal[f]	Solar/PV[g]	Wind[h]	Biomass				Total Renewable Energy
	Biofuels[b]	Total[c]						Wood[i]	Waste[j]	Biofuels[k]	Total	
1973 Total	**NA**	**1,529**	**4,411**	**2,861**	**20**	**NA**	**NA**	**1,527**	**2**	**NA**	**1,529**	**4,411**
1975 Total	**NA**	**1,499**	**4,687**	**3,155**	**34**	**NA**	**NA**	**1,497**	**2**	**NA**	**1,499**	**4,687**
1980 Total	**NA**	**2,475**	**5,428**	**2,900**	**53**	**NA**	**NA**	**2,474**	**2**	**NA**	**2,475**	**5,428**
1985 Total	**93**	**3,016**	**6,084**	**2,970**	**97**	**(s)**	**(s)**	**2,687**	**236**	**93**	**3,016**	**6,084**
1990 Total	**111**	**2,735**	**6,041**	**3,046**	**171**	**59**	**29**	**2,216**	**408**	**111**	**2,735**	**6,041**
1995 Total	**198**	**3,099**	**6,558**	**3,205**	**152**	**69**	**33**	**2,370**	**531**	**200**	**3,101**	**6,560**
1996 Total	**141**	**3,155**	**7,012**	**3,590**	**163**	**70**	**33**	**2,437**	**577**	**143**	**3,157**	**7,014**
1997 Total	**186**	**3,108**	**7,018**	**3,640**	**167**	**70**	**34**	**2,371**	**551**	**184**	**3,105**	**7,016**
1998 Total	**202**	**2,929**	**6,494**	**3,297**	**168**	**69**	**31**	**2,184**	**542**	**201**	**2,927**	**6,493**
1999 Total	**211**	**2,965**	**6,517**	**3,268**	**171**	**68**	**46**	**2,214**	**540**	**209**	**2,963**	**6,516**
2000 Total	**233**	**3,006**	**6,104**	**2,811**	**164**	**66**	**57**	**2,262**	**511**	**236**	**3,008**	**6,106**
2001 Total	**254**	**2,624**	**5,164**	**2,242**	**164**	**64**	**70**	**2,006**	**364**	**253**	**2,622**	**5,163**
2002 Total	**308**	**2,705**	**5,734**	**2,689**	**171**	**63**	**105**	**1,995**	**402**	**303**	**2,701**	**5,729**
2003 Total	**402**	**2,805**	**5,982**	**2,825**	**175**	**62**	**115**	**2,002**	**401**	**404**	**2,807**	**5,983**
2004 Total	**487**	**2,998**	**6,070**	**2,690**	**178**	**63**	**142**	**2,121**	**389**	**499**	**3,010**	**6,082**
2005 Total	**564**	**3,104**	**6,229**	**2,703**	**181**	**63**	**178**	**2,137**	**403**	**577**	**3,117**	**6,242**
2006 Total	**720**	**3,216**	**6,599**	**2,869**	**181**	**68**	**264**	**2,099**	**397**	**771**	**3,267**	**6,649**
2007 Total	**978**	**3,461**	**6,509**	**2,446**	**186**	**76**	**341**	**2,070**	**413**	**991**	**3,474**	**6,523**
2008 Total	**1,387**	**3,864**	**7,202**	**2,511**	**192**	**89**	**546**	**2,040**	**436**	**1,372**	**3,849**	**7,186**
2009 Total	**1,584**	**3,928**	**7,616**	**2,669**	**200**	**98**	**721**	**1,891**	**453**	**1,568**	**3,912**	**7,600**
2010 January	152	359	672	218	18	10	67	168	39	142	349	662
February	142	332	610	201	16	9	53	154	35	136	326	605
March	158	366	682	204	18	10	84	168	40	149	357	673
April	152	351	661	186	17	10	95	160	39	149	348	657
May	157	358	717	245	18	11	85	162	39	155	356	715
June	152	355	753	291	17	11	79	164	39	155	357	755
July	158	367	701	239	17	11	66	170	40	158	368	701
August	160	371	662	196	18	11	65	171	40	159	370	660
September	156	360	626	168	17	11	69	166	38	153	357	622
October	163	369	646	173	17	10	77	166	39	160	366	643
November	164	369	682	191	17	10	95	165	40	157	363	676
December	168	383	726	226	18	10	88	174	41	163	377	720
Total	**1,884**	**4,341**	**8,136**	**2,539**	**208**	**126**	**923**	**1,988**	**469**	**1,837**	**4,294**	**8,090**
2011 January	170	383	754	255	20	12	84	174	40	154	367	739
February	152	344	717	241	18	12	103	156	36	146	337	710
March	171	377	822	310	20	13	103	166	40	160	366	811
April	163	359	821	309	18	13	121	158	38	154	351	812
May	171	371	840	323	19	14	114	160	40	165	365	835
June	167	375	828	315	19	14	106	168	40	166	374	827
July	172	384	797	308	19	14	72	171	41	162	374	787
August	175	384	746	257	19	14	72	169	41	173	382	744
September	167	371	680	210	18	13	67	165	40	160	365	673
October	176	379	711	195	19	14	104	163	40	167	370	702
November	177	382	742	209	19	12	121	164	41	165	370	730
December	186	403	779	241	19	13	102	175	42	173	390	766
Total	**2,047**	**4,511**	**9,236**	**3,171**	**226**	**158**	**1,168**	**1,987**	**477**	**1,947**	**4,411**	**9,135**
2012 January	177	389	792	233	19	15	135	173	40	157	370	773
February	[R] 164	[R] 362	705	203	18	15	108	161	37	153	351	695
March	172	372	797	256	19	16	132	161	40	164	364	789
3-Month Total	**512**	**1,123**	**2,294**	**693**	**57**	**46**	**375**	**494**	**117**	**474**	**1,085**	**2,256**
2011 3-Month Total	**493**	**1,103**	**2,293**	**806**	**57**	**37**	**290**	**495**	**116**	**460**	**1,071**	**2,261**
2010 3-Month Total	**452**	**1,057**	**1,964**	**623**	**52**	**29**	**204**	**490**	**114**	**428**	**1,032**	**1,940**

[a] Production equals consumption for all renewable energy sources except biofuels.

[b] Total biomass inputs to the production of fuel ethanol and biodiesel.

[c] Wood and wood-derived fuels, biomass waste, and total biomass inputs to the production of fuel ethanol and biodiesel.

[d] Hydroelectric power, geothermal, solar thermal/photovoltaic, wind, and biomass.

[e] Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[f] Geothermal electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6), and geothermal heat pump and direct use energy.

[g] Solar thermal and photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6), and solar thermal direct use energy.

[h] Wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[i] Wood and wood-derived fuels.

[j] 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).

[k] Fuel ethanol (minus denaturant) and biodiesel consumption, plus losses and co-products from the production of fuel ethanol and biodiesel.

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.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1973.

Sources: Tables 10.2a–10.4.

Table 10.2a Renewable Energy Consumption: Residential and Commercial Sectors

(Trillion Btu)

	Residential Sector				Commercial Sector[a]								
			Biomass						Biomass				
	Geo-thermal[b]	Solar/ PV[c]	Wood[d]	Total	Hydro-electric Power[e]	Geo-thermal[b]	Solar/ PV[f]	Wind[g]	Wood[d]	Waste[h]	Fuel Ethanol[i]	Total	Total
1973 Total	**NA**	**NA**	**354**	**354**	**NA**	**NA**	**NA**	**NA**	**7**	**NA**	**NA**	**7**	**7**
1975 Total	**NA**	**NA**	**425**	**425**	**NA**	**NA**	**NA**	**NA**	**8**	**NA**	**NA**	**8**	**8**
1980 Total	**NA**	**NA**	**850**	**850**	**NA**	**NA**	**NA**	**NA**	**21**	**NA**	**NA**	**21**	**21**
1985 Total	**NA**	**NA**	**1,010**	**1,010**	**NA**	**NA**	**NA**	**NA**	**24**	**NA**	**(s)**	**24**	**24**
1990 Total	**6**	**56**	**580**	**641**	**1**	**3**	**–**	**–**	**66**	**28**	**(s)**	**94**	**98**
1995 Total	**7**	**64**	**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**	**64**	**430**	**502**	**1**	**6**	**–**	**–**	**73**	**58**	**(s)**	**131**	**138**
1998 Total	**8**	**64**	**380**	**452**	**1**	**7**	**–**	**–**	**64**	**54**	**(s)**	**118**	**127**
1999 Total	**9**	**63**	**390**	**461**	**1**	**7**	**–**	**–**	**67**	**54**	**(s)**	**121**	**129**
2000 Total	**9**	**61**	**420**	**489**	**1**	**8**	**–**	**–**	**71**	**47**	**(s)**	**119**	**128**
2001 Total	**9**	**59**	**370**	**438**	**1**	**8**	**–**	**–**	**67**	**25**	**(s)**	**92**	**101**
2002 Total	**10**	**57**	**380**	**448**	**(s)**	**9**	**–**	**–**	**69**	**26**	**(s)**	**95**	**104**
2003 Total	**13**	**57**	**400**	**470**	**1**	**11**	**–**	**–**	**71**	**29**	**1**	**101**	**113**
2004 Total	**14**	**57**	**410**	**481**	**1**	**12**	**–**	**–**	**70**	**34**	**1**	**105**	**118**
2005 Total	**16**	**58**	**430**	**504**	**1**	**14**	**–**	**–**	**70**	**34**	**1**	**105**	**120**
2006 Total	**18**	**63**	**380**	**462**	**1**	**14**	**–**	**–**	**65**	**36**	**1**	**103**	**118**
2007 Total	**22**	**70**	**410**	**502**	**1**	**14**	**–**	**–**	**70**	**31**	**2**	**103**	**118**
2008 Total	**26**	**80**	**450**	**557**	**1**	**15**	**(s)**	**–**	**73**	**34**	**2**	**109**	**125**
2009 Total	**33**	**89**	**430**	**552**	**1**	**17**	**(s)**	**(s)**	**72**	**36**	**3**	**112**	**129**
2010 January	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
February	3	9	32	44	(s)	1	(s)	(s)	5	3	(s)	8	10
March	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
April	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	11
May	3	10	36	48	(s)	2	(s)	(s)	6	4	(s)	10	12
June	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	11
July	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
August	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	10	11
September	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	11
October	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
November	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	10
December	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
Total	**37**	**114**	**420**	**571**	**1**	**19**	**(s)**	**(s)**	**72**	**36**	**3**	**111**	**130**
2011 January	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	9	11
February	3	11	33	47	(s)	2	(s)	(s)	5	3	(s)	9	10
March	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	9	11
April	3	12	35	50	(s)	2	(s)	(s)	6	3	(s)	9	10
May	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	9	11
June	3	12	35	50	(s)	2	(s)	(s)	6	3	(s)	9	11
July	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	9	11
August	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	9	11
September	3	12	35	50	(s)	2	(s)	(s)	6	3	(s)	9	11
October	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	9	11
November	3	12	35	50	(s)	2	(s)	(s)	6	3	(s)	9	11
December	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	10	11
Total	**40**	**140**	**430**	**610**	**1**	**20**	**(s)**	**(s)**	**71**	**36**	**3**	**110**	**131**
2012 January	3	14	36	54	(s)	2	(s)	(s)	6	3	(s)	9	11
February	3	13	34	51	(s)	2	(s)	(s)	6	3	(s)	9	10
March	3	14	36	54	(s)	2	(s)	(s)	6	3	(s)	9	11
3-Month Total	**10**	**42**	**107**	**159**	**(s)**	**5**	**(s)**	**(s)**	**18**	**9**	**1**	**27**	**32**
2011 3-Month Total	**10**	**35**	**106**	**150**	**(s)**	**5**	**(s)**	**(s)**	**17**	**9**	**1**	**27**	**32**
2010 3-Month Total	**9**	**28**	**104**	**141**	**(s)**	**5**	**(s)**	**(s)**	**18**	**9**	**1**	**27**	**32**

[a] 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.

[b] Geothermal heat pump and direct use energy.

[c] Solar thermal direct use energy, and photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6). Includes small amounts of distributed solar thermal and PV energy used in the commercial, industrial, and electric power sectors.

[d] Wood and wood-derived fuels.

[e] Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[f] Photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6) at commercial plants with capacity of 1 megawatt or greater.

[g] Wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[h] 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).

[i] The fuel ethanol (minus denaturant) portion of motor fuels, such as E10, consumed by the commercial sector.

NA=Not available. – =No data reported. (s)=Less than 0.5 trillion Btu.

Notes: • Data are estimates, except for commercial sector solar/PV, hydroelectric power, wind, 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.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1973.

Sources: See end of section.

Table 10.2b Renewable Energy Consumption: Industrial and Transportation Sectors

(Trillion Btu)

	Industrial Sector[a]										Transportation Sector		
					Biomass						Biomass		
	Hydroelectric Power[b]	Geothermal[c]	Solar/PV[d]	Wind[e]	Wood[f]	Waste[g]	Fuel Ethanol[h]	Losses and Co-products[i]	Total	Total	Fuel Ethanol[j]	Biodiesel	Total
1973 Total	**35**	**NA**	**NA**	**NA**	**1,165**	**NA**	**NA**	**NA**	**1,165**	**1,200**	**NA**	**NA**	**NA**
1975 Total	**32**	**NA**	**NA**	**NA**	**1,063**	**NA**	**NA**	**NA**	**1,063**	**1,096**	**NA**	**NA**	**NA**
1980 Total	**33**	**NA**	**NA**	**NA**	**1,600**	**NA**	**NA**	**NA**	**1,600**	**1,633**	**NA**	**NA**	**NA**
1985 Total	**33**	**NA**	**NA**	**NA**	**1,645**	**230**	**1**	**42**	**1,918**	**1,951**	**50**	**NA**	**50**
1990 Total	**31**	**2**	**–**	**–**	**1,442**	**192**	**1**	**49**	**1,684**	**1,717**	**60**	**NA**	**60**
1995 Total	**55**	**3**	**–**	**–**	**1,652**	**195**	**2**	**86**	**1,934**	**1,992**	**112**	**NA**	**112**
1996 Total	**61**	**3**	**–**	**–**	**1,683**	**224**	**1**	**61**	**1,969**	**2,033**	**81**	**NA**	**81**
1997 Total	**58**	**3**	**–**	**–**	**1,731**	**184**	**1**	**80**	**1,996**	**2,057**	**102**	**NA**	**102**
1998 Total	**55**	**3**	**–**	**–**	**1,603**	**180**	**1**	**86**	**1,872**	**1,929**	**113**	**NA**	**113**
1999 Total	**49**	**4**	**–**	**–**	**1,620**	**171**	**1**	**90**	**1,882**	**1,934**	**118**	**NA**	**118**
2000 Total	**42**	**4**	**–**	**–**	**1,636**	**145**	**1**	**99**	**1,881**	**1,928**	**135**	**NA**	**135**
2001 Total	**33**	**5**	**–**	**–**	**1,443**	**129**	**3**	**108**	**1,681**	**1,719**	**141**	**1**	**142**
2002 Total	**39**	**5**	**–**	**–**	**1,396**	**146**	**3**	**130**	**1,676**	**1,720**	**168**	**2**	**170**
2003 Total	**43**	**3**	**–**	**–**	**1,363**	**142**	**4**	**169**	**1,679**	**1,726**	**228**	**2**	**230**
2004 Total	**33**	**4**	**–**	**–**	**1,476**	**132**	**6**	**203**	**1,817**	**1,853**	**286**	**3**	**290**
2005 Total	**32**	**4**	**–**	**–**	**1,452**	**148**	**7**	**230**	**1,837**	**1,873**	**327**	**12**	**339**
2006 Total	**29**	**4**	**–**	**–**	**1,472**	**130**	**10**	**285**	**1,897**	**1,930**	**442**	**33**	**475**
2007 Total	**16**	**5**	**–**	**–**	**1,405**	**144**	**10**	**377**	**1,936**	**1,956**	**557**	**46**	**602**
2008 Total	**17**	**5**	**–**	**–**	**1,340**	**144**	**12**	**532**	**2,028**	**2,049**	**786**	**40**	**826**
2009 Total	**18**	**4**	**–**	**–**	**1,208**	**155**	**13**	**617**	**1,994**	**2,016**	**894**	**42**	**935**
2010 January	2	(s)	(s)	–	109	15	1	60	185	187	81	(s)	81
February	2	(s)	(s)	–	100	13	1	56	170	172	76	3	79
March	2	(s)	(s)	–	110	15	1	62	188	190	83	2	85
April	2	(s)	(s)	–	105	15	1	60	181	183	84	4	87
May	2	(s)	(s)	–	106	14	1	62	183	185	89	3	92
June	1	(s)	(s)	–	107	13	2	60	182	183	90	2	93
July	1	(s)	(s)	–	111	14	2	62	188	190	91	3	94
August	1	(s)	(s)	–	111	14	2	63	190	191	91	3	94
September	1	(s)	(s)	–	110	13	1	61	185	187	86	4	90
October	1	(s)	(s)	–	110	15	2	64	190	192	91	3	94
November	1	(s)	(s)	–	108	15	1	65	190	191	88	3	91
December	1	(s)	(s)	–	114	15	2	67	198	199	92	3	94
Total	**16**	**4**	**(s)**	**–**	**1,301**	**169**	**17**	**742**	**2,230**	**2,250**	**1,040**	**34**	**1,074**
2011 January	1	(s)	(s)	(s)	115	15	1	66	197	199	83	3	86
February	2	(s)	(s)	(s)	102	14	1	59	176	178	81	4	85
March	2	(s)	(s)	(s)	109	14	1	66	190	192	87	6	93
April	2	(s)	(s)	(s)	105	14	1	62	182	185	83	8	91
May	2	(s)	(s)	(s)	105	14	2	65	185	187	90	9	99
June	1	(s)	(s)	(s)	112	14	2	63	190	192	92	9	102
July	1	(s)	(s)	(s)	112	14	1	64	192	194	85	11	96
August	1	(s)	(s)	(s)	110	14	2	65	191	192	96	10	106
September	1	(s)	(s)	(s)	109	14	1	62	187	188	83	14	97
October	1	(s)	(s)	(s)	107	15	1	65	189	190	89	12	100
November	1	(s)	(s)	(s)	110	15	1	66	192	194	84	13	98
December	2	(s)	(s)	(s)	116	15	2	69	202	204	90	13	102
Total	**18**	**4**	**(s)**	**(s)**	**1,311**	**172**	**17**	**772**	**2,273**	**2,295**	**1,042**	**112**	**1,154**
2012 January	2	(s)	(s)	(s)	114	15	1	67	197	199	81	8	89
February	2	(s)	(s)	(s)	106	14	1	61	183	185	82	[R]9	90
March	2	(s)	(s)	(s)	104	14	1	64	184	186	87	11	98
3-Month Total	**5**	**1**	**(s)**	**(s)**	**325**	**43**	**4**	**192**	**563**	**570**	**250**	**27**	**277**
2011 3-Month Total	**5**	**1**	**(s)**	**(s)**	**325**	**43**	**4**	**191**	**563**	**569**	**251**	**14**	**265**
2010 3-Month Total	**5**	**1**	**(s)**	**–**	**318**	**42**	**4**	**178**	**543**	**549**	**239**	**6**	**245**

[a] 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 fossil-fuels heat rate—see Table A6).

[c] Geothermal heat pump and direct use energy.

[d] Photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6) at industrial plants with capacity of 1 megawatt or greater.

[e] Wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[f] Wood and wood-derived fuels.

[g] 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] The fuel ethanol (minus denaturant) portion of motor fuels, such as E10, consumed by the industrial sector.

[i] Losses and co-products from the production of fuel ethanol and biodiesel. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol and biodiesel—these are included in the industrial sector consumption statistics for the appropriate energy source.

[j] The fuel ethanol (minus denaturant) portion of motor fuels, such as E10 and E85, consumed by the transportation sector.

R=Revised. NA=Not available. – =No data reported. (s)=Less than 0.5 trillion Btu.

Notes: • Data are estimates, except for industrial sector hydroelectric power in 1973-1978 and 1989 forward, solar/PV, and wind. • 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.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1973.

Sources: See end of section.

Table 10.2c Renewable Energy Consumption: Electric Power Sector

(Trillion Btu)

	Hydro-electric Power[a]	Geo-thermal[b]	Solar/PV[c]	Wind[d]	Biomass			Total
					Wood[e]	Waste[f]	Total	
1973 Total	**2,827**	**20**	**NA**	**NA**	**1**	**2**	**3**	**2,851**
1975 Total	**3,122**	**34**	**NA**	**NA**	**(s)**	**2**	**2**	**3,158**
1980 Total	**2,867**	**53**	**NA**	**NA**	**3**	**2**	**4**	**2,925**
1985 Total	**2,937**	**97**	**(s)**	**(s)**	**8**	**7**	**14**	**3,049**
1990 Total[g]	**3,014**	**161**	**4**	**29**	**129**	**188**	**317**	**3,524**
1995 Total	**3,149**	**138**	**5**	**33**	**125**	**296**	**422**	**3,747**
1996 Total	**3,528**	**148**	**5**	**33**	**138**	**300**	**438**	**4,153**
1997 Total	**3,581**	**150**	**5**	**34**	**137**	**309**	**446**	**4,216**
1998 Total	**3,241**	**151**	**5**	**31**	**137**	**308**	**444**	**3,872**
1999 Total	**3,218**	**152**	**5**	**46**	**138**	**315**	**453**	**3,874**
2000 Total	**2,768**	**144**	**5**	**57**	**134**	**318**	**453**	**3,427**
2001 Total	**2,209**	**142**	**6**	**70**	**126**	**211**	**337**	**2,763**
2002 Total	**2,650**	**147**	**6**	**105**	**150**	**230**	**380**	**3,288**
2003 Total	**2,781**	**148**	**5**	**115**	**167**	**230**	**397**	**3,445**
2004 Total	**2,656**	**148**	**6**	**142**	**165**	**223**	**388**	**3,340**
2005 Total	**2,670**	**147**	**6**	**178**	**185**	**221**	**406**	**3,406**
2006 Total	**2,839**	**145**	**5**	**264**	**182**	**231**	**412**	**3,665**
2007 Total	**2,430**	**145**	**6**	**341**	**186**	**237**	**423**	**3,345**
2008 Total	**2,494**	**146**	**9**	**546**	**177**	**258**	**435**	**3,630**
2009 Total	**2,650**	**146**	**9**	**721**	**180**	**261**	**441**	**3,967**
2010 January	217	13	(s)	67	17	21	39	335
February	199	11	(s)	53	16	20	36	300
March	202	13	1	84	16	22	39	338
April	184	12	1	95	15	21	36	329
May	243	13	1	85	14	22	36	378
June	290	12	2	79	16	23	39	421
July	238	12	2	66	17	23	40	358
August	195	13	2	65	18	23	41	315
September	168	12	1	69	16	22	38	288
October	171	12	1	77	15	22	37	298
November	190	12	1	95	16	23	39	337
December	225	13	(s)	88	17	23	41	367
Total	**2,521**	**148**	**12**	**923**	**196**	**264**	**459**	**4,064**
2011 January	254	14	(s)	84	16	21	38	391
February	239	13	1	103	15	20	35	390
March	308	14	1	103	15	23	38	463
April	307	13	2	121	12	22	33	476
May	321	14	2	113	13	22	35	486
June	313	13	2	106	15	23	38	473
July	307	13	2	72	16	24	40	434
August	256	13	2	72	16	23	39	383
September	209	13	2	67	15	22	37	327
October	194	14	2	104	13	23	36	349
November	207	13	1	120	13	23	36	377
December	239	14	1	102	16	23	39	396
Total	**3,153**	**163**	**18**	**1,168**	**175**	**269**	**444**	**4,945**
2012 January	232	14	1	135	16	22	38	420
February	201	13	1	108	15	21	35	359
March	255	14	2	132	14	23	37	440
3-Month Total	**688**	**41**	**4**	**375**	**45**	**66**	**111**	**1,218**
2011 3-Month Total	**801**	**42**	**2**	**290**	**46**	**64**	**110**	**1,245**
2010 3-Month Total	**618**	**37**	**1**	**204**	**50**	**63**	**114**	**973**

[a] Conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[b] Geothermal electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[c] Solar thermal and photovoltaic (PV) electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[d] Wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6).

[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 tire-derived fuels).

[g] 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.

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.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1973.

Sources: • **Biomass:** Table 7.4b. • **All Other Data:** Tables 7.2b and A6.

Table 10.3 Fuel Ethanol Overview

	Feedstock[a]	Losses and Co-products[b]	Denaturant[c]	Production[d]			Trade[d] Net Imports[e]	Stocks[d,f]	Stock Change[d,g]	Consumption[d]			*Consumption Minus Denaturant*[h]
	TBtu	TBtu	Mbbl	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu	*TBtu*
1981 Total	**13**	**6**	**40**	**1,978**	**83**	**7**	**NA**	**NA**	**NA**	**1,978**	**83**	**7**	***7***
1985 Total	**93**	**42**	**294**	**14,693**	**617**	**52**	**NA**	**NA**	**NA**	**14,693**	**617**	**52**	***51***
1990 Total	**111**	**49**	**356**	**17,802**	**748**	**63**	**NA**	**NA**	**NA**	**17,802**	**748**	**63**	***62***
1995 Total	**198**	**86**	**647**	**32,325**	**1,358**	**115**	**387**	**2,186**	**-207**	**32,919**	**1,383**	**117**	***114***
1996 Total	**141**	**61**	**464**	**23,178**	**973**	**83**	**313**	**2,065**	**-121**	**23,612**	**992**	**84**	***82***
1997 Total	**186**	**80**	**613**	**30,674**	**1,288**	**109**	**85**	**2,925**	**860**	**29,899**	**1,256**	**107**	***104***
1998 Total	**202**	**86**	**669**	**33,453**	**1,405**	**119**	**66**	**3,406**	**481**	**33,038**	**1,388**	**118**	***115***
1999 Total	**211**	**90**	**698**	**34,881**	**1,465**	**124**	**87**	**4,024**	**618**	**34,350**	**1,443**	**122**	***119***
2000 Total	**233**	**99**	**773**	**38,627**	**1,622**	**138**	**116**	**3,400**	**-624**	**39,367**	**1,653**	**140**	***137***
2001 Total	**253**	**108**	**841**	**42,028**	**1,765**	**150**	**315**	**4,298**	**898**	**41,445**	**1,741**	**148**	***144***
2002 Total	**307**	**130**	**1,019**	**50,956**	**2,140**	**182**	**306**	**6,200**	**1,902**	**49,360**	**2,073**	**176**	***171***
2003 Total	**400**	**169**	**1,335**	**66,772**	**2,804**	**238**	**292**	**5,978**	**-222**	**67,286**	**2,826**	**240**	***233***
2004 Total	**484**	**203**	**1,621**	**81,058**	**3,404**	**289**	**3,542**	**6,002**	**24**	**84,576**	**3,552**	**301**	***293***
2005 Total	**552**	**230**	**1,859**	**92,961**	**3,904**	**331**	**3,234**	**5,563**	**-439**	**96,634**	**4,059**	**344**	***335***
2006 Total	**688**	**285**	**2,326**	**116,294**	**4,884**	**414**	**17,408**	**8,760**	**3,197**	**130,505**	**5,481**	**465**	***453***
2007 Total	**914**	**376**	**3,105**	**155,263**	**6,521**	**553**	**10,457**	**10,535**	**1,775**	**163,945**	**6,886**	**584**	***569***
2008 Total	**1,300**	**531**	**4,433**	**221,637**	**9,309**	**790**	**12,610**	**14,226**	**3,691**	**230,556**	**9,683**	**821**	***800***
2009 Total	**1,517**	**616**	**5,688**	**260,424**	**10,938**	**928**	**4,720**	**16,594**	**2,368**	**262,776**	**11,037**	**936**	***910***
2010 January	149	60	541	25,625	1,076	91	-234	18,251	1,657	23,734	997	85	*82*
February	138	56	496	23,802	1,000	85	-482	19,297	1,046	22,274	936	79	*77*
March	154	62	537	26,486	1,112	94	-1,104	20,222	925	24,457	1,027	87	*85*
April	147	59	522	25,384	1,066	90	-927	20,042	-180	24,637	1,035	88	*85*
May	152	61	534	26,244	1,102	93	-368	19,851	-191	26,067	1,095	93	*90*
June	149	60	522	25,632	1,077	91	-341	18,565	-1,286	26,577	1,116	95	*92*
July	154	62	543	26,584	1,117	95	-578	17,809	-756	26,762	1,124	95	*93*
August	157	63	538	26,964	1,132	96	-695	17,380	-429	26,698	1,121	95	*93*
September	152	61	533	26,221	1,101	93	-924	17,437	57	25,240	1,060	90	*88*
October	160	64	563	27,471	1,154	98	-830	17,278	-159	26,800	1,126	95	*93*
November	161	65	585	27,747	1,165	99	-923	18,150	872	25,952	1,090	92	*90*
December	165	67	592	28,457	1,195	101	-1,711	17,941	-209	26,955	1,132	96	*93*
Total	**1,839**	**742**	**6,506**	**316,617**	**13,298**	**1,127**	**-9,115**	**17,941**	**1,347**	**306,155**	**12,858**	**1,090**	***1,061***
2011 January	165	66	581	28,524	1,198	102	-1,359	20,672	[i] 2,732	24,433	1,026	87	*85*
February	147	59	535	25,400	1,067	90	-1,425	20,809	137	23,838	1,001	85	*83*
March	163	65	548	28,194	1,184	100	-2,003	21,440	631	25,560	1,074	91	*89*
April	154	62	507	26,591	1,117	95	-2,865	20,807	-633	24,359	1,023	87	*85*
May	161	64	545	27,756	1,166	99	-1,743	20,387	-420	26,433	1,110	94	*92*
June	157	63	535	27,064	1,137	96	-1,533	18,833	-1,554	27,085	1,138	96	*94*
July	160	64	555	27,624	1,160	98	-2,731	18,700	-133	25,026	1,051	89	*87*
August	163	65	575	28,110	1,181	100	-790	17,900	-800	28,120	1,181	100	*97*
September	154	62	525	26,645	1,119	95	-1,820	18,437	537	24,288	1,020	86	*84*
October	163	65	557	28,092	1,180	100	-2,388	18,072	-365	26,069	1,095	93	*90*
November	164	66	573	28,335	1,190	101	-3,258	18,343	271	24,806	1,042	88	*86*
December	172	69	600	29,772	1,250	106	-3,407	18,261	-82	26,447	1,111	94	*92*
Total	**1,922**	**770**	**6,636**	**332,107**	**13,948**	**1,182**	**-25,322**	**18,261**	[i] **321**	**306,464**	**12,871**	**1,091**	***1,063***
2012 January	167	67	583	29,063	1,221	103	-1,789	21,753	3,492	23,782	999	85	*82*
February	154	61	528	26,653	1,119	95	-1,785	22,572	819	24,049	1,010	86	*83*
March	160	64	522	27,706	1,164	99	-1,626	22,952	380	25,700	1,079	91	*89*
3-Month Total	**481**	**191**	**1,633**	**83,422**	**3,504**	**297**	**-5,200**	**22,952**	**4,691**	**73,531**	**3,088**	**262**	***255***
2011 3-Month Total	**475**	**190**	**1,664**	**82,118**	**3,449**	**292**	**-4,787**	**21,440**	**3,500**	**73,831**	**3,101**	**263**	***256***
2010 3-Month Total	**441**	**178**	**1,574**	**75,913**	**3,188**	**270**	**-1,819**	**20,222**	**3,628**	**70,466**	**2,960**	**251**	***244***

[a] Total corn and other biomass inputs to the production of undenatured ethanol used for fuel ethanol.

[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.

[c] The amount of denaturant in fuel ethanol produced.

[d] Includes denaturant.

[e] Through 2009, data are for fuel ethanol imports only; data for fuel ethanol exports are not available. Beginning in 2010, data are for fuel ethanol imports minus fuel ethanol exports.

[f] Stocks are at end of period.

[g] A negative value indicates a decrease in stocks and a positive value indicates an increase.

[h] Consumption of fuel ethanol minus denaturant. Data for fuel ethanol minus denaturant are used to develop data for "Renewable Energy/Biomass" in Tables 10.1–10.2b, as well as in Sections 1 and 2.

[i] Derived from the preliminary December 2010 stocks value (17,940 thousand barrels), not the final December 2010 value (17,941 thousand barrels) that is shown under "Stocks."

NA=Not available.

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Fuel ethanol data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by the approximate heat content of fuel ethanol—see Table A3. • Through 1980, data are not available. For 1981–1992, data are estimates. For 1993–2008, only data for feedstock, losses and co-products, and denaturant are estimates. Beginning in 2009, only data for feedstock, and losses and co-products, are estimates. • See "Denaturant," "Ethanol," "Fuel Ethanol," and "Fuel Ethanol Minus Denaturant" in Glossary. • 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.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1981.

Sources: See end of section.

Table 10.4 Biodiesel Overview

	Feed-stock[a]	Losses and Co-products[b]	Production			Trade			Stocks[d]	Stock Change[e]	Bal-ancing Item[f]	Consumption		
						Imports	Exports	Net Imports[c]						
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu
2001 Total	**1**	**(s)**	**204**	**9**	**1**	**78**	**39**	**39**	**NA**	**NA**	**NA**	**243**	**10**	**1**
2002 Total	**1**	**(s)**	**250**	**10**	**1**	**191**	**56**	**135**	**NA**	**NA**	**NA**	**385**	**16**	**2**
2003 Total	**2**	**(s)**	**338**	**14**	**2**	**94**	**110**	**-16**	**NA**	**NA**	**NA**	**322**	**14**	**2**
2004 Total	**4**	**(s)**	**666**	**28**	**4**	**97**	**124**	**-26**	**NA**	**NA**	**NA**	**640**	**27**	**3**
2005 Total	**12**	**(s)**	**2,162**	**91**	**12**	**207**	**206**	**1**	**NA**	**NA**	**NA**	**2,163**	**91**	**12**
2006 Total	**32**	**(s)**	**5,963**	**250**	**32**	**1,069**	**828**	**242**	**NA**	**NA**	**NA**	**6,204**	**261**	**33**
2007 Total	**63**	**1**	**11,662**	**490**	**62**	**3,342**	**6,477**	**-3,135**	**NA**	**NA**	**NA**	**8,528**	**358**	**46**
2008 Total	**88**	**1**	**16,145**	**678**	**87**	**7,502**	**16,128**	**-8,626**	**NA**	**NA**	**NA**	**7,519**	**316**	**40**
2009 Total	**67**	**1**	**12,281**	**516**	**66**	**1,844**	**6,332**	**-4,489**	**711**	**711**	**669**	**7,750**	**326**	**42**
2010 January	3	(s)	633	27	3	41	296	-256	1,049	338	0	40	2	(s)
February	4	(s)	696	29	4	31	139	-108	1,039	-10	0	599	25	3
March	4	(s)	804	34	4	60	433	-374	1,057	18	0	412	17	2
April	4	(s)	814	34	4	45	227	-182	1,009	-48	0	680	29	4
May	4	(s)	760	32	4	80	251	-171	1,016	7	0	582	24	3
June	4	(s)	644	27	3	54	304	-249	968	-48	0	443	19	2
July	4	(s)	657	28	4	32	199	-167	830	-138	0	628	26	3
August	4	(s)	653	27	3	52	225	-173	771	-59	0	539	23	3
September	4	(s)	723	30	4	69	131	-62	682	-89	0	749	31	4
October	4	(s)	676	28	4	18	132	-114	650	-32	0	594	25	3
November	3	(s)	528	22	3	30	57	-27	676	26	0	475	20	3
December	3	(s)	588	25	3	34	109	-75	672	-4	0	517	22	3
Total	**44**	**1**	**8,177**	**343**	**44**	**546**	**2,503**	**-1,958**	**672**	**-39**	**0**	**6,258**	**263**	**34**
2011 January	5	(s)	842	35	5	49	217	-169	738	[g] 76	0	597	25	3
February	5	(s)	961	40	5	37	88	-51	869	131	0	779	33	4
March	8	(s)	1,419	60	8	53	197	-144	984	115	0	1,160	49	6
April	9	(s)	1,692	71	9	52	222	-169	1,012	28	0	1,494	63	8
May	10	(s)	1,838	77	10	48	192	-144	1,102	90	0	1,604	67	9
June	11	(s)	1,938	81	10	48	117	-69	1,216	114	0	1,755	74	9
July	12	(s)	2,183	92	12	62	142	-80	1,267	51	0	2,052	86	11
August	12	(s)	2,273	95	12	65	71	-7	1,663	396	0	1,871	79	10
September	12	(s)	2,283	96	12	65	193	-127	1,201	-462	0	2,617	110	14
October	14	(s)	2,508	105	13	82	132	-49	1,481	280	0	2,179	92	12
November	14	(s)	2,494	105	13	66	131	-65	1,436	-45	0	2,474	104	13
December	14	(s)	2,604	109	14	234	39	195	1,902	466	0	2,333	98	13
Total	**125**	**2**	**23,034**	**967**	**123**	**861**	**1,740**	**-879**	**1,902**	[g] **1,240**	**0**	**20,915**	**878**	**112**
2012 January	9	(s)	1,700	71	9	44	248	-204	1,913	11	0	[R] 1,486	62	8
February	10	(s)	[R] 1,837	[R] 77	10	58	119	-62	2,083	170	0	[R] 1,606	[R] 67	[R] 9
March	12	(s)	2,193	92	12	55	149	-93	2,218	135	0	1,964	82	11
3-Month Total	**31**	**(s)**	**5,730**	**241**	**31**	**157**	**516**	**-359**	**2,218**	**316**	**0**	**5,056**	**212**	**27**
2011 3-Month Total	**18**	**(s)**	**3,221**	**135**	**17**	**139**	**503**	**-364**	**984**	**322**	**0**	**2,535**	**106**	**14**
2010 3-Month Total	**12**	**(s)**	**2,134**	**90**	**11**	**131**	**868**	**-737**	**1,057**	**346**	**0**	**1,051**	**44**	**6**

[a] Total vegetable oil and other biomass inputs to the production of biodiesel.

[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.

[c] Net imports equal imports minus exports.

[d] Stocks are at end of period.

[e] A negative value indicates a decrease in stocks and a positive value indicates an increase.

[f] Beginning in 2009, because of incomplete data coverage and different data sources, "Balancing Item" is used to balance biodiesel supply and disposition.

[g] Derived from the preliminary December 2010 stocks value (662 thousand barrels), not the final December 2010 value (672 thousand barrels) that is shown under "Stocks."

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

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Biodiesel data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by 5.359 million Btu per barrel (the approximate heat content of biodiesel—see Table A3). • Through 2000, data are not available. Beginning in 2001, data not from U.S. Energy Information Administration (EIA) surveys 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.gov/totalenergy/data/monthly/#renewable for all available data beginning in 2001.

Sources: See end of section.

Renewable Energy

Note. Renewable Energy Production and Consumption. In Tables 1.1, 1.3, and 10.1, renewable energy consumption consists of: conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6); geothermal electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fuels heat rate —see Table A6), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6); 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 (minus denaturant) and biodiesel consumption; and losses and co-products from the production of fuel ethanol and biodiesel. In Tables 1.1, 1.2, and 10.1, renewable 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

1989–2009: U.S. Energy Information Administration (EIA) 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.

2010 forward: EIA estimates based on Form EIA-63B, "Annual Photovoltaic Cell/Module Shipments Report"; Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey" (pre-2010 data); and SEIA/GTM Research, *U.S. Solar Market Insight: 2010 Year in Review.* 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 2012 is derived using the average annual growth rate for 2009–2011.)

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 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

1989 forward: Commercial sector conventional hydroelectricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," and predecessor forms, are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

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, Solar/PV

2008 forward: Commercial sector solar thermal and photovoltaic (PV) electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

Commercial Sector, Wind

2009 forward: Commercial sector wind electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

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 estimate based on the 1983 value.

1985–1988: Values interpolated.

1989 forward: EIA, *Monthly Energy Review* (*MER*), Tables 7.4a–7.4c; and EIA 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 (Minus Denaturant)

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 (minus denaturant) consumption (Table 10.3).

Table 10.2b Sources

Industrial Sector, Hydroelectric Power

Industrial sector conventional hydroelectricity net generation data from Table 7.2c are converted to Btu by multiplying by the fossil-fuels heat rate—see Table 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, Solar/PV

2010 forward: Industrial sector solar thermal and photovoltaic (PV) electricity net generation data from the U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

Industrial Sector, Wind

2011 forward: Industrial sector wind electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

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, *Monthly Energy Review (MER),* Table 7.4c; and EIA 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 estimates for total waste consumption based on *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.

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 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 (Minus Denaturant)

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 (minus denaturant) consumption (Table 10.3).

Industrial Sector, Losses and Co-products

Calculated as fuel ethanol losses and co-products (Table 10.3) plus biodiesel losses and co-products (Table 10.4).

Transportation Sector, Fuel Ethanol (Minus Denaturant)

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 (minus denaturant) consumption (Table 10.3).

Transportation Sector, Biodiesel

EIA, MER, Table 10.4. Transportation sector biodiesel consumption is assumed to equal total biodiesel consumption.

Table 10.3 Sources

Feedstock

Calculated as fuel ethanol production (in thousand barrels) minus denaturant, and then multiplied by the fuel ethanol feedstock factor—see Table A3.

Losses and Co-products

Calculated as fuel ethanol feedstock plus denaturant minus fuel ethanol production.

Denaturant

1981–2008: Data in thousand barrels for petroleum denaturant in fuel ethanol produced are estimated as 2 percent of fuel ethanol production; these data are converted to Btu by multiplying by 4.645 million Btu per barrel (the estimated quantity-weighted factor of pentanes plus and conventional motor gasoline used as denaturant).

2009 and 2010: U.S. Energy Information Administration (EIA), *Petroleum Supply Annual (PSA)*, annual reports, Table 1. Data in thousand barrels for net production of pentanes plus at renewable fuels and oxygenate plants are multiplied by -1; these data are converted to Btu by multiplying by 4.620 million Btu per barrel (the approximate heat content of pentanes plus). Data in thousand barrels for net production of conventional motor gasoline and motor gasoline blending components at renewable fuels and oxygenate plants are multiplied by -1; these data are converted to Btu by multiplying by 5.253 million Btu per barrel (the approximate heat content of conventional motor gasoline). Total denaturant is the sum of the values for pentanes plus, conventional motor gasoline, and motor gasoline blending components.

2011 and 2012: EIA, *Petroleum Supply Monthly (PSM),* monthly reports, Table 1. Data in thousand barrels for net production of pentanes plus at renewable fuels and oxygenate plants are multiplied by -1; these data are converted to Btu by multiplying by 4.620 million Btu per barrel (the approximate heat content of pentanes plus). Data in thousand barrels for net production of conventional motor gasoline and motor gasoline blending components at renewable fuels and oxygenate plants are multiplied by -1; these data are converted to Btu by multiplying by 5.253 million Btu per barrel (the approximate heat content of conventional motor gasoline). Total denaturant is the sum of the values for pentanes plus, conventional motor gasoline, and motor gasoline blending components.

Production

1981–1992: Fuel ethanol production is assumed to equal 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 EIA, Form EIA-819, "Monthly Oxygenate Report," and predecessor form, which were not reconciled and updated to be consistent with the final balance.

2005–2008: EIA, Form EIA-819, "Monthly Oxygenate Report."

2009 and 2010: EIA, PSA, annual reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

2011 and 2012: EIA, PSM, monthly reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

Trade, Stocks, and Stock Change

1992–2010: EIA, PSA, annual reports, Table 1.

2011 and 2012: EIA, PSM, monthly reports, Table 1.

Consumption

1981–1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10; and interpolated values for 1982, 1983, 1985, 1986, and 1988.

1990–1992: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D2; and interpolated value for 1991.

1993–2004: EIA, PSA, annual reports, Tables 2 and 16. Calculated as 10 percent of oxygenated finished motor gasoline field production (Table 2), plus fuel ethanol refinery input (Table 16).

2005–2008: 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 blender net inputs (Table 15).

2009 and 2010: EIA, PSA, annual reports, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

2011 and 2012: EIA, PSM, monthly reports, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

Consumption Minus Denaturant

Calculated as fuel ethanol consumption minus the amount of denaturant in fuel ethanol consumed. Denaturant in fuel ethanol consumed is estimated by multiplying denaturant in fuel ethanol produced by the fuel ethanol consumption-to-production ratio.

Table 10.4 Sources

Feedstock

Calculated as biodiesel production in thousand barrels multiplied by 5.433 million Btu per barrel (the biodiesel feedstock factor—see Table A3).

Losses and Co-products

Calculated as biodiesel feedstock minus biodiesel production.

Production

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," data for soybean oil consumed in methyl esters (biodiesel). In addition, the U.S. Energy Information Administration (EIA) estimates that 14.4 million gallons of yellow grease were consumed in methyl esters (biodiesel).

2007: U.S. Department of Commerce, Bureau of the Census, "M311K—Fats and Oils: Production, Consumption, and Stocks," data for all fats and oils consumed in methyl esters (biodiesel).

2008: EIA, *Monthly Biodiesel Production Report,* December 2009 (release date October 2010), Table 11. Monthly data for 2008 are estimated based on U.S. Department of Commerce, Bureau of the Census, M311K data, multiplied by the EIA 2008 annual value's share of the M311K 2008 annual value.

2009 forward: EIA, *Monthly Biodiesel Production Report,* monthly reports, Table 1.

Trade

For imports, U.S. Department of Agriculture, data for the following Harmonized Tariff Schedule codes: 3824.90.40.20, "Fatty Esters Animal/Vegetable Mixture" (data through June 2010); 3824.90.40.30, "Biodiesel/Mixes" (data for July 2010–2011); 3826.00.00.00, "Biodiesel B30-99" (data for 2012); and 3826.00.10.00, "Biodiesel B100" (data for 2012). For exports, U.S. Department of Agriculture, data for the following Schedule B codes: 3824.90.40.00, "Fatty Substances Animal/Vegetable/Mixture" (data through 2010); 3824.90.40.30, "Biodiesel <70%" (data for 2011); and 3826.00.00.00, "Biodiesel B=>30" (data for 2012). Although these categories include products other than biodiesel (such as biodiesel coprocessed with petroleum feedstocks; and products destined for soaps, cosmetics, and other items), biodiesel is the largest component. In the absence of other reliable data for biodiesel trade, EIA sees these data as good substitutes.

Stocks and Stock Change

2009 and 2010: EIA, *Petroleum Supply Annual (PSA),* annual reports, Table 1, data for renewable fuels except fuel ethanol.

2011 and 2012: EIA, *Petroleum Supply Monthly,* monthly reports, Table 1, data for renewable fuels except fuel ethanol.

Balancing Item

Calculated as biodiesel consumption and biodiesel stock change minus biodiesel production and biodiesel net imports.

Consumption

2001–2008: Calculated as biodiesel production plus biodiesel net imports.

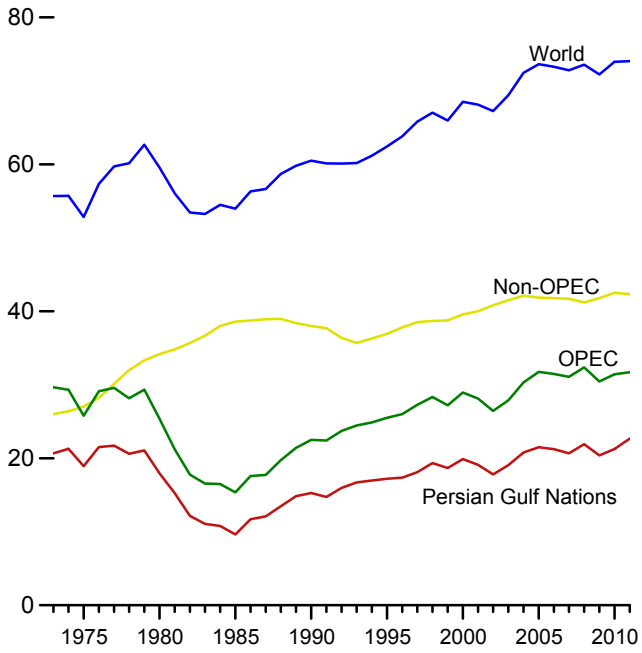
January and February 2009: EIA, PSA, Table 1, data for refinery and blender net inputs of renewable fuels except fuel ethanol.

March 2009 forward: Calculated as biodiesel production plus biodiesel net imports minus biodiesel stock change.

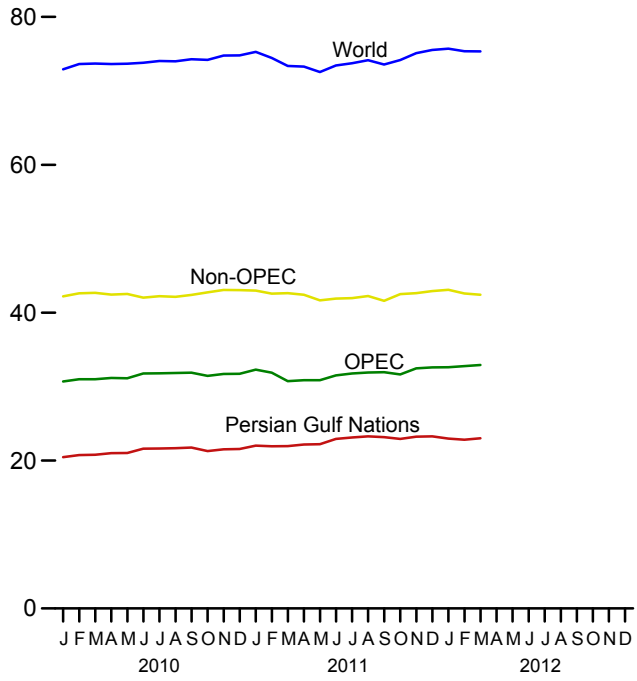
11. International Petroleum

Figure 11.1a World Crude Oil Production Overview
(Million Barrels per Day)

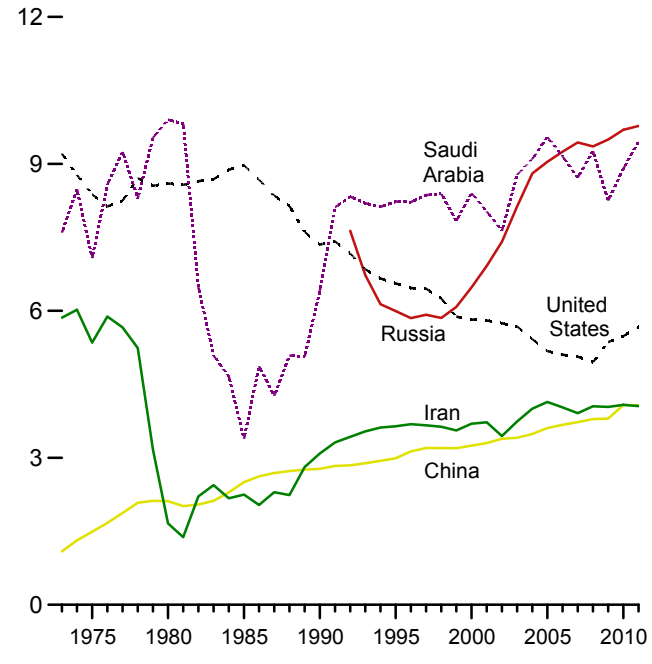
World Production, 1973-2011



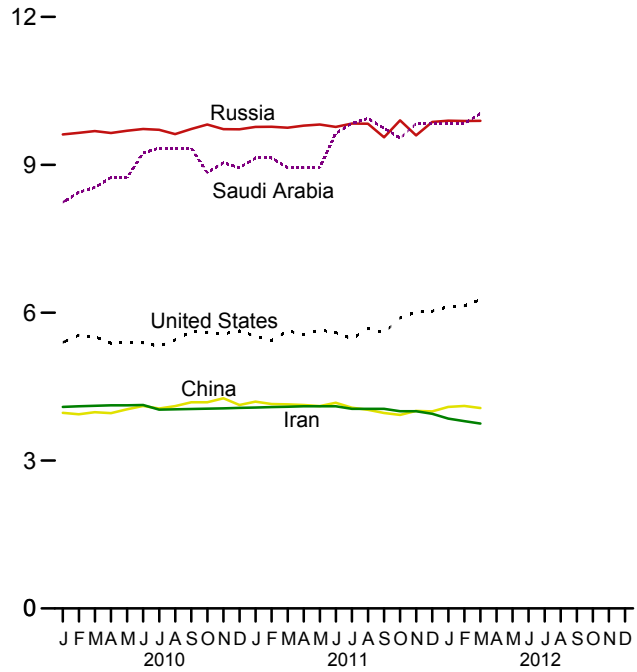
World Production, Monthly



Selected Producers, 1973-2011



Selected Producers, Monthly

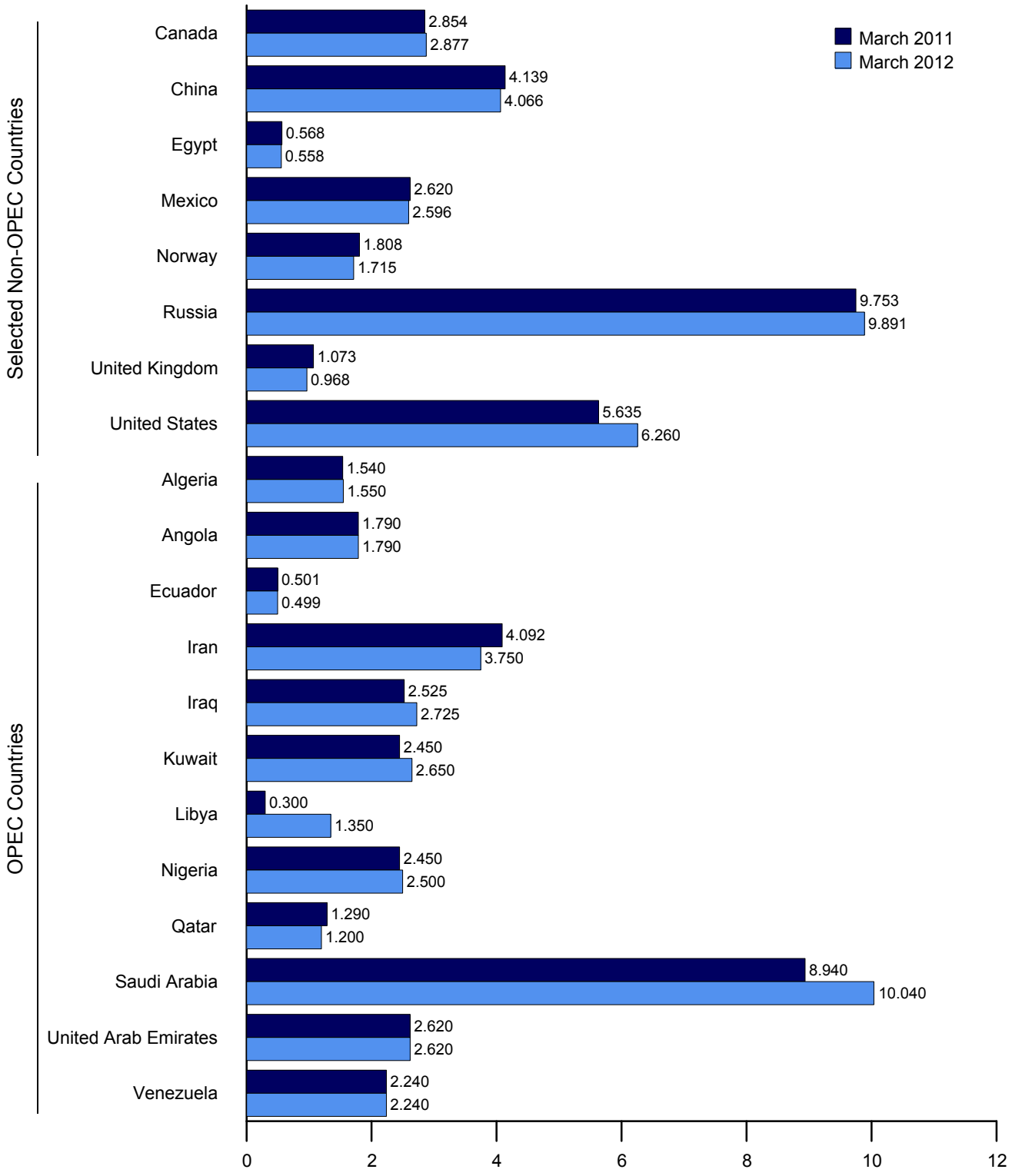


Notes: • OPEC is the Organization of the Petroleum Exporting Countries. • The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

Web Page: http://www.eia.gov/totalenergy/data/monthly/#international.

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.gov/totalenergy/data/monthly/#international.
Sources: Tables 11.1a and 11.1b.

Table 11.1a World Crude Oil Production: OPEC Members

(Thousand Barrels per Day)

	Algeria	Angola	Ecuador	Iran	Iraq	Kuwait[a]	Libya	Nigeria	Qatar	Saudi Arabia[a]	United Arab Emirates	Vene-zuela	Total OPEC[b]
1973 Average	**1,097**	**162**	**209**	**5,861**	**2,018**	**3,020**	**2,175**	**2,054**	**570**	**7,596**	**1,533**	**3,366**	**29,661**
1975 Average	**983**	**165**	**161**	**5,350**	**2,262**	**2,084**	**1,480**	**1,783**	**438**	**7,075**	**1,664**	**2,346**	**25,790**
1980 Average	**1,106**	**150**	**204**	**1,662**	**2,514**	**1,656**	**1,787**	**2,055**	**472**	**9,900**	**1,709**	**2,168**	**25,383**
1985 Average	**1,036**	**231**	**281**	**2,250**	**1,433**	**1,023**	**1,059**	**1,495**	**301**	**3,388**	**1,193**	**1,677**	**15,367**
1990 Average	**1,180**	**475**	**285**	**3,088**	**2,040**	**1,175**	**1,375**	**1,810**	**406**	**6,410**	**2,117**	**2,137**	**22,498**
1995 Average	**1,162**	**646**	**392**	**3,643**	**560**	**2,057**	**1,390**	**1,993**	**442**	**8,231**	**2,233**	**2,750**	**25,500**
1996 Average	**1,227**	**709**	**396**	**3,686**	**579**	**2,062**	**1,401**	**2,001**	**510**	**8,218**	**2,278**	**2,938**	**26,003**
1997 Average	**1,259**	**714**	**388**	**3,664**	**1,155**	**2,007**	**1,446**	**2,132**	**550**	**8,362**	**2,316**	**3,280**	**27,274**
1998 Average	**1,226**	**735**	**375**	**3,634**	**2,150**	**2,085**	**1,390**	**2,153**	**696**	**8,389**	**2,345**	**3,167**	**28,346**
1999 Average	**1,177**	**745**	**373**	**3,557**	**2,508**	**1,898**	**1,319**	**2,130**	**665**	**7,833**	**2,169**	**2,826**	**27,199**
2000 Average	**1,214**	**746**	**395**	**3,696**	**2,571**	**2,079**	**1,410**	**2,165**	**737**	**8,404**	**2,368**	**3,155**	**28,940**
2001 Average	**1,265**	**742**	**412**	**3,724**	**2,390**	**1,998**	**1,367**	**2,256**	**714**	**8,031**	**2,205**	**3,010**	**28,114**
2002 Average	**1,349**	**896**	**393**	**3,444**	**2,023**	**1,894**	**1,319**	**2,118**	**679**	**7,634**	**2,082**	**2,604**	**26,435**
2003 Average	**1,516**	**903**	**411**	**3,743**	**1,308**	**2,136**	**1,421**	**2,275**	**715**	**8,775**	**2,348**	**2,335**	**27,885**
2004 Average	**1,582**	**1,052**	**528**	**4,001**	**2,011**	**2,376**	**1,515**	**2,329**	**783**	**9,101**	**2,478**	**2,557**	**30,313**
2005 Average	**1,692**	**1,250**	**532**	**4,139**	**1,878**	**2,529**	**1,633**	**2,627**	**835**	**9,550**	**2,535**	**2,565**	**31,766**
2006 Average	**1,699**	**1,413**	**536**	**4,028**	**1,996**	**2,535**	**1,681**	**2,440**	**850**	**9,152**	**2,636**	**2,511**	**31,476**
2007 Average	**1,708**	**1,744**	**511**	**3,912**	**2,086**	**2,464**	**1,702**	**2,350**	**851**	**8,722**	**2,603**	**2,433**	**31,085**
2008 Average	**1,705**	**1,981**	**505**	**4,050**	**2,375**	**2,586**	**1,736**	**2,165**	**924**	**9,261**	**2,681**	**2,394**	**32,363**
2009 Average	**1,585**	**1,907**	**486**	**4,037**	**2,391**	**2,350**	**1,650**	**2,208**	**927**	**8,250**	**2,413**	**2,239**	**30,442**
2010 January	1,540	2,040	464	4,088	2,475	2,250	1,650	2,480	969	8,240	2,414	2,090	30,699
February	1,540	2,060	470	4,100	2,475	2,250	1,650	2,420	1,036	8,440	2,414	2,140	30,995
March	1,540	2,070	478	4,112	2,375	2,250	1,650	2,430	1,055	8,540	2,414	2,090	31,004
April	1,540	2,070	480	4,120	2,375	2,250	1,650	2,360	1,072	8,740	2,414	2,110	31,181
May	1,540	2,030	478	4,120	2,375	2,250	1,650	2,310	1,091	8,740	2,415	2,140	31,138
June	1,540	1,980	491	4,127	2,425	2,250	1,650	2,410	1,113	9,240	2,415	2,140	31,780
July	1,540	1,970	492	4,033	2,325	2,350	1,650	2,410	1,136	9,340	2,415	2,140	31,801
August	1,540	1,890	485	4,040	2,325	2,350	1,650	2,510	1,164	9,340	2,415	2,140	31,849
September	1,540	1,790	490	4,047	2,375	2,350	1,650	2,550	1,193	9,340	2,415	2,140	31,880
October	1,540	1,790	497	4,053	2,375	2,350	1,650	2,580	1,216	8,840	2,415	2,140	31,446
November	1,540	1,790	508	4,060	2,375	2,350	1,650	2,510	1,235	9,040	2,415	2,240	31,713
December	1,540	1,790	499	4,068	2,525	2,350	1,650	2,490	1,235	8,940	2,415	2,240	31,742
Average	**1,540**	**1,939**	**486**	**4,080**	**2,399**	**2,300**	**1,650**	**2,455**	**1,127**	**8,900**	**2,415**	**2,146**	**31,437**
2011 January	1,540	1,790	500	4,076	2,625	2,350	1,650	2,580	1,280	9,140	2,520	2,240	32,291
February	1,540	1,790	509	4,084	2,525	2,350	1,340	2,570	1,280	9,140	2,520	2,240	31,888
March	1,540	1,790	501	4,092	2,525	2,450	300	2,450	1,290	8,940	2,620	2,240	30,738
April	1,540	1,740	504	4,100	2,525	2,550	200	2,500	1,300	8,940	2,720	2,240	30,859
May	1,540	1,640	497	4,100	2,575	2,550	200	2,570	1,300	8,940	2,720	2,240	30,872
June	1,540	1,690	495	4,100	2,575	2,550	100	2,570	1,300	9,640	2,720	2,240	31,520
July	1,540	1,740	492	4,050	2,625	2,550	100	2,570	1,300	9,840	2,720	2,240	31,767
August	1,540	1,790	495	4,050	2,625	2,600	0	2,600	1,300	9,940	2,720	2,240	31,900
September	1,540	1,840	496	4,050	2,725	2,600	100	2,600	1,300	9,740	2,720	2,240	31,951
October	1,540	1,790	502	4,000	2,725	2,600	300	2,400	1,300	9,540	2,720	2,240	31,657
November	1,540	1,940	504	4,000	2,725	2,600	550	2,500	1,300	9,840	2,720	2,240	32,459
December	1,540	1,890	501	3,950	2,725	2,600	800	2,400	1,300	9,840	2,820	2,240	32,606
Average	**1,540**	**1,786**	**500**	**4,054**	**2,626**	**2,530**	**465**	**2,525**	**1,296**	**9,458**	**2,688**	**2,240**	**31,708**
2012 January	1,550	1,890	504	3,850	2,675	2,650	1,000	2,500	1,300	9,840	2,620	2,240	32,619
February	1,550	1,940	503	3,800	2,575	2,650	1,200	2,550	1,300	9,840	2,620	2,240	32,768
March	1,550	1,790	499	3,750	2,725	2,650	1,350	2,500	1,200	10,040	2,620	2,240	32,914
3-Month Average	**1,550**	**1,872**	**502**	**3,800**	**2,660**	**2,650**	**1,183**	**2,516**	**1,266**	**9,908**	**2,620**	**2,240**	**32,767**
2011 3-Month Average	**1,540**	**1,790**	**503**	**4,084**	**2,559**	**2,384**	**1,089**	**2,532**	**1,283**	**9,071**	**2,554**	**2,240**	**31,631**
2010 3-Month Average	**1,540**	**2,057**	**471**	**4,100**	**2,440**	**2,250**	**1,650**	**2,444**	**1,020**	**8,406**	**2,414**	**2,106**	**30,896**

[a] 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 March 2012, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 600 thousand barrels per day. Data for Saudi Arabia include approximately 150 thousand barrels per day from the Abu Safah field produced on behalf of Bahrain.

[b] See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. On Tables 11.1a and 11.1b, countries are classified as "OPEC" or "Non-OPEC" in all years based on their status in the most current year. For example, Ecuador rejoined OPEC in 2007, and is thus included in "Total OPEC" for all years; and Indonesia left OPEC at the end of 2008, and is thus included in "Total Non-OPEC" for all years.

Notes: • Data are for crude oil and lease condensate; they exclude 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.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

Sources: See end of section.

Table 11.1b World Crude Oil Production: Persian Gulf Nations, Non-OPEC, and World (Thousand Barrels per Day)

	Persian Gulf Nations[b]	Selected Non-OPEC[a] Producers									Total Non-OPEC[a]	World
		Canada	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States		
1973 Average	**20,668**	**1,798**	**1,090**	**165**	**465**	**32**	**8,324**	**NA**	**2**	**9,208**	**26,018**	**55,679**
1975 Average	**18,934**	**1,430**	**1,490**	**235**	**705**	**189**	**9,523**	**NA**	**12**	**8,375**	**27,039**	**52,828**
1980 Average	**17,961**	**1,435**	**2,114**	**595**	**1,936**	**486**	**11,706**	**NA**	**1,622**	**8,597**	**34,175**	**59,558**
1985 Average	**9,630**	**1,471**	**2,505**	**887**	**2,745**	**773**	**11,585**	**NA**	**2,530**	**8,971**	**38,598**	**53,965**
1990 Average	**15,278**	**1,553**	**2,774**	**873**	**2,553**	**1,630**	**10,975**	**NA**	**1,820**	**7,355**	**37,999**	**60,497**
1995 Average	**17,208**	**1,805**	**2,990**	**920**	**2,711**	**2,766**	**– –**	**5,995**	**2,489**	**6,560**	**36,934**	**62,434**
1996 Average	**17,367**	**1,837**	**3,131**	**922**	**2,944**	**3,091**	**– –**	**5,850**	**2,568**	**6,465**	**37,815**	**63,818**
1997 Average	**18,095**	**1,922**	**3,200**	**856**	**3,104**	**3,142**	**– –**	**5,920**	**2,518**	**6,452**	**38,532**	**65,806**
1998 Average	**19,337**	**1,981**	**3,198**	**834**	**3,160**	**3,011**	**– –**	**5,854**	**2,616**	**6,252**	**38,685**	**67,032**
1999 Average	**18,667**	**1,907**	**3,195**	**852**	**2,998**	**3,019**	**– –**	**6,079**	**2,684**	**5,881**	**38,768**	**65,967**
2000 Average	**19,892**	**1,977**	**3,249**	**768**	**3,104**	**3,222**	**– –**	**6,479**	**2,275**	**5,822**	**39,583**	**68,522**
2001 Average	**19,098**	**2,029**	**3,300**	**720**	**3,218**	**3,226**	**– –**	**6,917**	**2,282**	**5,801**	**40,003**	**68,116**
2002 Average	**17,794**	**2,171**	**3,390**	**715**	**3,263**	**3,131**	**– –**	**7,408**	**2,292**	**5,746**	**40,826**	**67,262**
2003 Average	**19,063**	**2,306**	**3,409**	**713**	**3,459**	**3,042**	**– –**	**8,132**	**2,093**	**5,681**	**41,515**	**69,400**
2004 Average	**20,787**	**2,398**	**3,485**	**673**	**3,476**	**2,954**	**– –**	**8,805**	**1,845**	**5,419**	**42,133**	**72,446**
2005 Average	**21,501**	**2,369**	**3,609**	**623**	**3,423**	**2,698**	**– –**	**9,043**	**1,649**	**5,178**	**41,871**	**73,637**
2006 Average	**21,232**	**2,525**	**3,673**	**535**	**3,345**	**2,491**	**– –**	**9,247**	**1,490**	**5,102**	**41,804**	**73,280**
2007 Average	**20,672**	**2,628**	**3,729**	**530**	**3,143**	**2,270**	**– –**	**9,437**	**1,498**	**5,064**	**41,715**	**72,800**
2008 Average	**21,913**	**2,579**	**3,790**	**566**	**2,839**	**2,182**	**– –**	**9,357**	**1,391**	**4,950**	**41,212**	**73,575**
2009 Average	**20,402**	**2,579**	**3,799**	**587**	**2,646**	**2,067**	**– –**	**9,495**	**1,328**	**5,361**	**41,788**	**72,230**
2010 January	20,471	2,497	3,968	579	2,660	2,060	– –	9,615	1,379	R 5,397	R 42,207	R 72,906
February	20,750	2,712	3,938	578	2,655	2,038	– –	9,648	1,274	R 5,543	R 42,625	R 73,620
March	20,781	2,621	3,981	577	2,641	1,983	– –	9,683	1,429	R 5,512	R 42,689	R 73,693
April	21,007	2,695	3,961	576	2,639	1,967	– –	9,646	1,378	R 5,379	R 42,456	R 73,637
May	21,025	2,745	4,040	576	2,639	1,921	– –	9,691	1,297	R 5,404	R 42,523	R 73,661
June	21,604	2,772	4,108	575	2,592	1,611	– –	9,727	1,076	R 5,387	R 42,031	R 73,811
July	21,634	2,765	4,056	575	2,618	1,864	– –	9,710	1,055	R 5,318	R 42,233	R 74,034
August	21,669	2,783	4,104	574	2,604	1,648	– –	9,623	1,070	R 5,448	R 42,142	R 73,990
September	21,755	2,648	4,183	574	2,615	1,637	– –	9,725	1,194	R 5,613	R 42,398	R 74,278
October	21,284	2,690	4,181	573	2,615	1,952	– –	9,816	1,195	R 5,605	42,740	74,186
November	21,510	2,942	4,263	573	2,556	1,868	– –	9,723	1,248	R 5,568	R 43,070	R 74,783
December	21,568	2,933	4,126	572	2,620	1,886	– –	9,719	1,207	R 5,630	R 43,050	R 74,792
Average	**21,257**	**2,734**	**4,076**	**575**	**2,621**	**1,869**	**– –**	**9,694**	**1,233**	**R 5,483**	**R 42,513**	**R 73,950**
2011 January	22,026	2,870	4,195	570	2,632	1,905	– –	9,769	1,316	RE 5,526	R 42,987	R 75,278
February	21,934	2,906	4,147	569	2,602	1,861	– –	9,773	1,085	RE 5,436	R 42,568	R 74,456
March	21,952	2,854	4,139	568	2,620	1,808	– –	9,753	1,073	RE 5,635	R 42,632	R 73,370
April	22,170	2,848	4,127	567	2,621	1,874	– –	9,795	1,164	RE 5,560	42,431	73,290
May	22,220	2,564	4,104	566	2,603	1,607	– –	9,818	1,017	RE 5,647	R 41,669	R 72,542
June	22,920	2,664	4,172	565	2,592	1,660	– –	9,770	1,018	RE 5,598	R 41,910	R 73,430
July	23,120	2,916	4,073	564	2,580	1,737	– –	9,837	946	RE 5,468	R 41,978	R 73,744
August	23,270	3,068	4,030	563	2,598	1,714	– –	9,832	767	RE 5,680	R 42,250	R 74,150
September	23,170	2,983	3,964	562	2,534	1,636	– –	9,557	890	RE 5,592	R 41,607	R 73,558
October	22,920	3,032	3,926	561	2,598	1,756	– –	9,902	998	RE 5,892	R 42,505	R 74,162
November	23,220	3,022	4,006	560	2,573	1,764	– –	9,595	1,039	RE 6,012	R 42,646	R 75,105
December	23,270	3,120	3,998	559	2,601	1,713	– –	9,869	1,010	RE 6,028	R 42,930	R 75,535
Average	**22,687**	**2,904**	**4,073**	**564**	**2,596**	**1,752**	**– –**	**9,774**	**1,026**	**RE 5,675**	**R 42,343**	**R 74,051**
2012 January	22,970	3,189	4,089	558	2,562	1,761	– –	9,894	999	RE 6,124	R 43,084	R 75,703
February	22,820	3,045	4,109	R 558	2,588	1,745	– –	9,889	1,016	RE 6,139	R 42,588	R 75,356
March	23,020	2,877	4,066	558	2,596	1,715	– –	9,891	968	E 6,260	42,419	75,334
3-Month Average	**22,939**	**3,037**	**4,088**	**558**	**2,582**	**1,740**	**– –**	**9,891**	**994**	**E 6,175**	**42,700**	**75,467**
2011 3-Month Average	**21,972**	**2,876**	**4,161**	**569**	**2,618**	**1,858**	**– –**	**9,765**	**1,160**	**5,536**	**42,735**	**74,365**
2010 3-Month Average	**20,664**	**2,607**	**3,963**	**578**	**2,652**	**2,027**	**– –**	**9,649**	**1,363**	**5,482**	**42,503**	**73,399**

[a] See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. On Tables 11.1a and 11.1b, countries are classified as "OPEC" or "Non-OPEC" in all years based on their status in the most current year. For example, Ecuador rejoined OPEC in 2007, and is thus included in "Total OPEC" for all years; and Indonesia left OPEC at the end of 2008, and is thus included in "Total Non-OPEC" for all years.

[b] Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

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

Notes: • Data are for crude oil and lease condensate; they exclude 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. • 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.

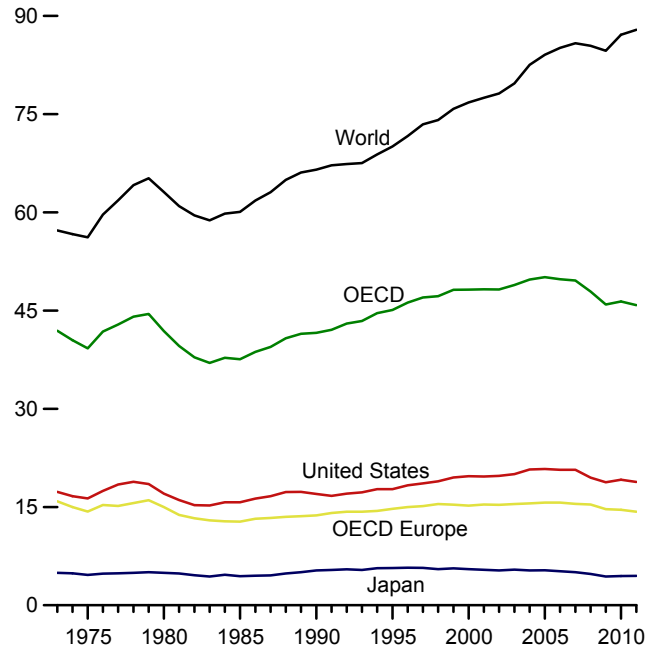
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

Sources: See end of section.

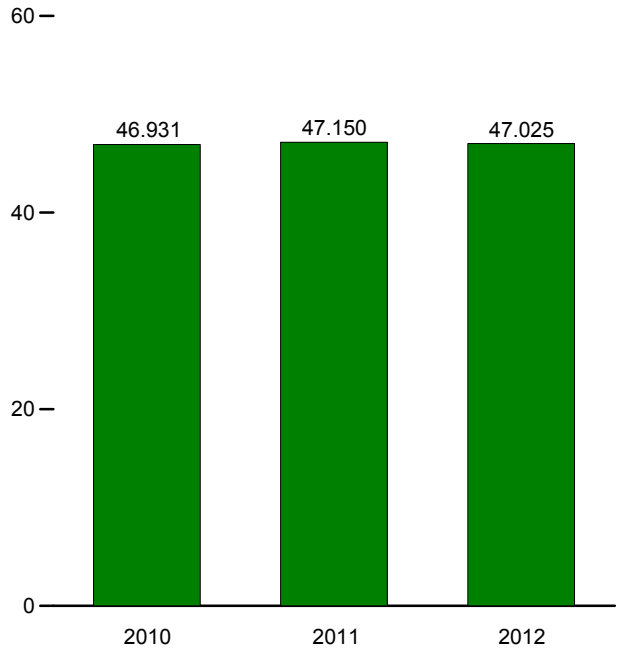
Figure 11.2 Petroleum Consumption in OECD Countries

(Million Barrels per Day)

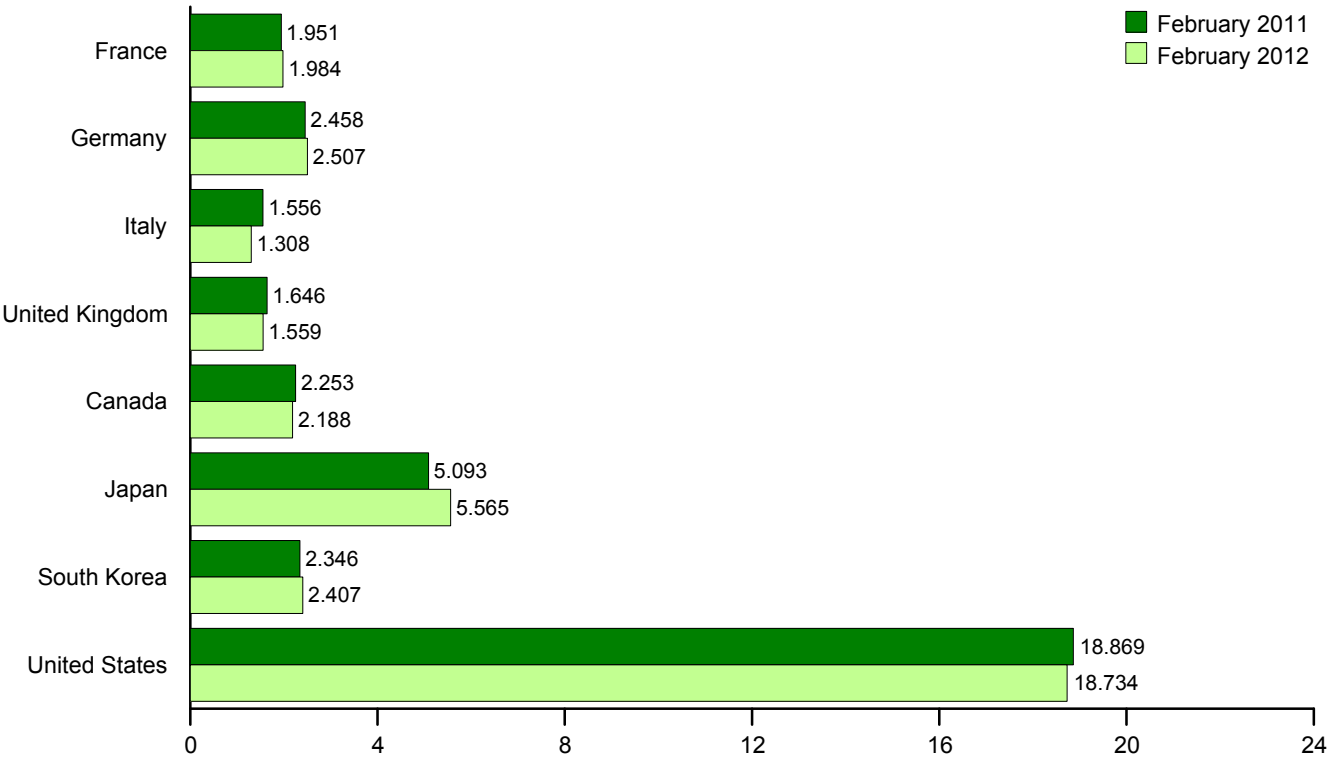
Overview, 1973-2011



OECD Total, February



By Selected OECD Country



Note: OECD is the Organization for Economic Cooperation and Development.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#international.
Source: Table 11.2.

Table 11.2 Petroleum Consumption in OECD Countries

(Thousand Barrels per Day)

	France	Germany[a]	Italy	United Kingdom	OECD Europe[b]	Canada	Japan	South Korea	United States	Other OECD[c]	OECD[d]	World
1973 Average	**2,601**	**3,324**	**2,068**	**2,341**	**15,879**	**1,729**	**4,949**	**281**	**17,308**	**1,768**	**41,913**	**57,237**
1975 Average	**2,252**	**2,957**	**1,855**	**1,911**	**14,314**	**1,779**	**4,621**	**311**	**16,322**	**1,885**	**39,232**	**56,198**
1980 Average	**2,256**	**3,082**	**1,934**	**1,725**	**14,995**	**1,873**	**4,960**	**537**	**17,056**	**2,449**	**41,870**	**63,113**
1985 Average	**1,753**	**2,651**	**1,705**	**1,617**	**12,770**	**1,526**	**4,436**	**552**	**15,726**	**2,564**	**37,575**	**60,083**
1990 Average	**1,826**	**2,682**	**1,868**	**1,776**	**13,729**	**1,737**	**5,315**	**1,048**	**16,988**	**2,784**	**41,601**	**66,533**
1995 Average	**1,920**	**2,882**	**1,942**	**1,816**	**14,714**	**1,817**	**5,693**	**2,008**	**17,725**	**3,135**	**45,092**	**70,067**
1996 Average	**1,949**	**2,922**	**1,920**	**1,852**	**14,998**	**1,871**	**5,739**	**2,101**	**18,309**	**3,206**	**46,224**	**71,665**
1997 Average	**1,969**	**2,917**	**1,934**	**1,810**	**15,140**	**1,940**	**5,702**	**2,255**	**18,620**	**3,355**	**47,013**	**73,450**
1998 Average	**2,043**	**2,923**	**1,943**	**1,792**	**15,448**	**1,931**	**5,507**	**1,917**	**18,917**	**3,486**	**47,206**	**74,105**
1999 Average	**2,031**	**2,836**	**1,891**	**1,811**	**15,357**	**2,016**	**5,642**	**2,084**	**19,519**	**3,567**	**48,185**	**75,819**
2000 Average	**2,000**	**2,767**	**1,854**	**1,765**	**15,215**	**2,014**	**5,515**	**2,135**	**19,701**	**3,624**	**48,205**	**76,781**
2001 Average	**2,054**	**2,807**	**1,832**	**1,747**	**15,384**	**2,043**	**5,412**	**2,132**	**19,649**	**3,633**	**48,253**	**77,508**
2002 Average	**1,985**	**2,710**	**1,870**	**1,739**	**15,329**	**2,065**	**5,319**	**2,149**	**19,761**	**3,595**	**48,218**	**78,161**
2003 Average	**2,001**	**2,662**	**1,860**	**1,759**	**15,445**	**2,191**	**5,428**	**2,175**	**20,034**	**3,628**	**48,901**	**79,708**
2004 Average	**2,009**	**2,649**	**1,829**	**1,785**	**15,547**	**2,282**	**5,319**	**2,155**	**20,731**	**3,719**	**49,753**	**82,530**
2005 Average	**1,991**	**2,621**	**1,781**	**1,823**	**15,666**	**2,315**	**5,328**	**2,191**	**20,802**	**3,800**	**50,102**	**84,064**
2006 Average	**1,991**	**2,639**	**1,777**	**1,803**	**15,666**	**2,229**	**5,197**	**2,180**	**20,687**	**3,826**	**49,785**	**85,133**
2007 Average	**1,979**	**2,420**	**1,729**	**1,734**	**15,474**	**2,283**	**5,037**	**2,241**	**20,680**	**3,876**	**49,591**	**85,823**
2008 Average	**1,945**	**2,545**	**1,667**	**1,725**	**15,389**	**2,232**	**4,788**	**2,142**	**19,498**	**3,870**	R **47,919**	R **85,431**
2009 Average	**1,870**	**2,452**	**1,543**	**1,646**	**14,663**	**2,157**	**4,394**	**2,188**	**18,771**	**3,744**	**45,918**	R **84,693**
2010 January	1,785	2,186	1,353	1,578	13,489	2,104	4,766	2,344	18,652	3,482	44,837	NA
February	1,988	2,481	1,518	1,679	14,696	2,229	4,988	2,365	18,850	3,804	46,931	NA
March	1,942	2,530	1,547	1,675	R 14,808	2,137	4,725	2,237	19,099	3,705	R 46,711	NA
April	1,875	2,286	1,504	1,638	R 14,230	2,108	4,352	2,232	19,044	3,754	R 45,719	NA
May	1,723	2,379	1,435	1,607	R 13,887	2,155	3,865	2,153	18,866	3,727	44,654	NA
June	1,866	2,535	1,561	1,590	R 14,660	2,241	3,992	2,160	19,537	3,826	46,416	NA
July	1,858	2,596	1,643	1,623	14,920	2,183	4,194	2,094	19,319	3,748	R 46,458	NA
August	1,770	2,572	1,490	1,635	14,497	2,335	4,412	2,204	19,662	3,595	46,705	NA
September	1,975	2,773	1,608	1,632	15,376	2,351	4,466	2,175	19,438	3,688	R 47,494	NA
October	1,782	2,647	1,516	1,659	R 14,895	2,220	4,059	2,209	18,974	3,640	R 45,997	NA
November	1,818	2,611	1,551	1,639	R 14,977	2,257	4,620	2,374	18,977	3,802	47,009	NA
December	1,968	2,349	1,615	1,518	14,607	R 2,213	5,029	2,479	19,722	3,824	R 47,874	NA
Average	**1,861**	**2,495**	**1,528**	**1,622**	R **14,583**	R **2,211**	**4,452**	**2,251**	**19,180**	**3,715**	R **46,393**	R **87,130**
2011 January	1,805	R 2,253	1,354	1,595	R 13,640	R 2,254	4,923	2,427	19,121	3,499	R 45,864	NA
February	1,951	R 2,458	1,556	1,646	R 14,765	2,253	5,093	2,346	18,869	3,823	R 47,150	NA
March	1,821	R 2,415	1,446	1,630	R 14,303	2,242	4,575	2,292	19,248	3,866	R 46,528	NA
April	1,780	R 2,281	1,463	1,615	R 13,937	2,115	4,008	2,008	18,613	3,766	R 44,447	NA
May	1,766	R 2,426	1,426	1,549	R 14,013	2,136	3,801	2,016	18,363	3,724	R 44,054	NA
June	1,819	R 2,294	1,511	1,682	R 14,406	2,204	3,957	2,109	19,277	3,861	R 45,815	NA
July	1,831	R 2,431	1,479	1,556	R 14,385	2,281	4,240	2,186	18,555	3,760	R 45,407	NA
August	1,836	R 2,661	1,401	1,611	R 14,701	2,344	4,439	2,209	19,153	3,811	R 46,658	NA
September	1,952	R 2,574	1,543	1,665	R 14,998	2,245	4,292	2,238	18,795	3,856	R 46,424	NA
October	1,808	R 2,531	1,467	1,572	R 14,350	2,230	4,408	2,213	18,563	3,663	R 45,427	NA
November	1,763	R 2,470	1,407	1,589	R 14,161	R 2,256	4,616	2,249	18,734	3,894	R 45,911	NA
December	1,768	R 2,284	1,425	1,526	R 13,748	R 2,289	R 5,443	2,434	18,738	3,873	R 46,524	NA
Average	**1,824**	R **2,423**	**1,455**	**1,602**	R **14,279**	R **2,238**	R **4,481**	**2,227**	**18,835**	**3,782**	R **45,842**	R **87,879**
2012 January	1,777	R 2,156	1,265	1,435	R 13,066	R 2,197	5,175	2,363	18,268	R 3,559	R 44,628	NA
February	1,984	2,507	1,308	1,559	14,348	2,188	5,565	2,407	18,734	3,784	47,025	NA
2-Month Average	**1,877**	**2,325**	**1,286**	**1,495**	**13,685**	**2,193**	**5,363**	**2,384**	**18,493**	**3,668**	**45,786**	**NA**
2011 2-Month Average	**1,874**	**2,350**	**1,450**	**1,619**	**14,174**	**2,254**	**5,004**	**2,389**	**19,002**	**3,653**	**46,475**	**NA**
2010 2-Month Average	**1,881**	**2,326**	**1,431**	**1,626**	**14,061**	**2,163**	**4,871**	**2,354**	**18,746**	**3,635**	**45,830**	**NA**

[a] Data are for unified Germany, i.e., the former East Germany and West Germany.

[b] "OECD Europe" consists of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

[c] "Other OECD" consists of Australia, Chile, Mexico, New Zealand, and the U.S. Territories.

[d] 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.

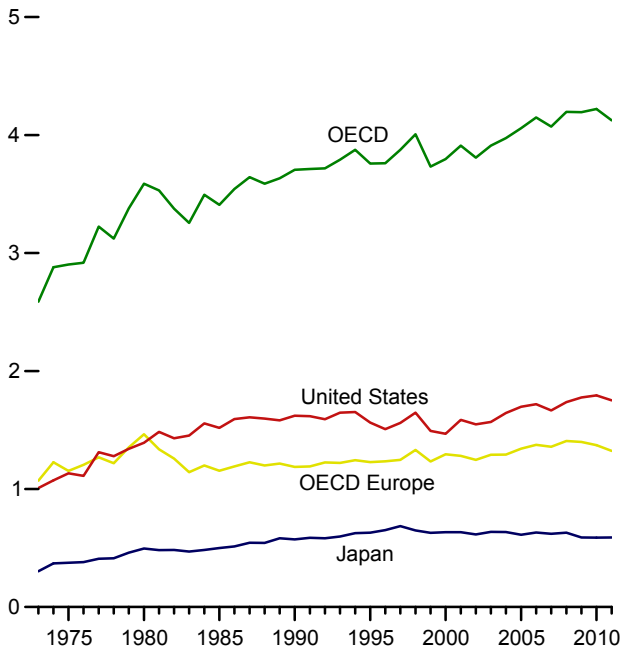
Notes: • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

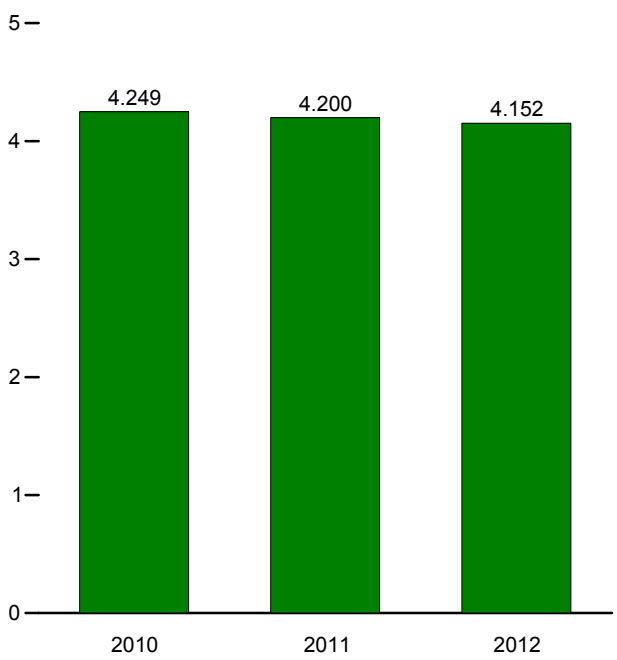
Sources: • **United States:** Table 3.1. • **Chile, East Germany, Former Czechoslovakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries, U.S. Territories,** and **World: 1973-1979—**U.S. Energy Information Administration (EIA), International Energy Database. • **Countries Other Than United States: 1980-2008**—EIA, International Energy Statistics (IES). • **OECD Countries,** and **U.S. Territories: 2009 forward—**EIA, IES. • **World: 2009 forward—**EIA, *Short Term Energy Outlook,* June 12, 2012, Table 3a. • **All Other Data:—**International Energy Agency (IEA), *Quarterly Oil Statistics and Energy Balances in OECD Countries,* various issues.

Figure 11.3 Petroleum Stocks in OECD Countries
(Billion Barrels)

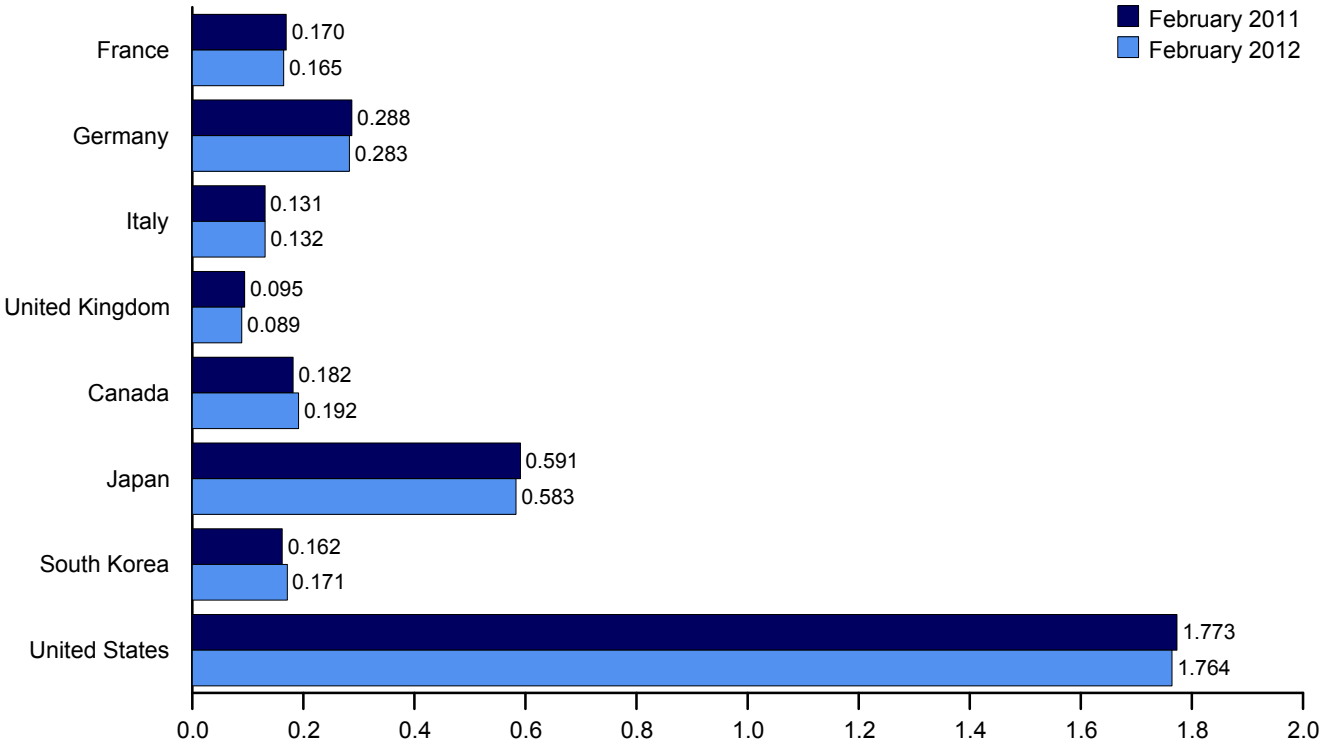
Overview, End of Year, 1973-2011



OECD Stocks, End of Month, February



By Selected OECD Country, End of Month



Note: OECD is the Organization for Economic Cooperation and Development.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#international.
Source: Table 11.3.

Table 11.3 Petroleum Stocks in OECD Countries

(Million Barrels)

	France	Germany[a]	Italy	United Kingdom	OECD Europe[b]	Canada	Japan	South Korea	United States	Other OECD[c]	OECD[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**	**154**	**634**	**143**	**1,586**	**112**	**3,910**
2002 Year	**170**	**253**	**138**	**104**	**1,247**	**155**	**615**	**140**	**1,548**	**103**	**3,808**
2003 Year	**179**	**273**	**135**	**100**	**1,290**	**165**	**636**	**155**	**1,568**	**96**	**3,910**
2004 Year	**177**	**267**	**136**	**101**	**1,292**	**154**	**635**	**149**	**1,645**	**99**	**3,974**
2005 Year	**185**	**283**	**132**	**95**	**1,342**	**168**	**612**	**135**	**1,698**	**103**	**4,058**
2006 Year	**182**	**283**	**133**	**103**	**1,374**	**169**	**631**	**152**	**1,720**	**103**	**4,148**
2007 Year	**180**	**275**	**133**	**90**	**1,358**	**175**	**621**	**143**	**1,665**	**108**	**4,072**
2008 Year	**179**	**279**	**128**	**99**	**1,407**	**174**	**630**	**135**	**1,737**	**114**	**4,196**
2009 Year	**175**	**284**	**126**	**94**	**1,398**	**169**	**589**	**155**	**1,776**	**105**	**4,193**
2010 January	182	295	127	95	1,439	172	593	162	1,786	111	4,263
February	175	290	134	99	1,424	174	587	163	1,785	117	4,249
March	172	289	129	93	1,404	180	581	164	1,787	114	4,230
April	172	284	135	95	1,414	181	590	166	1,810	111	4,272
May	173	286	131	99	1,422	177	599	166	1,830	108	4,302
June	170	280	133	96	1,405	178	597	167	1,842	120	4,308
July	168	282	127	96	1,389	186	598	170	1,855	116	4,314
August	171	289	133	93	1,406	195	597	169	1,862	115	4,343
September	163	286	127	95	1,365	193	582	174	1,861	111	4,286
October	161	285	129	94	1,375	195	599	170	1,847	112	4,298
November	170	287	126	92	1,367	197	604	171	1,827	108	4,274
December	**168**	**287**	**133**	**89**	**1,371**	**196**	**588**	**165**	**1,794**	**106**	**4,221**
2011 January	173	[R] 291	140	96	[R] 1,411	[R] 187	596	168	1,803	105	[R] 4,270
February	170	[R] 288	131	95	[R] 1,383	182	591	162	1,773	108	[R] 4,200
March	167	[R] 286	132	93	[R] 1,370	185	575	170	1,770	105	[R] 4,175
April	163	[R] 291	132	93	[R] 1,356	191	601	173	1,776	109	[R] 4,206
May	168	[R] 288	130	90	[R] 1,359	189	599	170	1,805	110	[R] 4,232
June	167	[R] 286	130	85	[R] 1,351	190	593	175	1,808	108	[R] 4,225
July	164	[R] 290	130	86	[R] 1,342	189	599	173	1,820	109	[R] 4,232
August	162	[R] 283	132	89	[R] 1,346	188	598	171	1,801	111	[R] 4,215
September	160	[R] 277	130	84	[R] 1,325	189	601	174	1,781	105	[R] 4,175
October	165	[R] 278	130	85	[R] 1,314	192	599	174	1,770	105	[R] 4,154
November	164	[R] 277	131	92	[R] 1,330	193	603	170	1,772	105	[R] 4,172
December	**165**	[R] **279**	**128**	**87**	[R] **1,320**	**190**	**589**	**167**	**1,751**	**105**	[R] **4,122**
2012 January	166	284	132	89	[R] 1,340	[R] 190	594	164	1,771	107	[R] 4,166
February	165	283	132	89	1,342	192	583	171	1,764	99	4,152

[a] 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 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."

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.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

Sources: • **United States:** Table 3.4. • **U.S. Territories: 1983 forward—**U.S. 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, May 11, 2012.

International Petroleum

Tables 11.1a and 11.1b Sources

United States
Table 3.1.

All Other Countries and World, Annual Data
1973–1979: U.S. Energy Information Administration (EIA), *International Energy Annual 1981*, Table 8.
1980 forward: EIA, International Energy Database, June 2012.

All Other Countries and World, Monthly Data
1973–1980: *Petroleum Intelligence Weekly (PIW)*, *Oil & Gas Journal (OGJ)*, and EIA adjustments.
1981–1993: *PIW*, *OGJ*, and other industry sources.
1994 forward: EIA, International Energy Database, June 2012.

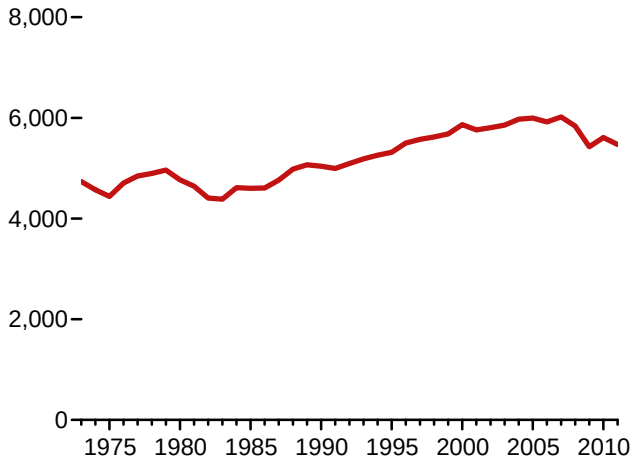
.

12. Environment

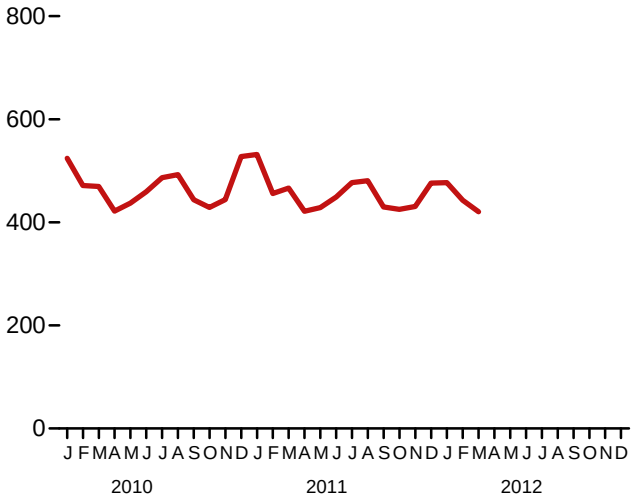
Figure 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide)

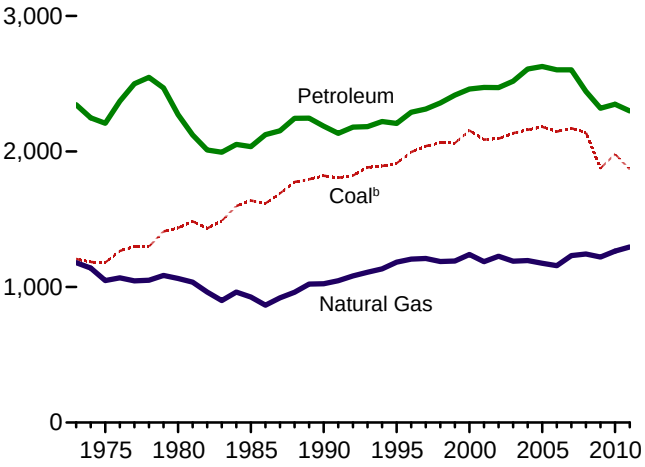
Total,[a] 1973-2011



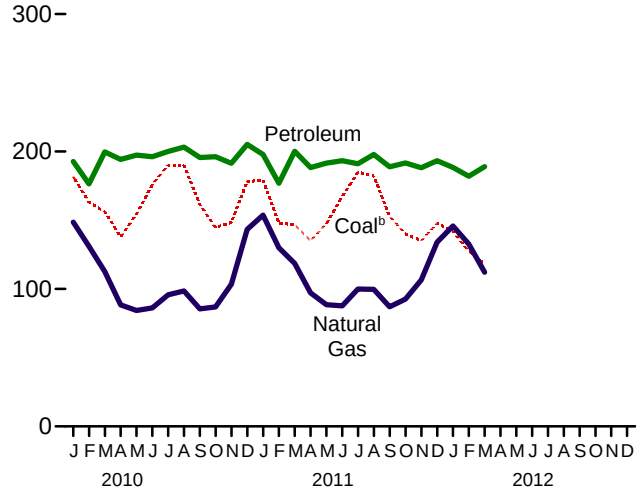
Total,[a] Monthly



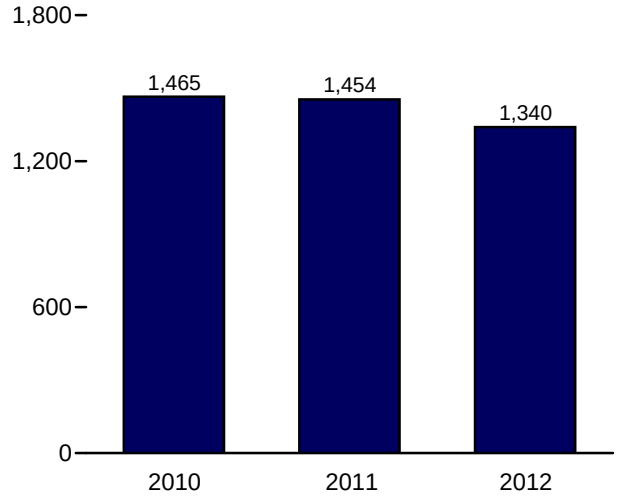
By Major Source, 1973-2011



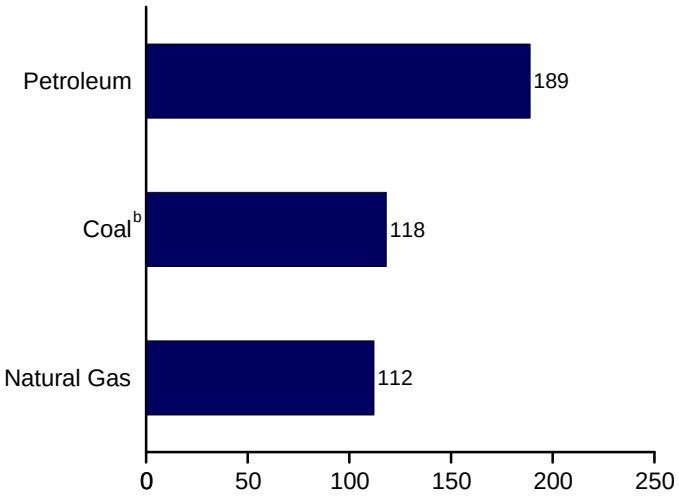
By Major Source, Monthly



Total,[a] January-March



By Major Source, March 2012



[a] Excludes emissions from biomass energy consumption.
[b] Includes coal coke net imports.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#environment.
Source: Table 12.1.

Table 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide[a])

			Petroleum											
	Coal[b]	Natural Gas[c]	Aviation Gasoline	Distillate Fuel Oil[d]	Jet Fuel	Kero-sene	LPG[e]	Lubri-cants	Motor Gasoline[f]	Petroleum Coke	Residual Fuel Oil	Other[g]	Total	Total[h,i]
1973 Total	**1,207**	**1,181**	**6**	**480**	**155**	**32**	**91**	**13**	**911**	**51**	**508**	**100**	**2,346**	**4,733**
1975 Total	**1,181**	**1,047**	**5**	**443**	**146**	**24**	**82**	**11**	**911**	**48**	**443**	**97**	**2,209**	**4,437**
1980 Total	**1,436**	**1,063**	**4**	**446**	**156**	**24**	**87**	**13**	**900**	**46**	**453**	**142**	**2,272**	**4,770**
1985 Total	**1,638**	**926**	**3**	**445**	**178**	**17**	**86**	**12**	**930**	**55**	**216**	**93**	**2,035**	**4,600**
1990 Total	**1,821**	**1,025**	**3**	**470**	**223**	**6**	**69**	**13**	**988**	**67**	**220**	**127**	**2,187**	**5,039**
1995 Total	**1,913**	**1,184**	**3**	**498**	**222**	**8**	**78**	**13**	**1,044**	**75**	**152**	**114**	**2,207**	**5,314**
1996 Total	**1,995**	**1,205**	**3**	**524**	**232**	**9**	**84**	**12**	**1,063**	**78**	**152**	**132**	**2,290**	**5,501**
1997 Total	**2,040**	**1,211**	**3**	**534**	**234**	**10**	**85**	**13**	**1,075**	**79**	**142**	**138**	**2,313**	**5,575**
1998 Total	**2,064**	**1,189**	**2**	**538**	**238**	**12**	**75**	**14**	**1,107**	**89**	**158**	**125**	**2,358**	**5,622**
1999 Total	**2,062**	**1,192**	**3**	**555**	**245**	**11**	**91**	**14**	**1,127**	**93**	**148**	**130**	**2,417**	**5,682**
2000 Total	**2,155**	**1,241**	**3**	**580**	**254**	**10**	**102**	**14**	**1,135**	**84**	**163**	**117**	**2,461**	**5,867**
2001 Total	**2,088**	**1,187**	**2**	**598**	**243**	**11**	**92**	**13**	**1,151**	**88**	**145**	**132**	**2,473**	**5,759**
2002 Total	**2,095**	**1,227**	**2**	**587**	**237**	**6**	**98**	**12**	**1,183**	**94**	**125**	**127**	**2,472**	**5,806**
2003 Total	**2,136**	**1,191**	**2**	**610**	**231**	**8**	**95**	**11**	**1,188**	**94**	**138**	**140**	**2,518**	**5,857**
2004 Total	**2,160**	**1,195**	**2**	**632**	**240**	**10**	**98**	**12**	**1,214**	**105**	**155**	**142**	**2,609**	**5,975**
2005 Total	**2,182**	**1,175**	**2**	**640**	**246**	**10**	**94**	**12**	**1,214**	**105**	**164**	**141**	**2,628**	**5,997**
2006 Total	**2,147**	**1,158**	**2**	**648**	**240**	**8**	**93**	**11**	**1,224**	**104**	**122**	**150**	**2,603**	**5,919**
2007 Total	**2,172**	**1,233**	**2**	**652**	**238**	**5**	**94**	**12**	**1,227**	**98**	**129**	**148**	**2,603**	**6,020**
2008 Total	**2,139**	**1,243**	**2**	**615**	**226**	**2**	**89**	**11**	**1,166**	**92**	**111**	**130**	**2,444**	**5,838**
2009 Total	**1,876**	**1,222**	**2**	**564**	**204**	**3**	**91**	**10**	**1,157**	**87**	**91**	**111**	**2,320**	**5,429**
2010 January	182	149	(s)	49	17	(s)	10	1	92	5	9	9	193	524
February	163	131	(s)	46	15	(s)	9	1	84	5	7	9	176	R 471
March	R 156	113	(s)	51	18	(s)	8	1	95	7	8	11	200	470
April	R 138	88	(s)	48	17	(s)	7	1	96	6	9	11	194	422
May	155	84	(s)	48	18	(s)	7	1	99	6	8	10	197	R 437
June	176	86	(s)	48	19	(s)	7	1	97	7	7	10	196	R 459
July	R 190	96	(s)	47	19	(s)	7	1	101	7	9	10	200	487
August	190	99	(s)	50	19	(s)	7	1	100	8	7	11	203	493
September	R 161	86	(s)	50	18	(s)	7	1	96	7	8	10	196	444
October	145	87	(s)	50	18	(s)	8	1	97	6	7	9	196	429
November	R 148	103	(s)	49	17	1	8	1	92	7	8	9	191	R 444
December	R 178	143	(s)	55	17	1	11	1	96	6	8	10	205	528
Total	**R 1,982**	**1,265**	**2**	**590**	**210**	**3**	**94**	**11**	**1,146**	**77**	**96**	**120**	**2,349**	**R 5,607**
2011 January	R 179	154	(s)	52	17	(s)	10	1	91	6	9	10	198	532
February	R 148	130	(s)	46	15	1	8	1	84	4	9	9	177	R 456
March	147	119	(s)	53	17	(s)	8	1	95	6	8	12	200	R 466
April	R 135	97	(s)	47	17	(s)	6	1	92	6	9	10	188	422
May	148	88	(s)	48	18	(s)	7	1	95	7	7	9	192	429
June	R 167	88	(s)	50	19	(s)	6	1	94	7	7	10	193	R 449
July	R 185	100	(s)	45	18	(s)	7	1	97	6	5	11	191	R 477
August	R 182	100	(s)	52	19	(s)	7	1	96	8	5	10	198	481
September	R 153	87	(s)	50	17	(s)	7	1	92	6	7	9	189	R 430
October	R 140	93	(s)	52	17	(s)	8	1	93	7	6	8	192	R 425
November	R 135	107	(s)	52	17	(s)	8	1	89	6	6	10	188	431
December	148	134	(s)	50	17	(s)	9	1	93	5	8	10	193	R 476
Total	**R 1,867**	**1,296**	**2**	**596**	**209**	**2**	**92**	**10**	**1,111**	**75**	**86**	**116**	**2,299**	**R 5,473**
2012 January	R 142	146	(s)	50	16	(s)	9	1	89	6	6	10	188	R 477
February	R 127	133	(s)	49	16	(s)	8	1	87	5	6	10	182	R 443
March	118	112	(s)	48	17	(s)	8	1	93	6	6	9	189	420
3-Month Total	**387**	**391**	**(s)**	**147**	**49**	**(s)**	**26**	**3**	**269**	**17**	**18**	**30**	**559**	**1,340**
2011 3-Month Total	**474**	**402**	**(s)**	**151**	**49**	**1**	**27**	**3**	**270**	**17**	**26**	**30**	**575**	**1,454**
2010 3-Month Total	**501**	**392**	**(s)**	**145**	**50**	**1**	**28**	**3**	**272**	**17**	**24**	**29**	**569**	**1,465**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Includes coal coke net imports.
[c] Natural gas, excluding supplemental gaseous fuels.
[d] Distillate fuel oil, excluding biodiesel.
[e] Liquefied petroleum gases.
[f] Finished motor gasoline, excluding fuel ethanol.
[g] Aviation gasoline blending components, crude oil, motor gasoline blending components, pentanes plus, petrochemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.
[h] Includes electric power sector use of geothermal energy and non-biomass waste. See Table 12.6.
[i] Excludes emissions from biomass energy consumption. See Table 12.7.

R=Revised. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, including the nonfuel use of fossil fuels. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," 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.

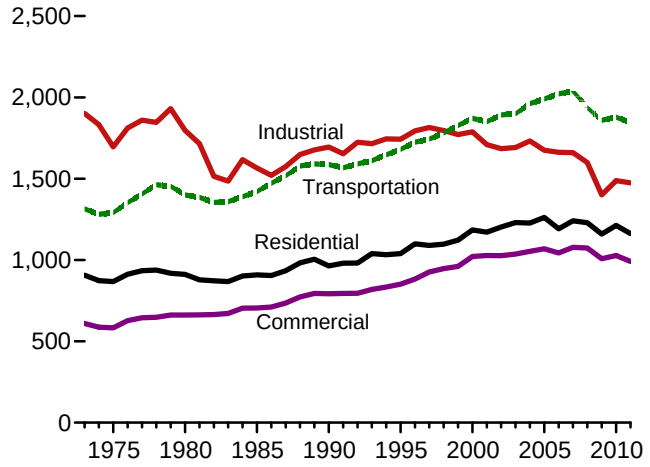
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

Sources: See end of section.

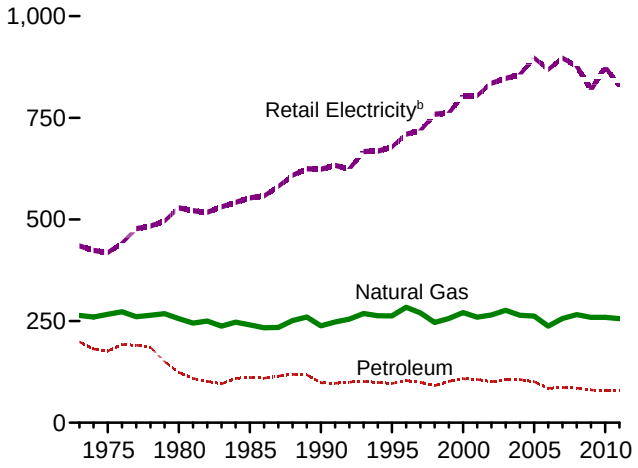
Figure 12.2 Carbon Dioxide Emissions From Energy Consumption by Sector

(Million Metric Tons of Carbon Dioxide)

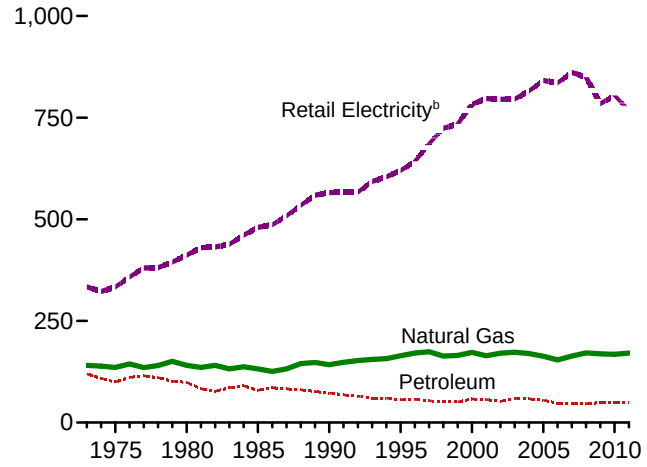
Total[a] by End-Use Sector,[b] 1973-2011



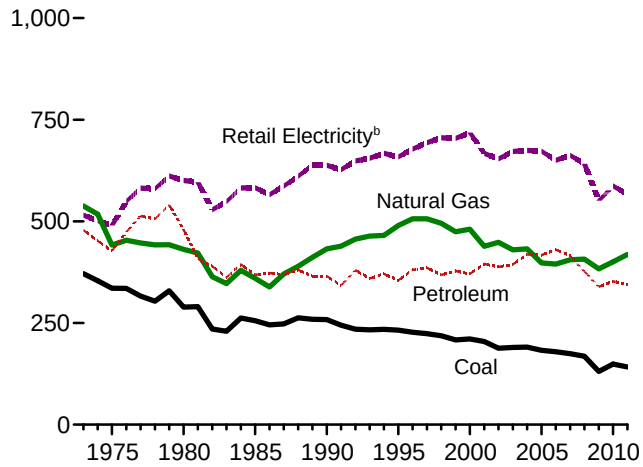
Residential Sector by Major Source, 1973-2011



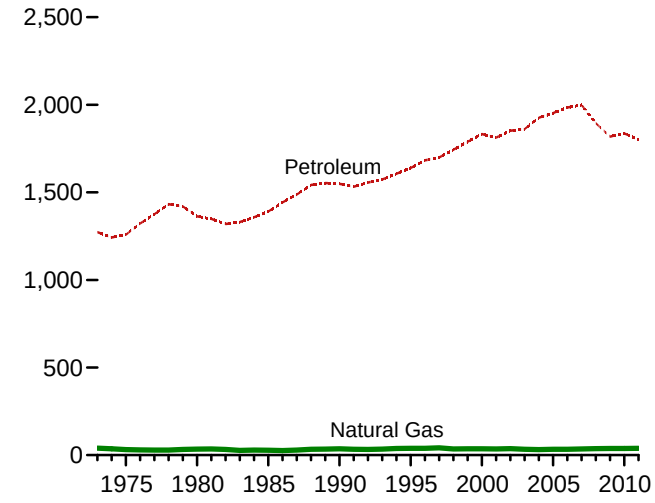
Commercial Sector by Major Source, 1973-2011



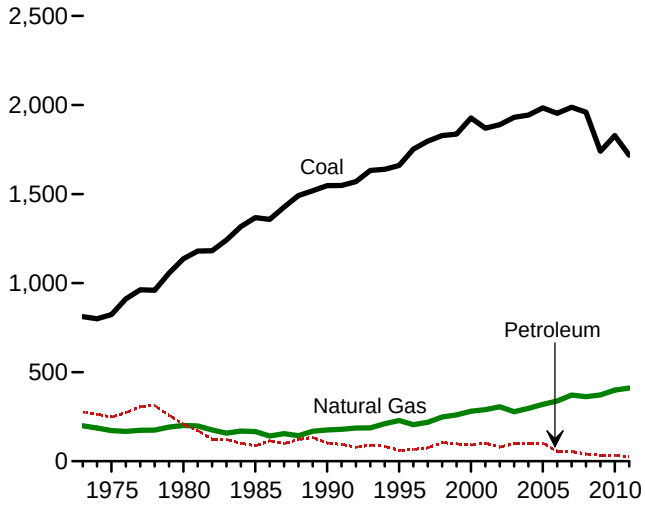
Industrial Sector by Major Source, 1973-2011



Transportation Sector by Major Source, 1973-2011



Electric Power Sector by Major Source, 1973-2011



[a] Excludes emissions from biomass energy consumption.

[b] Emissions from energy consumption in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail Sales.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#environment.

Sources: Tables 12.2–12.6.

Table 12.2 Carbon Dioxide Emissions From Energy Consumption: Residential Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum				Retail Electricity[e]	Total[f]
			Distillate Fuel Oil[c]	Kerosene	LPG[d]	Total		
1973 Total	**9**	**264**	**147**	**16**	**36**	**199**	**435**	**907**
1975 Total	**6**	**266**	**132**	**12**	**32**	**176**	**419**	**867**
1980 Total	**3**	**256**	**96**	**8**	**20**	**124**	**529**	**911**
1985 Total	**4**	**241**	**80**	**11**	**20**	**111**	**553**	**909**
1990 Total	**3**	**238**	**72**	**5**	**22**	**98**	**624**	**963**
1995 Total	**2**	**263**	**66**	**5**	**25**	**96**	**678**	**1,039**
1996 Total	**2**	**284**	**68**	**6**	**30**	**104**	**710**	**1,099**
1997 Total	**2**	**270**	**64**	**7**	**29**	**99**	**719**	**1,090**
1998 Total	**1**	**247**	**56**	**8**	**27**	**91**	**759**	**1,097**
1999 Total	**1**	**257**	**61**	**8**	**33**	**102**	**762**	**1,122**
2000 Total	**1**	**271**	**66**	**7**	**35**	**108**	**805**	**1,185**
2001 Total	**1**	**259**	**66**	**7**	**33**	**106**	**805**	**1,172**
2002 Total	**1**	**265**	**63**	**4**	**34**	**101**	**835**	**1,203**
2003 Total	**1**	**276**	**66**	**5**	**34**	**106**	**847**	**1,230**
2004 Total	**1**	**264**	**68**	**6**	**32**	**106**	**856**	**1,228**
2005 Total	**1**	**262**	**62**	**6**	**32**	**101**	**897**	**1,261**
2006 Total	**1**	**237**	**52**	**5**	**28**	**85**	**869**	**1,192**
2007 Total	**1**	**257**	**53**	**3**	**31**	**87**	**897**	**1,241**
2008 Total	**1**	**266**	**49**	**2**	**35**	**85**	**878**	**1,229**
2009 Total	**1**	**259**	**44**	**2**	**35**	**81**	**819**	**1,159**
2010 January	(s)	51	6	(s)	3	10	91	151
February	(s)	43	6	(s)	3	9	74	126
March	(s)	31	4	(s)	3	7	65	103
April	(s)	17	2	(s)	2	5	51	73
May	(s)	11	3	(s)	2	5	59	75
June	(s)	7	3	(s)	2	6	79	92
July	(s)	6	2	(s)	3	5	97	108
August	(s)	6	2	(s)	3	5	96	107
September	(s)	6	2	(s)	3	5	72	83
October	(s)	11	3	(s)	3	6	56	73
November	(s)	24	3	(s)	3	7	56	87
December	(s)	46	6	(s)	3	10	81	137
Total	**1**	**259**	**43**	**2**	**33**	**78**	**875**	**1,212**
2011 January	(s)	53	5	(s)	3	9	87	148
February	(s)	42	5	(s)	3	8	67	117
March	(s)	33	4	(s)	3	7	59	99
April	(s)	19	2	(s)	2	5	53	77
May	(s)	11	2	(s)	3	4	58	74
June	(s)	7	3	(s)	2	5	76	88
July	(s)	6	2	(s)	3	5	96	107
August	(s)	6	3	(s)	3	6	92	104
September	(s)	7	3	(s)	3	6	69	81
October	(s)	12	4	(s)	3	7	54	73
November	(s)	23	4	(s)	3	7	53	83
December	(s)	37	6	(s)	3	9	66	113
Total	**1**	**256**	**43**	**1**	**33**	**78**	**827**	**1,162**
2012 January	(s)	43	6	(s)	3	9	68	121
February	(s)	36	5	(s)	3	8	58	102
March	(s)	22	4	(s)	3	7	51	80
3-Month Total	**(s)**	**102**	**15**	**(s)**	**9**	**24**	**177**	**303**
2011 3-Month Total	**(s)**	**127**	**14**	**1**	**9**	**24**	**213**	**364**
2010 3-Month Total	**(s)**	**125**	**15**	**1**	**9**	**25**	**229**	**380**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel.
[d] Liquefied petroleum gases.
[e] Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6.
[f] Excludes emissions from biomass energy consumption. See Table 12.7.
(s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," 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.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.
Sources: See end of section.

Table 12.3 Carbon Dioxide Emissions From Energy Consumption: Commercial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum							Retail Electricity[f]	Total[g]
			Distillate Fuel Oil[c]	Kerosene	LPG[d]	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Total		
1973 Total	**15**	**141**	**47**	**5**	**9**	**6**	**NA**	**52**	**120**	**334**	**609**
1975 Total	**14**	**136**	**43**	**4**	**8**	**6**	**NA**	**39**	**100**	**333**	**583**
1980 Total	**11**	**141**	**38**	**3**	**6**	**8**	**NA**	**44**	**98**	**412**	**662**
1985 Total	**13**	**132**	**46**	**2**	**6**	**7**	**NA**	**18**	**79**	**480**	**704**
1990 Total	**12**	**142**	**39**	**1**	**6**	**8**	**0**	**18**	**73**	**566**	**793**
1995 Total	**11**	**164**	**35**	**2**	**7**	**1**	**(s)**	**11**	**56**	**620**	**851**
1996 Total	**12**	**171**	**35**	**2**	**8**	**2**	**(s)**	**11**	**57**	**643**	**883**
1997 Total	**12**	**174**	**32**	**2**	**8**	**3**	**(s)**	**9**	**54**	**686**	**926**
1998 Total	**9**	**164**	**31**	**2**	**7**	**3**	**(s)**	**7**	**51**	**724**	**947**
1999 Total	**10**	**165**	**32**	**2**	**9**	**2**	**(s)**	**6**	**51**	**735**	**960**
2000 Total	**9**	**173**	**36**	**2**	**9**	**3**	**(s)**	**7**	**58**	**783**	**1,022**
2001 Total	**9**	**164**	**37**	**2**	**9**	**3**	**(s)**	**6**	**57**	**797**	**1,027**
2002 Total	**9**	**170**	**32**	**1**	**9**	**3**	**(s)**	**6**	**52**	**795**	**1,026**
2003 Total	**8**	**173**	**35**	**1**	**10**	**4**	**(s)**	**9**	**59**	**796**	**1,036**
2004 Total	**10**	**170**	**34**	**1**	**10**	**3**	**(s)**	**10**	**58**	**816**	**1,054**
2005 Total	**9**	**163**	**33**	**2**	**8**	**3**	**(s)**	**9**	**55**	**842**	**1,069**
2006 Total	**6**	**154**	**29**	**1**	**8**	**3**	**(s)**	**6**	**48**	**836**	**1,043**
2007 Total	**7**	**164**	**28**	**1**	**8**	**4**	**(s)**	**6**	**47**	**861**	**1,078**
2008 Total	**7**	**171**	**27**	**(s)**	**10**	**3**	**(s)**	**6**	**46**	**850**	**1,074**
2009 Total	**6**	**169**	**30**	**(s)**	**9**	**4**	**(s)**	**6**	**49**	**785**	**1,008**
2010 January	1	27	4	(s)	1	(s)	(s)	1	6	66	101
February	1	24	4	(s)	1	(s)	(s)	1	6	60	91
March	1	18	3	(s)	1	(s)	(s)	1	4	59	82
April	(s)	12	2	(s)	1	(s)	(s)	(s)	3	57	73
May	(s)	9	2	(s)	1	(s)	0	(s)	3	66	78
June	(s)	7	2	(s)	1	(s)	0	(s)	4	74	85
July	(s)	6	2	(s)	1	(s)	0	(s)	3	80	90
August	(s)	7	2	(s)	1	(s)	(s)	(s)	3	81	91
September	(s)	7	1	(s)	1	(s)	(s)	(s)	3	69	79
October	(s)	10	2	(s)	1	(s)	(s)	(s)	4	63	77
November	(s)	16	2	(s)	1	(s)	(s)	(s)	4	61	81
December	1	25	4	(s)	1	(s)	(s)	1	6	68	100
Total	**6**	**168**	**30**	**(s)**	**9**	**4**	**(s)**	**6**	**49**	**805**	**1,027**
2011 January	1	29	4	(s)	1	(s)	(s)	1	6	65	99
February	1	R 23	3	(s)	1	(s)	(s)	1	5	55	R 84
March	1	20	3	(s)	1	(s)	(s)	(s)	4	58	83
April	(s)	13	2	(s)	1	(s)	0	(s)	3	57	73
May	(s)	9	1	(s)	1	(s)	0	(s)	2	63	75
June	(s)	7	2	(s)	1	(s)	0	(s)	3	70	81
July	(s)	7	2	(s)	1	(s)	0	(s)	3	79	89
August	(s)	7	2	(s)	1	(s)	0	(s)	4	77	88
September	(s)	8	2	(s)	1	(s)	0	(s)	4	66	77
October	(s)	12	3	(s)	1	(s)	0	1	4	61	77
November	(s)	15	3	(s)	1	(s)	(s)	1	5	57	77
December	(s)	22	4	(s)	1	(s)	(s)	1	6	59	87
Total	**5**	**171**	**30**	**(s)**	**9**	**4**	**(s)**	**6**	**49**	**767**	R **991**
2012 January	(s)	24	4	(s)	1	(s)	(s)	1	6	57	88
February	(s)	21	3	(s)	1	(s)	(s)	1	5	53	80
March	(s)	14	3	(s)	1	(s)	(s)	1	5	52	71
3-Month Total	**1**	**60**	**11**	**(s)**	**2**	**1**	**(s)**	**2**	**16**	**162**	**239**
2011 3-Month Total	**2**	**72**	**10**	**(s)**	**2**	**1**	**(s)**	**2**	**15**	**178**	**266**
2010 3-Month Total	**2**	**69**	**11**	**(s)**	**2**	**1**	**(s)**	**2**	**16**	**186**	**273**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel.
[d] Liquefied petroleum gases.
[e] Finished motor gasoline, excluding fuel ethanol.
[f] Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6.
[g] Excludes emissions from biomass energy consumption. See Table 12.7.
R=Revised. NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," 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.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

Sources: See end of section.

Table 12.4 Carbon Dioxide Emissions From Energy Consumption: Industrial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Coal Coke Net Imports	Natural Gas[b]	Petroleum									Retail Electricity[g]	Total[h]
				Distillate Fuel Oil[c]	Kerosene	LPG[d]	Lubricants	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total		
1973 Total	**371**	**-1**	**538**	**106**	**11**	**43**	**7**	**18**	**49**	**144**	**100**	**478**	**515**	**1,902**
1975 Total	**336**	**2**	**442**	**97**	**9**	**39**	**6**	**16**	**48**	**117**	**97**	**427**	**490**	**1,696**
1980 Total	**289**	**-4**	**431**	**96**	**13**	**61**	**7**	**11**	**45**	**105**	**142**	**480**	**601**	**1,797**
1985 Total	**256**	**-2**	**360**	**81**	**3**	**58**	**6**	**15**	**54**	**57**	**93**	**369**	**583**	**1,566**
1990 Total	**258**	**1**	**432**	**84**	**1**	**39**	**7**	**13**	**64**	**31**	**127**	**366**	**638**	**1,695**
1995 Total	**233**	**7**	**490**	**82**	**1**	**45**	**7**	**14**	**67**	**24**	**114**	**355**	**659**	**1,743**
1996 Total	**227**	**3**	**506**	**86**	**1**	**46**	**6**	**14**	**70**	**24**	**132**	**381**	**678**	**1,795**
1997 Total	**224**	**5**	**506**	**88**	**1**	**48**	**7**	**15**	**68**	**21**	**138**	**386**	**694**	**1,815**
1998 Total	**219**	**8**	**495**	**88**	**2**	**39**	**7**	**14**	**77**	**16**	**125**	**368**	**706**	**1,796**
1999 Total	**208**	**7**	**474**	**86**	**1**	**48**	**7**	**11**	**81**	**14**	**130**	**378**	**704**	**1,772**
2000 Total	**211**	**7**	**481**	**87**	**1**	**56**	**7**	**11**	**74**	**17**	**117**	**370**	**719**	**1,788**
2001 Total	**204**	**3**	**439**	**95**	**2**	**49**	**6**	**21**	**77**	**14**	**132**	**395**	**667**	**1,709**
2002 Total	**188**	**7**	**448**	**88**	**1**	**54**	**6**	**22**	**76**	**13**	**127**	**388**	**654**	**1,685**
2003 Total	**190**	**6**	**430**	**83**	**2**	**50**	**6**	**23**	**76**	**15**	**140**	**394**	**672**	**1,692**
2004 Total	**191**	**16**	**432**	**88**	**2**	**55**	**6**	**26**	**82**	**17**	**142**	**419**	**675**	**1,732**
2005 Total	**183**	**5**	**398**	**92**	**3**	**51**	**6**	**25**	**80**	**20**	**141**	**417**	**673**	**1,675**
2006 Total	**179**	**7**	**395**	**92**	**2**	**56**	**6**	**26**	**82**	**16**	**150**	**430**	**650**	**1,662**
2007 Total	**175**	**3**	**405**	**92**	**1**	**54**	**6**	**21**	**80**	**13**	**148**	**415**	**662**	**1,661**
2008 Total	**168**	**5**	**407**	**93**	**(s)**	**42**	**6**	**17**	**76**	**14**	**130**	**377**	**642**	**1,599**
2009 Total	**131**	**-3**	**383**	**80**	**(s)**	**46**	**5**	**17**	**73**	**7**	**111**	**339**	**551**	**1,401**
2010 January	12	(s)	37	6	(s)	6	(s)	2	3	1	9	28	46	R 122
February	12	(s)	34	6	(s)	5	(s)	1	4	1	9	27	44	118
March	13	(s)	35	9	(s)	4	(s)	2	6	1	11	33	46	127
April	R 12	(s)	32	8	(s)	3	(s)	2	5	1	11	30	45	120
May	R 12	(s)	32	6	(s)	3	(s)	2	5	1	10	28	51	R 123
June	R 12	(s)	31	5	(s)	3	1	2	5	1	10	27	52	R 122
July	R 12	(s)	32	4	(s)	3	1	2	5	1	10	26	54	124
August	13	(s)	32	7	(s)	4	(s)	2	6	1	11	31	55	R 130
September	13	(s)	32	9	(s)	4	(s)	2	6	1	10	31	48	124
October	R 12	(s)	33	7	(s)	4	(s)	2	5	1	9	28	47	120
November	13	-1	34	8	(s)	4	(s)	2	6	1	9	30	48	124
December	13	-1	37	9	(s)	6	(s)	2	5	1	10	33	50	R 133
Total	**R 149**	**-1**	**401**	**86**	**1**	**50**	**6**	**19**	**62**	**8**	**120**	**352**	**587**	**R 1,488**
2011 January	R 12	(s)	39	10	(s)	6	(s)	1	5	1	10	33	47	132
February	R 12	(s)	35	7	(s)	5	(s)	1	3	1	9	26	42	115
March	13	(s)	36	10	(s)	4	1	2	5	1	12	33	45	128
April	R 11	(s)	34	7	(s)	3	(s)	2	5	1	10	28	45	R 118
May	12	(s)	34	7	(s)	3	(s)	2	6	1	9	28	48	R 122
June	12	(s)	33	7	(s)	3	(s)	2	5	1	10	28	50	R 122
July	R 11	(s)	33	3	(s)	3	(s)	2	5	(s)	11	25	53	R 123
August	12	(s)	34	7	(s)	4	(s)	2	7	(s)	10	29	53	R 128
September	12	(s)	33	7	(s)	4	(s)	2	5	1	9	27	46	119
October	12	(s)	34	8	(s)	4	(s)	2	6	1	8	28	47	R 121
November	12	(s)	35	9	(s)	4	(s)	1	5	1	10	30	45	R 122
December	R 12	(s)	38	6	(s)	5	(s)	2	4	1	10	28	45	R 123
Total	**R 142**	**1**	**419**	**88**	**(s)**	**48**	**5**	**18**	**62**	**8**	**116**	**345**	**567**	**R 1,474**
2012 January	R 11	(s)	39	7	(s)	5	(s)	1	5	1	10	31	43	R 123
February	R 11	(s)	36	9	(s)	5	(s)	1	4	(s)	10	30	42	R 120
March	12	(s)	36	7	(s)	4	(s)	2	5	1	9	28	41	117
3-Month Total	**34**	**1**	**111**	**23**	**(s)**	**14**	**1**	**4**	**14**	**2**	**30**	**89**	**126**	**360**
2011 3-Month Total	**37**	**(s)**	**110**	**27**	**(s)**	**15**	**1**	**4**	**13**	**2**	**30**	**93**	**134**	**374**
2010 3-Month Total	**37**	**(s)**	**106**	**22**	**(s)**	**15**	**1**	**4**	**14**	**2**	**29**	**88**	**136**	**367**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel.
[d] Liquefied petroleum gases.
[e] Finished motor gasoline, excluding fuel ethanol.
[f] Aviation gasoline blending components, crude oil, motor gasoline blending components, pentanes plus, petrochemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.
[g] Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6.
[h] Excludes emissions from biomass energy consumption. See Table 12.7.

R=Revised. (s)=Less than 0.5 million metric tons and greater than -0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, including the nonfuel use of fossil fuels. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," 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.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

Sources: See end of section.

Table 12.5 Carbon Dioxide Emissions From Energy Consumption: Transportation Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum								Retail Electricity[f]	Total[g]
			Aviation Gasoline	Distillate Fuel Oil[c]	Jet Fuel	LPG[d]	Lubricants	Motor Gasoline[e]	Residual Fuel Oil	Total		
1973 Total	**(s)**	**39**	**6**	**163**	**152**	**3**	**6**	**886**	**57**	**1,273**	**2**	**1,315**
1975 Total	**(s)**	**32**	**5**	**155**	**145**	**3**	**6**	**889**	**56**	**1,258**	**2**	**1,292**
1980 Total	**(h)**	**34**	**4**	**204**	**155**	**1**	**6**	**881**	**110**	**1,363**	**2**	**1,400**
1985 Total	**(h)**	**28**	**3**	**232**	**178**	**2**	**6**	**908**	**62**	**1,391**	**3**	**1,421**
1990 Total	**(h)**	**36**	**3**	**268**	**223**	**1**	**7**	**967**	**80**	**1,548**	**3**	**1,588**
1995 Total	**(h)**	**38**	**3**	**307**	**222**	**1**	**6**	**1,029**	**72**	**1,639**	**3**	**1,681**
1996 Total	**(h)**	**39**	**3**	**327**	**232**	**1**	**6**	**1,047**	**67**	**1,683**	**3**	**1,725**
1997 Total	**(h)**	**41**	**3**	**342**	**234**	**1**	**6**	**1,057**	**56**	**1,699**	**3**	**1,744**
1998 Total	**(h)**	**35**	**2**	**352**	**238**	**1**	**7**	**1,090**	**53**	**1,743**	**3**	**1,782**
1999 Total	**(h)**	**36**	**3**	**366**	**245**	**1**	**7**	**1,115**	**52**	**1,789**	**3**	**1,828**
2000 Total	**(h)**	**36**	**3**	**378**	**254**	**1**	**7**	**1,121**	**70**	**1,833**	**4**	**1,872**
2001 Total	**(h)**	**35**	**2**	**387**	**243**	**1**	**6**	**1,127**	**46**	**1,813**	**4**	**1,852**
2002 Total	**(h)**	**37**	**2**	**394**	**237**	**1**	**6**	**1,158**	**53**	**1,851**	**4**	**1,892**
2003 Total	**(h)**	**33**	**2**	**414**	**231**	**1**	**6**	**1,161**	**45**	**1,861**	**5**	**1,899**
2004 Total	**(h)**	**32**	**2**	**434**	**240**	**1**	**6**	**1,185**	**58**	**1,926**	**5**	**1,962**
2005 Total	**(h)**	**33**	**2**	**444**	**246**	**2**	**6**	**1,186**	**66**	**1,953**	**5**	**1,991**
2006 Total	**(h)**	**33**	**2**	**469**	**240**	**2**	**5**	**1,194**	**71**	**1,984**	**5**	**2,022**
2007 Total	**(h)**	**35**	**2**	**472**	**238**	**1**	**6**	**1,201**	**78**	**1,999**	**5**	**2,040**
2008 Total	**(h)**	**37**	**2**	**440**	**226**	**3**	**5**	**1,146**	**72**	**1,895**	**5**	**1,937**
2009 Total	**(h)**	**38**	**2**	**404**	**204**	**2**	**5**	**1,137**	**64**	**1,818**	**5**	**1,860**
2010 January	(h)	4	(s)	31	17	(s)	(s)	91	6	145	(s)	150
February	(h)	4	(s)	30	15	(s)	(s)	82	5	133	(s)	137
March	(h)	3	(s)	35	18	(s)	(s)	94	6	154	(s)	157
April	(h)	3	(s)	35	17	(s)	(s)	94	7	154	(s)	157
May	(h)	3	(s)	37	18	(s)	(s)	97	6	159	(s)	161
June	(h)	3	(s)	36	19	(s)	1	95	5	156	(s)	159
July	(h)	3	(s)	38	19	(s)	(s)	99	6	162	(s)	165
August	(h)	3	(s)	39	19	(s)	(s)	98	5	161	(s)	165
September	(h)	3	(s)	37	18	(s)	(s)	94	6	155	(s)	157
October	(h)	3	(s)	37	18	(s)	(s)	95	6	157	(s)	160
November	(h)	3	(s)	35	17	(s)	(s)	90	6	149	(s)	152
December	(h)	4	(s)	35	17	(s)	(s)	94	5	153	(s)	158
Total	**(h)**	**38**	**2**	**425**	**210**	**2**	**5**	**1,124**	**69**	**1,836**	**5**	**1,879**
2011 January	(h)	5	(s)	33	17	(s)	(s)	89	7	147	(s)	152
February	(h)	4	(s)	30	15	(s)	(s)	83	7	135	(s)	140
March	(h)	4	(s)	36	17	(s)	1	93	6	153	(s)	157
April	(h)	3	(s)	35	17	(s)	(s)	90	7	151	(s)	154
May	(h)	3	(s)	38	18	(s)	(s)	93	6	155	(s)	158
June	(h)	3	(s)	38	19	(s)	(s)	92	5	155	(s)	158
July	(h)	3	(s)	37	18	(s)	(s)	95	3	155	(s)	158
August	(h)	3	(s)	39	19	(s)	(s)	94	3	157	(s)	160
September	(h)	3	(s)	36	17	(s)	(s)	90	5	150	(s)	153
October	(h)	3	(s)	37	17	(s)	(s)	91	5	151	(s)	154
November	(h)	3	(s)	35	17	(s)	(s)	87	4	145	(s)	148
December	(h)	4	(s)	34	17	(s)	(s)	92	6	149	(s)	153
Total	**(h)**	**39**	**2**	**430**	**209**	**2**	**5**	**1,089**	**65**	**1,802**	**4**	**1,845**
2012 January	(h)	4	(s)	32	16	(s)	(s)	87	5	140	(s)	145
February	(h)	4	(s)	31	16	(s)	(s)	85	4	137	(s)	141
March	(h)	3	(s)	34	17	(s)	(s)	91	5	148	(s)	152
3-Month Total	**(h)**	**12**	**(s)**	**97**	**49**	**1**	**1**	**264**	**13**	**426**	**1**	**438**
2011 3-Month Total	**(h)**	**12**	**(s)**	**99**	**49**	**1**	**1**	**265**	**20**	**436**	**1**	**449**
2010 3-Month Total	**(h)**	**12**	**(s)**	**96**	**50**	**1**	**1**	**266**	**17**	**432**	**1**	**445**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel.
[d] Liquefied petroleum gases.
[e] Finished motor gasoline, excluding fuel ethanol.
[f] Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 7.6 and 12.6.
[g] Excludes emissions from biomass energy consumption. See Table 12.7.
[h] Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

(s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, including the nonfuel use of fossil fuels. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," 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.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

Sources: See end of section.

Table 12.6 Carbon Dioxide Emissions From Energy Consumption: Electric Power Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum				Geo-thermal	Non-Biomass Waste[d]	Total[e]
			Distillate Fuel Oil[c]	Petroleum Coke	Residual Fuel Oil	Total			
1973 Total	**812**	**199**	**20**	**2**	**254**	**276**	**NA**	**NA**	**1,286**
1975 Total	**824**	**172**	**17**	**(s)**	**231**	**248**	**NA**	**NA**	**1,244**
1980 Total	**1,137**	**200**	**12**	**1**	**194**	**207**	**NA**	**NA**	**1,544**
1985 Total	**1,367**	**166**	**6**	**1**	**79**	**86**	**NA**	**NA**	**1,619**
1990 Total	**1,548**	**176**	**7**	**3**	**92**	**102**	**(s)**	**6**	**1,831**
1995 Total	**1,661**	**228**	**8**	**8**	**45**	**61**	**(s)**	**10**	**1,960**
1996 Total	**1,752**	**205**	**8**	**8**	**50**	**66**	**(s)**	**10**	**2,033**
1997 Total	**1,797**	**219**	**8**	**10**	**56**	**75**	**(s)**	**10**	**2,101**
1998 Total	**1,828**	**248**	**10**	**13**	**82**	**105**	**(s)**	**10**	**2,192**
1999 Total	**1,836**	**260**	**10**	**11**	**76**	**97**	**(s)**	**10**	**2,204**
2000 Total	**1,927**	**281**	**13**	**10**	**69**	**91**	**(s)**	**10**	**2,310**
2001 Total	**1,870**	**290**	**12**	**11**	**79**	**102**	**(s)**	**11**	**2,273**
2002 Total	**1,890**	**306**	**9**	**18**	**52**	**79**	**(s)**	**13**	**2,288**
2003 Total	**1,931**	**278**	**12**	**18**	**69**	**98**	**(s)**	**11**	**2,319**
2004 Total	**1,943**	**297**	**8**	**23**	**69**	**100**	**(s)**	**11**	**2,352**
2005 Total	**1,984**	**319**	**8**	**25**	**69**	**102**	**(s)**	**11**	**2,417**
2006 Total	**1,954**	**338**	**5**	**22**	**28**	**56**	**(s)**	**12**	**2,359**
2007 Total	**1,987**	**372**	**7**	**17**	**31**	**55**	**(s)**	**11**	**2,426**
2008 Total	**1,959**	**362**	**5**	**16**	**19**	**40**	**(s)**	**12**	**2,374**
2009 Total	**1,741**	**373**	**5**	**14**	**14**	**34**	**(s)**	**11**	**2,159**
2010 January	170	30	1	1	1	4	(s)	1	204
February	150	26	(s)	1	1	2	(s)	1	179
March	143	25	(s)	1	1	2	(s)	1	171
April	125	25	(s)	1	1	2	(s)	1	154
May	142	30	(s)	1	1	3	(s)	1	176
June	163	38	1	1	2	4	(s)	1	206
July	177	48	1	2	2	4	(s)	1	231
August	177	51	(s)	1	2	3	(s)	1	232
September	148	38	(s)	1	1	2	(s)	1	189
October	132	31	(s)	1	1	2	(s)	1	166
November	136	27	(s)	1	1	2	(s)	1	166
December	165	31	1	1	1	3	(s)	1	200
Total	**1,828**	**399**	**6**	**15**	**12**	**33**	**(s)**	**11**	**2,271**
2011 January	166	29	1	2	1	3	(s)	1	199
February	135	26	(s)	1	1	2	(s)	1	164
March	133	26	(s)	1	1	2	(s)	1	163
April	123	28	(s)	1	1	2	(s)	1	155
May	135	31	(s)	1	1	2	(s)	1	169
June	155	38	(s)	1	1	2	(s)	1	196
July	173	51	(s)	1	1	3	(s)	1	228
August	170	50	(s)	1	1	2	(s)	1	223
September	141	37	(s)	1	1	2	(s)	1	181
October	128	31	(s)	1	(s)	2	(s)	1	162
November	123	29	(s)	1	(s)	2	(s)	1	155
December	135	33	(s)	1	(s)	2	(s)	1	171
Total	**1,718**	**411**	**5**	**14**	**7**	**25**	**(s)**	**11**	**2,166**
2012 January	130	35	(s)	1	1	2	(s)	1	168
February	116	35	(s)	1	(s)	2	(s)	1	153
March	106	37	(s)	1	(s)	1	(s)	1	145
3-Month Total	**351**	**107**	**1**	**3**	**1**	**5**	**(s)**	**3**	**466**
2011 3-Month Total	**435**	**81**	**1**	**4**	**2**	**7**	**(s)**	**3**	**526**
2010 3-Month Total	**462**	**80**	**2**	**4**	**3**	**8**	**(s)**	**3**	**553**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.

[b] Natural gas, excluding supplemental gaseous fuels.

[c] Distillate fuel oil, excluding biodiesel.

[d] Municipal solid waste from non-biogenic sources, and tire-derived fuels.

[e] Excludes emissions from biomass energy consumption. See Table 12.7.

NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," 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.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

Sources: See end of section.

Table 12.7 Carbon Dioxide Emissions From Biomass Energy Consumption

(Million Metric Tons of Carbon Dioxide[a])

	By Source					By Sector					
	Wood[b]	Biomass Waste[c]	Fuel Ethanol[d]	Bio-diesel	Total	Resi-dential	Com-mercial[e]	Indus-trial[f]	Trans-portation	Electric Power[g]	Total
1973 Total	**143**	**(s)**	**NA**	**NA**	**143**	**33**	**1**	**109**	**NA**	**(s)**	**143**
1975 Total	**140**	**(s)**	**NA**	**NA**	**141**	**40**	**1**	**100**	**NA**	**(s)**	**141**
1980 Total	**232**	**(s)**	**NA**	**NA**	**232**	**80**	**2**	**150**	**NA**	**(s)**	**232**
1985 Total	**252**	**14**	**3**	**NA**	**270**	**95**	**2**	**168**	**3**	**1**	**270**
1990 Total	**208**	**24**	**4**	**NA**	**237**	**54**	**8**	**147**	**4**	**23**	**237**
1995 Total	**222**	**30**	**8**	**NA**	**260**	**49**	**9**	**166**	**8**	**28**	**260**
1996 Total	**229**	**32**	**6**	**NA**	**266**	**51**	**10**	**170**	**6**	**30**	**266**
1997 Total	**222**	**30**	**7**	**NA**	**259**	**40**	**10**	**172**	**7**	**30**	**259**
1998 Total	**205**	**30**	**8**	**NA**	**242**	**36**	**9**	**160**	**8**	**30**	**242**
1999 Total	**208**	**29**	**8**	**NA**	**245**	**37**	**9**	**161**	**8**	**30**	**245**
2000 Total	**212**	**27**	**9**	**NA**	**248**	**39**	**9**	**161**	**9**	**29**	**248**
2001 Total	**188**	**33**	**10**	**(s)**	**231**	**35**	**9**	**147**	**10**	**31**	**231**
2002 Total	**187**	**36**	**12**	**(s)**	**235**	**36**	**9**	**144**	**12**	**35**	**235**
2003 Total	**188**	**36**	**16**	**(s)**	**240**	**38**	**9**	**141**	**16**	**37**	**240**
2004 Total	**199**	**35**	**20**	**(s)**	**255**	**38**	**10**	**151**	**20**	**36**	**255**
2005 Total	**200**	**37**	**23**	**1**	**261**	**40**	**10**	**150**	**23**	**37**	**261**
2006 Total	**197**	**36**	**31**	**2**	**266**	**36**	**9**	**151**	**33**	**38**	**266**
2007 Total	**194**	**37**	**39**	**3**	**274**	**38**	**9**	**146**	**41**	**39**	**274**
2008 Total	**191**	**40**	**55**	**3**	**289**	**42**	**10**	**140**	**57**	**40**	**289**
2009 Total	**177**	**41**	**62**	**3**	**284**	**40**	**10**	**128**	**64**	**41**	**284**
2010 January	16	4	6	(s)	25	3	1	12	6	4	25
February	14	3	5	(s)	23	3	1	11	5	3	23
March	16	4	6	(s)	25	3	1	12	6	4	25
April	15	4	6	(s)	25	3	1	11	6	3	25
May	15	4	6	(s)	25	3	1	11	6	3	25
June	15	4	6	(s)	25	3	1	11	6	4	25
July	16	4	6	(s)	26	3	1	12	6	4	26
August	16	4	6	(s)	26	3	1	12	6	4	26
September	16	3	6	(s)	25	3	1	12	6	3	25
October	16	4	6	(s)	26	3	1	12	6	3	26
November	15	4	6	(s)	25	3	1	12	6	4	25
December	16	4	6	(s)	27	3	1	12	6	4	27
Total	**186**	**43**	**73**	**2**	**304**	**39**	**10**	**139**	**74**	**42**	**304**
2011 January	16	4	6	(s)	26	3	1	12	6	3	26
February	15	3	6	(s)	24	3	1	11	6	3	24
March	16	4	6	(s)	26	3	1	12	6	3	26
April	15	3	6	1	25	3	1	11	6	3	25
May	15	4	6	1	26	3	1	11	7	3	26
June	16	4	6	1	26	3	1	12	7	3	26
July	16	4	6	1	27	3	1	12	7	4	27
August	16	4	7	1	27	3	1	12	7	4	27
September	15	4	6	1	26	3	1	12	7	3	26
October	15	4	6	1	26	3	1	11	7	3	26
November	15	4	6	1	26	3	1	12	7	3	26
December	16	4	6	1	27	3	1	12	7	4	27
Total	**186**	**43**	**73**	**8**	**311**	**40**	**10**	**140**	**80**	**41**	**311**
2012 January	16	4	6	1	26	3	1	12	6	4	26
February	15	3	6	1	25	3	1	11	6	3	25
March	15	4	6	1	26	3	1	11	7	3	26
3-Month Total	**46**	**11**	**17**	**2**	**76**	**10**	**2**	**35**	**19**	**10**	**76**
2011 3-Month Total	**46**	**10**	**18**	**1**	**75**	**10**	**2**	**35**	**18**	**10**	**75**
2010 3-Month Total	**46**	**10**	**17**	**(s)**	**73**	**10**	**2**	**34**	**17**	**10**	**73**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Wood and wood-derived fuels.
[c] Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.
[d] Fuel ethanol minus denaturant.
[e] Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
[f] Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
[g] 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.

NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Carbon dioxide emissions from biomass energy consumption are excluded from the energy-related carbon dioxide emissions reported in Tables 12.1–12.6. See Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," 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.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

Sources: See end of section.

Environment

Note 1. Emissions of Carbon Dioxide and Other Greenhouse Gases. Greenhouse gases are those gases—such as water vapor, carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride—that are transparent to solar (short-wave) radiation but opaque to long-wave (infrared) radiation, thus preventing long-wave radiant energy from leaving Earth's atmosphere. The net effect is a trapping of absorbed radiation and a tendency to warm the planet's surface.

Energy-related carbon dioxide emissions account for about 98 percent of U.S. CO_2 emissions. The vast majority of CO_2 emissions come from fossil fuel combustion, with smaller amounts from the nonfuel use of fossil fuels, as well as from electricity generation using geothermal energy and non-biomass waste. Other sources of CO_2 emissions include industrial processes, such as cement and limestone production. Data in the U.S. Energy Information Administration's (EIA) *Monthly Energy Review (MER)* Tables 12.1–12.6 are estimates for U.S. CO_2 emissions from energy consumption, including the nonfuel use of fossil fuels (excluded are estimates for CO_2 emissions from biomass energy consumption, which appear in Table 12.7).

For annual U.S. estimates for emissions of CO_2 from all sources, as well as for emissions of other greenhouse gases, see EIA's *Emissions of Greenhouse Gases Report* at http://www.eia.gov/environment/emissions/ghg_report/.

Note 2. Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion. Carbon dioxide (CO_2) emissions from the combustion of biomass to produce energy are excluded from the energy-related CO_2 emissions reported in MER Tables 12.1–12.6, but appear in Table 12.7. According to current international convention (see the Intergovernmental Panel on Climate Change's "2006 IPCC Guidelines for National Greenhouse Gas Inventories"), carbon released through biomass combustion is excluded from reported energy-related emissions. The release of carbon from biomass combustion is assumed to be balanced by the uptake of carbon when the feedstock is grown, resulting in zero net emissions over some period of time. (This is not to say that biomass energy is carbon-neutral. Energy inputs are required in order to grow, fertilize, and harvest the feedstock and to produce and process the biomass into fuels.)

However, analysts have debated whether increased use of biomass energy may result in a decline in terrestrial carbon stocks, leading to a net positive release of carbon rather than the zero net release assumed by its exclusion from reported energy-related emissions. For example, the clearing of forests for biofuel crops could result in an initial release of carbon that is not fully recaptured in subsequent use of the land for agriculture.

To reflect the potential net emissions, the international convention for greenhouse gas inventories is to report biomass emissions in the category "agriculture, forestry, and other land use," usually based on estimates of net changes in carbon stocks over time.

This indirect accounting of CO_2 emissions from biomass can potentially lead to confusion in accounting for and understanding the flow of CO_2 emissions within energy and non-energy systems. In recognition of this issue, reporting of CO_2 emissions from biomass combustion alongside other energy-related CO_2 emissions offers an alternative accounting treatment. It is important, however, to avoid misinterpreting emissions from fossil energy and biomass energy sources as necessarily additive. Instead, the combined total of direct CO_2 emissions from biomass and energy-related CO_2 emissions implicitly assumes that none of the carbon emitted was previously or subsequently reabsorbed in terrestrial sinks or that other emissions sources offset any such sequestration.

Section 12 Methodology and Sources

To estimate carbon dioxide emissions from energy consumption for the *Monthly Energy Review (MER)*, Tables 12.1–12.7, the U.S. Energy Information Administration (EIA) uses the following methodology and sources:

Step 1. Determine Fuel Consumption

Coal—Coal sectoral (residential, commercial, coke plants, other industrial, transportation, electric power) consumption data in thousand short tons are from MER Table 6.2. Coal sectoral consumption data are converted to trillion Btu by multiplying by the coal heat content factors in MER Table A5.

Coal Coke Net Imports—Coal coke net imports data in trillion Btu are derived from coal coke imports and exports data in MER Tables 1.4a and 1.4b.

Natural Gas (excluding supplemental gaseous fuels)—Natural gas sectoral consumption data in trillion Btu are from MER Tables 2.2–2.6.

Petroleum—Total and sectoral consumption (product supplied) data in thousand barrels per day for asphalt and road oil, aviation gasoline, distillate fuel oil, jet fuel, kerosene, liquefied petroleum gases (LPG), lubricants, motor gasoline, petroleum coke, and residual fuel oil are from MER Tables 3.5 and 3.7a–3.7c. For the component products of LPG (ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene) and "other petroleum" (aviation gasoline blending components, crude oil, motor gasoline blending components, naphthas for petrochemical feedstock use, other oils for petrochemical feedstock use, pentanes plus, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products), consumption (product supplied) data in thousand barrels per day are from EIA's *Petroleum Supply Annual* (*PSA*), *Petroleum Supply Monthly* (*PSM*), and earlier

publications (see sources for MER Table 3.5). Petroleum consumption data by product are converted to trillion Btu by multiplying by the petroleum heat content factors in MER Table A1 (Table A3 for motor gasoline).

Biomass—Sectoral consumption data in trillion Btu for wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel are from MER Tables 10.2a–10.2c.

Step 2. Remove Biofuels From Petroleum

Distillate Fuel Oil—Beginning in 2009, the distillate fuel oil data (for total and transportation sector) in Step 1 include biodiesel, a non-fossil renewable fuel. To remove the biodiesel portion from distillate fuel oil, data in thousand barrels per day for refinery and blender net inputs of renewable diesel fuel (from the PSA/PSM) are converted to trillion Btu by multiplying by the biodiesel heat content factor in MER Table A3, and then subtracted from the distillate fuel oil consumption values.

Motor Gasoline—Beginning in 1993, the motor gasoline data (for total, commercial sector, industrial sector, and transportation sector) in Step 1 include fuel ethanol, a non-fossil renewable fuel. To remove the fuel ethanol portion from motor gasoline, data in trillion Btu for fuel ethanol consumption (from MER Tables 10.2a, 10.2b, and 10.3) are subtracted from the motor gasoline consumption values. (Note that about 2 percent of fuel ethanol is fossil-based petroleum denaturant, to make the fuel ethanol undrinkable. For 1993–2008, petroleum denaturant is double counted in the PSA product supplied statistics, in both the original product category—e.g., pentanes plus—and also in the finished motor gasoline category; for this time period for MER Section 12, petroleum denaturant is removed along with the fuel ethanol from motor gasoline, but left in the original product. Beginning in 2009, petroleum denaturant is counted only in the PSA/PSM product supplied statistics for motor gasoline; for this time period for MER Section 12, petroleum denaturant is left in motor gasoline.)

Step 3. Remove Carbon Sequestered by Nonfuel Use

The following fuels have industrial nonfuel uses as chemical feedstocks and other products: coal, natural gas, asphalt and road oil, distillate fuel oil, liquefied petroleum gases (ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene), lubricants (which have industrial and transportation nonfuel uses), naphthas for petrochemical feedstock use, other oils for petrochemical feedstock use, pentanes plus, petroleum coke, residual fuel oil, special naphthas, still gas, waxes, and miscellaneous petroleum products. In the nonfuel use of these fuels, some of the carbon is sequestered, and is thus subtracted from the fuel consumption values in Steps 1 and 2.

Estimates of annual nonfuel use and associated carbon sequestration are developed by EIA using the methodology detailed in "Documentation for *Emissions of Greenhouse Gases in the United States 2008*" at http://www.eia.gov/oiaf/1605/ggrpt/documentation/pdf/0638(2006).pdf.

To obtain monthly estimates of nonfuel use and associated carbon sequestration, monthly patterns for industrial consumption and product supplied data series are used. For coal nonfuel use, the monthly pattern for coke plants coal consumption from MER Table 6.2 is used. For natural gas, the monthly pattern for other industrial non-CHP natural gas consumption from MER Table 4.3 is used. For distillate fuel oil, petroleum coke, and residual fuel oil, the monthly patterns for industrial consumption from MER Table 3.7b are used. For the other petroleum products, the monthly patterns for product supplied from the PSA and PSM are used.

Step 4. Determine Carbon Dioxide Emissions From Energy Consumption

Carbon dioxide (CO_2) emissions data in million metric tons are calculated by multiplying consumption values in trillion Btu from Steps 1 and 2 (minus the carbon sequestered in nonfuel use in Step 3) by the CO_2 emissions factors at http://www.eia.gov/oiaf/1605/ggrpt/excel/CO2_coeffs_09_v2.xls. Beginning in 2010, the 2009 factors are used.

Coal—CO_2 emissions for coal are calculated for each sector (residential, commercial, coke plants, other industrial, transportation, electric power). Total coal emissions are the sum of the sectoral coal emissions.

Coal Coke Net Imports—CO_2 emissions for coal coke net imports are calculated.

Natural Gas—CO_2 emissions for natural gas are calculated for each sector (residential, commercial, industrial, transportation, electric power). Total natural gas emissions are the sum of the sectoral natural gas emissions.

Petroleum—CO_2 emissions are calculated for each petroleum product. Total petroleum emissions are the sum of the product emissions. Total LPG emissions are the sum of the emissions for the component products (ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene); residential, commercial, and transportation sector LPG emissions are estimated by multiplying consumption values in trillion Btu from MER Tables 3.8a and 3.8c by the propane emissions factor; industrial sector LPG emissions are estimated as total LPG emissions minus emissions by the other sectors.

Geothermal and Non-Biomass Waste—Annual CO_2 emissions data for geothermal and non-biomass waste are EIA estimates based on Form EIA-923, "Power Plant Operations Report" (and predecessor forms). Monthly estimates are created by dividing the annual data by the number of days in the year and then multiplying by the number of days in the month. (Annual estimates for the current year are set equal to those of the previous year.)

Biomass—CO_2 emissions for wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel are calculated for each sector. Total emissions for each biomass fuel are the sum of the sectoral emissions. The following factors, in million metric tons CO_2 per quadrillion Btu, are used: wood —93.80; biomass waste—90.70; fuel ethanol—68.44; and biodiesel—73.84. For 1973–1988, the biomass portion of waste in MER Tables 10.2a–10.2c is estimated as 67 percent; for 1989–2000, the biomass portion of waste is estimated as 67 percent in 1989 to 58 percent in 2000, based on the biogenic shares of total municipal solid waste shown in EIA's "Methodolology for Allocating Municipal Solid Waste to Biogenic and Non-Biogenic Energy," Table 1 at http://www.eia.gov/cneaf/solar.renewables/page/mswaste/msw.pdf.

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix A

British Thermal Unit 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	Pentanes Plus	4.620
Aviation Gasoline	5.048	Petrochemical Feedstocks	
Butane	4.326	Naptha Less Than 401°F	5.248
Butane-Propane Mixture[a]	4.130	Other Oils Equal to or Greater Than 401°F	5.825
Distillate Fuel Oil[b]	5.825	Still Gas	6.000
Ethane	3.082	Petroleum Coke	6.024
Ethane-Propane Mixture[c]	3.308	Plant Condensate	5.418
Isobutane	3.974	Propane	3.836
Jet Fuel, Kerosene Type	5.670	Residual Fuel Oil	6.287
Jet Fuel, Naphtha Type	5.355	Road Oil	6.636
Kerosene	5.670	Special Naphthas	5.248
Lubricants	6.065	Still Gas	6.000
Motor Gasoline[d]		Unfinished Oils	5.825
Conventional	5.253	Unfractionated Stream	5.418
Reformulated	5.150	Waxes	5.537
Oxygenated	5.150	Miscellaneous	5.796
Natural Gasoline and Isopentane	4.620		

[a] 60 percent butane and 40 percent propane.
[b] Does not include biodiesel. See Table A3 for biodiesel heat contents.
[c] 70 percent ethane and 30 percent propane.
[d] See Table A3 for motor gasoline weighted heat contents beginning in 1994, and for fuel ethanol heat contents.
Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A2. Approximate Heat Content of Petroleum Production, Imports, and Exports

(Million Btu per Barrel)

	Production		Imports			Exports		
	Crude Oil[a]	Natural Gas Plant Liquids	Crude Oil[a]	Petroleum Products	Total	Crude Oil[a]	Petroleum Products	Total
1973	5.800	4.049	5.817	5.983	5.897	5.800	5.752	5.752
1974	5.800	4.011	5.827	5.959	5.884	5.800	5.773	5.774
1975	5.800	3.984	5.821	5.935	5.858	5.800	5.747	5.748
1976	5.800	3.964	5.808	5.980	5.856	5.800	5.743	5.745
1977	5.800	3.941	5.810	5.908	5.834	5.800	5.796	5.797
1978	5.800	3.925	5.802	5.955	5.839	5.800	5.814	5.808
1979	5.800	3.955	5.810	5.811	5.810	5.800	5.864	5.832
1980	5.800	3.914	5.812	5.748	5.796	5.800	5.841	5.820
1981	5.800	3.930	5.818	5.659	5.775	5.800	5.837	5.821
1982	5.800	3.872	5.826	5.664	5.775	5.800	5.829	5.820
1983	5.800	3.839	5.825	5.677	5.774	5.800	5.800	5.800
1984	5.800	3.812	5.823	5.613	5.745	5.800	5.867	5.850
1985	5.800	3.815	5.832	5.572	5.736	5.800	5.819	5.814
1986	5.800	3.797	5.903	5.624	5.808	5.800	5.839	5.832
1987	5.800	3.804	5.901	5.599	5.820	5.800	5.860	5.858
1988	5.800	3.800	5.900	5.618	5.820	5.800	5.842	5.840
1989	5.800	3.826	5.906	5.641	5.833	5.800	5.869	5.857
1990	5.800	3.822	5.934	5.614	5.849	5.800	5.838	5.833
1991	5.800	3.807	5.948	5.636	5.873	5.800	5.827	5.823
1992	5.800	3.804	5.953	5.623	5.877	5.800	5.774	5.777
1993	5.800	3.801	5.954	5.620	5.883	5.800	5.777	5.779
1994	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	5.740	5.746
1996	5.800	3.777	5.947	5.468	5.847	5.800	5.728	5.736
1997	5.800	3.762	5.954	5.469	5.862	5.800	5.726	5.734
1998	5.800	3.769	5.953	5.462	5.861	5.800	5.710	5.720
1999	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
2002	5.800	3.729	5.971	5.451	5.863	5.800	5.687	5.688
2003	5.800	3.739	5.970	5.438	5.857	5.800	5.739	5.740
2004	5.800	3.724	5.981	5.475	5.863	5.800	5.753	5.754
2005	5.800	3.724	5.977	5.474	5.845	5.800	5.741	5.743
2006	5.800	3.712	5.980	5.454	5.842	5.800	5.723	5.724
2007	5.800	3.701	5.985	5.503	5.862	5.800	5.749	5.750
2008	5.800	3.706	5.990	5.479	5.866	5.800	5.762	5.762
2009	5.800	3.692	5.988	5.525	5.882	5.800	5.737	5.738
2010	5.800	3.674	5.989	5.557	5.894	5.800	5.670	5.672
2011[P]	5.800	3.675	6.007	5.555	5.910	5.800	5.619	5.622
2012[E]	5.800	3.675	6.007	5.555	5.910	5.800	5.619	5.622

[a] Includes lease condensate.

P=Preliminary. E=Estimate.

Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.

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 Petroleum[a] Consumption by Sector						Liquefied Petroleum Gases Consumption[f]	Motor Gasoline Consumption[g]	Fuel Ethanol[h]	*Fuel Ethanol Feedstock Factor*[i]	Biodiesel	*Biodiesel Feedstock Factor*[j]
	Residential	Commercial[b]	Industrial[b]	Transportation[b,c]	Electric Power[d,e]	Total[b,c]						
1973	5.258	5.689	5.557	5.396	6.245	5.515	3.746	5.253	NA	*NA*	NA	*NA*
1974	5.253	5.683	5.525	5.394	6.238	5.504	3.730	5.253	NA	*NA*	NA	*NA*
1975	5.253	5.649	5.513	5.392	6.250	5.494	3.715	5.253	NA	*NA*	NA	*NA*
1976	5.277	5.672	5.523	5.396	6.251	5.504	3.711	5.253	NA	*NA*	NA	*NA*
1977	5.285	5.682	5.539	5.401	6.249	5.518	3.677	5.253	NA	*NA*	NA	*NA*
1978	5.287	5.665	5.536	5.405	6.251	5.519	3.669	5.253	NA	*NA*	NA	*NA*
1979	5.365	5.717	5.409	5.429	6.258	5.494	3.680	5.253	NA	*NA*	NA	*NA*
1980	5.321	5.751	5.366	5.441	6.254	5.479	3.674	5.253	3.563	*6.586*	NA	*NA*
1981	5.283	5.693	5.299	5.433	6.258	5.448	3.643	5.253	3.563	*6.562*	NA	*NA*
1982	5.266	5.698	5.247	5.423	6.258	5.415	3.615	5.253	3.563	*6.539*	NA	*NA*
1983	5.140	5.591	5.254	5.416	6.255	5.406	3.614	5.253	3.563	*6.515*	NA	*NA*
1984	5.307	5.657	5.207	5.418	6.251	5.395	3.599	5.253	3.563	*6.492*	NA	*NA*
1985	5.263	5.598	5.199	5.423	6.247	5.387	3.603	5.253	3.563	*6.469*	NA	*NA*
1986	5.268	5.632	5.269	5.426	6.257	5.418	3.640	5.253	3.563	*6.446*	NA	*NA*
1987	5.239	5.594	5.233	5.429	6.249	5.403	3.659	5.253	3.563	*6.423*	NA	*NA*
1988	5.257	5.597	5.228	5.433	6.250	5.410	3.652	5.253	3.563	*6.400*	NA	*NA*
1989	5.194	5.549	5.219	5.438	[d]6.240	5.410	3.683	5.253	3.563	*6.377*	NA	*NA*
1990	5.145	5.553	5.253	5.442	6.244	5.411	3.625	5.253	3.563	*6.355*	NA	*NA*
1991	5.094	5.528	5.167	5.441	6.246	5.384	3.614	5.253	3.563	*6.332*	NA	*NA*
1992	5.124	5.513	5.168	5.443	6.238	5.378	3.624	5.253	3.563	*6.309*	NA	*NA*
1993	5.102	[b]5.505	[b]5.178	[b]5.436	6.230	[b]5.379	3.606	5.253	3.563	*6.287*	NA	*NA*
1994	5.098	5.515	5.150	5.424	6.213	5.361	3.635	5.230	3.563	*6.264*	NA	*NA*
1995	5.063	5.478	5.121	5.417	6.188	5.341	3.623	5.215	3.563	*6.242*	NA	*NA*
1996	4.998	5.433	5.114	5.420	6.195	5.336	3.613	5.216	3.563	*6.220*	NA	*NA*
1997	4.989	5.391	5.120	5.416	6.199	5.336	3.616	5.213	3.563	*6.198*	NA	*NA*
1998	4.975	5.365	5.137	5.413	6.210	5.349	3.614	5.212	3.563	*6.176*	NA	*NA*
1999	4.902	5.291	5.092	5.413	6.205	5.328	3.616	5.211	3.563	*6.167*	NA	*NA*
2000	4.908	5.316	5.057	5.422	6.189	5.326	3.607	5.210	3.563	*6.159*	NA	*NA*
2001	4.937	5.325	5.142	5.412	6.199	5.345	3.614	5.210	3.563	*6.151*	5.359	*5.433*
2002	4.886	5.293	5.093	5.411	6.173	5.324	3.613	5.208	3.563	*6.143*	5.359	*5.433*
2003	4.907	5.307	5.142	5.409	6.182	5.340	3.629	5.207	3.563	*6.116*	5.359	*5.433*
2004	4.953	5.328	5.144	5.421	6.192	5.350	3.618	5.215	3.563	*6.089*	5.359	*5.433*
2005	4.916	5.364	5.178	5.427	6.188	5.365	3.620	5.218	3.563	*6.063*	5.359	*5.433*
2006	4.894	5.310	5.160	5.431	6.143	5.353	3.605	5.218	3.563	*6.036*	5.359	*5.433*
2007	4.850	5.298	5.127	5.434	6.151	5.346	3.591	5.219	3.563	*6.009*	5.359	*5.433*
2008	4.732	5.175	5.149	5.426	6.123	5.339	3.600	5.218	3.563	*5.983*	5.359	*5.433*
2009	4.691	5.266	5.018	[c]5.414	6.105	[c]5.301	3.558	5.218	3.563	*5.957*	5.359	*5.433*
2010	4.692	5.263	4.988	5.421	6.084	5.297	3.557	5.218	3.561	*5.931*	5.359	*5.433*
2011	[E]4.692	[E]5.261	[E]4.964	[E]5.425	[P]6.062	[P]5.291	[P]3.529	[P]5.218	[P]3.560	*5.905*	5.359	*5.433*
2012	[E]4.692	[E]5.261	[E]4.964	[E]5.425	[E]6.062	[E]5.291	[E]3.529	[E]5.218	[E]3.560	*5.880*	5.359	*5.433*

[a] 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.

[b] Beginning in 1993, includes fuel ethanol blended into motor gasoline.

[c] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

[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 weighted average heat contents for distillate fuel oil, petroleum coke, and residual fuel oil; they exclude other liquids.

[f] Quantity-weighted averages of the major components of liquefied petroleum gases are calculated by using heat content values shown in Table A1.

[g] 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.

[h] Includes denaturant (petroleum added to ethanol to make it undrinkable). Fuel ethanol factors are weighted average heat contents for undenatured ethanol (3.539 million Btu per barrel), pentanes plus used as denaturant (4.620 million Btu per barrel), and conventional motor gasoline and motor gasoline blending components used as denaturant (5.253 million Btu per barrel). The factor for 2009 is used as the estimated factor for 1980-2008.

[i] Corn input to the production of undenatured ethanol (million Btu corn per barrel undenatured ethanol), used as the factor to estimate total biomass inputs to the production of undenatured ethanol. Observed ethanol yields (gallons undenatured ethanol per bushel of corn) are 2.5 in 1980, 2.666 in 1998, 2.68 in 2002, and 2.764 in 2009; yields in other years are estimated. Corn is assumed to have a gross heat content of 0.392 million Btu per bushel. Undenatured ethanol is assumed to have a gross heat content of 3.539 million Btu per barrel.

[j] Soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel), used as the factor to estimate total biomass inputs to the production of biodiesel. It is assumed that 7.65 pounds of soybean oil are needed to produce one gallon of biodiesel, and 5.433 million Btu of soybean oil are needed to produce one barrel of biodiesel. Soybean oil is assumed to have a gross heat content of 16,909 Btu per pound, or 5.483 million Btu per barrel. Biodiesel is assumed to have a gross heat content of 17,253 Btu per pound, or 5.359 million Btu per barrel.

P=Preliminary. E=Estimate. NA=Not available.

Note: The heat content values in this table are for gross heat contents. See "Heat Content" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Production		Consumption[a]				
	Marketed	Dry	End-Use Sectors[b]	Electric Power Sector[c]	Total	Imports	Exports
1973	1,093	1,021	1,020	1,024	1,021	1,026	1,023
1974	1,097	1,024	1,024	1,022	1,024	1,027	1,016
1975	1,095	1,021	1,020	1,026	1,021	1,026	1,014
1976	1,093	1,020	1,019	1,023	1,020	1,025	1,013
1977	1,093	1,021	1,019	1,029	1,021	1,026	1,013
1978	1,088	1,019	1,016	1,034	1,019	1,030	1,013
1979	1,092	1,021	1,018	1,035	1,021	1,037	1,013
1980	1,098	1,026	1,024	1,035	1,026	1,022	1,013
1981	1,103	1,027	1,025	1,035	1,027	1,014	1,011
1982	1,107	1,028	1,026	1,036	1,028	1,018	1,011
1983	1,115	1,031	1,031	1,030	1,031	1,024	1,010
1984	1,109	1,031	1,030	1,035	1,031	1,005	1,010
1985	1,112	1,032	1,031	1,038	1,032	1,002	1,011
1986	1,110	1,030	1,029	1,034	1,030	997	1,008
1987	1,112	1,031	1,031	1,032	1,031	999	1,011
1988	1,109	1,029	1,029	1,028	1,029	1,002	1,018
1989	1,107	1,031	1,031	[c]1,028	1,031	1,004	1,019
1990	1,105	1,029	1,030	1,027	1,029	1,012	1,018
1991	1,108	1,030	1,031	1,025	1,030	1,014	1,022
1992	1,110	1,030	1,031	1,025	1,030	1,011	1,018
1993	1,106	1,027	1,028	1,025	1,027	1,020	1,016
1994	1,105	1,028	1,029	1,025	1,028	1,022	1,011
1995	1,106	1,026	1,027	1,021	1,026	1,021	1,011
1996	1,109	1,026	1,027	1,020	1,026	1,022	1,011
1997	1,107	1,026	1,027	1,020	1,026	1,023	1,011
1998	1,109	1,031	1,033	1,024	1,031	1,023	1,011
1999	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
2001	1,105	1,028	1,029	1,026	1,028	1,023	1,010
2002	1,103	1,024	1,025	1,020	1,024	1,022	1,008
2003	1,103	1,028	1,029	1,025	1,028	1,025	1,009
2004	1,104	1,026	1,026	1,027	1,026	1,025	1,009
2005	1,104	1,028	1,028	1,028	1,028	1,025	1,009
2006	1,103	1,028	1,028	1,028	1,028	1,025	1,009
2007	1,102	1,027	1,027	1,027	1,027	1,025	1,009
2008	1,100	1,027	1,027	1,027	1,027	1,025	1,009
2009	1,101	1,025	1,025	1,025	1,025	1,025	1,009
2010	1,097	1,023	1,023	1,022	1,023	1,025	1,009
2011	[E]1,097	[E]1,022	[E]1,023	[P]1,021	[E]1,022	[E]1,025	[E]1,009
2012	[E]1,097	[E]1,022	[E]1,023	[E]1,021	[E]1,022	[E]1,025	[E]1,009

[a] Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels.
[b] Residential, commercial, industrial, and transportation sectors.
[c] 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.
P=Preliminary. E=Estimate.
Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

	Coal									Coal Coke
			Consumption							
				Industrial Sector						
	Production[a]	Waste Coal Supplied[b]	Residential and Commercial Sectors	Coke Plants	Other[c]	Electric Power Sector[d,e]	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
1982	22.239	NA	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
1983	22.052	NA	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
1984	22.010	NA	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
1985	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
1987	21.922	NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
1988	21.823	NA	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
1989	21.765	[b]10.391	23.650	26.800	22.347	[d]20.898	21.307	25.000	26.160	24.800
1990	21.822	9.303	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
1991	21.681	10.758	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
1992	21.682	10.396	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
1993	21.418	10.638	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
1994	21.394	11.097	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
1995	21.326	11.722	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
1996	21.322	12.147	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
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
1999	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	[a]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	12.360	22.242	27.425	22.468	20.082	20.387	25.000	25.972	24.800
2004	20.424	12.266	22.324	27.426	22.473	19.980	20.290	25.000	26.108	24.800
2005	20.348	12.093	22.342	26.279	22.178	19.988	20.246	25.000	25.494	24.800
2006	20.310	12.080	22.066	26.271	22.050	19.931	20.181	25.000	25.453	24.800
2007	20.340	12.090	22.069	26.329	22.371	19.909	20.168	25.000	25.466	24.800
2008	20.208	12.121	21.887	26.281	22.348	19.713	19.977	25.000	25.399	24.800
2009	19.963	12.076	22.059	26.334	21.893	19.521	19.742	25.000	25.633	24.800
2010	20.173	11.960	21.826	26.296	21.005	19.623	19.832	25.000	25.713	24.800
2011[P]	20.136	11.604	20.724	26.300	20.588	19.370	19.583	25.000	25.645	24.800
2012[E]	20.136	11.604	20.724	26.300	20.588	19.370	19.583	25.000	25.645	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 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 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."

[c] 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.

P=Preliminary. E=Estimate. NA=Not available.

Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A6. Approximate Heat Rates for Electricity, and Heat Content of Electricity

(Btu per Kilowatthour)

	Approximate Heat Rates[a] for Electricity Net Generation						
	Fossil Fuels[b]						
	Coal[c]	Petroleum[d]	Natural Gas[e]	Total Fossil Fuels[f,g]	Nuclear[h]	Noncombustible Renewable Energy[g,i]	Heat Content[j] of Electricity[k]
1973	NA	NA	NA	10,389	10,903	10,389	3,412
1974	NA	NA	NA	10,442	11,161	10,442	3,412
1975	NA	NA	NA	10,406	11,013	10,406	3,412
1976	NA	NA	NA	10,373	11,047	10,373	3,412
1977	NA	NA	NA	10,435	10,769	10,435	3,412
1978	NA	NA	NA	10,361	10,941	10,361	3,412
1979	NA	NA	NA	10,353	10,879	10,353	3,412
1980	NA	NA	NA	10,388	10,908	10,388	3,412
1981	NA	NA	NA	10,453	11,030	10,453	3,412
1982	NA	NA	NA	10,454	11,073	10,454	3,412
1983	NA	NA	NA	10,520	10,905	10,520	3,412
1984	NA	NA	NA	10,440	10,843	10,440	3,412
1985	NA	NA	NA	10,447	10,622	10,447	3,412
1986	NA	NA	NA	10,446	10,579	10,446	3,412
1987	NA	NA	NA	10,419	10,442	10,419	3,412
1988	NA	NA	NA	10,324	10,602	10,324	3,412
1989	NA	NA	NA	10,432	10,583	10,432	3,412
1990	NA	NA	NA	10,402	10,582	10,402	3,412
1991	NA	NA	NA	10,436	10,484	10,436	3,412
1992	NA	NA	NA	10,342	10,471	10,342	3,412
1993	NA	NA	NA	10,309	10,504	10,309	3,412
1994	NA	NA	NA	10,316	10,452	10,316	3,412
1995	NA	NA	NA	10,312	10,507	10,312	3,412
1996	NA	NA	NA	10,340	10,503	10,340	3,412
1997	NA	NA	NA	10,213	10,494	10,213	3,412
1998	NA	NA	NA	10,197	10,491	10,197	3,412
1999	NA	NA	NA	10,226	10,450	10,226	3,412
2000	NA	NA	NA	10,201	10,429	10,201	3,412
2001	10,378	10,742	10,051	[b]10,333	10,443	10,333	3,412
2002	10,314	10,641	9,533	10,173	10,442	10,173	3,412
2003	10,297	10,610	9,207	10,241	10,421	10,241	3,412
2004	10,331	10,571	8,647	10,022	10,427	10,022	3,412
2005	10,373	10,631	8,551	9,999	10,436	9,999	3,412
2006	10,351	10,809	8,471	9,919	10,436	9,919	3,412
2007	10,375	10,794	8,403	9,884	10,485	9,884	3,412
2008	10,378	11,015	8,305	9,854	10,453	9,854	3,412
2009	10,414	10,923	8,160	9,760	10,460	9,760	3,412
2010	10,415	10,984	8,185	9,756	10,452	9,756	3,412
2011	[E] 10,415	[E] 10,984	[E] 8,185	[E] 9,756	[E] 10,452	[E] 9,756	3,412
2012	[E] 10,415	[E] 10,984	[E] 8,185	[E] 9,756	[E] 10,452	[E] 9,756	3,412

[a] The values in columns 1-6 of this table are for net heat rates. See "Heat Rate" in Glossary.

[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 electricity-only independent power producers.

[c] Includes anthracite, bituminous coal, subbituminous coal, lignite, and, beginning in 2002, waste coal and coal synfuel.

[d] Includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke, and waste oil.

[e] Includes natural gas and supplemental gaseous fuels.

[f] Includes coal, petroleum, natural gas, and, beginning in 2001, other gases (blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels).

[g] The fossil-fuels heat rate is used as the thermal conversion factor for electricity net generation from noncombustible renewable energy (hydro, geothermal, solar thermal, photovoltaic, and wind) 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.

[h] Used as the thermal conversion factor for nuclear electricity net generation.

[i] Technology-based geothermal heat rates are no longer used in Btu calculations in this report. For technology-based geothermal heat rates for 1960–2010, see the *Annual Energy Review 2010,* Table A6.

[j] See "Heat Content" in Glossary.

[k] 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.

E=Estimate. NA=Not Available.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.

Sources: See "Thermal Conversion Factor Source Documentation," which follows this table.

Thermal Conversion Factor Source Documentation

Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

Asphalt. The U.S. 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 (Denatured).**

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.gov/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-923, "Power Plant Operations 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.gov/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.gov/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.gov/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 thermal conversion factor for biodiesel to be 5.359 million Btu per barrel, or 17,253 Btu per pound.

Biodiesel Feedstock. EIA used soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel) as the factor to estimate total biomass inputs to the production of biodiesel. EIA assumed that 7.65 pounds of soybean oil are needed to produce one gallon of biodiesel, and 5.433 million Btu of soybean oil are needed to produce one barrel of biodiesel. EIA also assumed that soybean oil has a gross heat content of 16,909 Btu per pound, or 5.483 million Btu per barrel.

Ethanol (Undenatured). 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 (Denatured). 1981–2008: EIA used the 2009 factor. 2009 forward: Calculated by EIA as the annual quantity-weighted average of the thermal conversion factors for undenatured ethanol (3.539 million Btu per barrel), pentanes plus used as denaturant (4.620 million Btu per barrel), and conventional motor gasoline and motor gasoline blending components used as denaturant (5.253 million Btu per barrel). The quantity of ethanol consumed is from EIA's *Petroleum Supply Annual (PSA)* and *Petroleum Supply Monthly (PSM),* Table 1, data for renewable fuels and oxygenate plant net production of fuel ethanol. The quantity of pentanes plus used as denaturant is from PSA/PSM, Table 1, data for renewable fuels and oxygenate plant net production of pentanes plus, multiplied by -1. The quantity of conventional motor gasoline and motor gasoline blending components used as denaturant is from PSA/PSM, Table 1, data for renewable fuels and oxygenate plant net production of conventional motor gasoline and motor gasoline blending components, multiplied by -1.

Fuel Ethanol Feedstock. EIA used corn input to the production of undenatured ethanol (million Btu corn per barrel undenatured ethanol) as the annual factor to estimate total biomass inputs to the production of undenatured ethanol. U.S. Department of Agriculture observed ethanol yields (gallons undenatured ethanol per bushel of corn) were 2.5 in 1980, 2.666 in 1998, 2.68 in 2002, and 2.764 in 2009; EIA estimated the ethanol yields in other years. EIA also assumed that corn has a gross heat content of 0.392 million Btu per bushel.

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-923, "Power Plant Operations 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-923, "Power Plant Operations Report," and predecessor forms.

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-923, "Power Plant Operations Report," and predecessor forms.

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 forward, data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants"; Form EIA-923, "Power Plant Operations Report"; and predecessor forms.

Approximate Heat Rates for Electricity

Electricity Net Generation, Coal. 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-923, "Power Plant Operations Report," and predecessor forms. The computation includes data for electric utilities and electricity-only independent power producers using anthracite, bituminous coal, subbituminous coal, lignite, and beginning in 2002, waste coal and coal synfuel.

Electricity Net Generation, Natural Gas. 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-923, "Power Plant Operations Report," and predecessor forms. The computation includes data for electric utilities and electricity-only independent power producers using natural gas and supplemental gaseous fuels.

Electricity Net Generation, Noncombustible Renewable Energy. There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydro, geothermal, solar thermal, photovoltaic, and wind energy sources. Therefore, EIA calculates a rate factor that is equal to the annual average heat rate factor for fossil-fueled power plants in the United States (see "Electricity Net Generation, Total Fossil Fuels"). By using that factor it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts.

Electricity Net Generation, Nuclear. 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 data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms).

Electricity Net Generation, Petroleum. 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-923, "Power Plant Operations Report," and predecessor forms. The computation includes data for electric utilities and electricity-only independent power producers using distillate fuel oil, residual fuel oil, jet fuel, kerosene, petroleum coke, and waste oil.

Electricity Net Generation, Total Fossil Fuels. 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 data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and net generation data reported 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-923, "Power Plant Operations Report," and predecessor forms. The computation includes data for electric utilities and electricity-only independent power producers using coal, petroleum, natural gas, and other gases (blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels).

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix B

Metric Conversion Factors, Metric Prefixes, and Other Physical Conversion Factors

Data presented in the *Monthly Energy Review* and in other U.S. 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. 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)
	1 long ton	=	1.016 047	metric tons (t)
	1 pound (lb)	=	0.453 592 37[a]	kilograms (kg)
	1 pound uranium oxide (lb U_3O_8)	=	0.384 647[b]	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 (m^3)
	1 cubic yard (yd^3)	=	0.764 555	cubic meters (m^3)
	1 cubic foot (ft^3)	=	0.028 316 85	cubic meters (m^3)
	1 U.S. gallon (gal)	=	3.785 412	liters (L)
	1 ounce, fluid (fl oz)	=	29.573 53	milliliters (mL)
	1 cubic inch (in^3)	=	16.387 06	milliliters (mL)
Length	1 mile (mi)	=	1.609 344[a]	kilometers (km)
	1 yard (yd)	=	0.914 4[a]	meters (m)
	1 foot (ft)	=	0.304 8[a]	meters (m)
	1 inch (in)	=	2.54[a]	centimeters (cm)
Area	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi^2)	=	2.589 988	square kilometers (km^2)
	1 square yard (yd^2)	=	0.836 127 4	square meters (m^2)
	1 square foot (ft^2)	=	0.092 903 04[a]	square meters (m^2)
	1 square inch (in^2)	=	6.451 6[a]	square centimeters (cm^2)
Energy	1 British thermal unit (Btu)[c]	=	1,055.055 852 62[a]	joules (J)
	1 calorie (cal)	=	4.186 8[a]	joules (J)
	1 kilowatthour (kWh)	=	3.6[a]	megajoules (MJ)
Temperature[d]	32 degrees Fahrenheit (ºF)	=	0[a]	degrees Celsius (ºC)
	212 degrees Fahrenheit (ºF)	=	100[a]	degrees Celsius (ºC)

[a]Exact conversion.
[b]Calculated by the U.S. Energy Information Administration.
[c]The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.
[d]To convert degrees Fahrenheit (ºF) to degrees Celsius (ºC) 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.gov/totalenergy/data/monthly/#appendices.

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^{1}	deka	da	10^{-1}	deci	d
10^{2}	hecto	h	10^{-2}	centi	c
10^{3}	kilo	k	10^{-3}	milli	m
10^{6}	mega	M	10^{-6}	micro	µ
10^{9}	giga	G	10^{-9}	nano	n
10^{12}	tera	T	10^{-12}	pico	p
10^{15}	peta	P	10^{-15}	femto	f
10^{18}	exa	E	10^{-18}	atto	a
10^{21}	zetta	Z	10^{-21}	zepto	z
10^{24}	yotta	Y	10^{-24}	yocto	y

Web Page: http ://www.eia.gov/totalenergy/data/monthly/#appendices.
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		Equivalent in Final Units	
Petroleum	1 barrel (bbl)	=	42[a]	U.S. gallons (gal)
Coal	1 short ton	=	2,000[a]	pounds (lb)
	1 long ton	=	2,240[a]	pounds (lb)
	1 metric ton (t)	=	1,000[a]	kilograms (kg)
Wood	1 cord (cd)	=	1.25[b]	shorts tons
	1 cord (cd)	=	128[a]	cubic feet (ft^3)

[a]Exact conversion.
[b]Calculated by the U.S. Energy Information Administration.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.
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.

THIS PAGE INTENTIONALLY LEFT BLANK

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; $CH(3)-(CH(2))_n-OH$ (e.g., **methanol**, **ethanol**, and tertiary butyl alcohol). See **Fuel Ethanol.**

Alternative Fuel: Alternative fuels, for transportation applications, include the following: **methanol**; denatured **ethanol**, and other **alcohols**; fuel mixtures containing 85 percent or more by volume of methanol, denatured ethanol, and other alcohols with **motor gasoline** or other fuels; **natural gas**; **liquefied petroleum gas** (**propane**); **hydrogen**; **coal**-derived liquid fuels; fuels (other than alcohol) derived from biological materials (**biofuels** such as soy **diesel fuel**); **electricity** (including electricity from **solar energy**); and "... any other fuel the Secretary determines, by rule, is substantially not **petroleum** and would yield substantial energy security benefits and substantial environmental benefits." The term "alternative fuel" does not include alcohol or other blended portions of primarily petroleum-based fuels used as **oxygenates** or extenders, i.e., **MTBE**, ETBE, other ethers, and the 10-percent ethanol portion of **gasohol**.

Alternative-Fuel Vehicle (AFV): A vehicle designed to operate on an **alternative fuel** (e.g., compressed **natural gas**, **methane** blend, or **electricity**). The vehicle could be either a dedicated vehicle designed to operate exclusively on alternative fuel or a nondedicated vehicle designed to operate on alternative fuel and/or a traditional fuel.

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.

Anthropogenic: Made or generated by a human or caused by human activity. The term is used in the context of global **climate change** to refer to gaseous emissions that are the result of human activities, as well as other potentially climate-altering activities, such as deforestation.

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: A fuel typically made from soybean, canola, or other vegetable oils; animal fats; and recycled grease. It can serve as a substitute for **petroleum**-derived **diesel fuel** or **distillate fuel oil**. For U.S. Energy Information Administration reporting, it is a fuel composed of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM (American Society for Testing & Materials) D 6751.

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.**

Btu Conversion Factor: A factor for converting **energy** data between one unit of measurement and **British thermal units (Btu)**. Btu conversion factors are generally used to convert energy data from physical units of measure (such as **barrels**, **cubic feet**, or **short tons**) into the energy-equivalent measure of Btu. (See http://www.eia.gov/totalenergy/data/monthly/#appendices for further information on Btu conversion factors.)

Butane: A normally gaseous straight-chain or branched-chain 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 10.9º 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 31.1º 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.

Carbon Dioxide (CO_2): A colorless, odorless, non-poisonous gas that is a normal part of Earth's atmosphere. Carbon dioxide is a product of **fossil-fuel** combustion as well as other processes. It is considered a **greenhouse gas** as it traps heat (infrared energy) radiated by the Earth into the atmosphere and thereby contributes to the potential for **global warming**. The **global warming potential** (GWP) of other greenhouse gases is measured in relation to that of carbon dioxide, which by international scientific convention is assigned a value of one (1).

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**.

Citygate: A point or measuring station at which a distribution gas utility receives gas from a natural gas pipeline company or transmission system.

Climate Change: A term used to refer to all forms of climatic inconsistency, but especially to significant change from one prevailing climatic condition to another. In some cases, "climate change" has been used synonymously with the term **"global warming"**; scientists, however, tend to use the term in a wider sense inclusive of natural changes in climate, including climatic cooling.

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 2,000º 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.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 factor for converting data between one unit of measurement and another (such as between **short tons** and **British thermal units**, or between **barrels** and gallons). (See http://www.eia.gov/totalenergy/data/monthly/#appendices and http://www.eia.gov/totalenergy/data/monthly/#appendices for further information on conversion factors.) See **Btu Conversion Factor** and **Thermal Conversion Factor**.

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 60º 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 population-weighted 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. Degree-day 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.

Denaturant: **Petroleum**, typically **pentanes plus** or **conventional motor gasoline**, added to **fuel ethanol** to make it unfit for human consumption. Fuel ethanol is denatured, usually prior to transport from the ethanol production facility, by adding 2 to 5 volume percent denaturant. See **Fuel Ethanol** and **Fuel Ethanol Minus Denaturant**.

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**.

E85: A fuel containing a mixture of 85 percent **ethanol** and 15 percent **motor gasoline**.

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 -127.48º F. It is extracted from natural gas and refinery gas streams.

Ethanol (C_2H_5OH): A clear, colorless, flammable **alcohol**. Ethanol is typically produced biologically from **biomass** feedstocks such as agricultural crops and cellulosic residues from agricultural crops or wood. Ethanol can also be produced chemically from **ethylene**. See **Biomass**, **Fuel Ethanol**, and **Fuel Ethanol Minus Denaturant**.

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 U.S. 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 U.S. 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 U.S. Department of Energy was created. Its functions were divided between the U.S. Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

First Purchase Price: The price for domestic crude oil reported by the company that owns the crude oil the first time it is removed from the lease boundary.

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 **Union of Soviet Socialist Republics (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: Ethanol intended for fuel use. Fuel ethanol in the United States must be anhydrous (less than 1 percent water). Fuel ethanol is denatured (made unfit for human consumption), usually prior to transport from the ethanol production facility, by adding 2 to 5 volume percent petroleum, typically **pentanes plus** or **conventional motor gasoline**. Fuel ethanol is used principally for blending in low concentrations with **motor gasoline** as an **oxygenate** or octane enhancer. In high concentrations, it is used to fuel **alternative-fuel vehicles** specially designed for its use. See **Alternative-Fuel Vehicle**, **Denaturant**, **E85**, **Ethanol**, **Fuel Ethanol Minus Denaturant**, and **Oxygenates**.

Fuel Ethanol Minus Denaturant: An unobserved quantity of anhydrous, **biomass**-derived, undenatured **ethanol** for fuel use. The quantity is obtained by subtracting the estimated **denaturant** volume from **fuel ethanol** volume. Fuel ethanol minus denaturant is counted as **renewable energy**, while denaturant is counted as **nonrenewable fuel**. See **Denaturant**, **Ethanol**, **Fuel Ethanol**, **Nonrenewable Fuels**, **Oxygenates**, and **Renewable Energy**.

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.

Global Warming: An increase in the near-surface temperature of the Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is today most often used to refer to the warming some scientists predict will occur as a result of increased **anthropogenic** emissions of **greenhouse gases**. See **Climate Change**.

Global Warming Potential (GWP): An index used to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. GWPs are calculated as the ratio of the radiative forcing that would result from the emission of one kilogram of a **greenhouse gas** to that from the emission of one kilogram of **carbon dioxide** over a fixed period of time, such as 100 years.

Greenhouse Gases: Those gases, such as water vapor, **carbon dioxide**, nitrous oxide, **methane**, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride, that are transparent to solar (short-wave) radiation but opaque to long-wave (infrared) radiation, thus preventing long-wave radiant energy from leaving Earth's atmosphere. The net effect is a trapping of absorbed radiation and a tendency to warm the planet's surface.

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 U.S. 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.

Hydrogen (H): The lightest of all gases, hydrogen occurs chiefly in combination with oxygen in water. It also exists in acids, bases, **alcohols**, **petroleum**, and other **hydrocarbons**.

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.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 isused 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 401º F at the 10-percent recovery point, a final boiling point of 572º F, and a minimum flash point of 100º 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 -260º 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_4) 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, $(CH_3)_3COCH_3$, intended for motor gasoline blending. See **Oxygenates**.

Methanol: A light, volatile alcohol (CH_3OH) 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 122ºF to 158ºF at the 10-percent recovery point to 365ºF to 374ºF 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 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-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/eos/www/naics/.

Naphtha: A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400º 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.

Nonrenewable Fuels: Fuels that cannot be easily made or "renewed," such as **crude oil**, **natural gas**, and **coal**.

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): An international organization helping governments tackle the economic, social and governance challenges of a globalized economy. Its membership comprises about 30 member countries. With active relationships with some 70 other countries, non-governmental organizations (NGOs) and civil society, it has a global reach. For details about the organization, see http://www.oecd.org.

Organization of the Petroleum Exporting Countries (OPEC): An intergovernmental organization whose stated objective is to "coordinate and unify the petroleum policies of member countries." It was created at the Baghdad Conference on September 10–14, 1960. Current members (with years of membership) include Algeria (1969–present), Angola (2007–present), Ecuador (1973–1992 and 2007–present), Iran (1960–present), Iraq (1960–present), Kuwait (1960–present), Libya (1962–present), Nigeria (1971–present), Qatar (1961–present), Saudi Arabia (1960–present), United Arab Emirates (1967–present), and Venezuela (1960–present). Countries no longer members of OPEC include Gabon (1975–1994) and Indonesia (1962–2008).

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.

Primary Energy: **Energy** in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy. For example, **coal** can be converted to synthetic gas, which can be converted to **electricity**; in this example, coal is primary energy, synthetic gas is secondary energy, and electricity is tertiary energy. See **Primary Energy Production** and **Primary Energy Consumption**.

Primary Energy Consumption: Consumption of **primary energy**. (Energy sources that are produced from other energy sources—e.g., **coal coke** from **coal**—are included in primary energy consumption only if their energy content has not already been included as part of the original energy source. Thus, U.S. primary energy consumption does include net imports of coal coke, but not the coal coke produced from domestic coal.) The U.S. Energy Information Administration includes the following in U.S. primary energy consumption: coal consumption; coal coke net imports; **petroleum consumption** (**petroleum products supplied**, including **natural gas plant liquids** and **crude oil** burned as fuel); **dry 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 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 wood-derived fuels** consumption; **biomass waste** 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). See **Total Energy Consumption**.

Primary Energy Production: Production of **primary energy**. The U.S. Energy Information Administration includes the following in U.S. primary energy production: **coal** production, **waste coal** supplied, and coal refuse recovery; **crude oil** and **lease condensate** production; **natural gas plant liquids** production; **dry natural gas**—excluding **supplemental gaseous fuels**—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), and 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 wood-derived fuels** consumption; **biomass waste** consumption; and **biofuels** feedstock.

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 -43.67º 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_3H_6) 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 and Blender Net Inputs: Raw materials, **unfinished oils**, and blending components processed at refineries, or blended at refineries or petroleum storage terminals to produce finished **petroleum products**. Included are gross inputs of **crude oil**, **natural gas plant liquids**, other **hydrocarbon** raw materials, **hydrogen**, **oxygenates** (excluding **fuel ethanol**), and renewable fuels (including fuel ethanol). Also included are net inputs of unfinished oils, **motor gasoline blending components**, and **aviation gasoline blending components**. Net inputs are calculated as gross inputs minus gross production. Negative net inputs indicate gross inputs are less than gross production. Examples of negative net inputs include reformulated gasoline blendstock for oxygenate blending (RBOB) produced at refineries for shipment to blending terminals, and unfinished oils produced and added to inventory in advance of scheduled maintenance of a refinery crude oil distillation unit.

Refinery and Blender Net Production: Liquefied refinery gases, and finished **petroleum products** produced at a **refinery** or petroleum storage terminal blending facility. Net production equals gross production minus gross inputs. Negative net production indicates gross production is less than gross inputs for a finished petroleum product. Examples of negative net production include reclassification of one finished product to another finished product, or reclassification of a finished product to **unfinished oils** or blending components.

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 hydroelectric 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.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-matter-free 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: A factor for converting data between physical units of measure (such as **barrels**, **cubic feet**, or **short tons**) and thermal units of measure (such as **British thermal units**, calories, or joules); or for converting data between different thermal units of measure. See **Btu Conversion Factor.**

Total Energy Consumption: **Primary energy consumption** in the **end-use sectors**, plus **electricity retail sales** and **electrical system energy losses**.

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.gov/neic/datadefinitions/Guideforwebtrans.htm See **End-Use Sectors** and **Energy-Use Sectors**.

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.

Union of Soviet Socialist Republics (U.S.S.R.): A political entity that consisted of 15 constituent republics: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. The U.S.S.R. ceased to exist as of December 31, 1991.

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.: See **Union of Soviet Socialist Republics (U.S.S.R.).**

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.