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September 2013

Monthly Energy Review

Independent Statistics & Analysis
U.S. Energy Information Administration

www.eia.gov/mer

Monthly Energy Review

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

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

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

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

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

Important Notes About the Data

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

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

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

Electronic Access

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

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

Note: PDF files display selected annual and monthly data; Excel and CSV files display all available annual and monthly data, often at a greater level of precision than the PDF files.

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

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Monthly Energy Review

September 2013

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

Contacts

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

For assistance in acquiring data, please contact EIA's Office of Communications at 202-586-8800 (infoctr@eia.gov). Questions about the collection, processing, or interpretation of the information may be directed to the following subject specialists:

Section	**1.**	**Energy Overview**	Dianne R. Dunn	202-586-2792 dianne.dunn@eia.gov
Section	**2.**	**Energy Consumption by Sector**	Dianne R. Dunn	202-586-2792 dianne.dunn@eia.gov
Section	**3.**	**Petroleum**	Jennifer Barrick	202-586-6254 jennifer.barrick@eia.gov
Section	**4.**	**Natural Gas**	Amy Sweeney	202-586-2627 amy.sweeney@eia.gov
Section	**5.**	**Crude Oil and Natural Gas Resource Development**	Robert Schmitt	202-586-8644 robert.schmitt@eia.gov
Section	**6.**	**Coal**	Nicholas Paduano	202-287-6326 nicholas.paduano@eia.gov
Section	**7.**	**Electricity**	Ronald S. Hankey	202-586-2630 ronald.hankey@eia.gov
Section	**8.**	**Nuclear Energy**	Michele Simmons	202-586-9787 michele.simmons@eia.gov
Section	**9.**	**Energy Prices**		
		Petroleum	Maureen Klein	202-586-8013 maureen.klein@eia.gov
		Natural Gas	Amy Sweeney	202-586-2627 amy.sweeney@eia.gov
		Average Retail Prices of Electricity	Charlene Harris-Russell	202-586-2661 charlene.harris-russell@eia.gov
		Cost of Fuel at Electric Generating Plants	Rebecca Peterson	202-586-4509 rebecca.peterson@eia.gov
Section	**10.**	**Renewable Energy**	Peter Wong	202-586-7574 peter.wong@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

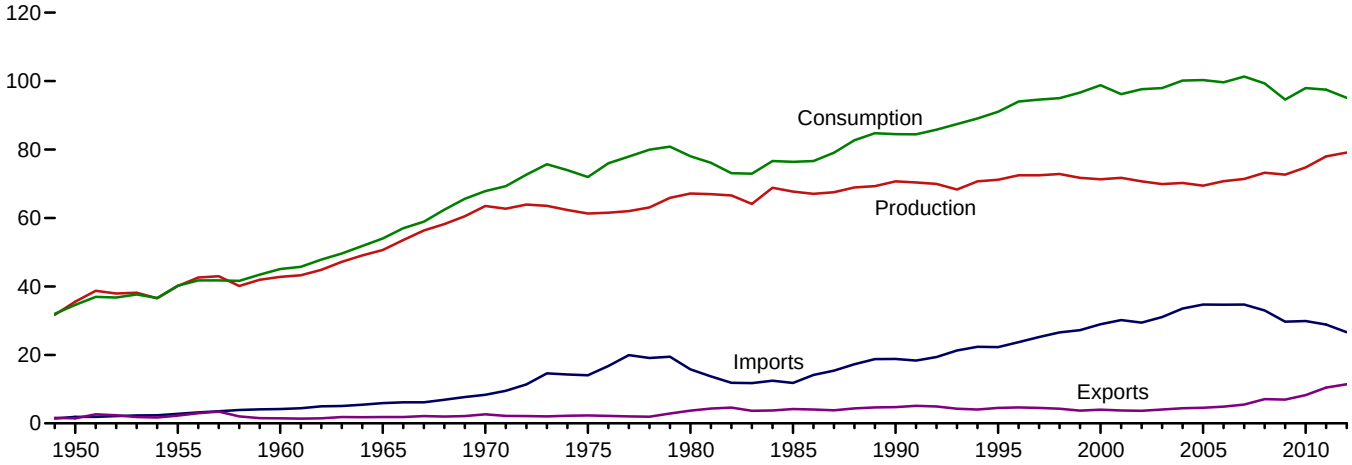
Figures

Figures

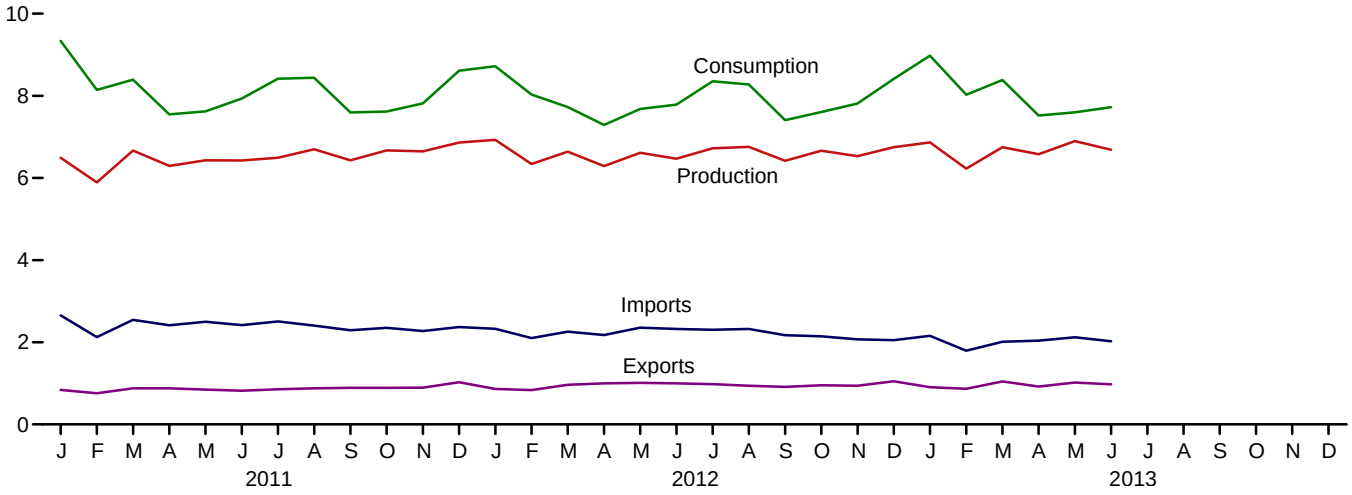
1. Energy Overview

Figure 1.1 Primary Energy Overview
(Quadrillion Btu)

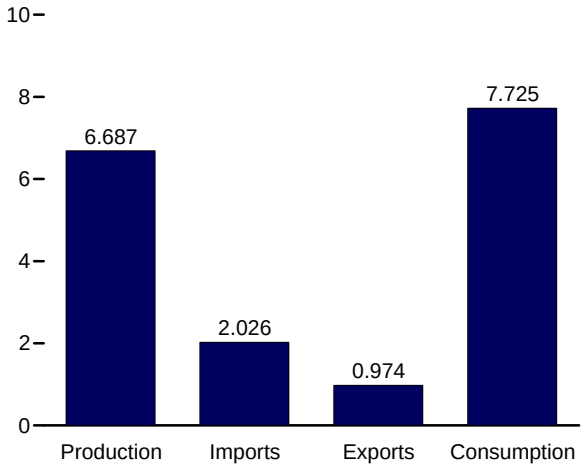
Overview, 1949–2012



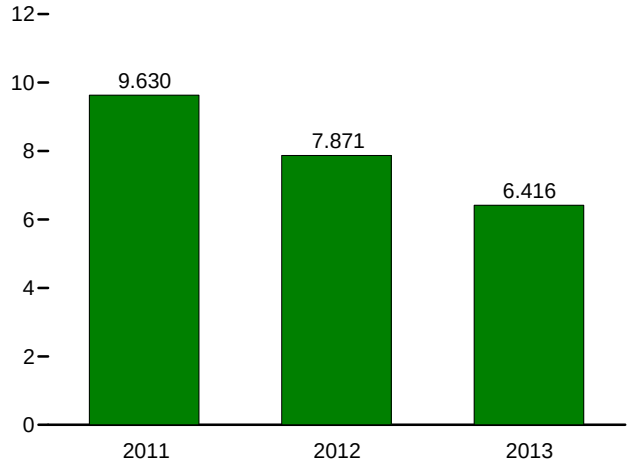
Overview, Monthly



Overview, June 2013



Net Imports, January–June



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**	**22.260**	**4.511**	**17.750**	**2.105**	**77.259**	**7.075**	**6.560**	**91.029**
2000 Total	**57.366**	**7.862**	**6.104**	**71.332**	**28.973**	**4.006**	**24.967**	**2.515**	**84.731**	**7.862**	**6.106**	**98.814**
2001 Total	**58.541**	**8.029**	**5.164**	**71.735**	**30.157**	**3.771**	**26.386**	**-1.953**	**82.902**	**8.029**	**5.163**	**96.168**
2002 Total	**56.834**	**8.145**	**5.734**	**70.713**	**29.408**	**3.669**	**25.739**	**1.193**	**83.699**	**8.145**	**5.729**	**97.645**
2003 Total	**56.022**	**7.959**	**5.947**	**69.927**	**31.061**	**4.054**	**27.007**	**1.009**	**84.014**	**7.959**	**5.948**	**97.943**
2004 Total	**55.930**	**8.222**	**6.069**	**70.220**	**33.544**	**4.434**	**29.110**	**.830**	**85.819**	**8.222**	**6.081**	**100.160**
2005 Total	**55.053**	**8.161**	**6.229**	**69.443**	**34.709**	**4.560**	**30.149**	**.689**	**85.794**	**8.161**	**6.242**	**100.282**
2006 Total	**55.940**	**8.215**	**6.599**	**70.754**	**34.679**	**4.872**	**29.806**	**-.930**	**84.702**	**8.215**	**6.649**	**99.629**
2007 Total	**56.435**	**8.455**	**6.528**	**71.419**	**34.703**	**5.482**	**29.221**	**.675**	**86.211**	**8.455**	**6.541**	**101.315**
2008 Total	**57.588**	**8.427**	**7.219**	**73.235**	**32.992**	**7.060**	**25.932**	**.125**	**83.549**	**8.427**	**7.204**	**99.292**
2009 Total	**56.669**	**8.356**	**7.655**	**72.680**	**29.706**	**6.965**	**22.741**	**-.822**	**78.488**	**8.356**	**7.639**	**94.598**
2010 Total	**58.224**	**8.434**	**8.128**	**74.786**	**29.877**	**8.234**	**21.643**	**1.544**	**81.369**	**8.434**	**8.082**	**97.974**
2011 January	4.985	.761	.747	6.494	2.656	.841	1.815	1.028	7.835	.761	.731	9.337
February	4.504	.678	.710	5.892	2.126	.759	1.367	.884	6.754	.678	.703	8.143
March	5.163	.687	.816	6.667	2.545	.880	1.664	.062	6.892	.687	.806	8.393
April	4.911	.571	.813	6.294	2.411	.878	1.533	-.281	6.164	.571	.804	7.546
May	5.000	.597	.832	6.429	2.497	.847	1.651	-.460	6.185	.597	.826	7.620
June	4.917	.683	.825	6.425	2.418	.818	1.600	-.091	6.416	.683	.824	7.934
July	4.941	.757	.792	6.490	2.505	.854	1.652	.275	6.861	.757	.782	8.417
August	5.208	.746	.742	6.697	2.406	.879	1.527	.215	6.935	.746	.741	8.439
September	5.054	.700	.677	6.430	2.292	.892	1.400	-.236	6.214	.700	.670	7.594
October	5.301	.663	.708	6.672	2.352	.891	1.461	-.516	6.246	.663	.699	7.618
November	5.237	.675	.738	6.649	2.274	.894	1.380	-.214	6.406	.675	.727	7.816
December	5.339	.752	.770	6.861	2.372	1.026	1.347	.405	7.089	.752	.761	8.612
Total	**60.562**	**8.269**	**9.170**	**78.001**	**28.855**	**10.458**	**18.397**	**1.071**	**79.999**	**8.269**	**9.074**	**97.469**
2012 January	R 5.388	.757	.783	6.929	2.329	.863	1.466	R .326	7.191	.757	.760	8.720
February	4.974	.668	.699	6.341	2.102	.837	1.265	R .425	6.665	.668	.688	8.031
March	5.201	.646	.792	6.639	2.258	.963	1.295	R -.208	6.285	.646	.784	7.725
April	4.936	.585	.768	6.289	2.176	.999	1.177	-.176	5.928	.585	.765	7.290
May	R 5.147	.650	.814	R 6.611	2.353	1.010	1.343	R -.272	6.204	.650	.814	7.682
June	R 5.009	.682	.778	R 6.468	2.324	.998	1.326	R -.010	6.312	.682	.777	7.784
July	R 5.248	.723	.749	R 6.720	2.305	.981	1.324	R .309	6.860	.723	.750	8.353
August	R 5.317	.728	.711	6.756	2.324	.941	1.383	R .135	6.812	.728	.716	8.275
September	R 5.100	.675	.643	R 6.418	2.172	.914	1.258	R -.268	6.077	.675	.642	7.408
October	R 5.363	.625	.674	R 6.663	2.146	.954	1.192	R -.248	6.290	.625	.679	7.607
November	R 5.252	.593	.685	R 6.530	2.070	.940	1.130	R .151	6.519	.593	.685	7.811
December	R 5.263	.718	.769	R 6.750	2.052	1.052	1.000	R .663	6.920	.718	.765	8.414
Total	**R 62.197**	**8.050**	**8.867**	**R 79.115**	**26.611**	**11.452**	**15.159**	**R .826**	**78.063**	**8.050**	**8.825**	**95.100**
2013 January	R 5.331	.747	.789	R 6.867	2.158	.905	1.253	R .859	7.431	.747	.787	8.979
February	4.883	.643	.700	R 6.227	1.796	.867	.929	.873	6.670	.643	.701	8.028
March	R 5.326	.659	.763	R 6.748	2.013	1.046	.967	R .670	6.948	.659	.764	8.385
April	R 5.177	.594	.805	R 6.576	2.040	.923	1.117	R -.171	6.110	.594	.806	7.522
May	R 5.385	.658	.854	R 6.896	R 2.120	1.020	R 1.100	R -.397	R 6.072	.658	.854	R 7.600
June	5.176	.695	.816	6.687	2.026	.974	1.051	-.013	6.195	.695	.817	7.725
6-Month Total	**31.278**	**3.996**	**4.728**	**40.002**	**12.151**	**5.735**	**6.416**	**1.820**	**39.427**	**3.996**	**4.730**	**48.238**
2012 6-Month Total	**30.654**	**3.987**	**4.635**	**39.277**	**13.542**	**5.670**	**7.871**	**.084**	**38.586**	**3.987**	**4.587**	**47.232**
2011 6-Month Total	**29.482**	**3.977**	**4.743**	**38.201**	**14.654**	**5.023**	**9.630**	**1.142**	**40.247**	**3.977**	**4.694**	**48.974**

[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.

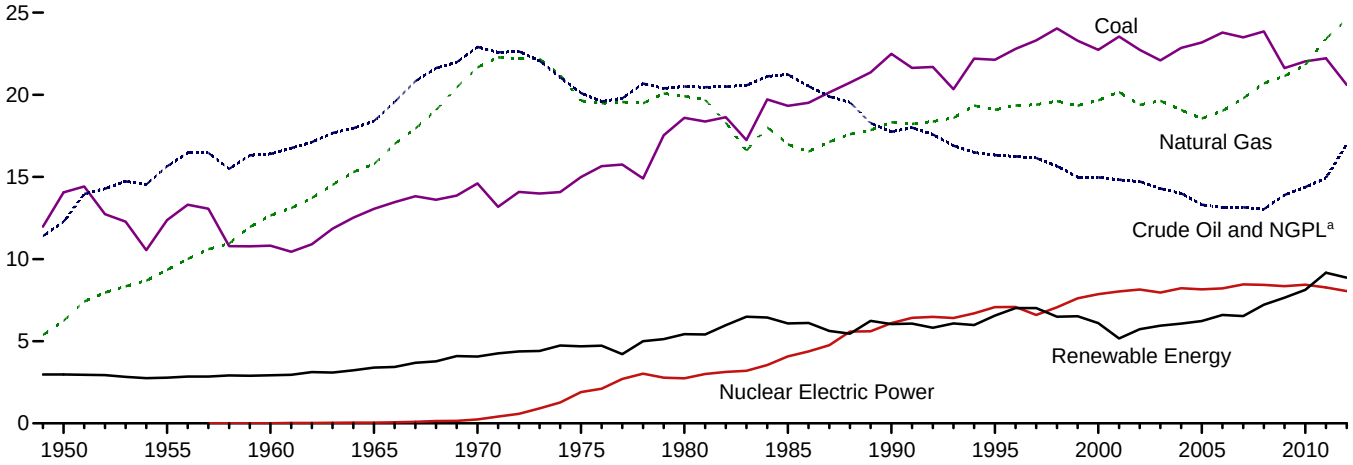
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#summary for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#summary for all available monthly and annual data beginning in 1973.

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.

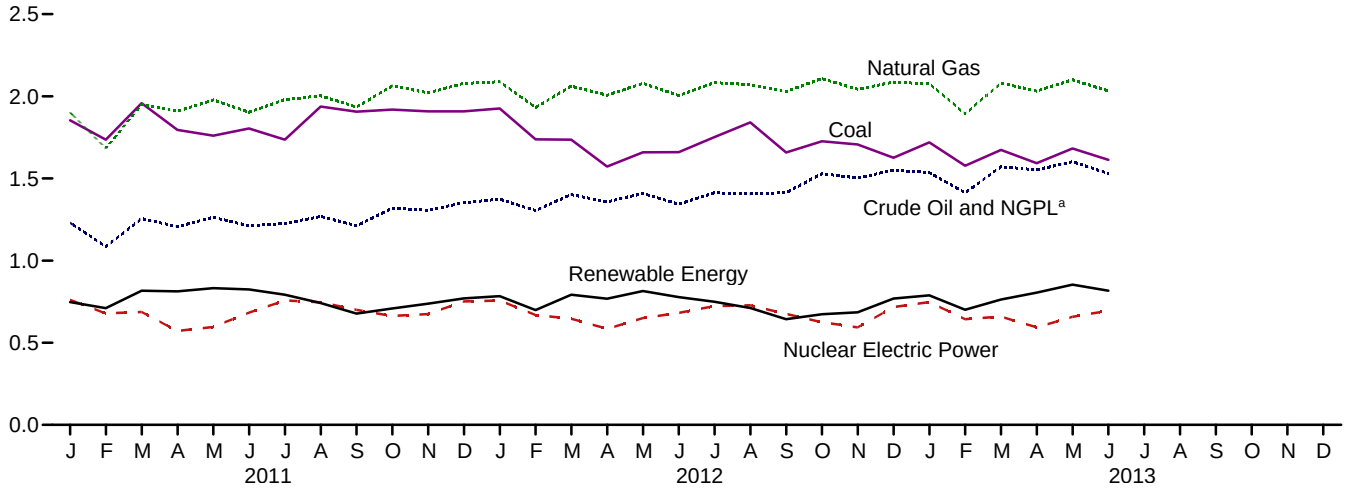
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 1.2 Primary Energy Production
(Quadrillion Btu)

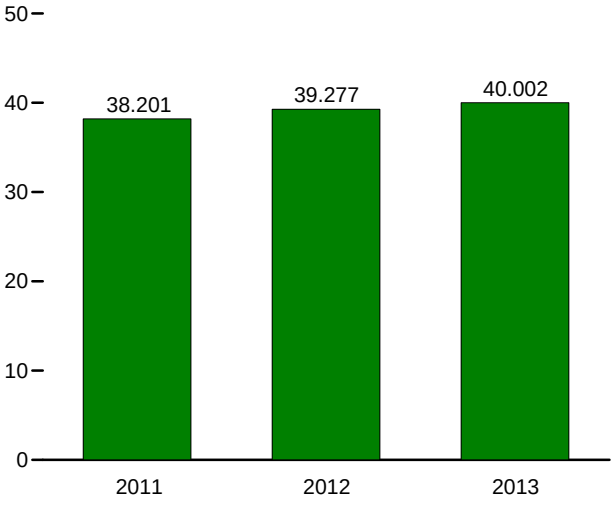
By Source, 1949–2012



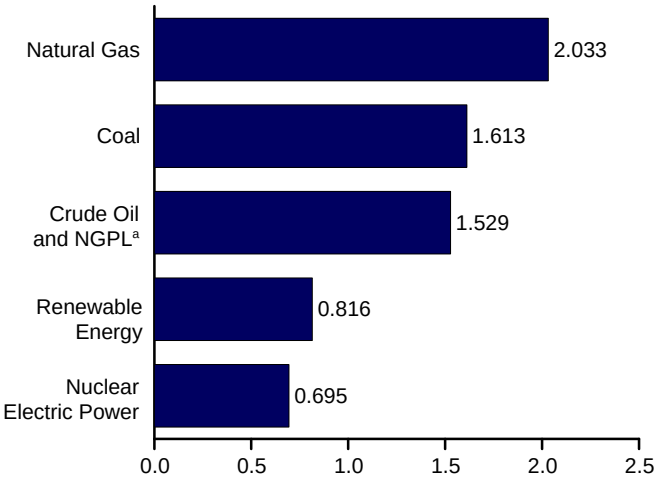
By Source, Monthly



Total, January–June



By Source, June 2013



[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**	**11.948**	**2.346**	**56.022**	**7.959**	**2.793**	**.173**	**.062**	**.113**	**2.805**	**5.947**	**69.927**
2004 Total	**22.852**	**19.074**	**11.538**	**2.466**	**55.930**	**8.222**	**2.688**	**.178**	**.063**	**.142**	**2.998**	**6.069**	**70.220**
2005 Total	**23.185**	**18.556**	**10.978**	**2.334**	**55.053**	**8.161**	**2.703**	**.181**	**.063**	**.178**	**3.104**	**6.229**	**69.443**
2006 Total	**23.790**	**19.022**	**10.772**	**2.356**	**55.940**	**8.215**	**2.869**	**.181**	**.068**	**.264**	**3.216**	**6.599**	**70.754**
2007 Total	**23.493**	**19.786**	**10.748**	**2.409**	**56.435**	**8.455**	**2.446**	**.186**	**.076**	**.341**	**3.480**	**6.528**	**71.419**
2008 Total	**23.851**	**20.703**	**10.615**	**2.419**	**57.588**	**8.427**	**2.511**	**.192**	**.089**	**.546**	**3.881**	**7.219**	**73.235**
2009 Total	**21.624**	**21.139**	**11.332**	**2.574**	**56.669**	**8.356**	**2.669**	**.200**	**.098**	**.721**	**3.967**	**7.655**	**72.680**
2010 Total	**22.038**	**21.806**	**11.598**	**2.781**	**58.224**	**8.434**	**2.539**	**.208**	**.126**	**.923**	**4.332**	**8.128**	**74.786**
2011 January	1.854	1.901	.989	.241	4.985	.761	.248	.018	.013	.083	.384	.747	6.494
February	1.736	1.684	.879	.207	4.504	.678	.234	.017	.013	.102	.345	.710	5.892
March	1.958	1.950	1.006	.250	5.163	.687	.303	.018	.014	.102	.379	.816	6.667
April	1.795	1.909	.965	.241	4.911	.571	.303	.017	.014	.121	.358	.813	6.294
May	1.760	1.977	1.009	.254	5.000	.597	.317	.018	.015	.114	.368	.832	6.429
June	1.804	1.903	.970	.241	4.917	.683	.312	.017	.015	.107	.374	.825	6.425
July	1.736	1.979	.975	.251	4.941	.757	.304	.018	.015	.073	.383	.792	6.490
August	1.937	2.003	1.015	.254	5.208	.746	.250	.018	.015	.073	.386	.742	6.697
September	1.907	1.935	.973	.239	5.054	.700	.208	.017	.014	.067	.371	.677	6.430
October	1.919	2.063	1.056	.263	5.301	.663	.192	.018	.015	.102	.381	.708	6.672
November	1.909	2.022	1.045	.261	5.237	.675	.201	.018	.014	.121	.385	.738	6.649
December	1.908	2.079	1.084	.268	5.339	.752	.231	.018	.014	.104	.404	.770	6.861
Total	**22.221**	**23.406**	**11.965**	**2.970**	**60.562**	**8.269**	**3.103**	**.212**	**.171**	**1.168**	**4.516**	**9.170**	**78.001**
2012 January	1.925	E 2.089	E 1.103	.271	R 5.388	.757	.227	.019	.017	.134	.386	.783	6.929
February	1.738	E 1.931	E 1.049	.255	4.974	.668	.198	.018	.017	.108	.358	.699	6.341
March	1.736	E 2.062	RE 1.131	.271	5.201	.646	.250	.019	.019	.135	.369	.792	6.639
April	1.572	E 2.007	E 1.094	.263	4.936	.585	.254	.018	.019	.124	.352	.768	6.289
May	1.659	E 2.079	RE 1.138	.271	R 5.147	.650	.277	.019	.021	.122	.374	.814	R 6.611
June	1.660	E 2.005	RE 1.085	.258	R 5.009	.682	.259	.019	.021	.116	.364	.778	R 6.468
July	1.751	E 2.084	RE 1.148	.265	R 5.248	.723	.260	.019	.021	.085	.364	.749	R 6.720
August	1.841	E 2.070	RE 1.135	.270	R 5.317	.728	.225	.019	.021	.081	.366	.711	6.756
September	1.658	E 2.029	RE 1.142	.272	R 5.100	.675	.171	.019	.020	.084	.349	.643	R 6.418
October	1.726	E 2.108	RE 1.246	.284	R 5.363	.625	.157	.019	.021	.122	.355	.674	R 6.663
November	1.707	E 2.043	RE 1.224	.278	R 5.252	.593	.183	.019	.019	.112	.352	.685	R 6.530
December	1.626	E 2.086	E 1.275	.276	R 5.263	.718	.226	.020	.019	.138	.367	.769	R 6.750
Total	**20.600**	**E 24.592**	**RE 13.769**	**3.235**	**R 62.197**	**8.050**	**2.687**	**.227**	**.235**	**1.361**	**4.357**	**8.867**	**R 79.115**
2013 January	1.720	E 2.076	RE 1.266	.270	R 5.331	.747	.244	.019	.023	.141	.361	.789	R 6.867
February	1.577	E 1.894	E 1.159	.253	4.883	.643	.199	.018	.022	.135	.327	.700	R 6.227
March	1.674	E 2.081	RE 1.289	.283	R 5.326	.659	.200	.019	.026	.152	.367	.763	R 6.748
April	1.593	E 2.032	RE 1.279	.273	R 5.177	.594	.241	.019	.026	.168	.352	.805	R 6.576
May	1.682	RE 2.100	RE 1.320	.283	R 5.385	.658	.277	.019	.027	.159	.371	.854	R 6.896
June	1.613	E 2.033	E 1.253	.276	5.176	.695	.266	.019	.028	.134	.370	.816	6.687
6-Month Total	**9.860**	**E 12.216**	**E 7.566**	**1.637**	**31.278**	**3.996**	**1.427**	**.113**	**.151**	**.889**	**2.148**	**4.728**	**40.002**
2012 6-Month Total	**10.291**	**E 12.172**	**E 6.600**	**1.590**	**30.654**	**3.987**	**1.465**	**.112**	**.114**	**.740**	**2.203**	**4.635**	**39.277**
2011 6-Month Total	**10.906**	**11.325**	**5.817**	**1.433**	**29.482**	**3.977**	**1.717**	**.106**	**.084**	**.629**	**2.207**	**4.743**	**38.201**

[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.

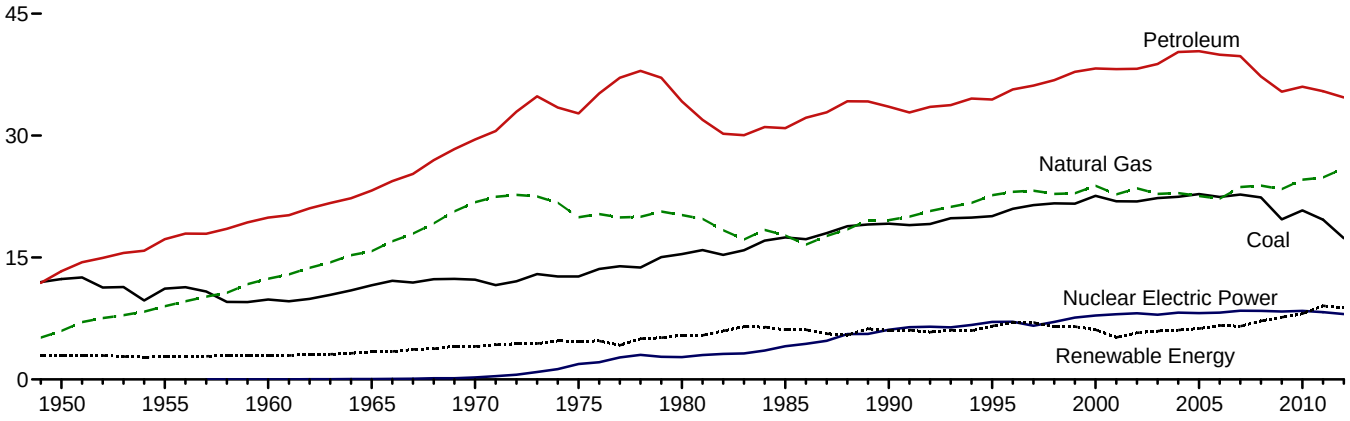
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#summary for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#summary for all available monthly and annual data beginning in 1973.

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

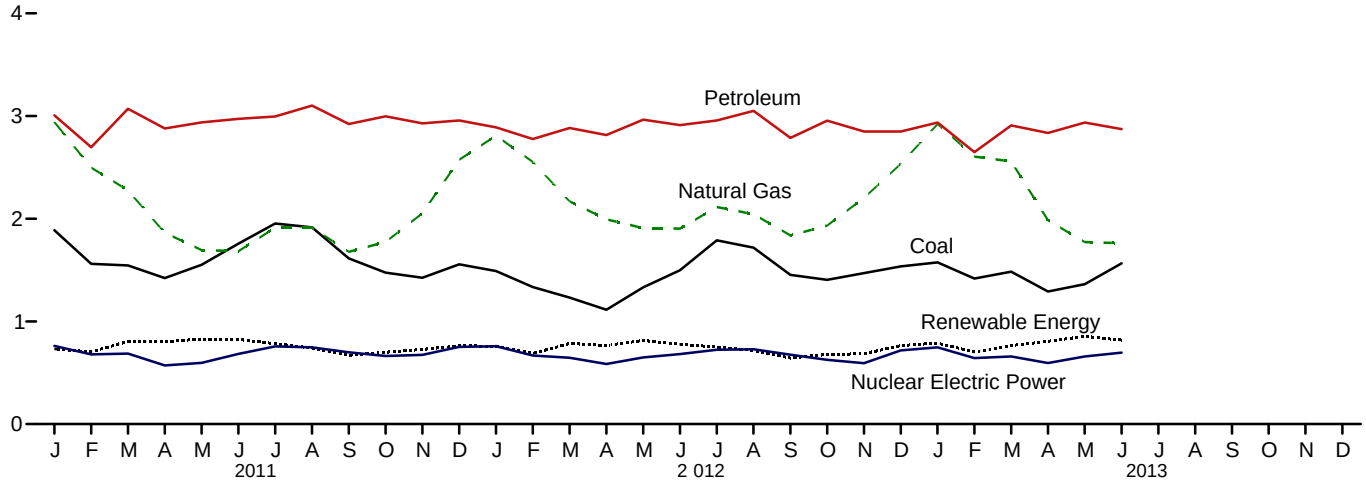
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

Figure 1.3 Primary Energy Consumption
(Quadrillion Btu)

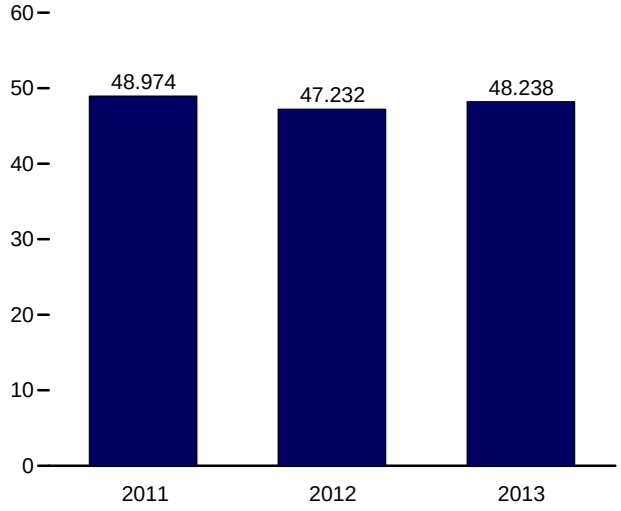
By Source,[a] 1949–2012



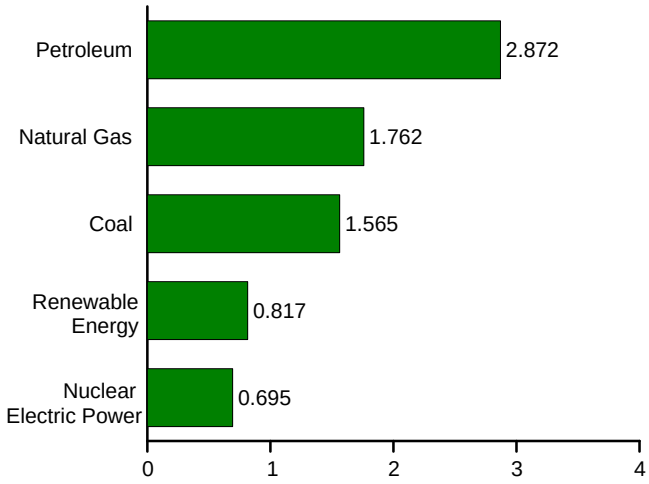
By Source,[a] Monthly



Total, January–June



By Source,[a] June 2013



[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**	**34.438**	**77.259**	**7.075**	**3.205**	**.152**	**.069**	**.033**	**3.101**	**6.560**	**91.029**
2000 Total	**22.580**	**23.824**	**38.262**	**84.731**	**7.862**	**2.811**	**.164**	**.066**	**.057**	**3.008**	**6.106**	**98.814**
2001 Total	**21.914**	**22.773**	**38.186**	**82.902**	**8.029**	**2.242**	**.164**	**.064**	**.070**	**2.622**	**5.163**	**96.168**
2002 Total	**21.904**	**23.510**	**38.224**	**83.699**	**8.145**	**2.689**	**.171**	**.063**	**.105**	**2.701**	**5.729**	**97.645**
2003 Total	**22.321**	**22.831**	**38.811**	**84.014**	**7.959**	**2.793**	**.173**	**.062**	**.113**	**2.807**	**5.948**	**97.943**
2004 Total	**22.466**	**22.923**	**40.292**	**85.819**	**8.222**	**2.688**	**.178**	**.063**	**.142**	**3.010**	**6.081**	**100.160**
2005 Total	**22.797**	**22.565**	**40.388**	**85.794**	**8.161**	**2.703**	**.181**	**.063**	**.178**	**3.117**	**6.242**	**100.282**
2006 Total	**22.447**	**22.239**	**39.955**	**84.702**	**8.215**	**2.869**	**.181**	**.068**	**.264**	**3.267**	**6.649**	**99.629**
2007 Total	**22.749**	**23.663**	**39.774**	**86.211**	**8.455**	**2.446**	**.186**	**.076**	**.341**	**3.493**	**6.541**	**101.315**
2008 Total	**22.385**	**23.843**	**37.280**	**83.549**	**8.427**	**2.511**	**.192**	**.089**	**.546**	**3.866**	**7.204**	**99.292**
2009 Total	**19.692**	**23.416**	**35.403**	**78.488**	**8.356**	**2.669**	**.200**	**.098**	**.721**	**3.951**	**7.639**	**94.598**
2010 Total	**20.791**	**24.575**	**36.010**	**81.369**	**8.434**	**2.539**	**.208**	**.126**	**.923**	**4.286**	**8.082**	**97.974**
2011 January	1.888	2.940	3.006	7.835	.761	.248	.018	.013	.083	.368	.731	9.337
February	1.560	2.497	2.696	6.754	.678	.234	.017	.013	.102	.338	.703	8.143
March	1.544	2.276	3.070	6.892	.687	.303	.018	.014	.102	.368	.806	8.393
April	1.421	1.863	2.879	6.164	.571	.303	.017	.014	.121	.349	.804	7.546
May	1.551	1.695	2.938	6.185	.597	.317	.018	.015	.114	.362	.826	7.620
June	1.758	1.684	2.973	6.416	.683	.312	.017	.015	.107	.373	.824	7.934
July	1.953	1.913	2.995	6.861	.757	.304	.018	.015	.073	.373	.782	8.417
August	1.917	1.914	3.101	6.935	.746	.250	.018	.015	.073	.385	.741	8.439
September	1.614	1.677	2.923	6.214	.700	.208	.017	.014	.067	.364	.670	7.594
October	1.475	1.773	2.998	6.246	.663	.192	.018	.015	.102	.372	.699	7.618
November	1.425	2.053	2.929	6.406	.675	.201	.018	.014	.121	.374	.727	7.816
December	1.556	2.574	2.957	7.089	.752	.231	.018	.014	.104	.394	.761	8.612
Total	**19.663**	**24.860**	**35.465**	**79.999**	**8.269**	**3.103**	**.212**	**.171**	**1.168**	**4.421**	**9.074**	**97.469**
2012 January	1.491	2.809	2.889	7.191	.757	.227	.019	.017	.134	.363	.760	8.720
February	1.335	2.553	2.777	6.665	.668	.198	.018	.017	.108	.347	.688	8.031
March	1.232	2.168	2.883	6.285	.646	.250	.019	.019	.135	.361	.784	7.725
April	1.113	1.994	2.815	5.928	.585	.254	.018	.019	.124	.349	.765	7.290
May	1.331	1.907	2.964	6.204	.650	.277	.019	.021	.122	.374	.814	7.682
June	1.498	1.903	2.911	6.312	.682	.259	.019	.021	.116	.362	.777	7.784
July	1.789	2.114	2.957	6.860	.723	.260	.019	.021	.085	.365	.750	8.353
August	1.718	2.043	3.051	6.812	.728	.225	.019	.021	.081	.371	.716	8.275
September	1.453	1.838	2.788	6.077	.675	.171	.019	.020	.084	.348	.642	7.408
October	1.405	1.933	2.955	6.290	.625	.157	.019	.021	.122	.360	.679	7.607
November	1.471	2.202	2.849	6.519	.593	.183	.019	.019	.112	.352	.685	7.811
December	1.536	2.535	2.849	6.920	.718	.226	.020	.019	.138	.363	.765	8.414
Total	**17.372**	**26.000**	**34.688**	**78.063**	**8.050**	**2.687**	**.227**	**.235**	**1.361**	**4.316**	**8.825**	**95.100**
2013 January	1.575	2.921	2.936	7.431	.747	.244	.019	.023	.141	.360	.787	8.979
February	1.418	2.604	2.648	6.670	.643	.199	.018	.022	.135	.327	.701	8.028
March	1.484	2.557	2.909	6.948	.659	.200	.019	.026	.152	.367	.764	8.385
April	1.291	1.985	2.836	6.110	.594	.241	.019	.026	.168	.353	.806	7.522
May	1.363	R 1.773	2.937	R 6.072	.658	.277	.019	.027	.159	.372	.854	R 7.600
June	1.565	1.762	2.872	6.195	.695	.266	.019	.028	.134	.371	.817	7.725
6-Month Total	**8.695**	**13.602**	**17.137**	**39.427**	**3.996**	**1.427**	**.113**	**.151**	**.889**	**2.151**	**4.730**	**48.238**
2012 6-Month Total	**8.000**	**13.334**	**17.240**	**38.586**	**3.987**	**1.465**	**.112**	**.114**	**.740**	**2.155**	**4.587**	**47.232**
2011 6-Month Total	**9.722**	**12.956**	**17.563**	**40.247**	**3.977**	**1.717**	**.106**	**.084**	**.629**	**2.158**	**4.694**	**48.974**

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

[b] Natural gas only; excludes supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

[c] Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel. Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."

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

[e] Conventional hydroelectric power.

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

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

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

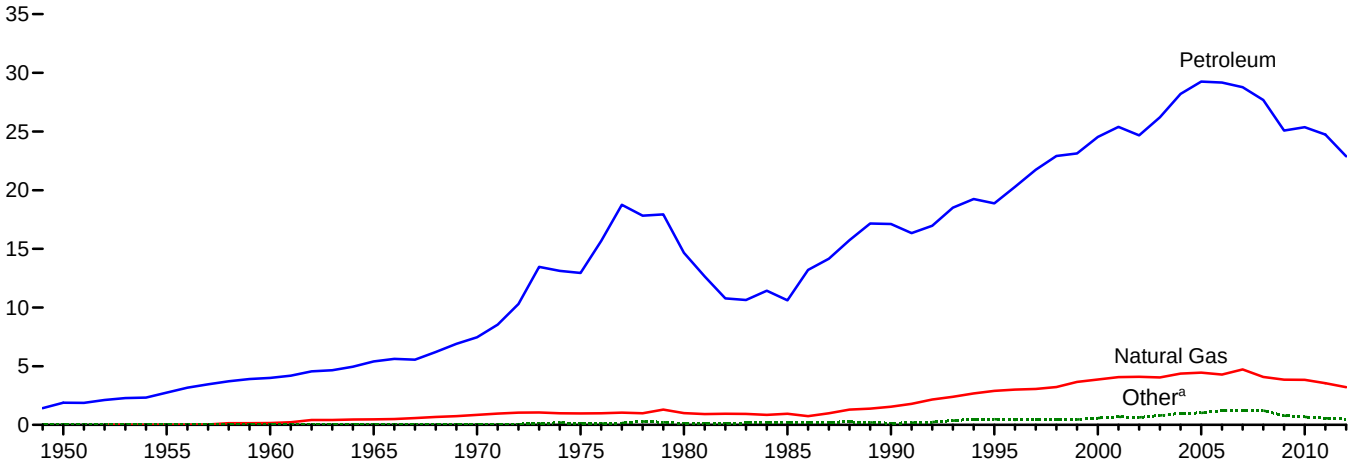
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#summary for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#summary for all available monthly and annual data beginning in 1973.

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

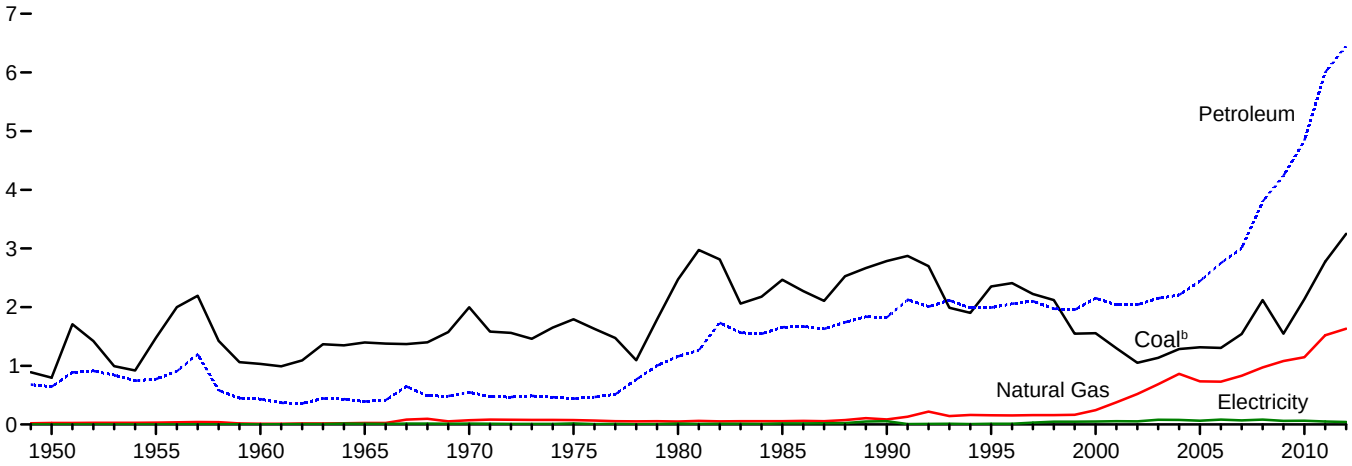
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

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

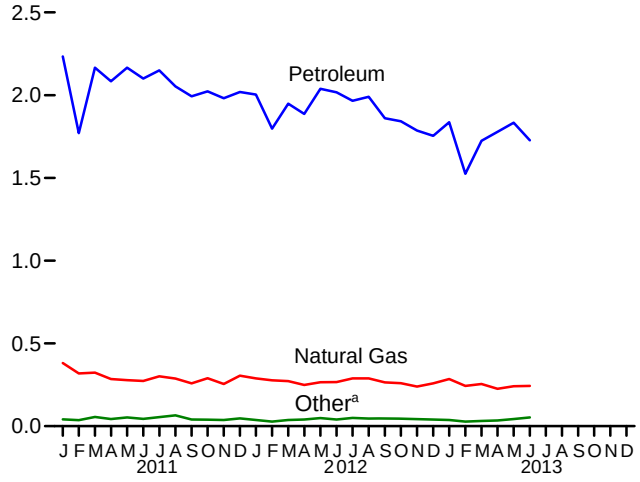
Imports by Source, 1949–2012



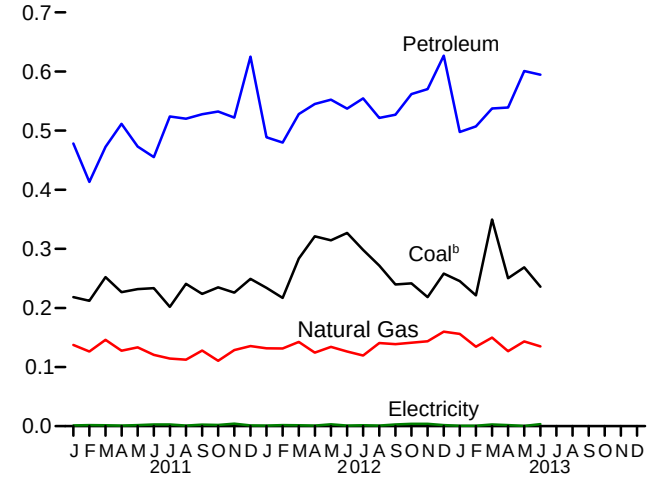
Exports by Source, 1949–2012



Imports by Source, Monthly



Exports by Major Source, Monthly



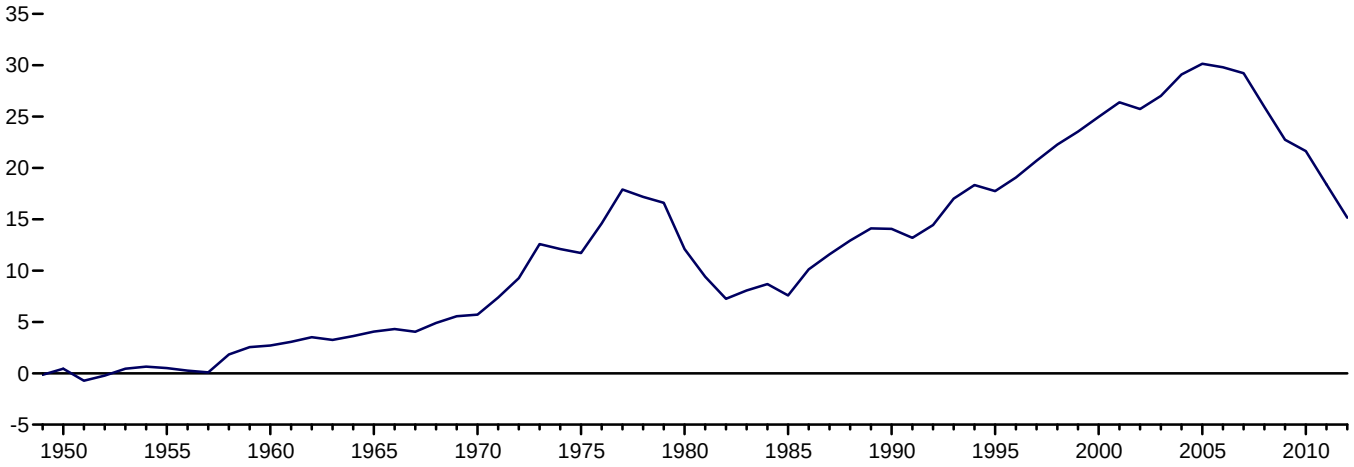
[a] Coal, coal coke, biofuels, and electricity.
[b] Includes coal coke.

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

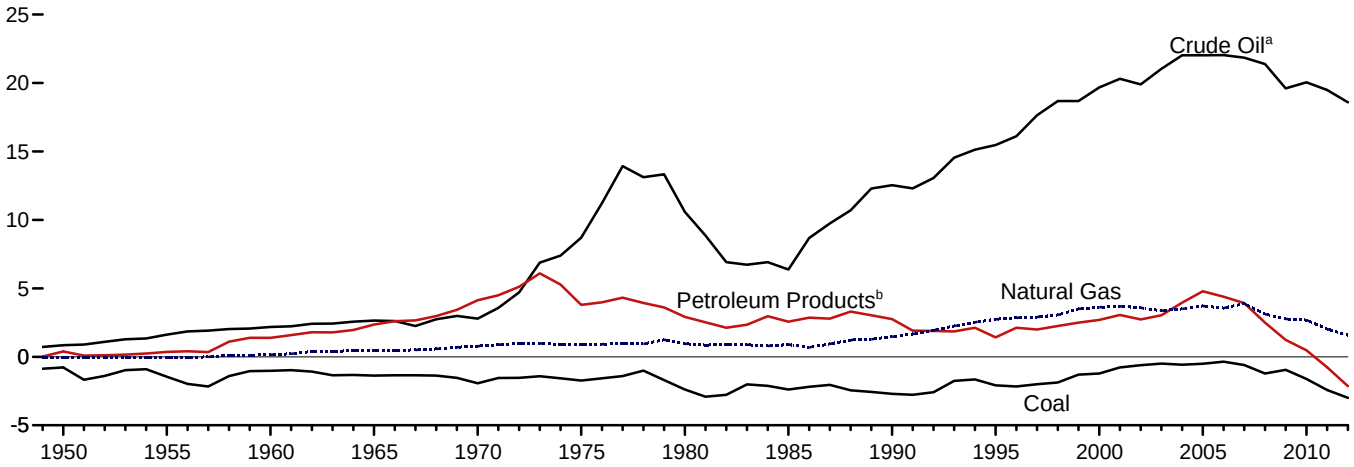
Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu, Except as noted)

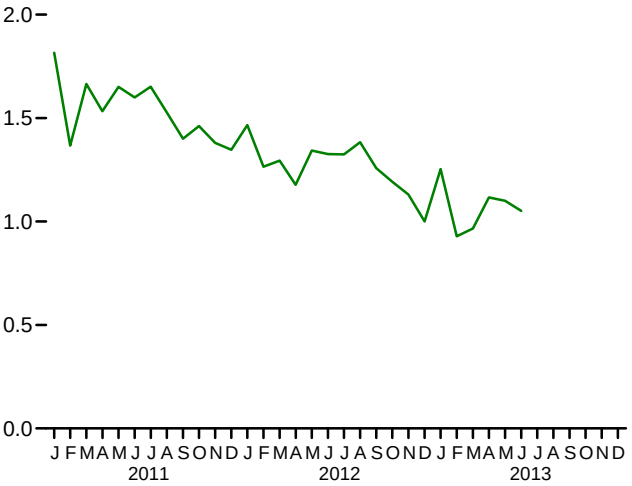
Total, 1949–2012



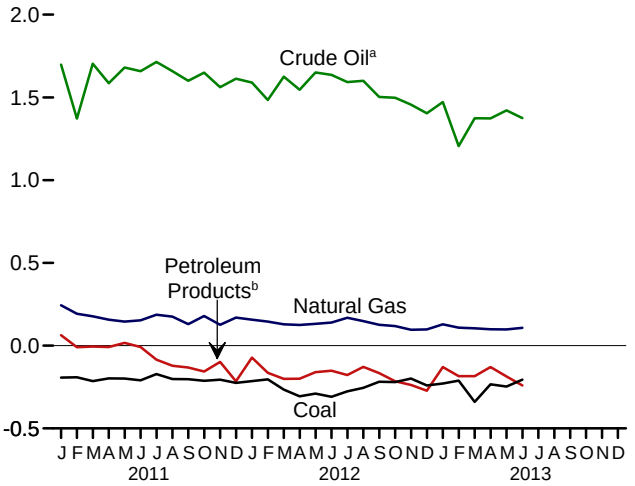
By Major Source, 1949–2012



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**	**3.211**	**18.881**	**.001**	**.146**	**22.260**
2000 Total	**.313**	**.094**	**3.869**	**19.783**	**4.749**	**24.531**	**(s)**	**.166**	**28.973**
2001 Total	**.495**	**.063**	**4.068**	**20.348**	**5.051**	**25.398**	**.002**	**.131**	**30.157**
2002 Total	**.422**	**.080**	**4.104**	**19.920**	**4.754**	**24.674**	**.002**	**.125**	**29.408**
2003 Total	**.626**	**.068**	**4.042**	**21.060**	**5.159**	**26.219**	**.002**	**.104**	**31.061**
2004 Total	**.682**	**.170**	**4.365**	**22.082**	**6.114**	**28.197**	**.013**	**.117**	**33.544**
2005 Total	**.762**	**.088**	**4.450**	**22.091**	**7.157**	**29.248**	**.012**	**.150**	**34.709**
2006 Total	**.906**	**.101**	**4.291**	**22.085**	**7.084**	**29.169**	**.066**	**.146**	**34.679**
2007 Total	**.909**	**.061**	**4.723**	**21.914**	**6.868**	**28.781**	**.054**	**.175**	**34.703**
2008 Total	**.855**	**.089**	**4.084**	**21.448**	**6.237**	**27.685**	**.084**	**.195**	**32.992**
2009 Total	**.566**	**.009**	**3.845**	**19.699**	**5.383**	**25.082**	**.026**	**.178**	**29.706**
2010 Total	**.484**	**.030**	**3.834**	**20.140**	**5.231**	**25.371**	**.004**	**.154**	**29.877**
2011 January	.025	.001	.381	1.710	.523	2.233	(s)	.015	2.656
February	.021	.002	.319	1.377	.394	1.771	(s)	.013	2.126
March	.038	.004	.323	1.710	.455	2.166	(s)	.014	2.545
April	.028	.001	.285	1.593	.490	2.084	(s)	.013	2.411
May	.033	.004	.278	1.687	.479	2.166	(s)	.017	2.497
June	.024	.004	.273	1.665	.436	2.101	.001	.015	2.418
July	.030	.003	.301	1.728	.422	2.150	.001	.021	2.505
August	.039	.005	.287	1.664	.389	2.053	.002	.019	2.406
September	.021	.003	.258	1.607	.386	1.993	.003	.014	2.292
October	.023	.002	.289	1.659	.364	2.023	.002	.013	2.352
November	.020	.002	.255	1.572	.409	1.981	.003	.012	2.274
December	.024	.004	.305	1.622	.397	2.019	.005	.015	2.372
Total	**.327**	**.035**	**3.555**	**19.595**	**5.145**	**24.740**	**.019**	**.178**	**28.855**
2012 January	.020	.003	.288	1.600	.403	2.003	(s)	.014	2.329
February	.013	.002	.277	1.494	.303	1.797	(s)	.012	2.102
March	.017	.004	.272	1.636	.312	1.948	.002	.014	2.258
April	.016	.007	.249	1.552	.335	1.887	.001	.017	2.176
May	.025	.004	.265	1.663	.376	2.039	.002	.019	2.353
June	.018	.001	.266	1.644	.373	2.017	.003	.018	2.324
July	.022	.001	.288	1.606	.360	1.966	.004	.023	2.305
August	.017	.001	.288	1.611	.379	1.990	.007	.022	2.324
September	.021	.002	.264	1.513	.348	1.861	.007	.017	2.172
October	.022	.001	.260	1.510	.332	1.842	.007	.015	2.146
November	.020	.001	.240	1.468	.317	1.786	.007	.016	2.070
December	.018	.002	.258	1.414	.340	1.754	.005	.015	2.052
Total	**.229**	**.028**	**3.216**	**18.712**	**4.178**	**22.891**	**.045**	**.202**	**26.611**
2013 January	.016	(s)	.285	1.484	.352	1.836	.004	.017	2.158
February	.010	.001	.243	1.226	.299	1.525	.001	.016	1.796
March	.010	(s)	.254	1.392	.332	1.725	.006	.018	2.013
April	.017	(s)	.226	1.396	.382	1.778	.003	.016	2.040
May	.022	.001	.241	1.444	.389	1.833	.004	.019	R 2.120
June	.030	(s)	.243	1.396	.330	1.727	.006	.020	2.026
6-Month Total	**.105**	**.002**	**1.492**	**8.338**	**2.085**	**10.424**	**.024**	**.105**	**12.151**
2012 6-Month Total	**.109**	**.021**	**1.617**	**9.589**	**2.102**	**11.692**	**.008**	**.095**	**13.542**
2011 6-Month Total	**.170**	**.016**	**1.860**	**9.742**	**2.778**	**12.520**	**.002**	**.086**	**14.654**

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

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

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

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

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

Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#summary for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#summary for all available monthly and annual data beginning in 1973.

Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke: 1949–1975**—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*. **1976–1980**—U.S. Energy Information Administration (EIA), Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual." **1981 forward**—EIA, *Quarterly Coal Report,* quarterly reports and Table A5. • **Natural Gas:** Tables 4.1 and A4. • **Crude Oil** and **Petroleum Products:** Tables 3.3b, 10.3, 10.4, and A2. • **Biofuels:** Tables 10.3, 10.4 and A3. • **Electricity:** Tables 7.1 and A6.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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**	**1.791**	**1.991**	**NA**	**.012**	**4.511**	**17.750**
2000 Total	**1.528**	**.028**	**.245**	**.106**	**2.048**	**2.154**	**NA**	**.051**	**4.006**	**24.967**
2001 Total	**1.265**	**.033**	**.377**	**.043**	**1.996**	**2.039**	**(s)**	**.056**	**3.771**	**26.386**
2002 Total	**1.032**	**.020**	**.520**	**.019**	**2.023**	**2.042**	**(s)**	**.054**	**3.669**	**25.739**
2003 Total	**1.117**	**.018**	**.686**	**.026**	**2.124**	**2.151**	**.001**	**.082**	**4.054**	**27.007**
2004 Total	**1.253**	**.033**	**.862**	**.057**	**2.151**	**2.208**	**.001**	**.078**	**4.434**	**29.110**
2005 Total	**1.273**	**.043**	**.735**	**.067**	**2.374**	**2.442**	**.001**	**.065**	**4.560**	**30.149**
2006 Total	**1.264**	**.040**	**.730**	**.052**	**2.699**	**2.751**	**.004**	**.083**	**4.872**	**29.806**
2007 Total	**1.507**	**.036**	**.830**	**.058**	**2.949**	**3.007**	**.035**	**.069**	**5.482**	**29.221**
2008 Total	**2.071**	**.049**	**.972**	**.061**	**3.739**	**3.800**	**.086**	**.083**	**7.060**	**25.932**
2009 Total	**1.515**	**.032**	**1.082**	**.093**	**4.147**	**4.240**	**.034**	**.062**	**6.965**	**22.741**
2010 Total	**2.101**	**.036**	**1.147**	**.088**	**4.750**	**4.838**	**.046**	**.065**	**8.234**	**21.643**
2011 January	.218	.001	.137	.013	.460	.473	.006	.005	.841	1.815
February	.212	.002	.126	.005	.403	.408	.005	.005	.759	1.367
March	.252	.001	.146	.007	.461	.467	.008	.005	.880	1.664
April	.227	.001	.128	.007	.499	.506	.011	.005	.878	1.533
May	.232	.002	.133	.007	.462	.469	.007	.004	.847	1.651
June	.233	.003	.121	.006	.444	.451	.006	.004	.818	1.600
July	.202	.003	.114	.013	.506	.520	.011	.004	.854	1.652
August	.241	.001	.112	.006	.511	.517	.005	.003	.879	1.527
September	.224	.003	.128	.006	.518	.524	.010	.003	.892	1.400
October	.235	.002	.110	.009	.520	.529	.011	.003	.891	1.461
November	.226	.004	.129	.011	.507	.518	.013	.004	.894	1.380
December	.249	.001	.136	.010	.613	.622	.014	.003	1.026	1.347
Total	**2.751**	**.024**	**1.521**	**.100**	**5.904**	**6.004**	**.108**	**.051**	**10.458**	**18.397**
2012 January	.234	.001	.132	.010	.475	.486	.008	.003	.863	1.466
February	.217	.002	.131	.010	.467	.477	.007	.003	.837	1.265
March	.284	.002	.142	.011	.513	.524	.008	.004	.963	1.295
April	.321	.001	.124	.006	.535	.541	.007	.004	.999	1.177
May	.314	.003	.134	.012	.536	.548	.006	.004	1.010	1.343
June	.327	.001	.126	.008	.525	.533	.007	.004	.998	1.326
July	.298	.001	.119	.014	.537	.551	.007	.003	.981	1.324
August	.272	.001	.141	.011	.508	.519	.006	.003	.941	1.383
September	.240	.003	.139	.010	.514	.524	.006	.003	.914	1.258
October	.242	.004	.141	.012	.547	.559	.006	.003	.954	1.192
November	.218	.004	.144	.013	.555	.567	.004	.003	.940	1.130
December	.258	.002	.160	.010	.613	.623	.005	.004	1.052	1.000
Total	**3.225**	**.024**	**1.633**	**.127**	**6.325**	**6.452**	**.077**	**.041**	**11.452**	**15.159**
2013 January	.245	.001	.156	.013	.481	.494	.005	.003	.905	1.253
February	.221	.001	.134	.020	.484	.504	.004	.003	.867	.929
March	.350	.003	.150	.018	.516	.534	.006	.003	1.046	.967
April	.250	.002	.127	.023	.512	.535	.005	.004	.923	1.117
May	.269	(s)	.143	.022	.575	.598	.006	.003	1.020	[R] 1.100
June	.236	.003	.135	.021	.571	.592	.006	.003	.974	1.051
6-Month Total	**1.571**	**.009**	**.845**	**.118**	**3.139**	**3.257**	**.033**	**.020**	**5.735**	**6.416**
2012 6-Month Total	**1.697**	**.009**	**.790**	**.057**	**3.051**	**3.108**	**.043**	**.023**	**5.670**	**7.871**
2011 6-Month Total	**1.375**	**.010**	**.791**	**.044**	**2.729**	**2.773**	**.044**	**.030**	**5.023**	**9.630**

[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.

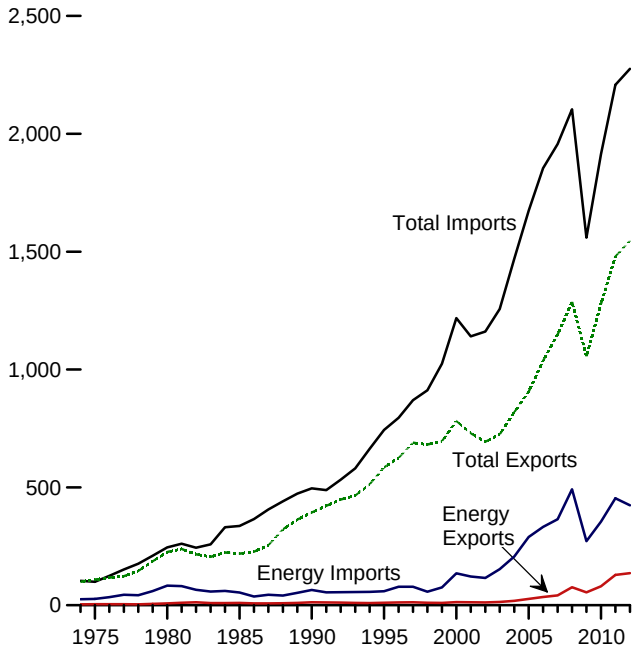
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#summary for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#summary for all available monthly and annual data beginning in 1973.

Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke: 1949–1975**—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook.* **1976–1980**—U.S. Energy Information Administration (EIA), Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual." **1981 forward**—EIA, *Quarterly Coal Report,* quarterly reports and Table A5. • **Natural Gas:** Tables 4.1 and A4. • **Crude Oil** and **Petroleum Products:** Tables 3.3b, 10.4, and A2. • **Biofuels:** Tables 10.3, 10.4 and A3. • **Electricity:** Tables 7.1 and A6.

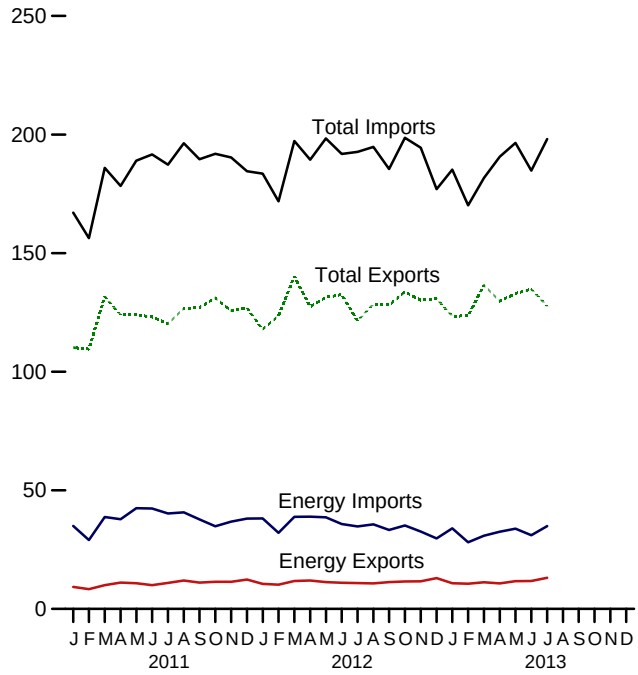
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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

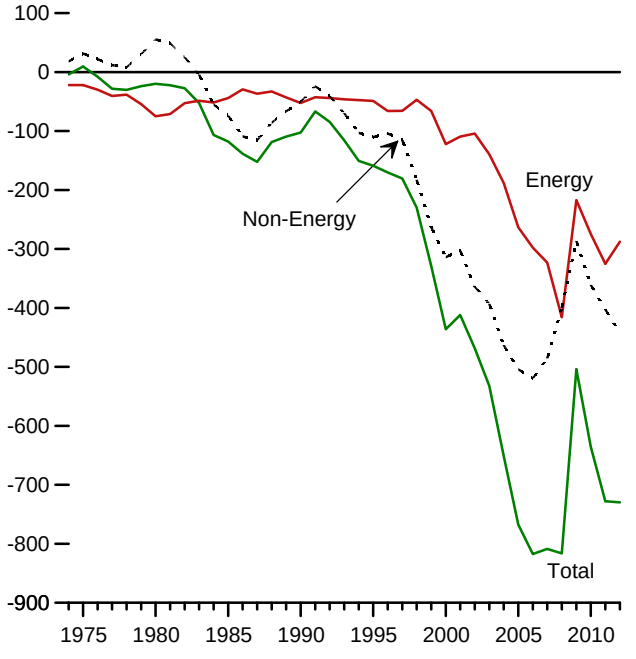
Imports and Exports, 1974–2012



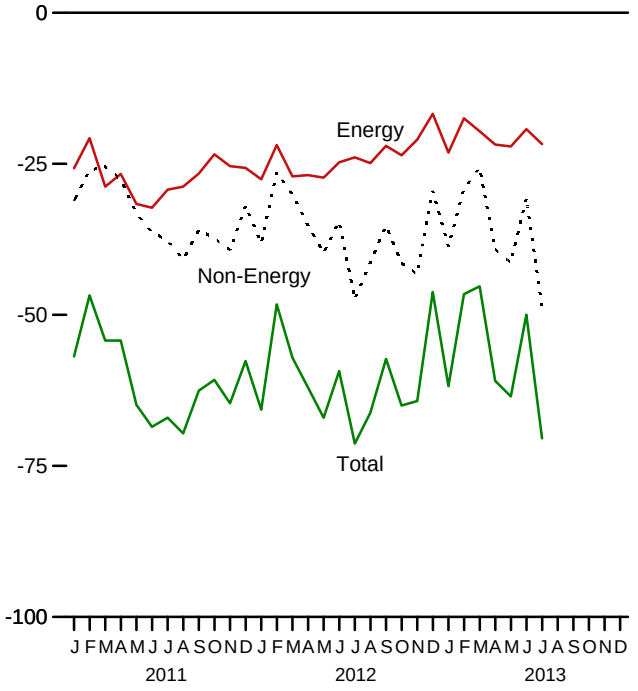
Imports and Exports, Monthly



Trade Balance, 1974–2012



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 January	7,453	33,050	-25,597	9,281	35,010	-25,729	-31,133	110,186	167,048	-56,862
February	6,619	27,551	-20,932	8,307	29,062	-20,755	-26,021	109,539	156,315	-46,776
March	7,883	37,096	-29,213	10,000	38,763	-28,763	-25,491	131,724	185,978	-54,254
April	9,075	36,457	-27,382	11,117	37,803	-26,686	-27,561	124,047	178,294	-54,247
May	8,795	41,002	-32,207	10,823	42,470	-31,647	-33,241	124,066	188,954	-64,888
June	8,039	40,872	-32,833	10,040	42,305	-32,265	-36,271	123,047	191,582	-68,536
July	9,098	38,622	-29,524	10,935	40,224	-29,289	-37,730	120,245	187,265	-67,019
August	9,935	39,063	-29,128	11,962	40,732	-28,770	-40,843	126,734	196,347	-69,613
September	9,203	36,467	-27,264	11,129	37,741	-26,612	-35,927	127,031	189,570	-62,539
October	9,606	33,467	-23,861	11,436	34,857	-23,421	-37,352	131,088	191,861	-60,773
November	9,593	35,665	-26,072	11,447	36,821	-25,374	-39,256	125,693	190,323	-64,630
December	10,545	36,831	-26,286	12,396	38,084	-25,688	-31,940	126,891	184,519	-57,628
Total	**105,844**	**436,145**	**-330,301**	**128,873**	**453,872**	**-324,999**	**-402,766**	**1,480,290**	**2,208,055**	**-727,765**
2012 January	8,706	36,947	-28,241	10,583	38,146	-27,563	-38,120	117,839	183,522	-65,683
February	8,690	31,043	-22,353	10,203	32,092	-21,889	-26,368	123,609	171,866	-48,257
March	9,925	37,963	-28,038	11,766	38,832	-27,066	-30,011	140,233	197,310	-57,077
April	10,094	38,079	-27,985	12,004	38,861	-26,857	-35,155	127,405	189,417	-62,012
May	9,546	37,668	-28,122	11,304	38,603	-27,299	-39,729	131,342	198,370	-67,028
June	9,173	34,897	-25,724	11,019	35,777	-24,758	-34,546	132,547	191,851	-59,304
July	9,135	33,742	-24,607	10,876	34,797	-23,921	-47,375	121,412	192,707	-71,296
August	9,129	34,636	-25,507	10,793	35,672	-24,879	-41,303	128,587	194,769	-66,182
September	9,766	32,410	-22,644	11,283	33,313	-22,030	-35,259	128,198	185,488	-57,289
October	10,038	34,108	-24,070	11,567	35,159	-23,592	-41,423	133,600	198,614	-65,015
November	10,289	31,380	-21,091	11,627	32,611	-20,984	-43,264	130,182	194,431	-64,248
December	11,359	28,535	-17,176	12,998	29,729	-16,731	-29,488	130,756	176,975	-46,219
Total	**115,848**	**411,409**	**-295,561**	**136,023**	**423,591**	**-287,568**	**-442,043**	**1,545,709**	**2,275,320**	**-729,611**
2013 January	[b] 8,881	[b] 32,361	[b] -23,480	10,825	33,967	-23,142	-38,655	123,390	185,187	-61,797
February	8,915	26,622	-17,707	10,634	28,106	-17,472	-29,099	123,606	170,177	-46,571
March	8,899	29,308	-20,409	11,224	30,844	-19,620	-25,653	136,414	181,687	-45,273
April	8,705	31,072	-22,367	10,737	32,544	-21,807	-39,116	129,728	190,651	-60,923
May	9,621	32,523	-22,902	11,720	33,856	-22,136	-41,350	133,003	196,488	-63,486
June	9,841	29,659	-19,818	11,772	31,036	-19,264	[R] -30,691	[R] 134,819	[R] 184,774	[R] -49,955
July	11,132	33,468	-22,336	13,153	34,894	-21,741	-48,703	127,616	198,060	-70,444
7-Month Total	**65,993**	**215,012**	**-149,019**	**80,065**	**225,247**	**-145,182**	**-253,267**	**908,575**	**1,307,023**	**-398,449**
2012 7-Month Total	**65,269**	**250,339**	**-185,070**	**77,754**	**257,108**	**-179,354**	**-251,304**	**894,385**	**1,325,043**	**-430,658**
2011 7-Month Total	**56,962**	**254,650**	**-197,688**	**70,503**	**265,637**	**-195,134**	**-217,448**	**842,854**	**1,255,436**	**-412,582**

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

[b] Through 2012, data are for crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels. Beginning in 2013, data are for petroleum products and preparations.

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

R=Revised.

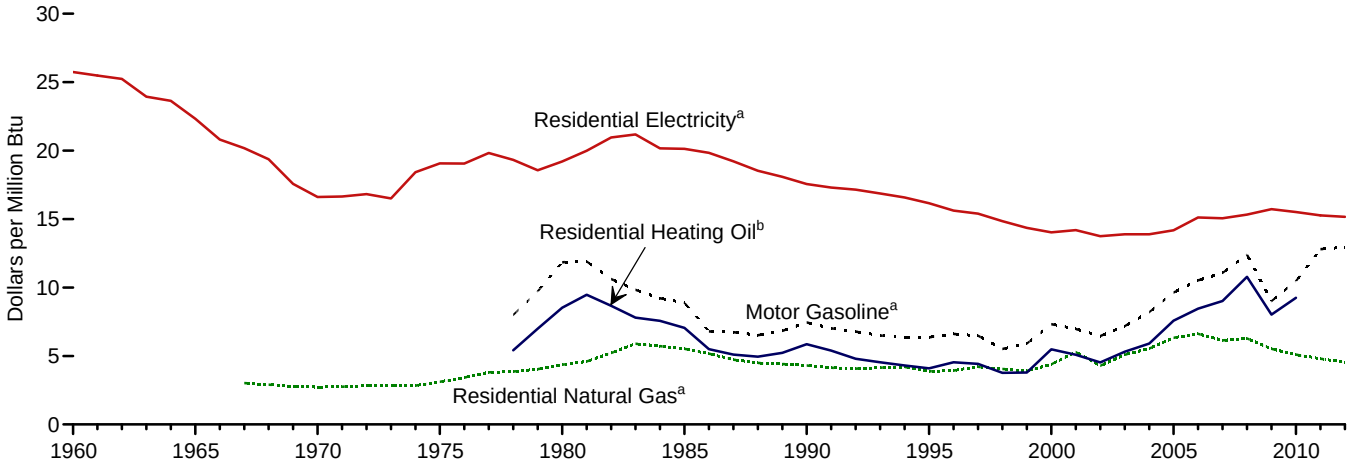
Notes: • Monthly data are not adjusted for seasonal variations. • See Note, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries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

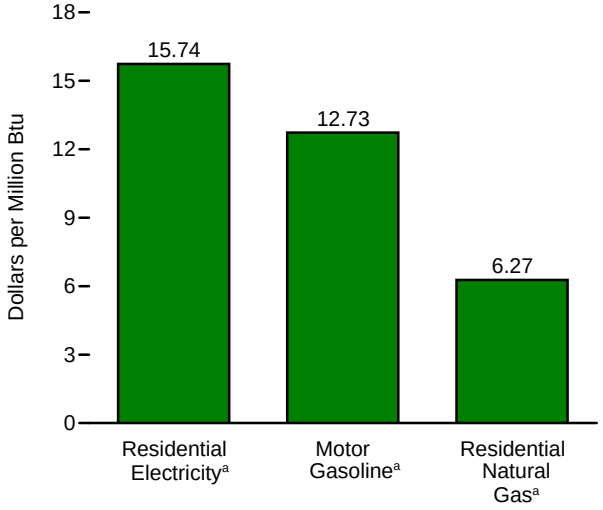
Sources: See end of section.

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

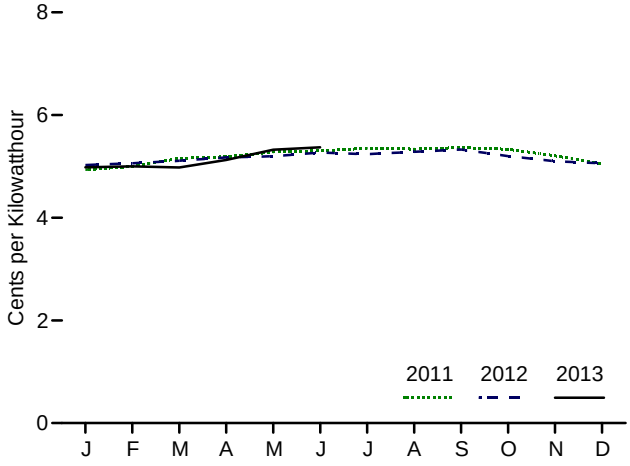
Costs, 1960–2012



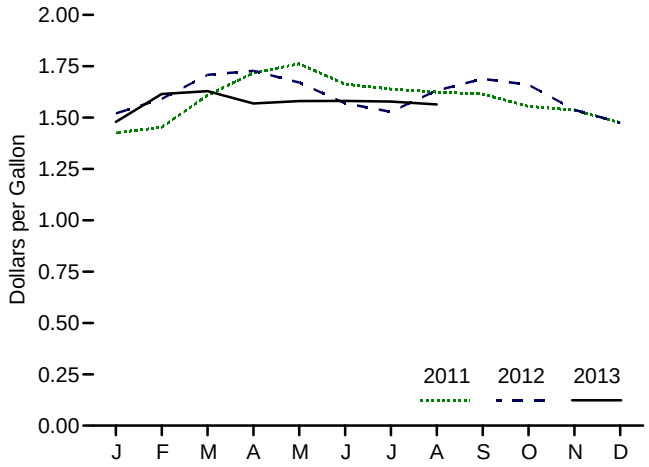
Costs, June 2013



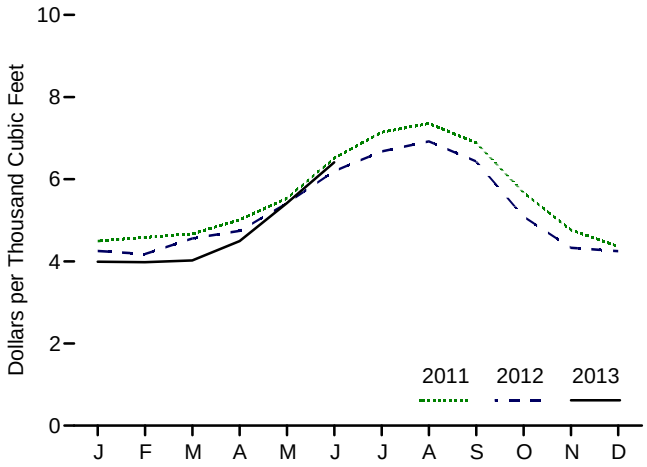
Residential Electricity,[a] Monthly



Motor Gasoline,[a] Monthly



Residential Natural Gas,[a] Monthly



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

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

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

	Consumer Price Index, All Urban Consumers[a]	Motor Gasoline[b]		Residential Heating Oil[c]		Residential Natural Gas[b]		Residential Electricity[b]	
	Index 1982–1984=100	Dollars per Gallon	Dollars per Million Btu	Dollars per Gallon	Dollars per Million Btu	Dollars per Thousand Cubic Feet	Dollars per Million Btu	Cents per Kilowatthour	Dollars per Million Btu
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**	**6.37**	**0.569**	**4.10**	**3.98**	**3.87**	**5.51**	**16.15**
2000 Average	**172.2**	**0.908**	**7.32**	**0.761**	**5.49**	**4.51**	**4.39**	**4.79**	**14.02**
2001 Average	**177.1**	**0.864**	**6.97**	**0.706**	**5.09**	**5.44**	**5.28**	**4.84**	**14.20**
2002 Average	**179.9**	**0.801**	**6.46**	**0.628**	**4.52**	**4.39**	**4.28**	**4.69**	**13.75**
2003 Average	**184.0**	**0.890**	**7.18**	**0.736**	**5.31**	**5.23**	**5.09**	**4.74**	**13.89**
2004 Average	**188.9**	**1.018**	**8.20**	**0.819**	**5.91**	**5.69**	**5.55**	**4.74**	**13.89**
2005 Average	**195.3**	**1.197**	**9.64**	**1.051**	**7.58**	**6.50**	**6.33**	**4.84**	**14.18**
2006 Average	**201.6**	**1.307**	**10.52**	**1.173**	**8.46**	**6.81**	**6.63**	**5.16**	**15.12**
2007 Average	**207.342**	**1.374**	**11.06**	**1.250**	**9.01**	**6.31**	**6.14**	**5.14**	**15.05**
2008 Average	**215.303**	**1.541**	**12.40**	**1.495**	**10.78**	**6.45**	**6.28**	**5.23**	**15.33**
2009 Average	**214.537**	**1.119**	**9.01**	**1.112**	**8.02**	**5.66**	**5.52**	**5.37**	**15.72**
2010 Average	**218.056**	**1.301**	**10.47**	**1.283**	**9.25**	**5.22**	**5.11**	**5.29**	**15.51**
2011 January	220.223	1.425	11.47	1.476	10.64	4.50	4.40	4.94	14.47
February	221.309	1.453	11.69	1.540	11.11	4.58	4.48	5.00	14.65
March	223.467	1.608	12.95	NA	NA	4.67	4.57	5.16	15.11
April	224.906	1.718	13.83	NA	NA	5.01	4.90	5.19	15.21
May	225.964	1.762	14.18	NA	NA	5.53	5.41	5.28	15.47
June	225.722	1.663	13.38	NA	NA	6.51	6.37	5.30	15.54
July	225.922	1.639	13.19	NA	NA	7.14	6.99	5.35	15.68
August	226.545	1.624	13.07	NA	NA	7.36	7.20	5.34	15.64
September	226.889	1.615	13.00	NA	NA	6.89	6.74	5.36	15.72
October	226.421	1.555	12.52	NA	NA	5.68	5.55	5.34	15.64
November	226.230	1.536	12.36	NA	NA	4.77	4.66	5.21	15.26
December	225.672	1.475	11.87	NA	NA	4.36	4.27	5.05	14.81
Average	**224.939**	**1.590**	**12.80**	**NA**	**NA**	**4.90**	**4.80**	**5.21**	**15.27**
2012 January	226.665	1.521	12.24	NA	NA	4.25	4.16	5.03	14.73
February	227.663	1.591	12.80	NA	NA	4.18	4.09	5.06	14.83
March	229.392	1.708	13.75	NA	NA	4.56	4.46	5.11	14.97
April	230.085	1.728	13.91	NA	NA	4.74	4.64	5.18	15.17
May	229.815	1.670	13.44	NA	NA	5.41	5.30	5.20	15.23
June	229.478	1.570	12.63	NA	NA	6.20	6.06	5.27	15.44
July	229.104	1.529	12.30	NA	NA	6.67	6.53	5.24	15.35
August	230.379	1.632	13.13	NA	NA	6.92	6.77	5.28	15.48
September	231.407	1.689	13.59	NA	NA	6.44	6.30	5.33	15.62
October	231.317	1.660	13.36	NA	NA	5.09	4.98	5.20	15.24
November	230.221	1.539	12.38	NA	NA	4.33	4.24	5.10	14.95
December	229.601	1.475	11.87	NA	NA	4.25	4.16	5.06	14.83
Average	**229.594**	**1.609**	**12.95**	**NA**	**NA**	**4.65**	**4.55**	**5.17**	**15.17**
2013 January	230.280	1.480	11.91	NA	NA	3.99	3.90	4.98	14.60
February	232.166	1.614	12.99	NA	NA	3.98	3.89	5.00	14.66
March	232.773	1.629	13.11	NA	NA	4.02	3.93	4.98	14.59
April	232.531	1.568	12.62	NA	NA	4.49	4.40	5.13	15.02
May	232.945	1.581	12.72	NA	NA	5.42	5.30	5.32	15.60
June	233.504	1.582	12.73	NA	NA	R 6.41	R 6.27	R 5.37	R 15.74
July	233.596	1.578	12.70	NA	NA	NA	NA	NA	NA
August	233.877	1.564	12.59	NA	NA	NA	NA	NA	NA

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

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

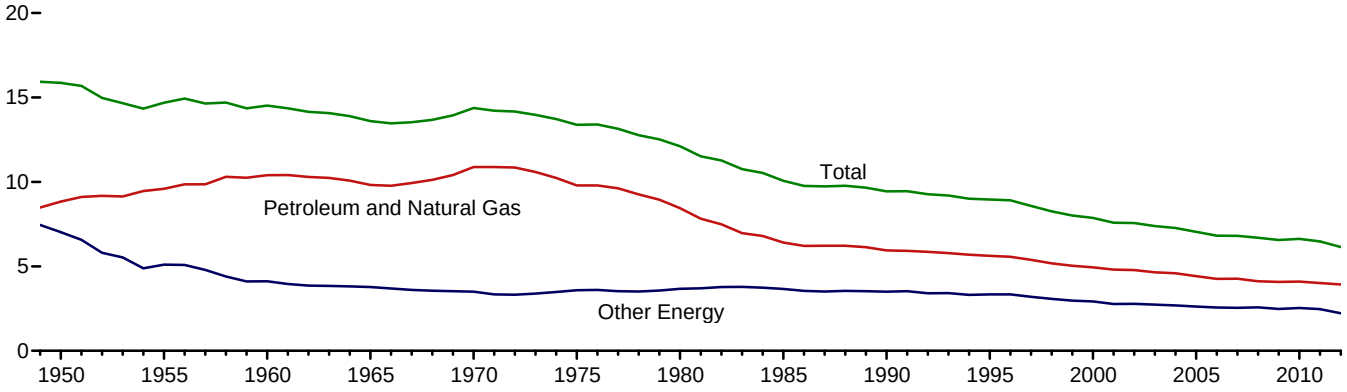
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973.

Sources: • **Fuel Prices:** Tables 9.4 (All 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.

Selected years of data from 1960 through 1972 have been added to this table. For all years of data from 1973 through 2013, see the "Web Page" cited above.

Figure 1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product, 1949–2012

(Thousand Btu per Chained (2009) Dollar)



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

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

	Energy Consumption			Gross Domestic Product (GDP)	Energy Consumption per Real Dollar of GDP		
	Petroleum and Natural Gas	Other Energy[a]	Total		Petroleum and Natural Gas	Other Energy[a]	Total
	Quadrillion Btu			Billion Chained (2009) Dollars	Thousand Btu per Chained (2009) Dollar		
1950	19.284	15.332	34.616	2,181.9	8.84	7.03	15.86
1955	26.253	13.955	40.208	2,736.4	9.59	5.10	14.69
1960	32.305	12.782	45.086	3,105.8	10.40	4.12	14.52
1965	39.014	15.001	54.015	3,972.9	9.82	3.78	13.60
1970	51.315	16.523	67.838	4,717.7	10.88	3.50	14.38
1975	52.680	19.284	71.965	5,379.5	9.79	3.58	13.38
1980	54.440	23.627	78.067	6,443.4	8.45	3.67	12.12
1985	48.628	27.764	76.392	7,585.7	6.41	3.66	10.07
1990	53.155	31.330	84.485	8,945.4	5.94	3.50	9.44
1995	57.110	33.920	91.029	10,163.7	5.62	3.34	8.96
2000	62.086	36.729	98.814	12,565.2	4.94	2.92	7.86
2001	60.958	35.210	96.168	12,684.4	4.81	2.78	7.58
2002	61.734	35.911	97.645	12,909.7	4.78	2.78	7.56
2003	61.642	36.301	97.943	13,270.0	4.65	2.74	7.38
2004	63.215	36.945	100.160	13,774.0	4.59	2.68	7.27
2005	62.953	37.328	100.282	14,235.6	4.42	2.62	7.04
2006	62.194	37.435	99.629	14,615.2	4.26	2.56	6.82
2007	63.437	37.878	101.315	14,876.8	4.26	2.55	6.81
2008	61.123	38.169	99.292	14,833.6	4.12	2.57	6.69
2009	58.819	35.779	94.598	14,417.9	4.08	2.48	6.56
2010	60.584	37.389	97.974	14,779.4	4.10	2.53	6.63
2011	60.325	37.144	97.469	15,052.4	4.01	2.47	6.48
2012	60.688	34.412	95.100	15,470.7	3.92	2.22	6.15

[a] Coal, coal coke net imports, nuclear electric power, renewable energy, and electricity net imports.

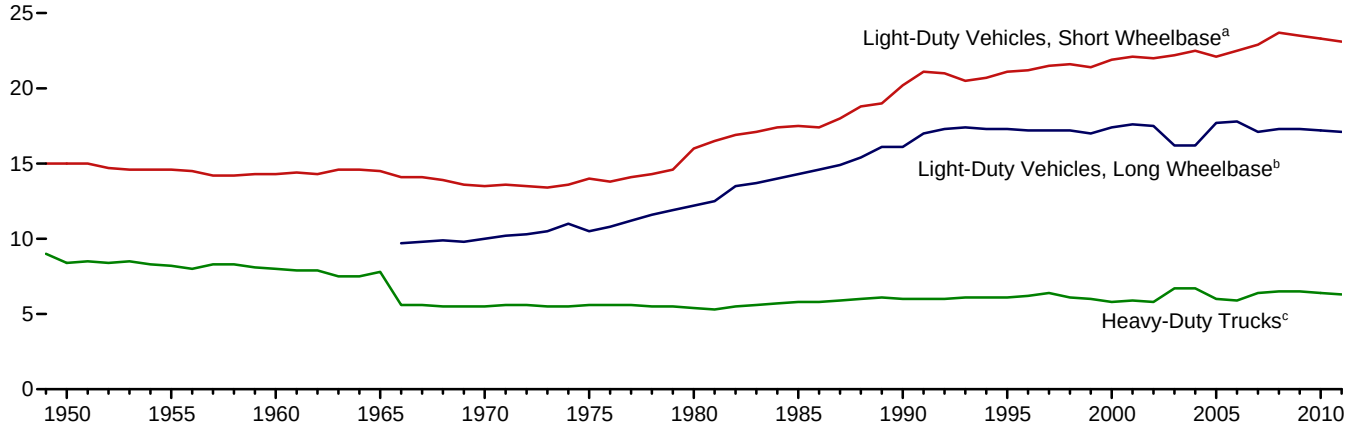
Notes: • See "Primary Energy Consumption" and "Real Dollars" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **Energy Consumption:** Table 1.3. • **Gross Domestic Product:** U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts (August 29, 2013), Table 1.1.6.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1973 through 2013, see the "Web Page" cited above.

Figure 1.8 Motor Vehicle Fuel Economy, 1949–2011
(Miles per Gallon)



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
1985	9,419	538	17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1990	10,504	520	20.2	11,902	738	16.1	23,603	3,953	6.0	11,107	677	16.4
1995	11,203	530	21.1	12,018	694	17.3	26,514	4,315	6.1	11,793	700	16.8
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[P]	10,614	460	23.1	14,596	855	17.1	26,016	4,126	6.3	11,640	666	17.5

[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 1965–2006, 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#consumption for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#summary for all available annual data beginning in 1973.

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.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Table 1.9 Heating Degree-Days by Census Division

Census Divisions	August					Cumulative July through August				
				Percent Change					Percent Change	
	Normal[a]	2012	2013	Normal to 2013	2012 to 2013	Normal[a]	2012	2013	Normal to 2013	2012 to 2013
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	26	9	21	NM	NM	37	13	27	NM	NM
Middle Atlantic										
New Jersey, New York, Pennsylvania	16	3	11	NM	NM	22	4	16	NM	NM
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	26	25	29	NM	NM	35	25	60	NM	NM
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	29	25	21	NM	NM	44	25	42	NM	NM
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	1	0	2	NM	NM	1	0	2	NM	NM
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	1	1	2	NM	NM	1	1	3	NM	NM
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	0	0	0	NM	NM	0	0	0	NM	NM
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	30	4	2	NM	NM	49	4	2	NM	NM
Pacific[b]										
California, Oregon, Washington	22	7	1	NM	NM	46	18	4	NM	NM
U.S. Average[b]	**15**	**8**	**10**	**NM**	**NM**	**24**	**10**	**18**	**NM**	**NM**

[a] "Normal" is based on calculations of data from 1971 through 2000.

[b] Excludes Alaska and Hawaii.

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

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

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

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

Table 1.10 Cooling Degree-Days by Census Division

Census Divisions	August					Cumulative January through August				
				Percent Change					Percent Change	
	Normal[a]	2012	2013	Normal to 2013	2012 to 2013	Normal[a]	2012	2013	Normal to 2013	2012 to 2013
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	146	202	120	-18	-41	395	561	561	42	0
Middle Atlantic										
New Jersey, New York, Pennsylvania	205	253	178	-13	-30	592	806	727	23	-10
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	197	200	180	-9	-10	641	914	640	(s)	-30
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	255	259	265	4	2	828	1,114	810	-2	-27
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	393	409	387	-2	-5	1,497	1,723	1,549	3	-10
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	376	374	365	-3	-2	1,276	1,524	1,250	-2	-18
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	527	575	566	7	-2	1,929	2,310	2,007	4	-13
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	302	374	370	23	-1	1,017	1,232	1,251	23	2
Pacific[b]										
California, Oregon, Washington	193	304	242	25	-20	538	624	694	29	11
U.S. Average[b]	**290**	**330**	**297**	**2**	**-10**	**986**	**1,214**	**1,067**	**8**	**-12**

[a] "Normal" is based on calculations of data from 1971 through 2000.
[b] Excludes Alaska and Hawaii.
(s)=Less than 0.5 percent and greater than -0.5 percent.

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

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

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

Note. Merchandise Trade Value. Imports data presented are based on the customs values. Those values do not include insurance and freight and are consequently lower than the cost, insurance, and freight (CIF) values, which are also reported by the Bureau of the Census. All exports data, and imports data 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 1.5 Sources

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

Petroleum Exports
1974–1987: "U.S. Exports," FT-410, December issues.
1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.
1990–1992: "U.S. Merchandise Trade," Final Report.
1993–2009: "U.S. International Trade in Goods and Services," Annual Revisions.
2010–2012: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.
2013: "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.
2010–2012: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.
2013: "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.
2010–2012: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.
2013: "U.S. International Trade in Goods and Services," FT-900, monthly.

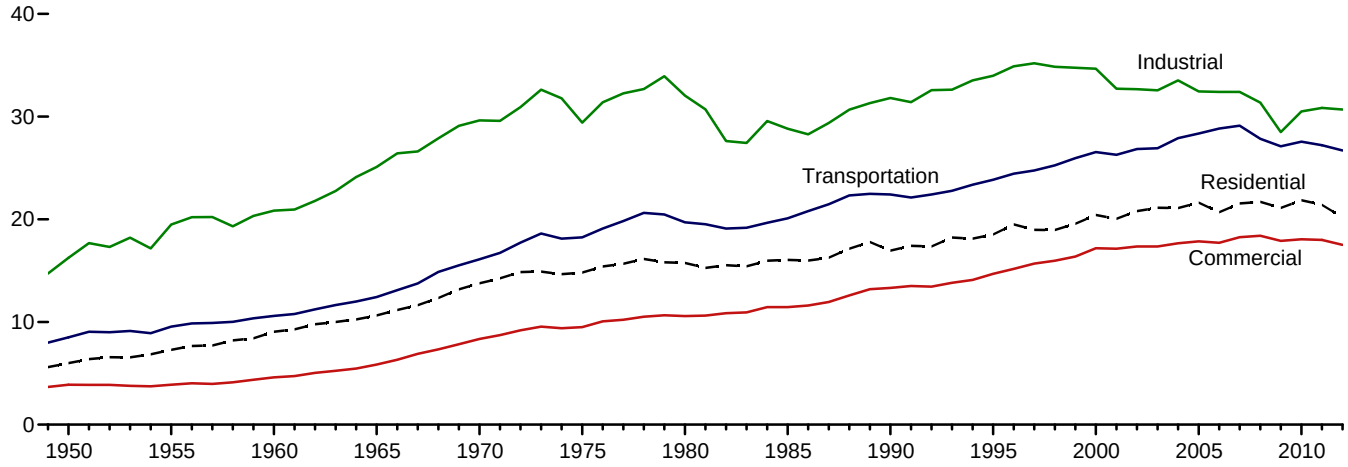
Petroleum, Energy, and Non-Energy Balances
Calculated by the U.S. Energy Information Administration.

Total Merchandise
1974–1987: U.S. merchandise trade press releases and database printouts for adjustments.
1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.
1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990.
1990: "U.S. Merchandise Trade, 1990 Final Report," May 10, 1991, and "U.S. Merchandise Trade, December 1992," February 18, 1993, page 3.
1991: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.
1992–2009: "U.S. International Trade in Goods and Services," Annual Revisions.
2010–2012: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.
2013: "U.S. International Trade in Goods and Services," FT-900, monthly.

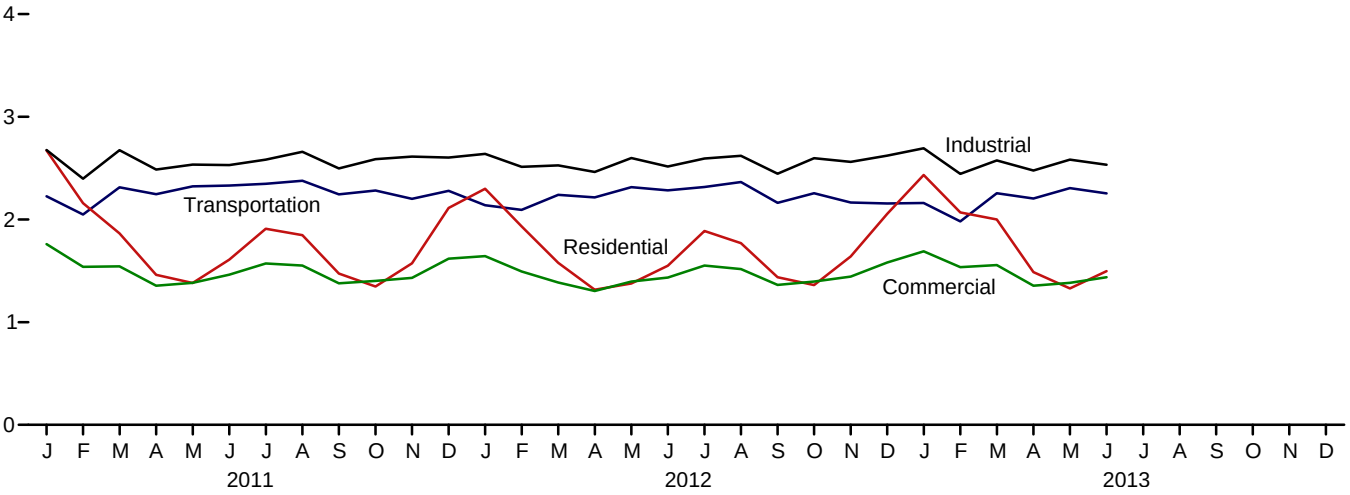
2. Energy Consumption by Sector

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

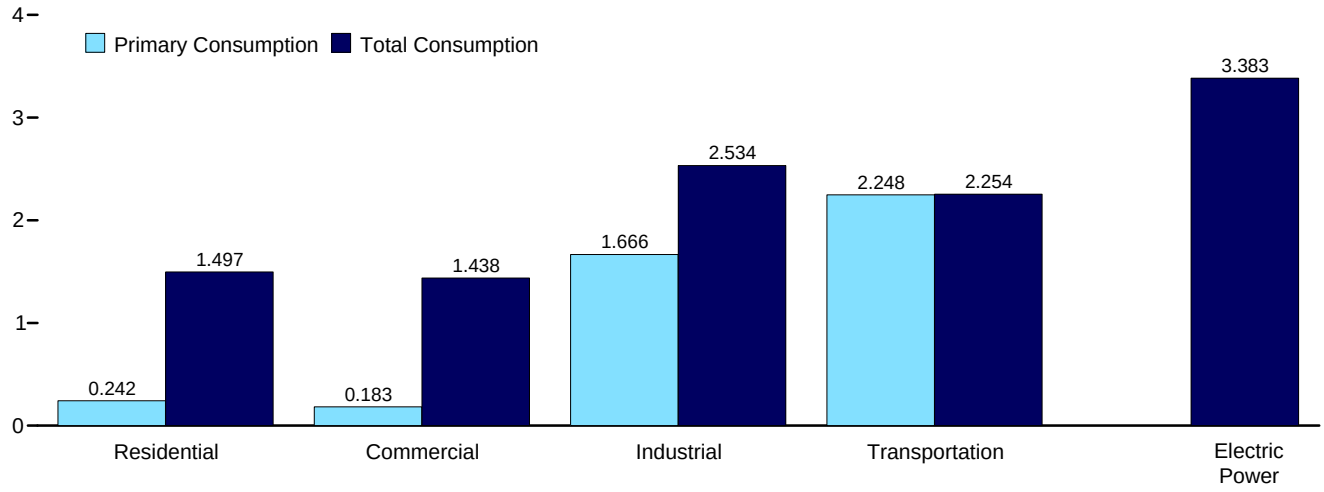
Total Consumption by End-Use Sector, 1949–2012



Total Consumption by End-Use Sector, Monthly



By Sector, June 2013



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**	**18,519**	**4,101**	**14,690**	**22,719**	**33,971**	**23,791**	**23,846**	**33,479**	**3**	**91,029**
2000 Total	**7,159**	**20,425**	**4,278**	**17,175**	**22,824**	**34,664**	**26,489**	**26,548**	**38,062**	**2**	**98,814**
2001 Total	**6,868**	**20,042**	**4,084**	**17,137**	**21,794**	**32,720**	**26,213**	**26,275**	**37,215**	**-6**	**96,168**
2002 Total	**6,912**	**20,791**	**4,132**	**17,345**	**21,799**	**32,662**	**26,781**	**26,842**	**38,016**	**5**	**97,645**
2003 Total	**7,238**	**21,125**	**4,298**	**17,346**	**21,536**	**32,555**	**26,845**	**26,919**	**38,028**	**-1**	**97,943**
2004 Total	**6,993**	**21,092**	**4,232**	**17,659**	**22,412**	**33,519**	**27,817**	**27,895**	**38,712**	**-6**	**100,160**
2005 Total	**6,909**	**21,626**	**4,051**	**17,857**	**21,411**	**32,446**	**28,272**	**28,353**	**39,638**	**(s)**	**100,282**
2006 Total	**6,168**	**20,688**	**3,747**	**17,711**	**21,536**	**32,401**	**28,751**	**28,830**	**39,428**	**(s)**	**99,629**
2007 Total	**6,608**	**21,541**	**3,922**	**18,255**	**21,379**	**32,403**	**29,029**	**29,117**	**40,377**	**-1**	**101,315**
2008 Total	**6,916**	**21,695**	**4,094**	**18,402**	**20,555**	**31,364**	**27,748**	**27,831**	**39,978**	**(s)**	**99,292**
2009 Total	**6,666**	**21,111**	**4,051**	**17,889**	**18,779**	**28,491**	**27,025**	**27,108**	**38,077**	**(s)**	**94,598**
2010 Total	**6,595**	**21,853**	**4,011**	**18,050**	**20,254**	**30,502**	**27,479**	**27,561**	**39,627**	**8**	**97,974**
2011 January	1,162	2,672	633	1,760	1,844	2,677	2,218	2,225	3,477	3	9,337
February	943	2,159	529	1,539	1,625	2,397	2,042	2,048	3,006	(s)	8,143
March	761	1,864	447	1,543	1,811	2,675	2,306	2,313	3,069	-2	8,393
April	475	1,461	297	1,354	1,640	2,486	2,240	2,247	2,895	-1	7,546
May	326	1,381	220	1,383	1,648	2,535	2,316	2,323	3,111	-1	7,620
June	259	1,609	196	1,463	1,630	2,530	2,323	2,330	3,523	2	7,934
July	236	1,909	187	1,571	1,640	2,583	2,340	2,347	4,008	6	8,417
August	245	1,847	203	1,551	1,733	2,660	2,370	2,377	3,883	5	8,439
September	257	1,473	210	1,379	1,655	2,498	2,238	2,245	3,234	(s)	7,594
October	375	1,348	284	1,402	1,721	2,587	2,276	2,282	2,963	-2	7,618
November	586	1,573	366	1,431	1,755	2,612	2,195	2,201	2,916	-2	7,816
December	874	2,113	501	1,618	1,752	2,603	2,273	2,280	3,215	-1	8,612
Total	**6,498**	**21,410**	**4,073**	**17,991**	**20,454**	**30,843**	**27,137**	**27,218**	**39,301**	**7**	**97,469**
2012 January	991	2,299	553	1,643	1,822	2,639	2,132	2,139	3,222	(s)	8,720
February	833	1,933	478	1,494	1,719	2,513	2,087	2,093	2,916	-2	8,031
March	561	1,577	341	1,386	1,697	2,527	2,234	2,241	2,897	-5	7,725
April	412	1,315	272	1,303	1,638	2,462	2,209	2,215	2,765	-5	7,290
May	297	1,377	212	1,395	1,693	2,598	2,308	2,314	3,174	-2	7,682
June	253	1,550	193	1,434	1,638	2,515	2,277	2,284	3,422	1	7,784
July	240	1,887	187	1,551	1,669	2,593	2,310	2,316	3,942	5	8,353
August	248	1,769	205	1,517	1,720	2,621	2,358	2,365	3,741	3	8,275
September	249	1,437	202	1,363	1,632	2,445	2,155	2,161	3,168	1	7,408
October	378	1,361	275	1,395	1,756	2,596	2,249	2,255	2,949	-1	7,607
November	631	1,640	379	1,444	1,742	2,561	2,159	2,166	2,899	(s)	7,811
December	838	2,055	473	1,580	1,791	2,622	2,149	2,156	3,162	(s)	8,414
Total	**5,932**	**20,197**	**3,770**	**17,508**	**20,518**	**30,696**	**26,627**	**26,705**	**38,258**	**-5**	**95,100**
2013 January	1,068	2,434	572	1,690	1,880	2,694	2,154	2,161	3,304	(s)	8,979
February	925	2,068	516	1,536	1,691	2,444	1,975	1,981	2,922	-1	8,028
March	836	2,000	474	1,556	1,762	2,574	2,249	2,256	3,063	-1	8,385
April	509	1,488	314	1,355	1,680	2,477	2,197	2,204	2,825	-2	7,522
May	[R] 318	[R] 1,328	[R] 222	[R] 1,384	[R] 1,706	[R] 2,583	[R] 2,299	[R] 2,306	[R] 3,054	-1	[R] 7,600
June	242	1,497	183	1,438	1,666	2,534	2,248	2,254	3,383	2	7,725
6-Month Total	**3,898**	**10,814**	**2,282**	**8,958**	**10,385**	**15,306**	**13,122**	**13,162**	**18,552**	**-1**	**48,238**
2012 6-Month Total	**3,347**	**10,052**	**2,049**	**8,654**	**10,207**	**15,255**	**13,246**	**13,285**	**18,396**	**-14**	**47,232**
2011 6-Month Total	**3,926**	**11,145**	**2,323**	**9,041**	**10,198**	**15,299**	**13,446**	**13,487**	**19,080**	**1**	**48,974**

[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.

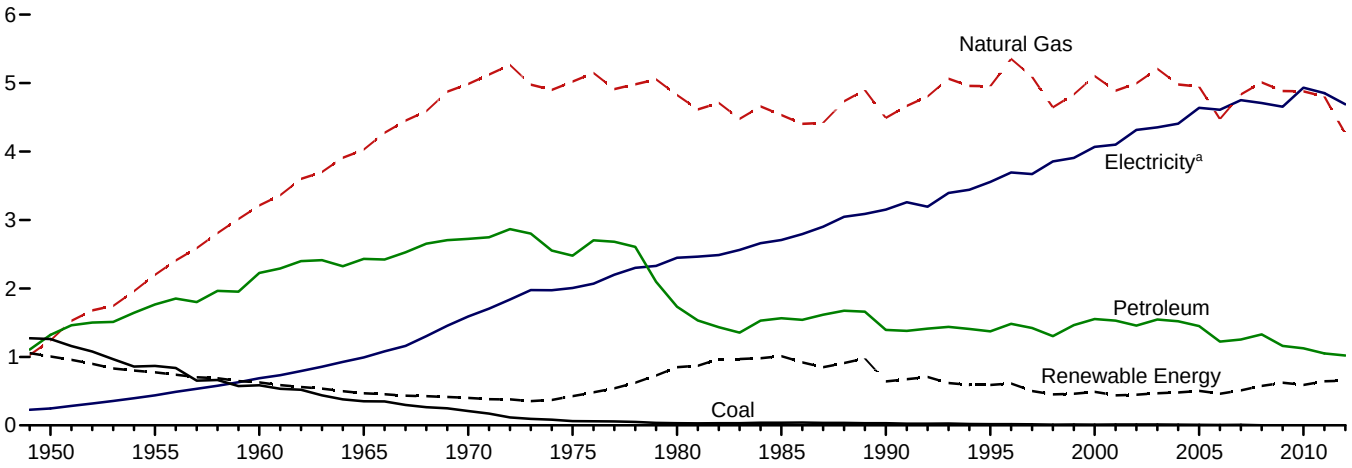
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#consumption for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available monthly and annual data beginning in 1973.

Sources: Tables 1.3 and 2.2–2.6.

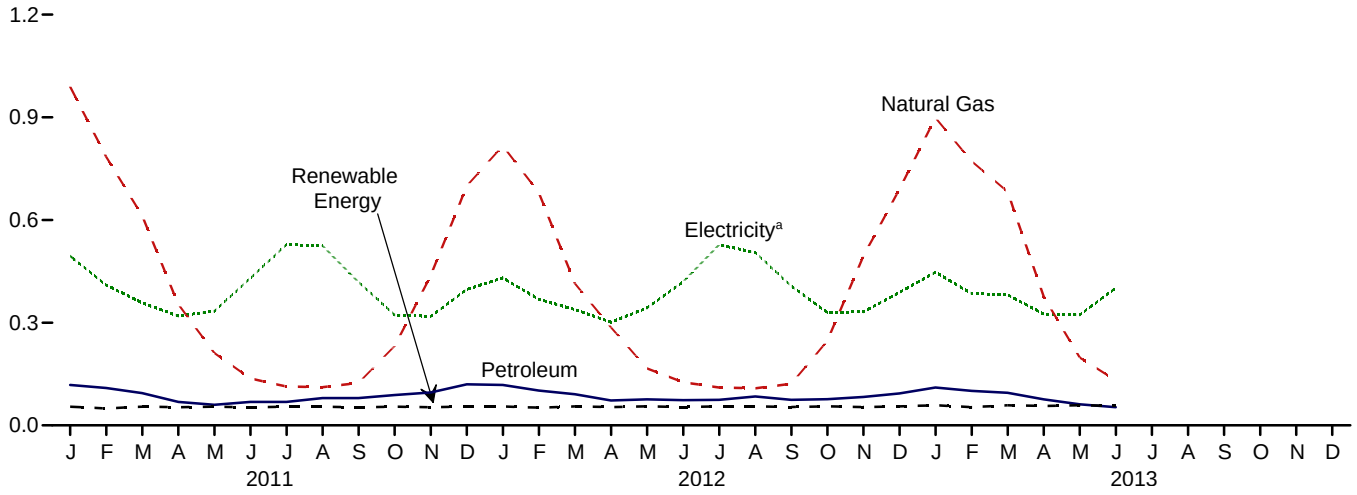
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

Figure 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

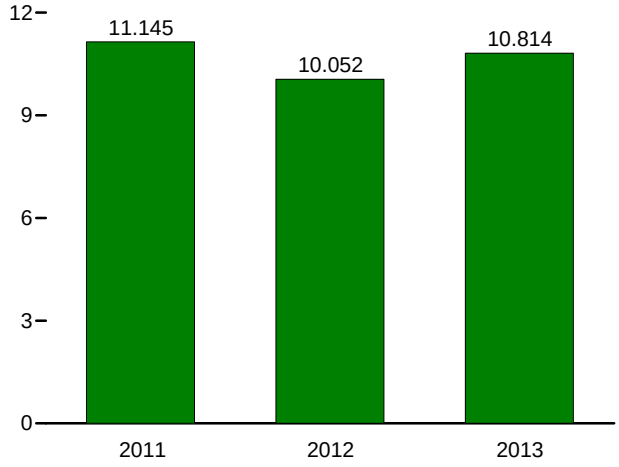
By Major Source, 1949–2012



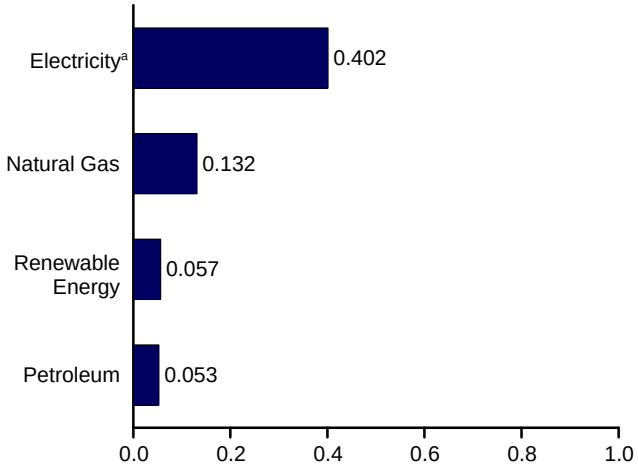
By Major Source, Monthly



Total, January–June



By Major Source, June 2013



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

Table 2.2 Residential Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]											
	Fossil Fuels				Renewable Energy[b]							
	Coal	Natural Gas[c]	Petro-leum	Total	Geo-thermal	Solar/ PV	Bio-mass	Total	Total Primary	Electricity Retail Sales[d]	Electrical System Energy Losses[e]	Total
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**	**1,374**	**6,345**	**7**	**64**	**520**	**591**	**6,936**	**3,557**	**8,026**	**18,519**
2000 Total	**11**	**5,105**	**1,554**	**6,670**	**9**	**61**	**420**	**489**	**7,159**	**4,069**	**9,197**	**20,425**
2001 Total	**12**	**4,889**	**1,529**	**6,430**	**9**	**59**	**370**	**438**	**6,868**	**4,100**	**9,074**	**20,042**
2002 Total	**12**	**4,995**	**1,457**	**6,464**	**10**	**57**	**380**	**448**	**6,912**	**4,317**	**9,562**	**20,791**
2003 Total	**12**	**5,209**	**1,547**	**6,768**	**13**	**57**	**400**	**470**	**7,238**	**4,353**	**9,534**	**21,125**
2004 Total	**11**	**4,981**	**1,520**	**6,513**	**14**	**57**	**410**	**481**	**6,993**	**4,408**	**9,690**	**21,092**
2005 Total	**8**	**4,946**	**1,451**	**6,406**	**16**	**58**	**430**	**504**	**6,909**	**4,638**	**10,079**	**21,626**
2006 Total	**6**	**4,476**	**1,224**	**5,706**	**18**	**63**	**380**	**462**	**6,168**	**4,611**	**9,909**	**20,688**
2007 Total	**8**	**4,835**	**1,254**	**6,097**	**22**	**70**	**420**	**512**	**6,608**	**4,750**	**10,182**	**21,541**
2008 Total	**NA**	**5,010**	**1,330**	**6,340**	**26**	**80**	**470**	**577**	**6,916**	**4,708**	**10,071**	**21,695**
2009 Total	**NA**	**4,883**	**1,161**	**6,044**	**33**	**89**	**500**	**622**	**6,666**	**4,656**	**9,789**	**21,111**
2010 Total	**NA**	**4,878**	**1,126**	**6,004**	**37**	**114**	**440**	**591**	**6,595**	**4,933**	**10,326**	**21,853**
2011 January	NA	989	118	1,107	3	13	38	55	1,162	495	1,015	2,672
February	NA	785	109	894	3	12	35	49	943	410	806	2,159
March	NA	613	94	707	3	13	38	55	761	358	745	1,864
April	NA	354	69	422	3	13	37	53	475	320	666	1,461
May	NA	211	60	271	3	13	38	55	326	333	722	1,381
June	NA	137	69	206	3	13	37	53	259	430	920	1,609
July	NA	113	68	182	3	13	38	55	236	528	1,145	1,909
August	NA	111	80	191	3	13	38	55	245	525	1,077	1,847
September	NA	124	80	204	3	13	37	53	257	419	798	1,473
October	NA	232	89	320	3	13	38	55	375	323	650	1,348
November	NA	437	96	533	3	13	37	53	586	318	670	1,573
December	NA	699	120	819	3	13	38	55	874	397	842	2,113
Total	**NA**	**4,804**	**1,051**	**5,855**	**40**	**153**	**450**	**643**	**6,498**	**4,855**	**10,057**	**21,410**
2012 January	NA	817	118	935	3	16	36	55	991	431	878	2,299
February	NA	680	102	781	3	15	33	52	833	368	731	1,933
March	NA	414	91	506	3	16	36	55	561	338	678	1,577
April	NA	286	73	359	3	16	34	53	412	301	602	1,315
May	NA	166	76	242	3	16	36	55	297	343	737	1,377
June	NA	126	74	200	3	16	34	53	253	420	877	1,550
July	NA	111	75	185	3	16	36	55	240	528	1,119	1,887
August	NA	108	85	193	3	16	36	55	248	505	1,016	1,769
September	NA	121	75	196	3	16	34	53	249	407	781	1,437
October	NA	247	76	323	3	16	36	55	378	330	653	1,361
November	NA	495	83	578	3	16	34	53	631	332	678	1,640
December	NA	690	93	783	3	16	36	55	838	388	829	2,055
Total	**NA**	**4,260**	**1,020**	**5,280**	**40**	**193**	**420**	**652**	**5,932**	**4,690**	**9,574**	**20,197**
2013 January	NA	898	111	1,009	3	20	36	59	1,068	448	918	2,434
February	NA	772	101	872	3	18	32	53	925	385	757	2,068
March	NA	683	95	778	3	20	36	59	836	382	782	2,000
April	NA	376	76	452	3	19	35	57	509	325	654	1,488
May	NA	R 198	R 61	R 259	3	20	36	59	R 318	323	R 687	R 1,328
June	NA	132	53	185	3	19	35	57	242	402	853	1,497
6-Month Total	**NA**	**3,058**	**497**	**3,555**	**20**	**115**	**208**	**343**	**3,898**	**2,264**	**4,652**	**10,814**
2012 6-Month Total	**NA**	**2,489**	**534**	**3,023**	**20**	**96**	**209**	**324**	**3,347**	**2,201**	**4,504**	**10,052**
2011 6-Month Total	**NA**	**3,089**	**518**	**3,607**	**20**	**76**	**223**	**319**	**3,926**	**2,346**	**4,874**	**11,145**

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

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

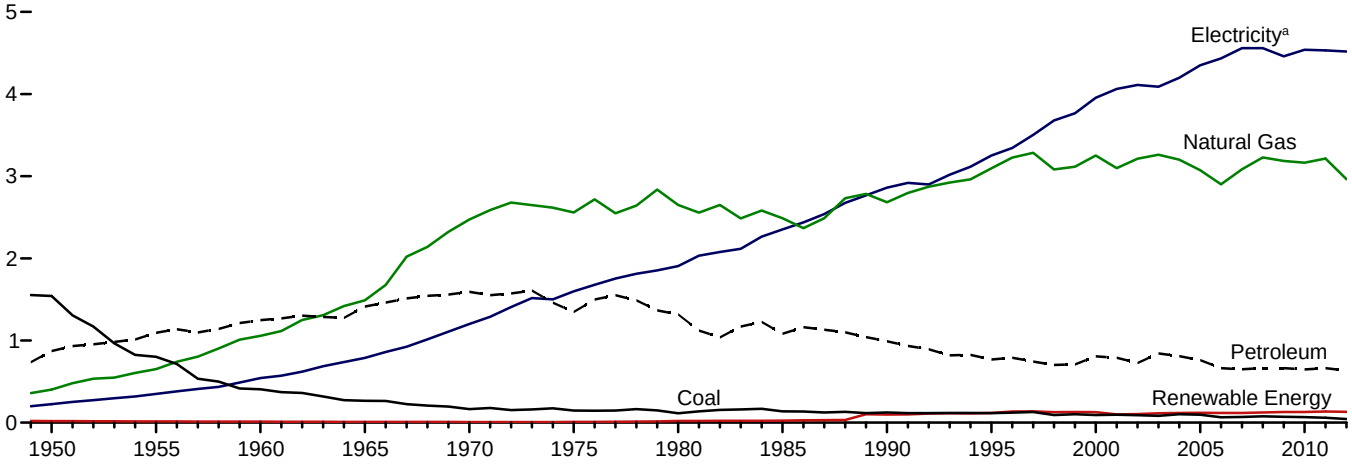
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#consumption for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available monthly and annual data beginning in 1973.

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

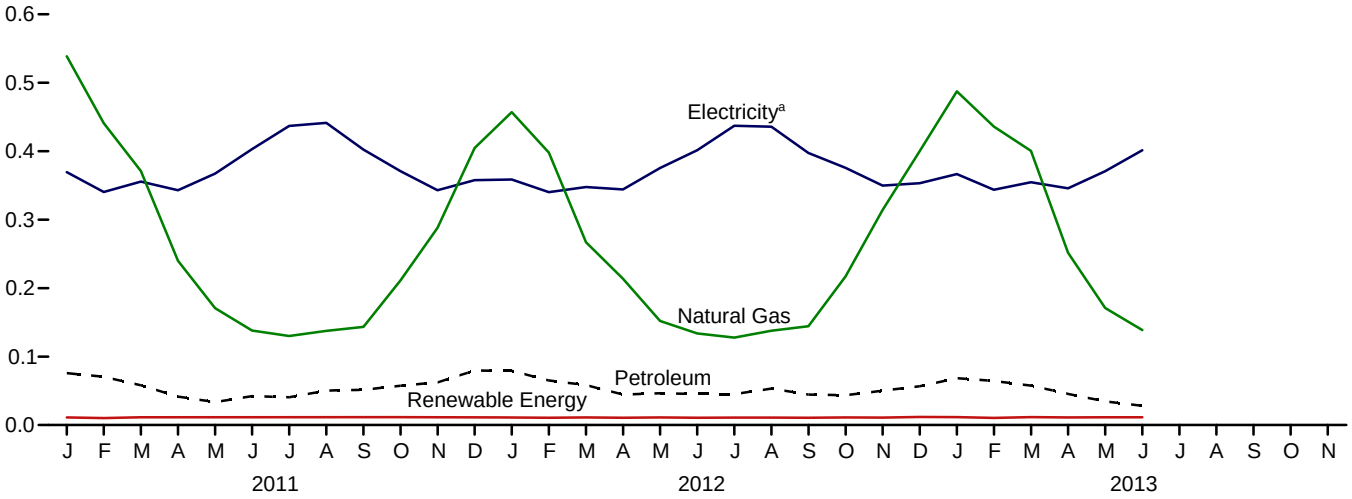
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

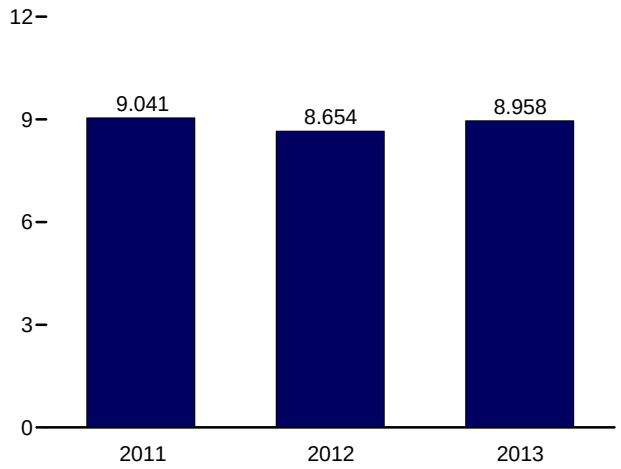
By Major Source, 1949–2012



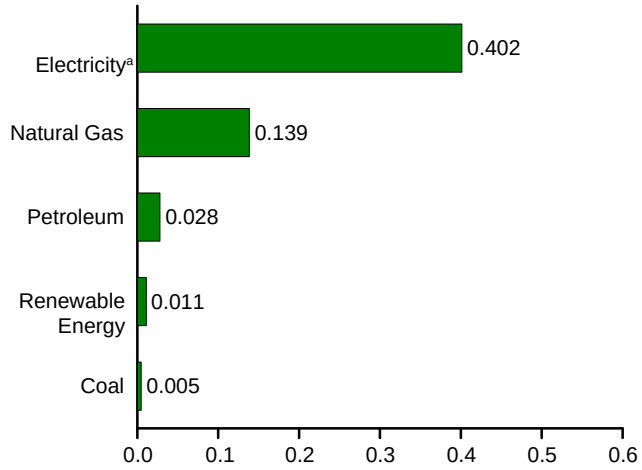
By Major Source, Monthly



Total, January–June



By Major Source, June 2013



[a] Electricity retail sales.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.3.

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Table 2.3 Commercial Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]													
	Fossil Fuels				Renewable Energy[b]									
	Coal	Natural Gas[c]	Petroleum[d]	Total	Hydroelectric Power[e]	Geothermal	Solar/PV	Wind	Biomass	Total	Total Primary	Electricity Retail Sales[f]	Electrical System Energy Losses[g]	Total
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**	**4,101**	**3,252**	**7,338**	**14,690**
2000 Total	**92**	**3,252**	**807**	**4,150**	**1**	**8**	**–**	**–**	**119**	**128**	**4,278**	**3,956**	**8,942**	**17,175**
2001 Total	**97**	**3,097**	**790**	**3,984**	**1**	**8**	**–**	**–**	**92**	**101**	**4,084**	**4,062**	**8,990**	**17,137**
2002 Total	**90**	**3,212**	**726**	**4,028**	**(s)**	**9**	**–**	**–**	**95**	**104**	**4,132**	**4,110**	**9,104**	**17,345**
2003 Total	**82**	**3,261**	**842**	**4,185**	**1**	**11**	**–**	**–**	**101**	**113**	**4,298**	**4,090**	**8,958**	**17,346**
2004 Total	**103**	**3,201**	**809**	**4,113**	**1**	**12**	**–**	**–**	**105**	**118**	**4,232**	**4,198**	**9,229**	**17,659**
2005 Total	**97**	**3,073**	**761**	**3,932**	**1**	**14**	**–**	**–**	**105**	**120**	**4,051**	**4,351**	**9,455**	**17,857**
2006 Total	**65**	**2,902**	**663**	**3,629**	**1**	**14**	**–**	**–**	**103**	**118**	**3,747**	**4,435**	**9,529**	**17,711**
2007 Total	**70**	**3,085**	**649**	**3,805**	**1**	**14**	**–**	**–**	**103**	**118**	**3,922**	**4,560**	**9,773**	**18,255**
2008 Total	**77**	**3,228**	**664**	**3,969**	**1**	**15**	**(s)**	**–**	**109**	**125**	**4,094**	**4,558**	**9,749**	**18,402**
2009 Total	**71**	**3,187**	**664**	**3,922**	**1**	**17**	**(s)**	**(s)**	**112**	**129**	**4,051**	**4,460**	**9,378**	**17,889**
2010 Total	**67**	**3,165**	**649**	**3,880**	**1**	**19**	**(s)**	**(s)**	**111**	**130**	**4,011**	**4,539**	**9,501**	**18,050**
2011 January	8	539	76	622	(s)	2	(s)	(s)	9	11	633	369	757	1,760
February	7	441	70	518	(s)	2	(s)	(s)	9	10	529	340	670	1,539
March	7	371	58	436	(s)	2	(s)	(s)	10	11	447	356	740	1,543
April	4	240	42	286	(s)	2	(s)	(s)	9	11	297	343	714	1,354
May	4	171	33	209	(s)	2	(s)	(s)	10	12	220	367	795	1,383
June	5	138	42	185	(s)	2	(s)	(s)	10	11	196	403	863	1,463
July	4	130	41	175	(s)	2	(s)	(s)	10	12	187	437	948	1,571
August	4	138	50	191	(s)	2	(s)	(s)	10	12	203	441	906	1,551
September	3	143	52	198	(s)	2	(s)	(s)	9	11	210	402	767	1,379
October	4	212	57	273	(s)	2	(s)	(s)	10	11	284	371	747	1,402
November	4	288	62	355	(s)	2	(s)	(s)	10	11	366	343	722	1,431
December	5	405	80	489	(s)	2	(s)	(s)	10	12	501	358	759	1,618
Total	**59**	**3,214**	**663**	**3,937**	**(s)**	**20**	**1**	**(s)**	**115**	**136**	**4,073**	**4,531**	**9,387**	**17,991**
2012 January	5	457	79	542	(s)	2	(s)	(s)	9	11	553	359	731	1,643
February	5	398	65	468	(s)	2	(s)	(s)	9	11	478	340	675	1,494
March	4	267	58	330	(s)	2	(s)	(s)	9	11	341	348	697	1,386
April	3	214	45	261	(s)	2	(s)	(s)	9	11	272	344	687	1,303
May	3	152	46	201	(s)	2	(s)	(s)	9	11	212	376	807	1,395
June	3	134	46	182	(s)	2	(s)	(s)	9	11	193	401	839	1,434
July	3	128	45	176	(s)	2	(s)	(s)	9	11	187	437	927	1,551
August	3	138	53	194	(s)	2	(s)	(s)	9	11	205	436	877	1,517
September	3	144	44	192	(s)	2	(s)	(s)	9	11	202	397	763	1,363
October	3	217	43	264	(s)	2	(s)	(s)	9	11	275	376	744	1,395
November	4	314	50	368	(s)	2	(s)	(s)	9	11	379	350	715	1,444
December	4	400	57	461	(s)	2	(s)	(s)	10	12	473	353	754	1,580
Total	**43**	**2,963**	**632**	**3,639**	**(s)**	**20**	**1**	**1**	**109**	**131**	**3,770**	**4,517**	**9,221**	**17,508**
2013 January	5	487	68	561	(s)	2	(s)	(s)	10	12	572	366	751	1,690
February	5	436	64	505	(s)	2	(s)	(s)	9	10	516	344	676	1,536
March	5	400	58	463	(s)	2	(s)	(s)	10	12	474	355	727	1,556
April	6	252	45	303	(s)	2	(s)	(s)	9	11	314	346	695	1,355
May	6	R 171	R 34	R 211	(s)	2	(s)	(s)	9	11	R 222	371	R 790	R 1,384
June	5	139	28	172	(s)	2	(s)	(s)	9	11	183	402	853	1,438
6-Month Total	**31**	**1,885**	**299**	**2,215**	**(s)**	**10**	**1**	**(s)**	**56**	**67**	**2,282**	**2,183**	**4,493**	**8,958**
2012 6-Month Total	**23**	**1,622**	**339**	**1,984**	**(s)**	**10**	**1**	**(s)**	**54**	**65**	**2,049**	**2,168**	**4,437**	**8,654**
2011 6-Month Total	**35**	**1,899**	**321**	**2,256**	**(s)**	**10**	**(s)**	**(s)**	**56**	**67**	**2,323**	**2,179**	**4,540**	**9,041**

[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.

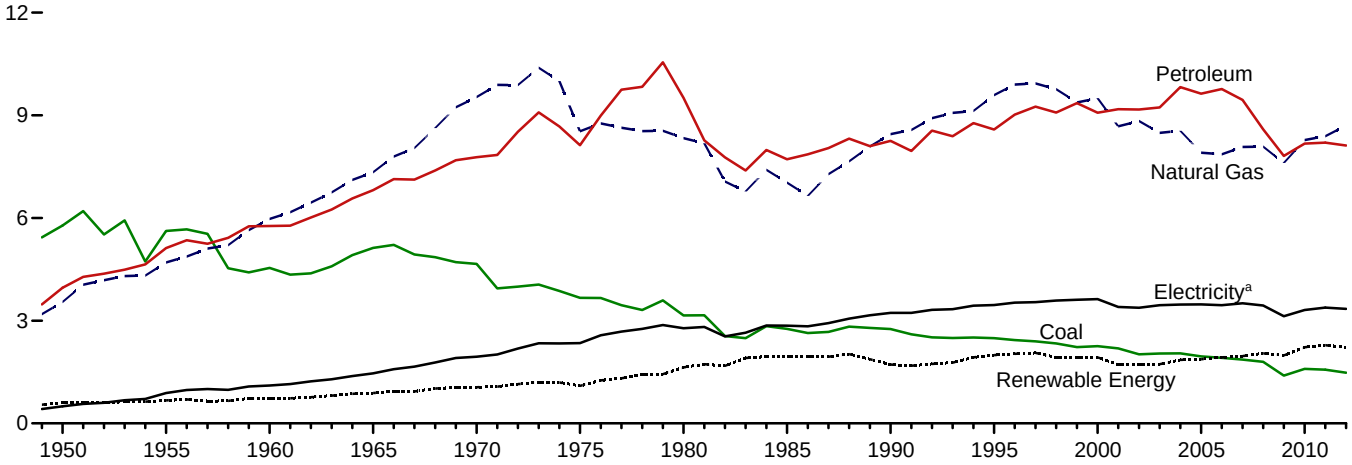
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#consumption for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available monthly and annual data beginning in 1973.

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

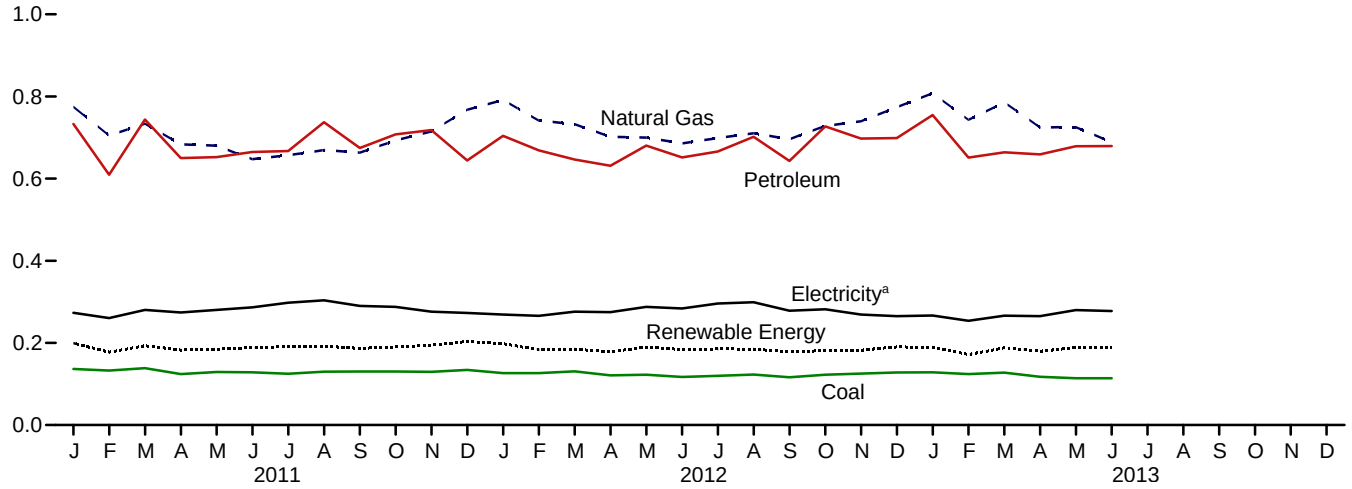
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

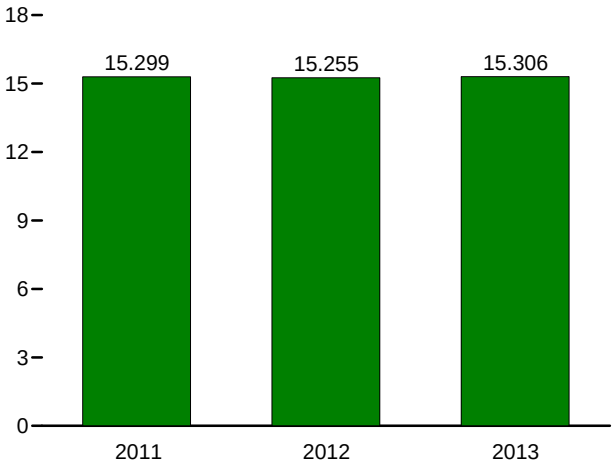
By Major Source, 1949–2012



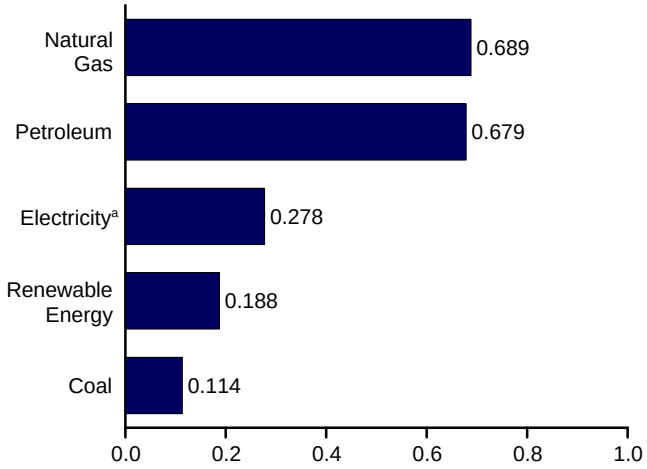
By Major Source, Monthly



Total, January–June



By Major Source, June 2013



[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**	**8,586**	**20,727**	**55**	**3**	**–**	**–**	**1,934**	**1,992**	**22,719**	**3,455**	**7,796**	**33,971**
2000 Total	**2,256**	**9,500**	**9,075**	**20,896**	**42**	**4**	**–**	**–**	**1,881**	**1,928**	**22,824**	**3,631**	**8,208**	**34,664**
2001 Total	**2,192**	**8,676**	**9,178**	**20,075**	**33**	**5**	**–**	**–**	**1,681**	**1,719**	**21,794**	**3,400**	**7,526**	**32,720**
2002 Total	**2,019**	**8,832**	**9,168**	**20,079**	**39**	**5**	**–**	**–**	**1,676**	**1,720**	**21,799**	**3,379**	**7,484**	**32,662**
2003 Total	**2,041**	**8,488**	**9,230**	**19,811**	**43**	**3**	**–**	**–**	**1,679**	**1,725**	**21,536**	**3,454**	**7,565**	**32,555**
2004 Total	**2,047**	**8,550**	**9,825**	**20,559**	**33**	**4**	**–**	**–**	**1,817**	**1,853**	**22,412**	**3,473**	**7,634**	**33,519**
2005 Total	**1,954**	**7,907**	**9,633**	**19,538**	**32**	**4**	**–**	**–**	**1,837**	**1,873**	**21,411**	**3,477**	**7,557**	**32,446**
2006 Total	**1,914**	**7,861**	**9,770**	**19,606**	**29**	**4**	**–**	**–**	**1,897**	**1,930**	**21,536**	**3,451**	**7,415**	**32,401**
2007 Total	**1,865**	**8,074**	**9,451**	**19,414**	**16**	**5**	**–**	**–**	**1,944**	**1,965**	**21,379**	**3,507**	**7,517**	**32,403**
2008 Total	**1,796**	**8,083**	**8,588**	**18,508**	**17**	**5**	**–**	**–**	**2,026**	**2,047**	**20,555**	**3,444**	**7,365**	**31,364**
2009 Total	**1,396**	**7,609**	**7,813**	**16,794**	**18**	**4**	**–**	**–**	**1,963**	**1,985**	**18,779**	**3,130**	**6,582**	**28,491**
2010 Total	**1,590**	**8,278**	**8,172**	**18,033**	**16**	**4**	**(s)**	**–**	**2,201**	**2,221**	**20,254**	**3,313**	**6,934**	**30,502**
2011 January	137	775	733	1,644	1	(s)	(s)	(s)	197	199	1,844	273	560	2,677
February	133	705	609	1,447	2	(s)	(s)	(s)	175	177	1,625	260	512	2,397
March	139	734	744	1,618	2	(s)	(s)	(s)	191	193	1,811	280	583	2,675
April	124	683	650	1,458	2	(s)	(s)	(s)	180	182	1,640	274	571	2,486
May	129	680	652	1,463	2	(s)	(s)	(s)	182	185	1,648	280	607	2,535
June	128	647	665	1,442	1	(s)	(s)	(s)	187	189	1,630	286	613	2,530
July	125	657	667	1,449	1	(s)	(s)	(s)	190	191	1,640	298	646	2,583
August	130	669	737	1,540	1	(s)	(s)	(s)	191	192	1,733	304	623	2,660
September	130	663	675	1,469	1	(s)	(s)	(s)	185	187	1,655	290	552	2,498
October	130	693	707	1,530	1	(s)	(s)	(s)	189	190	1,721	288	579	2,587
November	130	715	718	1,561	1	(s)	(s)	(s)	192	194	1,755	276	581	2,612
December	134	768	644	1,548	2	(s)	(s)	(s)	201	203	1,752	273	579	2,603
Total	**1,569**	**8,389**	**8,201**	**18,171**	**17**	**4**	**(s)**	**(s)**	**2,261**	**2,283**	**20,454**	**3,382**	**7,007**	**30,843**
2012 January	127	792	704	1,624	2	(s)	(s)	(s)	196	198	1,822	269	548	2,639
February	126	741	669	1,536	2	(s)	(s)	(s)	181	183	1,719	266	528	2,513
March	131	732	646	1,512	2	(s)	(s)	(s)	183	185	1,697	276	553	2,527
April	121	702	631	1,460	2	(s)	(s)	(s)	176	178	1,638	275	549	2,462
May	122	700	680	1,503	2	(s)	(s)	(s)	188	190	1,693	288	618	2,598
June	117	686	652	1,454	1	(s)	(s)	(s)	182	184	1,638	284	594	2,515
July	120	699	666	1,484	1	(s)	(s)	(s)	184	185	1,669	296	628	2,593
August	123	710	702	1,535	1	(s)	(s)	(s)	183	185	1,720	299	602	2,621
September	116	696	643	1,454	1	(s)	(s)	(s)	177	178	1,632	278	534	2,445
October	122	728	727	1,575	1	(s)	(s)	(s)	180	181	1,756	282	558	2,596
November	125	740	698	1,560	2	(s)	(s)	(s)	180	182	1,742	269	550	2,561
December	128	774	699	1,601	2	(s)	(s)	(s)	188	190	1,791	265	566	2,622
Total	**1,479**	**8,699**	**8,116**	**18,298**	**18**	**4**	**(s)**	**(s)**	**2,197**	**2,219**	**20,518**	**3,347**	**6,832**	**30,696**
2013 January	128	808	755	1,691	3	(s)	(s)	(s)	186	190	1,880	267	547	2,694
February	124	743	651	1,519	4	(s)	(s)	(s)	168	171	1,691	254	499	2,444
March	128	785	664	1,574	3	(s)	(s)	(s)	185	188	1,762	266	546	2,574
April	117	725	659	1,500	2	(s)	(s)	(s)	177	180	1,680	265	533	2,477
May	114	R 725	R 679	R 1,518	3	(s)	(s)	(s)	185	188	R 1,706	280	597	R 2,583
June	114	689	679	1,478	3	(s)	(s)	(s)	185	188	1,666	278	590	2,534
6-Month Total	**725**	**4,475**	**4,087**	**9,280**	**18**	**2**	**(s)**	**(s)**	**1,084**	**1,105**	**10,385**	**1,610**	**3,311**	**15,306**
2012 6-Month Total	**744**	**4,352**	**3,982**	**9,090**	**10**	**2**	**(s)**	**(s)**	**1,106**	**1,118**	**10,207**	**1,657**	**3,390**	**15,255**
2011 6-Month Total	**790**	**4,224**	**4,053**	**9,073**	**10**	**2**	**(s)**	**(s)**	**1,113**	**1,125**	**10,198**	**1,655**	**3,447**	**15,299**

[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.

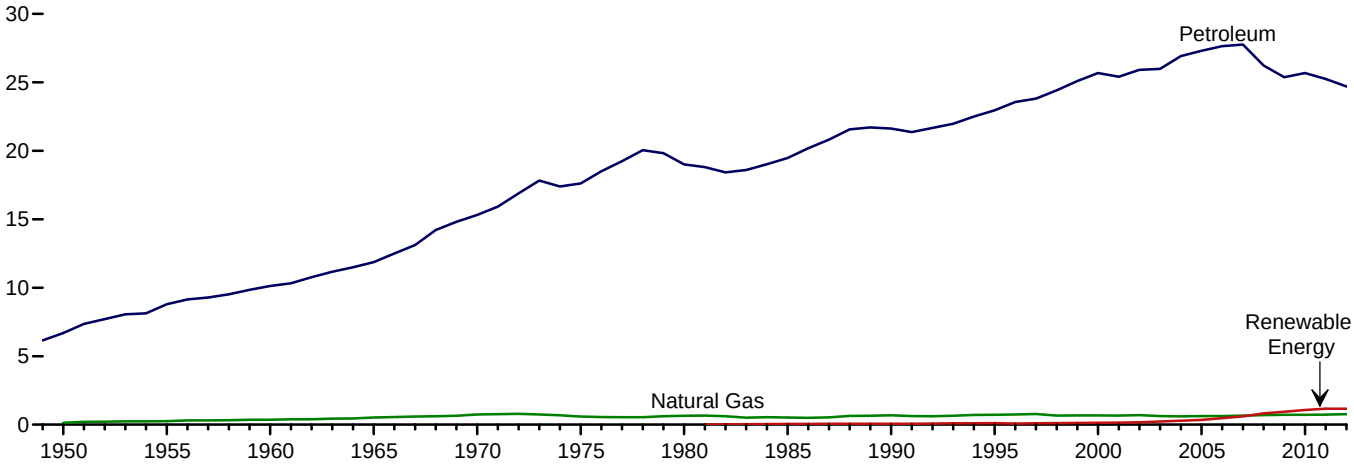
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#consumption for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available monthly and annual data beginning in 1973.

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

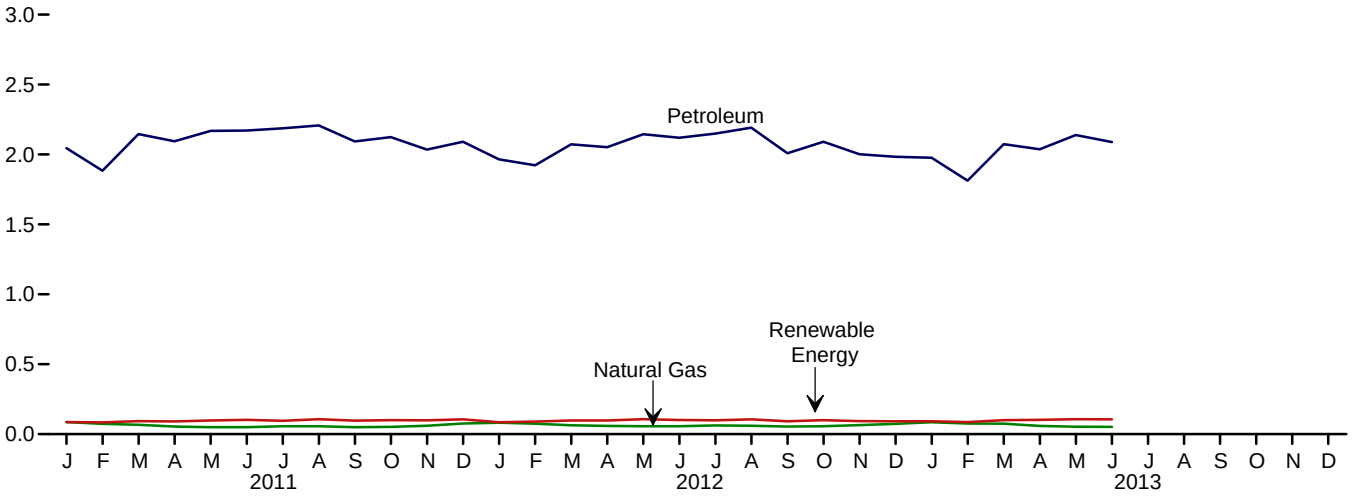
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

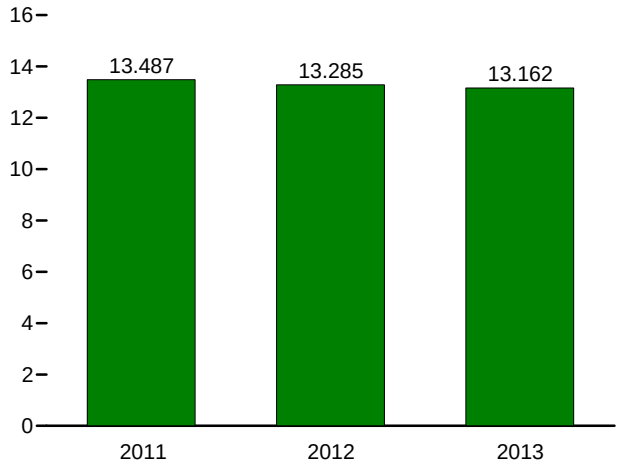
By Major Source, 1949–2012



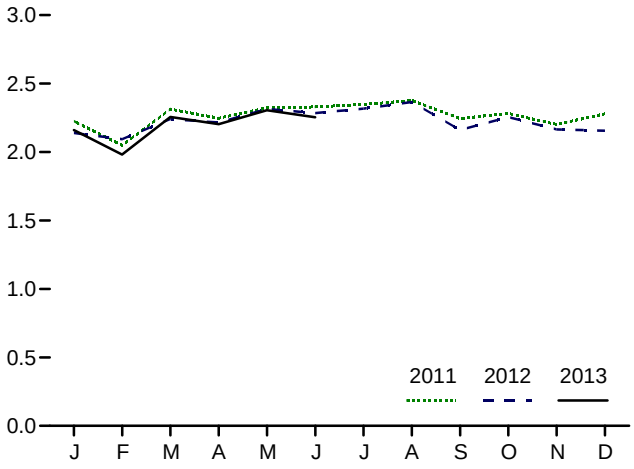
By Major Source, Monthly



Total, January–June



Total, Monthly



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

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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**	**22,955**	**23,679**	**112**	**23,791**	**17**	**38**	**23,846**
2000 Total	**(g)**	**672**	**25,682**	**26,354**	**135**	**26,489**	**18**	**42**	**26,548**
2001 Total	**(g)**	**658**	**25,412**	**26,070**	**142**	**26,213**	**20**	**43**	**26,275**
2002 Total	**(g)**	**699**	**25,913**	**26,612**	**170**	**26,781**	**19**	**42**	**26,842**
2003 Total	**(g)**	**627**	**25,987**	**26,615**	**230**	**26,845**	**23**	**51**	**26,919**
2004 Total	**(g)**	**602**	**26,925**	**27,527**	**290**	**27,817**	**25**	**54**	**27,895**
2005 Total	**(g)**	**624**	**27,309**	**27,933**	**339**	**28,272**	**26**	**56**	**28,353**
2006 Total	**(g)**	**625**	**27,651**	**28,276**	**475**	**28,751**	**25**	**54**	**28,830**
2007 Total	**(g)**	**663**	**27,763**	**28,427**	**602**	**29,029**	**28**	**60**	**29,117**
2008 Total	**(g)**	**692**	**26,230**	**26,922**	**826**	**27,748**	**26**	**56**	**27,831**
2009 Total	**(g)**	**715**	**25,375**	**26,090**	**935**	**27,025**	**27**	**56**	**27,108**
2010 Total	**(g)**	**719**	**25,686**	**26,405**	**1,075**	**27,479**	**26**	**55**	**27,561**
2011 January	(g)	87	2,045	2,132	86	2,218	2	5	2,225
February	(g)	74	1,883	1,957	84	2,042	2	4	2,048
March	(g)	67	2,146	2,213	93	2,306	2	5	2,313
April	(g)	55	2,095	2,150	90	2,240	2	4	2,247
May	(g)	50	2,168	2,218	98	2,316	2	5	2,323
June	(g)	50	2,171	2,221	103	2,323	2	5	2,330
July	(g)	56	2,187	2,244	96	2,340	2	5	2,347
August	(g)	56	2,207	2,263	107	2,370	2	4	2,377
September	(g)	49	2,093	2,142	96	2,238	2	4	2,245
October	(g)	52	2,124	2,176	100	2,276	2	4	2,282
November	(g)	60	2,035	2,096	99	2,195	2	4	2,201
December	(g)	76	2,092	2,167	105	2,273	2	5	2,280
Total	**(g)**	**732**	**25,247**	**25,979**	**1,158**	**27,137**	**26**	**54**	**27,218**
2012 January	(g)	82	1,965	2,047	86	2,132	2	5	2,139
February	(g)	74	1,923	1,997	90	2,087	2	4	2,093
March	(g)	64	2,073	2,136	98	2,234	2	4	2,241
April	(g)	59	2,052	2,111	98	2,209	2	4	2,215
May	(g)	56	2,144	2,201	107	2,308	2	4	2,314
June	(g)	56	2,120	2,176	101	2,277	2	4	2,284
July	(g)	62	2,149	2,211	99	2,310	2	5	2,316
August	(g)	60	2,192	2,252	106	2,358	2	4	2,365
September	(g)	54	2,008	2,063	92	2,155	2	4	2,161
October	(g)	57	2,091	2,148	101	2,249	2	4	2,255
November	(g)	65	2,002	2,067	93	2,159	2	4	2,166
December	(g)	74	1,984	2,058	92	2,149	2	5	2,156
Total	**(g)**	**764**	**24,702**	**25,466**	**1,161**	**26,627**	**26**	**52**	**26,705**
2013 January	(g)	85	1,976	2,061	92	2,154	2	5	2,161
February	(g)	76	1,813	1,888	87	1,975	2	4	1,981
March	(g)	75	2,074	2,149	101	2,249	2	4	2,256
April	(g)	59	2,037	2,095	102	2,197	2	4	2,204
May	(g)	53	2,139	2,192	107	R 2,299	2	5	R 2,306
June	(g)	52	2,089	2,141	106	2,248	2	5	2,254
6-Month Total	**(g)**	**399**	**12,128**	**12,527**	**595**	**13,122**	**13**	**27**	**13,162**
2012 6-Month Total	**(g)**	**391**	**12,276**	**12,668**	**579**	**13,246**	**13**	**26**	**13,285**
2011 6-Month Total	**(g)**	**382**	**12,509**	**12,891**	**554**	**13,446**	**13**	**28**	**13,487**

[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.

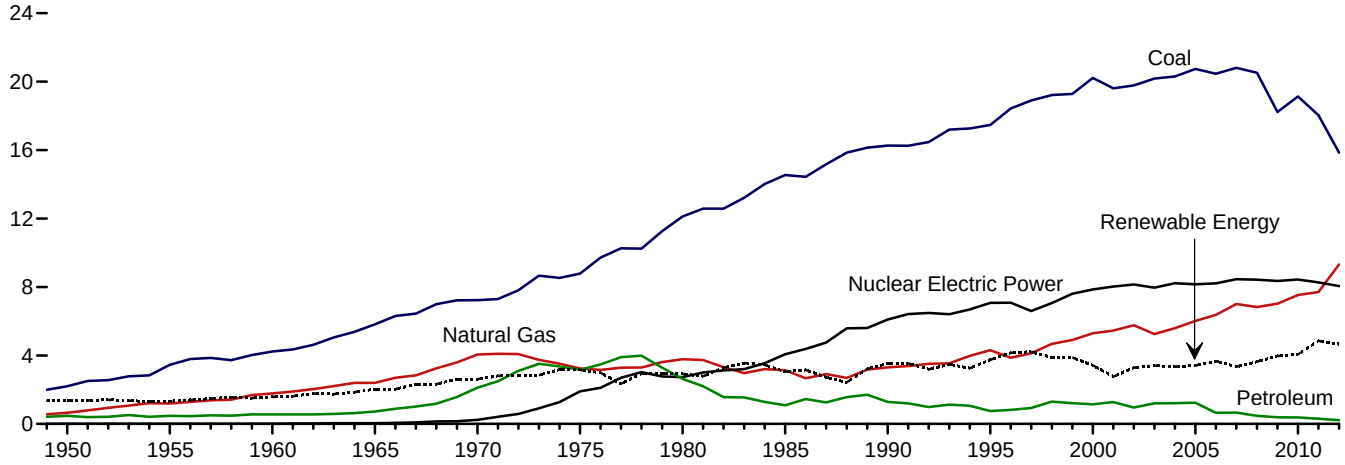
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#consumption for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available monthly and annual data beginning in 1973.

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

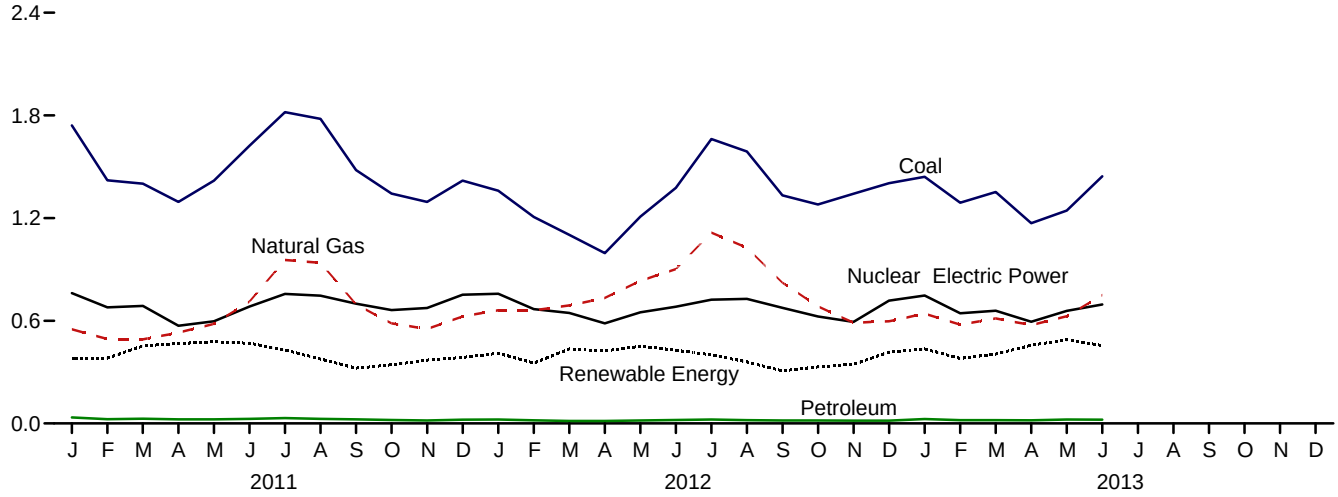
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

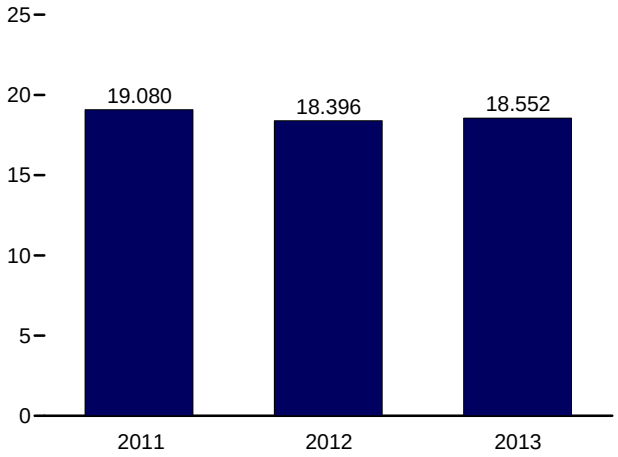
By Major Source, 1949–2012



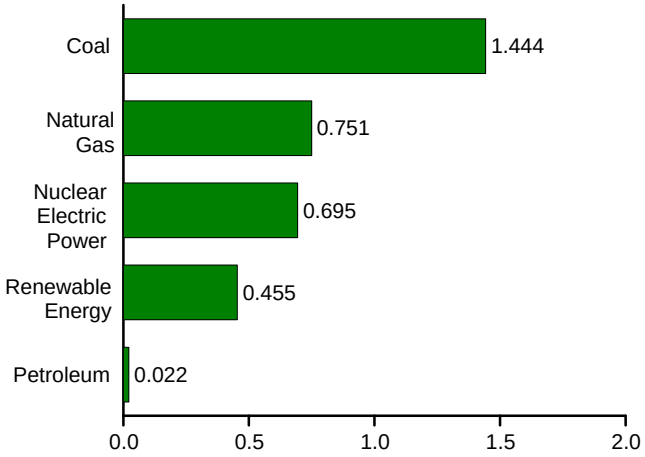
By Major Source, Monthly



Total, January–June



By Major Source, June 2013



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

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Table 2.6 Electric Power Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]												
	Fossil Fuels				Nuclear Electric Power	Renewable Energy[b]						Electricity Net Imports[e]	Total Primary
	Coal	Natural Gas[c]	Petroleum	Total		Hydroelectric Power[d]	Geothermal	Solar/PV	Wind	Biomass	Total		
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**	**1,277**	**26,348**	**8,029**	**2,209**	**142**	**6**	**70**	**337**	**2,763**	**75**	**37,215**
2002 Total	**19,783**	**5,767**	**961**	**26,511**	**8,145**	**2,650**	**147**	**6**	**105**	**380**	**3,288**	**72**	**38,016**
2003 Total	**20,185**	**5,246**	**1,205**	**26,636**	**7,959**	**2,749**	**146**	**5**	**113**	**397**	**3,411**	**22**	**38,028**
2004 Total	**20,305**	**5,595**	**1,212**	**27,112**	**8,222**	**2,655**	**148**	**6**	**142**	**388**	**3,339**	**39**	**38,712**
2005 Total	**20,737**	**6,015**	**1,235**	**27,986**	**8,161**	**2,670**	**147**	**6**	**178**	**406**	**3,406**	**85**	**39,638**
2006 Total	**20,462**	**6,375**	**648**	**27,485**	**8,215**	**2,839**	**145**	**5**	**264**	**412**	**3,665**	**63**	**39,428**
2007 Total	**20,808**	**7,005**	**657**	**28,470**	**8,455**	**2,430**	**145**	**6**	**341**	**423**	**3,345**	**107**	**40,377**
2008 Total	**20,513**	**6,829**	**468**	**27,810**	**8,427**	**2,494**	**146**	**9**	**546**	**435**	**3,630**	**112**	**39,978**
2009 Total	**18,225**	**7,022**	**390**	**25,638**	**8,356**	**2,650**	**146**	**9**	**721**	**441**	**3,967**	**116**	**38,077**
2010 Total	**19,133**	**7,528**	**378**	**27,039**	**8,434**	**2,521**	**148**	**12**	**923**	**459**	**4,064**	**89**	**39,627**
2011 January	1,741	550	35	2,326	761	247	13	(s)	83	37	381	9	3,477
February	1,421	493	24	1,938	678	233	12	1	102	35	382	8	3,006
March	1,401	491	28	1,920	687	301	13	1	102	36	453	8	3,069
April	1,294	531	24	1,849	571	301	12	2	121	32	467	7	2,895
May	1,418	582	24	2,024	597	315	13	2	114	34	477	12	3,111
June	1,623	712	26	2,361	683	311	12	2	107	37	469	11	3,523
July	1,819	955	32	2,806	757	303	12	2	73	39	429	16	4,008
August	1,780	938	27	2,745	746	249	12	2	73	39	376	16	3,883
September	1,481	696	24	2,201	700	207	12	2	67	37	323	10	3,234
October	1,343	585	20	1,949	663	191	12	1	102	36	343	10	2,963
November	1,294	552	18	1,864	675	199	12	1	121	36	369	8	2,916
December	1,419	625	22	2,066	752	229	13	1	103	39	385	12	3,215
Total	**18,035**	**7,712**	**303**	**26,050**	**8,269**	**3,085**	**149**	**17**	**1,167**	**437**	**4,855**	**127**	**39,301**
2012 January	1,359	661	23	2,044	757	225	14	1	134	37	410	11	3,222
February	1,206	660	18	1,885	668	196	13	1	108	34	353	9	2,916
March	1,101	690	15	1,806	646	249	14	2	135	35	435	10	2,897
April	995	734	15	1,743	585	252	13	3	124	31	424	13	2,765
May	1,209	833	17	2,059	650	276	14	5	122	35	451	15	3,174
June	1,376	901	20	2,298	682	257	13	5	116	36	428	14	3,422
July	1,661	1,115	23	2,799	723	259	14	5	85	38	401	19	3,942
August	1,589	1,026	19	2,634	728	224	13	4	80	38	360	19	3,741
September	1,333	822	17	2,172	675	170	13	4	84	36	307	14	3,168
October	1,280	684	17	1,981	625	156	14	4	122	35	330	12	2,949
November	1,342	589	16	1,947	593	181	14	3	112	36	346	13	2,899
December	1,403	597	17	2,017	718	224	14	2	138	38	416	11	3,162
Total	**15,854**	**9,313**	**218**	**25,385**	**8,050**	**2,668**	**163**	**41**	**1,360**	**429**	**4,661**	**161**	**38,258**
2013 January	1,441	642	26	2,108	747	241	14	3	141	37	435	14	3,304
February	1,290	577	19	1,886	643	195	13	4	135	32	380	13	2,922
March	1,352	614	19	1,985	659	197	14	6	152	37	405	14	3,063
April	1,170	574	18	1,762	594	238	13	6	168	31	457	12	2,825
May	1,244	R 626	23	R 1,892	658	274	14	7	159	35	489	16	R 3,054
June	1,444	751	22	2,217	695	263	14	8	134	36	455	17	3,383
6-Month Total	**7,940**	**3,784**	**127**	**11,851**	**3,996**	**1,408**	**81**	**34**	**888**	**208**	**2,620**	**85**	**18,552**
2012 6-Month Total	**7,247**	**4,480**	**108**	**11,835**	**3,987**	**1,455**	**81**	**18**	**740**	**208**	**2,502**	**72**	**18,396**
2011 6-Month Total	**8,899**	**3,359**	**161**	**12,419**	**3,977**	**1,707**	**75**	**8**	**629**	**211**	**2,629**	**56**	**19,080**

[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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#consumption for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#consumption for all available monthly and annual data beginning in 1973.

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

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 electricity retail sales (see Tables 7.6 and A6). Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric, 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 percent is lost in plant use and 7 percent is lost in transmission and distribution.

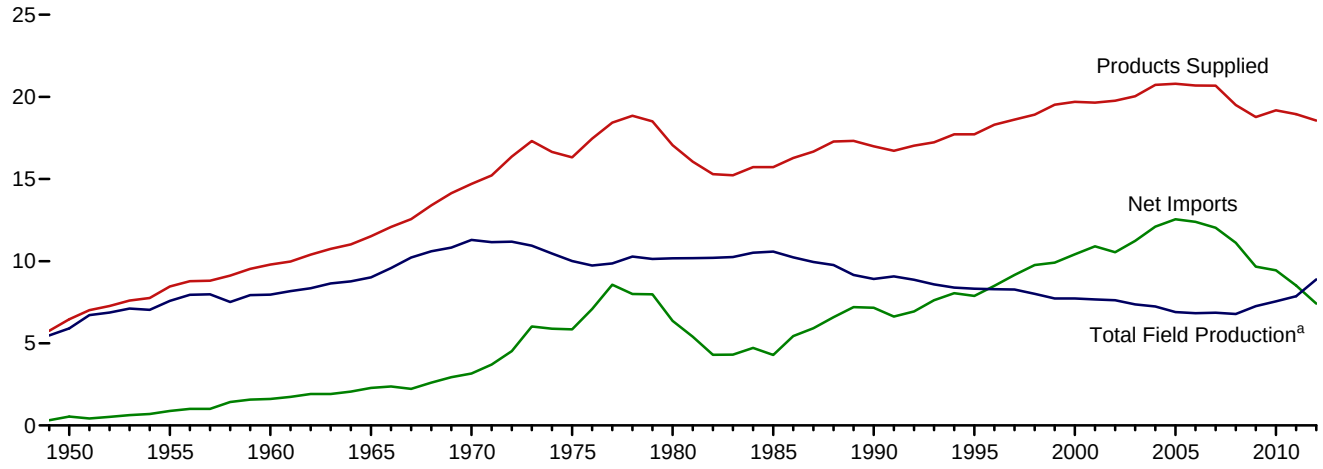
Note 2. Energy Consumption Data and Surveys. Most of the data in this section of the *Monthly Energy Review* (*MER*) are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the U.S. Energy Information Administration (EIA). Supply surveys are directed to suppliers 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.

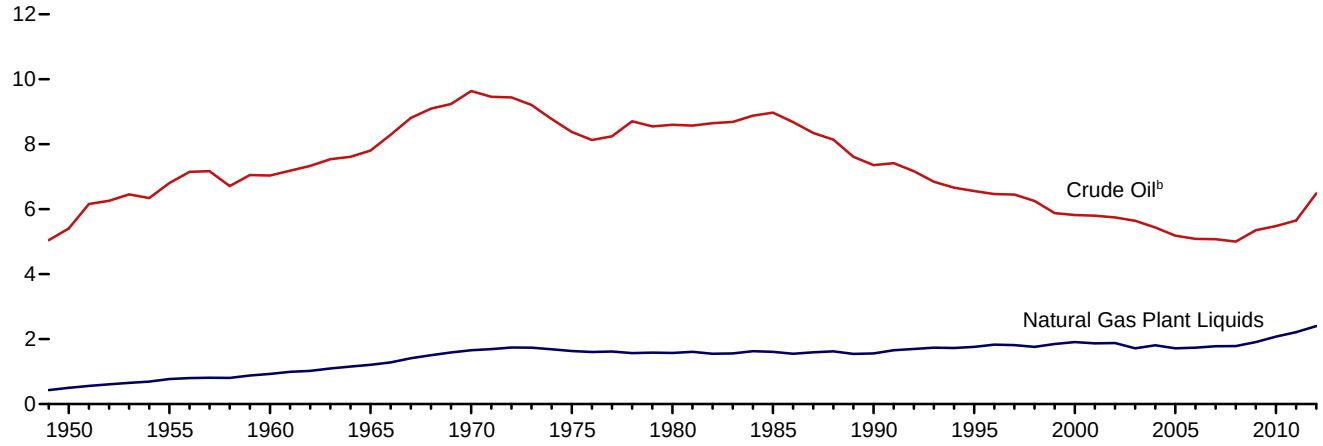
3. Petroleum

Figure 3.1 Petroleum Overview
(Million Barrels per Day)

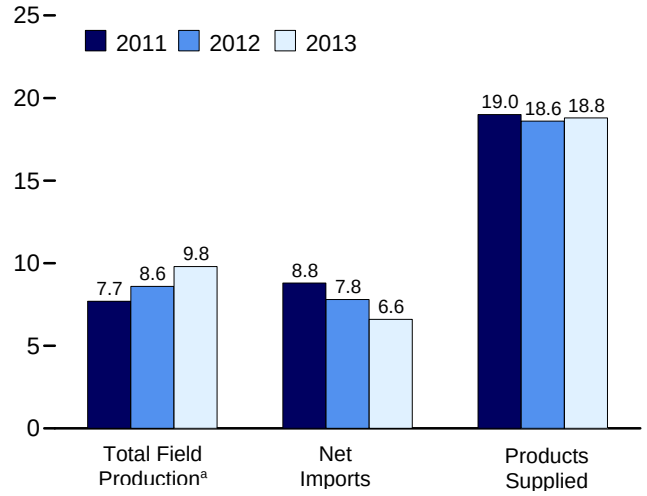
Overview, 1949–2012



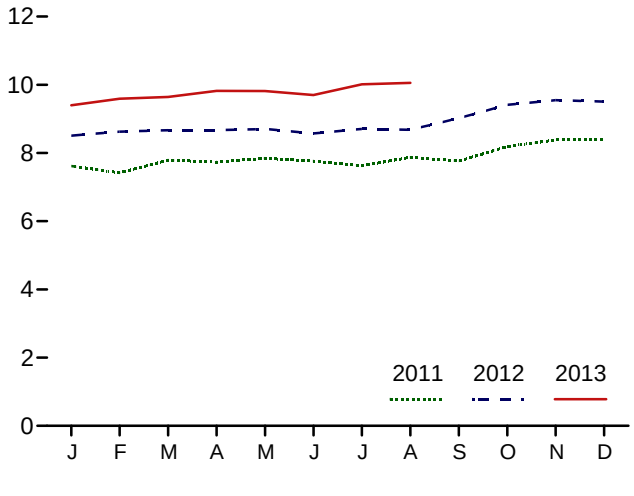
Crude Oil and Natural Gas Plant Liquids Field Production, 1949–2012



Overview, January–August



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	**4,670**	**974**	**5,644**	**1,719**	**7,363**	**NA**	**974**	**12,264**	**1,027**	**11,238**	**56**	**514**	**20,034**
2004 Average	**4,527**	**908**	**5,435**	**1,809**	**7,244**	**NA**	**1,051**	**13,145**	**1,048**	**12,097**	**209**	**548**	**20,731**
2005 Average	**4,322**	**864**	**5,186**	**1,717**	**6,903**	**NA**	**989**	**13,714**	**1,165**	**12,549**	**145**	**506**	**20,802**
2006 Average	**4,348**	**741**	**5,089**	**1,739**	**6,827**	**NA**	**994**	**13,707**	**1,317**	**12,390**	**60**	**536**	**20,687**
2007 Average	**4,355**	**722**	**5,077**	**1,783**	**6,860**	**NA**	**996**	**13,468**	**1,433**	**12,036**	**-148**	**641**	**20,680**
2008 Average	**4,318**	**683**	**5,000**	**1,784**	**6,784**	**NA**	**993**	**12,915**	**1,802**	**11,114**	**195**	**802**	**19,498**
2009 Average	**4,708**	**645**	**5,353**	**1,910**	**7,263**	**746**	**979**	**11,691**	**2,024**	**9,667**	**109**	**226**	**18,771**
2010 Average	**4,877**	**601**	**5,479**	**2,074**	**7,553**	**907**	**1,068**	**11,793**	**2,353**	**9,441**	**49**	**261**	**19,180**
2011 January	5,038	464	5,502	2,114	7,616	982	1,019	12,248	2,750	9,497	484	363	18,993
February	4,799	611	5,410	2,009	7,419	972	954	10,738	2,634	8,104	-1,033	392	18,873
March	4,984	611	5,595	2,195	7,789	1,002	1,019	11,850	2,733	9,117	-139	262	19,329
April	4,940	606	5,546	2,186	7,733	996	1,013	11,808	3,071	8,736	105	278	18,650
May	5,029	582	5,611	2,234	7,845	992	1,085	11,866	2,735	9,131	884	310	18,479
June	5,019	553	5,573	2,188	7,760	1,015	1,106	11,877	2,716	9,161	59	270	19,253
July	4,968	453	5,420	2,206	7,627	1,004	1,122	11,757	3,053	8,704	231	552	18,778
August	5,119	526	5,645	2,227	7,873	1,027	1,133	11,227	3,002	8,224	-644	513	19,415
September	5,008	585	5,593	2,171	7,763	1,011	1,123	11,270	3,174	8,095	-492	407	18,892
October	5,309	566	5,874	2,313	8,188	1,023	1,084	11,053	3,107	7,946	-371	233	18,844
November	5,413	593	6,006	2,373	8,379	1,076	1,113	11,217	3,159	8,059	23	476	19,080
December	5,436	592	6,027	2,358	8,386	1,085	1,134	11,064	3,667	7,397	-646	154	18,803
Average	**5,091**	**561**	**5,652**	**2,216**	**7,868**	**1,016**	**1,076**	**11,504**	**2,986**	**8,518**	**-121**	**350**	**18,949**
2012 January	RE 5,540	E 593	RE 6,133	2,376	RE 8,508	1,021	1,053	10,944	2,839	8,104	655	R 248	18,280
February	RE 5,654	E 582	RE 6,236	2,388	RE 8,625	1,012	1,068	10,464	2,980	7,484	-228	R 343	18,760
March	RE 5,724	E 567	RE 6,291	2,375	RE 8,666	994	1,023	10,610	3,064	7,547	409	R 391	18,213
April	RE 5,735	E 552	RE 6,287	2,382	RE 8,669	1,001	1,047	10,634	3,263	7,370	-18	R 224	18,330
May	RE 5,782	E 546	RE 6,328	2,376	RE 8,704	1,018	1,089	11,132	3,194	7,939	524	R 482	18,707
June	RE 5,745	E 493	RE 6,238	2,335	RE 8,574	1,004	1,099	11,393	3,209	8,184	493	R 548	18,915
July	RE 5,968	E 415	RE 6,383	2,323	RE 8,705	929	1,060	10,748	3,211	7,537	33	R 402	18,601
August	RE 5,909	E 404	RE 6,313	2,367	RE 8,680	957	1,102	10,898	3,017	7,881	-272	R 335	19,226
September	RE 6,060	E 502	RE 6,562	2,458	RE 9,021	924	1,047	10,533	3,150	7,383	582	R 380	18,173
October	RE 6,381	E 547	RE 6,927	2,485	RE 9,412	913	998	10,088	3,255	6,833	-278	R 287	18,722
November	RE 6,481	E 553	RE 7,034	2,516	RE 9,549	928	1,118	10,103	3,404	6,698	-40	R 269	18,604
December	RE 6,538	E 555	RE 7,093	2,414	RE 9,508	915	1,187	9,610	3,623	5,987	-57	R 476	18,130
Average	RE **5,961**	E **526**	RE **6,486**	**2,399**	RE **8,886**	**968**	**1,074**	**10,596**	**3,184**	**7,412**	**151**	R **366**	**18,555**
2013 January	RE 6,491	E 549	RE 7,040	2,361	RE 9,400	894	1,119	10,042	2,882	7,160	185	R 256	18,646
February	RE 6,598	E 541	RE 7,139	2,453	RE 9,592	908	998	9,235	3,243	5,992	-777	R 391	18,659
March	RE 6,636	E 533	RE 7,169	2,475	RE 9,644	949	1,035	9,456	3,111	6,345	79	R 582	18,476
April	RE 6,828	E 523	RE 7,351	2,469	RE 9,819	973	1,088	10,076	3,208	6,868	444	R 249	18,553
May	RE 6,824	E 515	RE 7,340	2,475	RE 9,815	1,011	1,058	10,052	3,467	6,585	353	R 435	18,551
June	RE 6,716	RE 486	RE 7,201	R 2,498	RE 9,699	R 1,033	R 1,096	R 9,790	R 3,545	R 6,245	R 8	R 658	R 18,724
July	E 7,028	E 490	E 7,518	E 2,493	E 10,011	E 948	E 1,151	E 9,935	E 2,920	E 7,015	E -141	E 332	E 19,597
August	E 7,162	E 428	E 7,590	E 2,464	E 10,054	E 930	E 1,131	E 9,972	E 3,170	E 6,802	E 17	E 259	E 19,158
8-Month Average	E **6,788**	E **508**	E **7,296**	E **2,461**	E **9,756**	E **956**	E **1,086**	E **9,826**	E **3,191**	E **6,635**	E **29**	E **395**	E **18,798**
2012 8-Month Average	E **5,758**	E **519**	E **6,277**	**2,365**	E **8,642**	**992**	**1,068**	**10,855**	**3,097**	**7,758**	**203**	**372**	**18,628**
2011 8-Month Average	**4,989**	**550**	**5,539**	**2,172**	**7,711**	**999**	**1,058**	**11,681**	**2,839**	**8,842**	**5**	**368**	**18,973**

[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.

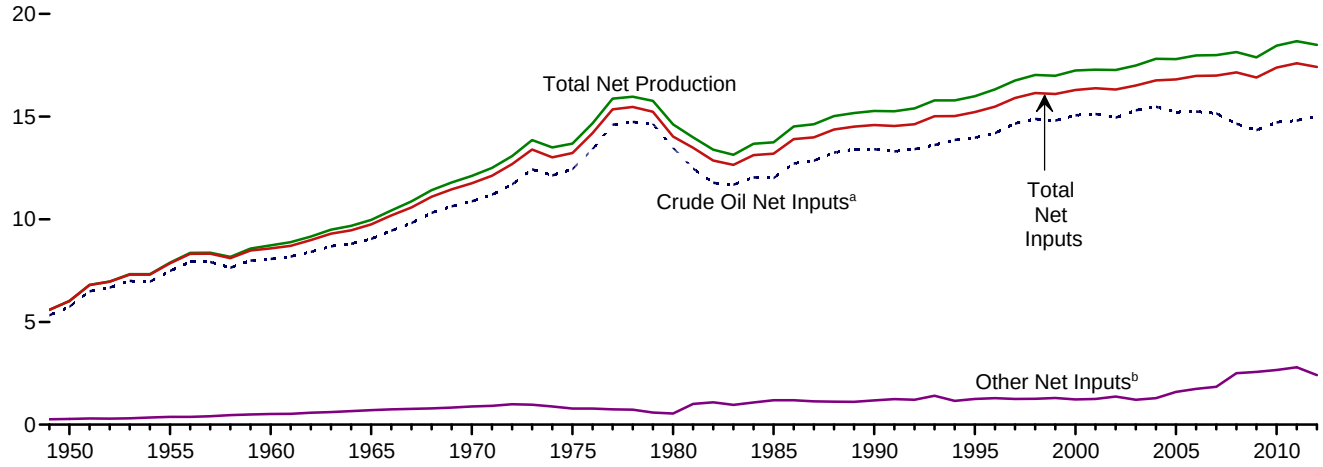
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

Sources: See end of section.

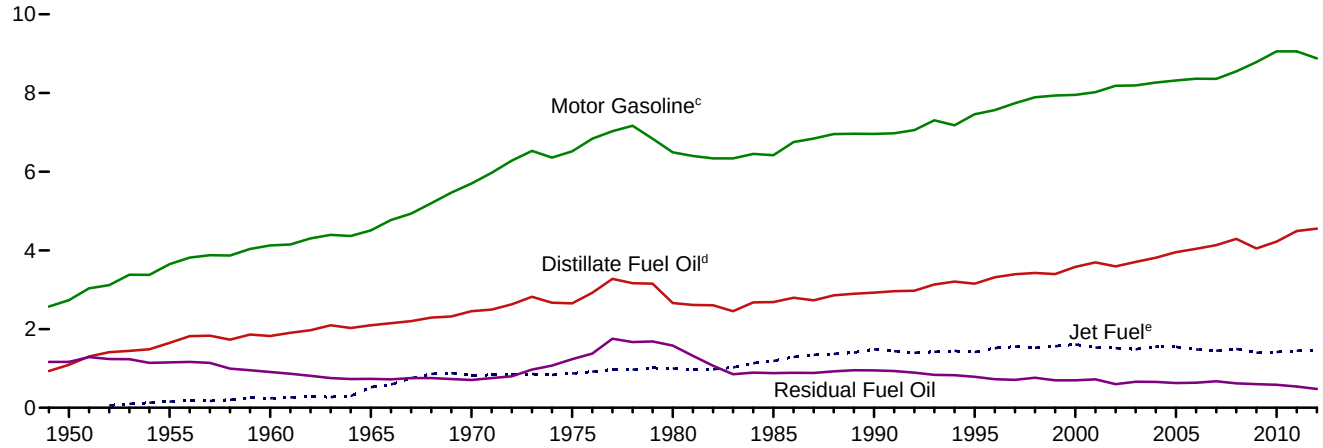
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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

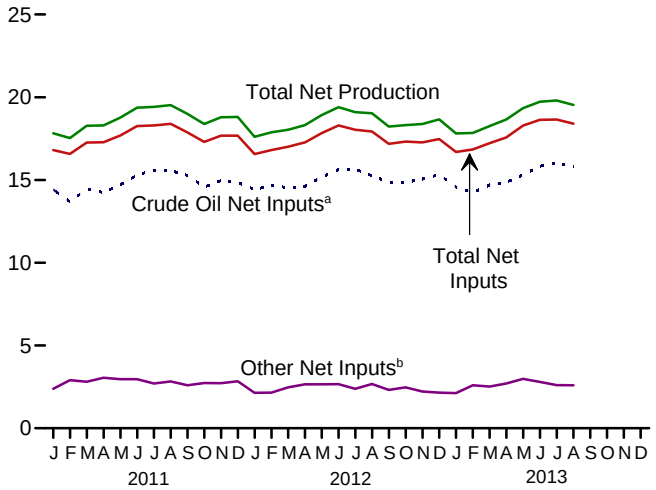
Net Inputs and Net Production, 1949–2012



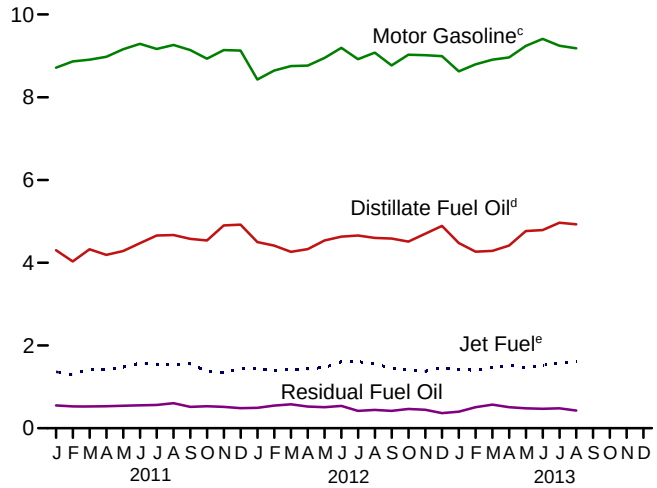
Net Production, Selected Products, 1949–2012



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 January	14,423	549	1,835	16,807	4,303	1,362	561	431	8,714	552	2,464	17,826
February	13,676	515	2,388	16,579	4,033	1,298	512	472	8,866	529	2,335	17,533
March	14,451	460	2,350	17,261	4,326	1,431	528	636	8,908	526	2,454	18,280
April	14,231	448	2,606	17,285	4,189	1,422	542	781	8,978	534	2,394	18,298
May	14,718	432	2,535	17,685	4,283	1,479	563	815	9,157	538	2,496	18,770
June	15,294	444	2,522	18,260	4,471	1,568	567	847	9,289	553	2,638	19,366
July	15,589	417	2,288	18,294	4,656	1,550	557	820	9,166	563	2,661	19,416
August	15,556	437	2,396	18,388	4,668	1,543	553	791	9,264	604	2,652	19,522
September	15,275	494	2,100	17,870	4,576	1,553	569	603	9,140	516	2,605	18,993
October	14,570	524	2,205	17,298	4,539	1,378	540	480	8,932	530	2,525	18,382
November	14,960	599	2,118	17,677	4,902	1,341	564	377	9,141	516	2,513	18,790
December	14,842	566	2,270	17,678	4,919	1,449	566	368	9,128	486	2,462	18,812
Average	**14,806**	**490**	**2,300**	**17,596**	**4,492**	**1,449**	**552**	**619**	**9,058**	**537**	**2,518**	**18,673**
2012 January	14,415	513	1,633	16,561	4,498	1,437	518	414	8,427	495	2,343	17,613
February	14,659	531	1,618	16,809	4,416	1,401	532	492	8,645	547	2,375	17,876
March	14,545	445	2,022	17,012	4,262	1,412	545	685	8,753	577	2,347	18,035
April	14,614	443	2,215	17,272	4,330	1,433	558	833	8,763	525	2,436	18,319
May	15,177	429	2,228	17,833	4,537	1,468	569	856	8,952	509	2,601	18,922
June	15,632	442	2,222	18,297	4,632	1,609	585	841	9,193	538	2,582	19,396
July	15,656	435	1,944	18,036	4,659	1,611	565	841	8,921	420	2,644	19,096
August	15,259	435	2,239	17,932	4,599	1,559	543	777	9,079	443	2,577	19,034
September	14,863	522	1,794	17,179	4,584	1,450	522	553	8,770	420	2,450	18,226
October	14,854	620	1,846	17,320	4,509	1,418	543	476	9,026	467	2,421	18,318
November	15,054	624	1,591	17,269	4,702	1,378	550	366	9,016	445	2,480	18,387
December	15,320	642	1,513	17,475	4,890	1,463	579	384	8,993	364	2,568	18,662
Average	**15,006**	**507**	**1,906**	**17,419**	**4,552**	**1,470**	**551**	**627**	**8,879**	**479**	**2,486**	**18,493**
2013 January	14,569	541	1,580	16,690	4,476	1,421	543	417	8,624	399	2,472	17,810
February	14,246	501	2,094	16,841	4,267	1,403	535	485	8,794	508	2,382	17,839
March	14,703	488	2,035	17,226	4,285	1,463	557	652	8,908	571	2,380	18,260
April	14,865	427	2,275	17,567	4,415	1,526	561	820	8,963	509	2,422	18,655
May	15,300	379	2,606	18,286	4,767	1,451	574	869	9,241	483	2,532	19,343
June	R 15,833	R 426	R 2,376	R 18,634	R 4,788	R 1,523	R 566	R 848	R 9,409	R 469	R 2,693	R 19,731
July	E 16,047	F 422	RE 2,181	RF 18,650	E 4,966	E 1,576	RE 695	RF 840	E 9,244	E 482	RE 2,692	RE 19,801
August	E 15,802	F 438	E 2,161	F 18,401	E 4,929	E 1,601	E 680	F 812	E 9,184	E 427	E 2,579	E 19,532
8-Month Average	**E 15,180**	**E 452**	**E 2,163**	**E 17,796**	**E 4,616**	**E 1,496**	**E 590**	**E 720**	**E 9,048**	**E 481**	**E 2,521**	**E 18,881**
2012 8-Month Average	**14,996**	**459**	**2,017**	**17,472**	**4,492**	**1,492**	**552**	**718**	**8,842**	**506**	**2,489**	**18,539**
2011 8-Month Average	**14,755**	**462**	**2,363**	**17,580**	**4,371**	**1,458**	**548**	**701**	**9,044**	**550**	**2,514**	**18,638**

[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.

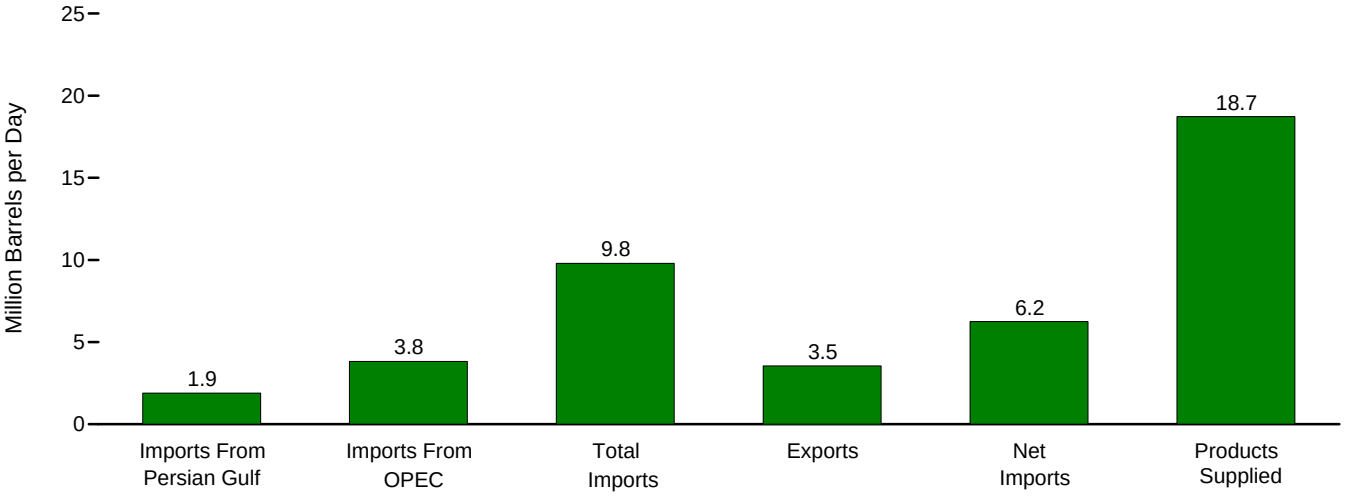
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

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. • **1981–2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012 and 2013:** 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.

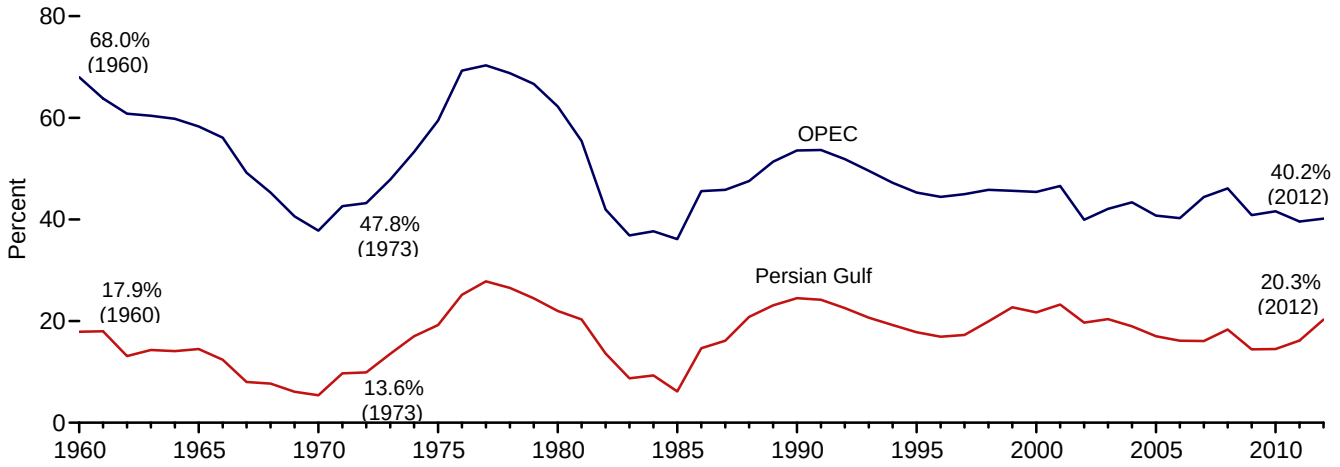
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

Figure 3.3a Petroleum Trade: Overview

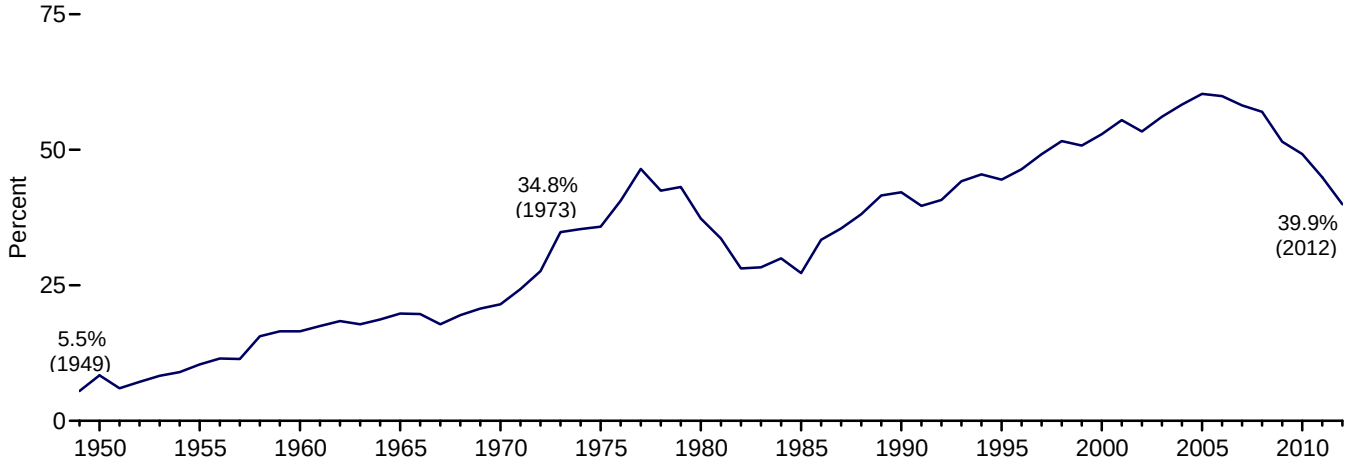
Overview, June 2013



Imports From OPEC and Persian Gulf as Share of Total Imports, 1960–2012



Net Imports as Share of Products Supplied, 1949–2012



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					
	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]
	As Share of Products Supplied						As Share of Total Imports					
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 January	1,681	4,909	12,248	2,750	9,497	18,993	8.8	25.8	64.5	50.0	13.7	40.1
February	1,495	4,530	10,738	2,634	8,104	18,873	7.9	24.0	56.9	42.9	13.9	42.2
March	1,667	4,638	11,850	2,733	9,117	19,329	8.6	24.0	61.3	47.2	14.1	39.1
April	1,704	4,548	11,808	3,071	8,736	18,650	9.1	24.4	63.3	46.8	14.4	38.5
May	1,844	4,619	11,866	2,735	9,131	18,479	10.0	25.0	64.2	49.4	15.5	38.9
June	2,033	4,894	11,877	2,716	9,161	19,253	10.6	25.4	61.7	47.6	17.1	41.2
July	2,167	4,939	11,757	3,053	8,704	18,778	11.5	26.3	62.6	46.4	18.4	42.0
August	1,910	4,656	11,227	3,002	8,224	19,415	9.8	24.0	57.8	42.4	17.0	41.5
September	2,039	4,326	11,270	3,174	8,095	18,892	10.8	22.9	59.7	42.9	18.1	38.4
October	1,904	4,296	11,053	3,107	7,946	18,844	10.1	22.8	58.7	42.2	17.2	38.9
November	1,944	4,206	11,217	3,159	8,059	19,080	10.2	22.0	58.8	42.2	17.3	37.5
December	1,921	4,093	11,064	3,667	7,397	18,803	10.2	21.8	58.8	39.3	17.4	37.0
Average	**1,861**	**4,555**	**11,504**	**2,986**	**8,518**	**18,949**	**9.8**	**24.0**	**60.7**	**44.9**	**16.2**	**39.6**
2012 January	2,208	4,203	10,944	2,839	8,104	18,280	12.1	23.0	59.9	44.3	20.2	38.4
February	1,948	3,986	10,464	2,980	7,484	18,760	10.4	21.2	55.8	39.9	18.6	38.1
March	2,222	4,314	10,610	3,064	7,547	18,213	12.2	23.7	58.3	41.4	20.9	40.7
April	2,228	4,394	10,634	3,263	7,370	18,330	12.2	24.0	58.0	40.2	21.0	41.3
May	2,560	4,672	11,132	3,194	7,939	18,707	13.7	25.0	59.5	42.4	23.0	42.0
June	2,376	4,618	11,393	3,209	8,184	18,915	12.6	24.4	60.2	43.3	20.9	40.5
July	2,131	4,331	10,748	3,211	7,537	18,601	11.5	23.3	57.8	40.5	19.8	40.3
August	2,071	4,344	10,898	3,017	7,881	19,226	10.8	22.6	56.7	41.0	19.0	39.9
September	2,071	4,268	10,533	3,150	7,383	18,173	11.4	23.5	58.0	40.6	19.7	40.5
October	2,141	4,186	10,088	3,255	6,833	18,722	11.4	22.4	53.9	36.5	21.2	41.5
November	2,103	4,195	10,103	3,404	6,698	18,604	11.3	22.5	54.3	36.0	20.8	41.5
December	1,750	3,554	9,610	3,623	5,987	18,130	9.7	19.6	53.0	33.0	18.2	37.0
Average	**2,151**	**4,256**	**10,596**	**3,184**	**7,412**	**18,555**	**11.6**	**22.9**	**57.1**	**39.9**	**20.3**	**40.2**
2013 January	1,798	3,850	10,042	2,882	7,160	18,646	9.6	20.6	53.9	38.4	17.9	38.3
February	1,831	3,094	9,235	3,243	5,992	18,659	9.8	16.6	49.5	32.1	19.8	33.5
March	2,087	3,713	9,456	3,111	6,345	18,476	11.3	20.1	51.2	34.3	22.1	39.3
April	1,804	3,780	10,076	3,208	6,868	18,553	9.7	20.4	54.3	37.0	17.9	37.5
May	2,135	4,045	10,052	3,467	6,585	18,551	11.5	21.8	54.2	35.5	21.2	40.2
June	R 1,894	R 3,825	R 9,790	R 3,545	R 6,245	R 18,724	R 10.1	R 20.4	R 52.3	R 33.4	R 19.3	R 39.1
July	NA	NA	E 9,935	E 2,920	E 7,015	E 19,597	NA	NA	E 50.7	E 35.8	NA	NA
August	NA	NA	E 9,972	E 3,170	E 6,802	E 19,158	NA	NA	E 52.1	E 35.5	NA	NA
8-Month Average	**NA**	**NA**	**E 9,826**	**E 3,191**	**E 6,635**	**E 18,798**	**NA**	**NA**	**E 52.3**	**E 35.3**	**NA**	**NA**
2012 8-Month Average	**2,220**	**4,360**	**10,855**	**3,097**	**7,758**	**18,628**	**11.9**	**23.4**	**58.3**	**41.6**	**20.4**	**40.2**
2011 8-Month Average	**1,816**	**4,719**	**11,681**	**2,839**	**8,842**	**18,973**	**9.6**	**24.9**	**61.6**	**46.6**	**15.5**	**40.4**

[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.

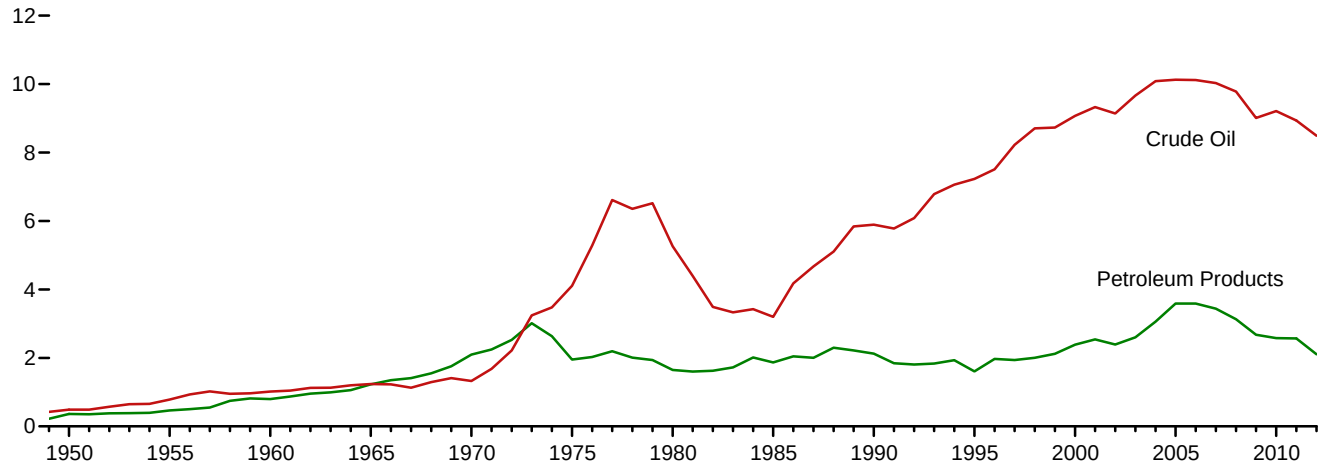
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

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. • **1981–2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012 and 2013:** 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.

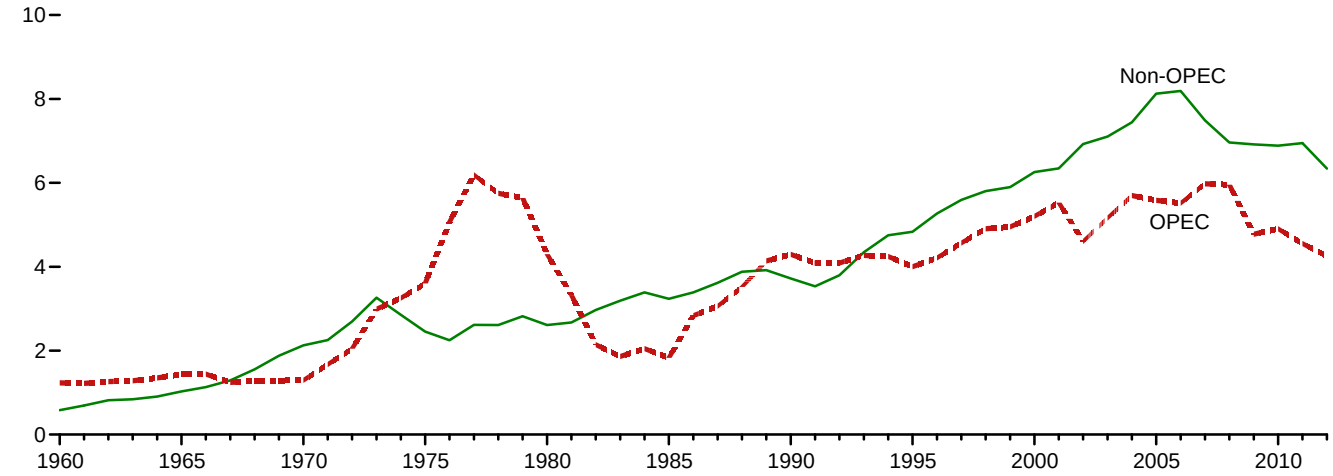
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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

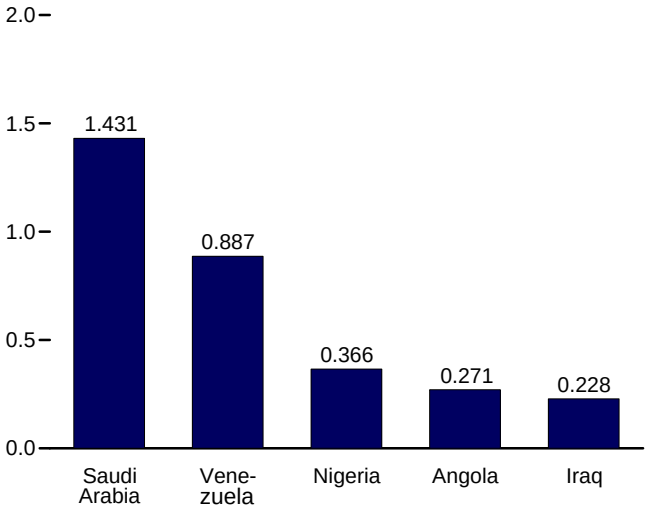
Overview, 1949–2012



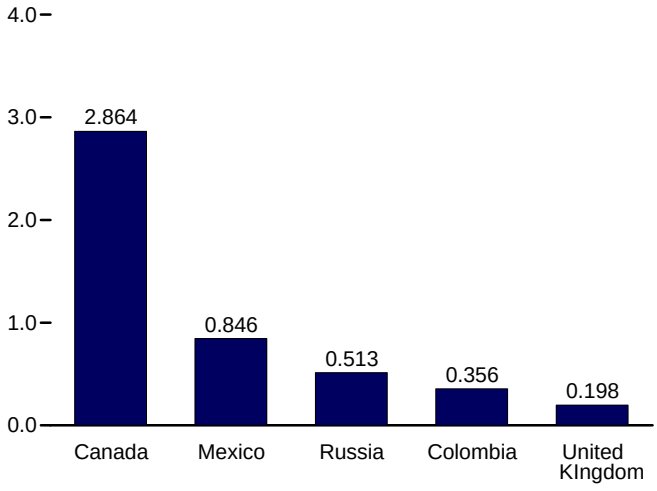
OPEC and Non-OPEC, 1960–2012



From Selected OPEC Countries, June 2013



From Selected Non-OPEC Countries, June 2013



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 January	–	9,183	337	65	235	290	102	411	1,860	12,248	72	2,678	2,750
February	–	8,184	206	68	220	266	119	364	1,532	10,738	30	2,604	2,634
March	–	9,183	190	65	205	260	135	378	1,639	11,850	36	2,696	2,733
April	–	8,839	191	80	141	177	138	424	1,959	11,808	41	3,031	3,071
May	–	9,059	170	91	118	160	137	306	1,942	11,866	37	2,698	2,735
June	–	9,235	127	82	115	160	130	353	1,789	11,877	36	2,680	2,716
July	–	9,276	157	95	115	157	92	246	1,733	11,757	73	2,980	3,053
August	–	8,936	148	66	123	167	106	231	1,573	11,227	34	2,969	3,002
September	–	8,914	179	58	141	176	99	277	1,567	11,270	35	3,139	3,174
October	–	8,907	128	61	129	166	66	286	1,440	11,053	51	3,057	3,107
November	–	8,724	138	72	152	191	74	341	1,677	11,217	64	3,094	3,159
December	–	8,711	175	21	210	258	60	330	1,509	11,064	53	3,614	3,667
Average	**–**	**8,935**	**179**	**69**	**158**	**202**	**105**	**328**	**1,686**	**11,504**	**47**	**2,939**	**2,986**
2012 January	–	8,572	156	6	145	168	99	305	1,637	10,944	56	2,783	2,839
February	–	8,558	142	41	125	155	46	226	1,296	10,464	59	2,921	2,980
March	–	8,767	136	5	108	136	91	271	1,205	10,610	60	3,004	3,064
April	–	8,591	98	56	102	129	53	240	1,466	10,634	32	3,231	3,263
May	–	8,909	111	49	172	218	60	251	1,534	11,132	69	3,124	3,194
June	–	9,101	87	42	133	170	66	325	1,602	11,393	46	3,163	3,209
July	–	8,606	113	48	148	182	52	247	1,501	10,748	77	3,134	3,211
August	–	8,631	110	124	142	186	37	233	1,577	10,898	60	2,957	3,017
September	–	8,375	84	84	149	191	35	256	1,507	10,533	58	3,092	3,150
October	–	8,091	88	106	135	176	26	219	1,382	10,088	67	3,188	3,255
November	–	8,130	189	46	136	156	32	236	1,314	10,103	73	3,331	3,404
December	–	7,576	190	59	160	181	64	178	1,362	9,610	58	3,565	3,623
Average	**–**	**8,491**	**125**	**55**	**138**	**171**	**55**	**249**	**1,449**	**10,596**	**60**	**3,125**	**3,184**
2013 January	–	7,953	213	46	184	207	40	238	1,345	10,042	73	2,809	2,882
February	–	7,270	174	61	166	186	19	196	1,331	9,235	124	3,119	3,243
March	–	7,460	146	18	141	164	56	300	1,312	9,456	101	3,010	3,111
April	–	7,726	238	74	110	130	35	259	1,614	10,076	132	3,075	3,208
May	–	7,737	168	83	81	98	24	186	1,757	10,052	125	3,342	3,467
June	–	R 7,730	R 120	R 76	R 110	R 131	R 70	R 173	R 1,490	R 9,790	R 120	R 3,425	R 3,545
July	–	E 7,901	E 114	E 52	E 75	NA	E 59	E 235	NA	E 9,935	E 51	E 2,869	E 2,920
August	–	E 8,111	E 105	E 123	E 74	NA	E 64	E 215	NA	E 9,972	E 54	E 3,116	E 3,170
8-Month Average	**–**	**E 7,742**	**E 159**	**E 67**	**E 117**	**NA**	**E 46**	**E 226**	**NA**	**E 9,826**	**E 97**	**E 3,094**	**E 3,191**
2012 8-Month Average	**–**	**8,717**	**119**	**46**	**135**	**168**	**63**	**262**	**1,478**	**10,855**	**58**	**3,039**	**3,097**
2011 8-Month Average	**–**	**8,996**	**191**	**77**	**159**	**204**	**120**	**338**	**1,755**	**11,681**	**45**	**2,794**	**2,839**

[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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual 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. • **1981–2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012 and 2013:** 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.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 January	565	316	238	433	147	57	1,022	1,101	1,030	–	4,909
February	406	370	255	263	118	36	978	1,114	989	–	4,530
March	500	280	182	398	161	32	913	1,108	1,065	–	4,638
April	466	277	169	519	78	1	922	1,107	1,009	–	4,548
May	391	356	158	422	200	(s)	854	1,203	1,016	19	4,619
June	297	373	219	559	238	35	853	1,169	1,084	68	4,894
July	354	407	172	596	228	–	884	1,326	954	18	4,939
August	298	331	309	637	165	1	892	1,075	914	32	4,656
September	291	304	305	404	145	2	580	1,479	806	11	4,326
October	173	439	178	490	278	2	693	1,120	906	17	4,296
November	260	340	181	395	302	10	703	1,222	767	26	4,206
December	297	357	106	380	231	9	534	1,310	868	–	4,093
Average	**358**	**346**	**206**	**459**	**191**	**15**	**818**	**1,195**	**951**	**16**	**4,555**
2012 January	269	370	100	390	352	5	504	1,423	750	41	4,203
February	256	230	244	271	252	29	353	1,420	931	–	3,986
March	325	175	174	386	462	60	374	1,374	984	–	4,314
April	259	253	201	395	235	68	483	1,589	904	7	4,394
May	303	256	199	675	407	65	428	1,471	861	7	4,672
June	236	378	236	649	250	93	515	1,456	788	17	4,618
July	213	285	176	352	304	110	372	1,466	1,046	7	4,331
August	303	153	180	550	301	126	504	1,220	1,007	–	4,344
September	175	237	218	461	310	67	468	1,291	1,035	6	4,268
October	186	183	122	593	287	59	543	1,257	951	4	4,186
November	199	157	136	489	276	30	501	1,325	1,070	12	4,195
December	179	116	155	462	254	16	248	1,032	1,092	–	3,554
Average	**242**	**232**	**178**	**474**	**308**	**61**	**441**	**1,359**	**952**	**8**	**4,256**
2013 January	194	223	240	419	389	20	479	979	898	10	3,850
February	17	198	174	529	255	20	255	1,032	601	14	3,094
March	74	98	218	426	367	74	403	1,284	763	8	3,713
April	160	167	322	455	238	76	405	1,109	847	–	3,780
May	168	328	178	321	361	125	395	1,440	720	10	4,045
June	88	271	202	228	217	119	366	1,431	887	16	3,825
6-Month Average	**118**	**214**	**223**	**395**	**306**	**73**	**386**	**1,215**	**788**	**10**	**3,727**
2012 6-Month Average	**275**	**277**	**191**	**462**	**328**	**53**	**443**	**1,455**	**869**	**12**	**4,367**
2011 6-Month Average	**439**	**328**	**203**	**434**	**158**	**27**	**923**	**1,134**	**1,033**	**15**	**4,692**

[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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1960–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual 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. • **1981–2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012 and 2013:** EIA, *Petroleum Supply Monthly,* monthly reports.

Selected years of data from 1960 through 1972 have been added to this table. For all years of data from 1960 through 2013, see the "Web Pages" cited above.

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 January	263	3,004	355	1,366	101	85	558	155	276	1,176	7,338
February	179	2,997	258	1,103	129	69	437	110	179	749	6,209
March	165	2,819	427	1,319	91	156	690	198	149	1,198	7,211
April	228	2,755	548	1,077	133	167	704	193	179	1,275	7,260
May	298	2,564	433	1,303	129	101	684	245	194	1,296	7,247
June	283	2,586	309	1,222	175	93	689	146	151	1,330	6,983
July	330	2,691	418	1,197	80	58	564	175	192	1,113	6,818
August	239	2,688	395	1,185	81	87	585	125	185	1,001	6,571
September	190	2,880	529	1,192	64	97	592	124	189	1,087	6,943
October	190	2,719	578	1,177	23	180	687	150	151	902	6,757
November	245	2,858	424	1,256	96	174	737	125	177	918	7,011
December	417	3,009	508	1,064	101	88	552	162	214	857	6,971
Average	**253**	**2,796**	**433**	**1,206**	**100**	**113**	**624**	**159**	**186**	**1,077**	**6,948**
2012 January	321	3,008	431	1,114	101	46	572	168	96	884	6,740
February	286	3,048	472	1,081	92	163	288	127	28	894	6,478
March	356	2,931	482	1,004	143	87	326	187	1	779	6,296
April	237	2,931	472	1,002	84	51	388	204	12	858	6,239
May	215	3,018	430	996	121	95	550	143	2	891	6,460
June	297	3,051	515	915	151	82	655	205	(s)	904	6,775
July	257	2,973	397	1,007	137	47	491	131	1	976	6,417
August	289	3,022	409	1,016	91	90	368	197	–	1,072	6,554
September	152	2,815	357	1,096	75	63	562	109	–	1,036	6,264
October	90	2,683	376	1,062	69	67	552	117	3	882	5,902
November	107	2,843	465	1,065	72	80	445	126	–	704	5,908
December	85	3,131	379	1,016	52	36	523	144	–	690	6,056
Average	**224**	**2,955**	**432**	**1,031**	**99**	**75**	**477**	**155**	**12**	**881**	**6,341**
2013 January	106	3,433	351	1,068	120	48	327	116	–	624	6,193
February	79	3,416	366	978	120	10	454	95	–	623	6,141
March	123	3,004	479	677	121	69	454	111	–	705	5,743
April	96	3,163	465	973	80	40	579	131	–	769	6,296
May	193	2,842	389	885	88	26	552	170	–	862	6,007
June	182	2,864	356	846	74	80	513	198	–	853	5,965
6-Month Average	**131**	**3,117**	**401**	**903**	**101**	**46**	**479**	**137**	**–**	**740**	**6,055**
2012 6-Month Average	**285**	**2,998**	**467**	**1,019**	**116**	**87**	**464**	**172**	**23**	**868**	**6,498**
2011 6-Month Average	**237**	**2,785**	**390**	**1,235**	**126**	**112**	**629**	**176**	**188**	**1,176**	**7,054**

[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.

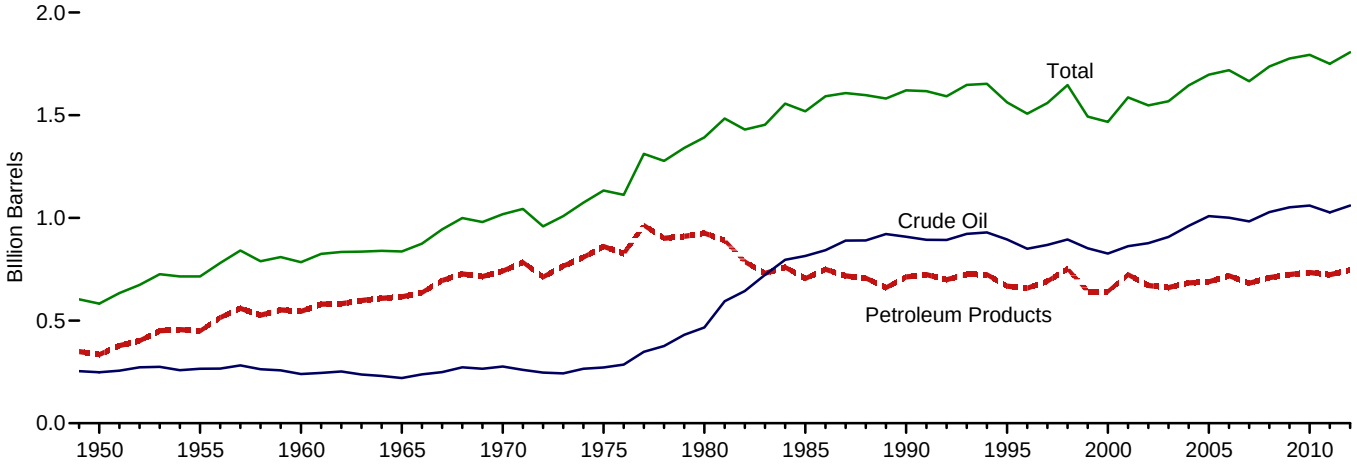
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1960–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

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. • **1981–2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012 and 2013:** EIA, *Petroleum Supply Monthly,* monthly reports.

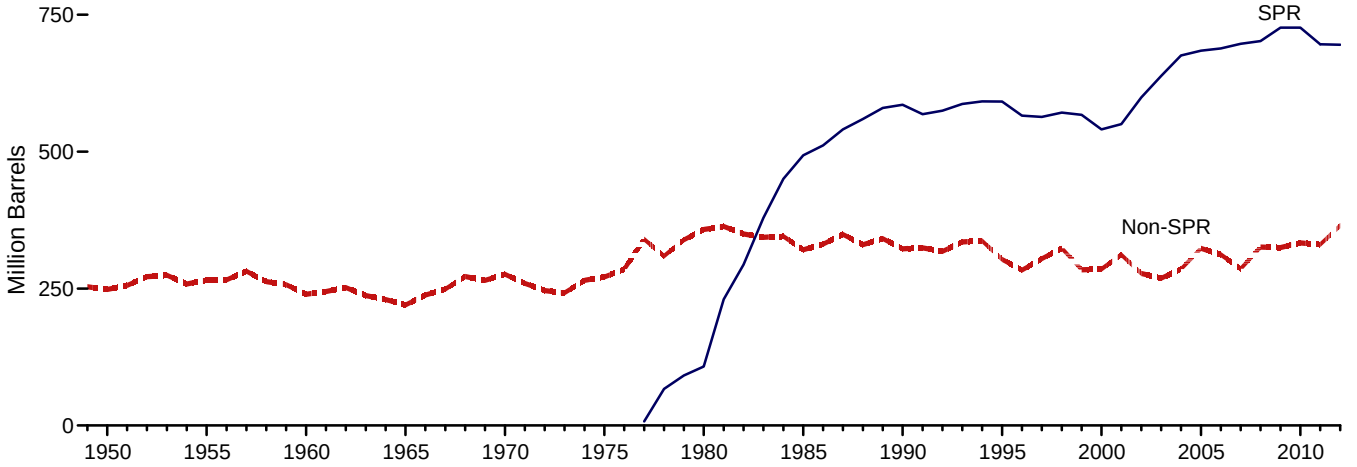
Selected years of data from 1960 through 1972 have been added to this table. For all years of data from 1960 through 2013, see the "Web Pages" cited above.

Figure 3.4 Petroleum Stocks

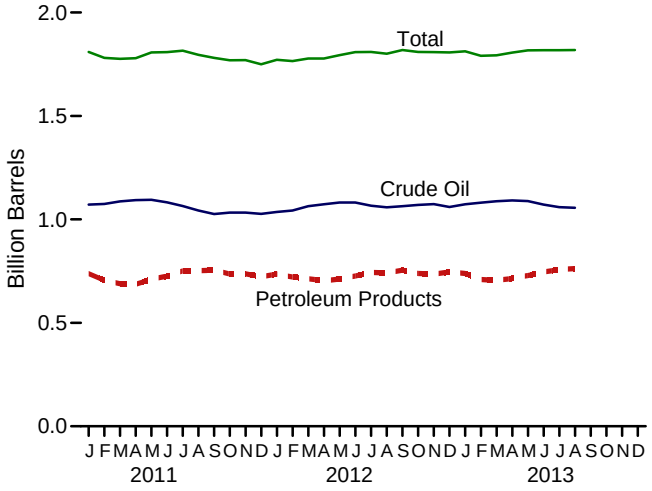
Overview, 1949–2012



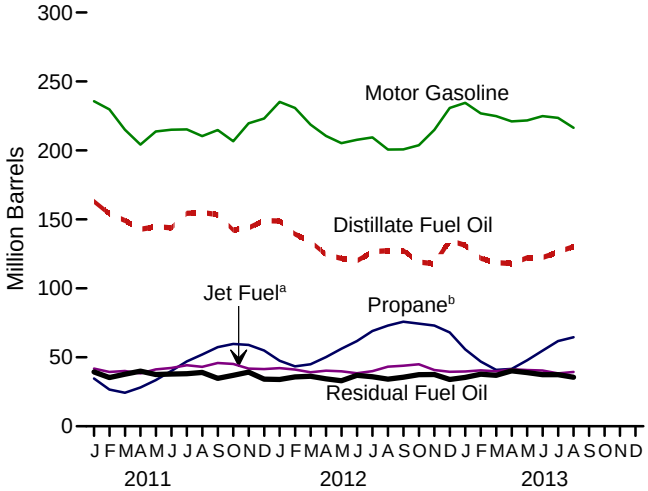
SPR and Non-SPR Crude Oil Stocks, 1949–2012



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 January	727	345	1,072	163	42	35	87	236	39	171	1,809
February	727	348	1,075	154	39	27	73	230	35	174	1,780
March	727	360	1,087	149	40	24	71	215	38	177	1,776
April	727	367	1,093	143	38	28	81	204	40	180	1,779
May	727	368	1,095	145	41	34	93	214	38	181	1,807
June	727	356	1,082	144	42	40	107	215	38	180	1,809
July	718	346	1,065	154	44	47	121	215	38	179	1,816
August	696	347	1,043	155	43	52	132	210	39	173	1,796
September	696	330	1,026	153	46	57	135	215	35	171	1,781
October	696	337	1,033	142	45	60	135	207	37	170	1,769
November	696	337	1,033	144	42	59	126	220	39	167	1,770
December	**696**	**331**	**1,027**	**149**	**41**	**55**	**112**	**223**	**34**	**164**	**1,750**
2012 January	696	340	1,036	149	42	48	101	235	34	175	1,772
February	696	347	1,043	139	41	43	96	231	36	179	1,765
March	696	368	1,064	134	39	45	102	219	36	184	1,778
April	696	377	1,073	125	40	50	116	211	34	179	1,777
May	696	386	1,082	122	40	56	133	205	33	179	1,794
June	696	386	1,082	120	38	62	147	208	37	176	1,808
July	696	370	1,066	127	40	69	159	210	36	172	1,809
August	696	363	1,058	127	43	73	171	201	34	166	1,801
September	695	369	1,064	127	44	76	175	201	36	172	1,818
October	695	375	1,070	119	45	74	168	204	37	166	1,810
November	695	379	1,074	118	41	73	158	215	38	166	1,809
December	**695**	**365**	**1,060**	**135**	**39**	**68**	**141**	**231**	**34**	**167**	**1,807**
2013 January	696	378	1,073	131	40	56	121	234	35	177	1,812
February	696	385	1,081	122	41	47	108	227	38	175	1,791
March	696	392	1,088	119	40	41	103	225	37	182	1,793
April	696	396	1,092	118	41	42	111	221	40	183	1,807
May	696	392	1,088	122	41	48	127	222	39	179	1,817
June	696	[R] 376	[R] 1,072	122	40	[R] 55	[R] 142	[R] 225	[R] 37	[R] 178	[R] 1,818
July	[E] 696	[E] 363	[E] 1,059	[E] 126	[E] 38	[E] 62	[F] 157	[E] 224	[E] 37	[E] 176	[E] 1,818
August	[E] 696	[E] 360	[E] 1,056	[E] 130	[E] 39	[E] 65	[F] 169	[E] 216	[E] 36	[E] 172	[E] 1,818

[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.

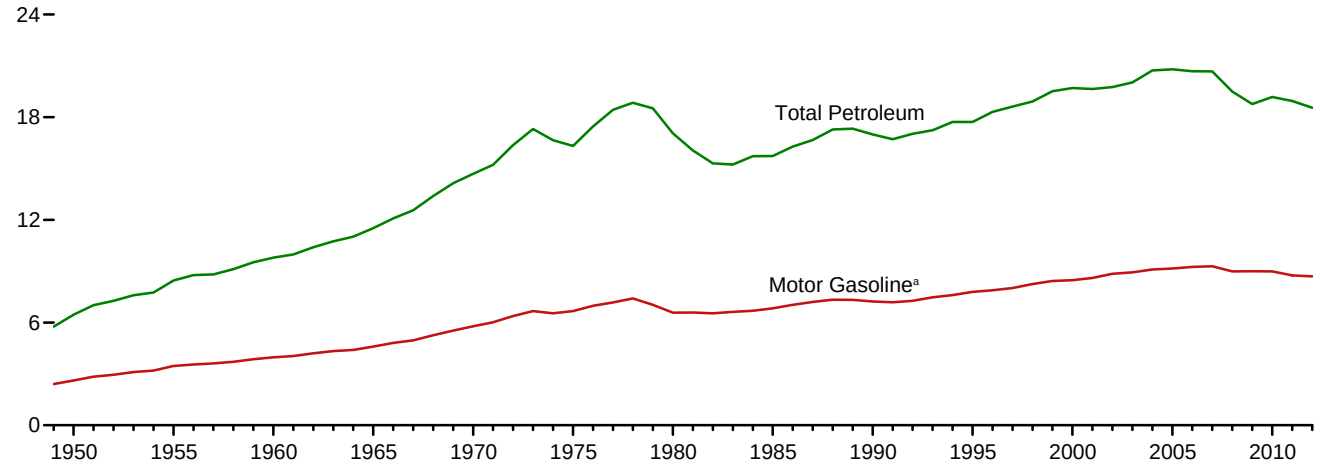
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

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. • **1981–2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012 and 2013:** 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.

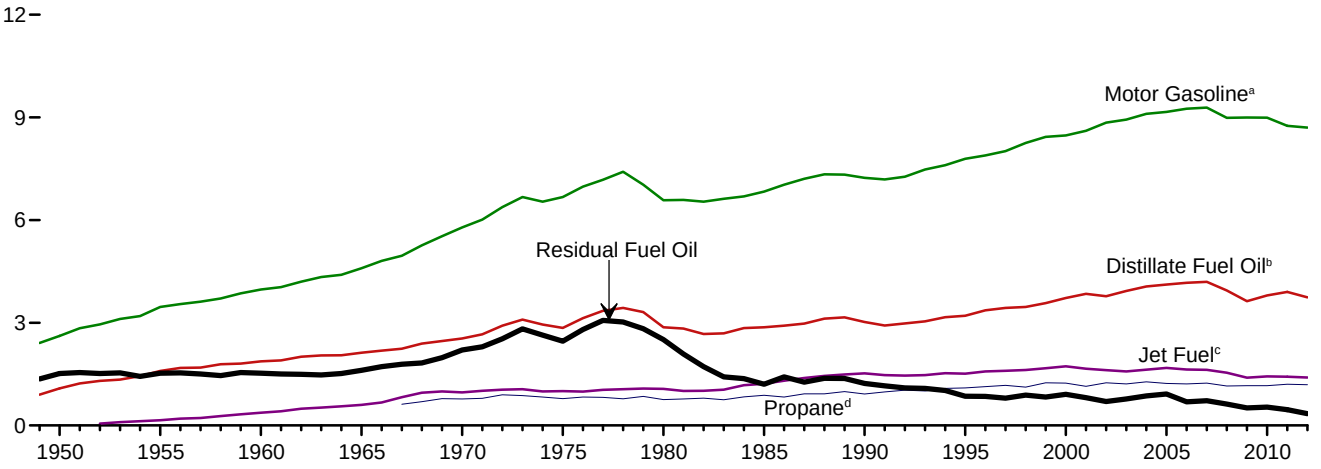
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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

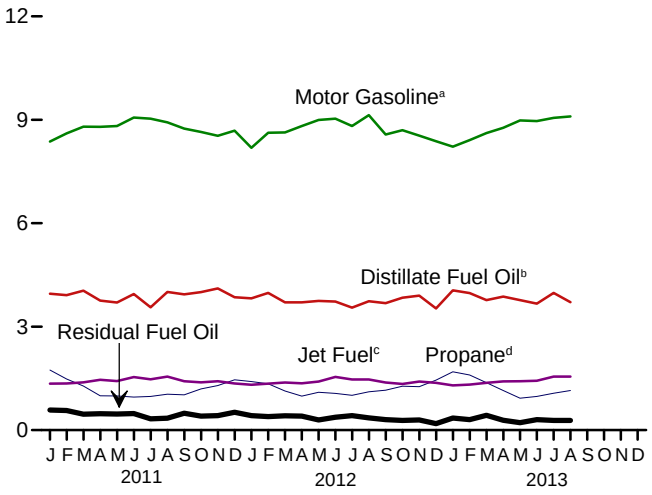
Total Petroleum and Motor Gasoline, 1949–2012



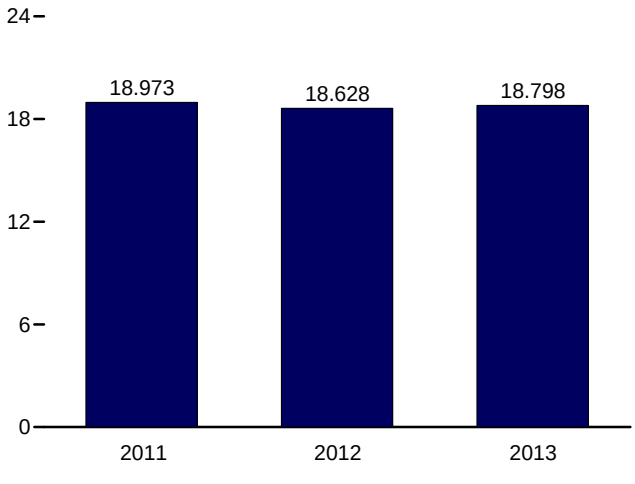
Selected Products,1949–2012



Selected Products, Monthly



Total Petroleum, January–August



[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 January	221	11	3,958	1,346	19	1,743	2,757	124	8,370	361	582	1,244	18,993
February	248	14	3,913	1,352	50	1,485	2,527	121	8,604	293	566	1,185	18,873
March	282	18	4,045	1,385	26	1,277	2,410	150	8,799	348	462	1,405	19,329
April	311	10	3,755	1,457	8	996	2,043	136	8,796	355	477	1,301	18,650
May	357	18	3,699	1,424	(s)	989	2,077	122	8,817	414	468	1,082	18,479
June	454	17	3,947	1,540	4	958	2,027	125	9,067	379	479	1,213	19,253
July	465	19	3,564	1,473	9	976	2,039	119	9,031	368	329	1,363	18,778
August	545	18	4,009	1,554	5	1,040	2,102	137	8,925	461	347	1,311	19,415
September	462	13	3,936	1,416	8	1,021	2,050	125	8,744	349	491	1,299	18,892
October	423	16	4,003	1,384	2	1,195	2,227	102	8,649	395	405	1,239	18,844
November	297	12	4,109	1,416	6	1,292	2,393	124	8,537	377	419	1,391	19,080
December	187	10	3,853	1,353	12	1,458	2,616	111	8,683	229	519	1,228	18,803
Average	**355**	**15**	**3,899**	**1,425**	**12**	**1,202**	**2,272**	**125**	**8,753**	**361**	**461**	**1,272**	**18,949**
2012 January	216	12	3,823	1,313	2	1,406	2,463	129	8,187	367	420	1,349	18,280
February	218	11	3,980	1,350	23	1,343	2,421	139	8,622	297	394	1,306	18,760
March	236	14	3,706	1,382	2	1,134	2,226	111	8,633	323	416	1,163	18,213
April	329	14	3,704	1,359	3	986	2,069	122	8,817	338	408	1,166	18,330
May	378	17	3,745	1,409	1	1,095	2,152	116	8,996	376	294	1,224	18,707
June	454	13	3,729	1,545	2	1,064	2,072	107	9,035	372	372	1,214	18,915
July	461	20	3,552	1,468	2	1,008	2,120	104	8,819	338	418	1,298	18,601
August	485	13	3,740	1,469	1	1,110	2,190	111	9,135	409	353	1,320	19,226
September	444	15	3,681	1,379	3	1,157	2,224	103	8,575	357	302	1,090	18,173
October	369	14	3,838	1,341	3	1,273	2,388	110	8,700	319	279	1,361	18,722
November	282	11	3,902	1,407	3	1,258	2,367	116	8,539	380	294	1,303	18,604
December	206	9	3,529	1,373	2	1,452	2,541	91	8,378	363	190	1,448	18,130
Average	**340**	**14**	**3,743**	**1,399**	**4**	**1,191**	**2,270**	**113**	**8,703**	**354**	**345**	**1,271**	**18,555**
2013 January	223	11	4,055	1,297	9	1,693	2,767	127	8,218	369	350	1,220	18,646
February	212	8	3,975	1,320	7	1,597	2,753	125	8,412	281	304	1,259	18,659
March	237	12	3,772	1,369	15	1,376	2,498	126	8,616	306	431	1,095	18,476
April	295	12	3,871	1,414	5	1,148	2,245	110	8,766	293	284	1,259	18,553
May	294	15	3,772	1,416	2	924	2,038	129	8,983	360	215	1,327	18,551
June	R 410	R 15	R 3,667	R 1,431	R 2	R 979	R 2,025	R 141	R 8,965	R 402	R 303	R 1,362	R 18,724
July	F 457	F 16	E 3,979	E 1,550	RF 6	E 1,070	RF 2,092	RF 113	E 9,054	F 353	E 283	RE 1,695	E 19,597
August	F 482	F 16	E 3,710	E 1,552	F 5	E 1,147	F 2,173	F 125	E 9,099	F 395	E 281	E 1,319	E 19,158
8-Month Average	**E 328**	**E 13**	**E 3,849**	**E 1,420**	**E 6**	**E 1,239**	**E 2,320**	**E 124**	**E 8,768**	**E 346**	**E 306**	**E 1,318**	**E 18,798**
2012 8-Month Average	**348**	**14**	**3,746**	**1,412**	**4**	**1,143**	**2,214**	**117**	**8,781**	**353**	**384**	**1,255**	**18,628**
2011 8-Month Average	**362**	**16**	**3,861**	**1,442**	**15**	**1,181**	**2,246**	**129**	**8,803**	**373**	**462**	**1,264**	**18,973**

[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.

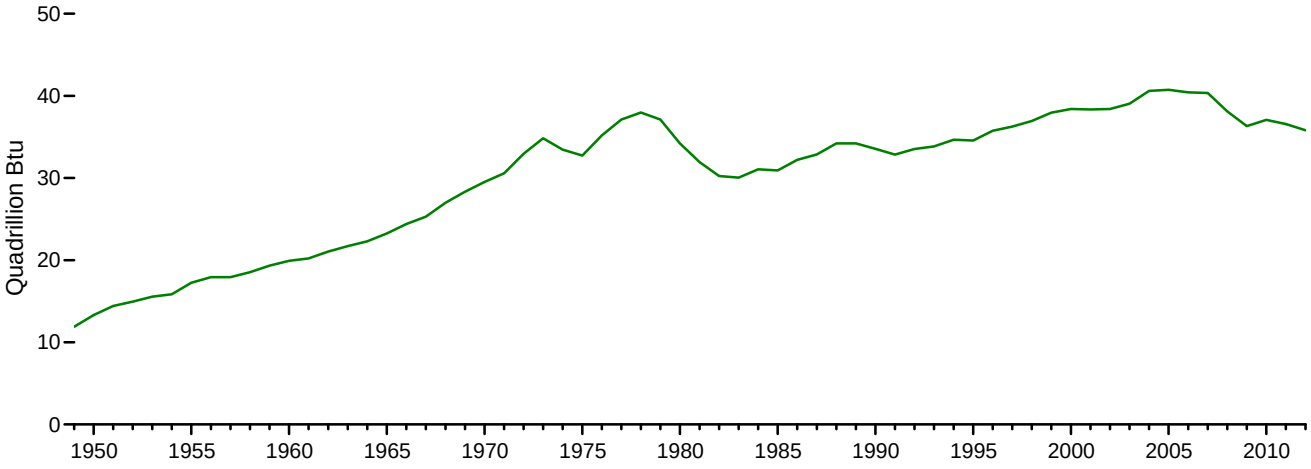
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

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. • **1981–2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012 and 2013:** 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.

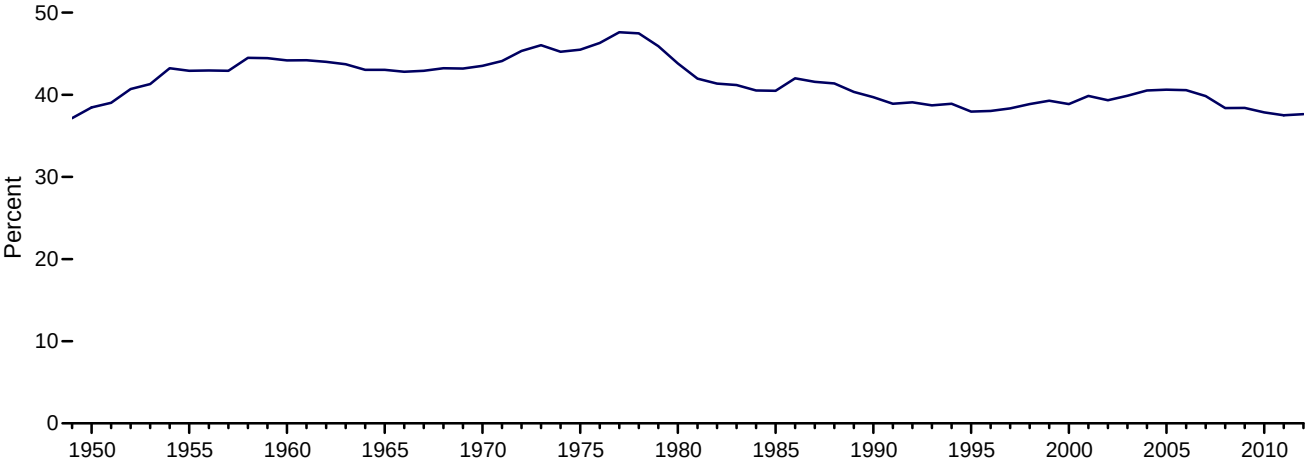
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 3.6 Heat Content of Petroleum Products Supplied by Type

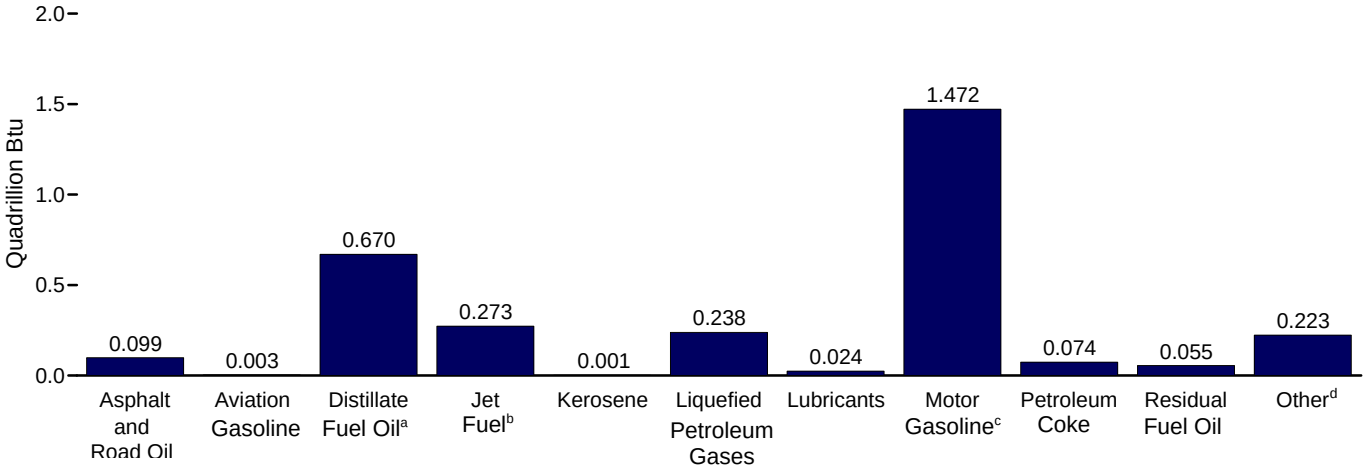
Total, 1949–2012



Petroleum Products Supplied as Share of Total Energy Consumption, 1949–2012



By Product, August 2013



[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**	**6,818**	**3,132**	**112**	**1,534**	**2,512**	**346**	**14,825**	**802**	**1,955**	**2,837**	**34,556**
2000 Total	**1,276**	**36**	**7,935**	**3,580**	**140**	**1,734**	**2,945**	**369**	**16,155**	**895**	**2,091**	**2,979**	**38,402**
2001 Total	**1,257**	**35**	**8,179**	**3,426**	**150**	**1,598**	**2,697**	**338**	**16,373**	**961**	**1,861**	**3,056**	**38,333**
2002 Total	**1,240**	**34**	**8,028**	**3,340**	**90**	**1,747**	**2,852**	**334**	**16,819**	**1,018**	**1,605**	**3,040**	**38,400**
2003 Total	**1,220**	**30**	**8,349**	**3,265**	**113**	**1,701**	**2,748**	**309**	**16,981**	**1,000**	**1,772**	**3,264**	**39,051**
2004 Total	**1,304**	**31**	**8,652**	**3,383**	**133**	**1,791**	**2,824**	**313**	**17,379**	**1,156**	**1,990**	**3,428**	**40,593**
2005 Total	**1,323**	**35**	**8,755**	**3,475**	**144**	**1,721**	**2,682**	**312**	**17,444**	**1,133**	**2,111**	**3,318**	**40,732**
2006 Total	**1,261**	**33**	**8,864**	**3,379**	**111**	**1,701**	**2,700**	**303**	**17,622**	**1,148**	**1,581**	**3,416**	**40,420**
2007 Total	**1,197**	**32**	**8,921**	**3,358**	**67**	**1,729**	**2,733**	**313**	**17,689**	**1,077**	**1,659**	**3,313**	**40,358**
2008 Total	**1,012**	**28**	**8,411**	**3,193**	**30**	**1,620**	**2,574**	**291**	**17,168**	**1,022**	**1,432**	**2,941**	**38,101**
2009 Total	**873**	**27**	**7,720**	**2,883**	**36**	**1,624**	**2,664**	**262**	**17,135**	**938**	**1,173**	**2,611**	**36,321**
2010 Total	**878**	**27**	**8,080**	**2,963**	**41**	**1,624**	**2,821**	**291**	**17,127**	**826**	**1,228**	**2,800**	**37,082**
2011 January	45	2	715	237	3	207	304	23	1,354	67	113	227	3,091
February	46	2	638	215	8	159	254	20	1,257	49	100	190	2,779
March	58	3	730	243	5	152	265	28	1,423	65	90	250	3,160
April	62	2	656	248	1	115	216	25	1,377	64	90	224	2,965
May	73	3	668	250	(s)	118	226	23	1,426	77	91	194	3,032
June	90	3	690	262	1	110	214	23	1,419	68	90	209	3,070
July	96	3	644	259	2	116	222	22	1,461	69	64	245	3,086
August	112	3	724	273	1	124	231	26	1,444	86	68	234	3,201
September	92	2	688	241	1	117	216	23	1,369	63	93	224	3,011
October	87	2	723	243	(s)	142	245	19	1,399	74	79	220	3,092
November	59	2	718	241	1	149	254	23	1,336	68	79	239	3,020
December	38	2	696	238	2	173	289	21	1,405	43	101	220	3,054
Total	**859**	**27**	**8,289**	**2,950**	**25**	**1,682**	**2,937**	**276**	**16,670**	**794**	**1,058**	**2,676**	**36,562**
2012 January	44	2	690	231	(s)	167	270	24	1,324	69	82	238	2,976
February	42	2	672	222	4	149	250	24	1,305	52	72	219	2,864
March	49	2	669	243	(s)	135	245	21	1,397	60	81	209	2,976
April	65	2	647	231	1	113	219	22	1,381	61	77	201	2,907
May	78	3	676	248	(s)	130	237	22	1,455	70	57	217	3,063
June	90	2	652	263	(s)	122	218	19	1,415	67	70	211	3,008
July	95	3	641	258	(s)	120	230	20	1,427	63	81	232	3,051
August	100	2	675	258	(s)	132	239	21	1,478	76	69	233	3,152
September	88	2	643	235	(s)	133	236	19	1,343	64	57	190	2,877
October	76	2	693	236	1	151	263	21	1,408	60	54	241	3,054
November	56	2	682	239	1	145	252	21	1,337	69	56	225	2,939
December	42	1	637	241	(s)	173	281	17	1,356	68	37	259	2,940
Total	**826**	**25**	**7,979**	**2,904**	**8**	**1,671**	**2,940**	**251**	**16,624**	**779**	**793**	**2,676**	**35,806**
2013 January	46	2	732	228	2	201	308	24	1,330	69	68	218	3,025
February	39	1	648	210	1	171	277	21	1,229	47	53	204	2,732
March	49	2	681	241	3	164	278	24	1,394	57	84	195	3,006
April	59	2	676	241	1	132	240	20	1,372	53	54	217	2,934
May	61	2	681	249	(s)	110	223	24	1,453	67	42	236	3,039
June	R 82	2	R 641	R 243	R (s)	R 113	R 214	R 26	1,404	R 73	R 57	R 233	R 2,975
July	F 94	F 2	E 719	E 272	F 1	E 127	RF 230	F 21	E 1,465	F 66	E 55	RE 278	E 3,203
August	F 99	F 3	E 670	E 273	F 1	E 136	F 238	F 24	E 1,472	F 74	E 55	E 223	E 3,131
8-Month Total	**E 528**	**E 16**	**E 5,449**	**E 1,957**	**E 9**	**E 1,155**	**E 2,007**	**E 183**	**E 11,119**	**E 506**	**E 468**	**E 1,804**	**E 24,046**
2012 8-Month Total	**563**	**18**	**5,324**	**1,953**	**6**	**1,069**	**1,908**	**173**	**11,182**	**519**	**590**	**1,761**	**23,996**
2011 8-Month Total	**583**	**19**	**5,465**	**1,987**	**21**	**1,101**	**1,933**	**190**	**11,161**	**547**	**706**	**1,773**	**24,385**

[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.

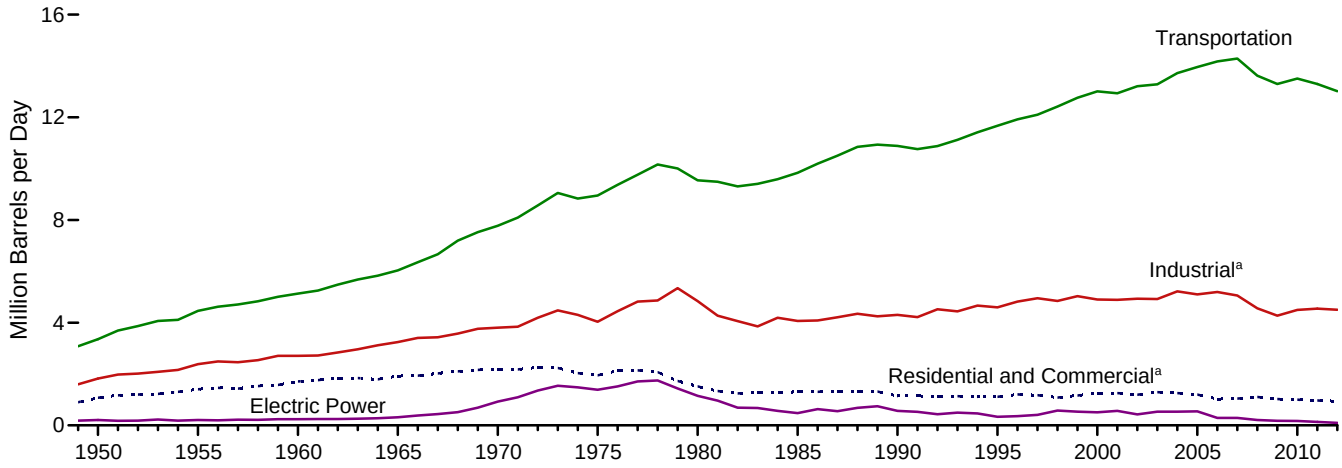
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

Sources: See end of section.

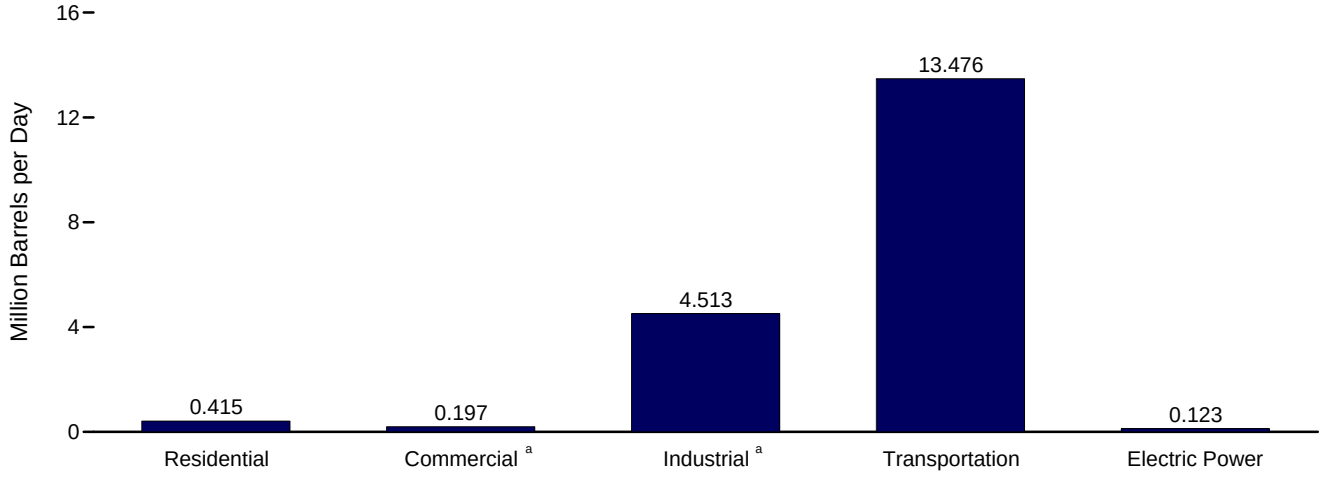
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 3.7 Petroleum Consumption by Sector

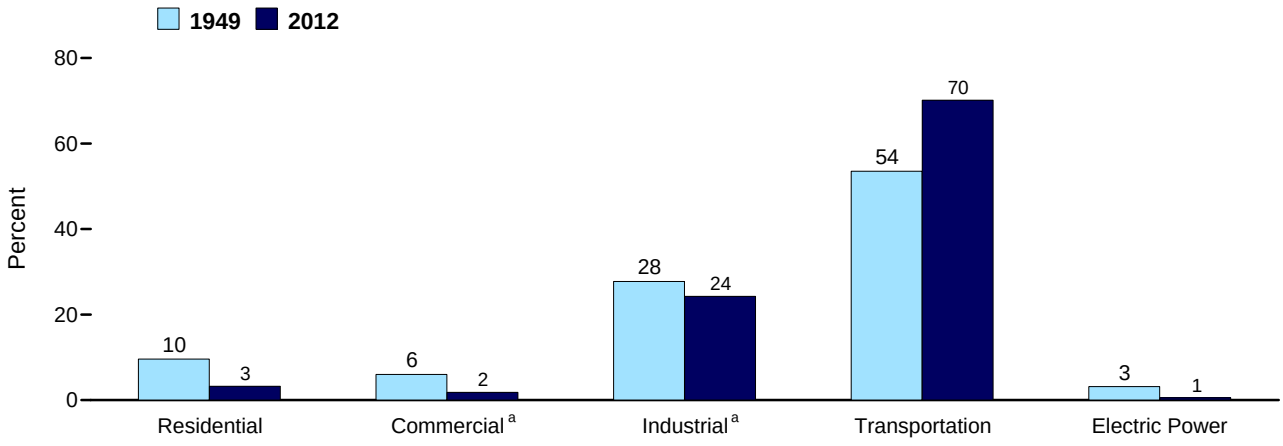
By Sector, 1949–2012



By Sector, June 2013



Sector Shares, 1949 and 2012



[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**	**188**	**2**	**99**	**28**	**(s)**	**31**	**348**
2010 Average	**266**	**14**	**379**	**659**	**184**	**2**	**100**	**28**	**(s)**	**27**	**342**
2011 January	351	14	439	803	278	2	127	23	(s)	33	464
February	368	36	402	806	292	6	116	23	(s)	35	473
March	251	19	384	654	199	3	111	24	(s)	24	361
April	173	6	325	504	137	1	94	24	0	16	273
May	114	(s)	331	445	90	(s)	96	24	0	11	221
June	177	3	323	503	140	1	93	25	0	17	276
July	158	7	325	489	125	1	94	25	0	15	260
August	216	4	335	555	172	1	97	24	0	20	314
September	237	6	326	569	188	1	94	24	0	22	329
October	257	1	354	613	204	(s)	103	24	0	24	354
November	295	4	381	680	234	1	110	23	(s)	28	396
December	380	9	416	805	302	2	120	24	(s)	36	483
Average	**247**	**9**	**362**	**618**	**196**	**2**	**105**	**24**	**(s)**	**23**	**350**
2012 January	395	1	392	789	314	(s)	113	22	(s)	29	479
February	332	17	385	734	264	3	111	23	(s)	24	426
March	270	1	354	625	214	(s)	103	23	(s)	20	360
April	197	2	329	529	157	(s)	95	24	(s)	14	291
May	196	(s)	343	539	155	(s)	99	24	0	14	293
June	203	1	330	534	161	(s)	95	25	0	15	296
July	189	2	337	528	150	(s)	98	24	(s)	14	286
August	238	1	349	587	189	(s)	101	25	(s)	17	332
September	191	2	354	547	152	(s)	102	23	(s)	14	292
October	170	2	380	552	135	(s)	110	24	(s)	12	281
November	224	2	377	603	178	(s)	109	23	(s)	16	327
December	248	2	404	655	197	(s)	117	23	(s)	18	355
Average	**238**	**3**	**361**	**602**	**189**	**(s)**	**105**	**24**	**(s)**	**17**	**335**
2013 January	315	7	441	763	250	1	127	22	(s)	23	425
February	324	5	438	767	266	1	127	23	(s)	24	441
March	254	11	398	662	201	2	115	23	(s)	19	361
April	197	3	357	558	156	1	103	24	(s)	14	298
May	R 124	2	324	R 450	R 99	(s)	94	24	0	9	R 226
June	91	2	322	415	72	(s)	93	24	0	7	197
6-Month Average	**217**	**5**	**380**	**601**	**173**	**1**	**110**	**24**	**(s)**	**16**	**323**
2012 6-Month Average	**266**	**4**	**356**	**625**	**211**	**1**	**103**	**24**	**(s)**	**19**	**357**
2011 6-Month Average	**237**	**13**	**367**	**617**	**188**	**2**	**106**	**24**	**(s)**	**22**	**343**

[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.

R=Revised. 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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**	**508**	**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 January	221	711	3	2,162	64	131	275	76	1,244	4,887
February	248	601	7	1,981	62	135	218	74	1,185	4,512
March	282	751	4	1,890	77	138	266	60	1,405	4,871
April	311	568	1	1,602	70	138	302	61	1,301	4,353
May	357	557	(s)	1,629	63	138	359	60	1,082	4,246
June	454	580	1	1,589	64	142	309	61	1,213	4,414
July	465	344	1	1,599	61	142	287	39	1,363	4,301
August	545	546	1	1,648	70	140	388	42	1,311	4,691
September	462	570	1	1,607	64	137	276	63	1,299	4,480
October	423	599	(s)	1,746	53	136	343	52	1,239	4,590
November	297	704	1	1,876	64	134	336	53	1,391	4,855
December	187	487	2	2,051	57	136	173	66	1,228	4,388
Average	**355**	**584**	**2**	**1,781**	**64**	**137**	**295**	**59**	**1,272**	**4,549**
2012 January	216	637	(s)	1,931	66	129	303	53	1,349	4,684
February	218	781	3	1,898	71	135	242	51	1,306	4,706
March	236	581	(s)	1,746	57	136	292	54	1,163	4,265
April	329	569	(s)	1,623	63	138	311	53	1,166	4,253
May	378	553	(s)	1,687	59	141	343	38	1,224	4,424
June	454	479	(s)	1,625	55	142	336	46	1,214	4,350
July	461	367	(s)	1,662	54	138	298	52	1,298	4,330
August	485	421	(s)	1,717	57	143	368	44	1,320	4,555
September	444	522	(s)	1,744	53	135	314	38	1,090	4,340
October	369	648	(s)	1,873	57	137	283	35	1,361	4,763
November	282	708	(s)	1,856	60	134	341	37	1,303	4,722
December	206	489	(s)	1,992	47	132	325	22	1,448	4,661
Average	**340**	**562**	**1**	**1,780**	**58**	**137**	**313**	**44**	**1,271**	**4,504**
2013 January	223	861	1	2,170	65	129	315	42	1,220	5,027
February	212	737	1	2,159	64	132	229	38	1,259	4,831
March	237	637	2	1,959	65	135	255	56	1,095	4,440
April	295	674	1	1,760	56	138	245	36	1,259	4,464
May	294	R 649	(s)	1,598	67	141	293	27	1,327	R 4,397
June	410	567	(s)	1,588	72	141	333	39	1,362	4,513
6-Month Average	**279**	**688**	**1**	**1,870**	**65**	**136**	**279**	**40**	**1,253**	**4,610**
2012 6-Month Average	**305**	**599**	**1**	**1,751**	**62**	**137**	**305**	**49**	**1,237**	**4,446**
2011 6-Month Average	**312**	**629**	**3**	**1,808**	**67**	**137**	**289**	**65**	**1,239**	**4,550**

[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.

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Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

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**	**13,296**	**33**	**63**	**79**	**175**
2010 Average	**15**	**2,765**	**1,432**	**21**	**64**	**8,824**	**389**	**13,509**	**38**	**65**	**67**	**170**
2011 January	11	2,575	1,346	29	60	8,216	417	12,655	43	85	56	184
February	14	2,620	1,352	27	59	8,446	421	12,938	33	75	37	144
March	18	2,816	1,385	26	73	8,637	342	13,295	29	82	37	147
April	10	2,844	1,457	22	66	8,634	354	13,387	33	54	46	133
May	18	2,907	1,424	22	59	8,655	355	13,440	31	55	41	128
June	17	3,019	1,540	22	61	8,900	358	13,916	32	70	43	145
July	19	2,901	1,473	22	58	8,865	223	13,559	36	81	52	169
August	18	3,048	1,554	22	67	8,761	240	13,711	26	73	44	143
September	13	2,918	1,416	22	61	8,583	372	13,384	24	73	33	130
October	16	2,921	1,384	24	50	8,489	297	13,180	24	52	32	107
November	12	2,852	1,416	26	60	8,380	306	13,052	25	40	32	97
December	10	2,656	1,353	28	54	8,523	386	13,011	28	56	31	116
Average	**15**	**2,841**	**1,425**	**24**	**61**	**8,592**	**338**	**13,295**	**30**	**66**	**41**	**137**
2012 January	12	2,451	1,313	26	62	8,036	304	12,205	26	63	34	123
February	11	2,580	1,350	26	67	8,463	291	12,788	23	55	27	105
March	14	2,623	1,382	24	54	8,474	314	12,883	19	31	29	79
April	14	2,755	1,359	22	59	8,655	312	13,177	26	27	28	80
May	17	2,812	1,409	23	56	8,830	214	13,360	29	33	29	91
June	13	2,858	1,545	22	52	8,868	266	13,624	29	37	45	111
July	20	2,818	1,468	23	51	8,657	299	13,336	28	40	53	121
August	13	2,870	1,469	23	54	8,966	253	13,649	23	41	39	102
September	15	2,794	1,379	24	50	8,417	220	12,899	22	43	30	94
October	14	2,861	1,341	25	54	8,540	200	13,034	24	36	32	92
November	11	2,768	1,407	25	56	8,381	213	12,861	24	39	28	91
December	9	2,573	1,373	27	44	8,224	121	12,372	22	38	28	88
Average	**14**	**2,730**	**1,399**	**24**	**55**	**8,543**	**250**	**13,016**	**25**	**40**	**34**	**98**
2013 January	11	2,595	1,297	30	62	8,067	234	12,296	32	54	50	136
February	8	2,626	1,320	29	61	8,257	206	12,507	23	52	37	112
March	12	2,659	1,369	27	61	8,457	329	12,913	21	51	28	100
April	12	2,822	1,414	24	53	8,604	204	13,134	22	48	29	100
May	15	R 2,873	1,416	22	63	8,817	R 151	R 13,357	26	66	28	120
June	15	2,915	1,431	22	68	8,800	225	13,476	22	69	32	123
6-Month Average	**12**	**2,749**	**1,375**	**25**	**61**	**8,502**	**225**	**12,950**	**24**	**57**	**34**	**115**
2012 6-Month Average	**14**	**2,679**	**1,393**	**24**	**58**	**8,553**	**283**	**13,004**	**25**	**41**	**32**	**98**
2011 6-Month Average	**15**	**2,798**	**1,418**	**25**	**63**	**8,581**	**374**	**13,273**	**33**	**70**	**44**	**147**

[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.

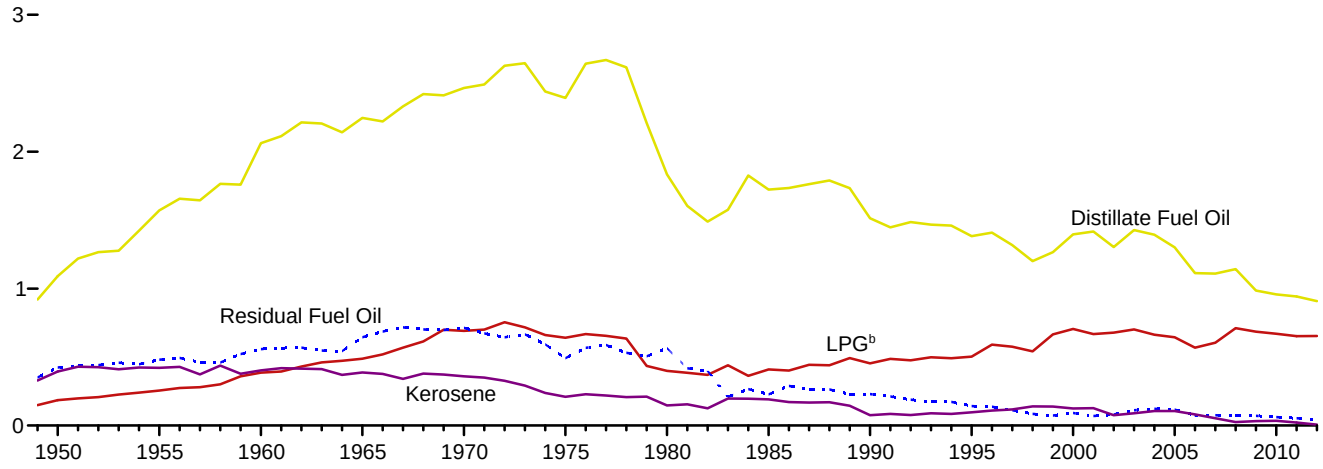
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

Sources: See end of section.

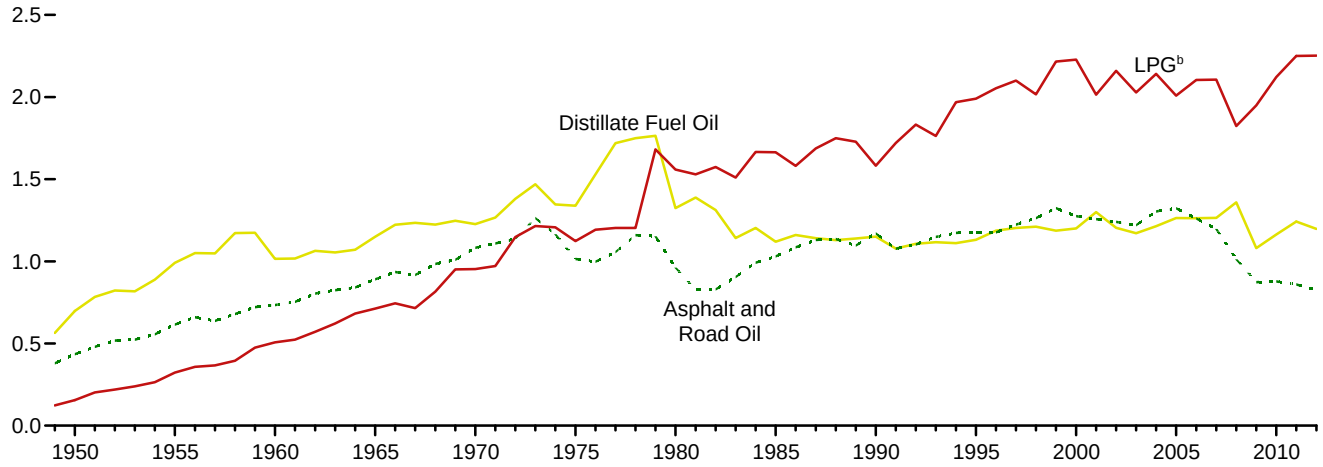
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 3.8a Heat Content of Petroleum Consumption by End-Use Sector, 1949–2012
(Quadrillion Btu)

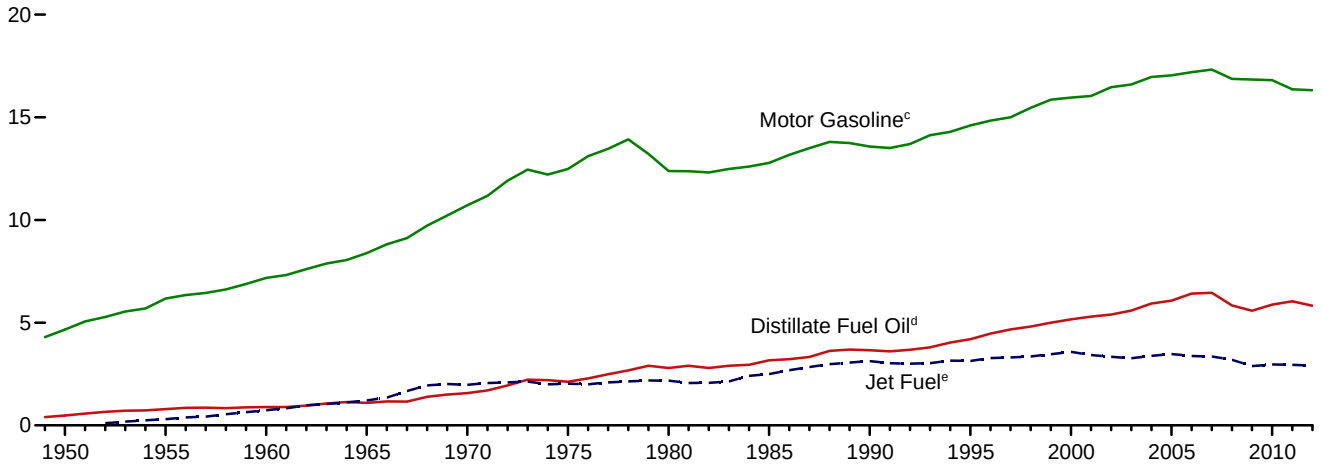
Residential and Commercial[a] Sectors, Selected Products



Industrial[a] Sector, Selected Products



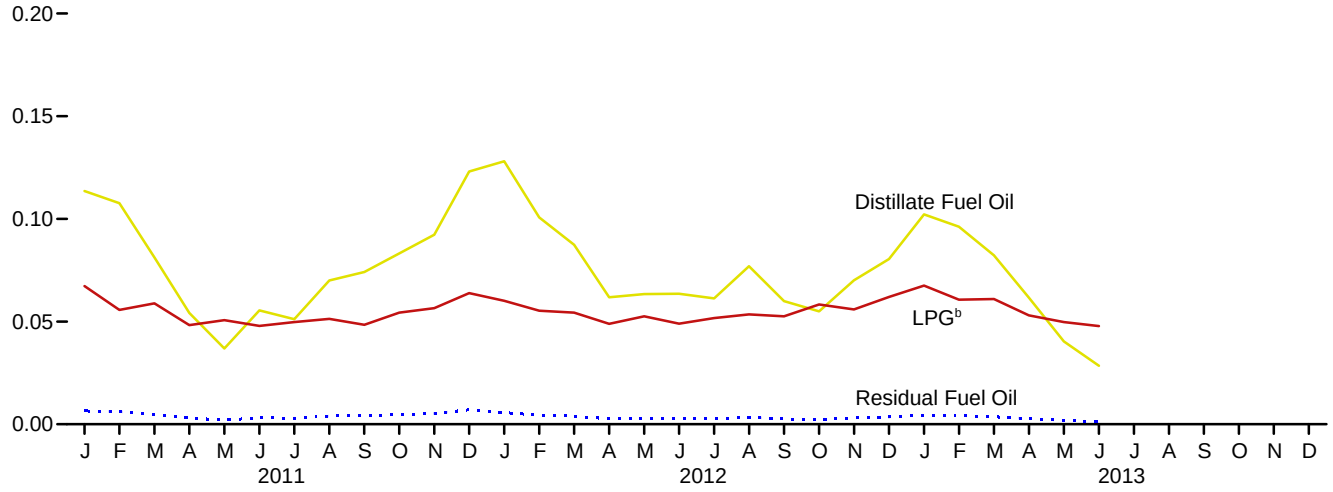
Transportation Sector, Selected Products



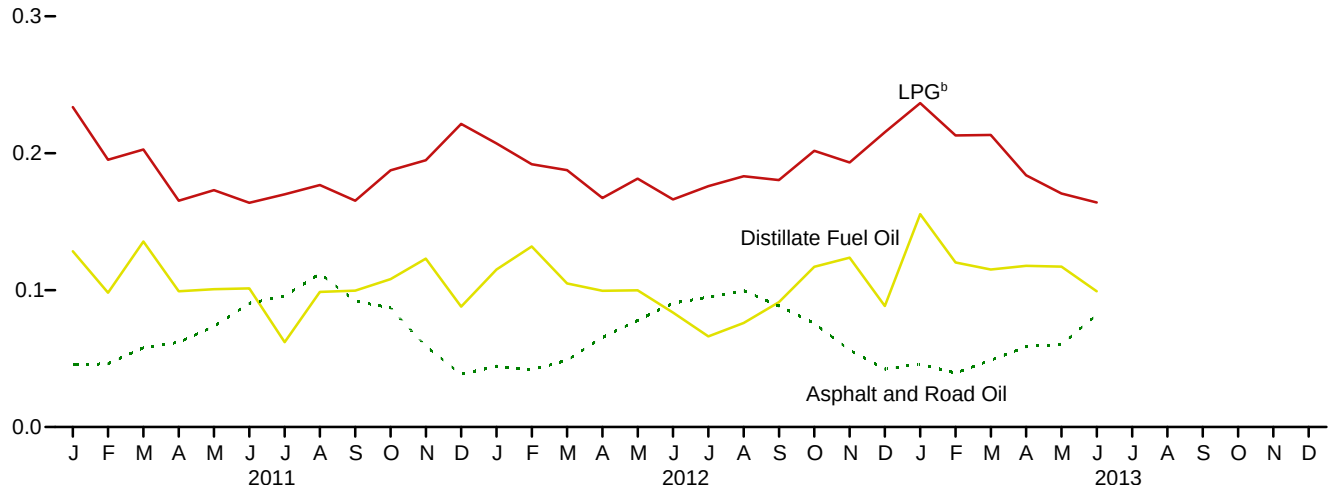
[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.
[b] Liquefied petroleum gases.
[c] Beginning in 1993, includes fuel ethanol blended into motor gasoline.
[d] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel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

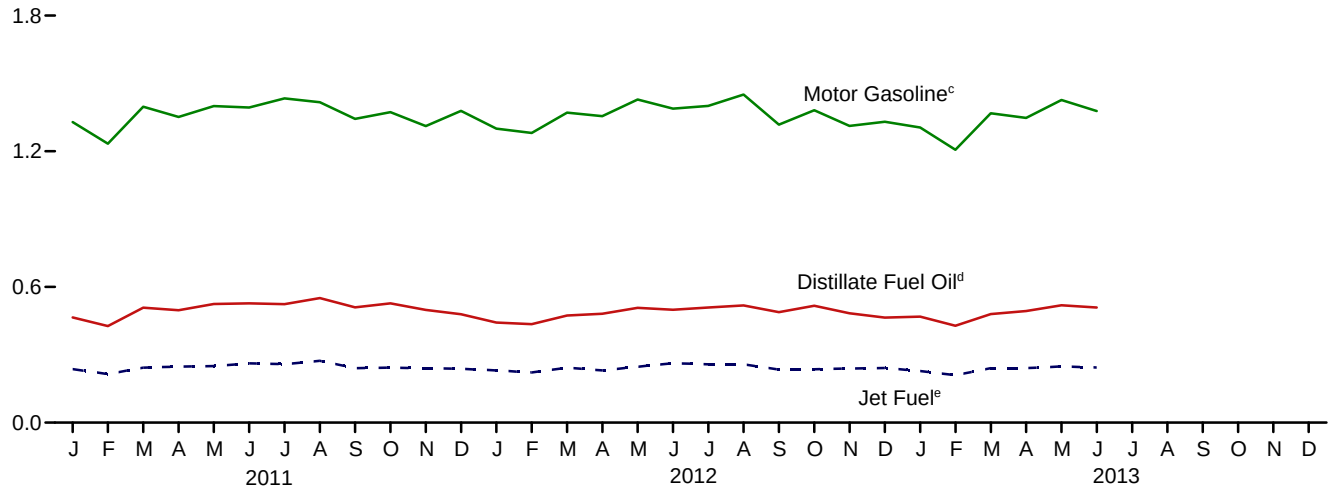
Residential and Commercial[a] Sectors, Selected Products



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	**905**	**74**	**395**	**1,374**	**479**	**22**	**109**	**18**	**(s)**	**141**	**769**
2000 Total	**905**	**95**	**555**	**1,554**	**491**	**30**	**150**	**45**	**(s)**	**92**	**807**
2001 Total	**908**	**95**	**526**	**1,529**	**508**	**31**	**143**	**37**	**(s)**	**70**	**790**
2002 Total	**860**	**60**	**537**	**1,457**	**444**	**16**	**141**	**45**	**(s)**	**80**	**726**
2003 Total	**932**	**70**	**544**	**1,547**	**496**	**19**	**157**	**60**	**(s)**	**111**	**843**
2004 Total	**924**	**85**	**512**	**1,520**	**470**	**20**	**152**	**45**	**(s)**	**122**	**810**
2005 Total	**854**	**84**	**513**	**1,451**	**447**	**22**	**131**	**46**	**(s)**	**116**	**762**
2006 Total	**712**	**66**	**446**	**1,224**	**401**	**15**	**123**	**49**	**(s)**	**75**	**664**
2007 Total	**726**	**44**	**484**	**1,254**	**384**	**9**	**121**	**61**	**(s)**	**75**	**651**
2008 Total	**756**	**21**	**553**	**1,330**	**387**	**4**	**158**	**46**	**(s)**	**71**	**666**
2009 Total	**587**	**28**	**547**	**1,161**	**399**	**4**	**139**	**53**	**(s)**	**71**	**667**
2010 Total	**566**	**29**	**530**	**1,126**	**392**	**5**	**140**	**53**	**(s)**	**62**	**652**
2011 January	63	2	52	118	50	(s)	15	4	(s)	6	76
February	60	6	43	109	48	1	12	3	(s)	6	71
March	45	3	46	94	36	1	13	4	(s)	5	58
April	30	1	37	69	24	(s)	11	4	0	3	42
May	21	(s)	39	60	16	(s)	11	4	0	2	34
June	31	1	37	69	25	(s)	11	4	0	3	42
July	29	1	39	68	23	(s)	11	4	0	3	41
August	39	1	40	80	31	(s)	12	4	0	4	51
September	41	1	38	80	33	(s)	11	4	0	4	52
October	46	(s)	42	89	37	(s)	12	4	0	5	58
November	51	1	44	96	41	(s)	13	4	(s)	5	63
December	69	2	50	120	54	(s)	14	4	(s)	7	80
Total	**526**	**19**	**506**	**1,051**	**417**	**3**	**146**	**45**	**(s)**	**54**	**666**
2012 January	71	(s)	47	118	57	(s)	13	4	(s)	6	79
February	56	3	43	102	45	(s)	12	4	(s)	4	65
March	49	(s)	42	91	39	(s)	12	4	(s)	4	59
April	34	(s)	38	73	27	(s)	11	4	(s)	3	45
May	35	(s)	41	76	28	(s)	12	4	0	3	47
June	35	(s)	38	74	28	(s)	11	4	0	3	46
July	34	(s)	40	75	27	(s)	12	4	(s)	3	45
August	43	(s)	41	85	34	(s)	12	4	(s)	3	54
September	33	(s)	41	75	27	(s)	12	4	(s)	3	45
October	31	(s)	45	76	24	(s)	13	4	(s)	2	44
November	39	(s)	43	83	31	(s)	13	4	(s)	3	50
December	45	(s)	48	93	36	(s)	14	4	(s)	4	57
Total	**507**	**6**	**507**	**1,020**	**402**	**1**	**147**	**45**	**(s)**	**40**	**635**
2013 January	57	1	52	111	45	(s)	15	4	(s)	4	69
February	53	1	47	101	43	(s)	14	3	(s)	4	65
March	46	2	47	95	36	(s)	14	4	(s)	4	58
April	34	1	41	76	27	(s)	12	4	(s)	3	46
May	[R] 22	(s)	39	[R] 61	18	(s)	11	4	0	2	35
June	16	(s)	37	53	13	(s)	11	4	0	1	28
6-Month Total	**228**	**5**	**264**	**497**	**183**	**1**	**76**	**22**	**(s)**	**18**	**300**
2012 6-Month Total	**282**	**4**	**248**	**534**	**223**	**1**	**72**	**23**	**(s)**	**22**	**341**
2011 6-Month Total	**250**	**13**	**255**	**518**	**199**	**2**	**74**	**22**	**(s)**	**26**	**323**

[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.

R=Revised. 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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**	**1,131**	**15**	**1,990**	**178**	**200**	**721**	**337**	**2,837**	**8,588**
2000 Total	**1,276**	**1,200**	**16**	**2,228**	**190**	**150**	**796**	**241**	**2,979**	**9,076**
2001 Total	**1,257**	**1,300**	**23**	**2,014**	**174**	**295**	**858**	**203**	**3,056**	**9,181**
2002 Total	**1,240**	**1,204**	**14**	**2,160**	**172**	**309**	**842**	**190**	**3,040**	**9,171**
2003 Total	**1,220**	**1,171**	**24**	**2,028**	**159**	**324**	**825**	**220**	**3,264**	**9,235**
2004 Total	**1,304**	**1,214**	**28**	**2,141**	**161**	**372**	**934**	**249**	**3,428**	**9,831**
2005 Total	**1,323**	**1,264**	**39**	**2,009**	**160**	**356**	**889**	**281**	**3,318**	**9,640**
2006 Total	**1,261**	**1,263**	**30**	**2,104**	**156**	**376**	**934**	**239**	**3,416**	**9,780**
2007 Total	**1,197**	**1,265**	**13**	**2,106**	**161**	**306**	**906**	**193**	**3,313**	**9,461**
2008 Total	**1,012**	**1,359**	**4**	**1,823**	**150**	**250**	**868**	**194**	**2,941**	**8,600**
2009 Total	**873**	**1,081**	**4**	**1,950**	**135**	**244**	**799**	**130**	**2,611**	**7,826**
2010 Total	**878**	**1,163**	**7**	**2,121**	**149**	**267**	**682**	**120**	**2,800**	**8,188**
2011 January	45	128	(s)	234	12	21	51	15	227	734
February	46	98	1	195	11	20	37	13	190	611
March	58	136	1	203	14	22	50	12	250	745
April	62	99	(s)	165	13	22	55	12	224	651
May	73	101	(s)	173	12	22	67	12	194	654
June	90	101	(s)	164	12	22	56	12	209	666
July	96	62	(s)	170	11	23	54	8	245	668
August	112	99	(s)	177	13	23	73	8	234	739
September	92	100	(s)	165	12	21	50	12	224	676
October	87	108	(s)	187	10	22	64	10	220	709
November	59	123	(s)	195	12	21	61	10	239	719
December	38	88	(s)	221	11	22	32	13	220	646
Total	**859**	**1,242**	**4**	**2,250**	**142**	**262**	**648**	**135**	**2,676**	**8,218**
2012 January	44	115	(s)	207	12	21	57	10	238	705
February	42	132	1	192	13	20	42	9	219	670
March	49	105	(s)	188	11	22	55	10	209	648
April	65	99	(s)	167	11	22	56	10	201	633
May	78	100	(s)	181	11	23	64	7	217	682
June	90	84	(s)	166	10	22	61	9	211	653
July	95	66	(s)	176	10	22	56	10	232	667
August	100	76	(s)	183	11	23	69	9	233	703
September	88	91	(s)	180	10	21	57	7	190	644
October	76	117	(s)	202	11	22	53	7	241	729
November	56	124	(s)	193	11	21	62	7	225	699
December	42	88	(s)	215	9	21	61	4	259	700
Total	**826**	**1,197**	**1**	**2,252**	**129**	**261**	**690**	**100**	**2,676**	**8,133**
2013 January	46	156	(s)	237	12	21	59	8	218	756
February	39	120	(s)	213	11	19	39	7	204	653
March	49	115	(s)	213	12	22	48	11	195	665
April	59	118	(s)	184	10	22	44	7	217	661
May	61	117	(s)	171	13	23	55	5	236	680
June	82	99	(s)	164	13	22	60	7	233	680
6-Month Total	**335**	**725**	**1**	**1,181**	**71**	**128**	**304**	**45**	**1,304**	**4,095**
2012 6-Month Total	**369**	**635**	**1**	**1,102**	**68**	**130**	**334**	**56**	**1,296**	**3,990**
2011 6-Month Total	**375**	**663**	**3**	**1,134**	**73**	**130**	**315**	**74**	**1,294**	**4,061**

[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.

(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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

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**	**4,195**	**3,132**	**18**	**168**	**14,607**	**911**	**23,070**	**108**	**81**	**566**	**755**
2000 Total	**36**	**5,165**	**3,580**	**12**	**179**	**15,960**	**888**	**25,820**	**175**	**99**	**871**	**1,144**
2001 Total	**35**	**5,292**	**3,426**	**14**	**164**	**16,041**	**586**	**25,557**	**171**	**103**	**1,003**	**1,277**
2002 Total	**34**	**5,392**	**3,340**	**14**	**162**	**16,465**	**677**	**26,085**	**127**	**175**	**659**	**961**
2003 Total	**30**	**5,590**	**3,265**	**18**	**150**	**16,597**	**571**	**26,222**	**161**	**175**	**869**	**1,205**
2004 Total	**31**	**5,932**	**3,383**	**19**	**152**	**16,962**	**740**	**27,219**	**111**	**222**	**879**	**1,212**
2005 Total	**35**	**6,076**	**3,475**	**28**	**151**	**17,043**	**837**	**27,645**	**115**	**243**	**876**	**1,235**
2006 Total	**33**	**6,414**	**3,379**	**27**	**147**	**17,197**	**906**	**28,105**	**74**	**214**	**361**	**648**
2007 Total	**32**	**6,457**	**3,358**	**22**	**152**	**17,321**	**994**	**28,335**	**89**	**171**	**397**	**657**
2008 Total	**28**	**5,837**	**3,193**	**40**	**141**	**16,872**	**926**	**27,038**	**73**	**154**	**240**	**468**
2009 Total	**27**	**5,583**	**2,883**	**28**	**127**	**16,838**	**791**	**26,277**	**70**	**139**	**181**	**390**
2010 Total	**27**	**5,879**	**2,963**	**29**	**141**	**16,807**	**892**	**26,738**	**80**	**144**	**154**	**378**
2011 January	2	465	237	3	11	1,329	81	2,129	8	16	11	35
February	2	427	215	3	10	1,234	74	1,965	5	13	6	24
March	3	509	243	3	14	1,397	67	2,235	5	15	7	28
April	2	497	248	3	12	1,352	67	2,179	6	10	9	24
May	3	525	250	3	11	1,400	69	2,261	6	10	8	24
June	3	528	262	2	11	1,393	67	2,266	6	13	8	26
July	3	524	259	3	11	1,434	43	2,276	7	15	10	32
August	3	550	273	3	13	1,417	47	2,306	5	14	9	27
September	2	510	241	3	11	1,344	70	2,180	4	13	6	24
October	2	527	243	3	9	1,373	58	2,216	4	10	6	20
November	2	498	241	3	11	1,312	58	2,125	4	7	6	18
December	2	480	238	3	10	1,379	75	2,187	5	11	6	22
Total	**27**	**6,040**	**2,950**	**34**	**134**	**16,363**	**776**	**26,324**	**64**	**146**	**93**	**303**
2012 January	2	443	231	3	12	1,300	59	2,050	5	12	7	23
February	2	436	222	3	12	1,281	53	2,008	4	10	5	18
March	2	474	243	3	10	1,371	61	2,164	3	6	6	15
April	2	481	231	3	11	1,355	59	2,142	4	5	5	15
May	3	508	248	3	11	1,429	42	2,242	5	6	6	17
June	2	499	263	3	9	1,389	50	2,215	5	7	9	20
July	3	509	258	3	10	1,401	58	2,241	5	7	10	23
August	2	518	258	3	10	1,451	49	2,291	4	8	8	19
September	2	488	235	3	9	1,318	42	2,096	4	8	6	17
October	2	517	236	3	10	1,382	39	2,188	4	7	6	17
November	2	484	239	3	10	1,312	40	2,090	4	7	5	16
December	1	465	241	3	8	1,331	24	2,073	4	7	5	17
Total	**25**	**5,821**	**2,904**	**34**	**122**	**16,318**	**576**	**25,800**	**52**	**89**	**77**	**218**
2013 January	2	469	228	4	12	1,305	46	2,064	6	10	10	26
February	1	428	210	3	10	1,207	36	1,895	4	9	6	19
March	2	480	241	3	11	1,368	64	2,170	4	9	6	19
April	2	493	241	3	10	1,347	38	2,134	4	9	6	18
May	2	[R] 519	249	3	12	1,427	29	2,240	5	12	5	23
June	2	509	243	2	12	1,378	42	2,190	4	13	6	22
6-Month Total	**11**	**2,898**	**1,411**	**18**	**67**	**8,032**	**256**	**12,693**	**26**	**62**	**39**	**127**
2012 6-Month Total	**12**	**2,841**	**1,437**	**17**	**64**	**8,124**	**324**	**12,820**	**27**	**45**	**37**	**108**
2011 6-Month Total	**13**	**2,950**	**1,455**	**17**	**69**	**8,105**	**425**	**13,035**	**35**	**76**	**50**	**161**

[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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#petroleum for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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; *Petroleum Supply Monthly*, monthly reports; revisions to crude oil production, total field production, and adjustments (based on crude oil production data from: 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, Aviation Gasoline, Distillate Fuel Oil, Kerosene, Propane, Lubricants, Petroleum Coke, and Residual Fuel Oil

Product supplied data in thousand barrels per day for these petroleum products are from Table 3.5, and are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1.

Jet Fuel

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

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

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

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

Other Petroleum Products
Prior to the current two months, product supplied data in thousand barrels per day for "other" petroleum products are from the PSA, PSM, and earlier publications (see sources for Table 3.5). "Other" petroleum products include pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products; beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components; beginning in 1983, also includes crude oil burned as fuel; and beginning in 2005, also includes naphtha-type jet fuel. These data are converted to trillion Btu by multiplying by the appropriate heat content factors in MER Table A1. Total "Other" petroleum product supplied is the sum of the data in trillion Btu for the individual products.

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

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

Tables 3.7a–3.7c Sources

Petroleum consumption data 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.
1981–2011: EIA, *Petroleum Statement Annual*, annual reports.
2012 and 2013: 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 Consumed by the Electric Power Sector
See sources for Table 7.4b. For 1973–1979, electric utility consumption of distillate fuel oil is assumed to be the amount of petroleum (minus small amounts of kerosene and kerosene-type jet fuel deliveries) consumed in gas turbine and internal combustion plants. For 1980–2000, electric utility consumption of distillate fuel oil is assumed to be the amount of light oil (fuel oil nos. 1 and 2, plus small amounts of kerosene and jet fuel) consumed.

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

(previously Form EIA-172). Shares for the current year are based on the most recent Sales report.

Following are notes on the individual sector groupings:

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 Consumed by the End-Use Sectors, Monthly

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

The transportation highway use portion is allocated into the months in proportion to each month's share of the year's total sales for highway use as reported by the Federal Highway Administration's Table MF-25, "Private and Commercial Highway Use of Special Fuels by Months." 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*. The allocations of LPG sold for internal combustion engine use to the transportation sector range from a low of 20 percent (in 2001) to a high of 80 percent (in 2008).

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

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

1973–1982: EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports, based primarily on data collected by Form EIA-174, “Sales of Liquefied Petroleum Gases.”
1983: End-use consumption estimates for 1983 are based on 1982 end-use consumption because the collection of data under Form EIA-174 was discontinued after data year 1982.
1984 forward: American Petroleum Institute (API), "Sales of Natural Gas Liquids and Liquefied Refinery Gases," which is based on an LPG sales survey jointly sponsored by API, the Gas Processors Association, and the National Liquefied Petroleum Gas Association. EIA adjusts the data to remove quantities of pentanes plus and to estimate withheld values.

Lubricants
The consumption of lubricants is allocated to the industrial and transportation sectors for all months according to proportions developed from annual sales of lubricants to the two sectors from U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases." The 1973 shares are applied to 1973 and 1974; the 1975 shares are applied to 1975 and 1976; and the 1977 shares are applied to 1977 forward.

Motor Gasoline
The total monthly consumption of motor gasoline is allocated to the sectors in proportion to aggregations of annual sales categories created on the basis of the U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Tables MF-21, MF-24, and MF-25, as follows:

Commercial sales are the sum of sales for public non-highway use and miscellaneous and unclassified uses.

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

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

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

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

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

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

Following are notes on the individual sector groupings:

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

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

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

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

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

Table 3.8a Sources

Distillate Fuel Oil, Kerosene, Petroleum Coke, and Residual Fuel Oil
Residential and/or commercial sector consumption data in thousand barrels per day for these petroleum products are from Table 3.7a, and are converted to trillion Btu by multiplying by the appropriate heat content factors in Table A1.

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

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

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

Table 3.8b Sources

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

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

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

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

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

Table 3.8c Sources

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

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

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

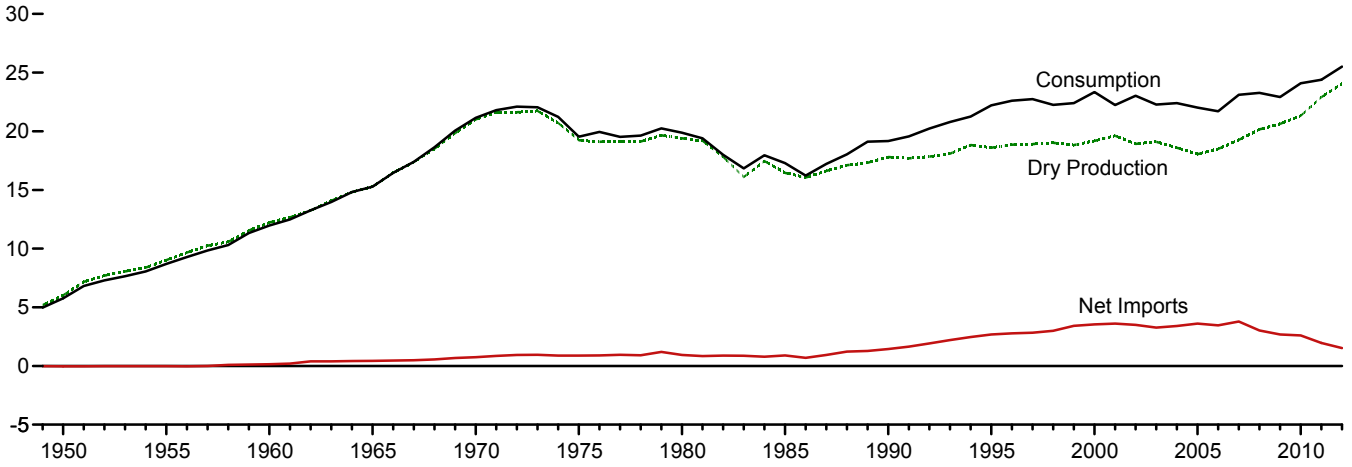
Motor Gasoline
Transportation sector consumption data in thousand barrels per day for motor gasoline are from Table 3.7c, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors in Table A3.

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

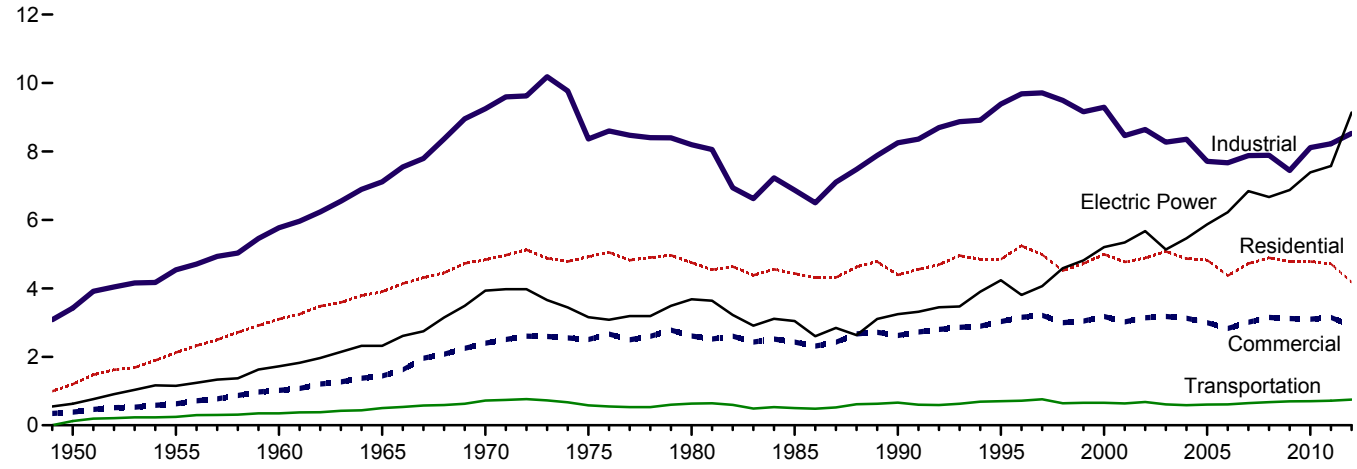
4. Natural Gas

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

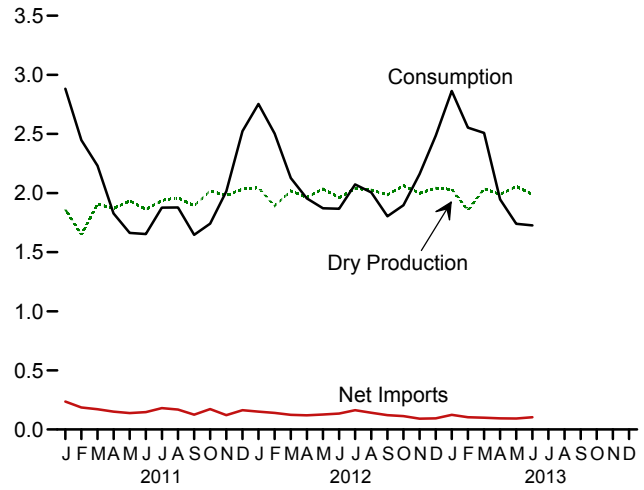
Overview, 1949–2012



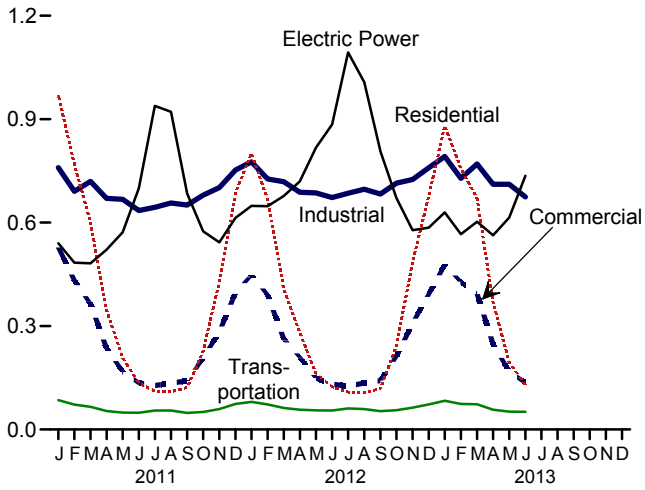
Consumption by Sector, 1949–2012



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]	Extraction Loss[c]	Dry Gas Production[d]	Supplemental Gaseous Fuels[e]	Trade			Net Storage Withdrawals[f]	Balancing Item[g]	Consumption[h]
						Imports	Exports	Net Imports			
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 January	2,299	1,953	92	1,861	5	372	136	236	811	-31	2,882
February	2,104	1,729	82	1,647	4	311	125	186	594	16	2,448
March	2,411	2,002	95	1,908	5	315	145	171	151	-3	2,232
April	2,350	1,961	93	1,868	5	278	127	151	-216	20	1,828
May	2,411	2,031	96	1,935	5	271	132	139	-405	-10	1,663
June	2,313	1,954	92	1,862	5	267	120	147	-346	-15	1,653
July	2,340	2,033	96	1,937	5	293	113	180	-248	3	1,877
August	2,370	2,057	97	1,960	5	280	111	169	-249	-7	1,878
September	2,358	1,987	94	1,893	5	252	127	125	-404	27	1,646
October	2,502	2,119	100	2,019	5	282	110	173	-391	-65	1,741
November	2,476	2,076	98	1,978	5	249	128	121	-41	-50	2,014
December	2,544	2,135	101	2,034	5	298	134	163	390	-69	2,524
Total	**28,479**	**24,036**	**1,134**	**22,902**	**60**	**3,469**	**1,507**	**1,962**	**-354**	**-185**	**24,385**
2012 January	2,573	[E] 2,149	105	[E] 2,044	6	281	130	151	545	9	2,754
February	2,378	[E] 1,989	99	[E] 1,890	5	270	130	140	459	9	2,504
March	2,537	[E] 2,123	105	[E] 2,017	6	265	141	124	-39	19	2,127
April	2,445	[E] 2,065	102	[E] 1,963	4	243	123	120	-137	5	1,956
May	2,530	[E] 2,139	105	[E] 2,034	4	259	133	126	-283	-11	1,871
June	2,420	[E] 2,061	100	[E] 1,962	5	260	125	135	-230	-4	1,868
July	2,461	[E] 2,142	103	[E] 2,039	5	281	118	163	-134	1	2,073
August	2,374	[E] 2,130	104	[E] 2,026	5	281	139	142	-168	(s)	2,004
September	2,432	[E] 2,090	105	[E] 1,985	5	258	137	121	-291	-16	1,804
October	2,576	[E] 2,174	111	[E] 2,063	5	253	140	113	-241	-44	1,897
November	2,503	[E] 2,108	109	[E] 1,999	5	234	142	92	125	-61	2,160
December	2,562	[E] 2,149	107	[E] 2,041	6	252	159	94	385	-39	2,486
Total	**29,792**	[E] **25,319**	**1,257**	[E] **24,063**	**62**	**3,138**	**1,619**	**1,519**	[R] **-9**	**-132**	**25,502**
2013 January	[R] 2,546	[RE] 2,136	105	[RE] 2,031	6	278	155	124	721	[R] -18	2,864
February	[R] 2,316	[RE] 1,951	98	[E] 1,853	5	237	133	104	604	[R] -12	2,553
March	[R] 2,546	[E] 2,146	110	[E] 2,036	6	248	149	100	381	-14	2,508
April	[R] 2,483	[E] 2,095	107	[E] 1,988	5	220	126	95	-136	-4	1,947
May	[R] 2,540	[RE] 2,166	111	[RE] 2,055	[R] 5	235	142	93	-418	[R] 5	1,740
June	2,443	[E] 2,096	107	[E] 1,989	3	237	134	103	-372	3	1,726
6-Month Total	**14,875**	[E] **12,590**	**638**	[E] **11,953**	**30**	**1,456**	**838**	**618**	**779**	**-41**	**13,338**
2012 6-Month Total	**14,884**	[E] **12,527**	**617**	[E] **11,910**	**31**	**1,578**	**783**	**795**	**315**	**27**	**13,078**
2011 6-Month Total	**13,888**	**11,630**	**549**	**11,081**	**29**	**1,814**	**784**	**1,030**	**589**	**-23**	**12,706**

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

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

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

[f] Net withdrawals from underground storage. For 1980–2011, 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. (s)=Less than 0.5 billion cubic feet and greater than -0.5 billion cubic feet. NA=Not available.

Notes: • See Note 8, "Natural Gas 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#naturalgas for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#naturalgas for all available monthly and annual 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: 1949–2007—**U.S. Energy Information Administration (EIA), *Natural Gas Annual,* annual reports. **2008 forward—**EIA, *Natural Gas Monthly,* August 2013, Table 1.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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**	**41**	**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 January	0	332	3	(s)	0	13	16	9	372	85	2	37	13	136
February	0	279	6	(s)	0	0	11	15	311	84	2	37	3	125
March	0	277	6	(s)	0	14	10	9	315	98	2	41	3	145
April	0	245	6	(s)	0	4	11	13	278	76	2	43	6	127
May	0	236	3	(s)	0	24	8	0	271	80	3	44	6	132
June	0	239	6	(s)	0	5	11	6	267	71	2	47	0	120
July	0	273	0	(s)	0	5	13	3	293	64	0	47	3	113
August	0	250	0	(s)	2	8	11	9	280	67	2	42	0	111
September	0	231	0	(s)	0	4	8	9	252	77	2	39	8	127
October	0	251	3	1	0	8	8	12	282	64	0	43	3	110
November	0	233	0	(s)	0	3	12	0	249	84	2	39	3	128
December	0	272	3	(s)	0	4	10	9	298	87	0	42	5	134
Total	**0**	**3,117**	**35**	**3**	**2**	**91**	**129**	**92**	**3,469**	**937**	**18**	**500**	**52**	**1,507**
2012 January	0	265	0	(s)	0	4	9	3	281	84	3	40	3	130
February	0	250	3	(s)	0	0	11	6	270	87	2	42	0	130
March	0	246	0	(s)	0	4	13	3	265	93	0	46	3	141
April	0	235	0	(s)	0	4	1	3	243	78	0	45	0	123
May	0	243	0	(s)	0	6	11	0	259	78	3	52	0	133
June	0	251	0	(s)	0	0	8	0	260	64	2	58	0	125
July	0	266	0	(s)	0	3	12	0	281	62	0	57	0	118
August	0	262	0	(s)	0	3	16	0	281	77	2	60	0	139
September	0	246	0	(s)	0	3	8	0	258	80	0	58	0	137
October	0	243	0	(s)	0	6	5	0	253	75	2	61	3	140
November	0	220	0	(s)	0	3	8	3	234	93	0	49	0	142
December	0	235	0	(s)	0	0	8	9	252	101	0	52	6	159
Total	**0**	**2,963**	**3**	**(s)**	**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	155
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	220	71	0	55	0	126
May	0	[R] 230	0	(s)	0	0	6	0	235	82	0	60	0	142
June	0	229	0	(s)	0	0	8	0	237	76	0	58	0	134
6-Month Total	**0**	**1,404**	**0**	**(s)**	**0**	**7**	**42**	**3**	**1,456**	**504**	**0**	**334**	**0**	**838**
2012 6-Month Total	**0**	**1,491**	**3**	**(s)**	**0**	**16**	**54**	**14**	**1,578**	**483**	**10**	**284**	**6**	**783**
2011 6-Month Total	**0**	**1,607**	**29**	**1**	**0**	**60**	**67**	**51**	**1,814**	**494**	**12**	**248**	**30**	**784**

[a] As liquefied natural gas.

[b] By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981; exported to Mexico beginning in 1998; and exported to Canada in 2007, 2012, and 2013. 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 2008–2012; Oman in 2000–2005; Peru in 2010 and 2011; United Arab Emirates in 1996–2000; Yemen in 2010 forward; and Other (unassigned) in 2004.

[d] Brazil in 2010–2012; Chile in 2011; China in 2011; India in 2010–2012; Russia in 2007; South Korea in 2009–2011; Spain in 2010 and 2011; and United Kingdom in 2010 and 2011.

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

Notes: • See Note 9, "Natural Gas Imports and Exports," at end of section. • 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#naturalgas for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#naturalgas for all available monthly and annual 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." • **1988–2010:** EIA, *Natural Gas Annual,* annual reports. • **2011 forward:** EIA, *Natural Gas Monthly,* August 2013, Tables 4 and 5; and U.S. Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
			Industrial					Transportation				
				Other Industrial								
	Residential	Commercial[a]	Lease and Plant Fuel	CHP[b]	Non-CHP[c]	Total	Total	Pipelines[d] and Distribution[e]	Vehicle Fuel	Total	Electric Power Sector[f,g]	Total
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 January	970	528	107	90	563	652	759	82	3	85	540	2,882
February	769	432	97	81	513	594	691	70	2	72	484	2,448
March	601	364	111	82	526	608	719	63	3	66	482	2,232
April	347	236	109	83	479	562	670	51	3	54	521	1,828
May	208	168	112	87	468	555	667	46	3	49	572	1,663
June	135	135	107	88	440	527	635	46	3	48	699	1,653
July	111	128	110	97	438	535	644	52	3	55	939	1,877
August	109	135	111	99	446	546	657	52	3	55	921	1,878
September	122	141	109	91	451	541	651	46	3	48	684	1,646
October	227	208	116	85	479	563	680	48	3	51	575	1,741
November	429	283	115	86	501	587	701	56	3	59	543	2,014
December	686	397	118	96	539	635	753	71	3	74	614	2,524
Total	**4,714**	**3,154**	**1,323**	**1,063**	**5,842**	**6,905**	**8,227**	**684**	**32**	**716**	**7,574**	**24,385**
2012 January	801	448	[E] 118	98	560	658	776	[E] 77	[E] 3	[E] 80	648	2,754
February	667	390	[E] 109	90	527	617	726	[E] 70	[E] 3	[E] 73	648	2,504
March	407	262	[E] 117	90	512	602	718	[E] 60	[E] 3	[E] 62	677	2,127
April	281	210	[E] 114	87	487	574	688	[E] 55	[E] 3	[E] 58	720	1,956
May	163	149	[E] 118	93	476	568	686	[E] 52	[E] 3	[E] 55	817	1,871
June	124	131	[E] 113	94	465	559	673	[E] 52	[E] 3	[E] 55	885	1,868
July	109	125	[E] 118	101	466	567	685	[E] 58	[E] 3	[E] 61	1,093	2,073
August	106	135	[E] 117	98	482	580	697	[E] 56	[E] 3	[E] 59	1,007	2,004
September	119	142	[E] 115	93	475	568	683	[E] 51	[E] 3	[E] 53	807	1,804
October	242	213	[E] 120	95	500	595	714	[E] 53	[E] 3	[E] 56	671	1,897
November	486	308	[E] 116	97	512	609	725	[E] 61	[E] 3	[E] 63	578	2,160
December	677	393	[E] 118	103	538	641	759	[E] 70	[E] 3	[E] 72	585	2,486
Total	**4,180**	**2,907**	[E] **1,393**	**1,139**	**5,998**	**7,138**	**8,531**	[E] **715**	[E] **33**	[E] **748**	**9,137**	**25,502**
2013 January	881	478	[E] 118	102	573	675	792	[E] 80	[E] 3	[E] 83	629	2,864
February	757	428	[E] 107	91	530	621	728	[E] 72	[E] 3	[E] 74	566	2,553
March	670	393	[E] 118	98	554	652	770	[E] 70	[E] 3	[E] 73	602	2,508
April	369	247	[E] 115	90	506	596	711	[E] 55	[E] 3	[E] 57	563	1,947
May	194	168	[E] 119	94	498	592	711	[E] 49	[E] 3	[E] 52	615	1,740
June	129	136	[E] 115	93	466	559	675	[E] 48	[E] 3	[E] 51	736	1,726
6-Month Total	**3,000**	**1,849**	[E] **693**	**568**	**3,127**	**3,695**	**4,388**	[E] **374**	[E] **16**	[E] **390**	**3,712**	**13,338**
2012 6-Month Total	**2,442**	**1,591**	[E] **689**	**553**	**3,025**	**3,578**	**4,268**	[E] **367**	[E] **16**	[E] **383**	**4,395**	**13,078**
2011 6-Month Total	**3,029**	**1,863**	**644**	**509**	**2,989**	**3,498**	**4,142**	**358**	**16**	**374**	**3,298**	**12,706**

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

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

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

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

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

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

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

[h] Included in "Non-CHP."

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

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#naturalgas for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#naturalgas for all available monthly and annual data beginning in 1973.

Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total** and **Pipelines and Distribution: 1949–2007—**U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA),* annual reports and unpublished revisions. **2008 forward—**EIA, *Natural Gas Monthly (NGM),* August 2013, Table 2. • **Industrial CHP:** Table 7.4c. • **Vehicle Fuel: 1990 and 1991—**EIA, NGA 2000, (November 2001), Table 95. **1992–1998—**EIA, "Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4). **1999–2007—**EIA, NGA, annual reports. **2008 forward—**EIA, NGM, August 2013, Table 2. • **Electric Power Sector:** Table 7.4b.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 January	4,303	2,306	6,609	2	.1	849	50	799
February	4,302	1,722	6,024	39	2.3	666	82	584
March	4,302	1,577	5,879	-75	-4.6	314	168	146
April	4,304	1,788	6,092	-223	-11.1	100	312	-212
May	4,304	2,187	6,491	-233	-9.6	58	458	-399
June	4,302	2,530	6,831	-210	-7.7	80	421	-340
July	4,300	2,775	7,075	-190	-6.4	116	359	-244
August	4,300	3,019	7,319	-134	-4.2	126	370	-244
September	4,301	3,416	7,717	-92	-2.6	55	454	-398
October	4,302	3,804	8,106	-47	-1.2	52	437	-385
November	4,300	3,843	8,143	74	2.0	184	221	-38
December	4,302	3,462	7,764	351	11.3	474	90	383
Total	**4,302**	**3,462**	**7,764**	**351**	**11.3**	**3,074**	**3,422**	**-348**
2012 January	4,307	R 2,915	R 7,222	R 609	R 26.4	R 620	R 75	545
February	4,307	2,455	6,762	733	R 42.5	R 515	R 56	459
March	4,325	2,477	6,802	900	57.1	R 203	R 242	-39
April	4,329	2,613	6,942	825	46.1	R 126	R 264	-137
May	4,334	2,890	R 7,224	R 703	32.2	R 73	R 356	-283
June	4,337	3,118	7,456	589	23.3	R 91	R 321	-230
July	4,339	3,246	7,585	471	17.0	129	263	-134
August	4,348	3,409	7,757	390	12.9	134	302	-168
September	4,352	3,693	8,045	278	8.1	67	358	-291
October	4,365	R 3,929	R 8,294	R 125	3.3	R 86	R 327	-241
November	4,372	3,799	8,172	-43	-1.1	R 281	R 156	125
December	4,371	3,413	7,784	-49	-1.4	490	105	385
Total	**4,371**	**3,413**	**7,784**	**-49**	**-1.4**	**R 2,815**	**R 2,824**	**R -9**
2013 January	4,373	2,703	7,076	R -212	-7.3	793	72	721
February	4,379	2,103	6,483	-351	-14.3	648	44	604
March	4,378	1,724	6,102	-753	-30.4	482	101	381
April	4,377	1,858	6,236	-755	-28.9	136	272	-136
May	4,381	2,272	6,653	-618	-21.4	49	467	-418
June	4,385	2,643	7,028	-475	-15.2	69	441	-372
6-Month Total	– –	– –	– –	– –	– –	**2,177**	**1,397**	**779**
2012 6-Month Total	– –	– –	– –	– –	– –	**1,629**	**1,314**	**315**
2011 6-Month Total	– –	– –	– –	– –	– –	**2,068**	**1,490**	**578**

[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 1980–2011, 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#naturalgas for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#naturalgas for all available monthly and annual 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. **1996–2007—**EIA, *Natural Gas Monthly (NGM),* monthly issues. **2008 forward—**EIA, NGM, August 2013, 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." **1996–2007—**EIA, NGM, monthly issues. **2008 forward—**EIA, NGM, August 2013, Table 8.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 Extraction Loss. Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants—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 extraction losses, see the NGA.

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

Monthly data are revised and considered final after publication of the NGA. Final monthly data are estimated by allocating annual extraction loss data to the months on the basis of total natural gas marketed production data from the 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. The difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

Total underground storage capacity, which includes both active and inactive fields, at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

1975	6,280	**1988**	8,124	**2001**	8,182
1976	6,544	**1989**	8,120	**2002**	8,207
1977	6,678	**1990**	7,794	**2003**	8,206
1978	6,890	**1991**	7,993	**2004**	8,255
1979	6,929	**1992**	7,932	**2005**	8,268
1980	7,434	**1993**	7,989	**2006**	8,330
1981	7,805	**1994**	8,043	**2007**	8,402
1982	7,915	**1995**	7,953	**2008**	8,499
1983	7,985	**1996**	7,980	**2009**	8,656
1984	8,043	**1997**	8,332	**2010**	8,764
1985	8,087	**1998**	8,179	**2011**	8,849
1986	8,145	**1999**	8,229	**2012**	[P]9,011
1987	8,124	**2000**	8,241		

P= Preliminary.

Monthly underground storage data are collected from the Federal Energy Regulatory Commission Form FERC-8 (interstate data) and EIA Form EIA-191 (intrastate data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of EIA's *Natural Gas Annual* (*NGA*).

The final monthly and annual storage and withdrawal data for 1980–2011 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), Extraction Loss (1997, 1998, 2000), Dry Gas Production (1996, 1997), Supplemental Gaseous Fuels (1997–2000), Balancing Item (1997–2000), and Total Consumption (1997 –2000). The Table 4.3 data series (and years) that were adjusted are: Lease and Plant Fuel (1997–2000), Total Industrial (1997–2000), Pipelines and Distribution (2000), Total Transportation (2000), and Total Consumption (1997–2000).

Note 9. Natural Gas Imports and Exports. The United States imports natural gas via pipeline from Canada and Mexico; and imports liquefied natural gas (LNG) via tanker from Algeria, Australia, Brunei, Egypt, Equatorial Guinea, Indonesia, Malaysia, Nigeria, Norway, Oman, Peru, Qatar, Trinidad and Tobago, the United Arab Emirates, and Yemen. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico; and exports LNG via tanker to Brazil, China, Chile, India, Japan, Russia, South Korea, Spain, and United Kingdom. Also, small amounts of LNG have gone to Mexico since 1998 and to Canada in 2007, 2012, and 2013.

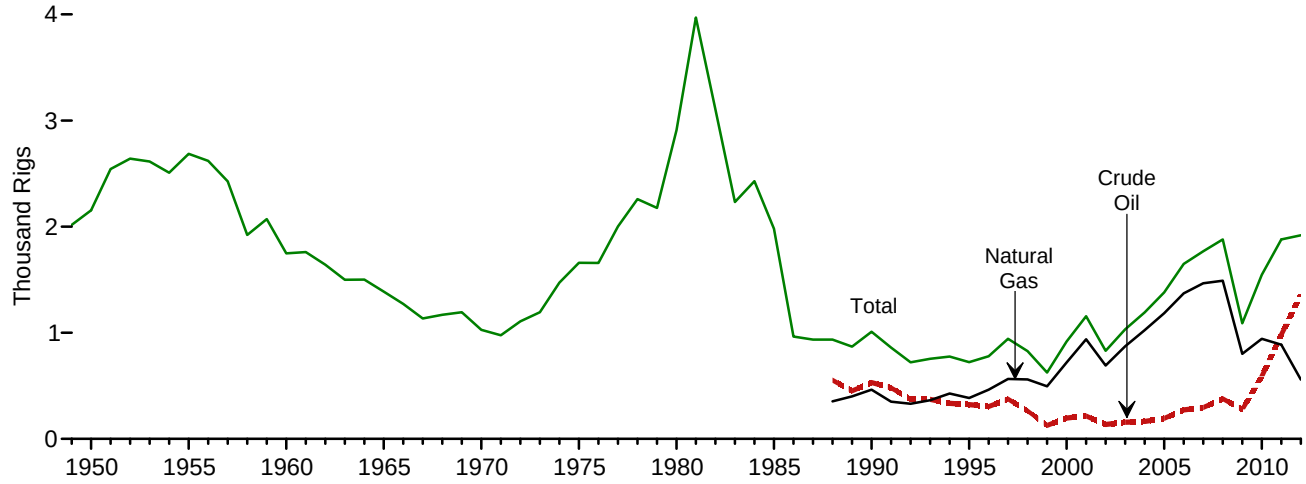
Annual and final monthly data are from the annual EIA Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be reported by month for the calendar year.

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*.

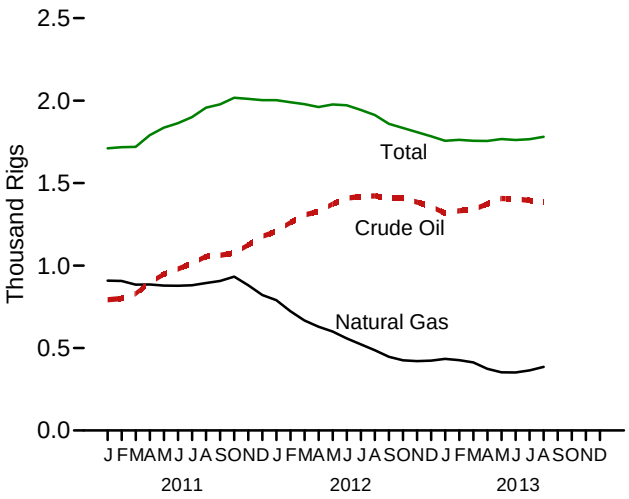
5. Crude Oil and Natural Gas Resource Development

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

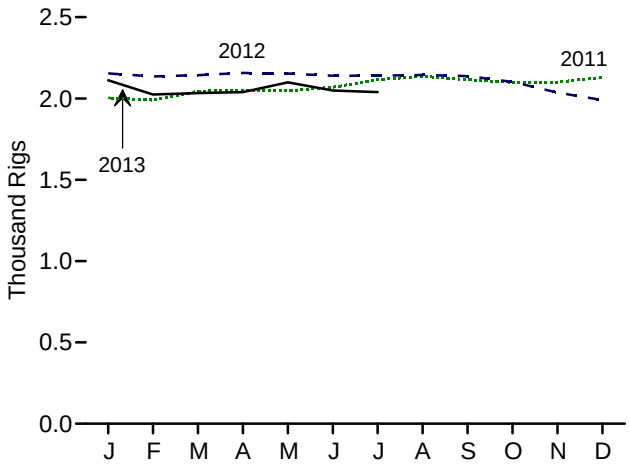
Rotary Rigs in Operation by Type, 1949–2012



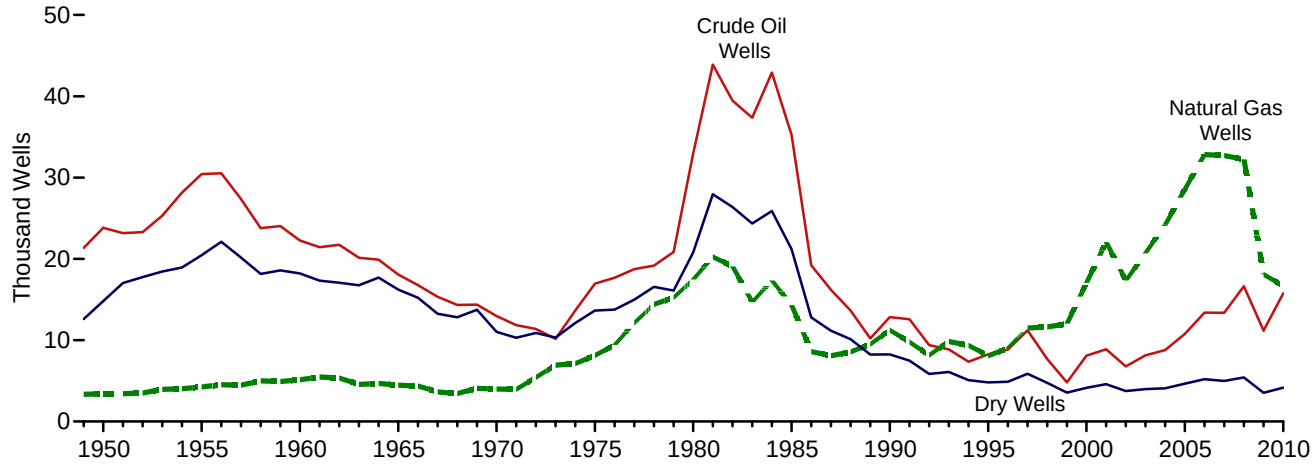
Rotary Rigs in Operation by Type, Monthly



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 January	1,686	26	793	909	1,711	2,004
February	1,692	26	801	907	1,718	1,990
March	1,694	26	830	884	1,720	2,044
April	1,762	28	896	885	1,790	2,052
May	1,804	32	948	878	1,836	2,047
June	1,829	34	979	877	1,863	2,069
July	1,865	35	1,014	880	1,900	2,116
August	1,923	35	1,055	894	1,957	2,136
September	1,946	32	1,063	907	1,978	2,115
October	1,982	35	1,077	933	2,017	2,100
November	1,974	37	1,125	880	2,011	2,100
December	1,961	42	1,177	821	2,003	2,131
Average	**1,846**	**32**	**984**	**887**	**1,879**	**2,075**
2012 January	1,960	43	1,208	790	2,003	2,154
February	1,949	42	1,261	723	1,990	2,135
March	1,935	43	1,307	667	1,979	2,143
April	1,917	44	1,329	629	1,961	2,157
May	1,931	46	1,373	600	1,977	2,153
June	1,923	49	1,409	558	1,972	2,139
July	1,894	51	1,419	522	1,944	2,140
August	1,863	50	1,423	487	1,913	2,144
September	1,808	51	1,409	447	1,859	2,137
October	1,785	49	1,407	425	1,834	2,102
November	1,758	51	1,385	421	1,809	2,036
December	1,733	51	1,358	423	1,784	1,990
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	R 2,039
August	1,720	61	1,388	386	1,781	NA
8-Month Average	**1,709**	**54**	**1,370**	**387**	**1,763**	**NA**
2012 8-Month Average	**1,920**	**46**	**1,344**	**617**	**1,966**	**2,144**
2011 8-Month Average	**1,784**	**30**	**917**	**889**	**1,814**	**2,057**

[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 wovrking every day of the month.

R=Revised. NA=Not available.

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

Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#resources for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#crude for all available monthly and annual data beginning in 1973.

Sources: • **Rotary Rigs in Operation:** Baker Hughes, Inc., Houston, TX, *Rotary Rigs Running—by State,* 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/Forms/Product.aspx?prodID=cdc209c4-79a3-47e5-99c2-fdeda6d4aad6.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#resources for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#crude for all available monthly and annual 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.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2010, see the "Web Pages" cited above.

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

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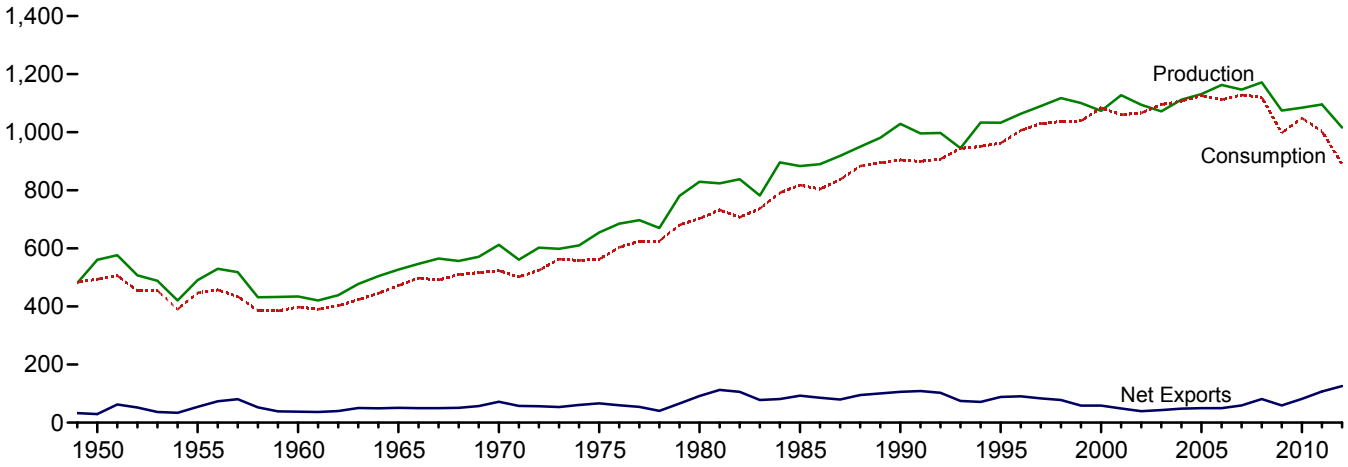
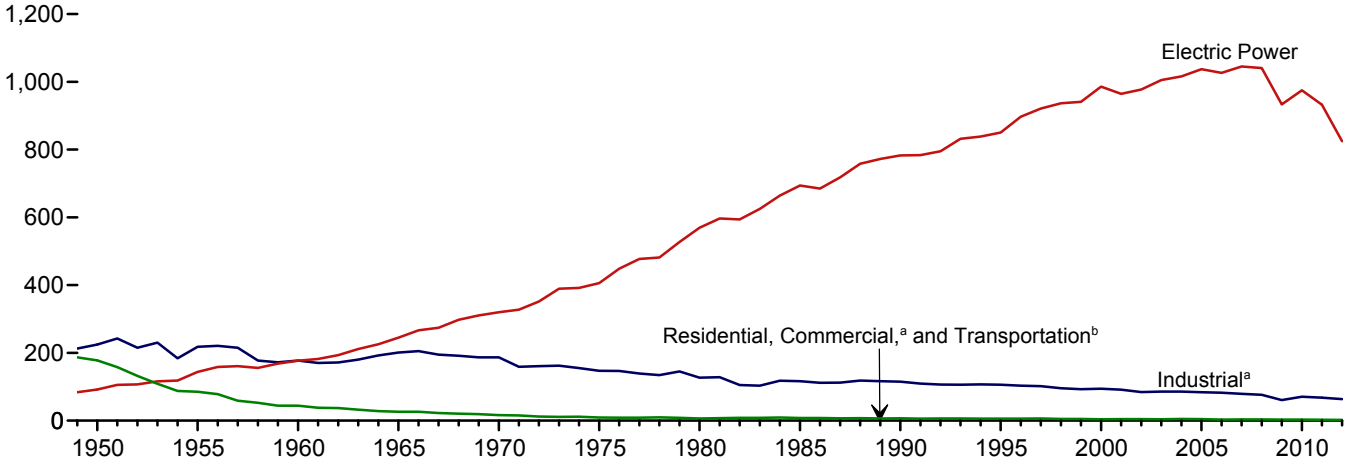
6. Coal

Figure 6.1 Coal
(Million Short Tons)

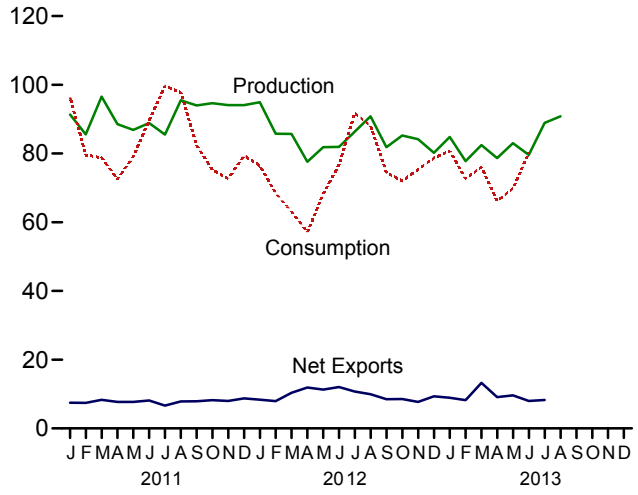
Overview, 1949–2012



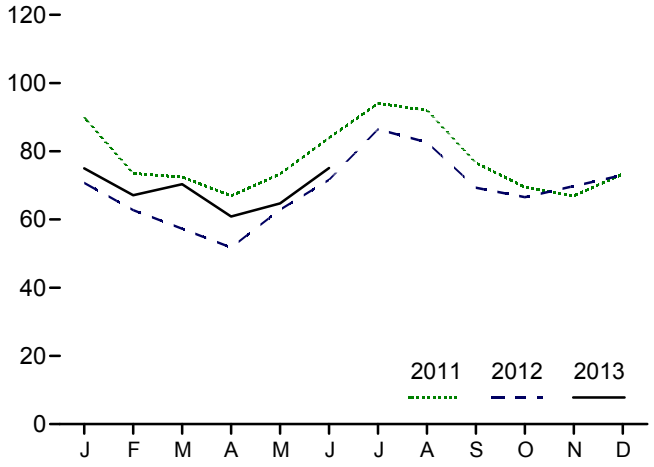
Consumption by Sector, 1949–2012



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 January	91,355	1,182	1,014	8,509	-7,496	-11,679	418	96,303
February	85,575	1,046	843	8,275	-7,432	-3,306	2,917	79,577
March	96,548	1,126	1,524	9,832	-8,308	3,991	6,608	78,767
April	88,563	996	1,136	8,843	-7,706	8,966	390	72,497
May	86,850	910	1,313	9,042	-7,730	2,393	-1,461	79,098
June	88,878	1,162	970	9,102	-8,132	-9,803	2,060	89,652
July	85,498	1,202	1,208	7,865	-6,657	-15,788	-3,788	99,618
August	95,495	1,181	1,545	9,387	-7,843	-10,739	1,809	97,762
September	94,013	1,117	835	8,723	-7,888	5,015	-113	82,341
October	94,643	1,078	917	9,159	-8,242	13,552	-1,334	75,261
November	94,109	1,133	807	8,808	-8,001	11,911	2,623	72,707
December	94,101	1,076	976	9,713	-8,737	5,698	1,377	79,365
Total	**1,095,628**	**13,209**	**13,088**	**107,259**	**-94,171**	**211**	**11,506**	**1,002,948**
2012 January	94,944	1,127	789	9,126	-8,337	2,882	8,413	76,439
February	85,763	917	534	8,460	-7,927	8,111	2,202	68,440
March	85,698	886	699	11,055	-10,356	9,769	3,326	63,133
April	77,624	746	623	12,529	-11,905	7,263	2,127	57,074
May	81,825	938	986	12,257	-11,271	467	2,773	68,252
June	81,911	905	719	12,749	-12,030	-5,275	-704	76,766
July	86,344	1,050	894	11,623	-10,729	-14,946	-99	91,710
August	90,839	992	667	10,597	-9,930	-7,254	1,092	88,063
September	81,846	800	855	9,344	-8,489	2,375	-2,696	74,478
October	85,244	766	868	9,421	-8,554	3,741	1,704	72,012
November	84,152	1,020	798	8,516	-7,718	1,821	247	75,386
December	80,208	893	727	10,068	-9,341	-974	-5,995	78,729
Total	**1,016,399**	**11,040**	**9,159**	**125,746**	**-116,586**	**7,980**	**12,389**	**890,483**
2013 January	84,828	974	654	9,572	-8,917	-6,426	2,581	80,730
February	77,766	912	385	8,627	-8,242	-5,952	3,725	72,664
March	82,464	1,101	390	13,637	-13,247	-5,677	-70	76,066
April	78,678	F 725	672	9,754	-9,082	1,461	2,680	66,180
May	83,018	F 892	870	10,478	-9,608	6,320	-1,862	69,843
June	79,613	RF 854	1,213	9,194	-7,981	R -8,372	R 644	R 80,214
July	88,909	NA	R 874	R 9,125	R -8,251	NA	NA	NA
August	90,830	NA	NA	NA	NA	NA	NA	NA
8-Month Total	**666,105**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
2012 8-Month Total	**684,948**	**7,562**	**5,911**	**88,396**	**-82,485**	**1,016**	**19,129**	**589,878**
2011 8-Month Total	**718,761**	**8,805**	**9,553**	**70,857**	**-61,303**	**-35,965**	**8,953**	**693,275**

[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. 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#coal for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#coal for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

	End-Use Sectors										Electric Power Sector[e,f]	Total
		Commercial			Industrial							
						Other Industrial						
	Resi-dential	CHP[a]	Other[b]	Total	Coke Plants	CHP[c]	Non-CHP[d]	Total	Total	Trans-portation		
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 January	(i)	189	176	364	1,746	2,082	2,090	4,172	5,917	(h)	90,021	96,303
February	(i)	173	161	335	1,623	1,800	2,345	4,145	5,769	(h)	73,474	79,577
March	(i)	164	153	317	1,819	1,891	2,281	4,173	5,991	(h)	72,458	78,767
April	(i)	124	86	210	1,668	1,787	1,902	3,689	5,357	(h)	66,930	72,497
May	(i)	124	87	211	1,878	1,836	1,836	3,672	5,550	(h)	73,338	79,098
June	(i)	130	91	222	1,846	1,843	1,833	3,676	5,522	(h)	83,908	89,652
July	(i)	145	48	193	1,670	1,946	1,772	3,718	5,388	(h)	94,037	99,618
August	(i)	129	43	172	1,863	1,962	1,753	3,715	5,578	(h)	92,012	97,762
September	(i)	122	41	163	1,874	1,788	1,947	3,735	5,609	(h)	76,569	82,341
October	(i)	110	72	182	1,784	1,748	2,088	3,836	5,621	(h)	69,458	75,261
November	(i)	117	77	194	1,772	1,712	2,110	3,822	5,594	(h)	66,919	72,707
December	(i)	139	91	230	1,891	1,923	1,962	3,885	5,776	(h)	73,359	79,365
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 January	(i)	162	92	254	1,701	1,913	1,851	3,764	5,465	(h)	70,720	76,439
February	(i)	141	81	222	1,687	1,708	2,069	3,776	5,463	(h)	62,755	68,440
March	(i)	135	77	211	1,895	1,707	2,020	3,727	5,622	(h)	57,300	63,133
April	(i)	115	21	136	1,783	1,542	1,864	3,405	5,188	(h)	51,751	57,074
May	(i)	121	22	143	1,857	1,689	1,695	3,384	5,241	(h)	62,868	68,252
June	(i)	114	21	135	1,657	1,634	1,745	3,379	5,036	(h)	71,595	76,766
July	(i)	118	11	129	1,676	1,773	1,703	3,476	5,152	(h)	86,429	91,710
August	(i)	126	12	138	1,816	1,827	1,639	3,466	5,282	(h)	82,643	88,063
September	(i)	116	11	127	1,552	1,613	1,865	3,478	5,030	(h)	69,321	74,478
October	(i)	115	43	157	1,647	1,796	1,846	3,641	5,289	(h)	66,565	72,012
November	(i)	134	50	185	1,715	1,728	1,961	3,689	5,403	(h)	69,798	75,386
December	(i)	151	57	208	1,766	1,789	1,955	3,744	5,510	(h)	73,011	78,729
Total	**(i)**	**1,549**	**496**	**2,045**	**20,751**	**20,717**	**22,213**	**42,930**	**63,681**	**(h)**	**824,758**	**890,483**
2013 January	(i)	153	82	235	1,825	1,760	1,940	3,701	5,526	(h)	74,968	80,730
February	(i)	144	77	222	1,644	1,626	2,086	3,712	5,357	(h)	67,086	72,664
March	(i)	141	76	217	1,810	1,694	1,989	3,683	5,494	(h)	70,355	76,066
April	(i)	114	[F] 147	[F] 261	[F] 1,624	1,509	[F] 1,927	[F] 3,436	[F] 5,060	(h)	60,859	66,180
May	(i)	120	[F] 148	[F] 268	[F] 1,708	1,564	[F] 1,611	[F] 3,176	[F] 4,883	(h)	64,692	69,843
June	(i)	111	[F] 128	[F] 239	[F] 1,721	1,554	[F] 1,604	[F] 3,158	[F] 4,879	(h)	75,096	80,214
6-Month Total	**(i)**	**784**	**[E] 659**	**[E] 1,443**	**[E] 10,333**	**9,708**	**[E] 11,158**	**[E] 20,865**	**[E] 31,198**	**(h)**	**413,055**	**445,696**
2012 6-Month Total	**(i)**	**788**	**313**	**1,101**	**10,579**	**10,192**	**11,244**	**21,436**	**32,015**	**(h)**	**376,990**	**410,106**
2011 6-Month Total	**(i)**	**905**	**754**	**1,659**	**10,580**	**11,239**	**12,287**	**23,526**	**34,105**	**(h)**	**460,130**	**495,894**

[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).

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#coal for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#coal for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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**	**[d] 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 January	48,709	536	1,937	4,305	6,241	6,777	164,575	220,061
February	49,140	520	1,948	4,084	6,032	6,552	161,064	216,755
March	48,165	503	1,959	3,864	5,823	6,326	166,255	220,746
April	49,852	505	1,958	3,969	5,927	6,433	173,427	229,712
May	51,473	508	1,957	4,075	6,032	6,539	174,093	232,105
June	50,507	510	1,956	4,181	6,136	6,646	165,149	222,302
July	52,420	513	2,082	4,203	6,285	6,798	147,296	206,514
August	50,287	515	2,221	4,225	6,446	6,961	138,527	195,775
September	49,909	518	2,405	4,247	6,652	7,170	143,711	200,790
October	50,810	546	2,473	4,316	6,790	7,336	156,196	214,342
November	50,997	575	2,541	4,386	6,927	7,502	167,754	226,253
December	**51,897**	**603**	**2,610**	**4,455**	**7,065**	**7,668**	**172,387**	**231,951**
2012 January	[F] 48,424	587	2,507	4,285	6,791	7,379	179,030	234,833
February	[F] 49,954	572	2,403	4,114	6,517	7,089	185,901	242,944
March	[F] 51,458	557	2,300	3,943	6,244	6,800	194,455	252,713
April	[F] 51,705	566	2,299	4,038	6,337	6,903	201,368	259,976
May	[F] 51,253	575	2,297	4,134	6,431	7,006	202,184	260,443
June	[F] 51,007	585	2,295	4,229	6,524	7,109	197,052	255,168
July	[F] 49,859	589	2,329	4,327	6,656	7,244	183,119	240,222
August	[F] 48,343	592	2,363	4,424	6,787	7,379	177,246	232,968
September	[F] 47,181	596	2,396	4,522	6,918	7,514	180,648	235,343
October	[F] 46,885	592	2,438	4,508	6,946	7,538	184,661	239,084
November	[F] 46,711	587	2,480	4,493	6,973	7,561	186,633	240,905
December	**[F] 47,424**	**583**	**2,522**	**4,479**	**7,001**	**7,584**	**184,923**	**239,931**
2013 January	[F] 45,899	565	2,417	4,305	6,722	7,288	180,318	233,505
February	[F] 43,354	548	2,312	4,132	6,444	6,991	177,208	227,553
March	[F] 41,940	530	2,207	3,958	6,165	6,695	173,241	221,876
April	[F] 43,188	[F] 605	[F] 2,147	[F] 4,318	[F] 6,465	[F] 7,070	173,078	223,337
May	[F] 44,379	[F] 604	[F] 2,272	[F] 4,425	[F] 6,697	[F] 7,301	177,977	229,657
June	[F] 43,001	[F] 603	[F] 2,398	[F] 4,532	[F] 6,930	[F] 7,533	170,751	221,285

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

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#coal for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#coal for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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.

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

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figures. The adjustment procedure uses state-level production data and is explained 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 and Demand: Base Case." The monthly estimates are based on the quarterly values, which are released in March, June, September, and December. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Residential and Commercial—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 Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. For 1980–1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Beginning in 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the Federal Reserve System. Indices for six major industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 311; paper manufacturing, NAICS

322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; non-metallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights. 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 for the most recent months (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 and Demand: Base Case." The monthly estimates are based on the quarterly values (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

Producers and Distributors—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, Bureau of the Census, 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.

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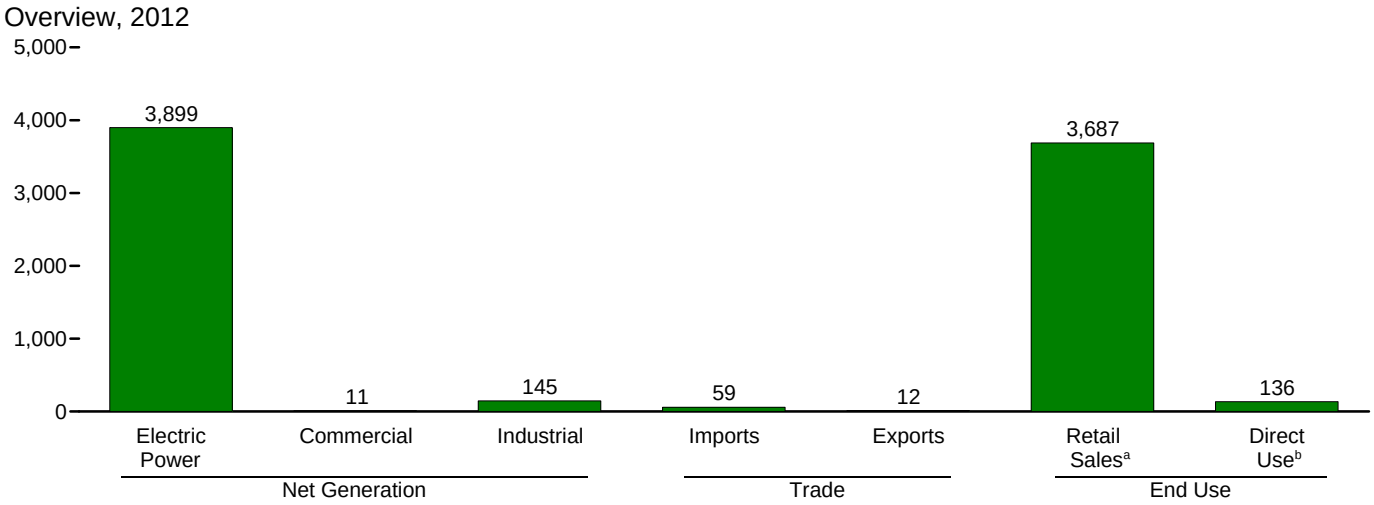
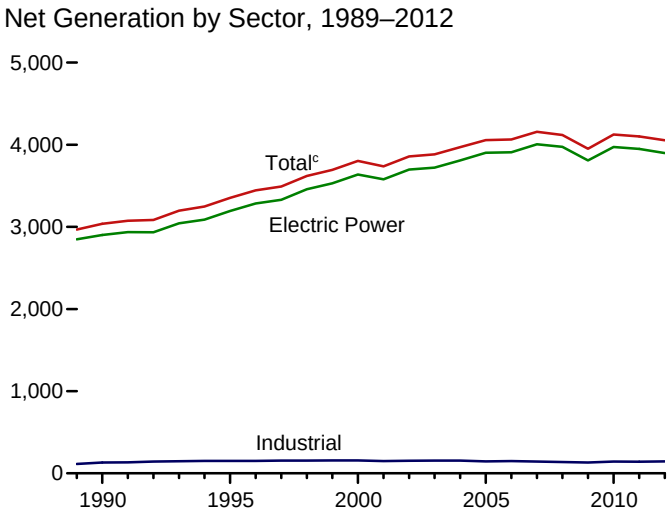
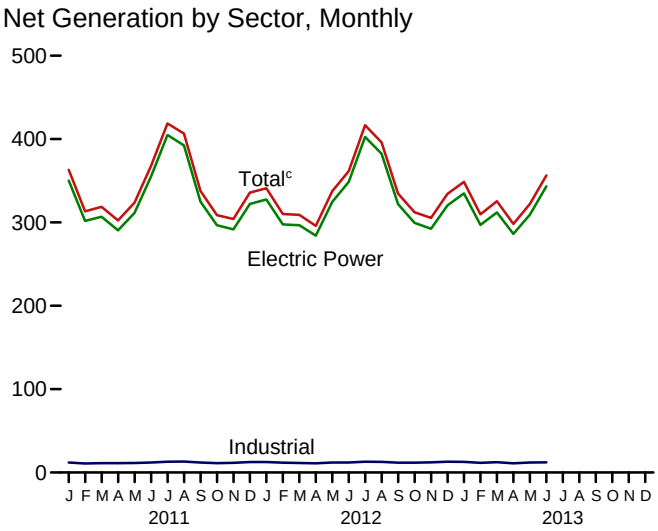
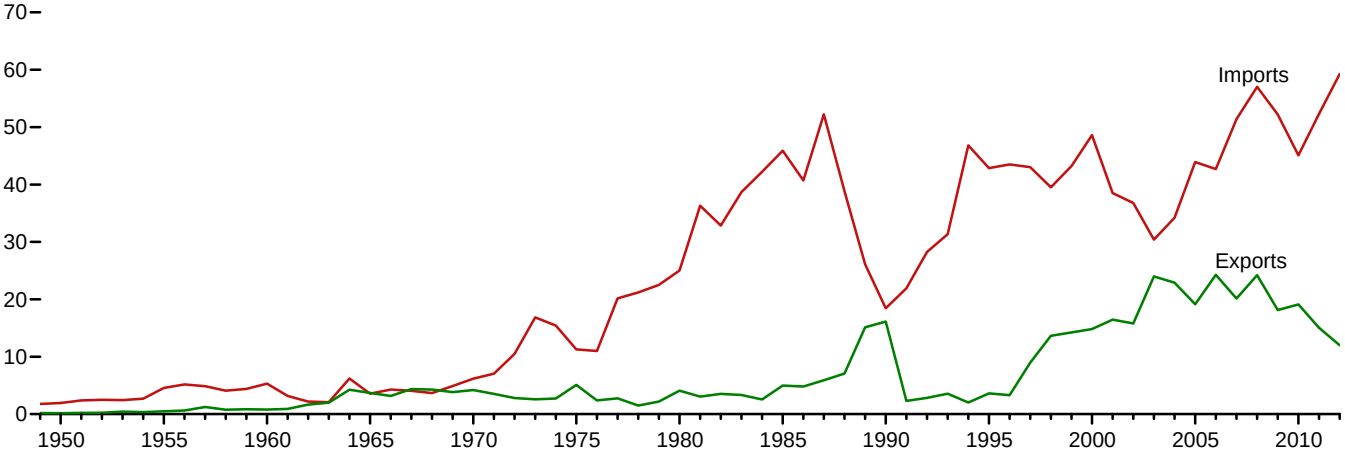
7. Electricity

Figure 7.1 Electricity Overview
(Billion Kilowatthours)









[a] Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.
[b] See "Direct Use" in Glossary.
[c] 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				Trade			T&D Losses[e] and Unaccounted for[f]	End Use		
	Electric Power Sector[a]	Commercial Sector[b]	Industrial Sector[c]	Total	Imports[d]	Exports[d]	Net Imports[d]		Retail Sales[g]	Direct Use[h]	Total
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**	**287**	**3,733**	**132**	**3,865**
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**	**265**	**3,754**	**132**	**3,886**
2011 January	350	1	12	363	4	2	3	20	334	[E] 11	345
February	302	1	11	313	4	2	2	9	297	[E] 10	307
March	307	1	11	319	4	2	2	19	292	[E] 10	302
April	291	1	11	302	4	2	2	19	275	[E] 10	286
May	311	1	11	324	5	1	4	29	288	[E] 11	299
June	355	1	12	368	4	1	3	31	329	[E] 11	340
July	405	1	13	419	6	1	5	41	371	[E] 12	383
August	392	1	13	407	6	1	5	26	373	[E] 12	385
September	325	1	12	338	4	1	3	4	326	[E] 11	337
October	297	1	11	309	4	1	3	13	288	[E] 11	299
November	292	1	12	304	3	1	2	20	275	[E] 11	286
December	322	1	13	336	4	1	3	26	302	[E] 12	314
Total	**3,949**	**10**	**142**	**4,101**	**52**	**15**	**37**	**255**	**3,750**	**133**	**3,883**
2012 January	328	1	12	341	4	1	3	22	311	[E] 12	323
February	298	1	12	310	4	1	3	16	286	[E] 11	297
March	297	1	11	309	4	1	3	19	283	[E] 11	293
April	284	1	11	296	5	1	4	19	270	[E] 10	281
May	325	1	12	338	5	1	4	35	295	[E] 11	307
June	349	1	12	362	5	1	4	30	324	[E] 11	336
July	403	1	13	417	7	1	6	40	370	[E] 12	382
August	383	1	13	396	6	1	5	26	364	[E] 12	376
September	322	1	12	335	5	1	4	10	318	[E] 11	329
October	299	1	12	312	4	1	4	15	290	[E] 11	301
November	293	1	12	306	5	1	4	19	279	[E] 11	291
December	320	1	13	334	4	1	3	30	296	[E] 12	308
Total	**3,899**	**11**	**145**	**4,054**	**59**	**12**	**47**	**279**	**3,687**	**[E] 136**	**3,823**
2013 January	335	1	13	349	5	1	4	23	317	[E] 12	329
February	297	1	12	310	5	1	4	14	289	[E] 11	300
March	312	1	12	325	5	1	4	23	294	[E] 12	306
April	286	1	11	298	5	1	3	16	275	[E] 10	285
May	309	1	12	322	5	1	5	29	286	[E] 11	297
June	343	1	12	356	6	1	5	32	317	[E] 11	329
6-Month Total	**1,883**	**5**	**72**	**1,960**	**31**	**6**	**25**	**139**	**1,779**	**[E] 68**	**1,847**
2012 6-Month Total	**1,879**	**5**	**71**	**1,955**	**28**	**7**	**21**	**140**	**1,770**	**[E] 66**	**1,836**
2011 6-Month Total	**1,916**	**5**	**68**	**1,989**	**25**	**9**	**16**	**126**	**1,815**	**[E] 64**	**1,879**

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

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

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

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

[e] Transmission and distribution losses (electricity losses that occur between the point of generation and delivery to the customer). See Note 2, "Electrical System Energy Losses," at end of Section 2.

[f] Data collection frame differences and nonsampling error.

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

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

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

Notes: • See Note 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.

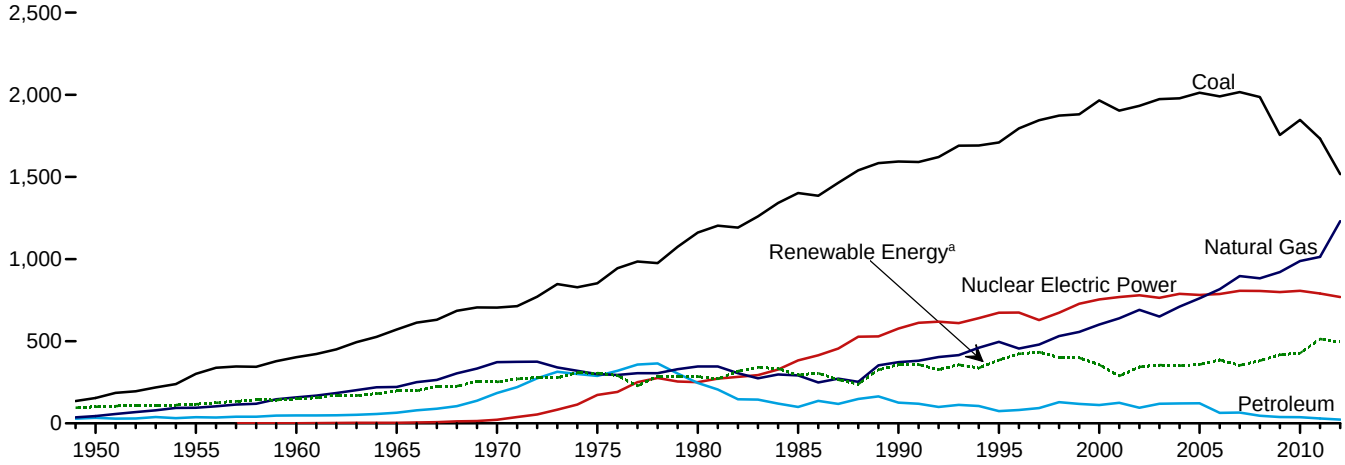
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

Sources: See end of section.

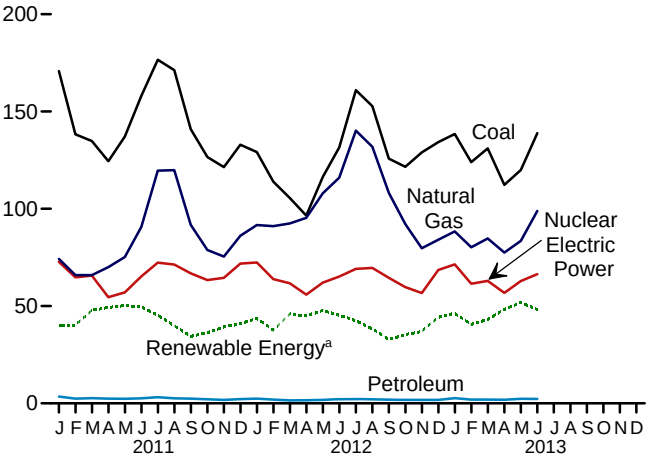
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

Figure 7.2 Electricity Net Generation
(Billion Kilowatthours)

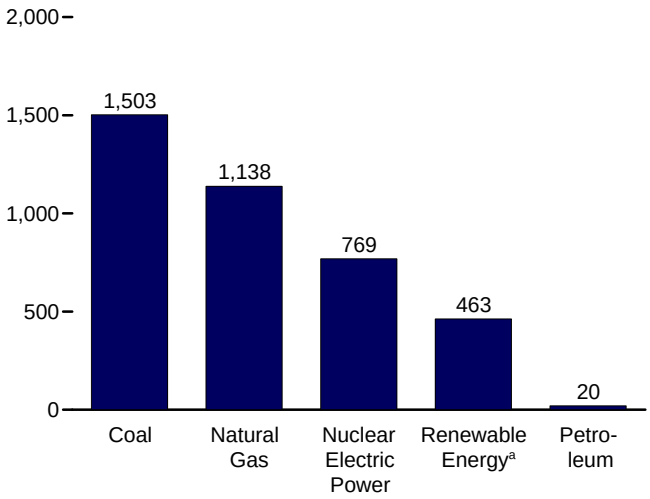
Total (All Sectors), Major Sources, 1949–2012



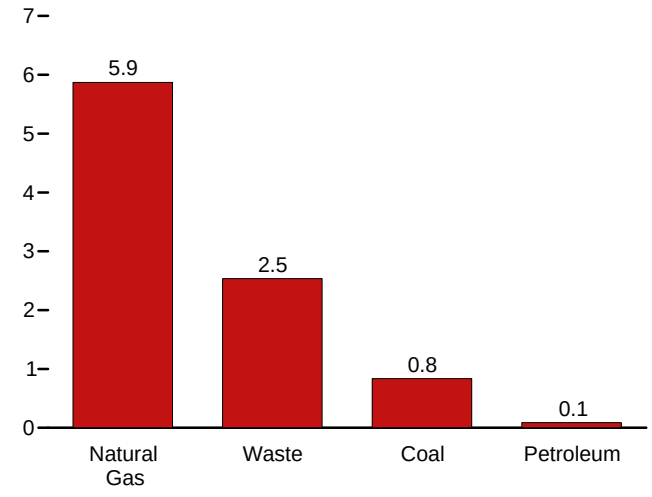
Total (All Sectors), Major Sources, Monthly



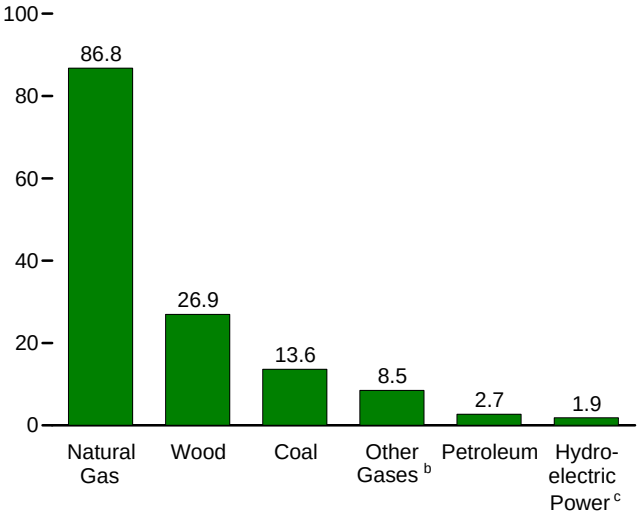
Electric Power Sector, Major Sources, 2012



Commercial Sector, Major Sources, 2012



Industrial Sector, Major Sources, 2012



[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.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Sources: Tables 7.2a–7.2c.

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

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

	Fossil Fuels				Nuclear Electric Power	Hydro-electric Pumped Storage[e]	Renewable Energy						Total[j]
							Conventional Hydro-electric Power[f]	Biomass		Geo-thermal	Solar/ PV[i]	Wind	
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Gases[d]				Wood[g]	Waste[h]				
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 January	170,803	3,457	74,254	930	72,743	-426	25,531	3,290	1,515	1,347	40	8,550	363,105
February	138,311	2,434	65,924	807	64,789	-247	24,131	2,937	1,427	1,215	85	10,452	313,293
March	134,845	2,692	65,947	945	65,662	-349	31,134	3,081	1,565	1,337	122	10,545	318,710
April	124,488	2,424	70,029	918	54,547	-466	31,194	2,798	1,503	1,239	164	12,422	302,400
May	137,102	2,378	75,243	875	57,013	-418	32,587	2,794	1,563	1,318	191	11,772	323,627
June	158,055	2,594	90,691	1,013	65,270	-567	32,151	3,230	1,632	1,215	223	10,985	367,727
July	176,586	3,154	119,624	1,098	72,345	-708	31,285	3,362	1,690	1,269	191	7,489	418,693
August	171,281	2,594	119,856	1,087	71,339	-663	25,764	3,384	1,692	1,275	229	7,474	406,541
September	140,941	2,424	91,739	1,004	66,849	-553	21,378	3,178	1,589	1,226	186	6,869	337,961
October	126,627	2,062	78,819	941	63,337	-572	19,787	2,954	1,631	1,281	159	10,525	308,727
November	121,463	1,783	75,441	943	64,474	-441	20,681	3,088	1,684	1,271	107	12,439	304,119
December	132,929	2,186	86,122	1,005	71,837	-496	23,732	3,353	1,731	1,324	121	10,656	335,753
Total	**1,733,430**	**30,182**	**1,013,689**	**11,566**	**790,204**	**-5,905**	**319,355**	**37,449**	**19,222**	**15,316**	**1,818**	**120,177**	**4,100,656**
2012 January	129,115	2,444	91,641	980	72,381	-330	23,359	3,366	1,629	1,415	86	13,806	340,919
February	113,908	1,926	91,091	1,005	63,847	-226	20,361	3,126	1,537	1,339	137	11,164	310,151
March	105,546	1,561	92,503	1,010	61,729	-268	25,770	2,938	1,663	1,413	249	13,897	309,040
April	96,466	1,564	95,346	980	55,871	-242	26,136	2,666	1,668	1,335	346	12,812	295,940
May	116,345	1,727	107,927	969	62,081	-343	28,542	2,997	1,713	1,422	511	12,573	337,530
June	131,569	2,056	116,015	945	65,140	-475	26,611	3,060	1,687	1,380	561	11,944	361,506
July	160,938	2,288	140,202	968	69,129	-587	26,758	3,296	1,769	1,421	522	8,724	416,515
August	152,743	2,072	131,828	1,024	69,602	-496	23,146	3,311	1,676	1,388	464	8,287	396,108
September	125,767	1,864	108,206	893	64,511	-401	17,562	3,143	1,628	1,377	462	8,680	334,735
October	121,587	1,861	92,141	820	59,743	-351	16,207	3,073	1,660	1,413	431	12,514	312,157
November	128,992	1,779	79,707	759	56,713	-390	18,834	3,216	1,633	1,429	314	11,513	305,548
December	134,230	1,757	84,103	858	68,584	-549	23,248	3,350	1,762	1,459	258	14,175	334,335
Total	**1,517,203**	**22,900**	**1,230,708**	**11,212**	**769,331**	**-4,658**	**276,535**	**37,540**	**20,025**	**16,791**	**4,342**	**140,089**	**4,054,485**
2013 January	138,447	2,669	88,375	919	71,406	-442	25,123	3,299	1,587	1,444	288	14,535	348,642
February	123,936	1,926	80,250	804	61,483	-275	20,493	3,032	1,392	1,322	441	13,884	309,601
March	131,032	1,962	84,713	915	62,947	-358	20,573	3,194	1,667	1,425	619	15,638	325,372
April	112,293	1,840	77,502	853	56,767	-264	24,764	2,594	1,594	1,372	683	17,299	298,261
May	119,943	2,356	83,491	973	62,848	-326	28,553	3,013	1,718	1,396	764	16,370	322,118
June	138,872	2,282	98,912	917	66,430	-298	27,331	3,134	1,673	1,427	880	13,771	356,400
6-Month Total	**764,524**	**13,034**	**513,243**	**5,380**	**381,881**	**-1,963**	**146,838**	**18,266**	**9,631**	**8,386**	**3,677**	**91,497**	**1,960,395**
2012 6-Month Total	**692,947**	**11,279**	**594,522**	**5,889**	**381,049**	**-1,885**	**150,779**	**18,153**	**9,897**	**8,304**	**1,891**	**76,195**	**1,955,086**
2011 6-Month Total	**863,604**	**15,980**	**442,088**	**5,488**	**380,024**	**-2,473**	**176,729**	**18,130**	**9,204**	**7,671**	**825**	**64,726**	**1,988,862**

[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.

NA=Not available.

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

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

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

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 January	169,390	3,229	66,932	243	72,743	-426	25,386	981	1,247	1,347	37	8,547	350,234
February	137,082	2,255	59,380	207	64,789	-247	23,970	886	1,180	1,215	81	10,448	301,798
March	133,584	2,526	59,362	252	65,662	-349	30,945	897	1,299	1,337	116	10,540	306,808
April	123,272	2,257	63,257	244	54,547	-466	31,008	705	1,251	1,239	155	12,417	290,519
May	135,820	2,218	68,175	242	57,013	-418	32,386	760	1,296	1,318	181	11,767	311,401
June	156,716	2,438	83,426	259	65,270	-567	31,999	936	1,365	1,215	210	10,981	354,929
July	175,129	3,006	111,502	262	72,345	-708	31,173	1,048	1,413	1,269	181	7,486	404,802
August	169,798	2,449	111,540	264	71,339	-663	25,666	1,038	1,407	1,275	218	7,471	392,471
September	139,648	2,272	84,300	252	66,849	-553	21,254	916	1,319	1,226	177	6,865	325,143
October	125,442	1,894	71,962	240	63,337	-572	19,660	807	1,354	1,281	151	10,519	296,704
November	120,323	1,632	68,262	227	64,474	-441	20,533	800	1,403	1,271	103	12,431	291,657
December	131,686	2,025	78,193	247	71,837	-496	23,552	959	1,455	1,324	117	10,649	322,237
Total	**1,717,891**	**28,202**	**926,290**	**2,939**	**790,204**	**-5,905**	**317,531**	**10,733**	**15,989**	**15,316**	**1,727**	**120,121**	**3,948,701**
2012 January	127,857	2,144	83,819	237	72,381	-330	23,181	952	1,349	1,415	83	13,798	327,525
February	112,775	1,727	83,629	233	63,847	-226	20,201	879	1,264	1,339	132	11,157	297,543
March	104,379	1,358	85,311	241	61,729	-268	25,580	830	1,394	1,413	240	13,888	296,736
April	95,403	1,344	88,356	234	55,871	-242	25,973	642	1,395	1,335	334	12,804	284,075
May	115,212	1,541	100,212	226	62,081	-343	28,357	802	1,426	1,422	493	12,565	324,644
June	130,371	1,842	108,256	228	65,140	-475	26,476	869	1,414	1,380	544	11,936	348,626
July	159,516	2,071	131,757	237	69,129	-587	26,646	989	1,467	1,421	506	8,719	402,532
August	151,372	1,813	123,795	244	69,602	-496	23,045	1,016	1,379	1,388	451	8,282	382,523
September	124,585	1,626	100,681	225	64,511	-401	17,467	892	1,348	1,377	447	8,675	322,061
October	120,392	1,635	84,574	206	59,743	-351	16,097	829	1,360	1,413	417	12,507	299,443
November	127,836	1,522	71,950	183	56,713	-390	18,595	906	1,335	1,429	305	11,508	292,512
December	133,034	1,498	75,731	224	68,584	-549	23,026	959	1,444	1,459	252	14,167	320,482
Total	**1,502,732**	**20,122**	**1,138,072**	**2,719**	**769,331**	**-4,658**	**274,644**	**10,566**	**16,574**	**16,791**	**4,203**	**140,004**	**3,898,702**
2013 January	137,301	2,433	80,113	221	71,406	-442	24,776	937	1,306	1,444	282	14,526	334,889
February	122,808	1,786	72,832	176	61,483	-275	20,118	841	1,140	1,322	425	13,875	297,059
March	129,859	1,764	76,762	195	62,947	-358	20,273	913	1,372	1,425	596	15,628	312,006
April	111,270	1,645	70,376	207	56,767	-264	24,508	612	1,320	1,372	656	17,288	286,342
May	118,791	2,131	75,890	245	62,848	-326	28,228	832	1,438	1,396	733	16,360	309,215
June	137,672	2,083	91,172	261	66,430	-298	27,030	872	1,380	1,427	846	13,762	343,298
6-Month Total	**757,701**	**11,843**	**467,146**	**1,305**	**381,881**	**-1,963**	**144,933**	**5,007**	**7,957**	**8,386**	**3,538**	**91,440**	**1,882,809**
2012 6-Month Total	**685,997**	**9,957**	**549,584**	**1,399**	**381,049**	**-1,885**	**149,768**	**4,974**	**8,242**	**8,304**	**1,826**	**76,148**	**1,879,149**
2011 6-Month Total	**855,865**	**14,924**	**400,531**	**1,446**	**380,024**	**-2,473**	**175,693**	**5,165**	**7,637**	**7,671**	**781**	**64,700**	**1,915,688**

[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.

NA=Not available.

Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

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 January	108	21	421	186	817	1,304	207	6,901	687	143	2,307	82	12,054
February	104	11	367	169	725	1,125	168	6,177	600	160	2,048	78	10,770
March	100	7	373	188	753	1,161	160	6,212	693	187	2,181	78	11,149
April	77	4	357	179	706	1,139	163	6,416	674	184	2,090	73	11,175
May	82	5	471	202	867	1,199	156	6,597	633	198	2,033	66	11,359
June	90	3	463	200	860	1,249	152	6,802	753	150	2,292	67	11,938
July	104	7	605	205	1,023	1,353	141	7,517	836	109	2,312	71	12,868
August	94	7	571	210	985	1,389	138	7,745	823	96	2,343	76	13,085
September	84	7	487	195	870	1,209	145	6,953	752	122	2,260	75	11,948
October	65	6	438	190	799	1,120	162	6,419	700	126	2,146	86	11,224
November	62	7	437	195	800	1,077	143	6,742	715	146	2,286	86	11,663
December	78	6	499	195	874	1,165	155	7,429	758	178	2,392	81	12,642
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 January	84	7	528	203	913	1,175	294	7,293	743	175	2,412	77	12,480
February	78	5	499	202	875	1,055	194	6,963	771	157	2,246	72	11,733
March	70	5	476	199	853	1,097	197	6,716	769	186	2,106	70	11,452
April	64	6	468	202	843	998	214	6,522	745	160	2,022	72	11,022
May	70	6	480	210	880	1,063	180	7,235	742	182	2,193	77	12,006
June	68	10	493	202	880	1,130	204	7,266	717	131	2,188	71	12,000
July	78	12	553	219	980	1,344	205	7,892	731	109	2,304	82	13,003
August	71	10	498	220	917	1,299	249	7,535	779	97	2,293	77	12,669
September	58	8	480	211	869	1,124	231	7,045	668	92	2,249	69	11,805
October	43	9	471	219	855	1,152	217	7,096	614	107	2,241	81	11,860
November	72	7	447	217	845	1,085	250	7,309	576	236	2,308	81	12,191
December	81	6	478	231	911	1,115	252	7,894	634	218	2,388	88	12,942
Total	**837**	**90**	**5,870**	**2,536**	**10,621**	**13,634**	**2,688**	**86,767**	**8,490**	**1,851**	**26,949**	**915**	**145,162**
2013 January	77	15	522	208	923	1,069	221	7,740	698	344	2,359	73	12,831
February	89	10	459	186	848	1,039	130	6,958	627	371	2,189	67	11,693
March	71	5	476	220	900	1,102	193	7,475	720	297	2,279	75	12,466
April	58	6	414	199	808	965	189	6,712	646	252	1,980	75	11,111
May	67	6	449	204	857	1,085	219	7,152	728	319	2,179	76	12,047
June	78	6	467	213	903	1,122	193	7,272	656	295	2,260	80	12,199
6-Month Total	**440**	**49**	**2,787**	**1,229**	**5,240**	**6,382**	**1,143**	**43,310**	**4,075**	**1,878**	**13,247**	**445**	**72,346**
2012 6-Month Total	**434**	**38**	**2,943**	**1,217**	**5,244**	**6,516**	**1,284**	**41,995**	**4,488**	**990**	**13,166**	**437**	**70,693**
2011 6-Month Total	**562**	**50**	**2,451**	**1,124**	**4,729**	**7,177**	**1,006**	**39,106**	**4,040**	**1,022**	**12,952**	**442**	**68,445**

[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).

NA=Not available.

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.

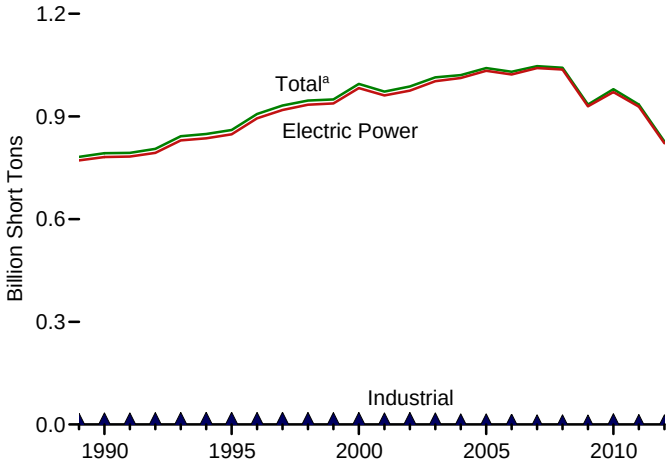
Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

Sources: See end of section.

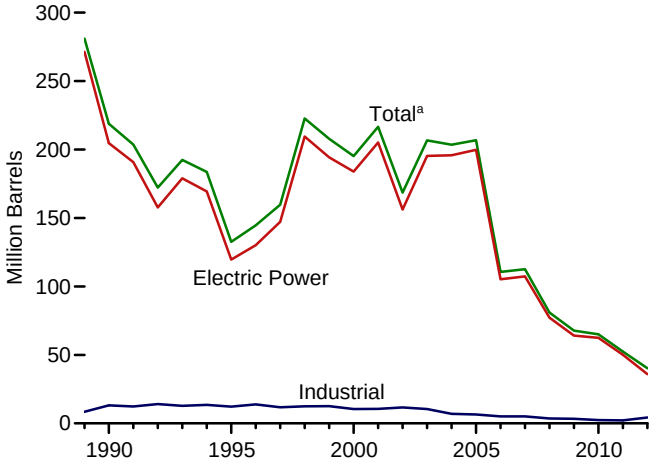
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation

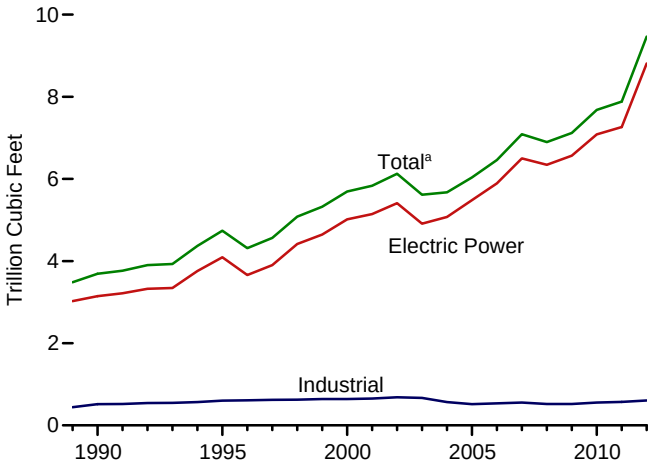
Coal by Sector, 1989–2012



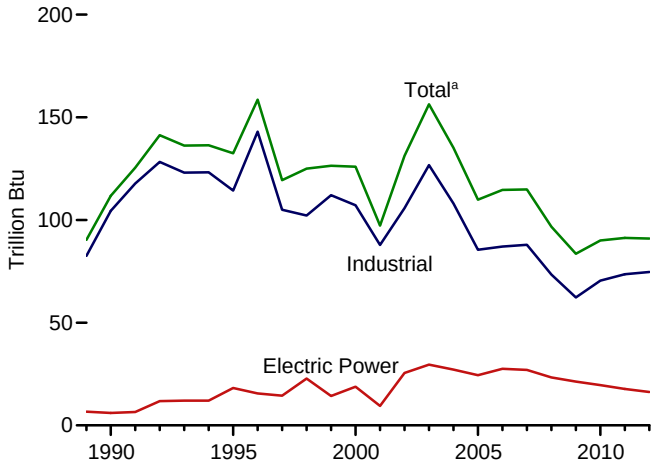
Petroleum by Sector, 1989–2012



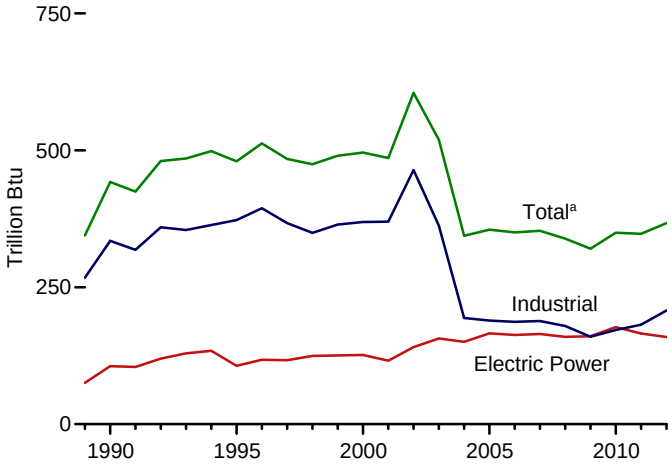
Natural Gas by Sector, 1989–2012



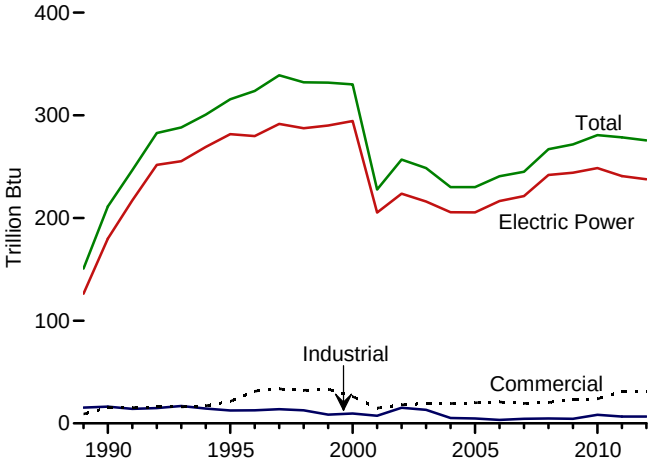
Other Gases[b] by Sector, 1989–2012



Wood by Sector, 1989–2012



Waste by Sector, 1989–2012



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

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 January	90,208	1,347	1,723	255	552	6,086	564	7	31	22	16
February	73,614	913	1,020	144	431	4,230	505	6	28	21	15
March	72,645	907	1,113	140	517	4,746	503	7	29	23	17
April	67,128	1,005	1,333	111	336	4,130	546	7	25	22	17
May	73,522	973	1,230	88	357	4,078	599	7	26	23	18
June	84,156	968	1,249	138	432	4,514	727	8	30	24	18
July	94,304	1,138	1,550	238	510	5,476	967	9	31	25	19
August	92,297	831	1,313	146	464	4,610	951	9	32	25	18
September	76,790	736	942	156	454	4,105	712	8	30	23	17
October	69,605	753	938	143	338	3,522	600	7	27	24	17
November	67,059	768	917	147	257	3,115	568	8	28	24	17
December	73,610	892	922	138	365	3,775	642	8	31	25	18
Total	**934,938**	**11,231**	**14,251**	**1,844**	**5,012**	**52,387**	**7,884**	**91**	**348**	**279**	**205**
2012 January	70,846	816	994	78	465	4,213	675	8	33	22	15
February	62,906	689	760	118	354	3,340	673	8	31	21	14
March	57,442	599	875	128	234	2,771	702	8	28	23	15
April	51,893	789	799	141	202	2,741	742	8	26	23	14
May	62,978	907	839	166	245	3,138	844	8	29	24	16
June	71,750	899	1,299	177	265	3,698	911	8	30	23	15
July	86,667	894	1,608	174	291	4,131	1,123	8	32	25	16
August	82,862	723	1,143	154	319	3,617	1,034	8	33	23	16
September	69,490	681	836	112	313	3,196	834	7	31	22	15
October	66,745	776	937	148	266	3,188	699	7	29	23	15
November	69,977	737	782	118	298	3,126	609	6	31	23	15
December	73,144	687	816	126	300	3,128	618	7	33	24	16
Total	**826,700**	**9,196**	**11,687**	**1,639**	**3,552**	**40,285**	**9,465**	**91**	**367**	**276**	**181**
2013 January	75,110	1,027	1,547	246	375	4,696	660	7	32	22	14
February	67,213	663	1,000	135	308	3,337	594	6	29	20	13
March	70,467	658	829	102	359	3,381	632	8	32	23	15
April	60,957	674	826	116	335	3,289	588	7	25	22	14
May	64,814	827	807	118	464	4,074	642	8	29	24	15
June	75,241	671	903	92	470	4,016	766	8	30	24	17
6-Month Total	**413,803**	**4,520**	**5,912**	**809**	**2,310**	**22,793**	**3,882**	**45**	**177**	**135**	**89**
2012 6-Month Total	**377,815**	**4,699**	**5,565**	**808**	**1,765**	**19,900**	**4,548**	**47**	**177**	**136**	**89**
2011 6-Month Total	**461,273**	**6,113**	**7,668**	**877**	**2,625**	**27,783**	**3,444**	**43**	**168**	**134**	**100**

[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.

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

Notes: • Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

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

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 January	89,681	1,314	1,660	238	524	5,833	512	1	15	19	10
February	73,167	886	977	127	409	4,033	459	1	14	18	10
March	72,148	882	1,082	124	495	4,563	457	2	14	20	11
April	66,643	989	1,302	96	312	3,948	498	1	11	19	11
May	73,010	955	1,206	72	333	3,899	548	1	12	20	11
June	83,622	951	1,223	123	409	4,344	675	2	14	21	12
July	93,724	1,117	1,524	223	491	5,317	909	2	16	21	12
August	91,707	812	1,287	130	440	4,430	893	2	16	21	12
September	76,286	714	915	140	428	3,911	659	1	14	20	11
October	69,165	727	906	128	312	3,321	551	1	13	20	11
November	66,642	745	889	132	232	2,926	518	1	12	21	11
December	73,063	868	891	123	339	3,579	586	1	15	22	12
Total	**928,857**	**10,961**	**13,861**	**1,655**	**4,726**	**50,105**	**7,265**	**18**	**166**	**241**	**133**
2012 January	70,382	797	958	62	382	3,727	620	1	15	19	11
February	62,486	674	725	102	306	3,032	621	1	14	17	10
March	57,010	582	845	119	183	2,463	652	1	12	20	10
April	51,504	766	773	113	153	2,415	693	1	10	20	10
May	62,569	885	808	158	196	2,831	789	1	12	21	11
June	71,310	871	1,276	159	215	3,380	856	1	13	20	11
July	86,138	867	1,579	166	237	3,796	1,063	1	15	21	12
August	82,344	696	1,119	147	247	3,195	977	1	15	20	11
September	69,048	656	812	101	247	2,807	781	1	14	19	11
October	66,287	749	914	125	213	2,851	645	1	12	20	11
November	69,550	717	760	112	223	2,704	553	1	13	20	11
December	72,738	669	792	115	226	2,706	559	1	14	21	11
Total	**821,365**	**8,929**	**11,362**	**1,479**	**2,827**	**35,907**	**8,810**	**16**	**159**	**238**	**129**
2013 January	74,704	1,001	1,501	232	322	4,343	602	1	14	19	10
February	66,822	646	965	129	283	3,156	541	1	13	17	9
March	70,060	640	802	93	304	3,057	576	2	14	19	11
April	60,601	652	802	104	280	2,958	538	1	9	19	10
May	64,409	809	782	100	402	3,702	589	2	12	21	11
June	74,819	654	880	87	411	3,673	711	2	13	20	12
6-Month Total	**411,415**	**4,401**	**5,732**	**745**	**2,002**	**20,889**	**3,555**	**9**	**75**	**115**	**63**
2012 6-Month Total	**375,260**	**4,576**	**5,385**	**713**	**1,435**	**17,848**	**4,232**	**8**	**76**	**117**	**64**
2011 6-Month Total	**458,271**	**5,977**	**7,450**	**780**	**2,483**	**26,620**	**3,149**	**9**	**80**	**115**	**65**

[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.

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

Notes: • Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 January	40	27	4	3	487	226	48	6	16	1	4
February	39	16	3	2	409	180	43	5	14	1	4
March	37	11	3	3	460	173	43	5	15	1	5
April	25	5	3	2	460	177	45	6	14	1	5
May	25	5	4	3	487	174	47	6	14	1	5
June	27	5	4	3	507	165	48	7	16	1	5
July	32	14	5	3	548	145	53	7	16	1	5
August	29	12	5	3	562	168	54	7	16	1	5
September	26	13	4	3	479	181	49	6	15	1	4
October	21	10	4	3	419	191	45	6	15	1	5
November	21	11	4	3	397	179	47	6	16	1	5
December	26	9	4	3	521	187	51	6	16	1	5
Total	**347**	**137**	**47**	**31**	**5,735**	**2,145**	**572**	**74**	**182**	**7**	**57**
2012 January	29	9	4	3	435	476	50	6	18	1	3
February	27	7	4	3	393	301	48	7	17	1	3
March	25	8	4	3	407	300	46	7	15	1	3
April	22	10	4	2	366	316	45	6	16	1	3
May	24	9	4	3	385	298	51	6	17	1	3
June	26	15	4	2	413	303	51	6	17	1	3
July	30	18	5	3	500	318	55	6	18	1	3
August	28	16	4	2	491	407	53	7	18	1	3
September	24	12	4	3	418	377	50	6	17	1	3
October	20	13	4	3	438	324	50	5	17	1	3
November	26	11	4	3	401	412	51	5	18	1	3
December	28	9	4	3	378	412	55	6	19	1	3
Total	**310**	**136**	**49**	**31**	**5,026**	**4,243**	**606**	**75**	**207**	**7**	**36**
2013 January	31	22	4	3	375	331	54	6	18	1	3
February	29	13	4	3	362	168	49	5	17	(s)	3
March	28	8	4	3	379	316	52	6	18	1	3
April	24	9	4	3	332	322	47	5	16	1	3
May	27	9	4	3	379	363	49	7	16	1	3
June	29	9	4	3	393	334	51	6	17	1	3
6-Month Total	**167**	**70**	**24**	**16**	**2,220**	**1,834**	**303**	**36**	**102**	**3**	**18**
2012 6-Month Total	**154**	**57**	**25**	**15**	**2,400**	**1,994**	**291**	**39**	**101**	**3**	**17**
2011 6-Month Total	**193**	**69**	**21**	**15**	**2,809**	**1,094**	**273**	**35**	**88**	**3**	**28**

[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).

(s)=Less than 0.5 trillion Btu.

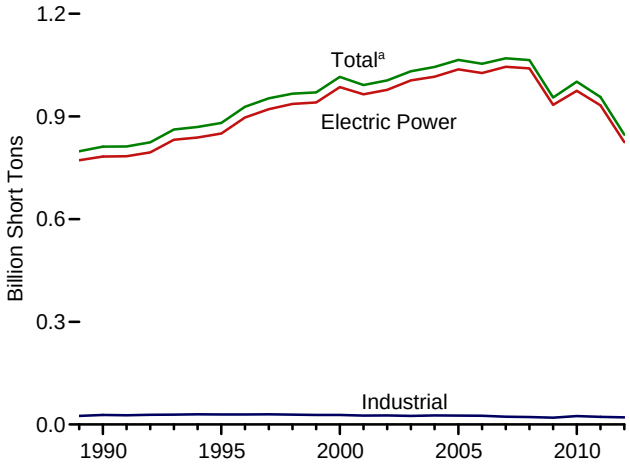
Notes: • Data are for fuels consumed to produce electricity. Through 1988, data are not available. • See Note 1, "Coverage of Electricity Statistics," and Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

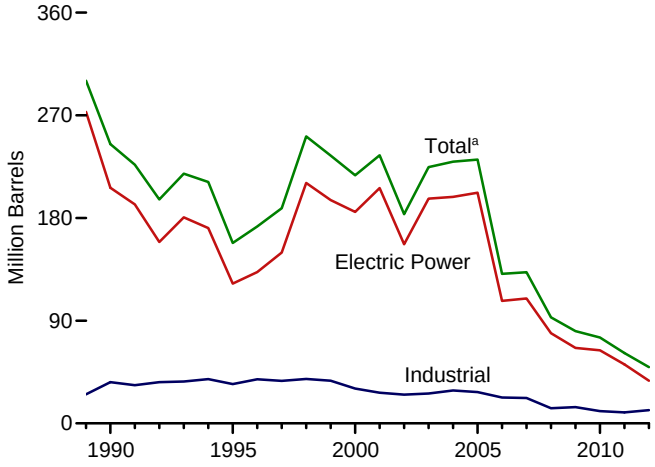
Sources: • **1989–1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998–2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001–2003:** EIA, Form EIA-906, "Power Plant Report." • **2004–2007:** EIA, Form EIA-906,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

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

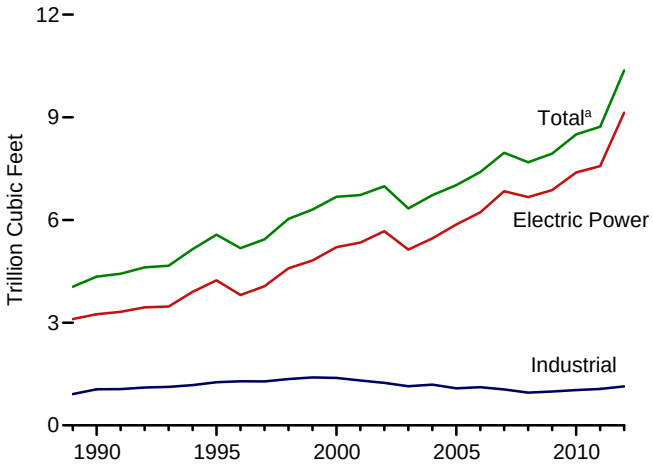
Coal by Sector, 1989–2012



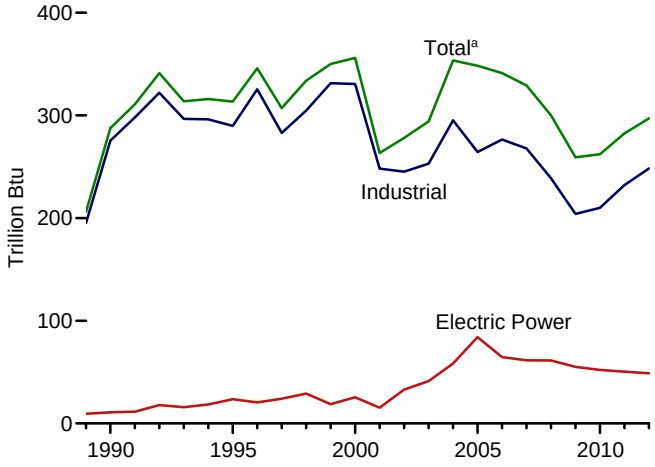
Petroleum by Sector, 1989–2012



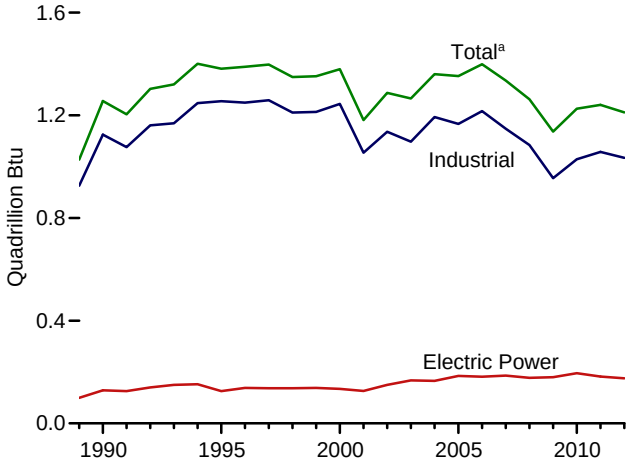
Natural Gas by Sector, 1989–2012



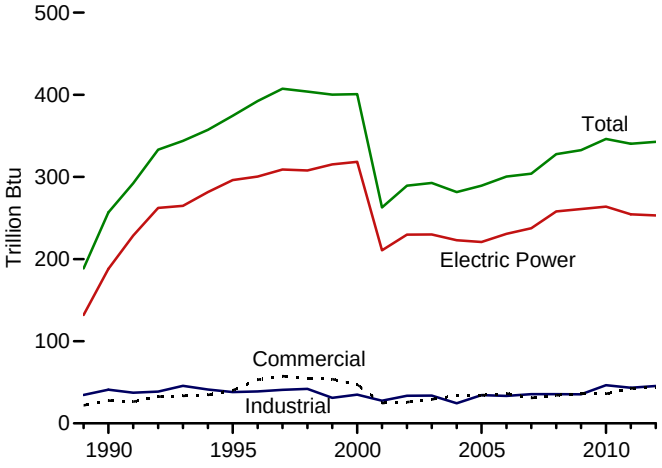
Other Gases[b] by Sector, 1989–2012



Wood by Sector, 1989–2012



Waste by Sector, 1989–2012



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

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 January	92,292	1,411	2,123	329	645	7,087	636	23	111	28	20
February	75,447	986	1,247	213	521	5,052	570	22	99	26	19
March	74,514	965	1,327	201	603	5,506	570	24	104	28	22
April	68,841	1,034	1,537	166	428	4,876	610	22	96	26	21
May	75,298	1,016	1,416	146	452	4,838	666	23	95	27	22
June	85,881	1,001	1,450	191	521	5,246	794	24	104	28	23
July	96,128	1,169	1,738	292	599	6,194	1,045	25	107	29	24
August	94,103	855	1,515	204	545	5,298	1,030	25	107	29	23
September	78,479	770	1,136	207	545	4,837	782	24	104	28	21
October	71,317	797	1,147	201	429	4,289	666	24	100	30	22
November	68,748	805	1,118	201	345	3,848	636	23	103	30	22
December	75,422	926	1,123	189	460	4,537	718	24	111	31	23
Total	**956,470**	**11,735**	**16,877**	**2,540**	**6,092**	**61,610**	**8,724**	**282**	**1,241**	**340**	**261**
2012 January	72,795	847	1,188	131	561	4,970	755	26	109	28	18
February	64,604	710	892	168	449	4,015	746	25	101	26	16
March	59,142	626	994	198	360	3,617	775	27	96	29	17
April	53,407	814	920	219	317	3,538	814	25	91	27	17
May	64,678	938	991	206	355	3,909	917	26	100	29	18
June	73,344	943	1,458	234	365	4,458	987	25	100	28	18
July	88,319	937	1,767	205	385	4,836	1,203	25	105	29	18
August	84,597	754	1,303	180	412	4,297	1,113	26	103	28	18
September	71,050	705	973	146	406	3,854	908	23	101	27	17
October	68,476	803	1,087	214	379	3,999	774	22	98	29	17
November	71,660	765	931	148	405	3,868	682	22	100	30	17
December	74,951	712	961	164	418	3,927	696	25	106	32	18
Total	**847,023**	**9,555**	**13,465**	**2,214**	**4,811**	**49,287**	**10,370**	**297**	**1,211**	**343**	**209**
2013 January	76,882	1,066	1,716	298	505	5,603	739	25	107	30	17
February	68,856	700	1,165	160	422	4,135	665	22	96	26	16
March	72,191	697	972	133	463	4,117	708	24	104	29	18
April	62,481	707	976	162	432	4,007	660	23	93	28	17
May	66,376	855	970	165	532	4,650	715	25	99	29	17
June	76,761	703	1,054	121	545	4,603	836	23	102	29	19
6-Month Total	**423,547**	**4,728**	**6,854**	**1,038**	**2,899**	**27,115**	**4,323**	**142**	**601**	**171**	**103**
2012 6-Month Total	**387,970**	**4,878**	**6,442**	**1,156**	**2,406**	**24,506**	**4,995**	**153**	**598**	**167**	**103**
2011 6-Month Total	**472,273**	**6,414**	**9,101**	**1,245**	**3,169**	**32,605**	**3,846**	**138**	**609**	**164**	**127**

[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.

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

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

Sources: See sources for Tables 7.4b and 7.4c.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 January	90,021	1,322	1,745	239	529	5,953	540	4	17	21	11
February	73,474	911	1,024	127	417	4,148	484	4	16	19	11
March	72,458	885	1,153	124	506	4,692	482	5	15	21	12
April	66,930	991	1,384	96	321	4,078	521	4	12	20	12
May	73,338	957	1,286	72	344	4,034	572	4	13	21	12
June	83,908	954	1,303	123	419	4,474	699	4	16	22	12
July	94,037	1,120	1,609	223	501	5,458	939	4	17	22	13
August	92,012	816	1,375	130	451	4,575	921	4	17	22	13
September	76,569	716	1,002	140	439	4,052	684	4	15	21	12
October	69,458	730	990	128	319	3,445	575	4	14	22	12
November	66,919	748	968	134	241	3,052	543	4	14	22	12
December	73,359	870	965	123	350	3,707	614	4	16	23	12
Total	**932,484**	**11,021**	**14,803**	**1,658**	**4,837**	**51,667**	**7,574**	**50**	**182**	**255**	**143**
2012 January	70,720	800	1,050	63	393	3,877	648	4	16	21	12
February	62,755	676	787	102	317	3,149	648	4	15	19	10
March	57,300	585	895	119	194	2,568	677	4	14	21	11
April	51,751	769	836	113	162	2,526	720	4	11	20	11
May	62,868	890	889	158	207	2,971	817	4	13	22	12
June	71,595	874	1,362	159	221	3,497	885	4	15	21	12
July	86,429	871	1,656	166	246	3,922	1,093	4	16	22	12
August	82,643	699	1,199	147	256	3,324	1,007	4	16	21	12
September	69,321	659	889	101	257	2,933	807	4	15	20	11
October	66,565	753	997	125	222	2,982	671	4	14	21	11
November	69,798	720	841	112	232	2,832	578	3	15	22	11
December	73,011	672	874	115	236	2,841	585	4	16	23	12
Total	**824,758**	**8,968**	**12,272**	**1,480**	**2,940**	**37,420**	**9,137**	**49**	**176**	**253**	**139**
2013 January	74,968	1,007	1,551	232	332	4,449	629	4	16	21	11
February	67,086	656	1,030	130	292	3,273	566	3	14	18	10
March	70,355	644	883	93	314	3,191	602	3	15	21	11
April	60,859	656	884	105	290	3,095	563	4	11	20	11
May	64,692	811	868	100	411	3,833	615	4	14	21	12
June	75,096	656	959	87	417	3,785	736	4	15	21	13
6-Month Total	**413,055**	**4,430**	**6,175**	**746**	**2,055**	**21,626**	**3,712**	**22**	**84**	**124**	**68**
2012 6-Month Total	**376,990**	**4,594**	**5,818**	**714**	**1,492**	**18,587**	**4,395**	**25**	**84**	**124**	**69**
2011 6-Month Total	**460,130**	**6,021**	**7,895**	**781**	**2,536**	**27,379**	**3,298**	**25**	**89**	**122**	**70**

[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.

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. • 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 January	189	103	7	3	2,082	1,031	90	18	94	4	7
February	173	48	6	3	1,800	856	81	18	83	4	7
March	164	26	6	3	1,891	788	82	19	88	4	8
April	124	8	6	3	1,787	791	83	18	84	3	8
May	124	12	7	4	1,836	791	87	19	82	3	8
June	130	9	7	4	1,843	764	88	20	88	3	8
July	145	23	9	4	1,946	714	97	20	90	3	9
August	129	20	9	4	1,962	703	99	20	90	3	8
September	122	23	8	4	1,788	762	91	20	88	3	7
October	110	14	7	4	1,748	830	85	20	86	4	8
November	117	28	7	4	1,712	767	86	19	90	5	8
December	139	19	8	4	1,923	812	96	20	95	4	8
Total	**1,668**	**333**	**87**	**43**	**22,319**	**9,610**	**1,063**	**232**	**1,057**	**43**	**94**
2012 January	162	27	9	4	1,913	1,065	98	21	93	4	4
February	141	20	8	4	1,708	847	90	21	86	4	3
March	135	23	8	4	1,707	1,026	90	22	82	4	4
April	115	16	7	3	1,542	997	87	21	80	4	3
May	121	17	7	4	1,689	921	93	22	87	4	4
June	114	29	8	3	1,634	932	94	21	85	3	4
July	118	38	8	4	1,773	876	101	21	89	4	4
August	126	32	8	3	1,827	942	98	22	86	4	4
September	116	25	8	3	1,613	896	93	19	85	4	4
October	115	28	8	4	1,796	989	95	18	85	4	4
November	134	25	7	4	1,728	1,011	97	19	86	4	4
December	151	23	8	4	1,789	1,064	103	21	90	5	4
Total	**1,549**	**302**	**94**	**44**	**20,717**	**11,566**	**1,139**	**248**	**1,034**	**45**	**45**
2013 January	153	53	8	4	1,760	1,101	102	21	91	4	4
February	144	34	7	4	1,626	827	91	19	82	4	4
March	141	21	8	4	1,694	905	98	20	89	4	4
April	114	18	7	4	1,509	894	90	19	82	4	4
May	120	18	7	4	1,564	800	94	21	85	4	3
June	111	18	7	4	1,554	799	93	19	87	4	4
6-Month Total	**784**	**163**	**44**	**23**	**9,708**	**5,326**	**568**	**120**	**516**	**24**	**22**
2012 6-Month Total	**788**	**132**	**47**	**22**	**10,192**	**5,788**	**553**	**128**	**513**	**21**	**22**
2011 6-Month Total	**905**	**206**	**39**	**21**	**11,239**	**5,021**	**509**	**113**	**520**	**21**	**45**

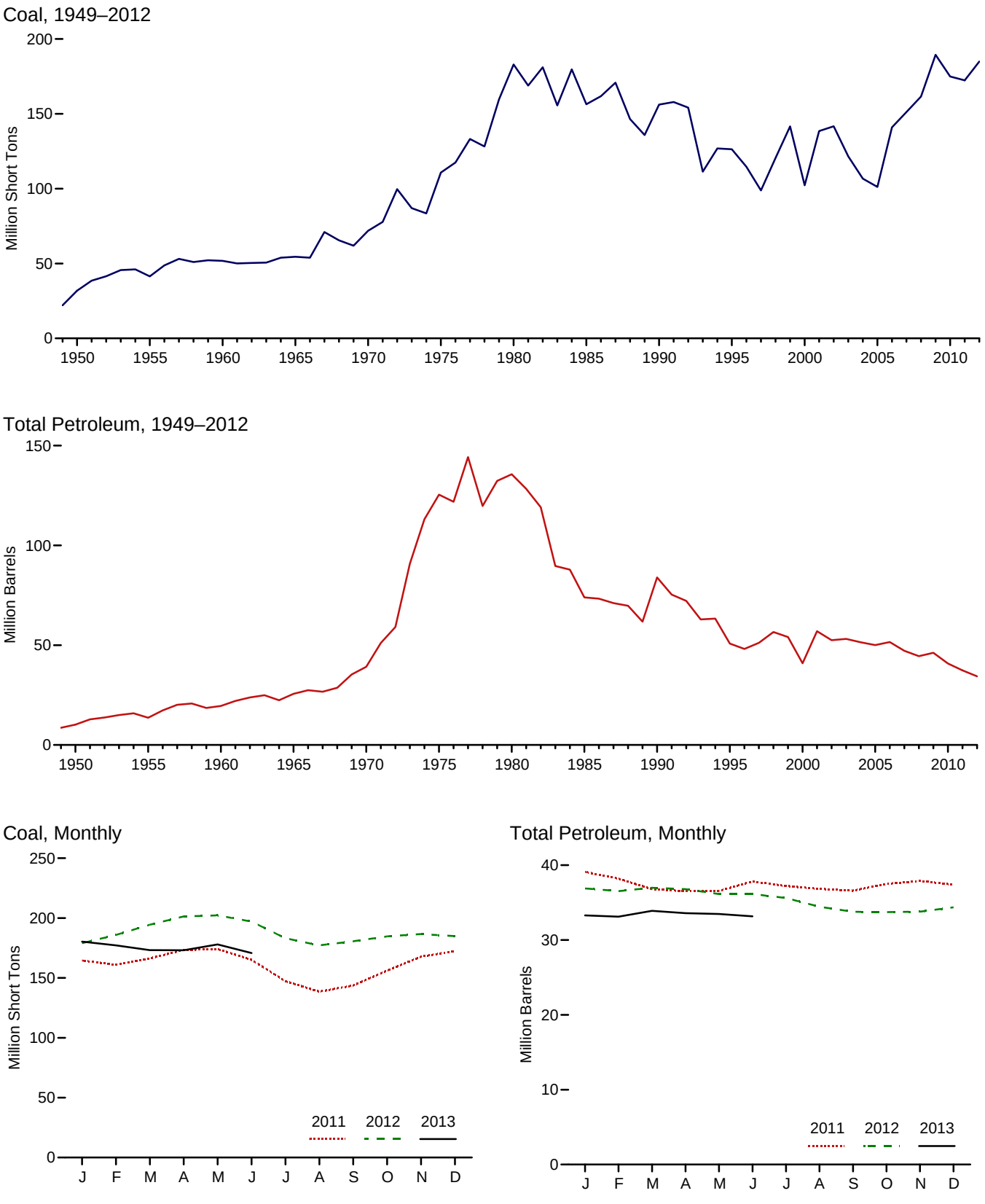
[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[d] Distillate fuel oil, residual fuel 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).

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 for all available data beginning in 1989.

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

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector



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

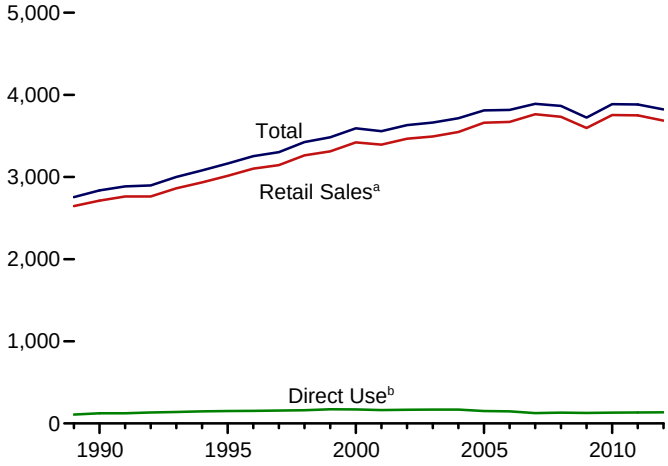
	Coal[a]	Petroleum				
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e,f]
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels
1950 Year	**31,842**	**NA**	**NA**	**NA**	**NA**	**10,201**
1955 Year	**41,391**	**NA**	**NA**	**NA**	**NA**	**13,671**
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 January	164,575	16,613	16,012	2,492	799	39,111
February	161,064	16,565	15,552	2,545	707	38,198
March	166,255	16,367	15,405	2,546	495	36,794
April	173,427	16,153	15,181	2,561	526	36,525
May	174,093	15,997	15,209	2,539	563	36,558
June	165,149	16,379	16,359	2,601	496	37,820
July	147,296	16,170	16,111	2,622	463	37,218
August	138,527	16,162	15,843	2,631	437	36,822
September	143,711	16,311	15,726	2,628	385	36,593
October	156,196	16,567	16,044	2,681	440	37,495
November	167,754	16,729	15,964	2,744	494	37,906
December	**172,387**	**16,649**	**15,491**	**2,707**	**508**	**37,387**
2012 January	179,030	16,712	15,232	2,735	443	36,893
February	185,901	16,532	15,121	2,778	420	36,532
March	194,455	16,423	15,244	2,815	500	36,984
April	201,368	16,325	15,082	2,856	507	36,795
May	202,184	16,232	14,747	2,872	459	36,147
June	197,052	16,152	14,500	2,900	519	36,145
July	183,119	16,581	13,728	2,941	474	35,617
August	177,246	16,023	13,509	2,840	413	34,439
September	180,648	15,920	13,317	2,748	358	33,773
October	184,661	15,813	13,148	2,774	398	33,725
November	186,633	15,837	13,039	2,808	423	33,796
December	**184,923**	**16,061**	**12,995**	**2,841**	**495**	**34,371**
2013 January	180,318	16,092	12,222	2,763	444	33,296
February	177,208	16,163	11,992	2,754	444	33,127
March	173,241	16,133	12,983	2,758	406	33,906
April	173,078	15,994	12,529	2,790	455	33,589
May	177,977	15,951	12,483	2,823	444	33,476
June	170,751	16,054	12,199	2,871	409	33,171

[a] Anthracite, bituminous coal, subbituminous coal, and lignite.
[b] Fuel oil nos. 1, 2 and 4. For 1973–1979, data are for gas turbine and internal combustion plant stocks of petroleum. For 1980–2000, electric utility data also include small amounts of kerosene and jet fuel.
[c] Fuel oil nos. 5 and 6. For 1973–1979, data are for steam plant stocks of petroleum. For 1980–2000, electric utility data also include a small amount of fuel oil no. 4.
[d] Jet fuel and kerosene. Through 2003, data also include a small amount of waste oil.
[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.
[f] 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.
NA=Not available.
Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks are at end of period. • 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual 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."

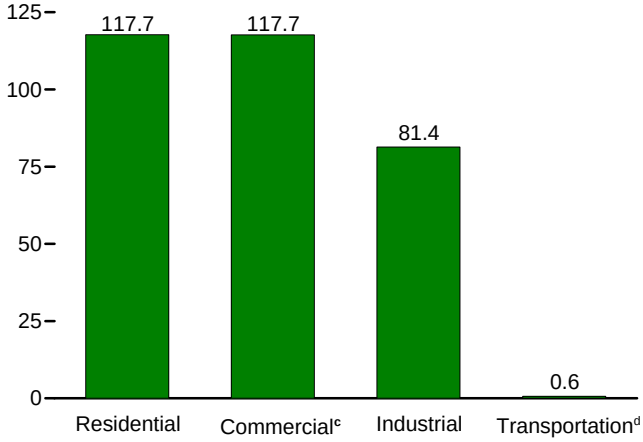
Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Figure 7.6 Electricity End Use
(Billion Kilowatthours)

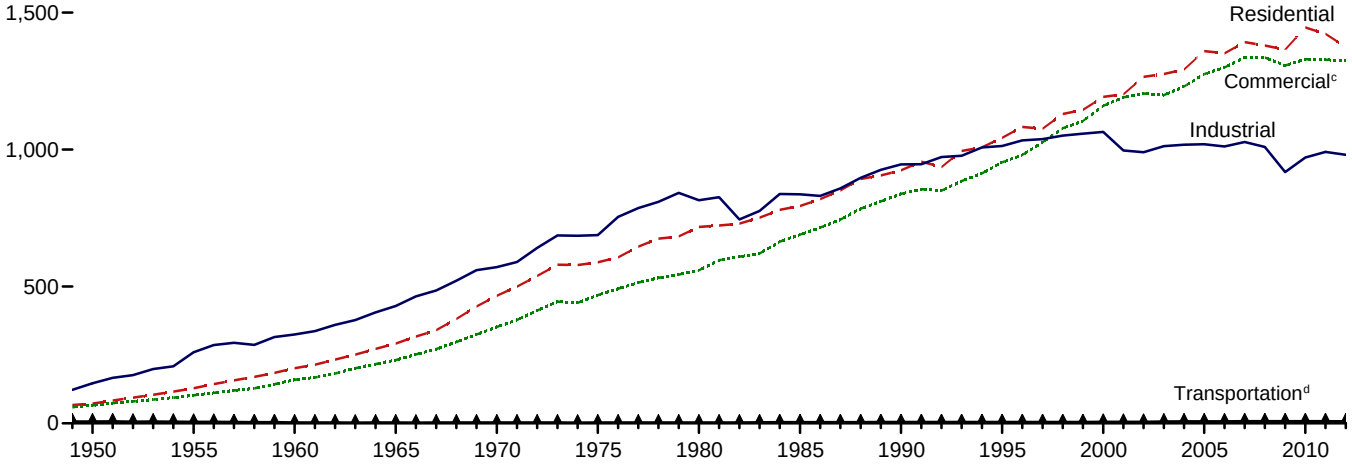
Electricity End Use Overview, 1989–2012



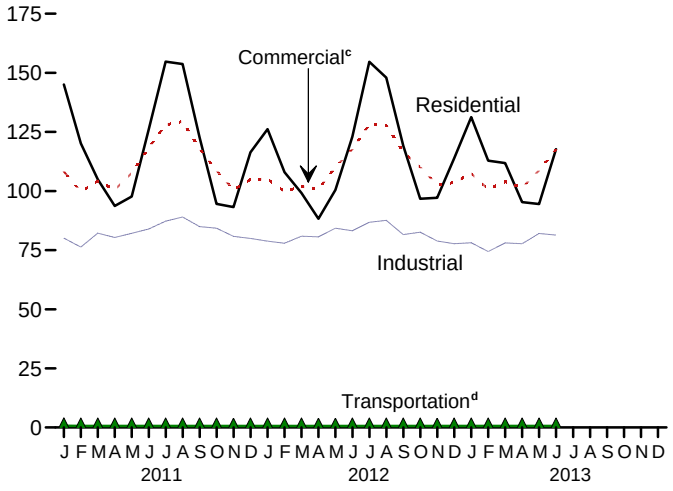
Retail Sales[a] by Sector, June 2013



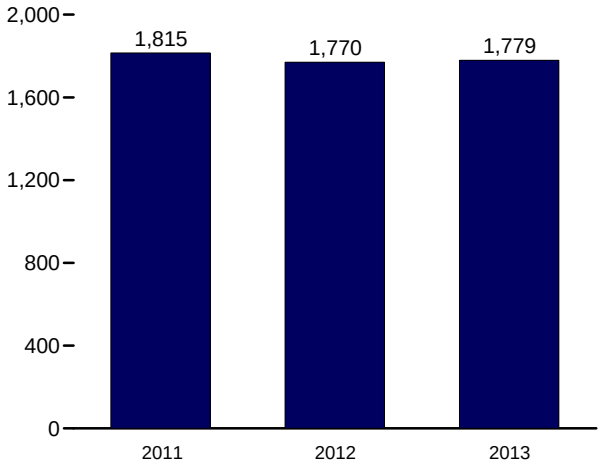
Retail Sales[a] by Sector, 1949–2012



Retail Sales[a] by Sector, Monthly



Retail Sales[a] Total, January–June



[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	**1,379,981**	**1,335,981**	**1,009,300**	**7,700**	**3,732,962**	**132,197**	**3,865,159**	**– –**	**– –**
2009 Total	**1,364,474**	**1,307,168**	**917,442**	**7,781**	**3,596,865**	**126,938**	**3,723,803**	**– –**	**– –**
2010 Total	**1,445,708**	**1,330,199**	**970,873**	**7,712**	**3,754,493**	**131,910**	**3,886,403**	**– –**	**– –**
2011 January	145,054	108,243	80,077	710	334,084	E 11,245	345,329	– –	– –
February	120,121	99,789	76,332	637	296,879	E 10,042	306,922	– –	– –
March	104,921	104,263	82,196	664	292,044	E 10,398	302,442	– –	– –
April	93,700	100,505	80,356	629	275,190	E 10,380	285,570	– –	– –
May	97,688	107,624	82,095	619	288,026	E 10,681	298,707	– –	– –
June	125,983	118,169	83,941	643	328,736	E 11,181	339,917	– –	– –
July	154,729	128,063	87,245	650	370,686	E 12,136	382,822	– –	– –
August	153,739	129,371	89,014	625	372,749	E 12,292	385,041	– –	– –
September	122,720	117,951	84,959	634	326,263	E 11,199	337,462	– –	– –
October	94,585	108,655	84,287	616	288,144	E 10,504	298,647	– –	– –
November	93,220	100,552	80,858	590	275,220	E 10,888	286,108	– –	– –
December	116,341	104,873	79,956	656	301,826	E 11,808	313,634	– –	– –
Total	**1,422,801**	**1,328,057**	**991,316**	**7,672**	**3,749,846**	**132,754**	**3,882,600**	**– –**	**– –**
2012 January	126,208	105,118	78,821	666	310,813	E 11,702	322,515	– –	– –
February	107,951	99,682	77,898	646	286,177	E 11,014	297,191	– –	– –
March	99,153	101,930	80,911	619	282,613	E 10,750	293,363	– –	– –
April	88,300	100,839	80,604	604	270,348	E 10,366	280,713	– –	– –
May	100,478	110,062	84,273	606	295,420	E 11,258	306,678	– –	– –
June	122,992	117,651	83,202	610	324,455	E 11,252	335,708	– –	– –
July	154,649	128,157	86,762	642	370,210	E 12,216	382,426	– –	– –
August	147,991	127,713	87,629	650	363,984	E 11,869	375,853	– –	– –
September	119,201	116,483	81,560	628	317,873	E 11,073	328,945	– –	– –
October	96,707	110,111	82,600	619	290,037	E 11,108	301,144	– –	– –
November	97,174	102,546	78,877	580	279,178	E 11,389	290,567	– –	– –
December	113,791	103,551	77,698	632	295,673	E 12,103	307,775	– –	– –
Total	**1,374,594**	**1,323,844**	**980,837**	**7,504**	**3,686,780**	**E 136,099**	**3,822,878**	**– –**	**– –**
2013 January	131,252	107,415	78,152	664	317,482	E 12,016	329,498	– –	– –
February	112,869	100,765	74,402	646	288,683	E 10,957	299,639	– –	– –
March	111,822	103,963	78,079	631	294,496	E 11,677	306,173	– –	– –
April	95,334	101,380	77,691	625	275,029	E 10,413	285,442	– –	– –
May	94,537	108,685	82,068	621	285,911	E 11,273	297,184	– –	– –
June	117,736	117,674	81,376	631	317,416	E 11,447	328,863	– –	– –
6-Month Total	**663,550**	**639,881**	**471,769**	**3,817**	**1,779,017**	**E 67,782**	**1,846,799**	**– –**	**– –**
2012 6-Month Total	**645,081**	**635,283**	**485,710**	**3,751**	**1,769,826**	**E 66,341**	**1,836,168**	**– –**	**– –**
2011 6-Month Total	**687,468**	**638,593**	**484,997**	**3,901**	**1,814,959**	**E 63,927**	**1,878,886**	**– –**	**– –**

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

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

[c] Industrial sector. Through 2002, excludes agriculture and irrigation; beginning in 2003, includes agriculture and irrigation.

[d] Transportation sector, including sales to railroads and railways.

[e] The sum of "Residential," "Commercial," "Industrial," and "Transportation."

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

[g] The sum of "Total Retail Sales" and "Direct Use."

[h] "Commercial (Old)" is a discontinued series—data are for the commercial sector, excluding public street and highway lighting, interdepartmental sales, and other sales to public authorities.

[i] "Other (Old)" is a discontinued series—data are for public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

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

Notes: • 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#electricity for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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.doc.

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."
1984–2002: EIA, Form EIA-861, "Annual Electric Utility Report."
2003 forward: EIA, *Electric Power Monthly* (*EPM*), August 2013, 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 forward: EIA, EPM, August 2013, 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 forward: EIA, EPM, August 2013, 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."
2001–2011: EIA, *Electric Power Annual 2011*, January 2013, Table 2.2.
2012: 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 2012 and 2013, the 2011 annual share is used.

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

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

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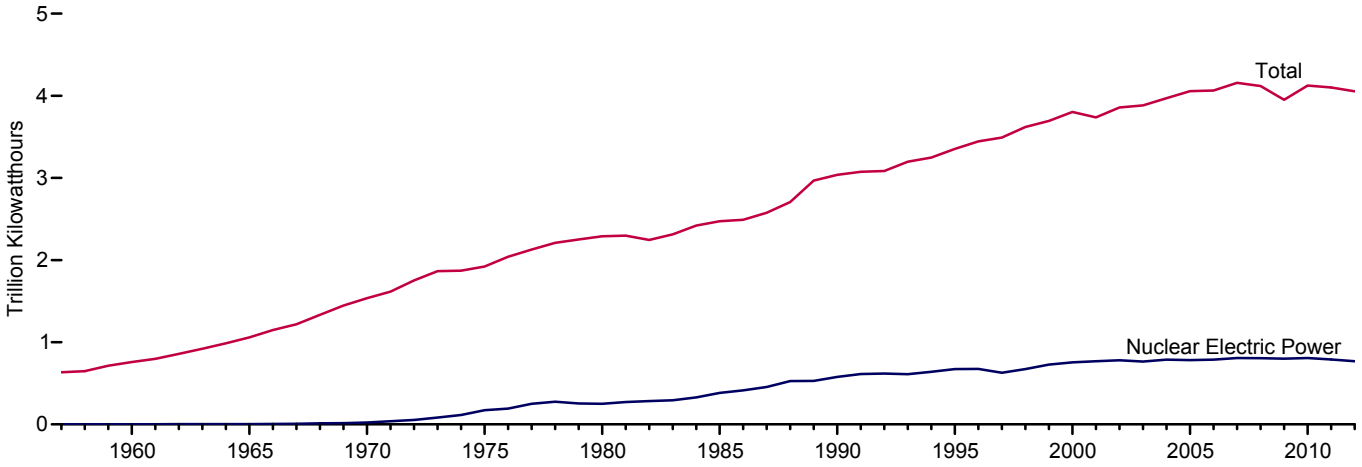
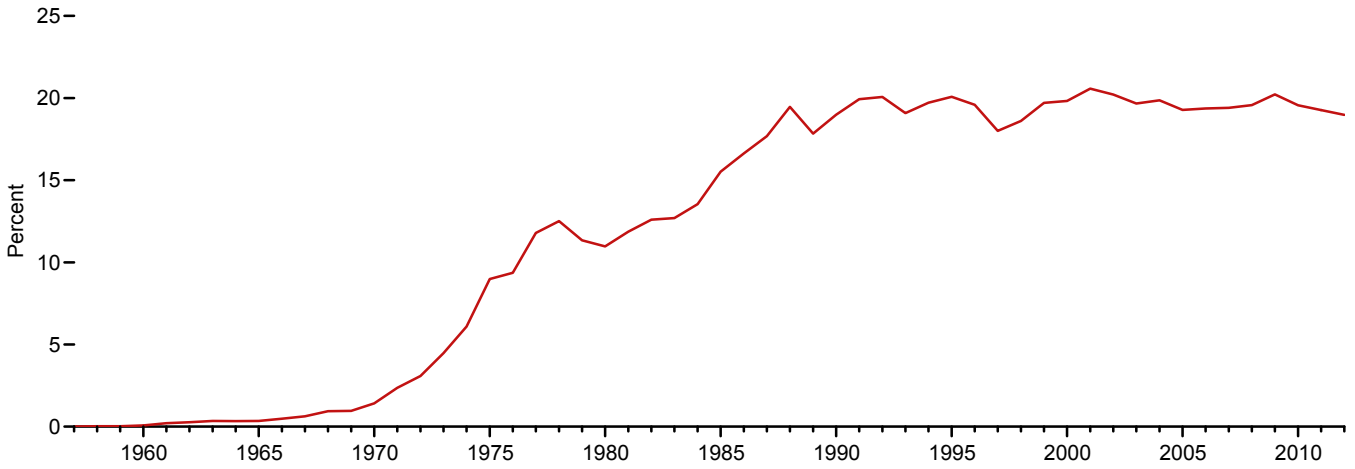
8. Nuclear Energy

Figure 8.1 Nuclear Energy Overview

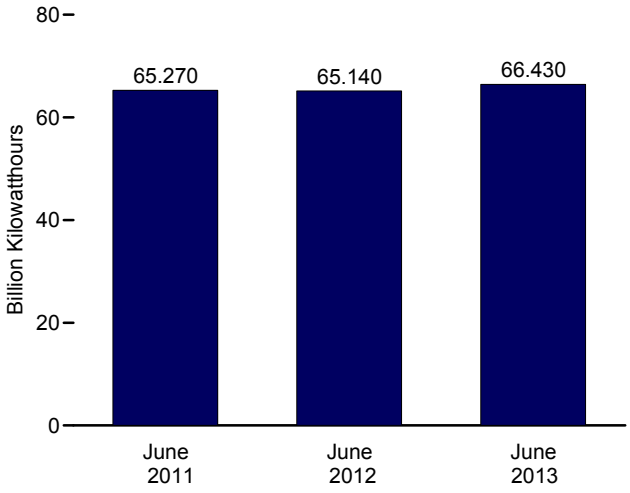
Electricity Net Generation, 1957–2012



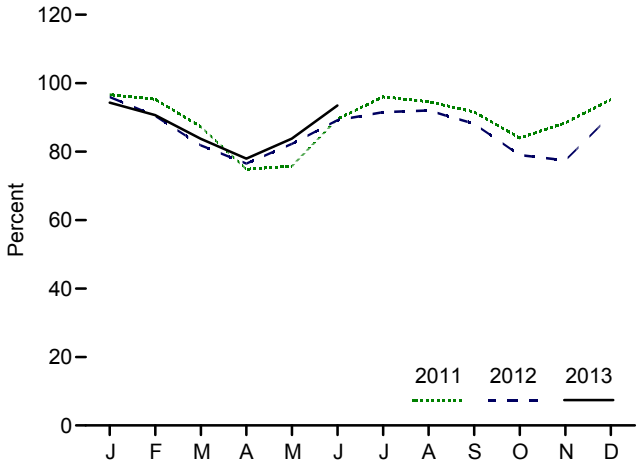
Nuclear Share of Electricity Net Generation, 1957–2012



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**	**91.1**
2009 Total	**104**	**101.004**	**798,855**	**20.2**	**90.3**
2010 Total	**104**	**[c] 101.167**	**806,968**	**19.6**	**91.1**
2011 January	104	[E] 101.167	72,743	20.0	[E] 96.6
February	104	[E] 101.167	64,789	20.7	[E] 95.3
March	104	[E] 101.167	65,662	20.6	[E] 87.2
April	104	[E] 101.167	54,547	18.0	[E] 74.9
May	104	[E] 101.167	57,013	17.6	[E] 75.7
June	104	[E] 101.281	65,270	17.7	[E] 89.5
July	104	[E] 101.281	72,345	17.3	[E] 96.0
August	104	[E] 101.351	71,339	17.5	[E] 94.6
September	104	[E] 101.351	66,849	19.8	[E] 91.6
October	104	[E] 101.351	63,337	20.5	[E] 84.0
November	104	[E] 101.351	64,474	21.2	[E] 88.4
December	104	101.419	71,837	21.4	95.2
Total	**104**	**101.419**	**790,204**	**19.3**	**89.1**
2012 January	104	[E] 101.419	72,381	21.2	[E] 95.9
February	104	[E] 101.419	63,847	20.6	[E] 90.5
March	104	[E] 101.419	61,729	20.0	[E] 81.8
April	104	[E] 101.419	55,871	18.9	[E] 76.5
May	104	[E] 101.442	62,081	18.4	[E] 82.3
June	104	[E] 101.442	65,140	18.0	[E] 89.2
July	104	[E] 101.564	69,129	16.6	[E] 91.5
August	104	[E] 101.673	69,602	17.6	[E] 92.0
September	104	[E] 101.673	64,511	19.3	[E] 88.1
October	104	[E] 101.673	59,743	19.1	[E] 79.0
November	104	[E] 101.702	56,713	18.6	[E] 77.4
December	104	[E] 101.702	68,584	20.5	[E] 90.6
Total	**104**	**[E] 101.702**	**769,331**	**19.0**	**[E] 86.2**
2013 January	104	[RE] 101.760	71,406	20.5	[RE] 94.3
February	103	[RE] 100.900	61,483	19.9	[E] 90.7
March	103	[RE] 101.009	62,947	19.3	[E] 83.8
April	103	[RE] 101.157	56,767	19.0	[RE] 77.9
May	102	[RE] 100.836	62,848	19.5	[E] 83.8
June	100	[E] 98.686	66,430	18.6	[E] 93.5
6-Month Total	**100**	**[E] 98.686**	**381,881**	**19.5**	**[E] 87.3**
2012 6-Month Total	**104**	**[E] 101.442**	**381,049**	**19.5**	**[E] 86.0**
2011 6-Month Total	**104**	**[E] 101.281**	**380,024**	**19.1**	**[E] 86.5**

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

[d] 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#nuclear for all available annual data from 1957–1972. • See http://www.eia.gov/totalenergy/data/monthly/#nuclear for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1957 through 1972 have been added to this table. For all years of data from 1957 through 2013, see the "Web Pages" cited above.

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 have recently been retired: Crystal River 3 in February 2013; Kewaunee in May 2013; and San Onofre 2 and 3 in June 2013.

Note 2. Nuclear Capacity. Nuclear generating units may have more than one type of net capacity rating, including the following:

(a) Net Summer Capacity—The steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power, as demonstrated by test at the time of summer peak demand. Auxiliary power of a typical nuclear power plant is about 5 percent of gross generation.

(b) Net Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of a unit, specified by the utility and used for plant design.

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

Table 8.1 Sources

Total Operable Units and **Net Summer Capacity of Operable Units**
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.

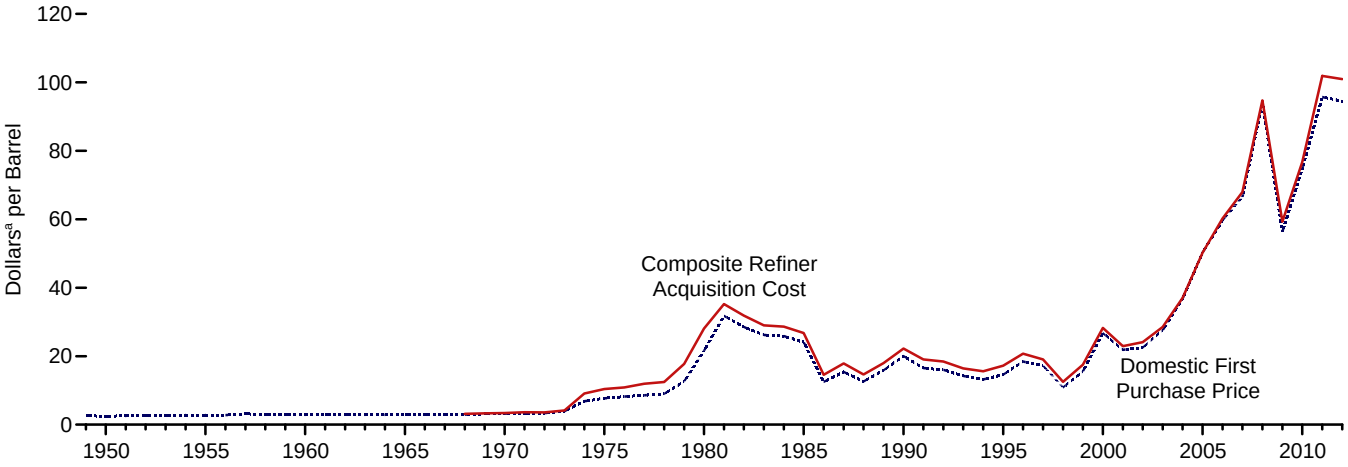
Nuclear Electricity Net Generation and **Nuclear Share of Electricity Net Generation**
1957 forward: Table 7.2a.

Capacity Factor
1973 forward: Calculated by EIA using the method described above in Note 2.

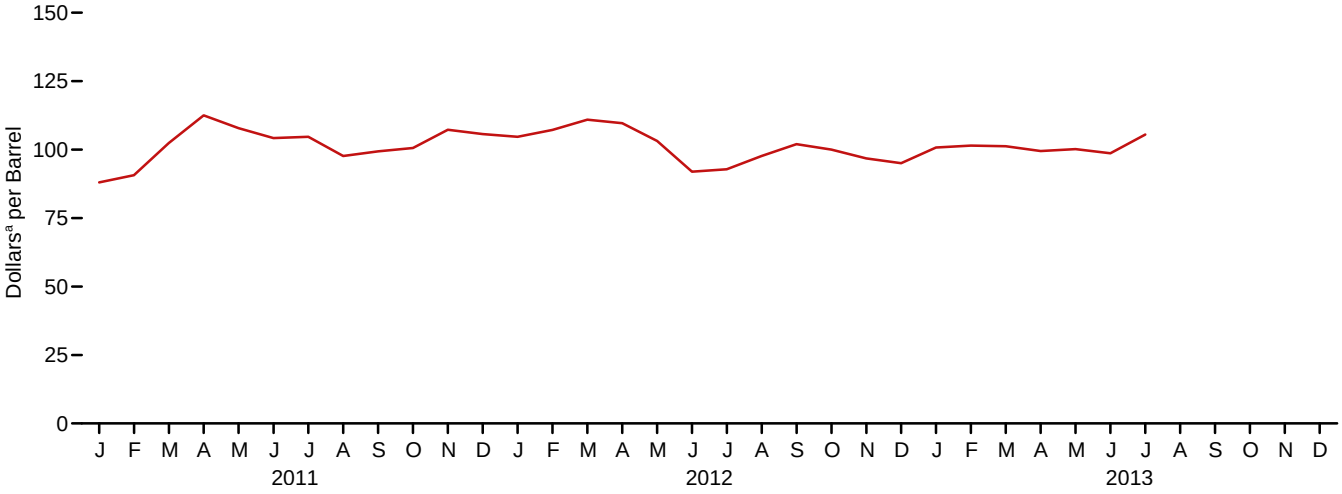
9. Energy Prices

Figure 9.1 Petroleum Prices

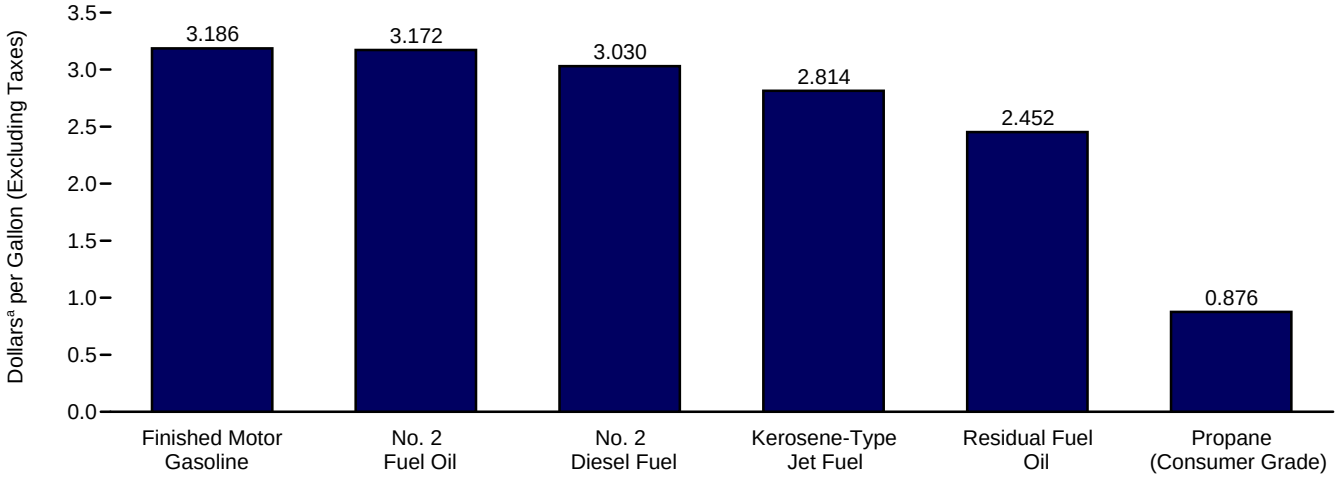
Crude Oil Prices, 1949–2012



Composite Refiner Acquisition Cost, Monthly



Refiner Prices to End Users: Selected Products, June 2013



[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 January	85.66	86.81	89.47	88.70	87.61	88.04
February	86.69	92.20	94.28	89.50	91.42	90.66
March	99.19	104.17	104.73	102.41	102.43	102.43
April	108.80	111.52	112.43	111.70	113.02	112.51
May	102.46	105.81	108.18	107.63	107.98	107.84
June	97.30	104.33	105.18	102.51	105.38	104.23
July	97.82	105.59	106.22	102.67	105.94	104.68
August	89.00	97.72	99.30	95.90	99.00	97.70
September	90.22	100.82	101.03	96.89	101.05	99.39
October	92.28	101.91	102.55	98.34	101.99	100.57
November	100.18	105.79	106.00	106.69	107.67	107.28
December	98.71	103.09	105.62	104.51	106.52	105.69
Average	**95.73**	**101.66**	**102.92**	**100.71**	**102.63**	**101.87**
2012 January	98.99	103.96	105.27	103.97	105.25	104.71
February	102.04	108.56	109.23	105.93	108.08	107.18
March	105.42	110.65	110.62	110.80	111.00	110.92
April	103.62	107.17	107.55	111.22	108.54	109.68
May	95.57	100.79	101.56	103.04	103.26	103.17
June	83.59	87.89	91.90	91.66	92.18	91.96
July	86.10	92.50	93.68	92.64	92.99	92.84
August	92.53	99.63	98.70	98.58	97.04	97.70
September	95.98	101.03	101.34	102.17	101.82	101.97
October	92.24	97.75	99.22	99.07	100.92	100.02
November	89.64	91.86	96.20	95.28	98.07	96.78
December	89.81	92.69	95.01	96.56	93.70	95.06
Average	**94.52**	**99.78**	**101.00**	**100.72**	**101.09**	**100.93**
2013 January	94.89	95.23	95.19	103.78	97.91	100.78
February	95.04	100.94	99.09	103.75	99.23	101.45
March	95.85	100.21	98.51	103.45	99.11	101.23
April	94.72	R 95.56	R 95.72	102.53	96.45	99.50
May	R 95.00	R 96.14	R 97.11	101.98	98.50	100.17
June	R 94.05	R 95.50	R 95.02	R 100.26	R 97.17	R 98.67
July	NA	NA	NA	E 107.31	E 104.09	E 105.53

[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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#prices for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the “Web Pages” cited above.

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 January	95.97	83.36	84.45	99.86	W	–	81.25	W	89.74	83.96
February	W	88.55	88.77	109.07	W	–	85.11	97.25	96.01	88.99
March	113.63	101.29	102.55	117.98	W	–	97.56	107.36	106.19	102.41
April	122.52	114.17	109.90	126.05	W	–	106.56	114.82	115.15	107.71
May	113.33	106.15	105.13	117.66	W	–	101.60	110.02	108.43	103.64
June	115.13	102.78	103.43	119.13	W	–	100.59	106.39	108.22	100.37
July	114.80	100.30	104.84	119.68	W	–	100.62	109.06	110.09	100.88
August	W	95.01	98.21	115.61	W	–	97.17	106.98	104.19	93.57
September	112.49	97.45	100.28	115.43	109.99	–	95.72	108.41	105.82	97.06
October	109.74	102.37	101.48	114.46	W	–	96.93	105.62	105.20	98.64
November	112.49	106.97	107.94	115.35	W	–	105.44	106.51	108.16	104.17
December	111.26	103.10	105.96	W	W	–	105.75	104.48	106.42	100.80
Average	**111.82**	**100.21**	**100.90**	**115.35**	**107.08**	**–**	**97.23**	**106.47**	**105.34**	**98.49**
2012 January	111.10	106.69	107.79	114.12	W	–	105.08	107.51	107.51	101.40
February	121.45	114.47	110.14	124.31	W	–	110.37	111.12	113.85	103.42
March	W	118.46	114.81	128.10	W	–	112.76	118.06	117.06	104.65
April	118.84	114.06	110.54	W	W	–	109.33	115.02	113.85	101.42
May	110.79	101.27	103.12	110.79	W	–	101.45	105.16	105.28	96.74
June	95.65	91.81	90.60	98.96	91.90	–	87.64	90.55	90.63	85.28
July	W	96.83	95.03	103.86	W	–	93.81	95.47	96.30	88.46
August	W	106.16	101.12	114.62	W	–	99.94	104.87	104.18	95.13
September	112.75	108.59	102.49	111.74	107.14	–	101.00	105.58	105.05	97.52
October	W	105.77	98.98	W	W	–	98.10	102.70	101.29	95.05
November	W	103.75	93.45	–	W	–	93.15	101.91	95.94	89.37
December	–	101.24	94.19	W	W	–	92.99	102.93	98.04	87.64
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	91.51
February	W	106.45	108.25	W	W	–	104.06	105.22	106.93	97.34
March	W	101.31	105.16	111.03	W	–	101.60	108.10	105.77	94.86
April	W	99.58	99.95	W	W	–	R 95.01	R 100.50	R 98.68	R 93.04
May	103.27	R 98.35	R 99.21	R 106.45	W	–	R 95.48	98.51	R 98.62	R 94.06
June	103.67	98.56	97.22	W	W	–	96.11	97.42	98.12	93.42

[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 for all available data beginning in 1973.

Sources: See end of section.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Dollars[a] per Barrel)

	Selected Countries								Persian Gulf Nations[b]	Total OPEC[c]	Total Non-OPEC[c]
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[d]	**W**	**5.33**	**W**	**–**	**9.08**	**5.37**	**–**	**5.99**	**5.91**	**6.85**	**5.64**
1975 Average	**11.81**	**12.84**	**–**	**12.61**	**12.70**	**12.50**	**–**	**12.36**	**12.64**	**12.70**	**12.70**
1980 Average	**34.76**	**30.11**	**W**	**31.77**	**37.15**	**29.80**	**35.68**	**25.92**	**30.59**	**33.56**	**33.99**
1985 Average	**27.39**	**25.71**	**–**	**25.63**	**28.96**	**24.72**	**28.36**	**24.43**	**25.50**	**26.86**	**26.53**
1990 Average	**21.51**	**20.48**	**22.34**	**19.64**	**23.33**	**21.82**	**22.65**	**20.31**	**20.55**	**21.23**	**20.98**
1995 Average	**17.66**	**16.65**	**17.45**	**16.19**	**18.25**	**16.84**	**17.91**	**14.81**	**16.78**	**16.61**	**16.95**
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 January	99.58	81.96	85.88	85.07	101.24	96.59	W	84.70	96.41	94.00	85.07
February	110.07	80.54	90.93	89.08	109.61	103.20	W	89.88	101.81	100.19	89.00
March	114.40	89.39	105.84	103.03	117.17	110.22	118.42	101.22	109.64	109.26	101.11
April	123.35	99.13	112.47	110.55	126.47	116.13	124.38	107.95	115.07	116.57	108.80
May	116.76	98.12	109.70	105.62	119.95	112.19	W	104.04	111.10	111.75	104.97
June	116.73	92.33	104.31	103.71	120.81	110.00	W	102.32	108.97	109.87	100.82
July	117.77	91.75	101.35	105.38	121.80	111.06	W	103.04	110.19	111.61	100.37
August	113.36	84.05	95.08	98.78	115.83	109.45	W	99.54	108.32	106.27	93.83
September	112.63	85.21	99.17	99.90	117.19	109.91	W	99.10	108.82	107.67	95.59
October	114.82	88.20	104.14	101.97	116.09	108.90	W	99.89	108.00	107.95	97.93
November	115.14	93.80	108.52	108.46	117.05	108.61	W	106.90	108.39	110.10	102.91
December	115.65	95.74	106.64	106.31	117.10	108.27	W	108.02	107.53	109.63	102.52
Average	**114.05**	**89.92**	**102.57**	**101.21**	**116.43**	**108.83**	**118.45**	**100.14**	**108.01**	**107.84**	**98.64**
2012 January	115.13	93.43	110.54	108.38	115.41	110.49	W	106.23	110.61	110.32	101.31
February	121.30	92.09	115.19	111.24	126.42	114.75	W	111.72	114.24	115.76	102.99
March	128.35	88.71	119.93	115.20	130.46	117.55	–	114.29	116.71	117.99	103.94
April	120.60	85.55	113.78	111.55	124.06	115.33	W	110.58	115.77	116.10	99.94
May	114.94	82.78	105.04	103.79	113.89	108.39	W	103.02	108.52	108.26	95.21
June	103.10	78.11	93.85	90.89	103.24	99.38	–	89.41	99.24	97.29	87.15
July	106.95	75.65	97.70	95.24	106.95	99.00	W	94.91	99.05	99.49	88.11
August	113.27	80.68	105.94	101.98	114.51	104.66	–	101.38	104.35	105.27	92.29
September	116.51	85.42	109.19	103.16	114.95	107.06	–	102.97	106.29	107.02	95.79
October	114.90	86.35	106.48	99.09	117.03	106.12	W	99.31	105.76	105.81	93.77
November	111.01	82.89	104.74	94.32	112.41	106.05	–	94.67	104.94	102.26	91.17
December	116.37	76.68	102.86	94.98	114.52	106.87	W	94.30	105.78	103.38	86.76
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	75.45	106.36	101.04	120.99	108.57	–	99.04	107.02	106.85	86.43
February	115.77	76.67	109.28	108.95	117.89	108.75	W	105.54	107.96	108.83	90.85
March	110.56	79.59	105.37	106.36	114.08	107.71	W	103.35	108.02	107.57	90.36
April	R 105.56	R 83.02	101.42	100.63	R 106.03	R 102.30	W	R 96.19	R 102.31	R 101.76	R 90.79
May	R 106.32	R 86.63	R 100.46	R 100.07	R 108.12	R 100.76	W	R 97.44	R 100.85	R 101.38	R 93.37
June	106.76	86.21	99.04	97.71	W	99.81	–	97.78	99.63	100.35	91.90

[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 for all available data beginning in 1973.

Sources: • **October 1973–September 1977:** Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • **October 1977–December 1977:** U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • **1978–2007:** EIA, *Petroleum Marketing Annual 2007,* Table 22. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* September 2013, 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 January	– –	3.091	3.345	3.139	3.058	3.173	3.095	3.388
February	– –	3.167	3.424	3.215	3.168	3.301	3.211	3.584
March	– –	3.546	3.807	3.594	3.509	3.671	3.561	3.905
April	– –	3.816	4.074	3.863	3.746	3.914	3.800	4.064
May	– –	3.933	4.192	3.982	3.849	4.025	3.906	4.047
June	– –	3.702	3.972	3.753	3.628	3.789	3.680	3.933
July	– –	3.654	3.915	3.703	3.614	3.726	3.650	3.905
August	– –	3.630	3.893	3.680	3.612	3.698	3.639	3.860
September	– –	3.612	3.887	3.664	3.573	3.693	3.611	3.837
October	– –	3.468	3.745	3.521	3.400	3.549	3.448	3.798
November	– –	3.423	3.700	3.475	3.330	3.497	3.384	3.962
December	– –	3.278	3.553	3.329	3.220	3.361	3.266	3.861
Average	**– –**	**3.527**	**3.792**	**3.577**	**3.476**	**3.616**	**3.521**	**3.840**
2012 January	– –	3.399	3.663	3.447	3.330	3.486	3.380	3.833
February	– –	3.572	3.840	3.622	3.517	3.711	3.579	3.953
March	– –	3.868	4.138	3.918	3.774	4.017	3.852	4.127
April	– –	3.927	4.194	3.976	3.837	4.032	3.900	4.115
May	– –	3.792	4.062	3.839	3.643	3.919	3.732	3.979
June	– –	3.552	3.825	3.602	3.465	3.695	3.539	3.759
July	– –	3.451	3.726	3.502	3.379	3.565	3.439	3.721
August	– –	3.707	3.991	3.759	3.668	3.834	3.722	3.983
September	– –	3.856	4.140	3.908	3.801	3.949	3.849	4.120
October	– –	3.786	4.079	3.839	3.653	3.939	3.746	4.094
November	– –	3.488	3.782	3.542	3.380	3.603	3.452	4.000
December	– –	3.331	3.626	3.386	3.256	3.424	3.310	3.961
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

[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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#petroleum for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#prices for all available monthly and annual 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."

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Table 9.5 Refiner Prices of Residual Fuel Oil

(Dollars[a] per Gallon, Excluding Taxes)

	Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent		Residual Fuel Oil Sulfur Content Greater Than 1 Percent		Average	
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
1978 Average	**0.293**	**0.314**	**0.245**	**0.275**	**0.263**	**0.298**
1980 Average	**.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 January	NA	2.302	1.896	1.870	1.918	2.013
February	2.100	2.451	2.079	2.019	2.086	2.150
March	2.344	2.654	2.307	2.245	2.321	2.403
April	2.555	2.741	2.427	2.370	2.448	2.475
May	2.463	2.786	2.374	2.325	2.392	2.440
June	2.467	2.905	2.377	2.312	2.402	2.473
July	2.547	2.877	2.430	2.362	2.474	2.508
August	2.394	2.896	2.392	2.342	2.392	2.512
September	2.368	2.882	2.370	2.318	2.369	2.473
October	2.512	2.891	2.375	2.276	2.406	2.454
November	2.566	2.853	2.424	2.368	2.459	2.521
December	2.473	2.891	2.335	2.348	2.371	2.509
Average	**2.389**	**2.736**	**2.316**	**2.257**	**2.336**	**2.401**
2012 January	2.591	2.965	2.480	2.452	2.512	2.620
February	2.739	3.070	2.632	2.556	2.654	2.705
March	2.921	3.159	2.717	2.601	2.772	2.784
April	2.805	3.201	2.624	2.596	2.670	2.731
May	2.589	3.170	2.501	2.652	2.527	2.784
June	2.275	3.083	2.186	2.179	2.211	2.476
July	2.271	2.926	2.224	2.221	2.234	2.406
August	2.586	3.041	2.457	2.442	2.483	2.579
September	2.558	2.970	2.491	2.473	2.501	2.582
October	2.464	2.969	2.393	2.382	2.409	2.496
November	2.385	2.895	2.283	2.346	2.300	2.492
December	2.341	2.814	2.248	2.275	2.268	2.431
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	R 2.316	2.839	2.213	2.421	R 2.240	2.507
June	2.285	2.785	2.209	2.383	2.228	2.452

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

R=Revised. NA=Not available.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. • Values for the current month are preliminary. • 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 for all available data beginning in 1978.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007,* Table 17. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* September 2013, 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 January	2.472	3.161	2.585	2.804	2.585	2.621	1.380
February	2.584	3.248	2.783	2.974	2.737	2.820	1.401
March	2.934	3.607	3.095	3.196	2.996	3.134	1.403
April	3.218	4.035	3.259	3.296	3.167	3.296	1.433
May	3.174	4.096	3.188	W	3.039	3.116	1.515
June	2.970	3.847	3.101	3.054	2.956	3.079	1.503
July	3.058	4.011	3.090	3.158	3.024	3.135	1.513
August	2.949	3.899	3.040	3.089	2.927	3.032	1.522
September	2.896	3.878	3.025	3.073	2.927	3.035	1.557
October	2.805	3.616	2.962	3.096	2.915	3.035	1.511
November	2.701	3.494	3.089	3.258	3.050	3.157	1.498
December	2.614	3.424	2.951	3.006	2.928	2.927	1.444
Average	**2.867**	**3.739**	**3.014**	**3.065**	**2.907**	**3.034**	**1.467**
2012 January	2.747	3.576	3.059	3.197	3.027	3.018	1.341
February	2.936	3.788	3.186	3.293	3.166	3.163	1.282
March	3.203	4.052	3.296	3.306	3.211	3.308	1.293
April	3.189	4.157	3.255	3.243	3.153	3.252	1.163
May	3.016	4.004	3.076	3.008	2.976	3.039	.950
June	2.757	3.883	2.747	2.697	2.635	2.741	.762
July	2.806	3.877	2.850	2.936	2.774	2.907	.809
August	3.087	4.124	3.129	3.195	2.988	3.206	.875
September	3.163	4.269	3.245	3.236	3.128	3.278	.910
October	2.941	4.002	3.182	3.250	3.155	3.265	.979
November	2.713	3.508	3.015	3.221	3.049	3.117	.955
December	2.590	3.518	2.982	3.145	3.003	3.022	.894
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	R 2.951	4.068	2.763	2.793	R 2.708	R 2.958	.932
June	2.882	3.983	2.785	2.806	2.741	2.922	.861

[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. W=Value withheld to avoid disclosure of individual company data.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. • Values for the current month are preliminary. • 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 for all available data beginning in 1978.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007,* Table 4. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* September 2013, 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 January	2.615	3.323	2.623	3.358	2.889	2.681	NA
February	2.712	3.374	2.818	3.506	3.020	2.867	1.823
March	3.072	3.767	3.161	3.697	3.255	3.189	1.763
April	3.340	4.132	3.306	3.796	3.430	3.370	NA
May	3.419	4.091	3.220	3.894	3.337	3.231	1.648
June	3.184	3.913	3.138	3.802	3.193	3.183	1.681
July	3.172	4.027	3.118	3.812	3.294	3.214	1.620
August	3.134	3.920	3.057	3.851	3.251	3.143	1.650
September	3.090	3.915	3.059	3.873	3.288	3.127	1.702
October	2.980	3.697	2.987	3.823	3.346	3.108	1.706
November	2.922	3.620	3.124	3.892	3.403	3.225	1.773
December	2.808	W	2.963	3.824	3.255	3.024	1.691
Average	**3.050**	**3.803**	**3.054**	**3.616**	**3.193**	**3.117**	**1.709**
2012 January	2.914	3.732	3.087	3.848	3.345	3.093	1.655
February	3.087	W	3.206	3.874	3.495	3.224	1.518
March	3.389	4.133	3.337	3.919	3.522	3.378	1.470
April	3.405	4.313	3.283	3.916	3.509	3.342	1.352
May	3.289	W	3.100	3.741	3.258	3.163	1.080
June	3.061	W	2.768	3.753	2.982	2.912	.902
July	2.981	W	2.856	3.612	3.041	2.989	.972
August	3.248	4.091	3.123	3.575	3.256	3.265	.916
September	3.357	4.262	3.283	3.771	3.361	3.367	.932
October	3.261	4.064	3.211	3.864	3.486	3.364	.980
November	2.994	3.561	3.045	3.854	3.403	3.206	.926
December	2.828	3.599	3.008	3.789	3.321	3.115	.840
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	R 3.188	R 3.900	R 2.787	3.786	R 3.222	3.058	.953
June	3.186	W	2.814	3.634	3.172	3.030	.876

[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.

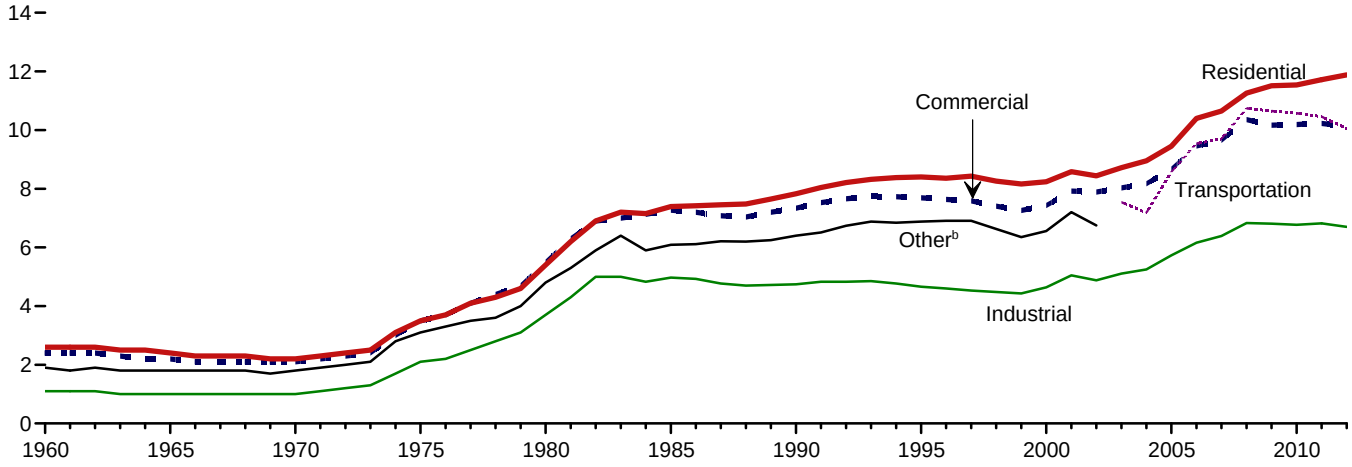
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007*, Table 2. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* September 2013, Table 2.

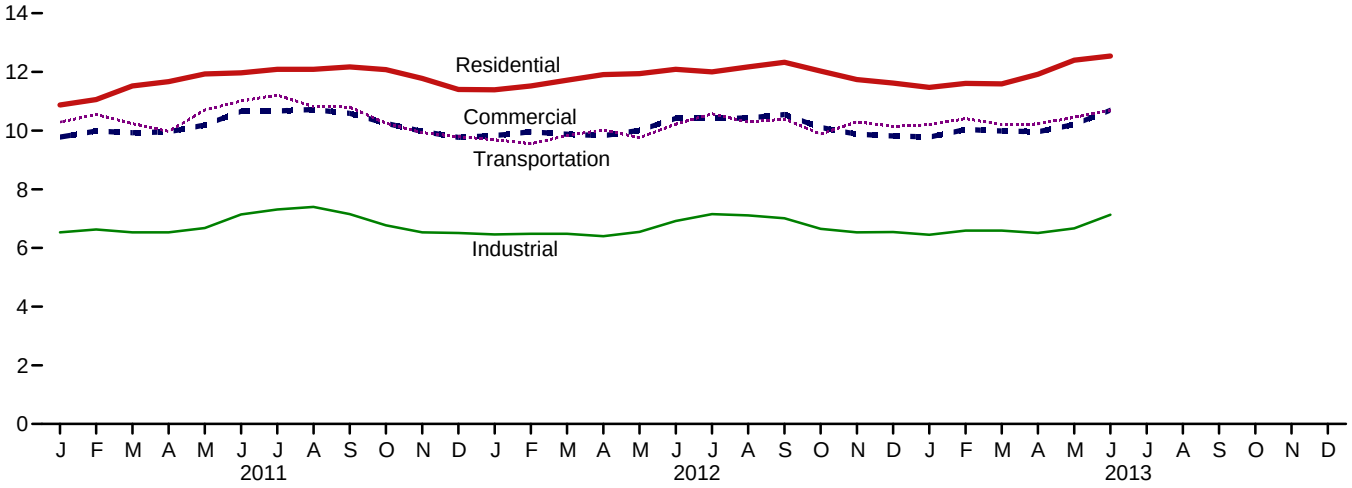
Figure 9.2 Average Retail Prices of Electricity

(Cents[a] per Kilowatthour)

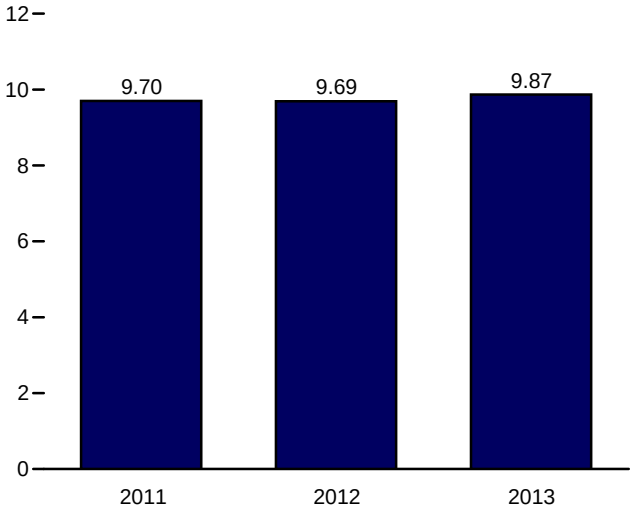
By Sector, 1960–2012



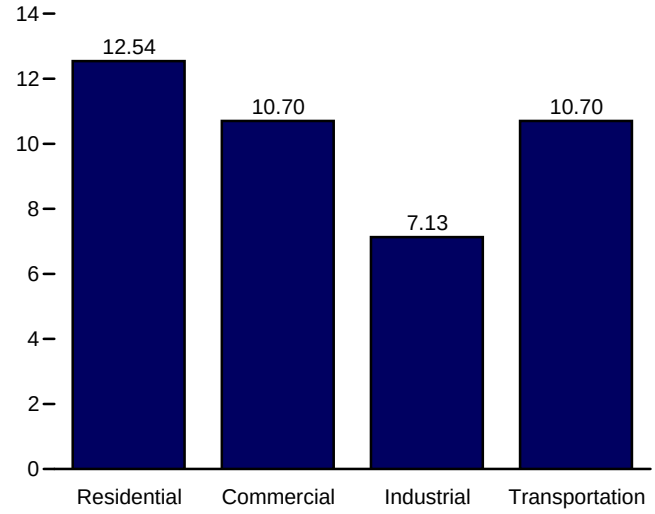
By Sector, Monthly



Total, January–June



By Sector, June 2013



[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**	**10.36**	**6.83**	**10.74**	**– –**	**9.74**
2009 Average	**11.51**	**10.17**	**6.81**	**10.65**	**– –**	**9.82**
2010 Average	**11.54**	**10.19**	**6.77**	**10.57**	**– –**	**9.83**
2011 January	10.87	9.78	6.53	10.29	– –	9.48
February	11.06	9.99	6.63	10.55	– –	9.56
March	11.52	9.93	6.53	10.24	– –	9.55
April	11.67	9.96	6.53	9.97	– –	9.54
May	11.93	10.19	6.68	10.70	– –	9.78
June	11.97	10.66	7.14	11.01	– –	10.26
July	12.09	10.67	7.31	11.21	– –	10.47
August	12.09	10.72	7.40	10.82	– –	10.49
September	12.17	10.59	7.15	10.80	– –	10.29
October	12.08	10.25	6.77	10.25	– –	9.83
November	11.78	9.98	6.53	9.93	– –	9.58
December	11.40	9.77	6.51	9.79	– –	9.53
Average	**11.72**	**10.23**	**6.82**	**10.46**	**– –**	**9.90**
2012 January	11.39	9.83	6.46	9.69	– –	9.61
February	11.52	9.96	6.48	9.55	– –	9.60
March	11.72	9.88	6.48	9.83	– –	9.56
April	11.91	9.83	6.40	10.02	– –	9.49
May	11.94	10.01	6.55	9.76	– –	9.68
June	12.09	10.42	6.92	10.22	– –	10.15
July	12.00	10.42	7.15	10.57	– –	10.31
August	12.17	10.43	7.11	10.29	– –	10.34
September	12.33	10.55	7.01	10.39	– –	10.31
October	12.03	10.11	6.65	9.88	– –	9.76
November	11.74	9.88	6.53	10.30	– –	9.58
December	11.62	9.82	6.54	10.14	– –	9.65
Average	**11.88**	**10.12**	**6.70**	**10.05**	**– –**	**9.87**
2013 January	11.47	9.78	6.45	10.20	– –	9.66
February	11.61	10.04	6.59	10.41	– –	9.77
March	11.59	9.99	6.59	10.20	– –	9.69
April	11.92	9.96	6.51	10.23	– –	9.67
May	12.40	10.21	6.67	10.45	– –	9.92
June	12.54	10.70	7.13	10.70	– –	10.47
6-Month Average	**11.90**	**10.13**	**6.66**	**10.36**	**– –**	**9.87**
2012 6-Month Average	**11.75**	**10.00**	**6.55**	**9.84**	**– –**	**9.69**
2011 6-Month Average	**11.47**	**10.10**	**6.67**	**10.46**	**– –**	**9.70**

[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.

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#electricity for all available annual data from 1960–1972. • See http://www.eia.gov/totalenergy/data/monthly/#prices for all available monthly and annual data beginning in 1973.

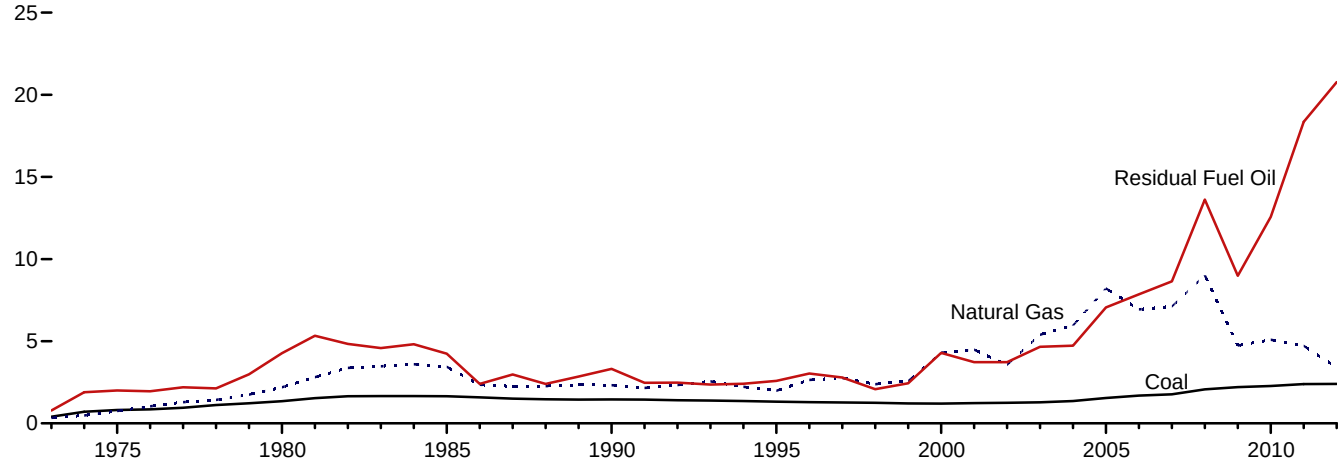
Sources: • **1960–September 1977:** Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **October 1977–February 1980:** Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **March 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." • **1984–2009:** EIA, Form EIA-861, "Annual Electric Power Industry Report." • **2010 forward:** EIA, *Electric Power Monthly,* August 2013, Table 5.3.

Selected years of data from 1960 through 1972 have been added to this table. For all years of data from 1960 through 2013, see the "Web Pages" cited above.

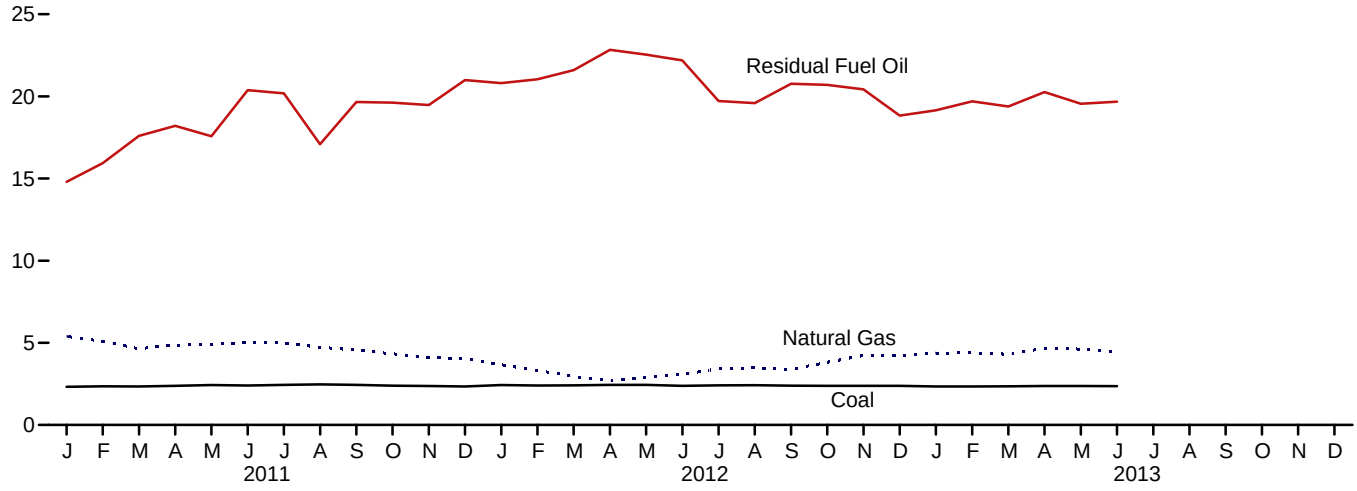
Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants

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

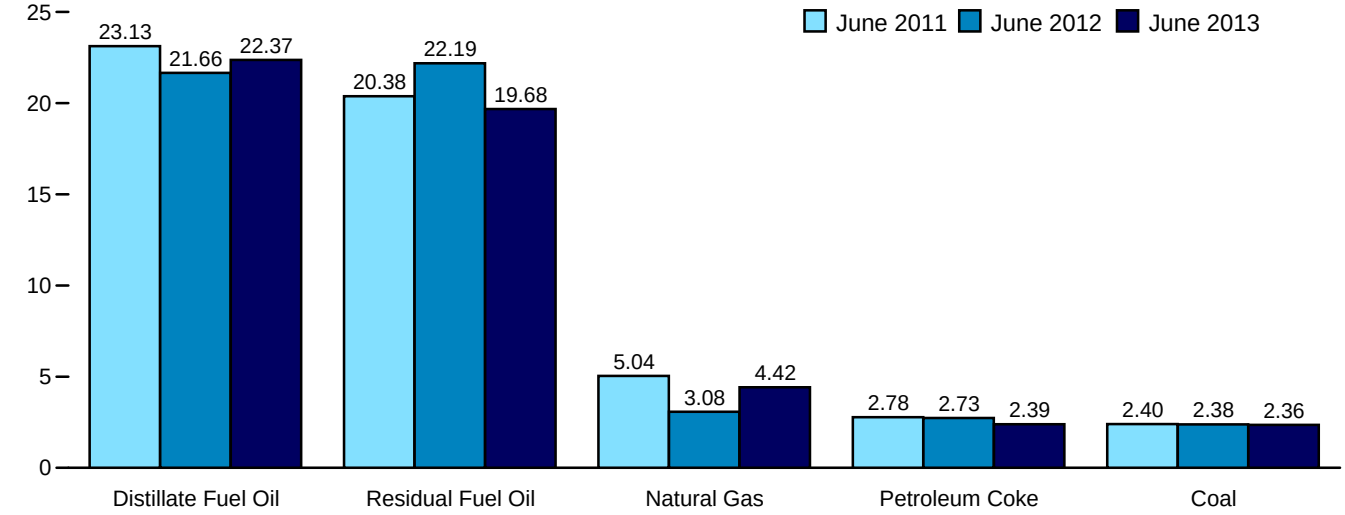
Costs, 1973–2012



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 January	2.32	14.80	19.59	3.13	11.83	5.39	3.37
February	2.35	15.94	20.93	2.84	11.60	5.09	3.27
March	2.34	17.59	22.59	3.09	12.98	4.64	3.12
April	2.38	18.21	24.06	3.20	13.04	4.86	3.28
May	2.43	17.57	23.04	3.31	13.21	4.89	3.38
June	2.40	20.38	23.13	2.78	14.29	5.04	3.51
July	2.44	20.18	22.95	3.30	12.13	4.98	3.61
August	2.47	17.09	22.51	3.08	10.52	4.73	3.43
September	2.44	19.66	22.73	2.93	11.51	4.56	3.25
October	2.39	19.62	23.20	3.32	13.20	4.33	3.13
November	2.37	19.47	23.38	2.58	13.03	4.10	3.03
December	2.34	20.99	22.45	2.74	12.11	4.04	3.02
Average	**2.39**	**18.35**	**22.46**	**3.03**	**12.48**	**4.72**	**3.29**
2012 January	2.43	20.81	22.87	2.71	12.76	3.67	2.98
February	2.40	21.04	23.73	2.57	12.61	3.32	2.83
March	2.41	21.60	24.80	2.43	12.31	2.96	2.73
April	2.44	22.83	24.30	2.64	13.17	2.68	2.65
May	2.44	22.54	23.23	2.68	13.88	2.90	2.75
June	2.38	22.19	21.66	2.73	13.41	3.08	2.81
July	2.41	19.72	21.80	2.93	13.95	3.41	2.98
August	2.42	19.59	23.15	2.51	13.24	3.48	2.97
September	2.39	20.77	24.30	2.43	10.33	3.38	2.87
October	2.38	20.70	24.85	2.07	12.24	3.81	3.00
November	2.38	20.43	24.37	2.46	12.27	4.23	3.10
December	2.38	18.83	23.50	2.46	11.44	4.20	3.13
Average	**2.40**	**20.78**	**23.45**	**2.54**	**12.60**	**3.40**	**2.90**
2013 January	2.34	19.15	23.00	2.46	12.03	4.38	3.10
February	2.34	19.70	23.89	2.50	12.22	4.39	3.10
March	2.35	19.39	23.85	2.59	13.78	4.30	3.10
April	2.37	20.26	22.92	2.61	9.36	4.67	3.16
May	2.37	19.55	22.62	2.32	10.78	4.62	3.16
June	2.36	19.68	22.37	2.39	10.11	4.42	3.15
6-Month Average	**2.36**	**19.55**	**23.07**	**2.48**	**11.52**	**4.46**	**3.13**
2012 6-Month Average	**2.42**	**21.77**	**23.31**	**2.63**	**13.01**	**3.09**	**2.79**
2011 6-Month Average	**2.37**	**17.48**	**22.05**	**3.06**	**12.86**	**4.99**	**3.32**

[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.

NA=Not available.

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.

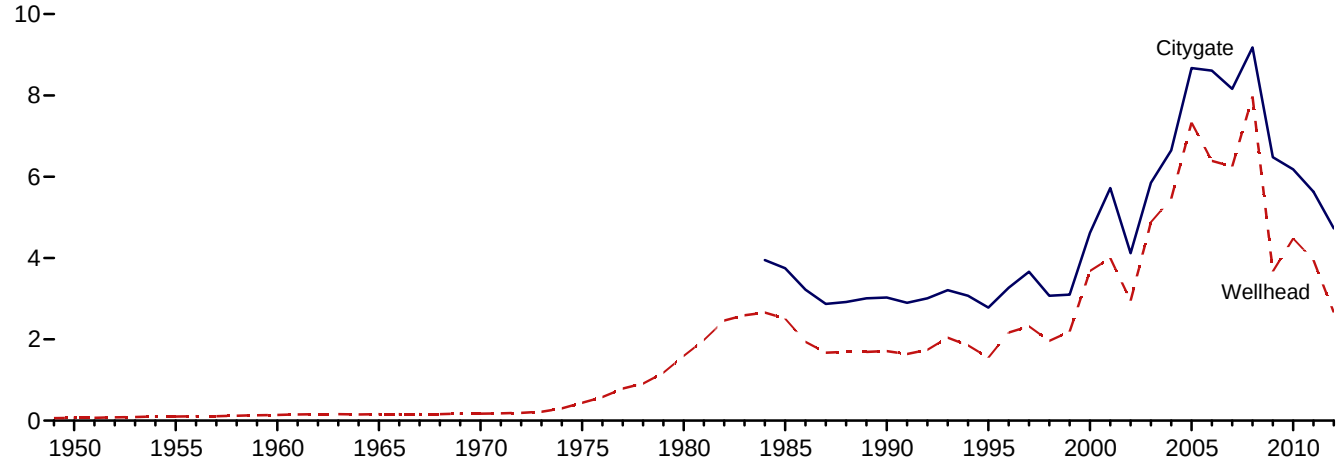
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: See end of section.

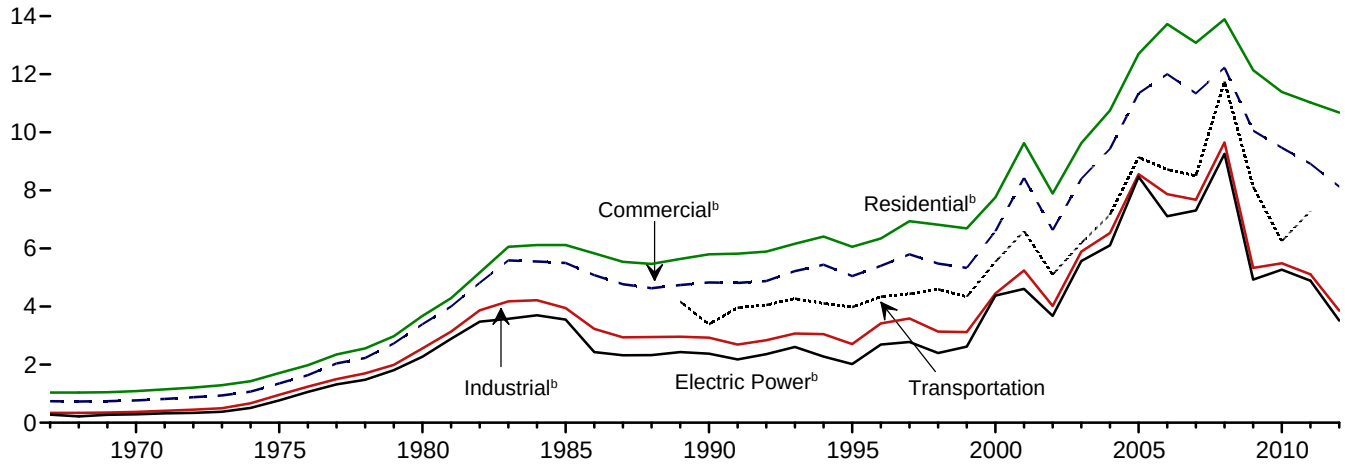
Figure 9.4 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

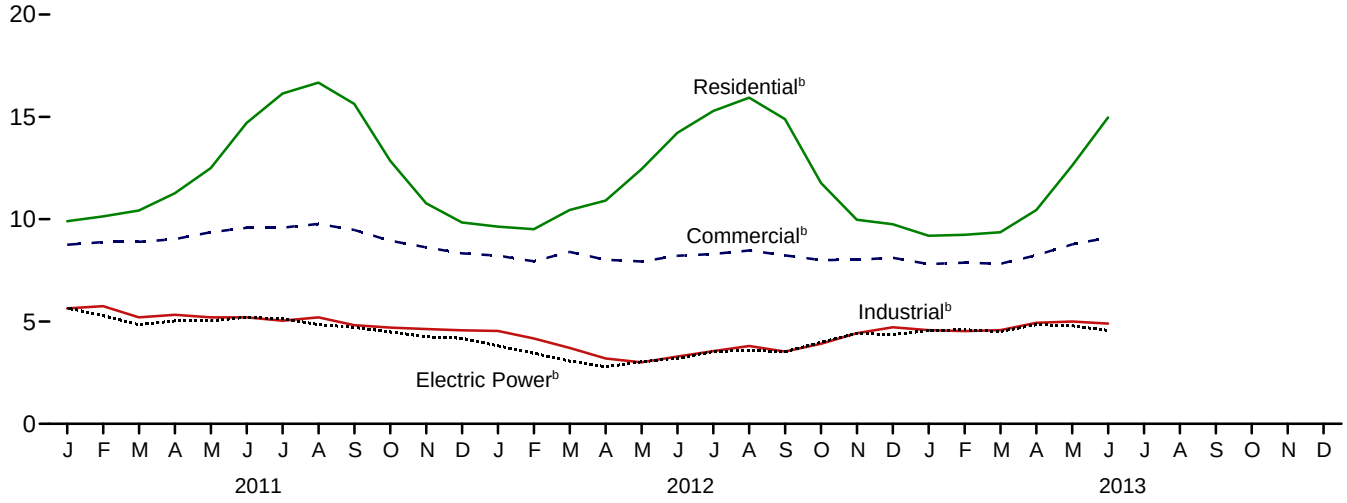
Wellhead and Citygate, 1949–2012



Consuming Sectors, 1967–2012



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 January	4.37	5.69	9.90	96.5	8.75	72.8	5.64	17.1	NA	5.66	101.7
February	4.34	5.75	10.14	96.5	8.88	72.0	5.75	16.9	NA	5.29	101.8
March	3.95	5.73	10.43	96.2	8.89	69.6	5.20	16.8	NA	4.84	101.0
April	4.05	5.62	11.27	96.0	9.03	66.4	5.33	16.3	NA	5.03	101.6
May	4.12	5.80	12.50	96.2	9.36	63.9	5.20	16.7	NA	5.04	101.3
June	4.20	6.12	14.70	96.3	9.58	61.7	5.20	16.2	NA	5.20	101.1
July	4.27	6.16	16.14	96.3	9.59	60.1	5.04	17.0	NA	5.13	100.5
August	4.20	6.19	16.67	95.7	9.77	58.1	5.20	16.4	NA	4.85	101.0
September	3.82	5.94	15.63	95.5	9.47	57.8	4.82	16.2	NA	4.71	101.4
October	3.62	5.45	12.85	95.7	8.95	61.4	4.70	16.2	NA	4.49	101.5
November	3.35	5.29	10.78	95.2	8.63	66.1	4.63	16.5	NA	4.26	101.1
December	3.14	5.03	9.84	96.4	8.33	69.1	4.57	17.0	NA	4.18	101.4
Average	**3.95**	**5.63**	**11.03**	**96.2**	**8.92**	**67.3**	**5.11**	**16.6**	**7.29**	**4.89**	**101.2**
2012 January	[E] 2.89	4.85	9.64	96.2	8.22	70.5	4.54	16.3	NA	3.81	100.8
February	[E] 2.46	4.73	9.51	96.1	7.94	69.2	4.17	16.5	NA	3.45	100.4
March	[E] 2.25	4.84	10.45	96.2	8.40	67.3	3.71	16.3	NA	3.07	100.3
April	[E] 1.89	4.19	10.91	95.5	8.02	63.7	3.19	15.8	NA	2.79	101.1
May	[E] 1.94	4.30	12.44	95.6	7.93	60.8	3.01	15.9	NA	3.03	100.8
June	[E] 2.54	4.63	14.22	95.6	8.21	60.7	3.29	15.9	NA	3.20	100.7
July	[E] 2.59	4.88	15.29	95.6	8.30	59.1	3.55	16.3	NA	3.53	100.7
August	[E] 2.86	5.13	15.94	95.1	8.47	57.2	3.80	16.9	NA	3.59	100.5
September	[E] 2.71	4.74	14.89	95.1	8.23	57.6	3.53	16.8	NA	3.52	101.3
October	[E] 3.03	4.65	11.77	95.2	8.00	60.7	3.91	16.7	NA	3.98	101.4
November	[E] 3.35	4.79	9.97	95.5	8.02	65.8	4.43	17.2	NA	4.42	100.4
December	[E] 3.35	4.79	9.75	95.8	8.11	68.6	4.72	17.3	NA	4.36	101.6
Average	**[E] 2.66**	**4.73**	**10.68**	**95.8**	**8.13**	**65.4**	**3.86**	**16.5**	**NA**	**3.52**	**100.8**
2013 January	NA	4.52	9.19	95.9	7.81	70.8	4.58	17.4	NA	4.56	95.1
February	NA	4.56	9.24	95.6	7.88	70.4	4.53	17.3	NA	4.59	94.3
March	NA	4.75	9.36	95.5	7.82	69.5	4.58	17.1	NA	4.51	94.6
April	NA	5.14	10.45	95.3	8.24	67.1	4.94	17.1	NA	4.85	95.0
May	NA	5.56	12.62	95.2	8.77	63.5	5.00	16.6	NA	4.79	95.2
June	NA	5.74	14.97	94.9	9.10	59.4	4.90	16.4	NA	4.56	94.9
6-Month Average	**NA**	**4.81**	**9.91**	**95.6**	**8.06**	**68.3**	**4.74**	**17.0**	**NA**	**4.64**	**94.9**
2012 6-Month Average	**[E] 2.33**	**4.68**	**10.33**	**96.0**	**8.13**	**66.9**	**3.69**	**16.1**	**NA**	**3.21**	**100.7**
2011 6-Month Average	**4.17**	**5.74**	**10.65**	**96.3**	**8.95**	**69.5**	**5.40**	**16.7**	**NA**	**5.18**	**101.4**

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

NA=Not available. E=Estimate.

Notes: • Prices are for natural gas, plus a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#naturalgas for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#prices for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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*, September 2013, 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*, September 2013, 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. Bureau of the Census.
1974–1976: DOI, BOM, *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.
1977: January–September, FEA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."
October–December, EIA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."

1978–2007: EIA, *Petroleum Marketing Annual 2007*, Table 1.
2008 forward: EIA, *Petroleum Marketing Monthly*, September 2013, 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."
1978–2007: EIA, *Petroleum Marketing Annual 2007*, Table 21.
2008 forward: EIA, *Petroleum Marketing Monthly*, September 2013, 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*, August 2013, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

Table 9.10 Sources

All Prices Except Vehicle Fuel and Electric Power
1949–2006: U.S. Energy Information Administration (EIA), *Natural Gas Annual* (*NGA*), annual reports and unpublished revisions.
2007 forward: EIA, *Natural Gas Monthly* (*NGM*), August 2013, Table 3.

Vehicle Fuel Price
1989 forward: 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
1989–2011: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."
2012 and 2013: EIA, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Percentage of Commercial Sector
1987–2006: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to commercial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to commercial consumers.
2007 forward: EIA, NGM, August 2013, Table 3.

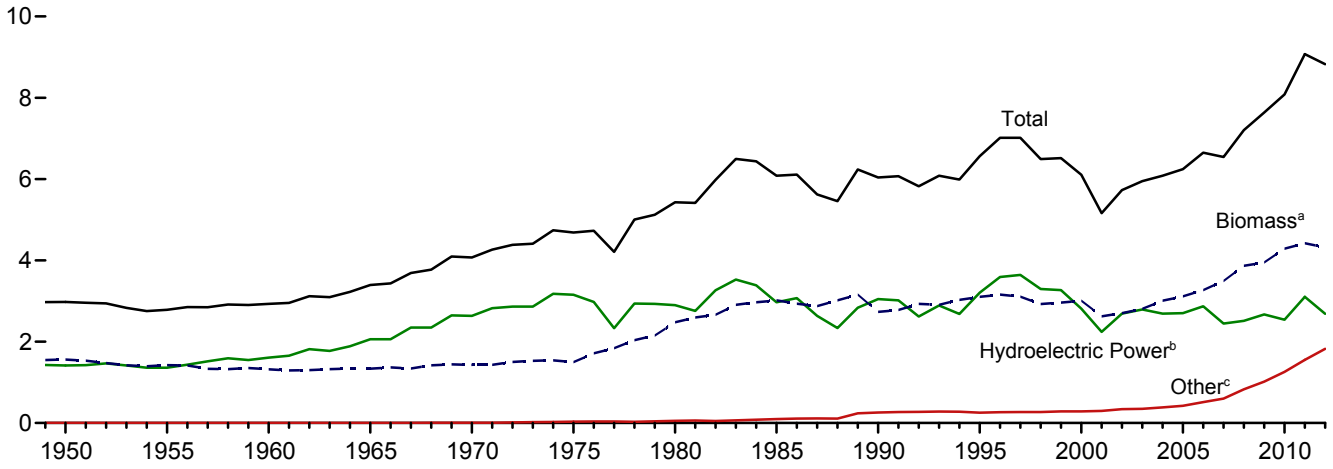
Percentage of Industrial Sector
1982–2006: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers.
2007 forward: EIA, NGM, August 2013, 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).

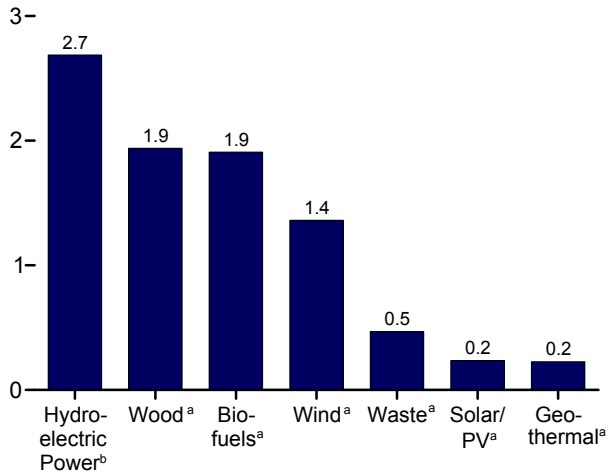
10. Renewable Energy

Figure 10.1 Renewable Energy Consumption
(Quadrillion Btu)

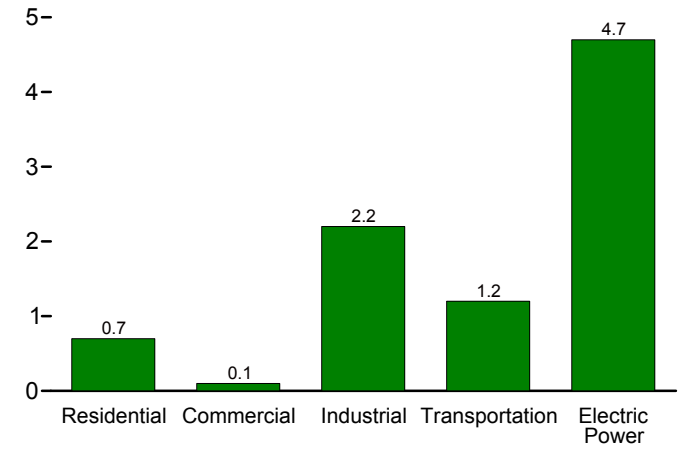
Total and Major Sources, 1949–2012



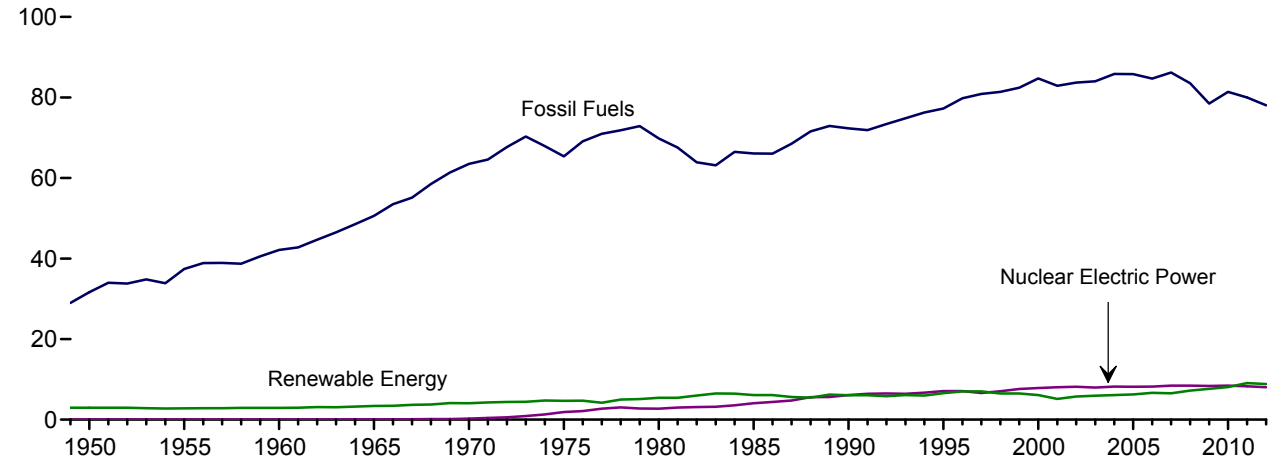
By Source, 2012



By Sector, 2012



Compared With Other Resources, 1949–2012



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

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

Table 10.1 Renewable Energy Production and Consumption by Source

(Trillion Btu)

	Production[a]			Consumption								
	Biomass		Total Renewable Energy[d]	Hydroelectric Power[e]	Geothermal[f]	Solar/PV[g]	Wind[h]	Biomass				Total Renewable Energy
	Biofuels[b]	Total[c]						Wood[i]	Waste[j]	Biofuels[k]	Total	
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	**402**	**2,805**	**5,947**	**2,793**	**173**	**62**	**113**	**2,002**	**401**	**404**	**2,807**	**5,948**
2004 Total	**487**	**2,998**	**6,069**	**2,688**	**178**	**63**	**142**	**2,121**	**389**	**499**	**3,010**	**6,081**
2005 Total	**564**	**3,104**	**6,229**	**2,703**	**181**	**63**	**178**	**2,137**	**403**	**577**	**3,117**	**6,242**
2006 Total	**720**	**3,216**	**6,599**	**2,869**	**181**	**68**	**264**	**2,099**	**397**	**771**	**3,267**	**6,649**
2007 Total	**978**	**3,480**	**6,528**	**2,446**	**186**	**76**	**341**	**2,089**	**413**	**991**	**3,493**	**6,541**
2008 Total	**1,387**	**3,881**	**7,219**	**2,511**	**192**	**89**	**546**	**2,059**	**435**	**1,372**	**3,866**	**7,204**
2009 Total	**1,584**	**3,967**	**7,655**	**2,669**	**200**	**98**	**721**	**1,931**	**452**	**1,568**	**3,951**	**7,639**
2010 Total	**1,884**	**4,332**	**8,128**	**2,539**	**208**	**126**	**923**	**1,981**	**468**	**1,837**	**4,286**	**8,082**
2011 January	169	384	747	248	18	13	83	176	39	153	368	731
February	151	345	710	234	17	13	102	158	36	145	338	703
March	171	379	816	303	18	14	102	169	39	160	368	806
April	163	358	813	303	17	14	121	159	36	154	349	804
May	170	368	832	317	18	15	114	161	37	164	362	826
June	168	374	825	312	17	15	107	167	38	168	373	824
July	171	383	792	304	18	15	73	172	39	162	373	782
August	174	386	742	250	18	15	73	172	39	174	385	741
September	166	371	677	208	17	14	67	167	38	160	364	670
October	176	381	708	192	18	15	102	166	40	167	372	699
November	178	385	738	201	18	14	121	167	40	167	374	727
December	186	404	770	231	18	14	104	176	41	176	394	761
Total	**2,044**	**4,516**	**9,170**	**3,103**	**212**	**171**	**1,168**	**2,010**	**462**	**1,948**	**4,421**	**9,074**
2012 January	177	386	783	227	19	17	134	170	39	154	363	760
February	164	358	699	198	18	17	108	158	36	152	347	688
March	172	369	792	250	19	19	135	158	39	163	361	784
April	164	352	768	254	18	19	124	151	38	160	349	765
May	173	374	814	277	19	21	122	162	39	172	374	814
June	165	364	778	259	19	21	116	160	38	164	362	777
July	157	364	749	260	19	21	85	167	40	158	365	750
August	163	366	711	225	19	21	81	165	39	168	371	716
September	152	349	643	171	19	20	84	160	37	150	348	642
October	156	355	674	157	19	21	122	160	40	161	360	679
November	152	352	685	183	19	19	112	160	40	152	352	685
December	157	367	769	226	20	19	138	168	42	153	363	765
Total	**1,951**	**4,357**	**8,867**	**2,687**	**227**	**235**	**1,361**	**1,938**	**468**	**1,909**	**4,316**	**8,825**
2013 January	152	361	789	244	19	23	141	169	40	151	360	787
February	139	327	700	199	18	22	135	152	36	140	327	701
March	161	367	763	200	19	26	152	166	40	161	367	764
April	162	352	805	241	19	26	168	153	38	163	353	806
May	171	371	854	277	19	27	159	161	40	171	372	854
June	169	370	816	266	19	28	134	162	40	170	371	817
6-Month Total	**954**	**2,148**	**4,728**	**1,427**	**113**	**151**	**889**	**961**	**233**	**956**	**2,151**	**4,730**
2012 6-Month Total	**1,014**	**2,203**	**4,635**	**1,465**	**112**	**114**	**740**	**959**	**230**	**966**	**2,155**	**4,587**
2011 6-Month Total	**993**	**2,207**	**4,743**	**1,717**	**106**	**84**	**629**	**990**	**224**	**944**	**2,158**	**4,694**

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

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

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

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

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

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

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

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

[i] Wood and wood-derived fuels.

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

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

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#renewable for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available monthly and annual data beginning in 1973.

Sources: Tables 10.2a–10.4.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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 January	3	13	38	55	(s)	2	(s)	(s)	6	3	(s)	9	11
February	3	12	35	49	(s)	2	(s)	(s)	5	3	(s)	9	10
March	3	13	38	55	(s)	2	(s)	(s)	6	3	(s)	10	11
April	3	13	37	53	(s)	2	(s)	(s)	6	3	(s)	9	11
May	3	13	38	55	(s)	2	(s)	(s)	6	4	(s)	10	12
June	3	13	37	53	(s)	2	(s)	(s)	6	4	(s)	10	11
July	3	13	38	55	(s)	2	(s)	(s)	6	4	(s)	10	12
August	3	13	38	55	(s)	2	(s)	(s)	6	4	(s)	10	12
September	3	13	37	53	(s)	2	(s)	(s)	6	4	(s)	9	11
October	3	13	38	55	(s)	2	(s)	(s)	6	4	(s)	10	11
November	3	13	37	53	(s)	2	(s)	(s)	6	4	(s)	10	11
December	3	13	38	55	(s)	2	(s)	(s)	6	4	(s)	10	12
Total	**40**	**153**	**450**	**643**	**(s)**	**20**	**1**	**(s)**	**69**	**43**	**3**	**115**	**136**
2012 January	3	16	36	55	(s)	2	(s)	(s)	5	4	(s)	9	11
February	3	15	33	52	(s)	2	(s)	(s)	5	4	(s)	9	11
March	3	16	36	55	(s)	2	(s)	(s)	5	4	(s)	9	11
April	3	16	34	53	(s)	2	(s)	(s)	5	3	(s)	9	11
May	3	16	36	55	(s)	2	(s)	(s)	5	4	(s)	9	11
June	3	16	34	53	(s)	2	(s)	(s)	5	3	(s)	9	11
July	3	16	36	55	(s)	2	(s)	(s)	5	4	(s)	9	11
August	3	16	36	55	(s)	2	(s)	(s)	5	3	(s)	9	11
September	3	16	34	53	(s)	2	(s)	(s)	5	3	(s)	9	11
October	3	16	36	55	(s)	2	(s)	(s)	5	4	(s)	9	11
November	3	16	34	53	(s)	2	(s)	(s)	5	4	(s)	9	11
December	3	16	36	55	(s)	2	(s)	(s)	5	4	(s)	10	12
Total	**40**	**193**	**420**	**652**	**(s)**	**20**	**1**	**1**	**62**	**44**	**3**	**109**	**131**
2013 January	3	20	36	59	(s)	2	(s)	(s)	5	4	(s)	10	12
February	3	18	32	53	(s)	2	(s)	(s)	5	4	(s)	9	10
March	3	20	36	59	(s)	2	(s)	(s)	5	4	(s)	10	12
April	3	19	35	57	(s)	2	(s)	(s)	5	4	(s)	9	11
May	3	20	36	59	(s)	2	(s)	(s)	5	4	(s)	9	11
June	3	19	35	57	(s)	2	(s)	(s)	5	4	(s)	9	11
6-Month Total	**20**	**115**	**208**	**343**	**(s)**	**10**	**1**	**(s)**	**31**	**23**	**1**	**56**	**67**
2012 6-Month Total	**20**	**96**	**209**	**324**	**(s)**	**10**	**1**	**(s)**	**31**	**22**	**1**	**54**	**65**
2011 6-Month Total	**20**	**76**	**223**	**319**	**(s)**	**10**	**(s)**	**(s)**	**34**	**21**	**1**	**56**	**67**

[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 using the fossil-fuels heat rate—see 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 using the fossil-fuels heat rate—see Table A6).

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

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

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

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

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

Notes: • Data are estimates, except for commercial sector solar/PV, hydroelectric power, wind, and waste. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#renewable for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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	Total
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**	**169**	**1,679**	**1,725**	**228**	**2**	**230**
2004 Total	**33**	**4**	**–**	**–**	**1,476**	**132**	**6**	**203**	**1,817**	**1,853**	**286**	**3**	**290**
2005 Total	**32**	**4**	**–**	**–**	**1,452**	**148**	**7**	**230**	**1,837**	**1,873**	**327**	**12**	**339**
2006 Total	**29**	**4**	**–**	**–**	**1,472**	**130**	**10**	**285**	**1,897**	**1,930**	**442**	**33**	**475**
2007 Total	**16**	**5**	**–**	**–**	**1,413**	**145**	**10**	**377**	**1,944**	**1,965**	**557**	**46**	**602**
2008 Total	**17**	**5**	**–**	**–**	**1,339**	**143**	**12**	**532**	**2,026**	**2,047**	**786**	**40**	**826**
2009 Total	**18**	**4**	**–**	**–**	**1,178**	**154**	**13**	**617**	**1,963**	**1,985**	**894**	**42**	**935**
2010 Total	**16**	**4**	**(s)**	**–**	**1,273**	**168**	**17**	**742**	**2,201**	**2,221**	**1,041**	**34**	**1,075**
2011 January	1	(s)	(s)	(s)	115	15	1	66	197	199	82	3	86
February	2	(s)	(s)	(s)	102	13	1	59	175	177	81	4	84
March	2	(s)	(s)	(s)	110	14	1	65	191	193	87	6	93
April	2	(s)	(s)	(s)	105	13	1	62	180	182	82	8	90
May	2	(s)	(s)	(s)	103	13	1	64	182	185	90	8	98
June	1	(s)	(s)	(s)	109	13	1	63	187	189	92	10	103
July	1	(s)	(s)	(s)	111	13	1	64	190	191	86	10	96
August	1	(s)	(s)	(s)	111	13	2	65	191	192	95	12	107
September	1	(s)	(s)	(s)	109	13	1	62	185	187	83	13	96
October	1	(s)	(s)	(s)	107	15	1	65	189	190	89	11	100
November	1	(s)	(s)	(s)	110	15	1	66	192	194	86	13	99
December	2	(s)	(s)	(s)	116	15	1	69	201	203	91	14	105
Total	**17**	**4**	**(s)**	**(s)**	**1,309**	**165**	**17**	**771**	**2,261**	**2,283**	**1,045**	**113**	**1,158**
2012 January	2	(s)	(s)	(s)	113	14	1	67	196	198	81	5	86
February	2	(s)	(s)	(s)	105	14	1	61	181	183	82	8	90
March	2	(s)	(s)	(s)	103	14	1	64	183	185	88	10	98
April	2	(s)	(s)	(s)	100	14	1	61	176	178	87	11	98
May	2	(s)	(s)	(s)	108	14	1	64	188	190	93	14	107
June	1	(s)	(s)	(s)	106	14	1	61	182	184	90	11	101
July	1	(s)	(s)	(s)	110	14	1	58	184	185	88	10	99
August	1	(s)	(s)	(s)	107	14	2	60	183	185	95	11	106
September	1	(s)	(s)	(s)	105	14	1	56	177	178	83	9	92
October	1	(s)	(s)	(s)	106	15	1	58	180	181	93	8	101
November	2	(s)	(s)	(s)	106	15	1	58	180	182	84	9	93
December	2	(s)	(s)	(s)	111	15	1	60	188	190	86	5	92
Total	**18**	**4**	**(s)**	**(s)**	**1,281**	**171**	**17**	**728**	**2,197**	**2,219**	**1,050**	**111**	**1,161**
2013 January	3	(s)	(s)	(s)	112	15	1	57	186	190	83	9	92
February	4	(s)	(s)	(s)	101	14	1	52	168	171	78	9	87
March	3	(s)	(s)	(s)	109	15	1	59	185	188	89	12	101
April	2	(s)	(s)	(s)	102	14	1	59	177	180	90	12	102
May	3	(s)	(s)	(s)	106	14	1	63	185	188	94	13	107
June	3	(s)	(s)	(s)	107	14	1	62	185	188	92	14	106
6-Month Total	**18**	**2**	**(s)**	**(s)**	**638**	**86**	**8**	**352**	**1,084**	**1,105**	**525**	**69**	**595**
2012 6-Month Total	**10**	**2**	**(s)**	**(s)**	**636**	**84**	**8**	**378**	**1,106**	**1,118**	**520**	**59**	**579**
2011 6-Month Total	**10**	**2**	**(s)**	**(s)**	**644**	**81**	**8**	**380**	**1,113**	**1,125**	**515**	**40**	**554**

[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 using the fossil-fuels heat rate—see Table A6).

[c] Geothermal heat pump and direct use energy.

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

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

[f] Wood and wood-derived fuels.

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

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

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

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

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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#renewable for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available monthly and annual data beginning in 1973.

Sources: See end of section.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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[g]	**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 January	247	13	(s)	83	17	21	37	381
February	233	12	1	102	16	19	35	382
March	301	13	1	102	15	21	36	453
April	301	12	2	121	12	20	32	467
May	315	13	2	114	13	21	34	477
June	311	12	2	107	16	22	37	469
July	303	12	2	73	17	22	39	429
August	249	12	2	73	17	22	39	376
September	207	12	2	67	15	21	37	323
October	191	12	1	102	14	22	36	343
November	199	12	1	121	14	22	36	369
December	229	13	1	103	16	23	39	385
Total	**3,085**	**149**	**17**	**1,167**	**182**	**255**	**437**	**4,855**
2012 January	225	14	1	134	16	21	37	410
February	196	13	1	108	15	19	34	353
March	249	14	2	135	14	21	35	435
April	252	13	3	124	11	20	31	424
May	276	14	5	122	13	22	35	451
June	257	13	5	116	15	21	36	428
July	259	14	5	85	16	22	38	401
August	224	13	4	80	16	21	38	360
September	170	13	4	84	15	20	36	307
October	156	14	4	122	14	21	35	330
November	181	14	3	112	15	22	36	346
December	224	14	2	138	16	23	38	416
Total	**2,668**	**163**	**41**	**1,360**	**176**	**253**	**429**	**4,661**
2013 January	241	14	3	141	16	21	37	435
February	195	13	4	135	14	18	32	380
March	197	14	6	152	15	21	37	405
April	238	13	6	168	11	20	31	457
May	274	14	7	159	14	21	35	489
June	263	14	8	134	15	21	36	455
6-Month Total	**1,408**	**81**	**34**	**888**	**84**	**124**	**208**	**2,620**
2012 6-Month Total	**1,455**	**81**	**18**	**740**	**84**	**124**	**208**	**2,502**
2011 6-Month Total	**1,707**	**75**	**8**	**629**	**89**	**122**	**211**	**2,629**

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

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

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

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

[e] Wood and wood-derived fuels.

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

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

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

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

Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#renewable for all available annual data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available monthly and annual data beginning in 1973.

Sources: Tables 7.2b, 7.4b, and A6.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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**	**169**	**1,335**	**66,772**	**2,804**	**238**	**292**	**5,978**	**-222**	**67,286**	**2,826**	**240**	***233***
2004 Total	**484**	**203**	**1,621**	**81,058**	**3,404**	**289**	**3,542**	**6,002**	**24**	**84,576**	**3,552**	**301**	***293***
2005 Total	**552**	**230**	**1,859**	**92,961**	**3,904**	**331**	**3,234**	**5,563**	**-439**	**96,634**	**4,059**	**344**	***335***
2006 Total	**688**	**285**	**2,326**	**116,294**	**4,884**	**414**	**17,408**	**8,760**	**3,197**	**130,505**	**5,481**	**465**	***453***
2007 Total	**914**	**376**	**3,105**	**155,263**	**6,521**	**553**	**10,457**	**10,535**	**1,775**	**163,945**	**6,886**	**584**	***569***
2008 Total	**1,300**	**531**	**4,433**	**221,637**	**9,309**	**790**	**12,610**	**14,226**	**3,691**	**230,556**	**9,683**	**821**	***800***
2009 Total	**1,517**	**616**	**5,688**	**260,424**	**10,938**	**928**	**4,720**	**16,594**	**2,368**	**262,776**	**11,037**	**936**	***910***
2010 Total	**1,839**	**742**	**6,506**	**316,617**	**13,298**	**1,127**	**-9,115**	**17,941**	**1,347**	**306,155**	**12,858**	**1,090**	***1,061***
2011 January	165	66	581	28,467	1,196	101	-1,359	20,826	2,885	24,223	1,017	86	*84*
February	146	59	535	25,300	1,063	90	-1,425	21,016	190	23,685	995	84	*82*
March	163	65	548	28,178	1,183	100	-2,003	21,593	577	25,598	1,075	91	*89*
April	154	62	508	26,538	1,115	94	-2,865	21,065	-528	24,201	1,016	86	*84*
May	160	64	550	27,720	1,164	99	-1,743	20,609	-456	26,433	1,110	94	*92*
June	158	63	540	27,224	1,143	97	-1,533	19,217	-1,392	27,083	1,137	96	*94*
July	159	64	555	27,541	1,157	98	-2,731	18,788	-429	25,239	1,060	90	*88*
August	162	65	575	27,976	1,175	100	-665	18,123	-665	27,976	1,175	100	*97*
September	154	62	525	26,588	1,117	95	-1,745	18,465	342	24,501	1,029	87	*85*
October	162	65	557	28,013	1,177	100	-2,388	18,038	-427	26,052	1,094	93	*90*
November	164	66	573	28,383	1,192	101	-2,911	18,308	270	25,202	1,058	90	*87*
December	172	69	602	29,718	1,248	106	-2,997	18,238	-70	26,791	1,125	95	*93*
Total	**1,919**	**769**	**6,649**	**331,646**	**13,929**	**1,181**	**-24,365**	**18,238**	**297**	**306,984**	**12,893**	**1,093**	***1,065***
2012 January	167	67	583	29,063	1,221	103	-1,789	21,753	[i] 3,492	23,782	999	85	*82*
February	154	61	528	26,653	1,119	95	-1,785	22,572	819	24,049	1,010	86	*83*
March	160	64	522	27,706	1,164	99	-1,626	22,952	380	25,700	1,079	91	*89*
April	152	61	494	26,368	1,107	94	-1,549	22,370	-582	25,401	1,067	90	*88*
May	160	64	520	27,718	1,164	99	-1,013	21,851	-519	27,224	1,143	97	*95*
June	154	61	503	26,611	1,118	95	-613	21,456	-395	26,393	1,109	94	*92*
July	146	58	504	25,329	1,064	90	-502	20,373	-1,083	25,910	1,088	92	*90*
August	151	60	526	26,194	1,100	93	654	19,369	-1,004	27,852	1,170	99	*97*
September	141	56	497	24,511	1,029	87	694	20,044	675	24,530	1,030	87	*85*
October	146	58	528	25,352	1,065	90	609	18,762	-1,282	27,243	1,144	97	*94*
November	145	58	527	25,189	1,058	90	997	20,174	1,412	24,774	1,041	88	*86*
December	150	60	534	25,971	1,091	92	-79	20,677	503	25,389	1,066	90	*88*
Total	**1,825**	**727**	**6,266**	**316,665**	**13,300**	**1,127**	**-6,002**	**20,677**	[i] **2,416**	**308,247**	**12,946**	**1,097**	***1,069***
2013 January	144	57	504	24,935	1,047	89	-546	20,558	-119	24,508	1,029	87	*85*
February	130	52	462	22,645	951	81	-727	19,580	-978	22,896	962	82	*79*
March	148	59	511	25,681	1,079	91	-264	18,941	-639	26,056	1,094	93	*90*
April	148	59	515	25,662	1,078	91	-559	17,645	-1,296	26,399	1,109	94	*92*
May	157	62	537	27,197	1,142	97	-535	16,810	-835	27,497	1,155	98	*95*
June	154	61	509	26,722	1,122	95	-170	16,395	-415	26,967	1,133	96	*94*
6-Month Total	**881**	**351**	**3,038**	**152,842**	**6,419**	**544**	**-2,801**	**16,395**	**-4,282**	**154,323**	**6,482**	**549**	***535***
2012 6-Month Total	**946**	**377**	**3,150**	**164,119**	**6,893**	**584**	**-8,375**	**21,456**	**3,195**	**152,549**	**6,407**	**543**	***530***
2011 6-Month Total	**946**	**379**	**3,262**	**163,427**	**6,864**	**582**	**-10,927**	**19,217**	**1,276**	**151,224**	**6,351**	**538**	***525***

[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.

[i] Derived from the preliminary 2011 stocks value (18,261 thousand barrels), not the final 2011 value (18,238 thousand barrels) that is shown under "Stocks."

NA=Not available.

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Fuel ethanol data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by the approximate heat content of fuel ethanol—see Table A3. • Through 1980, data are not available. For 1981–1992, data are estimates. For 1993–2008, only data for feedstock, losses and co-products, and denaturant are estimates. Beginning in 2009, only data for feedstock, and losses and co-products, are estimates. • See "Denaturant," "Ethanol," "Fuel Ethanol," and "Fuel Ethanol Minus Denaturant" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available data beginning in 1981.

Sources: See end of section.

Table 10.4 Biodiesel Overview

	Feed-stock[a]	Losses and Co-products[b]	Production			Trade			Stocks[d]	Stock Change[e]	Bal-ancing Item[f]	Consumption		
						Imports	Exports	Net Imports[c]						
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu
2001 Total	**1**	**(s)**	**204**	**9**	**1**	**78**	**39**	**39**	**NA**	**NA**	**NA**	**243**	**10**	**1**
2002 Total	**1**	**(s)**	**250**	**10**	**1**	**191**	**56**	**135**	**NA**	**NA**	**NA**	**385**	**16**	**2**
2003 Total	**2**	**(s)**	**338**	**14**	**2**	**94**	**110**	**-16**	**NA**	**NA**	**NA**	**322**	**14**	**2**
2004 Total	**4**	**(s)**	**666**	**28**	**4**	**97**	**124**	**-26**	**NA**	**NA**	**NA**	**640**	**27**	**3**
2005 Total	**12**	**(s)**	**2,162**	**91**	**12**	**207**	**206**	**1**	**NA**	**NA**	**NA**	**2,163**	**91**	**12**
2006 Total	**32**	**(s)**	**5,963**	**250**	**32**	**1,069**	**828**	**242**	**NA**	**NA**	**NA**	**6,204**	**261**	**33**
2007 Total	**63**	**1**	**11,662**	**490**	**62**	**3,342**	**6,477**	**-3,135**	**NA**	**NA**	**NA**	**8,528**	**358**	**46**
2008 Total	**88**	**1**	**16,145**	**678**	**87**	**7,502**	**16,128**	**-8,626**	**NA**	**NA**	**NA**	**7,519**	**316**	**40**
2009 Total	**67**	**1**	**12,281**	**516**	**66**	**1,844**	**6,332**	**-4,489**	**711**	**711**	**669**	**7,750**	**326**	**42**
2010 Total	**44**	**1**	**8,177**	**343**	**44**	**546**	**2,503**	**-1,958**	**672**	**-39**	**0**	**6,258**	**263**	**34**
2011 January	5	(s)	842	35	5	49	217	-169	1,016	[g] 39	0	634	27	3
February	5	(s)	961	40	5	37	88	-51	1,217	201	0	709	30	4
March	8	(s)	1,419	60	8	53	197	-144	1,381	164	0	1,111	47	6
April	9	(s)	1,692	71	9	52	222	-169	1,408	27	0	1,495	63	8
May	10	(s)	1,838	77	10	48	192	-144	1,576	168	0	1,526	64	8
June	11	(s)	1,938	81	10	48	117	-69	1,524	-53	0	1,922	81	10
July	12	(s)	2,183	92	12	62	142	-80	1,748	224	0	1,879	79	10
August	12	(s)	2,273	95	12	65	71	-7	1,834	86	0	2,181	92	12
September	12	(s)	2,284	96	12	65	193	-127	1,617	-216	0	2,373	100	13
October	14	(s)	2,508	105	13	82	132	-49	1,965	347	0	2,111	89	11
November	14	(s)	2,494	105	13	66	131	-65	1,877	-88	0	2,517	106	13
December	14	(s)	2,604	109	14	234	39	195	2,012	135	0	2,664	112	14
Total	**125**	**2**	**23,035**	**967**	**123**	**861**	**1,740**	**-879**	**2,012**	**[g] 1,035**	**0**	**21,122**	**887**	**113**
2012 January	9	(s)	1,700	71	9	44	248	-204	2,527	[h] 625	0	872	37	5
February	10	(s)	1,837	77	10	58	119	-62	2,869	342	0	1,433	60	8
March	12	(s)	2,193	92	12	55	149	-93	3,053	184	0	1,915	80	10
April	12	(s)	2,180	92	12	49	221	-171	2,932	-121	0	2,130	89	11
May	13	(s)	2,373	100	13	94	306	-212	2,514	-418	0	2,579	108	14
June	12	(s)	2,162	91	12	102	375	-273	2,363	-151	0	2,039	86	11
July	11	(s)	2,065	87	11	160	408	-248	2,253	-110	0	1,927	81	10
August	12	(s)	2,140	90	11	43	386	-342	2,003	-250	0	2,048	86	11
September	11	(s)	1,935	81	10	81	282	-202	2,060	57	0	1,676	70	9
October	10	(s)	1,781	75	10	33	200	-167	2,183	123	0	1,491	63	8
November	7	(s)	1,356	57	7	9	65	-56	1,875	-309	0	1,609	68	9
December	7	(s)	1,360	57	7	68	143	-75	2,169	292	0	993	42	5
Total	**125**	**2**	**23,082**	**969**	**124**	**797**	**2,903**	**-2,105**	**2,169**	**[h] 264**	**0**	**20,712**	**870**	**111**
2013 January	9	(s)	1,578	66	8	30	16	14	2,110	-58	0	1,651	69	9
February	9	(s)	1,611	68	9	52	59	-7	2,109	-2	0	1,606	67	9
March	13	(s)	2,332	98	12	406	185	221	2,434	325	0	2,228	94	12
April	14	(s)	2,532	106	14	304	371	-67	2,625	191	0	2,274	95	12
May	14	(s)	2,635	111	14	385	554	-169	2,635	9	0	2,457	103	13
June	15	(s)	2,685	113	14	682	587	95	2,709	80	0	2,700	113	14
6-Month Total	**73**	**1**	**13,373**	**562**	**72**	**1,859**	**1,772**	**87**	**2,709**	**545**	**0**	**12,915**	**542**	**69**
2012 6-Month Total	**68**	**1**	**12,445**	**523**	**67**	**403**	**1,418**	**-1,015**	**2,363**	**461**	**0**	**10,969**	**461**	**59**
2011 6-Month Total	**47**	**1**	**8,689**	**365**	**47**	**287**	**1,033**	**-745**	**1,524**	**547**	**0**	**7,397**	**311**	**40**

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

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

[c] Net imports equal imports minus exports.

[d] Stocks are at end of period. 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] Beginning in 2009, because of incomplete data coverage and different data sources, "Balancing Item" is used to balance biodiesel supply and disposition.

[g] Derived from the 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."

[h] Derived from the preliminary 2011 stocks value (1,902 thousand barrels), not the final 2011 value (2,012 thousand barrels) that is shown under "Stocks."

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

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Biodiesel data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by 5.359 million Btu per barrel (the approximate heat content of biodiesel—see Table A3). • Through 2000, data are not available. Beginning in 2001, data not from U.S. Energy Information Administration (EIA) surveys are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable for all available data beginning in 2001.

Sources: See end of section.

Renewable Energy

Note. Renewable Energy Production and Consumption. In Tables 1.1, 1.3, and 10.1, renewable energy consumption consists of: conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6); geothermal electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fuels heat rate —see Table A6), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fuels heat rate—see Table A6); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; fuel ethanol (minus denaturant) and biodiesel consumption; and losses and co-products from the production of fuel ethanol and biodiesel. In Tables 1.1, 1.2, and 10.1, renewable 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 forward: Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimates for 2012 and 2013 are set equal to that of 2011.)

Residential Sector, Solar/PV

1989–2009: U.S. Energy Information Administration (EIA) estimates based on Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey," and Form EIA-63B, "Annual Photovoltaic Module/Cell Manufacturers Survey." Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

2010 forward: EIA estimates based on Form EIA-63B, "Annual Photovoltaic Cell/Module Shipments Report"; Form EIA-63A, "Annual Solar Thermal Collector Manufacturers Survey" (pre-2010 data); and SEIA/GTM Research, *U.S. Solar Market Insight: 2010 Year in Review.* Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for 2013 is set equal to that of 2012 plus the 2011–2012 increase in Btu.)

Residential Sector, Wood

1949–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980 forward: EIA, Form EIA-457, "Residential Energy Consumption Survey"; and EIA estimates based on Form EIA-457 and regional heating degree-day data. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for 2013 is set equal to that of 2012.)

Commercial Sector, Hydroelectric Power

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

Commercial Sector, Geothermal

1989 forward: Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimates for 2012 and 2013 are set equal to that of 2011.)

Commercial Sector, Solar/PV

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

Commercial Sector, Wind

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

Commercial Sector, Wood

1949–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980–1983: EIA, *Estimates of U.S. Wood Energy Consumption 1980-1983*, Table ES1.

1984: EIA estimate based on the 1983 value.

1985–1988: Values interpolated.

1989 forward: EIA, *Monthly Energy Review* (*MER*), Tables 7.4a–7.4c; and EIA estimates based on Form EIA-871, "Commercial Buildings Energy Consumption Survey." Data for wood consumption at commercial combined-heat-and-power (CHP) plants are calculated as total wood consumption at electricity-only and CHP plants (MER, Table 7.4a) minus wood consumption in the electric power sector (MER, Table 7.4b) and at industrial CHP plants

(MER, Table 7.4c). Annual estimates for wood consumption at other commercial plants are based on Form EIA-871 (the annual estimate for 2013 is set equal to that of 2012); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

Commercial Sector, Biomass Waste

1989 forward: EIA, MER, Table 7.4c.

Commercial Sector, Fuel Ethanol (Minus Denaturant)

1981 forward: EIA, MER, Tables 3.5, 3.7a, and 10.3. Calculated as commercial sector motor gasoline consumption (Table 3.7a) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

Table 10.2b Sources

Industrial Sector, Hydroelectric Power

1949 forward: Industrial sector conventional hydroelectricity net generation data from Table 7.2c are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

Industrial Sector, Geothermal

1989 forward: Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimates for 2012 and 2013 are set equal to that of 2011.)

Industrial Sector, Solar/PV

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

Industrial Sector, Wind

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

Industrial Sector, Wood

1949–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980–1983: EIA, *Estimates of U.S. Wood Energy Consumption 1980-1983*, Table ES1.

1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 1.

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of Biofuels Consumption in the United States During 1987*, Table 2.

1988: Value interpolated.

1989 forward: EIA, *Monthly Energy Review (MER),* Table 7.4c; and EIA estimates based on Form EIA-846, "Manufacturing Energy Consumption Survey." Data for wood consumption at industrial combined-heat-and-power (CHP) plants are from MER, Table 7.4c. Annual estimates for wood consumption at other industrial plants are based on Form EIA-846 (the annual estimate for 2013 is set equal to that of 2012); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

Industrial Sector, Biomass Waste

1981: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, MER, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1982 and 1983: EIA estimates for total waste consumption based on *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, MER, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, MER, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8; and EIA, MER, Table 10.2c. Estimates are calculated as total waste consumption minus electric power sector waste consumption.

1988: Value interpolated.

1989 forward: EIA, MER, Table 7.4c; and EIA estimates based on information presented in Government Advisory Associates, *Resource Recovery Yearbook* and *Methane Recovery Yearbook*, and information provided by the U.S. Environmental Protection Agency, Landfill Methane Outreach Program. Data for waste consumption at industrial CHP plants are from MER, Table 7.4c. Annual estimates for waste consumption at other industrial plants are based on the non-EIA sources listed above (the annual estimate for 2013 is set equal to that of 2012); monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

Industrial Sector, Fuel Ethanol (Minus Denaturant)

1981 forward: EIA, MER, Tables 3.5, 3.7b, and 10.3. Calculated as industrial sector motor gasoline consumption (Table 3.7b) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

Industrial Sector, Losses and Co-products

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

Transportation Sector, Fuel Ethanol (Minus Denaturant)

1981 forward: EIA, MER, Tables 3.5, 3.7c, and 10.3. Calculated as transportation sector motor gasoline consumption (Table 3.7c) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

Transportation Sector, Biodiesel

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

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 percent of fuel ethanol production; these data are converted to Btu by multiplying by 4.645 million Btu per barrel (the estimated quantity-weighted factor of pentanes plus and conventional motor gasoline used as denaturant).

2009–2011: 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.

2012 and 2013: 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."

2009–2011: EIA, PSA, annual reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

2012 and 2013: EIA, PSM, monthly reports, Table 1, data for net production of fuel ethanol at renewable fuels and oxygenate plants.

Trade, Stocks, and Stock Change

1992–2011: EIA, PSA, annual reports, Table 1.

2012 and 2013: EIA, PSM, monthly reports, Table 1.

Consumption

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

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

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

2005–2008: EIA, PSA, annual reports, Tables 1 and 15. Calculated as motor gasoline blending components adjustments (Table 1), plus finished motor gasoline adjustments (Table 1), plus fuel ethanol refinery and blender net inputs (Table 15).

2009–2011: EIA, PSA, annual reports, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

2012 and 2013: 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

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).

Losses and Co-products

2001 forward: Calculated as biodiesel feedstock minus biodiesel production.

Production

2001–2005: U.S. Department of Agriculture, Commodity Credit Corporation, Bioenergy Program records. Annual data are derived from quarterly data. Monthly data are estimated by dividing the annual data by the number of days in the year and then multiplying by the number of days in the month.

2006: U.S. Department of Commerce, Bureau of the Census, "M311K—Fats and Oils: Production, Consumption, and Stocks," data for soybean oil consumed in methyl esters (biodiesel). In addition, the U.S. Energy Information Administration (EIA) estimates that 14.4 million gallons of yellow grease were consumed in methyl esters (biodiesel).

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

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

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

Trade

2001–October 2012: For imports, U.S. Department of Agriculture, data for the following Harmonized Tariff Schedule codes: 3824.90.40.20, "Fatty Esters Animal/Vegetable Mixture" (data through June 2010); 3824.90.40.30, "Biodiesel/Mixes" (data for July 2010–2011); 3826.00.00.00, "Biodiesel B30-99" (data for 2012); and 3826.00.10.00, "Biodiesel B100" (data for 2012). For exports, U.S. Department of Agriculture, data for the following Schedule B codes: 3824.90.40.00, "Fatty Substances Animal/ Vegetable/Mixture" (data through 2010); 3824.90.40.30, "Biodiesel <70%" (data for 2011); and 3826.00.00.00, "Biodiesel B=>30" (data for 2012). Although these categories include products other than biodiesel (such as biodiesel coprocessed with petroleum feedstocks; and products destined for soaps, cosmetics, and other items), biodiesel is the largest component. In the absence of other reliable data for biodiesel trade, EIA sees these data as good substitutes.

November 2012 forward: EIA, *Petroleum Supply Monthly (PSM),* monthly reports, Tables 37 and 49, data for biomass-based diesel fuel.

Stocks and Stock Change

2009–2011: EIA, *Petroleum Supply Annual (PSA),* annual reports, Table 1, data for renewable fuels except fuel ethanol.

2012 and 2013: EIA, PSM, monthly reports, Table 1, data for renewable fuels except fuel ethanol.

Balancing Item

2009 forward: Calculated as biodiesel consumption and biodiesel stock change minus biodiesel production and biodiesel net imports.

Consumption

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

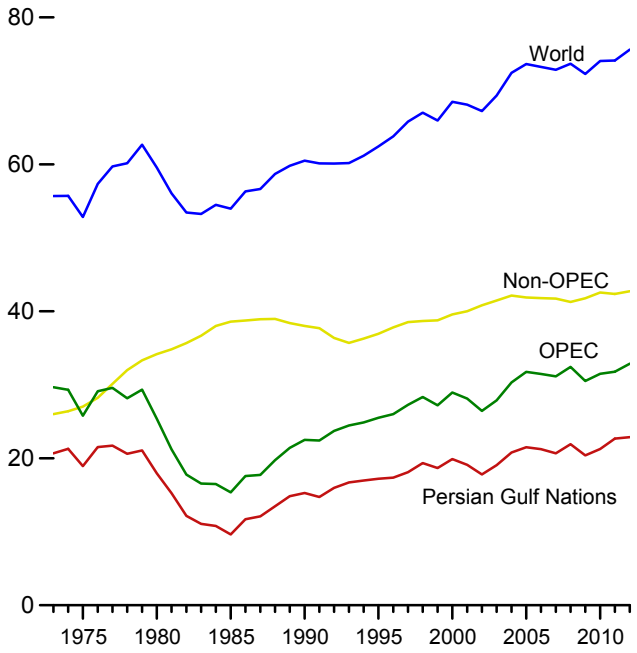
January and February 2009: EIA, PSA, Table 1, data for refinery and blender net inputs of renewable fuels except fuel ethanol.

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

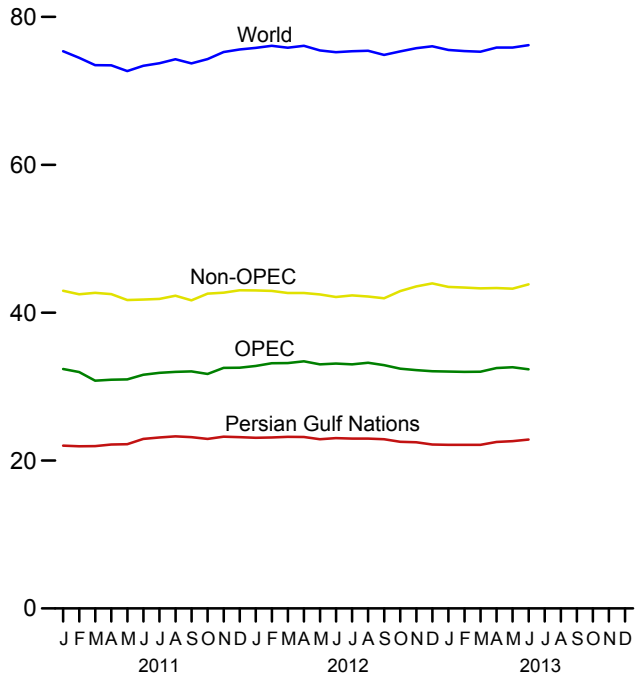
11. International Petroleum

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

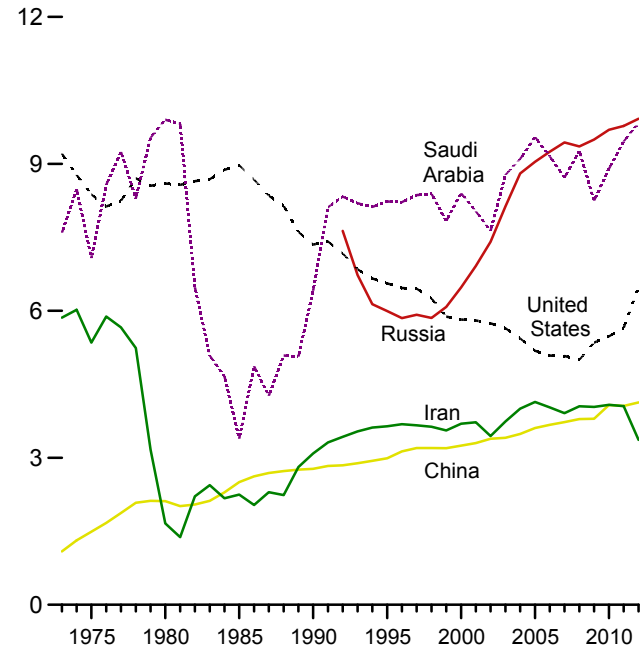
World Production, 1973–2012



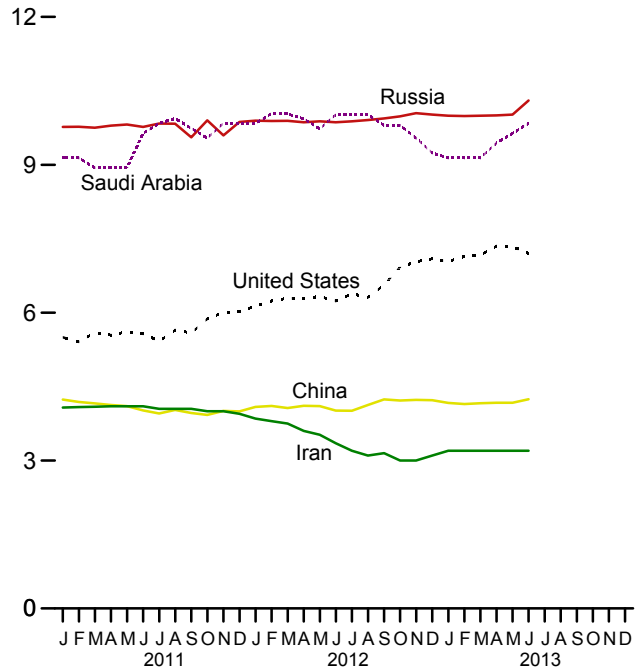
World Production, Monthly



Selected Producers, 1973–2012



Selected Producers, Monthly

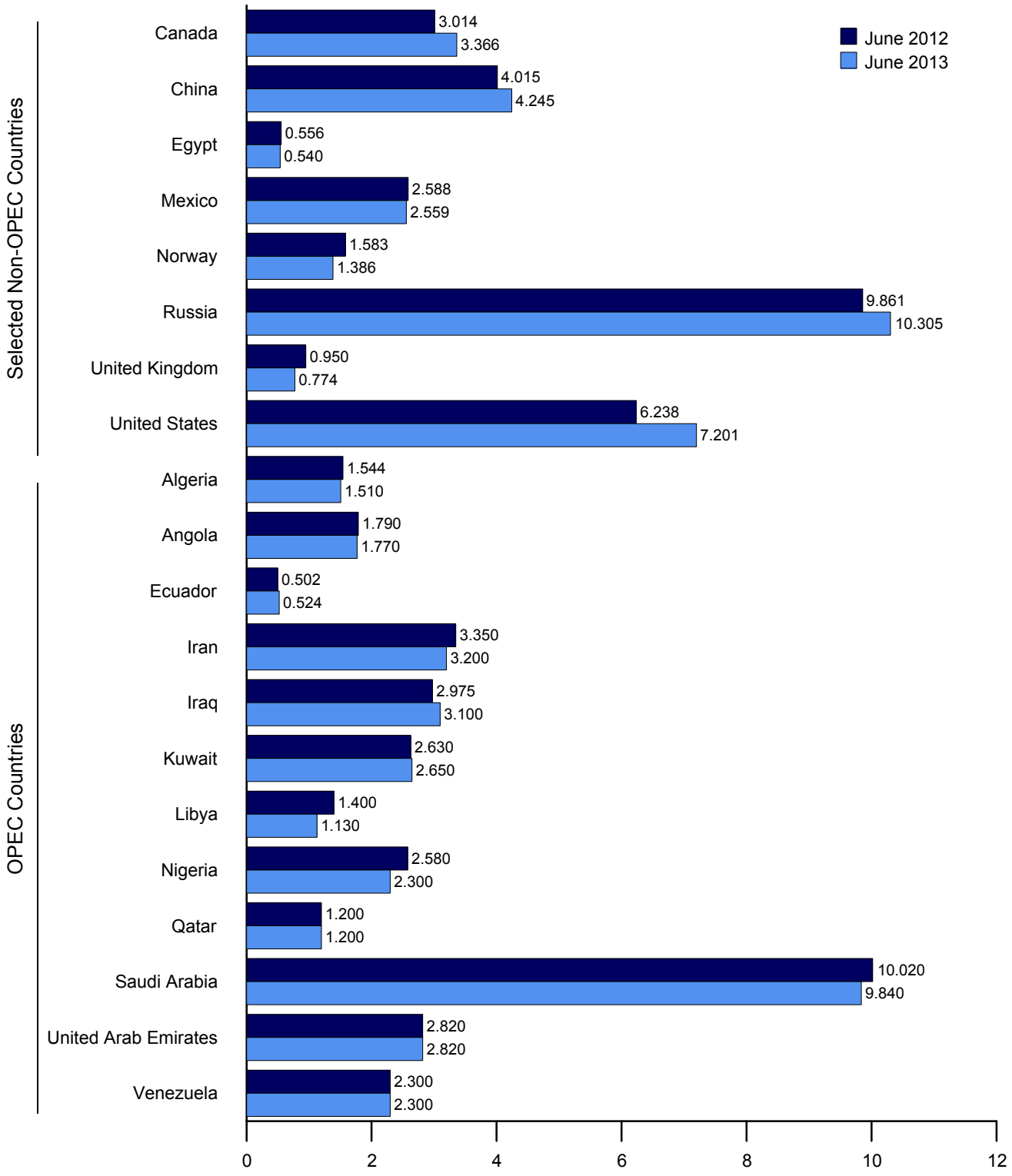


Notes: • OPEC is the Organization of the Petroleum Exporting Countries. • The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

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

Sources: Tables 11.1a and 11.1b.

Figure 11.1b World Crude Oil Production by Selected Country
(Million Barrels per Day)



Note: OPEC is the Organization of the Petroleum Exporting Countries.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#international.
Sources: Tables 11.1a and 11.1b.

Table 11.1a World Crude Oil Production: OPEC Members

(Thousand Barrels per Day)

	Algeria	Angola	Ecuador	Iran	Iraq	Kuwait[a]	Libya	Nigeria	Qatar	Saudi Arabia[a]	United Arab Emirates	Vene-zuela	Total OPEC[b]
1973 Average	**1,097**	**162**	**209**	**5,861**	**2,018**	**3,020**	**2,175**	**2,054**	**570**	**7,596**	**1,533**	**3,366**	**29,661**
1975 Average	**983**	**165**	**161**	**5,350**	**2,262**	**2,084**	**1,480**	**1,783**	**438**	**7,075**	**1,664**	**2,346**	**25,790**
1980 Average	**1,106**	**150**	**204**	**1,662**	**2,514**	**1,656**	**1,787**	**2,055**	**472**	**9,900**	**1,709**	**2,168**	**25,383**
1985 Average	**1,036**	**231**	**281**	**2,250**	**1,433**	**1,023**	**1,059**	**1,495**	**301**	**3,388**	**1,193**	**1,677**	**15,367**
1990 Average	**1,180**	**475**	**285**	**3,088**	**2,040**	**1,175**	**1,375**	**1,810**	**406**	**6,410**	**2,117**	**2,137**	**22,498**
1995 Average	**1,162**	**646**	**392**	**3,643**	**560**	**2,057**	**1,390**	**1,993**	**442**	**8,231**	**2,233**	**2,750**	**25,500**
1996 Average	**1,227**	**709**	**396**	**3,686**	**579**	**2,062**	**1,401**	**2,001**	**510**	**8,218**	**2,278**	**2,938**	**26,003**
1997 Average	**1,259**	**714**	**388**	**3,664**	**1,155**	**2,007**	**1,446**	**2,132**	**550**	**8,362**	**2,316**	**3,280**	**27,274**
1998 Average	**1,226**	**735**	**375**	**3,634**	**2,150**	**2,085**	**1,390**	**2,153**	**696**	**8,389**	**2,345**	**3,167**	**28,346**
1999 Average	**1,177**	**745**	**373**	**3,557**	**2,508**	**1,898**	**1,319**	**2,130**	**665**	**7,833**	**2,169**	**2,826**	**27,199**
2000 Average	**1,214**	**746**	**395**	**3,696**	**2,571**	**2,079**	**1,410**	**2,165**	**737**	**8,404**	**2,368**	**3,155**	**28,940**
2001 Average	**1,265**	**742**	**412**	**3,724**	**2,390**	**1,998**	**1,367**	**2,256**	**714**	**8,031**	**2,205**	**3,010**	**28,114**
2002 Average	**1,349**	**896**	**393**	**3,444**	**2,023**	**1,894**	**1,319**	**2,118**	**679**	**7,634**	**2,082**	**2,604**	**26,435**
2003 Average	**1,516**	**903**	**411**	**3,743**	**1,308**	**2,136**	**1,421**	**2,275**	**715**	**8,775**	**2,348**	**2,335**	**27,885**
2004 Average	**1,582**	**1,052**	**528**	**4,001**	**2,011**	**2,376**	**1,515**	**2,329**	**783**	**9,101**	**2,478**	**2,557**	**30,313**
2005 Average	**1,692**	**1,250**	**532**	**4,139**	**1,878**	**2,529**	**1,633**	**2,627**	**835**	**9,550**	**2,535**	**2,565**	**31,766**
2006 Average	**1,699**	**1,413**	**536**	**4,028**	**1,996**	**2,535**	**1,681**	**2,440**	**850**	**9,152**	**2,636**	**2,511**	**31,476**
2007 Average	**1,708**	**1,744**	**511**	**3,912**	**2,086**	**2,464**	**1,702**	**2,350**	**851**	**8,722**	**2,603**	**2,490**	**31,143**
2008 Average	**1,705**	**1,981**	**505**	**4,050**	**2,375**	**2,586**	**1,736**	**2,165**	**924**	**9,261**	**2,681**	**2,464**	**32,433**
2009 Average	**1,585**	**1,907**	**486**	**4,037**	**2,391**	**2,350**	**1,650**	**2,208**	**927**	**8,250**	**2,413**	**2,319**	**30,522**
2010 Average	**1,540**	**1,939**	**486**	**4,080**	**2,399**	**2,300**	**1,650**	**2,455**	**1,127**	**8,900**	**2,415**	**2,216**	**31,507**
2011 January	1,540	1,790	500	4,076	2,625	2,350	1,650	2,616	1,280	9,140	2,520	2,300	32,387
February	1,540	1,790	509	4,084	2,525	2,350	1,340	2,604	1,280	9,140	2,520	2,300	31,982
March	1,540	1,790	501	4,092	2,525	2,450	300	2,460	1,290	8,940	2,620	2,300	30,808
April	1,540	1,740	504	4,100	2,525	2,550	200	2,520	1,300	8,940	2,720	2,300	30,939
May	1,540	1,640	497	4,100	2,575	2,550	200	2,604	1,300	8,940	2,720	2,300	30,966
June	1,540	1,690	495	4,100	2,575	2,550	100	2,604	1,300	9,640	2,720	2,300	31,614
July	1,540	1,740	492	4,050	2,625	2,550	100	2,604	1,300	9,840	2,720	2,300	31,861
August	1,540	1,790	495	4,050	2,625	2,600	0	2,640	1,300	9,940	2,720	2,300	32,000
September	1,540	1,840	496	4,050	2,725	2,600	100	2,640	1,300	9,740	2,720	2,300	32,051
October	1,540	1,790	502	4,000	2,725	2,600	300	2,400	1,300	9,540	2,720	2,300	31,717
November	1,540	1,940	504	4,000	2,725	2,600	550	2,520	1,300	9,840	2,720	2,300	32,539
December	1,540	1,890	501	3,950	2,725	2,600	800	2,400	1,300	9,840	2,720	2,300	32,566
Average	**1,540**	**1,786**	**500**	**4,054**	**2,626**	**2,530**	**465**	**2,550**	**1,296**	**9,458**	**2,679**	**2,300**	**31,784**
2012 January	1,550	1,890	504	3,850	2,675	2,650	1,000	2,520	1,300	9,840	2,720	2,300	32,799
February	1,550	1,940	503	3,800	2,575	2,650	1,200	2,580	1,300	10,040	2,720	2,300	33,158
March	1,550	1,790	499	3,750	2,725	2,640	1,350	2,520	1,200	10,030	2,820	2,300	33,174
April	1,550	1,890	500	3,600	2,965	2,640	1,400	2,640	1,190	9,930	2,820	2,300	33,425
May	1,550	1,840	498	3,525	2,925	2,640	1,400	2,580	1,200	9,730	2,820	2,300	33,008
June	1,544	1,790	502	3,350	2,975	2,630	1,400	2,580	1,200	10,020	2,820	2,300	33,111
July	1,546	1,740	508	3,200	3,075	2,625	1,400	2,580	1,200	10,015	2,820	2,300	33,009
August	1,548	1,840	512	3,100	3,175	2,625	1,450	2,640	1,200	10,015	2,820	2,300	33,225
September	1,550	1,740	506	3,150	3,275	2,610	1,500	2,460	1,200	9,800	2,820	2,300	32,911
October	1,482	1,790	503	3,000	3,075	2,610	1,500	2,340	1,200	9,800	2,820	2,300	32,420
November	1,483	1,770	504	3,000	3,225	2,650	1,450	2,280	1,200	9,540	2,820	2,300	32,222
December	1,485	1,790	503	3,100	3,125	2,650	1,350	2,520	1,200	9,240	2,820	2,300	32,083
Average	**1,532**	**1,817**	**504**	**3,367**	**2,983**	**2,635**	**1,367**	**2,520**	**1,216**	**9,832**	**2,804**	**2,300**	**32,877**
2013 January	1,490	1,840	505	3,200	3,075	2,650	1,350	2,460	1,200	9,140	2,820	2,300	32,030
February	1,490	1,790	506	3,200	3,075	2,650	1,400	2,420	1,200	9,140	2,820	2,300	31,991
March	1,490	1,840	504	3,200	3,075	2,650	1,350	2,445	1,200	9,140	2,820	2,300	32,014
April	1,510	1,855	516	3,200	3,175	2,650	1,450	2,400	1,200	9,440	2,820	2,300	32,516
May	1,510	1,890	522	3,200	3,075	2,650	1,420	2,400	1,200	9,640	2,820	2,300	32,627
June	1,510	1,770	524	3,200	3,100	2,650	1,130	2,300	1,200	9,840	2,820	2,300	32,344
6-Month Average	**1,500**	**1,832**	**513**	**3,200**	**3,096**	**2,650**	**1,350**	**2,405**	**1,200**	**9,391**	**2,820**	**2,300**	**32,256**
2012 6-Month Average	**1,549**	**1,856**	**501**	**3,646**	**2,807**	**2,642**	**1,291**	**2,569**	**1,231**	**9,930**	**2,787**	**2,300**	**33,110**
2011 6-Month Average	**1,540**	**1,739**	**501**	**4,092**	**2,559**	**2,468**	**625**	**2,567**	**1,292**	**9,121**	**2,638**	**2,300**	**31,442**

[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 June 2013, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 520 thousand barrels per day. Data for Saudi Arabia include approximately 150 thousand barrels per day from the Abu Safah field produced on behalf of Bahrain.

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

Notes: • Data are for crude oil and lease condensate; they exclude natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available.

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

Sources: See end of section.

Table 11.1b World Crude Oil Production: Persian Gulf Nations, Non-OPEC, and World

(Thousand Barrels per Day)

	Persian Gulf Nations[b]	Selected Non-OPEC[a] Producers									Total Non-OPEC[a]	World
		Canada	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States		
1973 Average	**20,668**	**1,798**	**1,090**	**165**	**465**	**32**	**8,324**	**NA**	**2**	**9,208**	**26,018**	**55,679**
1975 Average	**18,934**	**1,430**	**1,490**	**235**	**705**	**189**	**9,523**	**NA**	**12**	**8,375**	**27,039**	**52,828**
1980 Average	**17,961**	**1,435**	**2,114**	**595**	**1,936**	**486**	**11,706**	**NA**	**1,622**	**8,597**	**34,175**	**59,558**
1985 Average	**9,630**	**1,471**	**2,505**	**887**	**2,745**	**773**	**11,585**	**NA**	**2,530**	**8,971**	**38,598**	**53,965**
1990 Average	**15,278**	**1,553**	**2,774**	**873**	**2,553**	**1,630**	**10,975**	**NA**	**1,820**	**7,355**	**37,999**	**60,497**
1995 Average	**17,208**	**1,805**	**2,990**	**920**	**2,711**	**2,766**	**– –**	**5,995**	**2,489**	**6,560**	**36,934**	**62,434**
1996 Average	**17,367**	**1,837**	**3,131**	**922**	**2,944**	**3,091**	**– –**	**5,850**	**2,568**	**6,465**	**37,815**	**63,818**
1997 Average	**18,095**	**1,922**	**3,200**	**856**	**3,104**	**3,142**	**– –**	**5,920**	**2,518**	**6,452**	**38,532**	**65,806**
1998 Average	**19,337**	**1,981**	**3,198**	**834**	**3,160**	**3,011**	**– –**	**5,854**	**2,616**	**6,252**	**38,685**	**67,032**
1999 Average	**18,667**	**1,907**	**3,195**	**852**	**2,998**	**3,019**	**– –**	**6,079**	**2,684**	**5,881**	**38,768**	**65,967**
2000 Average	**19,892**	**1,977**	**3,249**	**768**	**3,104**	**3,222**	**– –**	**6,479**	**2,275**	**5,822**	**39,583**	**68,522**
2001 Average	**19,098**	**2,029**	**3,300**	**720**	**3,218**	**3,226**	**– –**	**6,917**	**2,282**	**5,801**	**40,003**	**68,116**
2002 Average	**17,794**	**2,171**	**3,390**	**715**	**3,263**	**3,131**	**– –**	**7,408**	**2,292**	**5,744**	**40,825**	**67,260**
2003 Average	**19,063**	**2,306**	**3,409**	**713**	**3,459**	**3,042**	**– –**	**8,132**	**2,093**	**5,644**	**41,478**	**69,363**
2004 Average	**20,787**	**2,398**	**3,485**	**673**	**3,476**	**2,954**	**– –**	**8,805**	**1,845**	**5,435**	**42,149**	**72,462**
2005 Average	**21,501**	**2,369**	**3,609**	**623**	**3,423**	**2,698**	**– –**	**9,043**	**1,649**	**5,186**	**41,878**	**73,644**
2006 Average	**21,232**	**2,525**	**3,673**	**535**	**3,345**	**2,491**	**– –**	**9,247**	**1,490**	**5,089**	**R 41,792**	**73,269**
2007 Average	**20,672**	**2,628**	**3,729**	**530**	**3,143**	**2,270**	**– –**	**9,437**	**1,498**	**5,077**	**41,730**	**72,873**
2008 Average	**21,913**	**2,579**	**3,790**	**566**	**2,839**	**2,182**	**– –**	**9,357**	**1,391**	**5,000**	**41,265**	**R 73,698**
2009 Average	**20,402**	**2,579**	**3,796**	**587**	**2,646**	**2,067**	**– –**	**9,495**	**1,328**	**5,353**	**R 41,784**	**R 72,306**
2010 Average	**21,257**	**2,741**	**4,078**	**575**	**2,621**	**1,869**	**– –**	**9,694**	**1,233**	**5,479**	**R 42,559**	**74,067**
2011 January	22,026	2,833	4,238	572	2,636	1,905	– –	9,769	1,316	5,502	42,969	R 75,356
February	21,934	2,783	4,188	571	2,606	1,861	– –	9,773	1,085	5,410	R 42,495	R 74,477
March	21,952	2,854	4,160	570	2,624	1,808	– –	9,753	1,073	5,595	R 42,677	R 73,485
April	22,170	2,854	4,127	569	2,624	1,874	– –	9,795	1,164	5,546	R 42,505	R 73,444
May	22,220	2,562	4,106	568	2,608	1,607	– –	9,818	1,017	5,611	41,719	R 72,685
June	22,920	2,670	4,017	567	2,595	1,660	– –	9,770	1,018	5,573	R 41,780	R 73,394
July	23,120	2,913	3,956	566	2,584	1,737	– –	9,837	946	5,420	R 41,865	73,726
August	23,270	3,073	4,027	565	2,601	1,714	– –	9,832	767	5,645	R 42,284	R 74,284
September	23,170	2,993	3,964	564	2,537	1,636	– –	9,557	890	5,593	R 41,668	R 73,719
October	22,920	3,062	3,926	563	2,601	1,756	– –	9,902	998	5,874	42,577	R 74,293
November	23,220	3,043	4,006	562	2,577	1,764	– –	9,595	1,039	6,006	R 42,700	R 75,239
December	23,170	3,155	3,998	561	2,604	1,713	– –	9,869	1,010	6,027	R 43,028	75,594
Average	**22,678**	**2,901**	**4,059**	**566**	**2,600**	**1,752**	**– –**	**9,774**	**1,026**	**5,652**	**42,357**	**74,141**
2012 January	23,070	R 3,108	4,089	560	2,566	1,761	– –	9,894	1,021	RE 6,133	43,015	75,814
February	23,120	R 3,249	4,109	560	2,591	1,745	– –	9,889	1,034	RE 6,236	R 42,940	R 76,097
March	23,200	R 3,037	4,066	560	2,600	1,715	– –	9,891	977	RE 6,291	R 42,657	R 75,831
April	23,180	R 3,155	4,111	560	2,590	1,720	– –	9,861	975	RE 6,287	R 42,666	R 76,091
May	22,875	R 3,035	4,105	560	2,591	1,699	– –	9,882	899	RE 6,328	R 42,458	R 75,466
June	23,030	R 3,014	4,015	556	2,588	1,583	– –	9,861	950	RE 6,238	R 42,119	R 75,230
July	22,970	R 3,114	4,010	554	2,571	1,553	– –	9,882	946	RE 6,383	R 42,342	R 75,351
August	22,970	R 3,064	4,128	554	2,600	1,570	– –	9,907	792	RE 6,313	R 42,191	R 75,416
September	22,890	R 3,011	4,242	553	2,602	1,309	– –	9,941	601	RE 6,562	R 41,946	R 74,857
October	22,540	3,173	4,217	551	2,584	1,549	– –	9,984	682	RE 6,927	R 42,917	R 75,337
November	22,470	R 3,271	4,232	551	2,622	1,517	– –	10,048	864	RE 7,034	R 43,541	R 75,763
December	22,170	3,427	4,224	551	2,606	1,558	– –	10,018	923	RE 7,093	R 43,951	R 76,034
Average	**22,872**	**R 3,138**	**4,129**	**556**	**2,593**	**1,607**	**– –**	**9,922**	**888**	**RE 6,486**	**R 42,729**	**R 75,606**
2013 January	22,120	R 3,329	4,168	548	R 2,602	1,545	– –	9,995	932	RE 7,040	R 43,494	R 75,524
February	22,120	R 3,259	4,146	547	R 2,595	1,502	– –	9,990	823	RE 7,139	R 43,391	R 75,382
March	22,120	R 3,419	4,164	545	R 2,555	1,498	– –	9,995	803	RE 7,169	R 43,279	R 75,294
April	22,520	R 3,237	4,174	543	R 2,557	1,567	– –	10,002	R 812	RE 7,351	R 43,330	R 75,846
May	22,620	R 3,027	4,174	541	R 2,548	1,563	– –	R 10,018	R 844	RE 7,340	R 43,239	R 75,866
June	22,845	3,366	4,245	540	2,559	1,386	– –	10,305	774	E 7,201	43,828	76,172
6-Month Average	**22,392**	**3,273**	**4,179**	**544**	**2,569**	**1,511**	**– –**	**10,051**	**832**	**E 7,207**	**43,426**	**75,682**
2012 6-Month Average	**23,078**	**3,098**	**4,082**	**559**	**2,588**	**1,704**	**– –**	**9,880**	**975**	**E 6,252**	**42,642**	**75,752**
2011 6-Month Average	**22,204**	**2,759**	**4,139**	**569**	**2,616**	**1,785**	**– –**	**9,780**	**1,113**	**5,541**	**42,358**	**73,800**

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

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

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

Notes: • Data are for crude oil and lease condensate; they exclude natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available. • Data for countries may not sum to World totals due to independent rounding. • U.S. geographic coverage is the 50 states and the District of Columbia.

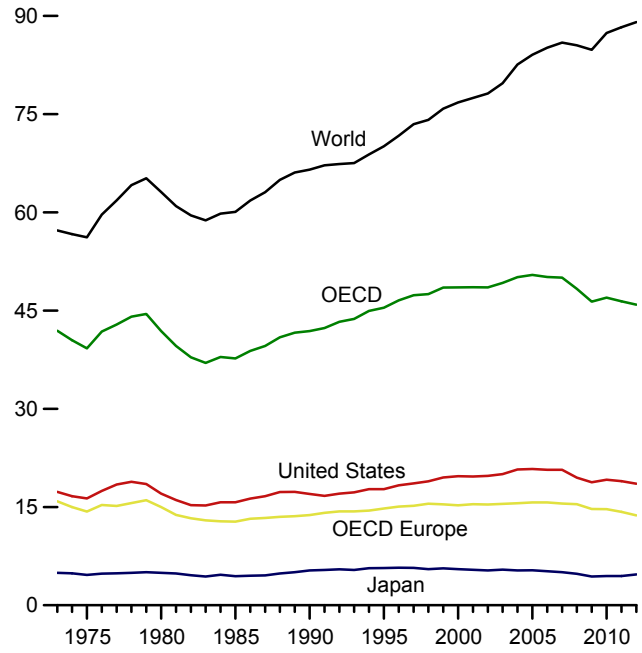
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

Sources: See end of section.

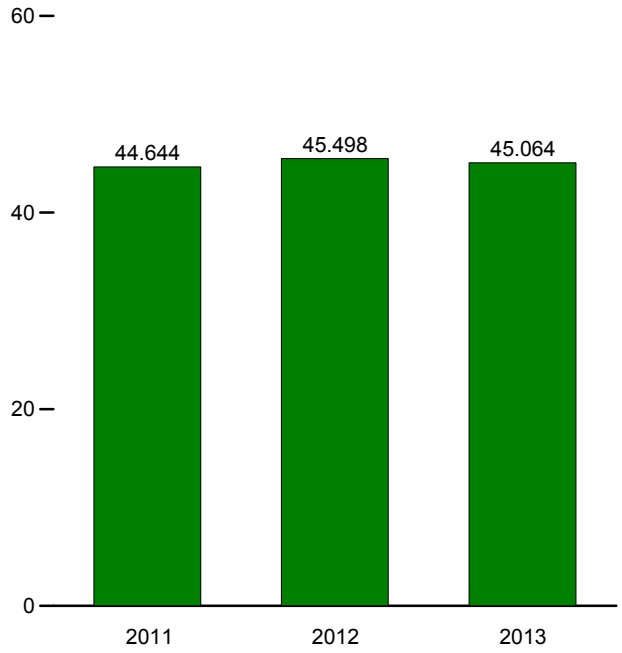
Figure 11.2 Petroleum Consumption in OECD Countries

(Million Barrels per Day)

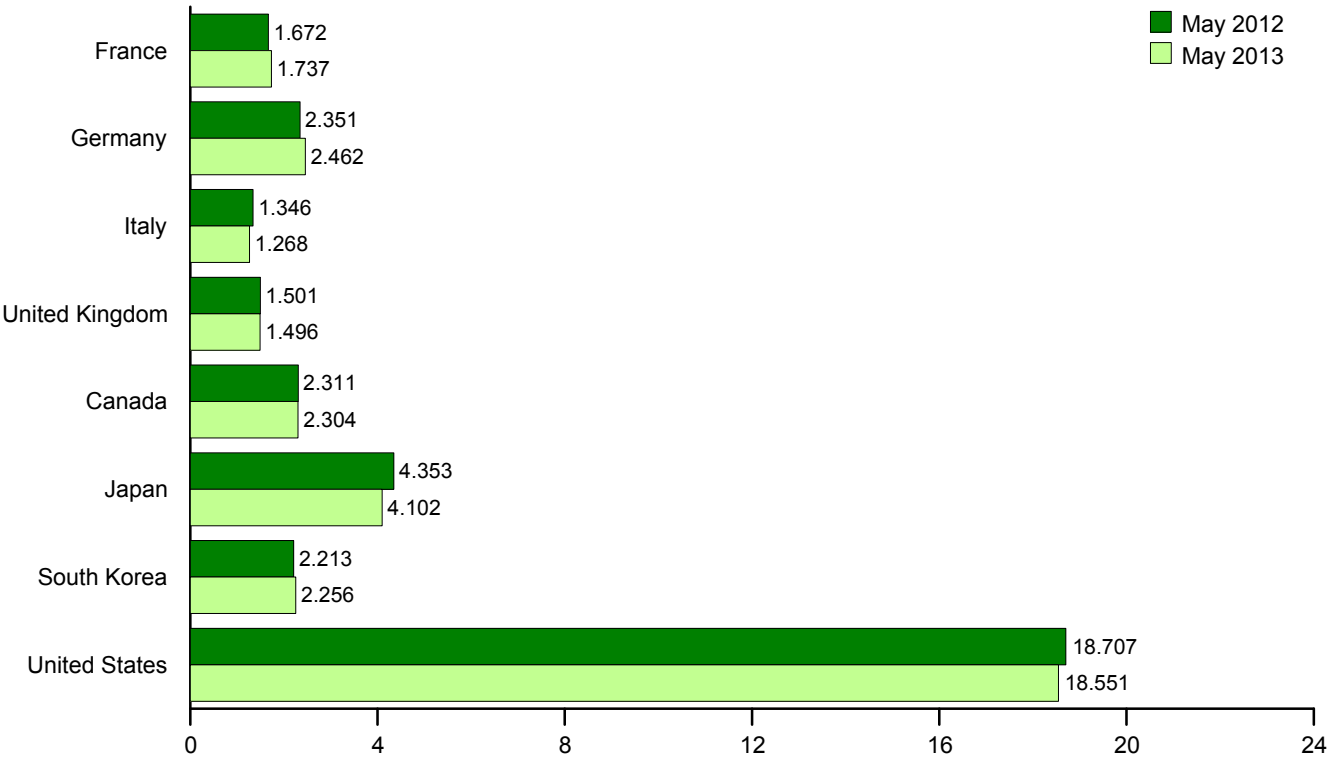
Overview, 1973–2012



OECD Total, May



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**	**12,772**	**1,514**	**4,436**	**552**	**15,726**	**2,699**	**37,699**	**60,083**
1990 Average	**1,826**	**2,682**	**1,868**	**1,776**	**13,762**	**1,722**	**5,315**	**1,048**	**16,988**	**3,040**	**41,875**	**66,533**
1995 Average	**1,920**	**2,882**	**1,942**	**1,816**	**14,762**	**1,799**	**5,693**	**2,008**	**17,725**	**3,452**	**45,439**	**70,099**
1996 Average	**1,949**	**2,922**	**1,920**	**1,852**	**15,055**	**1,853**	**5,739**	**2,101**	**18,309**	**3,509**	**46,566**	**71,714**
1997 Average	**1,969**	**2,917**	**1,934**	**1,810**	**15,195**	**1,940**	**5,702**	**2,255**	**18,620**	**3,629**	**47,342**	**73,464**
1998 Average	**2,043**	**2,923**	**1,943**	**1,792**	**15,500**	**1,931**	**5,507**	**1,917**	**18,917**	**3,757**	**47,529**	**74,117**
1999 Average	**2,031**	**2,836**	**1,891**	**1,811**	**15,409**	**2,016**	**5,642**	**2,084**	**19,519**	**3,844**	**48,514**	**75,833**
2000 Average	**2,000**	**2,767**	**1,854**	**1,765**	**15,272**	**2,014**	**5,515**	**2,135**	**19,701**	**3,902**	**48,539**	**76,784**
2001 Average	**2,054**	**2,807**	**1,832**	**1,747**	**15,442**	**2,043**	**5,412**	**2,132**	**19,649**	**3,892**	**48,570**	**77,476**
2002 Average	**1,985**	**2,710**	**1,870**	**1,739**	**15,379**	**2,065**	**5,319**	**2,149**	**19,761**	**3,877**	**48,551**	**78,173**
2003 Average	**2,001**	**2,662**	**1,860**	**1,759**	**15,486**	**2,191**	**5,428**	**2,175**	**20,034**	**3,920**	**49,234**	**79,714**
2004 Average	**2,009**	**2,649**	**1,829**	**1,785**	**15,589**	**2,282**	**5,319**	**2,155**	**20,731**	**4,021**	**50,096**	**82,579**
2005 Average	**1,991**	**2,621**	**1,781**	**1,820**	**15,704**	**2,315**	**5,328**	**2,191**	**20,802**	**4,100**	**50,441**	**84,085**
2006 Average	**1,991**	**2,639**	**1,777**	**1,806**	**15,708**	**2,229**	**5,197**	**2,180**	**20,687**	**4,135**	**50,137**	**85,148**
2007 Average	**1,979**	**2,416**	**1,729**	**1,753**	**15,528**	**2,283**	**5,037**	**2,241**	**20,680**	**4,256**	**50,025**	**85,932**
2008 Average	**1,945**	**2,542**	**1,667**	**1,727**	**15,435**	**2,225**	**4,798**	**2,142**	**19,498**	**4,226**	**48,324**	**85,523**
2009 Average	**1,868**	**2,453**	**1,544**	**1,637**	**14,692**	**2,163**	**4,390**	**2,189**	**18,771**	**4,169**	**46,374**	**84,835**
2010 Average	**1,833**	**2,470**	**1,544**	**1,621**	**14,662**	**2,265**	**4,455**	**2,269**	**19,180**	**4,154**	**46,984**	**87,389**
2011 January	1,774	2,227	1,391	1,577	13,620	2,232	4,852	2,456	18,993	3,870	46,024	NA
February	1,917	2,429	1,598	1,626	14,760	2,290	5,058	2,379	18,873	4,324	47,685	NA
March	1,790	2,390	1,484	1,612	14,248	2,367	4,552	2,322	19,329	4,312	47,130	NA
April	1,748	2,254	1,502	1,596	13,927	2,121	4,098	2,039	18,650	4,155	44,989	NA
May	1,735	2,400	1,464	1,531	14,010	2,161	3,778	2,049	18,479	4,168	44,644	NA
June	1,787	2,267	1,550	1,663	14,351	2,317	3,944	2,140	19,253	4,323	46,327	NA
July	1,800	2,405	1,517	1,538	14,359	2,298	4,228	2,215	18,778	4,247	46,125	NA
August	1,805	2,635	1,439	1,593	14,702	2,433	4,454	2,239	19,415	4,286	47,529	NA
September	1,920	2,547	1,581	1,646	14,937	2,278	4,294	2,269	18,892	4,269	46,937	NA
October	1,777	2,505	1,504	1,554	14,341	2,167	4,403	2,243	18,844	4,064	46,062	NA
November	1,731	2,443	1,445	1,570	14,133	2,252	4,592	2,280	19,080	4,336	46,673	NA
December	1,738	2,259	1,463	1,508	13,696	2,275	5,428	2,463	18,803	4,362	47,027	NA
Average	**1,792**	**2,397**	**1,494**	**1,584**	**14,252**	**2,266**	**4,471**	**2,258**	**18,949**	**4,225**	**46,421**	R **88,275**
2012 January	1,746	2,134	1,305	1,424	12,955	2,116	5,149	2,398	18,280	4,190	45,088	NA
February	1,951	2,567	1,351	1,548	14,452	2,200	5,537	2,444	18,760	4,376	47,769	NA
March	1,726	2,263	1,358	1,598	13,643	2,266	5,145	2,185	18,213	4,420	45,872	NA
April	1,688	2,291	1,337	1,584	13,587	2,171	4,375	2,132	18,330	4,207	44,802	NA
May	1,672	2,351	1,346	1,501	13,602	2,311	4,353	2,213	18,707	4,311	45,498	NA
June	1,781	2,521	1,411	1,510	14,111	2,203	4,114	2,337	18,915	4,328	46,009	NA
July	1,801	2,496	1,422	1,491	13,983	2,308	4,358	2,228	18,601	4,312	45,790	NA
August	1,665	2,333	1,369	1,459	13,650	2,428	4,615	2,267	19,226	4,420	46,608	NA
September	1,727	2,388	1,358	1,509	13,722	2,297	4,428	2,298	18,173	4,174	45,092	NA
October	1,809	2,573	1,399	1,406	14,126	2,314	4,408	2,231	18,722	4,423	46,225	NA
November	1,710	2,548	1,299	1,490	13,811	2,445	4,627	2,456	18,604	4,441	46,383	NA
December	1,613	2,212	1,277	1,517	12,976	2,373	5,478	2,432	18,130	4,377	45,766	NA
Average	**1,740**	**2,388**	**1,353**	**1,503**	**13,713**	**2,287**	**4,715**	**2,301**	**18,555**	**4,332**	**45,902**	R **89,054**
2013 January	1,684	2,234	1,230	1,420	R 12,790	R 2,310	5,180	2,402	18,646	4,196	R 45,525	NA
February	1,812	2,321	1,323	1,522	R 13,455	R 2,287	5,299	2,387	18,659	R 4,305	R 46,393	NA
March	1,746	R 2,342	1,282	R 1,494	R 13,182	R 2,258	4,745	2,159	18,476	R 4,143	R 44,962	NA
April	1,807	2,589	1,302	1,597	R 14,009	R 2,309	4,319	2,267	18,553	R 4,299	R 45,756	NA
May	1,737	2,462	1,268	1,496	13,655	2,304	4,102	2,256	18,551	4,196	45,064	NA
5-Month Average	**1,756**	**2,389**	**1,280**	**1,505**	**13,414**	**2,293**	**4,721**	**2,293**	**18,575**	**4,226**	**45,522**	**NA**
2012 5-Month Average	**1,755**	**2,318**	**1,339**	**1,531**	**13,637**	**2,213**	**4,907**	**2,273**	**18,455**	**4,300**	**45,786**	**NA**
2011 5-Month Average	**1,791**	**2,339**	**1,486**	**1,588**	**14,102**	**2,234**	**4,458**	**2,248**	**18,866**	**4,163**	**46,070**	**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.

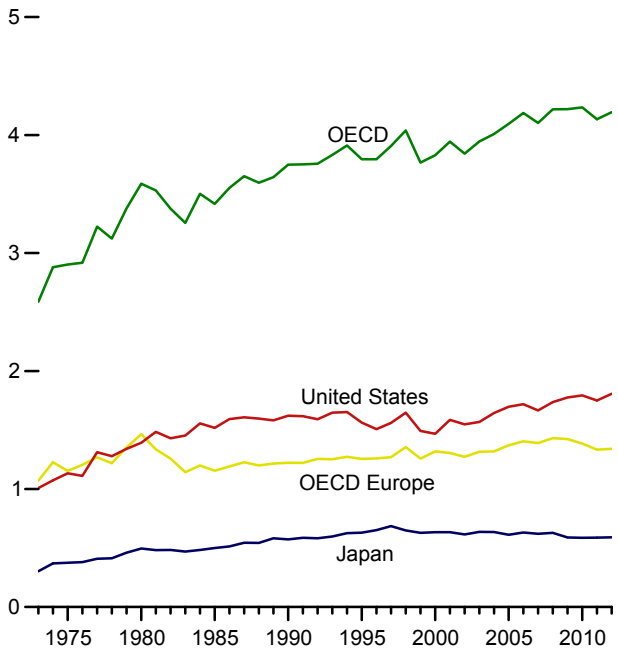
Notes: • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 states and the District of Columbia.

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

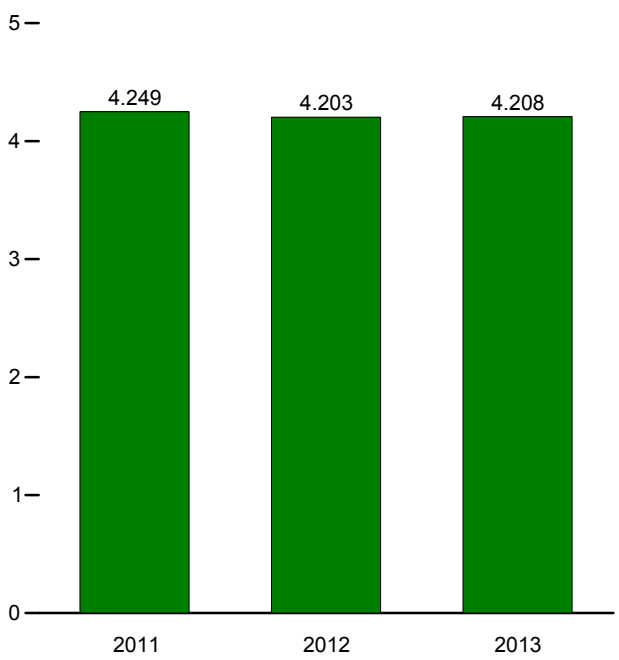
Sources: • **United States:** Table 3.1. • **Chile, East Germany, Former Czechoslovakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries, U.S. Territories,** and **World: 1973–1979—**U.S. Energy Information Administration (EIA), International Energy Database. • **Countries Other Than United States: 1980–2008—**EIA, International Energy Statistics (IES). • **OECD Countries,** and **U.S. Territories: 2009 forward—**EIA, IES. • **World: 2009 forward—**EIA, *Short Term Energy Outlook,* September 2013, 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)

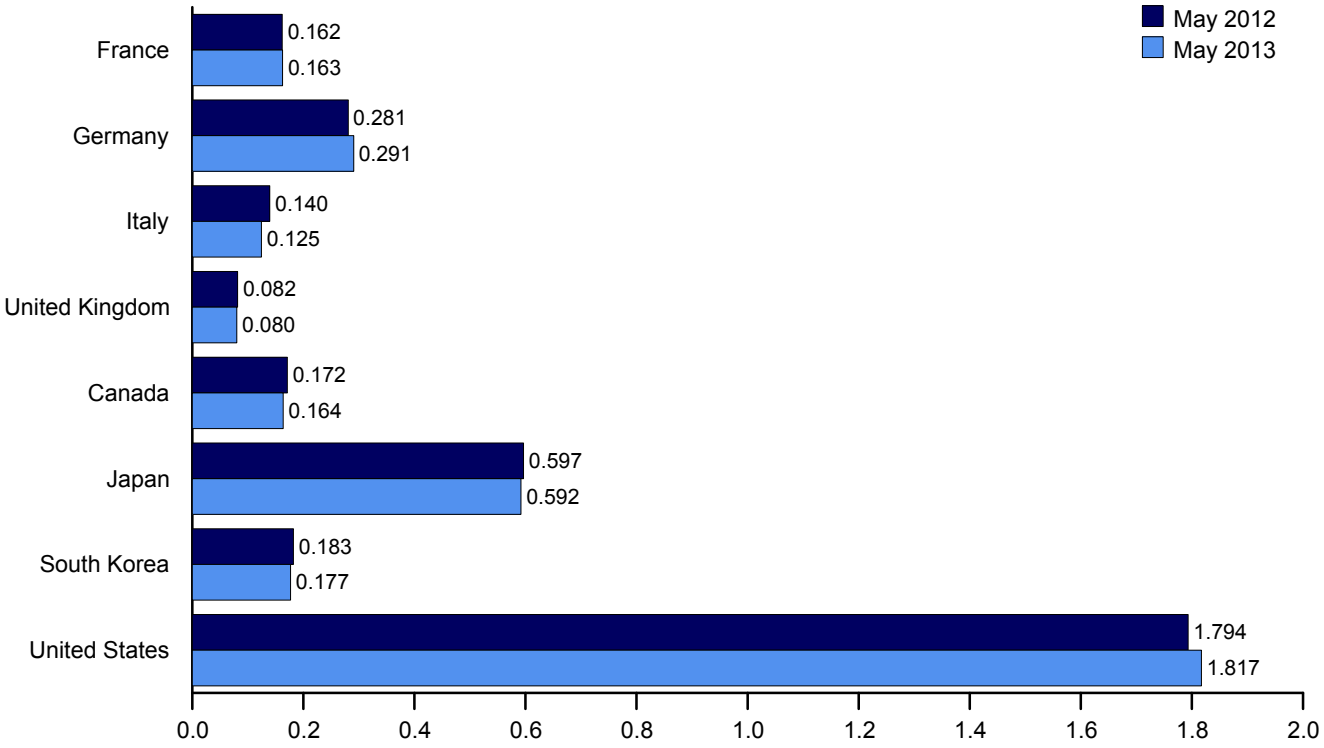
Overview, End of Year, 1973–2012



OECD Stocks, End of Month, May



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**	**1,371**	**168**	**612**	**135**	**1,698**	**112**	**4,095**
2006 Year	**182**	**283**	**153**	**103**	**1,404**	**169**	**631**	**152**	**1,720**	**113**	**4,187**
2007 Year	**180**	**275**	**152**	**92**	**1,389**	**163**	**621**	**143**	**1,665**	**121**	**4,103**
2008 Year	**179**	**279**	**148**	**93**	**1,431**	**162**	**629**	**135**	**1,737**	**124**	**4,218**
2009 Year	**175**	**284**	**146**	**89**	**1,424**	**157**	**589**	**155**	**1,776**	**118**	**4,219**
2010 Year	**168**	**287**	**143**	**83**	**1,385**	**184**	**587**	**165**	**1,794**	**120**	**4,234**
2011 January	173	291	149	90	1,426	174	596	168	1,809	120	4,293
February	170	288	140	89	1,396	169	591	162	1,780	122	4,222
March	167	286	141	87	1,385	172	580	170	1,776	118	4,201
April	163	291	142	89	1,373	179	601	173	1,779	125	4,229
May	168	288	139	85	1,373	177	598	170	1,807	124	4,249
June	167	286	141	79	1,367	177	593	175	1,809	121	4,242
July	164	290	140	81	1,357	177	599	173	1,816	124	4,245
August	162	283	142	83	1,360	176	598	171	1,796	124	4,224
September	160	277	140	78	1,339	176	601	174	1,781	121	4,191
October	165	278	140	79	1,328	178	599	174	1,769	120	4,168
November	164	277	141	86	1,344	179	603	170	1,770	117	4,183
December	**165**	**281**	**138**	**80**	**1,333**	**178**	**589**	**167**	**1,750**	**117**	**4,134**
2012 January	166	288	141	84	1,363	178	594	164	1,772	121	4,192
February	165	286	141	84	1,360	180	583	171	1,765	113	4,173
March	165	284	142	82	1,371	171	580	164	1,778	113	4,176
April	163	284	140	85	1,363	170	592	174	1,777	115	4,191
May	162	281	140	82	1,341	R 172	597	183	1,794	117	R 4,203
June	164	280	138	82	1,343	R 170	601	177	1,808	112	R 4,212
July	163	285	135	80	1,353	R 173	608	181	1,809	116	R 4,240
August	168	284	142	82	1,370	R 177	603	179	1,801	114	R 4,244
September	164	283	146	75	1,351	R 179	606	184	1,818	117	R 4,255
October	160	282	144	75	1,333	R 175	614	180	1,810	110	R 4,221
November	160	287	141	85	1,348	R 174	604	177	1,809	106	R 4,219
December	**162**	**287**	**129**	**81**	**R 1,340**	**R 173**	**590**	**175**	**1,807**	**108**	**4,194**
2013 January	162	R 292	133	86	1,384	R 170	591	179	1,812	105	R 4,242
February	162	289	133	R 81	1,376	170	581	176	1,791	110	4,205
March	161	R 291	134	79	1,374	R 162	589	188	1,793	R 114	R 4,220
April	159	289	135	R 84	R 1,372	R 161	596	176	1,807	114	R 4,226
May	163	291	125	80	1,345	164	592	177	1,817	111	4,208

[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 for all available data beginning in 1973.

Sources: • **United States:** Table 3.4. • **U.S. Territories: 1983 forward—**U.S. Energy Information Administration, International Energy Database. • **All Other Data: 1973–1982—**International Energy Agency (IEA), *Quarterly Oil Statistics and Energy Balances,* various issues. **1983—**IEA, Monthly Oil and Gas Statistics Database. **1984 forward—**IEA, Monthly Oil Data Service, August 9, 2013.

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, September 2013.

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, September 2013.

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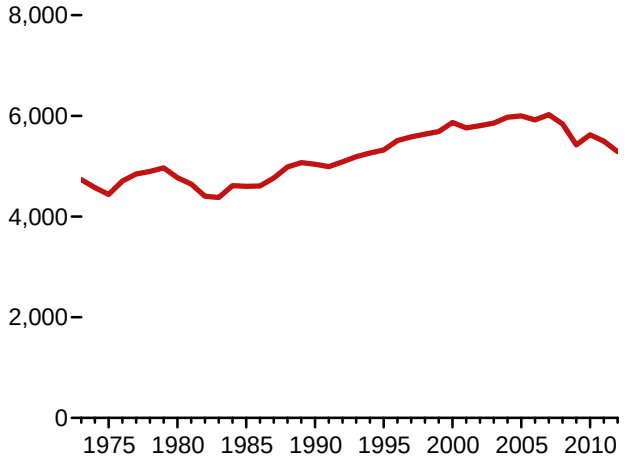
12. Environment

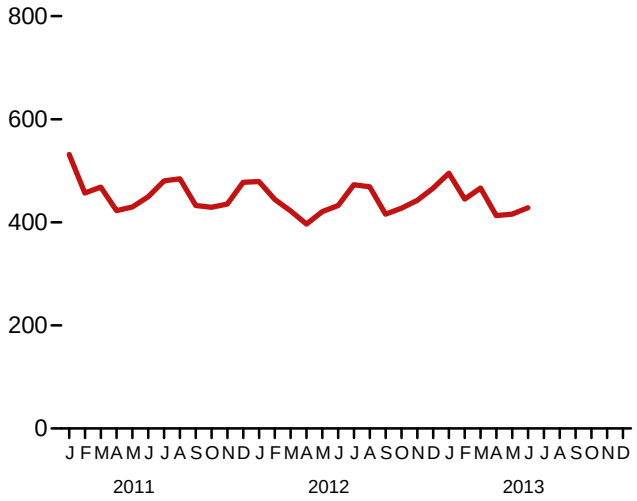
Figure 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide)

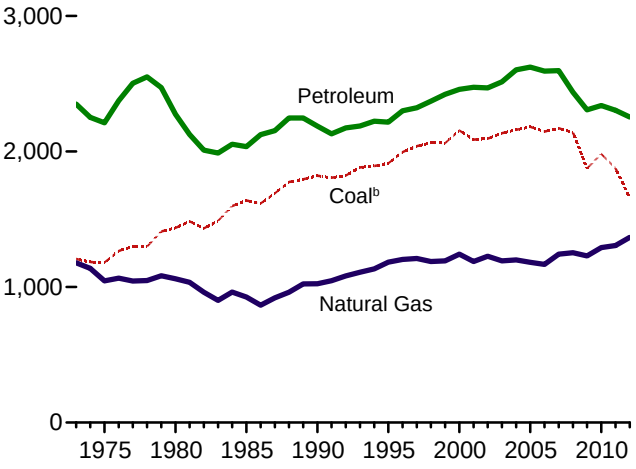
Total,[a] 1973–2012



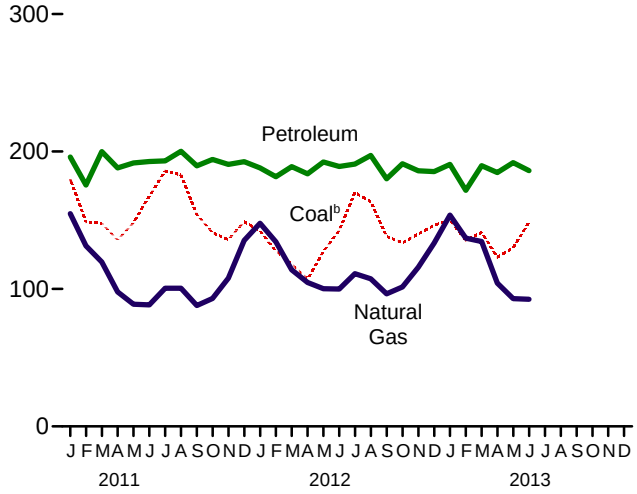
Total,[a] Monthly



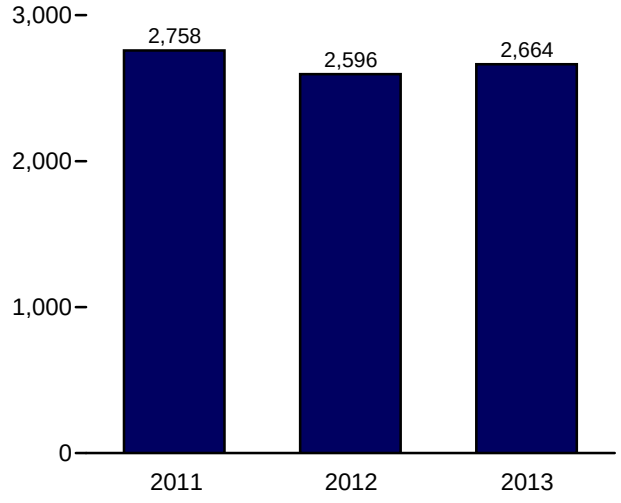
By Major Source, 1973–2012



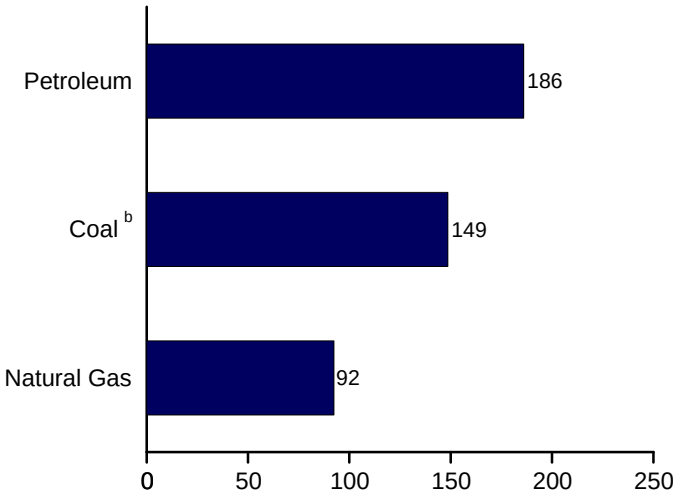
By Major Source, Monthly



Total,[a] January–June



By Major Source, June 2013



[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])

	Coal[b]	Natural Gas[c]	Petroleum											Total[h,i]
			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	
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**	**1,044**	**76**	**152**	**121**	**2,216**	**5,323**
1996 Total	**1,995**	**1,204**	**3**	**525**	**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**	**538**	**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**	**1,127**	**96**	**148**	**133**	**2,422**	**5,688**
2000 Total	**2,155**	**1,243**	**3**	**580**	**254**	**10**	**97**	**14**	**1,135**	**86**	**163**	**118**	**2,459**	**5,868**
2001 Total	**2,088**	**1,188**	**2**	**598**	**243**	**11**	**88**	**13**	**1,151**	**89**	**144**	**135**	**2,474**	**5,761**
2002 Total	**2,095**	**1,227**	**2**	**587**	**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**	**1,188**	**96**	**138**	**142**	**2,514**	**5,855**
2004 Total	**2,160**	**1,200**	**2**	**632**	**240**	**10**	**87**	**12**	**1,214**	**107**	**155**	**144**	**2,603**	**5,975**
2005 Total	**2,182**	**1,183**	**2**	**640**	**246**	**10**	**84**	**12**	**1,214**	**106**	**165**	**143**	**2,623**	**5,999**
2006 Total	**2,147**	**1,168**	**2**	**648**	**240**	**8**	**80**	**11**	**1,224**	**106**	**122**	**152**	**2,593**	**5,920**
2007 Total	**2,172**	**1,243**	**2**	**652**	**238**	**5**	**83**	**12**	**1,227**	**100**	**129**	**150**	**2,596**	**6,023**
2008 Total	**2,139**	**1,253**	**2**	**615**	**226**	**2**	**79**	**11**	**1,166**	**93**	**111**	**132**	**2,437**	**5,841**
2009 Total	**1,876**	**1,230**	**2**	**564**	**204**	**3**	**78**	**10**	**1,157**	**87**	**91**	**112**	**2,307**	**5,424**
2010 Total	**1,982**	**1,290**	**2**	**590**	**210**	**3**	**79**	**11**	**1,146**	**81**	**96**	**122**	**2,339**	**5,623**
2011 January	180	155	(s)	52	17	(s)	10	1	91	7	9	10	196	532
February	149	131	(s)	47	15	1	8	1	84	5	8	8	176	457
March	148	120	(s)	53	17	(s)	8	1	95	6	7	11	200	468
April	136	98	(s)	48	18	(s)	6	1	92	6	7	10	188	423
May	148	89	(s)	49	18	(s)	6	1	95	8	7	8	192	430
June	168	88	(s)	50	19	(s)	6	1	95	7	7	9	193	450
July	186	101	(s)	47	18	(s)	6	1	98	7	5	11	193	481
August	183	101	(s)	53	19	(s)	7	1	96	8	5	10	200	485
September	154	88	(s)	50	17	(s)	6	1	92	6	7	10	190	433
October	141	93	(s)	53	17	(s)	7	1	93	7	6	10	194	429
November	136	108	(s)	52	17	(s)	8	1	89	7	6	11	191	435
December	149	135	(s)	51	17	(s)	9	1	94	4	8	10	193	478
Total	**1,876**	**1,306**	**2**	**603**	**209**	**2**	**87**	**10**	**1,113**	**78**	**82**	**118**	**2,304**	**5,498**
2012 January	142	148	(s)	50	16	(s)	8	1	89	7	6	11	188	479
February	128	134	(s)	49	16	(s)	8	1	87	5	6	10	182	444
March	118	114	(s)	49	17	(s)	7	1	93	6	6	9	189	422
April	107	105	(s)	47	16	(s)	6	1	92	6	6	9	184	397
May	127	100	(s)	49	18	(s)	7	1	97	7	4	9	192	421
June	143	100	(s)	47	19	(s)	6	1	94	7	5	10	189	433
July	170	111	(s)	47	18	(s)	7	1	95	6	6	10	191	473
August	164	107	(s)	49	18	(s)	7	1	99	7	5	11	197	469
September	138	97	(s)	47	17	(s)	7	1	90	6	4	8	180	416
October	134	102	(s)	50	17	(s)	8	1	94	6	4	11	191	427
November	140	116	(s)	50	17	(s)	8	1	89	7	4	11	186	443
December	146	133	(s)	46	17	(s)	9	1	90	7	3	13	185	466
Total	**1,657**	**1,367**	**2**	**579**	**206**	**1**	**88**	**9**	**1,110**	**76**	**61**	**122**	**2,254**	**5,290**
2013 January	150	154	(s)	53	16	(s)	10	1	89	7	5	10	191	495
February	135	137	(s)	47	15	(s)	9	1	82	5	4	9	172	445
March	141	134	(s)	49	17	(s)	9	1	93	6	7	8	190	466
April	123	104	(s)	49	17	(s)	7	1	91	5	4	10	185	413
May	130	93	(s)	49	18	(s)	6	1	97	7	3	11	192	416
June	149	92	(s)	46	17	(s)	6	1	93	7	4	10	186	428
6-Month Total	**828**	**715**	**1**	**294**	**100**	**(s)**	**47**	**5**	**546**	**36**	**28**	**58**	**1,115**	**2,664**
2012 6-Month Total	**765**	**701**	**1**	**291**	**102**	**(s)**	**43**	**5**	**553**	**37**	**34**	**58**	**1,124**	**2,596**
2011 6-Month Total	**928**	**681**	**1**	**299**	**103**	**1**	**44**	**5**	**552**	**38**	**45**	**56**	**1,144**	**2,758**

[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.

(s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, including the nonfuel use of fossil fuels. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

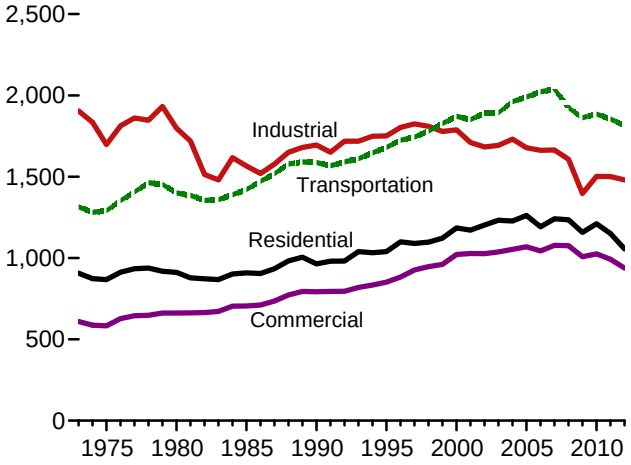
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

Sources: See end of section.

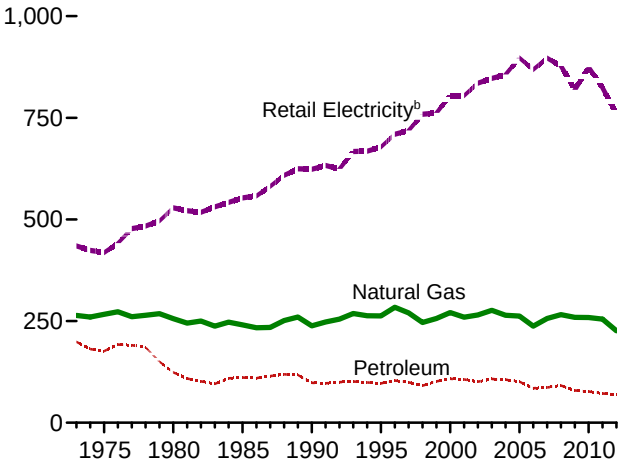
Figure 12.2 Carbon Dioxide Emissions From Energy Consumption by Sector

(Million Metric Tons of Carbon Dioxide)

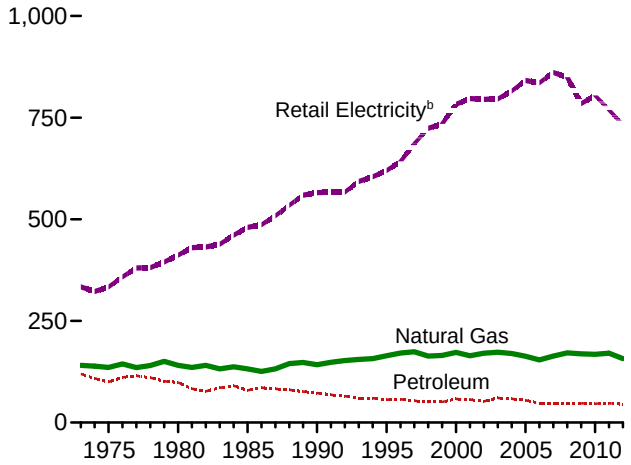
Total[a] by End-Use Sector,[b] 1973–2012



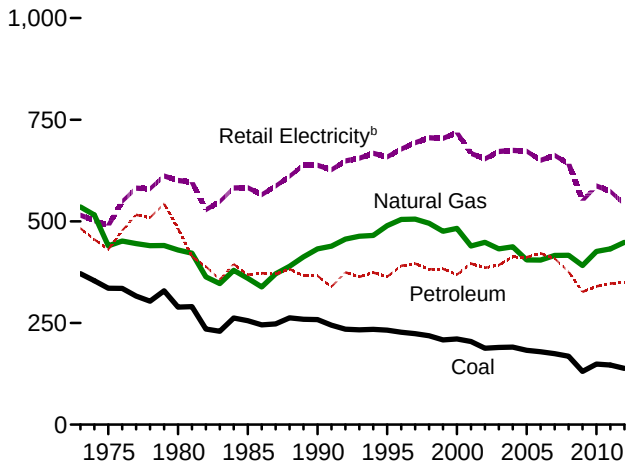
Residential Sector by Major Source, 1973–2012



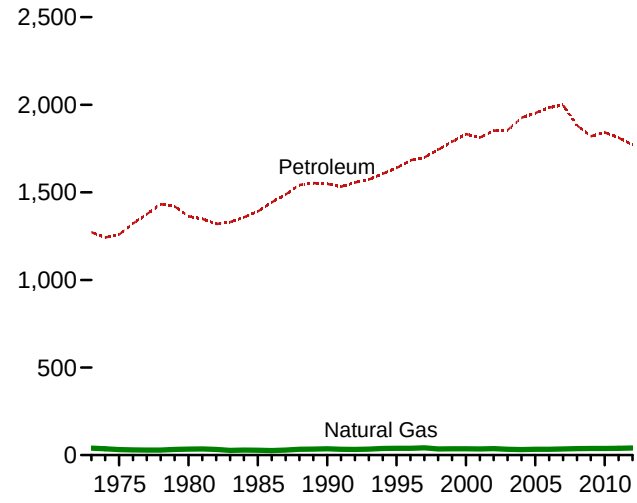
Commercial Sector by Major Source, 1973–2012



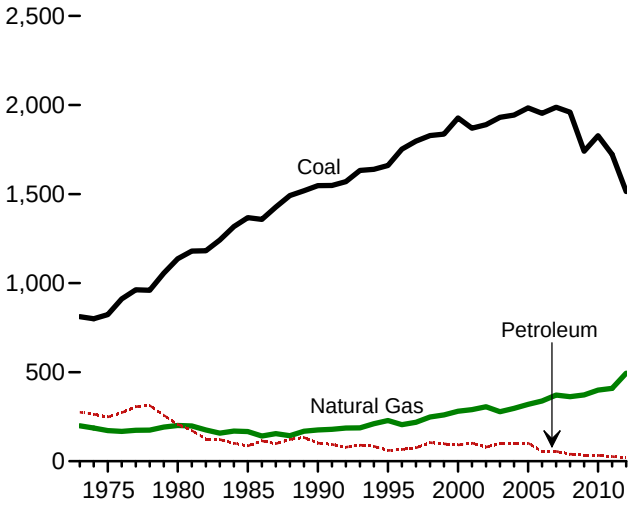
Industrial Sector by Major Source, 1973–2012



Transportation Sector by Major Source, 1973–2012



Electric Power Sector by Major Source, 1973–2012



[a] Excludes emissions from biomass energy consumption.

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

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

Sources: Tables 12.2–12.6.

Table 12.2 Carbon Dioxide Emissions From Energy Consumption: Residential Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum				Retail Electricity[e]	Total[f]
			Distillate Fuel Oil[c]	Kerosene	LPG[d]	Total		
1973 Total	**9**	**264**	**147**	**16**	**36**	**199**	**435**	**907**
1975 Total	**6**	**266**	**132**	**12**	**32**	**176**	**419**	**867**
1980 Total	**3**	**256**	**96**	**8**	**20**	**124**	**529**	**911**
1985 Total	**4**	**241**	**80**	**11**	**20**	**111**	**553**	**909**
1990 Total	**3**	**238**	**72**	**5**	**22**	**98**	**624**	**963**
1995 Total	**2**	**263**	**66**	**5**	**25**	**96**	**678**	**1,039**
1996 Total	**2**	**284**	**68**	**6**	**30**	**104**	**710**	**1,099**
1997 Total	**2**	**270**	**64**	**7**	**29**	**99**	**719**	**1,090**
1998 Total	**1**	**247**	**56**	**8**	**27**	**91**	**759**	**1,097**
1999 Total	**1**	**257**	**61**	**8**	**33**	**102**	**762**	**1,122**
2000 Total	**1**	**271**	**66**	**7**	**35**	**108**	**805**	**1,185**
2001 Total	**1**	**259**	**66**	**7**	**33**	**106**	**805**	**1,172**
2002 Total	**1**	**265**	**63**	**4**	**34**	**101**	**835**	**1,203**
2003 Total	**1**	**276**	**68**	**5**	**34**	**108**	**847**	**1,232**
2004 Total	**1**	**264**	**68**	**6**	**32**	**106**	**856**	**1,228**
2005 Total	**1**	**262**	**62**	**6**	**32**	**101**	**897**	**1,261**
2006 Total	**1**	**237**	**52**	**5**	**28**	**85**	**869**	**1,192**
2007 Total	**1**	**257**	**53**	**3**	**31**	**87**	**897**	**1,241**
2008 Total	**NA**	**266**	**55**	**2**	**35**	**92**	**878**	**1,235**
2009 Total	**NA**	**259**	**43**	**2**	**35**	**79**	**819**	**1,157**
2010 Total	**NA**	**259**	**41**	**2**	**33**	**77**	**875**	**1,210**
2011 January	NA	52	5	(s)	3	8	87	147
February	NA	42	4	(s)	3	8	67	116
March	NA	33	3	(s)	3	6	59	98
April	NA	19	2	(s)	2	5	53	76
May	NA	11	2	(s)	2	4	57	73
June	NA	7	2	(s)	2	5	75	87
July	NA	6	2	(s)	2	5	95	106
August	NA	6	3	(s)	3	5	92	103
September	NA	7	3	(s)	2	5	68	80
October	NA	12	3	(s)	3	6	53	72
November	NA	23	4	(s)	3	7	53	82
December	NA	37	5	(s)	3	8	66	112
Total	**NA**	**255**	**38**	**1**	**32**	**72**	**824**	**1,150**
2012 January	NA	43	5	(s)	3	8	68	120
February	NA	36	4	(s)	3	7	58	101
March	NA	22	4	(s)	3	6	51	79
April	NA	15	3	(s)	2	5	44	65
May	NA	9	3	(s)	3	5	55	69
June	NA	7	3	(s)	2	5	69	81
July	NA	6	2	(s)	3	5	92	103
August	NA	6	3	(s)	3	6	85	96
September	NA	6	2	(s)	3	5	65	76
October	NA	13	2	(s)	3	5	54	72
November	NA	26	3	(s)	3	6	56	88
December	NA	37	3	(s)	3	6	65	108
Total	**NA**	**226**	**37**	**(s)**	**32**	**69**	**760**	**1,056**
2013 January	NA	48	4	(s)	3	8	72	128
February	NA	41	4	(s)	3	7	61	109
March	NA	36	3	(s)	3	6	62	105
April	NA	20	3	(s)	3	5	50	75
May	NA	11	2	(s)	2	4	51	66
June	NA	7	1	(s)	2	4	67	78
6-Month Total	**NA**	**162**	**17**	**(s)**	**17**	**34**	**364**	**560**
2012 6-Month Total	**NA**	**132**	**21**	**(s)**	**16**	**37**	**345**	**514**
2011 6-Month Total	**NA**	**164**	**18**	**1**	**16**	**35**	**397**	**597**

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

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Table 12.3 Carbon Dioxide Emissions From Energy Consumption: Commercial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum							Retail Electricity[f]	Total[g]
			Distillate Fuel Oil[c]	Kerosene	LPG[d]	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Total		
1973 Total	**15**	**141**	**47**	**5**	**9**	**6**	**NA**	**52**	**120**	**334**	**609**
1975 Total	**14**	**136**	**43**	**4**	**8**	**6**	**NA**	**39**	**100**	**333**	**583**
1980 Total	**11**	**141**	**38**	**3**	**6**	**8**	**NA**	**44**	**98**	**412**	**662**
1985 Total	**13**	**132**	**46**	**2**	**6**	**7**	**NA**	**18**	**79**	**480**	**704**
1990 Total	**12**	**142**	**39**	**1**	**6**	**8**	**0**	**18**	**73**	**566**	**793**
1995 Total	**11**	**164**	**35**	**2**	**7**	**1**	**(s)**	**11**	**56**	**620**	**851**
1996 Total	**12**	**171**	**35**	**2**	**8**	**2**	**(s)**	**11**	**57**	**643**	**883**
1997 Total	**12**	**174**	**32**	**2**	**8**	**3**	**(s)**	**9**	**54**	**686**	**926**
1998 Total	**9**	**164**	**31**	**2**	**7**	**3**	**(s)**	**7**	**51**	**724**	**947**
1999 Total	**10**	**165**	**32**	**2**	**9**	**2**	**(s)**	**6**	**51**	**735**	**960**
2000 Total	**9**	**173**	**36**	**2**	**9**	**3**	**(s)**	**7**	**58**	**783**	**1,022**
2001 Total	**9**	**164**	**37**	**2**	**9**	**3**	**(s)**	**6**	**57**	**797**	**1,027**
2002 Total	**9**	**170**	**32**	**1**	**9**	**3**	**(s)**	**6**	**52**	**795**	**1,026**
2003 Total	**8**	**173**	**36**	**1**	**10**	**4**	**(s)**	**9**	**61**	**796**	**1,037**
2004 Total	**10**	**170**	**34**	**1**	**10**	**3**	**(s)**	**10**	**58**	**816**	**1,054**
2005 Total	**9**	**163**	**33**	**2**	**8**	**3**	**(s)**	**9**	**55**	**842**	**1,069**
2006 Total	**6**	**154**	**29**	**1**	**8**	**3**	**(s)**	**6**	**48**	**836**	**1,043**
2007 Total	**7**	**164**	**28**	**1**	**8**	**4**	**(s)**	**6**	**47**	**861**	**1,078**
2008 Total	**7**	**171**	**28**	**(s)**	**10**	**3**	**(s)**	**6**	**47**	**850**	**1,075**
2009 Total	**7**	**169**	**29**	**(s)**	**9**	**4**	**(s)**	**6**	**47**	**785**	**1,008**
2010 Total	**6**	**168**	**29**	**(s)**	**9**	**4**	**(s)**	**5**	**46**	**805**	**1,025**
2011 January	1	29	4	(s)	1	(s)	(s)	1	5	65	99
February	1	23	3	(s)	1	(s)	(s)	(s)	5	55	85
March	1	20	3	(s)	1	(s)	(s)	(s)	4	58	83
April	(s)	13	2	(s)	1	(s)	0	(s)	3	57	73
May	(s)	9	1	(s)	1	(s)	0	(s)	2	63	75
June	(s)	7	2	(s)	1	(s)	0	(s)	3	70	81
July	(s)	7	2	(s)	1	(s)	0	(s)	3	79	89
August	(s)	7	2	(s)	1	(s)	0	(s)	4	77	89
September	(s)	8	2	(s)	1	(s)	0	(s)	4	66	77
October	(s)	11	3	(s)	1	(s)	0	(s)	4	61	77
November	(s)	15	3	(s)	1	(s)	(s)	(s)	4	57	77
December	(s)	21	4	(s)	1	(s)	(s)	1	6	60	87
Total	**6**	**171**	**31**	**(s)**	**9**	**3**	**(s)**	**4**	**47**	**769**	**992**
2012 January	1	24	4	(s)	1	(s)	(s)	(s)	6	57	87
February	(s)	21	3	(s)	1	(s)	(s)	(s)	5	53	79
March	(s)	14	3	(s)	1	(s)	(s)	(s)	4	52	71
April	(s)	11	2	(s)	1	(s)	(s)	(s)	3	51	66
May	(s)	8	2	(s)	1	(s)	0	(s)	3	60	72
June	(s)	7	2	(s)	1	(s)	0	(s)	3	66	77
July	(s)	7	2	(s)	1	(s)	(s)	(s)	3	76	87
August	(s)	7	2	(s)	1	(s)	(s)	(s)	4	73	85
September	(s)	8	2	(s)	1	(s)	(s)	(s)	3	64	75
October	(s)	12	2	(s)	1	(s)	(s)	(s)	3	61	76
November	(s)	17	2	(s)	1	(s)	(s)	(s)	4	59	80
December	(s)	21	3	(s)	1	(s)	(s)	(s)	4	59	85
Total	**4**	**157**	**29**	**(s)**	**9**	**3**	**(s)**	**3**	**45**	**732**	**938**
2013 January	(s)	26	3	(s)	1	(s)	(s)	(s)	5	59	90
February	(s)	23	3	(s)	1	(s)	(s)	(s)	5	55	83
March	(s)	21	3	(s)	1	(s)	(s)	(s)	4	58	84
April	1	13	2	(s)	1	(s)	(s)	(s)	3	53	70
May	1	9	1	(s)	1	(s)	0	(s)	2	59	71
June	(s)	7	1	(s)	1	(s)	0	(s)	2	67	77
6-Month Total	**3**	**100**	**13**	**(s)**	**5**	**1**	**(s)**	**1**	**21**	**351**	**475**
2012 6-Month Total	**2**	**86**	**16**	**(s)**	**5**	**2**	**(s)**	**2**	**24**	**339**	**452**
2011 6-Month Total	**3**	**101**	**15**	**(s)**	**5**	**1**	**(s)**	**2**	**23**	**369**	**496**

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

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Table 12.4 Carbon Dioxide Emissions From Energy Consumption: Industrial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Coal Coke Net Imports	Natural Gas[b]	Petroleum									Retail Electricity[g]	Total[h]
				Distillate Fuel Oil[c]	Kerosene	LPG[d]	Lubricants	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total		
1973 Total	**371**	**-1**	**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**	**87**	**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**	**393**	**672**	**1,692**
2004 Total	**191**	**16**	**437**	**88**	**2**	**44**	**6**	**26**	**84**	**18**	**144**	**413**	**675**	**1,731**
2005 Total	**183**	**5**	**405**	**92**	**3**	**42**	**6**	**25**	**81**	**20**	**143**	**412**	**673**	**1,678**
2006 Total	**179**	**7**	**405**	**92**	**2**	**43**	**6**	**26**	**84**	**16**	**152**	**421**	**650**	**1,662**
2007 Total	**175**	**3**	**416**	**92**	**1**	**43**	**6**	**21**	**82**	**13**	**150**	**409**	**662**	**1,665**
2008 Total	**168**	**5**	**417**	**99**	**(s)**	**32**	**6**	**17**	**77**	**13**	**132**	**376**	**642**	**1,607**
2009 Total	**131**	**-3**	**391**	**78**	**(s)**	**33**	**5**	**16**	**72**	**9**	**112**	**326**	**551**	**1,396**
2010 Total	**149**	**-1**	**426**	**84**	**1**	**35**	**6**	**18**	**67**	**8**	**122**	**340**	**587**	**1,502**
2011 January	13	(s)	40	9	(s)	5	(s)	1	5	1	10	33	48	133
February	12	(s)	36	7	(s)	4	(s)	1	4	1	8	26	42	117
March	13	(s)	38	10	(s)	4	1	1	5	1	11	33	46	130
April	12	(s)	35	7	(s)	3	(s)	1	5	1	10	28	45	120
May	12	(s)	35	7	(s)	3	(s)	1	7	1	8	28	48	123
June	12	(s)	33	7	(s)	3	(s)	1	5	1	9	27	50	123
July	12	(s)	34	5	(s)	3	(s)	2	5	1	11	26	54	125
August	12	(s)	35	7	(s)	3	(s)	2	7	1	10	31	53	131
September	12	(s)	34	7	(s)	3	(s)	1	5	1	10	28	47	122
October	12	(s)	36	8	(s)	4	(s)	1	6	1	10	30	47	125
November	12	(s)	37	9	(s)	4	(s)	1	6	1	11	32	46	126
December	13	(s)	40	6	(s)	5	(s)	1	3	1	10	27	45	124
Total	**147**	**1**	**432**	**90**	**(s)**	**44**	**5**	**17**	**63**	**9**	**118**	**347**	**574**	**1,501**
2012 January	12	(s)	41	8	(s)	4	(s)	1	5	1	11	31	43	127
February	12	(s)	38	10	(s)	4	(s)	1	4	1	10	31	42	122
March	12	(s)	38	8	(s)	4	(s)	1	5	1	9	29	41	120
April	11	1	36	7	(s)	3	(s)	1	5	1	9	27	41	116
May	11	(s)	36	7	(s)	4	(s)	2	6	1	9	29	46	123
June	11	(s)	35	6	(s)	3	(s)	1	6	1	10	27	47	120
July	11	(s)	36	5	(s)	3	(s)	1	5	1	10	26	52	125
August	12	(s)	37	6	(s)	4	(s)	2	7	1	11	29	50	127
September	11	(s)	36	7	(s)	4	(s)	1	6	(s)	8	26	44	118
October	11	(s)	38	9	(s)	4	(s)	1	5	(s)	11	31	46	126
November	12	(s)	38	9	(s)	4	(s)	1	6	(s)	11	32	46	127
December	12	(s)	40	6	(s)	5	(s)	1	6	(s)	13	32	44	128
Total	**138**	**(s)**	**449**	**87**	**(s)**	**45**	**5**	**17**	**67**	**7**	**122**	**350**	**543**	**1,480**
2013 January	12	(s)	42	11	(s)	5	(s)	1	6	1	10	34	43	131
February	12	(s)	38	9	(s)	5	(s)	1	4	(s)	9	29	40	119
March	12	(s)	40	8	(s)	5	(s)	1	5	1	8	29	44	124
April	11	(s)	37	9	(s)	4	(s)	1	4	(s)	10	29	41	118
May	11	(s)	37	[R] 9	(s)	3	(s)	2	5	(s)	11	30	45	123
June	11	(s)	36	7	(s)	3	(s)	1	6	1	10	29	46	121
6-Month Total	**68**	**-1**	**231**	**53**	**(s)**	**25**	**3**	**9**	**30**	**3**	**58**	**179**	**259**	**736**
2012 6-Month Total	**70**	**1**	**224**	**46**	**(s)**	**22**	**3**	**9**	**32**	**4**	**58**	**173**	**259**	**728**
2011 6-Month Total	**74**	**1**	**218**	**48**	**(s)**	**22**	**3**	**9**	**31**	**5**	**56**	**174**	**280**	**746**

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

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

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, including the nonfuel use of fossil fuels. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Table 12.5 Carbon Dioxide Emissions From Energy Consumption: Transportation Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum								Retail Electricity[f]	Total[g]
			Aviation Gasoline	Distillate Fuel Oil[c]	Jet Fuel	LPG[d]	Lubricants	Motor Gasoline[e]	Residual Fuel Oil	Total		
1973 Total	**(s)**	**39**	**6**	**163**	**152**	**3**	**6**	**886**	**57**	**1,273**	**2**	**1,315**
1975 Total	**(s)**	**32**	**5**	**155**	**145**	**3**	**6**	**889**	**56**	**1,258**	**2**	**1,292**
1980 Total	**(h)**	**34**	**4**	**204**	**155**	**1**	**6**	**881**	**110**	**1,363**	**2**	**1,400**
1985 Total	**(h)**	**28**	**3**	**232**	**178**	**2**	**6**	**908**	**62**	**1,391**	**3**	**1,421**
1990 Total	**(h)**	**36**	**3**	**268**	**223**	**1**	**7**	**967**	**80**	**1,548**	**3**	**1,588**
1995 Total	**(h)**	**38**	**3**	**307**	**222**	**1**	**6**	**1,029**	**72**	**1,639**	**3**	**1,681**
1996 Total	**(h)**	**39**	**3**	**327**	**232**	**1**	**6**	**1,047**	**67**	**1,683**	**3**	**1,725**
1997 Total	**(h)**	**41**	**3**	**342**	**234**	**1**	**6**	**1,057**	**56**	**1,699**	**3**	**1,744**
1998 Total	**(h)**	**35**	**2**	**352**	**238**	**1**	**7**	**1,090**	**53**	**1,743**	**3**	**1,782**
1999 Total	**(h)**	**36**	**3**	**366**	**245**	**1**	**7**	**1,115**	**52**	**1,789**	**3**	**1,828**
2000 Total	**(h)**	**36**	**3**	**378**	**254**	**1**	**7**	**1,121**	**70**	**1,833**	**4**	**1,872**
2001 Total	**(h)**	**35**	**2**	**387**	**243**	**1**	**6**	**1,127**	**46**	**1,813**	**4**	**1,852**
2002 Total	**(h)**	**37**	**2**	**394**	**237**	**1**	**6**	**1,158**	**53**	**1,851**	**4**	**1,892**
2003 Total	**(h)**	**33**	**2**	**409**	**231**	**1**	**6**	**1,161**	**45**	**1,856**	**5**	**1,893**
2004 Total	**(h)**	**32**	**2**	**434**	**240**	**1**	**6**	**1,185**	**58**	**1,926**	**5**	**1,962**
2005 Total	**(h)**	**33**	**2**	**444**	**246**	**2**	**6**	**1,186**	**66**	**1,953**	**5**	**1,991**
2006 Total	**(h)**	**33**	**2**	**469**	**240**	**2**	**5**	**1,194**	**71**	**1,984**	**5**	**2,022**
2007 Total	**(h)**	**35**	**2**	**472**	**238**	**1**	**6**	**1,201**	**78**	**1,999**	**5**	**2,040**
2008 Total	**(h)**	**37**	**2**	**427**	**226**	**3**	**5**	**1,146**	**73**	**1,882**	**5**	**1,924**
2009 Total	**(h)**	**38**	**2**	**408**	**204**	**2**	**5**	**1,137**	**62**	**1,820**	**5**	**1,863**
2010 Total	**(h)**	**38**	**2**	**429**	**210**	**2**	**5**	**1,125**	**70**	**1,843**	**5**	**1,886**
2011 January	(h)	5	(s)	34	17	(s)	(s)	89	6	147	(s)	152
February	(h)	4	(s)	31	15	(s)	(s)	82	6	135	(s)	139
March	(h)	4	(s)	37	17	(s)	1	93	5	154	(s)	158
April	(h)	3	(s)	36	18	(s)	(s)	91	5	150	(s)	154
May	(h)	3	(s)	38	18	(s)	(s)	93	5	156	(s)	159
June	(h)	3	(s)	38	19	(s)	(s)	93	5	156	(s)	159
July	(h)	3	(s)	38	18	(s)	(s)	96	3	157	(s)	160
August	(h)	3	(s)	40	19	(s)	(s)	94	4	158	(s)	162
September	(h)	3	(s)	37	17	(s)	(s)	90	6	150	(s)	153
October	(h)	3	(s)	38	17	(s)	(s)	92	5	152	(s)	156
November	(h)	3	(s)	36	17	(s)	(s)	87	5	146	(s)	150
December	(h)	4	(s)	35	17	(s)	(s)	92	6	150	(s)	155
Total	**(h)**	**39**	**2**	**439**	**209**	**2**	**5**	**1,093**	**61**	**1,812**	**4**	**1,855**
2012 January	(h)	4	(s)	32	16	(s)	(s)	87	5	141	(s)	146
February	(h)	4	(s)	32	16	(s)	(s)	86	4	138	(s)	142
March	(h)	3	(s)	34	17	(s)	(s)	92	5	149	(s)	152
April	(h)	3	(s)	35	16	(s)	(s)	90	5	147	(s)	151
May	(h)	3	(s)	37	18	(s)	(s)	95	3	154	(s)	157
June	(h)	3	(s)	36	19	(s)	(s)	93	4	152	(s)	155
July	(h)	3	(s)	37	18	(s)	(s)	94	5	154	(s)	158
August	(h)	3	(s)	38	18	(s)	(s)	97	4	157	(s)	161
September	(h)	3	(s)	35	17	(s)	(s)	88	3	144	(s)	147
October	(h)	3	(s)	37	17	(s)	(s)	92	3	150	(s)	153
November	(h)	3	(s)	35	17	(s)	(s)	88	3	143	(s)	147
December	(h)	4	(s)	34	17	(s)	(s)	89	2	142	(s)	146
Total	**(h)**	**41**	**2**	**422**	**206**	**2**	**5**	**1,089**	**45**	**1,771**	**4**	**1,816**
2013 January	(h)	5	(s)	34	16	(s)	(s)	87	4	142	(s)	147
February	(h)	4	(s)	31	15	(s)	(s)	81	3	130	(s)	134
March	(h)	4	(s)	35	17	(s)	(s)	91	5	149	(s)	153
April	(h)	3	(s)	36	17	(s)	(s)	90	3	146	(s)	149
May	(h)	3	(s)	37	18	(s)	(s)	95	2	153	(s)	156
June	(h)	3	(s)	37	17	(s)	(s)	92	3	150	(s)	153
6-Month Total	**(h)**	**21**	**1**	**209**	**100**	**1**	**2**	**535**	**20**	**869**	**2**	**892**
2012 6-Month Total	**(h)**	**21**	**1**	**206**	**102**	**1**	**2**	**543**	**26**	**880**	**2**	**903**
2011 6-Month Total	**(h)**	**20**	**1**	**215**	**103**	**1**	**3**	**541**	**34**	**898**	**2**	**920**

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

(s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, including the nonfuel use of fossil fuels. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

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

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum				Geo-thermal	Non-Biomass Waste[d]	Total[e]
			Distillate Fuel Oil[c]	Petroleum Coke	Residual Fuel Oil	Total			
1973 Total	**812**	**199**	**20**	**2**	**254**	**276**	**NA**	**NA**	**1,286**
1975 Total	**824**	**172**	**17**	**(s)**	**231**	**248**	**NA**	**NA**	**1,244**
1980 Total	**1,137**	**200**	**12**	**1**	**194**	**207**	**NA**	**NA**	**1,544**
1985 Total	**1,367**	**166**	**6**	**1**	**79**	**86**	**NA**	**NA**	**1,619**
1990 Total	**1,548**	**176**	**7**	**3**	**92**	**102**	**(s)**	**6**	**1,831**
1995 Total	**1,661**	**228**	**8**	**8**	**45**	**61**	**(s)**	**10**	**1,960**
1996 Total	**1,752**	**205**	**8**	**8**	**50**	**66**	**(s)**	**10**	**2,033**
1997 Total	**1,797**	**219**	**8**	**10**	**56**	**75**	**(s)**	**10**	**2,101**
1998 Total	**1,828**	**248**	**10**	**13**	**82**	**105**	**(s)**	**10**	**2,192**
1999 Total	**1,836**	**260**	**10**	**11**	**76**	**97**	**(s)**	**10**	**2,204**
2000 Total	**1,927**	**281**	**13**	**10**	**69**	**91**	**(s)**	**10**	**2,310**
2001 Total	**1,870**	**290**	**12**	**11**	**79**	**102**	**(s)**	**11**	**2,273**
2002 Total	**1,890**	**306**	**9**	**18**	**52**	**79**	**(s)**	**13**	**2,288**
2003 Total	**1,931**	**278**	**12**	**18**	**69**	**98**	**(s)**	**11**	**2,319**
2004 Total	**1,943**	**297**	**8**	**23**	**69**	**100**	**(s)**	**11**	**2,352**
2005 Total	**1,984**	**319**	**8**	**25**	**69**	**102**	**(s)**	**11**	**2,417**
2006 Total	**1,954**	**338**	**5**	**22**	**28**	**56**	**(s)**	**12**	**2,359**
2007 Total	**1,987**	**372**	**7**	**17**	**31**	**55**	**(s)**	**11**	**2,426**
2008 Total	**1,959**	**362**	**5**	**16**	**19**	**40**	**(s)**	**12**	**2,374**
2009 Total	**1,741**	**373**	**5**	**14**	**14**	**34**	**(s)**	**11**	**2,159**
2010 Total	**1,828**	**399**	**6**	**15**	**12**	**33**	**(s)**	**11**	**2,271**
2011 January	166	29	1	2	1	3	(s)	1	200
February	136	26	(s)	1	1	2	(s)	1	165
March	134	26	(s)	2	1	3	(s)	1	163
April	124	28	(s)	1	1	2	(s)	1	155
May	135	31	(s)	1	1	2	(s)	1	169
June	155	38	(s)	1	1	2	(s)	1	196
July	174	51	(s)	2	1	3	(s)	1	228
August	170	50	(s)	1	1	2	(s)	1	223
September	141	37	(s)	1	(s)	2	(s)	1	182
October	128	31	(s)	1	(s)	2	(s)	1	162
November	124	29	(s)	1	(s)	2	(s)	1	155
December	136	33	(s)	1	(s)	2	(s)	1	172
Total	**1,723**	**409**	**5**	**15**	**7**	**27**	**(s)**	**11**	**2,171**
2012 January	130	35	(s)	1	1	2	(s)	1	168
February	115	35	(s)	1	(s)	2	(s)	1	153
March	105	37	(s)	1	(s)	1	(s)	1	144
April	95	39	(s)	(s)	(s)	1	(s)	1	136
May	115	44	(s)	1	(s)	1	(s)	1	162
June	131	48	(s)	1	1	2	(s)	1	182
July	159	59	(s)	1	1	2	(s)	1	221
August	152	54	(s)	1	1	2	(s)	1	209
September	127	44	(s)	1	(s)	2	(s)	1	173
October	122	36	(s)	1	(s)	1	(s)	1	161
November	128	31	(s)	1	(s)	1	(s)	1	162
December	134	32	(s)	1	(s)	1	(s)	1	168
Total	**1,514**	**494**	**4**	**9**	**6**	**19**	**(s)**	**11**	**2,039**
2013 January	138	34	(s)	1	1	2	(s)	1	175
February	123	31	(s)	1	1	2	(s)	1	156
March	129	33	(s)	1	(s)	2	(s)	1	164
April	112	30	(s)	1	(s)	2	(s)	1	145
May	119	33	(s)	1	(s)	2	(s)	1	155
June	138	40	(s)	1	(s)	2	(s)	1	181
6-Month Total	**758**	**201**	**2**	**6**	**3**	**11**	**(s)**	**6**	**976**
2012 6-Month Total	**692**	**238**	**2**	**5**	**3**	**9**	**(s)**	**6**	**945**
2011 6-Month Total	**850**	**178**	**3**	**8**	**4**	**14**	**(s)**	**6**	**1,048**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel.
[d] Municipal solid waste from non-biogenic sources, and tire-derived fuels.
[e] Excludes emissions from biomass energy consumption. See Table 12.7.
NA=Not available. (s)=Less than 0.5 million metric tons.
Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Data exclude emissions from biomass energy consumption. See Table 12.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.
Sources: See end of section.

Table 12.7 Carbon Dioxide Emissions From Biomass Energy Consumption

(Million Metric Tons of Carbon Dioxide[a])

	By Source					By Sector					
	Wood[b]	Biomass Waste[c]	Fuel Ethanol[d]	Bio-diesel	Total	Resi-dential	Com-mercial[e]	Indus-trial[f]	Trans-portation	Electric Power[g]	Total
1973 Total	**143**	**(s)**	**NA**	**NA**	**143**	**33**	**1**	**109**	**NA**	**(s)**	**143**
1975 Total	**140**	**(s)**	**NA**	**NA**	**141**	**40**	**1**	**100**	**NA**	**(s)**	**141**
1980 Total	**232**	**(s)**	**NA**	**NA**	**232**	**80**	**2**	**150**	**NA**	**(s)**	**232**
1985 Total	**252**	**14**	**3**	**NA**	**270**	**95**	**2**	**168**	**3**	**1**	**270**
1990 Total	**208**	**24**	**4**	**NA**	**237**	**54**	**8**	**147**	**4**	**23**	**237**
1995 Total	**222**	**30**	**8**	**NA**	**260**	**49**	**9**	**166**	**8**	**28**	**260**
1996 Total	**229**	**32**	**6**	**NA**	**266**	**51**	**10**	**170**	**6**	**30**	**266**
1997 Total	**222**	**30**	**7**	**NA**	**259**	**40**	**10**	**172**	**7**	**30**	**259**
1998 Total	**205**	**30**	**8**	**NA**	**242**	**36**	**9**	**160**	**8**	**30**	**242**
1999 Total	**208**	**29**	**8**	**NA**	**245**	**37**	**9**	**161**	**8**	**30**	**245**
2000 Total	**212**	**27**	**9**	**NA**	**248**	**39**	**9**	**161**	**9**	**29**	**248**
2001 Total	**188**	**33**	**10**	**(s)**	**231**	**35**	**9**	**147**	**10**	**31**	**231**
2002 Total	**187**	**36**	**12**	**(s)**	**235**	**36**	**9**	**144**	**12**	**35**	**235**
2003 Total	**188**	**36**	**16**	**(s)**	**240**	**38**	**9**	**141**	**16**	**37**	**240**
2004 Total	**199**	**35**	**20**	**(s)**	**255**	**38**	**10**	**151**	**20**	**36**	**255**
2005 Total	**200**	**37**	**23**	**1**	**261**	**40**	**10**	**150**	**23**	**37**	**261**
2006 Total	**197**	**36**	**31**	**2**	**266**	**36**	**9**	**151**	**33**	**38**	**266**
2007 Total	**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 January	17	3	6	(s)	26	4	1	12	6	3	26
February	15	3	6	(s)	24	3	1	11	6	3	24
March	16	3	6	(s)	26	4	1	12	6	3	26
April	15	3	6	1	25	3	1	11	6	3	25
May	15	3	6	1	25	4	1	11	7	3	25
June	16	3	6	1	26	3	1	12	7	3	26
July	16	4	6	1	26	4	1	12	7	4	26
August	16	4	7	1	27	4	1	12	7	4	27
September	16	3	6	1	26	3	1	11	7	3	26
October	16	4	6	1	26	4	1	12	7	3	26
November	16	4	6	1	26	3	1	12	7	3	26
December	17	4	6	1	28	4	1	12	7	4	28
Total	**189**	**42**	**73**	**8**	**312**	**42**	**11**	**139**	**80**	**40**	**312**
2012 January	16	4	6	(s)	25	3	1	12	6	3	25
February	15	3	6	1	24	3	1	11	6	3	24
March	15	4	6	1	25	3	1	11	7	3	25
April	14	3	6	1	24	3	1	11	7	3	24
May	15	4	6	1	26	3	1	12	7	3	26
June	15	3	6	1	26	3	1	11	7	3	26
July	16	4	6	1	26	3	1	12	7	4	26
August	15	4	7	1	26	3	1	11	7	3	26
September	15	3	6	1	25	3	1	11	6	3	25
October	15	4	6	1	26	3	1	11	7	3	26
November	15	4	6	1	25	3	1	11	6	3	25
December	16	4	6	(s)	26	3	1	12	6	4	26
Total	**182**	**42**	**73**	**8**	**306**	**39**	**10**	**137**	**80**	**39**	**306**
2013 January	16	4	6	1	26	3	1	12	6	3	26
February	14	3	5	1	24	3	1	11	6	3	24
March	16	4	6	1	26	3	1	12	7	3	26
April	14	3	6	1	25	3	1	11	7	3	25
May	15	4	7	1	26	3	1	11	7	3	26
June	15	4	6	1	26	3	1	11	7	3	26
6-Month Total	**90**	**21**	**37**	**5**	**153**	**20**	**5**	**68**	**41**	**19**	**153**
2012 6-Month Total	**90**	**21**	**36**	**4**	**151**	**20**	**5**	**68**	**40**	**19**	**151**
2011 6-Month Total	**93**	**20**	**36**	**3**	**152**	**21**	**5**	**68**	**38**	**19**	**152**

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

[b] Wood and wood-derived fuels.

[c] Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

[d] Fuel ethanol minus denaturant.

[e] Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[f] Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

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

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

Notes: • Carbon dioxide emissions from biomass energy consumption are excluded from the energy-related carbon dioxide emissions reported in Tables 12.1–12.6. See Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Environment

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

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

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

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

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

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

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

Section 12 Methodology and Sources

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

Step 1. Determine Fuel Consumption

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

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

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

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

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

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

Step 2. Remove Biofuels From Petroleum

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

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

Step 3. Remove Carbon Sequestered by Nonfuel Use

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

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

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

Step 4. Determine Carbon Dioxide Emissions From Energy Consumption

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

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

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

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

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

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

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

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Appendix A

British Thermal Unit Conversion Factors

The thermal conversion factors presented in the following tables can be used to estimate the heat content in British thermal units (Btu) of a given amount of energy measured in physical units, such as barrels or cubic feet. For example, 10 barrels of asphalt has a heat content of approximately 66.36 million Btu (10 barrels x 6.636 million Btu per barrel = 66.36 million Btu).

The heat content rates (i.e., thermal conversion factors) provided in this section represent the gross (or higher or upper) energy content of the fuels. Gross heat content rates are applied in all Btu calculations for the *Monthly Energy Review* and are commonly used in energy calculations in the United States; net (or lower) heat content rates are typically used in European energy calculations. The difference between the two rates is the amount of energy that is consumed to vaporize water that is created during the combustion process. Generally, the difference ranges from 2 percent to 10 percent, depending on the specific fuel and its hydrogen content. Some fuels, such as unseasoned wood, can be more than 40 percent different in their gross and net heat content rates. See "Heat Content" and "British Thermal Unit (Btu)" in the Glossary for more information.

Thermal conversion factors for hydrocarbon mixes (Table A1) are weighted averages of the thermal conversion factors for each hydrocarbon included in the mix. For example, in calculating the thermal conversion factor for a 60-40 butane-propane mixture, the thermal conversion factor for butane is weighted 1.5 times the thermal conversion factor for propane.

In general, the annual thermal conversion factors presented in Tables A2 through A6 are computed from final annual data or from the best available data and labeled "preliminary." Often, the previous year's factor is used as a preliminary value until data become available to calculate the factor appropriate to the year. The source of each factor is described in the section entitled "Thermal Conversion Factor Source Documentation," which follows Table A6 in this appendix.

Table A1. Approximate Heat Content of Petroleum Products
(Million Btu per Barrel)

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

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

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

(Million Btu per Barrel)

	Production		Imports			Exports		
	Crude Oil[a]	Natural Gas Plant Liquids	Crude Oil[a]	Petroleum Products	Total	Crude Oil[a]	Petroleum Products	Total
1950	5.800	4.522	5.943	6.263	6.080	5.800	5.751	5.766
1955	5.800	4.406	5.924	6.234	6.040	5.800	5.765	5.768
1960	5.800	4.295	5.911	6.161	6.021	5.800	5.835	5.834
1965	5.800	4.264	5.872	6.123	5.997	5.800	5.742	5.743
1970	5.800	4.146	5.822	6.088	5.985	5.800	5.811	5.810
1975	5.800	3.984	5.821	5.935	5.858	5.800	5.747	5.748
1980	5.800	3.914	5.812	5.748	5.796	5.800	5.841	5.820
1981	5.800	3.930	5.818	5.659	5.775	5.800	5.837	5.821
1982	5.800	3.872	5.826	5.664	5.775	5.800	5.829	5.820
1983	5.800	3.839	5.825	5.677	5.774	5.800	5.800	5.800
1984	5.800	3.812	5.823	5.613	5.745	5.800	5.867	5.850
1985	5.800	3.815	5.832	5.572	5.736	5.800	5.819	5.814
1986	5.800	3.797	5.903	5.624	5.808	5.800	5.839	5.832
1987	5.800	3.804	5.901	5.599	5.820	5.800	5.860	5.858
1988	5.800	3.800	5.900	5.618	5.820	5.800	5.842	5.840
1989	5.800	3.826	5.906	5.641	5.833	5.800	5.869	5.857
1990	5.800	3.822	5.934	5.614	5.849	5.800	5.838	5.833
1991	5.800	3.807	5.948	5.636	5.873	5.800	5.827	5.823
1992	5.800	3.804	5.953	5.623	5.877	5.800	5.774	5.777
1993	5.800	3.801	5.954	5.620	5.883	5.800	5.777	5.779
1994	5.800	3.794	5.950	5.534	5.861	5.800	5.777	5.779
1995	5.800	3.796	5.938	5.483	5.855	5.800	5.740	5.746
1996	5.800	3.777	5.947	5.468	5.847	5.800	5.728	5.736
1997	5.800	3.762	5.954	5.469	5.862	5.800	5.726	5.734
1998	5.800	3.769	5.953	5.462	5.861	5.800	5.710	5.720
1999	5.800	3.744	5.942	5.421	5.840	5.800	5.684	5.699
2000	5.800	3.733	5.959	5.432	5.849	5.800	5.651	5.658
2001	5.800	3.735	5.976	5.443	5.862	5.800	5.751	5.752
2002	5.800	3.729	5.971	5.451	5.863	5.800	5.687	5.688
2003	5.800	3.739	5.970	5.438	5.857	5.800	5.739	5.740
2004	5.800	3.724	5.981	5.475	5.863	5.800	5.753	5.754
2005	5.800	3.724	5.977	5.474	5.845	5.800	5.741	5.743
2006	5.800	3.712	5.980	5.454	5.842	5.800	5.723	5.724
2007	5.800	3.701	5.985	5.503	5.862	5.800	5.749	5.750
2008	5.800	3.706	5.990	5.479	5.866	5.800	5.762	5.762
2009	5.800	3.692	5.988	5.525	5.882	5.800	5.737	5.738
2010	5.800	3.674	5.989	5.557	5.894	5.800	5.670	5.672
2011	5.800	3.672	6.008	5.507	5.896	5.800	5.596	5.599
2012[P]	5.800	3.684	6.021	5.485	5.915	5.800	5.584	5.588
2013[E]	5.800	3.684	6.021	5.485	5.915	5.800	5.584	5.588

[a] Includes lease condensate.

P=Preliminary. E=Estimate.

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

Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#appendices for all data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#appendices for all data beginning in 1973.

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

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Table A3. Approximate Heat Content of Petroleum Consumption and Biofuels Production

(Million Btu per Barrel)

	Total Petroleum[a] Consumption by Sector						Liquefied Petroleum Gases Consumption[f]	Motor Gasoline Consumption[g]	Fuel Ethanol[h]	*Fuel Ethanol Feedstock Factor*[i]	Biodiesel	*Biodiesel Feedstock Factor*[j]
	Residential	Commercial[b]	Industrial[b]	Transportation[b,c]	Electric Power[d,e]	Total[b,c]						
1950	5.473	5.817	5.953	5.461	6.254	5.649	4.011	5.253	NA	*NA*	NA	*NA*
1955	5.469	5.781	5.881	5.407	6.254	5.591	4.011	5.253	NA	*NA*	NA	*NA*
1960	5.417	5.781	5.818	5.387	6.267	5.555	4.011	5.253	NA	*NA*	NA	*NA*
1965	5.364	5.760	5.748	5.386	6.267	5.532	4.011	5.253	NA	*NA*	NA	*NA*
1970	5.260	5.708	5.595	5.393	6.252	5.503	[f] 3.779	5.253	NA	*NA*	NA	*NA*
1975	5.253	5.649	5.513	5.392	6.250	5.494	3.715	5.253	NA	*NA*	NA	*NA*
1980	5.321	5.751	5.366	5.441	6.254	5.479	3.674	5.253	3.563	*6.586*	NA	*NA*
1981	5.283	5.693	5.299	5.433	6.258	5.448	3.643	5.253	3.563	*6.562*	NA	*NA*
1982	5.266	5.698	5.247	5.423	6.258	5.415	3.615	5.253	3.563	*6.539*	NA	*NA*
1983	5.140	5.591	5.254	5.416	6.255	5.406	3.614	5.253	3.563	*6.515*	NA	*NA*
1984	5.307	5.657	5.207	5.418	6.251	5.395	3.599	5.253	3.563	*6.492*	NA	*NA*
1985	5.263	5.598	5.199	5.423	6.247	5.387	3.603	5.253	3.563	*6.469*	NA	*NA*
1986	5.268	5.632	5.269	5.426	6.257	5.418	3.640	5.253	3.563	*6.446*	NA	*NA*
1987	5.239	5.594	5.233	5.429	6.249	5.403	3.659	5.253	3.563	*6.423*	NA	*NA*
1988	5.257	5.597	5.228	5.433	6.250	5.410	3.652	5.253	3.563	*6.400*	NA	*NA*
1989	5.194	5.549	5.219	5.438	[d] 6.240	5.410	3.683	5.253	3.563	*6.377*	NA	*NA*
1990	5.145	5.553	5.253	5.442	6.244	5.411	3.625	5.253	3.563	*6.355*	NA	*NA*
1991	5.094	5.528	5.167	5.441	6.246	5.384	3.614	5.253	3.563	*6.332*	NA	*NA*
1992	5.124	5.513	5.168	5.443	6.238	5.378	3.624	5.253	3.563	*6.309*	NA	*NA*
1993	5.102	[b] 5.505	[b] 5.178	[b] 5.436	6.230	[b] 5.379	3.606	5.253	3.563	*6.287*	NA	*NA*
1994	5.098	5.515	5.150	5.424	6.213	5.361	3.635	[g] 5.230	3.563	*6.264*	NA	*NA*
1995	5.063	5.478	5.121	5.417	6.188	5.341	3.623	5.215	3.563	*6.242*	NA	*NA*
1996	4.998	5.433	5.114	5.420	6.195	5.336	3.613	5.216	3.563	*6.220*	NA	*NA*
1997	4.989	5.391	5.120	5.416	6.199	5.336	3.616	5.213	3.563	*6.198*	NA	*NA*
1998	4.975	5.365	5.137	5.413	6.210	5.349	3.614	5.212	3.563	*6.176*	NA	*NA*
1999	4.902	5.291	5.092	5.413	6.205	5.328	3.616	5.211	3.563	*6.167*	NA	*NA*
2000	4.908	5.316	5.057	5.422	6.189	5.326	3.607	5.210	3.563	*6.159*	NA	*NA*
2001	4.937	5.325	5.142	5.412	6.199	5.345	3.614	5.210	3.563	*6.151*	5.359	*5.433*
2002	4.886	5.293	5.093	5.411	6.173	5.324	3.613	5.208	3.563	*6.143*	5.359	*5.433*
2003	4.921	5.316	5.144	5.407	6.182	5.340	3.629	5.207	3.563	*6.116*	5.359	*5.433*
2004	4.953	5.328	5.144	5.421	6.192	5.350	3.618	5.215	3.563	*6.089*	5.359	*5.433*
2005	4.916	5.364	5.178	5.427	6.188	5.365	3.620	5.218	3.563	*6.063*	5.359	*5.433*
2006	4.894	5.310	5.160	5.431	6.143	5.353	3.605	5.218	3.563	*6.036*	5.359	*5.433*
2007	4.850	5.298	5.127	5.434	6.151	5.346	3.591	5.219	3.563	*6.009*	5.359	*5.433*
2008	4.790	5.186	5.154	5.424	6.123	5.339	3.600	5.218	3.563	*5.983*	5.359	*5.433*
2009	4.679	5.250	5.019	[c] 5.414	6.105	[c] 5.301	3.558	5.218	3.563	*5.957*	5.359	*5.433*
2010	4.679	5.228	4.985	5.423	6.084	5.297	3.557	5.218	3.561	*5.931*	5.359	*5.433*
2011	4.658	5.219	4.949	5.425	6.058	5.286	3.541	5.218	3.560	*5.905*	5.359	*5.433*
2012	[E] 4.630	[E] 5.185	[E] 4.933	[E] 5.416	[P] 6.064	[P] 5.272	[P] 3.539	[P] 5.219	[P] 3.560	*5.880*	5.359	*5.433*
2013	[E] 4.630	[E] 5.185	[E] 4.933	[E] 5.416	[E] 6.064	[E] 5.272	[E] 3.539	[E] 5.219	[E] 3.560	*5.880*	5.359	*5.433*

[a] Petroleum products supplied, including natural gas plant liquids and crude oil burned directly as fuel. Quantity-weighted averages of the petroleum products included in each category are calculated by using heat content values shown in Table A1.

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

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

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

[e] Electric power sector factors are weighted average heat contents for distillate fuel oil, petroleum coke, and residual fuel oil; they exclude other liquids.

[f] 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.

[g] There is a discontinuity in this time series between 1993 and 1994; beginning in 1994, the single constant factor is replaced by a quantity-weighted factor—quantity-weighted averages of the major components of motor gasoline, including fuel ethanol, are calculated by using heat content values shown in Table A1.

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

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

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

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

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

Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#appendices for all data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#appendices for all data beginning in 1973.

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

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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	1,094	1,022	1,022	1,021	1,022	1,025	1,009
2012	[E] 1,094	[E] 1,022	[E] 1,022	[P] 1,022	[E] 1,022	[E] 1,025	[E] 1,009
2013	[E] 1,094	[E] 1,022	[E] 1,022	[E] 1,022	[E] 1,022	[E] 1,025	[E] 1,009

[a] Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels.
[b] Residential, commercial, industrial, and transportation sectors.
[c] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

P=Preliminary. E=Estimate. – – =Not applicable.

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

Web Pages: • See http://www.eia.gov/totalenergy/data/annual/#appendices for all data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#appendices for all data beginning in 1973.

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

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

	Coal									Coal Coke
			Consumption							
				Industrial Sector						
	Production[a]	Waste Coal Supplied[b]	Residential and Commercial Sectors[c]	Coke Plants	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] 21.887	26.281	22.348	19.713	19.977	25.000	25.399	24.800
2009	19.963	12.076	22.059	26.334	21.893	19.521	19.742	25.000	25.633	24.800
2010	20.173	11.960	21.826	26.296	21.005	19.623	19.829	25.000	25.713	24.800
2011	20.142	11.604	21.179	26.300	21.738	19.341	19.605	25.000	25.645	24.800
2012	[E] 20.142	[E] 11.604	[E] 21.179	[E] 26.300	[E] 21.738	[P] 19.223	[E] 19.508	[E] 25.000	[E] 25.645	[E] 24.800
2013	[E] 20.142	[E] 11.604	[E] 21.179	[E] 26.300	[E] 21.738	[E] 19.223	[E] 19.508	[E] 25.000	[E] 25.645	[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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#appendices for all data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#appendices for all data beginning in 1973.

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

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

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	10,421	10,125	3,412
2004	10,331	10,571	8,647	10,016	10,427	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	10,436	9,919	3,412
2007	10,375	10,794	8,403	9,884	10,485	9,884	3,412
2008	10,378	11,015	8,305	9,854	10,453	9,854	3,412
2009	10,414	10,923	8,160	9,760	10,460	9,760	3,412
2010	10,415	10,984	8,185	9,756	10,452	9,756	3,412
2011	10,444	10,829	8,152	9,716	10,464	9,716	3,412
2012	[E] 10,444	[E] 10,829	[E] 8,152	[E] 9,716	[E] 10,464	[E] 9,716	3,412
2013	[E] 10,444	[E] 10,829	[E] 8,152	[E] 9,716	[E] 10,464	[E] 9,716	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 Pages: • See http://www.eia.gov/totalenergy/data/annual/#appendices for all data from 1949–1972. • See http://www.eia.gov/totalenergy/data/monthly/#appendices for all data beginning in 1973.
Sources: See "Thermal Conversion Factor Source Documentation," which follows this table.

Selected years of data from 1949 through 1972 have been added to this table. For all years of data from 1949 through 2013, see the "Web Pages" cited above.

Thermal Conversion Factor Source Documentation

Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

Asphalt. The U.S. Energy Information Administration (EIA) adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Aviation Gasoline. EIA adopted the thermal conversion factor of 5.048 million Btu per barrel as adopted by the Bureau of Mines from the Texas Eastern Transmission Corporation publication *Competition and Growth in American Energy Markets 1947–1985*, a 1968 release of historical and projected statistics.

Butane. EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Butane-Propane Mixture. EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See **Butane** and **Propane**.

Crude Oil Exports. Assumed by EIA to be 5.800 million Btu per barrel or equal to the thermal conversion factor for crude oil produced in the United States. See **Crude Oil Production**.

Crude Oil Imports. Calculated annually by EIA as the average of the thermal conversion factors for each type of crude oil imported weighted by the quantities imported. Thermal conversion factors for each type were calculated on a foreign country basis, by determining the average American Petroleum Institute (API) gravity of crude oil imported from each foreign country from Form ERA-60 in 1977 and converting average API gravity to average Btu content by using National Bureau of Standards, Miscellaneous Publication No. 97, *Thermal Properties of Petroleum Products*, 1933.

Crude Oil Production. EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Distillate Fuel Oil. EIA adopted the Bureau of Mines thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Ethane. EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Ethane-Propane Mixture. EIA calculation of 3.308 million Btu per barrel based on an assumed mixture of 70 percent ethane and 30 percent propane. See **Ethane** and **Propane**.

Isobutane. EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Jet Fuel, Kerosene-Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for "Jet Fuel, Commercial" as published by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947–1985*, a 1968 release of historical and projected statistics.

Jet Fuel, Naphtha-Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for "Jet Fuel, Military" as published by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947–1985*, a 1968 release of historical and projected statistics.

Kerosene. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Liquefied Petroleum Gases Consumption. • 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 Consumption. • 1949–1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947–1985*, a 1968 release of historical and projected statistics. • 1994 forward: EIA calculated

national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (see Table A3). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, "Fuel Economy Impact Analysis of Reformulated Gasoline." See **Fuel Ethanol (Denatured).**

Natural Gas Plant Liquids Production. Calculated annually by EIA as the average of the thermal conversion factors for each natural gas plant liquid produced weighted by the quantities produced.

Natural Gasoline. EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Pentanes Plus. EIA assumed the thermal conversion factor to be 4.620 million Btu or equal to that for natural gasoline. See **Natural Gasoline**.

Petrochemical Feedstocks, Naphtha less than 401° F. Assumed by EIA to be 5.248 million Btu per barrel or equal to the thermal conversion factor for special naphthas. See **Special Naphthas**.

Petrochemical Feedstocks, Other Oils equal to or greater than 401° F. Assumed by EIA to be 5.825 million Btu per barrel or equal to the thermal conversion factor for distillate fuel oil. See **Distillate Fuel Oil**.

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

Petroleum Coke. EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950." The Bureau of Mines calculated this factor by dividing 30.120 million Btu per short ton, as given in the referenced Bureau of Mines internal memorandum, by 5.0 barrels per short ton, as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

Petroleum Consumption, Commercial Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the commercial sector weighted by the estimated quantities consumed by the commercial sector. The quantities of petroleum products consumed by the commercial sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/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 all petroleum products consumed by the electric power sector weighted by the quantities consumed by the electric power sector. Data are from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

Petroleum Consumption, Industrial Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the industrial sector weighted by the estimated quantities consumed by the industrial sector. The quantities of petroleum products consumed by the industrial sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/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. EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel as

published in the *California Oil World and Petroleum Industry,* First Issue, April 1942.

Residual Fuel Oil. EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Road Oil. EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, which was assumed to be equal to that of asphalt (see **Asphalt**) and was first published by the Bureau of Mines in the *Petroleum Statement, Annual, 1970*.

Special Naphthas. EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, which was assumed to be equal to that of the total gasoline (aviation and motor) factor and was first published in the *Petroleum Statement, Annual, 1970*.

Still Gas. EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel, first published in the *Petroleum Statement, Annual, 1970*.

Total Petroleum Exports. Calculated annually by EIA as the average of the thermal conversion factors for crude oil and each petroleum product exported weighted by the quantities exported. See **Crude Oil Exports** and **Petroleum Products Exports**.

Total Petroleum Imports. Calculated annually by EIA as the average of the thermal conversion factors for each type of crude oil and petroleum product imported weighted by the quantities imported. See **Crude Oil Imports** and **Petroleum Products Imports**.

Unfinished Oils. EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel or equal to that for distillate fuel oil (see **Distillate Fuel Oil**) and first published it in EIA's *Annual Report to Congress, Volume 3, 1977*.

Unfractionated Stream. EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see **Plant Condensate**) and first published it in EIA's *Annual Report to Congress, Volume 2, 1981*.

Waxes. EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Approximate Heat Content of Biofuels

Biodiesel. EIA estimated the thermal conversion factor for biodiesel to be 5.359 million Btu per barrel, or 17,253 Btu per pound.

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

Ethanol (Undenatured). EIA adopted the thermal conversion factor of 3.539 million Btu per barrel published in "Oxygenate Flexibility for Future Fuels," a paper presented by William J. Piel of the ARCO Chemical Company at the National Conference on Reformulated Gasolines and Clean Air Act Implementation, Washington, D.C., October 1991.

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

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

Approximate Heat Content of Natural Gas

Natural Gas Consumption, Electric Power Sector. Calculated annually by EIA by dividing the heat content of natural gas consumed by the electric power sector by the quantity consumed. Data are from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

Natural Gas Consumption, End-Use Sectors. Calculated annually by EIA by dividing the heat content of natural gas consumed by the end-use sectors (residential, commercial, industrial, and transportation) by the quantity consumed. Data are from Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Natural Gas Consumption, Total. • 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. Calculated annually by EIA by dividing the heat content of coal consumed by coke plants by the quantity consumed. Data are from Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants."

Coal Consumption, Industrial Sector, Other. Calculated annually by EIA by dividing the heat content of coal consumed by manufacturing plants by the quantity consumed. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."

Coal Consumption, Residential and Commercial Sectors. Calculated annually by EIA by dividing the heat content of coal consumed by the residential and commercial sectors by the quantity consumed. Through 1999, data are from Form EIA-6, "Coal Distribution Report." Beginning in 2000, data are for commercial combined-heat-and-power (CHP) plants from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

Coal Consumption, Total. Calculated annually by EIA by dividing the total heat content of coal consumed by all sectors by the total quantity consumed.

Coal Exports. Calculated annually by EIA by dividing the heat content of steam coal and metallurgical coal exported by the quantity exported. Data are from U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Coal Imports. • 1949–1963: Calculated annually by EIA by dividing the heat content of coal imported by the quantity imported. • 1964 forward: Assumed by EIA to be 25.000 million Btu per short ton**.**

Coal Production. Calculated annually by EIA to balance the heat content of coal supply (production and imports) and the heat content of coal disposition (exports, stock change, and consumption).

Waste Coal Supplied. Calculated annually by EIA by dividing the total heat content of waste coal supplied by the quantity supplied. For 1989–1997, data are from Form EIA-867, "Annual Nonutility Power Producer Report." For 1998–2000, data are from Form EIA-860B, "Annual Electric Generator Report—Nonutility." For 2001 forward, data are from Form EIA-3, "Quarterly Coal Consumption and Quality

Report—Manufacturing Plants"; Form EIA-923, "Power Plant Operations Report"; and predecessor forms.

Approximate Heat Rates for Electricity

Electricity Net Generation, Coal. • 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-923, "Power Plant Operations Report," and predecessor forms. The computation includes data for 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).

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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.

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Glossary

Alcohol: The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a **hydrocarbon** plus a hydroxyl group; $CH(3)-(CH(2))_n-OH$ (e.g., **methanol**, **ethanol**, and tertiary butyl alcohol). See **Fuel Ethanol.**

Alternative Fuel: Alternative fuels, for transportation applications, include the following: **methanol**; denatured **ethanol**, and other **alcohols**; fuel mixtures containing 85 percent or more by volume of methanol, denatured ethanol, and other alcohols with **motor gasoline** or other fuels; **natural gas**; **liquefied petroleum gas** (**propane**); **hydrogen**; **coal**-derived liquid fuels; fuels (other than alcohol) derived from biological materials (**biofuels** such as soy **diesel fuel**); **electricity** (including electricity from **solar energy**); and "... any other fuel the Secretary determines, by rule, is substantially not **petroleum** and would yield substantial energy security benefits and substantial environmental benefits." The term "alternative fuel" does not include alcohol or other blended portions of primarily petroleum-based fuels used as **oxygenates** or extenders, i.e., **MTBE**, ETBE, other ethers, and the 10-percent ethanol portion of **gasohol**.

Alternative-Fuel Vehicle (AFV): A vehicle designed to operate on an **alternative fuel** (e.g., compressed **natural gas**, **methane** blend, or **electricity**). The vehicle could be either a dedicated vehicle designed to operate exclusively on alternative fuel or a nondedicated vehicle designed to operate on alternative fuel and/or a traditional fuel.

Anthracite: The highest rank of **coal**; used primarily for residential and commercial space heating. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). *Note:* Since the 1980's, anthracite refuse or mine waste has been used for steam-electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.

Anthropogenic: Made or generated by a human or caused by human activity. The term is used in the context of global **climate change** to refer to gaseous emissions that are the result of human activities, as well as other potentially climate-altering activities, such as deforestation.

Asphalt: A dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

ASTM: The American Society for Testing and Materials.

Aviation Gasoline Blending Components: Naphthas that will be used for blending or compounding into finished aviation gasoline (e.g., straight run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Aviation Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

Barrel (Petroleum): A unit of volume equal to 42 U.S. Gallons.

Base Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

Biodiesel: A fuel typically made from soybean, canola, or other vegetable oils; animal fats; and recycled grease. It can serve as a substitute for **petroleum**-derived **diesel fuel** or **distillate fuel oil**. For U.S. Energy Information Administration reporting, it is a fuel composed of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM (American Society for Testing & Materials) D 6751.

Biofuels: Liquid fuels and blending components produced from **biomass** (plant) feedstocks, used primarily for transportation. See **Biodiesel** and **Fuel Ethanol**.

Biogenic: Produced by biological processes of living organisms. Note: EIA uses the term “biogenic” to refer only to organic nonfossil material of biological origin.

Biomass: Organic non-fossil material of biological origin constituting a **renewable energy** source. See **Biodiesel**,

Biofuels, **Biomass Waste, Fuel Ethanol**, and **Wood and Wood-Derived Fuels.**

Biomass Waste: Organic non-fossil material of biological origin that is a byproduct or a discarded product. "Biomass waste" includes municipal solid waste from **biogenic** sources, landfill gas, sludge waste, agricultural crop byproducts, straw, and other **biomass** solids, liquids, and gases; but excludes **wood and wood-derived fuels** (including **black liquor**), **biofuels** feedstock, **biodiesel**, and **fuel ethanol**. **Note:** EIA "biomass waste" data also include energy crops grown specifically for energy production, which would not normally constitute waste.

Bituminous Coal: A dense **coal**, usually black, sometimes dark brown, often with well-defined bands of bright and dull material, used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make **coke**. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Black Liquor: A byproduct of the paper production process, alkaline spent liquor, that can be used as a source of energy. Alkaline spent liquor is removed from the digesters in the process of chemically pulping wood. After evaporation, the residual "black" liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.

British Thermal Unit (Btu): The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit). See **Heat Content**.

Btu: See **British Thermal Unit.**

Btu Conversion Factor: A factor for converting **energy** data between one unit of measurement and **British thermal units (Btu)**. Btu conversion factors are generally used to convert energy data from physical units of measure (such as **barrels**, **cubic feet**, or **short tons**) into the energy-equivalent measure of Btu. (See http://www.eia.gov/totalenergy/data/monthly/#appendices for further information on Btu conversion factors.)

Butane: A normally gaseous straight-chain or branched-chain hydrocarbon (C_4H_{10}). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Isobutane: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9º F. It is extracted from natural gas or refinery gas streams.

Normal Butane: A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1º F. It is extracted from natural gas or refinery gas streams.

Butylene: An olefinic hydrocarbon (C_4H_8) recovered from refinery processes.

Capacity Factor: The ratio of the electrical energy produced by a generating unit for a given period of time to the electrical energy that could have been produced at continuous full-power operation during the same period.

Carbon Dioxide (CO_2): A colorless, odorless, non-poisonous gas that is a normal part of Earth's atmosphere. Carbon dioxide is a product of **fossil-fuel** combustion as well as other processes. It is considered a **greenhouse gas** as it traps heat (infrared energy) radiated by the Earth into the atmosphere and thereby contributes to the potential for **global warming**. The **global warming potential** (GWP) of other greenhouse gases is measured in relation to that of carbon dioxide, which by international scientific convention is assigned a value of one (1).

Chained Dollars: A measure used to express **real prices**. Real prices are those that have been adjusted to remove the effect of changes in the purchasing power of the dollar; they usually reflect buying power relative to a reference year. Prior to 1996, real prices were expressed in constant dollars, a measure based on the weights of goods and services in a single year, usually a recent year. In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period and is therefore subject to less distortion over time.

CIF: See **Cost, Insurance, Freight**.

Citygate: A point or measuring station at which a distribution gas utility receives gas from a natural gas pipeline company or transmission system.

Climate Change: A term used to refer to all forms of climatic inconsistency, but especially to significant change from one prevailing climatic condition to another. In some cases, "climate change" has been used synonymously with the term **"global warming"**; scientists, however, tend to use the term in a wider sense inclusive of natural changes in climate, including climatic cooling.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time. See **Anthracite, Bituminous Coal**, **Lignite**, **Subbituminous Coal**, **Waste Coal**, and **Coal Synfuel**.

Coal Coke: See **Coke, Coal**.

Coal Stocks: Coal quantities that are held in storage for future use and disposition. Note: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of the period.

Coal Synfuel: **Coal**-based solid fuel that has been processed by a **coal synfuel plant**; and coal-based fuels such as briquettes, pellets, or extrusions, which are formed from fresh or recycled coal and binding materials.

Coal Synfuel Plant: A plant engaged in the chemical transformation of **coal** into **coal synfuel**.

Coke, Coal: A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000º F so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke (coal) has a heating value of 24.8 million Btu per ton.

Coke, Petroleum: A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (42 U.S. gallons each) per short ton. Coke (petroleum) has a heating value of 6.024 million Btu per barrel.

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

Combined-Heat-and-Power (CHP) Plant: A plant designed to produce both heat and electricity from a single heat source. Note: This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

Commercial Sector: An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; federal, state, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. *Note*: This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments. Various EIA programs differ in sectoral coverage-for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebcom.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

Completion: The installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir, the definition of a well (classified as an oil well or gas well) and the definition of a completion are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a well is not synonymous with a completion.

Conventional 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): A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60º F.

Degree-Day Normals: Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1961-1990). The averages may be simple degree-day normals or population-weighted degree-day normals.

Degree-Days, Cooling (CDD): A measure of how warm a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the base temperature (65 degrees) from the average of the day's high and low temperatures, with negative values set equal to zero. Each day's cooling degree-days are summed to create a cooling degree-day measure for a specified reference period. Cooling degree-days are used in energy analysis as an indicator of air conditioning energy requirements or use.

Degree-Days, Heating (HDD): A measure of how cold a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the average of the day's high and low temperatures from the base temperature (65 degrees), with negative values set equal to zero. Each day's heating degree-days are summed to create a heating degree-day measure for a specified reference period. Heating degree-days are used in energy analysis as an indicator of space heating energy requirements or use.

Degree-Days, Population-Weighted: Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute state population-weighted degree-days, each state is divided into from one to nine climatically homogeneous divisions, which are assigned weights based on the ratio of the population of the division to the total population of the state. Degree-day readings for each division are multiplied by the corresponding population weight for each division and those products are then summed to arrive at the state population-weighted degree-day figure. To compute national population-weighted degree-days, the nation is divided into nine Census regions, each comprising from three to eight states, which are assigned weights based on the ratio of the population of the region to the total population of the nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and those products are then summed to arrive at the national population-weighted degree-day figure.

Denaturant: Petroleum, typically **pentanes plus** or **conventional motor gasoline**, added to **fuel ethanol** to make it unfit for human consumption. Fuel ethanol is denatured, usually prior to transport from the ethanol production facility, by adding 2 to 5 volume percent denaturant. See **Fuel Ethanol** and **Fuel Ethanol Minus Denaturant**.

Design Electrical Rating, Net: The nominal net electrical output of a nuclear unit as specified by the electric utility for the purpose of plant design.

Development Well: A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

Diesel Fuel: A fuel composed of **distillate fuel oils** obtained in petroleum refining operation or blends of such

distillate fuel oils with **residual fuel oil** used in motor vehicles. The boiling point and specific gravity are higher for diesel fuels than for gasoline.

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

Distillate Fuel Oil: A general classification for one of the **petroleum** fractions produced in conventional distillation operations. It includes **diesel fuels** and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and **electricity generation**.

Dry Hole: An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

Dry Natural Gas Production: See **Natural Gas (Dry) Production**.

E85: A fuel containing a mixture of 85 percent **ethanol** and 15 percent **motor gasoline**.

Electric Power Plant: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Power Sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public-i.e., North American Industry Classification System 22 plants. See also **Combined-Heat-and-Power (CHP) Plant**, **Electricity-Only Plant**, **Electric Utility**, and **Independent Power Producer**.

Electric Utility: Any entity that generates, transmits, or distributes **electricity** and recovers the cost of its generation, transmission or distribution assets and operations, either directly or indirectly, through cost-based rates set by a separate regulatory authority (e.g., State Public Service Commission), or is owned by a governmental unit or the consumers that the entity serves. Examples of these entities include: investor-owned entities, public power districts, public utility districts, municipalities, rural electric cooperatives, and state and federal agencies. Electric utilities may have Federal Energy Regulatory Commission approval for interconnection agreements and wholesale trade tariffs covering either cost-of-service and/or market-based rates under the authority of the Federal Power Act. See **Electric Power Sector**.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

Electricity: A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.

Electricity Generation: The process of producing electric energy, or the amount of electric energy produced by transforming other forms of energy, commonly expressed in **kilowatthours** (kWh) or megawatthours (Mwh).

Electricity Generation, Gross: The total amount of electric energy produced by generating units and measured at the generating terminal in **kilowatthours** (kWh) or megawatthours (MWh).

Electricity Generation, Net: The amount of **gross electricity generation** less **station use** (the **electric energy** consumed at the generating station(s) for station service or auxiliaries). *Note*: Electricity required for pumping at **hydroelectric pumped-storage** plants is regarded as electricity for station service and is deducted from gross generation.

Electricity-Only Plant: A plant designed to produce electricity only. See also **Combined-Heat-and-Power (CHP) Plant**.

Electricity Retail Sales: The amount of electricity sold to customers purchasing electricity for their own use and not for resale.

End-Use Sectors: The **residential**, **commercial**, **industrial**, and **transportation** sectors of the economy.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy Consumption: The use of energy as a source of heat or power or as an input in the manufacturing process.

Energy Service Provider: An energy entity that provides service to a retail or end-use customer.

Energy-Use Sectors: A group of major energy-consuming components of U.S. society developed to measure and analyze energy use. The sectors most commonly referred to in EIA are: **residential**, **commercial**, **industrial**, **transportation**, and **electric power**.

Ethane: A normally gaseous straight-chain hydrocarbon (C_2H_6). It is a colorless, paraffinic gas that boils at a temperature of -127.48º F. It is extracted from natural gas and refinery gas streams.

Ethanol (C_2H_5OH): A clear, colorless, flammable **alcohol**. Ethanol is typically produced biologically from **biomass** feedstocks such as agricultural crops and cellulosic residues from agricultural crops or wood. Ethanol can also be produced chemically from **ethylene**. See **Biomass**, **Fuel Ethanol**, and **Fuel Ethanol Minus Denaturant**.

Ethylene: An olefinic hydrocarbon (C2H4) recovered from refinery processes or petrochemical processes.

Exploratory Well: A well drilled to find and produce oil or gas in an area previously considered an unproductive area, to find a new reservoir in a known field (i.e., one previously found to be producing oil or gas in another reservoir), or to extend the limit of a known oil or gas reservoir.

Exports: Shipments of goods from within the 50 states and the District of Columbia to U.S. possessions and territories or to foreign countries.

Extraction Loss: The reduction in volume of natural gas due to the removal of natural gas liquid constituents, such as ethane, propane, and butane, at natural gas processing plants.

Federal Energy Administration (FEA): A predecessor of the U.S. Energy Information Administration.

Federal Energy Regulatory Commission (FERC): The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the U.S. Department of Energy and is the successor to the Federal Power Commission.

Federal Power Commission (FPC): The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the U.S. Department of Energy was created. Its functions were divided between the U.S. Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

First Purchase Price: The price for domestic crude oil reported by the company that owns the crude oil the first time it is removed from the lease boundary.

Flared Natural Gas: Natural gas burned in flares on the base site or at gas processing plants.

F.O.B. (Free on Board): A sales transaction in which the seller makes the product available for pick up at a specified port or terminal at a specified price and the buyer pays for the subsequent transportation and insurance.

Footage Drilled: Total footage for wells in various categories, as reported for any specified period, includes (1) the deepest total depth (length of well bores) of all wells drilled from the surface, (2) the total of all bypassed footage drilled in connection with reported wells, and (3) all new footage drilled for directional sidetrack wells. Footage reported for directional sidetrack wells does not include footage in the common bore, which is reported as footage for the original well. In the case of old wells drilled deeper, the reported footage is that which was drilled below the total depth of the old well.

Former U.S.S.R.: See **Union of Soviet Socialist Republics (U.S.S.R.).**

Fossil Fuel: An energy source formed in the Earth's crust from decayed organic material, such as **petroleum**, **coal**, and **natural gas**.

Fossil-Fueled Steam-Electric Power Plant: An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

Fuel Ethanol: Ethanol intended for fuel use. Fuel ethanol in the United States must be anhydrous (less than 1 percent water). Fuel ethanol is denatured (made unfit for human consumption), usually prior to transport from the ethanol production facility, by adding 2 to 5 volume percent petroleum, typically **pentanes plus** or **conventional motor gasoline**. Fuel ethanol is used principally for blending in low concentrations with **motor gasoline** as an **oxygenate** or octane enhancer. In high concentrations, it is used to fuel **alternative-fuel vehicles** specially designed for its use. See **Alternative-Fuel Vehicle**, **Denaturant**, **E85**, **Ethanol**, **Fuel Ethanol Minus Denaturant**, and **Oxygenates**.

Fuel Ethanol Minus Denaturant: An unobserved quantity of anhydrous, **biomass**-derived, undenatured **ethanol** for fuel use. The quantity is obtained by subtracting the estimated **denaturant** volume from **fuel ethanol** volume. Fuel ethanol minus denaturant is counted as **renewable energy**, while denaturant is counted as **nonrenewable fuel**. See **Denaturant**, **Ethanol**, **Fuel Ethanol**, **Nonrenewable Fuels**, **Oxygenates**, and **Renewable Energy**.

Full-Power Operation: Operation of a nuclear generating unit at 100 percent of its design capacity. Full-power operation precedes commercial operation.

Gasohol: A blend of finished motor gasoline containing alcohol (generally **ethanol** but sometimes methanol) at a

concentration between 5.7 percent and 10 percent by volume. See **Motor Gasoline, Oxygenated**.

Gas Well: A well completed for the production of natural gas from one or more gas zones or reservoirs. (Wells producing both crude oil and natural gas are classified as oil wells.)

Geothermal Energy: Hot water or steam extracted from geothermal reservoirs in the earth's crust and used for geothermal heat pumps, water heating, or electricity generation.

Global Warming: An increase in the near-surface temperature of the Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is today most often used to refer to the warming some scientists predict will occur as a result of increased **anthropogenic** emissions of **greenhouse gases**. See **Climate Change**.

Global Warming Potential (GWP): An index used to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. GWPs are calculated as the ratio of the radiative forcing that would result from the emission of one kilogram of a **greenhouse gas** to that from the emission of one kilogram of **carbon dioxide** over a fixed period of time, such as 100 years.

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

Gross Domestic Product (GDP): The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.

GT/IC: Gas turbine and internal combustion plants.

Heat Content: The amount of heat energy available to be released by the transformation or use of a specified physical unit of an energy form (e.g., a ton of coal, a barrel of oil, a kilowatthour of electricity, a cubic foot of natural gas, or a pound of steam). The amount of heat energy is commonly expressed in **British thermal units (Btu)**. *Note*: Heat content of combustible energy forms can be expressed in terms of either gross heat content (higher or upper heating value) or net heat content (lower heating value), depending upon whether or not the available heat energy includes or excludes the energy used to vaporize water (contained in the original energy form or created during the combustion process). The U.S. Energy Information Administration typically uses gross heat content values.

Heat Rate: A measure of generating station thermal efficiency commonly stated as **Btu** per **kilowatthour**. *Note:* Heat rates can be expressed as either gross or net heat rates, depending whether the electricity output is gross or net generation. Heat rates are typically expressed as net heat rates.

Hydrocarbon: An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from the simplest (methane, the primary constituent of natural gas) to the very heavy and very complex.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Hydroelectric Power Plant: A plant in which the turbine generators are driven by falling water.

Hydroelectric Pumped Storage: Hydroelectricity that is generated during peak load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Hydrogen (H): The lightest of all gases, hydrogen occurs chiefly in combination with oxygen in water. It also exists in acids, bases, **alcohols**, **petroleum**, and other **hydrocarbons**.

Imports: Receipts of goods into the 50 states and the District of Columbia from U.S. possessions and territories or from foreign countries.

Independent Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an **electric utility**.

Industrial Sector: An **energy**-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (**NAICS** codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes **generators** that produce **electricity** and/or **useful thermal output** primarily to support the above-mentioned industrial activities. Various EIA programs differ in sectoral coverage-for more information see

http://www.eia.gov/neic/datadefinitions/Guideforwebind.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

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

Isobutane: A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams. See **Butane**.

Isobutylene: An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isopentane: A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Jet Fuel: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

Jet Fuel, Kerosene-Type: A kerosene-based product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It isused primarily for commercial turbojet and turboprop aircraft engines.

Jet Fuel, Naphtha-Type: A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290° to 470° F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

Kerosene: A petroleum distillate having a maximum distillation temperature of 401º F at the 10-percent recovery point, a final boiling point of 572º F, and a minimum flash point of 100º F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

Kilowatt: A unit of electrical power equal to 1,000 **watts**.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 **kilowatt** (1,000 **watts**) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu. See **Watthour**.

Landed Costs: The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).

Lease and Plant Fuel: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. Note: This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

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

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

Liquefied Petroleum Gases (LPG): Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

Low-Power Testing: The period of time between a nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during that period is 5 percent of the unit's design thermal rating.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Lubricant categories are paraffinic and naphthenic.

Marketed Production (Natural Gas): Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations.

Methane: A colorless, flammable, odorless, hydrocarbon gas (CH_4) that is the principal constituent of natural gas. It is also an important source of hydrogen in various industrial processes.

Methyl Tertiary Butyl Ether (MTBE): An ether, $(CH_3)_3COCH_3$, intended for motor gasoline blending. See **Oxygenates**.

Methanol: A light, volatile alcohol (CH_3OH) eligible for motor gasoline blending. See **Oxygenates**.

Miscellaneous Petroleum Products: All finished petroleum products not classified elsewhere-for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline Blending: Mechanical mixing of **motor gasoline blending components** and **oxygenates** as required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components: Naphtha (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. *Note*: oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Motor Gasoline, 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 hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122ºF to 158ºF at the 10-percent recovery point to 365ºF to 374ºF at the 90-percent recovery point. "Motor gasoline" includes conventional gasoline, all types of oxygenated gasoline including gasohol, and reformulated gasoline, but excludes aviation gasoline. Note: Volumetric data on blending components, as well as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

Motor Gasoline Grades: The classification of gasoline by octane ratings. Each type of gasoline (conventional, oxygenated, and reformulated) is classified by three grades: regular, midgrade, and premium. *Note*: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.

Regular Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Midgrade Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Premium Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Motor Gasoline, Oxygenated: Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 2.7 percent or higher by weight and required by the U.S. Environmental Protection Agency (EPA) to be sold in areas designated by EPA as carbon monoxide (CO) nonattainment areas. Note: Oxygenated gasoline excludes oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB). Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside CO nonattainment areas are included in data on oxygenated gasoline. Other data on gasohol are included in data on conventional gasoline.

Motor Gasoline, Reformulated: Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. Note: This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Motor Gasoline Retail Prices: Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). Those prices are collected in 85 urban areas selected to represent all urban consumers-about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those

providing all types of service (i.e., full-, mini-, and self-service.

Motor Gasoline (Total): For stock level data, a sum including finished motor gasoline stocks plus stocks of motor gasoline blending components but excluding stocks of oxygenates.

MTBE: See **Methyl Tertiary Butyl Ether**.

NAICS (North American Industry Classification System): A coding system developed jointly by the United States, Canada, and Mexico to classify businesses and industries according to the type of economic activity in which they are engaged. NAICS replaces the Standard Industrial Classification (SIC) codes. For additional information on NAICS, go to http://www.census.gov/eos/www/naics/.

Naphtha: A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400º F.

Natural Gas: A gaseous mixture of hydrocarbon compounds, primarily methane, used as a fuel for electricity generation and in a variety of ways in buildings, and as raw material input and fuel for industrial processes.

Natural Gas, Dry: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. *Note:* Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Natural Gas (Dry) Production: The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the production site include 1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and 2) gas vented and flared. Processing losses include 1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and 2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less extraction loss.

Natural Gas Marketed Production: Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring; nonhydrocarbon gases removed in treating and processing operations; and quantities vented and flared.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Material as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Wellhead Price: The wellhead price of natural gas is calculated by dividing the total reported value at the wellhead by the total quantity produced as reported by the appropriate agencies of individual producing states and the U.S. Minerals Management Service. The price includes all costs prior to shipment from the lease, including gathering and compression costs, in addition to state production, severance, and similar charges.

Natural Gasoline: A mixture of hydrocarbons (mostly pentanes and heavier) extracted from natural gas that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Summer Capacity: The maximum output, commonly expressed in **kilowatts** (kW) or megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of June 1 through September 30). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

Neutral Zone: A 6,200 square-mile area shared equally between Kuwait and Saudi Arabia under a 1992 agreement. The Neutral Zone contains an estimated 5 billion barrels of oil and 8 trillion cubic feet of natural gas.

Nominal Dollars: A measure used to express **nominal price**.

Nominal Price: The price paid for a product or service at the time of the transaction. Nominal prices are those that have not been adjusted to remove the effect of changes in the purchasing power of the dollar; they reflect buying power in the year in which the transaction occurred.

Non-Biomass Waste: Material of non-biological origin that is a byproduct or a discarded product. "Non-biomass waste" includes municipal solid waste from non-biogenic sources**,** such as plastics, and tire-derived fuels.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Nonrenewable Fuels: Fuels that cannot be easily made or "renewed," such as **crude oil**, **natural gas**, and **coal**.

Nuclear Electric Power (Nuclear Power): Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.

Nuclear Electric Power Plant: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

Nuclear Reactor: An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

OECD: See **Organization for Economic Cooperation and Development**.

Offshore: That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

Oil: See **Crude Oil**.

OPEC: See **Organization of the Petroleum Exporting Countries.**

Operable Unit (Nuclear): In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

Organization for Economic Cooperation and Development (OECD): An international organization helping governments tackle the economic, social and governance challenges of a globalized economy. Its membership comprises about 30 member countries. With active relationships with some 70 other countries, non-governmental organizations (NGOs) and civil society, it has a global reach. For details about the organization, see http://www.oecd.org.

Organization of the Petroleum Exporting Countries (OPEC): An intergovernmental organization whose stated objective is to "coordinate and unify the petroleum policies of member countries." It was created at the Baghdad Conference on September 10–14, 1960. Current members (with years of membership) include Algeria (1969–present), Angola (2007–present), Ecuador (1973–1992 and 2007–present), Iran (1960–present), Iraq (1960–present), Kuwait (1960–present), Libya (1962–present), Nigeria (1971–present), Qatar (1961–present), Saudi Arabia (1960–present), United Arab Emirates (1967–present), and Venezuela (1960–present). Countries no longer members of OPEC include Gabon (1975–1994) and Indonesia (1962–2008).

Oxygenates: Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. **Ethanol, Methyl Tertiary Butyl Ether (MTBE),** Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

PAD Districts: Petroleum Administration for Defense Districts. Geographic aggregations of the 50 states and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

Pentanes Plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Petrochemical Feedstocks: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics.

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: See **Coke, Petroleum**.

Petroleum Consumption: See **Products Supplied (Petroleum).**

Petroleum Imports: Imports of petroleum into the 50 states and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include

unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Stocks, Primary: For individual products, quantities that are held at refineries, in pipelines, and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.

Photovoltaic Energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquid at gas inlet separators or scrubbers in processing plants.

Primary Energy: **Energy** in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy. For example, **coal** can be converted to synthetic gas, which can be converted to **electricity**; in this example, coal is primary energy, synthetic gas is secondary energy, and electricity is tertiary energy. See **Primary Energy Production** and **Primary Energy Consumption**.

Primary Energy Consumption: Consumption of **primary energy**. (Energy sources that are produced from other energy sources—e.g., **coal coke** from **coal**—are included in primary energy consumption only if their energy content has not already been included as part of the original energy source. Thus, U.S. primary energy consumption does include net imports of coal coke, but not the coal coke produced from domestic coal.) The U.S. Energy Information Administration includes the following in U.S. primary energy consumption: coal consumption; coal coke net imports; **petroleum consumption** (**petroleum products supplied**, including **natural gas plant liquids** and **crude oil** burned as fuel); **dry natural gas**—excluding **supplemental gaseous fuels**—consumption; **nuclear electricity net generation** (converted to **Btu** using the nuclear plants **heat rate**); **conventional hydroelectricity** net generation (converted to Btu using the fossil-fueled plants heat rate); **geothermal** electricity net generation (converted to Btu using the 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.

Products Supplied (Petroleum): Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas-processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted-for crude oil (plus net receipts when calculated on a PAD District basis) minus stock change, minus crude oil losses, minus refinery inputs, and minus exports.

Propane: A normally gaseous straight-chain hydrocarbon (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67º F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene: An olefinic hydrocarbon (C_3H_6) recovered from refinery or petrochemical processes.

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

Real Price: A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices, which are expressed in constant dollars, usually reflect buying power relative to a base year.

Refiner Acquisition Cost of Crude Oil: The cost of crude oil to the refiner, including transportation and fees. The composite cost is the weighted average of domestic and imported crude oil costs.

Refinery and Blender Net Inputs: Raw materials, **unfinished oils**, and blending components processed at refineries, or blended at refineries or petroleum storage terminals to produce finished **petroleum products**. Included are gross inputs of **crude oil**, **natural gas plant liquids**, other **hydrocarbon** raw materials, **hydrogen**, **oxygenates** (excluding **fuel ethanol**), and renewable fuels (including fuel ethanol). Also included are net inputs of unfinished oils, **motor gasoline blending components**, and **aviation gasoline blending components**. Net inputs are calculated as gross inputs minus gross production. Negative net inputs indicate gross inputs are less than gross production. Examples of negative net inputs include reformulated gasoline blendstock for oxygenate blending (RBOB) produced at refineries for shipment to blending terminals, and unfinished oils produced and added to inventory in advance of scheduled maintenance of a refinery crude oil distillation unit.

Refinery and Blender Net Production: Liquefied refinery gases, and finished **petroleum products** produced at a **refinery** or petroleum storage terminal blending facility. Net production equals gross production minus gross inputs. Negative net production indicates gross production is less than gross inputs for a finished petroleum product. Examples of negative net production include reclassification of one finished product to another finished product, or reclassification of a finished product to **unfinished oils** or blending components.

Refinery (Petroleum): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Refuse Mine: A surface site where **coal** is recovered from previously mined coal. It may also be known as a silt bank, culm bank, refuse bank, slurry dam, or dredge operation.

Refuse Recovery: The recapture of **coal** from a **refuse mine** or the coal recaptured by that process. The resulting product has been cleaned to reduce the concentration of noncombustible materials.

Renewable Energy: Energy obtained from sources that are essentially inexhaustible (unlike, for example, the **fossil fuels**, of which there is a finite supply). Renewable sources of energy include **conventional hydroelectric power**, **biomass**, **geothermal**, **solar**, and **wind**.

Repressuring: The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

Residential Sector: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. *Note:* Various EIA programs differ in sectoral coverage for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebres.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

Residual Fuel Oil: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, for electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

Road Oil: Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

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

Short Ton (Coal): A unit of weight equal to 2,000 pounds.

SIC (Standard Industrial Classification): A set of codes developed by the U.S. Office of Management and Budget which categorizes industries into groups with similar economic activities. Replaced by **NAICS (North American Industry Classification System)**.

Solar Energy: See **Solar Thermal Energy** and **Photovoltaic Energy**.

Solar Thermal Energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or **electricity**.

Special Naphthas: All finished products within the naphtha boiling ranges that are used as paint thinner, cleaners or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are

to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

Station Use: Energy that is used to operate an **electric power plant**. It includes energy consumed for plant lighting, power, and auxiliary facilities, regardless of whether the energy is produced at the plant or comes from another source.

Steam Coal: All nonmetallurgical coal.

Steam-Electric Power Plant: A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Still Gas (Refinery Gas): Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and, petrochemical feedstock.

Stocks: See **Coal Stocks**, **Crude Oil Stocks**, or **Petroleum Stocks, Primary**.

Strategic Petroleum Reserve (SPR): Petroleum stocks maintained by the federal Government for use during periods of major supply interruption.

Subbituminous Coal: A **coal** whose properties range from those of **lignite** to those of **bituminous coal** and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Supplemental Gaseous Fuels: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to **natural gas**, resulting from the conversion or reforming of **hydrocarbons** that may easily be substituted for or interchanged with pipeline-quality natural gas.

Thermal Conversion Factor: A factor for converting data between physical units of measure (such as **barrels**, **cubic feet**, or **short tons**) and thermal units of measure (such as **British thermal units**, calories, or joules); or for converting data between different thermal units of measure. See **Btu Conversion Factor.**

Total Energy Consumption: **Primary energy consumption** in the **end-use sectors**, plus **electricity retail sales** and **electrical system energy losses**.

Transportation Sector: An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. Note: Various EIA programs differ in sectoral coverage-for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebtrans.htm See **End-Use Sectors** and **Energy-Use Sectors**.

Underground Storage: The storage of natural gas in underground reservoirs at a different location from which it was produced.

Unfinished Oils: All oils requiring further refinery processing except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Stream: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

Union of Soviet Socialist Republics (U.S.S.R.): A political entity that consisted of 15 constituent republics: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. The U.S.S.R. ceased to exist as of December 31, 1991.

United States: The 50 states and the District of Columbia. Note: The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 states and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

Useful Thermal Output: The thermal energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

U.S.S.R.: See **Union of Soviet Socialist Republics (U.S.S.R.).**

Vented Natural Gas: Gas released into the air on the production site or at processing plants.

Vessel Bunkering: Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

Waste Coal: Usable material that is a byproduct of previous **coal** processing operations. Waste coal is usually composed of mixed coal, soil, and rock (mine waste). Most waste coal is burned as-is in unconventional fluidized-bed combustors. For some uses, waste coal may be partially cleaned by removing some extraneous noncombustible constituents. Examples of waste coal include fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste.

Waste: See **Biomass Waste** and **Non-Biomass Waste**.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A watt is equal to 1/746 horsepower.

Watthour (Wh): The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.

Waxes: Solid or semisolid material derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

Wellhead Price: The value of crude oil or natural gas at the mouth of the well.

Wind Energy: Kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.

Wood and Wood-Derived Fuels: Wood and products derived from wood that are used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, paper pellets, railroad ties, utility poles, **black liquor**, red liquor, sludge wood, spent sulfite liquor, and other wood-based solids and liquids.

Working Gas: The volume of gas in a reservoir that is in addition to the base gas. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.