DOE/EIA-0035(2015/12)

December 2015

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*, and *Electric Power 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 1949, annual data are usually displayed only in 5-year increments between 1950 and 2000 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: In 2013, EIA expanded the MER to incorporate annual data as far back as 1949 in those data tables that were previously published in both the *Annual Energy Review (AER*) and MER. Analysts may wish to use the data in this report in conjunction with the AER which offers annual data beginning in 1949 for many related supplemental data series that are not 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 no later than the last work day of the month at http://www.eia.gov/totalenergy/data/monthly.

Released: December 23, 2015

DOE/EIA-0035(2015/12)

Monthly Energy Review

December 2015

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**	Jennifer Wade	202-586-4749 jennifer.wade@eia.gov
Section	**5.**	**Crude Oil and Natural Gas Resource Development**	Neal Davis	202-586-6581 neal.davis@eia.gov
Section	**6.**	**Coal**	Sundar Thapa	202-586-3836 sundar.thapa@eia.gov
Section	**7.**	**Electricity**	Ronald S. Hankey	202-586-2630 ronald.hankey@eia.gov
Section	**8.**	**Nuclear Energy**	Stan Kaplan	202-586-5114 stan.kaplan@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	Peter Wong	202-586-7574 peter.wong@eia.gov
		Cost of Fuel at Electric Generating Plants	Rebecca Peterson	202-586-4509 rebecca.peterson@eia.gov
Section	**10.**	**Renewable Energy**	Stan Kaplan	202-586-5114 stan.kaplan@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

Tables

Tables

Tables

Figures

Figures

Content Changes in 2015

Year-End Summary

1. New Table 2.7, "U.S. Government Energy Consumption by Agency, Fiscal Years" and new Table 2.8, "U.S. Government Energy Consumption by Source, Fiscal Years," have been added (October).

2. Table 1.9 and Table 1.10 have been modified to include annual degree-day data beginning in 1949 and monthly degree-day data beginning in 1973. Columns for "Normal" and "Percent Change" have been deleted (September).

3. Table 1.7 has been renamed "Primary Energy Consumption, Energy Expenditures, and Carbon Dioxide Emissions Indicators." The table has been modified to include a column for "Consumption per Capita"; four columns for "Energy Expenditures"; and three columns for "Carbon Dioxide Emissions." Columns for "Petroleum and Natural Gas," "Other Energy," and "Gross Domestic Product" have been deleted (August).

4. New Table C1, "Population, U.S. Gross Domestic Product, and U.S. Gross Output," has been added (August).

5. New Table D1, "Estimated Primary Energy Consumption in the United States, Selected Years, 1635-1945," has been added (August).

October 2015 Release

1. New Table 2.7, "U.S. Government Energy Consumption by Agency, Fiscal Years" and new Table 2.8, "U.S. Government Energy Consumption by Source, Fiscal Years," have been added.

2. Natural gas statistics have been revised in coordination with EIA's *Natural Gas Annual 2014*. Revisions affect data series in Energy Overview, Energy Consumption by Sector, Natural Gas, Energy Prices, Environment, and Approximate Heat Content of Natural Gas.

September 2015 Release

1. Table 1.9 and Table 1.10 have been modified to include annual degree-day data beginning in 1949 and monthly degree-day data beginning in 1973. Columns for "Normal" and "Percent Change" have been deleted.

2. Final 2014 monthly and annual statistics for the supply and disposition of crude oil and petroleum products, coordinated with EIA's *Petroleum Supply Annual 2014 Volume 2*, have been incorporated. Revisions affect data series in Petroleum, Energy Overview, Energy Consumption by Sector, Renewable Energy, and Environment.

3. Final 2014 heat contents for petroleum (Table A2 and Table A3) have been incorporated. Revisions affect Btu data in Energy Overview, Energy Consumption by Sector, Petroleum, and Environment; the 2014 final heat contents are used as estimated 2015 heat contents.

August 2015 Release

1. Table 1.7 has been renamed "Primary Energy Consumption, Energy Expenditures, and Carbon Dioxide Emissions Indicators." The table has been modified to include a column for "Consumption per Capita"; four columns for "Energy Expenditures"; and three columns for "Carbon Dioxide Emissions." Columns for "Petroleum and Natural Gas," "Other Energy," and "Gross Domestic Product" have been deleted.

2. New Table C1, "Population, U.S. Gross Domestic Product, and U.S. Gross Output," has been added.

3. New Table D1, "Estimated Primary Energy Consumption in the United States, Selected Years, 1635-1945," has been added.

May 2015 Release

Biodiesel and Other Renewable Fuels Overview (Table 10.4) was previously titled "Biodiesel Overview." The table has been modified to include a column for "Other Renewable Fuels." The column for "Balancing Item" has been deleted. In addition, the "Stocks" and "Stock Change" columns have been revised to include biodiesel only for 2011 forward.

Content Changes in 2015 (continued)

April 2015 Release

1. Approximate Heat Content of Petroleum Consumption and Fuel Ethanol (Table A3) has revised fuel ethanol feedstock factors for 2003-2015. The revisions affect data in Energy Overview, Energy Consumption by Sector, Renewable Energy, and Environment.

2. Approximate Heat Content of Natural Gas (Table A4) includes revisions for 2014 that affect data in Energy Overview, Energy Consumption by Sector, and Environment.

3. Approximate Heat Content of Coal and Coal Coke (Table A5) includes revisions for 2013 and 2014 that affect data in Energy Overview, Energy Consumption by Sector, and Environment.

March 2015 Release

1. Energy Overview, Energy Consumption by Sector, and Environment now include 2014 preliminary statistics for U.S. total energy consumption, production, trade, and carbon dioxide emissions.

2. Electricity statistics have been revised in coordination with EIA's *Electric Power Annual 2013*. Revisions affect data series in Energy Overview, Energy Consumption, Petroleum, Natural Gas, Coal, Electricity, Nuclear Energy, Energy Prices, Renewable Energy, and Environment. Final 2013 heat content rates for electricity (Table A6) have also been incorporated.

February 2015 Release

Table 1.8 (Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy) now has 2013 data and revised 2012 data.

January 2015 Release

1. Table A1 has been renamed "Heat Content of Petroleum and Other Liquids," and heat content factors are added for aviation gasoline blending components; distillate fuel oil by sulfur content; hydrogen; motor gasoline blending components (MGBC); oxygenates (excluding fuel ethanol); petroleum coke by type; renewable fuels except fuel ethanol; and other hydrocarbons. Revisions affect Btu data in Energy Overview, Energy Consumption by Sector, Petroleum, and Environment.

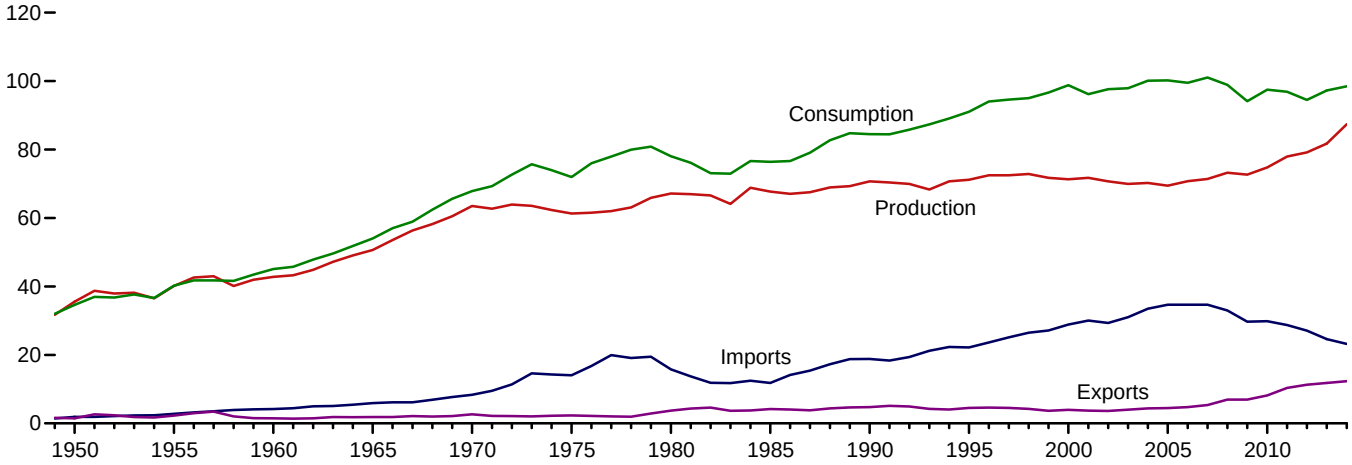
2. Table A2 has been modified to include columns for "Motor Gasoline Imports" and "Motor Gasoline Exports." Revisions affect Btu data in Energy Overview.

3. Table A3 has been renamed "Heat Content of Petroleum Consumption and Fuel Ethanol." The table has been modified to include columns for "Distillate Fuel Oil Consumption" and "Petroleum Coke Consumption" heat content factors. The columns for "Motor Gasoline Consumption (Old)," "Biodiesel," and "Biodiesel Feedstock" factors have been removed. The "Motor Gasoline Consumption (New)" heat content factors have been renamed "Motor Gasoline Consumption" and are now used in the MER to derive Btu data for motor gasoline, total petroleum products, and total petroleum in Sections 1–3. Revisions affect Btu data in in Energy Overview, Energy Consumption by Sector, Petroleum, and Environment.

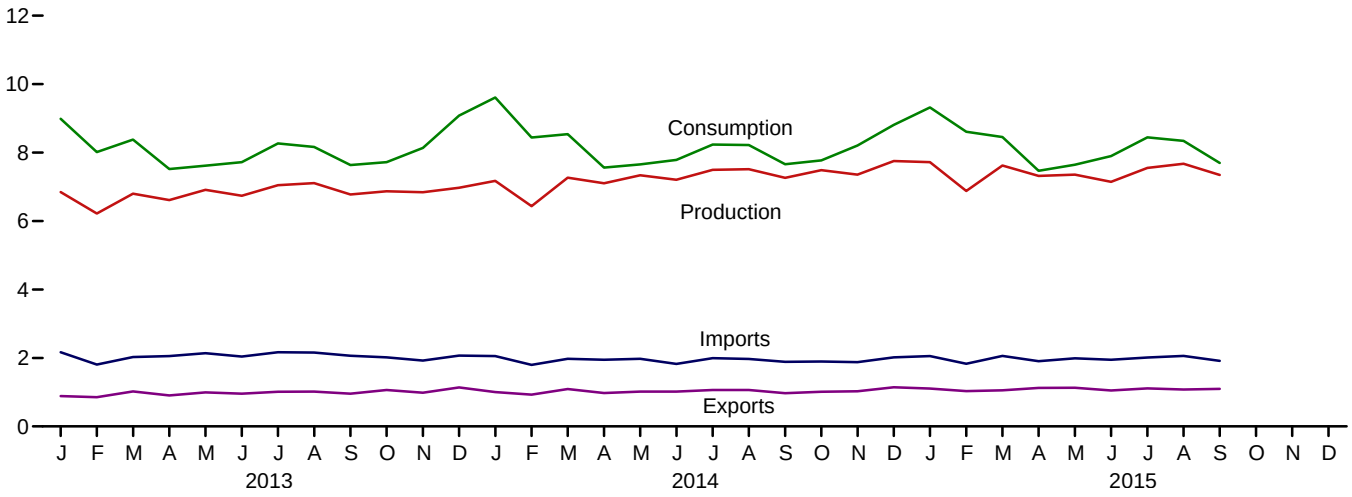
1. Energy Overview

Figure 1.1 Primary Energy Overview
(Quadrillion Btu)

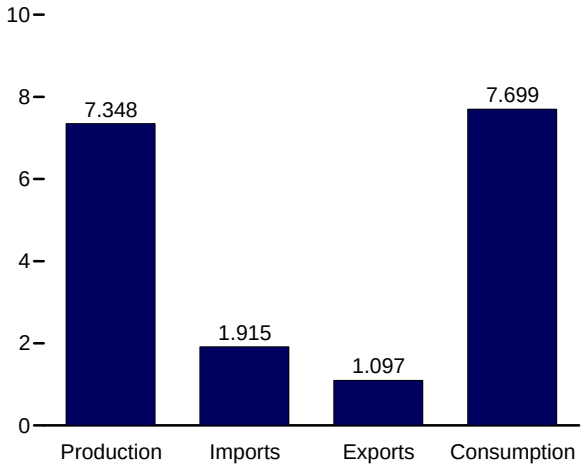
Overview, 1949–2014



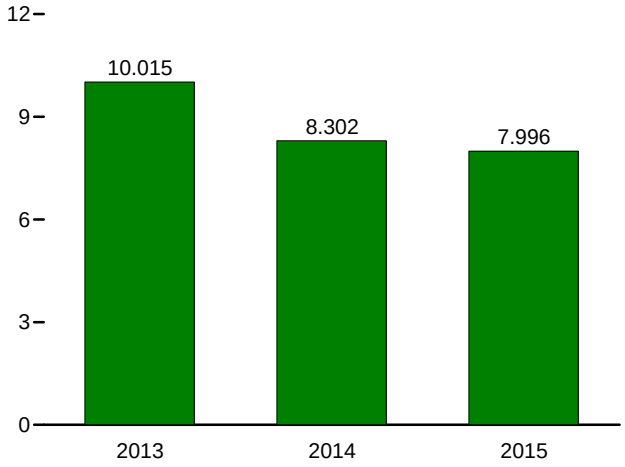
Overview, Monthly



Overview, September 2015



Net Imports, January–September



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]
1950 Total	**32.563**	**0.000**	**2.978**	**35.540**	**1.913**	**1.465**	**0.448**	**-1.372**	**31.632**	**0.000**	**2.978**	**34.616**
1955 Total	**37.364**	**.000**	**2.784**	**40.148**	**2.790**	**2.286**	**.504**	**-.444**	**37.410**	**.000**	**2.784**	**40.208**
1960 Total	**39.869**	**.006**	**2.928**	**42.803**	**4.188**	**1.477**	**2.710**	**-.427**	**42.137**	**.006**	**2.928**	**45.086**
1965 Total	**47.235**	**.043**	**3.396**	**50.674**	**5.892**	**1.829**	**4.063**	**-.722**	**50.577**	**.043**	**3.396**	**54.015**
1970 Total	**59.186**	**.239**	**4.070**	**63.495**	**8.342**	**2.632**	**5.709**	**-1.367**	**63.522**	**.239**	**4.070**	**67.838**
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**	**22.180**	**4.496**	**17.684**	**2.174**	**77.262**	**7.075**	**6.560**	**91.032**
2000 Total	**57.366**	**7.862**	**6.104**	**71.332**	**28.865**	**3.962**	**24.904**	**2.583**	**84.735**	**7.862**	**6.106**	**98.819**
2001 Total	**58.541**	**8.029**	**5.164**	**71.735**	**30.052**	**3.731**	**26.321**	**-1.883**	**82.906**	**8.029**	**5.163**	**96.172**
2002 Total	**56.834**	**8.145**	**5.734**	**70.713**	**29.331**	**3.608**	**25.722**	**1.211**	**83.700**	**8.145**	**5.729**	**97.647**
2003 Total	**56.033**	**7.960**	**5.946**	**69.938**	**31.007**	**4.013**	**26.994**	**.989**	**83.992**	**7.960**	**5.948**	**97.921**
2004 Total	**55.942**	**8.223**	**6.067**	**70.232**	**33.492**	**4.351**	**29.141**	**.721**	**85.754**	**8.223**	**6.079**	**100.094**
2005 Total	**55.049**	**8.161**	**6.226**	**69.436**	**34.659**	**4.462**	**30.197**	**.560**	**85.709**	**8.161**	**6.239**	**100.193**
2006 Total	**55.935**	**8.215**	**6.594**	**70.744**	**34.649**	**4.727**	**29.921**	**-1.173**	**84.570**	**8.215**	**6.645**	**99.492**
2007 Total	**56.436**	**8.459**	**6.520**	**71.415**	**34.679**	**5.338**	**29.341**	**.270**	**85.928**	**8.459**	**6.533**	**101.027**
2008 Total	**57.590**	**8.426**	**7.206**	**73.223**	**32.970**	**6.949**	**26.021**	**-.338**	**83.178**	**8.426**	**7.189**	**98.906**
2009 Total	**56.672**	**8.355**	**7.641**	**72.667**	**29.690**	**6.920**	**22.770**	**-1.300**	**78.042**	**8.355**	**7.624**	**94.138**
2010 Total	**58.217**	**8.434**	**8.112**	**74.764**	**29.866**	**8.176**	**21.690**	**1.026**	**80.891**	**8.434**	**8.066**	**97.480**
2011 Total	**60.531**	**8.269**	**9.155**	**77.955**	**28.748**	**10.373**	**18.375**	**.571**	**79.447**	**8.269**	**9.059**	**96.902**
2012 Total	**62.279**	**8.062**	**8.813**	**79.155**	**27.068**	**11.267**	**15.801**	**-.469**	**77.487**	**8.062**	**8.777**	**94.487**
2013 January	5.305	.746	.795	6.846	2.165	.885	1.280	.860	7.430	.746	.794	8.985
February	4.870	.642	.708	6.220	1.805	.854	.951	.845	6.649	.642	.710	8.016
March	5.371	.658	.772	6.801	2.027	1.020	1.007	.573	6.933	.658	.774	8.381
April	5.201	.593	.820	6.614	2.055	.905	1.150	-.245	6.091	.593	.822	7.519
May	5.396	.657	.860	6.913	2.137	.995	1.142	-.439	6.082	.657	.860	7.616
June	5.220	.694	.823	6.737	2.039	.958	1.081	-.099	6.179	.694	.828	7.719
July	5.496	.737	.813	7.046	2.168	1.014	1.154	.067	6.697	.737	.814	8.267
August	5.624	.745	.741	7.110	2.157	1.017	1.140	-.086	6.655	.745	.744	8.165
September	5.394	.688	.697	6.778	2.065	.955	1.110	-.252	6.227	.688	.704	7.636
October	5.471	.660	.741	6.872	2.017	1.062	.955	-.105	6.299	.660	.746	7.721
November	5.400	.679	.762	6.840	1.925	.983	.942	.353	6.678	.679	.761	8.135
December	5.426	.745	.800	6.971	2.066	1.139	.927	1.183	7.520	.745	.799	9.081
Total	**64.173**	**8.244**	**9.330**	**81.747**	**24.626**	**11.787**	**12.839**	**2.655**	**79.440**	**8.244**	**9.356**	**97.241**
2014 January	R 5.581	R .764	R .829	R 7.174	2.056	1.003	1.054	R 1.383	R 8.012	R .764	R .822	R 9.611
February	R 5.071	.655	R .710	R 6.436	1.797	.927	.870	R 1.135	R 7.071	.655	R .707	R 8.441
March	5.757	.652	R .859	R 7.268	1.975	1.092	.883	R .386	R 7.020	.652	R .854	R 8.537
April	R 5.647	.589	R .866	R 7.102	1.947	.975	.972	R -.512	R 6.100	.589	R .863	R 7.562
May	R 5.817	.658	R .861	R 7.335	1.977	1.016	.961	R -.643	6.122	.658	R .859	R 7.653
June	5.633	.712	R .859	R 7.204	1.827	1.018	.809	R -.228	R 6.205	.712	R .855	R 7.785
July	R 5.920	.752	R .825	R 7.497	1.993	1.064	.929	R -.192	R 6.645	.752	R .822	R 8.234
August	R 6.012	.743	R .759	R 7.514	1.970	1.064	.906	R -.201	R 6.697	.743	R .762	R 8.219
September	R 5.840	.706	R .715	R 7.261	1.887	.969	.918	R -.520	R 6.223	.706	R .714	7.658
October	R 6.069	.652	R .766	R 7.486	1.898	1.012	.886	R -.600	R 6.341	.652	R .767	R 7.773
November	R 5.864	.681	R .813	R 7.357	1.879	1.027	.852	R -.001	6.702	.681	R .809	R 8.208
December	R 6.156	.767	.831	R 7.754	2.016	1.142	.873	R .181	R 7.204	.767	R .823	R 8.808
Total	**R 69.367**	**R 8.330**	**R 9.692**	**R 87.389**	**23.221**	**12.308**	**10.913**	**R .188**	**80.341**	**R 8.330**	**R 9.656**	**R 98.491**
2015 January	R 6.102	.776	R .841	R 7.719	2.057	1.107	.950	R .652	R 7.700	.776	R .827	R 9.321
February	R 5.436	.663	R .778	R 6.877	1.830	1.029	.801	R .929	R 7.157	.663	R .773	R 8.607
March	R 6.106	.674	R .841	7.621	2.060	1.054	1.006	R -.176	R 6.922	.674	R .836	R 8.452
April	R 5.866	.624	R .830	R 7.321	1.904	1.123	.782	R -.634	5.996	.624	R .828	R 7.468
May	R 5.846	.688	R .822	R 7.356	1.988	1.130	.858	R -.567	R 6.116	.688	R .823	R 7.647
June	R 5.647	.716	R .783	R 7.146	1.947	1.049	.898	R -.149	R 6.373	.716	R .785	R 7.896
July	R 5.997	.746	R .812	R 7.554	2.015	R 1.112	R .903	R -.011	R 6.866	.746	R .813	R 8.446
August	R 6.134	.757	R .784	R 7.675	2.058	R 1.078	R .980	R -.313	R 6.775	.757	R .788	R 8.342
September	5.919	.695	.734	7.348	1.915	1.097	.818	-.467	6.244	.695	.740	7.699
9-Month Total	**53.053**	**6.340**	**7.225**	**66.617**	**17.775**	**9.779**	**7.996**	**-.736**	**60.148**	**6.340**	**7.212**	**73.877**
2014 9-Month Total	**51.279**	**6.230**	**7.283**	**64.792**	**17.429**	**9.127**	**8.302**	**.608**	**60.095**	**6.230**	**7.257**	**73.702**
2013 9-Month Total	**47.877**	**6.160**	**7.028**	**61.065**	**18.617**	**8.602**	**10.015**	**1.224**	**58.942**	**6.160**	**7.050**	**72.304**

[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.

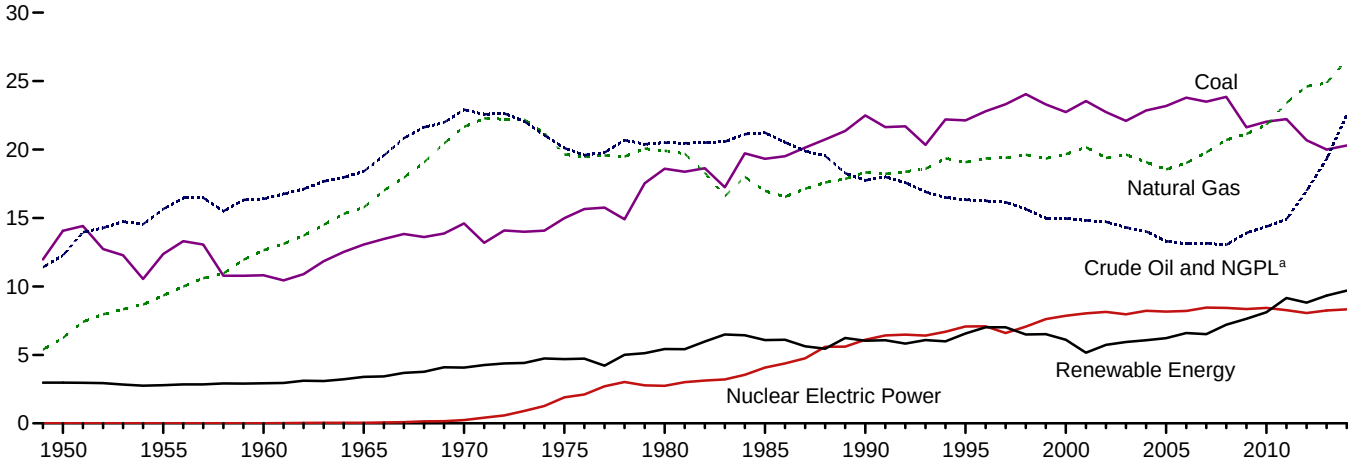
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

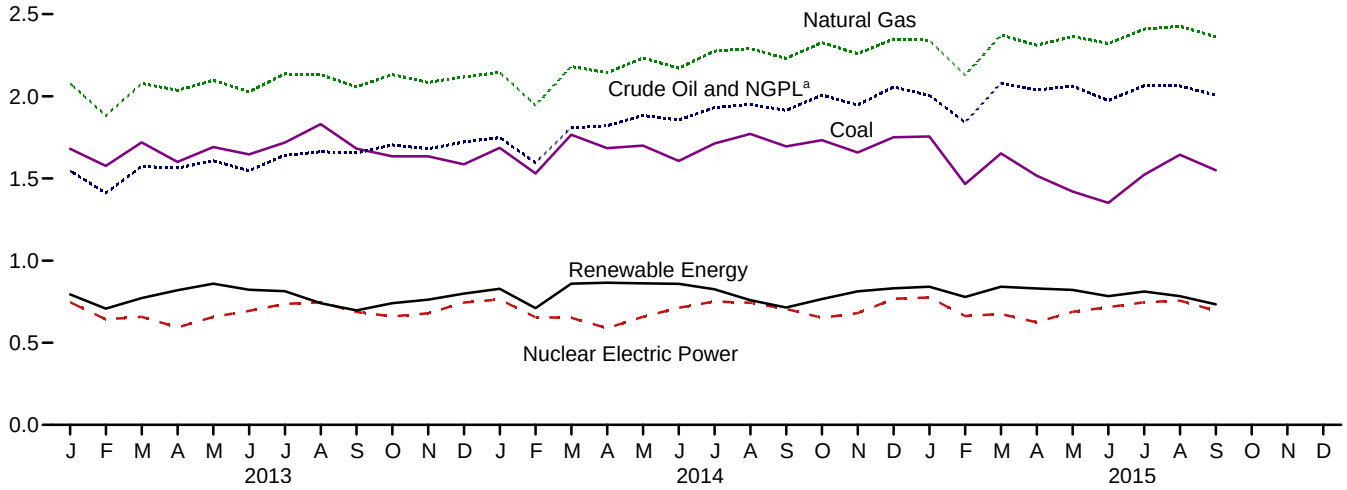
Sources: • **Production:** Table 1.2. • **Trade:** Tables 1.4a and 1.4b. • **Stock Change and Other:** Calculated as consumption minus production and net imports. • **Consumption:** Table 1.3.

Figure 1.2 Primary Energy Production
(Quadrillion Btu)

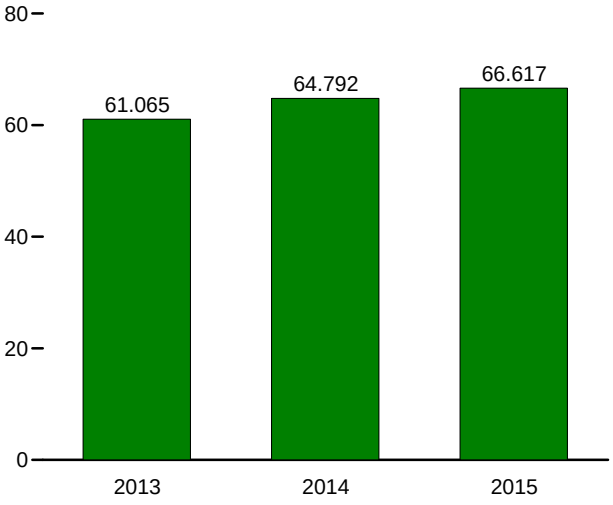
By Source, 1949–2014



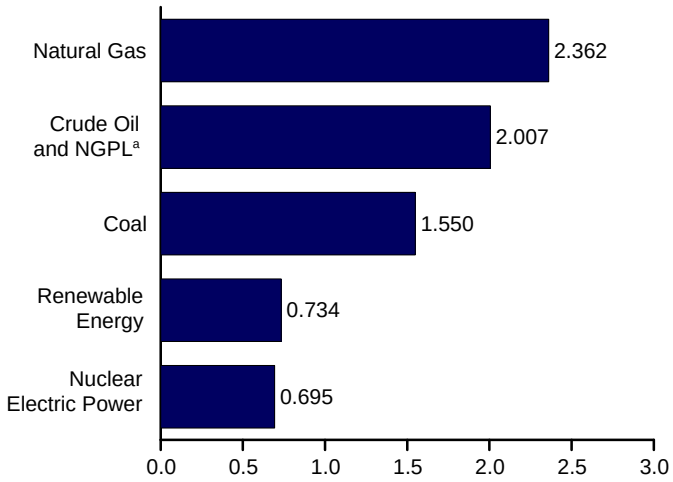
By Source, Monthly



Total, January–September



By Source, September 2015



[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	
1950 Total	**14.060**	**6.233**	**11.447**	**0.823**	**32.563**	**0.000**	**1.415**	**NA**	**NA**	**NA**	**1.562**	**2.978**	**35.540**
1955 Total	**12.370**	**9.345**	**14.410**	**1.240**	**37.364**	**.000**	**1.360**	**NA**	**NA**	**NA**	**1.424**	**2.784**	**40.148**
1960 Total	**10.817**	**12.656**	**14.935**	**1.461**	**39.869**	**.006**	**1.608**	**(s)**	**NA**	**NA**	**1.320**	**2.928**	**42.803**
1965 Total	**13.055**	**15.775**	**16.521**	**1.883**	**47.235**	**.043**	**2.059**	**.002**	**NA**	**NA**	**1.335**	**3.396**	**50.674**
1970 Total	**14.607**	**21.666**	**20.401**	**2.512**	**59.186**	**.239**	**2.634**	**.006**	**NA**	**NA**	**1.431**	**4.070**	**63.495**
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**
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**	**12.160**	**2.559**	**56.834**	**8.145**	**2.689**	**.171**	**.063**	**.105**	**2.705**	**5.734**	**70.713**
2003 Total	**22.094**	**19.633**	**11.960**	**2.346**	**56.033**	**7.960**	**2.793**	**.173**	**.062**	**.113**	**2.805**	**5.946**	**69.938**
2004 Total	**22.852**	**19.074**	**11.550**	**2.466**	**55.942**	**8.223**	**2.688**	**.178**	**.063**	**.142**	**2.996**	**6.067**	**70.232**
2005 Total	**23.185**	**18.556**	**10.974**	**2.334**	**55.049**	**8.161**	**2.703**	**.181**	**.063**	**.178**	**3.101**	**6.226**	**69.436**
2006 Total	**23.790**	**19.022**	**10.768**	**2.356**	**55.935**	**8.215**	**2.869**	**.181**	**.068**	**.264**	**3.212**	**6.594**	**70.744**
2007 Total	**23.493**	**19.786**	**10.749**	**2.409**	**56.436**	**8.459**	**2.446**	**.186**	**.076**	**.341**	**3.472**	**6.520**	**71.415**
2008 Total	**23.851**	**20.703**	**10.616**	**2.419**	**57.590**	**8.426**	**2.511**	**.192**	**.089**	**.546**	**3.868**	**7.206**	**73.223**
2009 Total	**21.624**	**21.139**	**11.335**	**2.574**	**56.672**	**8.355**	**2.669**	**.200**	**.098**	**.721**	**3.953**	**7.641**	**72.667**
2010 Total	**22.038**	**21.806**	**11.592**	**2.781**	**58.217**	**8.434**	**2.539**	**.208**	**.126**	**.923**	**4.316**	**8.112**	**74.764**
2011 Total	**22.221**	**23.406**	**11.934**	**2.970**	**60.531**	**8.269**	**3.103**	**.212**	**.171**	**1.168**	**4.501**	**9.155**	**77.955**
2012 Total	**20.677**	**24.610**	**13.747**	**3.246**	**62.279**	**8.062**	**2.629**	**.212**	**.227**	**1.340**	**4.406**	**8.813**	**79.155**
2013 January	1.681	2.078	1.273	.274	5.305	.746	.237	.019	.022	.141	.377	.795	6.846
February	1.576	1.882	1.152	.259	4.870	.642	.195	.017	.021	.134	.341	.708	6.220
March	1.720	2.078	1.288	.286	5.371	.658	.196	.019	.025	.150	.383	.772	6.801
April	1.600	2.037	1.283	.280	5.201	.593	.239	.017	.024	.167	.372	.820	6.614
May	1.692	2.098	1.313	.294	5.396	.657	.271	.018	.026	.155	.390	.860	6.913
June	1.646	2.027	1.264	.283	5.220	.694	.261	.017	.026	.131	.387	.823	6.737
July	1.718	2.136	1.340	.301	5.496	.737	.260	.018	.027	.106	.403	.813	7.046
August	1.831	2.131	1.349	.313	5.624	.745	.206	.018	.028	.092	.397	.741	7.110
September	1.681	2.057	1.345	.311	5.394	.688	.162	.018	.027	.111	.379	.697	6.778
October	1.635	2.132	1.385	.319	5.471	.660	.164	.018	.028	.130	.400	.741	6.872
November	1.635	2.085	1.374	.306	5.400	.679	.169	.017	.026	.151	.399	.762	6.840
December	1.586	2.118	1.416	.306	5.426	.745	.202	.018	.027	.133	.420	.800	6.971
Total	**20.001**	**24.859**	**15.781**	**3.532**	**64.173**	**8.244**	**2.562**	**.214**	**.305**	**1.601**	**4.647**	**9.330**	**81.747**
2014 January	1.686	2.146	R 1.438	.311	R 5.581	R .764	.206	R .018	.029	R .171	R .404	R .829	R 7.174
February	1.530	1.945	R 1.313	.283	R 5.071	.655	.166	R .016	R .027	R .134	R .367	R .710	R 6.436
March	1.766	2.182	R 1.482	.327	5.757	.652	.231	R .018	R .034	.169	R .406	R .859	R 7.268
April	1.684	2.143	R 1.491	.330	R 5.647	.589	R .243	.018	R .035	R .178	R .392	R .866	R 7.102
May	1.699	2.234	R 1.542	.341	R 5.817	.658	R .253	R .018	R .038	R .149	R .403	R .861	R 7.335
June	1.606	2.171	1.510	.346	5.633	.712	.246	.018	R .039	R .151	R .406	R .859	R 7.204
July	1.713	2.275	R 1.573	.359	R 5.920	.752	R .232	R .018	R .038	R .116	R .420	R .825	R 7.497
August	1.771	2.291	1.588	.363	R 6.012	.743	.189	R .018	R .039	.097	R .416	R .759	R 7.514
September	1.695	2.231	R 1.557	.357	R 5.840	.706	R .153	.018	R .038	.110	R .396	R .715	R 7.261
October	1.733	2.327	R 1.639	.369	R 6.069	.652	R .164	R .018	R .038	R .138	.407	R .766	R 7.486
November	1.659	2.259	R 1.599	.348	R 5.864	.681	R .178	R .018	.034	R .180	R .403	R .813	R 7.357
December	1.751	2.349	R 1.692	.364	R 6.156	.767	R .213	.019	.031	.140	R .428	.831	R 7.754
Total	**20.295**	**26.552**	**R 18.424**	**4.096**	**R 69.367**	**R 8.330**	**R 2.475**	**R .215**	**R .421**	**R 1.733**	**R 4.849**	**R 9.692**	**R 87.389**
2015 January	1.756	E 2.341	RE 1.662	.344	R 6.102	.776	R .235	R .020	.035	.146	R .405	R .841	R 7.719
February	1.467	E 2.129	RE 1.518	.323	R 5.436	.663	R .217	.018	.037	.143	R .364	R .778	R 6.877
March	1.652	E 2.373	RE 1.714	.367	R 6.106	.674	R .237	.019	.045	R .146	R .393	R .841	7.621
April	1.517	E 2.311	RE 1.668	.370	R 5.866	.624	R .215	.018	.048	.170	R .380	R .830	R 7.321
May	1.421	E 2.364	RE 1.687	.375	R 5.846	.688	R .193	.019	.049	R .164	R .397	R .822	R 7.356
June	1.351	E 2.321	RE 1.611	.364	R 5.647	.716	.191	.018	.049	.128	R .396	R .783	R 7.146
July	1.523	RE 2.409	RE 1.686	.379	R 5.997	.746	.201	.019	R .050	.130	R .411	R .812	R 7.554
August	1.644	RE 2.427	RE 1.680	.383	R 6.134	.757	R .185	.019	.051	.124	R .404	R .784	R 7.675
September	1.550	E 2.362	E 1.634	.373	5.919	.695	.155	.018	.045	.132	.384	.734	7.348
9-Month Total	**13.880**	**E 21.036**	**E 14.858**	**3.279**	**53.053**	**6.340**	**1.829**	**.169**	**.409**	**1.283**	**3.534**	**7.225**	**66.617**
2014 9-Month Total	**15.152**	**19.617**	**13.495**	**3.015**	**51.279**	**6.230**	**1.920**	**.160**	**.318**	**1.274**	**3.610**	**7.283**	**64.792**
2013 9-Month Total	**15.145**	**18.524**	**11.606**	**2.601**	**47.877**	**6.160**	**2.028**	**.160**	**.225**	**1.187**	**3.428**	**7.028**	**61.065**

[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.

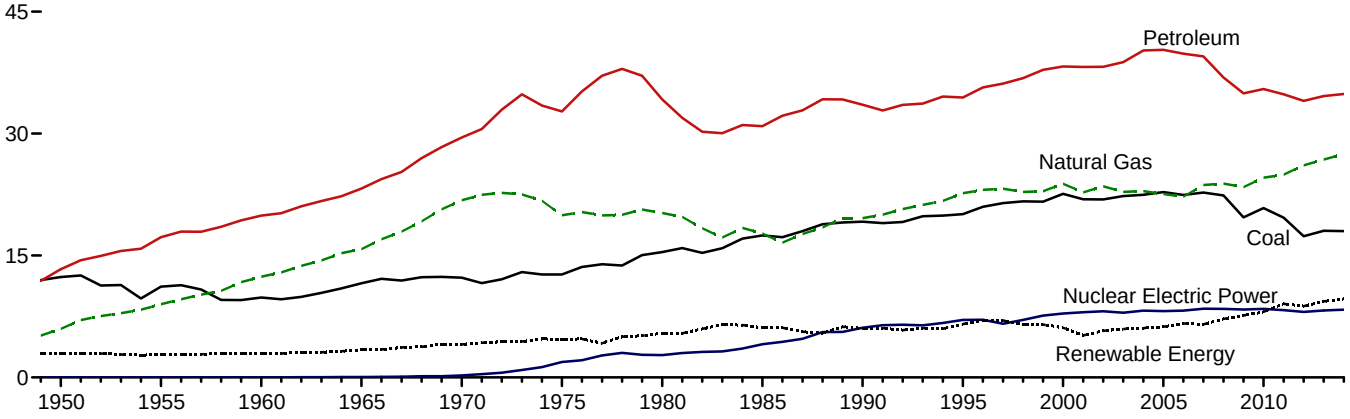
Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

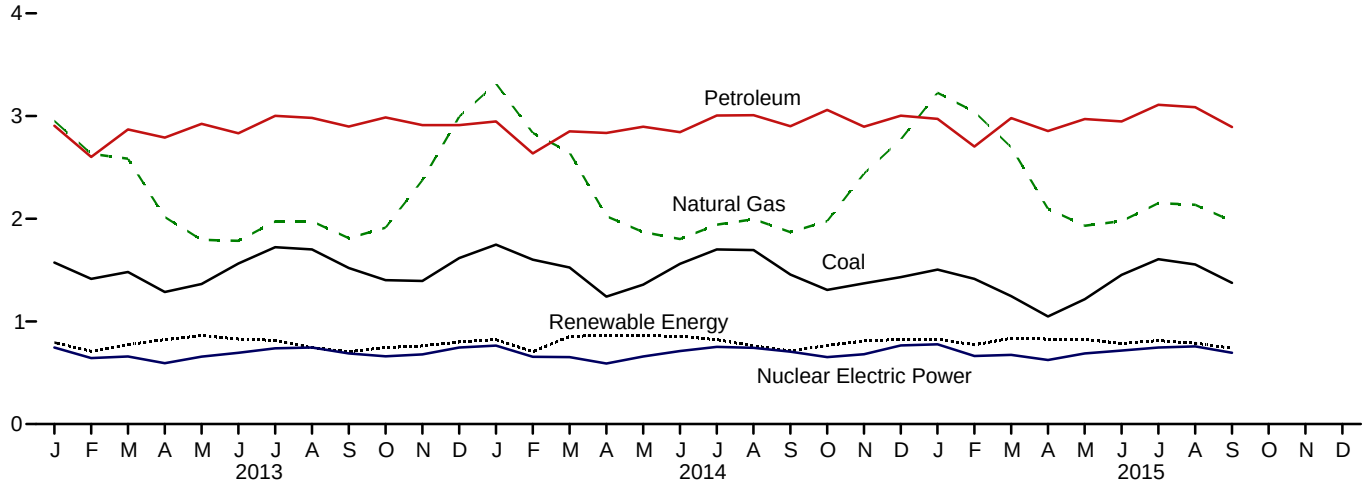
Sources: See end of section.

Figure 1.3 Primary Energy Consumption
(Quadrillion Btu)

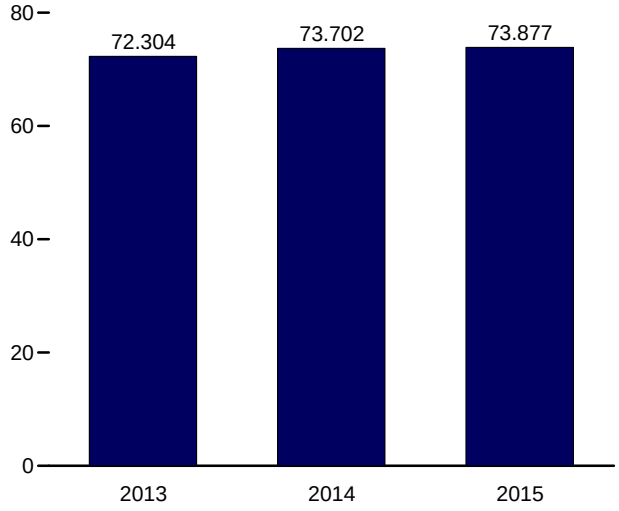
By Source,[a] 1949–2014



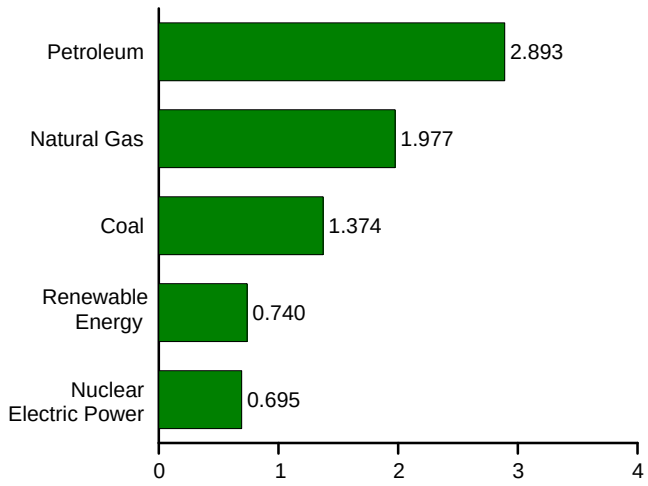
By Source,[a] Monthly



Total, January–September



By Source,[a] September 2015



[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]	Petro-leum[c]	Total[d]	Nuclear Electric Power	Hydro-electric Power[e]	Geo-thermal	Solar/ PV	Wind	Bio-mass	Total	Total[f]
1950 Total	**12.347**	**5.968**	**13.315**	**31.632**	**0.000**	**1.415**	**NA**	**NA**	**NA**	**1.562**	**2.978**	**34.616**
1955 Total	**11.167**	**8.998**	**17.255**	**37.410**	**.000**	**1.360**	**NA**	**NA**	**NA**	**1.424**	**2.784**	**40.208**
1960 Total	**9.838**	**12.385**	**19.919**	**42.137**	**.006**	**1.608**	**(s)**	**NA**	**NA**	**1.320**	**2.928**	**45.086**
1965 Total	**11.581**	**15.769**	**23.246**	**50.577**	**.043**	**2.059**	**.002**	**NA**	**NA**	**1.335**	**3.396**	**54.015**
1970 Total	**12.265**	**21.795**	**29.521**	**63.522**	**.239**	**2.634**	**.006**	**NA**	**NA**	**1.431**	**4.070**	**67.838**
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**	**34.441**	**77.262**	**7.075**	**3.205**	**.152**	**.069**	**.033**	**3.101**	**6.560**	**91.032**
2000 Total	**22.580**	**23.824**	**38.266**	**84.735**	**7.862**	**2.811**	**.164**	**.066**	**.057**	**3.008**	**6.106**	**98.819**
2001 Total	**21.914**	**22.773**	**38.190**	**82.906**	**8.029**	**2.242**	**.164**	**.064**	**.070**	**2.622**	**5.163**	**96.172**
2002 Total	**21.904**	**23.510**	**38.226**	**83.700**	**8.145**	**2.689**	**.171**	**.063**	**.105**	**2.701**	**5.729**	**97.647**
2003 Total	**22.321**	**22.831**	**38.790**	**83.992**	**7.960**	**2.793**	**.173**	**.062**	**.113**	**2.806**	**5.948**	**97.921**
2004 Total	**22.466**	**22.923**	**40.227**	**85.754**	**8.223**	**2.688**	**.178**	**.063**	**.142**	**3.008**	**6.079**	**100.094**
2005 Total	**22.797**	**22.565**	**40.303**	**85.709**	**8.161**	**2.703**	**.181**	**.063**	**.178**	**3.114**	**6.239**	**100.193**
2006 Total	**22.447**	**22.239**	**39.824**	**84.570**	**8.215**	**2.869**	**.181**	**.068**	**.264**	**3.262**	**6.645**	**99.492**
2007 Total	**22.749**	**23.663**	**39.491**	**85.928**	**8.459**	**2.446**	**.186**	**.076**	**.341**	**3.485**	**6.533**	**101.027**
2008 Total	**22.387**	**23.843**	**36.907**	**83.178**	**8.426**	**2.511**	**.192**	**.089**	**.546**	**3.851**	**7.189**	**98.906**
2009 Total	**19.691**	**23.416**	**34.959**	**78.042**	**8.355**	**2.669**	**.200**	**.098**	**.721**	**3.936**	**7.624**	**94.138**
2010 Total	**20.834**	**24.575**	**35.489**	**80.891**	**8.434**	**2.539**	**.208**	**.126**	**.923**	**4.270**	**8.066**	**97.480**
2011 Total	**19.658**	**24.955**	**34.824**	**79.447**	**8.269**	**3.103**	**.212**	**.171**	**1.168**	**4.405**	**9.059**	**96.902**
2012 Total	**17.378**	**26.089**	**34.016**	**77.487**	**8.062**	**2.629**	**.212**	**.227**	**1.340**	**4.369**	**8.777**	**94.487**
2013 January	1.572	2.952	2.906	7.430	.746	.237	.019	.022	.141	.376	.794	8.985
February	1.414	2.632	2.601	6.649	.642	.195	.017	.021	.134	.343	.710	8.016
March	1.481	2.584	2.870	6.933	.658	.196	.019	.025	.150	.385	.774	8.381
April	1.287	2.016	2.789	6.091	.593	.239	.017	.024	.167	.374	.822	7.519
May	1.364	1.795	2.923	6.082	.657	.271	.018	.026	.155	.390	.860	7.616
June	1.564	1.785	2.833	6.179	.694	.261	.017	.026	.131	.392	.828	7.719
July	1.723	1.974	3.002	6.697	.737	.260	.018	.027	.106	.403	.814	8.267
August	1.701	1.975	2.981	6.655	.745	.206	.018	.028	.092	.400	.744	8.165
September	1.520	1.810	2.898	6.227	.688	.162	.018	.027	.111	.387	.704	7.636
October	1.402	1.912	2.986	6.299	.660	.164	.018	.028	.130	.406	.746	7.721
November	1.394	2.375	2.912	6.678	.679	.169	.017	.026	.151	.398	.761	8.135
December	1.616	2.995	2.911	7.520	.745	.202	.018	.027	.133	.420	.799	9.081
Total	**18.039**	**26.805**	**34.613**	**79.440**	**8.244**	**2.562**	**.214**	**.305**	**1.601**	**4.673**	**9.356**	**97.241**
2014 January	R 1.748	3.317	2.948	R 8.012	R .764	.206	R .018	.029	R .171	R .397	R .822	R 9.611
February	1.601	R 2.835	2.636	R 7.071	.655	.166	R .016	R .027	R .134	R .364	R .707	R 8.441
March	1.525	R 2.645	2.851	R 7.020	.652	.231	R .018	R .034	.169	R .401	R .854	R 8.537
April	R 1.241	R 2.025	2.835	R 6.100	.589	R .243	.018	R .035	R .178	R .390	R .863	R 7.562
May	R 1.358	1.870	2.896	6.122	.658	R .253	R .018	R .038	R .149	R .401	R .859	R 7.653
June	R 1.560	R 1.803	2.843	R 6.205	.712	.246	.018	R .039	R .151	R .402	R .855	R 7.785
July	R 1.700	R 1.942	3.004	R 6.645	.752	R .232	R .018	R .038	R .116	R .417	R .822	R 8.234
August	1.695	R 1.996	3.009	R 6.697	.743	.189	R .018	R .039	.097	R .418	R .762	R 8.219
September	R 1.457	R 1.869	2.900	R 6.223	.706	R .153	.018	R .038	.110	R .394	R .714	7.658
October	R 1.307	1.976	3.059	R 6.341	.652	R .164	R .018	R .038	R .138	.408	R .767	R 7.773
November	R 1.370	R 2.439	2.896	6.702	.681	R .178	R .018	.034	R .180	R .399	R .809	R 8.208
December	R 1.432	R 2.772	3.003	R 7.204	.767	R .213	.019	.031	.140	R .420	R .823	R 8.808
Total	R **17.994**	R **27.488**	**34.881**	**80.341**	R **8.330**	R **2.475**	R **.215**	R **.421**	R **1.733**	R **4.812**	R **9.656**	R **98.491**
2015 January	R 1.504	R 3.226	2.972	R 7.700	.776	R .235	R .020	.035	.146	R .392	R .827	R 9.321
February	1.414	R 3.041	2.702	R 7.157	.663	R .217	.018	.037	.143	R .358	R .773	R 8.607
March	1.246	R 2.697	2.980	R 6.922	.674	R .237	.019	.045	R .146	R .388	R .836	R 8.452
April	1.048	2.096	2.854	5.996	.624	R .215	.018	.048	.170	R .377	R .828	R 7.468
May	R 1.216	R 1.931	2.971	R 6.116	.688	R .193	.019	.049	R .164	R .399	R .823	R 7.647
June	1.452	R 1.977	2.947	R 6.373	.716	.191	.018	.049	.128	R .398	R .785	R 7.896
July	R 1.606	R 2.151	3.110	R 6.866	.746	.201	.019	R .050	.130	R .412	R .813	R 8.446
August	R 1.555	R 2.136	3.086	R 6.775	.757	R .185	.019	.051	.124	R .408	R .788	R 8.342
September	1.374	1.977	2.893	6.244	.695	.155	.018	.045	.132	.390	.740	7.699
9-Month Total	**12.416**	**21.231**	**26.515**	**60.148**	**6.340**	**1.829**	**.169**	**.409**	**1.283**	**3.522**	**7.212**	**73.877**
2014 9-Month Total	**13.885**	**20.302**	**25.923**	**60.095**	**6.230**	**1.920**	**.160**	**.318**	**1.274**	**3.585**	**7.257**	**73.702**
2013 9-Month Total	**13.627**	**19.523**	**25.803**	**58.942**	**6.160**	**2.028**	**.160**	**.225**	**1.187**	**3.450**	**7.050**	**72.304**

[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.

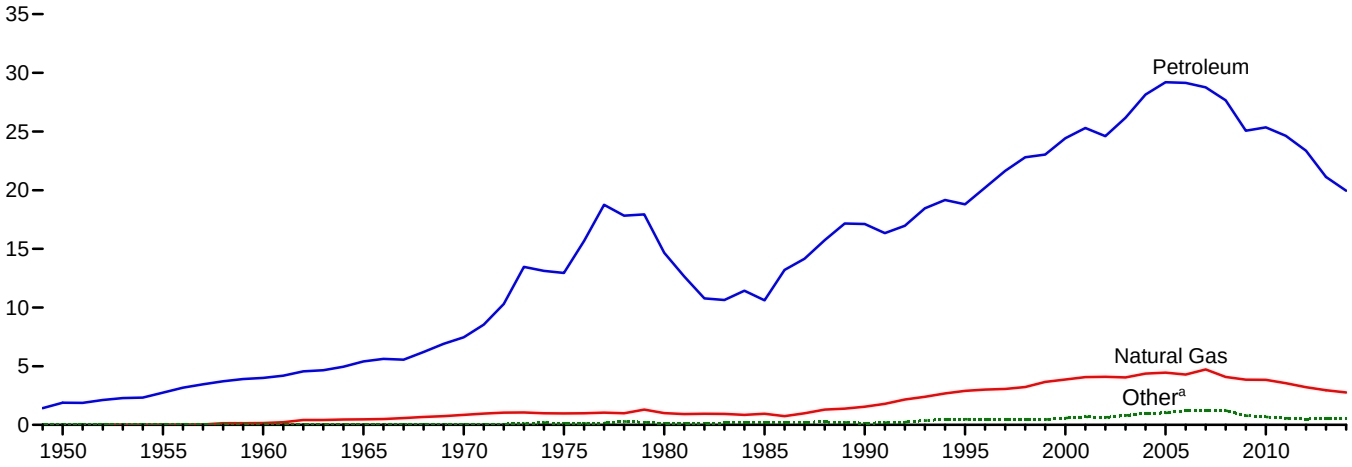
Notes: • See "Primary Energy Consumption" in Glossary. • See Table D1 for estimated energy consumption for 1635–1945. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

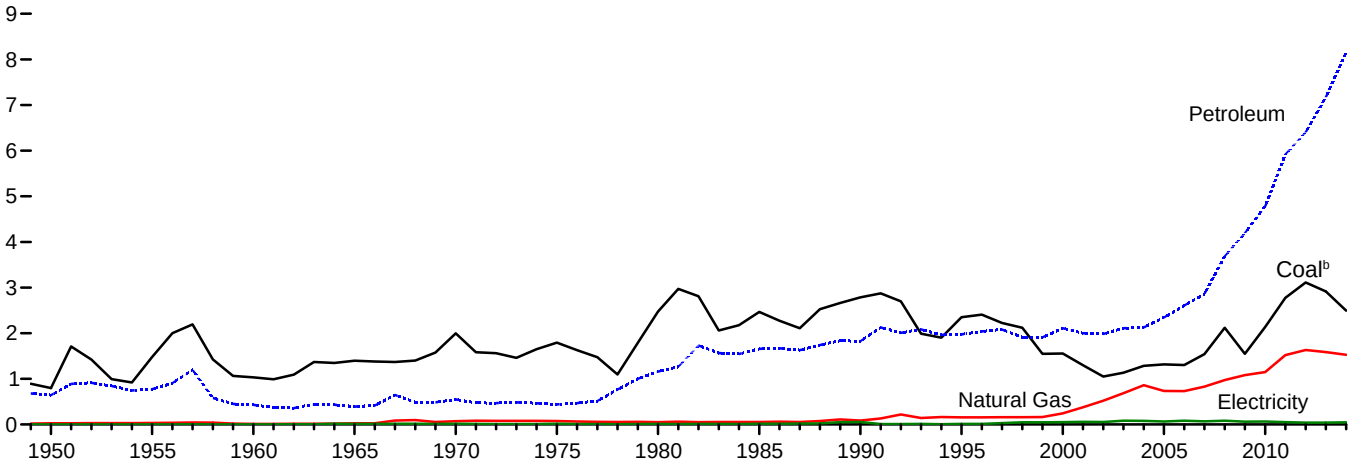
Sources: See end of section.

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

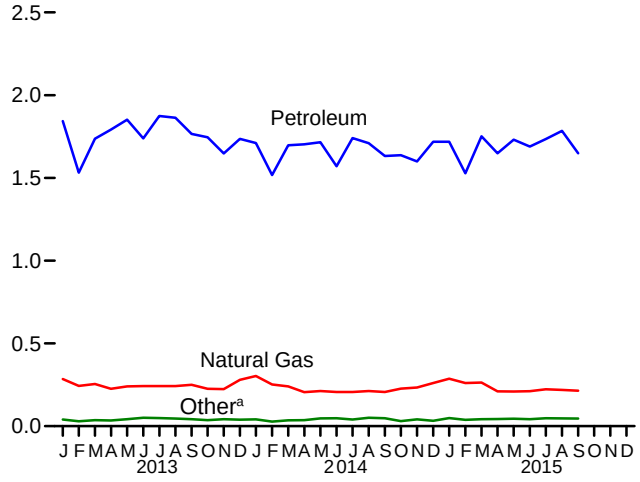
Imports by Source, 1949–2014



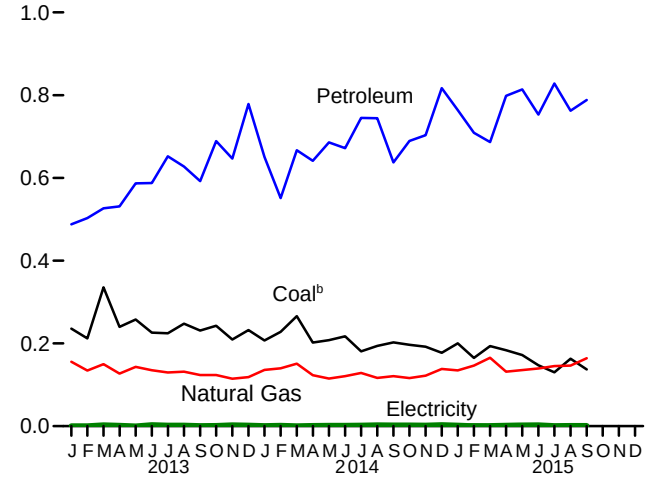
Exports by Source, 1949–2014



Imports by Source, Monthly



Exports by Major Source, Monthly



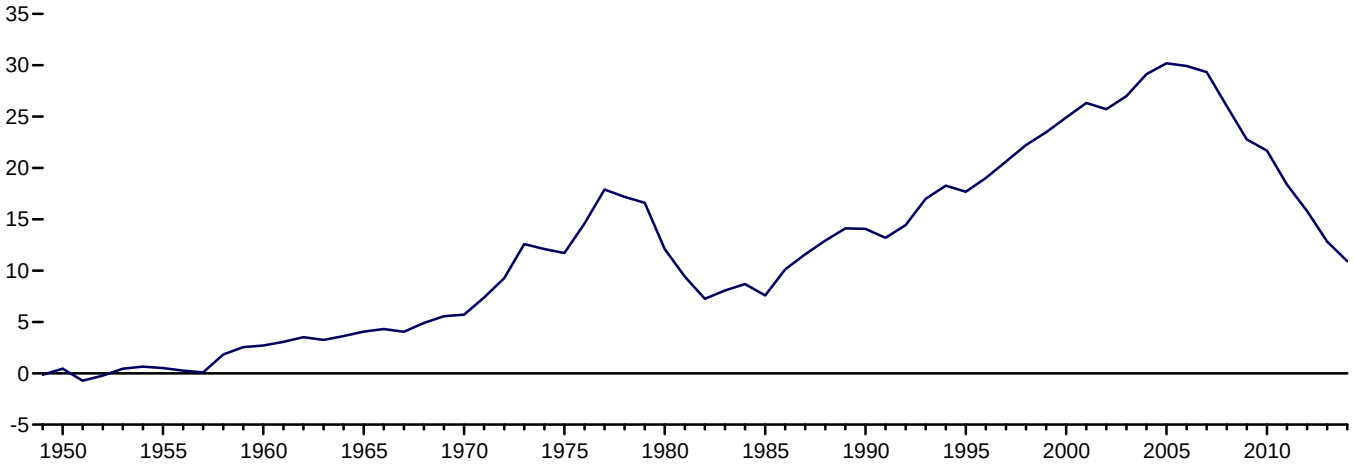
[a] Coal, coal coke, biofuels, and electricity.
[b] Includes coal coke.

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

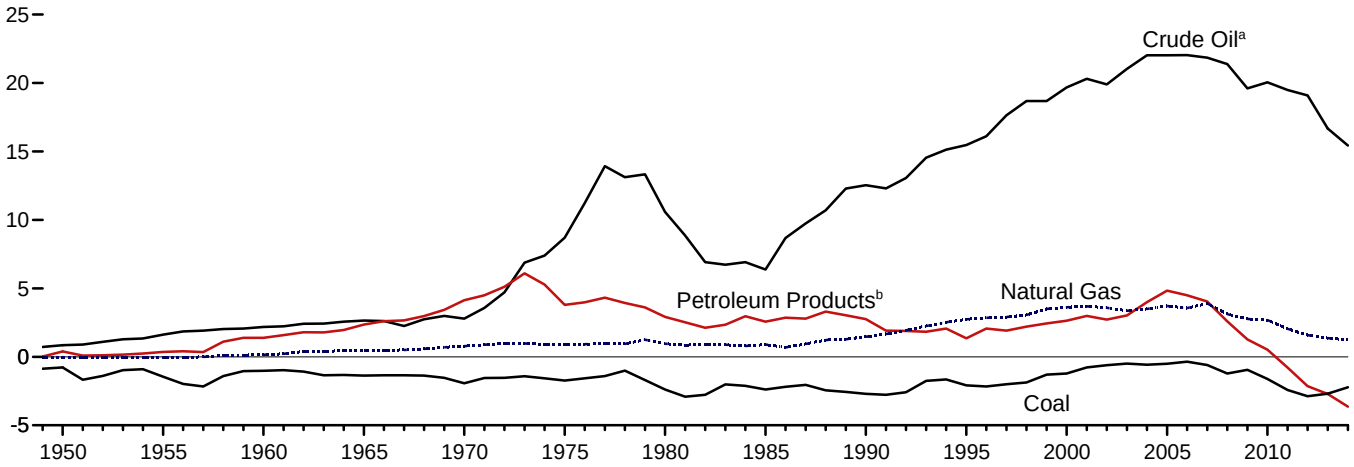
Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu)

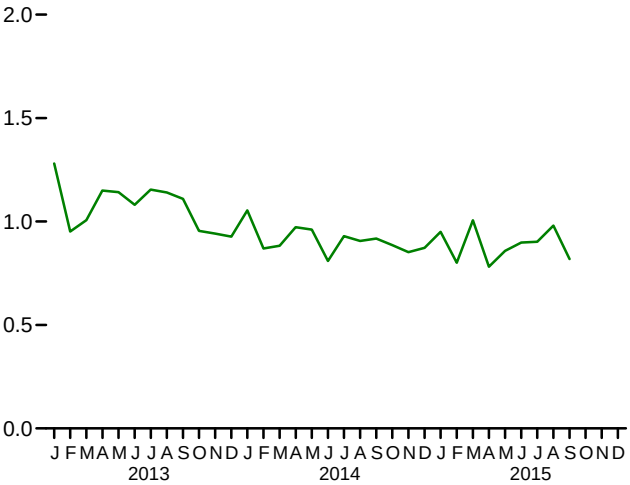
Total, 1949–2014



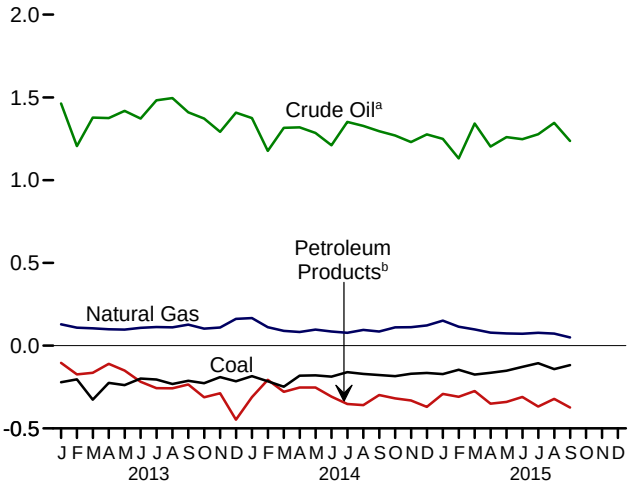
By Major Source, 1949–2014



Total, Monthly



By Major Source, Monthly



[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 1.4a 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
1950 Total	**0.009**	**0.011**	**0.000**	**1.056**	**0.830**	**1.886**	**NA**	**0.007**	**1.913**
1955 Total	**.008**	**.003**	**.011**	**1.691**	**1.061**	**2.752**	**NA**	**.016**	**2.790**
1960 Total	**.007**	**.003**	**.161**	**2.196**	**1.802**	**3.999**	**NA**	**.018**	**4.188**
1965 Total	**.005**	**.002**	**.471**	**2.654**	**2.748**	**5.402**	**NA**	**.012**	**5.892**
1970 Total	**.001**	**.004**	**.846**	**2.814**	**4.656**	**7.470**	**NA**	**.021**	**8.342**
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**	**3.131**	**18.800**	**.001**	**.146**	**22.180**
2000 Total	**.313**	**.094**	**3.869**	**19.783**	**4.641**	**24.424**	**(s)**	**.166**	**28.865**
2001 Total	**.495**	**.063**	**4.068**	**20.348**	**4.946**	**25.294**	**.002**	**.131**	**30.052**
2002 Total	**.422**	**.080**	**4.104**	**19.920**	**4.677**	**24.597**	**.002**	**.125**	**29.331**
2003 Total	**.626**	**.068**	**4.042**	**21.060**	**5.105**	**26.165**	**.002**	**.104**	**31.007**
2004 Total	**.682**	**.170**	**4.365**	**22.082**	**6.063**	**28.145**	**.013**	**.117**	**33.492**
2005 Total	**.762**	**.088**	**4.450**	**22.091**	**7.108**	**29.198**	**.012**	**.150**	**34.659**
2006 Total	**.906**	**.101**	**4.291**	**22.085**	**7.054**	**29.139**	**.066**	**.146**	**34.649**
2007 Total	**.909**	**.061**	**4.723**	**21.914**	**6.842**	**28.756**	**.055**	**.175**	**34.679**
2008 Total	**.855**	**.089**	**4.084**	**21.448**	**6.214**	**27.662**	**.085**	**.195**	**32.970**
2009 Total	**.566**	**.009**	**3.845**	**19.699**	**5.367**	**25.066**	**.027**	**.178**	**29.690**
2010 Total	**.484**	**.030**	**3.834**	**20.140**	**5.219**	**25.359**	**.004**	**.154**	**29.866**
2011 Total	**.327**	**.035**	**3.555**	**19.595**	**5.038**	**24.633**	**.019**	**.178**	**28.748**
2012 Total	**.212**	**.028**	**3.216**	**19.239**	**4.122**	**23.361**	**.049**	**.202**	**27.068**
2013 January	.015	(s)	.285	1.482	.361	1.843	.003	.020	2.165
February	.009	.001	.243	1.227	.304	1.531	.003	.018	1.805
March	.009	(s)	.254	1.397	.340	1.737	.007	.020	2.027
April	.015	(s)	.226	1.399	.393	1.792	.004	.017	2.055
May	.019	.001	.240	1.442	.410	1.852	.005	.020	2.137
June	.027	(s)	.243	1.394	.345	1.739	.010	.020	2.039
July	.020	(s)	.242	1.501	.373	1.874	.009	.023	2.168
August	.016	.001	.242	1.509	.354	1.863	.012	.023	2.157
September	.018	(s)	.250	1.429	.337	1.766	.011	.019	2.065
October	.016	(s)	.226	1.393	.353	1.746	.010	.019	2.017
November	.019	(s)	.224	1.336	.312	1.648	.014	.020	1.925
December	.017	(s)	.280	1.448	.288	1.736	.013	.020	2.066
Total	**.199**	**.003**	**2.955**	**16.957**	**4.169**	**21.126**	**.102**	**.240**	**24.626**
2014 January	.023	(s)	.303	1.420	.291	1.710	.003	.017	2.056
February	.013	(s)	.252	1.216	.300	1.517	.002	.014	1.797
March	.018	(s)	.240	1.361	.336	1.697	.003	.017	1.975
April	.020	(s)	.206	1.368	.335	1.703	.004	.015	1.947
May	.028	(s)	.212	1.341	.375	1.716	.005	.017	1.977
June	.030	.001	.207	1.280	.291	1.571	.002	.017	1.827
July	.020	(s)	.206	1.427	.313	1.740	.006	.020	1.993
August	.024	(s)	.212	1.398	.312	1.710	.004	.021	1.970
September	.025	(s)	.207	1.357	.276	1.633	.003	.019	1.887
October	.013	.001	.226	1.337	.300	1.637	.004	.017	1.898
November	.022	(s)	.233	1.321	.278	1.599	.005	.019	1.879
December	.013	(s)	.260	1.352	.367	1.719	.005	.019	2.016
Total	**.248**	**.002**	**2.763**	**16.178**	**3.773**	**19.951**	**.046**	**.210**	**23.221**
2015 January	.028	(s)	.286	1.338	.381	1.718	.003	.021	2.057
February	.019	(s)	.261	1.201	.326	1.528	.003	.019	1.830
March	.019	(s)	.264	1.417	.334	1.751	.004	.023	2.060
April	.019	(s)	.210	1.305	.344	1.649	.004	.022	1.904
May	.020	(s)	.209	1.355	.376	1.731	.005	.023	1.988
June	.018	(s)	.211	1.322	.366	1.689	.006	.023	1.947
July	.024	(s)	.223	1.371	.364	1.735	.009	.023	2.015
August	.021	(s)	.219	1.429	.355	1.784	.009	.024	2.058
September	.020	.002	.214	1.308	.341	1.649	.008	.023	1.915
9-Month Total	**.188**	**.002**	**2.098**	**12.047**	**3.188**	**15.235**	**.051**	**.201**	**17.775**
2014 9-Month Total	**.201**	**.001**	**2.043**	**12.168**	**2.829**	**14.996**	**.032**	**.156**	**17.429**
2013 9-Month Total	**.147**	**.003**	**2.225**	**12.780**	**3.216**	**15.996**	**.065**	**.181**	**18.617**

[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.

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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

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

(Quadrillion Btu)

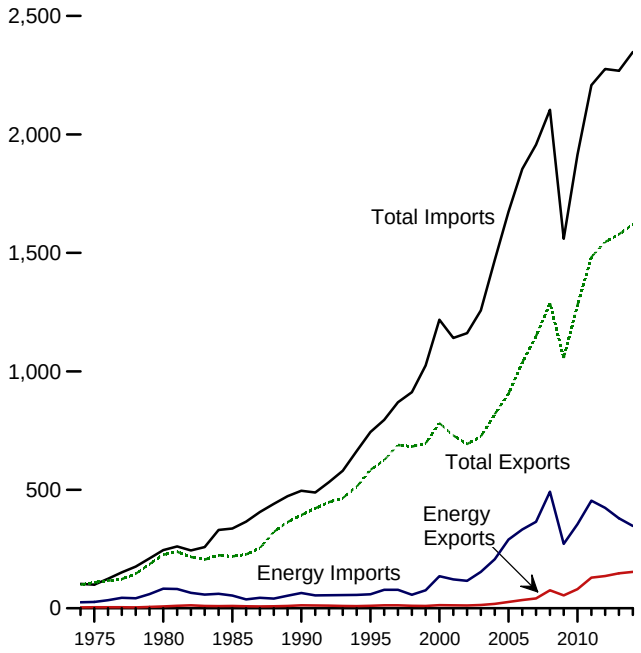
	Exports									Net Imports[a]
				Petroleum						
	Coal	Coal Coke	Natural Gas	Crude Oil[b]	Petroleum Products[c]	Total	Biofuels[d]	Electricity	Total	Total
1950 Total	**0.786**	**0.010**	**0.027**	**0.202**	**0.440**	**0.642**	**NA**	**0.001**	**1.465**	**0.448**
1955 Total	**1.465**	**.013**	**.032**	**.067**	**.707**	**.774**	**NA**	**.002**	**2.286**	**.504**
1960 Total	**1.023**	**.009**	**.012**	**.018**	**.413**	**.431**	**NA**	**.003**	**1.477**	**2.710**
1965 Total	**1.376**	**.021**	**.027**	**.006**	**.386**	**.392**	**NA**	**.013**	**1.829**	**4.063**
1970 Total	**1.936**	**.061**	**.072**	**.029**	**.520**	**.549**	**NA**	**.014**	**2.632**	**5.709**
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**	**1.776**	**1.976**	**NA**	**.012**	**4.496**	**17.684**
2000 Total	**1.528**	**.028**	**.245**	**.106**	**2.003**	**2.110**	**NA**	**.051**	**3.962**	**24.904**
2001 Total	**1.265**	**.033**	**.377**	**.043**	**1.956**	**1.999**	**(s)**	**.056**	**3.731**	**26.321**
2002 Total	**1.032**	**.020**	**.520**	**.019**	**1.963**	**1.982**	**(s)**	**.054**	**3.608**	**25.722**
2003 Total	**1.117**	**.018**	**.686**	**.026**	**2.083**	**2.110**	**.001**	**.082**	**4.013**	**26.994**
2004 Total	**1.253**	**.033**	**.862**	**.057**	**2.068**	**2.125**	**.001**	**.078**	**4.351**	**29.141**
2005 Total	**1.273**	**.043**	**.735**	**.067**	**2.276**	**2.344**	**.001**	**.065**	**4.462**	**30.197**
2006 Total	**1.264**	**.040**	**.730**	**.052**	**2.554**	**2.606**	**.005**	**.083**	**4.727**	**29.921**
2007 Total	**1.507**	**.036**	**.830**	**.058**	**2.803**	**2.861**	**.036**	**.069**	**5.338**	**29.341**
2008 Total	**2.071**	**.049**	**.972**	**.061**	**3.626**	**3.686**	**.089**	**.083**	**6.949**	**26.021**
2009 Total	**1.515**	**.032**	**1.082**	**.093**	**4.101**	**4.194**	**.035**	**.062**	**6.920**	**22.770**
2010 Total	**2.101**	**.036**	**1.147**	**.088**	**4.691**	**4.780**	**.047**	**.065**	**8.176**	**21.690**
2011 Total	**2.751**	**.024**	**1.519**	**.100**	**5.820**	**5.919**	**.108**	**.051**	**10.373**	**18.375**
2012 Total	**3.087**	**.024**	**1.633**	**.143**	**6.261**	**6.404**	**.078**	**.041**	**11.267**	**15.801**
2013 January	.236	.001	.156	.020	.465	.484	.005	.004	.885	1.280
February	.212	.001	.134	.021	.478	.500	.004	.003	.854	.951
March	.336	.003	.150	.019	.504	.523	.005	.003	1.020	1.007
April	.240	.002	.127	.024	.503	.527	.005	.004	.905	1.150
May	.258	(s)	.143	.023	.560	.584	.006	.003	.995	1.142
June	.226	.003	.135	.022	.563	.585	.006	.003	.958	1.081
July	.225	.002	.130	.019	.630	.649	.005	.003	1.014	1.154
August	.248	.002	.131	.013	.612	.625	.008	.003	1.017	1.140
September	.231	.001	.124	.018	.571	.590	.007	.002	.955	1.110
October	.242	.001	.124	.021	.664	.686	.006	.003	1.062	.955
November	.209	.003	.115	.044	.600	.644	.010	.003	.983	.942
December	.232	.002	.118	.040	.735	.775	.008	.004	1.139	.927
Total	**2.895**	**.021**	**1.587**	**.284**	**6.886**	**7.170**	**.076**	**.039**	**11.787**	**12.839**
2014 January	.207	.001	.136	.045	.602	.646	.008	.004	1.003	1.054
February	.228	.002	.140	.040	.507	.547	.006	.004	.927	.870
March	.266	.001	.151	.045	.615	.660	.008	.007	1.092	.883
April	.202	.001	.123	.049	.588	.637	.007	.005	.975	.972
May	.208	.002	.115	.055	.628	.683	.006	.003	1.016	.961
June	.217	.002	.121	.069	.600	.668	.006	.004	1.018	.809
July	.181	.002	.128	.076	.666	.741	.007	.004	1.064	.929
August	.194	.003	.116	.070	.671	.741	.006	.003	1.064	.906
September	.202	.003	.121	.061	.574	.635	.005	.003	.969	.918
October	.197	.002	.116	.068	.618	.686	.007	.003	1.012	.886
November	.192	.002	.122	.091	.610	.700	.008	.003	1.027	.852
December	.177	.003	.138	.076	.737	.813	.007	.004	1.142	.873
Total	**2.472**	**.023**	**1.528**	**.744**	**7.414**	**8.158**	**.081**	**.046**	**12.308**	**10.913**
2015 January	.200	.002	.135	.088	.673	.761	.006	.003	1.107	.950
February	.165	.001	.146	.070	.635	.704	.007	.005	1.029	.801
March	.193	.001	.165	.075	.608	.683	.008	.003	1.054	1.006
April	.183	.002	.132	.102	.694	.796	.007	.002	1.123	.782
May	.172	.003	.135	.095	.716	.812	.007	.002	1.130	.858
June	.147	.003	.139	.075	.676	.751	.006	.002	1.049	.898
July	.130	.001	R .145	.095	.731	.826	.008	.002	R 1.112	R .903
August	.163	.001	R .146	.083	.677	.760	.006	.002	R 1.078	R .980
September	.137	.002	.164	.071	.715	.786	.006	.002	1.097	.818
9-Month Total	**1.491**	**.015**	**1.308**	**.754**	**6.125**	**6.879**	**.061**	**.024**	**9.779**	**7.996**
2014 9-Month Total	**1.906**	**.016**	**1.152**	**.510**	**5.449**	**5.959**	**.059**	**.036**	**9.127**	**8.302**
2013 9-Month Total	**2.211**	**.015**	**1.230**	**.179**	**4.887**	**5.066**	**.052**	**.029**	**8.602**	**10.015**

[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.

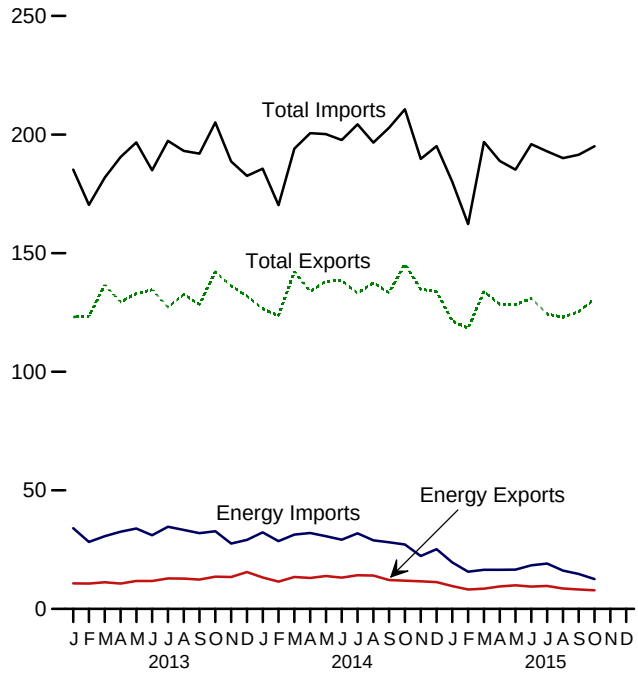
Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.
Sources: See end of section.

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

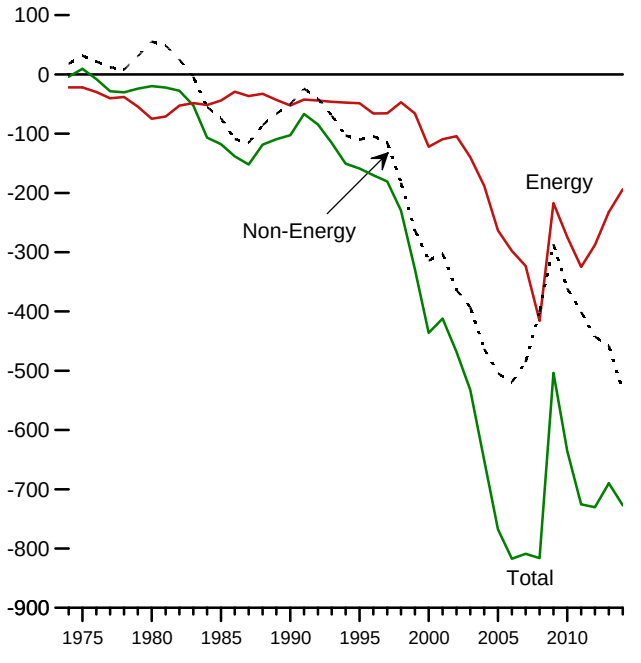
Imports and Exports, 1974–2014



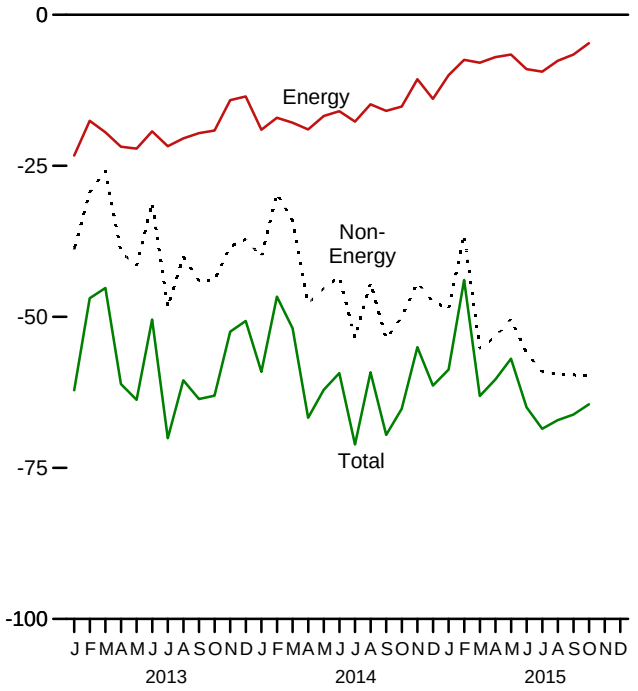
Imports and Exports, Monthly



Trade Balance, 1974–2014



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**
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 Total	**64,753**	**333,472**	**-268,719**	**80,625**	**354,982**	**-274,357**	**-361,005**	**1,278,495**	**1,913,857**	**-635,362**
2011 Total	**[b]102,180**	**[b]431,866**	**[b]-329,686**	**128,989**	**453,839**	**-324,850**	**-400,597**	**1,482,508**	**2,207,954**	**-725,447**
2012 Total	**111,951**	**408,509**	**-296,558**	**136,054**	**423,862**	**-287,808**	**-442,638**	**1,545,821**	**2,276,267**	**-730,446**
2013 January	8,787	32,448	-23,661	10,747	34,049	-23,302	-38,832	123,053	185,186	-62,134
February	9,027	26,828	-17,801	10,724	28,256	-17,532	-29,388	123,439	170,359	-46,920
March	8,909	29,265	-20,356	11,235	30,687	-19,452	-25,769	136,635	181,856	-45,221
April	8,586	31,204	-22,618	10,670	32,518	-21,848	-39,273	129,438	190,559	-61,121
May	9,679	32,590	-22,911	11,754	33,916	-22,162	-41,562	132,965	196,689	-63,724
June	9,851	29,673	-19,822	11,755	31,047	-19,292	-31,136	134,528	184,956	-50,428
July	10,860	33,327	-22,467	12,876	34,625	-21,749	-48,350	127,268	197,367	-70,099
August	10,817	32,044	-21,227	12,808	33,274	-20,466	-40,028	132,574	193,069	-60,494
September	10,398	30,754	-20,356	12,367	31,963	-19,596	-43,994	128,387	191,977	-63,590
October	11,495	31,590	-20,095	13,620	32,781	-19,161	-43,894	142,076	205,130	-63,055
November	11,375	26,226	-14,851	13,428	27,559	-14,131	-38,324	136,191	188,647	-52,455
December	13,434	27,192	-13,758	15,555	29,083	-13,528	-37,160	131,887	182,575	-50,688
Total	**123,218**	**363,141**	**-239,923**	**147,539**	**379,758**	**-232,219**	**-457,712**	**1,578,439**	**2,268,370**	**-689,931**
2014 January	10,994	29,460	-18,466	13,242	32,260	-19,018	-40,080	126,517	185,615	-59,098
February	9,157	25,711	-16,554	11,515	28,561	-17,046	-29,603	123,591	170,240	-46,649
March	10,656	28,912	-18,256	13,454	31,311	-17,857	-34,033	142,184	194,074	-51,890
April	10,395	30,519	-20,124	13,041	32,016	-18,975	-47,733	133,875	200,582	-66,708
May	11,386	29,201	-17,815	13,895	30,655	-16,760	-45,300	138,122	200,182	-62,060
June	11,093	27,668	-16,575	13,214	29,166	-15,952	-43,367	138,358	197,677	-59,319
July	12,032	30,447	-18,415	14,221	31,891	-17,670	-53,454	133,198	204,322	-71,124
August	12,032	27,585	-15,553	14,096	28,901	-14,805	-44,369	137,420	196,594	-59,174
September	9,983	26,778	-16,795	12,165	28,079	-15,914	-53,613	133,360	202,887	-69,527
October	9,776	25,875	-16,099	11,928	27,122	-15,194	-50,020	145,436	210,650	-65,214
November	9,924	20,859	-10,935	11,649	22,309	-10,660	-44,347	134,726	189,733	-55,007
December	9,500	23,700	-14,200	11,276	25,206	-13,930	-47,454	133,746	195,129	-61,384
Total	**126,928**	**326,715**	**-199,787**	**153,696**	**347,477**	**-193,781**	**-533,372**	**1,620,532**	**2,347,685**	**-727,153**
2015 January	7,939	18,094	-10,155	9,622	19,614	-9,992	-48,724	121,398	180,113	-58,716
February	6,705	13,737	-7,033	8,227	15,694	-7,466	-36,433	118,348	162,246	-43,899
March	6,824	15,019	-8,195	8,538	16,467	-7,929	-55,173	133,785	196,886	-63,102
April	7,791	15,549	-7,758	9,480	16,485	-7,005	-53,362	128,505	188,872	-60,367
May	8,341	15,552	-7,211	9,966	16,550	-6,584	-50,348	128,259	185,191	-56,932
June	8,021	17,474	-9,453	9,421	18,406	-8,985	-55,954	130,994	195,933	-64,939
July	8,339	18,079	-9,740	9,699	19,125	-9,426	-59,101	124,391	192,918	-68,527
August	7,144	15,192	-8,048	8,575	16,187	-7,612	-59,472	123,011	190,095	-67,084
September	6,846	13,836	-6,990	8,198	14,768	-6,570	[R] -59,596	[R] 125,281	[R] 191,447	[R] -66,166
October	6,510	11,662	-5,152	7,884	12,597	-4,713	-59,770	130,603	195,086	-64,483
10-Month Total	**74,460**	**154,195**	**-79,734**	**89,610**	**165,894**	**-76,283**	**-537,932**	**1,264,576**	**1,878,789**	**-614,213**
2014 10-Month Total	**107,504**	**282,156**	**-174,652**	**130,772**	**299,962**	**-169,191**	**-441,572**	**1,352,060**	**1,962,823**	**-610,763**
2013 10-Month Total	**98,501**	**309,731**	**-211,314**	**118,644**	**323,123**	**-204,560**	**-382,226**	**1,310,361**	**1,897,149**	**-586,788**

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

[b] Through 2010, data are for crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels. Beginning in 2011, data are for petroleum products and preparations.

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

R=Revised.

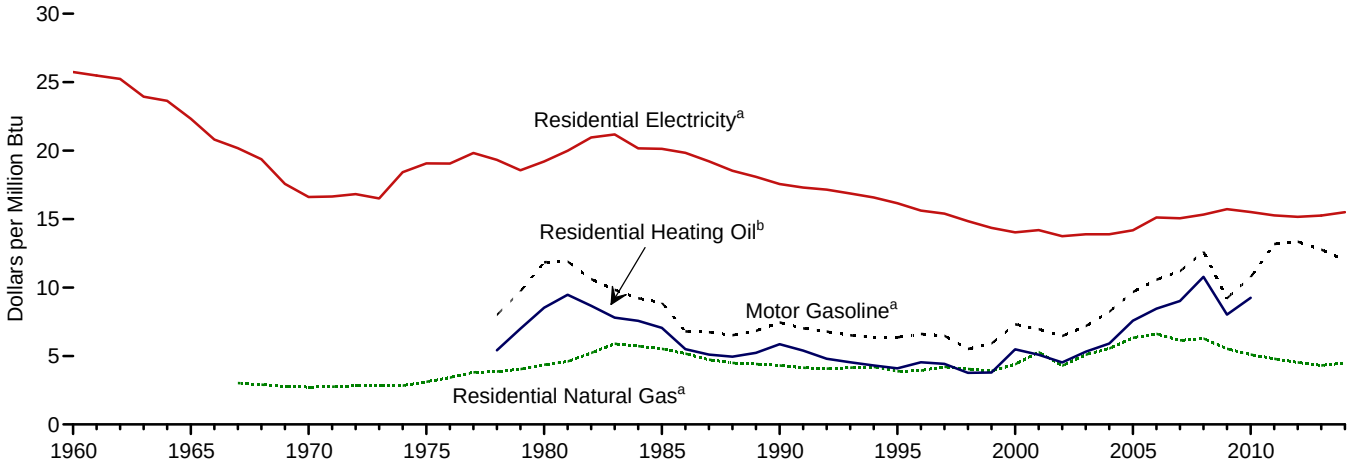
Notes: • Monthly data are not adjusted for seasonal variations. • See Note, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries 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 (Excel and CSV files) for all available annual and monthly data beginning in 1974.

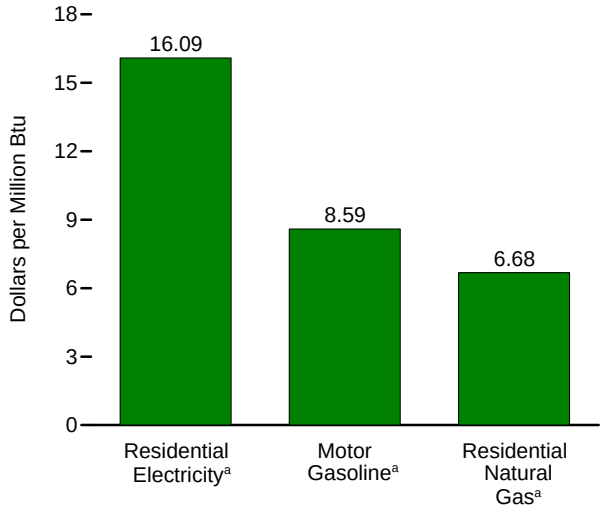
Sources: See end of section.

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

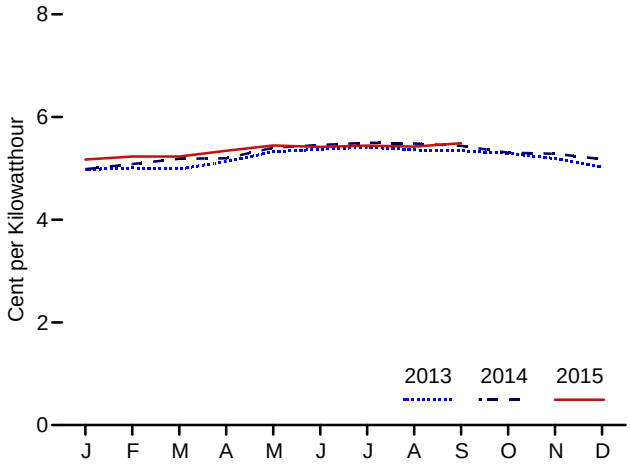
Costs, 1960–2014



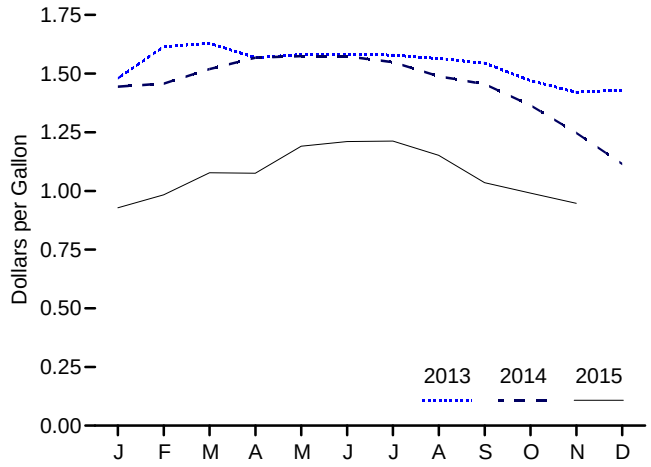
Costs, September 2015



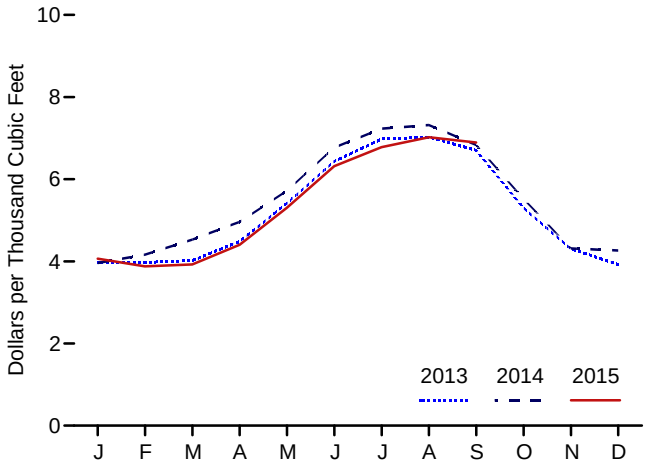
Residential Electricity,[a] Monthly



Motor Gasoline,[a] Monthly



Residential Natural Gas,[a] Monthly



[a] Includes taxes.
[b] Excludes taxes.
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
1960 Average	**29.6**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**8.8**	**25.74**
1965 Average	**31.5**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**7.6**	**22.33**
1970 Average	**38.8**	**NA**	**NA**	**NA**	**NA**	**2.81**	**2.72**	**5.7**	**16.62**
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**	**6.36**	**0.569**	**4.10**	**3.98**	**3.87**	**5.51**	**16.15**
2000 Average	**172.2**	**0.908**	**7.31**	**0.761**	**5.49**	**4.51**	**4.39**	**4.79**	**14.02**
2001 Average	**177.1**	**0.864**	**6.96**	**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**	**7.19**	**0.736**	**5.31**	**5.23**	**5.09**	**4.74**	**13.89**
2004 Average	**188.9**	**1.018**	**8.22**	**0.819**	**5.91**	**5.69**	**5.55**	**4.74**	**13.89**
2005 Average	**195.3**	**1.197**	**9.67**	**1.051**	**7.58**	**6.50**	**6.33**	**4.84**	**14.18**
2006 Average	**201.6**	**1.307**	**10.58**	**1.173**	**8.46**	**6.81**	**6.63**	**5.16**	**15.12**
2007 Average	**207.342**	**1.374**	**11.20**	**1.250**	**9.01**	**6.31**	**6.14**	**5.14**	**15.05**
2008 Average	**215.303**	**1.541**	**12.62**	**1.495**	**10.78**	**6.45**	**6.28**	**5.23**	**15.33**
2009 Average	**214.537**	**1.119**	**9.21**	**1.112**	**8.02**	**5.66**	**5.52**	**5.37**	**15.72**
2010 Average	**218.056**	**1.301**	**10.76**	**1.283**	**9.25**	**5.22**	**5.11**	**5.29**	**15.51**
2011 Average	**224.939**	**1.590**	**13.18**	**NA**	**NA**	**4.90**	**4.80**	**5.21**	**15.27**
2012 Average	**229.594**	**1.609**	**13.35**	**NA**	**NA**	**4.64**	**4.53**	**5.17**	**15.17**
2013 January	230.280	1.480	12.28	NA	NA	3.97	3.87	4.98	14.59
February	232.166	1.614	13.39	NA	NA	3.98	3.87	5.01	14.68
March	232.773	1.629	13.52	NA	NA	4.02	3.91	4.99	14.62
April	232.531	1.568	13.01	NA	NA	4.49	4.36	5.13	15.04
May	232.945	1.581	13.11	NA	NA	5.41	5.27	5.32	15.60
June	233.504	1.582	13.12	NA	NA	6.43	6.26	5.37	15.74
July	233.596	1.578	13.10	NA	NA	6.98	6.79	5.42	15.87
August	233.877	1.564	12.98	NA	NA	7.03	6.83	5.36	15.70
September	234.149	1.544	12.81	NA	NA	6.70	6.52	5.34	15.66
October	233.546	1.470	12.20	NA	NA	5.30	5.16	5.29	15.51
November	233.069	1.420	11.78	NA	NA	4.31	4.19	5.19	15.22
December	233.049	1.430	11.87	NA	NA	3.92	3.82	5.03	14.74
Average	**232.957**	**1.538**	**12.76**	**NA**	**NA**	**4.43**	**4.31**	**5.21**	**15.26**
2014 January	233.916	1.444	11.99	NA	NA	3.96	3.84	4.98	R 14.61
February	234.781	1.458	12.10	NA	NA	4.16	4.03	R 5.09	R 14.91
March	236.293	1.519	12.61	NA	NA	4.53	4.39	R 5.19	R 15.21
April	237.072	1.568	13.01	NA	NA	4.96	4.81	R 5.20	R 15.23
May	237.900	1.574	13.07	NA	NA	5.72	5.54	5.40	R 15.83
June	238.343	1.573	13.06	NA	NA	6.77	6.56	5.45	R 15.99
July	238.250	1.549	12.86	NA	NA	7.23	7.01	R 5.50	R 16.11
August	237.852	1.488	12.35	NA	NA	7.32	7.09	R 5.48	R 16.07
September	238.031	1.455	12.08	NA	NA	6.84	6.62	5.44	R 15.95
October	237.433	1.365	11.33	NA	NA	5.52	5.35	R 5.31	R 15.55
November	236.151	1.247	10.35	NA	NA	4.32	4.18	5.28	R 15.49
December	234.812	1.115	9.25	NA	NA	4.26	4.13	R 5.18	R 15.18
Average	**236.736**	**1.447**	**12.01**	**NA**	**NA**	**4.63**	**4.49**	R **5.29**	R **15.50**
2015 January	233.707	0.929	7.71	NA	NA	4.07	3.94	R 5.17	R 15.16
February	234.722	0.983	8.16	NA	NA	3.88	3.76	R 5.23	R 15.33
March	236.119	1.077	8.94	NA	NA	3.93	3.80	5.23	15.33
April	236.599	1.076	8.93	NA	NA	4.40	4.27	5.34	15.66
May	237.805	1.191	9.88	NA	NA	5.30	5.14	5.45	15.96
June	238.638	1.211	10.05	NA	NA	6.32	6.12	5.42	15.88
July	238.654	1.212	10.06	NA	NA	6.78	6.57	5.44	R 15.95
August	238.316	1.152	9.56	NA	NA	7.02	6.80	5.43	15.90
September	237.945	1.035	8.59	NA	NA	R 6.89	R 6.68	R 5.49	R 16.09
October	237.838	0.991	8.23	NA	NA	NA	NA	NA	NA
November	237.336	0.948	7.87	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.

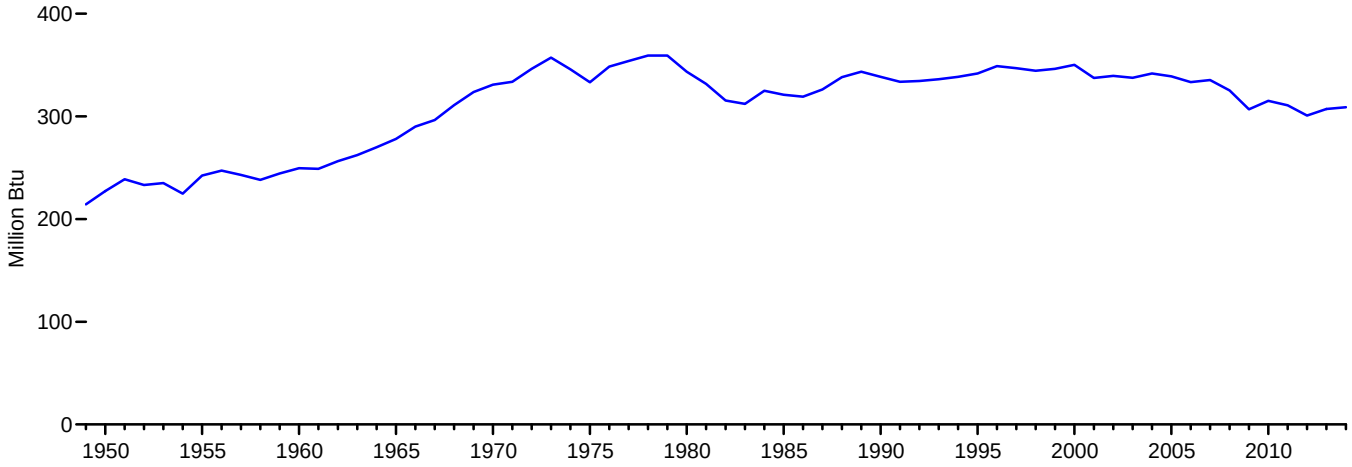
Notes: • See "Real Dollars" in Glossary. • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1995.

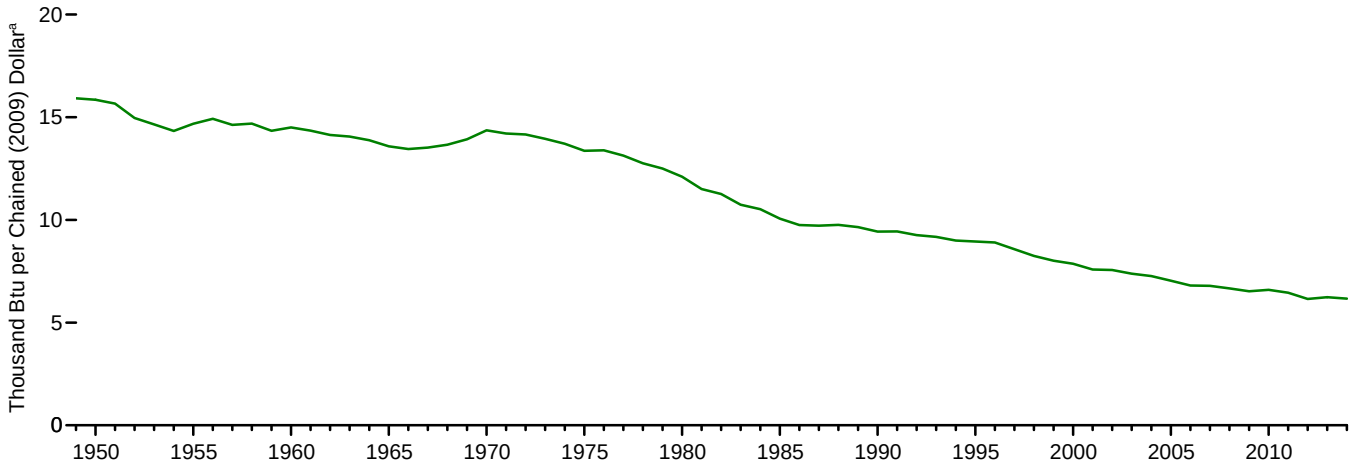
Sources: • **Fuel Prices:** Tables 9.4 (All Grades), 9.8, and 9.10, adjusted by the CPI; and *Monthy Energy Review,* September 2012, Table 9.8c. • **Consumer Price Index, All Urban Consumers:** U.S. Department of Labor, Bureau of Labor Statistics, series ID CUUR0000SA0. • **Conversion Factors:** Tables A1, A3, A4, and A6.

Figure 1.7 Primary Energy Consumption and Energy Expenditures Indicators

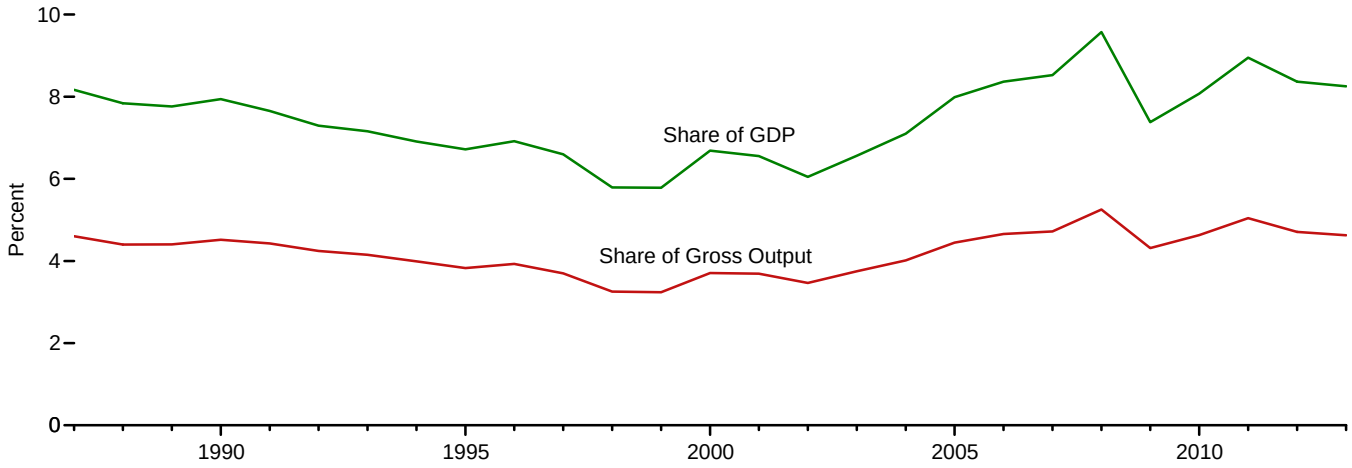
Energy Consumption per Capita, 1949–2014



Primary Energy Consumption per Real Dollar [a] of Gross Domestic Product, 1949–2014



Energy Expenditures as Share of Gross Domestic Product and Gross Output,[b] 1987–2013



[a] See "Chained Dollars" and "Real Dollars" in Glossary.
[b] Gross output is the value of gross domestic product (GDP) plus the value of intermediate inputs used to produce GDP.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.7.

Table 1.7 Primary Energy Consumption, Energy Expenditures, and Carbon Dioxide Emissions Indicators

	Primary Energy Consumption[a]			Energy Expenditures[b]				Carbon Dioxide Emissions[c]		
	Consumption	Consumption per Capita	Consumption per Real Dollar[d] of GDP[e]	Expenditures	Expenditures per Capita	Expenditures as Share of GDP[e]	Expenditures as Share of Gross Output[f]	Emissions	Emissions per Capita	Emissions per Real Dollar[d] of GDP[e]
	Quadrillion Btu	Million Btu	Thousand Btu per Chained (2009) Dollar[d]	Million Nominal Dollars[g]	Nominal Dollars[g]	Percent	Percent	Million Metric Tons Carbon Dioxide	Metric Tons Carbon Dioxide	Metric Tons Carbon Dioxide per Million Chained (2009) Dollars[d]
1950	34.616	227	15.85	NA	NA	NA	NA	2,382	15.6	1,091
1955	40.208	242	14.68	NA	NA	NA	NA	2,685	16.2	980
1960	45.086	250	14.50	NA	NA	NA	NA	2,914	16.1	937
1965	54.015	278	13.58	NA	NA	NA	NA	3,462	17.8	871
1970	67.838	331	14.37	82,875	404	7.7	NA	4,261	20.8	902
1975	71.965	333	13.36	171,851	796	10.2	NA	4,439	20.6	824
1980	78.067	344	12.10	374,347	1,647	13.1	NA	4,771	21.0	740
1981	76.106	332	11.50	427,898	1,865	13.3	NA	4,646	20.2	702
1982	73.099	316	11.26	426,479	1,841	12.7	NA	4,405	19.0	679
1983	72.971	312	10.74	417,617	1,786	11.5	NA	4,377	18.7	644
1984	76.632	325	10.52	435,371	1,846	10.8	NA	4,614	19.6	633
1985	76.392	321	10.06	438,531	1,843	10.1	NA	4,600	19.3	606
1986	76.647	319	9.75	384,284	1,600	8.4	NA	4,608	19.2	586
1987	79.054	326	9.72	397,819	1,642	8.2	4.6	4,766	19.7	586
1988	82.709	338	9.76	411,739	1,684	7.8	4.4	4,984	20.4	588
1989	84.786	344	9.65	439,235	1,780	7.8	4.4	5,070	20.5	577
1990	84.485	338	9.43	474,831	1,902	7.9	4.5	5,039	20.2	563
1991	84.438	334	9.44	472,543	1,868	7.7	4.4	4,993	19.7	558
1992	85.783	334	9.26	477,024	1,860	7.3	4.2	5,087	19.8	549
1993	87.366	336	9.18	492,383	1,894	7.2	4.2	5,185	19.9	545
1994	89.088	339	8.99	504,988	1,919	6.9	4.0	5,261	20.0	531
1995	91.032	342	8.95	514,755	1,933	6.7	3.8	5,323	20.0	523
1996	94.022	349	8.90	560,409	2,080	6.9	3.9	5,510	20.5	522
1997	94.602	347	8.57	568,075	2,084	6.6	3.7	5,584	20.5	506
1998	95.019	344	8.24	526,394	1,908	5.8	3.3	5,635	20.4	489
1999	96.650	346	8.01	558,739	2,002	5.8	3.2	5,688	20.4	471
2000	98.819	350	7.87	687,824	2,438	6.7	3.7	5,868	20.8	467
2001	96.172	337	7.58	696,347	2,444	6.6	3.7	5,761	20.2	454
2002	97.647	339	7.56	664,072	2,309	6.0	3.5	5,804	20.2	450
2003	97.921	338	7.38	755,205	2,603	6.6	3.8	5,853	20.2	441
2004	100.094	342	7.27	871,337	2,976	7.1	4.0	5,970	20.4	433
2005	100.193	339	7.04	1,045,910	3,539	8.0	4.4	5,993	20.3	421
2006	99.492	333	6.81	1,159,022	3,884	8.4	4.7	5,910	19.8	404
2007	101.027	335	6.79	1,234,037	4,097	8.5	4.7	6,001	19.9	403
2008	98.906	325	6.67	1,409,247	4,634	9.6	5.3	5,809	19.1	392
2009	94.138	307	6.53	1,063,889	3,468	7.4	4.3	5,386	17.6	374
2010	97.480	315	6.59	1,208,443	3,906	8.1	4.6	5,576	18.0	377
2011	96.902	311	6.45	1,388,618	4,455	8.9	5.0	5,439	17.4	362
2012	94.487	301	6.15	1,351,513	4,303	8.4	4.7	5,227	16.6	340
2013	97.241	307	6.24	1,375,306	4,345	8.3	4.6	5,355	16.9	344
2014	R 98.491	309	6.17	NA	NA	NA	NA	5,406	17.0	339

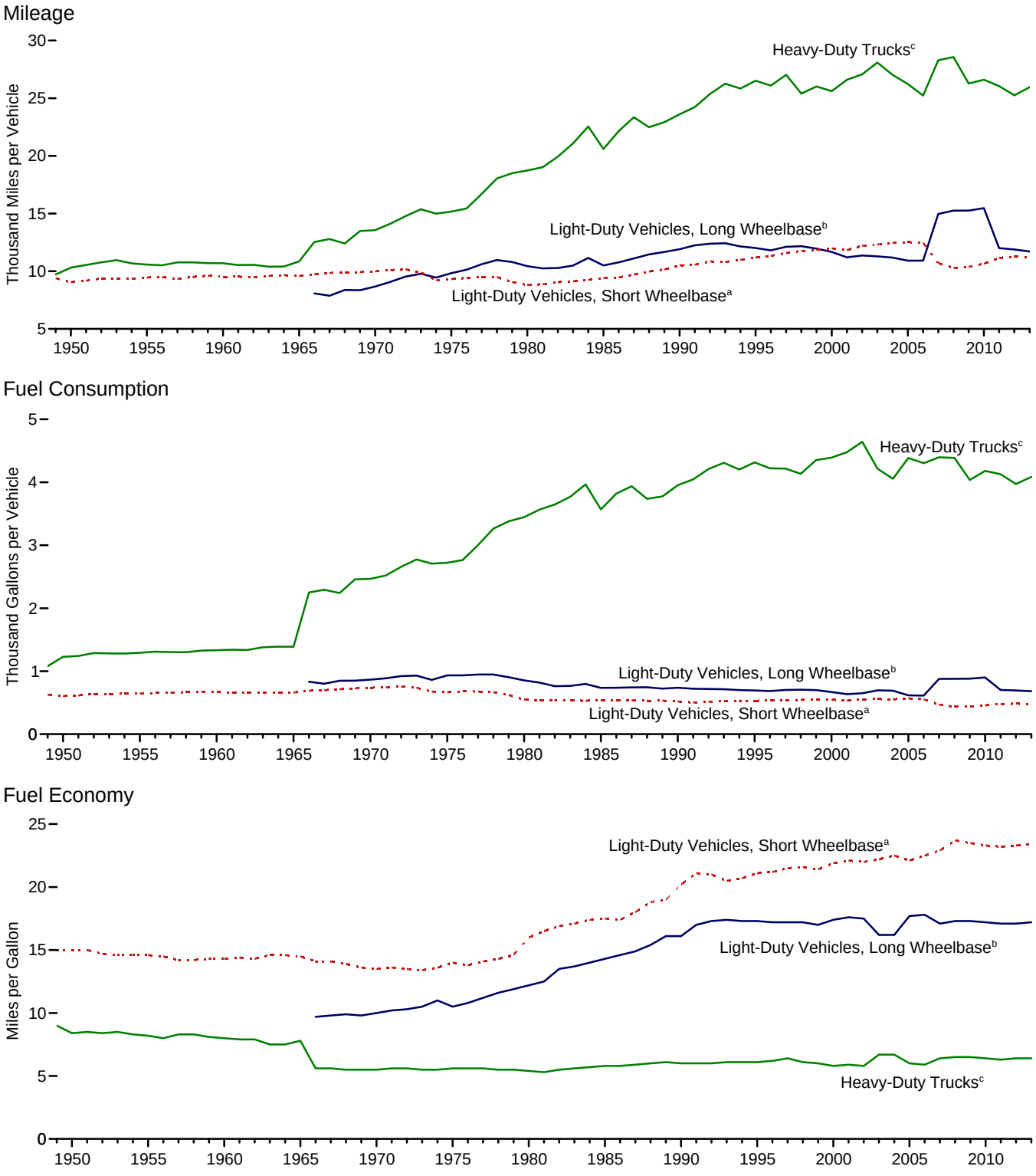
[a] See "Primary Energy Consumption" in Glossary.
[b] Expenditures include taxes where data are available.
[c] Carbon dioxide emissions from energy consumption. See Table 12.1.
[d] See "Chained Dollars" and "Real Dollars" in Glossary.
[e] See "Gross Domestic Product (GDP)" in Glossary.
[f] Gross output is the value of GDP plus the value of intermediate inputs used to produce GDP.
[g] See "Nominal Dollars" in Glossary.
R=Revised. NA=Not available.

Notes: • Data are estimates. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949.

Sources: • **Consumption:** Table 1.3. • **Consumption per Capita:** Calculated as energy consumption divided by U.S. population (see Table C1). • **Consumption per Real Dollar of GDP:** Calculated as energy consumption divided by U.S. gross domestic product in chained (2009) dollars (see Table C1). • **Expenditures:** U.S. Energy Information Administration, "State Energy Price and Expenditure Estimates, 1970 Through 2013" (July 2015), U.S. Table ET1. • **Expenditures per Capita:** Calculated as energy expenditures divided by U.S. population (see Table C1). • **Expenditures as Share of GDP:** Calculated as energy expenditures divided by U.S. gross domestic product in nominal dollars (see Table C1). • **Expenditures as Share of Gross Output:** Calculated as energy expenditures divided by U.S. gross output (see Table C1). • **Emissions: 1949–1972—**U.S. Energy Information Administration, *Annual Energy Review 2011,* Table 11.1. **1973 forward—**Table 12.1. • **Emissions per Capita:** Calculated as carbon dioxide emissions divided by U.S. population (see Table C1). • **Emissions per Real Dollar of GDP:** Calculated as carbon dioxide emissions divided by U.S. gross domestic product in chained (2009) dollars (see Table C1).

Figure 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy, 1949–2013



[a] Through 1989, data are for passenger cars and motorcycles. For 1990–2006, data are for passenger cars only. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase less than or equal to 121 inches.

[b] For 1966–2000, data are for vans, pickup trucks, and sport utility vehicles. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase greater than 121 inches.

[c] For 1949–1965, data are for single-unit trucks with 2 axles and 6 or more tires, combination trucks, and other vehicles with 2 axles and 4 tires that are not passenger cars. For 1966–2006 data are for single-unit trucks with 2 axles and 6 or more tires, and combination trucks. Beginning in 2007, data are for single-unit trucks with 2 axles and 6 or more tires (or a gross vehicle weight rating exceeding 10,000 pounds), and combination trucks.

Note: Through 1965, "Light-Duty Vehicles, Long Wheelbase" data are included in "Heavy-Duty Trucks."

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

	Light-Duty Vehicles, Short Wheelbase[a]			Light-Duty Vehicles, Long Wheelbase[b]			Heavy-Duty Trucks[c]			All Motor Vehicles[d]		
	Mileage	Fuel Consumption	Fuel Economy	Mileage	Fuel Consumption	Fuel Economy	Mileage	Fuel Consumption	Fuel Economy	Mileage	Fuel Consumption	Fuel Economy
	Miles per Vehicle	Gallons per Vehicle	Miles per Gallon	Miles per Vehicle	Gallons per Vehicle	Miles per Gallon	Miles per Vehicle	Gallons per Vehicle	Miles per Gallon	Miles per Vehicle	Gallons per Vehicle	Miles per Gallon
1950	9,060	603	15.0	([e])	([e])	([e])	10,316	1,229	8.4	9,321	725	12.8
1955	9,447	645	14.6	([e])	([e])	([e])	10,576	1,293	8.2	9,661	761	12.7
1960	9,518	668	14.3	([e])	([e])	([e])	10,693	1,333	8.0	9,732	784	12.4
1965	9,603	661	14.5	([e])	([e])	([e])	10,851	1,387	7.8	9,826	787	12.5
1970	9,989	737	13.5	8,676	866	10.0	13,565	2,467	5.5	9,976	830	12.0
1975	9,309	665	14.0	9,829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
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	10,157	533	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	[a] 10,710	[a] 468	[a] 22.9	[b] 14,970	[b] 877	[b] 17.1	[c] 28,290	[c] 4,398	6.4	11,915	693	17.2
2008	10,290	435	23.7	15,256	880	17.3	28,573	4,387	6.5	11,631	667	17.4
2009	10,391	442	23.5	15,252	882	17.3	26,274	4,037	6.5	11,631	661	17.6
2010	10,650	456	23.3	15,474	901	17.2	26,604	4,180	6.4	11,866	681	17.4
2011	11,150	481	23.2	12,007	702	17.1	26,054	4,128	6.3	11,652	665	17.5
2012	11,262	484	23.3	11,885	694	17.1	25,255	3,973	6.4	11,707	665	17.6
2013[P]	11,244	480	23.4	11,712	683	17.2	25,952	4,086	6.4	11,679	663	17.6

[a] Through 1989, data are for passenger cars and motorcycles. For 1990–2006, data are for passenger cars only. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase less than or equal to 121 inches.

[b] For 1966–2006, data are for vans, pickup trucks, and sport utility vehicles. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase greater than 121 inches.

[c] For 1949–1965, data are for single-unit trucks with 2 axles and 6 or more tires, combination trucks, and other vehicles with 2 axles and 4 tires that are not passenger cars. For 1966–2006, data are for single-unit trucks with 2 axles and 6 or more tires, and combination trucks. Beginning in 2007, data are for single-unit trucks with 2 axles and 6 or more tires (or a gross vehicle weight rating exceeding 10,000 pounds), and combination trucks.

[d] Includes buses and motorcycles, which are not separately displayed.

[e] Included in "Heavy-Duty Trucks."

P=Preliminary.

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949.

Sources: • **Light-Duty Vehicles, Short Wheelbase: 1990–1994—**U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1998,* Table 4-13. • **All Other Data: 1949–1994—**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

	New England[a]	Middle Atlantic[b]	East North Central[c]	West North Central[d]	South Atlantic[e]	East South Central[f]	West South Central[g]	Mountain[h]	Pacific[i]	United States
1950 Total	**6,794**	**6,324**	**7,027**	**7,455**	**3,521**	**3,547**	**2,277**	**6,341**	**3,906**	**5,367**
1955 Total	**6,872**	**6,231**	**6,486**	**6,912**	**3,508**	**3,513**	**2,294**	**6,704**	**4,320**	**5,246**
1960 Total	**6,828**	**6,391**	**6,908**	**7,184**	**3,780**	**4,134**	**2,767**	**6,281**	**3,799**	**5,404**
1965 Total	**7,029**	**6,393**	**6,587**	**6,932**	**3,372**	**3,501**	**2,237**	**6,086**	**3,819**	**5,146**
1970 Total	**7,022**	**6,388**	**6,721**	**7,090**	**3,452**	**3,823**	**2,558**	**6,119**	**3,726**	**5,218**
1975 Total	**6,547**	**5,892**	**6,406**	**6,880**	**2,970**	**3,437**	**2,312**	**6,260**	**4,117**	**4,905**
1980 Total	**7,071**	**6,477**	**6,975**	**6,836**	**3,378**	**3,964**	**2,494**	**5,554**	**3,539**	**5,080**
1985 Total	**6,749**	**5,971**	**6,668**	**7,262**	**2,899**	**3,660**	**2,535**	**6,059**	**3,935**	**4,889**
1990 Total	**5,987**	**5,252**	**5,780**	**6,137**	**2,307**	**2,942**	**1,968**	**5,391**	**3,603**	**4,180**
1995 Total	**6,684**	**6,093**	**6,740**	**6,911**	**2,988**	**3,648**	**2,147**	**5,101**	**3,269**	**4,640**
2000 Total	**6,625**	**5,999**	**6,315**	**6,500**	**2,905**	**3,551**	**2,153**	**4,971**	**3,460**	**4,494**
2001 Total	**6,202**	**5,541**	**5,844**	**6,221**	**2,604**	**3,327**	**2,162**	**5,004**	**3,545**	**4,257**
2002 Total	**6,234**	**5,550**	**6,128**	**6,485**	**2,664**	**3,443**	**2,292**	**5,197**	**3,510**	**4,356**
2003 Total	**6,975**	**6,258**	**6,536**	**6,593**	**2,884**	**3,559**	**2,205**	**4,817**	**3,355**	**4,544**
2004 Total	**6,709**	**5,892**	**6,178**	**6,329**	**2,715**	**3,291**	**2,041**	**5,010**	**3,346**	**4,344**
2005 Total	**6,644**	**5,950**	**6,222**	**6,213**	**2,775**	**3,380**	**1,985**	**4,896**	**3,377**	**4,348**
2006 Total	**5,885**	**5,211**	**5,703**	**5,821**	**2,475**	**3,211**	**1,802**	**4,915**	**3,557**	**4,040**
2007 Total	**6,537**	**5,756**	**6,074**	**6,384**	**2,525**	**3,187**	**2,105**	**4,939**	**3,506**	**4,268**
2008 Total	**6,434**	**5,782**	**6,677**	**7,118**	**2,712**	**3,600**	**2,125**	**5,233**	**3,566**	**4,494**
2009 Total	**6,644**	**5,922**	**6,512**	**6,841**	**2,812**	**3,536**	**2,152**	**5,139**	**3,538**	**4,481**
2010 Total	**5,934**	**5,553**	**6,185**	**6,565**	**3,167**	**3,948**	**2,449**	**5,082**	**3,624**	**4,463**
2011 Total	**6,114**	**5,483**	**6,172**	**6,565**	**2,565**	**3,343**	**2,114**	**5,322**	**3,818**	**4,312**
2012 Total	**5,561**	**4,970**	**5,356**	**5,515**	**2,306**	**2,876**	**1,650**	**4,574**	**3,411**	**3,769**
2013 January	1,170	1,064	1,178	1,263	506	681	497	1,018	645	828
February	1,026	990	1,090	1,097	506	623	368	808	520	733
March	920	897	1,021	1,048	505	628	311	592	392	660
April	566	480	543	630	151	216	123	458	289	348
May	245	192	174	227	60	70	15	217	158	136
June	36	22	40	48	1	1	0	57	51	26
July	1	1	8	15	0	0	0	11	12	5
August	27	17	21	18	1	0	0	16	14	12
September	139	111	89	67	19	16	1	99	55	59
October	397	315	392	439	125	169	67	414	239	257
November	785	748	837	879	385	544	347	613	390	572
December	1,113	1,002	1,228	1,404	477	700	597	970	596	829
Total	**6,426**	**5,838**	**6,621**	**7,135**	**2,736**	**3,648**	**2,326**	**5,272**	**3,362**	**4,465**
2014 January	1,304	R 1,306	1,519	1,484	R 760	1,013	R 649	834	R 434	969
February	R 1,141	R 1,104	1,323	1,348	493	690	R 479	R 705	R 446	R 798
March	1,117	R 1,027	R 1,095	R 1,032	461	564	R 351	583	R 373	683
April	R 583	505	497	513	158	180	82	405	276	325
May	254	179	205	201	37	48	11	218	R 131	127
June	46	20	27	41	1	1	0	86	61	28
July	4	7	29	30	1	R 1	0	11	9	10
August	32	19	19	R 21	1	0	0	R 37	11	13
September	110	74	120	126	12	16	4	100	37	57
October	R 358	311	419	389	119	160	37	271	R 122	R 221
November	R 784	R 758	938	1,021	R 441	624	R 389	R 652	R 353	R 614
December	940	896	1,010	1,102	479	R 626	R 422	R 835	512	706
Total	**R 6,672**	**R 6,206**	**R 7,199**	**R 7,306**	**R 2,962**	**R 3,924**	**R 2,424**	**R 4,736**	**R 2,764**	**4,551**
2015 January	1,336	R 1,260	R 1,336	1,267	646	836	623	R 815	R 468	890
February	R 1,415	R 1,320	1,406	1,307	669	R 865	499	R 599	R 329	867
March	1,103	1,002	R 953	R 801	361	445	R 278	R 481	R 281	584
April	R 590	481	456	398	133	R 147	55	395	R 292	300
May	148	101	R 159	R 215	R 23	37	14	266	206	119
June	84	30	R 46	R 39	1	1	0	42	R 25	24
July	7	4	12	12	0	0	0	24	8	6
August	8	10	25	33	0	1	0	R 21	R 13	11
September	43	27	39	49	8	13	1	78	57	32
9-Month Total	**4,733**	**4,237**	**4,433**	**4,122**	**1,841**	**2,345**	**1,471**	**2,720**	**1,678**	**2,835**
2014 9-Month Total	**4,591**	**4,240**	**4,834**	**4,795**	**1,923**	**2,513**	**1,576**	**2,978**	**1,778**	**3,010**
2013 9-Month Total	**4,130**	**3,773**	**4,164**	**4,413**	**1,750**	**2,235**	**1,315**	**3,276**	**2,137**	**2,807**

[a] Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
[b] New Jersey, New York, and Pennsylvania.
[c] Illinois, Indiana, Michigan, Ohio, and Wisconsin.
[d] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.
[e] Delaware, Florida, Georgia, Maryland (and the District of Columbia), North Carolina, South Carolina, Virginia, and West Virginia.
[f] Alabama, Kentucky, Mississippi, and Tennessee.
[g] Arkansas, Louisiana, Oklahoma, and Texas.
[h] Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.
[i] Alaska, California, Hawaii, Oregon, and Washington.
R=Revised.

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 degrees Fahrenheit (°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). • 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Source: State-level degree-day data are from U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Centers for Environmental Information. Using these state-level data, the U.S. Energy Information Administration calculates population-weighted census-division and U.S. degree-day averages using state populations from the same year the degree days are measured. See methodology at http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf.

Table 1.10 Cooling Degree-Days by Census Division

	New England[a]	Middle Atlantic[b]	East North Central[c]	West North Central[d]	South Atlantic[e]	East South Central[f]	West South Central[g]	Mountain[h]	Pacific[i]	United States
1950 Total	**295**	**401**	**505**	**647**	**1,414**	**1,420**	**2,282**	**682**	**629**	**871**
1955 Total	**532**	**761**	**922**	**1,139**	**1,636**	**1,674**	**2,508**	**780**	**558**	**1,144**
1960 Total	**318**	**487**	**626**	**871**	**1,583**	**1,532**	**2,367**	**974**	**796**	**1,000**
1965 Total	**310**	**498**	**618**	**832**	**1,613**	**1,552**	**2,461**	**780**	**577**	**979**
1970 Total	**423**	**615**	**747**	**980**	**1,744**	**1,571**	**2,282**	**971**	**734**	**1,079**
1975 Total	**422**	**584**	**721**	**937**	**1,791**	**1,440**	**2,162**	**903**	**597**	**1,049**
1980 Total	**438**	**680**	**769**	**1,158**	**1,911**	**1,754**	**2,651**	**1,071**	**653**	**1,214**
1985 Total	**324**	**509**	**602**	**780**	**1,878**	**1,522**	**2,519**	**1,095**	**761**	**1,121**
1990 Total	**429**	**562**	**602**	**913**	**2,054**	**1,563**	**2,526**	**1,212**	**838**	**1,200**
1995 Total	**471**	**704**	**877**	**928**	**2,028**	**1,613**	**2,398**	**1,213**	**794**	**1,261**
2000 Total	**279**	**458**	**632**	**983**	**1,925**	**1,674**	**2,775**	**1,480**	**772**	**1,232**
2001 Total	**464**	**623**	**722**	**994**	**1,897**	**1,478**	**2,543**	**1,508**	**861**	**1,255**
2002 Total	**508**	**772**	**899**	**1,045**	**2,182**	**1,757**	**2,515**	**1,467**	**783**	**1,363**
2003 Total	**475**	**615**	**619**	**907**	**1,980**	**1,452**	**2,496**	**1,553**	**978**	**1,268**
2004 Total	**368**	**591**	**585**	**722**	**2,038**	**1,517**	**2,482**	**1,290**	**828**	**1,217**
2005 Total	**598**	**892**	**944**	**1,063**	**2,098**	**1,676**	**2,647**	**1,372**	**777**	**1,388**
2006 Total	**485**	**693**	**734**	**1,034**	**2,053**	**1,648**	**2,786**	**1,466**	**922**	**1,360**
2007 Total	**447**	**694**	**881**	**1,102**	**2,219**	**1,892**	**2,475**	**1,564**	**828**	**1,392**
2008 Total	**462**	**667**	**683**	**818**	**1,993**	**1,537**	**2,501**	**1,385**	**918**	**1,282**
2009 Total	**350**	**524**	**534**	**698**	**2,029**	**1,479**	**2,590**	**1,393**	**894**	**1,241**
2010 Total	**635**	**908**	**964**	**1,096**	**2,269**	**1,977**	**2,757**	**1,358**	**674**	**1,456**
2011 Total	**554**	**836**	**859**	**1,074**	**2,259**	**1,727**	**3,112**	**1,450**	**736**	**1,470**
2012 Total	**565**	**815**	**974**	**1,221**	**2,162**	**1,762**	**2,915**	**1,573**	**917**	**1,495**
2013 January	0	0	0	0	58	9	18	0	7	15
February	0	0	0	0	35	2	22	0	7	11
March	0	0	0	0	16	2	34	23	13	11
April	0	0	0	1	91	20	64	47	25	34
May	8	23	71	49	154	113	229	122	58	100
June	88	134	142	181	349	319	490	309	135	245
July	304	326	218	263	414	339	519	390	252	339
August	123	160	181	251	370	342	563	337	209	288
September	17	36	72	141	255	235	433	186	137	177
October	0	6	6	7	134	55	145	39	27	56
November	0	0	0	0	66	1	15	9	13	18
December	0	0	0	0	58	2	4	0	9	13
Total	**540**	**683**	**690**	**892**	**2,000**	**1,441**	**2,536**	**1,462**	**892**	**1,306**
2014 January	0	0	0	0	20	0	5	3	15	7
February	0	0	0	0	45	1	8	R 8	10	12
March	0	0	0	0	R 42	5	21	R 21	15	15
April	0	0	1	4	R 83	27	R 96	47	26	37
May	R 8	26	54	65	210	R 148	R 227	R 119	R 71	R 113
June	R 69	R 131	175	R 194	350	330	457	272	127	242
July	201	R 219	133	199	399	R 308	503	392	274	301
August	109	R 149	R 197	261	R 381	R 378	R 557	R 273	229	292
September	R 33	65	46	78	279	R 237	381	206	189	R 182
October	0	R 5	2	12	126	R 61	R 195	86	R 85	74
November	0	0	0	0	31	0	10	R 9	R 18	11
December	0	0	0	0	R 36	4	R 14	0	7	10
Total	R **419**	R **596**	R **609**	**812**	R **2,001**	R **1,501**	R **2,473**	R **1,436**	R **1,068**	**1,298**
2015 January	0	0	0	0	34	3	R 5	2	11	9
February	0	0	0	0	R 18	0	6	11	14	7
March	0	0	0	3	R 84	R 21	R 39	33	R 28	30
April	0	0	1	8	R 130	52	R 141	41	23	53
May	R 31	70	81	56	239	175	R 261	R 78	28	125
June	39	R 114	R 137	R 202	R 391	R 352	R 453	R 318	R 177	255
July	194	R 248	R 202	R 290	R 453	R 443	586	R 328	R 220	336
August	206	R 227	169	R 202	R 408	R 340	560	R 365	262	R 314
September	86	135	127	168	293	235	425	233	194	223
9-Month Total	**556**	**794**	**717**	**929**	**2,050**	**1,619**	**2,476**	**1,409**	**956**	**1,352**
2014 9-Month Total	**418**	**590**	**606**	**800**	**1,807**	**1,435**	**2,254**	**1,341**	**957**	**1,202**
2013 9-Month Total	**540**	**678**	**684**	**885**	**1,743**	**1,382**	**2,372**	**1,413**	**843**	**1,219**

[a] Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
[b] New Jersey, New York, and Pennsylvania.
[c] Illinois, Indiana, Michigan, Ohio, and Wisconsin.
[d] Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.
[e] Delaware, Florida, Georgia, Maryland (and the District of Columbia), North Carolina, South Carolina, Virginia, and West Virginia.
[f] Alabama, Kentucky, Mississippi, and Tennessee.
[g] Arkansas, Louisiana, Oklahoma, and Texas.
[h] Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.
[i] Alaska, California, Hawaii, Oregon, and Washington.
R=Revised.

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 degrees Fahrenheit (°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).
• 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Source: State-level degree-day data are from U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Centers for Environmental Information. Using these state-level data, the U.S. Energy Information Administration calculates population-weighted census-division and U.S. degree-day averages using state populations from the same year the degree days are measured. See methodology at http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf.

Energy Overview

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 through 1980, 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 1.2 Sources

Coal
1949–1988: Coal production data from Table 6.1 are converted to Btu by multiplying by the coal production heat content factors in Table A5.
1989 forward: Coal production data from Table 6.1 are converted to Btu by multiplying by the coal production heat content factors in Table A5. Waste coal supplied data from Table 6.1 are converted to Btu by multiplying by the waste coal supplied heat content factors in Table A5. Coal production (including waste coal supplied) is equal to coal production plus waste coal supplied.

Natural Gas (Dry)
1949 forward: Natural gas (dry) production data from Table 4.1 are converted to Btu by multiplying by the natural gas (dry) production heat content factors in Table A4.

Crude Oil
1949 forward: Crude oil (including lease condensate) production data from Table 3.1 are converted to Btu by multiplying by the crude oil (including lease condensate) production heat content factors in Table A2.

NGPL
1949 forward: Natural gas plant liquids (NGPL) production data from Table 3.1 are converted to Btu by multiplying by the NGPL production heat content factors in Table A2.

Fossil Fuels Total
1949 forward: Total fossil fuels production is the sum of the production values for coal, natural gas (dry), crude oil, and NGPL.

Nuclear Electric Power
1949 forward: Nuclear electricity net generation data from Table 7.2a are converted to Btu by multiplying by the nuclear heat rate factors in Table A6.

Renewable Energy
1949 forward: Table 10.1.

Total Primary Energy Production
1949 forward: Total primary energy production is the sum of the production values for fossil fuels, nuclear electric power, and renewable energy.

Table 1.3 Sources

Coal
1949 forward: Coal consumption data from Table 6.1 are converted to Btu by multiplying by the total coal consumption heat content factors in Table A5.

Natural Gas
1949–1979: Natural gas (including supplemental gaseous fuels) consumption data from Table 4.1 are converted to Btu by multiplying by the total natural gas consumption heat content factors in Table A4.
1980 forward: Natural gas (including supplemental gaseous fuels) consumption data from Table 4.1 are converted to Btu by multiplying by the total natural gas consumption heat content factors in Table A4. Supplemental gaseous fuels data in Btu are estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Natural gas (excluding supplemental gaseous fuels) consumption is equal to natural gas (including supplemental gaseous fuels) consumption minus supplemental gaseous fuels.

Petroleum
1949–1992: Petroleum (excluding biofuels) consumption is equal to total petroleum products supplied from Table 3.6.
1993–2008: Petroleum (excluding biofuels) consumption is equal to total petroleum products supplied from Table 3.6 minus fuel ethanol consumption from Table 10.3.
2009 forward: Petroleum (excluding biofuels) consumption is equal to: total petroleum products supplied from Table 3.6; minus fuel ethanol (minus denaturant) consumption from Table 10.3; minus refinery and blender net inputs of renewable fuels (excluding fuel ethanol) from U.S. Energy Information Administration, *Petroleum Supply Annual*/*Petroleum Supply Monthly*, Table 1 (for biomass-based diesel fuel, the data are converted to Btu by multiplying by the biodiesel

heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1).

Coal Coke Net Imports
1949 forward: Coal coke net imports are equal to coal coke imports from Table 1.4a minus coal coke exports from Table 1.4b.

Fossil Fuels Total
1949 forward: Total fossil fuels consumption is the sum of the consumption values for coal, natural gas, and petroleum, plus coal coke net imports.

Nuclear Electric Power
1949 forward: Nuclear electricity net generation data from Table 7.2a are converted to Btu by multiplying by the nuclear heat rate factors in Table A6.

Renewable Energy
1949 forward: Table 10.1.

Electricity Net Imports
1949 forward: Electricity net imports are equal to electricity imports from Table 1.4a minus electricity exports from Table 1.4b.

Total Primary Energy Consumption
1949 forward: Total primary energy consumption is the sum of the consumption values for fossil fuels, nuclear electric power, and renewable energy, plus electricity net imports.

Table 1.4a Sources

Coal
1949 forward: Coal imports data from Table 6.1 are converted to Btu by multiplying by the coal imports heat content factors in Table A5.

Coal Coke
1949 forward: Coal coke imports data from U.S. Department of Commerce, Bureau of the Census, Monthly Report IM 145, are converted to Btu by multiplying by the coal coke imports heat content factor in Table A5.

Natural Gas
1949 forward: Natural gas imports data from Table 4.1 are converted to Btu by multiplying by the natural gas imports heat content factors in Table A4.

Crude Oil
1949 forward: Crude oil imports data from Table 3.3b are converted to Btu by multiplying by the crude oil imports heat content factors in Table A2.

Petroleum Products
1949–1992: Petroleum products (excluding biofuels) imports are equal to total petroleum imports from Table 3.3b minus crude oil imports from Table 3.3b; petroleum products (excluding biofuels) imports data are converted to Btu by multiplying by the total petroleum products imports heat content factors in Table A2.
1993–2008: Petroleum products (excluding biofuels) imports are equal to petroleum products (including biofuels) imports (see 1949–1992 sources above) minus fuel ethanol (minus denaturant) imports (see "Biofuels—Fuel Ethanol (Minus Denaturant)" sources below).
2009 forward: Renewable fuels (excluding fuel ethanol) imports data are from U.S. Energy Information Administration, *Petroleum Supply Annual (PSA)*, Tables 1 and 25, and *Petroleum Supply Monthly (PSM)*, Tables 1 and 37 (for biomass-based diesel fuel and other renewable fuels, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1). Petroleum products (excluding biofuels) imports are equal to petroleum products (including biofuels) imports (see 1949–1992 sources above) minus fuel ethanol (minus denaturant) imports (see "Biofuels—Fuel Ethanol (Minus Denaturant)" sources below) minus renewable fuels (excluding fuel ethanol) imports.

Total Petroleum
1949 forward: Total petroleum imports are equal to crude oil imports plus petroleum products imports.

Biofuels—Fuel Ethanol (Minus Denaturant)
1993 forward: Fuel ethanol (including denaturant) imports data are from PSA/PSM Table 1. Fuel ethanol (minus denaturant) production is equal to fuel ethanol (including denaturant) production from Table 10.3 minus denaturant from Table 10.3. Fuel ethanol (minus denaturant) imports are equal to fuel ethanol (including denaturant) imports multiplied by the ratio of fuel ethanol (minus denaturant) production to fuel ethanol (including denaturant) production. Fuel ethanol (minus denaturant) imports data are converted to Btu by multiplying by 3.539 million Btu per barrel, the undenatured ethanol heat content factor in Table A3.

Biofuels—Biodiesel
2001 forward: Biodiesel imports data are from Table 10.4, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

Biofuels—Other Renewable Fuels
2009 forward: Other renewable fuels imports data are from PSA Table 25 and PSM Table 37. For other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1; for other renewable fuels, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

Total Biofuels
1993–2000: Total biofuels imports are equal to fuel ethanol (minus denaturant) imports.

2001–2008: Total biofuels imports are equal to fuel ethanol (minus denaturant) imports plus biodiesel imports.
2009 forward: Total biofuels imports are the sum of imports values for fuel ethanol (minus denaturant), biodiesel, and other renewable fuels.

Electricity
1949 forward: Electricity imports data from Table 7.1 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Total Primary Energy Imports
1949 forward: Total primary energy imports are the sum of the imports values for coal, coal coke, natural gas, total petroleum, total biofuels, and electricity.

Table 1.4b Sources

Coal
1949 forward: Coal exports data from Table 6.1 are converted to Btu by multiplying by the coal exports heat content factors in Table A5.

Coal Coke
1949 forward: Coal coke exports data from U.S. Department of Commerce, Bureau of the Census, Monthly Report EM 545, are converted to Btu by multiplying by the coal coke exports heat content factor in Table A5.

Natural Gas
1949 forward: Natural gas exports data from Table 4.1 are converted to Btu by multiplying by the natural gas exports heat content factors in Table A4.

Crude Oil
1949 forward: Crude oil exports data from Table 3.3b are converted to Btu by multiplying by the crude oil exports heat content factor in Table A2.

Petroleum Products
1949–2009: Petroleum products (excluding biofuels) exports are equal to total petroleum exports from Table 3.3b minus crude oil exports from Table 3.3b; petroleum products (excluding biofuels) exports data are converted to Btu by multiplying by the total petroleum products exports heat content factors in Table A2.
2010: Petroleum products (including biofuels) exports are equal to total petroleum exports from Table 3.3b minus crude oil exports from Table 3.3b; petroleum products (including biofuels) exports data are converted to Btu by multiplying by the total petroleum products exports heat content factors in Table A2. Petroleum products (excluding biofuels) exports are equal to petroleum products (including biofuels) exports minus fuel ethanol (minus denaturant) exports (see "Biofuels—Fuel Ethanol (Minus Denaturant)" sources below).
2011 forward: Biomass-based diesel fuel exports data are from U.S. Energy Information Administration, *Petroleum Supply Annual (PSA)*, Table 31, and *Petroleum Supply Monthly (PSM)*, Table 49, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1. Petroleum products (excluding biofuels) exports are equal to petroleum products (including biofuels) exports (see 2010 sources above) minus fuel ethanol (minus denaturant) exports (see "Biofuels—Fuel Ethanol (Minus Denaturant)" sources below) minus biomass-based diesel fuel exports.

Total Petroleum
1949 forward: Total petroleum exports are equal to crude oil exports plus petroleum products exports.

Biofuels—Fuel Ethanol (Minus Denaturant)
2010 forward: Fuel ethanol (including denaturant) exports data are from PSA/PSM Table 1. Fuel ethanol (minus denaturant) production is equal to fuel ethanol (including denaturant) production from Table 10.3 minus denaturant from Table 10.3. Fuel ethanol (minus denaturant) exports are equal to fuel ethanol (including denaturant) exports multiplied by the ratio of fuel ethanol (minus denaturant) production to fuel ethanol (including denaturant) production. Fuel ethanol (minus denaturant) exports are converted to Btu by multiplying by 3.539 million Btu per barrel, the undenatured ethanol heat content factor in Table A3.

Biofuels—Biodiesel
2001 forward: Biodiesel exports data are from Table 10.4, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

Total Biofuels
2001–2009: Total biofuels exports are equal to biodiesel exports.
2010 forward: Total biofuels exports are equal to fuel ethanol (minus denaturant) exports plus biodiesel exports.

Electricity
1949 forward: Electricity exports data from Table 7.1 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Total Primary Energy Exports
1949 forward: Total primary energy exports are the sum of the exports values for coal, coal coke, natural gas, total petroleum, total biofuels, and electricity.

Total Primary Energy Net Imports
1949 forward: Total primary energy net imports are equal to total primary energy imports from Table 1.4a minus total primary energy exports.

Table 1.5 Sources

U.S. Department of Commerce, U.S. Census Bureau, 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.
1993–2009: "U.S. International Trade in Goods and Services," Annual Revisions.
2010–2011: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.
2012–2014: "U.S. International Trade in Goods and Services," 2014 Annual Revisions.
2015: "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.
1994–2009: "U.S. International Trade in Goods and Services," Annual Revisions.
2010–2011: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.
2012–2014: "U.S. International Trade in Goods and Services," 2014 Annual Revisions.
2015: "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.
1993–2009: "U.S. International Trade in Goods and Services," Annual Revisions.
2010–2011: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.
2012–2014: "U.S. International Trade in Goods and Services," 2014 Annual Revisions.
2015: "U.S. International Trade in Goods and Services," FT-900, monthly.

Petroleum Balance
1974 forward: The petroleum balance is calculated by the U.S. Energy Information Administration (EIA) as petroleum imports minus petroleum exports.

Energy Balance
1974 forward: The energy balance is calculated by EIA as energy imports minus energy exports.

Non-Energy Balance
1974 forward: The non-energy balance is calculated by EIA as the total merchandise balance minus the energy balance.

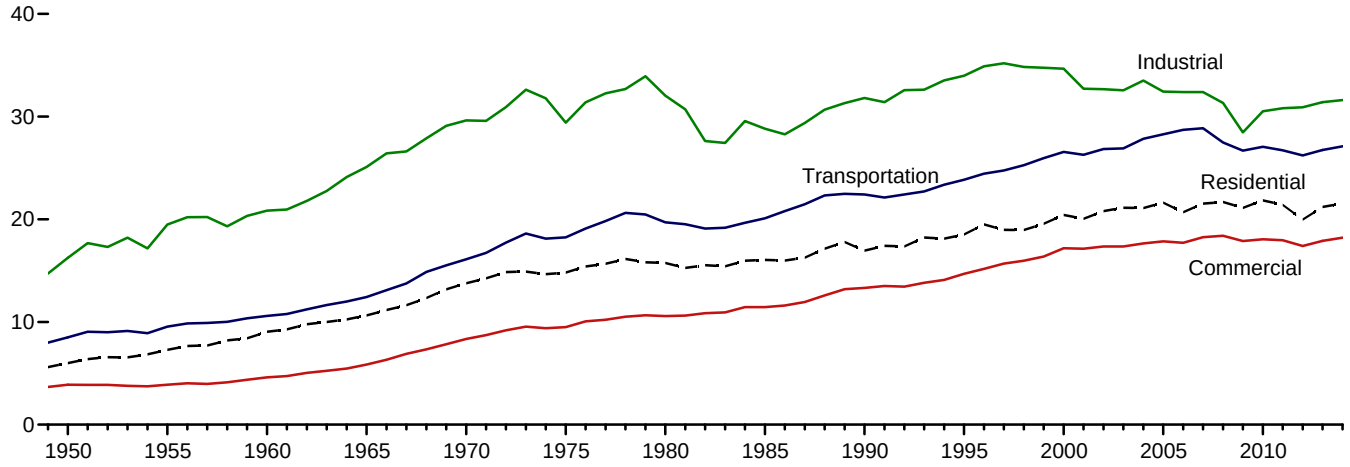
Total Merchandise
1974–1987: U.S. merchandise trade press releases and database printouts for adjustments.
1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.
1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990.
1990: "U.S. Merchandise Trade, 1990 Final 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.
1992–2009: "U.S. International Trade in Goods and Services," Annual Revisions.
2010–2011: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.
2012–2014: "U.S. International Trade in Goods and Services," 2014 Annual Revisions.
2015: "U.S. International Trade in Goods and Services," FT-900, monthly.

THIS PAGE INTENTIONALLY LEFT BLANK

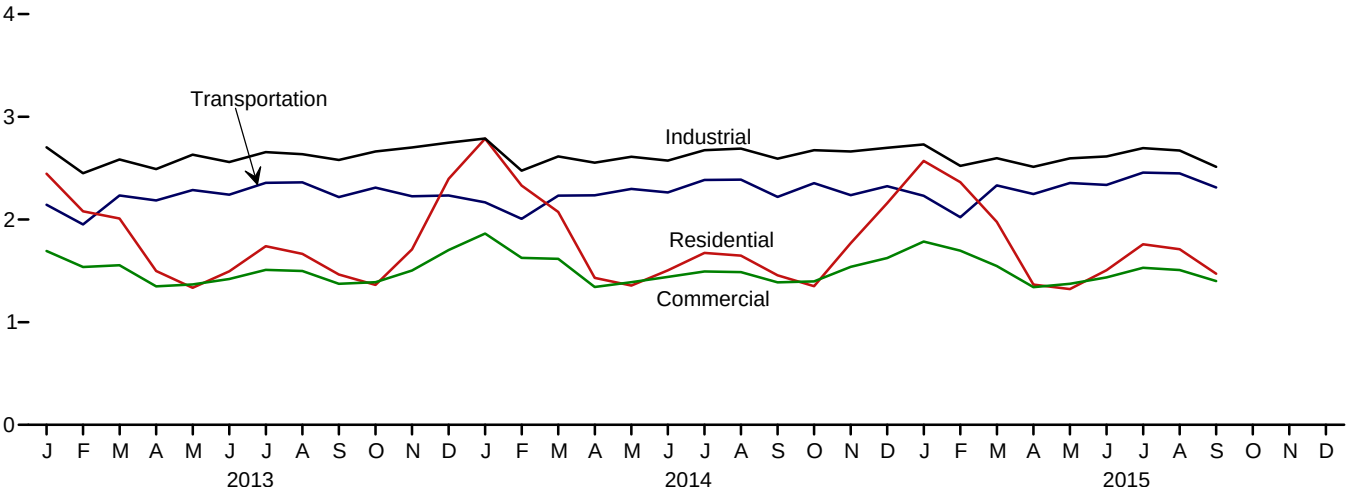
2. Energy Consumption by Sector

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

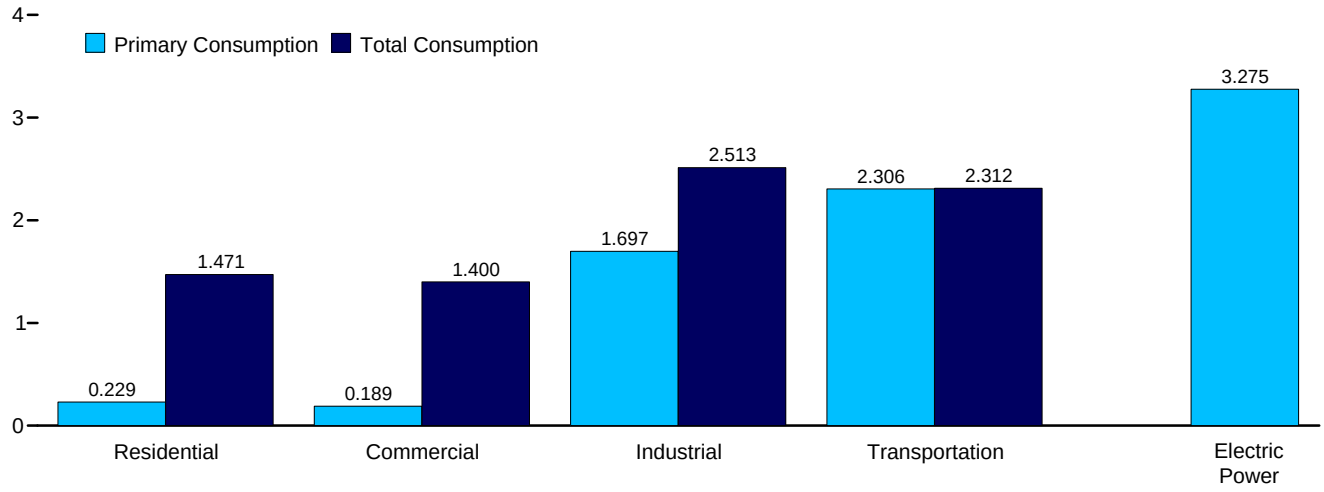
Total Consumption by End-Use Sector, 1949–2014



Total Consumption by End-Use Sector, Monthly



By Sector, September 2015



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]		
1950 Total	**4,829**	**5,989**	**2,834**	**3,893**	**13,890**	**16,241**	**8,383**	**8,492**	**4,679**	**(s)**	**34,616**
1955 Total	**5,608**	**7,278**	**2,561**	**3,895**	**16,103**	**19,485**	**9,474**	**9,550**	**6,461**	**(s)**	**40,208**
1960 Total	**6,651**	**9,039**	**2,723**	**4,609**	**16,996**	**20,842**	**10,560**	**10,596**	**8,158**	**(s)**	**45,086**
1965 Total	**7,279**	**10,639**	**3,177**	**5,845**	**20,148**	**25,098**	**12,399**	**12,432**	**11,012**	**(s)**	**54,015**
1970 Total	**8,322**	**13,766**	**4,237**	**8,346**	**22,964**	**29,628**	**16,062**	**16,098**	**16,253**	**(s)**	**67,838**
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**	[d] **30,495**	**-9**	**84,485**
1995 Total	**6,936**	**18,518**	**4,100**	**14,690**	**22,718**	**33,970**	**23,796**	**23,851**	**33,479**	**3**	**91,032**
2000 Total	**7,158**	**20,424**	**4,278**	**17,175**	**22,823**	**34,662**	**26,495**	**26,555**	**38,062**	**2**	**98,819**
2001 Total	**6,867**	**20,041**	**4,084**	**17,136**	**21,793**	**32,719**	**26,219**	**26,282**	**37,215**	**-6**	**96,172**
2002 Total	**6,911**	**20,790**	**4,131**	**17,345**	**21,798**	**32,661**	**26,785**	**26,846**	**38,016**	**5**	**97,647**
2003 Total	**7,237**	**21,124**	**4,297**	**17,345**	**21,533**	**32,553**	**26,826**	**26,900**	**38,028**	**-1**	**97,921**
2004 Total	**6,992**	**21,087**	**4,231**	**17,654**	**22,411**	**33,515**	**27,764**	**27,843**	**38,701**	**-6**	**100,094**
2005 Total	**6,908**	**21,620**	**4,050**	**17,852**	**21,410**	**32,441**	**28,199**	**28,280**	**39,626**	**(s)**	**100,193**
2006 Total	**6,165**	**20,681**	**3,745**	**17,705**	**21,528**	**32,390**	**28,638**	**28,717**	**39,417**	**(s)**	**99,492**
2007 Total	**6,603**	**21,534**	**3,919**	**18,249**	**21,362**	**32,385**	**28,772**	**28,859**	**40,371**	**-1**	**101,027**
2008 Total	**6,911**	**21,689**	**4,094**	**18,396**	**20,527**	**31,333**	**27,404**	**27,486**	**39,969**	**1**	**98,906**
2009 Total	**6,662**	**21,107**	**4,048**	**17,880**	**18,754**	**28,464**	**26,605**	**26,687**	**38,069**	**(s)**	**94,138**
2010 Total	**6,590**	**21,844**	**4,011**	**18,047**	**20,275**	**30,523**	**26,978**	**27,059**	**39,619**	**7**	**97,480**
2011 Total	**6,495**	**21,404**	**4,050**	**17,966**	**20,425**	**30,812**	**26,632**	**26,712**	**39,293**	**8**	**96,902**
2012 Total	**5,779**	**19,965**	**3,695**	**17,392**	**20,735**	**30,908**	**26,144**	**26,219**	**38,131**	**2**	**94,487**
2013 January	1,090	2,446	585	1,693	1,875	2,703	2,137	2,144	3,298	-1	8,985
February	947	2,079	526	1,537	1,682	2,450	1,945	1,952	2,917	-1	8,016
March	856	2,009	484	1,554	1,757	2,585	2,227	2,234	3,058	-2	8,381
April	528	1,498	320	1,349	1,676	2,490	2,179	2,185	2,820	-4	7,519
May	334	1,334	226	1,367	1,739	2,631	2,281	2,287	3,040	-3	7,616
June	254	1,496	184	1,420	1,674	2,560	2,235	2,242	3,370	2	7,719
July	245	1,740	185	1,509	1,752	2,655	2,350	2,357	3,729	5	8,267
August	246	1,665	191	1,498	1,733	2,636	2,355	2,361	3,636	4	8,165
September	257	1,463	198	1,374	1,754	2,579	2,212	2,218	3,214	1	7,636
October	365	1,362	261	1,389	1,827	2,663	2,303	2,309	2,967	-2	7,721
November	677	1,709	413	1,502	1,862	2,701	2,219	2,225	2,967	-2	8,135
December	1,033	2,396	554	1,702	1,924	2,749	2,226	2,233	3,343	1	9,081
Total	**6,832**	**21,196**	**4,125**	**17,895**	**21,255**	**31,403**	**26,670**	**26,749**	**38,360**	**-1**	**97,241**
2014 January	1,250	R 2,786	668	R 1,863	R 1,948	R 2,789	R 2,159	R 2,167	R 3,579	6	R 9,611
February	1,048	R 2,330	583	R 1,626	R 1,722	R 2,475	1,999	2,006	R 3,085	4	R 8,441
March	891	R 2,073	509	R 1,616	R 1,780	R 2,614	2,225	2,232	R 3,130	2	R 8,537
April	501	R 1,432	308	R 1,342	R 1,741	R 2,554	R 2,229	2,236	R 2,785	-2	R 7,562
May	352	R 1,357	238	R 1,389	R 1,714	R 2,610	2,290	2,297	R 3,059	(s)	R 7,653
June	266	R 1,504	R 198	R 1,441	R 1,675	R 2,574	2,257	2,263	R 3,386	3	R 7,785
July	253	R 1,675	R 192	R 1,494	1,758	R 2,675	2,378	2,385	R 3,647	6	R 8,234
August	249	R 1,648	R 194	R 1,488	R 1,765	R 2,690	R 2,382	2,388	R 3,626	5	R 8,219
September	275	R 1,456	213	R 1,388	R 1,756	R 2,592	2,214	2,220	R 3,198	2	7,658
October	376	R 1,351	272	R 1,397	R 1,829	R 2,675	2,348	2,354	R 2,951	-4	R 7,773
November	724	R 1,770	443	R 1,539	R 1,809	R 2,662	2,229	2,236	3,002	1	R 8,208
December	914	R 2,159	516	R 1,625	1,875	R 2,698	2,318	2,325	R 3,184	1	R 8,808
Total	**7,098**	R **21,539**	R **4,333**	R **18,208**	R **21,373**	R **31,610**	R **27,030**	R **27,109**	R **38,632**	**25**	R **98,491**
2015 January	1,143	R 2,570	635	R 1,785	R 1,931	R 2,731	R 2,224	R 2,231	R 3,383	4	R 9,321
February	1,091	R 2,363	613	R 1,696	R 1,758	R 2,522	R 2,015	R 2,022	R 3,126	3	R 8,607
March	809	R 1,977	R 470	R 1,546	R 1,825	R 2,596	2,326	2,333	R 3,023	(s)	R 8,452
April	461	R 1,367	295	R 1,341	R 1,729	R 2,513	2,242	2,248	R 2,743	-1	R 7,468
May	315	R 1,321	R 218	R 1,374	R 1,741	R 2,596	2,349	2,355	R 3,024	1	R 7,647
June	242	R 1,506	182	R 1,436	R 1,733	R 2,614	R 2,330	2,336	R 3,406	4	R 7,896
July	234	R 1,758	185	R 1,529	R 1,802	R 2,695	2,450	2,457	R 3,769	6	R 8,446
August	232	R 1,710	191	R 1,507	1,792	R 2,672	2,442	2,449	R 3,681	4	R 8,342
September	229	1,471	189	1,400	1,697	2,513	2,306	2,312	3,275	2	7,699
9-Month Total	**4,756**	**16,044**	**2,977**	**13,615**	**16,008**	**23,453**	**20,684**	**20,744**	**29,430**	**22**	**73,877**
2014 9-Month Total	**5,086**	**16,262**	**3,103**	**13,646**	**15,859**	**23,574**	**20,134**	**20,194**	**29,494**	**26**	**73,702**
2013 9-Month Total	**4,757**	**15,731**	**2,898**	**13,301**	**15,642**	**23,289**	**19,921**	**19,981**	**29,082**	**2**	**72,304**

[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 1, "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.

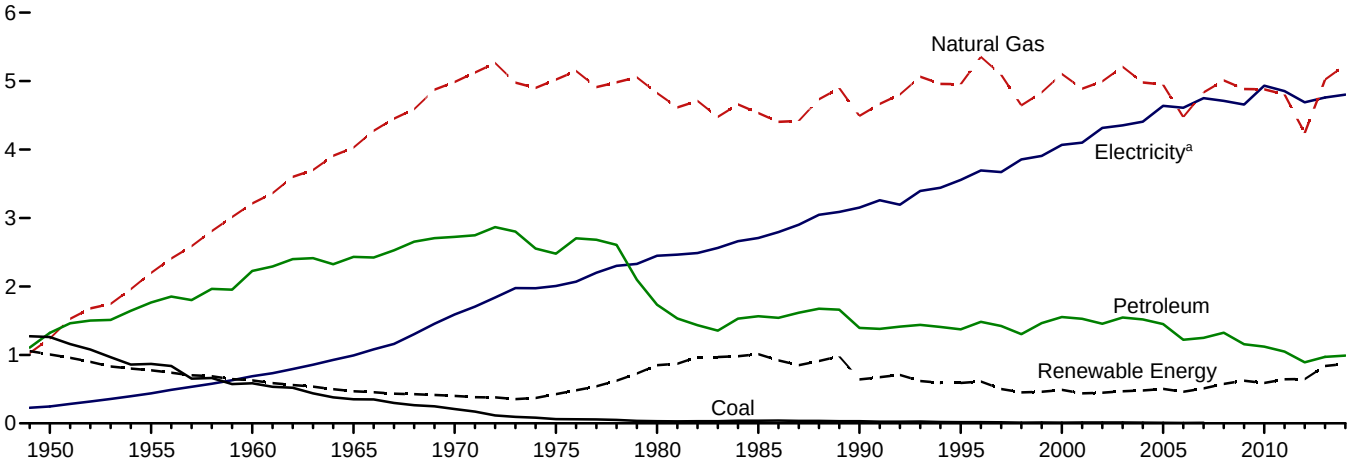
Notes: • Data are estimates, except for the electric power sector. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

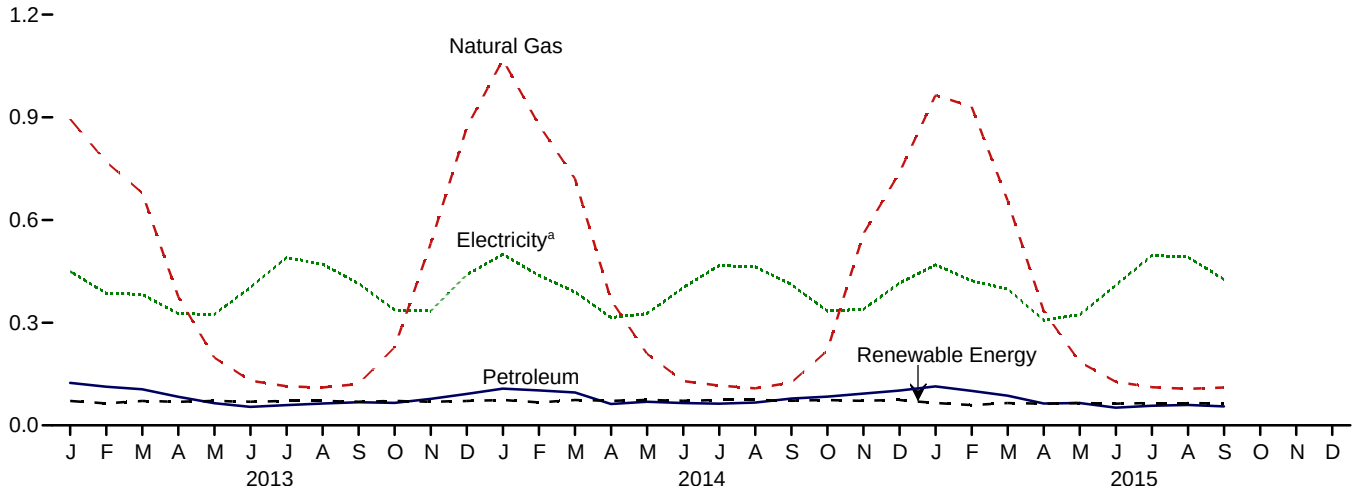
Sources: • **End-Use Sectors:** Tables 2.2–2.5. • **Electric Power Sector:** Table 2.6. • **Balancing Item:** Calculated as primary energy total consumption minus the sum of total energy consumption in the four end-use sectors. • **Primary Total:** Table 1.3.

Figure 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

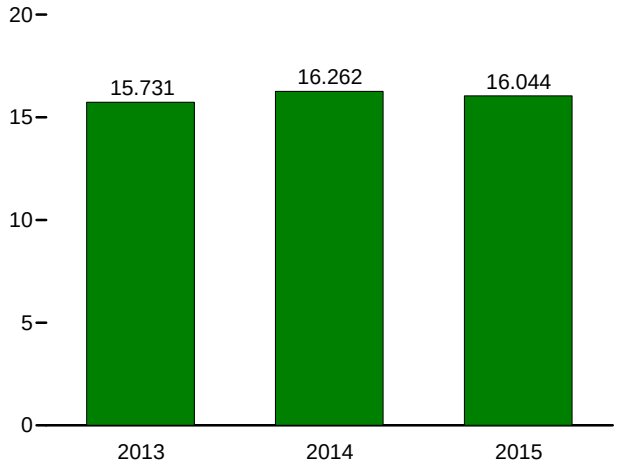
By Major Source, 1949–2014



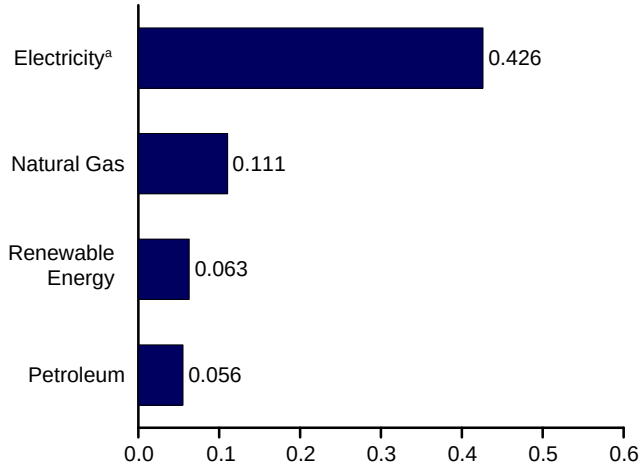
By Major Source, Monthly



Total, January–September



By Major Source, September 2015



[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[d]	Bio-mass	Total	Total Primary	Electricity Retail Sales[e]	Electrical System Energy Losses[f]	Total
1950 Total	**1,261**	**1,240**	**1,322**	**3,824**	**NA**	**NA**	**1,006**	**1,006**	**4,829**	**246**	**913**	**5,989**
1955 Total	**867**	**2,198**	**1,767**	**4,833**	**NA**	**NA**	**775**	**775**	**5,608**	**438**	**1,232**	**7,278**
1960 Total	**585**	**3,212**	**2,227**	**6,024**	**NA**	**NA**	**627**	**627**	**6,651**	**687**	**1,701**	**9,039**
1965 Total	**352**	**4,028**	**2,432**	**6,811**	**NA**	**NA**	**468**	**468**	**7,279**	**993**	**2,367**	**10,639**
1970 Total	**209**	**4,987**	**2,725**	**7,922**	**NA**	**NA**	**401**	**401**	**8,322**	**1,591**	**3,852**	**13,766**
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**	**1,373**	**6,345**	**7**	**64**	**520**	**591**	**6,936**	**3,557**	**8,026**	**18,518**
2000 Total	**11**	**5,105**	**1,553**	**6,669**	**9**	**61**	**420**	**489**	**7,158**	**4,069**	**9,197**	**20,424**
2001 Total	**12**	**4,889**	**1,528**	**6,429**	**9**	**59**	**370**	**438**	**6,867**	**4,100**	**9,074**	**20,041**
2002 Total	**12**	**4,995**	**1,456**	**6,463**	**10**	**57**	**380**	**448**	**6,911**	**4,317**	**9,562**	**20,790**
2003 Total	**12**	**5,209**	**1,546**	**6,768**	**13**	**57**	**400**	**470**	**7,237**	**4,353**	**9,534**	**21,124**
2004 Total	**11**	**4,981**	**1,519**	**6,511**	**14**	**57**	**410**	**481**	**6,992**	**4,408**	**9,687**	**21,087**
2005 Total	**8**	**4,946**	**1,450**	**6,405**	**16**	**58**	**430**	**504**	**6,908**	**4,638**	**10,074**	**21,620**
2006 Total	**6**	**4,476**	**1,221**	**5,704**	**18**	**63**	**380**	**462**	**6,165**	**4,611**	**9,905**	**20,681**
2007 Total	**8**	**4,835**	**1,249**	**6,092**	**22**	**70**	**420**	**512**	**6,603**	**4,750**	**10,180**	**21,534**
2008 Total	**NA**	**5,010**	**1,324**	**6,334**	**26**	**80**	**470**	**577**	**6,911**	**4,711**	**10,068**	**21,689**
2009 Total	**NA**	**4,883**	**1,157**	**6,040**	**33**	**89**	**500**	**622**	**6,662**	**4,657**	**9,788**	**21,107**
2010 Total	**NA**	**4,878**	**1,121**	**5,999**	**37**	**114**	**440**	**591**	**6,590**	**4,933**	**10,321**	**21,844**
2011 Total	**NA**	**4,805**	**1,048**	**5,852**	**40**	**153**	**450**	**643**	**6,495**	**4,855**	**10,054**	**21,404**
2012 Total	**NA**	**4,242**	**892**	**5,134**	**40**	**186**	**420**	**646**	**5,779**	**4,690**	**9,496**	**19,965**
2013 January	NA	895	124	1,019	3	19	49	71	1,090	450	906	2,446
February	NA	770	113	883	3	17	44	64	947	386	746	2,079
March	NA	679	105	785	3	19	49	71	856	382	771	2,009
April	NA	376	84	459	3	18	48	69	528	326	644	1,498
May	NA	198	65	263	3	19	49	71	334	325	675	1,334
June	NA	131	54	185	3	18	48	69	254	403	839	1,496
July	NA	114	59	174	3	19	49	71	245	491	1,005	1,740
August	NA	110	64	174	3	19	49	71	246	471	949	1,665
September	NA	121	67	188	3	18	48	69	257	414	792	1,463
October	NA	228	66	294	3	19	49	71	365	337	659	1,362
November	NA	531	77	608	3	18	48	69	677	334	698	1,709
December	NA	870	92	962	3	19	49	71	1,033	440	922	2,396
Total	**NA**	**5,023**	**970**	**5,993**	**40**	**219**	**580**	**839**	**6,832**	**4,759**	**9,605**	**21,196**
2014 January	NA	1,069	107	1,176	3	21	49	74	1,250	R 500	R 1,037	R 2,786
February	NA	879	102	981	3	19	44	67	1,048	R 438	R 845	R 2,330
March	NA	721	96	817	3	21	49	74	891	R 390	R 793	R 2,073
April	NA	367	63	429	3	21	48	72	501	315	R 617	R 1,432
May	NA	209	69	278	3	21	49	74	352	326	R 678	R 1,357
June	NA	129	65	195	3	21	48	72	266	R 402	R 836	R 1,504
July	NA	116	63	179	3	21	49	74	253	R 467	R 954	R 1,675
August	NA	108	66	175	3	21	49	74	249	R 463	R 936	R 1,648
September	NA	125	78	204	3	21	48	72	275	R 412	R 769	R 1,456
October	NA	218	84	302	3	21	49	74	376	R 334	R 641	R 1,351
November	NA	560	93	652	3	21	48	72	724	R 339	R 707	R 1,770
December	NA	738	102	840	3	21	49	74	914	R 415	R 830	R 2,159
Total	**NA**	**5,237**	**990**	**6,227**	**40**	**252**	**580**	**871**	**7,098**	**R 4,801**	**R 9,639**	**R 21,539**
2015 January	NA	964	114	1,078	3	24	38	65	1,143	R 469	R 958	R 2,570
February	NA	931	101	1,032	3	22	34	59	1,091	R 422	R 849	R 2,363
March	NA	657	87	744	3	24	38	65	809	R 399	R 770	R 1,977
April	NA	334	64	398	3	23	37	63	461	R 307	R 599	R 1,367
May	NA	185	65	250	3	24	38	65	315	324	R 682	R 1,321
June	NA	127	52	179	3	23	37	63	242	409	R 855	R 1,506
July	NA	111	57	169	3	24	38	65	234	496	R 1,028	R 1,758
August	NA	107	60	166	3	24	38	65	232	492	R 987	R 1,710
September	NA	111	56	166	3	23	37	63	229	426	815	1,471
9-Month Total	**NA**	**3,527**	**655**	**4,181**	**30**	**210**	**334**	**574**	**4,756**	**3,744**	**7,544**	**16,044**
2014 9-Month Total	**NA**	**3,723**	**711**	**4,434**	**30**	**188**	**434**	**652**	**5,086**	**3,713**	**7,464**	**16,262**
2013 9-Month Total	**NA**	**3,395**	**736**	**4,130**	**30**	**164**	**434**	**627**	**4,757**	**3,648**	**7,326**	**15,731**

[a] See "Primary Energy Consumption" in Glossary.
[b] 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] Includes distributed solar thermal and PV energy used in the commercial, industrial, and electric power sectors.
[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 1, "Electrical System Energy Losses," at end of section.

R=Revised. NA=Not available.

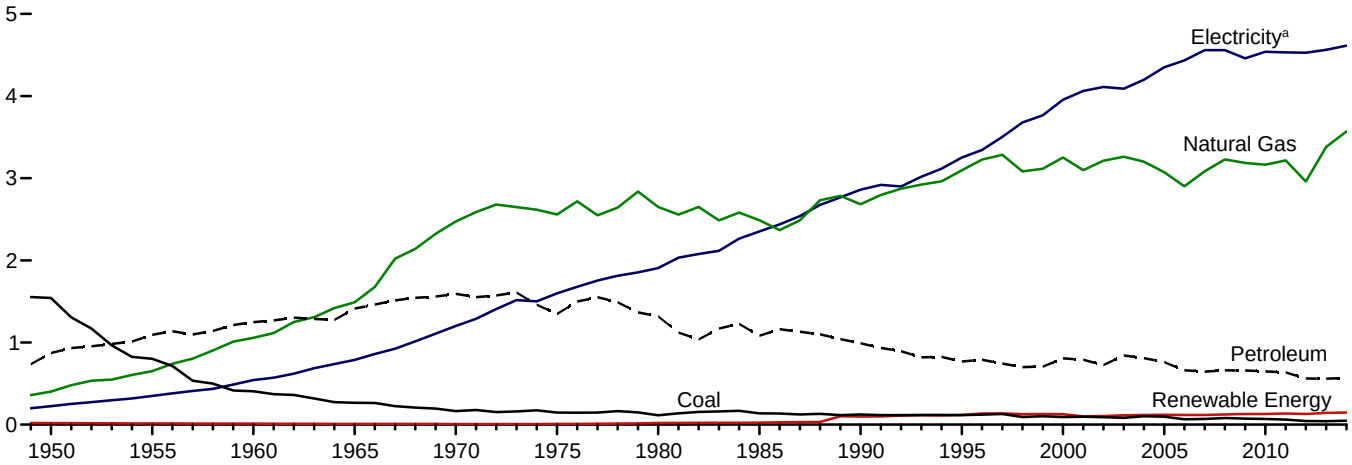
Notes: • Data are estimates, except for electricity retail sales. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

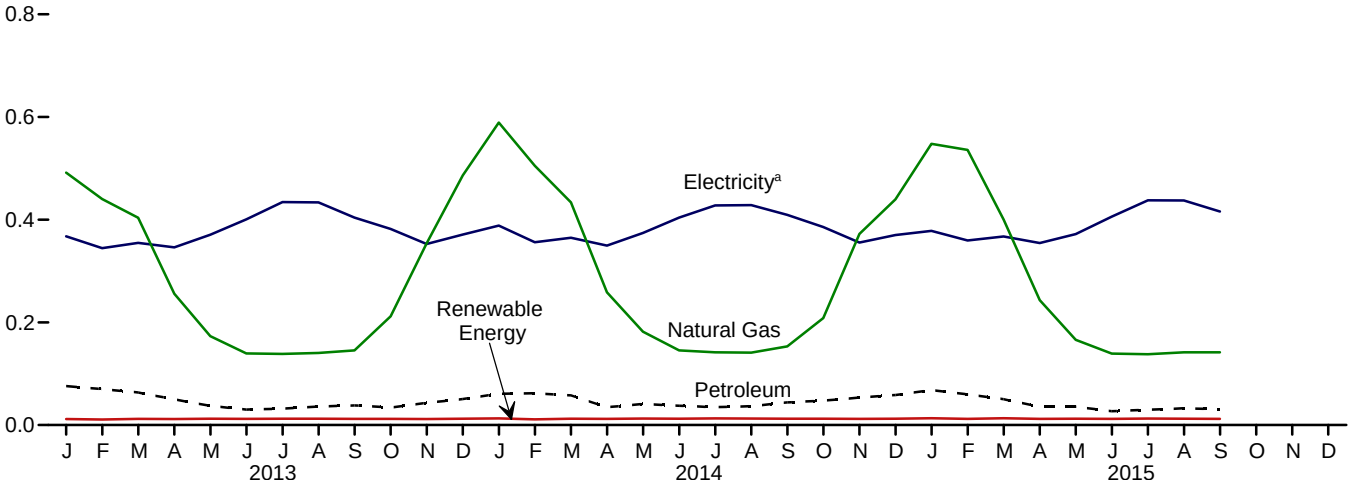
Sources: See end of section.

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

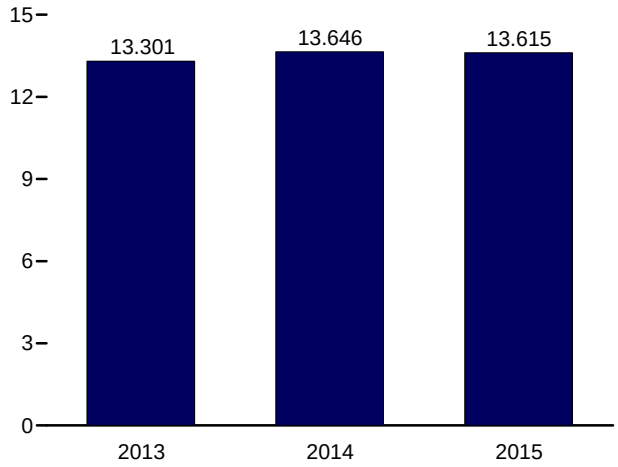
By Major Source, 1949–2014



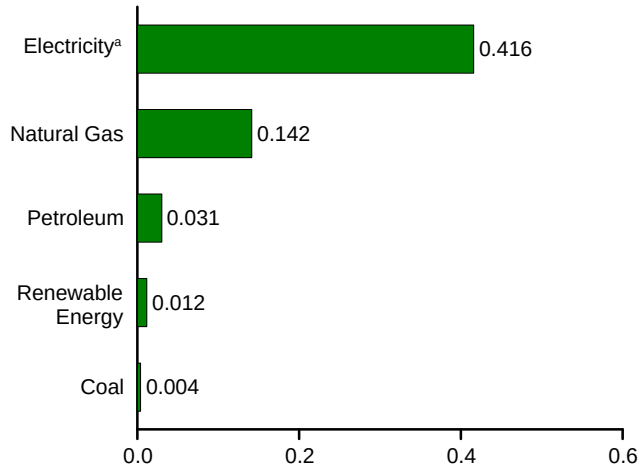
By Major Source, Monthly



Total, January–September



By Major Source, September 2015



[a] Electricity retail sales.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
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]	Petro-leum[d]	Total	Hydro-electric Power[e]	Geo-thermal	Solar/ PV	Wind	Bio-mass	Total	Total Primary	Elec-tricity Retail Sales[f]	Electrical System Energy Losses[g]	Total
1950 Total	**1,542**	**401**	**872**	**2,815**	**NA**	**NA**	**NA**	**NA**	**19**	**19**	**2,834**	**225**	**834**	**3,893**
1955 Total	**801**	**651**	**1,095**	**2,547**	**NA**	**NA**	**NA**	**NA**	**15**	**15**	**2,561**	**350**	**984**	**3,895**
1960 Total	**407**	**1,056**	**1,248**	**2,711**	**NA**	**NA**	**NA**	**NA**	**12**	**12**	**2,723**	**543**	**1,344**	**4,609**
1965 Total	**265**	**1,490**	**1,413**	**3,168**	**NA**	**NA**	**NA**	**NA**	**9**	**9**	**3,177**	**789**	**1,880**	**5,845**
1970 Total	**165**	**2,473**	**1,592**	**4,229**	**NA**	**NA**	**NA**	**NA**	**8**	**8**	**4,237**	**1,201**	**2,908**	**8,346**
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**	**4,100**	**3,252**	**7,337**	**14,690**
2000 Total	**92**	**3,252**	**806**	**4,150**	**1**	**8**	**–**	**–**	**119**	**128**	**4,278**	**3,956**	**8,942**	**17,175**
2001 Total	**97**	**3,097**	**789**	**3,983**	**1**	**8**	**–**	**–**	**92**	**101**	**4,084**	**4,062**	**8,990**	**17,136**
2002 Total	**90**	**3,212**	**725**	**4,027**	**(s)**	**9**	**–**	**–**	**95**	**104**	**4,131**	**4,110**	**9,104**	**17,345**
2003 Total	**82**	**3,261**	**841**	**4,184**	**1**	**11**	**–**	**–**	**101**	**113**	**4,297**	**4,090**	**8,958**	**17,345**
2004 Total	**103**	**3,201**	**809**	**4,113**	**1**	**12**	**–**	**–**	**105**	**118**	**4,231**	**4,198**	**9,225**	**17,654**
2005 Total	**97**	**3,073**	**761**	**3,931**	**1**	**14**	**–**	**–**	**105**	**120**	**4,050**	**4,351**	**9,451**	**17,852**
2006 Total	**65**	**2,902**	**661**	**3,627**	**1**	**14**	**–**	**–**	**103**	**118**	**3,745**	**4,435**	**9,525**	**17,705**
2007 Total	**70**	**3,085**	**646**	**3,801**	**1**	**14**	**–**	**–**	**103**	**118**	**3,919**	**4,560**	**9,771**	**18,249**
2008 Total	**81**	**3,228**	**660**	**3,970**	**1**	**15**	**(s)**	**–**	**109**	**125**	**4,094**	**4,559**	**9,743**	**18,396**
2009 Total	**73**	**3,187**	**659**	**3,919**	**1**	**17**	**(s)**	**(s)**	**112**	**129**	**4,048**	**4,459**	**9,373**	**17,880**
2010 Total	**70**	**3,165**	**647**	**3,881**	**1**	**19**	**(s)**	**(s)**	**111**	**130**	**4,011**	**4,539**	**9,497**	**18,047**
2011 Total	**62**	**3,216**	**636**	**3,914**	**(s)**	**20**	**1**	**(s)**	**115**	**136**	**4,050**	**4,531**	**9,385**	**17,966**
2012 Total	**44**	**2,960**	**562**	**3,565**	**(s)**	**20**	**1**	**1**	**108**	**130**	**3,695**	**4,528**	**9,168**	**17,392**
2013 January	5	492	76	573	(s)	2	(s)	(s)	10	12	585	368	740	1,693
February	5	440	70	515	(s)	2	(s)	(s)	9	11	526	345	666	1,537
March	5	404	63	472	(s)	2	(s)	(s)	10	12	484	355	715	1,554
April	3	256	50	308	(s)	2	(s)	(s)	10	12	320	346	683	1,349
May	3	173	37	213	(s)	2	(s)	(s)	10	12	226	371	771	1,367
June	3	139	30	172	(s)	2	(s)	(s)	10	12	184	401	835	1,420
July	3	138	32	173	(s)	2	(s)	(s)	10	12	185	434	889	1,509
August	3	140	36	179	(s)	2	(s)	(s)	10	12	191	434	873	1,498
September	2	145	38	186	(s)	2	(s)	(s)	10	12	198	404	773	1,374
October	3	212	34	249	(s)	2	(s)	(s)	10	12	261	382	746	1,389
November	4	354	43	401	(s)	2	(s)	(s)	10	12	413	353	737	1,502
December	4	486	51	541	(s)	2	(s)	(s)	10	12	554	371	778	1,702
Total	**41**	**3,380**	**561**	**3,982**	**(s)**	**20**	**3**	**1**	**120**	**143**	**4,125**	**4,562**	**9,208**	**17,895**
2014 January	5	589	61	655	(s)	2	(s)	(s)	R 11	R 13	668	R 388	R 806	R 1,863
February	5	505	62	572	(s)	2	(s)	(s)	9	11	583	R 356	R 686	R 1,626
March	5	434	58	496	(s)	2	(s)	(s)	10	12	509	R 365	R 743	R 1,616
April	3	258	35	296	(s)	2	(s)	(s)	10	12	308	R 349	R 685	R 1,342
May	3	182	41	225	(s)	2	(s)	(s)	10	R 13	238	R 374	R 777	R 1,389
June	2	146	37	185	(s)	2	(s)	(s)	10	12	R 198	R 404	R 839	R 1,441
July	3	142	35	179	(s)	2	(s)	(s)	R 11	R 13	R 192	R 428	R 874	R 1,494
August	3	141	36	181	(s)	2	(s)	(s)	R 11	R 13	R 194	R 428	R 866	R 1,488
September	3	153	44	201	(s)	2	(s)	(s)	10	12	213	R 409	R 765	R 1,388
October	4	208	47	260	(s)	2	(s)	(s)	10	12	272	R 386	R 739	R 1,397
November	5	372	54	431	(s)	2	(s)	(s)	10	12	443	356	R 741	R 1,539
December	6	440	58	503	(s)	2	(s)	(s)	10	12	516	R 370	R 739	R 1,625
Total	**48**	**3,569**	**568**	**4,185**	**(s)**	**20**	**4**	**1**	**R 123**	**R 148**	**R 4,333**	**R 4,614**	**R 9,262**	**R 18,208**
2015 January	6	548	68	622	(s)	2	(s)	(s)	11	13	635	R 378	R 772	R 1,785
February	6	536	60	601	(s)	2	(s)	(s)	10	12	613	360	R 723	R 1,696
March	6	400	50	456	(s)	2	(s)	(s)	11	13	R 470	R 367	R 709	R 1,546
April	4	243	35	283	(s)	2	1	(s)	10	12	295	R 354	R 692	R 1,341
May	4	166	36	205	(s)	2	1	(s)	R 10	R 12	R 218	R 372	R 784	R 1,374
June	4	139	27	170	(s)	2	1	(s)	10	12	182	R 406	R 848	R 1,436
July	4	138	30	172	(s)	2	1	(s)	10	13	185	R 438	R 907	R 1,529
August	5	142	33	179	(s)	2	1	(s)	10	12	191	438	R 878	R 1,507
September	4	142	31	177	(s)	2	(s)	(s)	10	12	189	416	795	1,400
9-Month Total	**43**	**2,454**	**369**	**2,865**	**(s)**	**15**	**4**	**1**	**92**	**112**	**2,977**	**3,528**	**7,109**	**13,615**
2014 9-Month Total	**33**	**2,549**	**409**	**2,992**	**(s)**	**15**	**3**	**1**	**93**	**111**	**3,103**	**3,502**	**7,040**	**13,646**
2013 9-Month Total	**30**	**2,328**	**433**	**2,791**	**(s)**	**15**	**2**	**(s)**	**90**	**107**	**2,898**	**3,456**	**6,946**	**13,301**

[a] See "Primary Energy Consumption" in Glossary.
[b] 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 1, "Electrical System Energy Losses," at end of section.

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

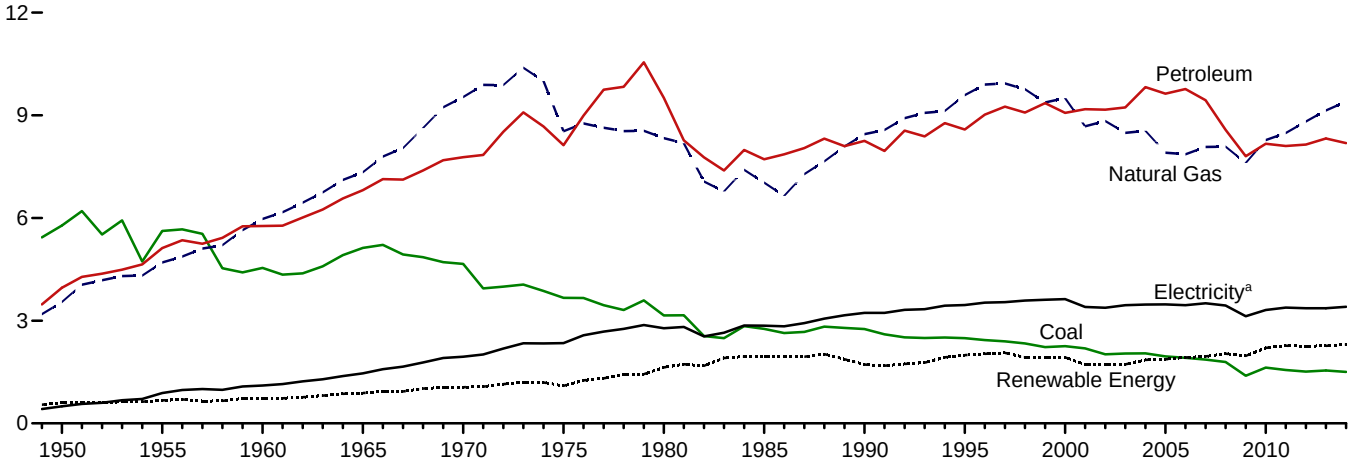
Notes: • Data are estimates, except for coal totals beginning in 2008; hydroelectric power; solar/PV; wind; and electricity retail sales beginning in 1979. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

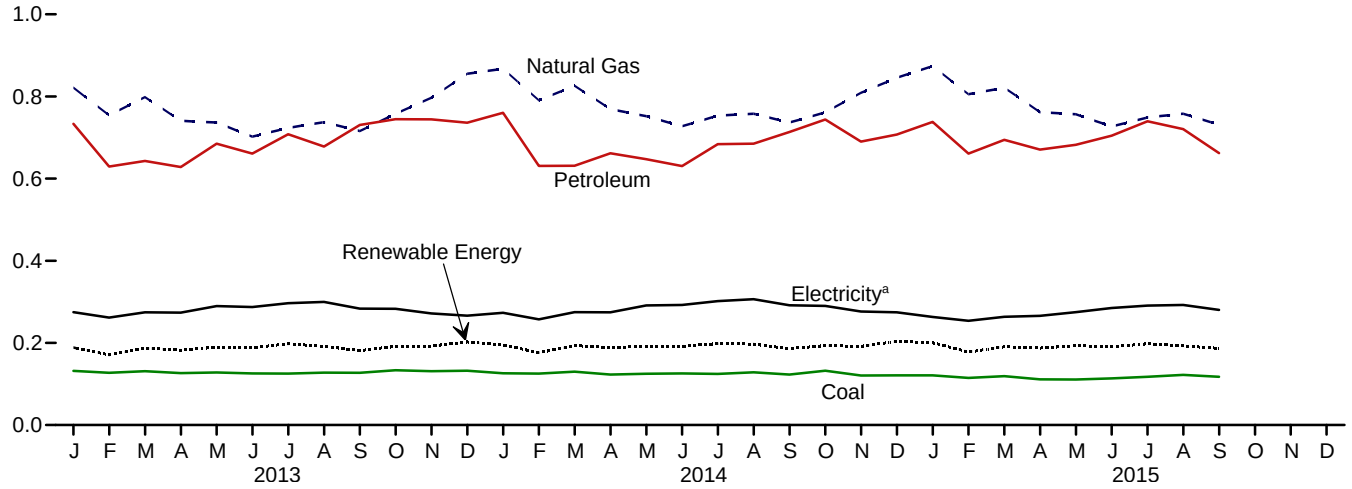
Sources: See end of section.

Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

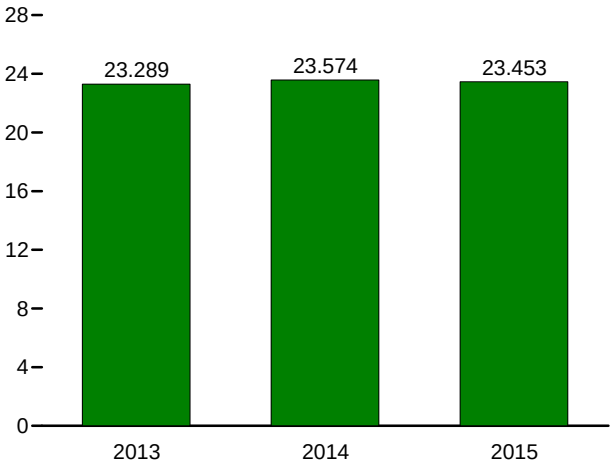
By Major Source, 1949–2014



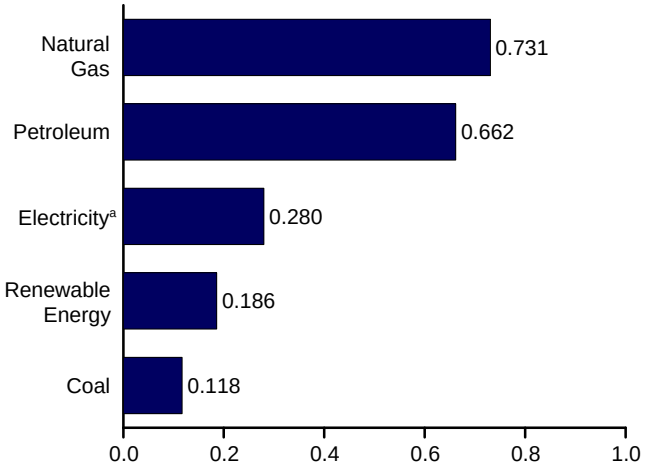
By Major Source, Monthly



Total, January–September



By Major Source, September 2015



[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]
1950 Total	**5,781**	**3,546**	**3,960**	**13,288**	**69**	**NA**	**NA**	**NA**	**532**	**602**	**13,890**	**500**	**1,852**	**16,241**
1955 Total	**5,620**	**4,701**	**5,123**	**15,434**	**38**	**NA**	**NA**	**NA**	**631**	**669**	**16,103**	**887**	**2,495**	**19,485**
1960 Total	**4,543**	**5,973**	**5,766**	**16,277**	**39**	**NA**	**NA**	**NA**	**680**	**719**	**16,996**	**1,107**	**2,739**	**20,842**
1965 Total	**5,127**	**7,339**	**6,813**	**19,260**	**33**	**NA**	**NA**	**NA**	**855**	**888**	**20,148**	**1,463**	**3,487**	**25,098**
1970 Total	**4,656**	**9,536**	**7,776**	**21,911**	**34**	**NA**	**NA**	**NA**	**1,019**	**1,053**	**22,964**	**1,948**	**4,716**	**29,628**
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**	**8,585**	**20,726**	**55**	**3**	**–**	**–**	**1,934**	**1,992**	**22,718**	**3,455**	**7,796**	**33,970**
2000 Total	**2,256**	**9,500**	**9,073**	**20,895**	**42**	**4**	**–**	**–**	**1,881**	**1,928**	**22,823**	**3,631**	**8,208**	**34,662**
2001 Total	**2,192**	**8,676**	**9,177**	**20,074**	**33**	**5**	**–**	**–**	**1,681**	**1,719**	**21,793**	**3,400**	**7,526**	**32,719**
2002 Total	**2,019**	**8,832**	**9,167**	**20,078**	**39**	**5**	**–**	**–**	**1,676**	**1,720**	**21,798**	**3,379**	**7,484**	**32,661**
2003 Total	**2,041**	**8,488**	**9,229**	**19,809**	**43**	**3**	**–**	**–**	**1,678**	**1,724**	**21,533**	**3,454**	**7,565**	**32,553**
2004 Total	**2,047**	**8,550**	**9,825**	**20,560**	**33**	**4**	**–**	**–**	**1,815**	**1,851**	**22,411**	**3,473**	**7,631**	**33,515**
2005 Total	**1,954**	**7,907**	**9,634**	**19,540**	**32**	**4**	**–**	**–**	**1,834**	**1,870**	**21,410**	**3,477**	**7,554**	**32,441**
2006 Total	**1,914**	**7,861**	**9,767**	**19,603**	**29**	**4**	**–**	**–**	**1,892**	**1,925**	**21,528**	**3,451**	**7,411**	**32,390**
2007 Total	**1,865**	**8,074**	**9,442**	**19,405**	**16**	**5**	**–**	**–**	**1,937**	**1,957**	**21,362**	**3,507**	**7,515**	**32,385**
2008 Total	**1,793**	**8,083**	**8,576**	**18,493**	**17**	**5**	**–**	**–**	**2,012**	**2,034**	**20,527**	**3,444**	**7,362**	**31,333**
2009 Total	**1,392**	**7,609**	**7,806**	**16,784**	**18**	**4**	**–**	**–**	**1,948**	**1,971**	**18,754**	**3,130**	**6,580**	**28,464**
2010 Total	**1,631**	**8,278**	**8,167**	**18,070**	**16**	**4**	**(s)**	**–**	**2,185**	**2,205**	**20,275**	**3,314**	**6,934**	**30,523**
2011 Total	**1,561**	**8,481**	**8,105**	**18,157**	**17**	**4**	**(s)**	**(s)**	**2,246**	**2,268**	**20,425**	**3,382**	**7,005**	**30,812**
2012 Total	**1,513**	**8,819**	**8,147**	**18,482**	**22**	**4**	**(s)**	**(s)**	**2,226**	**2,253**	**20,735**	**3,363**	**6,810**	**30,908**
2013 January	132	821	733	1,686	3	(s)	(s)	(s)	185	189	1,875	275	553	2,703
February	127	754	629	1,511	3	(s)	(s)	(s)	167	171	1,682	262	506	2,450
March	131	798	643	1,570	3	(s)	(s)	(s)	184	187	1,757	275	554	2,585
April	126	741	628	1,494	2	(s)	(s)	(s)	179	182	1,676	274	541	2,490
May	128	736	685	1,549	3	(s)	(s)	(s)	186	190	1,739	290	602	2,631
June	125	702	661	1,486	3	(s)	(s)	(s)	185	188	1,674	287	599	2,560
July	125	723	708	1,555	3	(s)	(s)	(s)	194	198	1,752	296	607	2,655
August	127	737	678	1,541	2	(s)	(s)	(s)	189	192	1,733	300	603	2,636
September	127	716	731	1,573	2	(s)	(s)	(s)	179	181	1,754	283	542	2,579
October	133	758	745	1,635	2	(s)	(s)	(s)	189	192	1,827	283	553	2,663
November	131	797	744	1,670	2	(s)	(s)	(s)	190	192	1,862	272	568	2,701
December	132	855	736	1,721	3	(s)	(s)	(s)	199	202	1,924	266	558	2,749
Total	**1,546**	**9,140**	**8,322**	**18,991**	**33**	**4**	**(s)**	**(s)**	**2,226**	**2,264**	**21,255**	**3,362**	**6,786**	**31,403**
2014 January	126	867	R 760	R 1,753	R 1	(s)	(s)	(s)	R 193	R 195	R 1,948	R 273	R 567	R 2,789
February	125	791	631	1,546	R 1	(s)	(s)	(s)	R 175	R 176	R 1,722	R 257	R 496	R 2,475
March	130	826	R 631	1,587	R 1	(s)	(s)	(s)	R 192	R 194	R 1,780	R 275	R 559	R 2,614
April	123	769	662	1,553	R 1	(s)	(s)	(s)	R 187	R 189	R 1,741	R 275	R 538	R 2,554
May	125	752	R 647	R 1,522	R 1	(s)	(s)	(s)	R 190	R 192	R 1,714	R 291	R 605	R 2,610
June	126	727	R 630	1,483	R 1	(s)	(s)	(s)	191	R 192	R 1,675	R 292	R 607	R 2,574
July	124	753	684	1,560	R 1	(s)	(s)	(s)	R 197	198	1,758	R 302	R 616	R 2,675
August	129	758	685	R 1,568	R 1	(s)	(s)	(s)	R 196	R 197	R 1,765	R 306	R 619	R 2,690
September	123	736	714	1,570	R 1	(s)	(s)	(s)	185	R 186	R 1,756	R 292	R 545	R 2,592
October	132	761	744	1,636	R 1	(s)	(s)	(s)	192	R 193	R 1,829	R 290	R 556	R 2,675
November	121	809	690	1,618	R 1	(s)	(s)	(s)	190	192	R 1,809	R 276	R 576	R 2,662
December	121	846	R 707	1,671	R 1	(s)	(s)	(s)	202	204	1,875	R 275	R 549	R 2,698
Total	**1,505**	**9,397**	**R 8,186**	**R 19,066**	**R 12**	**4**	**(s)**	**R 1**	**R 2,290**	**R 2,307**	**R 21,373**	**R 3,404**	**R 6,833**	**R 31,610**
2015 January	121	874	R 738	R 1,731	R 1	(s)	(s)	(s)	R 199	R 201	R 1,931	263	R 537	R 2,731
February	115	806	R 661	R 1,580	R 1	(s)	(s)	(s)	R 177	178	R 1,758	R 254	R 511	R 2,522
March	119	821	694	1,634	R 1	(s)	(s)	(s)	R 189	R 191	R 1,825	R 263	R 508	R 2,596
April	111	762	671	1,542	R 1	(s)	(s)	(s)	R 185	R 187	R 1,729	R 266	R 519	R 2,513
May	111	757	682	1,548	1	(s)	(s)	(s)	R 192	R 193	R 1,741	R 275	R 580	R 2,596
June	114	727	705	1,542	1	(s)	(s)	(s)	R 189	R 191	R 1,733	R 285	R 596	R 2,614
July	117	R 749	740	R 1,605	1	(s)	(s)	(s)	R 196	R 198	R 1,802	R 291	R 602	R 2,695
August	122	R 758	721	R 1,599	1	(s)	(s)	(s)	R 192	R 193	1,792	R 292	R 587	R 2,672
September	118	731	662	1,511	1	(s)	(s)	(s)	185	186	1,697	280	536	2,513
9-Month Total	**1,047**	**6,984**	**6,273**	**14,291**	**9**	**3**	**(s)**	**(s)**	**1,704**	**1,717**	**16,008**	**2,470**	**4,976**	**23,453**
2014 9-Month Total	**1,131**	**6,980**	**6,045**	**14,141**	**9**	**3**	**(s)**	**(s)**	**1,705**	**1,718**	**15,859**	**2,563**	**5,152**	**23,574**
2013 9-Month Total	**1,150**	**6,730**	**6,097**	**13,965**	**26**	**3**	**(s)**	**(s)**	**1,648**	**1,678**	**15,642**	**2,541**	**5,106**	**23,289**

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

[b] 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 1, "Electrical System Energy Losses," at end of section.

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

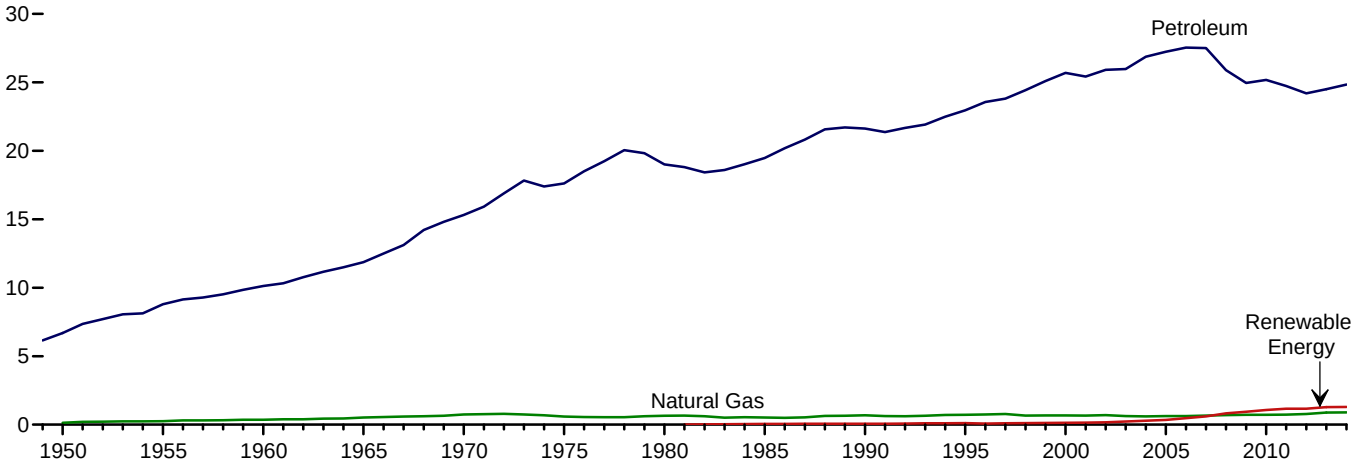
Notes: • Data are estimates, except for coal totals; hydroelectric power in 1949–1978 and 1989 forward; solar/PV; wind; and electricity retail sales. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

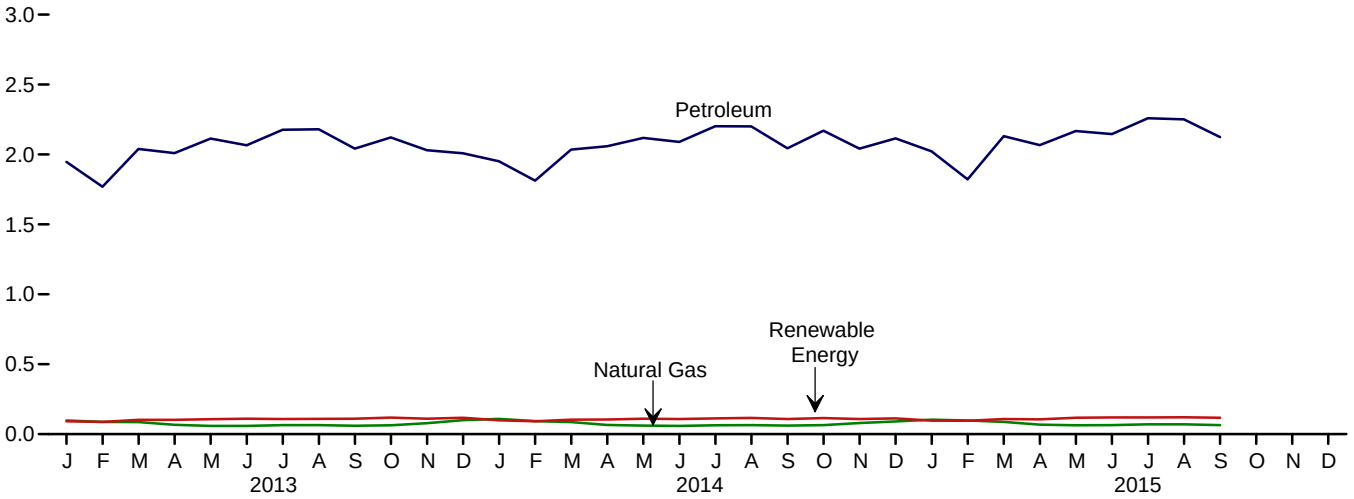
Sources: See end of section.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

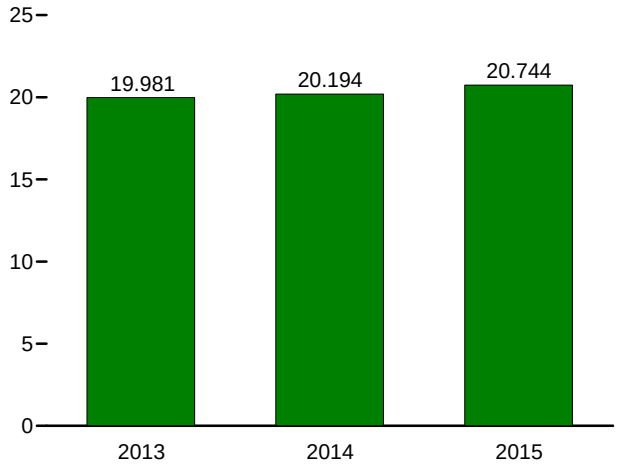
By Major Source, 1949–2014



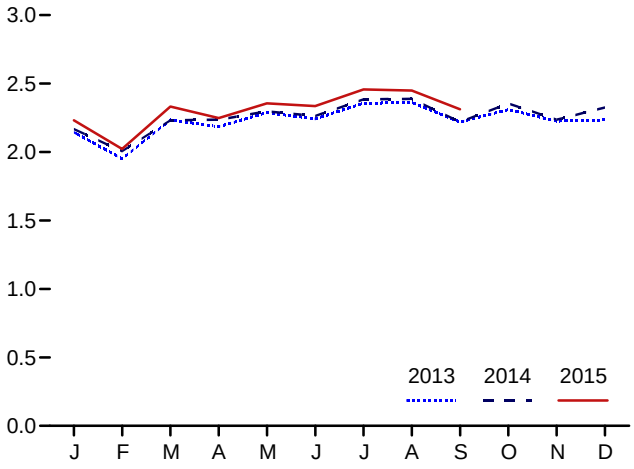
By Major Source, Monthly



Total, January–September



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				
1950 Total	**1,564**	**130**	**6,690**	**8,383**	**NA**	**8,383**	**23**	**86**	**8,492**
1955 Total	**421**	**254**	**8,799**	**9,474**	**NA**	**9,474**	**20**	**56**	**9,550**
1960 Total	**75**	**359**	**10,125**	**10,560**	**NA**	**10,560**	**10**	**26**	**10,596**
1965 Total	**16**	**517**	**11,866**	**12,399**	**NA**	**12,399**	**10**	**24**	**12,432**
1970 Total	**7**	**745**	**15,310**	**16,062**	**NA**	**16,062**	**11**	**26**	**16,098**
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**	**22,959**	**23,683**	**112**	**23,796**	**17**	**38**	**23,851**
2000 Total	**(g)**	**672**	**25,689**	**26,361**	**135**	**26,495**	**18**	**42**	**26,555**
2001 Total	**(g)**	**658**	**25,419**	**26,077**	**142**	**26,219**	**20**	**43**	**26,282**
2002 Total	**(g)**	**699**	**25,917**	**26,616**	**170**	**26,785**	**19**	**42**	**26,846**
2003 Total	**(g)**	**627**	**25,969**	**26,596**	**230**	**26,826**	**23**	**51**	**26,900**
2004 Total	**(g)**	**602**	**26,872**	**27,474**	**290**	**27,764**	**25**	**54**	**27,843**
2005 Total	**(g)**	**624**	**27,236**	**27,860**	**339**	**28,199**	**26**	**56**	**28,280**
2006 Total	**(g)**	**625**	**27,538**	**28,163**	**475**	**28,638**	**25**	**54**	**28,717**
2007 Total	**(g)**	**663**	**27,506**	**28,170**	**602**	**28,772**	**28**	**60**	**28,859**
2008 Total	**(g)**	**692**	**25,888**	**26,580**	**825**	**27,404**	**26**	**56**	**27,486**
2009 Total	**(g)**	**715**	**24,955**	**25,670**	**935**	**26,605**	**27**	**56**	**26,687**
2010 Total	**(g)**	**719**	**25,184**	**25,903**	**1,075**	**26,978**	**26**	**55**	**27,059**
2011 Total	**(g)**	**734**	**24,740**	**25,474**	**1,158**	**26,632**	**26**	**54**	**26,712**
2012 Total	**(g)**	**780**	**24,202**	**24,982**	**1,162**	**26,144**	**25**	**51**	**26,219**
2013 January	(g)	98	1,947	2,045	92	2,137	2	5	2,144
February	(g)	88	1,770	1,858	87	1,945	2	4	1,952
March	(g)	86	2,040	2,125	102	2,227	2	4	2,234
April	(g)	67	2,009	2,076	103	2,179	2	4	2,185
May	(g)	59	2,114	2,173	107	2,281	2	4	2,287
June	(g)	59	2,066	2,125	111	2,235	2	5	2,242
July	(g)	65	2,177	2,242	109	2,350	2	5	2,357
August	(g)	65	2,180	2,245	109	2,355	2	4	2,361
September	(g)	60	2,041	2,101	111	2,212	2	4	2,218
October	(g)	63	2,122	2,185	118	2,303	2	4	2,309
November	(g)	79	2,030	2,108	111	2,219	2	4	2,225
December	(g)	100	2,009	2,109	118	2,226	2	5	2,233
Total	**(g)**	**887**	**24,505**	**25,393**	**1,278**	**26,670**	**26**	**53**	**26,749**
2014 January	(g)	109	R 1,952	R 2,061	98	R 2,159	R 2	5	R 2,167
February	(g)	93	1,813	1,906	93	1,999	2	5	2,006
March	(g)	87	2,035	2,122	103	2,225	2	5	2,232
April	(g)	66	2,059	2,125	104	R 2,229	2	4	2,236
May	(g)	61	2,119	2,180	110	2,290	2	5	2,297
June	(g)	59	2,090	2,149	108	2,257	2	4	2,263
July	(g)	63	2,202	R 2,266	113	2,378	2	R 4	2,385
August	(g)	65	2,200	2,265	116	R 2,382	2	4	2,388
September	(g)	61	2,044	2,105	108	2,214	2	4	2,220
October	(g)	64	2,169	2,234	114	2,348	2	4	2,354
November	(g)	80	2,042	R 2,122	108	2,229	2	5	2,236
December	(g)	91	2,115	R 2,205	113	2,318	2	4	2,325
Total	**(g)**	**899**	**R 24,842**	**R 25,741**	**1,289**	**R 27,030**	**R 26**	**R 53**	**R 27,109**
2015 January	(g)	104	R 2,023	R 2,127	97	R 2,224	2	5	R 2,231
February	(g)	98	R 1,822	R 1,920	95	R 2,015	2	5	R 2,022
March	(g)	88	2,131	2,218	108	2,326	2	4	2,333
April	(g)	69	2,067	2,136	106	2,242	2	4	2,248
May	(g)	R 64	2,168	2,231	117	2,349	2	4	2,355
June	(g)	65	R 2,146	2,210	119	R 2,330	2	4	2,336
July	(g)	R 71	2,260	2,330	120	2,450	2	5	2,457
August	(g)	70	2,252	2,322	121	2,442	2	4	2,449
September	(g)	65	2,124	2,189	117	2,306	2	4	2,312
9-Month Total	**(g)**	**692**	**18,991**	**19,684**	**1,001**	**20,684**	**20**	**40**	**20,744**
2014 9-Month Total	**(g)**	**664**	**18,515**	**19,180**	**954**	**20,134**	**20**	**40**	**20,194**
2013 9-Month Total	**(g)**	**646**	**18,344**	**18,990**	**931**	**19,921**	**20**	**40**	**19,981**

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

[b] 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. Data are for natural gas consumed in the operation of pipelines (primarily in compressors) and small amounts consumed as vehicle fuel—see Table 4.3.

[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 1, "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.

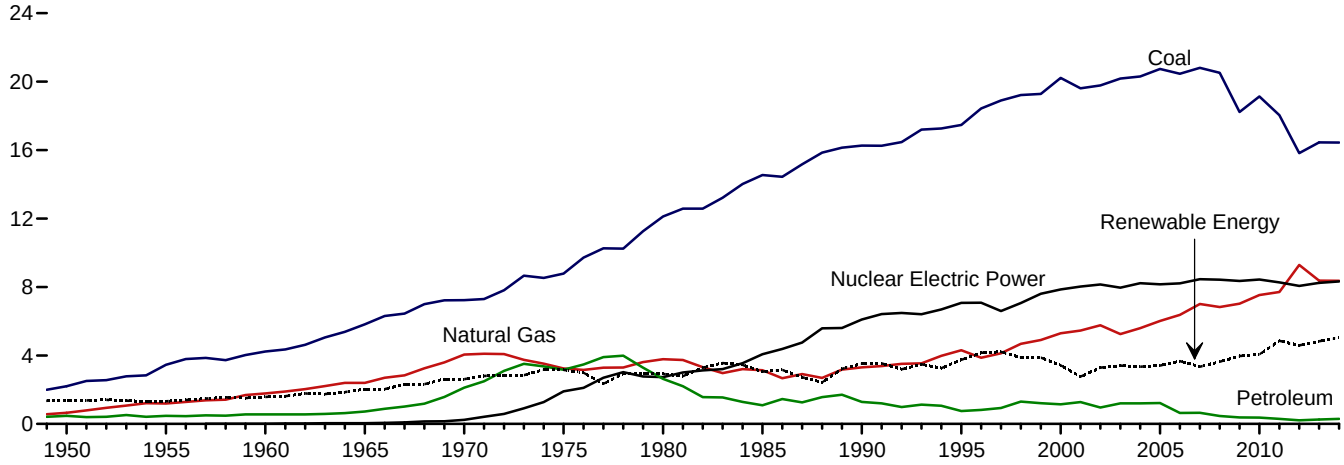
Notes: • Data are estimates, except for coal totals through 1977; and electricity retail sales beginning in 1979. • See Note 2, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

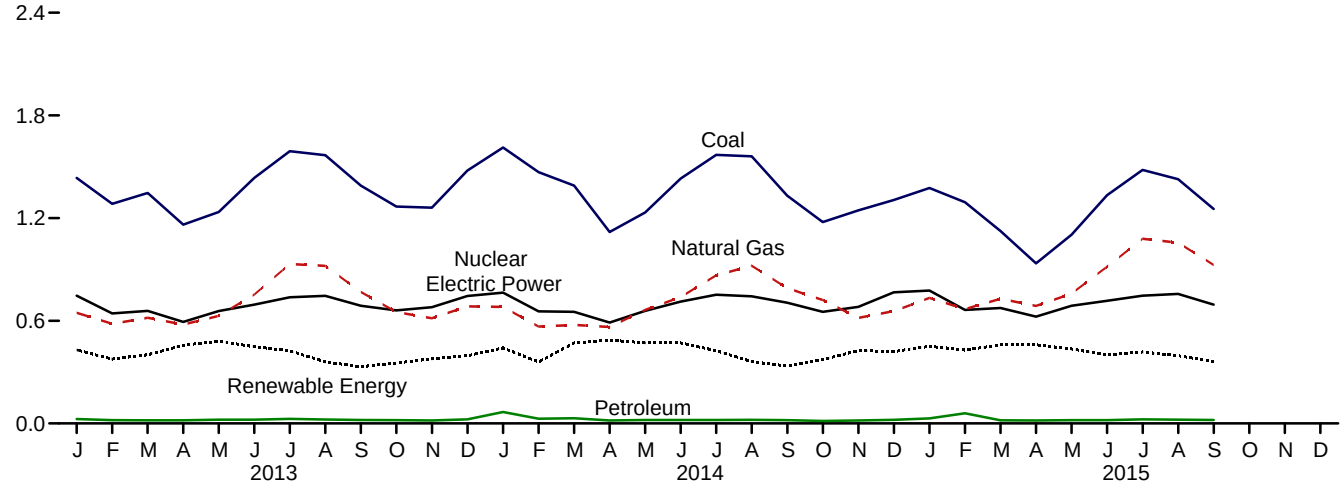
Sources: See end of section.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

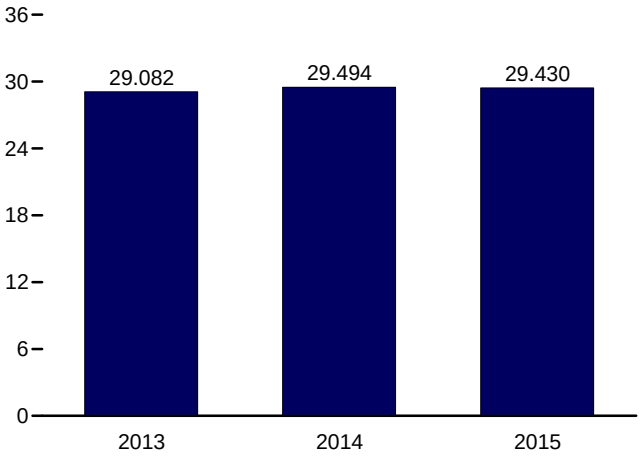
By Major Source, 1949–2014



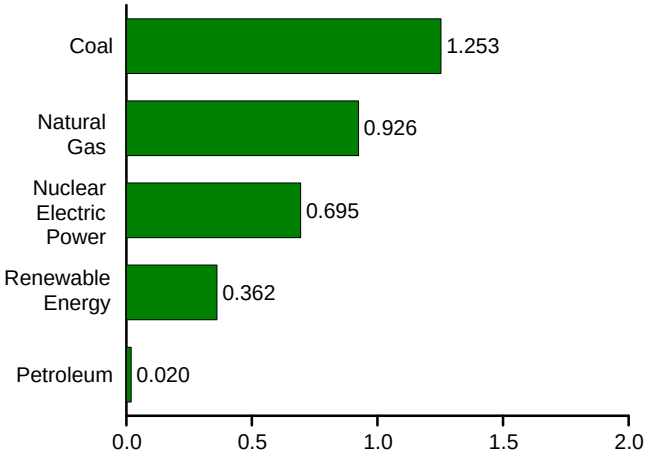
By Major Source, Monthly



Total, January–September



By Major Source, September 2015



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[e]	Total Primary
1950 Total	**2,199**	**651**	**472**	**3,322**	**0**	**1,346**	**NA**	**NA**	**NA**	**5**	**1,351**	**6**	**4,679**
1955 Total	**3,458**	**1,194**	**471**	**5,123**	**0**	**1,322**	**NA**	**NA**	**NA**	**3**	**1,325**	**14**	**6,461**
1960 Total	**4,228**	**1,785**	**553**	**6,565**	**6**	**1,569**	**(s)**	**NA**	**NA**	**2**	**1,571**	**15**	**8,158**
1965 Total	**5,821**	**2,395**	**722**	**8,938**	**43**	**2,026**	**2**	**NA**	**NA**	**3**	**2,031**	**(s)**	**11,012**
1970 Total	**7,227**	**4,054**	**2,117**	**13,399**	**239**	**2,600**	**6**	**NA**	**NA**	**4**	**2,609**	**7**	**16,253**
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[f]	**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**
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**	**1,276**	**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**	**7,960**	**2,749**	**146**	**5**	**113**	**397**	**3,411**	**22**	**38,028**
2004 Total	**20,305**	**5,595**	**1,201**	**27,101**	**8,223**	**2,655**	**148**	**6**	**142**	**388**	**3,339**	**39**	**38,701**
2005 Total	**20,737**	**6,015**	**1,222**	**27,974**	**8,161**	**2,670**	**147**	**6**	**178**	**406**	**3,406**	**85**	**39,626**
2006 Total	**20,462**	**6,375**	**637**	**27,474**	**8,215**	**2,839**	**145**	**5**	**264**	**412**	**3,665**	**63**	**39,417**
2007 Total	**20,808**	**7,005**	**648**	**28,461**	**8,459**	**2,430**	**145**	**6**	**341**	**423**	**3,345**	**107**	**40,371**
2008 Total	**20,513**	**6,829**	**459**	**27,801**	**8,426**	**2,494**	**146**	**9**	**546**	**435**	**3,630**	**112**	**39,969**
2009 Total	**18,225**	**7,022**	**382**	**25,630**	**8,355**	**2,650**	**146**	**9**	**721**	**441**	**3,967**	**116**	**38,069**
2010 Total	**19,133**	**7,528**	**370**	**27,031**	**8,434**	**2,521**	**148**	**12**	**923**	**459**	**4,064**	**89**	**39,619**
2011 Total	**18,035**	**7,712**	**295**	**26,042**	**8,269**	**3,085**	**149**	**17**	**1,167**	**437**	**4,855**	**127**	**39,293**
2012 Total	**15,821**	**9,287**	**214**	**25,322**	**8,062**	**2,606**	**148**	**40**	**1,339**	**453**	**4,586**	**161**	**38,131**
2013 January	1,435	646	25	2,107	746	234	13	3	141	39	429	16	3,298
February	1,283	582	19	1,884	642	191	12	4	134	35	376	15	2,917
March	1,346	618	18	1,983	658	193	13	6	150	39	402	17	3,058
April	1,162	577	18	1,757	593	237	12	6	167	35	457	13	2,820
May	1,236	628	22	1,886	657	268	12	7	155	37	480	17	3,040
June	1,435	753	22	2,210	694	258	12	8	131	39	448	18	3,370
July	1,591	931	27	2,549	737	257	13	8	106	41	424	19	3,729
August	1,567	921	23	2,510	745	204	13	9	92	42	360	20	3,636
September	1,390	768	20	2,179	688	160	12	9	111	39	331	17	3,214
October	1,268	651	20	1,938	660	162	13	9	130	39	353	16	2,967
November	1,261	615	18	1,893	679	167	12	8	151	41	377	17	2,967
December	1,478	684	24	2,186	745	198	13	8	133	43	396	16	3,343
Total	**16,451**	**8,376**	**255**	**25,082**	**8,244**	**2,529**	**151**	**83**	**1,600**	**470**	**4,833**	**201**	**38,360**
2014 January	R 1,612	681	R 67	R 2,360	R 764	R 205	R 13	R 7	R 171	R 45	R 441	13	R 3,579
February	R 1,468	R 566	27	R 2,061	655	R 165	12	8	R 134	R 42	R 360	9	R 3,085
March	1,390	R 576	31	R 1,997	652	R 230	13	R 12	169	R 46	R 471	11	R 3,130
April	1,119	R 563	17	R 1,699	589	R 241	13	R 14	R 178	R 41	R 487	10	R 2,785
May	R 1,233	664	20	R 1,917	658	R 252	13	R 16	R 149	R 41	R 471	14	R 3,059
June	R 1,431	R 739	20	R 2,190	712	R 245	R 12	R 18	R 151	R 45	R 471	13	R 3,386
July	R 1,569	R 865	20	2,455	752	R 232	13	17	R 116	R 48	R 425	16	R 3,647
August	R 1,561	R 921	21	R 2,503	743	R 188	13	18	97	R 46	R 362	18	R 3,626
September	R 1,331	R 791	19	R 2,141	706	R 153	R 12	17	R 110	R 43	R 335	16	R 3,198
October	R 1,177	722	15	R 1,913	652	R 163	13	16	R 138	42	R 372	14	R 2,951
November	R 1,245	R 616	17	R 1,879	681	R 177	R 13	13	R 180	R 44	R 426	16	3,002
December	R 1,306	R 656	21	R 1,983	767	212	R 13	R 10	140	R 45	R 420	15	R 3,184
Total	**R 16,441**	**R 8,362**	**R 295**	**R 25,098**	**R 8,330**	**R 2,462**	**R 151**	**R 165**	**R 1,732**	**R 530**	**R 5,040**	**164**	**R 38,632**
2015 January	R 1,375	R 734	R 30	R 2,139	776	R 233	14	11	145	R 46	R 451	18	R 3,383
February	1,293	R 668	59	R 2,020	663	R 216	13	15	143	R 42	R 428	14	R 3,126
March	1,124	R 729	18	R 1,870	674	R 236	14	21	146	R 42	R 459	19	R 3,023
April	936	686	17	1,639	624	R 214	13	24	170	R 39	R 459	20	R 2,743
May	R 1,103	R 758	19	R 1,881	688	191	14	R 24	R 164	R 41	R 435	21	R 3,024
June	R 1,334	R 916	19	R 2,268	716	190	13	R 25	128	R 43	R 400	21	R 3,406
July	R 1,482	R 1,079	23	R 2,584	746	200	14	26	130	R 48	R 417	21	R 3,769
August	1,427	R 1,056	22	R 2,505	757	R 185	14	R 26	124	R 47	R 396	22	R 3,681
September	1,253	926	20	2,199	695	154	12	22	132	41	362	20	3,275
9-Month Total	**11,326**	**7,552**	**227**	**19,105**	**6,340**	**1,820**	**121**	**195**	**1,282**	**391**	**3,808**	**177**	**29,430**
2014 9-Month Total	**12,713**	**6,366**	**242**	**19,322**	**6,230**	**1,911**	**113**	**127**	**1,273**	**399**	**3,822**	**120**	**29,494**
2013 9-Month Total	**12,444**	**6,425**	**194**	**19,064**	**6,160**	**2,002**	**113**	**59**	**1,187**	**346**	**3,706**	**152**	**29,082**

[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] Net imports equal imports minus exports.
[f] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

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

Notes: • Data are for fuels consumed to produce electricity and useful thermal 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 2, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 2.7 U.S. Government Energy Consumption by Agency, Fiscal Years

(Trillion Btu)

Fiscal Year[a]	Agri-culture	Defense	Energy	GSA[b]	HHS[c]	Interior	Justice	NASA[d]	Postal Service	Trans-portation	Veterans Affairs	Other[e]	Total
1975	9.5	1,360.2	50.4	22.3	6.5	9.4	5.9	13.4	30.5	19.3	27.1	10.5	1,565.0
1976	9.3	1,183.3	50.3	20.6	6.7	9.4	5.7	12.4	30.0	19.5	25.0	11.2	1,383.4
1977	8.9	1,192.3	51.6	20.4	6.9	9.5	5.9	12.0	32.7	20.4	25.9	11.9	1,398.5
1978	9.1	1,157.8	50.1	20.4	6.5	9.2	5.9	11.2	30.9	20.6	26.8	12.4	1,360.9
1979	9.2	1,175.8	49.6	19.6	6.4	10.4	6.4	11.1	29.3	19.6	25.7	12.3	1,375.4
1980	8.6	1,183.1	47.4	18.1	6.0	8.5	5.7	10.4	27.2	19.2	24.8	12.3	1,371.2
1981	7.9	1,239.5	47.3	18.0	6.7	7.6	5.4	10.0	27.9	18.8	24.0	11.1	1,424.2
1982	7.6	1,264.5	49.0	18.1	6.4	7.4	5.8	10.1	27.5	19.1	24.2	11.6	1,451.4
1983	7.4	1,248.3	49.5	16.1	6.2	7.7	5.5	10.3	26.5	19.4	24.1	10.8	1,431.8
1984	7.9	1,292.1	51.6	16.2	6.4	8.4	6.4	10.6	27.7	19.8	24.6	10.7	1,482.5
1985	8.4	1,250.6	52.2	20.7	6.0	7.8	8.2	10.9	27.8	19.6	25.1	13.1	1,450.3
1986	6.8	1,222.8	46.9	14.0	6.2	6.9	8.6	11.2	28.0	19.4	25.0	10.8	1,406.7
1987	7.3	1,280.5	48.5	13.1	6.6	6.6	8.1	11.3	28.5	19.0	24.9	11.9	1,466.3
1988	7.8	1,165.8	49.9	12.4	6.4	7.0	9.4	11.3	29.6	18.7	26.3	15.8	1,360.3
1989	8.7	1,274.4	44.2	12.7	6.7	7.1	7.7	12.4	30.3	18.5	26.2	15.6	1,464.7
1990	9.6	1,241.7	43.5	17.5	7.1	7.4	7.0	12.4	30.6	19.0	24.9	17.5	1,438.0
1991	9.6	1,269.3	42.1	14.0	6.2	7.1	8.0	12.5	30.8	19.0	25.1	18.1	1,461.7
1992	9.1	1,104.0	44.3	13.8	6.8	7.0	7.5	12.6	31.7	17.0	25.3	15.7	1,294.8
1993	9.3	1,048.8	43.4	14.1	7.2	7.5	9.1	12.4	33.7	19.4	25.7	16.2	1,246.8
1994	9.4	977.0	42.1	14.0	7.5	7.9	10.3	12.6	35.0	19.8	25.6	17.1	1,178.2
1995	9.0	926.0	47.3	13.7	6.1	6.4	10.2	12.4	36.2	18.7	25.4	17.1	1,128.5
1996	9.1	904.5	44.6	14.5	6.6	4.3	12.1	11.5	36.4	19.6	26.8	17.7	1,107.7
1997	7.4	880.0	43.1	14.4	7.9	6.6	12.0	12.0	40.8	19.1	27.3	20.8	1,091.2
1998	7.9	837.1	31.5	14.1	7.4	6.4	15.8	11.7	39.5	18.5	27.6	19.5	1,037.1
1999	7.8	810.7	27.0	14.4	7.1	7.5	15.4	11.4	39.8	22.6	27.5	19.8	1,010.9
2000	7.4	779.1	30.5	17.6	8.0	7.8	19.7	11.1	43.3	21.2	27.0	20.3	993.1
2001	7.4	787.2	31.1	18.4	8.5	9.5	19.7	10.9	43.4	17.8	27.7	20.7	1,002.3
2002	7.2	837.5	30.7	17.5	8.0	8.2	17.7	10.7	41.6	18.3	27.7	18.4	1,043.4
2003	7.7	895.1	31.9	18.5	10.1	7.3	22.7	10.8	50.9	5.5	30.6	41.0	1,132.3
2004	7.0	960.7	31.4	18.3	8.8	8.7	17.5	9.9	50.5	5.2	29.9	44.0	1,191.7
2005	7.5	933.2	29.6	18.4	9.6	8.6	18.8	10.3	53.5	5.0	30.0	42.1	1,166.4
2006	6.8	843.7	32.9	18.2	9.3	8.1	23.5	10.2	51.8	4.6	29.3	38.1	1,076.4
2007	6.8	864.6	31.5	19.1	9.9	7.5	20.7	10.6	45.8	5.6	30.0	38.1	1,090.2
2008	6.5	910.8	32.1	18.8	10.3	7.1	19.0	10.8	47.1	7.7	29.0	41.6	1,140.7
2009	6.6	874.3	31.1	18.6	10.8	7.9	16.5	10.2	44.2	4.3	29.9	40.2	1,094.6
2010	6.8	889.9	31.7	18.8	10.4	7.3	15.7	10.1	43.3	5.7	30.2	42.9	1,112.7
2011	8.3	890.3	33.1	18.5	10.5	7.3	13.9	10.1	43.0	6.7	30.6	41.7	1,114.1
2012	6.7	828.5	30.3	16.3	10.0	6.7	15.1	8.9	40.8	5.6	29.7	40.6	1,039.3
2013	7.3	749.5	28.9	16.4	10.5	6.2	15.3	8.7	41.9	5.3	29.9	39.3	959.3
2014[P]	6.3	730.6	29.4	17.0	9.5	6.2	15.6	8.3	43.0	5.2	31.4	39.0	941.5

[a] For 1975 and 1976, the U.S. Government's fiscal year was July 1 through June 30. Beginning in 1977, the U.S. Government's fiscal year is October 1 through September 30 (for example, fiscal year 2014 is October 2013 through September 2014).

[b] General Services Administration.

[c] Health and Human Services.

[d] National Aeronautics and Space Administration.

[e] Includes all U.S. government agencies not separately displayed. See http://ctsedwweb.ee.doe.gov/Annual/Report/AgencyReference.aspx for agency list.

P=Preliminary.

Notes: • Data in this table are developed using conversion factors that often differ from those in Tables A1–A6. • Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the U.S. Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. • Totals may not equal sum of components due to independent rounding.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption (Excel and CSV files) for all annual data beginning in 1975.

Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program. See http://ctsedwweb.ee.doe.gov/Annual/Report/Report.aspx, "A-5 Historical Federal Energy Consumption and Cost Data by Agency and Energy Type (FY 1975 to Present)" dataset.

Table 2.8 U.S. Government Energy Consumption by Source, Fiscal Years

(Trillion Btu)

Fiscal Year[a]	Coal	Natural Gas[b]	Petroleum						Other Mobility Fuels[f]	Electricity	Purchased Steam and Other[g]	Total
			Aviation Gasoline	Fuel Oil[c]	Jet Fuel	LPG[d]	Motor Gasoline[e]	Total				
1975	77.9	166.2	22.0	376.0	707.4	5.6	63.2	1,174.2	0.0	141.5	5.1	1,565.0
1976	71.3	151.8	11.6	329.7	610.0	4.7	60.4	1,016.4	.0	139.3	4.6	1,383.4
1977	68.4	141.2	8.8	348.5	619.2	4.1	61.4	1,042.1	.0	141.1	5.7	1,398.5
1978	66.0	144.7	6.2	332.3	601.1	3.0	60.1	1,002.9	.0	141.0	6.4	1,360.9
1979	65.1	148.9	4.7	327.1	618.6	3.7	59.1	1,013.1	.0	141.2	7.1	1,375.4
1980	63.5	147.3	4.9	307.7	638.7	3.8	56.5	1,011.6	.2	141.9	6.8	1,371.2
1981	65.1	142.2	4.6	351.3	653.3	3.5	53.2	1,066.0	.2	144.5	6.2	1,424.2
1982	68.6	146.2	3.6	349.4	672.7	3.7	53.1	1,082.5	.2	147.5	6.2	1,451.4
1983	62.4	147.8	2.6	329.5	673.4	3.8	51.6	1,060.8	.2	151.5	9.0	1,431.8
1984	65.3	157.4	1.9	342.9	693.7	3.9	51.2	1,093.6	.2	155.9	10.1	1,482.5
1985	64.8	149.9	1.9	292.6	705.7	3.8	50.4	1,054.3	.2	167.2	13.9	1,450.3
1986	63.8	140.9	1.4	271.6	710.2	3.6	45.3	1,032.1	.3	155.8	13.7	1,406.7
1987	67.0	145.6	1.0	319.5	702.3	3.6	43.1	1,069.5	.4	169.9	13.9	1,466.3
1988	60.2	144.6	6.0	284.8	617.2	2.7	41.2	951.9	.4	171.2	32.0	1,360.3
1989	48.7	152.4	.8	245.3	761.7	3.5	41.1	1,052.4	2.2	188.6	20.6	1,464.7
1990	44.3	159.4	.5	245.2	732.4	3.8	37.2	1,019.1	2.6	193.6	19.1	1,438.0
1991	45.9	154.1	.4	232.6	774.5	3.0	34.1	1,044.7	6.0	192.7	18.3	1,461.7
1992	51.7	151.2	1.0	200.6	628.2	3.0	35.6	868.4	8.4	192.5	22.5	1,294.8
1993	38.3	152.9	.7	187.0	612.4	3.5	34.5	838.1	5.8	193.1	18.6	1,246.8
1994	35.0	143.9	.6	198.5	550.7	3.2	29.5	782.6	7.7	190.9	18.2	1,178.2
1995	31.7	149.4	.3	178.4	522.3	3.0	31.9	735.9	8.4	184.8	18.2	1,128.5
1996	23.3	147.3	.2	170.5	513.0	3.1	27.6	714.4	18.7	184.0	20.1	1,107.7
1997	22.5	153.8	.3	180.0	475.7	2.6	39.0	697.6	14.5	183.6	19.2	1,091.2
1998	23.9	140.4	.2	174.5	445.5	3.5	43.0	666.8	5.9	181.4	18.8	1,037.1
1999	21.2	137.4	.1	162.1	444.7	2.4	41.1	650.4	.4	180.0	21.5	1,010.9
2000	22.7	133.8	.2	171.3	403.1	2.5	43.9	621.0	1.8	193.6	20.2	993.1
2001	18.8	133.7	.2	176.9	415.2	3.1	42.5	638.0	4.8	188.4	18.6	1,002.3
2002	16.9	133.7	.2	165.6	472.9	2.8	41.3	682.8	3.2	188.3	18.5	1,043.4
2003	18.1	135.5	.3	190.8	517.9	3.2	46.3	758.4	3.3	193.8	23.2	1,132.3
2004	17.4	135.3	.2	261.4	508.2	2.9	44.1	816.9	3.1	197.1	22.0	1,191.7
2005	17.1	135.7	.4	241.4	492.2	3.4	48.8	786.1	5.6	197.6	24.3	1,166.4
2006	23.5	132.6	.6	209.3	442.6	2.7	48.3	703.6	2.1	196.7	18.2	1,076.4
2007	20.4	131.5	.4	212.9	461.1	2.7	46.5	723.7	2.9	194.9	16.7	1,090.2
2008	20.8	129.5	.4	198.3	524.3	2.3	48.7	773.8	3.6	195.3	17.7	1,140.7
2009	20.3	131.7	.3	166.4	505.6	3.2	48.3	723.8	10.1	191.2	17.7	1,094.6
2010	20.0	130.1	.4	157.8	535.8	2.5	51.3	747.7	3.0	193.7	18.2	1,112.7
2011	18.5	124.7	.9	166.5	533.6	2.0	52.7	755.8	2.7	193.2	19.1	1,114.1
2012	15.9	116.2	.4	148.6	493.5	1.7	50.1	694.4	3.1	187.2	22.5	1,039.3
2013	14.3	122.5	.7	140.0	424.0	1.9	46.6	613.2	2.8	184.7	21.8	959.3
2014[P]	13.5	125.6	.3	133.5	414.3	1.8	44.9	594.8	3.6	182.1	21.9	941.5

[a] For 1975 and 1976, the U.S. Government's fiscal year was July 1 through June 30. Beginning in 1977, the U.S. Government's fiscal year is October 1 through September 30 (for example, fiscal year 2014 is October 2013 through September 2014).

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

[c] Distillate fuel oil, including diesel fuel; and residual fuel oil, including Navy Special.

[d] Liquefied petroleum gases, primarily propane.

[e] Includes E10 (a mixture of 10% ethanol and 90% motor gasoline) and E15 (a mixture of 15% ethanol and 85% motor gasoline).

[f] Other types of fuel used in vehicles and equipment. Primarily includes alternative fuels such as compressed natural gas (CNG); liquefied natural gas (LNG); E85 (a mixture of 85% ethanol and 15% motor gasoline); B20 (a mixture of 20% biodiesel and 80% diesel fuel); B100 (100% biodiesel); hydrogen; and methanol.

[g] Other types of energy used in facilities. Primarily includes chilled water, but also includes small amounts of renewable energy such as wood and solar thermal.

P=Preliminary.

Notes: • Data in this table are developed using conversion factors that often differ from those in Tables A1–A6. • Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the U.S. Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. • Totals may not equal sum of components due to independent rounding.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption (Excel and CSV files) for all annual data beginning in 1975.

Source: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program. See http://ctsedwweb.ee.doe.gov/Annual/Report/Report.aspx, "A-5 Historical Federal Energy Consumption and Cost Data by Agency and Energy Type (FY 1975 to Present)" dataset.

Energy Consumption by Sector

Note 1. 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 elec-tricity 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, geothermal, solar thermal, photovoltaic, and wind energy sources. 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% is lost in plant use and 7% is lost in transmission and distribution.

Note 2. 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.

Table 2.2 Sources

Coal
1949−2007: Residential sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the residential and commercial sectors coal consumption heat content factors in Table A5.

Natural Gas
1949−1979: Residential sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4.
1980 forward: Residential sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4. The residential sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Residential sector natural gas (excluding supplemental gaseous fuels) consumption is equal to residential sector natural gas (including supplemental gaseous fuels) consumption minus the residential sector portion of supplemental gaseous fuels.

Petroleum
1949 forward: Table 3.8a.

Fossil Fuels Total
1949−2007: Residential sector total fossil fuels consumption is the sum of the residential sector consumption values for coal, natural gas, and petroleum.
2008 forward: Residential sector total fossil fuels consumption is the sum of the residential sector consumption values for natural gas and petroleum.

Renewable Energy
1949 forward: Table 10.2a.

Total Primary Energy Consumption
1949 forward: Residential sector total primary energy consumption is the sum of the residential sector consumption values for fossil fuels and renewable energy.

Electricity Retail Sales
1949 forward: Residential sector electricity retail sales from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Electrical System Energy Losses
1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity retail sales from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor in Table A6). Total electrical system energy losses are allocated to the residential sector in proportion to the residential sector's share of total electricity retail sales from Table 7.6. See Note 1, "Electrical System Energy Losses," at end of section.

Total Energy Consumption
1949 forward: Residential sector total energy consumption is the sum of the residential sector consumption values for

total primary energy, electricity retail sales, and electrical system energy losses.

Table 2.3 Sources

Coal
1949 forward: Commercial sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the residential and commercial sectors coal consumption heat content factors in Table A5.

Natural Gas
1949−1979: Commercial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4.
1980 forward: Commercial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4. The commercial sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Commercial sector natural gas (excluding supplemental gaseous fuels) consumption is equal to commercial sector natural gas (including supplemental gaseous fuels) consumption minus the commercial sector portion of supplemental gaseous fuels.

Petroleum
1949−1992: Table 3.8a.
1993−2008: The commercial sector share of motor gasoline consumption is equal to commercial sector motor gasoline consumption from Table 3.7a divided by motor gasoline product supplied from Table 3.5. Commercial sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the commercial sector share of motor gasoline consumption. Commercial sector petroleum (excluding biofuels) consumption is equal to commercial sector petroleum (including biofuels) consumption from Table 3.8a minus commercial sector fuel ethanol (including denaturant) consumption.
2009 forward: Commercial sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the commercial sector share of motor gasoline consumption (see 1993−2008 sources above). Commercial sector petroleum (excluding biofuels) consumption is equal to commercial sector petroleum (including biofuels) consumption from Table 3.8a minus commercial sector fuel ethanol (minus denaturant) consumption.

Fossil Fuels Total
1949 forward: Commercial sector total fossil fuels consumption is the sum of the commercial sector consumption values for coal, natural gas, and petroleum.

Renewable Energy
1949 forward: Table 10.2a.

Total Primary Energy Consumption
1949 forward: Commercial sector total primary energy consumption is the sum of the commercial sector consumption values for fossil fuels and renewable energy.

Electricity Retail Sales
1949 forward: Commercial sector electricity retail sales from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Electrical System Energy Losses
1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity retail sales from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor in Table A6). Total electrical system energy losses are allocated to the commercial sector in proportion to the commercial sector's share of total electricity retail sales from Table 7.6. See Note 1, "Electrical System Energy Losses," at end of section.

Total Energy Consumption
1949 forward: Commercial sector total energy consumption is the sum of the commercial sector consumption values for total primary energy, electricity retail sales, and electrical system energy losses.

Table 2.4 Sources

Coal
1949 forward: Coke plants coal consumption from Table 6.2 is converted to Btu by multiplying by the coke plants coal consumption heat content factors in Table A5. Other industrial coal consumption from Table 6.2 is converted to Btu by multiplying by the other industrial coal consumption heat content factors in Table A5. Industrial sector coal consumption is equal to coke plants coal consumption and other industrial coal consumption.

Natural Gas
1949−1979: Industrial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4.
1980 forward: Industrial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4. The industrial sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Industrial sector natural gas (excluding supplemental gaseous fuels) consumption is equal to industrial sector natural gas (including supplemental gaseous fuels) consumption minus the industrial sector portion of supplemental gaseous fuels.

Petroleum
1949−1992: Table 3.8b.

1993−2008: The industrial sector share of motor gasoline consumption is equal to industrial sector motor gasoline consumption from Table 3.7b divided by motor gasoline product supplied from Table 3.5. Industrial sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the industrial sector share of motor gasoline consumption. Industrial sector petroleum (excluding biofuels) consumption is equal to industrial sector petroleum (including biofuels) consumption from Table 3.8b minus industrial sector fuel ethanol (including denaturant) consumption.
2009 forward: Industrial sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the industrial sector share of motor gasoline consumption (see 1993−2008 sources above). Industrial sector petroleum (excluding biofuels) consumption is equal to industrial sector petroleum (including biofuels) consumption from Table 3.8b minus industrial sector fuel ethanol (minus denaturant) consumption.

Coal Coke Net Imports
1949 forward: Coal coke net imports are equal to coal coke imports from Table 1.4a minus coal coke exports from Table 1.4b.

Fossil Fuels Total
1949 forward: Industrial sector total fossil fuels consumption is the sum of the industrial sector consumption values for coal, natural gas, and petroleum, plus coal coke net imports.

Renewable Energy
1949 forward: Table 10.2b.

Total Primary Energy Consumption
1949 forward: Industrial sector total primary energy consumption is the sum of the industrial sector consumption values for fossil fuels and renewable energy.

Electricity Retail Sales
1949 forward: Industrial sector electricity retail sales from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Electrical System Energy Losses
1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity retail sales from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor in Table A6). Total electrical system energy losses are allocated to the industrial sector in proportion to the industrial sector's share of total electricity retail sales from Table 7.6. See Note 1, "Electrical System Energy Losses," at end of section.

Total Energy Consumption
1949 forward: Industrial sector total energy consumption is the sum of the industrial sector consumption values for total primary energy, electricity retail sales, and electrical system energy losses.

Table 2.5 Sources

Coal
1949−1977: Transportation sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the other industrial sector coal consumption heat content factors in Table A5.

Natural Gas
1949 forward: Transportation sector natural gas consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors in Table A4.

Petroleum
1949−1992: Table 3.8c.
1993−2008: The transportation sector share of motor gasoline consumption is equal to transportation sector motor gasoline consumption from Table 3.7c divided by motor gasoline product supplied from Table 3.5. Transportation sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption. Transportation sector petroleum (excluding biofuels) consumption is equal to transportation sector petroleum (including biofuels) consumption from Table 3.8c minus transportation sector fuel ethanol (including denaturant) consumption.
2009 forward: Transportation sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption (see 1993−2008 sources above). Transportation sector petroleum (excluding biofuels) consumption is equal to: transportation sector petroleum (including biofuels) consumption from Table 3.8c; minus transportation sector fuel ethanol (minus denaturant) consumption; minus refinery and blender net inputs of renewable fuels (excluding fuel ethanol) from U.S. Energy Information Administration, *Petroleum Supply Annual*/*Petroleum Supply Monthly*, Table 1 (for biomass-based diesel fuel, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1).

Fossil Fuels Total
1949−1977: Transportation sector total fossil fuels consumption is the sum of the transportation sector consumption values for coal, natural gas, and petroleum.
1978 forward: Transportation sector total fossil fuels consumption is the sum of the transportation sector consumption values for natural gas and petroleum.

Renewable Energy
1981 forward: Table 10.2b.

Total Primary Energy Consumption
1949−1980: Transportation sector total primary energy consumption is equal to transportation sector fossil fuels consumption.

1981 forward: Transportation sector total primary energy consumption is the sum of the transportation sector consumption values for fossil fuels and renewable energy.

Electricity Retail Sales
1949 forward: Transportation sector electricity retail sales from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Electrical System Energy Losses
1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity retail sales from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor in Table A6). Total electrical system energy losses are allocated to the transportation sector in proportion to the transportation sector's share of total electricity retail sales from Table 7.6. See Note 1, "Electrical System Energy Losses," at end of section.

Total Energy Consumption
1949 forward: Transportation sector total energy consumption is the sum of the transportation sector consumption values for total primary energy, electricity retail sales, and electrical system energy losses.

Table 2.6 Sources

Coal
1949 forward: Electric power sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the electric power sector coal consumption heat content factors in Table A5.

Natural Gas
1949–1979: Electric power sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas electric power sector consumption heat content factors in Table A4.

1980 forward: Electric power sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas electric power sector consumption heat content factors in Table A4. The electric power sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Electric power sector natural gas (excluding supplemental gaseous fuels) consumption is equal to electric power sector natural gas (including supplemental gaseous fuels) consumption minus the electric power sector portion of supplemental gaseous fuels.

Petroleum
1949 forward: Table 3.8c.

Fossil Fuels Total
1949 forward: Electric power sector total fossil fuels consumption is the sum of the electric power sector consumption values for coal, natural gas, and petroleum.

Nuclear Electric Power
1949 forward: Nuclear electricity net generation data from Table 7.2a are converted to Btu by multiplying by the nuclear heat rate factors in Table A6.

Renewable Energy
1949 forward: Table 10.2c.

Electricity Net Imports
1949 forward: Electricity net imports are equal to electricity imports from Table 1.4a minus electricity exports from Table 1.4b.

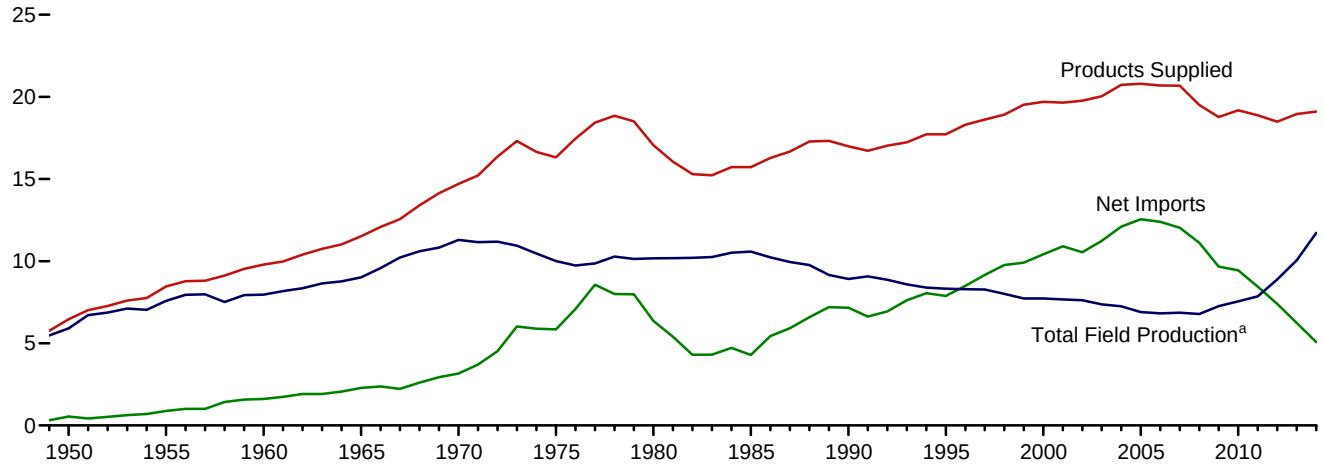
Total Primary Energy Consumption
1949 forward: Electric power sector total primary energy consumption is the sum of the electric power sector consumption values for fossil fuels, nuclear electric power, and renewable energy, plus electricity net imports.

THIS PAGE INTENTIONALLY LEFT BLANK

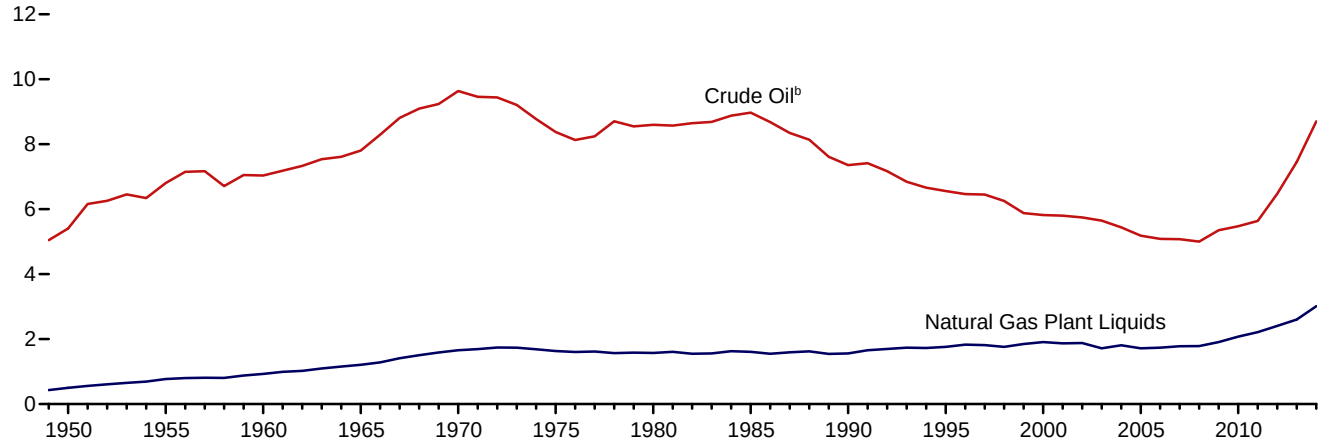
3. Petroleum

Figure 3.1 Petroleum Overview
(Million Barrels per Day)

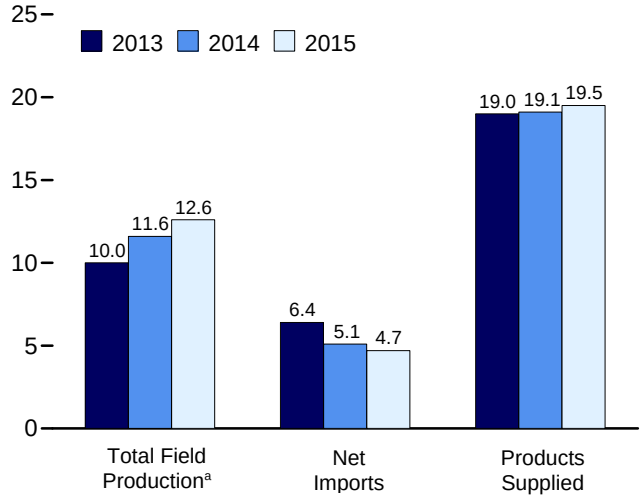
Overview, 1949–2014



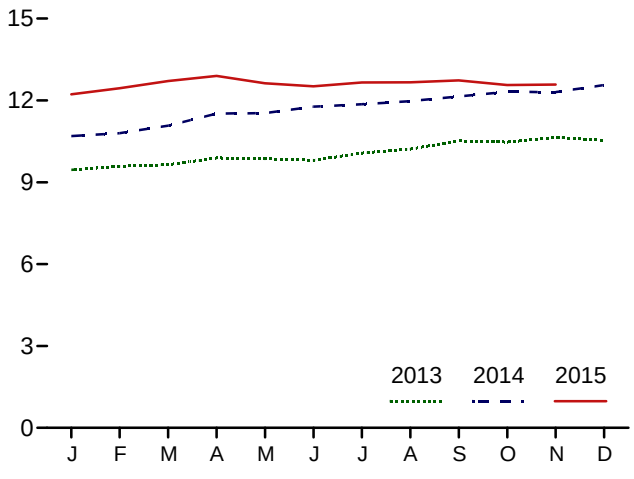
Crude Oil and Natural Gas Plant Liquids Field Production, 1949–2014



Overview, January–November



Total Field Production,[a] Monthly



[a] Crude oil, including lease condensate, and natural gas plant liquids field production.
[b] Includes lease condensate.

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[f]	Processing Gain[g]	Trade			Stock Change[j]	Adjustments[c,k]	Petroleum Products Supplied
	Crude Oil[b,c]			NGPL[e]	Total[c]			Imports[h]	Exports	Net Imports[i]			
	48 States[d]	Alaska	Total										
1950 Average	**5,407**	**0**	**5,407**	**499**	**5,906**	**NA**	**2**	**850**	**305**	**545**	**-56**	**-51**	**6,458**
1955 Average	**6,807**	**0**	**6,807**	**771**	**7,578**	**NA**	**34**	**1,248**	**368**	**880**	**(s)**	**-37**	**8,455**
1960 Average	**7,034**	**2**	**7,035**	**929**	**7,965**	**NA**	**146**	**1,815**	**202**	**1,613**	**-83**	**-8**	**9,797**
1965 Average	**7,774**	**30**	**7,804**	**1,210**	**9,014**	**NA**	**220**	**2,468**	**187**	**2,281**	**-8**	**-10**	**11,512**
1970 Average	**9,408**	**229**	**9,637**	**1,660**	**11,297**	**NA**	**359**	**3,419**	**259**	**3,161**	**103**	**-16**	**14,697**
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**
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	**4,759**	**985**	**5,744**	**1,880**	**7,624**	**NA**	**957**	**11,530**	**984**	**10,546**	**-105**	**529**	**19,761**
2003 Average	**4,675**	**974**	**5,649**	**1,719**	**7,369**	**NA**	**974**	**12,264**	**1,027**	**11,238**	**56**	**509**	**20,034**
2004 Average	**4,533**	**908**	**5,441**	**1,809**	**7,250**	**NA**	**1,051**	**13,145**	**1,048**	**12,097**	**209**	**542**	**20,731**
2005 Average	**4,320**	**864**	**5,184**	**1,717**	**6,901**	**NA**	**989**	**13,714**	**1,165**	**12,549**	**145**	**508**	**20,802**
2006 Average	**4,346**	**741**	**5,087**	**1,739**	**6,825**	**NA**	**994**	**13,707**	**1,317**	**12,390**	**60**	**538**	**20,687**
2007 Average	**4,355**	**722**	**5,077**	**1,783**	**6,860**	**NA**	**996**	**13,468**	**1,433**	**12,036**	**-148**	**640**	**20,680**
2008 Average	**4,318**	**683**	**5,001**	**1,784**	**6,785**	**NA**	**993**	**12,915**	**1,802**	**11,114**	**195**	**802**	**19,498**
2009 Average	**4,709**	**645**	**5,354**	**1,910**	**7,264**	**746**	**979**	**11,691**	**2,024**	**9,667**	**109**	**225**	**18,771**
2010 Average	**4,876**	**600**	**5,476**	**2,074**	**7,550**	**907**	**1,068**	**11,793**	**2,353**	**9,441**	**49**	**264**	**19,180**
2011 Average	**5,076**	**561**	**5,637**	**2,216**	**7,853**	**1,016**	**1,076**	**11,436**	**2,986**	**8,450**	**-121**	**365**	**18,882**
2012 Average	**5,950**	**526**	**6,476**	**2,408**	**8,884**	**964**	**1,059**	**10,598**	**3,205**	**7,393**	**158**	**348**	**18,490**
2013 January	6,529	549	7,078	2,379	9,457	891	1,061	10,089	2,881	7,208	98	231	18,749
February	6,554	541	7,095	2,490	9,585	905	966	9,286	3,280	6,007	-738	442	18,643
March	6,628	533	7,161	2,485	9,645	950	1,012	9,534	3,111	6,423	92	593	18,531
April	6,853	523	7,375	2,513	9,889	971	1,093	10,168	3,235	6,933	491	190	18,584
May	6,786	515	7,301	2,556	9,857	1,011	1,039	10,174	3,472	6,703	291	459	18,779
June	6,778	486	7,264	2,542	9,805	1,034	1,087	9,882	3,594	6,288	72	664	18,806
July	6,960	493	7,453	2,618	10,072	1,021	1,132	10,300	3,851	6,449	-37	546	19,257
August	7,074	428	7,502	2,715	10,218	1,004	1,115	10,249	3,725	6,524	162	426	19,125
September	7,216	511	7,727	2,791	10,519	998	1,136	10,036	3,632	6,405	353	547	19,252
October	7,181	521	7,702	2,766	10,469	1,052	1,085	9,608	4,074	5,535	-754	418	19,312
November	7,361	536	7,897	2,747	10,644	1,083	1,126	9,385	3,967	5,419	-688	530	19,491
December	7,327	546	7,873	2,660	10,533	1,102	1,179	9,539	4,602	4,938	-903	328	18,983
Average	**6,939**	**515**	**7,454**	**2,606**	**10,060**	**1,002**	**1,087**	**9,859**	**3,621**	**6,237**	**-127**	**448**	**18,961**
2014 January	R 7,456	542	R 7,998	2,695	R 10,693	1,001	1,107	9,305	3,911	5,394	-396	R 511	19,102
February	R 7,572	516	R 8,087	2,710	R 10,798	1,000	1,064	9,155	3,658	5,497	62	R 610	18,908
March	R 7,714	530	R 8,244	2,829	R 11,073	1,026	991	9,256	3,993	5,263	263	R 373	18,464
April	R 8,031	537	R 8,568	2,950	R 11,518	1,040	1,078	9,600	3,974	5,626	920	R 507	18,849
May	R 8,053	524	R 8,578	2,956	R 11,533	1,057	1,013	9,387	4,113	5,274	942	R 649	18,585
June	R 8,195	485	R 8,680	3,094	R 11,774	1,091	1,122	8,837	4,155	4,682	111	R 332	18,890
July	R 8,324	422	R 8,747	3,115	R 11,862	1,088	1,107	9,496	4,464	5,032	106	R 300	19,283
August	R 8,433	398	R 8,831	3,142	R 11,973	1,051	1,163	9,319	4,457	4,861	152	R 505	19,400
September	R 8,472	478	R 8,950	3,195	R 12,145	1,059	1,015	9,181	3,947	5,234	421	R 213	19,246
October	R 8,617	500	R 9,117	3,196	R 12,313	1,044	1,028	8,924	4,134	4,790	-186	R 329	19,691
November	R 8,671	516	R 9,188	3,115	R 12,303	1,059	1,178	9,009	4,353	4,656	349	R 524	19,370
December	R 8,890	520	R 9,409	3,156	R 12,565	1,134	1,100	9,402	4,892	4,510	486	R 634	19,457
Average	**R 8,206**	**497**	**R 8,703**	**3,015**	**R 11,718**	**1,055**	**1,081**	**9,241**	**4,176**	**5,065**	**269**	**R 457**	**19,106**
2015 January	RE 8,738	E 505	RE 9,243	2,980	RE 12,223	1,054	1,023	9,393	4,567	4,825	574	R 698	19,249
February	RE 8,852	E 494	RE 9,345	3,100	RE 12,445	1,046	955	9,243	4,699	4,544	128	R 534	19,396
March	RE 9,020	E 511	RE 9,531	3,181	RE 12,712	1,052	999	9,552	4,120	5,432	985	R 29	19,238
April	RE 9,075	E 510	RE 9,585	3,313	RE 12,898	1,065	1,042	9,307	4,943	4,364	900	R 568	19,037
May	RE 8,910	E 473	RE 9,382	3,249	RE 12,631	1,106	1,041	9,470	4,874	4,596	728	R 470	19,117
June	RE 8,811	E 447	RE 9,257	3,259	RE 12,517	1,148	990	9,552	4,668	4,884	443	R 496	19,591
July	RE 8,925	E 450	RE 9,375	3,284	RE 12,659	1,124	1,053	9,511	4,967	4,544	-85	R 515	19,979
August	RE 8,938	E 408	RE 9,346	3,319	RE 12,665	1,099	1,164	9,768	4,564	5,205	728	R 410	19,814
September	RE 8,917	RE 472	RE 9,389	R 3,343	RE 12,732	R 1,092	R 1,009	R 9,335	R 4,884	R 4,451	R 332	R 272	R 19,225
October	E 8,622	E 500	E 9,122	E 3,444	E 12,566	E 1,042	E 1,009	E 8,905	E 4,373	E 4,532	E -5	E 511	E 19,665
November	E 8,656	E 525	E 9,181	E 3,400	E 12,581	E 1,051	E 1,066	E 9,133	E 4,438	E 4,695	E 130	E 451	E 19,714
11-Month Average	**E 8,860**	**E 481**	**E 9,341**	**E 3,262**	**E 12,603**	**E 1,080**	**E 1,033**	**E 9,381**	**E 4,644**	**E 4,737**	**E 444**	**E 450**	**E 19,458**
2014 11-Month Average	**8,143**	**495**	**8,638**	**3,001**	**11,639**	**1,047**	**1,079**	**9,226**	**4,109**	**5,117**	**249**	**440**	**19,073**
2013 11-Month Average	**6,903**	**512**	**7,415**	**2,601**	**10,016**	**993**	**1,078**	**9,888**	**3,530**	**6,358**	**-55**	**459**	**18,959**

[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] Once a month, data for crude oil production, total field production, and adjustments are revised 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] Renewable fuels and oxygenate plant net production.

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

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

[i] Net imports equal imports minus exports.

[j] 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 Home Heating Oil Reserve. See Table 3.4.

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

R=Revised. E=Estimate. NA=Not available. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

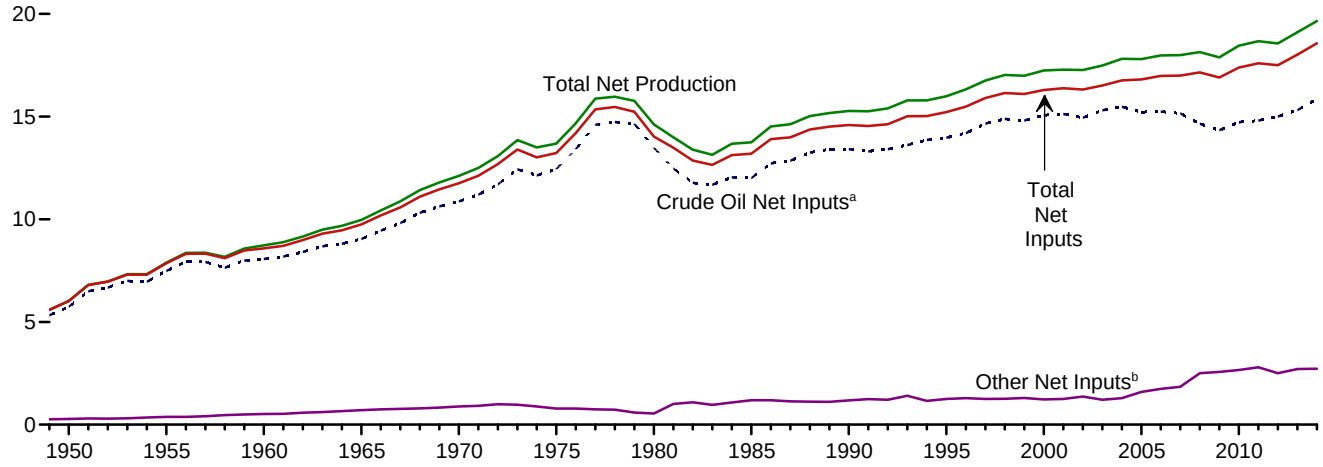
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

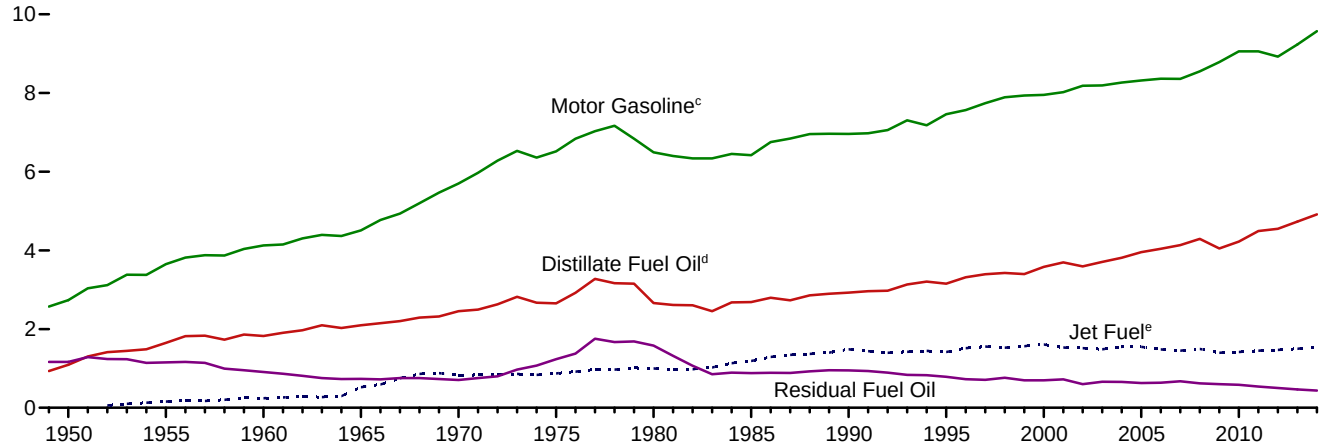
Sources: See end of section.

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

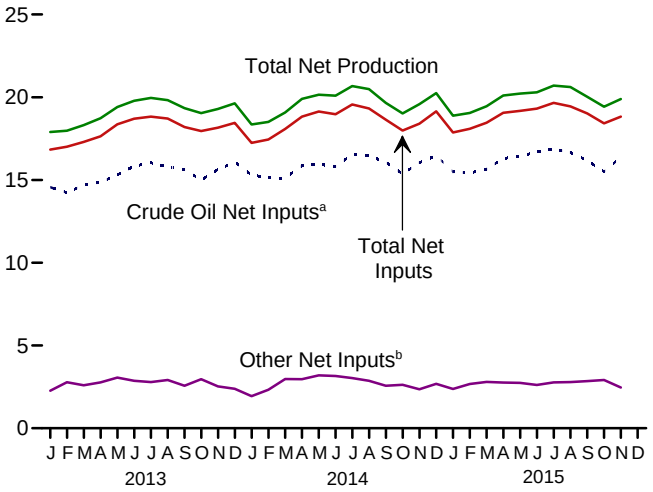
Net Inputs and Net Production, 1949–2014



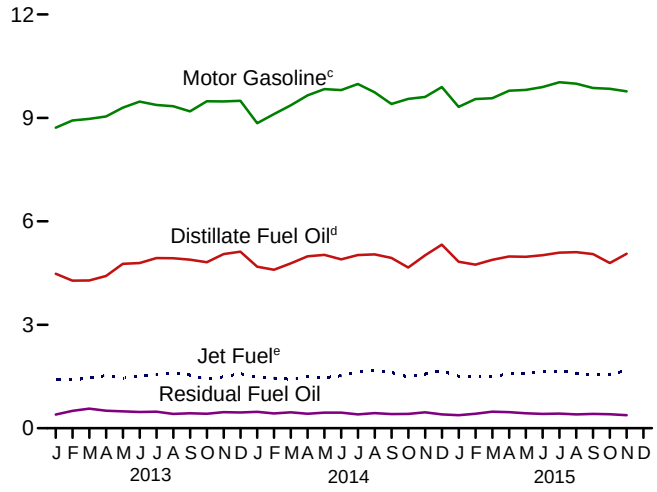
Net Production, Selected Products, 1949–2014



Net Inputs and Net Production, Monthly



Net Production, Selected Products, Monthly



[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.
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
1950 Average	**5,739**	**259**	**19**	**6,018**	**1,093**	**(h)**	**NA**	**80**	**2,735**	**1,165**	**947**	**6,019**
1955 Average	**7,480**	**345**	**32**	**7,857**	**1,651**	**155**	**NA**	**119**	**3,648**	**1,152**	**1,166**	**7,891**
1960 Average	**8,067**	**455**	**61**	**8,583**	**1,823**	**241**	**NA**	**212**	**4,126**	**908**	**1,420**	**8,729**
1965 Average	**9,043**	**618**	**88**	**9,750**	**2,096**	**523**	**NA**	**293**	**4,507**	**736**	**1,814**	**9,970**
1970 Average	**10,870**	**763**	**121**	**11,754**	**2,454**	**827**	**NA**	**345**	**5,699**	**706**	**2,082**	**12,113**
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**
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 Average	**14,724**	**442**	**2,219**	**17,385**	**4,223**	**1,418**	**560**	**659**	**9,059**	**585**	**2,509**	**18,452**
2011 Average	**14,806**	**490**	**2,300**	**17,596**	**4,492**	**1,449**	**552**	**619**	**9,058**	**537**	**2,518**	**18,673**
2012 Average	**14,999**	**509**	**1,997**	**17,505**	**4,550**	**1,471**	**553**	**630**	**8,926**	**501**	**2,487**	**18,564**
2013 January	14,567	543	1,727	16,838	4,480	1,414	543	410	8,718	395	2,481	17,898
February	14,230	506	2,270	17,007	4,281	1,402	536	477	8,926	504	2,383	17,973
March	14,703	490	2,108	17,301	4,284	1,461	559	648	8,971	569	2,379	18,312
April	14,864	429	2,342	17,636	4,416	1,524	561	814	9,042	508	2,424	18,729
May	15,305	379	2,683	18,367	4,767	1,450	574	860	9,299	488	2,542	19,407
June	15,833	426	2,443	18,702	4,792	1,522	566	841	9,472	469	2,694	19,789
July	16,042	427	2,358	18,827	4,934	1,561	575	858	9,374	481	2,750	19,959
August	15,793	444	2,471	18,708	4,930	1,605	584	829	9,340	417	2,702	19,823
September	15,636	560	2,006	18,202	4,888	1,544	574	630	9,190	434	2,652	19,338
October	14,991	567	2,398	17,956	4,815	1,426	542	418	9,484	420	2,478	19,041
November	15,633	595	1,935	18,163	5,050	1,491	557	301	9,476	466	2,505	19,290
December	16,069	589	1,791	18,449	5,122	1,586	600	376	9,495	455	2,594	19,628
Average	**15,312**	**496**	**2,211**	**18,019**	**4,733**	**1,499**	**564**	**623**	**9,234**	**467**	**2,550**	**19,106**
2014 January	15,311	524	1,412	17,247	4,685	1,479	584	406	8,849	476	2,459	18,354
February	15,128	531	1,790	17,448	4,594	1,453	572	505	9,111	427	2,423	18,513
March	15,116	495	2,476	18,087	4,780	1,421	564	666	9,368	461	2,383	19,078
April	15,864	433	2,529	18,826	4,988	1,498	600	860	9,652	420	2,485	19,904
May	15,946	432	2,761	19,139	5,026	1,468	596	887	9,834	454	2,483	20,152
June	15,817	431	2,727	18,975	4,896	1,521	596	870	9,809	455	2,545	20,097
July	16,534	414	2,615	19,563	5,021	1,637	613	909	9,983	402	2,718	20,670
August	16,460	424	2,440	19,325	5,042	1,675	602	888	9,741	439	2,703	20,488
September	16,074	543	2,025	18,642	4,940	1,619	552	610	9,404	410	2,676	19,658
October	15,361	594	2,035	17,990	4,662	1,485	529	444	9,552	416	2,460	19,018
November	16,043	658	1,701	18,402	5,012	1,570	603	387	9,607	462	2,542	19,580
December	16,469	659	2,019	19,147	5,323	1,665	635	398	9,898	401	2,563	20,247
Average	**15,848**	**511**	**2,214**	**18,574**	**4,916**	**1,541**	**587**	**653**	**9,570**	**435**	**2,537**	**19,654**
2015 January	15,493	587	1,786	17,866	4,828	1,505	561	395	9,321	377	2,464	18,889
February	15,414	544	2,132	18,090	4,746	1,517	529	398	9,546	421	2,417	19,045
March	15,657	494	2,308	18,459	4,882	1,492	537	609	9,571	478	2,424	19,458
April	16,299	405	2,353	19,057	4,981	1,587	589	823	9,787	469	2,453	20,099
May	16,435	393	2,345	19,174	4,974	1,600	582	884	9,811	436	2,511	20,216
June	16,695	414	2,201	19,310	5,021	1,632	569	858	9,894	413	2,482	20,300
July	16,884	432	2,338	19,654	5,091	1,663	581	850	10,037	426	2,640	20,707
August	16,662	449	2,340	19,450	5,108	1,598	575	836	9,993	404	2,675	20,614
September	R 16,174	R 546	R 2,297	R 19,017	R 5,053	R 1,541	R 529	R 580	R 9,866	R 414	R 2,572	R 20,026
October	E 15,500	RF 575	RE 2,343	RF 18,418	E 4,791	E 1,565	RE 444	RF 450	E 9,845	E 406	RE 2,370	RE 19,427
November	E 16,371	F 610	E 1,846	F 18,827	E 5,061	E 1,671	E 527	F 358	E 9,769	E 377	E 2,657	E 19,893
11-Month Average	**E 16,148**	**E 495**	**E 2,209**	**E 18,852**	**E 4,959**	**E 1,580**	**E 548**	**E 642**	**E 9,768**	**E 420**	**E 2,516**	**E 19,884**
2014 11-Month Average	**15,791**	**498**	**2,232**	**18,520**	**4,879**	**1,530**	**583**	**677**	**9,540**	**439**	**2,535**	**19,599**
2013 11-Month Average	**15,242**	**488**	**2,250**	**17,980**	**4,697**	**1,491**	**561**	**646**	**9,210**	**468**	**2,546**	**19,058**

[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] Beginning in 1965, includes kerosene-type jet fuel. (Through 1964, kerosene-type jet fuel is included with kerosene in "Other Products.") For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other Products.")
[i] Includes propylene.
[j] Finished motor gasoline. Through 1963, also includes aviation gasoline and special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.
[k] Asphalt and road oil, kerosene, lubricants, petrochemical feedstocks, petroleum coke, still gas (refinery gas), waxes, and miscellaneous products. Through 1964, also includes kerosene-type jet fuel. Beginning in 1964, also includes finished aviation gasoline and special naphthas. Beginning in 2005, also includes naphtha-type jet fuel.

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

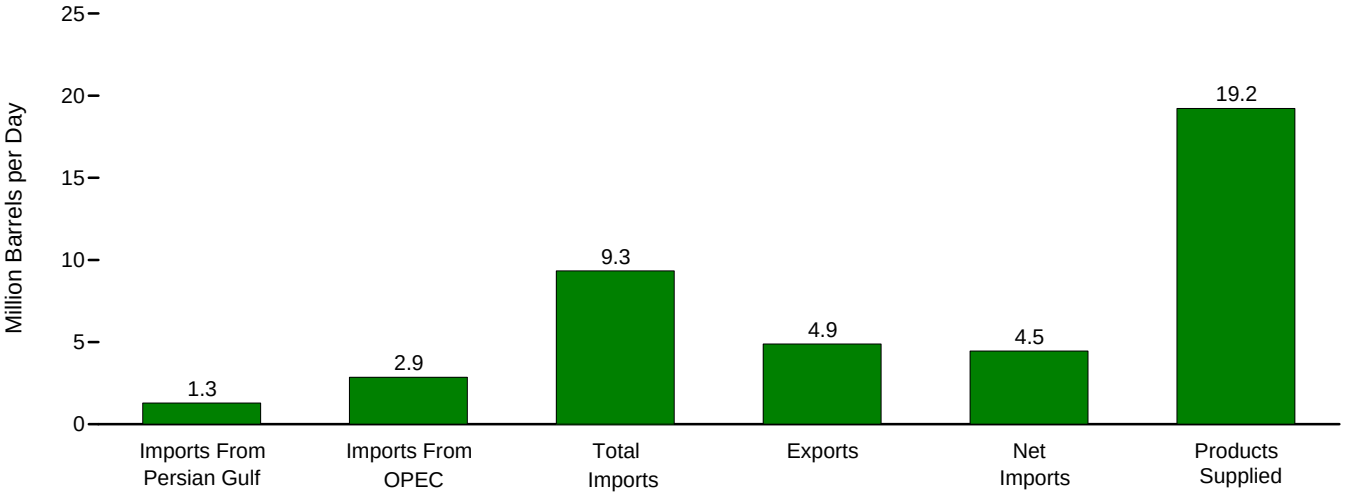
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

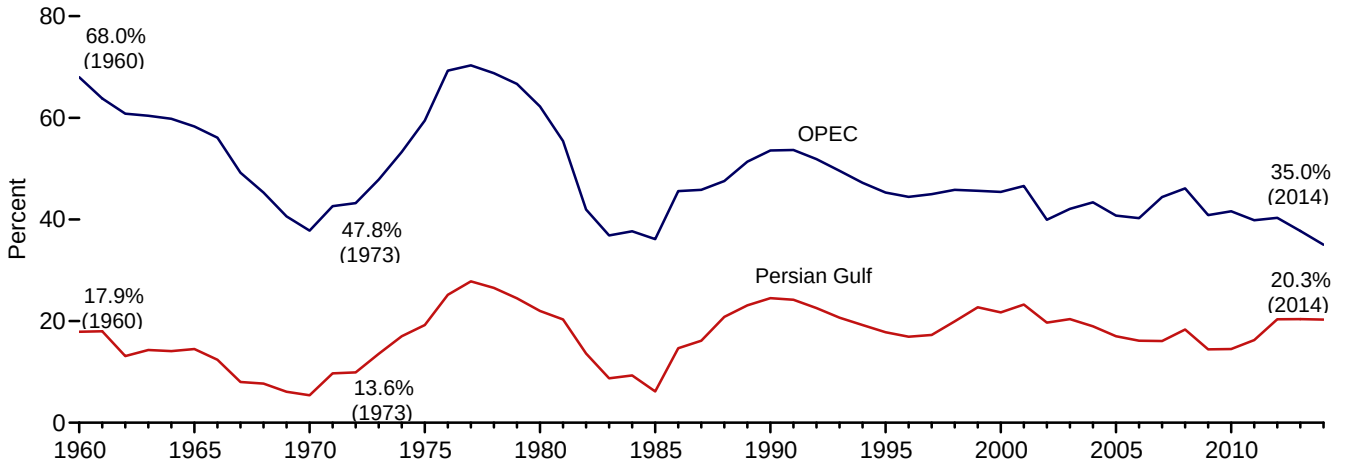
Sources: • **1949–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2013:** EIA, *Petroleum Supply Annual,* annual reports. • **2014 and 2015:** 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

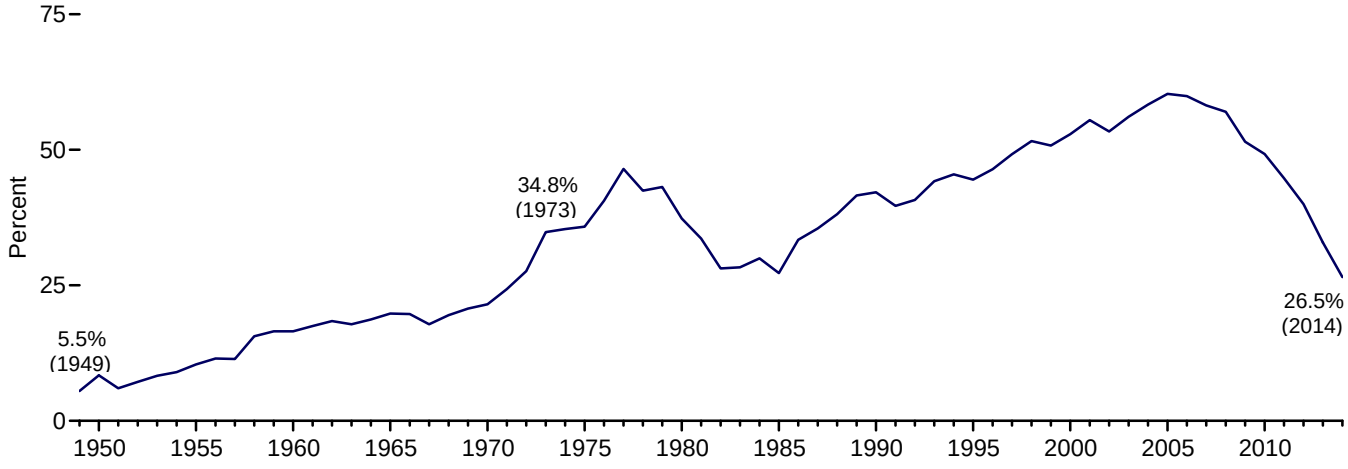
Overview, September 2015



Imports From OPEC and Persian Gulf as Share of Total Imports, 1960–2014



Net Imports as Share of Products Supplied, 1949–2014



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

	Thousand Barrels per Day						Percent					
							As Share of Products Supplied				As Share of Total Imports	
	Imports From Persian Gulf[a]	Imports From OPEC[b]	Imports	Exports	Net Imports	Products Supplied	Imports From Persian Gulf[a]	Imports From OPEC[b]	Imports	Net Imports	Imports From Persian Gulf[a]	Imports From OPEC[b]
1950 Average	**NA**	**NA**	**850**	**305**	**545**	**6,458**	**NA**	**NA**	**13.2**	**8.4**	**NA**	**NA**
1955 Average	**NA**	**NA**	**1,248**	**368**	**880**	**8,455**	**NA**	**NA**	**14.8**	**10.4**	**NA**	**NA**
1960 Average	**326**	**1,233**	**1,815**	**202**	**1,613**	**9,797**	**3.3**	**12.6**	**18.5**	**16.5**	**17.9**	**68.0**
1965 Average	**359**	**1,439**	**2,468**	**187**	**2,281**	**11,512**	**3.1**	**12.5**	**21.4**	**19.8**	**14.5**	**58.3**
1970 Average	**184**	**1,294**	**3,419**	**259**	**3,161**	**14,697**	**1.3**	**8.8**	**23.3**	**21.5**	**5.4**	**37.8**
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**
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 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 Average	**1,861**	**4,555**	**11,436**	**2,986**	**8,450**	**18,882**	**9.9**	**24.1**	**60.6**	**44.8**	**16.3**	**39.8**
2012 Average	**2,156**	**4,271**	**10,598**	**3,205**	**7,393**	**18,490**	**11.7**	**23.1**	**57.3**	**40.0**	**20.3**	**40.3**
2013 January	1,798	3,866	10,089	2,881	7,208	18,749	9.6	20.6	53.8	38.4	17.8	38.3
February	1,838	3,115	9,286	3,280	6,007	18,643	9.9	16.7	49.8	32.2	19.8	33.5
March	2,087	3,741	9,534	3,111	6,423	18,531	11.3	20.2	51.5	34.7	21.9	39.2
April	1,804	3,799	10,168	3,235	6,933	18,584	9.7	20.4	54.7	37.3	17.7	37.4
May	2,135	4,064	10,174	3,472	6,703	18,779	11.4	21.6	54.2	35.7	21.0	39.9
June	1,894	3,837	9,882	3,594	6,288	18,806	10.1	20.4	52.5	33.4	19.2	38.8
July	1,927	3,789	10,300	3,851	6,449	19,257	10.0	19.7	53.5	33.5	18.7	36.8
August	2,160	3,901	10,249	3,725	6,524	19,125	11.3	20.4	53.6	34.1	21.1	38.1
September	2,146	3,921	10,036	3,632	6,405	19,252	11.1	20.4	52.1	33.3	21.4	39.1
October	1,933	3,411	9,608	4,074	5,535	19,312	10.0	17.7	49.8	28.7	20.1	35.5
November	2,143	3,535	9,385	3,967	5,419	19,491	11.0	18.1	48.2	27.8	22.8	37.7
December	2,225	3,613	9,539	4,602	4,938	18,983	11.7	19.0	50.3	26.0	23.3	37.9
Average	**2,009**	**3,720**	**9,859**	**3,621**	**6,237**	**18,961**	**10.6**	**19.6**	**52.0**	**32.9**	**20.4**	**37.7**
2014 January	2,187	3,350	9,305	3,911	5,394	19,102	11.4	17.5	48.7	28.2	23.5	36.0
February	2,172	3,398	9,155	3,658	5,497	18,908	11.5	18.0	48.4	29.1	23.7	37.1
March	2,132	3,395	9,256	3,993	5,263	18,464	11.5	18.4	50.1	28.5	23.0	36.7
April	2,274	3,708	9,600	3,974	5,626	18,849	12.1	19.7	50.9	29.8	23.7	38.6
May	1,929	3,313	9,387	4,113	5,274	18,585	10.4	17.8	50.5	28.4	20.5	35.3
June	1,941	3,252	8,837	4,155	4,682	18,890	10.3	17.2	46.8	24.8	22.0	36.8
July	2,145	3,598	9,496	4,464	5,032	19,283	11.1	18.7	49.2	26.1	22.6	37.9
August	1,781	3,275	9,319	4,457	4,861	19,400	9.2	16.9	48.0	25.1	19.1	35.1
September	1,645	3,217	9,181	3,947	5,234	19,246	8.5	16.7	47.7	27.2	17.9	35.0
October	1,428	2,677	8,924	4,134	4,790	19,691	7.3	13.6	45.3	24.3	16.0	30.0
November	1,584	2,921	9,009	4,353	4,656	19,370	8.2	15.1	46.5	24.0	17.6	32.4
December	1,304	2,760	9,402	4,892	4,510	19,457	6.7	14.2	48.3	23.2	13.9	29.4
Average	**1,875**	**3,237**	**9,241**	**4,176**	**5,065**	**19,106**	**9.8**	**16.9**	**48.4**	**26.5**	**20.3**	**35.0**
2015 January	1,334	2,536	9,393	4,567	4,825	19,249	6.9	13.2	48.8	25.1	14.2	27.0
February	1,433	2,793	9,243	4,699	4,544	19,396	7.4	14.4	47.7	23.4	15.5	30.2
March	1,465	2,831	9,552	4,120	5,432	19,238	7.6	14.7	49.7	28.2	15.3	29.6
April	1,532	2,766	9,307	4,943	4,364	19,037	8.0	14.5	48.9	22.9	16.5	29.7
May	1,724	3,125	9,470	4,874	4,596	19,117	9.0	16.3	49.5	24.0	18.2	33.0
June	1,617	2,869	9,552	4,668	4,884	19,591	8.3	14.6	48.8	24.9	16.9	30.0
July	1,465	2,896	9,511	4,967	4,544	19,979	7.3	14.5	47.6	22.7	15.4	30.5
August	1,247	2,751	9,768	4,564	5,205	19,814	6.3	13.9	49.3	26.3	12.8	28.2
September	R 1,290	R 2,854	R 9,335	R 4,884	R 4,451	R 19,225	R 6.7	R 14.8	R 48.6	R 23.2	R 13.8	R 30.6
October	NA	NA	E 8,905	E 4,373	E 4,532	E 19,665	NA	NA	E 45.3	E 23.0	NA	NA
November	NA	NA	E 9,133	E 4,438	E 4,695	E 19,714	NA	NA	E 46.3	E 23.8	NA	NA
11-Month Average	**NA**	**NA**	**E 9,381**	**E 4,644**	**E 4,737**	**E 19,458**	**NA**	**NA**	**E 48.2**	**E 24.3**	**NA**	**NA**
2014 11-Month Average	**1,928**	**3,281**	**9,226**	**4,109**	**5,117**	**19,073**	**10.1**	**17.2**	**48.4**	**26.8**	**20.9**	**35.6**
2013 11-Month Average	**1,989**	**3,730**	**9,888**	**3,530**	**6,358**	**18,959**	**10.5**	**19.7**	**52.2**	**33.5**	**20.1**	**37.7**

[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.

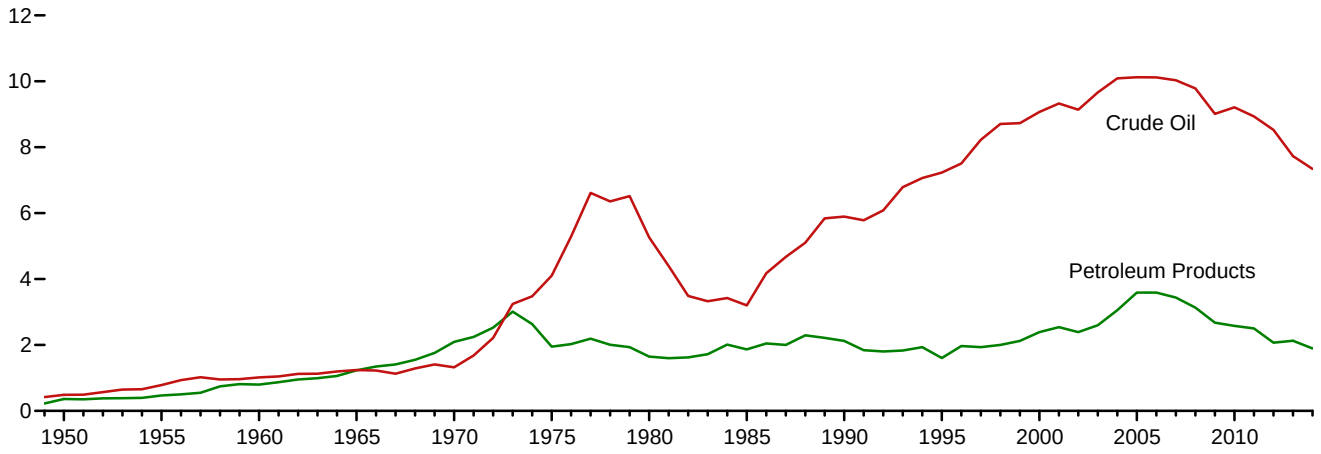
Notes: • For the feature article "Measuring Dependence on Imported Oil," published in the August 1995 *Monthly Energy Review,* see http://www.eia.gov/totalenergy/data/monthly/pdf/historical/imported_oil.pdf. • Beginning in October 1977, data include Strategic Petroleum Reserve imports. See Table 3.3b. • 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 Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

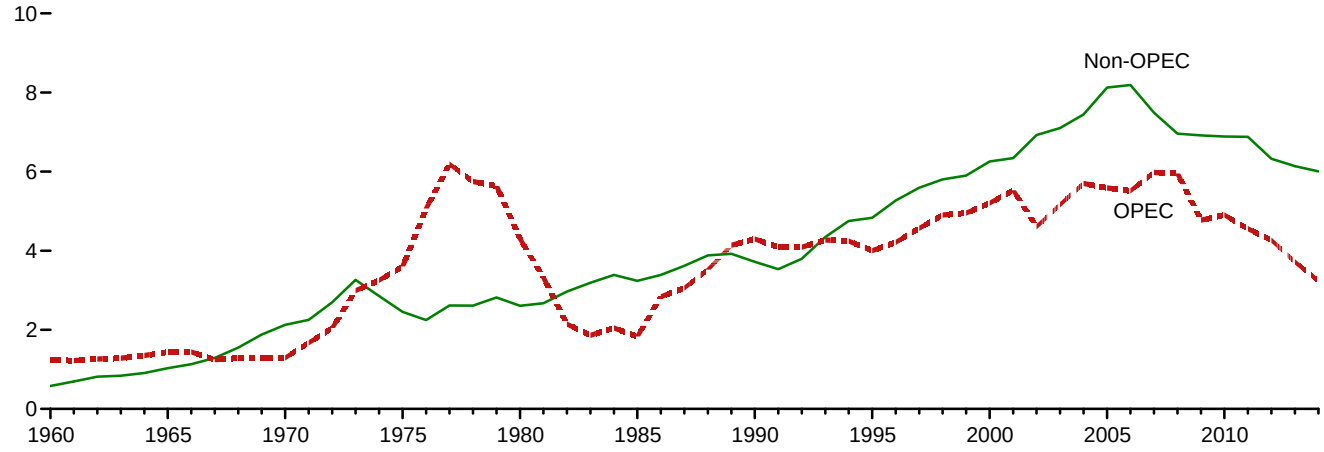
Sources: • **1949–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2013:** EIA, *Petroleum Supply Annual,* annual reports, and unpublished revisions. • **2014 and 2015:** 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)

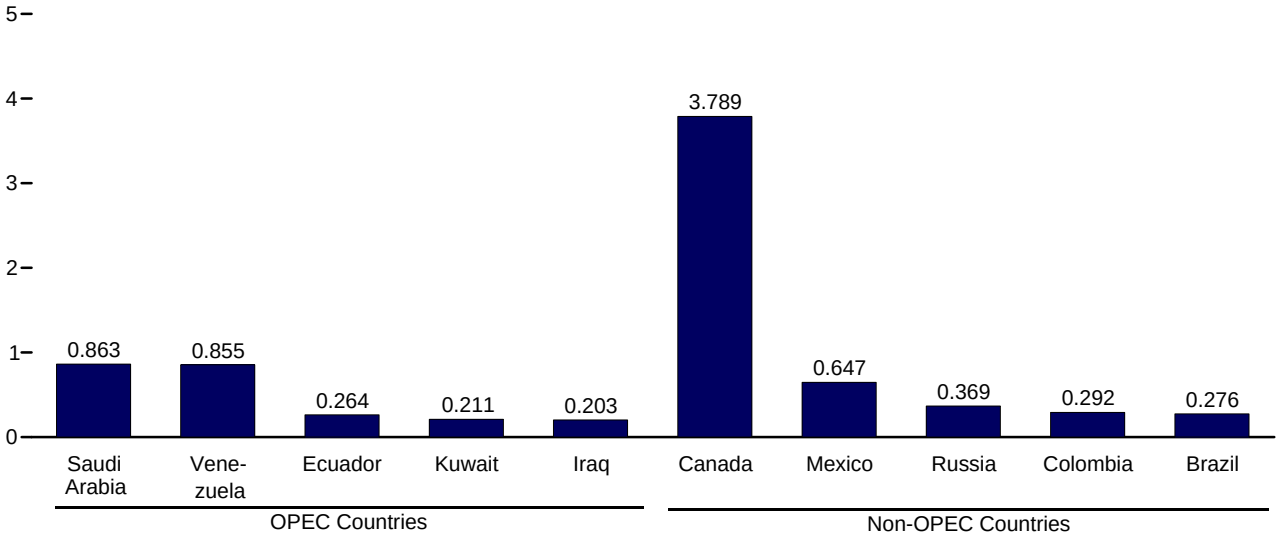
Overview, 1949–2014



OPEC and Non-OPEC, 1960–2014



From Selected Countries, September 2015



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[d]	LPG[b]		Motor Gasoline[f]	Residual Fuel Oil	Other[g]	Total	Crude Oil[a]	Petroleum Products	Total
	SPR[c]	Total			Propane[e]	Total							
1950 Average	– –	**487**	**7**	([d])	**0**	**0**	**(s)**	**329**	**27**	**850**	**95**	**210**	**305**
1955 Average	– –	**782**	**12**	([d])	**0**	**0**	**13**	**417**	**24**	**1,248**	**32**	**336**	**368**
1960 Average	– –	**1,015**	**35**	**34**	**NA**	**4**	**27**	**637**	**62**	**1,815**	**8**	**193**	**202**
1965 Average	– –	**1,238**	**36**	**81**	**NA**	**21**	**28**	**946**	**119**	**2,468**	**3**	**184**	**187**
1970 Average	– –	**1,324**	**147**	**144**	**26**	**52**	**67**	**1,528**	**157**	**3,419**	**14**	**245**	**259**
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**
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 Average	**–**	**9,213**	**228**	**98**	**121**	**153**	**134**	**366**	**1,600**	**11,793**	**42**	**2,311**	**2,353**
2011 Average	**–**	**8,935**	**179**	**69**	**110**	**135**	**105**	**328**	**1,686**	**11,436**	**47**	**2,939**	**2,986**
2012 Average	**–**	**8,527**	**126**	**55**	**116**	**141**	**44**	**256**	**1,450**	**10,598**	**67**	**3,137**	**3,205**
2013 January	–	7,956	213	61	184	207	40	239	1,372	10,089	109	2,772	2,881
February	–	7,293	174	70	166	186	19	199	1,347	9,286	132	3,148	3,280
March	–	7,497	146	44	141	164	56	285	1,343	9,534	107	3,004	3,111
April	–	7,760	238	104	111	130	35	264	1,636	10,168	138	3,096	3,235
May	–	7,741	168	113	81	98	38	194	1,822	10,174	130	3,341	3,472
June	–	7,731	121	99	111	133	70	181	1,548	9,882	124	3,470	3,594
July	–	8,058	107	96	88	109	53	252	1,627	10,300	104	3,747	3,851
August	–	8,099	123	124	84	109	68	296	1,430	10,249	71	3,654	3,725
September	–	7,923	132	68	87	108	40	231	1,533	10,036	105	3,526	3,632
October	–	7,478	128	98	158	181	38	195	1,489	9,608	119	3,955	4,074
November	–	7,408	145	74	169	189	49	194	1,326	9,385	253	3,714	3,967
December	–	7,772	164	61	146	166	33	169	1,174	9,539	220	4,381	4,602
Average	**–**	**7,730**	**155**	**84**	**127**	**148**	**45**	**225**	**1,471**	**9,859**	**134**	**3,487**	**3,621**
2014 January	–	7,589	283	42	187	206	42	132	1,011	9,305	248	3,663	3,911
February	–	7,199	337	94	221	244	11	221	1,049	9,155	247	3,411	3,658
March	–	7,274	324	91	122	142	36	156	1,233	9,256	251	3,741	3,993
April	–	7,555	181	144	79	101	57	183	1,379	9,600	282	3,693	3,974
May	–	7,167	198	104	66	85	47	175	1,611	9,387	309	3,804	4,113
June	–	7,068	121	109	91	117	51	151	1,222	8,837	394	3,761	4,155
July	–	7,630	129	85	64	83	60	177	1,331	9,496	421	4,043	4,464
August	–	7,473	143	63	76	90	73	166	1,311	9,319	391	4,066	4,457
September	–	7,495	126	133	75	96	77	178	1,076	9,181	349	3,598	3,947
October	–	7,148	120	90	99	122	64	218	1,161	8,924	376	3,758	4,134
November	–	7,295	136	80	90	110	41	175	1,172	9,009	521	3,832	4,353
December	–	7,225	245	102	129	153	29	152	1,495	9,402	421	4,471	4,892
Average	**–**	**7,344**	**195**	**94**	**108**	**128**	**49**	**173**	**1,257**	**9,241**	**351**	**3,824**	**4,176**
2015 January	–	7,150	349	132	142	161	74	190	1,337	9,393	491	4,076	4,567
February	–	7,109	391	121	148	167	51	222	1,182	9,243	428	4,271	4,699
March	–	7,574	324	157	132	145	61	131	1,160	9,552	417	3,703	4,120
April	–	7,208	234	130	119	136	75	152	1,372	9,307	586	4,357	4,943
May	–	7,245	191	166	87	106	109	228	1,423	9,470	531	4,343	4,874
June	–	7,304	132	193	91	111	100	174	1,537	9,552	431	4,237	4,668
July	–	7,331	143	160	95	117	33	144	1,584	9,511	526	4,441	4,967
August	–	7,638	140	132	104	123	33	209	1,494	9,768	461	4,103	4,564
September	–	[R] 7,222	[R] 103	[R] 66	[R] 79	[R] 101	[R] 63	[R] 243	[R] 1,537	[R] 9,335	[R] 409	[R] 4,475	[R] 4,884
October	–	[E] 7,198	[E] 98	[E] 87	[E] 98	NA	[E] 68	[E] 157	NA	[E] 8,905	[E] 515	[E] 3,858	[E] 4,373
November	–	[E] 7,444	[E] 148	[E] 92	[E] 109	NA	[E] 58	[E] 188	NA	[E] 9,133	[E] 469	[E] 3,969	[E] 4,438
11-Month Average	**–**	**[E] 7,313**	**[E] 204**	**[E] 131**	**[E] 109**	**NA**	**[E] 66**	**[E] 185**	**NA**	**[E] 9,381**	**[E] 479**	**[E] 4,164**	**[E] 4,644**
2014 11-Month Average	**–**	**7,355**	**190**	**94**	**106**	**126**	**51**	**175**	**1,234**	**9,226**	**345**	**3,764**	**4,109**
2013 11-Month Average	**–**	**7,726**	**154**	**87**	**125**	**146**	**46**	**230**	**1,499**	**9,888**	**126**	**3,404**	**3,530**

[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] Beginning in 1965, includes kerosene-type jet fuel. (Through 1964, kerosene-type jet fuel is included with kerosene in "Other.") For 1956–2004, also includes naphtha-type jet fuel. (Through 1955, naphtha-type jet fuel is included in "Motor Gasoline." Beginning in 2005, naphtha-type jet fuel is included in "Other.")

[e] Includes propylene.

[f] Finished motor gasoline. Through 1955, also includes naphtha-type jet fuel. Through 1963, also includes aviation gasoline and special naphthas. Through 1980, also includes motor gasoline blending components.

[g] Asphalt and road oil, aviation gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, unfinished oils, waxes, other hydrocarbons and oxygenates, and miscellaneous products. Through 1964, also includes kerosene-type jet fuel. Beginning in 1964, also includes finished aviation gasoline and special naphthas. Beginning in 1981, also includes motor gasoline blending components. Beginning in 2005, also includes naphtha-type jet fuel.

R=Revised. E=Estimate. NA=Not available. – – =Not applicable. – =No data reported. (s)=Less than 500 barrels per day.

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/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **1949–1975:** 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. • **1981–2013:** EIA, *Petroleum Supply Annual,* annual reports, and unpublished revisions. • **2014 and 2015:** 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[a]	Angola[b]	Ecuador[c]	Iraq	Kuwait[d]	Libya[e]	Nigeria[f]	Saudi Arabia[d]	Venezuela	Other[g]	Total OPEC
1960 Average	([a])	([b])	([c])	**22**	**182**	([e])	([f])	**84**	**911**	**34**	**1,233**
1965 Average	([a])	([b])	([c])	**16**	**74**	**42**	([f])	**158**	**994**	**155**	**1,439**
1970 Average	**8**	([b])	([c])	**0**	**48**	**47**	([f])	**30**	**989**	**172**	**1,294**
1975 Average	**282**	([b])	**57**	**2**	**16**	**232**	**762**	**715**	**702**	**832**	**3,601**
1980 Average	**488**	([b])	**27**	**28**	**27**	**554**	**857**	**1,261**	**481**	**577**	**4,300**
1985 Average	**187**	([b])	**67**	**46**	**21**	**4**	**293**	**168**	**605**	**439**	**1,830**
1990 Average	**280**	([b])	**49**	**518**	**86**	**0**	**800**	**1,339**	**1,025**	**199**	**4,296**
1995 Average	**234**	([b])	([c])	**0**	**218**	**0**	**627**	**1,344**	**1,480**	**98**	**4,002**
2000 Average	**225**	([b])	([c])	**620**	**272**	**0**	**896**	**1,572**	**1,546**	**72**	**5,203**
2001 Average	**278**	([b])	([c])	**795**	**250**	**0**	**885**	**1,662**	**1,553**	**105**	**5,528**
2002 Average	**264**	([b])	([c])	**459**	**228**	**0**	**621**	**1,552**	**1,398**	**83**	**4,605**
2003 Average	**382**	([b])	([c])	**481**	**220**	**0**	**867**	**1,774**	**1,376**	**61**	**5,162**
2004 Average	**452**	([b])	([c])	**656**	**250**	**20**	**1,140**	**1,558**	**1,554**	**70**	**5,701**
2005 Average	**478**	([b])	([c])	**531**	**243**	**56**	**1,166**	**1,537**	**1,529**	**47**	**5,587**
2006 Average	**657**	([b])	([c])	**553**	**185**	**87**	**1,114**	**1,463**	**1,419**	**38**	**5,517**
2007 Average	**670**	**508**	([c])	**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 Average	**510**	**393**	**212**	**415**	**197**	**70**	**1,023**	**1,096**	**988**	**3**	**4,906**
2011 Average	**358**	**346**	**206**	**459**	**191**	**15**	**818**	**1,195**	**951**	**16**	**4,555**
2012 Average	**242**	**233**	**180**	**476**	**305**	**61**	**441**	**1,365**	**960**	**9**	**4,271**
2013 January	195	223	240	419	389	20	479	979	913	10	3,866
February	17	198	174	529	255	20	255	1,032	614	20	3,115
March	74	98	228	426	367	74	403	1,284	781	8	3,741
April	160	167	322	455	238	76	405	1,109	866	–	3,799
May	168	328	178	321	361	125	395	1,440	739	10	4,064
June	88	271	202	228	217	119	366	1,431	899	16	3,837
July	112	228	198	299	309	150	240	1,318	933	–	3,789
August	105	376	349	397	420	67	167	1,332	678	10	3,901
September	136	226	255	287	299	35	286	1,557	837	–	3,921
October	66	207	251	226	335	13	183	1,362	759	10	3,411
November	144	125	235	182	397	–	93	1,563	796	–	3,535
December	110	136	198	332	332	(s)	99	1,520	847	39	3,613
Average	**115**	**216**	**236**	**341**	**328**	**59**	**281**	**1,329**	**806**	**10**	**3,720**
2014 January	68	94	227	249	474	–	89	1,462	687	1	3,350
February	79	114	207	290	348	–	59	1,464	807	31	3,398
March	92	117	173	306	360	–	112	1,444	772	19	3,395
April	69	157	170	321	342	–	187	1,607	853	1	3,708
May	102	178	217	351	334	–	118	1,241	772	1	3,313
June	147	166	138	529	355	–	115	1,017	748	38	3,252
July	118	159	214	496	375	–	61	1,232	901	40	3,598
August	137	129	305	543	263	10	48	897	867	76	3,275
September	185	202	305	350	245	–	57	1,005	824	42	3,217
October	101	147	242	286	304	–	59	830	702	6	2,677
November	98	209	120	421	137	57	55	1,014	800	10	2,921
December	125	180	255	282	197	11	144	813	744	10	2,760
Average	**110**	**154**	**215**	**369**	**311**	**6**	**92**	**1,166**	**789**	**23**	**3,237**
2015 January	82	54	331	227	266	20	51	820	668	17	2,536
February	112	181	245	222	241	4	38	945	782	24	2,793
March	76	93	244	122	277	–	109	1,047	849	15	2,831
April	106	102	114	139	186	3	54	1,205	857	–	2,766
May	150	119	169	283	222	12	58	1,210	897	7	3,125
June	126	113	237	214	314	–	21	1,077	757	10	2,869
July	109	108	281	133	144	–	130	1,173	808	11	2,896
August	121	102	256	117	113	4	86	1,005	935	11	2,751
September	145	182	264	203	211	5	114	863	855	11	2,854
9-Month Average	**114**	**116**	**238**	**184**	**219**	**5**	**74**	**1,039**	**824**	**12**	**2,825**
2014 9-Month Average	**111**	**146**	**218**	**382**	**344**	**1**	**94**	**1,262**	**803**	**28**	**3,389**
2013 9-Month Average	**118**	**235**	**239**	**372**	**319**	**77**	**334**	**1,277**	**808**	**8**	**3,788**

[a] Algeria joined OPEC in 1969. For 1960–1968, Algeria is included in "Total Non-OPEC" on Table 3.3d.

[b] Angola joined OPEC in January 2007. For 1960–2006, Angola is included in "Total Non-OPEC" on Table 3.3d.

[c] Ecuador was a member of OPEC from 1973–1992, and rejoined OPEC in November 2007. For 1960–1972 and 1993–2007, Ecuador is included in "Total Non-OPEC" on Table 3.3d.

[d] Through 1970, includes half the imports from the Neutral Zone between Kuwait and Saudi Arabia. Beginning in 1971, imports from the Neutral Zone are reported as originating in either Kuwait or Saudi Arabia depending on the country reported to U.S. Customs.

[e] Libya joined OPEC in 1962. For 1960 and 1961, Libya is included in "Total Non-OPEC" on Table 3.3d.

[f] Nigeria joined OPEC in 1971. For 1960–1970, Nigeria is included in "Total Non-OPEC" on Table 3.3d.

[g] Includes these countries in the years indicated: Gabon (1975–1994), Indonesia (1962–2008), Iran (1960 forward), Qatar (1961 forward), and United Arab Emirates (1967 forward).

– =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 Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1973.

Sources: • **1960–1972:** Bureau of Mines, *Minerals Yearbook,* annual reports. • **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. • **1981–2013:** EIA, *Petroleum Supply Annual,* annual reports. • **2014 and 2015:** 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
1960 Average	**1**	**120**	**42**	**16**	**NA**	**NA**	**0**	**(s)**	**NA**	**NA**	**581**
1965 Average	**0**	**323**	**51**	**48**	**1**	**0**	**0**	**(s)**	**0**	**606**	**1,029**
1970 Average	**2**	**766**	**46**	**42**	**39**	**0**	**3**	**11**	**189**	**1,027**	**2,126**
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**
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 Average	**272**	**2,535**	**365**	**1,284**	**108**	**89**	**612**	**256**	**253**	**1,112**	**6,887**
2011 Average	**253**	**2,729**	**433**	**1,206**	**100**	**113**	**624**	**159**	**186**	**1,077**	**6,881**
2012 Average	**226**	**2,946**	**433**	**1,035**	**99**	**75**	**477**	**149**	**12**	**874**	**6,327**
2013 January	103	3,456	351	1,068	121	48	328	116	–	632	6,223
February	79	3,457	366	978	121	10	454	95	–	612	6,172
March	123	3,037	479	677	122	57	454	111	–	733	5,793
April	97	3,208	465	973	76	40	584	131	–	795	6,369
May	198	2,854	389	885	88	30	554	180	–	931	6,110
June	192	2,885	356	846	74	80	519	198	–	896	6,045
July	185	3,014	588	930	69	68	456	192	–	1,011	6,511
August	241	3,082	375	912	85	36	572	163	–	882	6,348
September	262	3,086	314	839	61	56	459	149	–	890	6,116
October	95	3,218	384	878	83	114	555	160	–	711	6,197
November	133	3,130	308	1,014	78	53	325	124	–	685	5,850
December	105	3,296	293	1,030	90	54	265	146	–	648	5,926
Average	**151**	**3,142**	**389**	**919**	**89**	**54**	**460**	**147**	**–**	**786**	**6,138**
2014 January	128	3,412	381	1,030	106	36	212	142	–	508	5,955
February	181	3,213	320	864	105	88	365	68	–	554	5,757
March	72	3,201	382	871	90	70	424	131	–	620	5,861
April	100	3,140	334	753	110	72	405	170	–	809	5,893
May	136	3,276	247	799	127	39	351	179	–	921	6,074
June	143	3,258	210	777	15	30	274	97	–	781	5,585
July	157	3,289	202	753	32	55	405	128	–	877	5,897
August	214	3,432	336	798	61	44	394	84	–	680	6,044
September	113	3,543	333	859	56	7	282	57	–	713	5,964
October	258	3,429	354	834	119	28	316	109	–	801	6,247
November	224	3,466	427	945	68	35	170	110	–	644	6,088
December	198	3,971	287	821	129	42	355	119	–	720	6,642
Average	**160**	**3,388**	**318**	**842**	**85**	**45**	**330**	**117**	**–**	**720**	**6,004**
2015 January	236	3,974	417	831	78	11	389	140	–	781	6,857
February	138	3,936	353	784	81	58	300	77	–	722	6,450
March	170	3,863	523	875	109	52	374	77	–	677	6,721
April	232	3,829	409	713	67	37	341	112	–	802	6,542
May	108	3,557	535	663	80	108	337	130	–	827	6,345
June	255	3,618	377	856	23	56	475	134	–	888	6,683
July	208	3,520	441	755	54	87	408	142	–	1,001	6,614
August	396	3,920	339	731	22	138	433	154	–	885	7,018
September	276	3,789	292	647	53	48	369	178	–	830	6,481
9-Month Average	**225**	**3,777**	**411**	**762**	**63**	**66**	**381**	**128**	**–**	**824**	**6,637**
2014 9-Month Average	**138**	**3,308**	**305**	**834**	**78**	**49**	**346**	**118**	**–**	**719**	**5,895**
2013 9-Month Average	**165**	**3,117**	**410**	**900**	**91**	**47**	**487**	**149**	**–**	**822**	**6,188**

[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.

NA=Not available. – =No data reported. (s)=Less than 500 barrels per day.

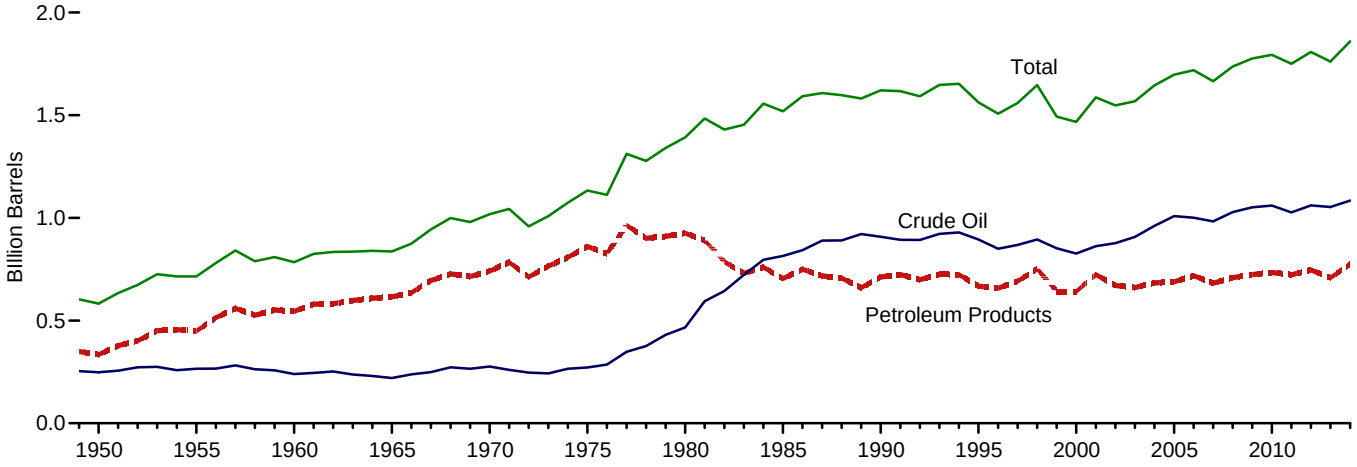
Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. Petroleum imports not classified as "OPEC" on Table 3.3c are included on this table. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. 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 Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1973.

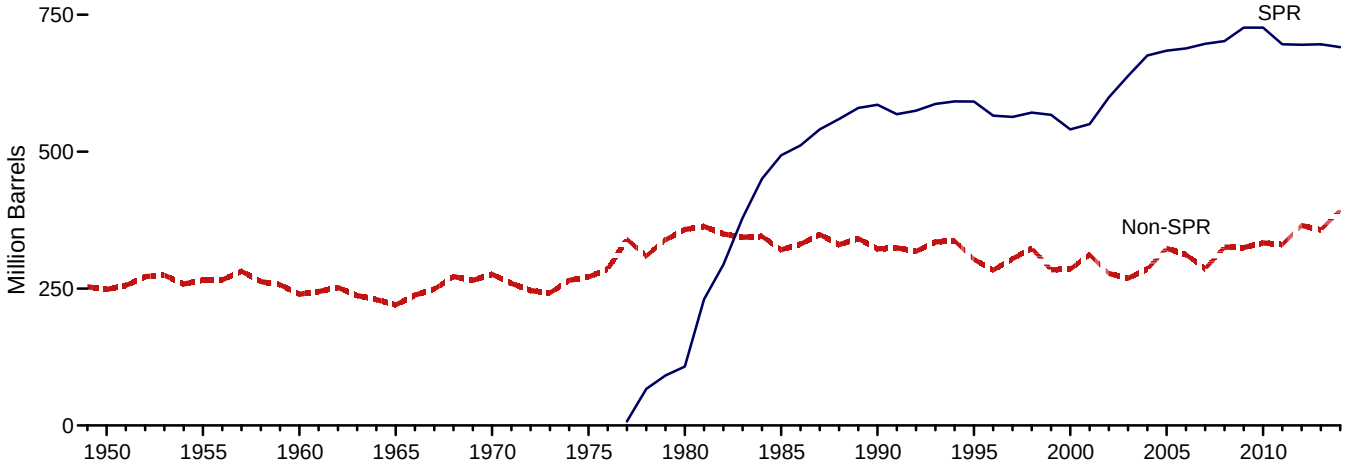
Sources: • **1960–1972:** Bureau of Mines, *Minerals Yearbook,* annual reports. • **1973–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2013:** EIA, *Petroleum Supply Annual,* annual reports. • **2014 and 2015:** EIA, *Petroleum Supply Monthly,* monthly reports.

Figure 3.4 Petroleum Stocks

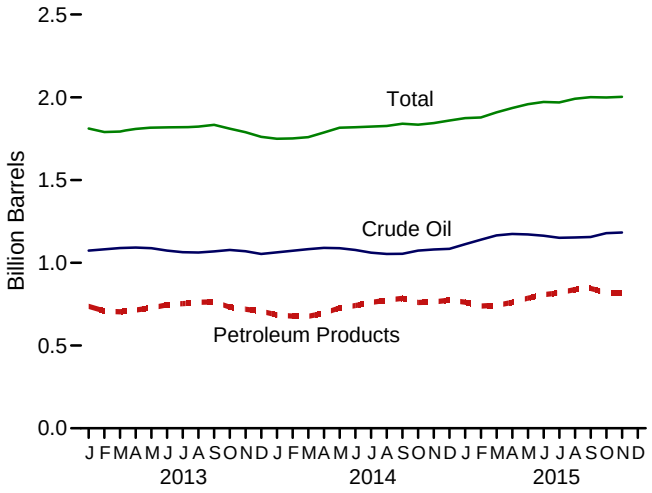
Overview, 1949–2014



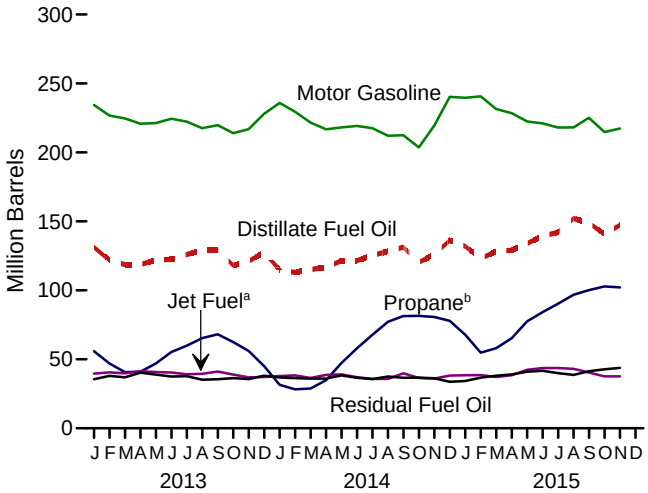
SPR and Non-SPR Crude Oil Stocks, 1949–2014



Overview, Monthly



Selected Products, Monthly



[a] Includes kerosene-type jet fuel only.
[b] Includes propylene.
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]	Jet Fuel[g]	LPG[b]		Motor Gasoline[i]	Residual Fuel Oil	Other[j]	Total
	SPR[c]	Non-SPR[d,e]	Total[e]			Propane[h]	Total				
1950 Year	– –	**248**	**248**	**72**	([g])	**NA**	**2**	**116**	**41**	**104**	**583**
1955 Year	– –	**266**	**266**	**111**	**3**	**NA**	**7**	**165**	**39**	**123**	**715**
1960 Year	– –	**240**	**240**	**138**	**7**	**NA**	**23**	**195**	**45**	**137**	**785**
1965 Year	– –	**220**	**220**	**155**	**19**	**NA**	**30**	**175**	**56**	**181**	**836**
1970 Year	– –	**276**	**276**	**195**	**28**	**NA**	**67**	**209**	**54**	**188**	**1,018**
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**
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 Year	**727**	**333**	**1,060**	**164**	**43**	**49**	**108**	**219**	**41**	**158**	**1,794**
2011 Year	**696**	**331**	**1,027**	**149**	**41**	**55**	**112**	**223**	**34**	**164**	**1,750**
2012 Year	**695**	**365**	**1,061**	**135**	**40**	**68**	**141**	**231**	**34**	**167**	**1,808**
2013 January	696	377	1,073	131	40	56	121	234	36	176	1,811
February	696	385	1,081	122	40	47	108	227	38	174	1,790
March	696	393	1,089	119	40	41	103	225	37	180	1,793
April	696	396	1,092	119	41	41	111	221	40	183	1,808
May	696	392	1,088	122	41	47	127	221	39	178	1,817
June	696	377	1,073	122	40	55	143	224	38	178	1,819
July	696	368	1,064	126	39	60	154	222	38	175	1,818
August	696	366	1,062	129	39	65	168	218	35	171	1,823
September	696	373	1,069	129	41	68	172	220	36	166	1,833
October	696	382	1,078	118	39	63	159	214	36	166	1,810
November	696	374	1,070	121	37	56	139	217	36	170	1,789
December	**696**	**357**	**1,053**	**128**	**37**	**45**	**114**	**228**	**38**	**163**	**1,761**
2014 January	696	367	1,063	115	38	32	90	236	37	171	1,749
February	696	377	1,073	113	38	28	82	229	36	179	1,751
March	696	387	1,083	115	36	29	86	222	36	182	1,759
April	693	397	1,090	117	39	35	103	217	36	186	1,787
May	691	397	1,088	122	39	47	126	218	38	185	1,816
June	691	386	1,077	122	37	58	150	219	37	177	1,819
July	691	370	1,061	125	36	68	172	218	36	174	1,822
August	691	363	1,053	128	36	77	187	212	38	172	1,827
September	691	363	1,054	131	40	81	191	212	37	174	1,840
October	691	383	1,074	120	36	82	186	204	37	177	1,834
November	691	389	1,080	126	36	81	171	220	36	175	1,844
December	**691**	**393**	**1,084**	**136**	**38**	**78**	**155**	**240**	**34**	**172**	**1,860**
2015 January	691	421	1,112	132	38	68	134	240	34	184	1,874
February	691	448	1,139	123	39	55	114	241	37	185	1,878
March	691	475	1,166	128	37	58	122	231	38	186	1,908
April	691	483	1,174	129	38	65	139	228	39	187	1,935
May	692	479	1,172	134	42	78	160	222	41	187	1,958
June	694	470	1,163	139	44	84	176	221	42	186	1,971
July	695	455	1,151	142	44	90	187	218	40	187	1,969
August	695	458	1,153	152	43	97	204	218	39	182	1,991
September	695	461	1,156	[R] 149	40	100	[R] 210	[R] 225	[R] 41	[R] 180	[R] 2,001
October	[E] 695	[E] 484	[E] 1,179	[E] 141	[E] 38	[E] 103	[RF] 207	[E] 215	[E] 43	[RE] 177	[E] 1,998
November	[E] 695	[E] 487	[E] 1,183	[E] 147	[E] 38	[E] 102	[F] 196	[E] 217	[E] 44	[E] 177	[E] 2,002

[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.
[f] Excludes stocks in the Northeast Home Heating Oil Reserve. Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[g] Beginning in 1965, includes kerosene-type jet fuel. (Through 1964, kerosene-type jet fuel is included with kerosene in "Other.") For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other.").
[h] Includes propylene.
[i] Includes finished motor gasoline and motor gasoline blending components; excludes oxygenates. Through 1963, also includes aviation gasoline and special naphthas.
[j] Asphalt and road oil, aviation gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, unfinished oils, waxes, miscellaneous products, oxygenates, renewable fuels, and other hydrocarbons. Through 1964, also includes kerosene-type jet fuel. Beginning in 1964, also includes finished aviation gasoline and special naphthas. Beginning in 2005, also includes naphtha-type jet fuel.

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

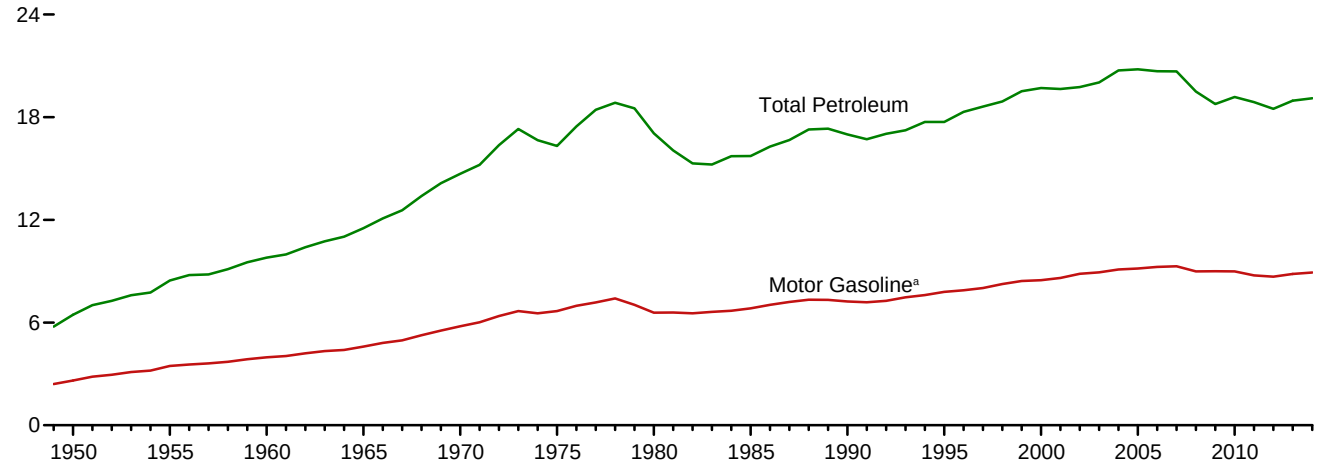
Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

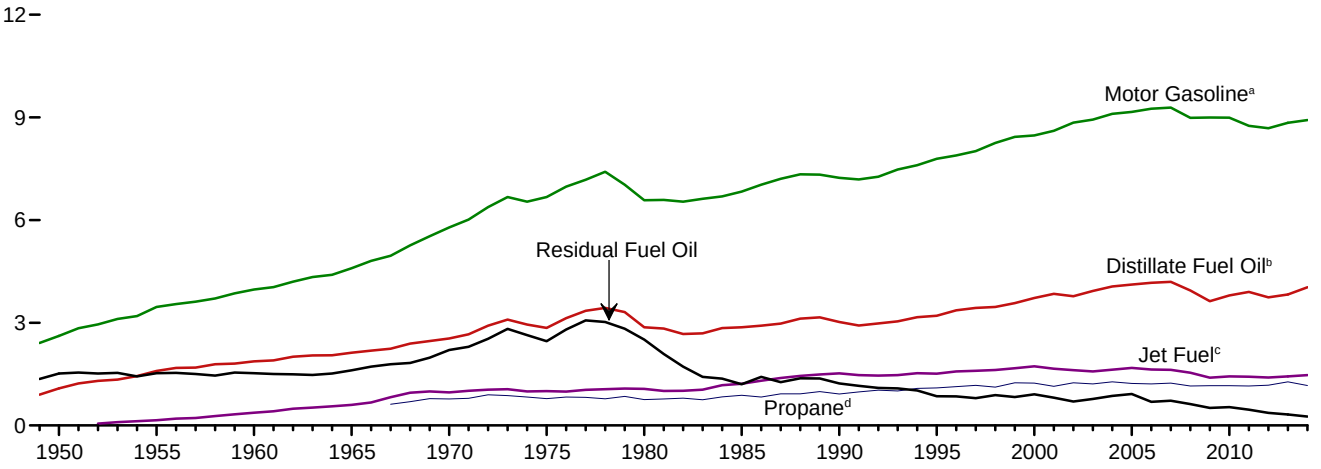
Sources: • **1949–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2013:** EIA, *Petroleum Supply Annual,* annual reports. • **2014 and 2015:** 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)

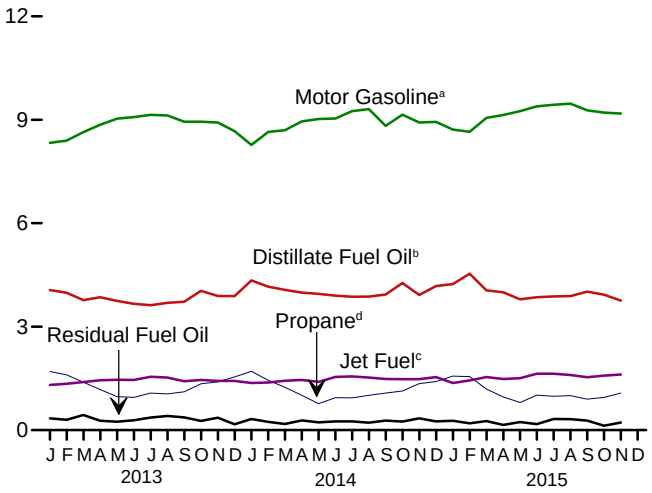
Total Petroleum and Motor Gasoline, 1949–2014



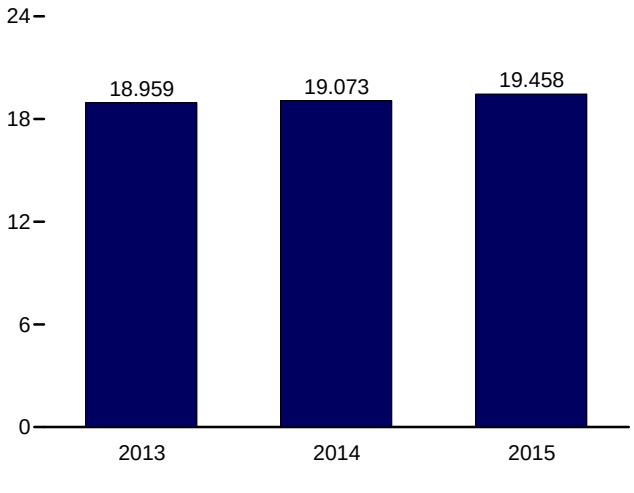
Selected Products,1949–2014



Selected Products, Monthly



Total, January–November



[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						
1950 Average	**180**	**108**	**1,082**	**(c)**	**323**	**NA**	**234**	**106**	**2,616**	**41**	**1,517**	**250**	**6,458**
1955 Average	**254**	**192**	**1,592**	**154**	**320**	**NA**	**404**	**116**	**3,463**	**67**	**1,526**	**366**	**8,455**
1960 Average	**302**	**161**	**1,872**	**371**	**271**	**NA**	**621**	**117**	**3,969**	**149**	**1,529**	**435**	**9,797**
1965 Average	**368**	**120**	**2,126**	**602**	**267**	**NA**	**841**	**129**	**4,593**	**202**	**1,608**	**657**	**11,512**
1970 Average	**447**	**55**	**2,540**	**967**	**263**	**776**	**1,224**	**136**	**5,785**	**212**	**2,204**	**866**	**14,697**
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**
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 Average	**362**	**15**	**3,800**	**1,432**	**20**	**1,160**	**2,173**	**131**	**8,993**	**376**	**535**	**1,343**	**19,180**
2011 Average	**355**	**15**	**3,899**	**1,425**	**12**	**1,153**	**2,204**	**125**	**8,753**	**361**	**461**	**1,272**	**18,882**
2012 Average	**340**	**14**	**3,741**	**1,398**	**5**	**1,175**	**2,251**	**114**	**8,682**	**360**	**369**	**1,215**	**18,490**
2013 January	224	11	4,062	1,311	11	1,701	2,757	127	8,331	404	341	1,171	18,749
February	215	8	3,984	1,344	2	1,605	2,775	127	8,395	281	297	1,214	18,643
March	236	12	3,769	1,393	15	1,390	2,493	127	8,641	292	440	1,114	18,531
April	290	12	3,854	1,444	5	1,174	2,283	113	8,855	267	272	1,189	18,584
May	308	15	3,749	1,459	1	973	2,081	128	9,033	397	244	1,363	18,779
June	406	15	3,663	1,454	1	949	2,048	141	9,078	403	287	1,311	18,806
July	453	16	3,621	1,546	1	1,074	2,279	122	9,146	374	363	1,336	19,257
August	464	14	3,693	1,524	1	1,052	2,181	120	9,124	401	409	1,192	19,125
September	461	11	3,725	1,417	4	1,112	2,276	119	8,946	402	370	1,521	19,252
October	377	11	4,039	1,455	1	1,345	2,607	116	8,944	315	267	1,178	19,312
November	262	14	3,893	1,429	(s)	1,401	2,689	100	8,923	393	361	1,426	19,491
December	180	7	3,887	1,428	19	1,543	2,822	115	8,670	308	170	1,377	18,983
Average	**323**	**12**	**3,827**	**1,434**	**5**	**1,275**	**2,440**	**121**	**8,843**	**354**	**319**	**1,282**	**18,961**
2014 January	195	10	4,340	1,364	18	1,703	2,935	105	8,273	439	325	1,098	19,102
February	208	7	4,160	1,380	5	1,445	2,603	103	8,647	300	238	1,256	18,908
March	215	12	4,066	1,433	2	1,241	2,405	145	8,697	178	180	1,130	18,464
April	278	12	3,990	1,455	2	1,009	2,198	131	8,955	324	279	1,224	18,849
May	346	13	3,952	1,400	2	770	1,943	129	9,023	368	226	1,183	18,585
June	402	11	3,902	1,544	2	942	2,096	117	9,039	352	254	1,171	18,890
July	466	17	3,867	1,559	12	936	2,143	138	9,249	413	253	1,166	19,283
August	458	14	3,875	1,522	1	1,010	2,342	128	9,311	346	218	1,184	19,400
September	447	12	3,933	1,482	18	1,076	2,340	144	8,822	413	278	1,358	19,246
October	392	11	4,266	1,479	16	1,134	2,410	127	9,148	362	246	1,234	19,691
November	264	11	3,917	1,476	6	1,346	2,674	137	8,921	400	339	1,225	19,370
December	247	12	4,178	1,537	22	1,408	2,668	111	8,941	265	252	1,223	19,457
Average	**327**	**12**	**4,037**	**1,470**	**9**	**1,167**	**2,396**	**126**	**8,921**	**347**	**257**	**1,204**	**19,106**
2015 January	198	8	4,235	1,367	2	1,568	2,765	153	8,718	384	272	1,146	19,249
February	214	8	4,535	1,442	9	1,551	2,762	112	8,650	240	197	1,226	19,396
March	235	9	4,054	1,540	11	1,190	2,356	146	9,055	378	261	1,193	19,238
April	302	14	3,998	1,483	1	961	2,229	124	9,139	376	151	1,220	19,037
May	340	13	3,793	1,507	20	801	2,108	163	9,251	385	234	1,303	19,117
June	470	12	3,854	1,637	(s)	1,016	2,211	128	9,391	406	172	1,309	19,591
July	484	18	3,877	1,637	1	980	2,329	158	9,438	408	325	1,303	19,979
August	507	11	3,888	1,596	1	998	2,189	122	9,467	405	318	1,308	19,814
September	R 471	R 11	R 4,015	R 1,535	R 2	R 896	R 2,072	R 129	R 9,275	R 298	R 275	R 1,143	R 19,225
October	F 408	F 12	E 3,927	E 1,582	RF 6	E 947	RF 2,307	F 130	E 9,209	RF 361	E 127	RE 1,597	E 19,665
November	F 293	F 11	E 3,755	E 1,613	F 6	E 1,075	F 2,401	F 131	E 9,180	F 372	E 219	E 1,733	E 19,714
11-Month Average	**E 358**	**E 12**	**E 3,990**	**E 1,541**	**E 5**	**E 1,086**	**E 2,337**	**E 136**	**E 9,165**	**E 366**	**E 233**	**E 1,317**	**E 19,458**
2014 11-Month Average	**335**	**12**	**4,024**	**1,464**	**8**	**1,144**	**2,370**	**128**	**8,919**	**354**	**258**	**1,202**	**19,073**
2013 11-Month Average	**337**	**13**	**3,822**	**1,435**	**4**	**1,250**	**2,404**	**122**	**8,859**	**358**	**332**	**1,274**	**18,959**

[a] Liquefied petroleum gases.

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

[c] Beginning in 1957, includes kerosene-type jet fuel. For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other.").

[d] Includes propylene.

[e] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[f] Pentanes plus, petrochemical feedstocks, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1964, also includes special naphthas. 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. NA=Not available. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

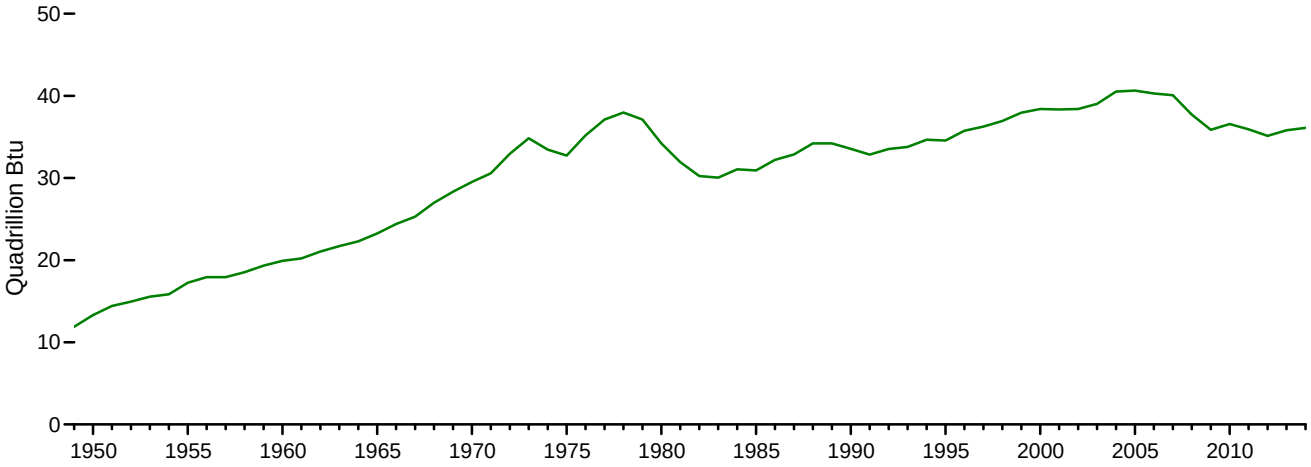
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

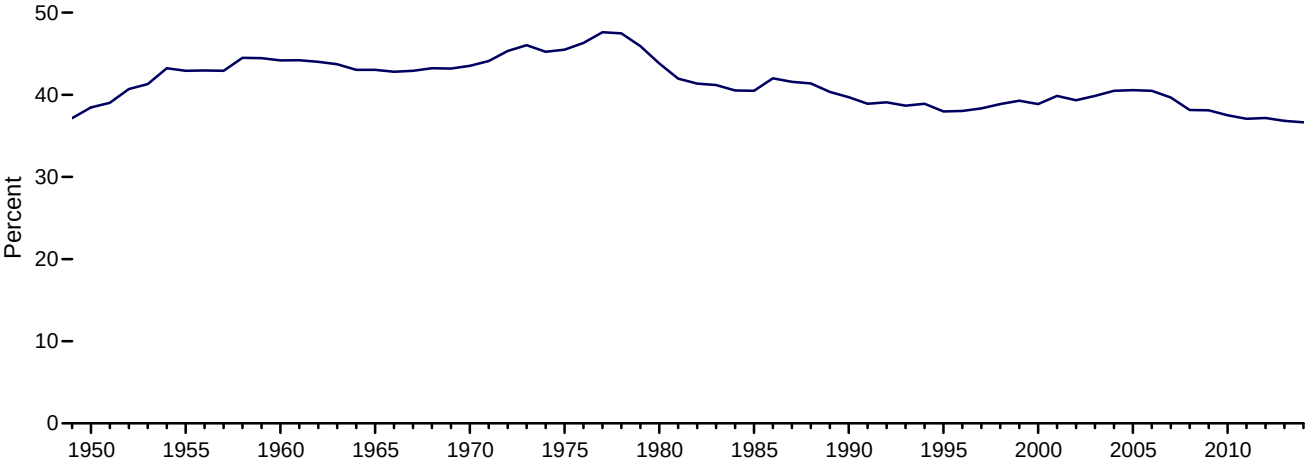
Sources: • **1949–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2013:** EIA, *Petroleum Supply Annual,* annual reports, and unpublished revisions. • **2014 and 2015:** 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

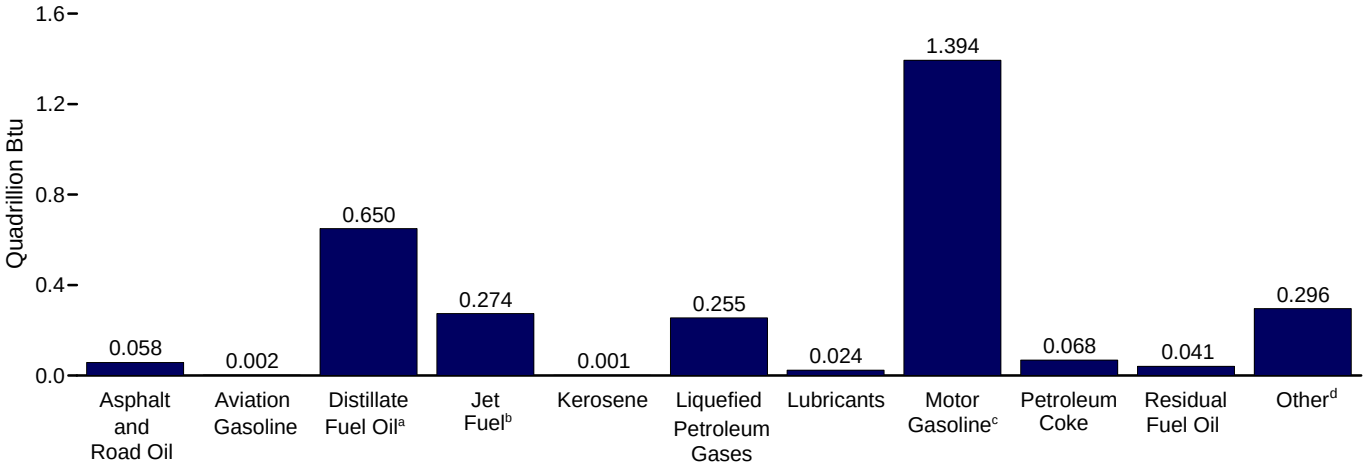
Total, 1949–2014



Petroleum Products Supplied as Share of Total Energy Consumption, 1949–2014



By Product, November 2015



[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 separately displayed.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 1.1 and 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						
1950 Total	**435**	**199**	**2,300**	**(c)**	**668**	**NA**	**343**	**236**	**5,015**	**90**	**3,482**	**546**	**13,315**
1955 Total	**615**	**354**	**3,385**	**301**	**662**	**NA**	**592**	**258**	**6,640**	**147**	**3,502**	**798**	**17,255**
1960 Total	**734**	**298**	**3,992**	**739**	**563**	**NA**	**912**	**259**	**7,631**	**328**	**3,517**	**947**	**19,919**
1965 Total	**890**	**222**	**4,519**	**1,215**	**553**	**NA**	**1,232**	**286**	**8,806**	**444**	**3,691**	**1,390**	**23,246**
1970 Total	**1,082**	**100**	**5,401**	**1,973**	**544**	**1,086**	**1,689**	**301**	**11,091**	**465**	**5,057**	**1,817**	**29,521**
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**	**6,812**	**3,132**	**112**	**1,534**	**2,512**	**346**	**14,834**	**802**	**1,955**	**2,837**	**34,558**
2000 Total	**1,276**	**36**	**7,927**	**3,580**	**140**	**1,734**	**2,945**	**369**	**16,167**	**895**	**2,091**	**2,979**	**38,406**
2001 Total	**1,257**	**35**	**8,170**	**3,426**	**150**	**1,598**	**2,697**	**338**	**16,386**	**961**	**1,861**	**3,056**	**38,337**
2002 Total	**1,240**	**34**	**8,020**	**3,340**	**90**	**1,747**	**2,852**	**334**	**16,829**	**1,018**	**1,605**	**3,040**	**38,401**
2003 Total	**1,220**	**30**	**8,341**	**3,265**	**113**	**1,701**	**2,748**	**309**	**16,968**	**1,000**	**1,772**	**3,264**	**39,030**
2004 Total	**1,304**	**31**	**8,642**	**3,383**	**133**	**1,791**	**2,824**	**313**	**17,333**	**1,148**	**1,990**	**3,428**	**40,528**
2005 Total	**1,323**	**35**	**8,745**	**3,475**	**144**	**1,721**	**2,682**	**312**	**17,378**	**1,125**	**2,111**	**3,318**	**40,647**
2006 Total	**1,261**	**33**	**8,831**	**3,379**	**111**	**1,701**	**2,700**	**303**	**17,531**	**1,141**	**1,581**	**3,416**	**40,289**
2007 Total	**1,197**	**32**	**8,860**	**3,358**	**67**	**1,729**	**2,733**	**313**	**17,472**	**1,072**	**1,659**	**3,313**	**40,075**
2008 Total	**1,012**	**28**	**8,346**	**3,193**	**30**	**1,620**	**2,574**	**291**	**16,865**	**1,017**	**1,432**	**2,941**	**37,728**
2009 Total	**873**	**27**	**7,661**	**2,883**	**36**	**1,624**	**2,664**	**262**	**16,750**	**937**	**1,173**	**2,611**	**35,877**
2010 Total	**878**	**27**	**8,014**	**2,963**	**41**	**1,624**	**2,821**	**291**	**16,668**	**831**	**1,228**	**2,800**	**36,561**
2011 Total	**859**	**27**	**8,217**	**2,950**	**25**	**1,614**	**2,839**	**276**	**16,191**	**801**	**1,058**	**2,676**	**35,920**
2012 Total	**827**	**25**	**7,903**	**2,901**	**11**	**1,649**	**2,912**	**254**	**16,089**	**802**	**849**	**2,558**	**35,130**
2013 January	46	2	727	230	2	202	306	24	1,307	76	66	208	2,995
February	40	1	644	213	(s)	172	279	22	1,190	48	52	196	2,686
March	48	2	674	245	3	165	277	24	1,356	55	86	197	2,966
April	58	2	667	246	1	135	244	21	1,345	49	51	204	2,887
May	63	2	671	256	(s)	116	228	24	1,418	75	47	241	3,026
June	81	2	634	247	(s)	109	217	26	1,379	74	54	223	2,937
July	93	3	647	272	(s)	128	251	23	1,435	71	71	241	3,106
August	95	2	660	268	(s)	125	239	23	1,432	76	80	212	3,086
September	92	2	644	241	1	128	240	22	1,359	74	70	258	3,001
October	78	2	722	256	(s)	160	287	22	1,403	60	52	211	3,093
November	52	2	674	243	(s)	161	287	18	1,355	72	68	243	3,014
December	37	1	695	251	3	183	312	22	1,360	58	33	244	3,016
Total	**783**	**22**	**8,059**	**2,969**	**11**	**1,785**	**3,167**	**268**	**16,339**	**786**	**731**	**2,677**	**35,812**
2014 January	40	2	776	240	3	203	326	20	1,298	83	63	195	3,045
February	39	1	672	219	1	155	260	18	1,225	51	42	201	2,727
March	44	2	727	252	(s)	148	263	27	1,364	34	35	202	2,950
April	55	2	690	248	(s)	116	233	24	1,359	59	53	212	2,936
May	71	2	707	246	(s)	92	210	24	1,415	70	44	212	3,001
June	80	2	675	263	(s)	108	220	21	1,372	64	48	201	2,946
July	96	3	691	274	2	111	232	26	1,451	78	49	209	3,111
August	94	2	693	268	(s)	120	254	24	1,461	65	42	211	3,115
September	89	2	681	252	3	124	246	26	1,339	75	52	233	2,999
October	81	2	763	260	3	135	265	24	1,435	69	48	218	3,166
November	53	2	678	251	1	155	286	25	1,354	73	64	211	2,997
December	51	2	747	270	4	167	295	21	1,402	50	49	215	3,106
Total	**793**	**22**	**8,499**	**3,042**	**19**	**1,634**	**3,090**	**280**	**16,476**	**772**	**590**	**2,518**	**36,101**
2015 January	41	1	757	240	(s)	186	307	29	1,367	73	53	202	3,071
February	40	1	733	229	1	167	275	19	1,226	41	35	195	2,794
March	48	1	725	271	2	141	258	27	1,420	72	51	209	3,085
April	60	2	692	252	(s)	111	235	23	1,387	69	28	208	2,956
May	70	2	678	265	4	95	230	31	1,451	73	46	232	3,080
June	94	2	667	279	(s)	117	235	23	1,425	74	33	225	3,056
July	100	3	693	288	(s)	117	255	30	1,480	77	63	232	3,221
August	104	2	695	281	(s)	119	240	23	1,485	77	62	229	3,198
September	R 94	2	R 695	R 261	R (s)	R 103	R 216	R 23	R 1,408	R 54	R 52	R 196	R 3,001
October	F 84	F 2	E 702	E 278	F 1	E 113	RF 253	RF 25	E 1,445	RF 68	E 25	RE 275	E 3,157
November	F 58	F 2	E 650	E 274	F 1	E 124	F 255	F 24	E 1,394	F 68	E 41	E 296	E 3,062
11-Month Total	**E 792**	**E 20**	**E 7,686**	**E 2,917**	**E 10**	**E 1,392**	**E 2,758**	**E 276**	**E 15,489**	**E 746**	**E 488**	**E 2,500**	**E 33,682**
2014 11-Month Total	**742**	**20**	**7,752**	**2,772**	**15**	**1,466**	**2,795**	**259**	**15,073**	**722**	**541**	**2,303**	**32,994**
2013 11-Month Total	**746**	**21**	**7,364**	**2,717**	**7**	**1,602**	**2,855**	**247**	**14,978**	**728**	**698**	**2,434**	**32,796**

[a] Liquefied petroleum gases.

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

[c] Beginning in 1957, includes kerosene-type jet fuel. For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other.").

[d] Includes propylene.

[e] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[f] Pentanes plus, petrochemical feedstocks, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1964, also includes special naphthas. 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. NA=Not available. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

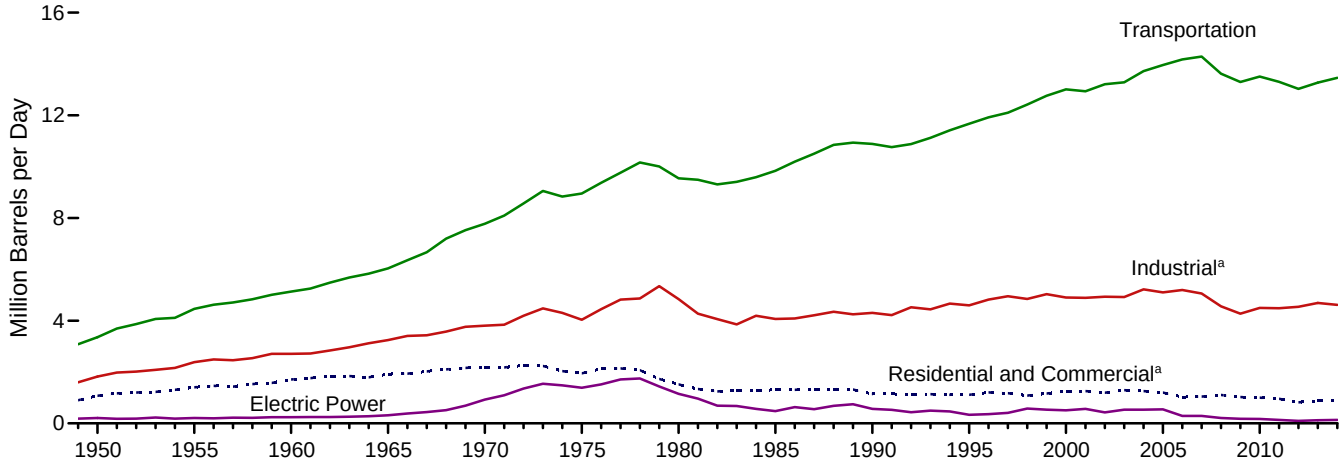
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

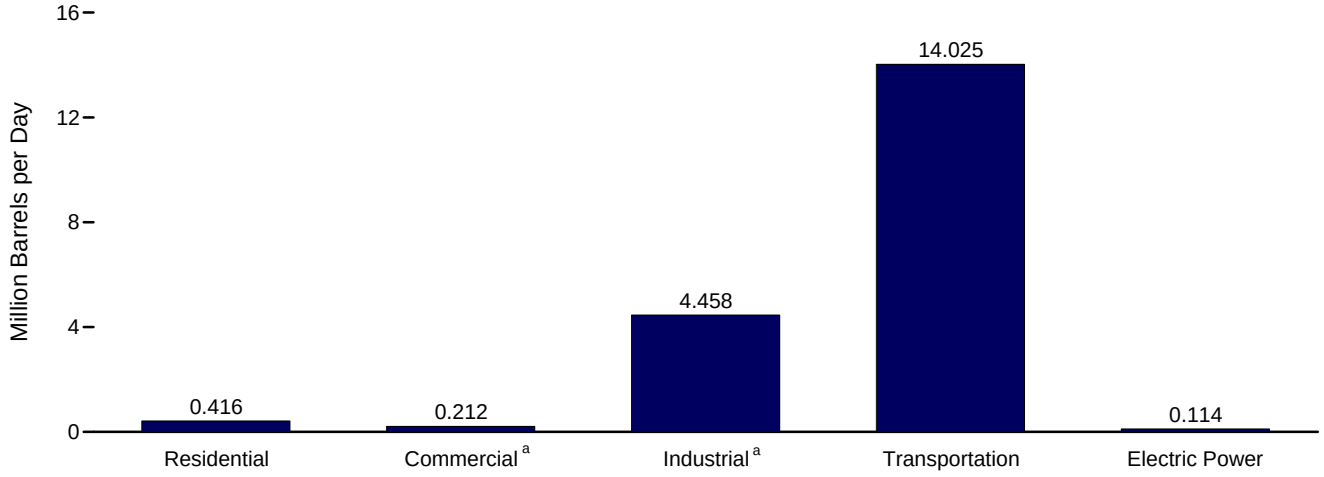
Sources: See end of section.

Figure 3.7 Petroleum Consumption by Sector

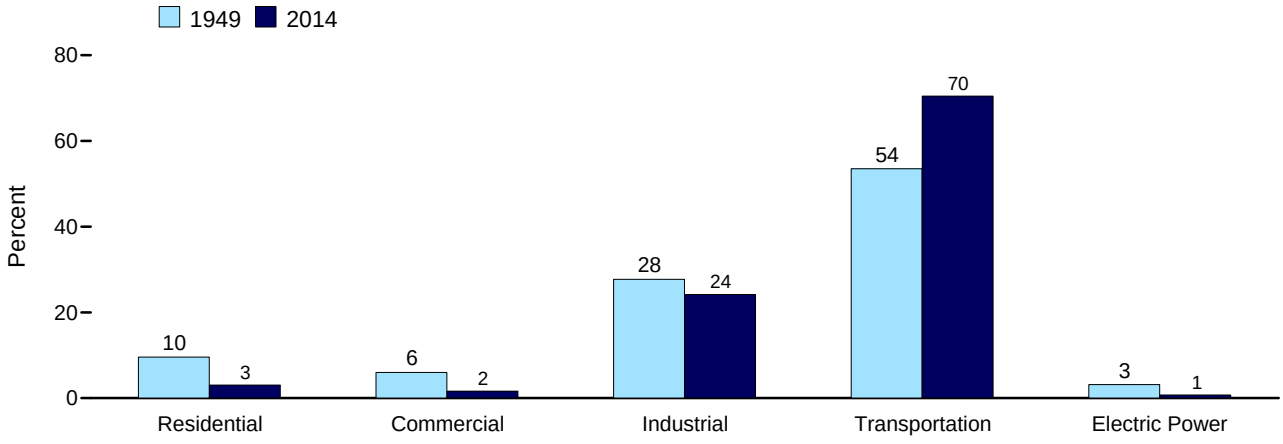
By Sector, 1949–2014



By Sector, September 2015



Sector Shares 1949 and 2014



[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.

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
1950 Average	**390**	**168**	**104**	**662**	**123**	**23**	**28**	**52**	**NA**	**185**	**411**
1955 Average	**562**	**179**	**144**	**885**	**177**	**24**	**38**	**69**	**NA**	**209**	**519**
1960 Average	**736**	**171**	**217**	**1,123**	**232**	**23**	**58**	**35**	**NA**	**243**	**590**
1965 Average	**805**	**161**	**275**	**1,242**	**251**	**26**	**74**	**40**	**NA**	**281**	**672**
1970 Average	**883**	**144**	**392**	**1,419**	**276**	**30**	**102**	**45**	**NA**	**311**	**764**
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**
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	**438**	**34**	**389**	**861**	**233**	**9**	**112**	**32**	**(s)**	**48**	**434**
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	**354**	**10**	**394**	**758**	**181**	**2**	**113**	**24**	**(s)**	**31**	**351**
2009 Average	**276**	**13**	**391**	**680**	**187**	**2**	**99**	**28**	**(s)**	**31**	**348**
2010 Average	**266**	**14**	**379**	**659**	**185**	**2**	**100**	**28**	**(s)**	**27**	**343**
2011 Average	**248**	**9**	**362**	**619**	**186**	**2**	**105**	**24**	**(s)**	**23**	**339**
2012 Average	**228**	**4**	**286**	**518**	**168**	**1**	**98**	**21**	**(s)**	**14**	**301**
2013 January	433	8	380	821	303	1	124	20	(s)	20	468
February	444	2	382	828	310	(s)	125	21	(s)	20	477
March	348	12	343	703	244	1	112	21	(s)	16	395
April	270	4	314	588	189	(s)	103	22	(s)	12	326
May	171	1	287	458	119	(s)	94	22	0	8	243
June	125	1	282	408	87	(s)	92	22	0	6	208
July	122	1	314	436	85	(s)	103	22	(s)	6	216
August	157	1	300	458	110	(s)	98	22	(s)	7	238
September	178	3	314	494	124	(s)	103	22	(s)	8	257
October	127	1	359	487	89	(s)	117	22	(s)	6	234
November	200	(s)	370	571	140	(s)	121	22	(s)	9	292
December	239	15	389	643	167	2	127	21	(s)	11	329
Average	**233**	**4**	**336**	**573**	**163**	**(s)**	**110**	**22**	**(s)**	**11**	**306**
2014 January	318	14	404	737	222	2	132	20	(s)	11	387
February	391	4	359	753	273	(s)	117	21	(s)	13	425
March	316	2	331	649	221	(s)	108	21	(s)	10	361
April	158	1	303	463	111	(s)	99	22	(s)	5	237
May	207	1	268	476	145	(s)	88	22	(s)	7	262
June	184	1	289	474	129	(s)	94	22	0	6	252
July	149	9	295	453	104	1	97	23	(s)	5	229
August	156	1	323	480	109	(s)	106	23	(s)	5	243
September	225	14	322	561	157	2	105	22	(s)	7	294
October	235	12	332	580	165	2	109	22	(s)	8	305
November	286	5	368	659	200	1	120	22	(s)	9	353
December	307	17	367	692	215	2	120	22	(s)	10	370
Average	**244**	**7**	**330**	**580**	**170**	**1**	**108**	**22**	**(s)**	**8**	**309**
2015 January	381	2	381	764	267	(s)	125	21	(s)	13	426
February	365	7	380	752	255	1	124	21	(s)	12	414
March	261	9	325	594	183	1	106	22	(s)	9	321
April	162	1	307	470	114	(s)	100	22	(s)	5	242
May	157	16	290	463	110	2	95	23	(s)	5	235
June	95	(s)	305	400	67	(s)	100	23	0	3	192
July	106	1	321	428	74	(s)	105	23	0	4	206
August	132	1	302	434	92	(s)	99	23	(s)	4	219
September	130	1	285	416	91	(s)	93	23	(s)	4	212
9-Month Average	**198**	**4**	**321**	**523**	**138**	**(s)**	**105**	**22**	**(s)**	**7**	**273**
2014 9-Month Average	**233**	**5**	**321**	**559**	**163**	**1**	**105**	**22**	**(s)**	**8**	**298**
2013 9-Month Average	**248**	**3**	**324**	**575**	**174**	**(s)**	**106**	**22**	**(s)**	**11**	**313**

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

[b] Finished motor gasoline. Through 1963, also includes special naphthas. 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 1, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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
1950 Average	**180**	**328**	**132**	**100**	**43**	**131**	**41**	**617**	**250**	**1,822**
1955 Average	**254**	**466**	**116**	**212**	**47**	**173**	**67**	**686**	**366**	**2,387**
1960 Average	**302**	**476**	**78**	**333**	**48**	**198**	**149**	**689**	**435**	**2,708**
1965 Average	**368**	**541**	**80**	**470**	**62**	**179**	**202**	**689**	**657**	**3,247**
1970 Average	**447**	**577**	**89**	**699**	**70**	**150**	**203**	**708**	**866**	**3,808**
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**
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**	**551**	**12**	**1,560**	**72**	**171**	**375**	**96**	**1,579**	**4,918**
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**	**637**	**2**	**1,419**	**67**	**131**	**394**	**84**	**1,408**	**4,559**
2009 Average	**360**	**509**	**2**	**1,541**	**61**	**128**	**363**	**57**	**1,251**	**4,272**
2010 Average	**362**	**547**	**4**	**1,673**	**68**	**140**	**310**	**52**	**1,343**	**4,500**
2011 Average	**355**	**586**	**2**	**1,714**	**64**	**138**	**295**	**59**	**1,272**	**4,484**
2012 Average	**340**	**602**	**1**	**1,841**	**59**	**136**	**319**	**30**	**1,215**	**4,543**
2013 January	224	749	1	2,217	65	134	351	22	1,171	4,935
February	215	621	(s)	2,232	65	135	230	20	1,214	4,731
March	236	525	2	2,005	65	139	241	28	1,114	4,356
April	290	571	1	1,836	58	143	219	18	1,189	4,325
May	308	565	(s)	1,674	66	146	331	16	1,363	4,469
June	406	500	(s)	1,647	73	146	334	19	1,311	4,436
July	453	449	(s)	1,833	63	148	307	23	1,336	4,610
August	464	453	(s)	1,754	62	147	331	26	1,192	4,430
September	461	544	1	1,831	61	144	337	23	1,521	4,922
October	377	809	(s)	2,097	60	144	257	17	1,178	4,939
November	262	721	(s)	2,162	51	144	346	24	1,426	5,135
December	180	705	3	2,270	59	140	251	17	1,377	5,001
Average	**323**	**601**	**1**	**1,962**	**62**	**143**	**295**	**21**	**1,282**	**4,690**
2014 January	195	R 911	3	2,361	54	133	372	R 17	1,098	R 5,144
February	208	713	1	2,093	53	140	240	R 15	1,256	R 4,718
March	215	R 668	(s)	1,934	75	140	114	R 11	1,130	R 4,287
April	278	R 709	(s)	1,768	68	144	278	R 16	1,224	R 4,485
May	346	R 583	(s)	1,563	67	146	R 308	14	1,183	R 4,209
June	402	513	(s)	1,686	60	146	R 287	16	1,171	R 4,282
July	466	R 508	2	1,724	71	149	R 356	15	1,166	R 4,456
August	458	R 493	(s)	1,884	66	150	R 288	R 12	1,184	R 4,535
September	447	R 552	3	1,882	74	142	R 354	16	1,358	R 4,827
October	392	764	2	1,938	65	148	328	R 15	1,234	4,885
November	264	573	1	2,150	71	144	R 354	20	1,225	R 4,802
December	247	R 755	3	2,145	57	144	R 200	15	1,223	R 4,790
Average	**327**	**645**	**1**	**1,926**	**65**	**144**	R **290**	R **15**	**1,204**	R **4,618**
2015 January	198	850	(s)	2,223	79	141	R 323	R 16	1,146	R 4,976
February	214	R 925	1	2,221	57	140	R 169	R 9	1,226	R 4,962
March	235	732	2	1,895	75	146	335	16	1,193	R 4,628
April	302	711	(s)	1,793	64	147	R 328	9	1,220	R 4,574
May	340	535	3	1,695	84	149	332	R 14	1,303	4,455
June	470	577	(s)	1,778	66	152	356	R 10	1,309	R 4,718
July	484	558	(s)	1,873	81	152	343	19	1,303	R 4,814
August	507	527	(s)	1,760	63	153	344	18	1,308	4,681
September	471	708	(s)	1,666	66	150	237	17	1,143	4,458
9-Month Average	**359**	**678**	**1**	**1,876**	**71**	**148**	**309**	**14**	**1,239**	**4,695**
2014 9-Month Average	**336**	**627**	**1**	**1,876**	**65**	**143**	**289**	**15**	**1,195**	**4,548**
2013 9-Month Average	**340**	**552**	**1**	**1,890**	**64**	**143**	**299**	**22**	**1,268**	**4,578**

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

[b] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[c] Pentanes plus, petrochemical feedstocks, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1964, also includes special naphthas. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

R=Revised. (s)=Less than 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 1, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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
1950 Average	**108**	**226**	**(c)**	**2**	**64**	**2,433**	**524**	**3,356**	**15**	**NA**	**192**	**207**
1955 Average	**192**	**372**	**154**	**9**	**70**	**3,221**	**440**	**4,458**	**15**	**NA**	**191**	**206**
1960 Average	**161**	**418**	**371**	**13**	**68**	**3,736**	**367**	**5,135**	**10**	**NA**	**231**	**241**
1965 Average	**120**	**514**	**602**	**23**	**67**	**4,374**	**336**	**6,036**	**14**	**NA**	**302**	**316**
1970 Average	**55**	**738**	**967**	**32**	**66**	**5,589**	**332**	**7,778**	**66**	**9**	**853**	**928**
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**
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**	**2,629**	**1,578**	**13**	**68**	**8,733**	**249**	**13,286**	**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**	**2,738**	**1,539**	**29**	**64**	**8,834**	**402**	**13,621**	**34**	**70**	**104**	**209**
2009 Average	**14**	**2,626**	**1,393**	**20**	**57**	**8,841**	**344**	**13,297**	**33**	**63**	**79**	**175**
2010 Average	**15**	**2,764**	**1,432**	**21**	**64**	**8,824**	**389**	**13,508**	**38**	**65**	**67**	**170**
2011 Average	**15**	**2,849**	**1,425**	**24**	**61**	**8,591**	**338**	**13,303**	**30**	**66**	**41**	**137**
2012 Average	**14**	**2,719**	**1,398**	**26**	**56**	**8,525**	**291**	**13,029**	**25**	**41**	**33**	**99**
2013 January	11	2,542	1,311	36	62	8,176	250	12,387	35	53	50	138
February	8	2,584	1,344	36	62	8,239	221	12,493	26	52	37	114
March	12	2,630	1,393	32	62	8,480	367	12,976	22	50	28	101
April	12	2,801	1,444	30	55	8,691	212	13,244	24	48	30	102
May	15	2,867	1,459	27	62	8,866	191	13,487	27	66	28	121
June	15	2,928	1,454	27	69	8,909	231	13,631	23	69	31	124
July	16	2,932	1,546	30	59	8,976	291	13,850	34	67	44	146
August	14	2,952	1,524	28	59	8,955	343	13,874	21	70	33	124
September	11	2,858	1,417	30	58	8,780	310	13,462	21	65	29	116
October	11	2,993	1,455	34	56	8,778	216	13,543	21	58	28	108
November	14	2,807	1,429	35	48	8,757	302	13,393	26	48	27	100
December	7	2,741	1,428	37	56	8,508	104	12,881	35	57	38	129
Average	**12**	**2,804**	**1,434**	**32**	**59**	**8,679**	**253**	**13,273**	**26**	**59**	**34**	**119**
2014 January	10	R 2,729	1,364	38	51	8,120	R 159	R 12,470	R 159	R 66	138	R 364
February	7	2,736	1,380	34	50	8,486	R 155	R 12,848	48	R 60	55	R 164
March	12	2,815	1,433	31	70	8,535	R 102	R 12,999	47	64	57	168
April	12	2,990	1,455	29	64	8,789	229	R 13,567	R 22	46	28	R 96
May	13	R 2,991	1,400	25	63	8,855	181	13,528	27	R 60	24	R 110
June	11	R 3,053	1,544	27	57	8,871	206	R 13,769	R 23	R 64	R 27	R 114
July	17	3,084	1,559	28	67	9,077	R 202	R 14,035	R 21	R 58	R 31	R 110
August	14	3,094	1,522	30	62	9,138	R 168	R 14,029	23	R 58	33	R 113
September	12	R 2,976	1,482	30	70	8,658	R 227	R 13,454	R 23	R 59	R 28	R 110
October	11	3,081	1,479	31	61	8,978	R 198	13,840	21	34	R 26	81
November	11	2,830	1,476	35	67	8,755	283	13,457	R 27	R 45	26	98
December	12	2,875	1,537	35	54	8,775	203	R 13,490	R 27	R 65	R 24	R 116
Average	**12**	**2,939**	**1,470**	**31**	**61**	**8,755**	**R 193**	**R 13,461**	**39**	**R 57**	**R 41**	**R 137**
2015 January	8	2,694	1,367	36	74	8,556	R 187	R 12,922	43	R 61	57	R 161
February	8	2,857	1,442	36	54	8,490	R 27	R 12,914	R 134	R 71	R 149	R 354
March	9	2,852	1,540	31	71	8,887	R 209	13,597	27	43	28	97
April	14	2,991	1,483	29	60	8,969	108	13,654	21	47	28	96
May	13	2,963	1,507	27	79	9,079	R 189	R 13,858	R 27	53	R 25	106
June	12	3,089	1,637	29	62	9,216	R 129	14,174	R 27	50	30	106
July	18	3,113	1,637	30	77	9,263	264	14,402	25	65	38	128
August	11	3,114	1,596	29	59	9,291	261	R 14,362	23	61	R 34	119
September	11	3,065	1,535	27	62	9,102	222	14,025	22	61	31	114
9-Month Average	**12**	**2,971**	**1,528**	**30**	**67**	**8,988**	**179**	**13,775**	**38**	**57**	**46**	**141**
2014 9-Month Average	**12**	**2,942**	**1,461**	**30**	**62**	**8,727**	**181**	**13,415**	**44**	**59**	**47**	**150**
2013 9-Month Average	**13**	**2,789**	**1,433**	**31**	**61**	**8,678**	**269**	**13,274**	**26**	**60**	**35**	**121**

[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] Beginning in 1957, includes kerosene-type jet fuel. For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other" on Table 3.7b.)

[d] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[e] Fuel oil nos. 1, 2, and 4. Through 1979, data are for gas turbine and internal combustion plant use of petroleum. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

[f] Fuel oil nos. 5 and 6. Through 1979, data are for steam plant use of petroleum. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

R=Revised. NA=Not available.

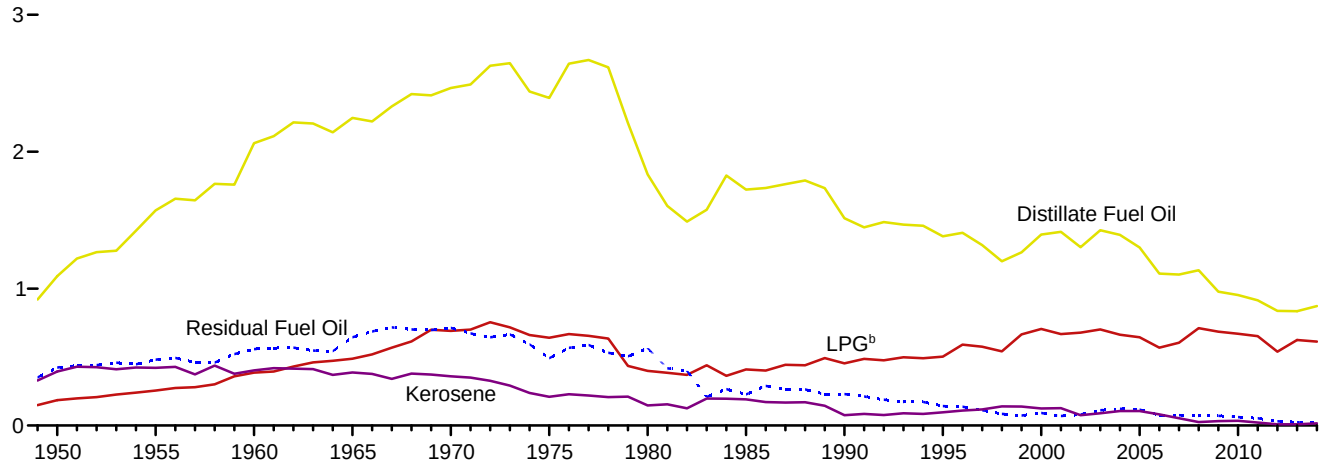
Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

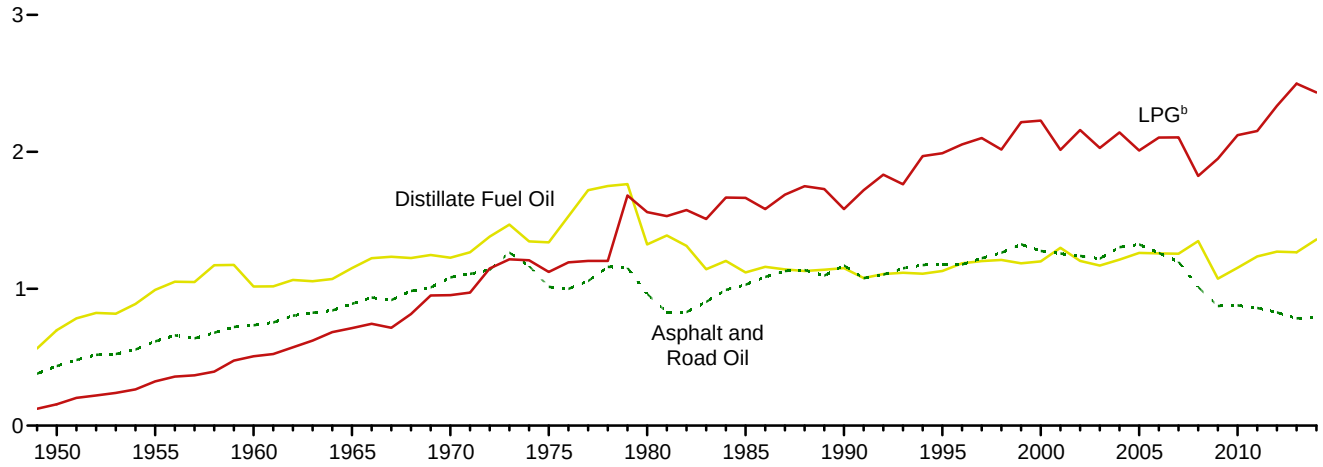
Sources: See end of section.

Figure 3.8a Heat Content of Petroleum Consumption by End-Use Sector, 1949–2014
(Quadrillion Btu)

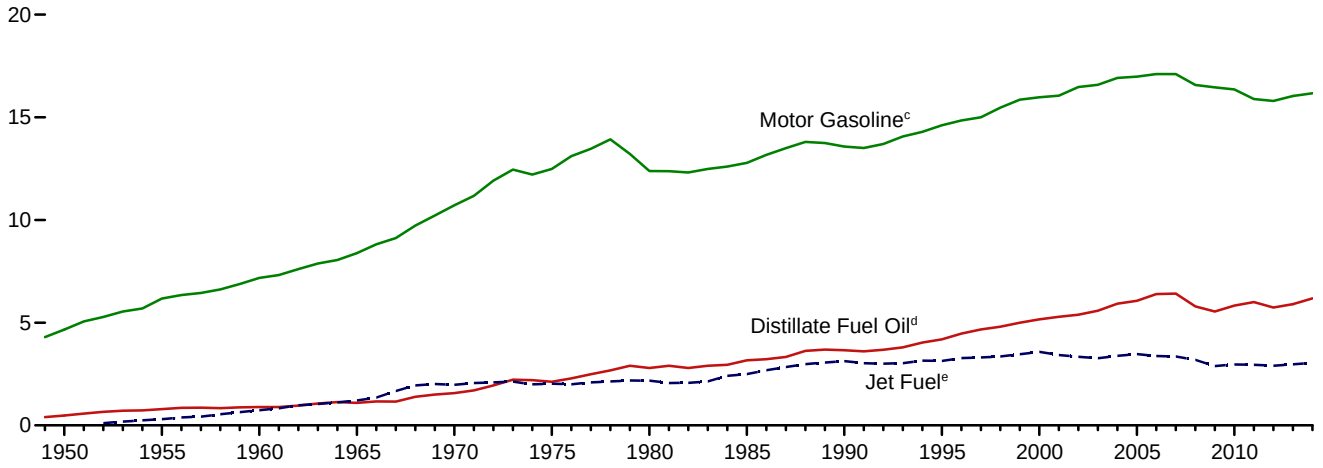
Residential and Commercial[a] Sectors, Selected Products



Industrial[a] Sector, Selected Products



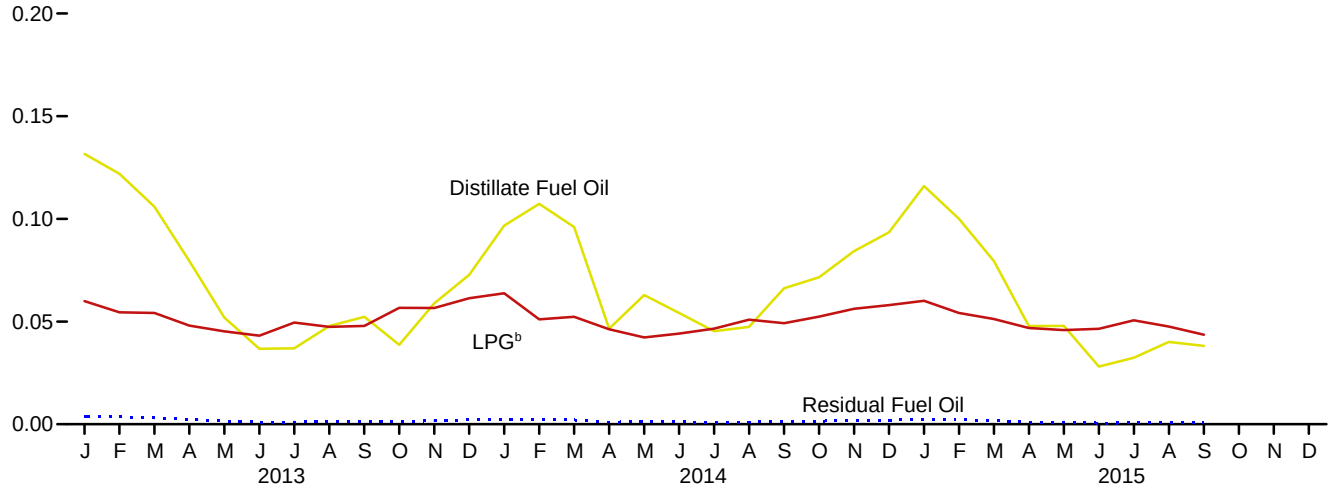
Transportation Sector, Selected Products



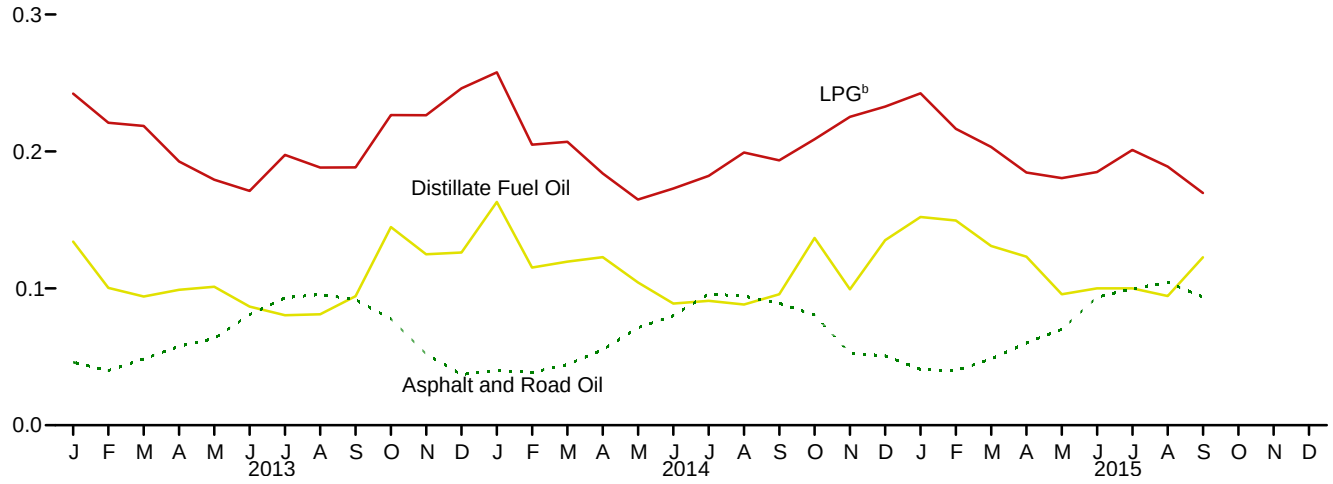
[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.
[b] Liquefied petroleum gases.
[c] Beginning in 1993, includes fuel ethanol blended into motor gasoline.
[d] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel 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.

Figure 3.8b Heat Content of Petroleum Consumption by End-Use Sector, Monthly
(Quadrillion Btu)

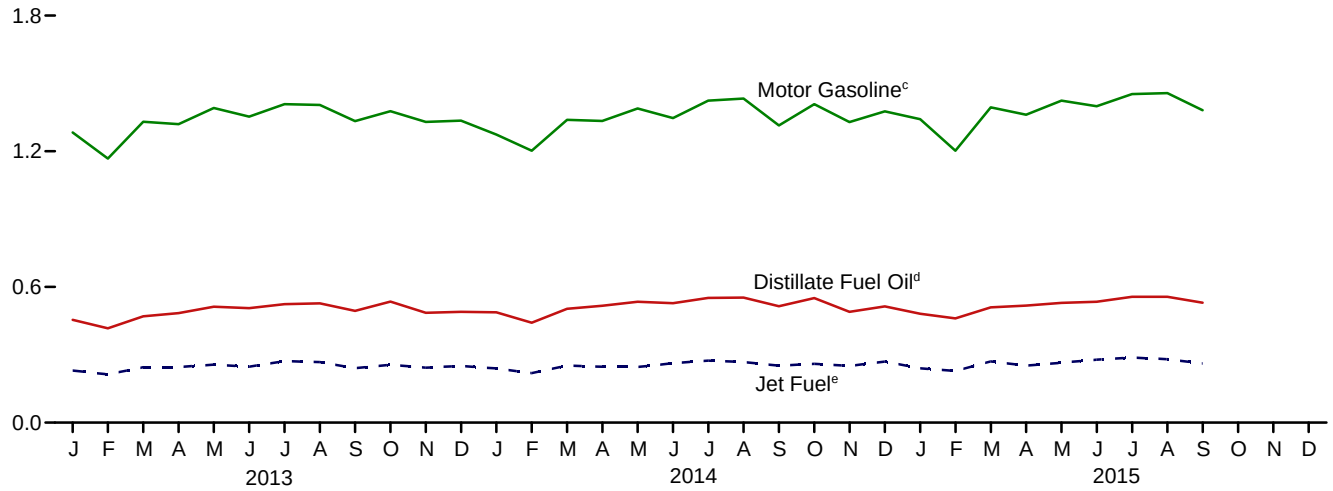
Residential and Commercial[a] Sectors, Selected Products



Industrial[a] Sector, Selected Products



Transportation Sector, Selected Products



[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 3.8a–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
1950 Total	**829**	**347**	**146**	**1,322**	**262**	**47**	**39**	**100**	**NA**	**424**	**872**
1955 Total	**1,194**	**371**	**202**	**1,767**	**377**	**51**	**54**	**133**	**NA**	**480**	**1,095**
1960 Total	**1,568**	**354**	**305**	**2,227**	**494**	**48**	**81**	**67**	**NA**	**559**	**1,248**
1965 Total	**1,713**	**334**	**385**	**2,432**	**534**	**54**	**103**	**77**	**NA**	**645**	**1,413**
1970 Total	**1,878**	**298**	**549**	**2,725**	**587**	**61**	**143**	**86**	**NA**	**714**	**1,592**
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	**904**	**74**	**395**	**1,373**	**478**	**22**	**109**	**18**	**(s)**	**141**	**769**
2000 Total	**904**	**95**	**555**	**1,553**	**490**	**30**	**150**	**45**	**(s)**	**92**	**807**
2001 Total	**907**	**95**	**526**	**1,528**	**508**	**31**	**143**	**37**	**(s)**	**70**	**789**
2002 Total	**859**	**60**	**537**	**1,456**	**444**	**16**	**141**	**45**	**(s)**	**80**	**726**
2003 Total	**931**	**70**	**544**	**1,546**	**496**	**19**	**157**	**60**	**(s)**	**111**	**842**
2004 Total	**923**	**85**	**512**	**1,519**	**470**	**20**	**152**	**45**	**(s)**	**122**	**810**
2005 Total	**853**	**84**	**513**	**1,450**	**447**	**22**	**131**	**46**	**(s)**	**116**	**762**
2006 Total	**709**	**66**	**446**	**1,221**	**400**	**15**	**123**	**48**	**(s)**	**75**	**662**
2007 Total	**721**	**44**	**484**	**1,249**	**381**	**9**	**121**	**60**	**(s)**	**75**	**648**
2008 Total	**750**	**21**	**553**	**1,324**	**384**	**4**	**158**	**45**	**(s)**	**71**	**663**
2009 Total	**582**	**28**	**547**	**1,157**	**395**	**4**	**139**	**52**	**(s)**	**71**	**662**
2010 Total	**562**	**29**	**530**	**1,121**	**391**	**5**	**140**	**52**	**(s)**	**62**	**650**
2011 Total	**523**	**19**	**506**	**1,048**	**391**	**3**	**146**	**44**	**(s)**	**54**	**639**
2012 Total	**482**	**8**	**402**	**892**	**355**	**1**	**138**	**39**	**(s)**	**31**	**564**
2013 January	77	1	45	124	54	(s)	15	3	(s)	4	76
February	72	(s)	41	113	50	(s)	13	3	(s)	4	70
March	62	2	41	105	44	(s)	13	3	(s)	3	64
April	47	1	36	84	33	(s)	12	3	(s)	2	50
May	31	(s)	34	65	21	(s)	11	3	0	2	38
June	22	(s)	32	54	15	(s)	11	3	0	1	30
July	22	(s)	37	59	15	(s)	12	4	(s)	1	32
August	28	(s)	36	64	20	(s)	12	4	(s)	1	36
September	31	1	36	67	22	(s)	12	3	(s)	2	38
October	23	(s)	43	66	16	(s)	14	3	(s)	1	35
November	35	(s)	43	77	24	(s)	14	3	(s)	2	43
December	43	3	46	92	30	(s)	15	3	(s)	2	51
Total	**491**	**8**	**470**	**970**	**344**	**1**	**154**	**40**	**(s)**	**24**	**563**
2014 January	57	2	48	107	40	(s)	16	3	(s)	2	61
February	63	1	39	102	44	(s)	13	3	(s)	2	62
March	57	(s)	39	96	40	(s)	13	3	(s)	2	58
April	27	(s)	35	63	19	(s)	11	3	(s)	1	35
May	37	(s)	32	69	26	(s)	10	3	(s)	1	41
June	32	(s)	33	65	22	(s)	11	3	0	1	38
July	27	2	35	63	19	(s)	11	4	(s)	1	35
August	28	(s)	38	66	20	(s)	13	4	(s)	1	37
September	39	2	37	78	27	(s)	12	3	(s)	1	44
October	42	2	39	84	29	(s)	13	4	(s)	2	48
November	50	1	42	93	35	(s)	14	3	(s)	2	54
December	55	3	44	102	38	(s)	14	3	(s)	2	59
Total	**513**	**14**	**462**	**990**	**359**	**2**	**151**	**40**	**1**	**18**	**571**
2015 January	68	(s)	45	114	48	(s)	15	3	(s)	2	68
February	59	1	41	101	41	(s)	13	3	(s)	2	60
March	47	2	39	87	33	(s)	13	3	(s)	2	51
April	28	(s)	35	64	20	(s)	12	3	(s)	1	36
May	28	3	35	65	20	(s)	11	4	(s)	1	36
June	17	(s)	35	52	12	(s)	11	3	0	1	27
July	19	(s)	38	57	13	(s)	12	4	0	1	30
August	24	(s)	36	60	16	(s)	12	4	(s)	1	33
September	22	(s)	33	56	16	(s)	11	3	(s)	1	31
9-Month Total	**312**	**6**	**336**	**655**	**218**	**1**	**110**	**31**	**(s)**	**11**	**371**
2014 9-Month Total	**367**	**8**	**336**	**711**	**256**	**1**	**110**	**30**	**(s)**	**13**	**411**
2013 9-Month Total	**391**	**5**	**339**	**736**	**273**	**1**	**111**	**30**	**(s)**	**19**	**435**

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

[b] Finished motor gasoline. Through 1963, also includes special naphthas. 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 1, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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
1950 Total	**435**	**698**	**274**	**156**	**94**	**251**	**90**	**1,416**	**546**	**3,960**
1955 Total	**615**	**991**	**241**	**323**	**103**	**332**	**147**	**1,573**	**798**	**5,123**
1960 Total	**734**	**1,016**	**161**	**507**	**107**	**381**	**328**	**1,584**	**947**	**5,766**
1965 Total	**890**	**1,150**	**165**	**712**	**137**	**342**	**444**	**1,582**	**1,390**	**6,813**
1970 Total	**1,082**	**1,226**	**185**	**953**	**155**	**288**	**446**	**1,624**	**1,817**	**7,776**
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**	**1,130**	**15**	**1,990**	**178**	**200**	**721**	**337**	**2,837**	**8,587**
2000 Total	**1,276**	**1,199**	**16**	**2,228**	**190**	**150**	**796**	**241**	**2,979**	**9,075**
2001 Total	**1,257**	**1,299**	**23**	**2,014**	**174**	**295**	**858**	**203**	**3,056**	**9,179**
2002 Total	**1,240**	**1,203**	**14**	**2,160**	**172**	**309**	**842**	**190**	**3,040**	**9,170**
2003 Total	**1,220**	**1,169**	**24**	**2,028**	**159**	**324**	**825**	**220**	**3,264**	**9,233**
2004 Total	**1,304**	**1,213**	**28**	**2,141**	**161**	**371**	**937**	**249**	**3,428**	**9,832**
2005 Total	**1,323**	**1,262**	**39**	**2,009**	**160**	**355**	**894**	**281**	**3,318**	**9,641**
2006 Total	**1,261**	**1,258**	**30**	**2,104**	**156**	**374**	**938**	**239**	**3,416**	**9,777**
2007 Total	**1,197**	**1,256**	**13**	**2,106**	**161**	**302**	**910**	**193**	**3,313**	**9,452**
2008 Total	**1,012**	**1,348**	**4**	**1,823**	**150**	**246**	**870**	**194**	**2,941**	**8,588**
2009 Total	**873**	**1,073**	**4**	**1,950**	**135**	**238**	**805**	**130**	**2,611**	**7,819**
2010 Total	**878**	**1,153**	**7**	**2,121**	**149**	**260**	**694**	**120**	**2,800**	**8,183**
2011 Total	**859**	**1,236**	**4**	**2,152**	**142**	**255**	**663**	**135**	**2,676**	**8,121**
2012 Total	**827**	**1,271**	**2**	**2,335**	**130**	**252**	**717**	**70**	**2,558**	**8,163**
2013 January	46	134	(s)	242	12	21	67	4	208	735
February	40	100	(s)	221	11	19	40	3	196	631
March	48	94	(s)	219	12	22	46	6	197	644
April	58	99	(s)	193	11	22	41	3	204	630
May	63	101	(s)	179	12	23	63	3	241	686
June	81	87	(s)	171	13	22	62	3	223	662
July	93	80	(s)	197	12	23	59	4	241	710
August	95	81	(s)	188	12	23	63	5	212	680
September	92	94	(s)	188	11	22	62	4	258	732
October	78	145	(s)	227	11	23	49	3	211	746
November	52	125	(s)	226	9	22	64	4	243	746
December	37	126	(s)	246	11	22	48	3	244	738
Total	**783**	**1,266**	**1**	**2,498**	**138**	**264**	**663**	**48**	**2,677**	**8,340**
2014 January	40	163	(s)	258	10	21	71	R 3	195	762
February	39	115	(s)	205	9	20	42	3	201	R 632
March	44	119	(s)	207	14	22	22	2	202	633
April	55	123	(s)	184	12	22	51	3	212	663
May	71	104	(s)	165	13	23	59	3	212	649
June	80	89	(s)	173	11	22	R 53	3	201	632
July	96	91	(s)	182	13	23	68	3	209	686
August	94	88	(s)	199	12	24	R 55	2	211	R 686
September	89	R 96	(s)	193	13	22	R 65	3	233	715
October	81	137	(s)	209	12	23	62	3	218	745
November	53	99	(s)	225	13	22	R 65	4	211	692
December	51	135	1	233	11	23	39	3	215	709
Total	**793**	R **1,360**	**3**	**2,433**	**144**	**266**	R **653**	R **35**	**2,518**	R **8,204**
2015 January	41	152	(s)	242	15	22	62	R 3	202	R 739
February	40	150	(s)	217	10	20	30	2	195	R 662
March	48	131	(s)	203	14	23	64	3	209	696
April	60	123	(s)	185	12	22	61	2	208	672
May	70	96	(s)	181	16	23	63	3	232	684
June	94	100	(s)	185	12	23	66	2	225	706
July	100	100	(s)	201	15	24	66	4	232	741
August	104	94	(s)	189	12	24	66	4	229	722
September	94	123	(s)	170	12	23	44	3	196	664
9-Month Total	**650**	**1,068**	**1**	**1,772**	**117**	**204**	**520**	**25**	**1,929**	**6,287**
2014 9-Month Total	**609**	**988**	**1**	**1,766**	**108**	**198**	**487**	**25**	**1,874**	**6,058**
2013 9-Month Total	**617**	**871**	**1**	**1,799**	**106**	**197**	**502**	**37**	**1,980**	**6,110**

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

[b] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[c] Pentanes plus, petrochemical feedstocks, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1964, also includes special naphthas. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

R=Revised. (s)=Less than 0.5 trillion Btu 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 1, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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
1950 Total	**199**	**480**	**(c)**	**3**	**141**	**4,664**	**1,201**	**6,690**	**32**	**NA**	**440**	**472**
1955 Total	**354**	**791**	**301**	**13**	**155**	**6,175**	**1,009**	**8,799**	**32**	**NA**	**439**	**471**
1960 Total	**298**	**892**	**739**	**19**	**152**	**7,183**	**844**	**10,125**	**22**	**NA**	**530**	**553**
1965 Total	**222**	**1,093**	**1,215**	**32**	**149**	**8,386**	**770**	**11,866**	**29**	**NA**	**693**	**722**
1970 Total	**100**	**1,569**	**1,973**	**44**	**147**	**10,716**	**761**	**15,310**	**141**	**19**	**1,958**	**2,117**
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**	**4,191**	**3,132**	**18**	**168**	**14,616**	**911**	**23,075**	**108**	**81**	**566**	**755**
2000 Total	**36**	**5,159**	**3,580**	**12**	**179**	**15,973**	**888**	**25,827**	**175**	**99**	**871**	**1,144**
2001 Total	**35**	**5,286**	**3,426**	**14**	**164**	**16,053**	**586**	**25,564**	**170**	**103**	**1,003**	**1,276**
2002 Total	**34**	**5,387**	**3,340**	**14**	**162**	**16,474**	**677**	**26,089**	**127**	**175**	**659**	**961**
2003 Total	**30**	**5,584**	**3,265**	**18**	**150**	**16,585**	**571**	**26,203**	**161**	**175**	**869**	**1,205**
2004 Total	**31**	**5,925**	**3,383**	**19**	**152**	**16,917**	**740**	**27,166**	**111**	**211**	**879**	**1,201**
2005 Total	**35**	**6,068**	**3,475**	**28**	**151**	**16,977**	**837**	**27,573**	**114**	**231**	**876**	**1,222**
2006 Total	**33**	**6,390**	**3,379**	**27**	**147**	**17,108**	**906**	**27,991**	**73**	**203**	**361**	**637**
2007 Total	**32**	**6,413**	**3,358**	**22**	**152**	**17,109**	**994**	**28,078**	**89**	**163**	**397**	**648**
2008 Total	**28**	**5,792**	**3,193**	**40**	**141**	**16,574**	**926**	**26,695**	**73**	**146**	**240**	**459**
2009 Total	**27**	**5,541**	**2,883**	**28**	**127**	**16,460**	**791**	**25,857**	**70**	**132**	**181**	**382**
2010 Total	**27**	**5,828**	**2,963**	**29**	**141**	**16,356**	**892**	**26,236**	**80**	**137**	**154**	**370**
2011 Total	**27**	**6,003**	**2,950**	**34**	**134**	**15,892**	**776**	**25,817**	**64**	**138**	**93**	**295**
2012 Total	**25**	**5,741**	**2,901**	**37**	**123**	**15,798**	**671**	**25,297**	**52**	**85**	**77**	**214**
2013 January	2	455	230	4	12	1,283	49	2,034	6	9	10	25
February	1	417	213	4	11	1,168	39	1,853	4	8	6	19
March	2	470	245	4	12	1,331	72	2,135	4	9	6	18
April	2	485	246	3	10	1,320	40	2,105	4	8	6	18
May	2	513	256	3	12	1,391	37	2,215	5	12	6	22
June	2	506	247	3	12	1,353	44	2,168	4	12	6	22
July	3	524	272	4	11	1,409	57	2,278	6	12	9	27
August	2	528	268	3	11	1,405	67	2,284	4	12	6	23
September	2	494	241	3	11	1,333	58	2,142	4	11	6	20
October	2	535	256	4	11	1,377	42	2,227	4	10	5	20
November	2	485	243	4	9	1,330	57	2,130	4	8	5	18
December	1	490	251	4	10	1,335	20	2,112	6	10	7	24
Total	**22**	**5,902**	**2,969**	**44**	**130**	**16,035**	**581**	**25,684**	**55**	**123**	**77**	**255**
2014 January	2	488	240	5	10	1,274	R 31	R 2,048	29	12	27	R 67
February	1	442	219	4	9	1,202	27	1,903	8	10	10	27
March	2	503	252	4	13	1,339	20	R 2,133	8	11	11	31
April	2	517	248	3	12	1,334	43	2,159	4	8	5	17
May	2	535	246	3	12	1,389	35	2,222	5	R 11	5	20
June	2	528	263	3	10	1,347	39	2,191	4	11	5	20
July	3	551	274	3	13	1,424	39	2,307	4	10	6	20
August	2	553	268	4	12	1,433	R 33	2,304	4	10	R 6	21
September	2	515	252	4	13	1,314	43	2,142	4	10	5	19
October	2	551	260	4	12	1,408	R 39	2,275	4	6	5	15
November	2	490	251	4	12	1,329	53	2,141	5	8	5	17
December	2	514	270	4	10	1,376	40	2,216	5	R 12	5	21
Total	**22**	**R 6,186**	**3,042**	**44**	**136**	**16,170**	**R 442**	**R 26,041**	**R 82**	**R 118**	**95**	**R 295**
2015 January	1	482	240	4	14	1,342	36	R 2,120	8	R 11	11	R 30
February	1	461	229	4	9	1,203	R 5	R 1,912	22	11	R 26	59
March	1	510	271	4	13	1,394	41	2,233	5	8	5	18
April	2	517	252	3	11	1,362	20	2,168	4	8	5	17
May	2	530	265	3	15	1,424	37	2,276	5	9	5	19
June	2	534	279	3	11	1,399	24	R 2,253	5	9	6	19
July	3	556	288	4	14	1,453	R 52	2,369	4	11	7	23
August	2	557	281	3	11	1,457	51	2,362	4	11	7	22
September	2	530	261	3	11	1,382	42	2,231	4	10	6	20
9-Month Total	**16**	**4,677**	**2,365**	**32**	**111**	**12,416**	**308**	**19,923**	**60**	**89**	**79**	**227**
2014 9-Month Total	**16**	**4,631**	**2,261**	**32**	**102**	**12,056**	**310**	**19,409**	**69**	**93**	**81**	**242**
2013 9-Month Total	**17**	**4,392**	**2,219**	**32**	**101**	**11,993**	**462**	**19,215**	**41**	**94**	**59**	**194**

[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] Beginning in 1957, includes kerosene-type jet fuel. For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other" on Table 3.8b.)

[d] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[e] Fuel oil nos. 1, 2, and 4. Through 1979, data are for gas turbine and internal combustion plant use of petroleum. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

[f] Fuel oil nos. 5 and 6. Through 1979, data are for steam plant use of petroleum. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

R=Revised. NA=Not available.

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 1, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Petroleum

Note 1. 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.

Note 2. 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.

Note 3. Historical Petroleum Data. Detailed information on petroleum data through 1993 can be found in Notes 1–6 on pages 60 and 61 in the July 2013 *Monthly Energy Review (MER)* at http://www.eia.gov/totalenergy/data/monthly/archive/00351307.pdf. The notes discuss:

Note 1, "Petroleum Survey Respondents": In 1993, EIA added numerous companies that produce, blend, store, or import oxygenates to the monthly surveys.

Note 2, "Motor Gasoline": In 1981, EIA expanded its universe to include nonrefinery blenders and separated blending components from finished motor gasoline as a reporting category. In 1993, EIA made adjustments to finished motor gasoline product supplied data to more accurately account for fuel ethanol and motor gasoline blending components blended into finished motor gasoline.

Note 3, "Distillate and Residual Fuel Oils": In 1981, EIA eliminated the requirement to report crude oil in pipelines or burned on leases as either distillate or residual fuel oil.

Note 4, "Petroleum New Stock Basis": In 1975, 1979, 1981, and 1983, EIA added numerous respondents to bulk terminal and pipeline surveys; in 1984, EIA made changes in the reporting of natural gas liquids; and in 1993, EIA changed how it collected bulk terminal and pipeline stocks of oxygenates. These changes affected stocks reported and stock change calculations.

Note 5, "Stocks of Alaskan Crude Oil": In 1981, EIA began to include data for stocks of Alaskan crude oil in transit.

Note 6, "Petroleum Data Discrepancies": In 1976, 1978, and 1979, there are some small discrepancies between data in the MER and the *Petroleum Supply Annual.*

Table 3.1 Sources

1949–1975: 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.

1981–2001: EIA, *Petroleum Supply Annual (PSA)*, annual reports.

2002 forward: EIA, PSA, annual reports, and unpublished revisions; *Petroleum Supply Monthly*, monthly reports; revisions to crude oil production, total field production, and adjustments (based on crude oil production data from: Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report"; state government agencies; U.S. Department of the Interior, Bureau of Safety and Environmental Enforcement, and predecessor agencies; and Form EIA-182, "Domestic Crude Oil First Purchase Report"); and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

Table 3.6 Sources

Asphalt and Road Oil

Product supplied data in thousand barrels per day for asphalt and road oil are from Table 3.5, and are converted to trillion Btu by multiplying by the asphalt and road oil heat content factors in Table A1.

Aviation Gasoline

Product supplied data in thousand barrels per day for aviation gasoline are from Table 3.5, and are converted to trillion Btu by multiplying by the aviation gasoline (finished) heat content factor in Table A1.

Distillate Fuel Oil

1949–2008: Product supplied data in thousand barrels per day for distillate fuel oil are from Table 3.5, and are

converted to trillion Btu by multiplying by the distillate fuel oil heat content factors in Table A3.

2009 forward: Data for refinery and blender net inputs of renewable diesel fuel are from U.S. Energy Information Administration (EIA), *Petroleum Supply Annual (PSA)/Petroleum Supply Monthly (PSM)*, Table 1 (for biomass-based diesel fuel, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1). Product supplied data for distillate fuel oil from Table 3.5, minus data for renewable diesel fuel from the PSA/PSM, are converted to Btu by multiplying by the distillate fuel oil heat content factors in Table A3. Total distillate fuel oil product supplied is the sum of distillate fuel oil (excluding renewable diesel fuel) and renewable diesel fuel.

Jet Fuel

Product supplied data in thousand barrels per day for kerosene-type jet fuel and, through 2004, naphtha-type jet fuel are from EIA's 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 jet fuel product supplied is the sum of the data in trillion Btu for kerosene-type and naphtha-type jet fuel.

Kerosene

Product supplied data in thousand barrels per day for kerosene are from Table 3.5, and are converted to trillion Btu by multiplying by the kerosene heat content factor in Table A1.

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.

Lubricants

Product supplied data in thousand barrels per day for lubricants are from Table 3.5, and are converted to trillion Btu by multiplying by the lubricants heat content factor in Table A1.

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.

Petroleum Coke

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

Propane

Product supplied data in thousand barrels per day for propane are from Table 3.5, and are converted to trillion Btu by multiplying by the propane/propylene heat content factor in Table A1.

Residual Fuel Oil

Product supplied data in thousand barrels per day for residual fuel oil are from Table 3.5, and are converted to trillion Btu by multiplying by the residual fuel oil heat content factor in Table A1.

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 for 1949–1972 are from the following sources:

1949–1959: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports, and U.S. Energy Information Administration (EIA) estimates.
1960–1972: EIA, State Energy Data System.

Petroleum consumption data beginning in 1973 are derived from data for "petroleum products supplied" from the following sources:

1973–1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement Annual*, annual reports.
1976–1980: EIA, Energy Data Reports, *Petroleum Statement Annual*, annual reports.
1981–2014: EIA, *Petroleum Supply Annual*, annual reports, and unpublished revisions.
2015: EIA, *Petroleum Supply Monthly*, monthly reports.

Beginning in 1973, 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, 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, End-Use Sectors, Annual Data
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:

Beginning in 1979, the residential sector sales total is directly from the Sales reports. Through 1978, 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.

Beginning in 1979, the commercial sector sales total is directly from the Sales reports. Through 1978, 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.

Beginning in 1979, the industrial sector sales total is the sum of the sales for industrial, farm, oil company, off-highway diesel, and all other uses. Through 1978, 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, End-Use Sectors, Monthly Data
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." Beginning in 1994, 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 assigned to the transportation sector. Beginning in 2005, kerosene-type jet fuel is assigned to 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).

Beginning in 1979, the residential sector sales total is directly from the Sales reports. Through 1978, each year's sales category called "heating" is allocated to the residential, commercial, and industrial sectors in proportion to the 1979 shares.

Beginning in 1979, the commercial sector sales total is directly from the Sales reports. Through 1978, each year's sales category called "heating" is allocated to the residential, commercial, and industrial sectors in proportion to the 1979 shares.

Beginning in 1979, the industrial sector sales total is the sum of the sales for industrial, farm, and all other uses. Through 1978, 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. Beginning in 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. Through 2002, 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*.

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, U.S. Census

Bureau, *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, 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, End-Use Sectors, Annual Data

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:

Beginning in 1979, commercial sales data are directly from the Sales reports. Through 1978, 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.

Beginning in 1979, industrial sales data are the sum of sales for industrial, oil company, and all other uses. Through 1978, 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, End-Use Sectors, Monthly Data

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
Residential and commercial sector consumption data in thousand barrels per day for distillate fuel oil are from Table 3.7a, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors in Table A3.

Kerosene
Residential and commercial sector consumption data in thousand barrels per day for kerosene are from Table 3.7a, and are converted to trillion Btu by multiplying by the kerosene heat content factor 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/propylene 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.

Petroleum Coke
1949–2003: Commercial sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7a, and are converted to trillion Btu by multiplying by the total petroleum coke heat content factor in Table A1.
2004 forward: Commercial sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7a, and are converted to trillion Btu by multiplying by the marketable petroleum coke heat content factor in Table A1.

Residual Fuel Oil
Commercial sector consumption data in thousand barrels per day for residual fuel oil are from Table 3.7a, and are converted to trillion Btu by multiplying by the residual fuel oil heat content factor in Table A1.

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
Industrial sector consumption data in thousand barrels per day for asphalt and road oil are from Table 3.7b, and are converted to trillion Btu by multiplying by the asphalt and road oil heat content factor in Table A1.

Distillate Fuel Oil
Industrial sector consumption data in thousand barrels per day for distillate fuel oil are from Table 3.7b, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors in Table A3.

Kerosene
Industrial sector consumption data in thousand barrels per day for kerosene are from Table 3.7b, and are converted to trillion Btu by multiplying by the kerosene heat content factor 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).

Lubricants
Industrial sector consumption data in thousand barrels per day for lubricants are from Table 3.7b, and are converted to trillion Btu by multiplying by the lubricants heat content factor in Table A1.

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.

Petroleum Coke
1949–2003: Industrial sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7b, and are converted to trillion Btu by multiplying by the total petroleum coke heat content factor in Table A1.
2004 forward: Industrial sector consumption data for petroleum coke are calculated by subtracting petroleum coke consumption data in trillion Btu for the commercial (Table 3.8a) and electric power (Table 3.8c) sectors from total petroleum coke consumption (Table 3.6).

Residual Fuel Oil
Industrial sector consumption data in thousand barrels per day for residual fuel oil are from Table 3.7b, and are

converted to trillion Btu by multiplying by the residual fuel oil heat content factor in Table A1.

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
Transportation sector consumption data in thousand barrels per day for aviation gasoline are from Table 3.7c, and are converted to trillion Btu by multiplying by the aviation gasoline (finished) heat content factor in Table A1.

Distillate Fuel Oil, Electric Power Sector
Electric power sector consumption data in thousand barrels per day for distillate fuel oil are from Table 3.7c, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors in Table A3.

Distillate Fuel Oil, Transportation Sector
1949–2008: Transportation sector consumption data in thousand barrels per day for distillate fuel oil are from Table 3.7c, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors in Table A3.
2009 forward: Data for refinery and blender net inputs of renewable diesel fuel are from U.S. Energy Information Administration (EIA), *Petroleum Supply Annual (PSA)/Petroleum Supply Monthly (PSM)*, Table 1 (for biomass-based diesel fuel, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1). Transportation sector consumption data from Table 3.7c, minus data for renewable diesel fuel from the PSA/PSM, are converted to Btu by multiplying by the distillate fuel oil heat content factors in Table A3. Total transportation sector distillate fuel oil consumption is the sum of distillate fuel oil (excluding renewable diesel fuel) and renewable diesel fuel.

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/propylene heat content factor in Table A1.

Lubricants
Transportation sector consumption data in thousand barrels per day for lubricants are from Table 3.7c, and are converted to trillion Btu by multiplying by the lubricants 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.

Petroleum Coke
1949–2003: Electric power sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7c, and are converted to trillion Btu by multiplying by the total petroleum coke heat content factor in Table A1.
2004 forward: Electric power sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7c, and are converted to trillion Btu by multiplying by the marketable petroleum coke heat content factor in Table A1.

Residual Fuel Oil
Transportation and electric power consumption data in thousand barrels per day for residual fuel oil are from Table 3.7c, and are converted to trillion Btu by multiplying by the residual fuel oil heat content factor in Table A1.

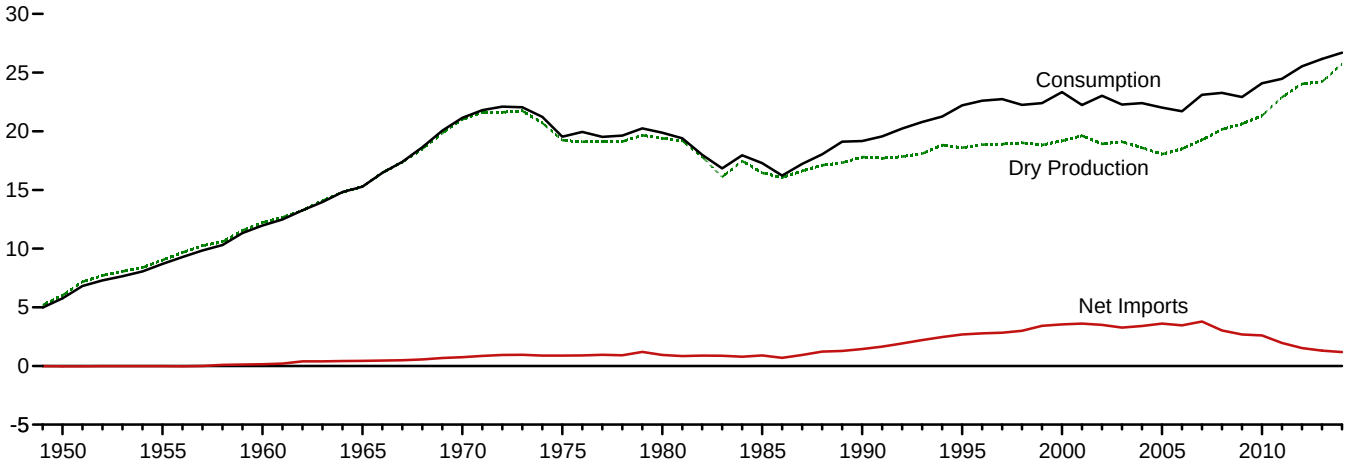
Total Petroleum
Transportation sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Transportation Sector" in Table 3.8c. Electric power sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown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

THIS PAGE INTENTIONALLY LEFT BLANK

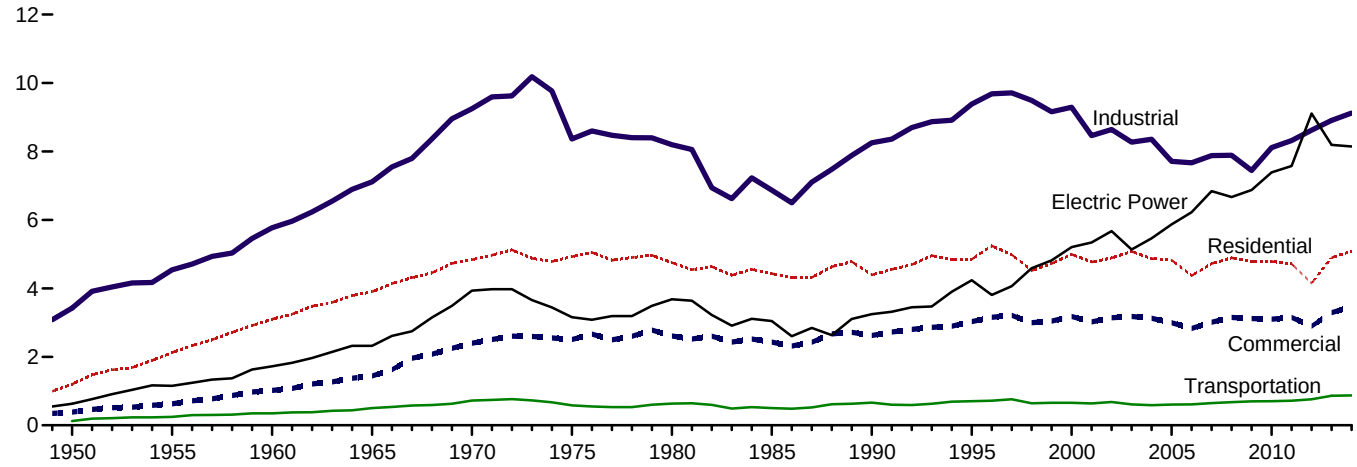
4. Natural Gas

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

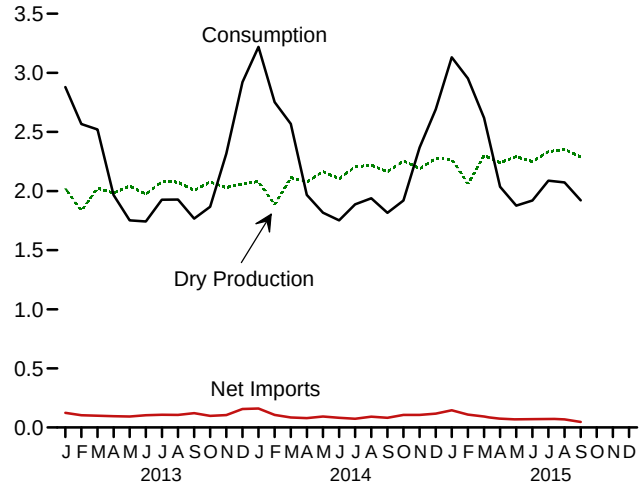
Overview, 1949–2014



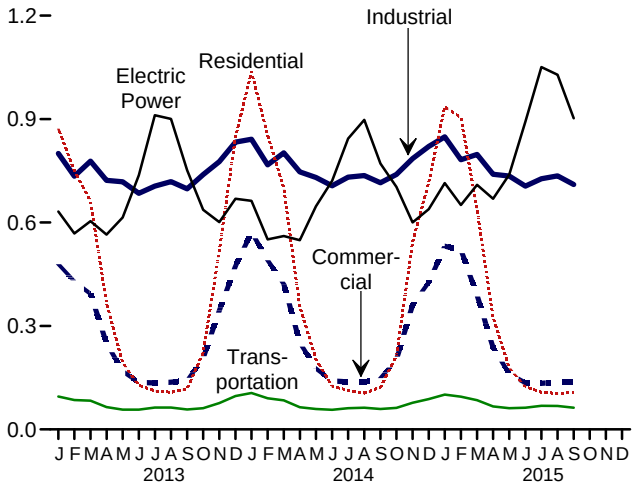
Consumption by Sector, 1949–2014



Overview, Monthly



Consumption by Sector, Monthly



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

Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Gross Withdrawals[a]	Marketed Production (Wet)[b]	NGPL Production[c]	Dry Gas Production[d]	Supplemental Gaseous Fuels[e]	Trade			Net Storage Withdrawals[f]	Balancing Item[g]	Consumption[h]
						Imports	Exports	Net Imports			
1950 Total	**8,480**	[i] **6,282**	**260**	[i] **6,022**	**NA**	**0**	**26**	**-26**	**-54**	**-175**	**5,767**
1955 Total	**11,720**	[i] **9,405**	**377**	[i] **9,029**	**NA**	**11**	**31**	**-20**	**-68**	**-247**	**8,694**
1960 Total	**15,088**	[i] **12,771**	**543**	[i] **12,228**	**NA**	**156**	**11**	**144**	**-132**	**-274**	**11,967**
1965 Total	**17,963**	[i] **16,040**	**753**	[i] **15,286**	**NA**	**456**	**26**	**430**	**-118**	**-319**	**15,280**
1970 Total	**23,786**	[i] **21,921**	**906**	[i] **21,014**	**NA**	**821**	**70**	**751**	**-398**	**-228**	**21,139**
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**
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 Total	**26,816**	**22,382**	**1,066**	**21,316**	**65**	**3,741**	**1,137**	**2,604**	**-13**	**115**	**24,087**
2011 Total	**28,479**	**24,036**	**1,134**	**22,902**	**60**	**3,469**	**1,506**	**1,963**	**-354**	**-94**	**24,477**
2012 Total	**29,542**	**25,283**	**1,250**	**24,033**	**61**	**3,138**	**1,619**	**1,519**	**-9**	**-66**	**25,538**
2013 January	2,512	2,136	113	2,023	5	278	154	124	732	-5	2,879
February	2,270	1,935	103	1,833	4	237	133	104	613	14	2,567
March	2,504	2,137	113	2,023	5	248	149	100	387	7	2,521
April	2,446	2,095	111	1,983	4	221	126	95	-141	26	1,967
May	2,489	2,157	114	2,043	5	234	142	92	-426	39	1,752
June	2,385	2,084	111	1,974	4	237	134	103	-379	41	1,743
July	2,512	2,196	117	2,080	5	236	129	108	-281	15	1,926
August	2,495	2,192	116	2,075	5	236	130	106	-278	19	1,927
September	2,414	2,115	112	2,003	5	244	122	121	-361	-1	1,767
October	2,513	2,193	116	2,076	5	220	122	98	-261	-51	1,867
November	2,455	2,144	114	2,030	5	219	114	105	216	-38	2,317
December	2,526	2,178	116	2,062	5	273	117	156	725	-27	2,921
Total	**29,523**	**25,562**	**1,357**	**24,206**	**55**	**2,883**	**1,572**	**1,311**	**546**	**38**	**26,155**
2014 January	2,594	2,209	130	2,079	5	295	135	161	991	-17	3,219
February	2,346	2,002	118	1,885	4	245	139	107	745	[R] 11	[R] 2,752
March	2,630	2,246	132	2,114	5	234	150	85	363	[R] 1	[R] 2,568
April	2,564	2,206	130	2,077	5	201	122	79	-224	[R] 31	[R] 1,967
May	2,642	2,300	135	2,165	5	207	114	93	-488	43	1,817
June	2,561	2,235	132	2,104	5	202	120	82	-473	[R] 34	[R] 1,752
July	2,617	2,342	138	2,205	5	201	127	74	-409	[R] 12	1,887
August	2,628	2,358	139	2,219	5	207	115	91	-382	[R] 6	[R] 1,939
September	2,621	2,297	135	2,162	5	202	120	82	-431	[R] -2	[R] 1,816
October	2,732	2,396	141	2,255	5	221	115	106	-409	-37	1,920
November	2,644	2,325	137	2,189	5	227	121	107	168	[R] -100	[R] 2,368
December	2,767	2,418	142	2,276	5	254	137	117	295	[R] -2	[R] 2,691
Total	**31,346**	**27,337**	**1,608**	**25,728**	**60**	**2,695**	**1,514**	**1,181**	**-253**	[R] **-21**	[R] **26,695**
2015 January	[E] 2,771	[E] 2,401	133	[E] 2,268	5	279	134	146	725	[R] -13	[R] 3,131
February	[E] 2,515	[E] 2,188	125	[E] 2,063	6	254	145	109	741	[R] 34	[R] 2,952
March	[E] 2,822	[E] 2,441	142	[E] 2,299	5	257	164	93	194	[R] 28	[R] 2,618
April	[E] 2,746	[E] 2,382	142	[E] 2,239	5	205	130	75	-321	38	2,036
May	[E] 2,780	[E] 2,435	145	[E] 2,290	5	204	134	70	-497	[R] 8	[R] 1,876
June	[E] 2,699	[E] 2,390	141	[E] 2,249	5	206	138	68	[R] -362	[R] -40	[R] 1,920
July	[RE] 2,790	[RE] 2,480	146	[RE] 2,335	4	217	[R] 144	73	-283	[R] -41	[R] 2,088
August	[RE] 2,794	[RE] 2,500	148	[RE] 2,352	4	214	[R] 145	[R] 69	[R] -309	[R] -42	[R] 2,073
September	[E] 2,778	[E] 2,433	144	[E] 2,288	5	209	163	46	-371	-48	1,921
9-Month Total	[E] **24,696**	[E] **21,649**	**1,266**	[E] **20,384**	**43**	**2,046**	**1,297**	**750**	**-484**	**-76**	**20,616**
2014 9-Month Total	**23,202**	**20,197**	**1,188**	**19,009**	**44**	**1,993**	**1,141**	**852**	**-307**	**119**	**19,716**
2013 9-Month Total	**22,028**	**19,048**	**1,011**	**18,037**	**41**	**2,171**	**1,219**	**952**	**-134**	**155**	**19,051**

[a] Gases withdrawn from natural gas, crude oil, coalbed, and shale gas wells. Includes natural gas, natural gas plant liquids, and nonhydrocarbon gases; but 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] Natural gas plant liquids (NGPL) production, gaseous equivalent. This data series was previously called "Extraction Loss." See Note 2, "Natural Gas Plant Liquids Production," at end of section.

[d] Marketed production (wet) minus NGPL production.

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

[f] Net withdrawals from underground storage. For 1980–2014, 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. Beginning in 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] Through 1979, 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. NA=Not available.

Notes: • See Note 8, "Natural Gas Data Adjustments, 1993–2000," at end of section. • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia (except Alaska, for which underground storage is excluded from "Net Storage Withdrawals" through 2012).

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#naturalgas (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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: 1949–2012—**U.S. Energy Information Administration (EIA), *Natural Gas Annual,* annual reports. **2013 forward—**EIA, *Natural Gas Monthly,* November 2015, 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
1950 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**23**	**0**	**26**
1955 Total	**0**	**11**	**0**	**(s)**	**0**	**0**	**0**	**0**	**11**	**11**	**0**	**20**	**0**	**31**
1960 Total	**0**	**109**	**0**	**47**	**0**	**0**	**0**	**0**	**156**	**6**	**0**	**6**	**0**	**11**
1965 Total	**0**	**405**	**0**	**52**	**0**	**0**	**0**	**0**	**456**	**18**	**0**	**8**	**0**	**26**
1970 Total	**1**	**779**	**0**	**(s)**	**0**	**0**	**0**	**0**	**821**	**11**	**44**	**15**	**0**	**70**
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**	**(s)**	**45**	**4**	**0**	**49**
1985 Total	**24**	**926**	**0**	**0**	**0**	**0**	**0**	**0**	**950**	**(s)**	**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**
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 Total	**0**	**3,280**	**73**	**30**	**42**	**46**	**190**	**81**	**3,741**	**739**	**33**	**333**	**32**	**1,137**
2011 Total	**0**	**3,117**	**35**	**3**	**2**	**91**	**129**	**92**	**3,469**	**937**	**18**	**499**	**52**	**1,506**
2012 Total	**0**	**2,963**	**3**	**0**	**0**	**34**	**112**	**26**	**3,138**	**971**	**14**	**620**	**14**	**1,619**
2013 January	0	265	0	(s)	0	0	11	3	278	99	0	56	0	154
February	0	225	0	(s)	0	4	8	0	237	84	0	49	0	133
March	0	240	0	(s)	0	4	5	0	248	92	0	56	0	149
April	0	215	0	(s)	0	0	5	0	221	71	0	55	0	126
May	0	229	0	(s)	0	0	6	0	234	82	0	60	0	142
June	0	229	0	(s)	0	0	8	0	237	76	0	58	0	134
July	0	228	0	(s)	0	0	8	0	236	66	0	62	0	129
August	0	227	0	(s)	0	0	6	3	236	68	0	62	0	130
September	0	227	0	(s)	3	0	9	6	244	70	0	53	0	122
October	0	215	0	(s)	0	0	3	3	220	70	0	53	0	122
November	0	216	0	(s)	0	0	3	0	219	60	0	54	0	114
December	0	270	0	(s)	0	0	0	3	273	73	0	44	0	117
Total	**0**	**2,786**	**0**	**1**	**3**	**7**	**70**	**17**	**2,883**	**911**	**0**	**661**	**0**	**1,572**
2014 January	0	287	0	(s)	0	0	6	2	295	82	0	53	0	135
February	0	242	0	(s)	0	0	4	0	245	85	0	51	3	139
March	0	231	0	(s)	0	0	3	0	234	91	0	58	0	150
April	0	198	0	(s)	0	0	3	0	201	65	0	57	0	122
May	0	204	0	(s)	0	0	0	3	207	50	2	62	0	114
June	0	192	0	(s)	0	0	7	3	202	55	0	65	0	120
July	0	195	0	(s)	0	0	6	0	201	55	3	69	0	127
August	0	205	0	(s)	0	0	2	0	207	47	3	66	0	115
September	0	196	0	(s)	0	0	3	3	202	52	3	65	0	120
October	0	214	0	(s)	0	0	4	3	221	52	3	60	0	115
November	0	227	0	(s)	0	0	0	0	227	62	0	59	0	121
December	0	246	0	(s)	0	0	5	3	254	73	0	64	0	137
Total	**0**	**2,635**	**0**	**1**	**0**	**0**	**43**	**16**	**2,695**	**770**	**13**	**729**	**3**	**1,514**
2015 January	0	268	0	(s)	0	0	9	2	279	62	0	69	3	134
February	0	242	0	(s)	0	0	10	2	254	78	0	65	3	145
March	0	R 242	0	(s)	0	0	12	3	257	90	0	74	0	164
April	0	202	0	(s)	0	0	3	0	205	53	0	77	0	130
May	0	203	0	(s)	0	0	2	0	204	45	0	87	3	134
June	0	204	0	(s)	0	0	3	0	206	45	0	91	3	138
July	0	210	0	(s)	0	0	7	0	217	R 40	3	101	0	R 144
August	0	203	0	(s)	0	0	11	0	214	R 41	3	101	0	R 145
September	0	203	0	(s)	0	0	6	0	209	60	0	100	3	163
9-Month Total	**0**	**1,976**	**0**	**1**	**0**	**0**	**62**	**7**	**2,046**	**513**	**6**	**765**	**14**	**1,297**
2014 9-Month Total	**0**	**1,948**	**0**	**1**	**0**	**0**	**34**	**11**	**1,993**	**582**	**10**	**546**	**3**	**1,141**
2013 9-Month Total	**0**	**2,085**	**0**	**1**	**3**	**7**	**64**	**11**	**2,171**	**709**	**0**	**510**	**0**	**1,219**

[a] As liquefied natural gas.

[b] By pipeline, except for small amounts of: liquefied natural gas (LNG) imported from Canada in 1973, 1977, 1981, and 2013 forward; LNG exported to Canada in 2007 and 2012 forward; compressed natural gas (CNG) imported from Canada in 2014 and 2015; CNG exported to Canada in 2013 forward; and LNG 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 2008–2014; Oman in 2000–2005; Peru in 2010 and 2011; United Arab Emirates in 1996–2000; Yemen in 2010 forward; and Other (unassigned) in 2004 and 2014.

[d] Brazil in 2010–2012, 2014, and 2015; Chile in 2011; China in 2011; India in 2010–2012; Portugal in 2012; Russia in 2007; South Korea in 2009–2011; Spain in 2010 and 2011; Taiwan in 2015; 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. • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **1949–1954:** U.S. Energy Information Administration (EIA) estimates based on Bureau of Mines, Minerals Yearbook, "Natural Gas" chapter. • **1955–1971:** Federal Power Commission data. • **1972–1987:** EIA, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • **1988–2012:** EIA, *Natural Gas Annual,* annual reports. • **2013 forward:** EIA, *Natural Gas Monthly,* November 2015, 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								
	Resi-dential	Com-mercial[a]	Lease and Plant Fuel	CHP[b]	Non-CHP[c]	Total	Total	Pipelines[d] and Dis-tribution[e]	Vehicle Fuel	Total	Electric Power Sector[f,g]	Total
1950 Total	**1,198**	**388**	**928**	([h])	**2,498**	**2,498**	**3,426**	**126**	**NA**	**126**	**629**	**5,767**
1955 Total	**2,124**	**629**	**1,131**	([h])	**3,411**	**3,411**	**4,542**	**245**	**NA**	**245**	**1,153**	**8,694**
1960 Total	**3,103**	**1,020**	**1,237**	([h])	**4,535**	**4,535**	**5,771**	**347**	**NA**	**347**	**1,725**	**11,967**
1965 Total	**3,903**	**1,444**	**1,156**	([h])	**5,955**	**5,955**	**7,112**	**501**	**NA**	**501**	**2,321**	**15,280**
1970 Total	**4,837**	**2,399**	**1,399**	([h])	**7,851**	**7,851**	**9,249**	**722**	**NA**	**722**	**3,932**	**21,139**
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**
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 Total	**4,782**	**3,103**	**1,286**	**1,029**	**5,797**	**6,826**	**8,112**	**674**	**29**	**703**	**7,387**	**24,087**
2011 Total	**4,714**	**3,155**	**1,323**	**1,063**	**5,931**	**6,994**	**8,317**	**688**	**30**	**718**	**7,574**	**24,477**
2012 Total	**4,150**	**2,895**	**1,396**	**1,149**	**6,077**	**7,226**	**8,622**	**731**	**30**	**761**	**9,111**	**25,538**
2013 January	872	479	124	100	576	676	800	93	3	96	632	2,879
February	750	429	112	89	533	622	734	83	2	85	568	2,567
March	662	393	124	97	557	654	778	81	3	83	604	2,521
April	366	249	122	92	508	601	722	62	2	65	565	1,967
May	193	169	125	93	500	593	718	55	3	57	615	1,752
June	128	136	121	96	468	564	685	55	2	57	737	1,743
July	112	135	127	105	473	578	705	61	3	63	911	1,926
August	108	137	127	104	488	592	719	61	3	63	901	1,927
September	118	142	123	96	479	575	698	56	2	58	751	1,767
October	223	207	127	96	516	612	739	59	3	61	637	1,867
November	518	345	124	98	555	652	777	74	2	77	601	2,317
December	848	474	126	105	602	707	833	94	3	97	669	2,921
Total	**4,897**	**3,295**	**1,483**	**1,170**	**6,255**	**7,425**	**8,909**	**833**	**30**	**863**	**8,191**	**26,155**
2014 January	1,037	572	121	[R] 106	[R] 615	720	842	103	3	106	663	3,219
February	853	490	110	89	569	657	767	88	3	90	[R] 551	[R] 2,752
March	700	421	123	[R] 94	[R] 584	679	802	81	3	84	[R] 561	[R] 2,568
April	356	251	121	89	537	626	747	61	3	64	[R] 549	[R] 1,967
May	203	177	126	[R] 92	[R] 512	604	730	56	3	59	[R] 647	1,817
June	126	141	123	[R] 91	[R] 493	584	707	54	3	57	[R] 721	[R] 1,752
July	113	138	129	[R] 99	[R] 504	603	732	58	3	61	[R] 843	1,887
August	105	137	129	[R] 101	[R] 506	607	736	60	3	63	[R] 898	[R] 1,939
September	122	149	126	[R] 95	[R] 495	589	715	56	3	59	[R] 771	[R] 1,816
October	212	202	131	[R] 95	[R] 514	608	740	59	3	62	[R] 703	1,920
November	544	362	128	94	564	658	785	74	3	77	[R] 600	[R] 2,368
December	717	427	133	[R] 100	[R] 588	688	821	85	3	88	[R] 639	[R] 2,691
Total	**5,087**	**3,467**	**1,500**	[R] **1,145**	[R] **6,479**	**7,624**	**9,124**	**836**	**35**	**871**	[R] **8,146**	[R] **26,695**
2015 January	936	532	[E] 132	[R] 103	[R] 613	717	848	[E] 98	[E] 3	[E] 101	[R] 714	[R] 3,131
February	904	520	[E] 120	[R] 91	[R] 571	662	782	[E] 92	[E] 3	[E] 95	[R] 651	[R] 2,952
March	638	389	[E] 134	[R] 98	[R] 566	663	797	[E] 82	[E] 3	[E] 85	[R] 709	[R] 2,618
April	325	236	[E] 131	[R] 91	[R] 518	609	740	[E] 64	[E] 3	[E] 66	669	2,036
May	179	161	[E] 134	[R] 95	[R] 506	601	735	[E] 59	[E] 3	[RE] 62	[R] 739	[R] 1,876
June	124	135	[E] 131	[R] 97	[R] 478	575	706	[E] 60	[E] 3	[E] 63	[R] 892	[R] 1,920
July	108	134	[E] 136	[R] 101	[R] 490	591	727	[E] 65	[E] 3	[E] 68	[R] 1,051	[R] 2,088
August	104	138	[RE] 137	[R] 103	[R] 495	598	[R] 735	[E] 65	[E] 3	[E] 68	[R] 1,029	[R] 2,073
September	108	138	[E] 133	96	481	577	710	[E] 60	[E] 3	[E] 63	902	1,921
9-Month Total	**3,425**	**2,383**	[E] **1,188**	**874**	**4,719**	**5,593**	**6,781**	[E] **645**	[E] **26**	[E] **671**	**7,357**	**20,616**
2014 9-Month Total	**3,615**	**2,476**	**1,108**	**856**	**4,813**	**5,670**	**6,778**	**617**	**26**	**644**	**6,203**	**19,716**
2013 9-Month Total	**3,309**	**2,270**	**1,105**	**872**	**4,582**	**5,454**	**6,560**	**606**	**22**	**628**	**6,284**	**19,051**

[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. Beginning in 2009, includes line loss, which is known volumes of natural gas that are the result of leaks, damage, accidents, migration, and/or blow down.

[e] Natural gas used as fuel in the delivery of natural gas to consumers. Beginning in 2009, includes line loss, which is known volumes of natural gas that are the result of leaks, damage, accidents, migration, and/or blow down.

[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 3, "Supplemental Gaseous Fuels," at end of section. • See Note 8, "Natural Gas Data Adjustments, 1993–2000," at end of section. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total** and **Pipelines and Distribution: 1949–2012—**U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA),* annual reports and unpublished revisions. **2013 forward—**EIA, *Natural Gas Monthly (NGM),* November 2015, Table 2. • **Other Industrial CHP:** Table 7.4c. • **Other Industrial Non-CHP:** Calculated as other industrial total minus other industrial CHP. • **Industrial Total:** Calculated as lease and plant fuel plus other industrial total. • **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). **1999–2012—**EIA, NGA, annual reports. **2013 forward—**EIA, NGM, November 2015, Table 2. • **Transportation Total:** Calculated as pipelines and distribution plus vehicle fuel. • **Electric Power Sector:** Table 7.4b. • **Total Consumption:** Calculated as the sum of residential, commercial, industrial total, transportation total, and electric power sector.

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]
1950 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**175**	**230**	**-54**
1955 Total	**863**	**505**	**1,368**	**40**	**8.7**	**437**	**505**	**-68**
1960 Total	**NA**	**NA**	**2,184**	**NA**	**NA**	**713**	**844**	**-132**
1965 Total	**1,848**	**1,242**	**3,090**	**83**	**7.2**	**960**	**1,078**	**-118**
1970 Total	**2,326**	**1,678**	**4,004**	**257**	**18.1**	**1,459**	**1,857**	**-398**
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**
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 Total	**4,301**	**3,111**	**7,412**	**-19**	**-.6**	**3,274**	**3,291**	**-17**
2011 Total	**4,302**	**3,462**	**7,764**	**351**	**11.3**	**3,074**	**3,422**	**-348**
2012 Total	**4,372**	**3,413**	**7,785**	**-49**	**-1.4**	**2,818**	**2,825**	**-7**
2013 January	4,377	2,699	7,077	-211	-7.2	793	72	721
February	4,384	2,099	6,483	-349	-14.3	648	44	604
March	4,382	1,720	6,102	-753	-30.5	483	103	380
April	4,381	1,855	6,236	-756	-29.0	135	272	-137
May	4,385	2,270	6,655	-617	-21.4	49	468	-419
June	4,385	2,643	7,027	-473	-15.2	69	441	-372
July	4,365	2,937	7,302	-308	-9.5	99	373	-275
August	4,362	3,212	7,574	-194	-5.7	102	374	-272
September	4,363	3,565	7,928	-129	-3.5	66	421	-355
October	4,364	3,817	8,181	-112	-2.9	84	340	-256
November	4,366	3,605	7,971	-194	-5.1	366	155	211
December	4,365	2,890	7,255	-523	-15.3	808	94	714
Total	**4,365**	**2,890**	**7,255**	**-523**	**-15.3**	**3,702**	**3,156**	**546**
2014 January	4,363	1,925	6,288	-774	-28.7	1,039	68	971
February	4,360	1,200	5,560	-899	-42.8	833	104	728
March	4,350	857	5,207	-863	-50.2	488	134	353
April	4,357	1,066	5,423	-789	-42.5	105	323	-217
May	4,353	1,548	5,901	-722	-31.8	51	529	-478
June	4,358	2,005	6,364	-637	-24.1	44	506	-463
July	4,361	2,400	6,761	-537	-18.3	63	463	-400
August	4,366	2,768	7,135	-444	-13.8	73	447	-374
September	4,369	3,187	7,556	-377	-10.6	47	469	-422
October	4,367	3,587	7,955	-230	-6.0	52	452	-400
November	4,367	3,427	7,794	-178	-5.0	361	200	161
December	4,365	3,141	7,506	251	8.7	429	143	286
Total	**4,365**	**3,141**	**7,506**	**251**	**8.7**	**3,586**	**3,839**	**-253**
2015 January	4,360	2,417	6,777	492	25.5	795	70	725
February	4,359	1,677	6,036	477	39.7	803	62	741
March	4,360	1,483	5,843	625	72.9	376	182	194
April	4,360	1,805	6,164	738	69.2	84	405	-321
May	4,362	2,299	6,661	751	48.5	44	542	-497
June	4,366	2,658	R 7,025	653	R 32.6	68	430	R -362
July	4,371	2,935	7,306	535	22.3	96	378	-283
August	4,363	R 3,252	R 7,616	R 484	R 17.5	R 85	394	R -309
September	4,365	3,626	7,991	439	13.8	63	435	-371
9-Month Total	– –	– –	– –	– –	– –	**2,413**	**2,898**	**-484**
2014 9-Month Total	– –	– –	– –	– –	– –	**2,743**	**3,043**	**-300**
2013 9-Month Total	– –	– –	– –	– –	– –	**2,443**	**2,567**	**-124**

[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 1980–2014, 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.

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

Notes: • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia (except Alaska, which is excluded through 2012).

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#naturalgas (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **Storage Activity: 1949–1975—**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. **1996–2012—**EIA, *Natural Gas Monthly (NGM),* monthly issues. **2013 forward—**EIA, NGM, November 2015, Table 8. • **All Other Data: 1954–1974—**American Gas Association, *Gas Facts,* annual issues. **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." **1996–2012—**EIA, NGA, annual reports. **2013 forward—**EIA, NGM, November 2015, Table 8.

Natural Gas

Note 1. Natural Gas Production. Final annual data are from the U.S. Energy Information Administration's (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 EIA's *Natural Gas Monthly* (*NGM*).

Monthly data are considered preliminary until after publication of the 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 pressure base of 14.73 psia (pounds per square inch absolute) at 60° Fahrenheit. Unless there are major changes, data are not revised until after publication of the NGA.

Differences between annual data in the 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 Plant Liquids Production. Natural gas plant liquids (NGPL) production is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants—these natural gas plant liquids are transferred to petroleum supply.

Annual data are from EIA's *Natural Gas Annual* (*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 NGPL production, see the NGA.

Through 2006, preliminary monthly data are estimated on the basis of NGPL production as an annual percentage of marketed production. Beginning in 2007, preliminary monthly data are estimated on the basis of NGPL production reported on Form EIA-816, "Monthly Natural Gas Liquids Report."

Monthly data are revised and considered final after publication of the NGA. Final monthly data are estimated by allocating annual NGPL production data to the months on the basis of total natural gas marketed production data from the 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 EIA's *Natural Gas Annual* (*NGA*). Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years. Monthly data are considered preliminary until after publication of the 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. Injection and withdrawal data from the FERC-8/EIA-191 survey may be adjusted to correspond to data from Form EIA-176 for publication of EIA's *Natural Gas Annual* (*NGA*).

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	**1989**	8,120	**2003**	8,206
1976	6,544	**1990**	7,794	**2004**	8,255
1977	6,678	**1991**	7,993	**2005**	8,268
1978	6,890	**1992**	7,932	**2006**	8,330
1979	6,929	**1993**	7,989	**2007**	8,402
1980	7,434	**1994**	8,043	**2008**	8,499
1981	7,805	**1995**	7,953	**2009**	8,656
1982	7,915	**1996**	7,980	**2010**	8,764
1983	7,985	**1997**	8,332	**2011**	8,849
1984	8,043	**1998**	8,179	**2012**	8,991
1985	8,087	**1999**	8,229	**2013**	9,173
1986	8,145	**2000**	8,241	**2014**	9,233
1987	8,124	**2001**	8,182		
1988	8,124	**2002**	8,207		

Through 1990, 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 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the EIA-191 survey may be adjusted to correspond to data from Form EIA-176 following publication of EIA's NGA.

The final monthly and annual storage and withdrawal data for 1980–2013 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.

Note 6. Natural Gas Consumption. Natural gas consumption statistics include data for the following: "Residential Sector": residential deliveries; "Commercial Sector": commercial deliveries, including to commercial combined-heat-and-power (CHP) and commercial electricity-only plants; "Industrial Sector": lease and plant fuel use, and other industrial deliveries, including to industrial CHP and industrial electricity-only plants; "Transportation Sector": pipelines and distribution use, and vehicle fuel use; and "Electric Power Sector": electric utility and independent power producer use.

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

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 1989–1992, 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 *Natural Gas Annual.* 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), NGPL Production (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, small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), 1981 (6 million cubic feet), 2013 (555 million cubic feet), 2014 (132 million cubic feet), and 2015 (290 million cubic feet). Also, small amounts of compressed natural gas (CNG) were imported from Canada in 2014 and 2015. The United States exports natural gas via pipeline to Canada and Mexico; and exports LNG via tanker to Brazil, Chile, China, India, Japan, Portugal, Russia, South Korea, Spain, Taiwan, and United Kingdom. Also, small amounts of LNG have gone to Mexico since 1998 and to Canada in 2007 and 2012 forward. Small amounts of CNG have been exported to Canada since 2013.

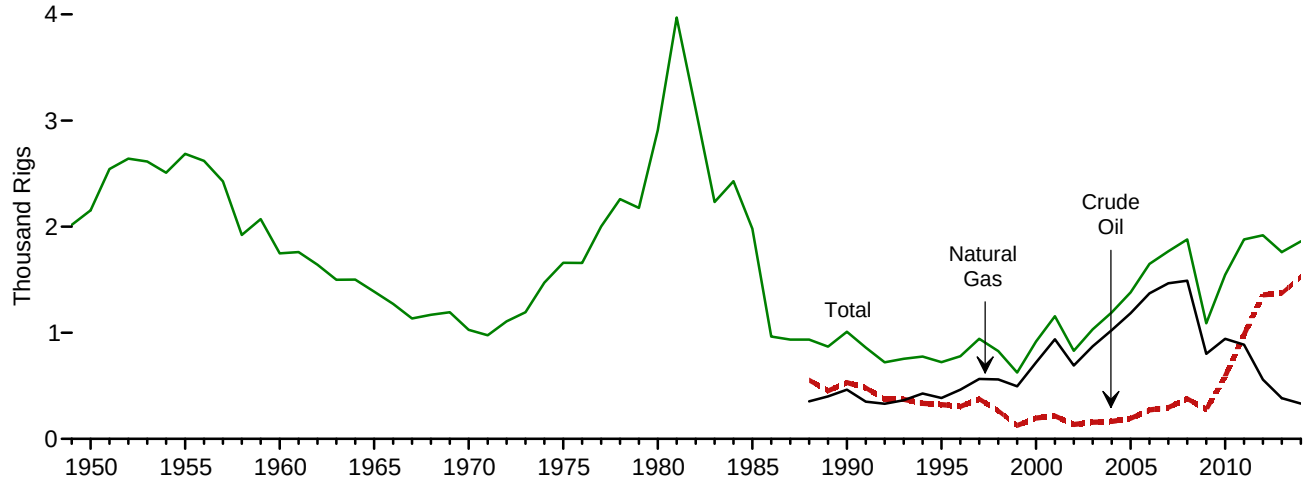
Annual and final monthly data are from the annual EIA Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be reported by month for the calendar year.

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

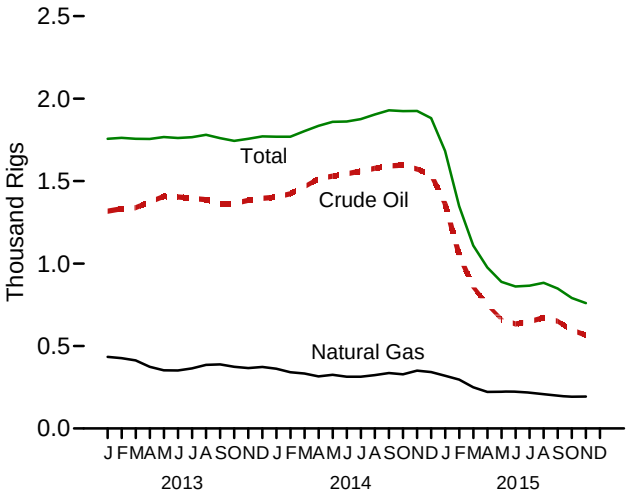
5. Crude Oil and Natural Gas Resource Development

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

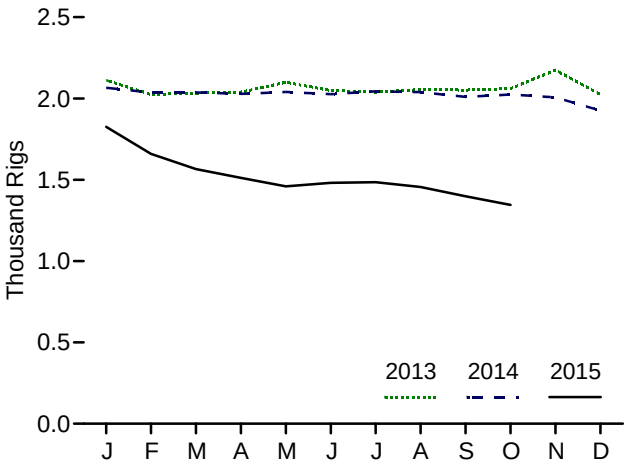
Rotary Rigs in Operation by Type, 1949–2014



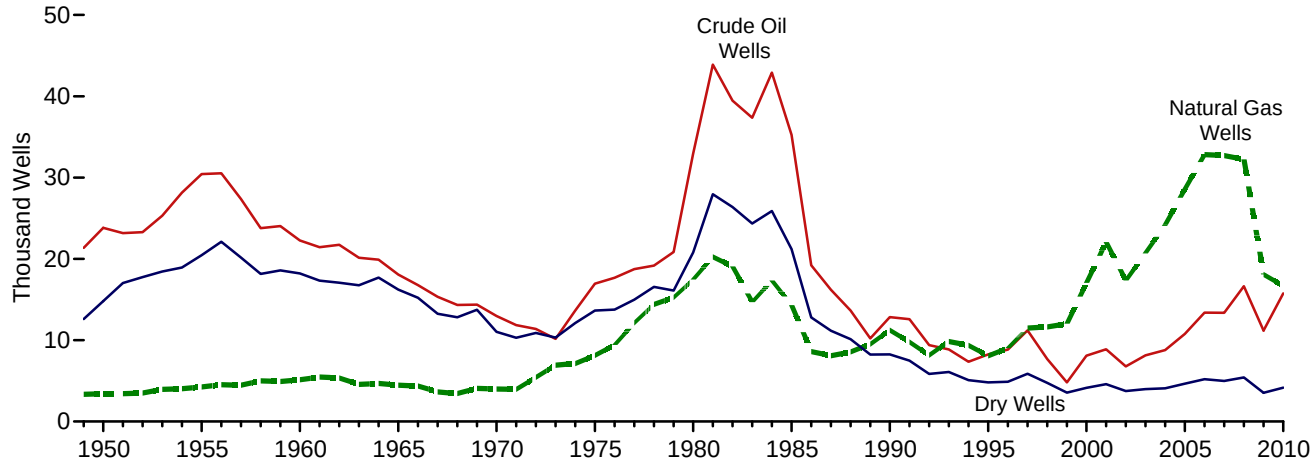
Rotary Rigs in Operation by Type, Monthly



Active Well Service Rig Count, Monthly



Total Wells Drilled by Type, 1949–2010



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]	
1950 Average	**NA**	**NA**	**NA**	**NA**	**2,154**	**NA**
1955 Average	**NA**	**NA**	**NA**	**NA**	**2,686**	**NA**
1960 Average	**NA**	**NA**	**NA**	**NA**	**1,748**	**NA**
1965 Average	**NA**	**NA**	**NA**	**NA**	**1,388**	**NA**
1970 Average	**NA**	**NA**	**NA**	**NA**	**1,028**	**NA**
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**
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 Average	**1,514**	**31**	**591**	**943**	**1,546**	**1,854**
2011 Average	**1,846**	**32**	**984**	**887**	**1,879**	**2,075**
2012 Average	**1,871**	**48**	**1,357**	**558**	**1,919**	**2,113**
2013 January	1,704	52	1,318	434	1,756	2,112
February	1,708	54	1,332	426	1,762	2,024
March	1,705	51	1,339	413	1,756	2,033
April	1,707	49	1,374	374	1,755	2,039
May	1,715	52	1,407	353	1,767	2,099
June	1,706	55	1,404	352	1,761	2,049
July	1,708	58	1,396	364	1,766	2,039
August	1,720	61	1,388	386	1,781	2,055
September	1,695	65	1,364	389	1,760	2,052
October	1,683	61	1,364	374	1,744	2,061
November	1,698	58	1,384	366	1,756	2,175
December	1,710	61	1,396	373	1,771	2,024
Average	**1,705**	**56**	**1,373**	**383**	**1,761**	**2,064**
2014 January	1,711	58	1,403	362	1,769	2,066
February	1,714	55	1,424	341	1,769	2,036
March	1,750	54	1,466	333	1,803	2,037
April	1,784	52	1,515	316	1,835	2,028
May	1,801	58	1,530	325	1,859	2,040
June	1,804	58	1,545	314	1,861	2,026
July	1,819	57	1,560	314	1,876	2,044
August	1,842	62	1,578	324	1,904	2,039
September	1,866	64	1,592	336	1,930	2,010
October	1,867	58	1,596	328	1,924	2,024
November	1,872	53	1,573	351	1,925	2,007
December	1,824	59	1,539	342	1,882	1,925
Average	**1,804**	**57**	**1,527**	**333**	**1,862**	**2,024**
2015 January	1,629	53	1,362	320	1,683	1,826
February	1,296	52	1,050	296	1,348	1,659
March	1,066	43	857	250	1,109	1,566
April	943	33	750	222	976	1,512
May	858	32	662	223	889	1,460
June	833	28	634	224	861	1,481
July	835	31	649	216	866	1,485
August	849	34	673	209	883	1,456
September	816	32	650	198	848	1,399
October	758	33	597	193	791	[R] 1,345
November	729	31	566	194	760	NA
11-Month Average	**969**	**37**	**772**	**232**	**1,006**	**NA**
2014 11-Month Average	**1,803**	**57**	**1,525**	**332**	**1,860**	**2,032**
2013 11-Month Average	**1,705**	**56**	**1,371**	**384**	**1,761**	**2,067**

[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. "Total" values may not equal the sum of "Onshore" and "Offshore" due to independent rounding.

[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.

R=Revised. 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **Rotary Rigs in Operation:** Baker Hughes, Inc., Houston, TX, "North America Rig Count," used with permission. See http://phx.corporate-ir.net/phoenix.zhtml?c=79687&p=irol-reportsother. • **Active Well Service Rig Count:** Cameron International Corporation, Houston, TX. See http://www.c-a-m.com/products-and-services/drilling/well-service-equipment-and-rig-count/types/guiberson-rig-count.

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
1950 Total	**1,583**	**431**	**8,292**	**10,306**	**22,229**	**3,008**	**6,507**	**31,744**	**23,812**	**3,439**	**14,799**	**42,050**	**157,358**
1955 Total	**2,236**	**874**	**11,832**	**14,942**	**28,196**	**3,392**	**8,620**	**40,208**	**30,432**	**4,266**	**20,452**	**55,150**	**226,182**
1960 Total	**1,321**	**868**	**9,515**	**11,704**	**20,937**	**4,281**	**8,697**	**33,915**	**22,258**	**5,149**	**18,212**	**45,619**	**192,176**
1965 Total	**946**	**515**	**8,005**	**9,466**	**17,119**	**3,967**	**8,221**	**29,307**	**18,065**	**4,482**	**16,226**	**38,773**	**174,882**
1970 Total	**757**	**477**	**6,162**	**7,396**	**12,211**	**3,534**	**4,869**	**20,614**	**12,968**	**4,011**	**11,031**	**28,010**	**138,556**
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**	**156,044**
1995 Total	**570**	**558**	**2,024**	**3,152**	**7,678**	**7,524**	**2,790**	**17,992**	**8,248**	**8,082**	**4,814**	**21,144**	**117,156**
2000 Total	**288**	**657**	**1,341**	**2,286**	**7,802**	**16,394**	**2,805**	**27,001**	**8,090**	**17,051**	**4,146**	**29,287**	**144,425**
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**	**180,141**
2002 Total	**258**	**844**	**1,282**	**2,384**	**6,517**	**16,498**	**2,472**	**25,487**	**6,775**	**17,342**	**3,754**	**27,871**	**145,159**
2003 Total	**350**	**997**	**1,297**	**2,644**	**7,779**	**19,725**	**2,685**	**30,189**	**8,129**	**20,722**	**3,982**	**32,833**	**177,239**
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**	**204,279**
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**	**240,307**
2006 Total	**646**	**2,456**	**1,547**	**4,649**	**12,739**	**30,382**	**3,659**	**46,780**	**13,385**	**32,838**	**5,206**	**51,429**	**282,675**
2007 Total	**808**	**2,794**	**1,582**	**5,184**	**12,563**	**29,925**	**3,399**	**45,887**	**13,371**	**32,719**	**4,981**	**51,071**	**301,515**
2008 January	88	208	144	440	1,111	2,321	272	3,704	1,199	2,529	416	4,144	25,306
February	82	230	107	419	1,080	2,261	247	3,588	1,162	2,491	354	4,007	24,958
March	66	216	127	409	1,132	2,363	271	3,766	1,198	2,579	398	4,175	26,226
April	68	189	130	387	1,177	2,415	281	3,873	1,245	2,604	411	4,260	26,920
May	88	206	124	418	1,317	2,449	240	4,006	1,405	2,655	364	4,424	27,947
June	63	195	139	397	1,428	2,540	299	4,267	1,491	2,735	438	4,664	28,739
July	79	163	171	413	1,439	2,695	344	4,478	1,518	2,858	515	4,891	29,140
August	67	165	144	376	1,448	2,735	379	4,562	1,515	2,900	523	4,938	28,942
September	52	166	164	382	1,488	2,667	355	4,510	1,540	2,833	519	4,892	28,960
October	80	243	173	496	1,549	2,841	373	4,763	1,629	3,084	546	5,259	31,505
November	97	192	160	449	1,361	2,418	334	4,113	1,458	2,610	494	4,562	29,276
December	67	172	132	371	1,206	2,196	313	3,715	1,273	2,368	445	4,086	26,222
Total	**897**	**2,345**	**1,715**	**4,957**	**15,736**	**29,901**	**3,708**	**49,345**	**16,633**	**32,246**	**5,423**	**54,302**	**334,141**
2009 January	80	171	99	350	1,192	2,253	250	3,695	1,272	2,424	349	4,045	28,077
February	62	125	88	275	991	1,925	195	3,111	1,053	2,050	283	3,386	25,440
March	59	146	88	293	867	1,771	210	2,848	926	1,917	298	3,141	25,304
April	36	68	93	197	755	1,396	205	2,356	791	1,464	298	2,553	21,406
May	47	90	80	217	584	1,136	156	1,876	631	1,226	236	2,093	20,055
June	44	91	75	210	804	1,297	189	2,290	848	1,388	264	2,500	16,301
July	40	100	101	241	789	1,188	217	2,194	829	1,288	318	2,435	13,543
August	49	84	88	221	867	1,372	207	2,446	916	1,456	295	2,667	15,970
September	61	71	96	228	945	1,170	207	2,322	1,006	1,241	303	2,550	15,547
October	55	79	78	212	966	1,167	222	2,355	1,021	1,246	300	2,567	17,261
November	38	83	85	206	931	1,133	199	2,263	969	1,216	284	2,469	16,236
December	34	98	84	216	894	1,074	213	2,181	928	1,172	297	2,397	16,424
Total	**605**	**1,206**	**1,055**	**2,866**	**10,585**	**16,882**	**2,470**	**29,937**	**11,190**	**18,088**	**3,525**	**32,803**	**231,562**
2010 January	55	91	81	227	898	1,264	169	2,331	953	1,355	250	2,558	15,304
February	44	71	67	182	871	1,096	144	2,111	915	1,167	211	2,293	16,862
March	59	85	88	232	1,062	1,224	216	2,502	1,121	1,309	304	2,734	15,102
April	49	78	77	204	1,173	1,152	249	2,574	1,222	1,230	326	2,778	17,904
May	48	107	86	241	1,282	1,208	255	2,745	1,330	1,315	341	2,986	17,987
June	61	100	90	251	1,385	1,250	302	2,937	1,446	1,350	392	3,188	19,408
July	46	103	105	254	1,386	1,443	390	3,219	1,432	1,546	495	3,473	20,847
August	56	104	94	254	1,434	1,402	314	3,150	1,490	1,506	408	3,404	22,923
September	57	73	88	218	1,374	1,358	268	3,000	1,431	1,431	356	3,218	23,037
October	75	87	117	279	1,502	1,463	283	3,248	1,577	1,550	400	3,527	22,123
November	62	114	103	279	1,400	1,352	263	3,015	1,462	1,466	366	3,294	24,561
December	57	92	70	219	1,317	1,379	243	2,939	1,374	1,471	313	3,158	23,189
Total	**669**	**1,105**	**1,066**	**2,840**	**15,084**	**15,591**	**3,096**	**33,771**	**15,753**	**16,696**	**4,162**	**36,611**	**239,247**

Notes: • Data are estimates. • For 1960–1969, data are for well completion reports received by the American Petroleum Institute during the reporting year; for all other years, data are for well completions in a given year. • Through 1989, 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. Beginning in 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **1949–1965:** Gulf Publishing Company, *World Oil,* "Forecast-Review" issue. • **1966–1969:** American Petroleum Institute (API), *Quarterly Review of Drilling Statistics for the United States,* annual summaries and monthly reports. • **1970–1989:** U.S. Energy Information Administration (EIA) computations based on well reports submitted to the API. • **1990 forward:** EIA computations based on well reports submitted to IHS, Inc., Denver, CO.

Data for 2011 forward in this table have been removed while EIA evaluates the quality of the data and the estimation methodology.

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.

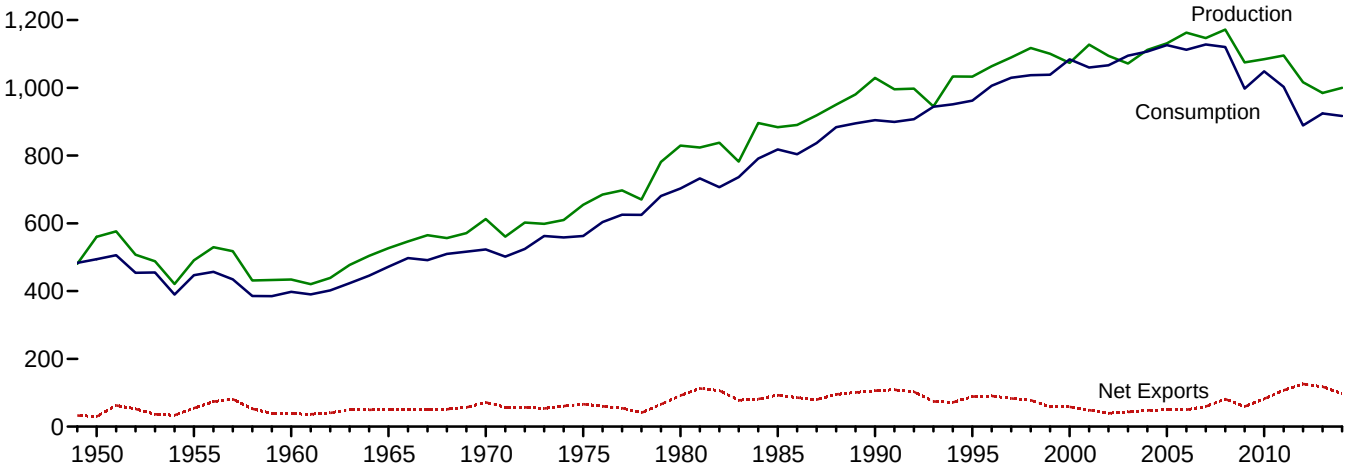
Prior to the March 1985 MER, drilling statistics consisted of completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported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

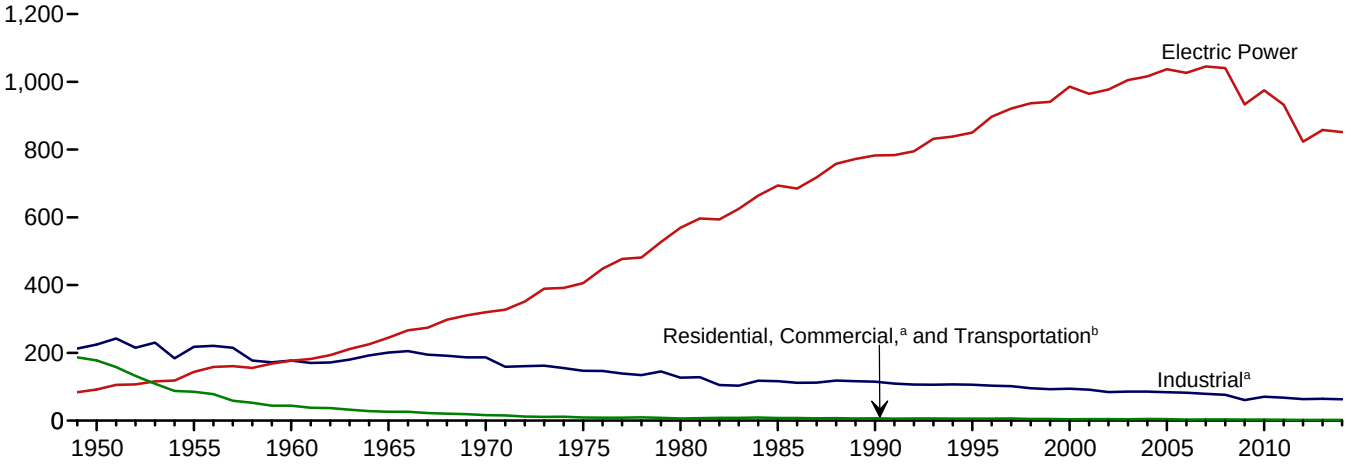
6. Coal

Figure 6.1 Coal
(Million Short Tons)

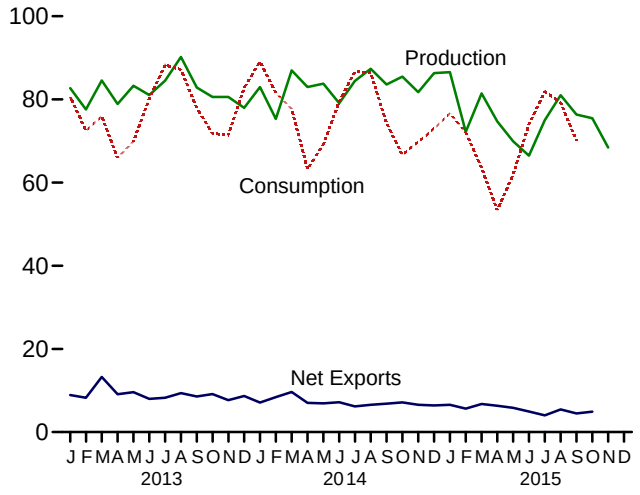
Overview, 1949–2014



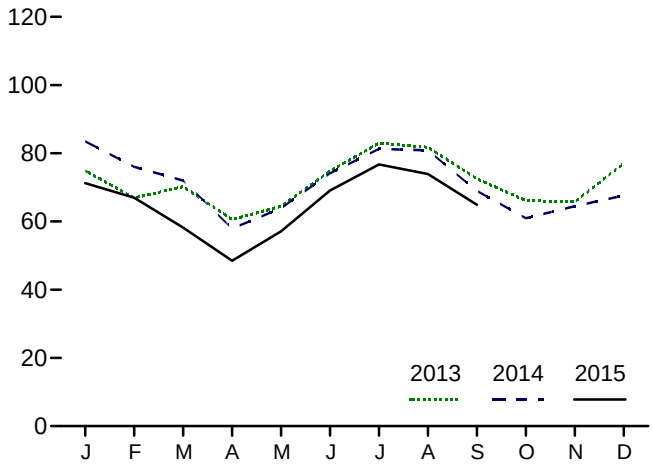
Consumption by Sector, 1949–2014



Overview, Monthly



Electric Power Sector Consumption, Monthly



[a] Includes combined-heat-and-power (CHP) plants and a small number of electricity-only-plants.
[b] For 1978 forward, small amounts of transportation sector use are included in "Industrial."

Web Page: http://www.eia.gov/totalenergy/data/monthly/#coal.
Sources: Tables 6.1–6.2.

Table 6.1 Coal Overview

(Thousand Short Tons)

	Production[a]	Waste Coal Supplied[b]	Trade			Stock Change[d,e]	Losses and Unaccounted for[e,f]	Consumption
			Imports	Exports	Net Imports[c]			
1950 Total	**560,388**	**NA**	**365**	**29,360**	**-28,995**	**27,829**	**9,462**	**494,102**
1955 Total	**490,838**	**NA**	**337**	**54,429**	**-54,092**	**-3,974**	**-6,292**	**447,012**
1960 Total	**434,329**	**NA**	**262**	**37,981**	**-37,719**	**-3,194**	**1,722**	**398,081**
1965 Total	**526,954**	**NA**	**184**	**51,032**	**-50,848**	**1,897**	**2,244**	**471,965**
1970 Total	**612,661**	**NA**	**36**	**71,733**	**-71,697**	**11,100**	**6,633**	**523,231**
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**
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 Total	**1,084,368**	**13,651**	**19,353**	**81,716**	**-62,363**	**-13,039**	**182**	**1,048,514**
2011 Total	**1,095,628**	**13,209**	**13,088**	**107,259**	**-94,171**	**211**	**11,506**	**1,002,948**
2012 Total	**1,016,458**	**11,196**	**9,159**	**125,746**	**-116,586**	**6,902**	**14,980**	**889,185**
2013 January	82,713	1,047	654	9,572	-8,917	-5,799	55	80,587
February	77,586	950	385	8,627	-8,242	-2,835	645	72,486
March	84,568	1,171	390	13,637	-13,247	-3,371	-51	75,914
April	78,909	716	672	9,754	-9,082	1,948	2,635	65,960
May	83,271	992	870	10,478	-9,608	4,830	-61	69,885
June	81,031	979	1,213	9,194	-7,981	-5,380	-759	80,169
July	84,518	1,108	874	9,125	-8,251	-11,970	1,045	88,299
August	90,199	925	710	10,073	-9,363	-6,318	923	87,156
September	82,878	749	815	9,391	-8,576	-2,738	-112	77,902
October	80,603	737	707	9,855	-9,148	1,229	-861	71,824
November	80,576	781	850	8,511	-7,662	1,783	473	71,439
December	77,990	1,122	766	9,443	-8,676	-9,897	-2,488	82,821
Total	**984,842**	**11,279**	**8,906**	**117,659**	**-108,753**	**-38,518**	**1,444**	**924,442**
2014 January	82,992	1,116	1,065	8,152	-7,087	R -14,750	R 2,689	R 89,082
February	75,320	999	582	8,972	-8,390	R -13,810	R 139	R 81,600
March	86,959	1,089	803	10,460	-9,657	R -1,582	R 2,253	R 77,719
April	82,981	934	930	7,952	-7,022	R 11,322	R 2,326	R 63,245
May	83,793	852	1,280	8,182	-6,902	R 7,624	R 904	R 69,214
June	79,069	1,003	1,365	8,540	-7,175	R -4,037	R -2,567	R 79,501
July	84,448	F 865	928	7,119	-6,192	R -7,652	R 121	R 86,654
August	87,346	F 865	1,076	7,637	-6,561	R -5,843	R 1,122	R 86,372
September	83,582	F 865	1,148	7,966	-6,818	R 2,809	R 585	R 74,235
October	85,462	F 865	584	7,738	-7,154	R 12,497	R 56	R 66,620
November	81,755	F 865	1,005	7,557	-6,552	R 6,157	R 91	R 69,820
December	86,341	F 865	586	6,981	-6,396	R 10,318	R -2,474	R 72,967
Total	**1,000,049**	E **11,184**	**11,350**	**97,257**	**-85,907**	R **3,052**	R **5,246**	R **917,028**
2015 January	86,548	F 902	1,293	7,871	-6,579	R 2,917	R 1,313	R 76,641
February	72,210	F 902	866	6,496	-5,630	R -4,671	R 67	R 72,086
March	81,430	F 902	850	7,612	-6,762	R 4,848	R 7,225	R 63,498
April	74,704	F 902	879	7,216	-6,337	R 13,541	R 2,328	R 53,400
May	69,942	F 902	919	6,761	-5,842	R 5,542	R -2,513	R 61,973
June	66,484	F 902	842	5,789	-4,947	R -6,713	R -4,868	R 74,020
July	74,991	F 902	1,091	5,117	-4,026	R -8,705	R -1,279	R 81,850
August	81,013	F 902	970	6,409	-5,439	R -3,480	R 730	R 79,226
September	76,355	RF 902	904	5,388	-4,485	R 5,228	R -2,505	R 70,049
October	75,455	NA	R 854	R 5,744	R -4,889	NA	NA	NA
November	68,431	NA	NA	NA	NA	NA	NA	NA
11-Month Total	**827,562**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
2014 11-Month Total	**913,708**	E **10,318**	**10,764**	**90,275**	**-79,511**	**-7,266**	**7,720**	**844,061**
2013 11-Month Total	**906,852**	**10,157**	**8,140**	**108,217**	**-100,077**	**-28,621**	**3,932**	**841,621**

[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] A negative value indicates a decrease in stocks and a positive value indicates an increase. See Table 6.3 for stocks data coverage.

[e] In 1949, stock change is included in "Losses and Unaccounted for."

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

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

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 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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
1950 Total	**51,562**	**(g)**	**63,021**	**63,021**	**104,014**	**(h)**	**120,623**	**120,623**	**224,637**	**63,011**	**91,871**	**494,102**
1955 Total	**35,590**	**(g)**	**32,852**	**32,852**	**107,743**	**(h)**	**110,096**	**110,096**	**217,839**	**16,972**	**143,759**	**447,012**
1960 Total	**24,159**	**(g)**	**16,789**	**16,789**	**81,385**	**(h)**	**96,017**	**96,017**	**177,402**	**3,046**	**176,685**	**398,081**
1965 Total	**14,635**	**(g)**	**11,041**	**11,041**	**95,286**	**(h)**	**105,560**	**105,560**	**200,846**	**655**	**244,788**	**471,965**
1970 Total	**9,024**	**(g)**	**7,090**	**7,090**	**96,481**	**(h)**	**90,156**	**90,156**	**186,637**	**298**	**320,182**	**523,231**
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)**	**[f] 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**
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	**(i)**	**2,021**	**1,485**	**3,506**	**22,070**	**21,902**	**32,491**	**54,393**	**76,463**	**(h)**	**1,040,580**	**1,120,548**
2009 Total	**(i)**	**1,798**	**1,412**	**3,210**	**15,326**	**19,766**	**25,549**	**45,314**	**60,641**	**(h)**	**933,627**	**997,478**
2010 Total	**(i)**	**1,720**	**1,361**	**3,081**	**21,092**	**24,638**	**24,650**	**49,289**	**70,381**	**(h)**	**975,052**	**1,048,514**
2011 Total	**(i)**	**1,668**	**1,125**	**2,793**	**21,434**	**22,319**	**23,919**	**46,238**	**67,671**	**(h)**	**932,484**	**1,002,948**
2012 Total	**(i)**	**1,450**	**595**	**2,045**	**20,751**	**20,065**	**22,773**	**42,838**	**63,589**	**(h)**	**823,551**	**889,185**
2013 January	(i)	149	93	242	1,825	1,767	1,921	3,688	5,513	(h)	74,832	80,587
February	(i)	137	85	222	1,644	1,600	2,099	3,699	5,344	(h)	66,919	72,486
March	(i)	132	82	215	1,810	1,748	1,922	3,670	5,481	(h)	70,219	75,914
April	(i)	100	29	129	1,817	1,565	1,865	3,430	5,246	(h)	60,584	65,960
May	(i)	105	31	136	1,868	1,618	1,819	3,437	5,305	(h)	64,444	69,885
June	(i)	102	30	132	1,787	1,563	1,871	3,434	5,221	(h)	74,817	80,169
July	(i)	100	19	119	1,756	1,674	1,784	3,457	5,214	(h)	82,966	88,299
August	(i)	102	19	121	1,836	1,626	1,835	3,461	5,297	(h)	81,737	87,156
September	(i)	96	18	115	1,836	1,530	1,920	3,450	5,286	(h)	72,501	77,902
October	(i)	91	51	142	1,807	1,620	2,148	3,768	5,575	(h)	66,107	71,824
November	(i)	112	63	175	1,737	1,683	2,081	3,764	5,501	(h)	65,763	71,439
December	(i)	130	73	203	1,750	1,765	2,031	3,797	5,547	(h)	77,071	82,821
Total	**(i)**	**1,356**	**595**	**1,951**	**21,474**	**19,761**	**23,294**	**43,055**	**64,529**	**(h)**	**857,962**	**924,442**
2014 January	(i)	R 132	R 116	247	1,605	R 1,791	R 1,941	3,732	5,337	(h)	R 83,498	R 89,082
February	(i)	R 131	R 114	245	1,543	R 1,633	R 2,142	3,775	5,318	(h)	R 76,036	R 81,600
March	(i)	R 118	R 118	236	1,687	R 1,729	R 2,068	3,796	5,484	(h)	R 72,000	R 77,719
April	(i)	R 82	R 58	140	1,648	R 1,472	R 2,050	3,521	5,169	(h)	R 57,936	R 63,245
May	(i)	R 72	R 47	118	1,730	R 1,549	R 1,954	3,503	5,233	(h)	R 63,863	R 69,214
June	(i)	R 78	R 35	114	1,758	R 1,540	R 1,966	3,506	5,264	(h)	R 74,123	R 79,501
July	(i)	R 85	RF 50	F **135**	F **1,685**	R 1,589	RF 1,958	F **3,548**	F **5,232**	(h)	R 81,287	R 86,654
August	(i)	R 72	RF 74	F **146**	F **1,854**	R 1,591	RF 1,917	F **3,509**	F **5,363**	(h)	R 80,863	R 86,372
September	(i)	R 64	RF 93	F **156**	F **1,655**	R 1,502	RF 2,005	F **3,507**	F **5,162**	(h)	R 68,916	R 74,235
October	(i)	R 58	RF 133	F **191**	F **2,029**	R 1,482	RF 1,969	F **3,452**	F **5,481**	(h)	R 60,947	R 66,620
November	(i)	R 82	RF 145	F **227**	F **1,548**	R 1,554	RF 1,996	F **3,550**	F **5,098**	(h)	R 64,495	R 69,820
December	(i)	R 90	RF 166	F **256**	F **1,657**	R 1,644	RF 1,771	F **3,415**	F **5,072**	(h)	R 67,638	R 72,967
Total	**(i)**	**R 1,063**	**RE 1,150**	**E 2,212**	**E 20,400**	**R 19,076**	**RE 23,738**	**E 42,815**	**E 63,214**	**(h)**	**R 851,602**	**R 917,028**
2015 January	(i)	R 96	RF 181	F 277	F 1,497	R 1,672	RF 1,953	F 3,625	F 5,122	(h)	R 71,242	R 76,641
February	(i)	R 91	RF 174	F 266	F 1,414	R 1,488	RF 1,960	F 3,448	F 4,862	(h)	R 66,959	R 72,086
March	(i)	R 88	RF 167	F 255	F 1,518	R 1,583	RF 1,929	F 3,511	F 5,029	(h)	R 58,214	R 63,498
April	(i)	R 64	RF 129	F 193	F 1,289	R 1,391	RF 2,065	F 3,456	F 4,745	(h)	R 48,462	R 53,400
May	(i)	R 62	RF 123	F 185	F 1,477	R 1,441	RF 1,746	F 3,187	F 4,664	(h)	R 57,124	R 61,973
June	(i)	64	F 124	F 188	F 1,584	R 1,433	RF 1,743	F 3,176	F 4,760	(h)	R 69,072	R 74,020
July	(i)	68	F 125	F 193	F 1,640	R 1,561	RF 1,709	F 3,270	F 4,910	(h)	R 76,747	R 81,850
August	(i)	R 63	F 151	F 213	F 1,796	R 1,560	RF 1,727	F 3,287	F 5,083	(h)	R 73,930	R 79,226
September	(i)	58	F 142	F 200	F 1,625	1,477	F 1,824	F 3,301	F 4,927	(h)	64,922	70,049
9-Month Total	**(i)**	**653**	**F 1,315**	**F 1,968**	**F 13,842**	**13,605**	**F 16,656**	**F 30,261**	**F 44,103**	**(h)**	**586,672**	**632,743**
2014 9-Month Total	**(i)**	**833**	**E 705**	**E 1,538**	**E 15,165**	**14,396**	**E 18,001**	**E 32,397**	**E 47,563**	**(h)**	**658,521**	**707,621**
2013 9-Month Total	**(i)**	**1,024**	**408**	**1,431**	**16,180**	**14,692**	**17,035**	**31,726**	**47,906**	**(h)**	**649,020**	**698,358**

[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 2, "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 2, "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 electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

[g] Included in "Commercial Other."

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

[i] Beginning in 2008, residential coal consumption data are no longer collected by the U.S. Energy Information Administration (EIA).

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

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 values preceded by "F" are derived from EIA'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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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[c,d]	Total
		Residential[a] and Commercial	Industrial			Total		
			Coke Plants	Other[b]	Total			
1950 Year	**NA**	**2,462**	**16,809**	**26,182**	**42,991**	**45,453**	**31,842**	**77,295**
1955 Year	**NA**	**998**	**13,422**	**15,880**	**29,302**	**30,300**	**41,391**	**71,691**
1960 Year	**NA**	**666**	**11,122**	**11,637**	**22,759**	**23,425**	**51,735**	**75,160**
1965 Year	**NA**	**353**	**10,640**	**13,122**	**23,762**	**24,115**	**54,525**	**78,640**
1970 Year	**NA**	**300**	**9,045**	**11,781**	**20,826**	**21,126**	**71,908**	**93,034**
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**
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 Year	**49,820**	**552**	**1,925**	**4,525**	**6,451**	**7,003**	**174,917**	**231,740**
2011 Year	**51,897**	**603**	**2,610**	**4,455**	**7,065**	**7,668**	**172,387**	**231,951**
2012 Year	**46,157**	**583**	**2,522**	**4,475**	**6,997**	**7,581**	**185,116**	**238,853**
2013 January	46,914	566	2,417	4,299	6,716	7,281	178,859	233,054
February	47,672	548	2,312	4,122	6,434	6,982	175,565	230,219
March	48,429	530	2,207	3,946	6,152	6,683	171,736	226,848
April	48,998	530	2,305	3,950	6,254	6,784	173,014	228,796
May	49,567	529	2,402	3,954	6,356	6,885	177,174	233,626
June	50,136	529	2,500	3,957	6,458	6,987	171,124	228,246
July	49,138	529	2,516	4,074	6,590	7,119	160,019	216,276
August	48,140	530	2,531	4,191	6,722	7,252	154,567	209,959
September	47,142	530	2,546	4,308	6,854	7,385	152,694	207,221
October	47,068	519	2,431	4,238	6,668	7,187	154,194	208,449
November	46,994	507	2,315	4,167	6,483	6,989	156,249	210,232
December	**45,659**	**495**	**2,200**	**4,097**	**6,297**	**6,792**	**147,884**	**200,335**
2014 January	F 45,439	465	2,064	3,913	5,977	6,441	R 133,705	R 185,585
February	F 45,780	435	1,927	3,729	5,657	6,091	R 119,904	R 171,775
March	F 46,192	405	1,791	3,545	5,336	5,741	R 118,260	R 170,193
April	F 46,765	413	1,833	3,579	5,412	5,825	R 128,925	R 181,515
May	F 46,310	421	1,875	3,613	5,488	5,908	R 136,921	R 189,139
June	F 45,610	429	1,937	3,647	5,584	6,013	R 133,479	R 185,102
July	F 45,355	F 431	F 1,904	F 3,890	F 5,794	F 6,225	R 125,870	R 177,450
August	F 43,796	F 433	F 1,879	F 4,129	F 6,009	F 6,442	R 121,369	R 171,607
September	F 43,220	F 435	F 1,847	F 4,368	F 6,215	F 6,649	R 124,546	R 174,415
October	F 43,146	F 436	F 1,851	F 4,514	F 6,366	F 6,802	R 136,964	R 186,912
November	F 43,527	F 439	F 1,850	F 4,658	F 6,508	F 6,947	R 142,595	R 193,069
December	**F 44,750**	**F 434**	**F 1,853**	**F 4,801**	**F 6,654**	**F 7,088**	**R 151,548**	**R 203,387**
2015 January	F 44,719	F 467	F 1,845	F 4,582	F 6,427	F 6,894	R 154,691	R 206,304
February	F 45,427	F 460	F 1,704	F 4,371	F 6,075	F 6,535	R 149,671	R 201,633
March	F 45,476	F 453	F 1,563	F 4,148	F 5,711	F 6,164	R 154,841	R 206,481
April	F 46,135	F 454	F 1,684	F 4,259	F 5,944	F 6,397	R 167,490	R 220,022
May	F 45,711	F 454	F 1,813	F 4,372	F 6,185	F 6,639	R 173,214	R 225,564
June	F 45,157	F 454	F 1,946	F 4,484	F 6,430	F 6,884	R 166,810	R 218,851
July	F 44,743	F 456	F 1,912	F 4,706	F 6,618	F 7,074	R 158,330	R 210,146
August	F 43,125	F 457	F 1,885	F 4,922	F 6,807	F 7,264	R 156,277	R 206,666
September	F 42,078	F 459	F 1,851	F 5,134	F 6,986	F 7,444	162,373	211,895

[a] Through 1979, data are for the residential and commercial sectors. Beginning in 2008, data are for the commercial sector only.

[b] Through 1979, data are for manufacturing plants and the transportation sector. For 1980–2007, data are for manufacturing plants only. Beginning in 2008, data are for manufacturing plants and coal transformation/processing plants.

[c] 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.

[d] Excludes waste coal. Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and 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 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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.

Through 2001, 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.

From 2002 through 2014, the weekly coal production model used statistical auto regressive methods to estimate national coal production as a function of railcar loadings of coal, heating degree-days, and cooling degree-days. On Thursday of each week, EIA received from the AAR data for the previous week. The latest weekly national data for heating degree-days and cooling degree-days were obtained from the National Oceanic and Atmospheric Administration's Climate Prediction Center.

Beginning in 2015, the revised weekly coal production model uses statistical auto regressive methods to estimate national coal production as a function of railcar loadings of coal. EIA receives AAR data on Thursday of each week for prior week car loadings. The weekly coal model is run and a national level coal production estimate is obtained. From there, state-level estimates are calculated using historical state production share. The state estimates are then aggregated to various regional-level estimates. 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 historical state-level production data, the methodology for which can be seen in the documentation located at http://www.eia.gov/coal/production/weekly/. 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. 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. Forecast data (designated by an "F") are derived from forecasted values shown in EIA's *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply, Consumption, and Inventories." 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—Through 2007, 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 using 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. Beginning in 2008, residential coal consumption data are not collected by EIA, and commercial coal consumption data are taken directly from reported data.

Industrial Coke Plants—Through 1979, 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 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—Through 1977, 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 U.S. Census Bureau 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 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; nonmetallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights. Through 2007, 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 20–30 thousand short 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 (designated by an "F") are derived from forecasted values shown in EIA's *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply, Consumption, and Inventories." 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—Through 1997, 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—Through 1979, 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 commercial (excluding residential) stocks data are collected on Form EIA-3 (data for "Commercial and Institutional Coal Users").

Industrial Coke Plants—Through 1979, 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—Through 1977, 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's Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

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

Table 6.1 Sources

Production

1949–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
1949 forward: U.S. Department of Commerce, U.S. Census Bureau, Monthly Reports IM 145 (Imports) and EM 545 (Exports).

Stock Change
1950 forward: Calculated from data in Table 6.3.

Losses and Unaccounted for
1949 forward: Calculated as the sum of production, imports, and waste coal supplied, minus exports, stock change, and consumption.

Consumption
1949 forward: Table 6.2.

Table 6.2 Sources

Residential and Commercial Total
Through 2007, 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:

1949–1976: 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 Coal Consumption and Quality Report—Coke Plants."

Commercial Total
Beginning in 2008, coal consumption by the commercial (excluding residential) sector is reported to EIA. Data for total commercial consumption are from:

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
1989 forward: Table 7.4c.

Commercial Other
1949 forward: Calculated as "Commercial Total" minus "Commercial CHP."

Industrial Coke Plants
1949–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, "Quarterly Coal Consumption and Quality Report—Coke Plants"; and, for forecast values, EIA, STIFS.

Other Industrial Total
1949–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
1989 forward: Table 7.4c.

Other Industrial Non-CHP
1949 forward: Calculated as "Other Industrial Total" minus "Other Industrial CHP."

Transportation
1949–1976: 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
1949 forward: 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
1949–1976: 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
1949–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, "Quarterly Coal Consumption and Quality Report—Coke Plants" and, for forecast values, EIA, STIFS.

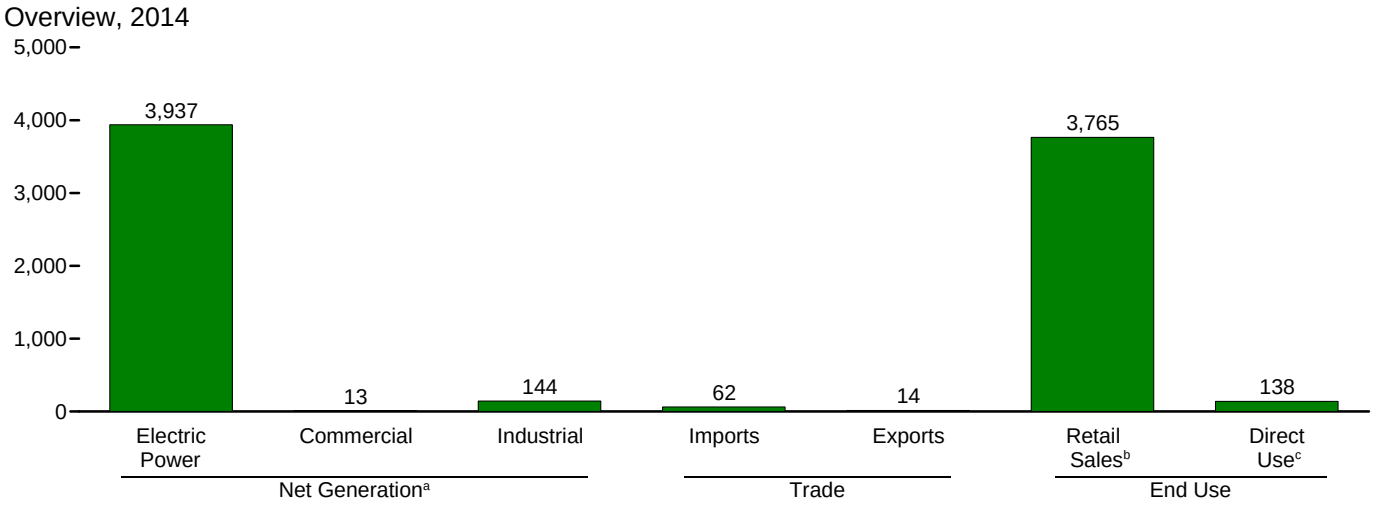
Industrial Other
1949–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."
1998–2007: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants."
2008 forward: EIA, Form 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.

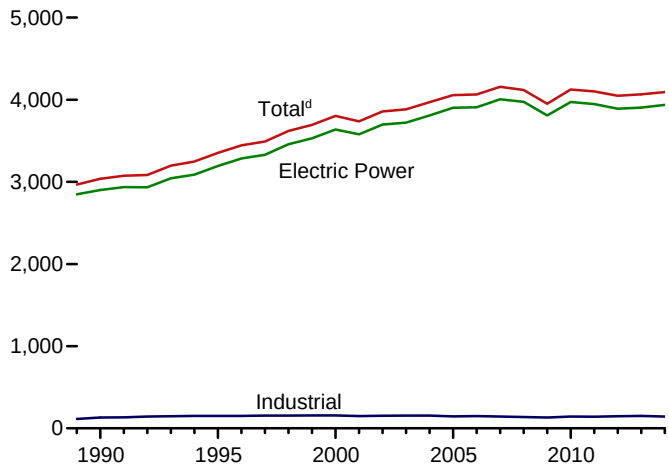
Electric Power
1949 forward: Table 7.5.

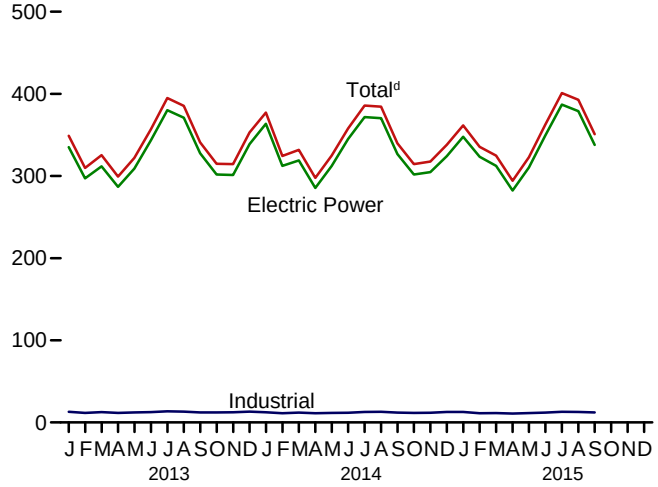
THIS PAGE INTENTIONALLY LEFT BLANK

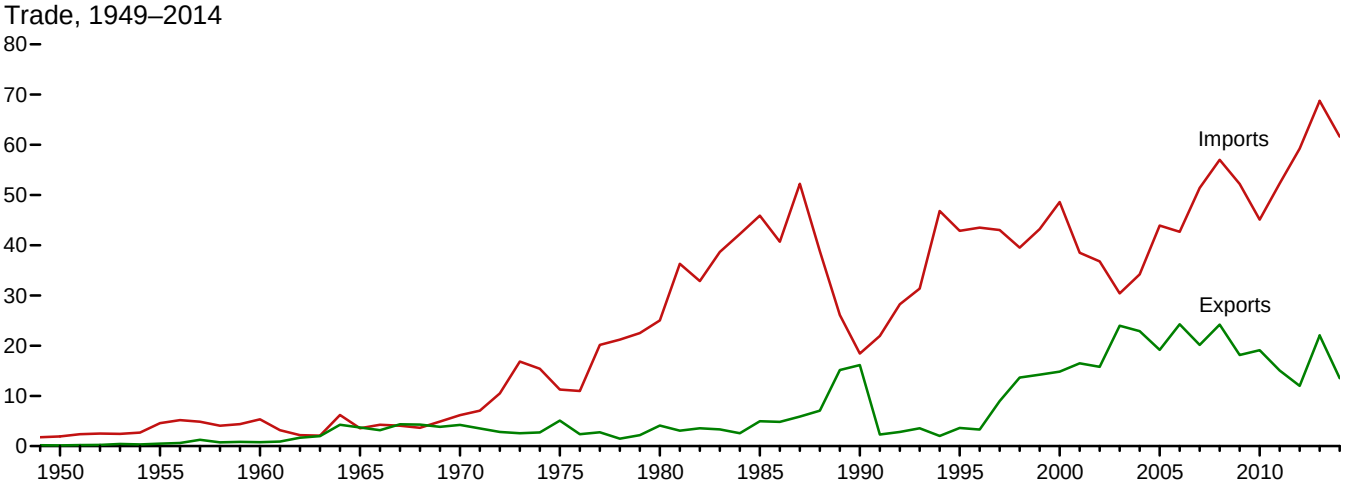
7. Electricity

Figure 7.1 Electricity Overview
(Billion Kilowatthours)









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

Table 7.1 Electricity Overview

(Billion Kilowatthours)

	Net Generation[a]				Trade			T&D Losses[f] and Unaccounted for[g]	End Use		
	Electric Power Sector[b]	Commercial Sector[c]	Industrial Sector[d]	Total	Imports[e]	Exports[e]	Net Imports[e]		Retail Sales[h]	Direct Use[i]	Total
1950 Total	**329**	**NA**	**5**	**334**	**2**	**(s)**	**2**	**44**	**291**	**NA**	**291**
1955 Total	**547**	**NA**	**3**	**550**	**5**	**(s)**	**4**	**58**	**497**	**NA**	**497**
1960 Total	**756**	**NA**	**4**	**759**	**5**	**1**	**5**	**76**	**688**	**NA**	**688**
1965 Total	**1,055**	**NA**	**3**	**1,058**	**4**	**4**	**(s)**	**104**	**954**	**NA**	**954**
1970 Total	**1,532**	**NA**	**3**	**1,535**	**6**	**4**	**2**	**145**	**1,392**	**NA**	**1,392**
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**	**[c] 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**
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**	**286**	**3,734**	**132**	**3,866**
2009 Total	**3,810**	**8**	**132**	**3,950**	**52**	**18**	**34**	**261**	**3,597**	**127**	**3,724**
2010 Total	**3,972**	**9**	**144**	**4,125**	**45**	**19**	**26**	**264**	**3,755**	**132**	**3,887**
2011 Total	**3,948**	**10**	**142**	**4,100**	**52**	**15**	**37**	**255**	**3,750**	**133**	**3,883**
2012 Total	**3,890**	**11**	**146**	**4,048**	**59**	**12**	**47**	**263**	**3,695**	**138**	**3,832**
2013 January	335	1	13	349	6	1	5	21	321	[E] 12	333
February	297	1	12	310	5	1	5	12	291	[E] 11	303
March	312	1	13	325	6	1	5	21	297	[E] 12	309
April	287	1	12	299	5	1	4	14	278	[E] 11	289
May	309	1	12	322	6	1	5	26	289	[E] 12	301
June	343	1	13	357	6	1	5	30	320	[E] 12	332
July	380	1	14	395	7	1	6	29	359	[E] 13	372
August	371	1	13	385	7	1	6	25	354	[E] 13	366
September	328	1	12	341	6	1	5	11	323	[E] 12	335
October	302	1	12	315	6	1	5	14	294	[E] 12	306
November	301	1	12	315	6	1	5	26	281	[E] 12	293
December	339	1	13	353	6	1	5	29	316	[E] 13	329
Total	**3,904**	**12**	**150**	**4,066**	**70**	**11**	**59**	**[R] 257**	**3,725**	**143**	**3,868**
2014 January	[R] 364	1	[R] 12	[R] 377	5	1	4	[R] 28	[R] 341	[E] 12	[R] 353
February	312	1	11	324	4	1	3	[R] 8	[R] 309	[E] 11	[R] 319
March	319	1	12	332	5	2	3	[R] 21	[R] 302	[E] 11	[R] 314
April	285	1	11	298	4	1	3	[R] 14	[R] 276	[E] 11	[R] 287
May	312	1	[R] 12	[R] 325	5	1	4	[R] 26	[R] 291	[E] 11	[R] 302
June	[R] 345	1	12	358	5	1	4	[R] 28	[R] 323	[E] 11	[R] 334
July	372	1	13	386	6	1	5	[R] 27	[R] 351	[E] 12	[R] 364
August	370	1	13	384	6	1	5	[R] 25	[R] 352	[E] 12	[R] 364
September	327	1	12	340	6	1	5	[R] 6	[R] 327	[E] 12	[R] 338
October	302	1	[R] 12	315	5	1	4	[R] 11	[R] 297	[E] 11	[R] 308
November	305	1	12	[R] 317	6	1	5	[R] 26	[R] 285	[E] 11	[R] 297
December	[R] 324	1	13	[R] 338	5	1	4	[R] 19	[R] 311	[E] 12	[R] 323
Total	**[R] 3,937**	**13**	**144**	**[R] 4,094**	**62**	**14**	**48**	**[R] 239**	**[R] 3,765**	**[RE] 138**	**[R] 3,903**
2015 January	[R] 348	1	13	[R] 362	6	1	5	[R] 29	326	[E] 12	338
February	323	1	11	[R] 336	6	1	4	[R] 25	304	[E] 11	315
March	312	1	11	[R] 325	7	1	6	17	302	[E] 11	313
April	282	1	11	294	7	1	6	17	272	[E] 10	[R] 283
May	[R] 310	1	11	[R] 323	7	1	6	[R] 33	[R] 285	[E] 11	[R] 296
June	[R] 350	1	12	[R] 363	7	1	6	[R] 34	323	[E] 12	335
July	[R] 387	1	13	[R] 401	7	1	6	[R] 35	360	[RE] 13	372
August	379	1	13	[R] 393	7	1	6	28	359	[E] 12	371
September	338	1	12	351	7	1	6	15	330	[E] 12	341
9-Month Total	**3,029**	**10**	**107**	**3,147**	**59**	**7**	**52**	**234**	**2,861**	**[E] 104**	**2,965**
2014 9-Month Total	**3,006**	**10**	**108**	**3,124**	**46**	**11**	**35**	**183**	**2,872**	**[E] 104**	**2,975**
2013 9-Month Total	**2,962**	**9**	**112**	**3,083**	**53**	**8**	**45**	**188**	**2,833**	**[E] 108**	**2,940**

[a] Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section.

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

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

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

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

[f] 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.

[g] Data collection frame differences and nonsampling error.

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

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

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

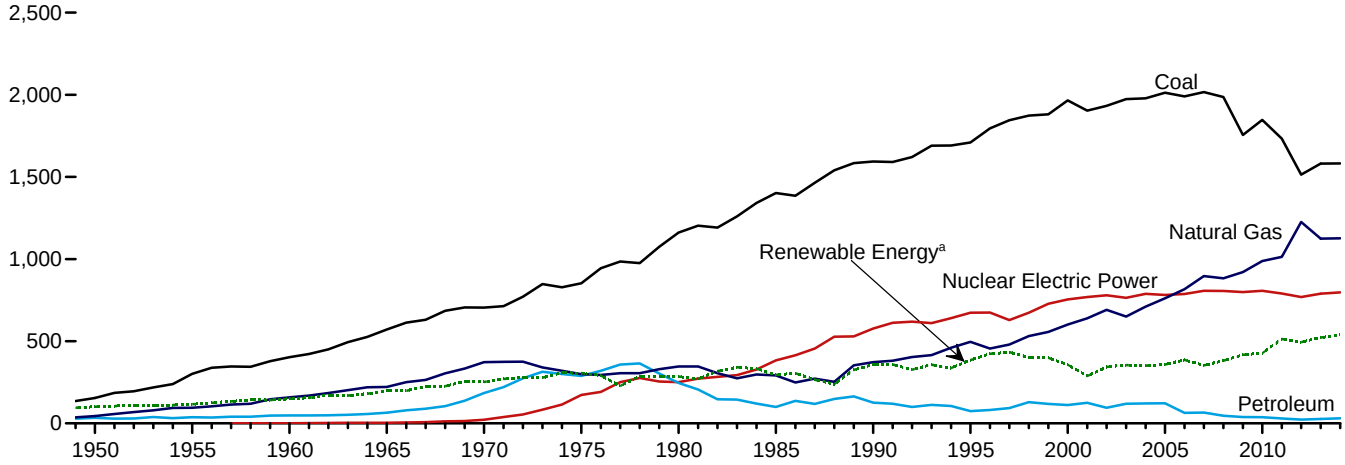
Notes: • See Note 1, "Coverage of Electricity Statistics," and Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

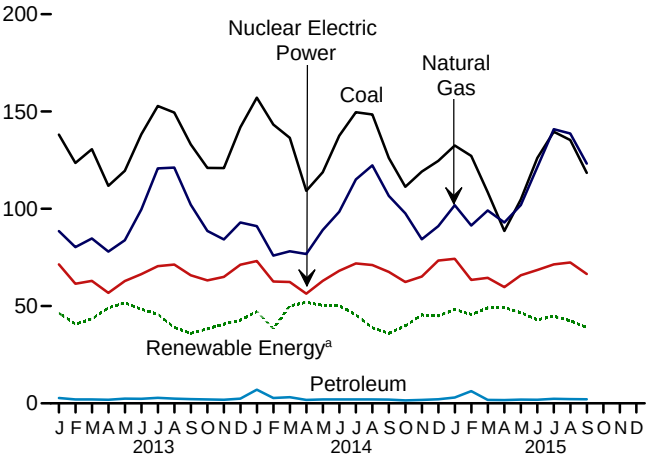
Sources: See end of section.

Figure 7.2 Electricity Net Generation
(Billion Kilowatthours)

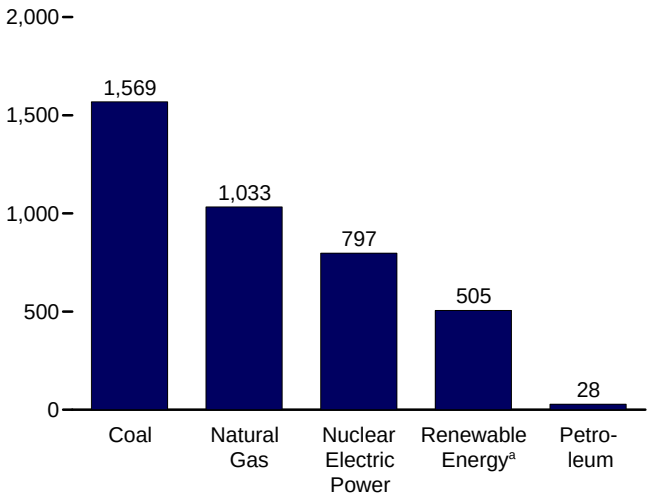
Total (All Sectors), Major Sources, 1949–2014



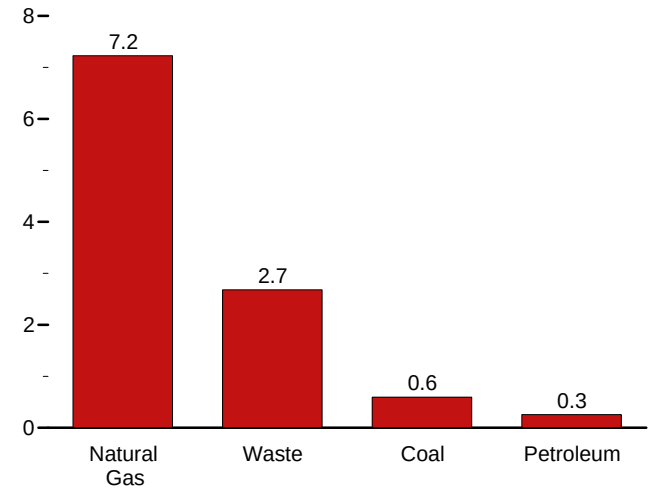
Total (All Sectors), Major Sources, Monthly



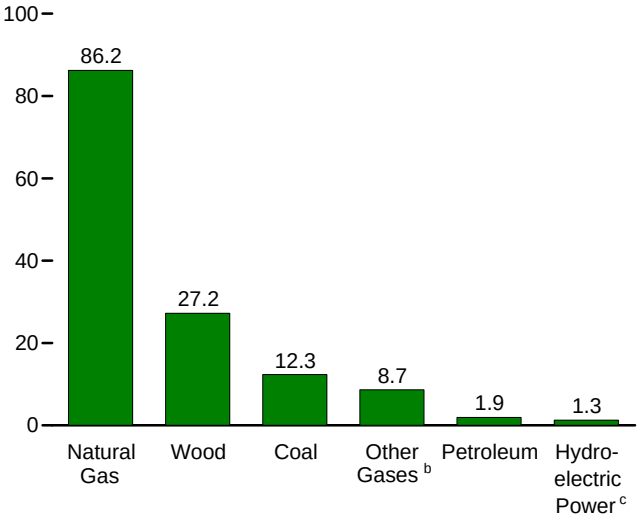
Electric Power Sector, Major Sources, 2014



Commercial Sector, Major Sources, 2014



Industrial Sector, Major Sources, 2014



[a] Conventional hydroelectric power, wood, waste, geothermal, solar/PV, and wind.
[b] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels.
[c] Conventional hydroelectric power.
Note: Data are for utility-scale facilities.
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						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]
1950 Total	**154,520**	**33,734**	**44,559**	**NA**	**0**	**(f)**	**100,885**	**390**	**NA**	**NA**	**NA**	**NA**	**334,088**
1955 Total	**301,363**	**37,138**	**95,285**	**NA**	**0**	**(f)**	**116,236**	**276**	**NA**	**NA**	**NA**	**NA**	**550,299**
1960 Total	**403,067**	**47,987**	**157,970**	**NA**	**518**	**(f)**	**149,440**	**140**	**NA**	**33**	**NA**	**NA**	**759,156**
1965 Total	**570,926**	**64,801**	**221,559**	**NA**	**3,657**	**(f)**	**196,984**	**269**	**NA**	**189**	**NA**	**NA**	**1,058,386**
1970 Total	**704,394**	**184,183**	**372,890**	**NA**	**21,804**	**(f)**	**250,957**	**136**	**220**	**525**	**NA**	**NA**	**1,535,111**
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**
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 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 Total	**1,733,430**	**30,182**	**1,013,689**	**11,566**	**790,204**	**-6,421**	**319,355**	**37,449**	**19,222**	**15,316**	**1,818**	**120,177**	**4,100,141**
2012 Total	**1,514,043**	**23,190**	**1,225,894**	**11,898**	**769,331**	**-4,950**	**276,240**	**37,799**	**19,823**	**15,562**	**4,327**	**140,822**	**4,047,765**
2013 January	138,105	2,775	88,559	1,144	71,406	-465	24,829	3,400	1,688	1,382	310	14,739	348,967
February	123,547	1,997	80,283	968	61,483	-320	20,418	3,083	1,503	1,236	433	14,076	309,728
March	130,634	1,997	84,725	1,070	62,947	-462	20,534	3,300	1,757	1,378	619	15,756	325,399
April	111,835	1,885	78,036	1,020	56,767	-292	25,097	2,863	1,681	1,274	667	17,476	299,333
May	119,513	2,412	83,816	1,088	62,848	-334	28,450	3,174	1,781	1,308	753	16,239	322,156
June	138,283	2,342	99,615	1,048	66,430	-358	27,384	3,330	1,727	1,278	871	13,748	356,823
July	152,867	2,812	120,771	1,148	70,539	-340	27,255	3,536	1,797	1,337	829	11,094	394,846
August	149,426	2,448	121,156	1,143	71,344	-465	21,633	3,634	1,847	1,322	944	9,634	385,286
September	133,110	2,186	102,063	1,087	65,799	-439	16,961	3,353	1,716	1,299	949	11,674	340,941
October	120,996	2,018	88,587	1,072	63,184	-373	17,199	3,341	1,731	1,363	988	13,635	314,925
November	120,940	1,840	84,287	1,060	64,975	-413	17,677	3,407	1,765	1,230	824	15,803	314,540
December	141,860	2,451	92,936	1,006	71,294	-421	21,128	3,606	1,837	1,366	850	13,967	353,021
Total	**1,581,115**	**27,164**	**1,124,836**	**12,853**	**789,016**	**-4,681**	**268,565**	**40,028**	**20,830**	**15,775**	**9,036**	**167,840**	**4,065,964**
2014 January	R 157,097	R 7,072	R 91,061	R 933	R 73,163	-290	R 21,634	R 3,626	R 1,850	R 1,355	R 751	R 17,911	R 377,255
February	R 143,294	R 2,763	R 75,942	R 817	62,639	-445	R 17,396	R 3,265	R 1,686	R 1,206	R 835	R 14,009	R 324,348
March	R 136,443	R 3,188	R 78,151	R 866	62,397	-421	R 24,257	R 3,609	R 1,851	R 1,338	R 1,317	R 17,736	R 331,823
April	R 109,281	R 1,753	R 76,782	R 854	56,385	-378	R 25,440	R 3,230	R 1,810	R 1,314	R 1,487	R 18,636	R 297,631
May	R 118,786	R 2,044	R 89,120	R 944	62,947	R -601	R 26,544	R 3,290	R 1,849	R 1,332	R 1,750	R 15,601	R 324,724
June	R 137,577	R 2,021	R 98,468	R 969	68,138	-653	R 25,744	R 3,622	R 1,826	R 1,293	R 1,923	R 15,799	R 357,844
July	R 149,627	R 2,042	R 115,081	1,069	71,940	-545	R 24,357	R 3,807	R 1,942	R 1,320	R 1,788	R 12,187	R 385,780
August	R 148,452	R 2,050	R 122,348	R 1,135	71,129	-840	R 19,807	R 3,761	R 1,880	R 1,329	R 1,879	R 10,171	R 384,341
September	R 126,110	R 1,948	R 106,582	R 1,126	67,535	-542	R 16,074	R 3,462	R 1,772	R 1,308	R 1,832	R 11,520	R 339,887
October	R 111,296	R 1,518	R 97,683	R 1,082	62,391	-448	R 17,159	R 3,422	R 1,726	R 1,345	R 1,717	R 14,508	R 314,522
November	R 119,127	R 1,738	R 84,354	R 1,073	65,140	-531	R 18,625	R 3,508	R 1,691	R 1,362	R 1,380	R 18,867	R 317,495
December	R 124,620	R 2,095	R 91,038	R 1,153	73,363	-480	R 22,329	R 3,737	R 1,767	R 1,375	R 1,032	R 14,711	R 337,957
Total	**R 1,581,710**	**R 30,232**	**R 1,126,609**	**R 12,022**	**R 797,166**	**R -6,174**	**R 259,367**	**R 42,340**	**R 21,650**	**R 15,877**	**R 17,691**	**R 181,655**	**R 4,093,606**
2015 January	R 132,509	R 2,970	R 101,817	R 1,268	74,270	-528	R 24,598	R 3,800	R 1,902	R 1,480	R 1,217	R 15,263	R 361,633
February	R 127,150	R 6,325	R 91,375	R 1,063	63,462	R -441	R 22,746	R 3,421	R 1,603	R 1,350	R 1,632	R 14,957	R 335,562
March	R 108,544	R 1,807	R 99,139	R 1,044	64,547	R -399	R 24,869	R 3,454	R 1,734	R 1,461	R 2,239	R 15,332	R 324,760
April	R 88,646	R 1,718	R 92,980	R 922	59,757	-208	R 22,559	R 3,244	R 1,740	R 1,343	R 2,564	R 17,829	R 294,158
May	R 104,774	R 1,942	R 101,922	R 998	65,833	R -363	R 20,187	R 3,360	R 1,809	R 1,461	R 2,598	R 17,167	R 322,814
June	R 126,139	R 1,847	R 121,397	R 1,096	68,546	R -381	R 20,068	R 3,546	R 1,808	R 1,385	R 2,713	R 13,432	R 362,735
July	R 139,601	R 2,347	R 140,900	R 1,288	71,412	-507	R 21,066	R 3,922	R 1,938	R 1,441	R 2,750	R 13,647	R 401,022
August	R 135,287	R 2,181	R 138,653	R 1,216	72,415	-623	R 19,440	R 3,842	R 1,905	R 1,429	R 2,829	R 13,032	R 392,840
September	118,489	2,060	123,248	1,217	66,466	-526	16,206	3,473	1,731	1,293	2,350	13,859	350,986
9-Month Total	**1,081,138**	**23,197**	**1,011,431**	**10,111**	**606,709**	**-3,974**	**191,738**	**32,062**	**16,171**	**12,643**	**20,892**	**134,518**	**3,146,512**
2014 9-Month Total	**1,226,667**	**24,881**	**853,535**	**8,713**	**596,272**	**-4,715**	**201,254**	**31,673**	**16,466**	**11,794**	**13,563**	**133,569**	**3,123,632**
2013 9-Month Total	**1,197,319**	**20,855**	**859,025**	**9,715**	**589,564**	**-3,475**	**212,562**	**29,673**	**15,498**	**11,815**	**6,374**	**124,434**	**3,083,478**

[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, waste oil, and, beginning in 2011, propane.

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

[d] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[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.

R=Revised. NA=Not available.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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]
1950 Total	**154,520**	**33,734**	**44,559**	**NA**	**0**	**(f)**	**95,938**	**390**	**NA**	**NA**	**NA**	**NA**	**329,141**
1955 Total	**301,363**	**37,138**	**95,285**	**NA**	**0**	**(f)**	**112,975**	**276**	**NA**	**NA**	**NA**	**NA**	**547,038**
1960 Total	**403,067**	**47,987**	**157,970**	**NA**	**518**	**(f)**	**145,833**	**140**	**NA**	**33**	**NA**	**NA**	**755,549**
1965 Total	**570,926**	**64,801**	**221,559**	**NA**	**3,657**	**(f)**	**193,851**	**269**	**NA**	**189**	**NA**	**NA**	**1,055,252**
1970 Total	**704,394**	**184,183**	**372,890**	**NA**	**21,804**	**(f)**	**247,714**	**136**	**220**	**525**	**NA**	**NA**	**1,531,868**
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**
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 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 Total	**1,717,891**	**28,202**	**926,290**	**2,939**	**790,204**	**-6,421**	**317,531**	**10,733**	**15,989**	**15,316**	**1,727**	**120,121**	**3,948,186**
2012 Total	**1,500,557**	**20,072**	**1,132,791**	**2,984**	**769,331**	**-4,950**	**273,859**	**11,050**	**16,555**	**15,562**	**4,164**	**140,749**	**3,890,358**
2013 January	136,952	2,501	80,389	385	71,406	-465	24,501	1,012	1,380	1,382	300	14,729	335,062
February	122,484	1,818	72,970	325	61,483	-320	20,051	891	1,231	1,236	417	14,068	297,198
March	129,469	1,779	76,765	318	62,947	-462	20,228	987	1,446	1,378	596	15,748	311,828
April	110,786	1,669	70,626	322	56,767	-292	24,842	776	1,357	1,274	640	17,468	286,807
May	118,380	2,149	76,244	367	62,848	-334	28,118	918	1,452	1,308	724	16,230	309,028
June	137,160	2,098	91,672	349	66,430	-358	27,051	993	1,404	1,278	839	13,742	343,286
July	151,653	2,553	111,959	381	70,539	-340	26,929	1,093	1,450	1,337	799	11,088	380,108
August	148,288	2,197	112,603	376	71,344	-465	21,389	1,202	1,494	1,322	914	9,629	370,943
September	132,047	1,972	94,193	373	65,799	-439	16,719	1,089	1,391	1,299	917	11,668	327,638
October	119,943	1,809	80,872	405	63,184	-373	16,958	1,040	1,393	1,363	954	13,627	301,782
November	119,858	1,696	76,367	367	64,975	-413	17,469	1,108	1,433	1,230	799	15,790	301,287
December	140,703	2,270	84,289	356	71,294	-421	20,803	1,193	1,486	1,366	826	13,955	338,748
Total	**1,567,722**	**24,510**	**1,028,949**	**4,322**	**789,016**	**-4,681**	**265,058**	**12,302**	**16,918**	**15,775**	**8,724**	**167,742**	**3,903,715**
2014 January	R 155,916	R 6,784	R 82,969	R 266	R 73,163	-290	R 21,510	R 1,273	R 1,490	R 1,355	R 734	R 17,895	R 363,645
February	R 142,218	R 2,578	R 68,730	R 211	62,639	-445	R 17,289	R 1,150	R 1,385	R 1,206	R 814	R 13,997	R 312,276
March	R 135,290	R 2,999	R 70,517	R 215	62,397	-421	R 24,139	R 1,291	R 1,514	R 1,338	R 1,286	R 17,722	R 318,914
April	R 108,279	R 1,583	R 69,583	R 231	56,385	-378	R 25,310	R 1,040	R 1,466	R 1,314	R 1,453	R 18,621	R 285,453
May	R 117,738	R 1,870	R 81,645	R 283	62,947	R -601	R 26,410	R 1,007	R 1,520	R 1,332	R 1,710	R 15,591	R 312,072
June	R 136,470	R 1,845	R 90,902	R 257	68,138	-653	R 25,640	R 1,317	R 1,491	R 1,293	R 1,883	R 15,786	R 344,988
July	R 148,472	R 1,867	R 106,696	R 283	71,940	-545	R 24,265	R 1,374	R 1,574	R 1,320	R 1,748	R 12,176	R 371,817
August	R 147,329	R 1,873	R 113,910	R 315	71,129	-840	R 19,708	R 1,372	R 1,526	R 1,329	R 1,839	R 10,162	R 370,304
September	R 125,062	R 1,777	R 98,690	R 298	67,535	-542	R 15,986	R 1,288	R 1,439	R 1,308	R 1,795	R 11,510	R 326,756
October	R 110,322	R 1,368	R 90,053	R 334	62,391	-448	R 17,063	R 1,238	R 1,393	R 1,345	R 1,680	R 14,492	R 301,847
November	R 118,118	R 1,577	R 76,711	R 302	65,140	-531	R 18,524	R 1,331	R 1,373	R 1,362	R 1,351	R 18,848	R 304,738
December	R 123,561	R 1,921	R 82,766	R 363	73,363	-480	R 22,202	R 1,347	R 1,432	R 1,375	R 1,011	R 14,696	R 324,193
Total	**R 1,568,774**	**R 28,043**	**R 1,033,172**	**R 3,358**	**R 797,166**	**R -6,174**	**R 258,046**	**R 15,027**	**R 17,602**	**R 15,877**	**R 17,304**	**R 181,496**	**R 3,937,003**
2015 January	R 131,465	R 2,786	R 93,496	R 402	74,270	-528	R 24,464	R 1,348	R 1,554	R 1,480	R 1,193	R 15,248	R 347,790
February	R 126,137	R 6,059	R 84,236	R 336	63,462	R -441	R 22,630	R 1,263	R 1,300	R 1,350	R 1,599	R 14,943	R 323,396
March	R 107,486	R 1,651	R 91,835	R 320	64,547	R -399	R 24,724	R 1,238	R 1,388	R 1,461	R 2,190	R 15,317	R 312,299
April	R 87,815	R 1,574	R 86,076	R 261	59,757	-208	R 22,419	R 1,045	R 1,427	R 1,343	R 2,508	R 17,813	R 282,406
May	R 103,827	R 1,800	R 94,400	R 311	65,833	R -363	R 20,070	R 1,177	R 1,487	R 1,461	R 2,541	R 17,151	R 310,304
June	R 125,079	R 1,723	R 113,532	R 302	68,546	R -381	R 19,964	R 1,292	R 1,487	R 1,385	R 2,651	R 13,419	R 349,612
July	R 138,475	R 2,194	R 132,513	R 332	71,412	-507	R 20,949	R 1,472	R 1,593	R 1,441	R 2,690	R 13,634	R 386,857
August	R 134,144	R 2,030	R 130,251	R 351	72,415	-623	R 19,357	R 1,484	R 1,581	R 1,429	R 2,767	R 13,020	R 378,871
September	117,442	1,915	115,296	347	66,466	-526	16,143	1,228	1,406	1,293	2,298	13,847	337,750
9-Month Total	**1,071,871**	**21,732**	**941,635**	**2,961**	**606,709**	**-3,974**	**190,720**	**11,546**	**13,222**	**12,643**	**20,436**	**134,391**	**3,029,284**
2014 9-Month Total	**1,216,774**	**23,177**	**783,642**	**2,359**	**596,272**	**-4,715**	**200,257**	**11,111**	**13,404**	**11,794**	**13,263**	**133,460**	**3,006,226**
2013 9-Month Total	**1,187,220**	**18,735**	**787,421**	**3,195**	**589,564**	**-3,475**	**209,829**	**8,961**	**12,606**	**11,815**	**6,146**	**124,370**	**2,961,898**

[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, waste oil, and, beginning in 2011, propane.

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

[d] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[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.

R=Revised. NA=Not available.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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]
1950 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**4,946**	**NA**	**NA**	**4,946**
1955 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,261**	**NA**	**NA**	**3,261**
1960 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,607**	**NA**	**NA**	**3,607**
1965 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,134**	**NA**	**NA**	**3,134**
1970 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,244**	**NA**	**NA**	**3,244**
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**
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 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 Total	**1,049**	**89**	**5,487**	**2,315**	**10,080**	**14,490**	**1,891**	**81,911**	**8,624**	**1,799**	**26,691**	**917**	**141,875**
2012 Total	**883**	**196**	**6,603**	**2,319**	**11,301**	**12,603**	**2,922**	**86,500**	**8,913**	**2,353**	**26,725**	**948**	**146,107**
2013 January	89	20	562	204	981	1,064	253	7,608	759	324	2,386	105	12,924
February	81	15	512	179	888	983	164	6,801	644	363	2,190	92	11,642
March	78	7	574	212	995	1,086	210	7,387	752	302	2,310	99	12,576
April	63	7	541	204	946	986	210	6,869	698	250	2,086	120	11,580
May	69	8	546	222	981	1,063	255	7,025	721	328	2,254	107	12,147
June	75	7	593	217	1,026	1,048	237	7,351	699	328	2,335	106	12,511
July	76	13	779	229	1,236	1,138	247	8,033	767	320	2,441	118	13,502
August	71	7	697	233	1,147	1,066	245	7,856	767	240	2,430	120	13,195
September	60	6	652	216	1,073	1,004	208	7,218	714	239	2,263	108	12,230
October	49	7	550	217	961	1,005	202	7,165	667	239	2,296	121	12,182
November	60	9	525	211	936	1,022	135	7,395	694	206	2,294	122	12,317
December	68	16	623	223	1,064	1,089	165	8,025	650	322	2,408	127	13,210
Total	**839**	**124**	**7,154**	**2,567**	**12,234**	**12,554**	**2,531**	**88,733**	**8,531**	**3,463**	**27,691**	**1,346**	**150,015**
2014 January	R 76	R 103	R 651	R 243	R 1,218	R 1,105	R 185	R 7,441	R 667	R 120	R 2,343	R 116	R 12,391
February	R 79	R 38	R 533	R 199	R 961	R 998	R 147	R 6,680	R 606	R 104	R 2,105	R 103	R 11,112
March	R 66	R 30	R 529	R 214	R 972	R 1,087	R 159	R 7,105	R 651	R 114	R 2,311	R 123	R 11,937
April	R 47	10	R 509	R 219	R 927	R 955	R 160	R 6,690	R 624	R 127	R 2,188	R 125	R 11,251
May	R 39	R 8	R 557	R 224	R 986	R 1,009	R 165	R 6,918	R 662	R 130	R 2,276	R 105	R 11,667
June	R 42	8	R 605	R 225	R 1,041	R 1,065	R 167	R 6,960	R 711	R 100	R 2,295	R 110	R 11,814
July	R 50	9	R 701	R 248	R 1,173	R 1,105	R 166	R 7,685	R 786	R 89	R 2,426	R 120	R 12,790
August	R 42	R 8	R 722	R 244	R 1,181	R 1,081	R 169	R 7,716	R 820	R 96	R 2,384	R 111	R 12,856
September	R 36	9	R 657	R 231	R 1,086	R 1,013	R 162	R 7,234	R 828	R 86	R 2,171	R 102	R 12,044
October	R 31	R 10	R 601	R 215	R 1,008	R 942	R 140	R 7,028	R 748	R 93	R 2,180	118	R 11,667
November	R 44	10	R 560	R 202	R 960	R 966	R 151	R 7,083	R 772	R 99	R 2,175	R 115	R 11,797
December	R 45	R 11	R 602	R 216	R 1,007	R 1,015	R 163	R 7,670	R 790	R 125	R 2,386	R 119	R 12,757
Total	**R 595**	**R 255**	**7,227**	**R 2,681**	**R 12,520**	**R 12,341**	**R 1,934**	**R 86,209**	**R 8,664**	**R 1,282**	**R 27,239**	**R 1,367**	**R 144,083**
2015 January	R 53	R 27	R 619	R 227	R 1,062	R 991	R 157	R 7,701	R 867	R 130	R 2,446	R 121	R 12,781
February	R 59	R 80	R 533	R 199	R 1,005	R 954	R 187	R 6,606	R 726	R 113	R 2,152	R 104	R 11,162
March	R 51	13	R 616	R 229	R 1,067	R 1,007	R 143	R 6,689	R 724	R 142	R 2,212	R 118	R 11,394
April	R 33	9	R 539	R 212	R 967	R 797	R 135	R 6,365	R 660	R 136	R 2,195	R 102	R 10,785
May	R 35	11	R 655	R 219	R 1,099	R 912	R 131	R 6,867	R 687	R 114	R 2,176	R 104	R 11,412
June	R 42	11	R 652	R 218	R 1,100	R 1,018	R 113	R 7,213	R 794	R 99	R 2,252	R 103	R 12,023
July	44	13	R 719	R 231	R 1,195	R 1,082	R 140	R 7,668	R 956	R 113	R 2,443	R 114	R 12,970
August	R 35	12	R 732	R 220	R 1,183	R 1,108	R 138	R 7,670	R 865	R 79	R 2,356	R 104	R 12,787
September	32	10	675	221	1,112	1,015	135	7,278	870	61	2,240	104	12,123
9-Month Total	**384**	**186**	**5,740**	**1,975**	**9,789**	**8,884**	**1,280**	**64,057**	**7,149**	**987**	**20,472**	**974**	**107,438**
2014 9-Month Total	**475**	**224**	**5,464**	**2,048**	**9,545**	**9,418**	**1,480**	**64,428**	**6,354**	**965**	**20,498**	**1,014**	**107,862**
2013 9-Month Total	**662**	**91**	**5,456**	**1,916**	**9,273**	**9,438**	**2,028**	**66,148**	**6,520**	**2,696**	**20,693**	**976**	**112,307**

[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, waste oil, and, beginning in 2011, propane.

[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, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[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).

R=Revised. NA=Not available.

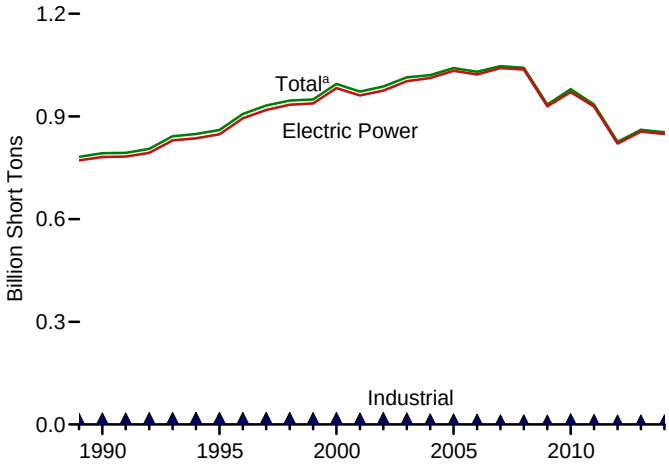
Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

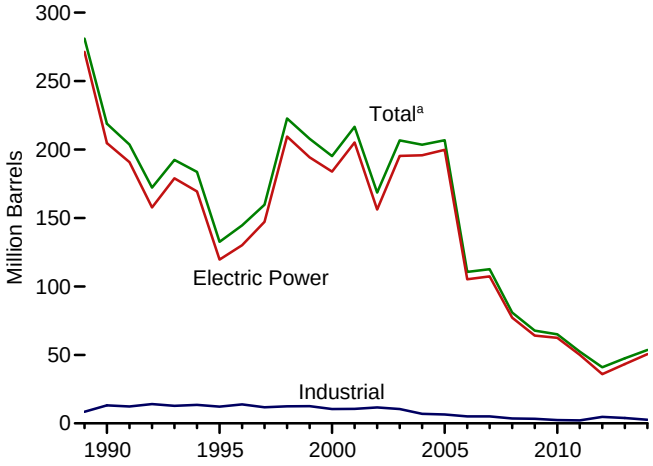
Sources: See end of section.

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation

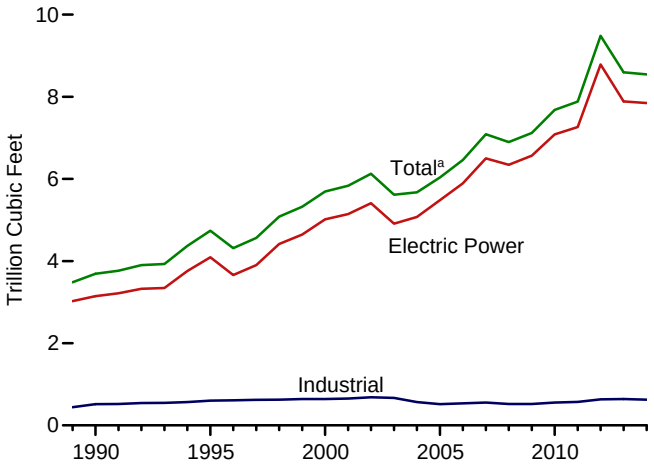
Coal by Sector, 1989–2014



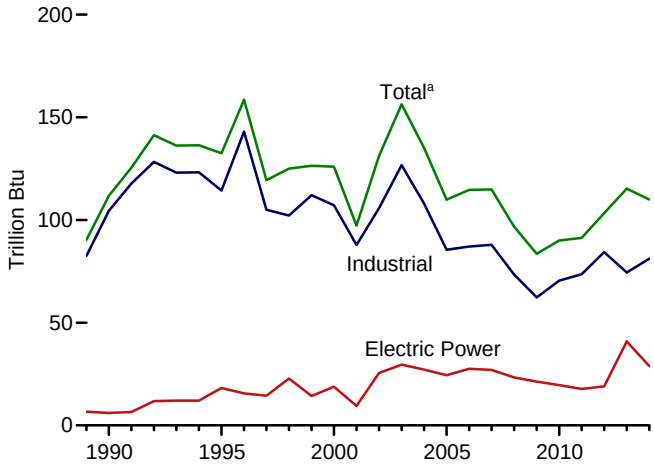
Petroleum by Sector, 1989–2014



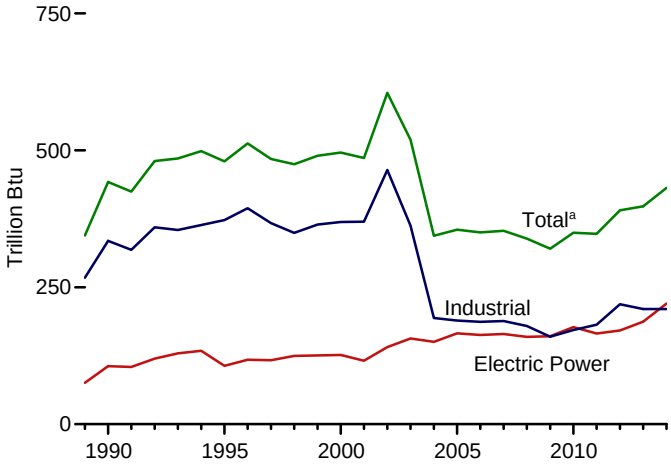
Natural Gas by Sector, 1989–2014



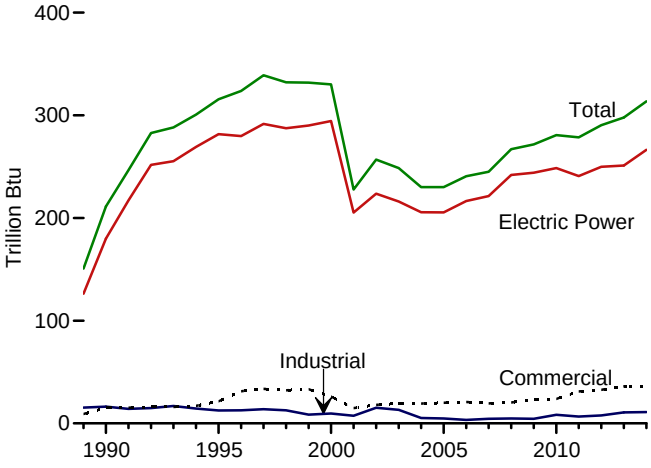
Other Gases[b] by Sector, 1989–2014



Wood by Sector, 1989–2014



Waste by Sector, 1989–2014



[a] Includes commercial sector.
[b] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

Note: Data are for utility-scale facilities.
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			
1950 Total	**91,871**	**5,423**	**69,998**	**NA**	**NA**	**75,421**	**629**	**NA**	**5**	**NA**	**NA**
1955 Total	**143,759**	**5,412**	**69,862**	**NA**	**NA**	**75,274**	**1,153**	**NA**	**3**	**NA**	**NA**
1960 Total	**176,685**	**3,824**	**84,371**	**NA**	**NA**	**88,195**	**1,725**	**NA**	**2**	**NA**	**NA**
1965 Total	**244,788**	**4,928**	**110,274**	**NA**	**NA**	**115,203**	**2,321**	**NA**	**3**	**NA**	**NA**
1970 Total	**320,182**	**24,123**	**311,381**	**NA**	**636**	**338,686**	**3,932**	**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**
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 Total	**979,684**	**14,050**	**23,997**	**2,056**	**4,994**	**65,071**	**7,680**	**90**	**350**	**281**	**184**
2011 Total	**934,938**	**11,231**	**14,251**	**1,844**	**5,012**	**52,387**	**7,884**	**91**	**348**	**279**	**205**
2012 Total	**825,734**	**9,285**	**11,755**	**1,565**	**3,675**	**40,977**	**9,485**	**103**	**390**	**290**	**204**
2013 January	75,049	1,114	1,548	299	385	4,889	667	10	33	24	16
February	67,129	734	1,004	152	314	3,459	599	9	30	21	15
March	70,469	700	840	99	364	3,459	637	10	33	25	17
April	60,807	724	844	117	342	3,397	596	9	28	24	15
May	64,688	852	829	109	469	4,136	646	10	31	26	17
June	75,054	710	889	100	476	4,080	772	10	33	25	17
July	83,213	1,076	1,317	153	474	4,915	949	10	35	26	18
August	81,970	676	968	132	491	4,233	937	10	36	26	18
September	72,723	657	814	120	442	3,803	785	10	33	25	17
October	66,348	661	813	107	404	3,604	670	10	34	25	17
November	65,959	786	751	120	308	3,197	634	10	34	25	16
December	77,319	1,094	1,150	173	381	4,321	705	9	37	27	18
Total	**860,729**	**9,784**	**11,766**	**1,681**	**4,852**	**47,492**	**8,596**	**115**	**398**	**298**	**200**
2014 January	R 83,647	R 4,958	R 4,278	R 954	R 436	R 12,369	R 695	9	37	R 27	R 17
February	R 76,160	R 1,380	R 1,538	R 199	R 361	R 4,924	R 580	R 8	34	R 25	R 15
March	R 72,124	R 1,480	R 1,731	R 264	R 421	R 5,578	R 591	8	37	R 27	R 16
April	R 58,065	R 672	R 801	83	R 303	R 3,070	R 579	8	R 32	R 26	R 16
May	R 64,033	R 840	R 698	R 109	R 393	R 3,614	R 680	9	R 32	R 27	R 17
June	R 74,328	R 690	R 762	R 50	R 418	R 3,591	R 754	9	37	R 27	R 17
July	R 81,495	R 673	R 921	R 102	R 385	R 3,621	R 881	10	R 39	R 28	R 17
August	R 81,074	R 700	R 954	R 97	R 382	R 3,661	R 935	10	38	R 27	R 18
September	R 69,127	R 718	R 805	R 121	R 372	R 3,504	R 806	10	R 36	R 26	R 17
October	R 61,129	R 675	R 753	R 123	R 230	R 2,701	R 736	9	35	25	R 16
November	R 64,651	R 841	R 734	R 106	R 288	R 3,121	R 633	R 10	36	24	R 17
December	R 67,799	R 837	R 730	R 153	R 424	R 3,840	R 674	10	38	25	R 18
Total	**R 853,634**	**R 14,465**	**R 14,704**	**R 2,363**	**R 4,412**	**R 53,593**	**R 8,544**	**R 110**	**R 431**	**R 314**	**R 200**
2015 January	R 71,378	R 1,330	R 1,784	R 243	R 400	R 5,354	R 748	R 11	38	R 27	15
February	R 67,116	R 3,764	R 4,212	R 720	R 419	R 10,793	R 678	9	35	R 23	R 13
March	R 58,375	R 869	R 815	R 146	R 278	R 3,220	R 736	8	R 35	R 25	14
April	R 48,567	647	R 797	R 108	R 301	R 3,055	R 695	8	31	R 24	15
May	R 57,238	R 864	R 746	R 132	343	R 3,455	R 770	8	34	R 25	16
June	R 69,226	R 816	R 850	R 105	R 305	R 3,298	R 926	9	R 36	R 25	16
July	R 76,916	R 803	R 1,128	R 111	421	R 4,147	R 1,085	R 11	39	R 27	17
August	R 74,132	R 749	R 1,004	R 109	397	R 3,847	R 1,063	10	39	R 26	17
September	65,088	680	877	161	381	3,624	935	9	35	24	16
9-Month Total	**588,036**	**10,523**	**12,213**	**1,834**	**3,244**	**40,792**	**7,636**	**82**	**321**	**226**	**139**
2014 9-Month Total	**660,054**	**12,112**	**12,487**	**1,980**	**3,470**	**43,930**	**6,501**	**81**	**322**	**239**	**149**
2013 9-Month Total	**651,102**	**7,243**	**9,053**	**1,281**	**3,759**	**36,371**	**6,588**	**87**	**293**	**222**	**149**

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

[b] Fuel oil nos. 1, 2, and 4. For 1949–1979, 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 1949–1979, 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, waste oil, and, beginning in 2011, propane.

[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, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[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.

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

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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			
1950 Total	**91,871**	**5,423**	**69,998**	**NA**	**NA**	**75,421**	**629**	**NA**	**5**	**NA**	**NA**
1955 Total	**143,759**	**5,412**	**69,862**	**NA**	**NA**	**75,274**	**1,153**	**NA**	**3**	**NA**	**NA**
1960 Total	**176,685**	**3,824**	**84,371**	**NA**	**NA**	**88,195**	**1,725**	**NA**	**2**	**NA**	**NA**
1965 Total	**244,788**	**4,928**	**110,274**	**NA**	**NA**	**115,203**	**2,321**	**NA**	**3**	**NA**	**NA**
1970 Total	**320,182**	**24,123**	**311,381**	**NA**	**636**	**338,686**	**3,932**	**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**
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 Total	**971,245**	**13,677**	**23,560**	**1,848**	**4,679**	**62,477**	**7,085**	**20**	**177**	**249**	**116**
2011 Total	**928,857**	**10,961**	**13,861**	**1,655**	**4,726**	**50,105**	**7,265**	**18**	**166**	**241**	**133**
2012 Total	**820,762**	**9,000**	**11,292**	**1,339**	**2,861**	**35,937**	**8,788**	**19**	**171**	**250**	**132**
2013 January	74,608	1,074	1,489	282	320	4,447	606	3	15	20	10
February	66,722	709	957	138	282	3,213	545	3	14	18	10
March	70,016	682	801	82	303	3,083	579	3	15	21	11
April	60,392	704	812	101	279	3,012	541	3	12	20	10
May	64,250	830	796	87	401	3,719	591	3	14	22	11
June	74,620	692	862	86	410	3,692	713	3	15	21	11
July	82,747	1,051	1,283	138	409	4,516	884	3	17	22	12
August	81,523	658	933	117	425	3,835	873	3	18	22	11
September	72,305	638	788	105	386	3,460	726	4	16	21	11
October	65,944	643	782	92	354	3,285	613	4	16	21	11
November	65,552	764	719	104	277	2,973	576	4	17	21	10
December	76,868	1,064	1,101	156	341	4,028	641	4	18	23	12
Total	**855,546**	**9,511**	**11,322**	**1,488**	**4,189**	**43,265**	**7,888**	**41**	**187**	**251**	**130**
2014 January	R 83,213	R 4,836	R 4,188	R 931	404	R 11,973	R 634	R 2	R 19	R 23	10
February	R 75,772	R 1,325	1,472	R 181	R 331	R 4,636	R 527	R 2	R 17	R 21	9
March	R 71,706	R 1,439	R 1,676	R 246	R 389	R 5,305	R 535	R 2	R 19	R 23	11
April	R 57,692	R 648	R 766	R 70	267	R 2,817	R 526	2	R 16	R 22	10
May	R 63,635	R 819	R 660	R 91	R 363	R 3,383	R 624	R 2	R 15	R 23	11
June	R 73,907	R 672	R 717	R 36	R 385	R 3,350	R 697	R 2	R 19	R 23	11
July	R 81,059	R 653	R 879	R 87	R 352	R 3,380	R 818	3	20	R 24	11
August	R 80,644	R 683	R 920	R 80	R 349	R 3,427	R 872	3	20	R 23	11
September	R 68,726	R 698	R 769	R 103	R 343	R 3,285	R 747	R 2	R 19	R 22	10
October	R 60,759	R 651	R 713	R 106	201	R 2,476	R 679	3	18	21	10
November	R 64,281	R 816	R 686	R 90	R 261	R 2,895	R 576	3	19	21	R 11
December	R 67,410	R 812	R 686	R 137	R 395	R 3,610	R 612	3	20	R 22	11
Total	**R 848,803**	**R 14,052**	**R 14,132**	**R 2,157**	**R 4,039**	**R 50,537**	**R 7,849**	**R 29**	**R 220**	**R 266**	**R 127**
2015 January	R 71,009	R 1,291	R 1,700	R 225	R 369	R 5,062	R 687	R 3	20	R 22	10
February	R 66,753	R 3,664	R 4,043	R 707	R 388	R 10,356	R 626	3	R 18	R 19	9
March	R 57,995	R 838	R 774	R 122	R 255	R 3,008	R 682	R 2	18	R 21	9
April	R 48,277	R 621	R 766	R 91	R 272	R 2,837	R 644	R 2	15	R 21	10
May	R 56,905	R 837	R 709	R 105	R 320	R 3,250	R 714	2	18	R 21	10
June	R 68,839	R 790	R 821	R 83	R 288	R 3,134	R 868	2	19	R 22	10
July	R 76,505	R 769	R 1,096	R 99	R 392	R 3,927	R 1,024	R 3	21	R 24	11
August	R 73,714	R 716	R 981	R 93	370	R 3,639	R 1,001	3	21	R 23	11
September	64,705	657	852	148	355	3,433	876	3	18	21	10
9-Month Total	**584,703**	**10,184**	**11,743**	**1,674**	**3,009**	**38,646**	**7,120**	**23**	**167**	**194**	**92**
2014 9-Month Total	**656,353**	**11,773**	**12,047**	**1,823**	**3,182**	**41,556**	**5,981**	**21**	**164**	**203**	**96**
2013 9-Month Total	**647,182**	**7,040**	**8,721**	**1,137**	**3,216**	**32,978**	**6,058**	**30**	**136**	**187**	**98**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[b] Fuel oil nos. 1, 2, and 4. For 1949–1979, 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 1949–1979, 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, waste oil, and, beginning in 2011, propane.
[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, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
[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.

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

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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			
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**
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 Total	**314**	**172**	**39**	**24**	**8,125**	**2,422**	**555**	**70**	**172**	**8**	**55**
2011 Total	**347**	**137**	**47**	**31**	**5,735**	**2,145**	**572**	**74**	**182**	**7**	**57**
2012 Total	**307**	**279**	**63**	**33**	**4,665**	**4,761**	**633**	**84**	**219**	**8**	**54**
2013 January	55	48	5	3	386	393	55	7	18	1	4
February	50	36	5	3	358	210	49	6	16	1	4
March	49	25	5	3	404	352	53	6	17	1	4
April	40	24	5	3	374	360	50	6	16	1	4
May	40	20	5	3	399	397	50	6	17	1	4
June	38	18	6	3	395	370	53	6	18	1	4
July	38	31	7	3	429	367	58	7	19	1	4
August	38	27	6	3	408	371	58	7	18	1	5
September	38	20	6	3	380	323	52	6	17	1	5
October	37	22	5	3	367	297	52	6	18	1	5
November	42	25	5	3	366	199	53	6	17	1	4
December	47	39	6	3	404	254	58	5	19	1	4
Total	**513**	**335**	**67**	**36**	**4,670**	**3,892**	**642**	**74**	**210**	**11**	**50**
2014 January	R 27	R 113	6	3	R 407	R 283	R 54	6	R 18	1	R 5
February	R 27	R 58	5	3	R 362	R 229	48	R 6	16	1	R 4
March	R 22	R 44	5	3	R 396	R 229	R 51	R 6	R 17	1	R 4
April	R 16	R 32	5	3	R 357	R 220	48	R 6	R 16	1	R 4
May	R 12	R 23	R 6	3	R 385	R 208	R 51	R 7	R 17	1	R 4
June	R 15	R 27	R 6	3	R 406	R 214	R 51	R 7	R 18	1	R 4
July	R 16	R 24	R 7	3	R 420	R 216	R 55	7	R 19	1	R 4
August	R 14	R 24	R 7	3	R 417	R 210	R 56	R 8	18	1	R 5
September	R 12	R 25	6	3	R 389	R 194	R 52	R 8	17	1	R 5
October	R 11	R 29	R 6	3	R 359	R 196	R 51	R 7	R 17	1	R 4
November	R 14	R 29	5	3	R 356	R 197	R 52	R 7	17	1	R 5
December	R 16	R 32	R 6	3	R 373	198	R 55	R 7	R 19	1	R 5
Total	**R 202**	**R 462**	**R 72**	**R 36**	**R 4,629**	**R 2,594**	**R 623**	**R 81**	**R 210**	**R 11**	**R 54**
2015 January	R 17	R 56	R 6	3	R 351	R 236	R 55	R 8	R 18	1	3
February	R 19	R 165	5	3	R 344	R 273	R 47	R 6	16	1	3
March	R 17	R 26	R 6	3	R 363	R 185	R 48	R 6	R 17	1	3
April	R 11	R 18	5	R 2	R 278	R 200	R 45	5	16	1	R 4
May	R 12	R 20	6	R 2	R 321	R 185	R 50	6	R 16	1	4
June	R 14	R 20	R 6	2	R 373	R 144	52	7	R 17	1	4
July	15	R 24	R 7	R 3	R 396	R 195	55	R 8	R 18	1	4
August	R 12	R 23	R 7	R 3	R 406	R 185	R 55	7	18	1	4
September	11	17	6	2	372	173	52	7	17	1	4
9-Month Total	**129**	**370**	**55**	**24**	**3,204**	**1,776**	**461**	**59**	**153**	**7**	**33**
2014 9-Month Total	**161**	**371**	**55**	**27**	**3,540**	**2,003**	**465**	**60**	**157**	**8**	**39**
2013 9-Month Total	**386**	**250**	**51**	**27**	**3,533**	**3,143**	**479**	**57**	**157**	**8**	**37**

[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, waste oil, and, beginning in 2011, propane.

[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, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[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).

R=Revised.

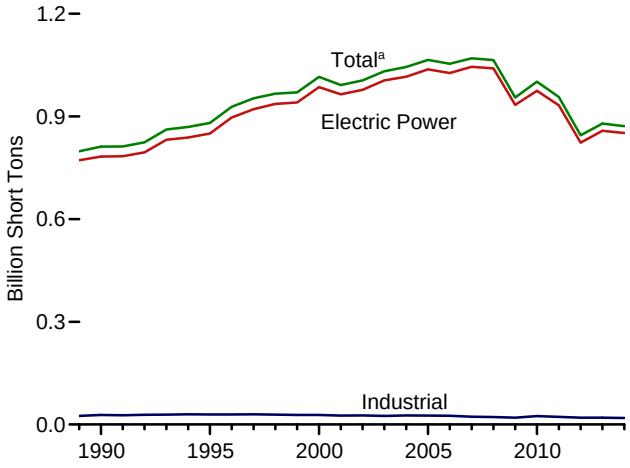
Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Data are for fuels consumed to produce electricity. Through 1988, data are not available. • 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 (Excel and CSV files) for all available annual and monthly data beginning in 1989.

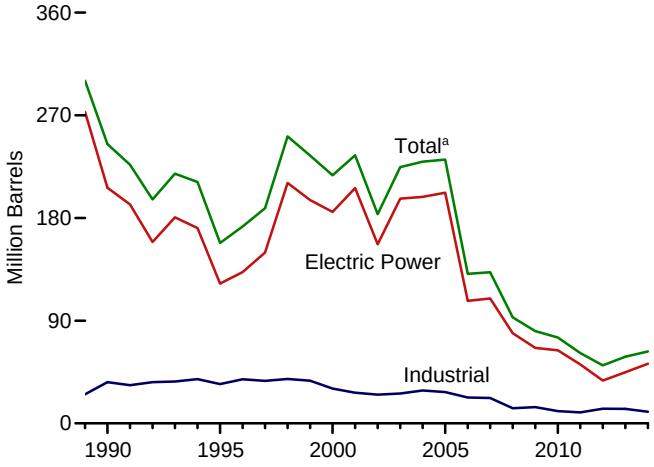
Sources: • **1989–1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998–2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001–2003:** EIA, Form EIA-906, "Power Plant Report." • **2004–2007:** EIA, Form EIA-906,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

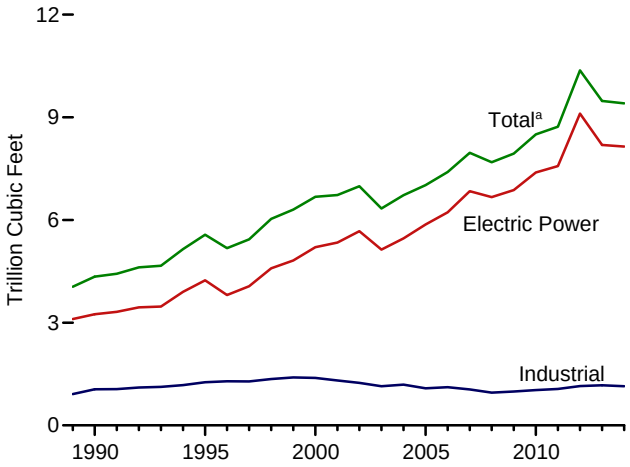
Coal by Sector, 1989–2014



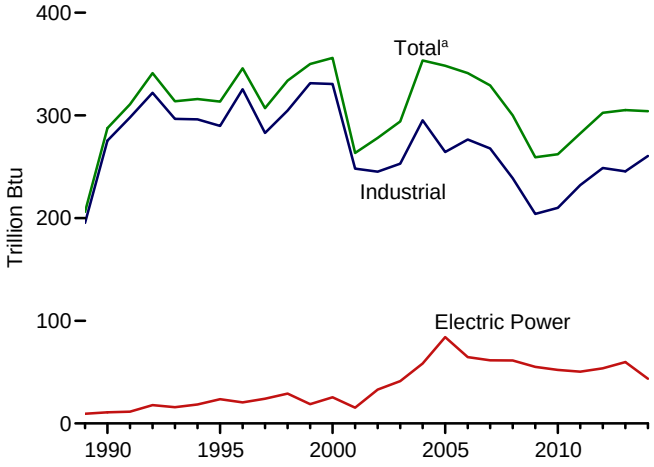
Petroleum by Sector, 1989–2014



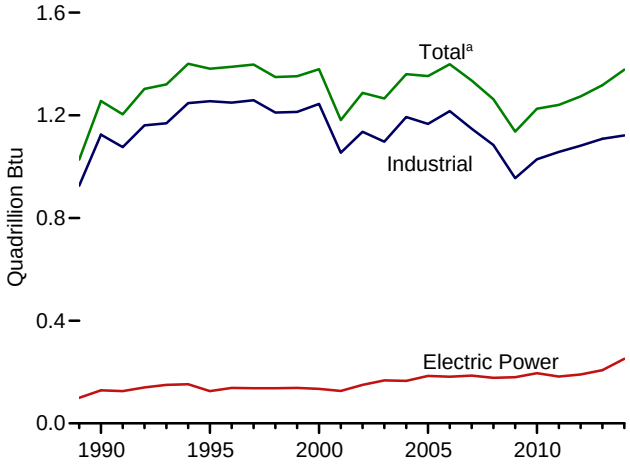
Natural Gas by Sector, 1989–2014



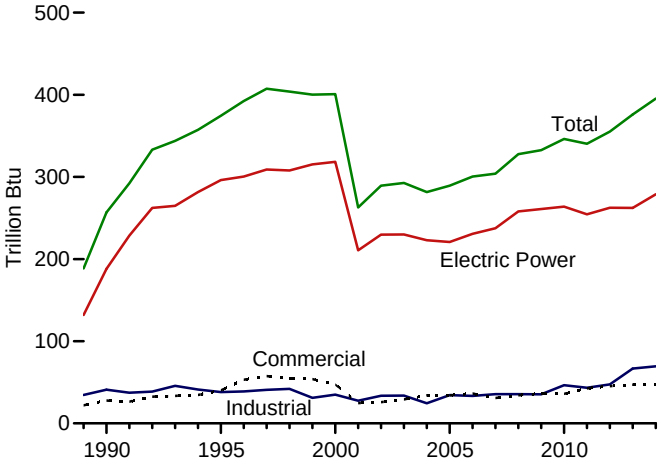
Other Gases[b] by Sector, 1989–2014



Wood by Sector, 1989–2014



Waste by Sector, 1989–2014



[a] Includes commercial sector.
[b] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

Note: Data are for utility-scale facilities.
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			
1950 Total	**91,871**	**5,423**	**69,998**	**NA**	**NA**	**75,421**	**629**	**NA**	**5**	**NA**	**NA**
1955 Total	**143,759**	**5,412**	**69,862**	**NA**	**NA**	**75,274**	**1,153**	**NA**	**3**	**NA**	**NA**
1960 Total	**176,685**	**3,824**	**84,371**	**NA**	**NA**	**88,195**	**1,725**	**NA**	**2**	**NA**	**NA**
1965 Total	**244,788**	**4,928**	**110,274**	**NA**	**NA**	**115,203**	**2,321**	**NA**	**3**	**NA**	**NA**
1970 Total	**320,182**	**24,123**	**311,381**	**NA**	**636**	**338,686**	**3,932**	**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]	**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**
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 Total	**1,001,411**	**15,247**	**26,944**	**2,777**	**6,053**	**75,231**	**8,502**	**262**	**1,226**	**346**	**237**
2011 Total	**956,470**	**11,735**	**16,877**	**2,540**	**6,092**	**61,610**	**8,724**	**282**	**1,241**	**340**	**261**
2012 Total	**845,066**	**9,945**	**13,571**	**2,185**	**5,021**	**50,805**	**10,371**	**302**	**1,273**	**355**	**252**
2013 January	76,748	1,173	1,906	356	522	6,045	741	26	113	31	19
February	68,656	789	1,216	197	416	4,284	666	24	101	28	18
March	72,100	739	989	146	493	4,341	711	26	109	32	20
April	62,249	762	1,000	167	456	4,211	666	25	101	31	18
May	66,168	889	995	153	600	5,036	717	25	106	31	19
June	76,482	750	1,032	147	606	4,961	842	25	109	31	20
July	84,740	1,107	1,467	193	614	5,837	1,028	26	118	32	21
August	83,466	709	1,110	166	653	5,250	1,015	26	116	32	21
September	74,127	690	946	157	558	4,583	858	25	107	30	20
October	67,818	700	964	147	522	4,421	742	25	108	32	20
November	67,559	830	904	157	400	3,893	708	25	111	32	19
December	78,966	1,139	1,671	226	496	5,516	785	28	117	35	21
Total	**879,078**	**10,277**	**14,199**	**2,212**	**6,338**	**58,378**	**9,479**	**305**	**1,318**	**376**	**236**
2014 January	R 85,420	R 5,177	R 4,609	R 1,046	R 541	R 13,536	R 782	25	R 118	R 35	R 20
February	R 77,801	R 1,460	R 1,746	R 247	R 454	R 5,722	R 649	R 23	R 107	R 32	R 17
March	R 73,846	R 1,528	R 1,932	R 316	R 527	R 6,410	R 664	R 25	R 117	R 34	R 19
April	R 59,489	R 710	R 932	R 118	R 418	R 3,852	R 646	R 24	R 109	R 34	R 19
May	R 65,483	R 869	R 835	R 153	R 504	R 4,376	R 748	R 24	R 109	R 33	R 19
June	R 75,741	R 726	R 904	R 81	R 527	R 4,343	822	24	R 116	R 33	R 20
July	R 82,961	R 702	R 1,050	R 138	R 499	R 4,386	R 953	26	R 120	R 35	R 20
August	R 82,526	R 741	R 1,073	R 137	R 494	R 4,422	R 1,010	R 27	R 121	R 33	R 21
September	R 70,482	R 752	R 908	R 158	R 485	R 4,243	R 876	26	R 112	R 31	R 20
October	R 62,488	R 701	R 893	R 165	R 316	R 3,339	R 808	R 26	114	R 32	R 19
November	R 66,131	R 870	R 878	R 152	R 393	R 3,863	704	R 27	R 115	R 32	R 20
December	R 69,372	R 871	R 853	R 196	R 538	R 4,612	R 749	R 27	121	R 33	R 21
Total	**R 871,741**	**R 15,107**	**R 16,615**	**R 2,908**	**R 5,695**	**R 63,106**	**R 9,410**	**R 304**	**R 1,378**	**R 395**	**R 236**
2015 January	R 73,010	R 1,404	R 1,965	R 316	R 540	R 6,383	R 828	R 27	R 122	R 34	18
February	R 68,538	R 3,939	R 4,526	R 780	R 555	R 12,018	R 751	R 23	R 109	R 29	R 15
March	R 59,885	R 911	R 960	R 200	R 425	R 4,198	R 818	R 23	R 110	R 32	17
April	R 49,916	R 682	R 921	R 155	R 420	R 3,859	R 768	22	R 108	R 31	17
May	58,627	R 897	R 874	R 185	R 444	R 4,175	R 844	R 23	R 111	R 32	18
June	R 70,569	R 855	R 984	R 147	R 422	R 4,094	R 1,000	R 24	R 112	R 31	18
July	R 78,376	R 850	R 1,270	R 141	R 525	R 4,885	R 1,163	R 25	R 118	R 35	R 20
August	R 75,553	R 785	R 1,133	R 144	R 501	R 4,570	R 1,143	R 25	R 116	R 33	19
September	66,457	711	1,045	202	488	4,400	1,010	22	109	31	18
9-Month Total	**600,930**	**11,035**	**13,678**	**2,271**	**4,320**	**48,582**	**8,325**	**213**	**1,015**	**288**	**160**
2014 9-Month Total	**673,750**	**12,665**	**13,991**	**2,395**	**4,448**	**51,292**	**7,149**	**225**	**1,028**	**298**	**176**
2013 9-Month Total	**664,735**	**7,608**	**10,660**	**1,682**	**4,920**	**44,549**	**7,244**	**228**	**981**	**277**	**177**

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

[b] Fuel oil nos. 1, 2, and 4. For 1949–1979, 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 1949–1979, 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, waste oil, and, beginning in 2011, propane.

[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, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[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.

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

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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			
1950 Total	**91,871**	**5,423**	**69,998**	**NA**	**NA**	**75,421**	**629**	**NA**	**5**	**NA**	**NA**
1955 Total	**143,759**	**5,412**	**69,862**	**NA**	**NA**	**75,274**	**1,153**	**NA**	**3**	**NA**	**NA**
1960 Total	**176,685**	**3,824**	**84,371**	**NA**	**NA**	**88,195**	**1,725**	**NA**	**2**	**NA**	**NA**
1965 Total	**244,788**	**4,928**	**110,274**	**NA**	**NA**	**115,203**	**2,321**	**NA**	**3**	**NA**	**NA**
1970 Total	**320,182**	**24,123**	**311,381**	**NA**	**636**	**338,686**	**3,932**	**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**
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 Total	**975,052**	**13,790**	**24,503**	**1,877**	**4,777**	**64,055**	**7,387**	**52**	**196**	**264**	**124**
2011 Total	**932,484**	**11,021**	**14,803**	**1,658**	**4,837**	**51,667**	**7,574**	**50**	**182**	**255**	**143**
2012 Total	**823,551**	**9,080**	**12,203**	**1,339**	**2,974**	**37,495**	**9,111**	**54**	**190**	**262**	**143**
2013 January	74,832	1,087	1,540	282	329	4,554	632	5	17	22	11
February	66,919	722	1,022	138	289	3,328	568	4	15	19	10
March	70,219	690	883	82	312	3,216	604	4	17	23	12
April	60,584	711	895	101	288	3,147	565	5	14	21	11
May	64,444	836	882	87	409	3,849	615	5	15	22	12
June	74,817	698	942	86	416	3,804	737	5	17	22	12
July	82,966	1,056	1,367	138	418	4,649	911	5	18	22	13
August	81,737	663	1,018	117	434	3,966	901	5	20	23	12
September	72,501	644	876	105	392	3,587	751	5	18	21	11
October	66,107	652	872	92	362	3,427	637	5	18	22	11
November	65,763	770	800	104	285	3,101	601	5	19	22	11
December	77,071	1,070	1,187	156	350	4,166	669	5	20	24	12
Total	**857,962**	**9,598**	**12,283**	**1,489**	**4,285**	**44,794**	**8,191**	**60**	**207**	**262**	**139**
2014 January	R 83,498	R 4,938	R 4,284	R 967	R 412	R 12,250	663	R 4	R 21	R 24	11
February	R 76,036	R 1,338	R 1,552	R 181	339	R 4,766	R 551	R 3	20	R 22	10
March	R 72,000	R 1,446	R 1,770	R 253	R 397	R 5,456	R 561	R 3	22	R 24	12
April	R 57,936	R 653	R 845	R 70	276	R 2,948	R 549	R 3	R 18	R 23	11
May	R 63,863	R 823	R 744	R 92	R 371	R 3,513	R 647	R 4	R 17	R 24	12
June	R 74,123	R 679	R 801	R 36	R 385	R 3,442	R 721	R 3	22	R 24	12
July	R 81,287	R 656	R 970	R 87	R 357	R 3,497	R 843	R 4	R 23	R 25	12
August	R 80,863	R 703	R 1,009	R 80	R 358	R 3,581	R 898	R 4	R 23	R 24	12
September	R 68,916	R 701	R 829	R 103	R 352	R 3,392	R 771	R 4	R 21	R 22	11
October	R 60,947	R 652	R 804	R 106	R 211	R 2,615	R 703	R 4	20	22	11
November	R 64,495	R 820	R 772	R 90	R 271	R 3,036	R 600	R 4	R 22	22	11
December	R 67,638	R 825	R 752	R 141	R 404	R 3,740	R 639	R 4	22	R 23	R 12
Total	**R 851,602**	**R 14,235**	**R 15,132**	**R 2,208**	**R 4,132**	**R 52,235**	**R 8,146**	**R 44**	**R 251**	**R 279**	**R 137**
2015 January	R 71,242	R 1,320	R 1,770	R 244	R 379	R 5,231	R 714	R 5	22	R 24	11
February	R 66,959	R 3,765	R 4,172	R 726	R 398	R 10,651	R 651	R 4	21	R 21	10
March	R 58,214	R 845	R 853	R 126	264	R 3,147	R 709	R 4	20	R 22	10
April	R 48,462	R 628	R 842	R 91	R 282	R 2,969	669	R 3	17	R 22	10
May	R 57,124	R 845	R 786	R 107	330	R 3,389	R 739	3	19	R 22	11
June	R 69,072	R 797	R 898	R 83	299	R 3,270	R 892	R 4	R 21	R 22	11
July	R 76,747	R 777	R 1,186	R 100	402	R 4,073	R 1,051	R 4	23	R 25	12
August	R 73,930	R 723	R 1,067	R 94	379	R 3,777	R 1,029	4	R 24	R 24	12
September	64,922	664	940	149	364	3,571	902	4	20	21	11
9-Month Total	**586,672**	**10,364**	**12,515**	**1,719**	**3,096**	**40,078**	**7,357**	**33**	**188**	**203**	**99**
2014 9-Month Total	**658,521**	**11,937**	**12,805**	**1,870**	**3,246**	**42,845**	**6,203**	**31**	**187**	**212**	**102**
2013 9-Month Total	**649,020**	**7,106**	**9,425**	**1,137**	**3,286**	**34,100**	**6,284**	**44**	**152**	**195**	**104**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[b] Fuel oil nos. 1, 2, and 4. For 1949–1979, 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 1949–1979, 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, waste oil, and, beginning in 2011, propane.
[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, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
[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.

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

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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			
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**
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 Total	**1,720**	**437**	**86**	**36**	**24,638**	**10,740**	**1,029**	**210**	**1,029**	**47**	**91**
2011 Total	**1,668**	**333**	**87**	**43**	**22,319**	**9,610**	**1,063**	**232**	**1,057**	**43**	**94**
2012 Total	**1,450**	**457**	**111**	**45**	**20,065**	**12,853**	**1,149**	**249**	**1,082**	**47**	**81**
2013 January	149	270	10	4	1,767	1,222	100	21	96	5	6
February	137	98	9	3	1,600	858	89	19	86	5	5
March	132	35	9	4	1,748	1,091	97	22	92	5	6
April	100	28	9	4	1,565	1,036	92	20	88	6	5
May	105	27	9	4	1,618	1,159	93	20	91	5	5
June	102	24	10	4	1,563	1,133	96	20	92	5	5
July	100	44	12	4	1,674	1,143	105	21	100	5	6
August	102	39	11	4	1,626	1,245	104	21	96	5	6
September	96	29	10	4	1,530	967	96	20	88	5	6
October	91	37	9	4	1,620	956	96	19	91	6	6
November	112	42	9	4	1,683	750	98	19	92	7	6
December	130	213	11	4	1,765	1,137	105	23	97	7	6
Total	**1,356**	**887**	**118**	**47**	**19,761**	**12,697**	**1,170**	**246**	**1,109**	**67**	**69**
2014 January	R 132	R 237	R 14	4	R 1,791	R 1,049	R 106	R 21	R 96	R 6	R 6
February	R 131	R 109	9	3	R 1,633	R 848	89	R 20	R 87	R 6	R 5
March	R 118	R 79	9	4	R 1,729	R 875	R 94	R 22	R 94	R 6	R 5
April	R 82	R 44	R 8	4	R 1,472	R 861	89	R 20	90	R 7	R 6
May	R 72	R 31	R 9	4	R 1,549	R 832	R 92	R 21	R 92	5	R 6
June	R 78	R 30	R 10	4	R 1,540	R 871	R 91	R 21	R 94	5	R 6
July	R 85	R 29	R 11	4	R 1,589	R 861	R 99	R 22	R 97	6	R 6
August	R 72	R 37	R 11	4	R 1,591	R 804	R 101	R 23	R 98	5	R 7
September	R 64	R 36	R 10	4	R 1,502	R 815	R 95	R 23	R 91	R 4	R 6
October	R 58	R 38	R 10	4	R 1,482	R 686	R 95	R 22	R 93	R 6	R 6
November	R 82	R 42	9	4	R 1,554	R 784	94	R 23	93	R 6	R 6
December	R 90	R 45	10	4	R 1,644	R 827	R 100	R 23	R 98	6	R 7
Total	**R 1,063**	**R 758**	**R 119**	**R 47**	**R 19,076**	**R 10,112**	**R 1,145**	**R 260**	**R 1,122**	**R 70**	**R 72**
2015 January	R 96	R 93	R 11	4	R 1,672	R 1,059	R 103	R 22	R 99	R 6	4
February	R 91	R 236	R 10	4	R 1,488	R 1,131	R 91	R 19	R 88	4	4
March	R 88	R 47	R 11	4	R 1,583	R 1,004	R 98	R 19	R 90	R 6	4
April	R 64	R 32	9	R 3	R 1,391	R 857	R 91	R 19	R 90	R 6	R 5
May	R 62	R 31	10	R 3	R 1,441	R 755	R 95	19	R 92	R 6	5
June	64	R 30	R 10	3	R 1,433	R 794	R 97	R 20	90	R 6	5
July	68	R 36	R 11	4	R 1,561	R 776	R 101	21	R 94	R 6	5
August	R 63	R 41	11	3	R 1,560	R 751	R 103	21	R 92	R 6	5
September	58	36	11	3	1,477	792	96	18	89	6	5
9-Month Total	**653**	**584**	**95**	**33**	**13,605**	**7,920**	**874**	**180**	**824**	**52**	**41**
2014 9-Month Total	**833**	**632**	**90**	**36**	**14,396**	**7,815**	**856**	**193**	**838**	**51**	**53**
2013 9-Month Total	**1,024**	**595**	**89**	**35**	**14,692**	**9,854**	**872**	**184**	**828**	**47**	**51**

[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, waste oil, and, beginning in 2011, propane.
[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, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
[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).

R=Revised.

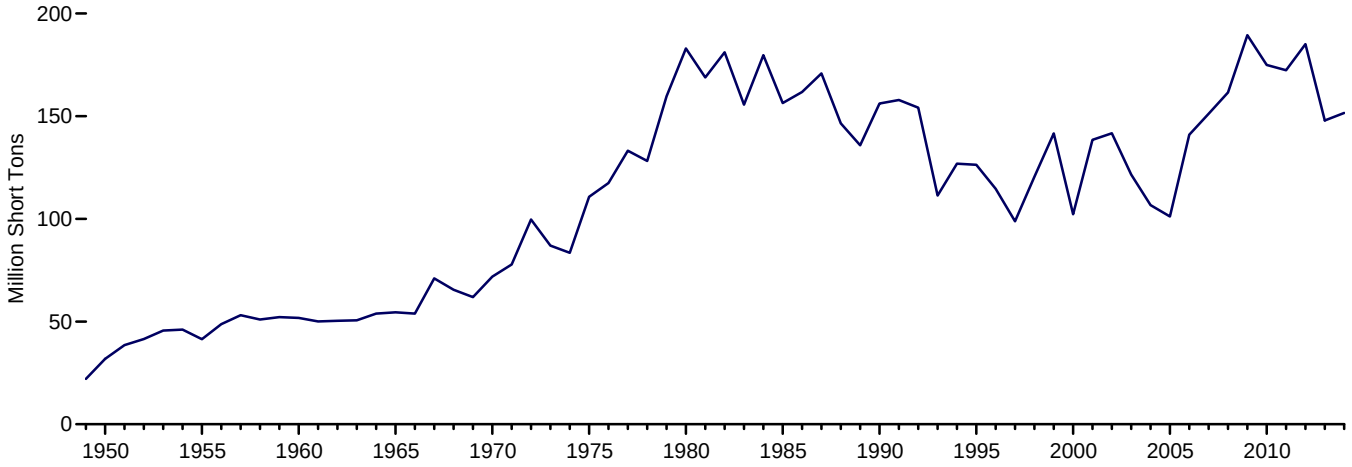
Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual and monthly data beginning in 1989.

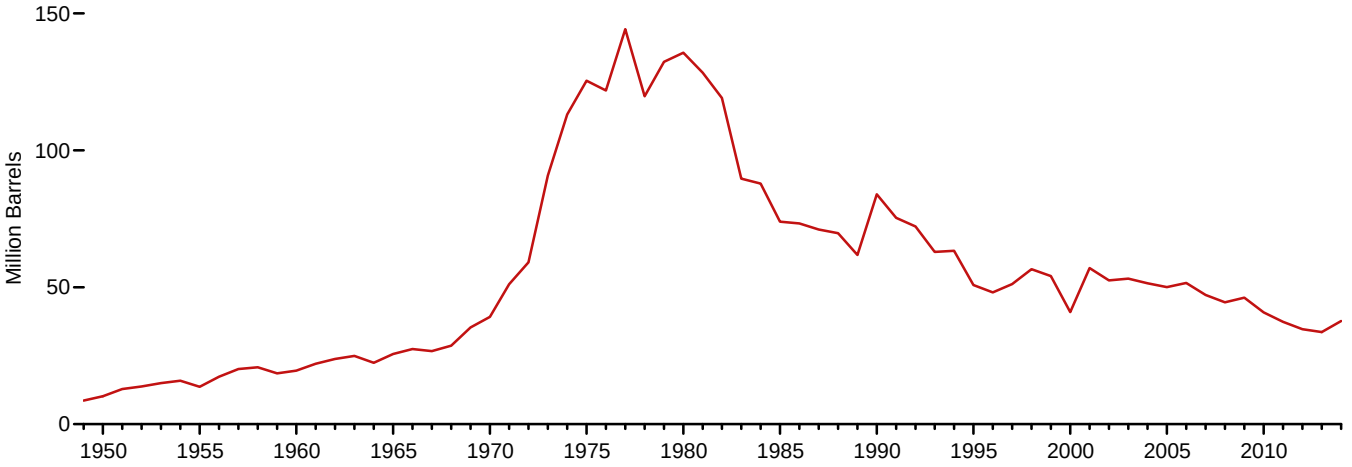
Sources: • **1989–1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998–2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001–2003:** EIA, Form EIA-906, "Power Plant Report." • **2004–2007:** EIA, Form EIA-906,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

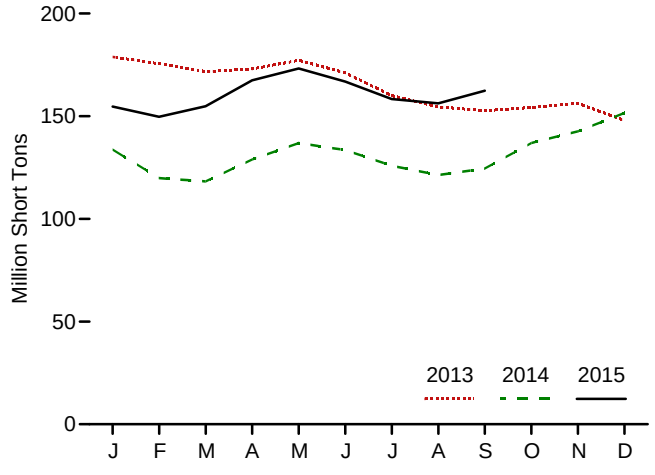
Coal, 1949–2014



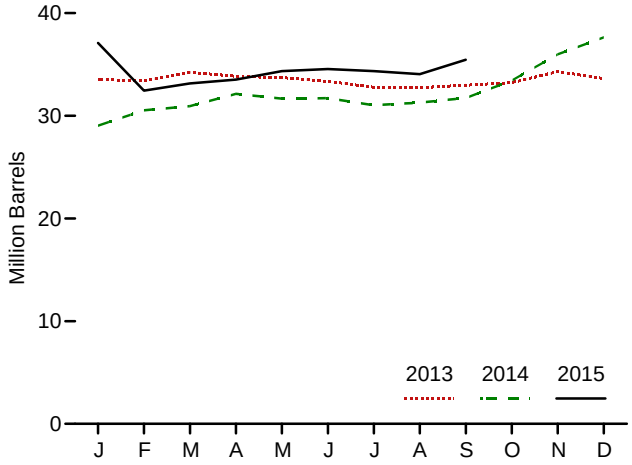
Total Petroleum, 1949–2014



Coal, Monthly



Total Petroleum, Monthly



Note: Data are for utility-scale facilities.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Source: Table 7.5.

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,f]
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels
1950 Year	**31,842**	**NA**	**NA**	**NA**	**NA**	**10,201**
1955 Year	**41,391**	**NA**	**NA**	**NA**	**NA**	**13,671**
1960 Year	**51,735**	**NA**	**NA**	**NA**	**NA**	**19,572**
1965 Year	**54,525**	**NA**	**NA**	**NA**	**NA**	**25,647**
1970 Year	**71,908**	**NA**	**NA**	**NA**	**239**	**39,151**
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**
2000 Year[g]	**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 Year	**174,917**	**16,758**	**16,629**	**2,319**	**1,019**	**40,800**
2011 Year	**172,387**	**16,649**	**15,491**	**2,707**	**508**	**37,387**
2012 Year	**185,116**	**16,433**	**12,999**	**2,792**	**495**	**34,698**
2013 January	178,859	16,431	12,219	2,664	442	33,525
February	175,565	16,517	12,024	2,664	442	33,417
March	171,736	16,508	12,983	2,707	407	34,234
April	173,014	16,322	12,531	2,715	456	33,847
May	177,174	16,271	12,476	2,747	443	33,711
June	171,124	16,345	12,198	2,770	408	33,350
July	160,019	16,260	11,760	2,784	394	32,774
August	154,567	16,350	12,275	2,810	260	32,735
September	152,694	16,301	12,349	2,778	309	32,973
October	154,194	16,497	12,514	2,759	291	33,226
November	156,249	16,787	13,046	2,787	338	34,310
December	**147,884**	**16,068**	**12,926**	**2,679**	**390**	**33,622**
2014 January	R 133,705	R 15,058	R 10,057	R 2,439	298	R 29,044
February	R 119,904	R 16,003	R 10,677	R 2,479	R 277	R 30,541
March	R 118,260	R 16,148	R 10,606	R 2,443	R 350	R 30,946
April	R 128,925	R 16,483	R 10,608	R 2,477	R 515	R 32,143
May	R 136,921	R 16,285	R 10,581	R 2,511	R 458	R 31,665
June	R 133,479	R 16,583	R 10,659	R 2,495	R 397	R 31,724
July	R 125,870	R 16,490	R 10,250	R 2,380	381	R 31,025
August	R 121,369	R 16,510	R 10,460	R 2,375	388	R 31,286
September	R 124,546	R 16,863	R 10,532	R 2,394	389	R 31,734
October	R 136,964	R 17,429	R 10,891	R 2,564	510	R 33,433
November	R 142,595	R 18,166	R 11,978	R 2,685	R 633	R 35,994
December	R **151,548**	R **18,309**	R **12,764**	R **2,432**	R **827**	R **37,643**
2015 January	R 154,691	R 18,037	R 12,142	R 2,458	R 892	R 37,096
February	R 149,671	R 16,237	R 9,780	R 2,181	R 850	R 32,450
March	R 154,841	R 16,637	R 10,167	R 2,261	818	R 33,155
April	R 167,490	R 16,693	R 10,045	R 2,231	912	R 33,529
May	R 173,214	R 16,703	R 10,417	R 2,232	999	R 34,348
June	R 166,810	R 16,666	R 10,463	R 2,267	1,031	R 34,553
July	R 158,330	R 16,620	R 10,157	R 2,245	1,065	R 34,345
August	R 156,277	R 16,701	R 9,968	R 2,246	1,029	R 34,058
September	162,373	17,116	10,617	2,224	1,102	35,465

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

[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] Distillate fuel oil and residual fuel oil. Beginning in 1970, also includes petroleum coke. Beginning in 2002, also includes other liquids.

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

R=Revised. NA=Not available.

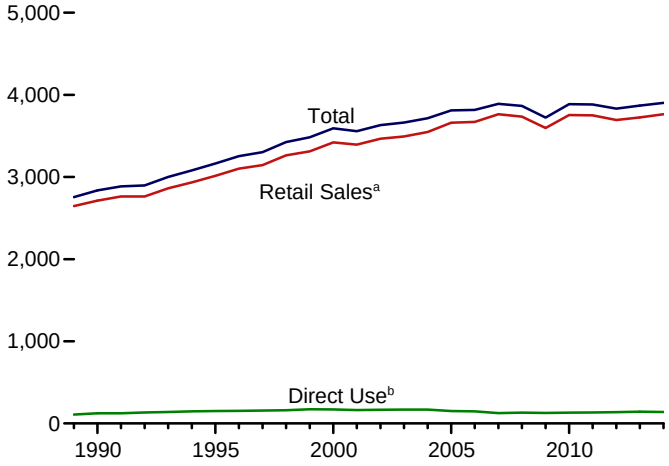
Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

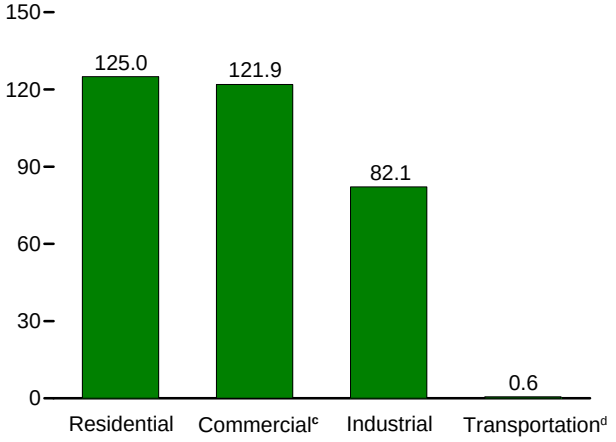
Sources: • **1949–September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977–1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982–1988:** U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power 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)

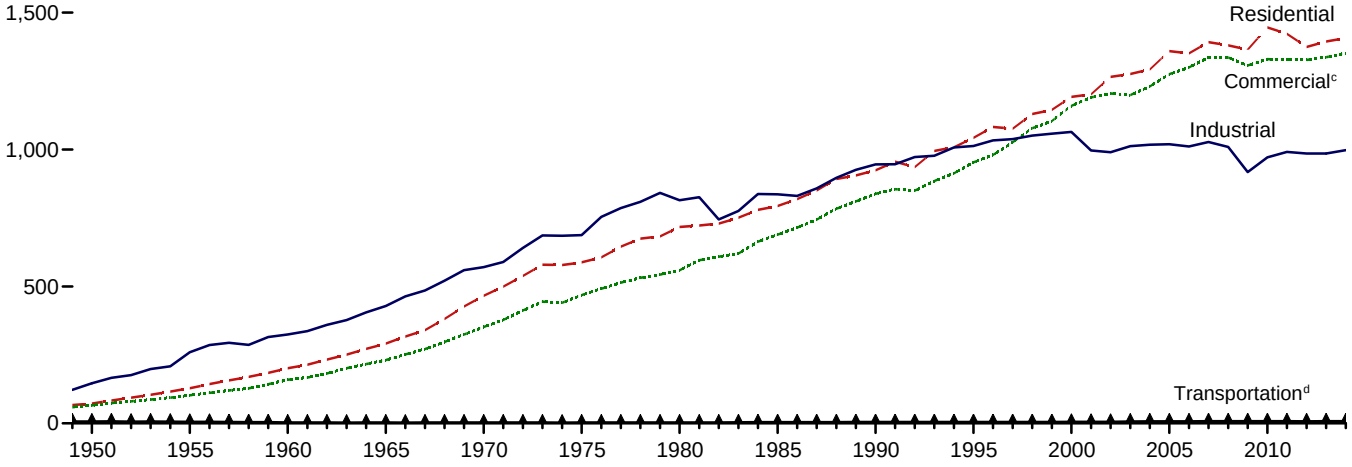
Electricity End Use Overview, 1989–2014



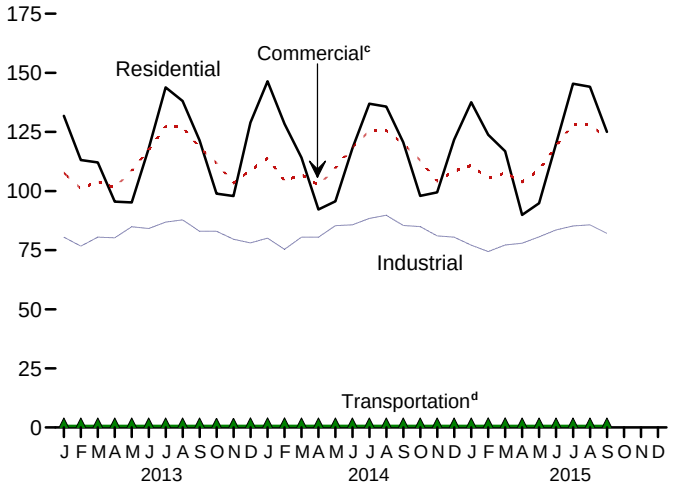
Retail Sales[a] by Sector, September 2015



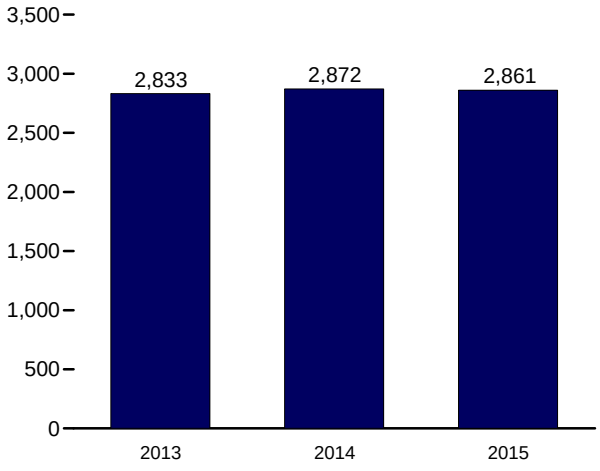
Retail Sales[a] by Sector, 1949–2014



Retail Sales[a] by Sector, Monthly



Retail Sales[a] Total, January–September



[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]							*Discontinued Retail Sales Series*	
	Residential	Commercial[b]	Industrial[c]	Transportation[d]	Total Retail Sales[e]	Direct Use[f]	Total End Use[g]	*Commercial (Old)* [h]	*Other (Old)* [i]
1950 Total	**72,200**	E **65,971**	**146,479**	E **6,793**	**291,443**	**NA**	**291,443**	***50,637***	***22,127***
1955 Total	**128,401**	E **102,547**	**259,974**	E **5,826**	**496,748**	**NA**	**496,748**	***79,389***	***28,984***
1960 Total	**201,463**	E **159,144**	**324,402**	E **3,066**	**688,075**	**NA**	**688,075**	***130,702***	***31,508***
1965 Total	**291,013**	E **231,126**	**428,727**	E **2,923**	**953,789**	**NA**	**953,789**	***200,470***	***33,580***
1970 Total	**466,291**	E **352,041**	**570,854**	E **3,115**	**1,392,300**	**NA**	**1,392,300**	***306,703***	***48,452***
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***
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	**1,380,662**	**1,336,133**	**1,009,516**	**7,653**	**3,733,965**	**132,197**	**3,866,161**	– –	– –
2009 Total	**1,364,758**	**1,306,853**	**917,416**	**7,768**	**3,596,795**	**126,938**	**3,723,733**	– –	– –
2010 Total	**1,445,708**	**1,330,199**	**971,221**	**7,712**	**3,754,841**	**131,910**	**3,886,752**	– –	– –
2011 Total	**1,422,801**	**1,328,057**	**991,316**	**7,672**	**3,749,846**	**132,754**	**3,882,600**	– –	– –
2012 Total	**1,374,515**	**1,327,101**	**985,714**	**7,320**	**3,694,650**	**137,657**	**3,832,306**	– –	– –
2013 January	131,785	107,729	80,505	664	320,683	E 12,296	332,978	– –	– –
February	113,114	101,016	76,692	659	291,480	E 11,079	302,559	– –	– –
March	112,097	104,011	80,474	644	297,226	E 12,000	309,226	– –	– –
April	95,541	101,395	80,216	630	277,782	E 11,076	288,858	– –	– –
May	95,192	108,683	84,897	627	289,398	E 11,608	301,006	– –	– –
June	117,982	117,410	84,170	638	320,201	E 11,969	332,170	– –	– –
July	143,855	127,311	86,887	649	358,701	E 13,031	371,732	– –	– –
August	138,065	127,063	87,806	645	353,580	E 12,682	366,262	– –	– –
September	121,419	118,408	83,025	626	323,478	E 11,762	335,240	– –	– –
October	98,893	111,907	82,980	591	294,370	E 11,621	305,992	– –	– –
November	97,904	103,384	79,632	574	281,494	E 11,718	293,212	– –	– –
December	128,966	108,762	78,067	679	316,475	E 12,621	329,095	– –	– –
Total	**1,394,812**	**1,337,079**	**985,352**	**7,625**	**3,724,868**	**143,462**	**3,868,330**	– –	– –
2014 January	R 146,422	R 113,833	R 80,118	R 712	R 341,085	RE 12,033	R 353,119	– –	– –
February	R 128,396	R 104,321	R 75,384	700	R 308,801	RE 10,675	R 319,476	– –	– –
March	R 114,163	R 106,936	R 80,509	R 648	R 302,256	RE 11,414	R 313,670	– –	– –
April	R 92,224	R 102,428	R 80,475	R 640	R 275,767	RE 10,767	R 286,534	– –	– –
May	R 95,656	R 109,632	R 85,351	R 646	R 291,285	RE 11,188	R 302,473	– –	– –
June	R 117,958	R 118,387	R 85,680	R 609	R 322,634	RE 11,367	R 334,001	– –	– –
July	R 136,920	R 125,396	R 88,384	R 645	R 351,345	RE 12,346	R 363,691	– –	– –
August	R 135,724	R 125,565	R 89,775	R 642	R 351,705	RE 12,412	R 364,117	– –	– –
September	R 120,644	R 120,012	R 85,458	R 628	R 326,741	RE 11,610	R 338,351	– –	– –
October	R 97,959	R 112,988	R 84,962	R 625	R 296,535	RE 11,208	R 307,742	– –	– –
November	R 99,418	R 104,213	R 81,014	637	R 285,282	RE 11,280	R 296,562	– –	– –
December	R 121,724	R 108,446	R 80,467	626	R 311,264	RE 12,170	R 323,434	– –	– –
Total	R **1,407,208**	R **1,352,158**	R **997,576**	R **7,758**	R **3,764,700**	RE **138,470**	R **3,903,170**	– –	– –
2015 January	R 137,528	R 110,807	R 77,086	R 670	R 326,091	RE 12,240	R 338,331	– –	– –
February	R 123,774	R 105,391	R 74,395	R 702	R 304,262	RE 10,758	R 315,020	– –	– –
March	R 116,862	R 107,645	R 77,204	R 682	R 302,392	RE 11,018	R 313,411	– –	– –
April	R 89,923	R 103,857	R 77,891	623	R 272,294	RE 10,391	R 282,685	– –	– –
May	R 94,860	R 109,012	R 80,603	611	R 285,086	RE 11,062	R 296,148	– –	– –
June	R 119,922	R 118,956	R 83,565	R 612	R 323,054	RE 11,604	R 334,658	– –	– –
July	R 145,413	R 128,289	R 85,205	R 650	R 359,557	RE 12,525	R 372,082	– –	– –
August	R 144,085	R 128,233	R 85,704	R 627	R 358,649	RE 12,352	R 371,001	– –	– –
September	124,992	121,934	82,141	617	329,684	E 11,703	341,387	– –	– –
9-Month Total	**1,097,359**	**1,034,122**	**723,793**	**5,794**	**2,861,068**	E **103,654**	**2,964,722**	– –	– –
2014 9-Month Total	**1,088,107**	**1,026,511**	**751,133**	**5,869**	**2,871,620**	E **103,812**	**2,975,432**	– –	– –
2013 9-Month Total	**1,069,049**	**1,013,025**	**744,673**	**5,781**	**2,832,529**	E **107,502**	**2,940,031**	– –	– –

[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.

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

Notes: • See Note 1, "Coverage of Electricity Statistics," 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Electricity

Note 1. Coverage of Electricity Statistics. Through 1984, data for electric utilities also include institutions (such as universities) and military facilities that generated electricity primarily for their own use; beginning in 1985, data for electric utilities exclude institutions and military facilities. Data for independent power producers, commercial plants, and industrial plants include plants with a generator nameplate capacity of one megawatt or greater; they exclude plants with a generator nameplate capacity less than one megawatt. Also excluded from the electricity statistics in Section 7 are data for residential and commercial self-generation from solar energy, except for the small amount sold to the grid and included in data for the electric power sector.

Note 2. 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.pdf.

Table 7.1 Sources

Net Generation, Electric Power Sector
1949 forward: Table 7.2b.

Net Generation, Commercial and Industrial Sectors
1949 forward: Table 7.2c.

Trade
1949–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."
1990–2000: National Energy Board of Canada; and DOE, Office of Electricity Delivery and Energy Reliability, Form FE-781R, "Annual Report of International Electrical Export/Import Data."
2001–May 2011: National Energy Board of Canada; DOE, Office of Electricity Delivery and Energy Reliability, Form OE-781R, "Monthly Electricity Imports and Exports Report," and predecessor form; and California Independent System Operator.
June 2011 forward: National Energy Board of Canada; California Independent System Operator; and EIA estimates for Texas transfers.

T&D Losses and Unaccounted for
1949 forward: Calculated as the sum of total net generation and imports minus end use and exports.

End Use
1949 forward: Table 7.6.

Table 7.2b Sources

1949–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, 1949–1988
1949–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

1949–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

1949–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

1949–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."
1984–2003: EIA, Form EIA-861, "Annual Electric Utility Report."
2004 forward: EIA, *Electric Power Monthly* (*EPM*), November 2015, Table 5.1.

Retail Sales, Commercial

1949–2002: 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/state/seds/sep_use/notes/use_elec.pdf.
2003: EIA, Form EIA-861, "Annual Electric Utility Report."
2004 forward: EIA, EPM, November 2015, Table 5.1.

Retail Sales, Transportation

1949–2002: Estimated by EIA as the transportation portion of "Other (Old)." See estimation methodology at http://www.eia.gov/state/seds/sep_use/notes/use_elec.pdf.
2003: EIA, Form EIA-861, "Annual Electric Utility Report."
2004 forward: EIA, EPM, November 2015, Table 5.1.

Direct Use, Annual

1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."
2001–2013: EIA, *Electric Power Annual 2013*, March 2015, Table 2.2.
2014: Sum of monthly estimates.

Direct Use, Monthly

1989 forward: 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 2014 and 2015, the 2013 annual share is used.

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

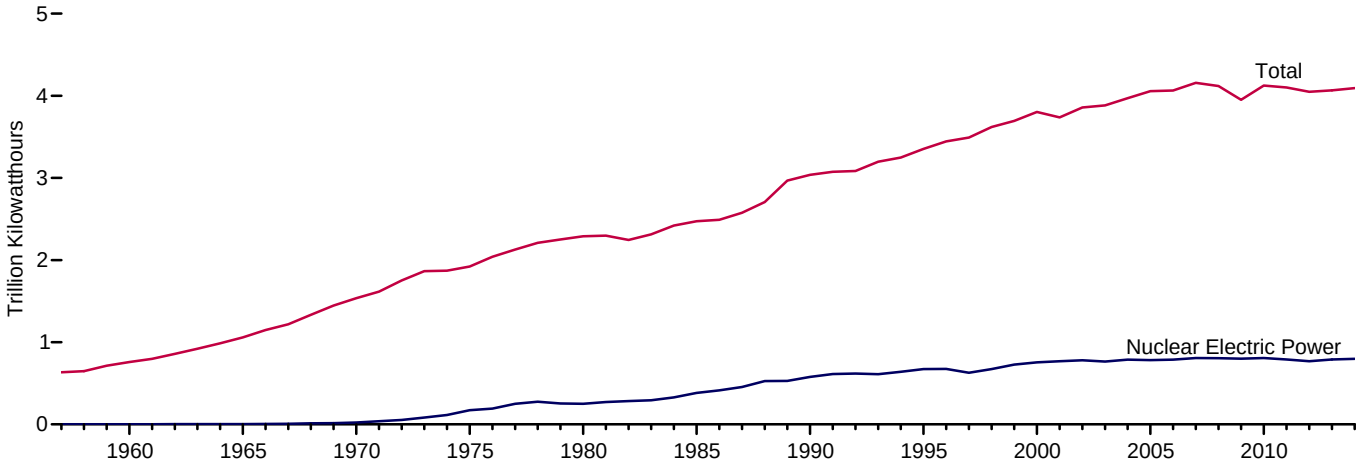
1949–2002: See sources for "Residential" and "Industrial."

THIS PAGE INTENTIONALLY LEFT BLANK

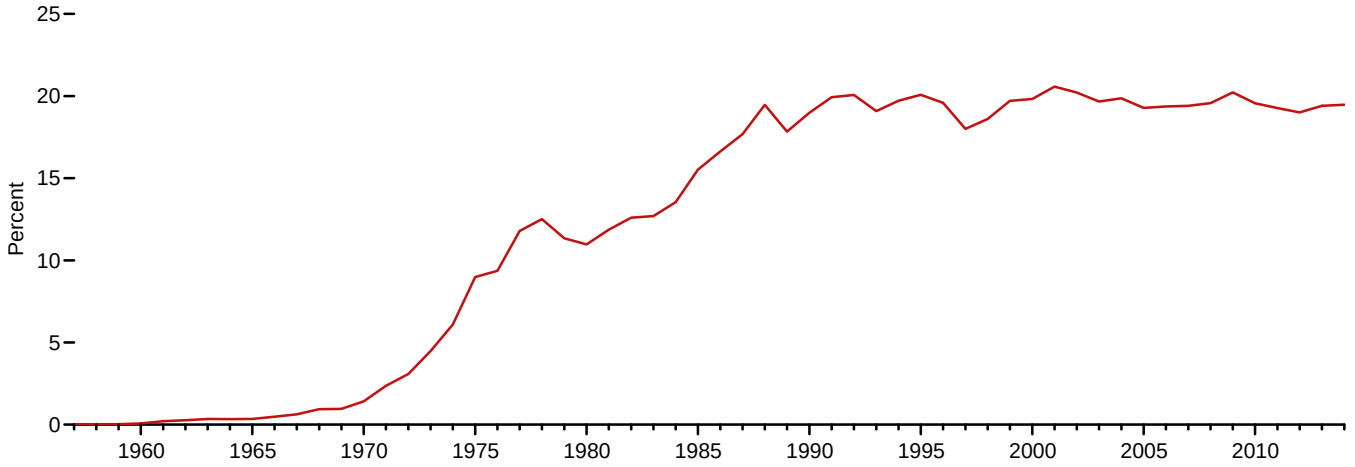
8. Nuclear Energy

Figure 8.1 Nuclear Energy Overview

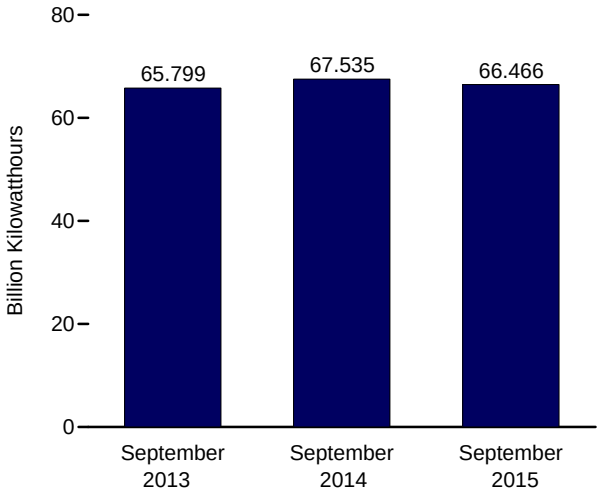
Electricity Net Generation, 1957–2014



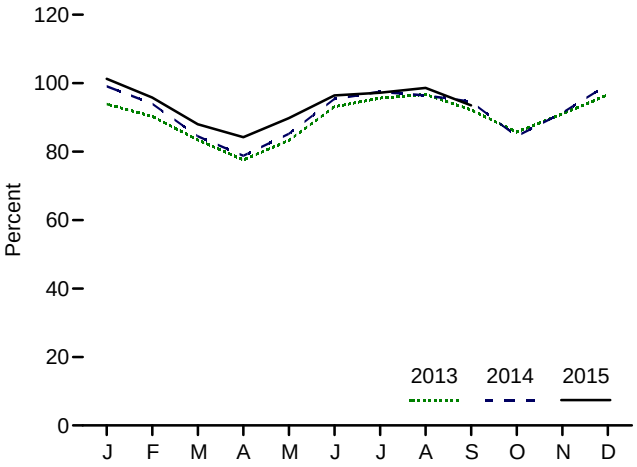
Nuclear Share of Electricity Net Generation, 1957–2014



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	
1957 Total	**1**	**0.055**	**10**	**(s)**	**NA**
1960 Total	**3**	**.411**	**518**	**.1**	**NA**
1965 Total	**13**	**.793**	**3,657**	**.3**	**NA**
1970 Total	**20**	**7.004**	**21,804**	**1.4**	**NA**
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**
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**	**[d] 91.1**
2009 Total	**104**	**101.004**	**798,855**	**20.2**	**90.3**
2010 Total	**104**	**101.167**	**806,968**	**19.6**	**91.1**
2011 Total	**104**	**[c] 101.419**	**790,204**	**19.3**	**89.1**
2012 Total	**104**	**101.885**	**769,331**	**19.0**	**86.1**
2013 January	104	102.206	71,406	20.5	93.9
February	103	101.346	61,483	19.9	90.3
March	103	101.455	62,947	19.3	83.4
April	103	101.603	56,767	19.0	77.6
May	102	101.282	62,848	19.5	83.3
June	100	99.132	66,430	18.6	93.1
July	100	99.132	70,539	17.9	95.6
August	100	99.132	71,344	18.5	96.7
September	100	99.132	65,799	19.3	92.2
October	100	99.132	63,184	20.1	85.7
November	100	99.132	64,975	20.7	91.0
December	100	99.240	71,294	20.2	96.6
Total	**100**	**99.240**	**789,016**	**19.4**	**89.9**
2014 January	100	[R] 99.182	[R] 73,163	19.4	[R] 99.1
February	100	[R] 99.182	62,639	19.3	[R] 94.0
March	100	[R] 99.182	62,397	18.8	84.5
April	100	[R] 99.182	56,385	18.9	[R] 78.8
May	100	[R] 99.182	62,947	19.4	[R] 85.2
June	100	[R] 99.182	68,138	19.0	95.4
July	100	[R] 99.182	71,940	[R] 18.6	[R] 97.5
August	100	[R] 99.182	71,129	18.5	[R] 96.4
September	100	[R] 99.182	67,535	19.9	[R] 94.6
October	100	[R] 99.182	62,391	19.8	84.5
November	100	[R] 99.182	65,140	20.5	[R] 91.3
December	99	[R] 98.569	73,363	[R] 21.7	[R] 99.6
Total	**99**	**[R] 98.569**	**[R] 797,166**	**19.5**	**91.7**
2015 January	99	[RE] 98.569	74,270	[R] 20.5	[RE] 101.3
February	99	[RE] 98.569	63,462	[R] 18.9	[E] 95.8
March	99	[RE] 98.569	64,547	19.9	[RE] 88.0
April	99	[RE] 98.569	59,757	[R] 20.3	[RE] 84.2
May	99	[RE] 98.569	65,833	[R] 20.4	[RE] 89.8
June	99	[E] 98.708	68,546	[R] 18.9	[E] 96.4
July	99	[E] 98.708	71,412	[R] 17.8	[E] 97.2
August	99	[E] 98.708	72,415	[R] 18.4	[E] 98.6
September	99	[E] 98.708	66,466	18.9	[E] 93.5
9-Month Total	**99**	**[E] 98.708**	**606,709**	**19.3**	**[E] 93.9**
2014 9-Month Total	**100**	**99.182**	**596,272**	**19.1**	**91.7**
2013 9-Month Total	**100**	**99.132**	**589,564**	**19.1**	**89.5**

[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.

[b] At end of period.

[c] For the definition of "Net Summer Capacity," see Note 2, "Nuclear Capacity," at end of section. Beginning in 2011, monthly capacity values are estimated in two steps: 1) uprates and derates 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 allocated to the month of January.

[d] Beginning in 2008, capacity factor data are calculated using a new methodology. For an explanation of the method of calculating the capacity factor, see Note 2, "Nuclear Capacity," at end of section.

R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.05%.

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 (Excel and CSV files) for all available annual data beginning in 1957 and monthly 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.

The following nuclear generating units were retired in 2013: Crystal River 3 in February; Kewaunee in May; and San Onofre 2 and 3 in June. Vermont Yankee was retired in December 2014.

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% 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.

Through 2007, 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). For the methodology used to calculate capacity factors beginning in 2008, see U.S. Energy Information Administration, *Electric Power Monthly*, Appendix C notes on "Average Capacity Factors."

Table 8.1 Sources

Total Operable Units and **Net Summer Capacity of Operable Units**
1957–1982: 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," and predecessor forms; Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"; and monthly updates as appropriate. For a list of operable units as of November 2011, see http://www.eia.gov/nuclear/reactors/stats_table1.html.

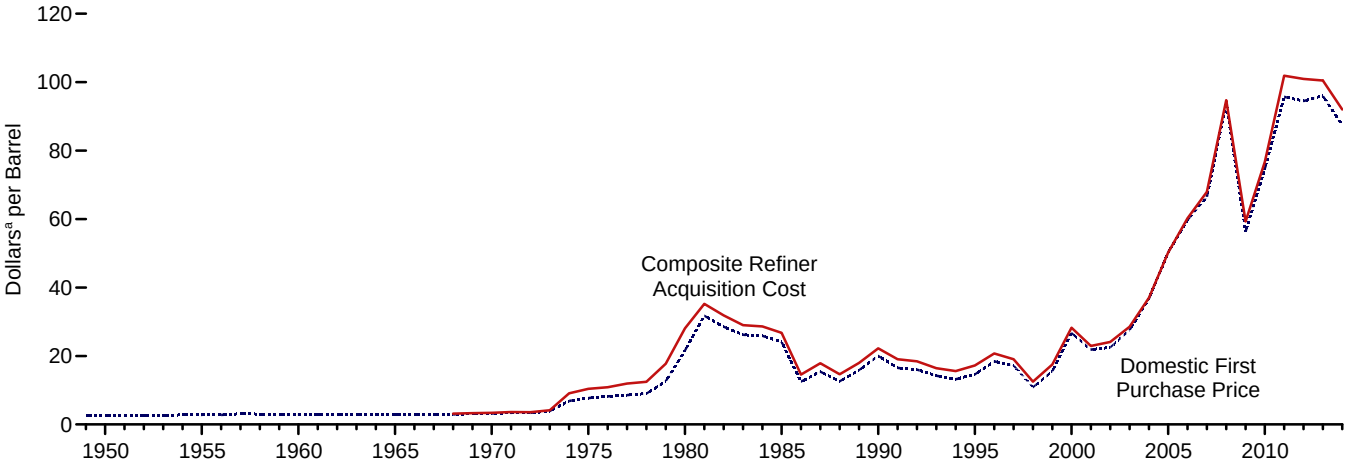
Nuclear Electricity Net Generation and **Nuclear Share of Electricity Net Generation**
1957 forward: Table 7.2a.

Capacity Factor
1973–2007: Calculated by EIA using the method described above in Note 2.
2008 forward: EIA, Form EIA-860, "Annual Electric Generator Report"; Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"; and Form EIA-923, "Power Plant Operations Report."

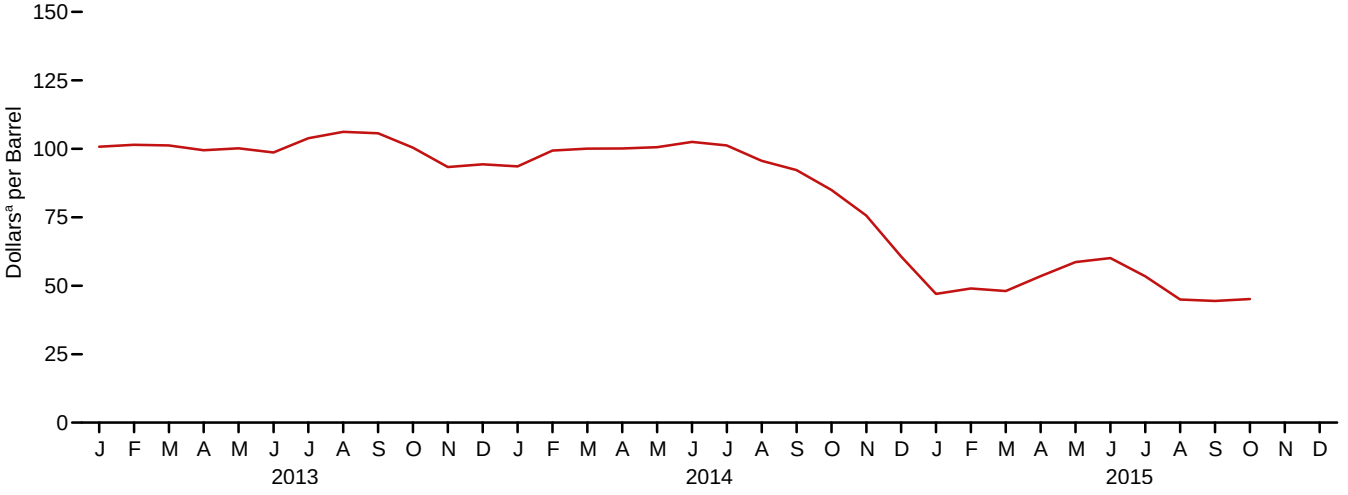
9. Energy Prices

Figure 9.1 Petroleum Prices

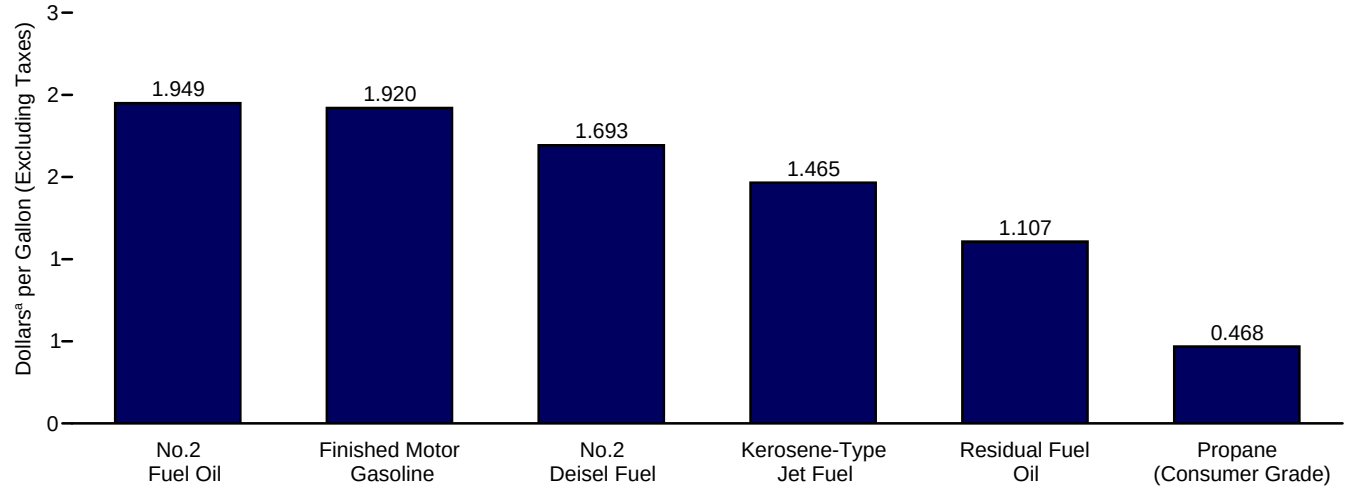
Crude Oil Prices, 1949–2014



Composite Refiner Acquisition Cost, Monthly



Refiner Prices to End Users: Selected Products, September 2015



[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
1950 Average	**2.51**	**NA**	**NA**	**NA**	**NA**	**NA**
1955 Average	**2.77**	**NA**	**NA**	**NA**	**NA**	**NA**
1960 Average	**2.88**	**NA**	**NA**	**NA**	**NA**	**NA**
1965 Average	**2.86**	**NA**	**NA**	**NA**	**NA**	**NA**
1970 Average	**3.18**	**NA**	**NA**	E **3.46**	E **2.96**	E **3.40**
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**
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 Average	**74.71**	**74.19**	**76.50**	**78.01**	**75.86**	**76.69**
2011 Average	**95.73**	**101.66**	**102.92**	**100.71**	**102.63**	**101.87**
2012 Average	**94.52**	**99.78**	**101.00**	**100.72**	**101.09**	**100.93**
2013 January	95.00	94.93	95.12	103.78	97.91	100.78
February	95.01	100.46	98.93	103.75	99.23	101.45
March	95.54	99.73	98.35	103.45	99.11	101.23
April	94.41	95.59	95.75	102.53	96.45	99.50
May	94.75	96.12	97.39	101.98	98.50	100.17
June	93.82	96.22	96.90	100.26	97.17	98.67
July	101.41	101.36	101.19	106.19	101.56	103.85
August	102.96	101.89	103.13	108.30	104.16	106.20
September	102.32	100.82	101.59	107.96	103.49	105.70
October	96.18	92.81	94.89	103.00	97.84	100.41
November	88.70	88.30	89.45	96.09	90.36	93.32
December	91.85	89.90	90.07	97.87	90.57	94.32
Average	**95.99**	**96.56**	**96.99**	**102.91**	**98.11**	**100.49**
2014 January	89.57	90.93	90.97	97.21	89.71	93.58
February	96.86	92.76	95.38	102.35	96.10	99.36
March	96.17	93.05	95.54	102.61	97.13	100.09
April	96.49	94.15	96.51	102.53	97.33	100.15
May	95.74	96.16	97.99	102.40	98.46	100.61
June	98.68	97.57	99.27	104.21	100.26	102.51
July	96.70	93.79	96.59	103.21	98.75	101.22
August	90.72	89.28	91.53	97.60	93.23	95.61
September	86.87	85.26	87.31	94.62	89.38	92.26
October	78.84	76.73	80.13	86.73	82.75	84.99
November	71.07	67.48	70.94	76.67	74.34	75.66
December	54.86	50.01	54.86	63.26	57.36	60.70
Average	**87.39**	**85.65**	**88.16**	**94.05**	**89.56**	**92.02**
2015 January	43.06	40.09	44.38	48.90	44.74	47.00
February	44.35	43.86	47.16	50.30	47.20	48.97
March	42.66	43.58	47.15	48.69	47.27	48.06
April	49.30	48.31	51.79	54.86	51.63	53.51
May	54.38	53.45	56.94	59.39	57.66	58.66
June	55.88	53.57	56.60	61.06	58.90	60.12
July	47.70	R 45.53	R 49.71	54.15	52.42	53.41
August	39.98	R 36.93	R 41.20	R 46.30	R 43.23	R 44.97
September	R 41.60	R 37.08	R 39.57	R 46.78	R 41.10	R 44.44
October	NA	NA	NA	E 48.05	E 41.61	E 45.14

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

Notes: • Domestic first purchase prices and refinery acquisition costs for the current two months are preliminary. F.O.B. and landed costs for the current three months are preliminary. • Through 1980, F.O.B. and landed costs reflect the period of reporting; beginning in 1981, they 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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**
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 Average	**78.18**	**72.56**	**72.46**	**80.83**	**76.44**	**W**	**70.30**	**75.65**	**75.23**	**73.24**
2011 Average	**111.82**	**100.21**	**100.90**	**115.35**	**107.08**	**–**	**97.23**	**106.47**	**105.34**	**98.49**
2012 Average	**111.23**	**106.43**	**101.84**	**114.51**	**106.65**	**–**	**100.15**	**105.45**	**104.39**	**95.71**
2013 January	W	106.99	100.16	W	W	–	97.15	105.30	102.42	91.11
February	W	106.45	108.25	W	W	–	104.06	105.22	106.93	96.65
March	W	101.31	105.16	111.03	W	–	101.60	108.10	105.77	94.09
April	W	99.58	99.94	W	W	–	95.01	100.50	98.68	93.14
May	103.46	98.97	99.06	106.45	W	–	95.48	98.46	98.72	93.99
June	103.67	98.56	97.16	W	W	–	95.71	97.42	98.45	94.59
July	W	102.20	101.27	W	W	W	100.32	101.21	102.36	100.54
August	W	105.59	100.97	111.28	W	–	101.12	104.10	103.69	100.42
September	113.86	103.16	100.14	W	103.53	W	100.37	103.22	104.44	98.42
October	–	W	93.76	–	98.96	–	95.72	98.48	97.38	89.45
November	W	W	88.56	W	91.38	–	91.79	92.02	93.23	84.76
December	W	95.50	90.25	–	95.97	–	92.46	94.88	94.41	87.24
Average	**107.71**	**101.24**	**98.40**	**110.06**	**101.16**	**W**	**97.52**	**100.62**	**100.57**	**93.67**
2014 January	W	95.84	89.30	–	99.21	–	89.69	98.44	94.85	87.56
February	W	96.04	91.77	–	102.26	–	92.88	100.70	97.51	89.73
March	W	W	91.38	W	101.25	–	92.27	100.67	97.19	90.59
April	W	98.61	93.22	W	99.76	–	95.26	99.02	99.15	90.49
May	W	98.75	95.31	–	100.58	–	96.67	98.89	98.29	94.58
June	W	99.03	98.20	–	104.95	–	98.19	102.49	100.67	95.67
July	W	100.11	94.65	–	105.25	–	92.45	103.81	97.43	91.37
August	W	92.38	91.17	–	99.74	–	89.22	98.95	93.30	86.68
September	W	86.08	88.50	–	94.98	–	83.20	93.59	88.39	83.11
October	W	72.47	79.79	–	85.77	–	74.19	85.04	79.29	75.20
November	W	70.25	71.87	–	W	–	65.55	W	71.14	65.49
December	W	50.95	53.20	–	W	–	45.33	60.65	52.49	48.59
Average	**W**	**80.75**	**86.55**	**W**	**95.60**	**–**	**84.51**	**94.03**	**89.76**	**82.95**
2015 January	–	42.49	40.70	–	48.14	–	37.99	52.21	42.64	38.64
February	W	51.02	47.75	W	W	–	45.85	46.60	47.12	42.31
March	W	47.32	46.15	–	W	–	43.51	49.25	45.17	42.69
April	W	55.92	50.28	–	58.87	–	49.03	52.28	50.12	47.39
May	W	59.04	56.14	–	W	–	51.99	57.52	54.12	53.09
June	W	57.39	56.56	–	W	–	50.34	59.62	53.96	53.35
July	W	46.62	50.75	–	W	–	R 44.44	50.08	R 46.33	R 45.18
August	W	43.55	R 40.12	–	R 43.69	–	R 35.49	R 43.21	R 38.15	R 36.26
September	W	W	40.07	–	44.49	–	36.55	43.85	40.15	34.63

[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. (Free on Board)" in Glossary, and Note 3, "Crude Oil F.O.B. Costs," at end of section. • Values for the current two months are preliminary. • Through 1980, prices reflect the period of reporting; beginning in 1981, prices 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 (Excel and CSV files) for all available annual and monthly 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**
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 Average	**80.61**	**72.80**	**74.25**	**72.86**	**83.14**	**79.29**	**80.29**	**72.43**	**78.60**	**78.28**	**74.68**
2011 Average	**114.05**	**89.92**	**102.57**	**101.21**	**116.43**	**108.83**	**118.45**	**100.14**	**108.01**	**107.84**	**98.64**
2012 Average	**114.95**	**84.24**	**107.07**	**102.45**	**116.88**	**108.15**	**W**	**101.58**	**107.74**	**107.56**	**95.05**
2013 January	115.79	75.30	106.36	101.04	120.99	108.57	–	99.04	107.02	106.84	86.31
February	115.90	76.46	109.28	108.95	117.89	108.75	W	105.54	107.96	108.86	90.59
March	110.56	79.51	105.37	106.36	113.36	107.59	W	103.35	107.94	107.50	90.13
April	105.56	83.06	101.42	100.62	106.07	102.28	W	96.19	102.30	101.76	90.88
May	106.47	86.92	100.70	99.92	108.12	101.54	W	97.44	101.35	101.63	93.52
June	106.73	88.30	99.36	97.56	108.38	101.41	W	97.44	101.26	101.21	93.48
July	110.43	94.14	102.47	101.87	W	104.13	W	101.65	103.15	103.96	98.64
August	111.88	98.63	106.04	101.52	114.47	104.62	W	102.95	104.15	104.91	101.58
September	113.92	95.02	105.76	100.70	115.21	101.16	W	102.09	101.94	104.10	99.35
October	W	85.36	102.29	94.35	–	98.68	–	97.60	99.31	99.53	91.23
November	110.50	77.34	97.30	89.19	W	96.12	–	94.42	96.57	96.32	83.89
December	113.16	75.23	97.41	91.11	W	99.29	W	94.83	98.30	98.02	84.14
Average	**110.81**	**84.41**	**103.00**	**99.06**	**112.87**	**102.60**	**111.23**	**99.34**	**102.53**	**102.98**	**91.99**
2014 January	W	78.21	97.87	90.85	–	101.30	–	92.53	100.18	98.30	84.91
February	110.96	87.98	98.59	92.92	W	102.62	W	95.33	101.54	100.41	91.27
March	107.52	89.40	98.71	92.44	W	102.15	–	94.63	101.68	100.36	92.15
April	108.70	89.01	99.68	94.01	W	102.48	W	97.08	102.07	101.81	91.99
May	W	91.77	101.24	96.12	W	103.03	–	98.35	102.03	101.54	94.96
June	W	93.03	102.61	99.36	–	104.11	W	99.78	102.78	102.39	97.01
July	W	90.27	101.68	95.61	–	103.01	W	94.12	102.39	100.17	94.03
August	103.69	83.93	95.70	92.07	–	98.80	–	91.64	99.98	97.19	88.15
September	99.49	81.27	91.03	89.25	–	93.39	–	84.78	93.81	91.07	85.08
October	90.74	76.38	80.37	80.42	W	79.85	W	75.72	83.84	82.50	78.56
November	80.21	66.85	73.37	73.18	W	72.72	–	67.59	75.10	73.17	69.65
December	61.33	50.82	56.17	53.54	W	58.56	W	47.86	62.29	58.35	52.75
Average	**99.25**	**81.30**	**88.29**	**87.48**	**102.16**	**94.91**	**W**	**86.88**	**95.30**	**93.10**	**84.67**
2015 January	W	40.23	45.57	41.18	W	50.10	–	40.08	52.99	48.17	42.14
February	W	42.17	53.18	48.00	W	52.36	–	47.93	52.12	51.38	44.56
March	W	41.62	51.25	46.99	W	55.32	W	45.90	54.38	51.07	44.63
April	W	46.43	57.67	51.89	–	59.87	W	52.17	56.96	55.29	49.50
May	60.84	53.83	60.46	56.75	W	61.94	W	53.78	60.74	58.94	55.68
June	61.45	55.25	58.08	57.15	W	58.56	–	52.43	58.27	56.79	56.48
July	53.22	R 47.78	52.53	51.26	W	R 51.53	–	R 46.74	R 51.92	R 50.38	R 49.33
August	R 54.02	R 38.11	R 43.98	R 41.78	–	R 45.78	W	R 38.74	R 46.32	R 43.10	R 40.22
September	W	34.68	42.69	40.26	–	46.29	–	37.94	46.17	43.48	37.43

[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. • Through 1980, prices reflect the period of reporting; beginning in 1981, prices 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 (Excel and CSV files) for all available annual and monthly 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." • **1978–2007:** EIA, *Petroleum Marketing Annual 2008,* Table 22. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* December 2015, Table 22.

Table 9.4 Retail Motor Gasoline and On-Highway Diesel Fuel Prices

(Dollars[a] per Gallon, Including Taxes)

	Platt's / Bureau of Labor Statistics Data				U.S. Energy Information Administration Data			
	Motor Gasoline by Grade				Regular Motor Gasoline by Area Type			
	Leaded Regular	Unleaded Regular	Unleaded Premium[b]	All Grades[c]	Conventional Gasoline Areas[d]	Reformulated Gasoline Areas[e]	All Areas	On-Highway Diesel Fuel
1950 Average	**0.268**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1955 Average	**.291**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1960 Average	**.311**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1965 Average	**.312**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1970 Average	**.357**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1975 Average	**.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**	**NA**	**NA**	**NA**	**NA**
1995 Average	**– –**	**1.147**	**1.336**	**1.205**	**1.103**	**1.163**	**1.111**	**1.109**
2000 Average	**– –**	**1.510**	**1.693**	**1.563**	**1.462**	**1.543**	**1.484**	**1.491**
2001 Average	**– –**	**1.461**	**1.657**	**1.531**	**1.384**	**1.498**	**1.420**	**1.401**
2002 Average	**– –**	**1.358**	**1.556**	**1.441**	**1.313**	**1.408**	**1.345**	**1.319**
2003 Average	**– –**	**1.591**	**1.777**	**1.638**	**1.516**	**1.655**	**1.561**	**1.509**
2004 Average	**– –**	**1.880**	**2.068**	**1.923**	**1.812**	**1.937**	**1.852**	**1.810**
2005 Average	**– –**	**2.295**	**2.491**	**2.338**	**2.240**	**2.335**	**2.270**	**2.402**
2006 Average	**– –**	**2.589**	**2.805**	**2.635**	**2.533**	**2.654**	**2.572**	**2.705**
2007 Average	**– –**	**2.801**	**3.033**	**2.849**	**2.767**	**2.857**	**2.796**	**2.885**
2008 Average	**– –**	**3.266**	**3.519**	**3.317**	**3.213**	**3.314**	**3.246**	**3.803**
2009 Average	**– –**	**2.350**	**2.607**	**2.401**	**2.315**	**2.433**	**2.353**	**2.467**
2010 Average	**– –**	**2.788**	**3.047**	**2.836**	**2.742**	**2.864**	**2.782**	**2.992**
2011 Average	**– –**	**3.527**	**3.792**	**3.577**	**3.476**	**3.616**	**3.521**	**3.840**
2012 Average	**– –**	**3.644**	**3.922**	**3.695**	**3.552**	**3.757**	**3.618**	**3.968**
2013 January	– –	3.351	3.646	3.407	3.255	3.452	3.319	3.909
February	– –	3.693	3.990	3.748	3.605	3.807	3.670	4.111
March	– –	3.735	4.038	3.792	3.648	3.845	3.711	4.068
April	– –	3.590	3.901	3.647	3.501	3.714	3.570	3.930
May	– –	3.623	3.936	3.682	3.565	3.720	3.615	3.870
June	– –	3.633	3.957	3.693	3.576	3.731	3.626	3.849
July	– –	3.628	3.951	3.687	3.515	3.751	3.591	3.866
August	– –	3.600	3.919	3.658	3.515	3.697	3.574	3.905
September	– –	3.556	3.881	3.616	3.474	3.656	3.532	3.961
October	– –	3.375	3.702	3.434	3.285	3.468	3.344	3.885
November	– –	3.251	3.585	3.310	3.186	3.362	3.243	3.839
December	– –	3.277	3.604	3.333	3.209	3.418	3.276	3.882
Average	**– –**	**3.526**	**3.843**	**3.584**	**3.443**	**3.635**	**3.505**	**3.922**
2014 January	– –	3.320	3.651	3.378	3.252	3.438	3.313	3.893
February	– –	3.364	3.694	3.422	3.305	3.464	3.356	3.984
March	– –	3.532	3.858	3.590	3.474	3.658	3.533	4.001
April	– –	3.659	3.986	3.717	3.590	3.809	3.661	3.964
May	– –	3.691	4.020	3.745	3.601	3.824	3.673	3.943
June	– –	3.695	4.027	3.750	3.626	3.831	3.692	3.906
July	– –	3.633	3.976	3.690	3.539	3.763	3.611	3.884
August	– –	3.481	3.835	3.540	3.425	3.616	3.487	3.838
September	– –	3.403	3.758	3.463	3.354	3.516	3.406	3.792
October	– –	3.182	3.547	3.241	3.120	3.277	3.171	3.681
November	– –	2.887	3.262	2.945	2.875	2.990	2.912	3.647
December	– –	2.560	2.940	2.618	2.488	2.657	2.543	3.411
Average	**– –**	**3.367**	**3.713**	**3.425**	**3.299**	**3.481**	**3.358**	**3.825**
2015 January	– –	2.110	2.497	2.170	2.046	2.262	2.116	2.997
February	– –	2.249	2.621	2.308	2.152	2.351	2.216	2.858
March	– –	2.483	2.867	2.544	2.352	2.697	2.464	2.897
April	– –	2.485	2.868	2.545	2.369	2.679	2.469	2.782
May	– –	2.775	3.166	2.832	2.578	3.014	2.718	2.888
June	– –	2.832	3.218	2.889	2.700	3.014	2.802	2.873
July	– –	2.832	3.252	2.893	2.666	3.061	2.794	2.788
August	– –	2.679	3.120	2.745	2.522	2.876	2.636	2.595
September	– –	2.394	2.860	2.463	2.275	2.555	2.365	2.505
October	– –	2.289	2.749	2.357	2.230	2.414	2.290	2.519
November	– –	2.185	2.640	2.249	2.088	2.304	2.158	2.467

[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 grades of motor gasoline not shown separately.

[d] Any area that does not require the sale of reformulated gasoline.

[e] "Reformulated Gasoline Areas" are ozone nonattainment areas designated by the U.S. Environmental Protection Agency that require the use of reformulated gasoline (RFG). Areas are reclassified each time a shift in or out of an RFG program occurs due to federal or state regulations.

NA=Not available. – – =Not applicable.

Notes: • See Note 5, "Motor Gasoline Prices," at end of section. • See "Motor Gasoline Grades," "Motor Gasoline, Conventional," "Motor Gasoline, Oxygenated," and "Motor Gasoline, Reformulated" in Glossary. • Geographic coverage: for columns 1–4, current coverage is 85 urban areas; for columns 5–7, coverage is the 50 states and the District of Columbia; for column 8, coverage is the 48 contiguous states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **Motor Gasoline by Grade, Monthly Data: October 1973 forward**—U.S. Department of Labor, Bureau of Labor Statistics (BLS), *U.S. City Average Gasoline Prices.* • **Motor Gasoline by Grade, Annual Data: 1949–1973**—*Platt's Oil Price Handbook and Oilmanac, 1974,* 51st Edition. **1974 forward**—calculated by the U.S. Energy Information Administration (EIA) as simple averages of the BLS monthly data. • **Regular Motor Gasoline by Area Type:** EIA, calculated as simple averages of weighted weekly estimates from "Weekly U.S. Retail Gasoline Prices, Regular Grade." • **On-Highway Diesel Fuel:** EIA, calculated as simple averages of weighted weekly estimates from "Weekly Retail On-Highway Diesel Prices."

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 %		Residual Fuel Oil Sulfur Content Greater Than 1 %		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	**.608**	**.675**	**.479**	**.523**	**.528**	**.607**
1985 Average	**.610**	**.644**	**.560**	**.582**	**.577**	**.610**
1990 Average	**.472**	**.505**	**.372**	**.400**	**.413**	**.444**
1995 Average	**.383**	**.436**	**.338**	**.377**	**.363**	**.392**
2000 Average	**.627**	**.708**	**.512**	**.566**	**.566**	**.602**
2001 Average	**.523**	**.642**	**.428**	**.492**	**.476**	**.531**
2002 Average	**.546**	**.640**	**.508**	**.544**	**.530**	**.569**
2003 Average	**.728**	**.804**	**.588**	**.651**	**.661**	**.698**
2004 Average	**.764**	**.835**	**.601**	**.692**	**.681**	**.739**
2005 Average	**1.115**	**1.168**	**.842**	**.974**	**.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 Average	**1.756**	**1.920**	**1.679**	**1.619**	**1.697**	**1.713**
2011 Average	**2.389**	**2.736**	**2.316**	**2.257**	**2.336**	**2.401**
2012 Average	**2.548**	**3.025**	**2.429**	**2.433**	**2.457**	**2.592**
2013 January	2.530	2.874	2.328	2.333	2.388	2.475
February	2.571	3.017	2.388	2.402	2.415	2.578
March	2.479	2.949	2.294	2.320	2.346	2.517
April	2.354	2.875	2.214	2.238	2.246	2.354
May	2.316	2.839	2.213	2.421	2.240	2.507
June	2.285	2.785	2.214	2.385	2.234	2.454
July	2.282	2.768	2.225	2.280	2.242	2.384
August	2.331	2.759	2.258	2.411	2.277	2.500
September	2.359	2.839	2.265	2.412	2.286	2.513
October	2.338	NA	2.232	2.364	2.255	2.532
November	2.296	NA	2.190	2.328	2.224	2.492
December	2.315	NA	2.177	2.353	2.209	2.458
Average	**2.363**	**2.883**	**2.249**	**2.353**	**2.278**	**2.482**
2014 January	2.337	NA	2.117	2.400	2.173	2.481
February	2.459	NA	2.139	2.459	2.207	2.532
March	2.470	NA	2.175	2.376	2.255	2.476
April	2.401	NA	2.149	2.323	2.226	2.464
May	2.350	2.902	2.198	2.304	2.267	2.420
June	2.358	2.888	2.247	2.314	2.293	2.423
July	2.287	2.977	2.186	2.324	2.223	2.455
August	2.148	W	2.130	2.350	2.136	2.471
September	2.100	2.756	2.068	2.255	2.077	2.362
October	1.893	2.573	1.858	2.099	1.866	2.194
November	1.639	2.294	1.604	1.848	1.611	1.946
December	1.237	1.916	1.310	1.611	1.287	1.676
Average	**2.153**	**2.694**	**1.996**	**2.221**	**2.044**	**2.325**
2015 January	.936	NA	1.038	1.192	1.023	1.264
February	1.150	NA	1.124	1.342	1.126	1.376
March	1.093	NA	1.131	1.436	1.126	1.465
April	1.124	1.704	1.114	1.465	1.114	1.516
May	1.198	NA	1.242	1.443	1.234	1.543
June	1.175	W	1.239	1.474	1.233	1.549
July	1.080	W	1.130	1.245	1.122	1.363
August	R .797	W	.928	1.150	R .918	1.207
September	.818	W	.853	1.063	.850	1.107

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

R=Revised. 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 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. • Through 1982, prices 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 (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007,* Table 17. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* December 2015, 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	**.941**	**1.128**	**.868**	**.864**	**.803**	**.801**	**.415**
1985 Average	**.835**	**1.130**	**.794**	**.874**	**.776**	**.772**	**.398**
1990 Average	**.786**	**1.063**	**.773**	**.839**	**.697**	**.694**	**.386**
1995 Average	**.626**	**.975**	**.539**	**.580**	**.511**	**.538**	**.344**
2000 Average	**.963**	**1.330**	**.880**	**.969**	**.886**	**.898**	**.595**
2001 Average	**.886**	**1.256**	**.763**	**.821**	**.756**	**.784**	**.540**
2002 Average	**.828**	**1.146**	**.716**	**.752**	**.694**	**.724**	**.431**
2003 Average	**1.002**	**1.288**	**.871**	**.955**	**.881**	**.883**	**.607**
2004 Average	**1.288**	**1.627**	**1.208**	**1.271**	**1.125**	**1.187**	**.751**
2005 Average	**1.670**	**2.076**	**1.723**	**1.757**	**1.623**	**1.737**	**.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**	**.921**
2010 Average	**2.165**	**2.874**	**2.185**	**2.299**	**2.147**	**2.214**	**1.212**
2011 Average	**2.867**	**3.739**	**3.014**	**3.065**	**2.907**	**3.034**	**1.467**
2012 Average	**2.929**	**3.919**	**3.080**	**3.163**	**3.031**	**3.109**	**1.033**
2013 January	2.676	3.685	3.093	3.334	3.069	3.046	.928
February	3.020	4.058	3.250	3.474	3.168	3.259	.953
March	2.987	4.085	3.036	3.137	2.977	3.082	.952
April	2.853	3.962	2.884	2.889	2.793	2.969	.949
May	2.951	4.068	2.763	2.793	2.708	2.958	.932
June	2.882	3.950	2.784	2.806	2.741	2.923	.861
July	2.942	4.017	2.899	2.996	2.894	3.015	.903
August	2.890	4.025	2.995	3.055	2.954	3.084	1.059
September	2.792	3.854	3.017	3.057	2.973	3.095	1.114
October	2.632	3.656	2.928	3.029	2.955	3.006	1.154
November	2.544	3.467	2.868	2.995	2.910	2.949	1.219
December	2.581	3.508	2.978	3.164	3.011	2.998	1.342
Average	**2.812**	**3.869**	**2.953**	**3.084**	**2.966**	**3.028**	**1.048**
2014 January	2.604	3.538	2.964	3.237	3.059	2.981	1.641
February	2.699	3.712	2.981	3.353	3.051	3.091	1.654
March	2.855	3.865	2.939	3.153	2.979	3.031	1.198
April	2.981	3.940	2.911	2.938	2.911	3.027	1.121
May	2.951	3.881	2.932	2.939	2.883	2.987	1.057
June	3.001	4.056	2.917	2.926	2.878	2.973	1.054
July	2.855	3.914	2.882	2.863	2.825	2.921	1.075
August	2.759	3.799	2.882	2.922	2.784	2.900	1.055
September	2.669	3.803	2.823	2.851	2.701	2.806	1.097
October	2.333	3.548	2.547	2.687	2.476	2.639	1.044
November	2.111	3.163	2.410	2.594	2.371	2.558	.966
December	1.634	2.635	1.998	2.195	2.050	1.980	.819
Average	**2.618**	**3.687**	**2.763**	**2.882**	**2.741**	**2.812**	**1.165**
2015 January	1.366	2.324	1.612	1.900	1.669	1.616	.713
February	1.637	2.529	1.722	2.233	1.850	1.861	.748
March	1.770	2.801	1.731	2.098	1.847	1.815	.689
April	1.835	2.827	1.709	1.800	1.740	1.805	.566
May	2.080	3.050	1.933	1.929	1.852	1.973	.475
June	2.121	3.259	1.813	1.871	1.813	1.881	.404
July	2.072	3.217	1.655	1.701	1.654	1.729	.405
August	1.838	2.980	R 1.479	1.494	1.461	1.562	R .402
September	1.609	2.586	1.443	1.509	1.438	1.551	.469

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

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. • Through 1982, prices 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 (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007,* Table 4. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* December 2015, 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**	**.868**	**.902**	**.788**	**.818**	**.482**
1985 Average	**.912**	**1.201**	**.796**	**1.030**	**.849**	**.789**	**.717**
1990 Average	**.883**	**1.120**	**.766**	**.923**	**.734**	**.725**	**.745**
1995 Average	**.765**	**1.005**	**.540**	**.589**	**.562**	**.560**	**.492**
2000 Average	**1.106**	**1.306**	**.899**	**1.123**	**.927**	**.935**	**.603**
2001 Average	**1.032**	**1.323**	**.775**	**1.045**	**.829**	**.842**	**.506**
2002 Average	**.947**	**1.288**	**.721**	**.990**	**.737**	**.762**	**.419**
2003 Average	**1.156**	**1.493**	**.872**	**1.224**	**.933**	**.944**	**.577**
2004 Average	**1.435**	**1.819**	**1.207**	**1.160**	**1.173**	**1.243**	**.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 Average	**2.301**	**3.028**	**2.201**	**3.063**	**2.462**	**2.314**	**1.481**
2011 Average	**3.050**	**3.803**	**3.054**	**3.616**	**3.193**	**3.117**	**1.709**
2012 Average	**3.154**	**3.971**	**3.104**	**3.843**	**3.358**	**3.202**	**1.139**
2013 January	2.850	W	3.117	3.790	3.341	3.129	.891
February	3.221	4.060	3.294	3.887	3.498	3.339	.925
March	3.233	4.022	3.070	3.869	3.314	3.204	.943
April	3.102	3.860	2.922	3.836	3.217	3.090	.971
May	3.188	3.900	2.787	3.786	3.222	3.058	.953
June	3.184	4.191	2.813	3.634	3.172	3.028	.876
July	3.146	4.224	2.908	3.840	3.244	3.099	.935
August	3.097	4.298	3.002	3.707	3.314	3.169	1.074
September	3.059	3.982	3.040	3.849	3.327	3.184	1.115
October	2.893	3.653	2.931	3.852	NA	3.085	1.169
November	2.759	3.674	2.883	3.847	NA	3.030	1.222
December	2.759	3.678	3.008	W	3.578	3.055	1.322
Average	**3.049**	**3.932**	**2.979**	**3.842**	**3.335**	**3.122**	**1.028**
2014 January	2.816	W	2.987	W	3.591	3.024	1.457
February	2.913	4.142	2.994	W	3.687	3.139	1.513
March	3.104	W	2.942	4.067	3.621	3.115	1.137
April	3.214	W	2.931	4.108	3.572	3.109	1.122
May	3.245	W	2.965	4.056	3.546	3.081	1.056
June	3.265	W	2.945	W	3.493	3.064	1.072
July	3.128	W	2.906	3.965	3.428	3.030	1.063
August	3.016	W	2.916	3.903	3.408	3.012	1.038
September	2.936	W	2.834	W	3.324	2.925	1.074
October	2.670	W	2.576	W	NA	2.802	.994
November	2.406	W	2.433	W	3.213	2.700	.904
December	2.013	W	2.028	W	2.901	2.193	.690
Average	**2.855**	**3.986**	**2.772**	**W**	**3.329**	**2.923**	**1.097**
2015 January	1.673	W	1.633	W	NA	1.819	.566
February	1.858	W	1.747	W	2.204	1.979	.671
March	2.054	W	1.766	W	2.141	1.962	.619
April	2.058	W	1.739	W	NA	1.939	.575
May	2.322	W	1.979	W	2.308	2.090	.465
June	2.374	W	1.855	W	2.321	2.021	.393
July	2.338	W	1.694	W	2.207	1.913	.405
August	[R] 2.218	W	[R] 1.516	W	2.046	[R] 1.737	.387
September	1.920	W	1.465	2.996	1.949	1.693	.468

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

[b] See Note 5, "Motor Gasoline Prices," at end of section.

R=Revised. 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. • Through 1982, prices 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.

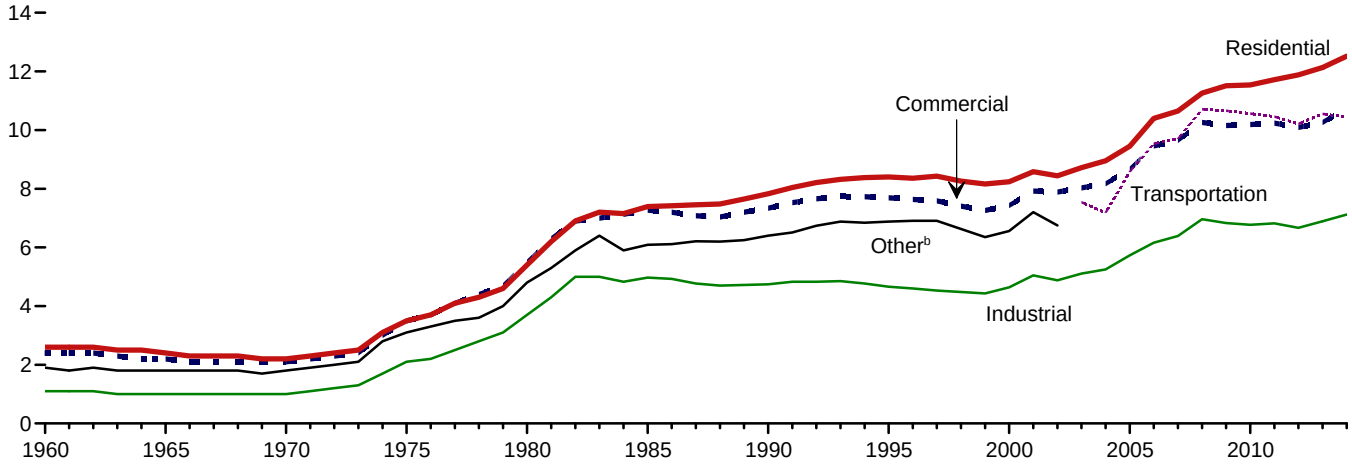
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007,* Table 2. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* December 2015, Table 2.

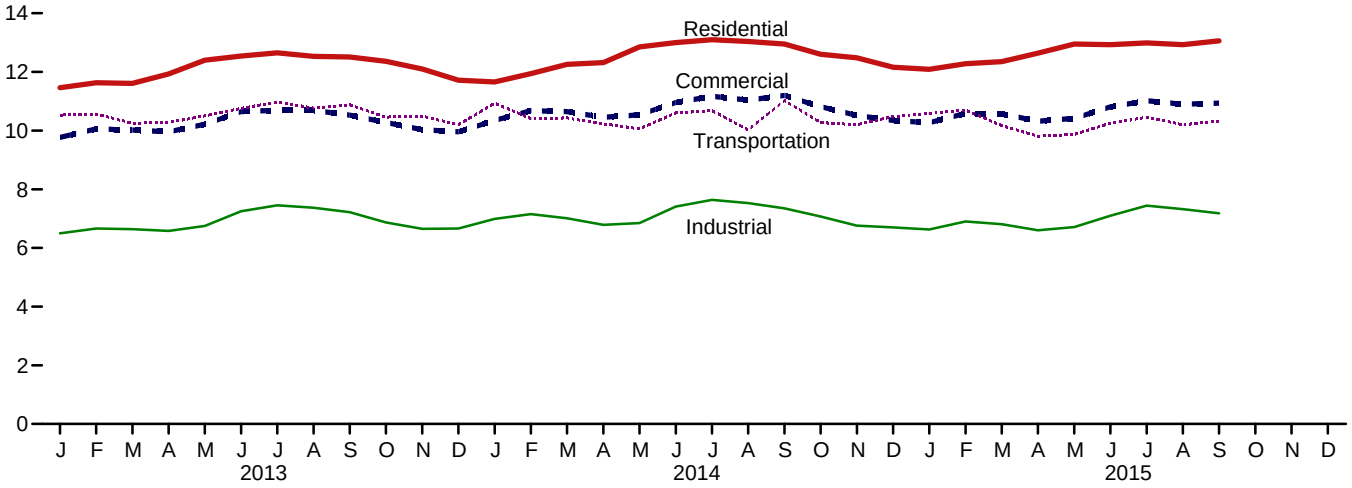
Figure 9.2 Average Retail Prices of Electricity

(Cents[a] per Kilowatthour)

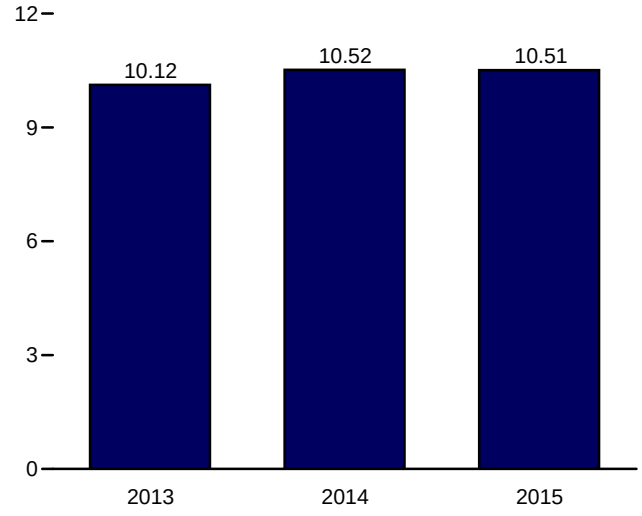
By Sector, 1960–2014



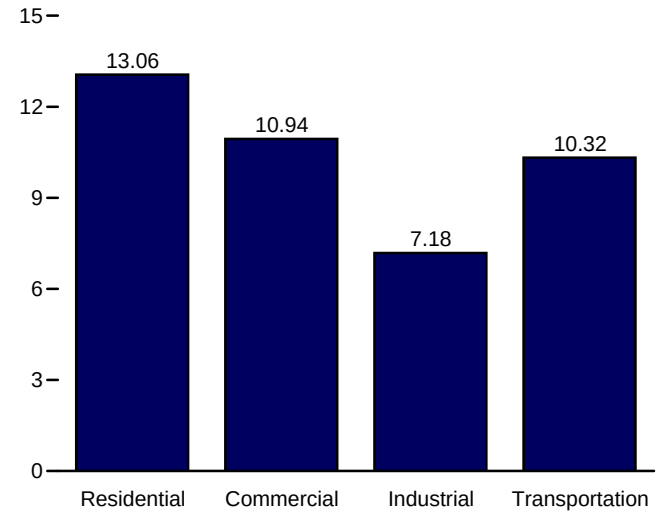
By Sector, Monthly



Total, January–September



By Sector, September 2015



[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 9.8.

Table 9.8 Average Retail Prices of Electricity

(Cents[a] per Kilowatthour, Including Taxes)

	Residential	Commercial[b]	Industrial[c]	Transportation[d]	Other[e]	Total
1960 Average	**2.60**	**2.40**	**1.10**	**NA**	**1.90**	**1.80**
1965 Average	**2.40**	**2.20**	**1.00**	**NA**	**1.80**	**1.70**
1970 Average	**2.20**	**2.10**	**1.00**	**NA**	**1.80**	**1.70**
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**
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**	**10.26**	**6.96**	**10.71**	**– –**	**9.74**
2009 Average	**11.51**	**10.16**	**6.83**	**10.66**	**– –**	**9.82**
2010 Average	**11.54**	**10.19**	**6.77**	**10.56**	**– –**	**9.83**
2011 Average	**11.72**	**10.24**	**6.82**	**10.46**	**– –**	**9.90**
2012 Average	**11.88**	**10.09**	**6.67**	**10.21**	**– –**	**9.84**
2013 January	11.46	9.77	6.50	10.53	– –	9.64
February	11.63	10.06	6.66	10.56	– –	9.77
March	11.61	10.02	6.64	10.25	– –	9.71
April	11.93	9.96	6.58	10.28	– –	9.66
May	12.40	10.22	6.75	10.50	– –	9.92
June	12.54	10.65	7.25	10.76	– –	10.45
July	12.65	10.70	7.45	10.97	– –	10.69
August	12.53	10.69	7.37	10.77	– –	10.58
September	12.51	10.53	7.22	10.88	– –	10.43
October	12.36	10.28	6.87	10.46	– –	10.02
November	12.10	10.03	6.65	10.49	– –	9.79
December	11.72	9.96	6.66	10.20	– –	9.86
Average	**12.13**	**10.26**	**6.89**	**10.55**	**– –**	**10.07**
2014 January	R 11.66	R 10.35	R 6.99	R 10.93	– –	R 10.12
February	R 11.94	R 10.68	R 7.15	R 10.41	– –	10.34
March	R 12.26	R 10.65	R 7.01	R 10.43	– –	R 10.29
April	R 12.32	R 10.46	R 6.79	R 10.23	– –	R 10.01
May	R 12.85	R 10.54	R 6.85	R 10.06	– –	R 10.22
June	R 13.00	R 10.96	R 7.41	R 10.60	– –	10.76
July	R 13.10	11.17	R 7.64	R 10.68	– –	R 11.03
August	R 13.04	R 11.04	R 7.53	R 10.02	– –	10.92
September	R 12.95	R 11.20	R 7.35	R 11.02	– –	R 10.84
October	R 12.60	R 10.82	R 7.07	R 10.27	– –	R 10.33
November	R 12.48	R 10.52	R 6.76	R 10.20	– –	R 10.14
December	R 12.16	R 10.35	R 6.70	R 10.48	– –	R 10.12
Average	R **12.52**	R **10.74**	R **7.12**	R **10.45**	**– –**	**10.45**
2015 January	R 12.09	R 10.27	R 6.63	R 10.59	– –	R 10.18
February	R 12.28	R 10.59	R 6.90	R 10.70	– –	R 10.38
March	12.35	R 10.57	R 6.81	R 10.17	– –	10.30
April	12.64	10.32	R 6.60	R 9.81	– –	10.02
May	12.95	R 10.42	R 6.71	R 9.87	– –	10.21
June	12.93	R 10.81	R 7.10	R 10.25	– –	10.64
July	R 12.99	R 11.02	R 7.44	R 10.45	– –	R 10.97
August	12.93	10.90	7.32	R 10.20	– –	10.86
September	13.06	10.94	7.18	10.32	– –	10.81
9-Month Average	**12.69**	**10.67**	**6.98**	**10.27**	**– –**	**10.51**
2014 9-Month Average	**12.56**	**10.80**	**7.20**	**10.49**	**– –**	**10.52**
2013 9-Month Average	**12.15**	**10.31**	**6.95**	**10.61**	**– –**	**10.12**

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

[b] Commercial sector. For 1960–2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.

[c] Industrial sector. For 1960–2002, 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.

R=Revised. 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. • Through 1979, data are for Classes A and B privately owned electric utilities only. (Class A utilities are those with operating revenues of $2.5 million or more; Class B utilities are those with operating revenues between $1 million and $2.5 million.) For 1980–1982, data are for selected Class A utilities whose electric operating revenues were $100 million or more during the previous year. For 1983, data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, data also include energy service providers selling to retail customers. • 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.

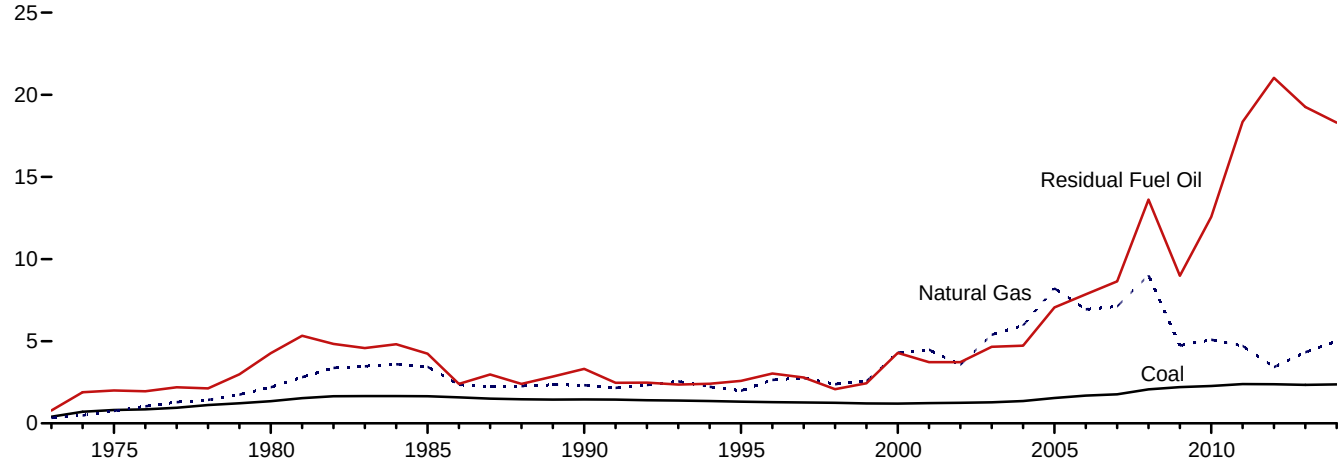
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1976.

Sources: • **1960–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." • **1984–2010:** EIA, Form EIA-861, "Annual Electric Power Industry Report." • **2011 forward:** EIA, *Electric Power Monthly,* November 2015, Table 5.3.

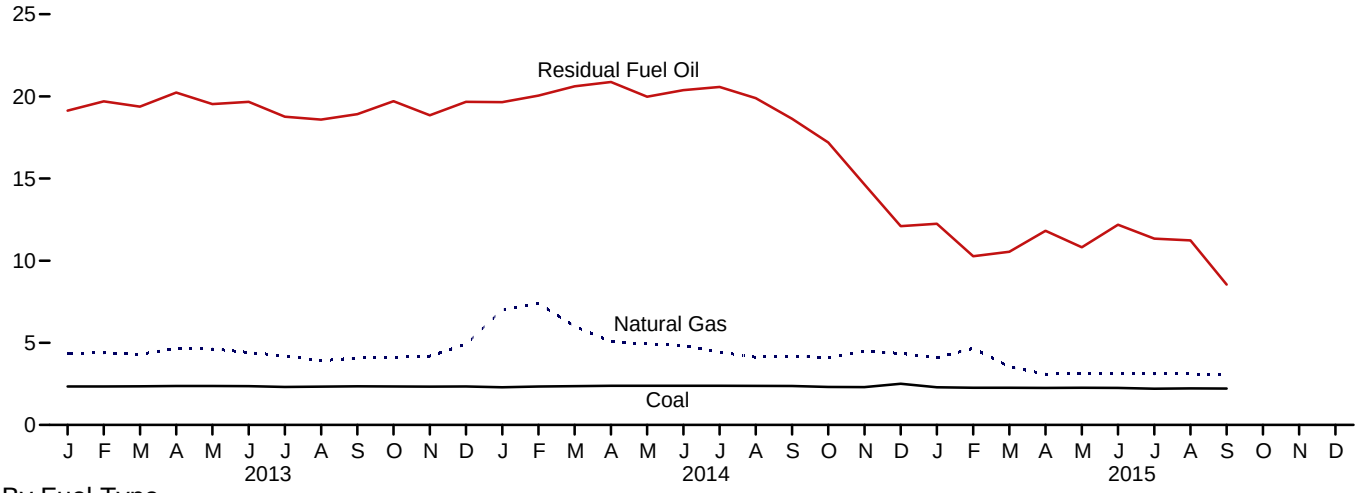
Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants

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

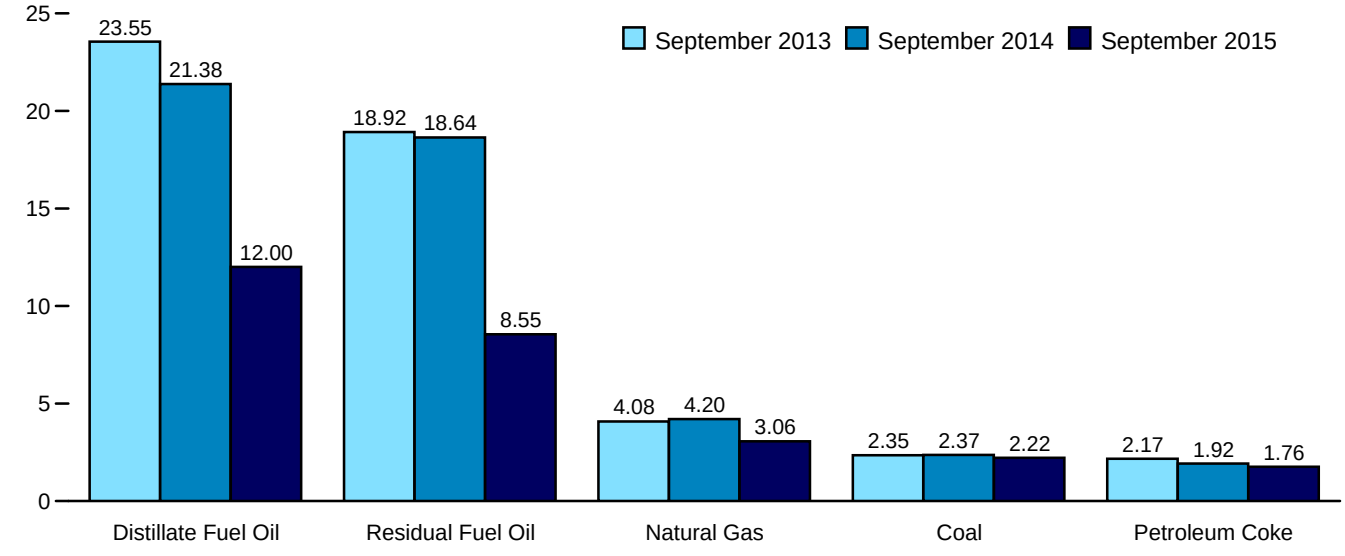
Costs, 1973–2014



Costs, Monthly



By Fuel Type



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

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

Table 9.9 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**
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 Average	**2.27**	**12.57**	**16.61**	**2.28**	**9.54**	**5.09**	**3.26**
2011 Average	**2.39**	**18.35**	**22.46**	**3.03**	**12.48**	**4.72**	**3.29**
2012 Average	**2.38**	**21.03**	**23.49**	**2.24**	**12.48**	**3.42**	**2.83**
2013 January	2.34	19.13	22.94	2.04	12.44	4.38	3.08
February	2.34	19.70	23.84	2.09	12.66	4.39	3.09
March	2.35	19.38	23.87	2.08	14.34	4.30	3.09
April	2.37	20.23	22.96	2.28	9.67	4.67	3.15
May	2.37	19.53	22.60	2.34	10.75	4.62	3.15
June	2.36	19.67	22.37	2.42	10.04	4.42	3.14
July	2.31	18.76	23.10	2.29	11.38	4.20	3.11
August	2.33	18.59	23.24	2.25	11.74	3.91	2.99
September	2.35	18.92	23.55	2.17	10.06	4.08	3.02
October	2.34	19.71	22.85	2.13	11.22	4.11	2.99
November	2.33	18.85	22.74	1.91	12.88	4.19	3.01
December	2.34	19.67	22.81	2.02	11.18	4.91	3.26
Average	**2.34**	**19.26**	**23.03**	**2.18**	**11.57**	**4.33**	**3.09**
2014 January	R 2.29	R 19.65	R 23.12	R 1.82	R 16.63	R 7.02	R 4.07
February	R 2.32	R 20.05	23.97	W	W	7.40	W
March	R 2.36	R 20.61	R 23.83	R 2.02	R 12.63	6.00	R 3.52
April	2.39	R 20.88	22.82	R 2.13	R 10.14	5.07	R 3.23
May	2.40	19.98	22.77	R 2.19	R 9.91	4.93	3.25
June	2.38	20.38	R 22.72	R 2.07	R 10.67	R 4.84	R 3.27
July	R 2.38	R 20.57	22.36	R 1.90	R 10.07	4.43	3.17
August	2.37	19.89	R 21.94	R 1.97	R 9.77	4.12	R 3.06
September	2.37	18.64	21.38	R 1.92	R 9.93	4.20	3.06
October	R 2.31	17.19	20.09	R 1.79	R 10.67	4.10	2.96
November	2.30	14.64	19.68	R 1.86	R 10.50	4.48	R 3.06
December	2.51	12.10	R 16.50	R 2.00	R 8.15	R 4.36	3.14
Average	**2.37**	**18.30**	R **21.88**	R **1.98**	R **11.60**	**5.00**	R **3.31**
2015 January	R 2.29	12.25	R 13.37	2.03	R 7.13	4.10	R 2.93
February	2.26	10.27	R 16.41	1.79	R 9.02	R 4.67	R 3.20
March	R 2.26	10.54	R 15.55	2.03	R 8.53	3.54	W
April	2.25	11.82	R 14.82	1.99	6.93	R 3.09	2.59
May	2.26	10.82	15.31	2.05	7.03	3.14	2.64
June	2.25	12.19	R 15.28	1.89	R 7.83	3.11	2.65
July	2.21	11.34	14.35	1.93	6.17	3.11	2.63
August	2.23	11.23	13.02	1.85	6.41	3.10	2.62
September	2.22	8.55	12.00	1.76	5.79	3.06	2.58
9-Month Average	**2.25**	**10.78**	**14.60**	**1.92**	**7.26**	**3.38**	**2.73**
2014 9-Month Average	**2.36**	**20.05**	**23.05**	**2.01**	**12.39**	**5.22**	**3.39**
2013 9-Month Average	**2.35**	**19.23**	**23.12**	**2.23**	**11.51**	**4.30**	**3.09**

[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] For all years, includes residual fuel oil and distillate fuel oil. For 1990 forward, also includes petroleum coke. For 1973–2012, also includes jet fuel, kerosene, and waste oil. For 1983–2012, also includes other petroleum, such as propane and refined motor oil.

[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.

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

Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • For this table, there are several breaks in the data series related to what plants and fuels are covered. Beginning in 2013, data cover all regulated generating plants; plus unregulated plants whose total fossil-fueled nameplate generating capacity is 50 megawatts or more for coal, and 200 megawatts or more for natural gas, residual fuel oil, distillate fuel oil, and petroleum coke. For data coverage before 2013, see EIA, *Electric Power Monthly,* Appendix C, Form EIA-923 notes, “Receipts and cost and quality of fossil fuels” section. • Geographic coverage is the 50 states and the District of Columbia.

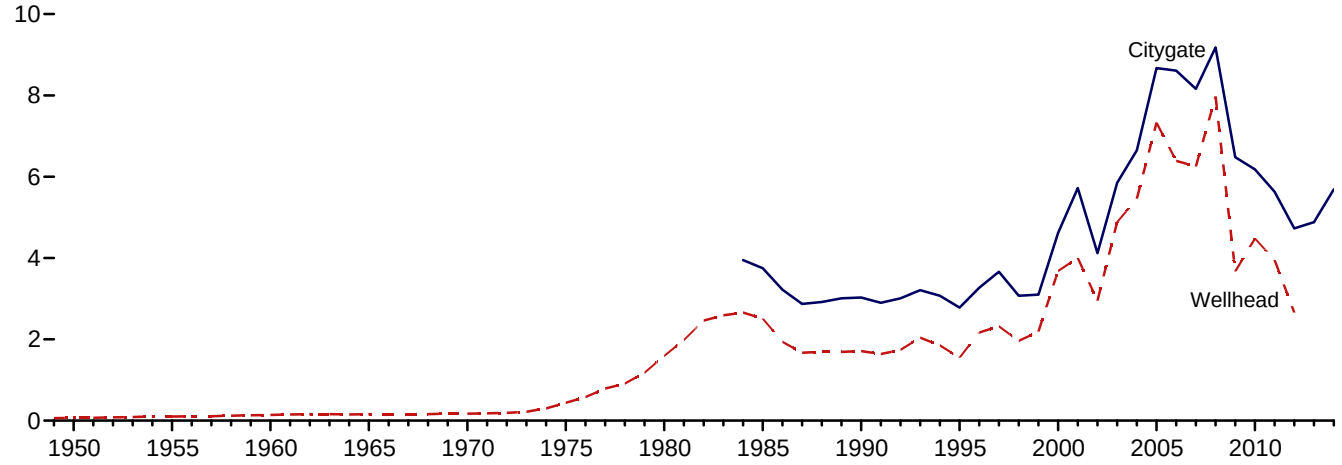
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

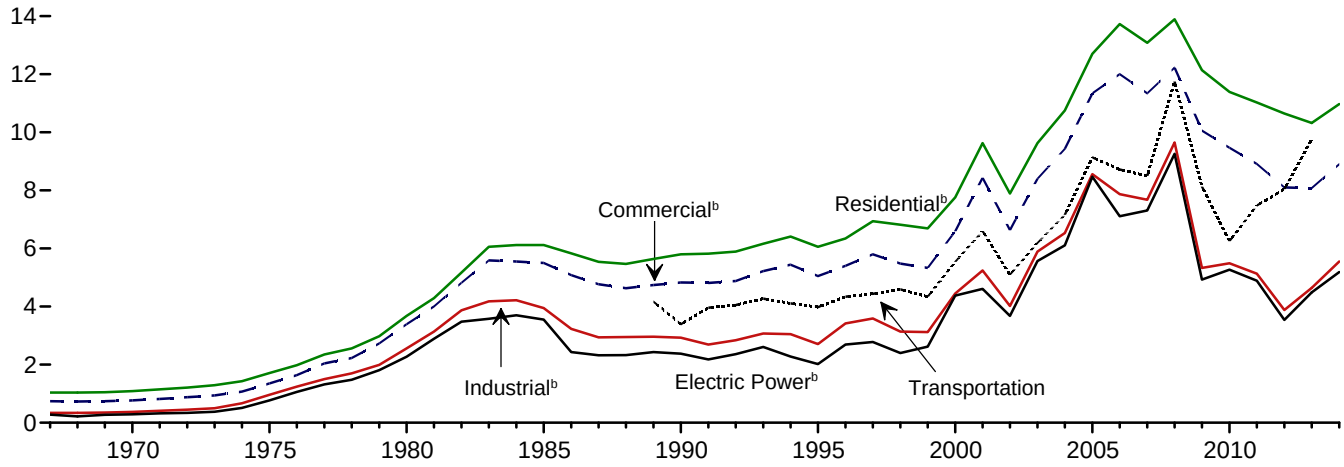
Figure 9.4 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

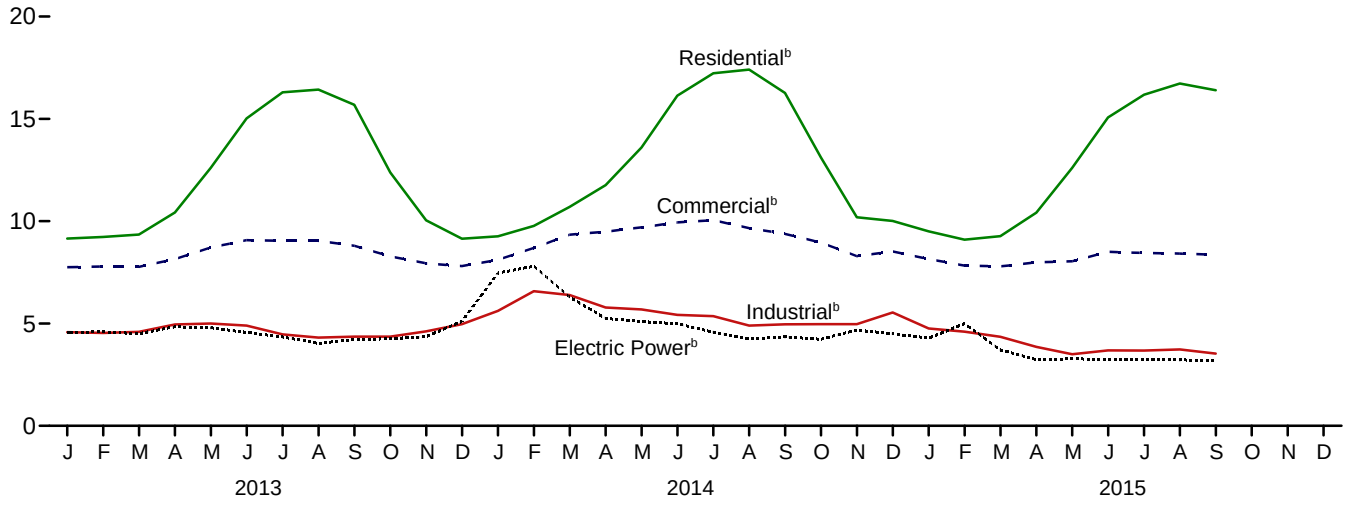
Wellhead and Citygate, 1949–2014



Consuming Sectors, 1967–2014



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 9.10.

Table 9.10 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

	Wellhead Price[f]	City-gate Price[g]	Consuming Sectors[b]								
			Residential		Commercial[c]		Industrial[d]		Transportation	Electric Power[e]	
			Price[h]	Percentage of Sector[i]	Price[h]	Percentage of Sector[i]	Price[h]	Percentage of Sector[i]	Vehicle Fuel[j] Price[h]	Price[h]	Percentage of Sector[i,k]
1950 Average	**0.07**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
1955 Average	**.10**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
1960 Average	**.14**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
1965 Average	**.16**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
1970 Average	**.17**	**NA**	**1.09**	**NA**	**.77**	**NA**	**.37**	**NA**	**NA**	**.29**	**NA**
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**
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**	**79.7**	**9.65**	**20.4**	**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 Average	**4.48**	**6.18**	**11.39**	**97.4**	**9.47**	**77.5**	**5.49**	**18.0**	**6.25**	**5.27**	**100.8**
2011 Average	**3.95**	**5.63**	**11.03**	**96.3**	**8.91**	**67.3**	**5.13**	**16.3**	**7.48**	**4.89**	**101.2**
2012 Average	[E] **2.66**	**4.73**	**10.65**	**95.8**	**8.10**	**65.2**	**3.88**	**16.2**	**8.04**	**3.54**	**95.5**
2013 January	NA	4.52	9.15	96.1	7.75	70.2	4.58	17.0	NA	4.56	95.0
February	NA	4.56	9.23	95.7	7.78	69.7	4.54	17.0	NA	4.59	94.1
March	NA	4.75	9.35	95.6	7.77	68.8	4.59	16.8	NA	4.50	94.7
April	NA	5.16	10.43	95.3	8.15	66.1	4.95	16.8	NA	4.84	95.2
May	NA	5.55	12.61	95.6	8.71	62.6	5.00	16.2	NA	4.79	95.5
June	NA	5.74	15.02	95.5	9.07	58.4	4.90	16.0	NA	4.56	95.0
July	NA	5.51	16.30	95.6	9.04	56.7	4.47	15.8	NA	4.34	94.6
August	NA	5.24	16.43	95.6	9.04	56.2	4.31	15.9	NA	4.03	94.9
September	NA	5.21	15.69	95.6	8.80	56.6	4.36	16.3	NA	4.22	95.2
October	NA	4.88	12.38	95.7	8.28	60.5	4.36	16.6	NA	4.26	95.1
November	NA	4.78	10.04	95.8	7.94	65.7	4.62	16.9	NA	4.36	94.6
December	NA	4.93	9.14	95.8	7.81	69.2	4.97	17.2	NA	5.11	94.3
Average	**NA**	**4.88**	**10.32**	**95.7**	**8.08**	**65.8**	**4.64**	**16.6**	**9.76**	**4.49**	**94.9**
2014 January	NA	5.56	9.26	95.7	8.11	70.7	5.62	16.6	NA	[R] 7.46	[R] 94.5
February	NA	6.41	9.77	95.5	8.69	70.6	6.58	17.1	NA	[R] 7.80	[R] 93.6
March	NA	6.57	10.70	95.4	9.34	69.4	6.39	16.9	NA	[R] 6.29	[R] 94.1
April	NA	5.64	11.76	95.3	9.49	65.1	5.78	16.0	NA	5.25	95.0
May	NA	5.90	13.60	95.4	9.70	60.5	5.69	15.8	NA	[R] 5.09	[R] 94.7
June	NA	6.05	16.13	95.5	9.94	58.1	5.42	15.6	NA	[R] 4.99	[R] 94.4
July	NA	5.99	17.23	95.5	10.05	55.7	5.36	15.7	NA	4.58	[R] 94.7
August	NA	5.49	17.41	95.6	9.66	55.2	4.90	15.4	NA	4.25	95.1
September	NA	5.51	16.27	95.6	9.38	55.7	4.96	14.9	NA	4.34	[R] 94.8
October	NA	5.16	13.11	95.3	8.96	58.8	4.97	14.8	NA	4.23	[R] 94.6
November	NA	4.91	10.19	95.8	8.29	66.1	4.97	15.7	NA	4.68	[R] 94.7
December	NA	5.15	10.01	95.6	8.52	68.4	5.54	15.9	NA	4.50	[R] 94.8
Average	**NA**	**5.71**	**10.97**	**95.5**	**8.90**	**65.8**	**5.55**	**15.9**	**NA**	**5.19**	[R] **94.6**
2015 January	NA	4.48	9.50	95.8	8.15	71.0	4.76	15.9	NA	4.29	[R] 94.6
February	NA	4.55	9.10	95.7	7.83	71.1	4.60	16.1	NA	4.99	94.3
March	NA	4.34	9.27	95.5	7.79	70.1	4.35	16.6	NA	3.71	[R] 94.4
April	NA	3.92	10.42	95.5	7.99	64.7	3.86	15.8	NA	3.23	95.3
May	NA	4.21	12.61	95.5	8.04	61.6	3.50	16.4	NA	3.28	[R] 95.0
June	NA	4.43	15.07	95.5	8.50	57.8	3.69	15.6	NA	3.24	94.4
July	NA	4.61	16.18	95.7	8.45	57.0	3.68	15.6	NA	3.23	[R] 94.4
August	NA	4.53	16.73	95.5	8.42	55.2	3.73	15.2	NA	3.22	[R] 93.9
September	NA	4.55	16.40	95.9	8.36	55.9	3.53	15.5	NA	3.19	94.2
9-Month Average	**NA**	**4.41**	**10.47**	**95.6**	**8.04**	**66.2**	**4.00**	**15.9**	**NA**	**3.53**	**94.5**
2014 9-Month Average	**NA**	**5.99**	**11.14**	**95.5**	**9.04**	**65.8**	**5.68**	**16.0**	**NA**	**5.42**	**94.6**
2013 9-Month Average	**NA**	**4.89**	**10.50**	**95.7**	**8.14**	**65.6**	**4.63**	**16.4**	**NA**	**4.46**	**94.9**

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

[b] See Note 8, "Natural Gas Prices," at end of section.

[c] Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "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 2, "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.

[f] See "Natural Gas Wellhead Price" in Glossary.

[g] See "Citygate" in Glossary.

[h] Includes taxes.

[i] 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 9.10 sources at end of section.

[j] 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.

[k] Percentages exceed 100% 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.

Notes: • Prices are for natural gas, plus a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 8, "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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1976.

Sources: See end of section.

Energy Prices

Note 1. 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 2. Crude Oil Domestic First Purchase Prices. The average domestic first purchase price represents the average price at which all domestic crude oil is purchased. Crude oil domestic first purchase prices were derived as follows: for 1949–1973, weighted average domestic first purchase values as reported by state agencies and calculated by the Bureau of Mines; for 1974 and 1975, weighted averages of a sample survey of major first purchasers' purchases; for 1976 forward, weighted averages of all first purchasers' purchases. The data series was previously called "Actual Domestic Wellhead Price."

Note 3. 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 4. 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 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 by grade 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. Prior to 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).

Regular motor gasoline prices by area type are determined by EIA in a weekly survey of retail motor gasoline outlets (Form EIA-878, "Motor Gasoline Price Survey"). Prices include all federal, state, and local taxes paid at the time of sale. A representative sample of outlets by geographic area and size is randomly selected from a sampling frame of approximately 115,000 retail motor gasoline outlets. Monthly and annual prices are simple averages of weighted weekly estimates from "Weekly U.S. Retail Gasoline Prices, Regular Grade." For more information on the survey methodology, see EIA, *Weekly Petroleum Status Report*, Appendix B, "Weekly Petroleum Price Surveys" section.

Refiner prices of finished motor gasoline for resale and to end users are determined by 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. 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 EIA, *Natural Gas Monthly*, Appendix C.

Table 9.1 Sources

Domestic First Purchase Price

1949–1976: 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*, December 2015, 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*, December 2015, Table 1.

Refiner Acquisition Cost

1968–1973: EIA estimates. The cost of domestic crude oil was derived by adding estimated transportation costs to the reported average domestic first purchase price. The cost of imported crude oil was derived by adding an estimated ocean transport cost based on the published "Average Freight Rate Assessment" to the average "Free Alongside Ship" value published by the U.S.Census Bureau.
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."
1977: 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*, December 2015, 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*, December 2015, Table 21.

Table 9.9 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*, November 2015, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

Table 9.10 Sources

All Prices Except Vehicle Fuel and Electric Power
1949–2012: U.S. Energy Information Administration (EIA), *Natural Gas Annual* (*NGA*), annual reports and unpublished revisions.
2013 forward: EIA, *Natural Gas Monthly* (*NGM*), November 2015, Table 3.

Vehicle Fuel Price
1989–2013: EIA, NGA, annual reports.

Electric Power Sector Price
1967–1972: EIA, NGA, annual reports.
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
1989–2012: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Calculated as the total amount of natural gas delivered to residential consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to residential consumers.
2013 forward: EIA, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Percentage of Commercial Sector
1987–2012: 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.
2013 forward: EIA, NGM, November 2015, Table 3.

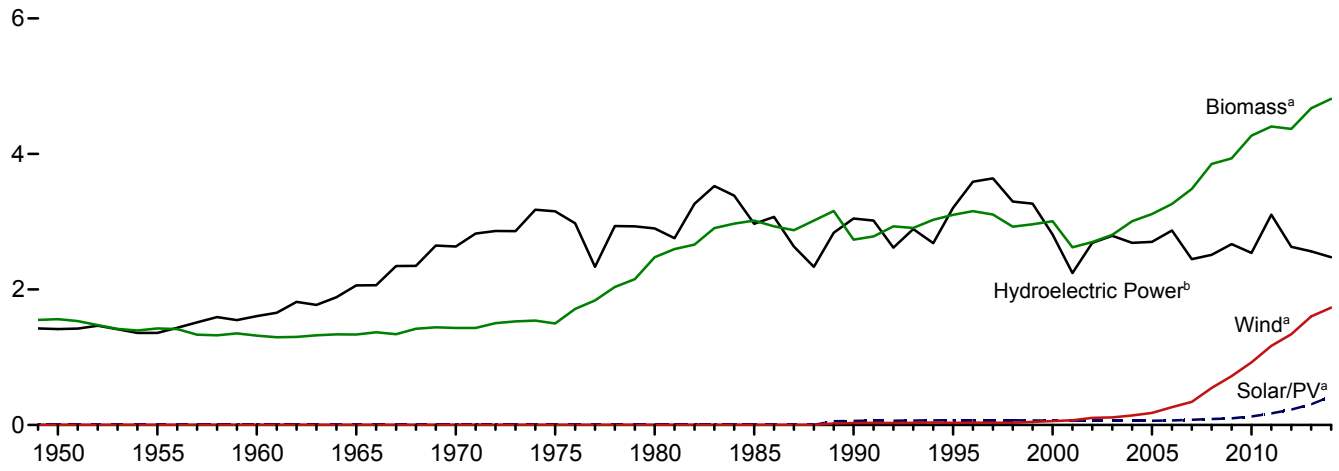
Percentage of Industrial Sector
1982–2013: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers.
2013 forward: EIA, NGM, November 2015, 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 Quality 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 (MER)*, Table 7.3b; for 1989–2001, see MER, 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 Quality 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 MER, 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 MER, Table 7.4b).

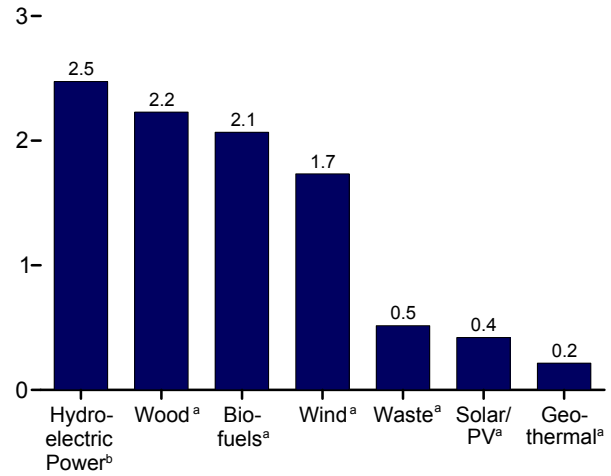
10. Renewable Energy

Figure 10.1 Renewable Energy Consumption
(Quadrillion Btu)

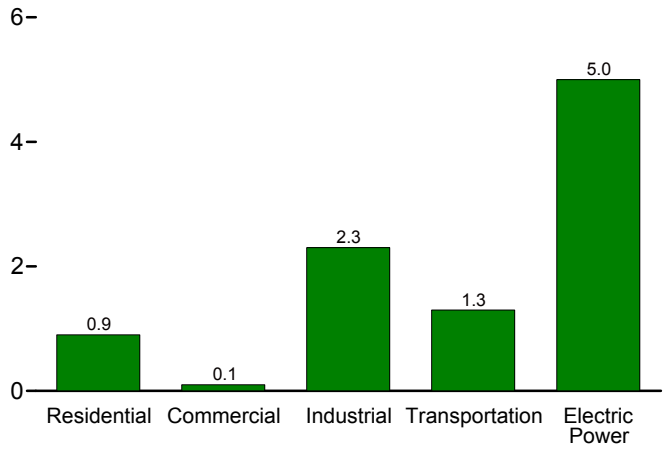
Major Sources, 1949–2014



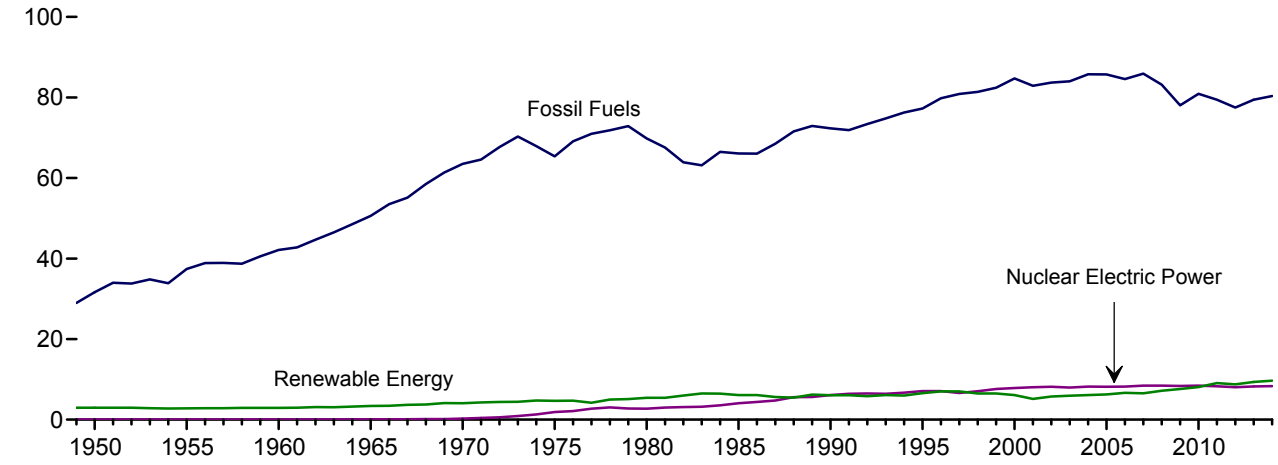
By Source, 2014



By Sector, 2014



Compared With Other Resources, 1949–2014



[a] See Table 10.1 for definition.
[b] Conventional hydroelectric power.

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	
1950 Total	**NA**	**1,562**	**2,978**	**1,415**	**NA**	**NA**	**NA**	**1,562**	**NA**	**NA**	**1,562**	**2,978**
1955 Total	**NA**	**1,424**	**2,784**	**1,360**	**NA**	**NA**	**NA**	**1,424**	**NA**	**NA**	**1,424**	**2,784**
1960 Total	**NA**	**1,320**	**2,928**	**1,608**	**(s)**	**NA**	**NA**	**1,320**	**NA**	**NA**	**1,320**	**2,928**
1965 Total	**NA**	**1,335**	**3,396**	**2,059**	**2**	**NA**	**NA**	**1,335**	**NA**	**NA**	**1,335**	**3,396**
1970 Total	**NA**	**1,431**	**4,070**	**2,634**	**6**	**NA**	**NA**	**1,429**	**2**	**NA**	**1,431**	**4,070**
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**
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	**401**	**2,805**	**5,946**	**2,793**	**173**	**62**	**113**	**2,002**	**401**	**403**	**2,806**	**5,948**
2004 Total	**486**	**2,996**	**6,067**	**2,688**	**178**	**63**	**142**	**2,121**	**389**	**498**	**3,008**	**6,079**
2005 Total	**561**	**3,101**	**6,226**	**2,703**	**181**	**63**	**178**	**2,137**	**403**	**574**	**3,114**	**6,239**
2006 Total	**716**	**3,212**	**6,594**	**2,869**	**181**	**68**	**264**	**2,099**	**397**	**766**	**3,262**	**6,645**
2007 Total	**970**	**3,472**	**6,520**	**2,446**	**186**	**76**	**341**	**2,089**	**413**	**983**	**3,485**	**6,533**
2008 Total	**1,374**	**3,868**	**7,206**	**2,511**	**192**	**89**	**546**	**2,059**	**435**	**1,357**	**3,851**	**7,189**
2009 Total	**1,570**	**3,953**	**7,641**	**2,669**	**200**	**98**	**721**	**1,931**	**452**	**1,553**	**3,936**	**7,624**
2010 Total	**1,868**	**4,316**	**8,112**	**2,539**	**208**	**126**	**923**	**1,981**	**468**	**1,821**	**4,270**	**8,066**
2011 Total	**2,029**	**4,501**	**9,155**	**3,103**	**212**	**171**	**1,168**	**2,010**	**462**	**1,933**	**4,405**	**9,059**
2012 Total	**1,929**	**4,406**	**8,813**	**2,629**	**212**	**227**	**1,340**	**2,010**	**467**	**1,892**	**4,369**	**8,777**
2013 January	150	377	795	237	19	22	141	185	41	149	376	794
February	137	341	708	195	17	21	134	167	37	139	343	710
March	159	383	772	196	19	25	150	182	42	161	385	774
April	160	372	820	239	17	24	167	171	41	162	374	822
May	169	390	860	271	18	26	155	179	41	170	390	860
June	167	387	823	261	17	26	131	179	40	173	392	828
July	170	403	813	260	18	27	106	190	42	171	403	814
August	167	397	741	206	18	28	92	188	42	170	400	744
September	162	379	697	162	18	27	111	177	40	170	387	704
October	177	400	741	164	18	28	130	181	42	183	406	746
November	176	399	762	169	17	26	151	181	42	175	398	761
December	185	420	800	202	18	27	133	189	45	185	420	799
Total	**1,981**	**4,647**	**9,330**	**2,562**	**214**	**305**	**1,601**	**2,170**	**496**	**2,007**	**4,673**	**9,356**
2014 January	170	R 404	R 829	206	R 18	29	R 171	R 190	R 45	163	R 397	R 822
February	153	R 367	R 710	166	R 16	R 27	R 134	R 173	R 41	150	R 364	R 707
March	173	R 406	R 859	231	R 18	R 34	169	R 189	R 45	167	R 401	R 854
April	170	R 392	R 866	R 243	18	R 35	R 178	R 179	R 44	167	R 390	R 863
May	178	R 403	R 861	R 253	R 18	R 38	R 149	R 182	R 43	176	R 401	R 859
June	177	R 406	R 859	246	18	R 39	R 151	R 186	R 42	173	R 402	R 855
July	183	R 420	R 825	R 232	R 18	R 38	R 116	R 192	R 45	180	R 417	R 822
August	179	R 416	R 759	189	R 18	R 39	97	R 193	R 43	182	R 418	R 762
September	173	R 396	R 715	R 153	18	R 38	110	R 182	R 41	172	R 394	R 714
October	179	407	R 766	R 164	R 18	R 38	R 138	R 186	R 42	180	408	R 767
November	177	R 403	R 813	R 178	R 18	34	R 180	R 185	R 42	173	R 399	R 809
December	191	R 428	831	R 213	19	31	140	R 194	R 44	183	R 420	R 823
Total	**2,103**	**R 4,849**	**R 9,692**	**R 2,475**	**R 215**	**R 421**	**R 1,733**	**R 2,230**	**R 516**	**2,067**	**R 4,812**	**R 9,656**
2015 January	178	R 405	R 841	R 235	R 20	35	146	R 182	R 45	164	R 392	R 827
February	162	R 364	R 778	R 217	18	37	143	R 164	R 39	156	R 358	R 773
March	180	R 393	R 841	R 237	19	45	R 146	R 171	R 43	174	R 388	R 836
April	172	R 380	R 830	R 215	18	48	170	R 166	R 41	169	R 377	R 828
May	183	R 397	R 822	R 193	19	49	R 164	R 172	R 42	185	R 399	R 823
June	184	R 396	R 783	191	18	49	128	R 170	R 42	186	R 398	R 785
July	187	R 411	R 812	201	19	R 50	130	R 179	R 45	188	R 412	R 813
August	184	R 404	R 784	R 185	19	51	124	R 177	R 43	188	R 408	R 788
September	176	384	734	155	18	45	132	168	41	182	390	740
9-Month Total	**1,605**	**3,534**	**7,225**	**1,829**	**169**	**409**	**1,283**	**1,548**	**381**	**1,593**	**3,522**	**7,212**
2014 9-Month Total	**1,556**	**3,610**	**7,283**	**1,920**	**160**	**318**	**1,274**	**1,666**	**388**	**1,531**	**3,585**	**7,257**
2013 9-Month Total	**1,442**	**3,428**	**7,028**	**2,028**	**160**	**225**	**1,187**	**1,618**	**367**	**1,464**	**3,450**	**7,050**

[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 by multiplying by the total fossil fuels heat rate factors in Table A6).

[f] Geothermal electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6), and geothermal heat pump and direct use energy.

[g] Solar thermal and photovoltaic (PV) electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6), and solar thermal direct use energy.

[h] Wind electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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
1950 Total	**NA**	**NA**	**1,006**	**1,006**	**NA**	**NA**	**NA**	**NA**	**19**	**NA**	**NA**	**19**	**19**
1955 Total	**NA**	**NA**	**775**	**775**	**NA**	**NA**	**NA**	**NA**	**15**	**NA**	**NA**	**15**	**15**
1960 Total	**NA**	**NA**	**627**	**627**	**NA**	**NA**	**NA**	**NA**	**12**	**NA**	**NA**	**12**	**12**
1965 Total	**NA**	**NA**	**468**	**468**	**NA**	**NA**	**NA**	**NA**	**9**	**NA**	**NA**	**9**	**9**
1970 Total	**NA**	**NA**	**401**	**401**	**NA**	**NA**	**NA**	**NA**	**8**	**NA**	**NA**	**8**	**8**
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**
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**	**420**	**512**	**1**	**14**	**–**	**–**	**70**	**31**	**2**	**103**	**118**
2008 Total	**26**	**80**	**470**	**577**	**1**	**15**	**(s)**	**–**	**73**	**34**	**2**	**109**	**125**
2009 Total	**33**	**89**	**500**	**622**	**1**	**17**	**(s)**	**(s)**	**73**	**36**	**3**	**112**	**129**
2010 Total	**37**	**114**	**440**	**591**	**1**	**19**	**(s)**	**(s)**	**72**	**36**	**3**	**111**	**130**
2011 Total	**40**	**153**	**450**	**643**	**(s)**	**20**	**1**	**(s)**	**69**	**43**	**3**	**115**	**136**
2012 Total	**40**	**186**	**420**	**646**	**(s)**	**20**	**1**	**1**	**61**	**45**	**3**	**108**	**130**
2013 January	3	19	49	71	(s)	2	(s)	(s)	6	4	(s)	10	12
February	3	17	44	64	(s)	2	(s)	(s)	5	3	(s)	9	11
March	3	19	49	71	(s)	2	(s)	(s)	6	4	(s)	10	12
April	3	18	48	69	(s)	2	(s)	(s)	6	4	(s)	10	12
May	3	19	49	71	(s)	2	(s)	(s)	6	4	(s)	10	12
June	3	18	48	69	(s)	2	(s)	(s)	6	4	(s)	10	12
July	3	19	49	71	(s)	2	(s)	(s)	6	4	(s)	10	12
August	3	19	49	71	(s)	2	(s)	(s)	6	4	(s)	10	12
September	3	18	48	69	(s)	2	(s)	(s)	6	4	(s)	10	12
October	3	19	49	71	(s)	2	(s)	(s)	6	4	(s)	10	12
November	3	18	48	69	(s)	2	(s)	(s)	6	4	(s)	10	12
December	3	19	49	71	(s)	2	(s)	(s)	6	4	(s)	10	12
Total	**40**	**219**	**580**	**839**	**(s)**	**20**	**3**	**1**	**70**	**47**	**3**	**120**	**143**
2014 January	3	21	49	74	(s)	2	(s)	(s)	6	4	(s)	R 11	R 13
February	3	19	44	67	(s)	2	(s)	(s)	R 6	3	(s)	9	11
March	3	21	49	74	(s)	2	(s)	(s)	6	4	(s)	10	12
April	3	21	48	72	(s)	2	(s)	(s)	6	4	(s)	10	12
May	3	21	49	74	(s)	2	(s)	(s)	6	4	(s)	10	R 13
June	3	21	48	72	(s)	2	(s)	(s)	6	4	(s)	10	12
July	3	21	49	74	(s)	2	(s)	(s)	6	4	(s)	R 11	R 13
August	3	21	49	74	(s)	2	(s)	(s)	6	4	(s)	R 11	R 13
September	3	21	48	72	(s)	2	(s)	(s)	6	4	(s)	10	12
October	3	21	49	74	(s)	2	(s)	(s)	6	4	(s)	10	12
November	3	21	48	72	(s)	2	(s)	(s)	6	4	(s)	10	12
December	3	21	49	74	(s)	2	(s)	(s)	6	4	(s)	10	12
Total	**40**	**252**	**580**	**871**	**(s)**	**20**	**4**	**1**	R **73**	R **47**	**3**	R **123**	R **148**
2015 January	3	24	38	65	(s)	2	(s)	(s)	R 7	4	(s)	11	13
February	3	22	34	59	(s)	2	(s)	(s)	6	4	(s)	10	12
March	3	24	38	65	(s)	2	(s)	(s)	6	4	(s)	11	13
April	3	23	37	63	(s)	2	1	(s)	6	R 3	(s)	10	12
May	3	24	38	65	(s)	2	1	(s)	R 6	R 3	(s)	R 10	R 12
June	3	23	37	63	(s)	2	1	(s)	6	3	(s)	10	12
July	3	24	38	65	(s)	2	1	(s)	7	4	(s)	10	13
August	3	24	38	65	(s)	2	1	(s)	6	3	(s)	10	12
September	3	23	37	63	(s)	2	(s)	(s)	6	3	(s)	10	12
9-Month Total	**30**	**210**	**334**	**574**	**(s)**	**15**	**4**	**1**	**57**	**33**	**2**	**92**	**112**
2014 9-Month Total	**30**	**188**	**434**	**652**	**(s)**	**15**	**3**	**1**	**55**	**36**	**2**	**93**	**111**
2013 9-Month Total	**30**	**164**	**434**	**627**	**(s)**	**15**	**2**	**(s)**	**52**	**35**	**2**	**90**	**107**

[a] Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "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 by multiplying by the total fossil fuels heat rate factors in Table A6). Includes 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 by multiplying by the total fossil fuels heat rate factors in Table A6).

[f] Photovoltaic (PV) electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6) at commercial plants with capacity of 1 megawatt or greater.

[g] Wind electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in 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.

R=Revised. 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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		
	Hydro-electric Power[b]	Geo-thermal[c]	Solar/ PV[d]	Wind[e]	Wood[f]	Waste[g]	Fuel Ethanol[h]	Losses and Co-products[i]	Total	Total	Fuel Ethanol[j]	Bio-diesel[k]	Total[l]
1950 Total	**69**	**NA**	**NA**	**NA**	**532**	**NA**	**NA**	**NA**	**532**	**602**	**NA**	**NA**	**NA**
1955 Total	**38**	**NA**	**NA**	**NA**	**631**	**NA**	**NA**	**NA**	**631**	**669**	**NA**	**NA**	**NA**
1960 Total	**39**	**NA**	**NA**	**NA**	**680**	**NA**	**NA**	**NA**	**680**	**719**	**NA**	**NA**	**NA**
1965 Total	**33**	**NA**	**NA**	**NA**	**855**	**NA**	**NA**	**NA**	**855**	**888**	**NA**	**NA**	**NA**
1970 Total	**34**	**NA**	**NA**	**NA**	**1,019**	**NA**	**NA**	**NA**	**1,019**	**1,053**	**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**
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**	**168**	**1,678**	**1,724**	**228**	**2**	**230**
2004 Total	**33**	**4**	**–**	**–**	**1,476**	**132**	**6**	**201**	**1,815**	**1,851**	**286**	**3**	**290**
2005 Total	**32**	**4**	**–**	**–**	**1,452**	**148**	**7**	**227**	**1,834**	**1,870**	**327**	**12**	**339**
2006 Total	**29**	**4**	**–**	**–**	**1,472**	**130**	**10**	**280**	**1,892**	**1,925**	**442**	**33**	**475**
2007 Total	**16**	**5**	**–**	**–**	**1,413**	**145**	**10**	**369**	**1,937**	**1,957**	**557**	**45**	**602**
2008 Total	**17**	**5**	**–**	**–**	**1,339**	**143**	**12**	**519**	**2,012**	**2,034**	**786**	**39**	**825**
2009 Total	**18**	**4**	**–**	**–**	**1,178**	**154**	**13**	**603**	**1,948**	**1,971**	**894**	**41**	**935**
2010 Total	**16**	**4**	**(s)**	**–**	**1,273**	**168**	**17**	**727**	**2,185**	**2,205**	**1,041**	**33**	**1,075**
2011 Total	**17**	**4**	**(s)**	**(s)**	**1,309**	**165**	**17**	**756**	**2,246**	**2,268**	**1,045**	**113**	**1,158**
2012 Total	**22**	**4**	**(s)**	**(s)**	**1,339**	**159**	**17**	**711**	**2,226**	**2,253**	**1,045**	**115**	**1,162**
2013 January	3	(s)	(s)	(s)	113	16	1	55	185	189	83	9	92
February	3	(s)	(s)	(s)	101	14	1	50	167	171	77	9	87
March	3	(s)	(s)	(s)	109	16	1	57	184	187	89	12	102
April	2	(s)	(s)	(s)	104	16	1	57	179	182	89	13	103
May	3	(s)	(s)	(s)	108	15	2	61	186	190	93	14	107
June	3	(s)	(s)	(s)	109	15	2	60	185	188	93	15	111
July	3	(s)	(s)	(s)	117	15	2	60	194	198	92	15	109
August	2	(s)	(s)	(s)	113	16	2	59	189	192	91	16	109
September	2	(s)	(s)	(s)	105	15	1	57	179	181	90	18	111
October	2	(s)	(s)	(s)	108	16	2	63	189	192	94	22	118
November	2	(s)	(s)	(s)	109	16	1	63	190	192	89	18	111
December	3	(s)	(s)	(s)	114	17	2	66	199	202	92	22	118
Total	**33**	**4**	**(s)**	**(s)**	**1,312**	**187**	**18**	**709**	**2,226**	**2,264**	**1,072**	**182**	**1,278**
2014 January	R 1	(s)	(s)	(s)	R 113	16	1	63	R 193	R 195	87	10	98
February	R 1	(s)	(s)	(s)	R 102	R 15	1	56	R 175	R 176	82	10	93
March	R 1	(s)	(s)	(s)	R 112	R 17	1	62	R 192	R 194	88	14	103
April	R 1	(s)	(s)	(s)	107	R 17	1	62	R 187	R 189	89	12	104
May	R 1	(s)	(s)	(s)	R 109	15	2	64	R 190	R 192	94	15	110
June	R 1	(s)	(s)	(s)	R 111	15	2	64	191	R 192	92	16	108
July	R 1	(s)	(s)	(s)	R 114	16	2	65	R 197	198	95	15	113
August	R 1	(s)	(s)	(s)	115	15	2	64	R 196	R 197	95	19	116
September	R 1	(s)	(s)	(s)	107	R 14	1	62	185	R 186	88	19	108
October	R 1	(s)	(s)	(s)	R 110	R 17	2	64	192	R 193	96	16	114
November	R 1	(s)	(s)	(s)	R 109	R 16	2	64	190	192	91	17	108
December	R 1	(s)	(s)	(s)	116	R 17	2	68	202	204	94	18	113
Total	**R 12**	**4**	**(s)**	**R 1**	**R 1,325**	**R 190**	**18**	**757**	**R 2,290**	**R 2,307**	**1,091**	**181**	**1,289**
2015 January	R 1	(s)	(s)	(s)	R 116	16	1	65	R 199	R 201	90	7	97
February	R 1	(s)	(s)	(s)	R 103	R 14	1	59	R 177	178	83	11	95
March	R 1	(s)	(s)	(s)	R 106	16	2	65	R 189	R 191	94	12	108
April	R 1	(s)	(s)	(s)	R 106	R 17	1	61	R 185	R 187	90	14	106
May	1	(s)	(s)	(s)	R 108	R 17	2	65	R 192	R 193	98	18	117
June	1	(s)	(s)	(s)	R 106	16	2	65	R 189	R 191	97	20	119
July	1	(s)	(s)	(s)	R 111	17	2	67	R 196	R 198	99	18	120
August	1	(s)	(s)	(s)	R 109	16	2	65	R 192	R 193	99	19	121
September	1	(s)	(s)	(s)	105	16	2	63	185	186	95	19	117
9-Month Total	**9**	**3**	**(s)**	**(s)**	**968**	**145**	**14**	**576**	**1,704**	**1,717**	**845**	**140**	**1,001**
2014 9-Month Total	**9**	**3**	**(s)**	**(s)**	**990**	**141**	**13**	**561**	**1,705**	**1,718**	**810**	**130**	**954**
2013 9-Month Total	**26**	**3**	**(s)**	**(s)**	**980**	**137**	**13**	**518**	**1,648**	**1,678**	**796**	**120**	**931**

[a] Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

[b] Conventional hydroelectricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).

[c] Geothermal heat pump and direct use energy.

[d] Photovoltaic (PV) electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6) at industrial plants with capacity of 1 megawatt or greater.

[e] Wind electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in 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.

[k] Although there is biodiesel use in other sectors, all biodiesel consumption is assigned to the transportation sector.

[l] Beginning in 2009, includes imports minus stock change of other renewable diesel fuel and other renewable fuels. See "Renewable Diesel Fuel (Other)" and "Renewable Fuels (Other)" in Glossary.

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 1949–1978 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly 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	
1950 Total	**1,346**	**NA**	**NA**	**NA**	**5**	**NA**	**5**	**1,351**
1955 Total	**1,322**	**NA**	**NA**	**NA**	**3**	**NA**	**3**	**1,325**
1960 Total	**1,569**	**(s)**	**NA**	**NA**	**2**	**NA**	**2**	**1,571**
1965 Total	**2,026**	**2**	**NA**	**NA**	**3**	**NA**	**3**	**2,031**
1970 Total	**2,600**	**6**	**NA**	**NA**	**1**	**2**	**4**	**2,609**
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	**3,014**	**161**	**4**	**29**	**129**	**188**	**317**	**3,524**
1995 Total	**3,149**	**138**	**5**	**33**	**125**	**296**	**422**	**3,747**
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	**2,749**	**146**	**5**	**113**	**167**	**230**	**397**	**3,411**
2004 Total	**2,655**	**148**	**6**	**142**	**165**	**223**	**388**	**3,339**
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 Total	**2,521**	**148**	**12**	**923**	**196**	**264**	**459**	**4,064**
2011 Total	**3,085**	**149**	**17**	**1,167**	**182**	**255**	**437**	**4,855**
2012 Total	**2,606**	**148**	**40**	**1,339**	**190**	**262**	**453**	**4,586**
2013 January	234	13	3	141	17	22	39	429
February	191	12	4	134	15	19	35	376
March	193	13	6	150	17	23	39	402
April	237	12	6	167	14	21	35	457
May	268	12	7	155	15	22	37	480
June	258	12	8	131	17	22	39	448
July	257	13	8	106	18	22	41	424
August	204	13	9	92	20	23	42	360
September	160	12	9	111	18	21	39	331
October	162	13	9	130	18	22	39	353
November	167	12	8	151	19	22	41	377
December	198	13	8	133	20	24	43	396
Total	**2,529**	**151**	**83**	**1,600**	**207**	**262**	**470**	**4,833**
2014 January	R 205	R 13	R 7	R 171	R 21	R 24	R 45	R 441
February	R 165	12	8	R 134	20	R 22	R 42	R 360
March	R 230	13	R 12	169	22	R 24	R 46	R 471
April	R 241	13	R 14	R 178	R 18	R 23	R 41	R 487
May	R 252	13	R 16	R 149	R 17	R 24	R 41	R 471
June	R 245	R 12	R 18	R 151	22	R 24	R 45	R 471
July	R 232	13	17	R 116	R 23	R 25	R 48	R 425
August	R 188	13	18	97	R 23	R 24	R 46	R 362
September	R 153	R 12	17	R 110	R 21	R 22	R 43	R 335
October	R 163	13	16	R 138	20	22	42	R 372
November	R 177	R 13	13	R 180	R 22	22	R 44	R 426
December	212	R 13	R 10	140	22	R 23	R 45	R 420
Total	**R 2,462**	**R 151**	**R 165**	**R 1,732**	**R 251**	**R 279**	**R 530**	**R 5,040**
2015 January	R 233	14	11	145	22	R 24	R 46	R 451
February	R 216	13	15	143	21	R 21	R 42	R 428
March	R 236	14	21	146	20	R 22	R 42	R 459
April	R 214	13	24	170	17	R 22	R 39	R 459
May	191	14	R 24	R 164	19	R 22	R 41	R 435
June	190	13	R 25	128	R 21	R 22	R 43	R 400
July	200	14	26	130	23	R 25	R 48	R 417
August	R 185	14	R 26	124	R 24	R 24	R 47	R 396
September	154	12	22	132	20	21	41	362
9-Month Total	**1,820**	**121**	**195**	**1,282**	**188**	**203**	**391**	**3,808**
2014 9-Month Total	**1,911**	**113**	**127**	**1,273**	**187**	**212**	**399**	**3,822**
2013 9-Month Total	**2,002**	**113**	**59**	**1,187**	**152**	**195**	**346**	**3,706**

[a] Conventional hydroelectricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).

[b] Geothermal electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).

[c] Solar thermal and photovoltaic (PV) electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).

[d] Wind electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in 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).

R=Revised. 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 (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: Tables 7.2b, 7.4b, 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***
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**	**168**	**1,335**	**66,772**	**2,804**	**238**	**292**	**5,978**	**-222**	**67,286**	**2,826**	**240**	***233***
2004 Total	**482**	**201**	**1,621**	**81,058**	**3,404**	**289**	**3,542**	**6,002**	**24**	**84,576**	**3,552**	**301**	***293***
2005 Total	**550**	**227**	**1,859**	**92,961**	**3,904**	**331**	**3,234**	**5,563**	**-439**	**96,634**	**4,059**	**344**	***335***
2006 Total	**683**	**280**	**2,326**	**116,294**	**4,884**	**414**	**17,408**	**8,760**	**3,197**	**130,505**	**5,481**	**465**	***453***
2007 Total	**907**	**368**	**3,105**	**155,263**	**6,521**	**553**	**10,457**	**10,535**	**1,775**	**163,945**	**6,886**	**584**	***569***
2008 Total	**1,286**	**518**	**4,433**	**221,637**	**9,309**	**790**	**12,610**	**14,226**	**3,691**	**230,556**	**9,683**	**821**	***800***
2009 Total	**1,503**	**602**	**5,688**	**260,424**	**10,938**	**928**	**4,720**	**16,594**	**2,368**	**262,776**	**11,037**	**936**	***910***
2010 Total	**1,823**	**726**	**6,506**	**316,617**	**13,298**	**1,127**	**-9,115**	**17,941**	**1,347**	**306,155**	**12,858**	**1,090**	***1,061***
2011 Total	**1,904**	**754**	**6,649**	**331,646**	**13,929**	**1,181**	**-24,365**	**18,238**	**297**	**306,984**	**12,893**	**1,093**	***1,065***
2012 Total	**1,801**	**709**	**6,264**	**314,714**	**13,218**	**1,120**	**-5,891**	**20,350**	**2,112**	**306,711**	**12,882**	**1,092**	***1,064***
2013 January	141	55	503	24,778	1,041	88	-767	19,894	-456	24,467	1,028	87	*85*
February	128	50	461	22,494	945	80	-727	19,009	-885	22,652	951	81	*79*
March	146	57	511	25,620	1,076	91	-169	18,410	-599	26,050	1,094	93	*90*
April	146	57	515	25,601	1,075	91	-551	17,370	-1,040	26,090	1,096	93	*90*
May	155	61	537	27,197	1,142	97	-400	16,804	-566	27,363	1,149	97	*95*
June	152	60	509	26,722	1,122	95	130	16,428	-376	27,228	1,144	97	*95*
July	154	60	519	26,923	1,131	96	624	17,072	644	26,903	1,130	96	*93*
August	150	59	494	26,279	1,104	94	413	16,945	-127	26,819	1,126	95	*93*
September	146	57	499	25,564	1,074	91	-187	15,986	-959	26,336	1,106	94	*91*
October	160	63	538	27,995	1,176	100	-767	15,750	-236	27,464	1,153	98	*95*
November	159	62	532	27,915	1,172	99	-1,902	15,569	-181	26,194	1,100	93	*91*
December	168	66	563	29,405	1,235	105	-1,459	16,424	855	27,091	1,138	96	*94*
Total	**1,805**	**707**	**6,181**	**316,493**	**13,293**	**1,126**	**-5,761**	**16,424**	**-3,926**	**314,658**	**13,216**	**1,120**	***1,092***
2014 January	160	62	558	28,194	1,184	100	-2,024	17,153	729	25,441	1,069	91	*88*
February	144	56	498	25,269	1,061	90	-1,473	16,865	-288	24,084	1,012	86	*84*
March	160	62	544	28,120	1,181	100	-1,985	17,310	445	25,690	1,079	91	*89*
April	158	61	551	27,733	1,165	99	-1,202	17,610	300	26,231	1,102	93	*91*
May	164	64	565	28,888	1,213	103	-704	18,330	720	27,464	1,153	98	*95*
June	163	63	524	28,629	1,202	102	-1,278	18,785	455	26,896	1,130	96	*93*
July	167	65	542	29,413	1,235	105	-1,495	18,696	-89	28,007	1,176	100	*97*
August	163	64	534	28,665	1,204	102	-1,283	18,218	-478	27,860	1,170	99	*97*
September	158	62	509	27,807	1,168	99	-1,346	18,724	506	25,955	1,090	92	*90*
October	163	64	502	28,644	1,203	102	-1,919	17,341	-1,383	28,108	1,181	100	*98*
November	163	63	540	28,588	1,201	102	-2,081	17,035	-306	26,813	1,126	95	*93*
December	175	68	609	30,831	1,295	110	-1,580	18,739	1,704	27,547	1,157	98	*96*
Total	**1,938**	**755**	**6,476**	**340,781**	**14,313**	**1,212**	**-18,371**	**18,739**	**2,315**	**320,095**	**13,444**	**1,139**	***1,111***
2015 January	168	65	588	29,755	1,250	106	-1,630	20,543	1,804	26,321	1,105	94	*91*
February	152	59	534	26,788	1,125	95	-1,992	20,979	436	24,360	1,023	87	*84*
March	167	65	567	29,489	1,239	105	-1,992	20,865	-114	27,611	1,160	98	*96*
April	158	61	527	27,910	1,172	99	-1,529	20,787	-78	26,459	1,111	94	*92*
May	168	65	545	29,666	1,246	106	-1,532	20,120	-667	28,801	1,210	102	*100*
June	168	65	528	29,684	1,247	106	-1,428	20,029	-91	28,347	1,191	101	*99*
July	172	66	539	30,256	1,271	108	-1,802	19,594	-435	28,889	1,213	103	*100*
August	168	65	523	29,621	1,244	105	-830	19,259	-335	29,126	1,223	104	*101*
September	162	63	519	28,543	1,199	102	-933	18,904	-355	27,965	1,175	99	*97*
9-Month Total	**1,484**	**575**	**4,870**	**261,712**	**10,992**	**931**	**-13,668**	**18,904**	**165**	**247,879**	**10,411**	**882**	***861***
2014 9-Month Total	**1,437**	**560**	**4,825**	**252,718**	**10,614**	**899**	**-12,792**	**18,724**	**2,300**	**237,626**	**9,980**	**845**	***825***
2013 9-Month Total	**1,318**	**516**	**4,548**	**231,178**	**9,709**	**823**	**-1,634**	**15,986**	**-4,364**	**233,908**	**9,824**	**832**	***812***

[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 (including industrial alcohol) 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.

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 (Excel and CSV files) for all available annual and monthly data beginning in 1981.

Sources: See end of section.

Table 10.4 Biodiesel and Other Renewable Fuels Overview

	Biodiesel													Other Renewable Fuels[f]
	Feedstock[a]	Losses and Co-products[b]	Production			Trade			Stocks[d]	Stock Change[e]	Consumption			
						Imports	Exports	Net Imports[c]						
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu	TBtu
2001 Total	**1**	**(s)**	**204**	**9**	**1**	**81**	**41**	**40**	**NA**	**NA**	**244**	**10**	**1**	**NA**
2002 Total	**1**	**(s)**	**250**	**10**	**1**	**197**	**57**	**140**	**NA**	**NA**	**390**	**16**	**2**	**NA**
2003 Total	**2**	**(s)**	**338**	**14**	**2**	**97**	**113**	**-17**	**NA**	**NA**	**322**	**14**	**2**	**NA**
2004 Total	**4**	**(s)**	**666**	**28**	**4**	**101**	**128**	**-27**	**NA**	**NA**	**639**	**27**	**3**	**NA**
2005 Total	**12**	**(s)**	**2,162**	**91**	**12**	**214**	**213**	**1**	**NA**	**NA**	**2,163**	**91**	**12**	**NA**
2006 Total	**32**	**(s)**	**5,963**	**250**	**32**	**1,105**	**856**	**250**	**NA**	**NA**	**6,213**	**261**	**33**	**NA**
2007 Total	**63**	**1**	**11,662**	**490**	**62**	**3,455**	**6,696**	**-3,241**	**NA**	**NA**	**8,422**	**354**	**45**	**NA**
2008 Total	**88**	**1**	**16,145**	**678**	**87**	**7,755**	**16,673**	**-8,918**	**NA**	**NA**	**7,228**	**304**	**39**	**NA**
2009 Total	**67**	**1**	**12,281**	**516**	**66**	**1,906**	**6,546**	**-4,640**	**711**	**711**	**[g] 7,663**	**322**	**41**	**(s)**
2010 Total	**44**	**1**	**8,177**	**343**	**44**	**564**	**2,588**	**-2,024**	**672**	**-39**	**6,192**	**260**	**33**	**(s)**
2011 Total	**125**	**2**	**23,035**	**967**	**123**	**890**	**1,799**	**-908**	**2,005**	**[h] 1,028**	**21,099**	**886**	**113**	**(s)**
2012 Total	**128**	**2**	**23,588**	**991**	**126**	**853**	**3,056**	**-2,203**	**1,984**	**-20**	**21,406**	**899**	**115**	**3**
2013 January	9	(s)	1,640	69	9	38	16	22	2,002	18	1,644	69	9	(s)
February	9	(s)	1,672	70	9	88	37	51	2,026	24	1,699	71	9	1
March	13	(s)	2,412	101	13	439	176	263	2,390	364	2,310	97	12	1
April	14	(s)	2,548	107	14	372	371	1	2,507	117	2,432	102	13	1
May	14	(s)	2,645	111	14	410	563	-153	2,460	-47	2,539	107	14	(s)
June	15	(s)	2,699	113	14	698	587	111	2,485	25	2,785	117	15	3
July	17	(s)	3,072	129	16	358	429	-71	2,683	198	2,803	118	15	2
August	17	(s)	3,086	130	17	385	687	-302	2,549	-134	2,918	123	16	2
September	16	(s)	3,025	127	16	781	511	270	2,509	-40	3,336	140	18	3
October	18	(s)	3,272	137	18	1,177	415	762	2,483	-26	4,061	171	22	3
November	17	(s)	3,080	129	17	1,641	408	1,233	3,360	877	3,436	144	18	3
December	17	(s)	3,217	135	17	1,765	476	1,289	3,810	450	4,056	170	22	3
Total	**176**	**2**	**32,368**	**1,359**	**173**	**8,152**	**4,675**	**3,477**	**3,810**	**1,825**	**34,020**	**1,429**	**182**	**24**
2014 January	9	(s)	1,727	73	9	222	134	88	3,708	-101	1,916	80	10	2
February	10	(s)	1,801	76	10	161	141	20	3,726	18	1,803	76	10	1
March	13	(s)	2,361	99	13	240	91	149	3,604	-122	2,632	111	14	2
April	12	(s)	2,223	93	12	135	261	-126	3,402	-202	2,299	97	12	3
May	14	(s)	2,531	106	14	133	208	-75	3,135	-267	2,724	114	15	2
June	14	(s)	2,645	111	14	235	263	-28	2,798	-337	2,953	124	16	(s)
July	16	(s)	2,926	123	16	493	320	173	3,082	284	2,815	118	15	2
August	16	(s)	2,987	125	16	571	264	307	2,786	-297	3,590	151	19	2
September	15	(s)	2,754	116	15	352	136	216	2,293	-492	3,462	145	19	1
October	16	(s)	2,928	123	16	507	40	467	2,641	347	3,048	128	16	2
November	14	(s)	2,610	110	14	989	65	924	3,084	444	3,091	130	17	(s)
December	16	(s)	2,958	124	16	540	51	489	3,131	46	3,401	143	18	1
Total	**165**	**2**	**30,452**	**1,279**	**163**	**4,578**	**1,974**	**2,604**	**3,131**	**-679**	**33,735**	**1,417**	**181**	**18**
2015 January	9	(s)	1,706	72	9	372	22	350	3,713	[i] 677	1,379	58	7	(s)
February	10	(s)	1,827	77	10	416	23	393	3,827	114	2,105	88	11	1
March	13	(s)	2,323	98	12	311	190	121	3,996	169	2,275	96	12	1
April	14	(s)	2,565	108	14	294	240	54	3,950	-45	2,664	112	14	2
May	15	(s)	2,755	116	15	307	255	52	3,464	-487	3,294	138	18	2
June	16	(s)	2,897	122	16	673	263	410	2,948	-516	3,823	161	20	2
July	16	(s)	2,875	121	15	1,157	255	902	3,284	336	3,441	145	18	3
August	16	(s)	2,933	123	16	858	275	583	3,227	-57	3,573	150	19	2
September	14	(s)	2,553	107	14	927	200	727	2,948	-279	3,558	149	19	3
9-Month Total	**122**	**2**	**22,434**	**942**	**120**	**5,315**	**1,723**	**3,592**	**2,948**	**-87**	**26,113**	**1,097**	**140**	**16**
2014 9-Month Total	**119**	**2**	**21,955**	**922**	**118**	**2,542**	**1,819**	**723**	**2,293**	**-1,516**	**24,194**	**1,016**	**130**	**15**
2013 9-Month Total	**124**	**2**	**22,800**	**958**	**122**	**3,569**	**3,377**	**192**	**2,509**	**525**	**22,467**	**944**	**120**	**14**

[a] Total vegetable oil and other biomass inputs to the production of biodiesel—calculated by multiplying biodiesel production by 5.433 million Btu per barrel. See "Biodiesel Feedstock" entry in the "Thermal Conversion Factor Source Documentation" at the end of Appendix A.

[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. Through 2010, includes stocks at bulk terminals only. Beginning in 2011, includes stocks at bulk terminals and biodiesel production plants.

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

[f] Imports minus stock change of other renewable diesel fuel and other renewable fuels. See "Renewable Diesel Fuel (Other)" and "Renewable Fuels (Other)" in Glossary.

[g] In 2009, because of incomplete data coverage and differing data sources, a "Balancing Item" amount of 733 thousand barrels (653 thousand barrels in January 2009; 80 thousand barrels in February 2009) is used to balance biodiesel supply and disposition.

[h] Derived from the final 2010 stocks value for bulk terminals and biodiesel production plants (977 thousand barrels), not the final 2010 value for bulk terminals only (672 thousand barrels) that is shown under "Stocks."

[i] Derived from the preliminary 2014 stocks value (3,036 thousand barrels), not the final 2014 value (3,131 thousand barrels) that is shown under "Stocks."

NA=Not available. (s)=Less than 0.5 trillion Btu and greater 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 A1). • 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 (Excel and CSV files) for all available annual and monthly 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 by multiplying by the total fossil fuels heat rate factors in Table A6); geothermal electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6), and solar thermal direct use energy; wind electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in 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 energy 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

1989–2011: Annual estimates by the U.S Energy Information Administration (EIA) based on data from Oregon Institute of Technology, Geo-Heat Center.
2012–2014: Annual estimates assumed by EIA to be equal to that of 2011.
2015: Annual estimate is from EIA, *Short-Term Energy Outlook (STEO),* April 2015.
(For 1989 forward, 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.)

Residential Sector, Solar/PV

1989–2009: Annual estimates are based on EIA, Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey," and Form EIA-63B, "Annual Photovoltaic Module/Cell Manufacturers Survey."
2010–2013: Annual estimates are based on EIA, 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.*
2014 and 2015: Annual estimates are from EIA, STEO, April 2015.
(For 1989 forward, 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.)

Residential Sector, Wood

1949–1979: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.
1980–2013: Annual estimates are based on EIA, Form EIA-457, "Residential Energy Consumption Survey"; and National Oceanic and Atmospheric Administration regional heating degree-day data.
2014: Annual estimate assumed by EIA to be equal to that of 2013.
2015: Annual estimate is from EIA, STEO, April 2015.
(For 1973 forward, 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.)

Residential Sector, Total Renewable Energy

1949–1988: Residential sector total renewable energy consumption is equal to residential sector wood consumption.
1989 forward: Residential sector total renewable energy consumption is the sum of the residential sector consumption values for geothermal, solar/PV, and wood.

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 total fossil fuels heat rate factors in Table A6.

Commercial Sector, Geothermal

1989–2011: Annual estimates by EIA based on data from Oregon Institute of Technology, Geo-Heat Center.
2012 forward: Annual estimates assumed by EIA to be equal to that of 2011.
(For 1989 forward, 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, 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 total fossil fuels heat rate factors in 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 total fossil fuels heat rate factors in Table A6.

Commercial Sector, Wood

1949–1979: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.
1980–1983: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption 1980 –1983,* Table ES1.
1984: Annual estimate assumed by EIA to be equal to that of 1983.
1985–1988: Annual estimates interpolated by EIA.

(For 1973–1988, 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.)
1989 forward: Monthly/annual commercial sector combined-heat-and-power (CHP) wood consumption data are from EIA, Form EIA-923, "Power Plant Operations Report," and predecessor forms. Annual estimates for commercial sector non-CHP wood consumption are based on EIA, Form EIA-871, "Commercial Buildings Energy Consumption Survey" (for 2014, the annual estimate is assumed by EIA to be equal to that of 2013; for 2015, the annual estimate is from EIA, STEO, April 2015). For 1989 forward, monthly estimates for commercial sector non-CHP wood consumption 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 total wood consumption is the sum of commercial sector CHP and non-CHP wood consumption.

Commercial Sector, Biomass Waste
1989 forward: Table 7.4c.

Commercial Sector, Fuel Ethanol (Minus Denaturant)
1981 forward: The commercial sector share of motor gasoline consumption is equal to commercial sector motor gasoline consumption from Table 3.7a divided by motor gasoline product supplied from Table 3.5. Commercial sector fuel ethanol (minus denaturant) consumption is equal to fuel ethanol (minus denaturant) consumption from Table 10.3 multplied by the commercial sector share of motor gasoline consumption.

Commercial Sector, Total Biomass
1949–1980: Commercial sector total biomass consumption is equal to commercial sector wood consumption.
1981–1988: Commercial sector total biomass consumption is the sum of the commercial sector consumption values for wood and fuel ethanol (minus denaturant).
1989 forward: Commercial sector total biomass consumption is the sum of the commercial sector consumption values for wood, waste, and fuel ethanol (minus denaturant).

Commercial Sector, Total Renewable Energy
1949–1988: Commercial sector total renewable energy consumption is equal to commercial sector total biomass consumption.
1989–2007: Commercial sector total renewable energy consumption is the sum of the commercial sector consumption values for conventional hydroelectric power, geothermal, and total biomass.
2008: Commercial sector total renewable energy consumption is the sum of the commercial sector consumption values for conventional hydroelectric power, geothermal, solar/PV, and total biomass.
2009 forward: Commercial sector total renewable energy is the sum of the commercial sector consumption values for conventional hydroelectric power, geothermal, solar/PV, wind, and total biomass.

Table 10.2b Sources

Industrial Sector, Hydroelectric Power
1949 forward: Industrial sector conventional hydroelectricity net generation data from Table 7.2c are converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6.

Industrial Sector, Geothermal
1989–2009: Annual estimates by the U.S. Energy Information Administration (EIA) based on data from Oregon Institute of Technology, Geo-Heat Center.
2010 forward: Annual estimates assumed by EIA to be equal to that of 2009.
(For 1989 forward, 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, Solar/PV
2010 forward: Industrial 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 total fossil fuels heat rate factors in 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 total fossil fuels heat rate factors in Table A6.

Industrial Sector, Wood
1949–1979: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.
1980–1983: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption 1980 –1983,* Table ES1.
1984: Annual estimate is from EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 1.
1985 and 1986: Annual estimates interpolated by EIA.
1987: Annual estimate is from EIA, *Estimates of Biofuels Consumption in the United States During 1987*, Table 2.
1988: Annual estimate interpolated by EIA.
(For 1973–1988, 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.)
1989 forward: Monthly/annual industrial sector combined-heat-and-power (CHP) wood consumption data are from EIA, Form EIA-923, "Power Plant Operations Report," and predecessor forms. Annual estimates for industrial sector non-CHP wood consumption are based on EIA, Form EIA-846, "Manufacturing Energy Consumption Survey" (for 2014, the annual estimate is assumed by EIA to be equal to that of 2013; for 2015, the annual estimate is from EIA, STEO, April 2015). For 1989 forward, monthly estimates for industrial sector non-CHP wood consumption 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 total wood consumption is the sum of industrial sector CHP and non-CHP wood consumption.

Industrial Sector, Biomass Waste

1981: Annual estimate is calculated as total waste consumption (from EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8) minus electric power sector waste consumption (from MER Table 10.2c).
1982 and 1983: Annual estimates are calculated as total waste consumption (based on *Estimates of U.S. Biofuels Consumption 1990*, Table 8) minus electric power sector waste consumption (from MER, Table 10.2c).
1984: Annual estimate is calculated as total waste consumption (from EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8) minus electric power sector waste consumption (from MER, Table 10.2c).
1985 and 1986: Annual estimates interpolated by EIA.
1987: Annual estimate is calculated as total waste consumption (from EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8) minus electric power sector waste consumption (from MER, Table 10.2c).
1988: Annual estimate interpolated by EIA.
(For 1973–1988, 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.)
1989 forward: Monthly/annual industrial sector combined-heat-and-power (CHP) consumption data are from Table 7.4c. Annual estimates for industrial sector non-CHP waste consumption are 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 (for 2014, the annual estimate is assumed by EIA to be equal to that of 2013; for 2015, the annual estimate is from EIA, STEO, April 2015). For 1989, forward, monthly estimates for industrial sector non-CHP waste consumption 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 total waste consumption is the sum of industrial sector CHP and non-CHP waste consumption.

Industrial Sector, Fuel Ethanol (Minus Denaturant)

1981 forward: The industrial sector share of motor gasoline consumption is equal to industrial sector motor gasoline consumption from Table 3.7b divided by motor gasoline product supplied from Table 3.5. Industrial sector fuel ethanol (minus denaturant) consumption is equal to fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the industrial sector share of motor gasoline consumption.

Industrial Sector, Biomass Losses and Co-products

1981 forward: Calculated as fuel ethanol losses and co-products from Table 10.3 plus biodiesel losses and co-products from Table 10.4.

Industrial Sector, Total Biomass

1949–1980: Industrial sector total biomass consumption is equal to industrial sector wood consumption.
1981 forward: Industrial sector total biomass consumption is the sum of the industrial sector consumption values for wood, waste, fuel ethanol (minus denaturant), and biomass losses and co-products.

Industrial Sector, Total Renewable Energy

1949–1988: Industrial sector total renewable energy consumption is the sum of the industrial sector consumption values for conventional hydroelectric power and total biomass.
1989–2009: Industrial sector total renewable energy consumption is the sum of the industrial sector consumption values for conventional hydroelectric power, geothermal, and total biomass.
2010: Industrial sector total renewable energy consumption is the sum of the industrial sector consumption values for conventional hydroelectric power, geothermal, solar/PV, and total biomass.
2011 forward: Industrial sector total renewable energy consumption is the sum of the industrial sector consumption values for conventional hydroelectric power, geothermal, solar/PV, wind, and total biomass.

Transportation Sector, Fuel Ethanol (Minus Denaturant)

1981 forward: The transportation sector share of motor gasoline consumption is equal to transportation sector motor gasoline consumption from Table 3.7c divided by motor gasoline product supplied from Table 3.5. Transportation sector fuel ethanol (minus denaturant) consumption is equal to fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption.

Transportation Sector, Biodiesel

2001 forward: Table 10.4. Transportation sector biodiesel consumption is assumed to equal total biodiesel consumption.

Transportation Sector, Other Renewable Fuels

2009 forward: Table 10.4.

Transportation Sector, Total Renewable Energy

1981–2000: Transportation sector total renewable energy consumption is equal to transportation sector fuel ethanol (minus denaturant) consumption.
2001–2008: Transportation sector total renewable energy consumption is the sum of the transportation sector consumption values for fuel ethanol (minus denaturant) and biodiesel.
2009 forward: Transportation sector total renewable energy consumption is the sum of the transportation sector consumption values for fuel ethanol (minus denaturant), biodiesel, and other renewable fuels.

Table 10.3 Sources

Feedstock
1981 forward: 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
1981 forward: 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% 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).
2009–2013: 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.
2014 and 2015: 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."
2009–2013: EIA, PSA, annual reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.
2014 and 2015: EIA, PSM, monthly reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

Trade, Stocks, and Stock Change
1992–2013: EIA, PSA, annual reports, Table 1.
2014 and 2015: 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% 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).
2009–2013: EIA, PSA, annual reports, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.
2014 and 2015: EIA, PSM, monthly reports, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

Consumption Minus Denaturant
1981 forward: 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

Biodiesel Feedstock
2001 forward: Calculated as biodiesel production in thousand barrels multiplied by 5.433 million Btu per barrel (the biodiesel feedstock factor—see Table A3).

Biodiesel Losses and Co-products
2001 forward: Calculated as biodiesel feedstock minus biodiesel production.

Biodiesel 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, U.S. Census Bureau, "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, U.S. Census Bureau, "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, U.S. Census Bureau, M311K data, multiplied by the EIA 2008 annual value's share of the M311K 2008 annual value.
2009 and 2010: EIA, *Monthly Biodiesel Production Report,* monthly reports, Table 1.
2011–2013: EIA, *Petroleum Supply Annual (PSA),* annual reports, Table 1, data for renewable fuels except fuel ethanol.
2014 and 2015: EIA, *Petroleum Supply Monthly (PSM),* monthly reports, Table 1, data for renewable fuels except fuel ethanol.

Biodiesel Trade

2001–2011: 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); and 3824.90.40.30, "Biodiesel/Mixes" (data for July 2010–2011). 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); and 3824.90.40.30, "Biodiesel <70%" (data for 2011). (The data above are converted from pounds to gallons by dividing by 7.4.) 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.
2012 and 2013: EIA, PSA, annual reports, Tables 25 and 31, data for biomass-based diesel fuel.
2014 and 2015: EIA, PSM, monthly reports, Tables 37 and 49, data for biomass-based diesel fuel.

Biodiesel Stocks and Stock Change

2009 forward: EIA, biodiesel data from EIA-22M, "Monthly Biodiesel Production Survey"; and biomass-based diesel fuel data from EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," and EIA-815, "Monthly Bulk Terminal and Blender Report."

Biodiesel 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.

Other Renewable Fuels

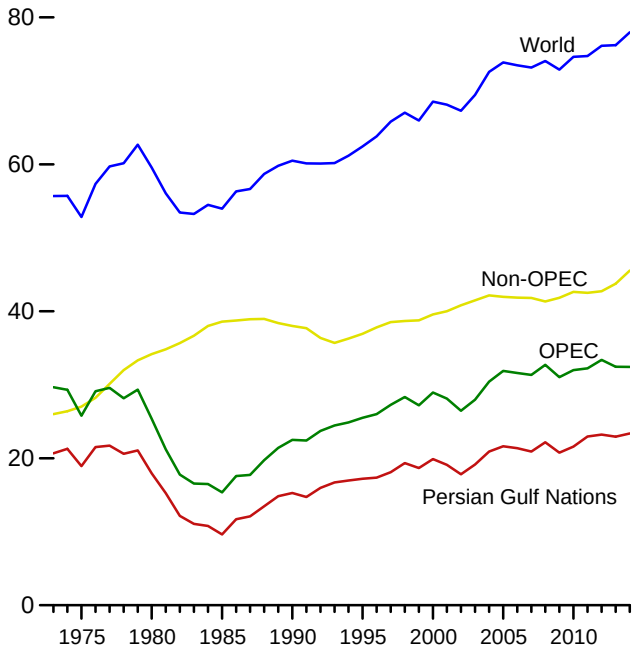
2009 forward: Imports data for "Other Renewable Diesel Fuel" are from EIA, PSA Table 25 and PSM Table 37 (data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1). Imports data for "Other Renewable Fuels" are from EIA, PSA Table 25 and PSM Table 37 (data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1). Stock change data for "Other Renewable Diesel Fuel" are from EIA, EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," and EIA-815, "Monthly Bulk Terminal and Blender Report" (data are converted to Btu by multiplying by the other renewable diesel heat content factor in Table A1). "Other Renewable Fuels" in Table 10.4 is calculated as other renewable diesel fuel imports plus other renewable fuels imports minus other renewable diesel fuel stock change.

THIS PAGE INTENTIONALLY LEFT BLANK

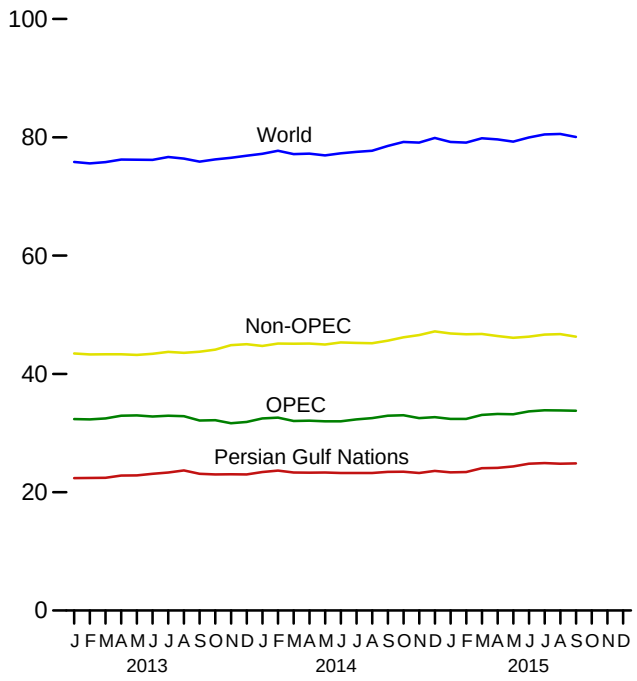
11. International Petroleum

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

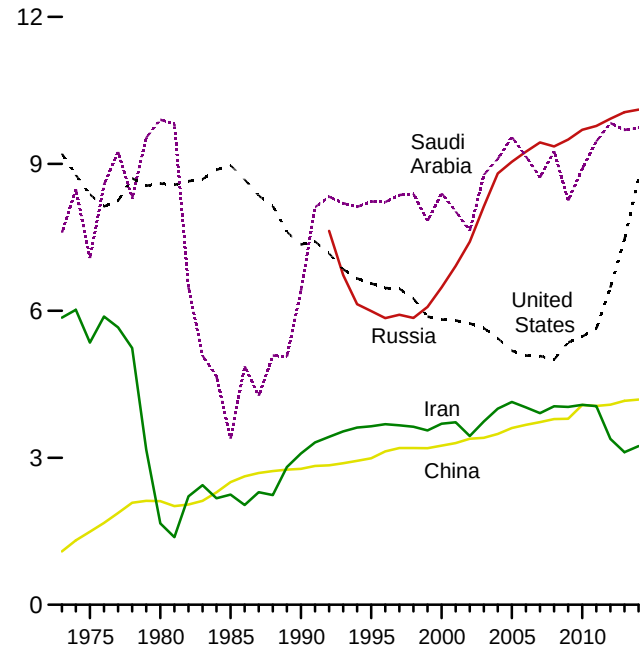
World Production, 1973–2014



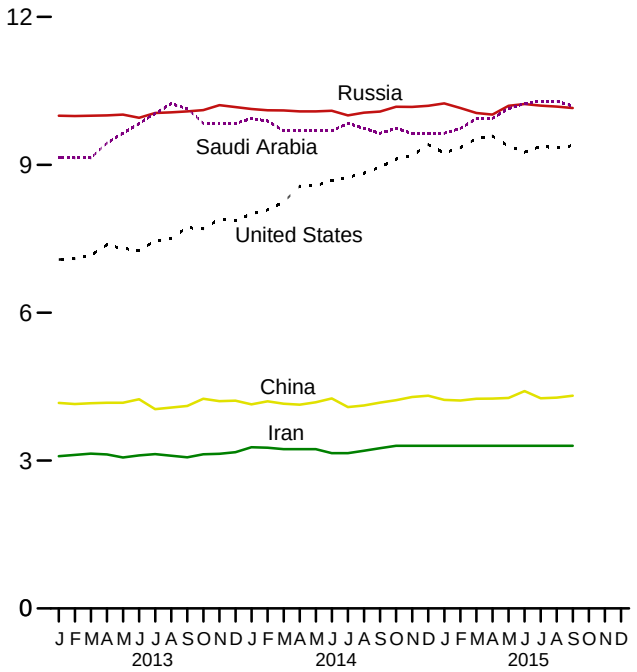
World Production, Monthly



Selected Producers, 1973–2014



Selected Producers, Monthly

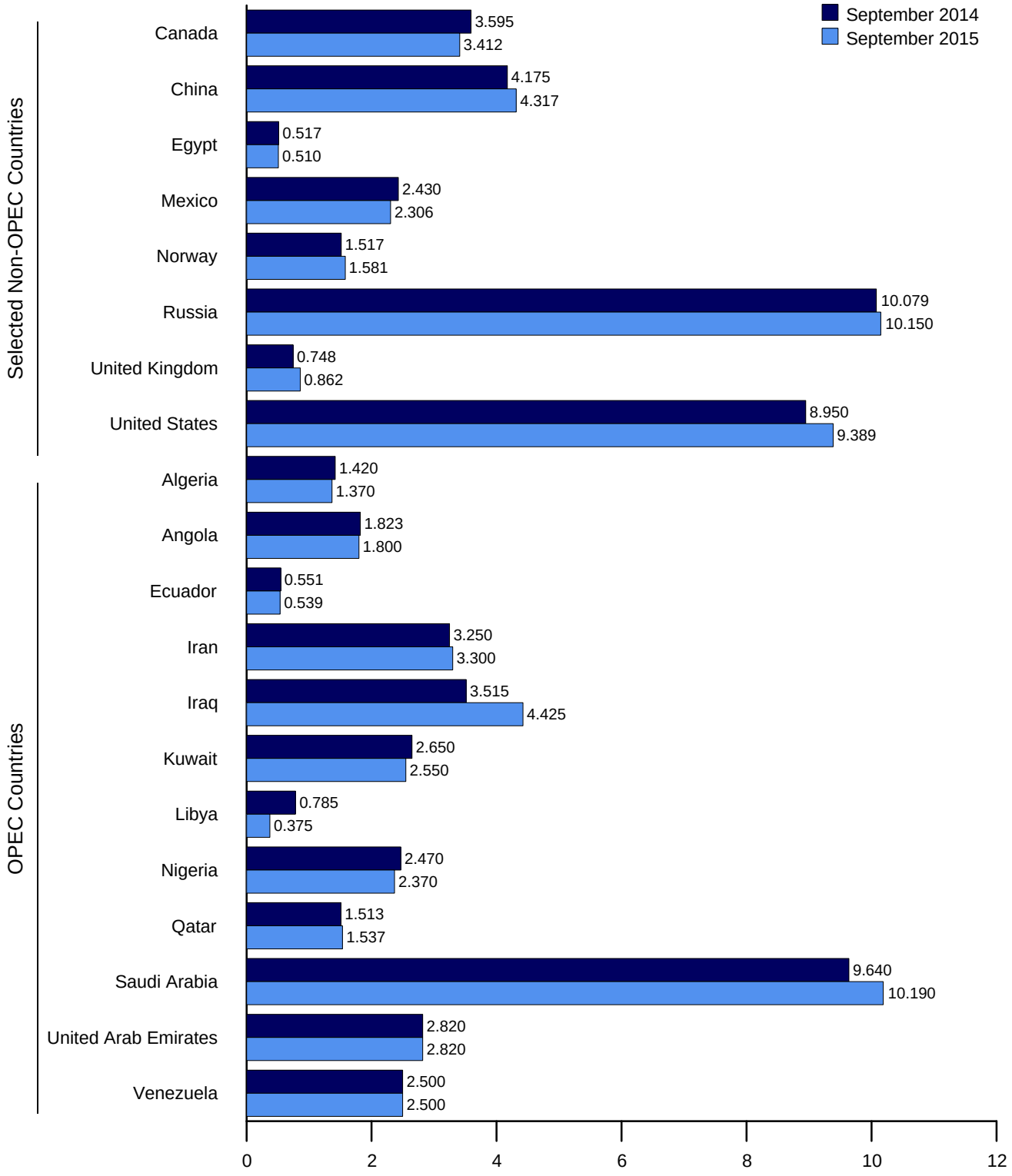


Notes: • OPEC is the Organization of the Petroleum Exporting Countries. • The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

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**	**742**	**8,404**	**2,368**	**3,155**	**28,944**
2001 Average	**1,265**	**742**	**412**	**3,724**	**2,390**	**1,998**	**1,367**	**2,256**	**730**	**8,031**	**2,205**	**3,010**	**28,129**
2002 Average	**1,349**	**896**	**393**	**3,444**	**2,023**	**1,894**	**1,319**	**2,118**	**709**	**7,634**	**2,082**	**2,604**	**26,465**
2003 Average	**1,516**	**903**	**411**	**3,743**	**1,308**	**2,136**	**1,421**	**2,275**	**807**	**8,775**	**2,348**	**2,335**	**27,977**
2004 Average	**1,582**	**1,052**	**528**	**4,001**	**2,011**	**2,376**	**1,515**	**2,329**	**901**	**9,101**	**2,478**	**2,557**	**30,432**
2005 Average	**1,692**	**1,239**	**532**	**4,139**	**1,878**	**2,529**	**1,633**	**2,627**	**978**	**9,550**	**2,535**	**2,565**	**31,897**
2006 Average	**1,699**	**1,398**	**536**	**4,028**	**1,996**	**2,535**	**1,681**	**2,440**	**996**	**9,152**	**2,636**	**2,511**	**31,607**
2007 Average	**1,708**	**1,724**	**511**	**3,912**	**2,086**	**2,464**	**1,702**	**2,350**	**1,083**	**8,722**	**2,603**	**2,490**	**31,354**
2008 Average	**1,705**	**1,951**	**505**	**4,050**	**2,375**	**2,586**	**1,736**	**2,165**	**1,198**	**9,261**	**2,681**	**2,510**	**32,723**
2009 Average	**1,585**	**1,877**	**486**	**4,037**	**2,391**	**2,350**	**1,650**	**2,208**	**1,279**	**8,250**	**2,413**	**2,520**	**31,045**
2010 Average	**1,540**	**1,909**	**486**	**4,080**	**2,399**	**2,300**	**1,650**	**2,455**	**1,459**	**8,900**	**2,415**	**2,410**	**32,003**
2011 Average	**1,540**	**1,756**	**500**	**4,054**	**2,626**	**2,530**	**465**	**2,550**	**1,571**	**9,458**	**2,679**	**2,500**	**32,229**
2012 Average	**1,532**	**1,787**	**504**	**3,387**	**2,983**	**2,635**	**1,367**	**2,520**	**1,551**	**9,832**	**2,804**	**2,500**	**33,402**
2013 January	1,470	1,812	505	3,088	3,075	2,650	1,350	2,410	1,553	9,140	2,820	2,500	32,373
February	1,470	1,762	506	3,115	3,075	2,650	1,400	2,320	1,553	9,140	2,820	2,500	32,311
March	1,470	1,862	504	3,139	3,075	2,650	1,350	2,420	1,553	9,140	2,820	2,500	32,483
April	1,470	1,827	516	3,124	3,175	2,650	1,450	2,400	1,553	9,440	2,820	2,500	32,925
May	1,470	1,862	522	3,064	3,075	2,650	1,420	2,420	1,553	9,640	2,820	2,500	32,996
June	1,470	1,842	524	3,105	3,100	2,650	1,130	2,260	1,553	9,840	2,820	2,500	32,794
July	1,470	1,762	530	3,130	3,100	2,650	1,000	2,390	1,553	10,040	2,820	2,500	32,945
August	1,470	1,742	537	3,097	3,275	2,650	590	2,370	1,553	10,240	2,820	2,500	32,844
September	1,470	1,782	535	3,065	2,825	2,650	360	2,420	1,553	10,140	2,820	2,500	32,120
October	1,470	1,772	540	3,127	2,975	2,650	550	2,370	1,553	9,840	2,820	2,500	32,167
November	1,370	1,792	545	3,136	2,975	2,650	220	2,270	1,553	9,840	2,820	2,500	31,671
December	1,470	1,812	548	3,169	2,925	2,650	230	2,350	1,553	9,840	2,820	2,500	31,867
Average	**1,462**	**1,803**	**526**	**3,113**	**3,054**	**2,650**	**918**	**2,367**	**1,553**	**9,693**	**2,820**	**2,500**	**32,460**
2014 January	1,420	1,663	550	3,270	3,125	2,650	510	2,470	1,563	9,940	2,820	2,500	32,481
February	1,420	1,733	551	3,260	3,425	2,650	380	2,420	1,563	9,890	2,820	2,500	32,612
March	1,420	1,673	557	3,230	3,325	2,650	250	2,370	1,563	9,690	2,820	2,500	32,048
April	1,420	1,743	560	3,230	3,300	2,650	210	2,420	1,553	9,690	2,820	2,500	32,096
May	1,420	1,683	554	3,230	3,325	2,650	230	2,320	1,553	9,690	2,820	2,500	31,975
June	1,420	1,663	555	3,150	3,325	2,650	235	2,420	1,553	9,690	2,820	2,500	31,981
July	1,420	1,713	558	3,150	3,195	2,650	435	2,470	1,553	9,840	2,820	2,500	32,304
August	1,420	1,813	558	3,200	3,225	2,650	530	2,520	1,553	9,740	2,820	2,500	32,529
September	1,420	1,823	551	3,250	3,515	2,650	785	2,470	1,513	9,640	2,820	2,500	32,937
October	1,420	1,848	557	3,300	3,465	2,575	950	2,320	1,513	9,740	2,820	2,500	33,008
November	1,420	1,813	563	3,300	3,425	2,500	615	2,440	1,503	9,640	2,820	2,500	32,539
December	1,420	1,733	561	3,300	3,775	2,500	510	2,440	1,503	9,640	2,820	2,500	32,702
Average	**1,420**	**1,742**	**556**	**3,239**	**3,368**	**2,619**	**471**	**2,423**	**1,540**	**9,735**	**2,820**	**2,500**	**32,433**
2015 January	1,370	1,860	558	3,300	R 3,475	2,550	370	2,445	1,514	9,640	2,820	2,500	R 32,402
February	1,370	1,810	553	3,300	R 3,325	2,650	360	2,445	1,520	9,740	2,820	2,500	R 32,393
March	1,370	1,820	553	3,300	R 3,775	2,650	475	2,345	1,525	9,940	2,820	2,500	R 33,073
April	1,370	1,830	548	3,300	R 3,825	2,650	505	2,420	1,531	9,940	2,820	2,500	R 33,239
May	1,370	1,840	543	3,300	R 3,975	2,550	430	2,170	1,532	10,140	2,820	2,500	R 33,170
June	1,370	1,860	541	3,300	R 4,325	2,550	410	2,220	1,537	10,240	2,820	2,500	R 33,673
July	1,370	1,890	538	3,300	R 4,375	2,550	400	2,270	1,537	10,290	2,820	2,500	R 33,840
August	1,370	1,910	537	3,300	4,275	2,550	360	2,370	1,537	R 10,290	2,820	2,500	R 33,819
September	1,370	1,800	539	3,300	4,425	2,550	375	2,370	1,537	10,190	2,820	2,500	33,776
9-Month Average	**1,370**	**1,847**	**545**	**3,300**	**3,980**	**2,583**	**410**	**2,338**	**1,530**	**10,048**	**2,820**	**2,500**	**33,271**
2014 9-Month Average	**1,420**	**1,723**	**555**	**3,219**	**3,305**	**2,650**	**396**	**2,431**	**1,552**	**9,756**	**2,820**	**2,500**	**32,326**
2013 9-Month Average	**1,470**	**1,806**	**520**	**3,103**	**3,087**	**2,650**	**1,115**	**2,380**	**1,553**	**9,644**	**2,820**	**2,500**	**32,647**

[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 September 2015, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 20 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.

R=Revised.

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 (Excel and CSV files) for all available annual and monthly 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	**19,897**	**1,977**	**3,249**	**768**	**3,104**	**3,222**	**– –**	**6,479**	**2,275**	**5,822**	**39,583**	**68,527**
2001 Average	**19,114**	**2,029**	**3,300**	**720**	**3,218**	**3,226**	**– –**	**6,917**	**2,282**	**5,801**	**40,003**	**68,132**
2002 Average	**17,824**	**2,171**	**3,390**	**715**	**3,263**	**3,131**	**– –**	**7,408**	**2,292**	**5,744**	**40,825**	**67,290**
2003 Average	**19,154**	**2,306**	**3,409**	**713**	**3,459**	**3,042**	**– –**	**8,132**	**2,093**	**5,649**	**41,483**	**69,460**
2004 Average	**20,906**	**2,398**	**3,485**	**673**	**3,476**	**2,954**	**– –**	**8,805**	**1,845**	**5,441**	**42,163**	**72,595**
2005 Average	**21,644**	**2,369**	**3,609**	**623**	**3,423**	**2,698**	**– –**	**9,043**	**1,649**	**5,184**	**41,969**	**73,866**
2006 Average	**21,377**	**2,525**	**3,673**	**535**	**3,345**	**2,491**	**– –**	**9,247**	**1,490**	**5,087**	**41,868**	**73,474**
2007 Average	**20,904**	**2,628**	**3,729**	**530**	**3,143**	**2,270**	**– –**	**9,437**	**1,498**	**5,077**	**41,809**	**73,163**
2008 Average	**22,186**	**2,579**	**3,790**	**566**	**2,839**	**2,182**	**– –**	**9,357**	**1,391**	**5,001**	**41,343**	**74,066**
2009 Average	**20,754**	**2,579**	**3,796**	**587**	**2,646**	**2,067**	**– –**	**9,495**	**1,328**	**5,354**	**41,849**	**72,894**
2010 Average	**21,589**	**2,741**	**4,078**	**568**	**2,621**	**1,871**	**– –**	**9,694**	**1,233**	**5,476**	**42,636**	**74,639**
2011 Average	**22,953**	**2,901**	**4,059**	**551**	**2,600**	**1,760**	**– –**	**9,774**	**1,026**	**5,637**	**42,511**	**74,740**
2012 Average	**23,233**	**3,138**	**4,085**	**539**	**2,593**	**1,612**	**– –**	**9,922**	**888**	**6,476**	**42,733**	**76,135**
2013 January	22,374	3,329	4,168	515	2,602	1,550	– –	9,995	825	7,078	R 43,448	R 75,822
February	22,401	3,259	4,146	512	2,595	1,512	– –	9,990	823	7,095	R 43,288	R 75,599
March	22,425	3,429	4,164	514	2,555	1,507	– –	9,995	812	7,161	R 43,326	R 75,809
April	22,810	3,237	4,174	522	2,557	1,567	– –	10,002	830	7,375	R 43,321	R 76,246
May	22,850	3,026	4,174	524	2,548	1,583	– –	10,018	861	7,301	R 43,209	R 76,204
June	23,116	3,146	4,244	529	2,559	1,390	– –	9,955	781	7,264	R 43,392	R 76,186
July	23,341	3,306	4,043	525	2,522	1,642	– –	10,052	792	7,453	R 43,720	R 76,666
August	23,683	3,471	4,075	525	2,554	1,547	– –	10,064	630	7,502	R 43,563	R 76,407
September	23,101	3,352	4,107	532	2,563	1,375	– –	10,082	744	7,727	R 43,762	R 75,882
October	23,013	3,335	4,255	535	2,580	1,483	– –	10,109	732	7,702	R 44,094	R 76,261
November	23,022	3,468	4,205	523	2,553	1,611	– –	10,209	833	7,897	R 44,872	R 76,543
December	23,005	3,534	4,215	528	2,557	1,617	– –	10,170	955	7,873	R 45,019	R 76,887
Average	**22,932**	**3,325**	**4,164**	**524**	**2,562**	**1,533**	**– –**	**10,054**	**801**	**7,454**	R **43,754**	R **76,214**
2014 January	23,417	3,568	4,141	518	2,545	1,629	– –	10,131	825	R 7,998	R 44,727	R 77,209
February	23,657	3,578	4,201	513	2,541	1,611	– –	10,106	929	R 8,087	R 45,124	R 77,736
March	23,327	3,685	4,153	513	2,511	1,597	– –	10,103	909	R 8,244	R 45,117	R 77,164
April	23,292	3,556	4,132	507	2,518	1,613	– –	10,083	820	R 8,568	R 45,134	R 77,230
May	23,317	3,467	4,181	514	2,530	1,358	– –	10,083	869	R 8,578	R 44,956	R 76,931
June	23,237	3,548	4,259	510	2,476	1,459	– –	10,095	752	R 8,680	R 45,321	R 77,302
July	23,258	3,589	4,084	516	2,427	1,588	– –	10,003	705	R 8,747	R 45,235	R 77,540
August	23,238	3,547	4,118	509	2,455	1,546	– –	10,056	468	R 8,831	R 45,194	R 77,723
September	23,438	3,595	4,175	517	2,430	1,517	– –	10,079	748	R 8,950	R 45,606	R 78,543
October	23,463	3,727	4,224	522	2,402	1,615	– –	10,176	790	R 9,117	R 46,196	R 79,205
November	23,238	3,714	4,290	537	2,401	1,600	– –	10,173	798	R 9,188	R 46,552	R 79,091
December	23,588	3,780	4,315	527	2,392	1,616	– –	10,197	846	R 9,409	R 47,188	R 79,891
Average	**23,371**	**3,613**	**4,189**	**517**	**2,469**	**1,562**	**– –**	**10,107**	**787**	R **8,703**	R **45,531**	R **77,965**
2015 January	R 23,349	3,885	4,232	508	2,290	1,579	– –	10,246	872	RE 9,243	R 46,822	R 79,224
February	R 23,405	3,906	4,218	516	2,370	1,589	– –	10,150	812	RE 9,345	R 46,707	R 79,100
March	R 24,060	3,775	4,254	525	2,356	1,586	– –	10,050	867	RE 9,531	R 46,759	R 79,832
April	R 24,116	3,463	4,258	503	2,235	1,614	– –	10,020	925	RE 9,585	R 46,400	R 79,639
May	R 24,367	3,212	4,271	512	2,263	1,555	– –	10,196	1,016	RE 9,382	46,104	R 79,274
June	R 24,822	3,457	4,408	504	2,283	1,596	– –	10,234	R 870	RE 9,257	R 46,306	R 79,980
July	R 24,922	3,821	4,263	524	2,308	1,611	– –	10,200	R 839	RE 9,375	R 46,636	R 80,475
August	R 24,822	3,912	R 4,278	511	2,291	1,599	– –	10,180	R 788	RE 9,346	R 46,736	R 80,555
September	24,872	3,412	4,317	510	2,306	1,581	– –	10,150	862	E 9,389	46,282	80,058
9-Month Average	**24,310**	**3,649**	**4,278**	**513**	**2,300**	**1,590**	**– –**	**10,159**	**873**	E **9,384**	**46,528**	**79,800**
2014 9-Month Average	**23,350**	**3,570**	**4,160**	**513**	**2,492**	**1,546**	**– –**	**10,082**	**779**	**8,523**	**45,155**	**77,481**
2013 9-Month Average	**22,904**	**3,285**	**4,144**	**522**	**2,561**	**1,520**	**– –**	**10,017**	**788**	**7,330**	**43,449**	**76,097**

[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.

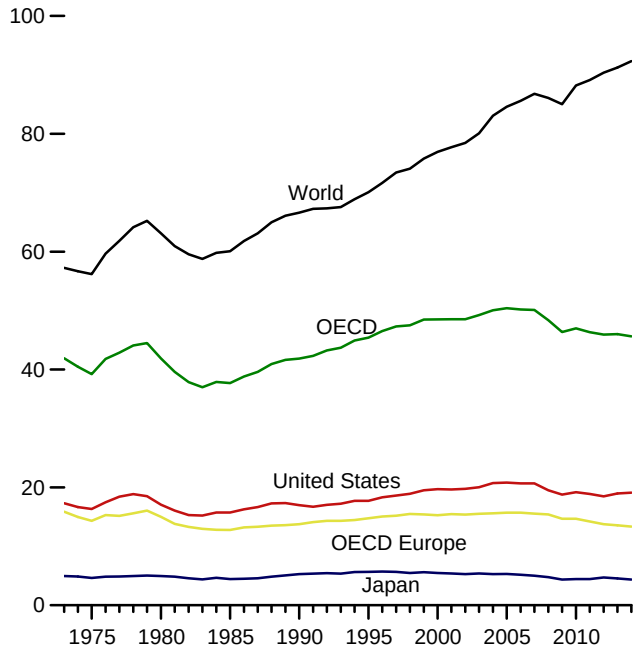
Notes: • Data are for crude oil and lease condensate; they exclude natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available. • Data for countries may not sum 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 (Excel and CSV files) for all available annual and monthly data beginning in 1973.

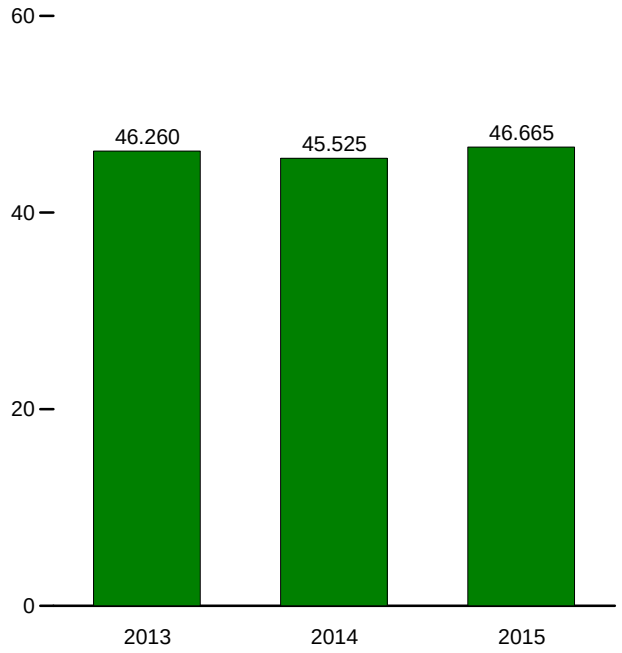
Sources: See end of section.

Figure 11.2 Petroleum Consumption in OECD Countries
(Million Barrels per Day)

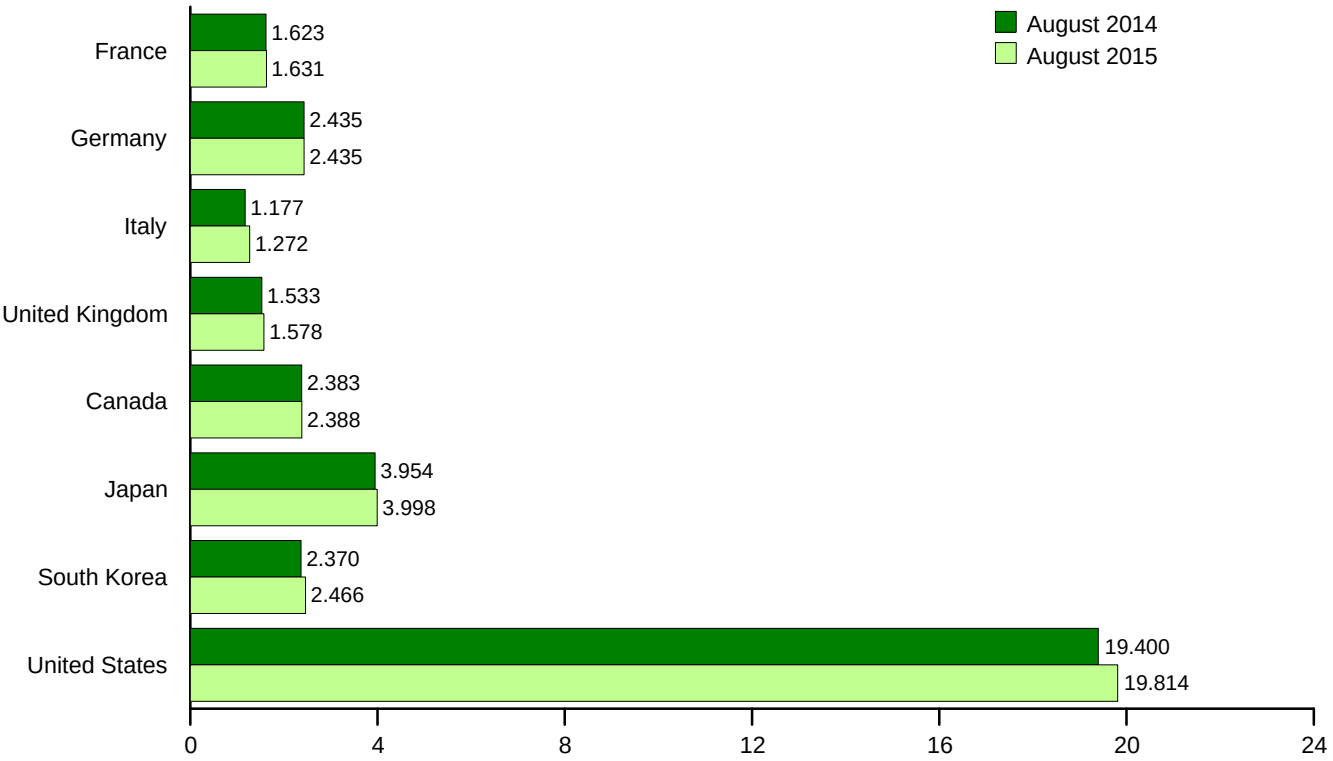
Overview, 1973–2014



OECD Total, August



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**	**1,514**	**4,436**	**552**	**15,726**	**2,699**	**37,697**	**60,083**
1990 Average	**1,827**	**2,682**	**1,868**	**1,776**	**13,763**	**1,722**	**5,293**	**1,048**	**16,988**	**3,038**	**41,852**	**66,627**
1995 Average	**1,915**	**2,882**	**1,942**	**1,816**	**14,758**	**1,799**	**5,659**	**2,008**	**17,725**	**3,452**	**45,401**	**70,094**
1996 Average	**1,943**	**2,922**	**1,920**	**1,852**	**15,051**	**1,853**	**5,704**	**2,101**	**18,309**	**3,509**	**46,527**	**71,675**
1997 Average	**1,962**	**2,917**	**1,934**	**1,810**	**15,193**	**1,940**	**5,667**	**2,255**	**18,620**	**3,629**	**47,305**	**73,427**
1998 Average	**2,040**	**2,923**	**1,943**	**1,792**	**15,498**	**1,931**	**5,472**	**1,917**	**18,917**	**3,757**	**47,492**	**74,080**
1999 Average	**2,034**	**2,836**	**1,891**	**1,811**	**15,410**	**2,016**	**5,606**	**2,084**	**19,519**	**3,842**	**48,478**	**75,796**
2000 Average	**2,001**	**2,767**	**1,854**	**1,765**	**15,277**	**2,008**	**5,480**	**2,135**	**19,701**	**3,905**	**48,506**	**76,928**
2001 Average	**2,054**	**2,807**	**1,835**	**1,747**	**15,453**	**2,029**	**5,380**	**2,132**	**19,649**	**3,903**	**48,546**	**77,732**
2002 Average	**1,991**	**2,710**	**1,870**	**1,739**	**15,393**	**2,040**	**5,287**	**2,149**	**19,761**	**3,891**	**48,522**	**78,457**
2003 Average	**2,001**	**2,679**	**1,860**	**1,759**	**15,515**	**2,155**	**5,397**	**2,175**	**20,034**	**3,960**	**49,235**	**80,089**
2004 Average	**2,008**	**2,648**	**1,829**	**1,789**	**15,603**	**2,233**	**5,288**	**2,155**	**20,731**	**4,054**	**50,064**	**83,063**
2005 Average	**1,990**	**2,624**	**1,781**	**1,819**	**15,714**	**2,296**	**5,298**	**2,191**	**20,802**	**4,114**	**50,416**	**84,588**
2006 Average	**1,991**	**2,636**	**1,777**	**1,806**	**15,718**	**2,294**	**5,168**	**2,180**	**20,687**	**4,150**	**50,197**	**85,592**
2007 Average	**1,978**	**2,407**	**1,729**	**1,751**	**15,534**	**2,389**	**5,009**	**2,240**	**20,680**	**4,268**	**50,121**	**86,788**
2008 Average	**1,940**	**2,533**	**1,667**	**1,731**	**15,415**	**2,317**	**4,770**	**2,142**	**19,498**	**4,227**	**48,368**	**86,082**
2009 Average	**1,863**	**2,434**	**1,544**	**1,635**	**14,686**	**2,230**	**4,363**	**2,188**	**18,771**	**4,120**	**46,358**	**85,021**
2010 Average	**1,822**	**2,467**	**1,544**	**1,618**	**14,678**	**2,326**	**4,429**	**2,269**	**19,180**	**4,116**	**46,998**	**88,205**
2011 Average	**1,779**	**2,392**	**1,494**	**1,577**	**14,207**	**2,357**	**4,439**	**2,259**	**18,882**	**4,200**	**46,345**	**89,114**
2012 Average	**1,739**	**2,389**	**1,370**	**1,527**	**13,743**	**2,403**	**4,697**	**2,322**	**18,490**	**4,264**	**45,919**	**90,376**
2013 January	1,665	2,263	1,190	1,392	12,775	2,437	5,139	2,425	18,749	4,203	45,728	NA
February	1,791	2,347	1,281	1,531	13,361	2,395	5,258	2,412	18,643	4,274	46,343	NA
March	1,726	2,369	1,243	1,432	13,072	2,330	4,742	2,182	18,531	4,165	45,021	NA
April	1,787	2,635	1,260	1,545	13,968	2,318	4,351	2,291	18,584	4,311	45,823	NA
May	1,718	2,487	1,228	1,508	13,732	2,412	4,112	2,279	18,779	4,237	45,552	NA
June	1,696	2,504	1,231	1,589	13,624	2,342	3,912	2,324	18,806	4,269	45,278	NA
July	1,838	2,481	1,369	1,527	14,151	2,401	4,389	2,268	19,257	4,226	46,691	NA
August	1,674	2,417	1,227	1,515	13,708	2,375	4,403	2,329	19,125	4,320	46,260	NA
September	1,695	2,479	1,280	1,543	13,811	2,386	4,136	2,240	19,252	4,004	45,828	NA
October	1,747	2,607	1,340	1,453	14,003	2,326	4,192	2,253	19,312	4,251	46,338	NA
November	1,605	2,465	1,218	1,554	13,499	2,438	4,838	2,459	19,491	4,155	46,880	NA
December	1,619	2,170	1,252	1,452	12,957	2,335	5,246	2,488	18,983	4,225	46,234	NA
Average	**1,713**	**2,435**	**1,260**	**1,502**	**13,555**	**2,374**	**4,557**	**2,328**	**18,961**	**4,220**	**45,996**	**91,243**
2014 January	1,592	2,291	1,179	1,425	12,515	2,403	5,042	2,353	19,102	3,985	45,400	NA
February	1,691	2,309	1,223	1,550	13,153	2,515	5,291	2,374	18,908	4,184	46,426	NA
March	1,625	2,458	1,186	1,442	13,152	2,327	4,906	2,327	18,464	4,115	45,293	NA
April	1,687	2,411	1,193	1,514	13,360	2,247	4,125	2,278	18,849	4,062	44,921	NA
May	1,535	2,348	1,231	1,469	13,083	2,317	3,840	2,328	18,585	4,135	44,289	NA
June	1,681	2,289	1,219	1,546	13,509	2,398	3,833	2,319	18,890	4,056	45,005	NA
July	1,787	2,485	1,307	1,498	13,887	2,469	3,982	2,303	19,283	4,163	46,087	NA
August	1,623	2,435	1,177	1,533	13,414	2,383	3,954	2,370	19,400	4,004	45,525	NA
September	1,728	2,499	1,274	1,512	13,915	2,477	3,851	2,294	19,246	4,046	45,829	NA
October	1,724	2,506	1,268	1,519	13,871	2,426	3,984	2,247	19,691	4,140	46,359	NA
November	1,474	2,390	1,166	1,528	12,998	2,366	4,354	2,360	19,370	4,041	45,490	NA
December	1,691	2,323	1,272	1,535	13,293	2,423	5,096	2,526	19,457	4,183	46,978	NA
Average	**1,653**	**2,396**	**1,225**	**1,505**	**13,347**	**2,395**	**4,350**	**2,340**	**19,106**	**4,093**	**45,630**	**92,325**
2015 January	1,615	2,310	1,155	1,431	R 12,987	2,374	R 4,633	2,489	19,249	3,965	R 45,698	NA
February	1,754	2,462	1,262	1,653	R 13,853	2,452	R 5,158	2,532	19,396	4,202	R 47,592	NA
March	1,669	2,405	1,251	1,477	R 13,458	2,270	R 4,617	2,427	19,238	R 4,082	R 46,092	NA
April	1,674	2,385	1,340	1,568	R 13,661	2,211	R 4,246	2,402	19,037	4,047	R 45,602	NA
May	1,497	2,190	1,256	1,485	R 12,951	2,252	R 3,678	2,224	19,117	R 4,059	R 44,281	NA
June	1,727	2,337	1,326	R 1,558	R 13,915	R 2,322	R 3,760	2,328	19,591	R 4,139	R 46,055	NA
July	1,766	2,422	1,422	R 1,494	R 14,110	R 2,372	R 3,880	2,313	19,979	R 4,231	R 46,885	NA
August	1,631	2,435	1,272	1,578	13,908	2,388	3,998	2,466	19,814	4,092	46,665	NA
8-Month Average	**1,665**	**2,367**	**1,285**	**1,529**	**13,601**	**2,329**	**4,237**	**2,396**	**19,429**	**4,101**	**46,093**	**NA**
2014 8-Month Average	**1,652**	**2,379**	**1,214**	**1,496**	**13,259**	**2,381**	**4,363**	**2,331**	**18,936**	**4,087**	**45,358**	**NA**
2013 8-Month Average	**1,736**	**2,438**	**1,253**	**1,504**	**13,549**	**2,376**	**4,533**	**2,312**	**18,812**	**4,250**	**45,833**	**NA**

[a] Data are for 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; for 1984 forward, Czech Republic, Hungary, Poland, and Slovakia; and, for 2000 forward, Slovenia.

[c] "Other OECD" consists of Australia, New Zealand, and the U.S. Territories; for 1984 forward, Mexico; and, for 2000 forward, Chile, Estonia, and Israel.

[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.

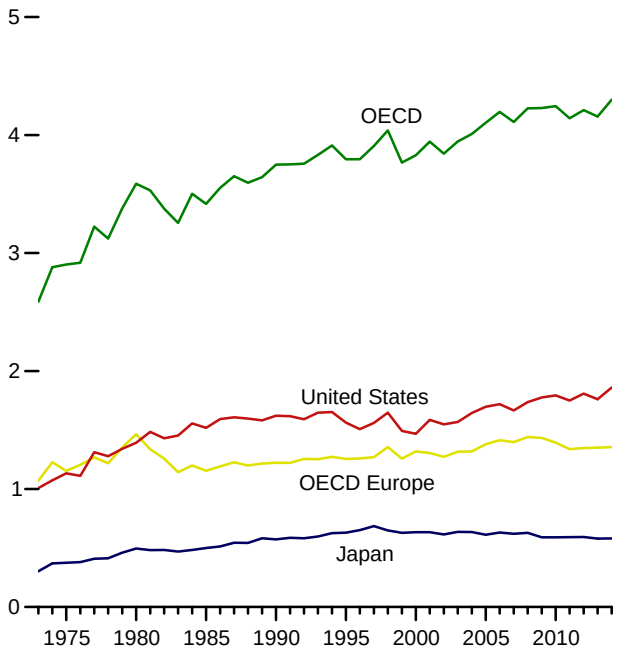
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#international (Excel and CSV files) for all available annual and monthly data beginning in 1973.

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,* December 2015, Table 3a. • **All Other Data:—**International Energy Agency (IEA), *Quarterly Oil Statistics and Energy Balances in OECD Countries,* various issues.

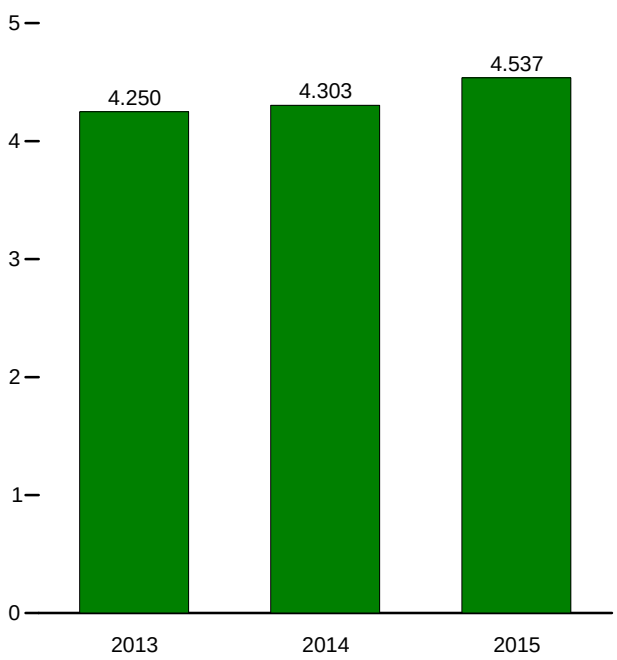
Figure 11.3 Petroleum Stocks in OECD Countries

(Billion Barrels)

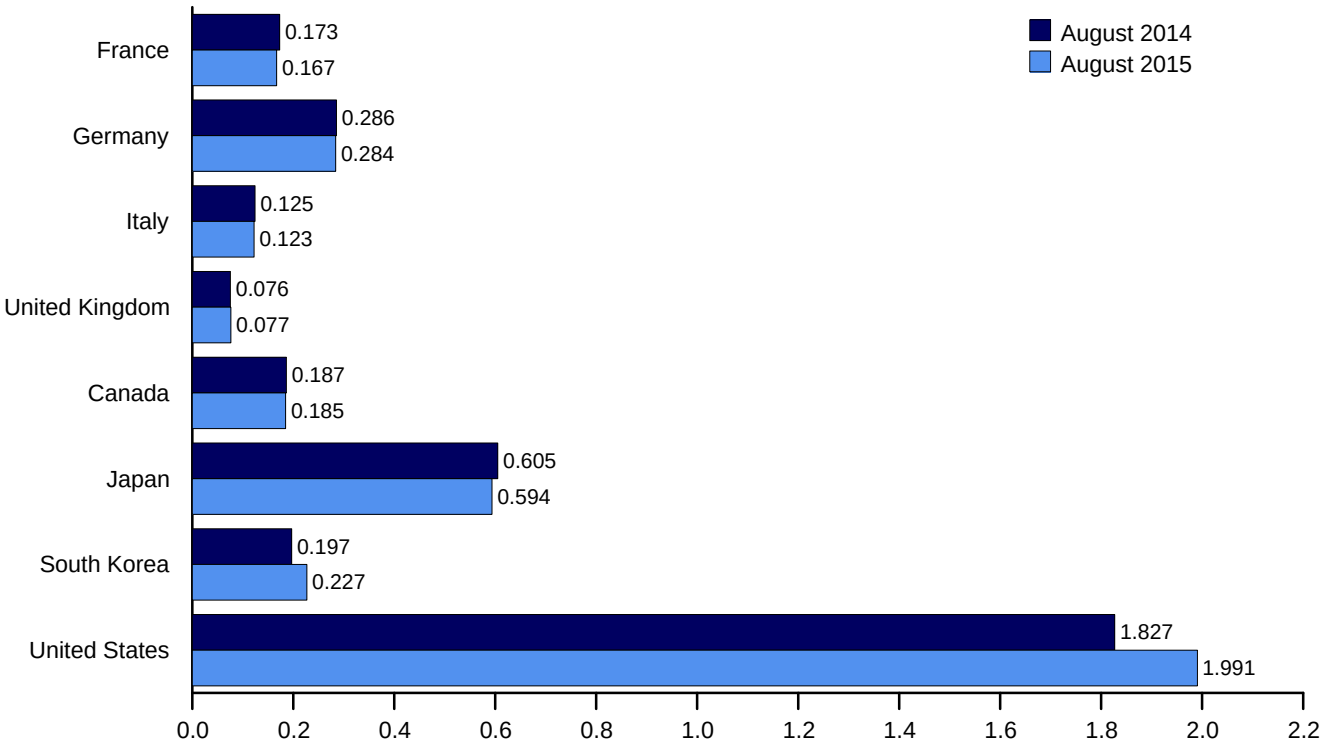
Overview, End of Year, 1973–2014



OECD Stocks, End of Month, August



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**	**119**	**3,417**
1990 Year	**143**	**280**	**171**	**103**	**1,222**	**143**	**572**	**64**	**1,621**	**126**	**3,749**
1995 Year	**155**	**302**	**162**	**101**	**1,256**	**132**	**631**	**92**	**1,563**	**122**	**3,795**
1996 Year	**154**	**303**	**152**	**103**	**1,259**	**127**	**651**	**123**	**1,507**	**127**	**3,794**
1997 Year	**161**	**299**	**147**	**100**	**1,271**	**144**	**685**	**124**	**1,560**	**123**	**3,907**
1998 Year	**169**	**323**	**153**	**104**	**1,355**	**139**	**649**	**129**	**1,647**	**120**	**4,039**
1999 Year	**160**	**290**	**148**	**101**	**1,258**	**141**	**629**	**132**	**1,493**	**114**	**3,766**
2000 Year	**170**	**272**	**157**	**100**	**1,318**	**143**	**634**	**140**	**1,468**	**126**	**3,829**
2001 Year	**165**	**273**	**151**	**113**	**1,306**	**154**	**634**	**143**	**1,586**	**120**	**3,944**
2002 Year	**170**	**253**	**156**	**104**	**1,273**	**155**	**615**	**140**	**1,548**	**112**	**3,843**
2003 Year	**179**	**273**	**153**	**100**	**1,316**	**165**	**636**	**155**	**1,568**	**105**	**3,945**
2004 Year	**177**	**267**	**154**	**101**	**1,319**	**154**	**635**	**149**	**1,645**	**108**	**4,010**
2005 Year	**185**	**283**	**151**	**95**	**1,380**	**168**	**612**	**135**	**1,698**	**112**	**4,105**
2006 Year	**182**	**283**	**153**	**103**	**1,413**	**169**	**631**	**152**	**1,720**	**113**	**4,197**
2007 Year	**180**	**275**	**152**	**92**	**1,398**	**163**	**621**	**143**	**1,665**	**121**	**4,112**
2008 Year	**179**	**279**	**148**	**93**	**1,441**	**162**	**629**	**135**	**1,737**	**124**	**4,227**
2009 Year	**175**	**284**	**146**	**89**	**1,432**	**157**	**591**	**155**	**1,776**	**118**	**4,230**
2010 Year	**168**	**287**	**143**	**83**	**1,393**	**184**	**590**	**165**	**1,794**	**119**	**4,246**
2011 Year	**165**	**281**	**135**	**80**	**1,338**	**178**	**592**	**167**	**1,750**	**117**	**4,143**
2012 Year	**162**	**288**	**126**	**80**	**1,347**	**174**	**594**	**181**	**1,808**	**107**	**4,212**
2013 January	162	294	129	82	1,384	172	596	181	1,811	105	4,249
February	162	291	130	81	1,389	174	587	177	1,790	110	4,227
March	161	293	131	77	1,383	171	594	188	1,793	114	4,245
April	159	291	132	81	1,379	172	601	178	1,808	113	4,251
May	163	293	121	81	1,355	169	597	180	1,817	111	4,228
June	166	290	126	81	1,352	174	591	185	1,819	115	4,236
July	166	290	126	77	1,363	178	582	196	1,818	113	4,250
August	167	289	127	76	1,353	185	582	193	1,823	113	4,250
September	166	288	131	75	1,360	183	594	196	1,833	112	4,279
October	167	290	130	75	1,359	176	590	193	1,810	114	4,241
November	167	289	131	74	1,346	174	591	185	1,789	113	4,198
December	**167**	**290**	**125**	**78**	**1,350**	**170**	**580**	**185**	**1,761**	**111**	**4,157**
2014 January	171	290	128	76	1,370	170	583	184	1,749	112	4,168
February	167	295	124	77	1,365	176	580	188	1,751	114	4,174
March	167	288	123	76	1,353	174	589	193	1,759	110	4,179
April	167	290	122	75	1,349	178	578	187	1,787	112	4,191
May	172	292	128	75	1,371	176	587	191	1,816	115	4,256
June	168	290	122	74	1,356	179	589	188	1,819	112	4,244
July	170	286	120	72	1,351	187	595	190	1,822	114	4,259
August	173	286	125	76	1,370	187	605	197	1,827	117	4,303
September	171	283	123	74	1,364	186	608	197	1,840	116	4,310
October	169	280	117	72	1,348	185	609	196	1,834	114	4,287
November	168	282	124	76	1,351	188	597	202	1,844	112	4,295
December	**168**	**284**	**119**	**78**	**1,355**	**193**	**581**	**197**	**1,860**	**114**	**4,299**
2015 January	170	286	116	73	1,371	192	574	197	1,874	114	4,322
February	170	288	113	75	1,383	184	568	198	1,878	112	4,321
March	173	286	121	76	1,408	183	568	201	1,908	110	4,378
April	170	286	124	85	1,411	185	558	210	1,935	110	4,409
May	175	290	122	78	1,418	181	582	224	1,958	107	4,470
June	170	287	117	R 77	R 1,409	176	578	225	1,971	113	R 4,471
July	168	283	116	R 74	R 1,400	R 184	589	223	1,969	R 113	R 4,477
August	167	284	123	77	1,427	185	594	227	1,991	113	4,537

[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; for 1984 forward, Czech Republic, Hungary, Poland, and Slovakia; and, for 2000 forward, Slovenia.

[c] "Other OECD" consists of Australia, New Zealand, and the U.S. Territories; for 1984 forward, Mexico; and, for 2000 forward, Chile, Estonia, and Israel.

[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 (Excel and CSV files) for all available annual and monthly 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, December 11, 2015.

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, December 2015.

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, December 2015.

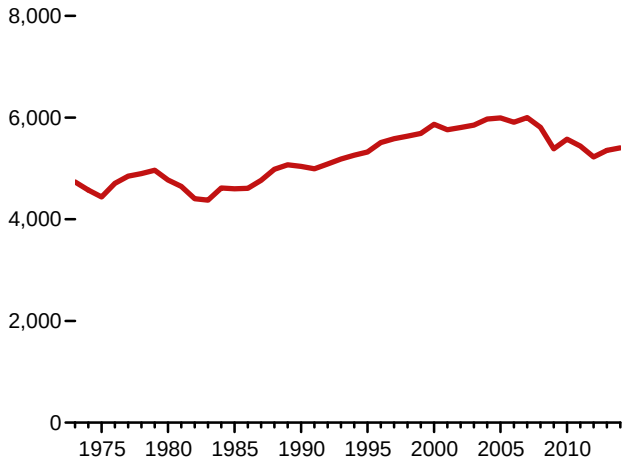
.

12. Environment

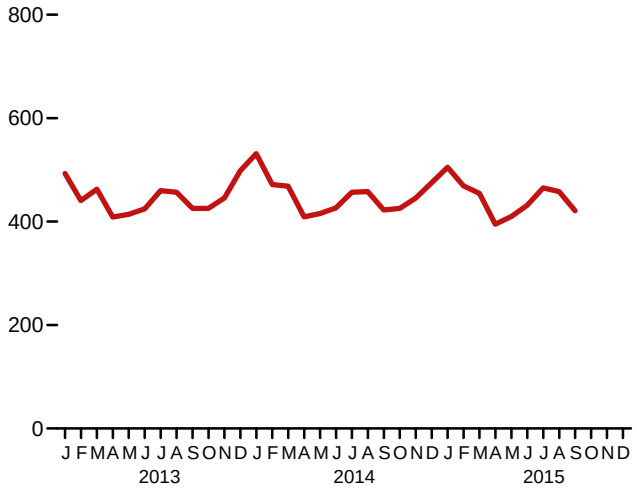
Figure 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide)

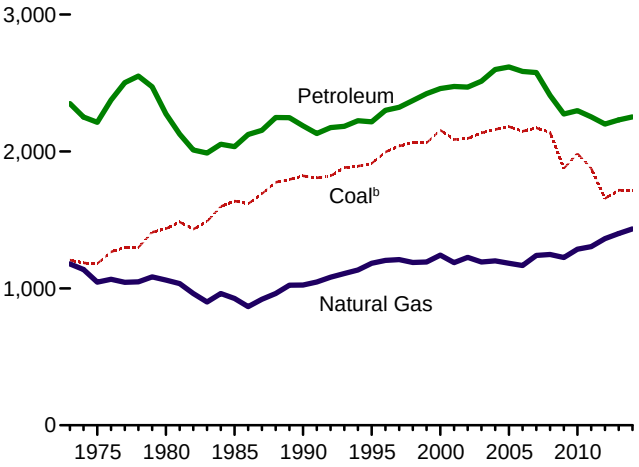
Total,[a] 1973–2014



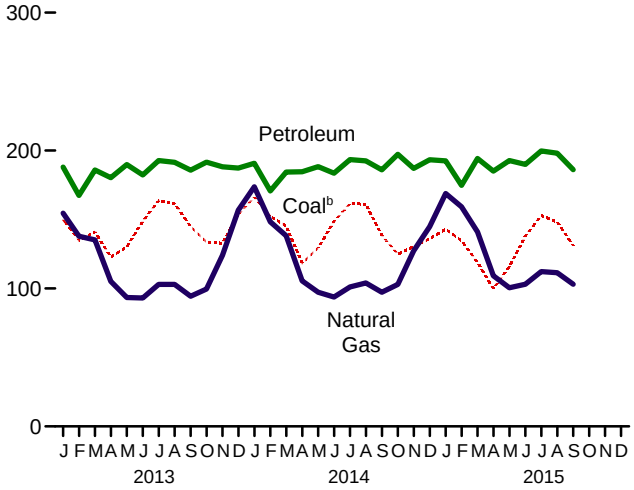
Total,[a] Monthly



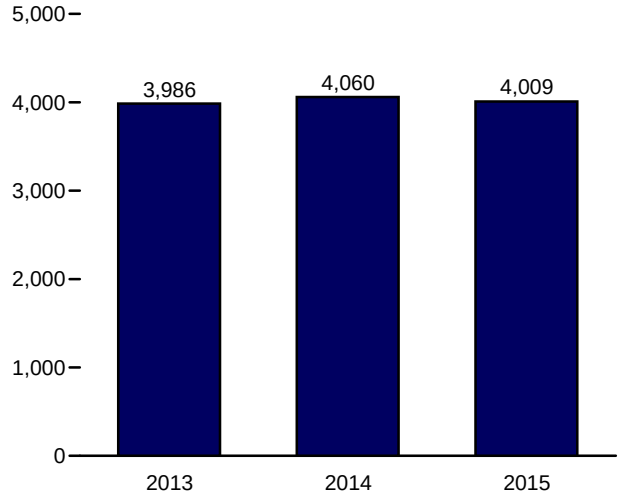
By Major Source, 1973–2014



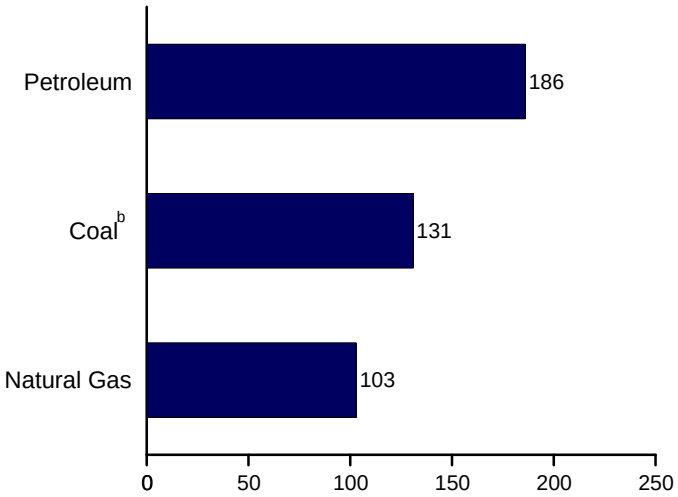
By Major Source, Monthly



Total,[a] January–September



By Major Source, September 2015



[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**	**1,178**	**6**	**480**	**155**	**32**	**92**	**13**	**911**	**54**	**508**	**100**	**2,350**	**4,735**
1975 Total	**1,181**	**1,046**	**5**	**443**	**146**	**24**	**82**	**11**	**911**	**51**	**443**	**97**	**2,212**	**4,439**
1980 Total	**1,436**	**1,061**	**4**	**446**	**156**	**24**	**87**	**13**	**900**	**49**	**453**	**142**	**2,275**	**4,771**
1985 Total	**1,638**	**926**	**3**	**445**	**178**	**17**	**87**	**12**	**930**	**54**	**216**	**93**	**2,036**	**4,600**
1990 Total	**1,821**	**1,024**	**3**	**470**	**223**	**6**	**67**	**13**	**988**	**70**	**220**	**127**	**2,187**	**5,039**
1995 Total	**1,913**	**1,183**	**3**	**498**	**222**	**8**	**80**	**13**	**1,045**	**76**	**152**	**121**	**2,216**	**5,323**
1996 Total	**1,995**	**1,204**	**3**	**524**	**232**	**9**	**86**	**12**	**1,063**	**79**	**152**	**139**	**2,300**	**5,510**
1997 Total	**2,040**	**1,210**	**3**	**534**	**234**	**10**	**87**	**13**	**1,075**	**80**	**142**	**145**	**2,323**	**5,584**
1998 Total	**2,064**	**1,189**	**2**	**537**	**238**	**12**	**82**	**14**	**1,107**	**93**	**158**	**128**	**2,372**	**5,635**
1999 Total	**2,062**	**1,193**	**3**	**555**	**245**	**11**	**90**	**14**	**1,128**	**96**	**148**	**133**	**2,422**	**5,688**
2000 Total	**2,155**	**1,243**	**3**	**579**	**254**	**10**	**97**	**14**	**1,136**	**86**	**163**	**118**	**2,459**	**5,868**
2001 Total	**2,088**	**1,188**	**2**	**597**	**243**	**11**	**88**	**13**	**1,152**	**89**	**144**	**135**	**2,474**	**5,761**
2002 Total	**2,095**	**1,227**	**2**	**586**	**237**	**6**	**91**	**12**	**1,183**	**96**	**125**	**130**	**2,470**	**5,804**
2003 Total	**2,136**	**1,193**	**2**	**610**	**231**	**8**	**87**	**11**	**1,187**	**96**	**138**	**142**	**2,513**	**5,853**
2004 Total	**2,160**	**1,200**	**2**	**632**	**240**	**10**	**87**	**12**	**1,210**	**107**	**155**	**144**	**2,598**	**5,970**
2005 Total	**2,182**	**1,183**	**2**	**639**	**246**	**10**	**84**	**12**	**1,209**	**106**	**165**	**143**	**2,617**	**5,993**
2006 Total	**2,147**	**1,167**	**2**	**645**	**240**	**8**	**80**	**11**	**1,217**	**106**	**122**	**152**	**2,584**	**5,910**
2007 Total	**2,172**	**1,241**	**2**	**647**	**238**	**5**	**83**	**12**	**1,211**	**100**	**128**	**150**	**2,576**	**6,001**
2008 Total	**2,140**	**1,248**	**2**	**610**	**226**	**2**	**79**	**11**	**1,143**	**93**	**110**	**132**	**2,409**	**5,809**
2009 Total	**1,876**	**1,225**	**2**	**559**	**204**	**3**	**78**	**10**	**1,129**	**87**	**90**	**112**	**2,273**	**5,386**
2010 Total	**1,986**	**1,286**	**2**	**585**	**210**	**3**	**79**	**11**	**1,112**	**82**	**93**	**122**	**2,299**	**5,576**
2011 Total	**1,876**	**1,305**	**2**	**599**	**209**	**2**	**78**	**10**	**1,078**	**79**	**79**	**117**	**2,252**	**5,439**
2012 Total	**1,657**	**1,363**	**2**	**574**	**206**	**1**	**81**	**9**	**1,071**	**79**	**65**	**113**	**2,200**	**5,227**
2013 January	150	155	(s)	53	16	(s)	9	1	87	7	5	9	188	493
February	135	138	(s)	47	15	(s)	8	1	79	5	4	9	167	441
March	141	135	(s)	49	17	(s)	8	1	90	5	7	8	186	463
April	123	105	(s)	48	17	(s)	7	1	89	5	4	9	180	409
May	130	93	(s)	48	18	(s)	6	1	94	7	4	11	190	414
June	149	93	(s)	46	18	(s)	6	1	92	7	4	9	182	425
July	164	103	(s)	47	19	(s)	7	1	96	7	5	11	193	460
August	162	103	(s)	47	19	(s)	6	1	95	7	6	9	192	457
September	145	94	(s)	46	17	(s)	6	1	90	7	5	12	186	425
October	134	100	(s)	52	18	(s)	8	1	93	6	4	9	192	425
November	133	124	(s)	48	17	(s)	8	1	90	7	5	11	188	446
December	154	157	(s)	50	18	(s)	9	1	90	6	3	11	187	498
Total	**1,718**	**1,400**	**2**	**581**	**210**	**1**	**88**	**10**	**1,087**	**77**	**56**	**119**	**2,231**	**5,355**
2014 January	166	174	(s)	56	17	(s)	10	1	86	8	5	8	191	531
February	152	148	(s)	49	16	(s)	7	1	81	5	3	9	171	472
March	145	138	(s)	52	18	(s)	7	1	91	3	3	9	184	468
April	R 118	R 105	(s)	50	18	(s)	6	1	90	6	4	10	185	409
May	129	97	(s)	51	17	(s)	5	1	94	7	3	9	188	416
June	149	94	(s)	49	19	(s)	6	1	91	6	4	9	184	427
July	162	101	(s)	50	19	(s)	6	1	96	8	4	9	193	457
August	161	104	(s)	50	19	(s)	6	1	97	6	3	9	193	458
September	139	97	(s)	49	18	(s)	6	1	89	7	4	11	186	R 422
October	125	103	(s)	55	18	(s)	7	1	95	7	4	10	197	426
November	130	127	(s)	49	18	(s)	8	1	90	7	5	9	187	445
December	136	145	(s)	54	19	(s)	8	1	93	5	4	9	193	475
Total	**1,713**	**1,434**	**2**	**614**	**216**	**1**	**83**	**10**	**1,095**	**76**	**45**	**110**	**2,252**	**5,406**
2015 January	143	169	(s)	55	17	(s)	9	1	91	7	4	8	193	505
February	135	159	(s)	53	16	(s)	8	1	81	4	3	9	175	469
March	119	141	(s)	52	19	(s)	7	1	94	7	4	9	194	455
April	100	109	(s)	50	18	(s)	6	1	92	7	2	9	185	395
May	116	R 101	(s)	49	19	(s)	6	1	96	7	4	11	193	R 410
June	138	103	(s)	48	20	(s)	6	1	95	7	R 3	11	190	R 432
July	R 153	112	(s)	50	20	(s)	6	1	98	8	5	11	200	R 465
August	148	111	(s)	50	20	(s)	6	1	99	8	5	10	198	458
September	131	103	(s)	50	19	(s)	6	1	93	5	4	8	186	421
9-Month Total	**1,182**	**1,109**	**1**	**457**	**168**	**1**	**60**	**8**	**840**	**60**	**33**	**86**	**1,713**	**4,009**
2014 9-Month Total	**1,322**	**1,059**	**1**	**455**	**160**	**1**	**60**	**8**	**817**	**57**	**33**	**82**	**1,674**	**4,060**
2013 9-Month Total	**1,298**	**1,020**	**1**	**431**	**157**	**1**	**63**	**8**	**813**	**59**	**44**	**87**	**1,664**	**3,986**

[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.

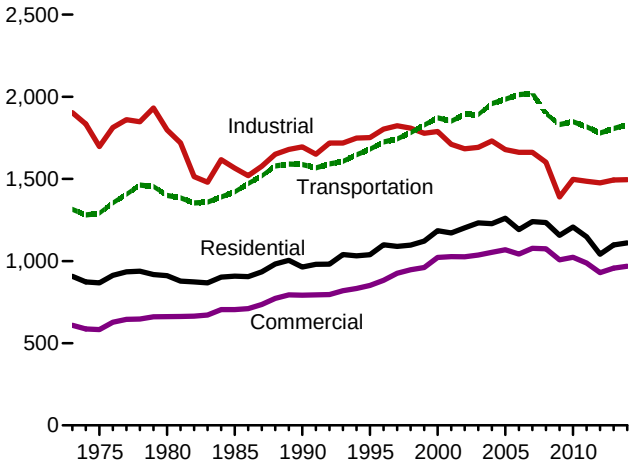
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

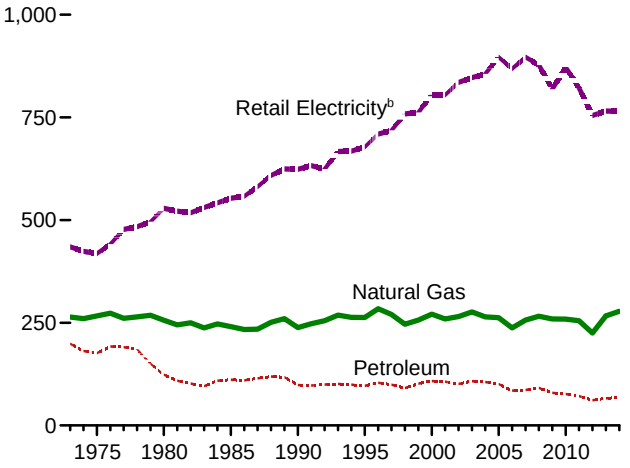
Figure 12.2 Carbon Dioxide Emissions From Energy Consumption by Sector

(Million Metric Tons of Carbon Dioxide)

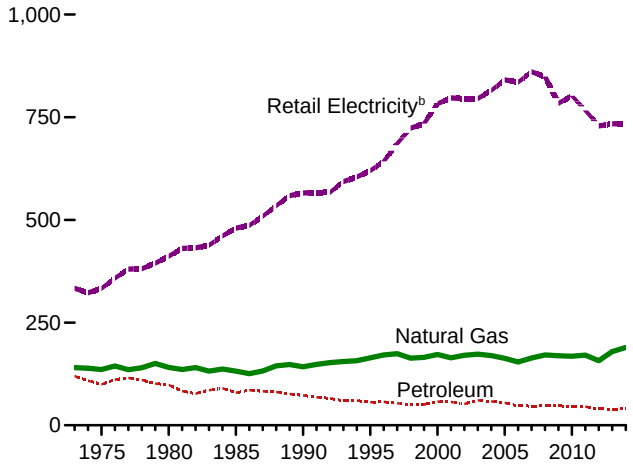
Total[a] by End-Use Sector,[b] 1973–2014



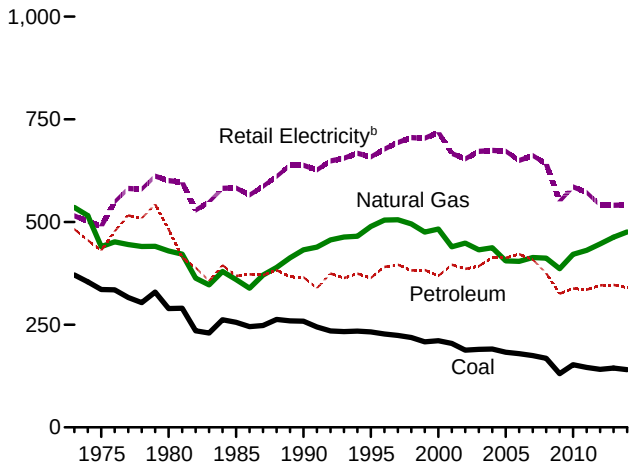
Residential Sector by Major Source, 1973–2014



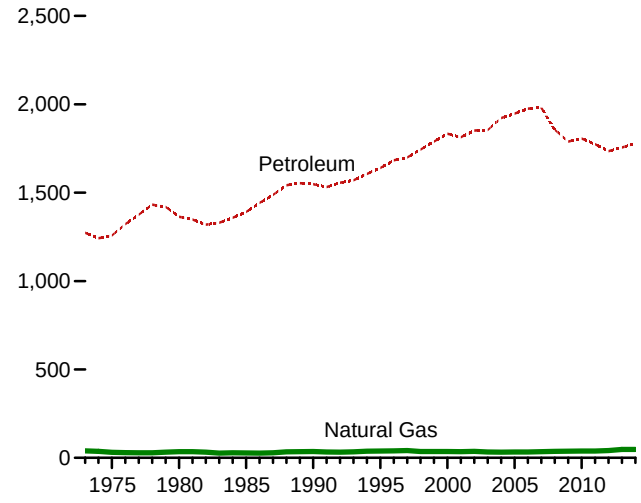
Commercial Sector by Major Source, 1973–2014



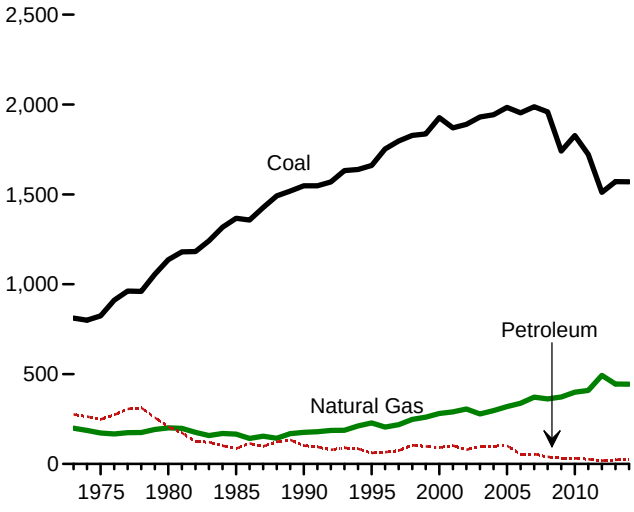
Industrial Sector by Major Source, 1973–2014



Transportation Sector by Major Source, 1973–2014



Electric Power Sector by Major Source, 1973–2014



[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**	**60**	**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**	**1,171**
2002 Total	**1**	**265**	**63**	**4**	**34**	**101**	**835**	**1,203**
2003 Total	**1**	**276**	**68**	**5**	**34**	**108**	**847**	**1,232**
2004 Total	**1**	**264**	**67**	**6**	**32**	**106**	**856**	**1,227**
2005 Total	**1**	**262**	**62**	**6**	**32**	**101**	**897**	**1,261**
2006 Total	**1**	**237**	**52**	**5**	**28**	**85**	**869**	**1,191**
2007 Total	**1**	**257**	**53**	**3**	**31**	**86**	**897**	**1,241**
2008 Total	**NA**	**266**	**55**	**2**	**35**	**91**	**877**	**1,234**
2009 Total	**NA**	**259**	**43**	**2**	**35**	**79**	**819**	**1,157**
2010 Total	**NA**	**259**	**41**	**2**	**33**	**77**	**872**	**1,207**
2011 Total	**NA**	**255**	**38**	**1**	**32**	**72**	**821**	**1,148**
2012 Total	**NA**	**225**	**35**	**1**	**25**	**61**	**755**	**1,041**
2013 January	NA	47	6	(s)	3	9	72	128
February	NA	41	5	(s)	3	8	60	109
March	NA	36	5	(s)	3	7	62	105
April	NA	20	3	(s)	2	6	49	75
May	NA	11	2	(s)	2	4	51	66
June	NA	7	2	(s)	2	4	66	77
July	NA	6	2	(s)	2	4	82	92
August	NA	6	2	(s)	2	4	79	89
September	NA	6	2	(s)	2	5	66	77
October	NA	12	2	(s)	3	4	53	70
November	NA	28	3	(s)	3	5	54	87
December	NA	46	3	(s)	3	6	73	126
Total	**NA**	**267**	**36**	**1**	**30**	**66**	**766**	**1,098**
2014 January	NA	57	4	(s)	3	7	R 84	R 148
February	NA	47	5	(s)	2	7	72	126
March	NA	38	4	(s)	2	7	63	108
April	NA	19	2	(s)	2	4	R 46	R 70
May	NA	11	3	(s)	2	5	51	67
June	NA	7	2	(s)	2	4	R 65	R 76
July	NA	6	2	(s)	2	4	R 77	88
August	NA	6	2	(s)	2	4	R 77	88
September	NA	7	3	(s)	2	5	R 63	R 75
October	NA	12	3	(s)	2	6	R 50	68
November	NA	30	4	(s)	3	6	54	90
December	NA	39	4	(s)	3	7	63	110
Total	**NA**	**278**	**38**	**1**	**29**	**68**	R **765**	R **1,110**
2015 January	NA	51	5	(s)	3	8	73	132
February	NA	49	4	(s)	3	7	67	123
March	NA	35	3	(s)	2	6	57	98
April	NA	18	2	(s)	2	4	42	64
May	NA	10	2	(s)	2	4	49	63
June	NA	7	1	(s)	2	3	66	76
July	NA	6	1	(s)	2	4	81	91
August	NA	6	2	(s)	2	4	78	88
September	NA	6	2	(s)	2	4	65	74
9-Month Total	**NA**	**187**	**23**	**(s)**	**21**	**44**	**579**	**811**
2014 9-Month Total	**NA**	**198**	**27**	**1**	**21**	**49**	**599**	**846**
2013 9-Month Total	**NA**	**180**	**29**	**(s)**	**21**	**50**	**586**	**817**

[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.
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 (Excel and CSV files) for all available annual and monthly 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])

			Petroleum								
	Coal	Natural Gas[b]	Distillate Fuel Oil[c]	Kerosene	LPG[d]	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Total	Retail Electricity[f]	Total[g]
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**	**50**	**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**	**36**	**1**	**10**	**4**	**(s)**	**9**	**60**	**796**	**1,037**
2004 Total	**10**	**170**	**34**	**1**	**10**	**3**	**(s)**	**10**	**58**	**815**	**1,053**
2005 Total	**9**	**163**	**33**	**2**	**8**	**3**	**(s)**	**9**	**55**	**841**	**1,069**
2006 Total	**6**	**154**	**29**	**1**	**8**	**3**	**(s)**	**6**	**47**	**835**	**1,043**
2007 Total	**7**	**164**	**28**	**1**	**8**	**4**	**(s)**	**6**	**46**	**861**	**1,078**
2008 Total	**8**	**171**	**28**	**(s)**	**10**	**3**	**(s)**	**6**	**47**	**849**	**1,075**
2009 Total	**7**	**169**	**29**	**(s)**	**9**	**4**	**(s)**	**6**	**47**	**784**	**1,007**
2010 Total	**7**	**168**	**29**	**(s)**	**9**	**3**	**(s)**	**5**	**46**	**802**	**1,023**
2011 Total	**6**	**171**	**29**	**(s)**	**9**	**3**	**(s)**	**4**	**45**	**767**	**988**
2012 Total	**4**	**157**	**26**	**(s)**	**9**	**3**	**(s)**	**2**	**40**	**729**	**930**
2013 January	(s)	26	4	(s)	1	(s)	(s)	(s)	5	58	90
February	(s)	23	4	(s)	1	(s)	(s)	(s)	5	54	83
March	(s)	21	3	(s)	1	(s)	(s)	(s)	5	57	84
April	(s)	14	2	(s)	1	(s)	(s)	(s)	4	52	70
May	(s)	9	2	(s)	1	(s)	0	(s)	3	58	70
June	(s)	7	1	(s)	1	(s)	0	(s)	2	66	76
July	(s)	7	1	(s)	1	(s)	(s)	(s)	2	72	82
August	(s)	7	1	(s)	1	(s)	(s)	(s)	3	72	83
September	(s)	8	2	(s)	1	(s)	(s)	(s)	3	64	75
October	(s)	11	1	(s)	1	(s)	(s)	(s)	2	60	74
November	(s)	19	2	(s)	1	(s)	(s)	(s)	3	57	79
December	(s)	26	2	(s)	1	(s)	(s)	(s)	4	62	92
Total	**4**	**179**	**25**	**(s)**	**10**	**3**	**(s)**	**2**	**40**	**734**	**957**
2014 January	1	31	3	(s)	1	(s)	(s)	(s)	4	R 65	102
February	1	27	3	(s)	1	(s)	(s)	(s)	4	R 58	R 90
March	(s)	23	3	(s)	1	(s)	(s)	(s)	4	R 59	R 86
April	(s)	14	1	(s)	1	(s)	(s)	(s)	2	52	R 68
May	(s)	10	2	(s)	1	(s)	(s)	(s)	3	R 58	R 71
June	(s)	8	2	(s)	1	(s)	0	(s)	3	R 65	R 76
July	(s)	8	1	(s)	1	(s)	(s)	(s)	2	R 71	R 81
August	(s)	7	1	(s)	1	(s)	(s)	(s)	3	R 72	R 82
September	(s)	8	2	(s)	1	(s)	(s)	(s)	3	R 63	R 74
October	(s)	11	2	(s)	1	(s)	(s)	(s)	3	R 58	R 73
November	(s)	20	3	(s)	1	(s)	(s)	(s)	4	R 56	R 80
December	1	23	3	(s)	1	(s)	(s)	(s)	4	R 56	R 84
Total	**5**	**189**	**26**	**(s)**	**10**	**3**	**(s)**	**1**	**40**	**R 735**	**R 969**
2015 January	1	29	3	(s)	1	(s)	(s)	(s)	5	59	R 93
February	1	28	3	(s)	1	(s)	(s)	(s)	4	57	90
March	1	21	2	(s)	1	(s)	(s)	(s)	4	53	78
April	(s)	13	1	(s)	1	(s)	(s)	(s)	2	49	65
May	(s)	9	1	(s)	1	(s)	(s)	(s)	2	57	68
June	(s)	7	1	(s)	1	(s)	0	(s)	2	66	R 75
July	(s)	7	1	(s)	1	(s)	0	(s)	2	72	82
August	(s)	8	1	(s)	1	(s)	(s)	(s)	2	70	80
September	(s)	8	1	(s)	1	(s)	(s)	(s)	2	63	73
9-Month Total	**4**	**130**	**16**	**(s)**	**7**	**2**	**(s)**	**1**	**26**	**544**	**704**
2014 9-Month Total	**3**	**135**	**19**	**(s)**	**7**	**2**	**(s)**	**1**	**29**	**563**	**731**
2013 9-Month Total	**3**	**124**	**20**	**(s)**	**7**	**2**	**(s)**	**2**	**31**	**555**	**712**

[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 (Excel and CSV files) for all available annual and monthly 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**	**536**	**106**	**11**	**44**	**7**	**18**	**52**	**144**	**100**	**483**	**515**	**1,904**
1975 Total	**336**	**2**	**440**	**97**	**9**	**39**	**6**	**16**	**51**	**117**	**97**	**431**	**490**	**1,697**
1980 Total	**289**	**-4**	**429**	**96**	**13**	**61**	**7**	**11**	**48**	**105**	**142**	**483**	**601**	**1,798**
1985 Total	**256**	**-2**	**360**	**81**	**3**	**59**	**6**	**15**	**54**	**57**	**93**	**369**	**583**	**1,566**
1990 Total	**258**	**1**	**432**	**84**	**1**	**37**	**7**	**13**	**67**	**31**	**127**	**366**	**638**	**1,695**
1995 Total	**233**	**7**	**489**	**82**	**1**	**47**	**7**	**14**	**67**	**25**	**121**	**364**	**659**	**1,751**
1996 Total	**227**	**3**	**505**	**86**	**1**	**48**	**6**	**14**	**71**	**24**	**139**	**391**	**678**	**1,803**
1997 Total	**224**	**5**	**505**	**88**	**1**	**50**	**7**	**15**	**70**	**21**	**145**	**396**	**694**	**1,824**
1998 Total	**219**	**8**	**495**	**88**	**2**	**47**	**7**	**14**	**80**	**16**	**128**	**382**	**706**	**1,809**
1999 Total	**208**	**7**	**475**	**86**	**1**	**47**	**7**	**11**	**85**	**14**	**133**	**383**	**704**	**1,778**
2000 Total	**211**	**7**	**483**	**87**	**1**	**52**	**7**	**11**	**76**	**17**	**118**	**369**	**719**	**1,788**
2001 Total	**204**	**3**	**440**	**95**	**2**	**45**	**6**	**21**	**79**	**14**	**135**	**396**	**667**	**1,711**
2002 Total	**188**	**7**	**448**	**88**	**1**	**47**	**6**	**22**	**79**	**13**	**130**	**386**	**654**	**1,683**
2003 Total	**190**	**6**	**432**	**85**	**2**	**41**	**6**	**23**	**78**	**16**	**142**	**392**	**672**	**1,692**
2004 Total	**191**	**16**	**437**	**88**	**2**	**44**	**6**	**26**	**85**	**18**	**144**	**413**	**674**	**1,731**
2005 Total	**183**	**5**	**405**	**92**	**3**	**42**	**6**	**25**	**82**	**20**	**143**	**413**	**672**	**1,678**
2006 Total	**179**	**7**	**404**	**91**	**2**	**43**	**6**	**26**	**85**	**16**	**152**	**422**	**650**	**1,662**
2007 Total	**175**	**3**	**414**	**91**	**1**	**43**	**6**	**21**	**83**	**13**	**150**	**408**	**662**	**1,661**
2008 Total	**168**	**5**	**412**	**98**	**(s)**	**32**	**6**	**17**	**78**	**13**	**132**	**376**	**642**	**1,602**
2009 Total	**131**	**-3**	**386**	**78**	**(s)**	**33**	**5**	**16**	**73**	**8**	**112**	**325**	**550**	**1,390**
2010 Total	**153**	**-1**	**421**	**84**	**1**	**35**	**6**	**17**	**68**	**6**	**122**	**338**	**586**	**1,497**
2011 Total	**146**	**1**	**431**	**90**	**(s)**	**34**	**5**	**17**	**65**	**6**	**117**	**335**	**572**	**1,486**
2012 Total	**141**	**(s)**	**447**	**93**	**(s)**	**45**	**5**	**17**	**70**	**3**	**113**	**346**	**541**	**1,476**
2013 January	12	(s)	42	10	(s)	5	(s)	1	7	(s)	9	32	44	130
February	12	(s)	38	7	(s)	4	(s)	1	4	(s)	9	26	41	117
March	12	(s)	40	7	(s)	4	(s)	1	5	(s)	8	26	44	123
April	12	(s)	38	7	(s)	3	(s)	1	4	(s)	9	26	42	116
May	12	(s)	37	7	(s)	3	(s)	2	6	(s)	11	29	45	124
June	12	(s)	36	6	(s)	3	(s)	1	6	(s)	9	27	47	121
July	12	(s)	37	6	(s)	3	(s)	2	6	(s)	11	28	49	126
August	12	(s)	37	6	(s)	3	(s)	2	6	(s)	9	26	50	125
September	12	(s)	36	7	(s)	3	(s)	1	6	(s)	12	30	45	124
October	12	(s)	38	11	(s)	4	(s)	2	5	(s)	9	31	45	126
November	12	(s)	40	9	(s)	4	(s)	1	6	(s)	11	33	44	129
December	12	(s)	43	9	(s)	5	(s)	1	5	(s)	11	32	44	131
Total	**144**	**-2**	**463**	**92**	**(s)**	**46**	**5**	**18**	**65**	**2**	**119**	**347**	**541**	**1,493**
2014 January	12	(s)	44	12	(s)	5	(s)	1	7	(s)	8	34	R 46	R 135
February	12	(s)	40	8	(s)	4	(s)	1	4	(s)	9	27	R 42	R 121
March	12	(s)	42	9	(s)	4	1	1	2	(s)	9	25	R 44	R 124
April	11	(s)	39	9	(s)	3	(s)	1	5	(s)	10	29	R 40	R 120
May	12	(s)	38	8	(s)	2	(s)	2	6	(s)	9	27	R 46	R 122
June	12	(s)	37	6	(s)	3	(s)	1	5	(s)	9	25	R 47	R 121
July	12	(s)	38	7	(s)	3	(s)	2	7	(s)	9	27	R 50	R 127
August	12	(s)	38	6	(s)	3	(s)	2	5	(s)	9	26	R 51	R 127
September	11	(s)	37	7	(s)	3	1	1	6	(s)	11	29	R 45	R 123
October	12	(s)	39	10	(s)	3	(s)	2	6	(s)	10	32	R 44	R 126
November	11	(s)	41	7	(s)	4	(s)	1	6	(s)	9	29	R 44	R 125
December	11	(s)	43	10	(s)	4	(s)	2	4	(s)	9	29	R 42	R 124
Total	**141**	**-2**	**476**	**99**	**(s)**	**42**	**5**	**18**	**64**	**2**	**110**	**340**	**R 542**	**R 1,496**
2015 January	11	(s)	44	11	(s)	5	1	1	6	(s)	8	33	41	129
February	11	(s)	41	11	(s)	4	(s)	1	3	(s)	9	29	40	120
March	11	(s)	42	10	(s)	4	1	2	6	(s)	9	31	38	121
April	10	(s)	39	9	(s)	3	(s)	1	6	(s)	9	29	R 37	114
May	10	(s)	38	7	(s)	2	1	2	6	(s)	11	29	42	119
June	11	(s)	37	7	(s)	3	(s)	2	6	(s)	11	30	46	R 123
July	11	(s)	38	7	(s)	3	1	2	6	(s)	11	30	R 48	R 127
August	11	(s)	R 38	7	(s)	3	(s)	2	6	(s)	10	29	47	125
September	11	(s)	37	9	(s)	3	(s)	2	4	(s)	8	26	43	117
9-Month Total	**98**	**-2**	**354**	**78**	**(s)**	**30**	**4**	**14**	**51**	**1**	**86**	**264**	**380**	**1,094**
2014 9-Month Total	**106**	**-2**	**353**	**72**	**(s)**	**30**	**4**	**13**	**48**	**1**	**82**	**250**	**412**	**1,119**
2013 9-Month Total	**107**	**-1**	**341**	**64**	**(s)**	**33**	**4**	**13**	**49**	**2**	**87**	**251**	**407**	**1,106**

[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 (Excel and CSV files) for all available annual and monthly 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**	**1,640**	**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**	**341**	**234**	**1**	**6**	**1,057**	**56**	**1,700**	**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**	**365**	**245**	**1**	**7**	**1,115**	**52**	**1,789**	**3**	**1,828**
2000 Total	**(h)**	**36**	**3**	**377**	**254**	**1**	**7**	**1,122**	**70**	**1,833**	**4**	**1,873**
2001 Total	**(h)**	**35**	**2**	**387**	**243**	**1**	**6**	**1,128**	**46**	**1,813**	**4**	**1,852**
2002 Total	**(h)**	**37**	**2**	**394**	**237**	**1**	**6**	**1,158**	**53**	**1,852**	**4**	**1,892**
2003 Total	**(h)**	**33**	**2**	**408**	**231**	**1**	**6**	**1,161**	**45**	**1,854**	**5**	**1,892**
2004 Total	**(h)**	**32**	**2**	**433**	**240**	**1**	**6**	**1,181**	**58**	**1,922**	**5**	**1,959**
2005 Total	**(h)**	**33**	**2**	**444**	**246**	**2**	**6**	**1,182**	**66**	**1,948**	**5**	**1,986**
2006 Total	**(h)**	**33**	**2**	**467**	**240**	**2**	**5**	**1,188**	**71**	**1,976**	**5**	**2,014**
2007 Total	**(h)**	**35**	**2**	**469**	**238**	**1**	**6**	**1,186**	**78**	**1,981**	**5**	**2,021**
2008 Total	**(h)**	**37**	**2**	**424**	**226**	**3**	**5**	**1,124**	**73**	**1,856**	**5**	**1,898**
2009 Total	**(h)**	**38**	**2**	**405**	**204**	**2**	**5**	**1,109**	**62**	**1,789**	**5**	**1,832**
2010 Total	**(h)**	**38**	**2**	**426**	**210**	**2**	**5**	**1,091**	**70**	**1,806**	**5**	**1,849**
2011 Total	**(h)**	**39**	**2**	**437**	**209**	**2**	**5**	**1,058**	**61**	**1,774**	**4**	**1,818**
2012 Total	**(h)**	**41**	**2**	**416**	**206**	**2**	**5**	**1,051**	**53**	**1,735**	**4**	**1,780**
2013 January	(h)	5	(s)	33	16	(s)	(s)	86	4	139	(s)	145
February	(h)	5	(s)	30	15	(s)	(s)	78	3	127	(s)	132
March	(h)	5	(s)	34	17	(s)	(s)	89	6	146	(s)	151
April	(h)	4	(s)	35	17	(s)	(s)	88	3	144	(s)	148
May	(h)	3	(s)	37	18	(s)	(s)	93	3	151	(s)	155
June	(h)	3	(s)	36	18	(s)	(s)	90	3	148	(s)	151
July	(h)	3	(s)	38	19	(s)	(s)	94	4	156	(s)	160
August	(h)	3	(s)	38	19	(s)	(s)	94	5	156	(s)	160
September	(h)	3	(s)	35	17	(s)	(s)	89	5	146	(s)	150
October	(h)	3	(s)	38	18	(s)	(s)	91	3	152	(s)	156
November	(h)	4	(s)	35	17	(s)	(s)	88	4	146	(s)	150
December	(h)	5	(s)	35	18	(s)	(s)	89	2	144	(s)	149
Total	**(h)**	**47**	**2**	**424**	**210**	**3**	**5**	**1,066**	**46**	**1,756**	**4**	**1,807**
2014 January	(h)	6	(s)	35	17	(s)	(s)	85	2	140	(s)	146
February	(h)	5	(s)	32	16	(s)	(s)	80	2	130	(s)	135
March	(h)	5	(s)	36	18	(s)	(s)	89	2	146	(s)	150
April	(h)	4	(s)	37	18	(s)	(s)	89	3	147	(s)	151
May	(h)	3	(s)	38	17	(s)	(s)	92	3	152	(s)	155
June	(h)	3	(s)	38	19	(s)	(s)	89	3	150	(s)	153
July	(h)	3	(s)	40	19	(s)	(s)	95	3	158	(s)	161
August	(h)	3	(s)	40	19	(s)	(s)	95	3	158	(s)	161
September	(h)	3	(s)	37	18	(s)	(s)	87	3	146	(s)	150
October	(h)	3	(s)	40	18	(s)	(s)	94	3	155	(s)	159
November	(h)	4	(s)	35	18	(s)	(s)	88	4	146	(s)	151
December	(h)	5	(s)	37	19	(s)	(s)	91	3	151	(s)	157
Total	**(h)**	**48**	**2**	**445**	**216**	**3**	**5**	**1,075**	**35**	**1,779**	**4**	**1,831**
2015 January	(h)	6	(s)	35	17	(s)	1	89	3	145	(s)	151
February	(h)	5	(s)	33	16	(s)	(s)	80	(s)	130	(s)	136
March	(h)	5	(s)	37	19	(s)	(s)	93	3	R 153	(s)	157
April	(h)	4	(s)	37	18	(s)	(s)	91	2	148	(s)	152
May	(h)	3	(s)	38	19	(s)	1	94	3	155	(s)	159
June	(h)	3	(s)	38	20	(s)	(s)	93	2	154	(s)	157
July	(h)	4	(s)	40	20	(s)	1	97	4	162	(s)	166
August	(h)	4	(s)	40	20	(s)	(s)	97	4	161	(s)	165
September	(h)	3	(s)	38	19	(s)	(s)	92	3	152	(s)	156
9-Month Total	**(h)**	**37**	**1**	**336**	**168**	**2**	**4**	**825**	**24**	**1,359**	**3**	**1,399**
2014 9-Month Total	**(h)**	**35**	**1**	**333**	**160**	**2**	**4**	**801**	**24**	**1,326**	**3**	**1,364**
2013 9-Month Total	**(h)**	**34**	**1**	**316**	**157**	**2**	**4**	**798**	**36**	**1,314**	**3**	**1,352**

[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.

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 (Excel and CSV files) for all available annual and monthly 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**	**22**	**69**	**99**	**(s)**	**11**	**2,350**
2005 Total	**1,984**	**319**	**8**	**24**	**69**	**101**	**(s)**	**11**	**2,416**
2006 Total	**1,954**	**338**	**5**	**21**	**28**	**55**	**(s)**	**12**	**2,358**
2007 Total	**1,987**	**372**	**6**	**17**	**31**	**54**	**(s)**	**11**	**2,425**
2008 Total	**1,959**	**362**	**5**	**15**	**19**	**39**	**(s)**	**12**	**2,373**
2009 Total	**1,741**	**373**	**5**	**13**	**14**	**33**	**(s)**	**11**	**2,158**
2010 Total	**1,828**	**399**	**6**	**14**	**12**	**32**	**(s)**	**5**	**2,265**
2011 Total	**1,723**	**409**	**5**	**14**	**7**	**26**	**(s)**	**6**	**2,165**
2012 Total	**1,511**	**493**	**4**	**9**	**6**	**19**	**(s)**	**6**	**2,029**
2013 January	137	34	(s)	1	1	2	(s)	1	174
February	123	31	(s)	1	1	2	(s)	(s)	156
March	129	33	(s)	1	(s)	2	(s)	1	164
April	111	31	(s)	1	(s)	2	(s)	(s)	144
May	118	33	(s)	1	(s)	2	(s)	1	154
June	137	40	(s)	1	(s)	2	(s)	(s)	180
July	152	49	(s)	1	1	2	(s)	1	204
August	150	49	(s)	1	1	2	(s)	1	201
September	133	41	(s)	1	(s)	2	(s)	(s)	176
October	121	35	(s)	1	(s)	2	(s)	1	158
November	120	33	(s)	1	(s)	2	(s)	(s)	155
December	141	36	(s)	1	1	2	(s)	1	180
Total	**1,571**	**444**	**4**	**13**	**6**	**23**	**(s)**	**6**	**2,045**
2014 January	154	36	2	1	2	5	(s)	1	196
February	140	30	1	1	1	2	(s)	(s)	173
March	133	R 31	1	1	1	3	(s)	1	R 167
April	107	30	(s)	1	(s)	1	(s)	(s)	139
May	118	35	(s)	1	(s)	2	(s)	1	155
June	137	39	(s)	1	(s)	2	(s)	(s)	R 178
July	150	46	(s)	1	(s)	2	(s)	1	198
August	149	49	(s)	1	R (s)	2	(s)	1	200
September	127	42	(s)	1	(s)	2	(s)	(s)	R 171
October	R 112	38	(s)	1	(s)	1	(s)	1	153
November	119	33	(s)	1	(s)	2	(s)	(s)	154
December	R 125	35	(s)	1	(s)	2	(s)	1	R 162
Total	**1,570**	**444**	**6**	**12**	R **7**	R **26**	**(s)**	**6**	**2,046**
2015 January	131	39	1	1	1	3	(s)	1	173
February	123	35	2	1	2	5	(s)	(s)	164
March	107	39	(s)	1	(s)	2	(s)	1	148
April	89	36	(s)	1	(s)	2	(s)	(s)	128
May	105	40	(s)	1	(s)	2	(s)	1	148
June	127	R 49	(s)	1	(s)	2	(s)	(s)	178
July	R 142	57	(s)	1	1	2	(s)	1	R 201
August	136	56	(s)	1	1	2	(s)	1	195
September	120	49	(s)	1	(s)	2	(s)	(s)	171
9-Month Total	**1,082**	**401**	**4**	**9**	**6**	**20**	**(s)**	**5**	**1,507**
2014 9-Month Total	**1,214**	**338**	**5**	**9**	**6**	**21**	**(s)**	**5**	**1,578**
2013 9-Month Total	**1,189**	**341**	**3**	**10**	**5**	**17**	**(s)**	**5**	**1,552**

[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. Through 1994, also includes blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2009, also includes municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.
[e] 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 (Excel and CSV files) for all available annual and monthly 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	**196**	**37**	**39**	**3**	**276**	**39**	**9**	**146**	**41**	**39**	**276**
2008 Total	**193**	**39**	**55**	**3**	**290**	**44**	**10**	**139**	**57**	**40**	**290**
2009 Total	**181**	**41**	**62**	**3**	**287**	**47**	**10**	**125**	**64**	**41**	**287**
2010 Total	**186**	**42**	**73**	**2**	**303**	**41**	**10**	**136**	**74**	**42**	**303**
2011 Total	**189**	**42**	**73**	**8**	**312**	**42**	**11**	**139**	**80**	**40**	**312**
2012 Total	**189**	**42**	**73**	**8**	**312**	**39**	**10**	**141**	**80**	**42**	**312**
2013 January	17	4	6	1	28	5	1	12	6	4	28
February	16	3	5	1	25	4	1	11	6	3	25
March	17	4	6	1	28	5	1	12	7	4	28
April	16	4	6	1	27	4	1	11	7	3	27
May	17	4	6	1	28	5	1	12	7	3	28
June	17	4	6	1	28	4	1	12	7	4	28
July	18	4	6	1	29	5	1	12	7	4	29
August	18	4	6	1	29	5	1	12	7	4	29
September	17	4	6	1	28	4	1	11	7	4	28
October	17	4	7	2	29	5	1	12	8	4	29
November	17	4	6	1	28	4	1	12	7	4	28
December	18	4	6	2	30	5	1	12	8	4	30
Total	**204**	**45**	**75**	**13**	**337**	**54**	**11**	**141**	**87**	**43**	**337**
2014 January	18	4	6	1	R 29	5	1	12	7	4	R 29
February	16	R 4	6	1	26	4	1	11	6	4	26
March	R 18	4	6	1	R 29	5	1	12	7	4	R 29
April	17	4	6	1	R 28	4	1	R 12	7	4	R 28
May	17	4	7	1	29	5	1	12	7	4	29
June	17	4	6	1	29	4	1	12	7	4	29
July	18	4	7	1	30	5	1	12	8	4	30
August	18	4	7	1	30	5	1	12	8	4	30
September	17	4	6	1	28	4	1	11	7	4	28
October	R 17	4	7	1	29	5	1	12	8	4	29
November	17	4	6	1	29	4	1	12	7	4	29
December	18	4	7	1	30	5	1	12	8	4	30
Total	**R 209**	**R 47**	**76**	**13**	**R 345**	**54**	**11**	**R 143**	**88**	**R 49**	**R 345**
2015 January	17	4	6	1	28	4	1	12	7	4	28
February	15	3	6	1	25	3	1	11	7	4	25
March	16	4	7	1	27	4	1	R 12	7	4	27
April	R 16	4	6	1	R 27	3	1	R 12	7	R 4	R 27
May	16	4	7	1	28	4	1	12	8	4	28
June	16	4	7	2	28	3	1	R 12	8	4	28
July	17	4	7	1	29	4	1	12	8	4	29
August	R 17	4	7	1	29	4	1	12	8	4	29
September	16	4	7	1	27	3	1	11	8	4	27
9-Month Total	**145**	**35**	**59**	**10**	**249**	**31**	**8**	**105**	**68**	**36**	**249**
2014 9-Month Total	**156**	**35**	**56**	**10**	**257**	**41**	**9**	**107**	**65**	**37**	**257**
2013 9-Month Total	**152**	**33**	**56**	**9**	**250**	**41**	**8**	**105**	**63**	**32**	**250**

[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.

R=Revised. 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 (Excel and CSV files) for all available annual and monthly 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% 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 MER 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 MER 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 Tables A1 and A3.

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 A1, 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% 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(2008).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%; for 1989–2000, the biomass portion of waste is estimated as 67% in 1989 to 58% in 2000, based on the biogenic shares of total municipal solid waste shown in EIA's "Methodology for Allocating Municipal Solid Waste to Biogenic and Non-Biogenic Energy," Table 1 at http://www.eia.gov/totalenergy/data/monthly/pdf/historical/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% to 10%, depending on the specific fuel and its hydrogen content. Some fuels, such as unseasoned wood, can be more than 40% different in their gross and net heat content rates. See "Heat Content" and "British Thermal Unit (Btu)" in the Glossary for more information.

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 current year's factors are labeled "estimate," and are set equal to the previous year's values until data become available to calculate the factors. 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 and Other Liquids
(Million Btu per Barrel, Except as Noted)

Commodity	Heat Content	Commodity	Heat Content
Asphalt and Road Oil	6.636	Motor Gasoline Blending Components (MGBC)	
Aviation Gasoline (Finished)	5.048	Through 2006	5.253
Aviation Gasoline Blending Components	5.048	Beginning in 2007	5.222
Biodiesel	5.359	Oxygenates (excluding Fuel Ethanol)	4.247
Crude Oil–see Table A2		Petrochemical Feedstocks	
Distillate Fuel Oil–see Table A3 for averages		Naphtha Less Than 401°F	5.248
15 ppm sulfur and under	5.770	Other Oils Equal to or Greater Than 401°F	5.825
Greater than 15 ppm to 500 ppm sulfur	5.817	Petroleum Coke–see Table A3 for averages	
Greater than 500 ppm sulfur	5.825	Total, through 2003	6.024
Fuel Ethanol–see Table A3		Catalyst, beginning in 2004	[a]6.287
Hydrocarbon Gas Liquids		Marketable, beginning in 2004	5.719
Ethane/Ethylene	3.082	Plant Condensate	5.418
Propane/Propylene	3.836	Renewable Fuels Except Fuel Ethanol	[b]5.359
Normal Butane/Butylene	4.326	Residual Fuel Oil	6.287
Isobutane/Isobutylene	3.974	Special Naphthas	5.248
Natural Gasoline (Pentanes Plus)	4.620	Still Gas	[c]6.000
Hydrogen	[a]6.287	Unfinished Oils	5.825
Jet Fuel, Kerosene Type	5.670	Unfractionated Stream	5.418
Jet Fuel, Naphtha Type	5.355	Waxes	5.537
Kerosene	5.670	Miscellaneous Products	5.796
Lubricants	6.065	Other Hydrocarbons	5.825
Motor Gasoline (Finished)–see Tables A2/A3			

[a] Per residual fuel oil equivalent barrel (6.287 million Btu per barrel).
[b] The biodiesel heat content factor, 5.359 million Btu per barrel, is used for "Biomass-Based Diesel Fuel" and "Other Renewable Fuels"; however, a factor of 5.494 million Btu per barrel is used for "Other Renewable Diesel Fuel."
[c] Per fuel oil equivalent barrel (6.000 million Btu per barrel).
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			
				Petroleum Products				Petroleum Products		
	Crude Oil[a]	Natural Gas Plant Liquids	Crude Oil[a]	Motor Gasoline[b]	Total Products	Total	Crude Oil[a]	Motor Gasoline[c]	Total Products	Total
1950	5.800	4.522	5.943	5.253	6.263	6.080	5.800	5.253	5.751	5.766
1955	5.800	4.406	5.924	5.253	6.234	6.040	5.800	5.253	5.765	5.768
1960	5.800	4.295	5.911	5.253	6.161	6.021	5.800	5.253	5.835	5.834
1965	5.800	4.264	5.872	5.253	6.123	5.997	5.800	5.253	5.742	5.743
1970	5.800	4.146	5.822	5.253	6.088	5.985	5.800	5.253	5.811	5.810
1975	5.800	3.984	5.821	5.253	5.935	5.858	5.800	5.253	5.747	5.748
1980	5.800	3.914	5.812	5.253	5.748	5.796	5.800	5.253	5.841	5.820
1981	5.800	3.930	5.818	5.253	5.659	5.775	5.800	5.253	5.837	5.821
1982	5.800	3.872	5.826	5.253	5.664	5.775	5.800	5.253	5.829	5.820
1983	5.800	3.839	5.825	5.253	5.677	5.774	5.800	5.253	5.800	5.800
1984	5.800	3.812	5.823	5.253	5.613	5.745	5.800	5.253	5.867	5.850
1985	5.800	3.815	5.832	5.253	5.572	5.736	5.800	5.253	5.819	5.814
1986	5.800	3.797	5.903	5.253	5.624	5.808	5.800	5.253	5.839	5.832
1987	5.800	3.804	5.901	5.253	5.599	5.820	5.800	5.253	5.860	5.858
1988	5.800	3.800	5.900	5.253	5.618	5.820	5.800	5.253	5.842	5.840
1989	5.800	3.826	5.906	5.253	5.641	5.833	5.800	5.253	5.869	5.857
1990	5.800	3.822	5.934	5.253	5.614	5.849	5.800	5.253	5.838	5.833
1991	5.800	3.807	5.948	5.253	5.636	5.873	5.800	5.253	5.827	5.823
1992	5.800	3.804	5.953	5.253	5.623	5.877	5.800	5.253	5.774	5.777
1993	5.800	3.801	5.954	5.253	5.539	5.866	5.800	5.253	5.681	5.693
1994	5.800	3.794	5.950	5.253	5.416	5.835	5.800	5.253	5.693	5.704
1995	5.800	3.796	5.938	5.253	5.345	5.830	5.800	5.253	5.692	5.703
1996	5.800	3.777	5.947	5.253	5.373	5.828	5.800	5.253	5.663	5.678
1997	5.800	3.762	5.954	5.253	5.333	5.836	5.800	5.253	5.663	5.678
1998	5.800	3.769	5.953	5.253	5.314	5.833	5.800	5.253	5.505	5.539
1999	5.800	3.744	5.942	5.253	5.291	5.815	5.800	5.253	5.530	5.564
2000	5.800	3.733	5.959	5.253	5.309	5.823	5.800	5.253	5.529	5.542
2001	5.800	3.735	5.976	5.253	5.330	5.838	5.800	5.253	5.637	5.641
2002	5.800	3.729	5.971	5.253	5.362	5.845	5.800	5.253	5.517	5.519
2003	5.800	3.739	5.970	5.253	5.381	5.845	5.800	5.253	5.628	5.630
2004	5.800	3.724	5.981	5.253	5.429	5.853	5.800	5.253	5.532	5.539
2005	5.800	3.724	5.977	5.253	5.436	5.835	5.800	5.253	5.504	5.513
2006	5.800	3.712	5.980	5.253	5.431	5.836	5.800	5.219	5.415	5.423
2007	5.800	3.701	5.985	5.222	5.483	5.857	5.800	5.188	5.465	5.471
2008	5.800	3.706	5.990	5.222	5.459	5.861	5.800	5.215	5.587	5.591
2009	5.800	3.692	5.988	5.222	5.509	5.878	5.800	5.221	5.674	5.677
2010	5.800	3.674	5.989	5.222	5.545	5.892	5.800	5.214	5.601	5.604
2011	5.800	3.672	6.008	5.222	5.538	5.905	5.800	5.216	5.526	5.530
2012	5.800	3.683	6.165	5.222	5.501	6.035	5.800	5.217	5.520	5.526
2013	5.800	3.714	6.010	5.222	5.497	5.899	5.800	5.216	5.470	5.482
2014	5.800	3.723	6.035	5.222	5.518	5.929	5.800	5.218	5.369	5.406
2015[E]	5.800	3.723	6.035	5.222	5.518	5.929	5.800	5.218	5.369	5.406

[a] Includes lease condensate.
[b] Excludes fuel ethanol, methyl tertiary butyl ether (MTBE), and other oxygenates blended into motor gasoline.
[c] Through 2005, excludes fuel ethanol, MTBE, and other oxygenates blended into motor gasoline. Beginning in 2006, includes MTBE, but excludes fuel ethanol and other oxygenates blended into motor gasoline.
E=Estimate.
Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A3. Approximate Heat Content of Petroleum Consumption and Fuel Ethanol

(Million Btu per Barrel)

	Total Petroleum[a] Consumption by Sector						Distillate Fuel Oil Consumption[f]	Liquefied Petroleum Gases Consumption[g]	Motor Gasoline (Finished) Consumption[h]	Petroleum Coke Consumption[i]	Fuel Ethanol[j]	*Fuel Ethanol Feedstock Factor*[k]
	Residential	Commercial[b]	Industrial[b]	Transportation[b,c]	Electric Power[d,e]	Total[b,c]						
1950	5.473	5.817	5.953	5.461	6.254	5.649	5.825	4.011	5.253	6.024	NA	*NA*
1955	5.469	5.781	5.881	5.407	6.254	5.591	5.825	4.011	5.253	6.024	NA	*NA*
1960	5.417	5.781	5.818	5.387	6.267	5.555	5.825	4.011	5.253	6.024	NA	*NA*
1965	5.364	5.760	5.748	5.386	6.267	5.532	5.825	4.011	5.253	6.024	NA	*NA*
1970	5.260	5.708	5.595	5.393	6.252	5.503	5.825	[g] 3.779	5.253	6.024	NA	*NA*
1975	5.253	5.649	5.513	5.392	6.250	5.494	5.825	3.715	5.253	6.024	NA	*NA*
1980	5.321	5.751	5.366	5.441	6.254	5.479	5.825	3.674	5.253	6.024	3.563	*6.586*
1981	5.283	5.693	5.299	5.433	6.258	5.448	5.825	3.643	5.253	6.024	3.563	*6.562*
1982	5.266	5.698	5.247	5.423	6.258	5.415	5.825	3.615	5.253	6.024	3.563	*6.539*
1983	5.140	5.591	5.254	5.416	6.255	5.406	5.825	3.614	5.253	6.024	3.563	*6.515*
1984	5.307	5.657	5.207	5.418	6.251	5.395	5.825	3.599	5.253	6.024	3.563	*6.492*
1985	5.263	5.598	5.199	5.423	6.247	5.387	5.825	3.603	5.253	6.024	3.563	*6.469*
1986	5.268	5.632	5.269	5.426	6.257	5.418	5.825	3.640	5.253	6.024	3.563	*6.446*
1987	5.239	5.594	5.233	5.429	6.249	5.403	5.825	3.659	5.253	6.024	3.563	*6.423*
1988	5.257	5.597	5.228	5.433	6.250	5.410	5.825	3.652	5.253	6.024	3.563	*6.400*
1989	5.194	5.549	5.219	5.438	[d] 6.240	5.410	5.825	3.683	5.253	6.024	3.563	*6.377*
1990	5.145	5.553	5.253	5.442	6.244	5.411	5.825	3.625	5.253	6.024	3.563	*6.355*
1991	5.094	5.528	5.167	5.441	6.246	5.384	5.825	3.614	5.253	6.024	3.563	*6.332*
1992	5.124	5.513	5.168	5.443	6.238	5.378	5.825	3.624	5.253	6.024	3.563	*6.309*
1993	5.102	[b] 5.504	[b] 5.177	[b] 5.422	6.230	[b] 5.370	5.825	3.606	[h] 5.232	6.024	3.563	*6.287*
1994	5.095	5.512	5.149	5.424	6.213	5.360	[f] 5.820	3.635	5.231	6.024	3.563	*6.264*
1995	5.060	5.475	5.121	5.418	6.187	5.342	5.820	3.623	5.218	6.024	3.563	*6.242*
1996	4.995	5.430	5.114	5.420	6.194	5.336	5.820	3.613	5.218	6.024	3.563	*6.220*
1997	4.986	5.388	5.119	5.416	6.198	5.336	5.820	3.616	5.215	6.024	3.563	*6.198*
1998	4.972	5.362	5.136	5.414	6.210	5.349	5.819	3.614	5.215	6.024	3.563	*6.176*
1999	4.899	5.288	5.091	5.413	6.204	5.328	5.819	3.616	5.213	6.024	3.563	*6.167*
2000	4.905	5.313	5.056	5.423	6.188	5.326	5.819	3.607	5.214	6.024	3.563	*6.159*
2001	4.934	5.322	5.141	5.413	6.199	5.346	5.819	3.614	5.214	6.024	3.563	*6.151*
2002	4.883	5.290	5.092	5.411	6.172	5.324	5.819	3.613	5.211	6.024	3.563	*6.143*
2003	4.918	5.312	5.143	5.404	6.182	5.338	5.819	3.629	5.203	6.024	3.563	*6.106*
2004	4.949	5.323	5.144	5.410	6.134	5.341	5.818	3.618	5.201	[i] 5.982	3.563	*6.069*
2005	4.913	5.359	5.179	5.412	6.126	5.353	5.818	3.620	5.198	5.982	3.563	*6.032*
2006	4.883	5.296	5.159	5.409	6.038	5.336	5.803	3.605	5.191	5.987	3.563	*5.995*
2007	4.831	5.271	5.122	5.385	6.064	5.309	5.785	3.591	5.155	5.996	3.563	*5.959*
2008	4.769	5.156	5.147	5.355	6.013	5.287	5.780	3.600	5.126	5.992	3.563	*5.922*
2009	4.661	5.216	5.014	[c] 5.328	5.987	[c] 5.236	5.781	3.558	5.101	6.017	3.563	*5.901*
2010	4.660	5.193	4.983	5.321	5.956	5.222	5.778	3.557	5.078	6.059	3.561	*5.880*
2011	4.640	5.163	4.962	5.317	5.900	5.212	5.776	3.528	5.068	6.077	3.560	*5.859*
2012	4.703	5.117	4.909	5.305	5.925	5.191	5.774	3.534	5.063	6.084	3.560	*5.838*
2013	4.637	5.045	4.871	5.301	5.892	5.174	5.774	3.556	5.062	6.089	3.559	*5.817*
2014	[E] 4.671	[E] 5.059	[E] 4.868	[E] 5.300	[P] 5.908	5.178	5.773	3.534	5.060	6.100	3.558	*5.797*
2015	[E] 4.671	[E] 5.059	[E] 4.868	[E] 5.300	[E] 5.908	[E] 5.178	[E] 5.773	[E] 3.534	[E] 5.060	[E] 6.100	[E] 3.558	*5.776*

[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 for individual products shown in Tables A1 and A3.

[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] 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 sulfur-content categories of distillate fuel oil are calculated by using heat content values shown in Table A1. Excludes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.

[g] There is a discontinuity in this time series between 1966 and 1967; beginning in 1967, the single constant factor is replaced by a quantity-weighted factor. Quantity-weighted averages of the major components of liquefied petroleum gases are calculated by using heat content values shown in Table A1.

[h] Through 1992, excludes oxygenates. Beginning in 1993, includes fuel ethanol blended into motor gasoline; and for 1993–2006, also includes methyl tertiary butyl ether (MTBE) and other oxygenates blended into motor gasoline.

[i] There is a discontinuity in this time series between 2003 and 2004; beginning in 2004, the single constant factor is replaced by a quantity-weighted factor. Quantity-weighted averages of the two categories of petroleum coke are calculated by using heat content values shown in Table A1.

[j] 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) and products used as denaturant (pentanes plus, finished motor gasoline, and motor gasoline blending components—see Tables A1 and A3 for factors). The factor for 2009 is used as the estimated factor for 1980–2008.

[k] 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, 2.78 in 2008, and 2.82 in 2012; 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.

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: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.

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
1950	1,119	1,035	1,035	1,035	1,035	– –	1,035
1955	1,120	1,035	1,035	1,035	1,035	1,035	1,035
1960	1,107	1,035	1,035	1,035	1,035	1,035	1,035
1965	1,101	1,032	1,032	1,032	1,032	1,032	1,032
1970	1,102	1,031	1,031	1,031	1,031	1,031	1,031
1975	1,095	1,021	1,020	1,026	1,021	1,026	1,014
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	1,098	1,023	1,023	1,022	1,023	1,025	1,009
2011	1,142	1,022	1,022	1,021	1,022	1,025	1,009
2012	1,091	1,024	1,025	1,022	1,024	1,025	1,009
2013	1,101	1,027	1,028	1,025	1,027	1,025	1,009
2014	1,116	1,032	1,032	1,029	1,032	1,025	1,009
2015	[E] 1,116	[E] 1,032	[E] 1,032	[E] 1,029	[E] 1,032	[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.

E=Estimate. – – =Not applicable.

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.

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							
	Production[a]	Waste Coal Supplied[b]	Residential and Commercial Sectors[c]	Industrial Sector: Coke Plants	Industrial Sector: Other[d]	Electric Power Sector[e,f]	Total	Imports	Exports	Imports and Exports
1950	25.090	NA	24.461	26.798	24.820	23.937	24.989	25.020	26.788	24.800
1955	25.201	NA	24.373	26.794	24.821	24.056	24.982	25.000	26.907	24.800
1960	24.906	NA	24.226	26.791	24.609	23.927	24.713	25.003	26.939	24.800
1965	24.775	NA	24.028	26.787	24.385	23.780	24.537	25.000	26.973	24.800
1970	23.842	NA	23.203	26.784	22.983	22.573	23.440	25.000	26.982	24.800
1975	22.897	NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	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	[e] 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	[c] 23.035	26.281	22.304	19.713	19.979	25.000	25.399	24.800
2009	19.963	12.076	22.852	26.334	21.823	19.521	19.741	25.000	25.633	24.800
2010	20.173	11.960	22.611	26.295	21.846	19.623	19.870	25.000	25.713	24.800
2011	20.142	11.604	22.099	26.299	21.568	19.341	19.600	25.000	25.645	24.800
2012	20.215	11.539	21.300	28.636	21.449	19.211	19.544	23.128	24.551	24.800
2013	20.182	11.103	21.233	28.705	21.600	19.174	19.513	22.379	24.605	24.800
2014	[P] 20.160	[E] 11.961	[E] 21.652	[E] 28.611	[E] 21.509	[P] 19.306	[E] 19.622	[P] 21.864	[P] 25.414	[P] 24.800
2015	[E] 20.160	[E] 11.961	[E] 21.652	[E] 28.611	[E] 21.509	[E] 19.306	[E] 19.622	[E] 21.864	[E] 25.414	[E] 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] Through 2007, used as the thermal conversion factor for coal consumption by the residential and commercial sectors. Beginning in 2008, used as the thermal conversion factor for coal consumption by the commercial sector only.

[d] Includes transportation. Excludes coal synfuel plants.

[e] 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.

[f] 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: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.

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]
1950	NA	NA	NA	14,030	– –	14,030	3,412
1955	NA	NA	NA	11,699	– –	11,699	3,412
1960	NA	NA	NA	10,760	11,629	10,760	3,412
1965	NA	NA	NA	10,453	11,804	10,453	3,412
1970	NA	NA	NA	10,494	10,977	10,494	3,412
1975	NA	NA	NA	10,406	11,013	10,406	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	10,125	10,422	10,125	3,412
2004	10,331	10,571	8,647	10,016	10,428	10,016	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	10,435	9,919	3,412
2007	10,375	10,794	8,403	9,884	10,489	9,884	3,412
2008	10,378	11,015	8,305	9,854	10,452	9,854	3,412
2009	10,414	10,923	8,160	9,760	10,459	9,760	3,412
2010	10,415	10,984	8,185	9,756	10,452	9,756	3,412
2011	10,444	10,829	8,152	9,716	10,464	9,716	3,412
2012	10,498	10,991	8,039	9,516	10,479	9,516	3,412
2013	10,459	10,713	7,948	9,541	10,449	9,541	3,412
2014	[E] 10,459	[E] 10,713	[E] 7,948	[E] 9,541	[E] 10,449	[E] 9,541	3,412
2015	[E] 10,459	[E] 10,713	[E] 7,948	[E] 9,541	[E] 10,449	[E] 9,541	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. – – =Not applicable.
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.
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 Blending Components. Assumed by EIA to be 5.048 million Btu per barrel or equal to the thermal conversion factor for **Aviation Gasoline (Finished)**.

Aviation Gasoline (Finished). 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-Propane Mixture. EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60% normal butane and 40% propane. See **Normal Butane/Butylene** and **Propane/Propylene**.

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 Consumption. • 1949–1993: 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." • 1994 forward: Calculated by EIA as the annual quantity-weighted average of the conversion factors for **Distillate Fuel Oil, 15 ppm Sulfur and Under** (5.770 million Btu per barrel), **Distillate Fuel Oil, Greater Than 15 ppm to 500 ppm Sulfur** (5.817 million Btu per barrel), and **Distillate Fuel Oil, Greater Than 500 ppm Sulfur** (5.825 million Btu per barrel).

Distillate Fuel Oil, 15 ppm Sulfur and Under. EIA adopted the thermal conversion factor of 5.770 million Btu per barrel (137,380 Btu per gallon) for U.S. conventional diesel from U.S. Department of Energy, Argonne National Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_2013, October 2013.

Distillate Fuel Oil, Greater Than 15 ppm to 500 ppm Sulfur. EIA adopted the thermal conversion factor of 5.817 million Btu per barrel (138,490 Btu per gallon) for low-sulfur diesel from U.S. Department of Energy, Argonne Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_2013, October 2013.

Distillate Fuel Oil, Greater Than 500 ppm Sulfur. 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/Ethylene. 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% ethane and 30% propane. See **Ethane/Ethylene** and **Propane/Propylene**.

Hydrogen. Assumed by EIA to be 6.287 million Btu per barrel or equal to the thermal conversion factor for **Residual Fuel Oil**.

Isobutane/Isobutylene. 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. • 1949–1966: U.S. Department of the Interior, Bureau of Mines, Mineral Industry Surveys, "Crude Petroleum and Petroleum Products, 1956," Table 4 footnote, constant value of 4.011 million Btu per barrel. • 1967 forward: 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 1967–1980, 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 Blending Components. • 1949–2006: 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 Markets 1947-1985,* a 1968 release of historical and projected statistics. • 2007 forward: EIA adopted the thermal conversion factor of 5.222 million Btu per barrel (124,340 Btu per gallon) for gasoline blendstock from U.S. Department of Energy, Argonne National Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_2013, October 2013.

Motor Gasoline Exports. • 1949–2005: 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. • 2006 forward: Calculated by EIA as the annual quantity-weighted average of the conversion factors for gasoline blendstock and the methyl tertiary butyl ether (MTBE) blended into motor gasoline exports. The factor for gasoline blendstock is 5.253 million Btu per barrel in 2006 and 5.222 million Btu per barrel beginning in 2007 (see **Motor Gasoline Blending Components**). For MTBE, EIA adopted the thermal conversion factor of 4.247 million Btu per barrel (101,130 Btu per gallon) from U.S. Department of Energy, Argonne National Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_2013, October 2013.

Motor Gasoline (Finished) Consumption. • 1949–1992: 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 Markets 1947-1985,* a 1968 release of historical and projected statistics. • 1993–2006: Calculated by EIA as the annual quantity-weighted average of the conversion factors for gasoline blendstock and the oxygenates blended into motor gasoline. The factor for gasoline blendstock is 5.253 million Btu per barrel (the motor gasoline factor used for previous years). The factors for fuel ethanol are shown in Table A3 (see **Fuel Ethanol, Denatured**). The following factors for other oxygenates are from U.S. Department of Energy, Argonne National Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_2013, October 2013—methyl tertiary butyl ether (MTBE): 4.247 million Btu per barrel (101,130 Btu per gallon); tertiary amyl methyl ether (TAME): 4.560 million Btu per barrel (108,570 Btu per gallon); ethyl tertiary butyl ether (ETBE): 4.390 million Btu per barrel (104,530 Btu per gallon); methanol: 2.738 million Btu per barrel (65,200 Btu per gallon); and butanol: 4.555 million Btu per barrel (108,458 Btu per gallon). • 2007 forward: Calculated by EIA as the annual quantity-weighted average of the conversion factors for gasoline blendstock and fuel ethanol blended into motor gasoline. The factor for gasoline blendstock is 5.222 million Btu per barrel (124,340 Btu per gallon), which is from the GREET model (see above). The factors for fuel ethanol are shown in Table A3 (see **Fuel Ethanol, Denatured**).

Motor Gasoline Imports. • 1949–2006: 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. • 2007 forward: EIA adopted the thermal conversion factor of 5.222 million Btu per barrel (124,340 Btu per gallon) for gasoline blendstock from U.S. Department of Energy, Argonne National Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_2013, October 2013.

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*.

Normal Butane/Butylene. 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.

Other Hydrocarbons. Assumed by EIA to be 5.825 million Btu per barrel or equal to the thermal conversion factor for **Unfinished Oils**.

Oxygenates (Excluding Fuel Ethanol). EIA adopted the thermal conversion factor of 4.247 million Btu per barrel (101,130 Btu per gallon) for methyl tertiary butyl ether (MTBE) from U.S. Department of Energy, Argonne National Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_2013, October 2013.

Pentanes Plus. Assumed by EIA to be 4.620 million Btu per barrel or equal to the thermal conversion factor for **Natural Gasoline**.

Petrochemical Feedstocks, Naphtha Less Than 401 Degrees Fahrenheit. Assumed by EIA to be 5.248 million Btu per barrel or equal to the thermal conversion factor for **Special Naphthas**.

Petrochemical Feedstocks, Other Oils Equal to or Greater Than 401 Degrees Fahrenheit. Assumed by EIA to be 5.825 million Btu per barrel or equal to the thermal conversion factor for **Distillate Fuel Oil**.

Petrochemical Feedstocks, Still Gas. Assumed by EIA to be 6.000 million Btu per barrel or equal to the thermal conversion factor for **Still Gas**.

Petroleum Coke, Catalyst. Assumed by EIA to be 6.287 million Btu per barrel or equal to the thermal conversion factor for **Residual Fuel Oil**.

.

Petroleum Coke, Marketable. EIA adopted the thermal conversion factor of 5.719 million Btu per barrel, calculated by dividing 28,595,925 Btu per short ton for petroleum coke (from U.S. Department of Energy, Argonne National Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_October 2013) by 5.0 barrels per short ton (as given in the Bureau of Mines Form 6-1300-M and successor EIA forms).

Petroleum Coke, Total. • 1949–2003: 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. • 2004 forward: Calculated by EIA as the annual quantity-weighted average of the conversion factors for **Petroleum Coke, Catalyst** (6.287 million Btu per barrel) and **Petroleum Coke, Marketable** (5.719 million Btu per barrel).

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/state/seds/sep_use/notes/use_petrol.pdf.

Petroleum Consumption, Electric Power Sector. Calculated annually by EIA as the average of the thermal conversion factors for distillate fuel oil, petroleum coke, and residual fuel oil 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/state/seds/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/state/seds/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/state/seds/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/Propylene. 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.

Renewable Fuels Except Fuel Ethanol. For "Biomass-Based Diesel Fuel" and "Other Renewable Fuels," EIA assumed the thermal conversion factor to be 5.359 million Btu per barrel or equal to the thermal conversion factor for **Biodiesel**. For "Other Renewable Diesel Fuel," EIA adopted the thermal conversion factor of 5.494 million Btu per barrel (130,817 Btu per gallon) for renewable diesel II (UOP-HDO) from U.S. Department of Energy, Argonne National Laboratory, "The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model" (GREET), version GREET1_2013, October 2013.

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** 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** 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** 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. EIA used the following observed ethanol yields (in gallons undenatured ethanol per bushel of corn) from U.S. Department of Agriculture: 2.5 in 1980, 2.666 in 1998, 2.68 in 2002; and from University of Illinois at Chicago, Energy Resources Center, "2012 Corn Ethanol: Emerging Plant Energy and Environmental Technologies": 2.78 in 2008, and 2.82 in 2012. 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. • 1949–1962: EIA adopted the thermal conversion factor of 1,035 Btu per cubic foot as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*. • 1963–1979: 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. • 1949–1972: Assumed by EIA to be equal to the thermal conversion factor for dry natural gas consumed (see **Natural Gas Consumption, Total**). • 1973 forward: 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. • 1949–1972: Assumed by EIA to be equal to the thermal conversion factor for dry natural gas consumed (see **Natural Gas Consumption, Total**). • 1973 forward: 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.
• 1949–2011: Calculated annually by EIA based on the reported volatility (low, medium, or high) of coal received by coke plants. (For 2011, EIA used the following volatility factors, in million Btu per short ton: low volatile—26.680; medium volatile—27.506; and high volatile—25.652.) Data are from Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants," and predecessor forms. • 2012 forward: Calculated annually by EIA by dividing the heat content of coal received by coke plants by the quantity received. Data are from Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants."

Coal Consumption, Industrial Sector, Other.
• 1949–2007: Calculated annually by EIA by dividing the heat content of coal received by manufacturing plants by the quantity received. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants," and predecessor forms. • 2008 forward: Calculated annually by EIA by dividing the heat content of coal received by manufacturing, gasification, and liquefaction plants by the quantity received. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality

Report—Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Users."

Coal Consumption, Residential and Commercial Sectors. • 1949–1999: Calculated annually by EIA by dividing the heat content of coal received by the residential and commercial sectors by the quantity received. Data are from Form EIA-6, "Coal Distribution Report," and predecessor forms. • 2000–2007: Calculated annually by EIA by dividing the heat content of coal consumed by commercial combined-heat-and-power (CHP) plants by the quantity consumed. Data are from Form EIA-923, "Power Plant Operations Report," and predecessor forms. • 2008 forward: Calculated annually by EIA by dividing the heat content of coal received by commercial and institutional users by the quantity received. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Users."

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. • 1949–2011: 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, U.S. Census Bureau, "Monthly Report EM 545," and predecessor forms. • 2012 forward: Calculated annually by EIA by dividing the heat content of steam coal and metallurgical coal exported by the quantity exported. The average heat content of steam coal is derived from receipts data from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Users," and Form EIA-923, "Power Plant Operations Report." The average heat content of metallurgical coal is derived from receipts data from Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants." Data for export quantities are from U.S. Department of Commerce, U.S. Census Bureau, "Monthly Report EM 545."

Coal Imports. • 1949–1963: Calculated annually by EIA by dividing the heat content of coal imported by the quantity imported. Data are from U.S. Department of Commerce, U.S. Census Bureau, "Monthly Report IM 145," and predecessor forms. • 1964–2011: Assumed by EIA to be 25.000 million Btu per short ton. • 2012 forward: Calculated annually by EIA by dividing the heat content of coal imported (received) by the quantity imported (received). Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Users"; Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants"; and Form EIA-923, "Power Plant Operations Report."

Coal Production. • 1949–2011: Calculated annually by EIA by dividing the heat content of domestic coal (excluding waste coal) received by the quantity received. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Users"; Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants"; Form EIA-923, "Power Plant Operations Report"; and predecessor forms. • 2012 forward: Calculated annually by EIA by dividing the heat content of domestic coal (excluding waste coal) received and exported by the quantity received and exported. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Users"; Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants"; Form EIA-923, "Power Plant Operations Report"; U.S. Department of Commerce, U.S. Census Bureau, "Monthly Report EM 545"; and predecessor forms.

Waste Coal Supplied. • 1989–2000: Calculated annually by EIA by dividing the heat content of waste coal consumed by the quantity consumed. Data are from Form EIA-860B, "Annual Electric Generator Report—Nonutility," and predecessor form. • 2001 forward: Calculated by EIA by dividing the heat content of waste coal received (or consumed) by the quantity received (or consumed). Receipts data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Users," and predecessor form. Consumption data are from 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 all 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 all 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. • 1957–1984: 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 all 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. • 1949–1955: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published by EIA in *Thermal-Electric Plant Construction Cost and Annual Production Expenses—1981* and *Steam-Electric Plant Construction Cost and Annual Production Expenses—1978*. • 1956–1988: 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 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 all 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

Appendix C

Table C1. Population, U.S. Gross Domestic Product, and U.S. Gross Output

	Population			U.S. Gross Domestic Product			U.S. Gross Output[a]
	United States[b]	World	United States as Share of World	Billion Nominal Dollars[d]	Billion Chained (2009) Dollars[e]	Implicit Price Deflator[c] (2009 = 1.00000)	Billion Nominal Dollars[d]
	Million People		Percent				
1950	152.3	2,557.6	6.0	300.2	2,184.0	0.13745	NA
1955	165.9	2,782.1	6.0	426.2	2,739.0	.15559	NA
1960	180.7	3,043.0	5.9	543.3	3,108.7	.17476	NA
1965	194.3	3,350.4	5.8	743.7	3,976.7	.18702	NA
1970	205.1	3,712.7	5.5	1,075.9	4,722.0	.22784	NA
1975	216.0	4,089.1	5.3	1,688.9	5,385.4	.31361	NA
1980	227.2	4,451.4	5.1	2,862.5	6,450.4	.44377	NA
1981	229.5	4,534.4	5.1	3,211.0	6,617.7	.48520	NA
1982	231.7	4,614.6	5.0	3,345.0	6,491.3	.51530	NA
1983	233.8	4,695.7	5.0	3,638.1	6,792.0	.53565	NA
1984	235.8	4,774.6	4.9	4,040.7	7,285.0	.55466	NA
1985	237.9	4,856.5	4.9	4,346.7	7,593.8	.57240	NA
1986	240.1	4,940.6	4.9	4,590.2	7,860.5	.58395	NA
1987	242.3	5,027.2	4.8	4,870.2	8,132.6	.59885	8,639.9
1988	244.5	5,114.6	4.8	5,252.6	8,474.5	.61982	9,359.5
1989	246.8	5,201.4	4.7	5,657.7	8,786.4	.64392	9,969.6
1990	249.6	5,289.0	4.7	5,979.6	8,955.0	.66773	10,511.1
1991	253.0	5,371.6	4.7	6,174.0	8,948.4	.68996	10,676.5
1992	256.5	5,456.1	4.7	6,539.3	9,266.6	.70569	11,242.4
1993	259.9	5,538.3	4.7	6,878.7	9,521.0	.72248	11,857.6
1994	263.1	5,618.7	4.7	7,308.8	9,905.4	.73785	12,647.2
1995	266.3	5,699.2	4.7	7,664.1	10,174.8	.75324	13,451.6
1996	269.4	5,779.4	4.7	8,100.2	10,561.0	.76699	14,259.9
1997	272.6	5,858.0	4.7	8,608.5	11,034.9	.78012	15,355.4
1998	275.9	5,935.2	4.6	9,089.2	11,525.9	.78859	16,171.3
1999	279.0	6,012.1	4.6	9,660.6	12,065.9	.80065	17,244.8
2000	282.2	6,088.6	4.6	10,284.8	12,559.7	.81887	18,564.6
2001	285.0	6,165.2	4.6	10,621.8	12,682.2	.83754	18,863.1
2002	287.6	6,242.0	4.6	10,977.5	12,908.8	.85039	19,175.0
2003	290.1	6,318.6	4.6	11,510.7	13,271.1	.86735	20,135.1
2004	292.8	6,395.7	4.6	12,274.9	13,773.5	.89120	21,697.3
2005	295.5	6,473.0	4.6	13,093.7	14,234.2	.91988	23,514.9
2006	298.4	6,551.3	4.6	13,855.9	14,613.8	.94814	24,888.0
2007	301.2	6,629.9	4.5	14,477.6	14,873.7	.97337	26,151.3
2008	304.1	6,709.0	4.5	14,718.6	14,830.4	.99246	26,825.7
2009	306.8	6,788.2	4.5	14,418.7	14,418.7	1.00000	24,657.2
2010	309.3	6,866.3	4.5	14,964.4	14,783.8	1.01221	26,093.5
2011	311.7	6,944.1	4.5	15,517.9	15,020.6	1.03311	27,536.0
2012	314.1	7,022.3	4.5	16,155.3	15,354.6	1.05214	28,703.8
2013	316.5	7,101.0	4.5	16,663.2	15,583.3	1.06929	29,721.3
2014	318.9	7,178.7	4.4	17,348.1	15,961.7	1.08686	31,001.4

[a] Gross output is the value of gross domestic product (GDP) plus the value of intermediate inputs used to produce GDP.

[b] Resident population of the 50 states and the District of Columbia estimated for July 1 of each year.

[c] The gross domestic product implicit price deflator is used to convert nominal dollars to chained (2009) dollars.

[d] See "Nominal Dollars" in Glossary.

[e] See "Chained Dollars" in Glossary.

NA=Not available.

Notes: • Data are estimates. • U.S. geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available annual data beginning in 1949.

Sources: • **United States Population: 1949–1989**—U.S. Department of Commerce (DOC), U.S. Census Bureau, Current Population Reports Series P-25 (June 2000). **1990–1999**—DOC, U.S. Census Bureau, "Time Series of Intercensal State Population Estimates" (April 2002). **2000–2009**—DOC, U.S. Census Bureau, "Intercensal Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico" (September 2011). **2010 forward**—DOC, U.S. Census Bureau, "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico" (December 2014). • **World Population: 1950 forward**—DOC, U.S. Census Bureau, International Database (July 2015). • **United States as Share of World Population:** Calculated as U.S. population divided by world population. • **U.S. Gross Domestic Product: 1949 forward**—DOC, Bureau of Economic Analysis (BEA), National Income and Product Accounts (September 2015), Tables 1.1.5, 1.1.6, and 1.1.9. • **U.S. Gross Output: 1987 forward**—DOC, BEA, GDP by Industry data (July 2015).

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix D

Table D1. Estimated Primary Energy Consumption in the United States, Selected Years, 1635–1945 (Quadrillion Btu)

	Fossil Fuels				Renewable Energy				
						Biomass			
	Coal	Natural Gas	Petroleum	Total	Conventional Hydroelectric Power	Wood [a]	Total	Electricity Net Imports[b]	Total
1635	NA	– –	– –	NA	– –	(s)	(s)	– –	(s)
1645	NA	– –	– –	NA	– –	0.001	0.001	– –	0.001
1655	NA	– –	– –	NA	– –	.002	.002	– –	.002
1665	NA	– –	– –	NA	– –	.005	.005	– –	.005
1675	NA	– –	– –	NA	– –	.007	.007	– –	.007
1685	NA	– –	– –	NA	– –	.009	.009	– –	.009
1695	NA	– –	– –	NA	– –	.014	.014	– –	.014
1705	NA	– –	– –	NA	– –	.022	.022	– –	.022
1715	NA	– –	– –	NA	– –	.037	.037	– –	.037
1725	NA	– –	– –	NA	– –	.056	.056	– –	.056
1735	NA	– –	– –	NA	– –	.080	.080	– –	.080
1745	NA	– –	– –	NA	– –	.112	.112	– –	.112
1755	NA	– –	– –	NA	– –	.155	.155	– –	.155
1765	NA	– –	– –	NA	– –	.200	.200	– –	.200
1775	NA	– –	– –	NA	– –	.249	.249	– –	.249
1785	NA	– –	– –	NA	– –	.310	.310	– –	.310
1795	NA	– –	– –	NA	– –	.402	.402	– –	.402
1805	NA	– –	– –	NA	– –	.537	.537	– –	.537
1815	NA	– –	– –	NA	– –	.714	.714	– –	.714
1825	NA	– –	– –	NA	– –	.960	.960	– –	.960
1835	NA	– –	– –	NA	– –	1.305	1.305	– –	1.305
1845	NA	– –	– –	NA	– –	1.757	1.757	– –	1.757
1850	0.219	– –	– –	0.219	– –	2.138	2.138	– –	2.357
1855	.421	– –	– –	.421	– –	2.389	2.389	– –	2.810
1860	.518	– –	0.003	.521	– –	2.641	2.641	– –	3.162
1865	.632	– –	.010	.642	– –	2.767	2.767	– –	3.409
1870	1.048	– –	.011	1.059	– –	2.893	2.893	– –	3.952
1875	1.440	– –	.011	1.451	– –	2.872	2.872	– –	4.323
1880	2.054	– –	.096	2.150	– –	2.851	2.851	– –	5.001
1885	2.840	0.082	.040	2.962	– –	2.683	2.683	– –	5.645
1890	4.062	.257	.156	4.475	0.022	2.515	2.537	– –	7.012
1895	4.950	.147	.168	5.265	.090	2.306	2.396	– –	7.661
1900	6.841	.252	.229	7.322	.250	2.015	2.265	– –	9.587
1905	10.001	.372	.610	10.983	.386	1.843	2.229	– –	13.212
1910	12.714	.540	1.007	14.261	.539	1.765	2.304	– –	16.565
1915	13.294	.673	1.418	15.385	.659	1.688	2.347	0.002	17.734
1920	15.504	.813	2.676	18.993	.738	1.610	2.348	.003	21.344
1925	14.706	1.191	4.280	20.177	.668	1.533	2.201	.004	22.382
1930	13.639	1.932	5.897	21.468	.752	1.455	2.207	.005	23.680
1935	10.634	1.919	5.675	18.228	.806	1.397	2.203	.005	20.436
1940	12.535	2.665	7.760	22.960	.880	1.358	2.238	.007	25.205
1945	15.972	3.871	10.110	29.953	1.442	[a]1.261	2.703	.009	32.665

[a] There is a discontinuity in the "Wood" time series between 1945 (in this table) and 1949 (in Table 10.1). Through 1945, data are for fuelwood only; beginning in 1949, data are for wood and wood-derived fuels.

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

NA=Not available. – – =Not applicable. (s)=Less than 0.0005 quadrillion Btu.

Notes: • For years not shown, data are not available. • See Tables 1.3 and 10.1 for continuation of these data series beginning in 1949. • See Note, "Geographic Coverage of Statistics for 1635–1945," at end of section.

Sources: • **Fossil Fuels:** *Energy in the American Economy, 1850–1975,* Table VII. • **Conventional Hydroelectric Power:** *Energy in the American Economy, 1850–1975,* Table II. • **Wood: 1635–1845—**U.S. Department of Agriculture, Circular No. 641, *Fuel Wood Used in the United States 1630–1930,* February 1942. This source estimates fuelwood consumption in cords per decade, which were converted to Btu using the conversion factor of 20 million Btu per cord. The annual average value for each decade was assigned to the fifth year of the decade on the assumption that annual use was likely to increase during any given decade and the average annual value was more likely to reflect mid-decade yearly consumption than use at either the beginning or end of the decade. Values thus begin in 1635 and are plotted at 10-year intervals. **1850–1945—***Energy in the American Economy, 1850–1975,* Table VII. • **Electricity Net Imports:** *Energy in the American Economy, 1850–1975,* Tables I and VI. Electricity net imports are assumed to equal hydroelectric consumption minus hydroelectric production (data are converted to Btu by multiplying by 3,412 Btu per kilowatthour).

Note. Geographic Coverage of Statistics for 1635–1945. Table D1 presents estimates of U.S. energy consumption by energy source for a period that begins a century and a half before the original 13 colonies formed a political union and continues through the decades during which the United States was still expanding territorially. The question thus arises, what exactly is meant by "U.S. consumption" of an energy source for those years when the United States did not formally exist or consisted of less territory than is now encompassed by the 50 states and the District of Columbia?

The documents used to assemble the estimates, and (as far as possible) the sources of those documents, were reviewed carefully for clues to geographic coverage. For most energy sources, the extent of coverage expanded more rapidly than the nation, defined as all the official states and the District of Columbia. Estimates or measurements of consumption of each energy source generally appear to follow settlement patterns. That is, they were made for areas of the continent that were settled enough to have economically significant consumption even though those areas were not to become states for years. The wood data series, for example, begins in 1635 and includes 12 of the original colonies (excepting Georgia), as well as Maine, Vermont, and the area that would become the District of Columbia. By the time the series reaches 1810, the rest of the continental states are all included, although the last of the 48 states to achieve statehood did not do so until 1912. Likewise, the coal data series begins in 1850 but includes consumption in areas, such as Utah and Washington (state), which were significant coal producing regions but had not yet attained statehood. (Note: No data were available on state-level historical coal consumption. The coal data shown in Table D1 through 1945 describe *apparent* consumption, i.e., production plus imports minus exports. The geographic coverage for coal was therefore based on a tally of coal-*producing* states listed in various historical issues of *Minerals Yearbook*. It is likely that coal was consumed in states where it was not mined in significant quantities.)

By energy source, the extent of coverage can be summarized as follows: • **Coal**—35 coal-producing states by 1885. • **Natural Gas**—All 48 contiguous states, the District of Columbia, and Alaska by 1885. • **Petroleum**—All 48 contiguous states, the District of Columbia, and Alaska by 1885. • **Conventional Hydroelectric Power**—Coverage for 1890 and 1895 is uncertain, but probably the 48 contiguous states and the District of Columbia. Coverage for 1900–1945 is the 48 contiguous states, and the District of Columbia. • **Wood**—All 48 contiguous states and the District of Columbia by 1810.

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 obtained by **petroleum** processing and containing bitumens as the predominant component; used primarily for road construction. It 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. *Note*: The conversion factor for asphalt is 5.5 barrels per short ton.

ASTM: The American Society for Testing and Materials.

Aviation Gasoline Blending Components: **Naphtha**s 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** (**alcohol**s, **ether**s), **butane**, and **pentanes plus**. Oxygenates are reported as **other hydrocarbons**, **hydrogen**, and oxygenates. See **Aviation Gasoline, Finished**.

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 quantity of **natural gas** needed to maintain adequate reservoir pressures and deliverability rates throughout the withdrawal season. Base gas usually is not withdrawn and remains in the reservoir. All natural gas native to a depleted reservoir 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-Based Diesel Fuel: Biodiesel and other renewable **diesel fuel** or diesel fuel blending components derived from **biomass**, but excluding renewable diesel fuel coprocessed with petroleum feedstocks. See **Renewable Diesel Fuel (Other)**.

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 (C_4H_{10}): A straight-chain or branch-chain **hydrocarbon** extracted from **natural gas** or **refinery gas** streams, which is gaseous at standard temperature and pressure. It includes **isobutane** and **normal butane** and is designated in ASTM Specification D1835 and Gas Processors Association specifications for commercial butane.

Isobutane (C_4H_{10})**:** A branch-chain saturated (paraffinic) **hydrocarbon** extracted from both **natural gas** and **refinery gas** streams, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of 11 degrees Fahrenheit. See **Paraffinic Hydrocarbons**.

Normal Butane (C_4H_{10})**:** A straight-chain saturated (paraffinic) **hydrocarbon** extracted from both **natural gas** and **refinery gas** streams, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of 31 degrees Fahrenheit. See **Paraffinic Hydrocarbons**.

Butylene (C_4H_8): An olefinic **hydrocarbon** recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Butylene is used in the production of gasoline and various petrochemical products. See **Olefinic Hydrocarbons (Olefins)**.

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, nonpoisonous 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: A solid carbonaceous residue derived from low-ash, low-sulfur **bituminous coal** from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees Fahrenheit 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 from coal is grey, hard, and porous and has a heating value of 24.8 million Btu per ton.

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: See **Coal Coke** and **Petroleum Coke**.

Coking Coal: Bituminous coal suitable for making coke. See **Coal Coke**.

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. 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 Hydroelectric Power: Hydroelectric power generated from flowing water that is not created by **hydroelectric pumped storage**.

Conventional Motor Gasoline: See **Motor Gasoline Conventional**.

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 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): The amount of **natural gas** contained at standard temperature and pressure (60 degrees Fahrenheit and 14.73 pounds standard per square inch) in a cube whose edges are one foot long.

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 (C_2H_6): A straight-chain saturated (paraffinic) **hydrocarbon** extracted predominantly from the **natural gas** stream, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of -127 degrees Fahrenheit. See **Paraffinic Hydrocarbons**.

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**.

Ether: A generic term applied to a group of organic chemical compounds composed of carbon, **hydrogen**, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., **methyl tertiary butyl ether**).

Ethylene (C_2H_4): An olefinic **hydrocarbon** recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Ethylene is used as a petrochemical feedstock for many chemical applications and the production of consumer goods. See **Olefinic Hydrocarbons (Olefins)**.

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.

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 production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil.

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.

Hydrocarbon Gas Liquids (HGL): A group of **hydrocarbon**s including **ethane**, **propane**, **normal butane**, **isobutane**, and **natural gasoline**, and their associated **olefins**, including **ethylene**, **propylene**, **butylene**, and **isobutylene**. As marketed products, HGL represents all **natural gas liquids** (NGL) and olefins. EIA reports production of HGL from refineries (**liquefied refinery gases**, or LRG) and natural gas plants (**natural gas plant liquids**, or NGPL). Excludes **liquefied natural gas** (LNG). See **Olefinic Hydrocarbons (Olefins)**.

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. See **End-Use Sectors** and **Energy-Use Sectors**.

Injections (Natural Gas): Natural gas injected into storage reservoirs.

Isobutane (C_4H_{10}): A branch-chain saturated (paraffinic) **hydrocarbon** extracted from both **natural gas** and **refinery gas** streams, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of 11 degrees Fahrenheit. See **Paraffinic Hydrocarbons**.

Isobutylene (C_4H_8): A branch-chain olefinic **hydrocarbon** recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Isobutylene is used in the production of gasoline and various petrochemical products. See **Olefinic Hydrocarbons (Olefins)**.

Isopentane (C_5H_{12}): 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. See **Jet Fuel, Kerosene-Type** and **Jet Fuel, Naphtha-Type**.

Jet Fuel, Kerosene-Type: A **kerosene**-based product having a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for commercial and military turbo jet and turbo prop aircraft engines.

Jet Fuel, Naphtha-Type: A fuel in the heavy **naphtha** boiling range having an average gravity of 52.8 degrees API, 20% to 90% distillation temperatures of 290 degrees to 470 degrees Fahrenheit, and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds.

Kerosene: A light **petroleum** distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil. See **Jet Fuel, Kerosene-Type**.

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: Light liquid **hydrocarbons** recovered from lease separators or field facilities at associated and non-associated **natural gas** wells. Mostly pentanes and heavier hydrocarbons. Normally enters the **crude oil** stream after production.

Lignite: The lowest rank of **coal**, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Liquefied Natural Gas (LNG): Natural gas (primarily **methane**) that has been liquefied by reducing its temperature to -260 degrees Fahrenheit at atmospheric pressure.

Liquefied Petroleum Gases (LPG): A group of **hydrocarbon** gases, primarily **propane**, **normal butane**, and **isobutane**, derived from **crude oil** refining or **natural gas** processing. These gases may be marketed individually or mixed. They can be liquefied through pressurization (without requiring cryogenic refrigeration) for convenience of transportation or storage. Excludes **ethane** and **olefins**. *Note*: In some EIA publications, LPG includes ethane and marketed refinery olefin streams, in accordance with definitions used prior to January 2014.

Liquefied Refinery Gases (LRG): **Hydrocarbon gas liquids** produced in refineries from processing of **crude oil** and **unfinished oils**. They are retained in the liquid state through pressurization and/or refrigeration. The reported categories include **ethane**, **propane**, **normal butane**, **isobutane**, and refinery **olefins** (**ethylene**, **propylene**, **butylene**, and **isobutylene**).

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): See **Natural Gas Marketed Production**.

Methane (CH_4): A colorless, flammable, odorless **hydrocarbon** gas which is the major component of **natural gas**. It is also an important source of **hydrogen** in various industrial processes. Methane is a greenhouse gas. See **Greenhouse Gases**.

Methanol (CH_3OH): A light, volatile **alcohol** eligible for gasoline blending. See **Motor Gasoline Blending** and **Oxygenates**.

Methyl Tertiary Butyl Ether (MTBE) ($(CH_3)_3COCH_3$): An **ether** intended for gasoline blending. See **Motor Gasoline Blending** and **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 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, Conventional: **Finished motor gasoline** not included in the **oxygenated** or **reformulated** motor gasoline categories. *Note*: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock. Conventional motor gasoline can be leaded or unleaded; regular, midgrade, or premium. See **Motor Gasoline Grades**.

Motor Gasoline (Finished): A complex mixture of relatively volatile **hydrocarbon**s with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10 percent recovery point to 365 to 374 degrees Fahrenheit 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, such as **oxygenates**, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline. See **Motor Gasoline, Conventional**; **Motor Gasoline, Oxygenated**; and **Motor Gasoline, Reformulated**.

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 refined or partially refined **petroleum** fraction with an approximate boiling range between 122 degrees and 400 degrees Fahrenheit.

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) **vented natural gas** and **flared natural gas**. 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 **natural gas plant liquids**. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals **natural gas marketed production** less **natural gas plant liquids** production.

Natural Gas Liquids (NGL): A group of **hydrocarbon**s including **ethane**, **propane**, **normal butane**, **isobutane**, and **natural gasoline**. Generally include **natural gas plant liquids** and all **liquefied refinery gases** except **olefins**. See **Paraffinic Hydrocarbons**.

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 of **vented natural gas** and **flared natural gas**.

Natural Gas Plant Liquids (NGPL): Those **hydrocarbons** in **natural gas** that are separated as liquids at natural gas processing, fractionating, and cycling plants. Products obtained include **ethane**, **liquefied petroleum gases** (**propane**,**normal butane**, and **isobutane**), and **natural gasoline**. Component products may be fractionated or mixed. **Lease condensate** and **plant condensate** are excluded. *Note:* Some EIA publications categorize NGPL production as field production, in accordance with definitions used prior to January 2014.

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 commodity product commonly traded in **natural gas liquids** (NGL) markets that comprises liquid **hydrocarbons** (mostly pentanes and hexanes) and generally remains liquid at ambient temperatures and atmospheric pressure. Natural gasoline is equivalent to **pentanes plus**.

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**.

Normal Butane (C_4H_{10}): A straight-chain saturated (paraffinic) **hydrocarbon** extracted from both **natural gas** and **refinery gas** streams, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of 31 degrees Fahrenheit. See **Paraffinic Hydrocarbons**.

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**.

Olefinic Hydrocarbons (Olefins): Unsaturated **hydrocarbon** compounds with the general formula C_nH_{2n} containing at least one carbon-to-carbon double-bond. Olefins are produced at crude oil refineries and petrochemical plants and are not naturally occurring constituents of oil and natural gas. Sometimes referred to as alkenes or unsaturated hydrocarbons. Excludes aromatics.

Olefins: See **Olefinic Hydrocarbons (Olefins)**.

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).

Other Hydrocarbons: Materials received by a refinery and consumed as a raw material. Includes **hydrogen**, coal tar derivatives, gilsonite. Excludes **natural gas** used for fuel or hydrogen feedstock.

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.

Paraffinic Hydrocarbons: Saturated **hydrocarbon** compounds with the general formula C_nH_{2n+2} containing only single bonds. Sometimes referred to as alkanes or **natural gas liquids**.

Pentanes Plus: A mixture of liquid **hydrocarbons**, mostly pentanes and heavier, extracted from **natural gas** in a gas processing plant. Pentanes plus is equivalent to **natural gasoline**.

Petrochemical Feedstocks: Chemical feedstocks derived from refined or partially refined **petroleum** fractions, principally for use in the manufacturing 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: 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 (of 42 U.S. gallons each) per short ton. See **Petroleum Coke, Catalyst** and **Petroleum Coke, Marketable**.

Petroleum Coke, Catalyst: The carbonaceous residue that is deposited on the catalyst used in many catalytic operations (e.g., catalytic cracking). Carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon producing heat and **carbon dioxide (CO2)**. The carbonaceous residue is not recoverable as a product. See **Petroleum Coke**.

Petroleum Coke, Marketable: Those grades of coke produced in delayed or fluid cokers that may be recovered as relatively pure carbon. Marketable petroleum coke may be sold as is or further purified by calcining. See **Petroleum Coke**.

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: Liquid **hydrocarbon**s recovered at inlet separators or scrubbers in **natural gas** processing plants at atmospheric pressure and ambient temperatures. Mostly pentanes and heavier hydrocarbons.

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 fossil-fueled 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 fossil-fueled 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.

Product 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 (C_3H_8): A straight-chain saturated (paraffinic) **hydrocarbon** extracted from **natural gas** or **refinery gas** streams, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of -44 degrees Fahrenheit. It includes all products designated in ASTM Specification D1835 and Gas Processors Association specifications for commercial (HD-5) propane. See **Paraffinic Hydrocarbons**.

Propylene (C_3H_6): An olefinic **hydrocarbon** recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Propylene is an important petrochemical feedstock. See **Olefinic Hydrocarbons (Olefins)**.

Real Dollars: These are dollars that have been adjusted for inflation.

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 Gas: **Still gas** consumed as refinery fuel.

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 Diesel Fuel: See **Biomass-Based Diesel Fuel** and **Renewable Diesel Fuel (Other).**

Renewable Diesel Fuel (Other): **Diesel fuel** and diesel fuel blending components produced from renewable sources that are coprocessed with **petroleum** feedstocks and meet requirements of advanced biofuels. *Note*: This category "other" pertains to the petroleum supply data system. See **Biomass-Based Diesel Fuel**.

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**.

Renewable Fuels Except Fuel Ethanol: See **Biomass-Based Diesel Fuel, Renewable Diesel Fuel (Other),** and **Renewable Fuels (Other).**

Renewable Fuels (Other): Fuels and fuel blending components, except **biomass-based diesel fuel**, **renewable diesel fuel (other)**, and **fuel ethanol**, produced from renewable **biomass**. *Note*: This category "other" pertains to the petroleum supply data system.

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. See **End-Use Sectors** and **Energy-Use Sectors**.

Residual Fuel Oil: A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the **distillate fuel oil**s and lighter **hydrocarbon**s are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore power plants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

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 range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification 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: Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are **methane** and **ethane**. May contain **hydrogen** and small/trace amounts of other gases. Still gas is typically consumed as refinery fuel or used as petrochemical feedstock. Still gas burned for refinery fuel may differ in composition from marketed still gas sold to other users. See **Refinery Gas**.

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, **still 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. 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 processing, except those requiring only mechanical blending. Unfinished oils are produced by partial refining of **crude oil** and include **naphtha**s and lighter oils, **kerosene** and light gas oils, heavy gas oils, and residuum.

Unfractionated Streams: Mixtures of unsegregated **natural gas liquids** 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: Natural 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: See **Biomass Waste** and **Non-Biomass Waste**.

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.

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.

Wax: A solid or semi-solid material consisting of a mixture of **hydrocarbon**s obtained or derived from **petroleum** fractions, or through a Fischer-Tropsch type process, in which the straight-chained paraffin series predominates. This includes all marketable wax, whether crude or refined, with a congealing point (ASTM D 938) between 100 and 200 degrees Fahrenheit and a maximum oil content (ASTM D 3235) of 50 weight percent.

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 quantity of **natural gas** in the reservoir that is in addition to the cushion or **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. Volumes of working gas are reported in thousand cubic feet at standard temperature and pressure.