DOE/EIA-0035(2012/11)

November 2012

Monthly Energy Review

Independent Statistics & Analysis
U.S. Energy Information Administration

www.eia.gov/mer

Monthly Energy Review

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

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

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

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

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

Important Notes About the Data

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

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

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

Electronic Access

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

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

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

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

Released: November 28, 2012

DOE/EIA-0035(2012/11)

Monthly Energy Review

November 2012

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

Contacts

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

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

Section	**1.**	**Energy Overview**	Dianne R. Dunn	202-586-2792 dianne.dunn@eia.gov
Section	**2.**	**Energy Consumption by Sector**	Dianne R. Dunn	202-586-2792 dianne.dunn@eia.gov
Section	**3.**	**Petroleum**	Jennifer Barrick	202-586-6254 jennifer.barrick@eia.gov
Section	**4.**	**Natural Gas**	Amy Sweeney	202-586-2627 amy.sweeney@eia.gov
Section	**5.**	**Crude Oil and Natural Gas Resource Development**	Robert F. King	202-586-4787 robert.king@eia.gov
Section	**6.**	**Coal**	Nicholas Paduano	202-287-6326 nicholas.paduano@eia.gov
Section	**7.**	**Electricity**	Ronald S. Hankey	202-586-2630 ronald.hankey@eia.gov
Section	**8.**	**Nuclear Energy**	Michael P. Mobilia	202-287-6318 michael.mobilia@eia.gov
Section	**9.**	**Energy Prices**		
		Petroleum	Maureen Klein	202-586-8013 maureen.klein@eia.gov
		Natural Gas	Amy Sweeney	202-586-2627 amy.sweeney@eia.gov
		Average Retail Prices of Electricity	Charlene Harris-Russell	202-586-2661 charlene.harris-russell@eia.gov
		Cost of Fuel at Electric Generating Plants	Rebecca Peterson	202-586-4509 rebecca.peterson@eia.gov
Section	**10.**	**Renewable Energy**	Gwendolyn Bredehoeft	202-586-5847 gwendolyn.bredehoeft@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

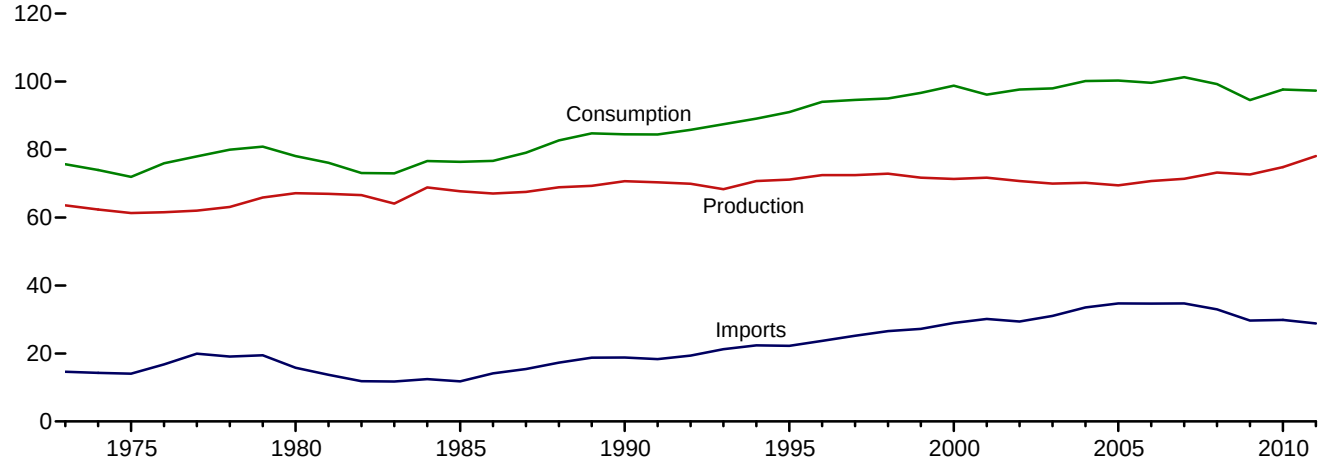
Figures

Figures

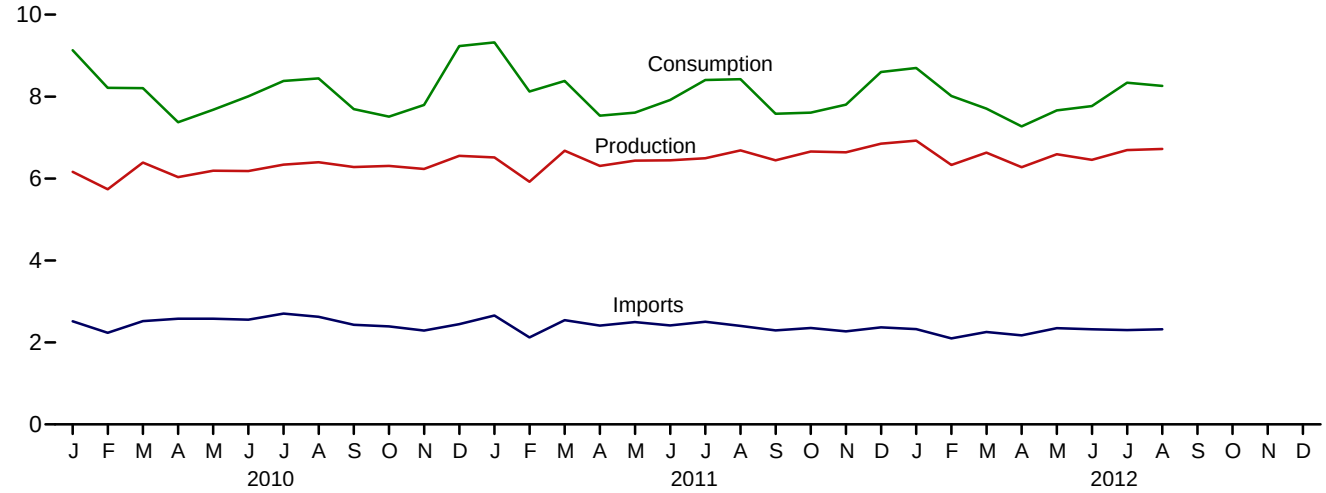
1. Energy Overview

Figure 1.1 Primary Energy Overview
(Quadrillion Btu)

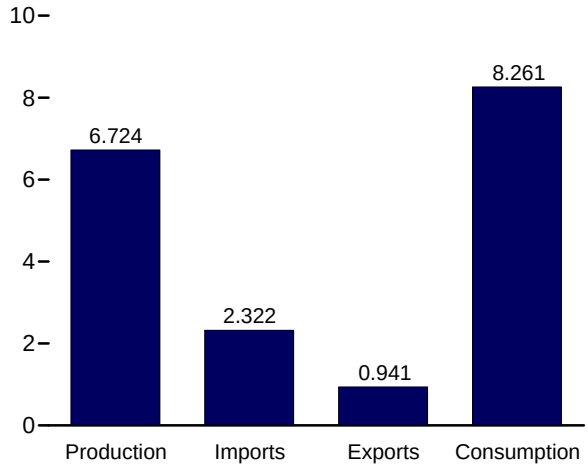
Consumption, Production, and Imports, 1973-2011



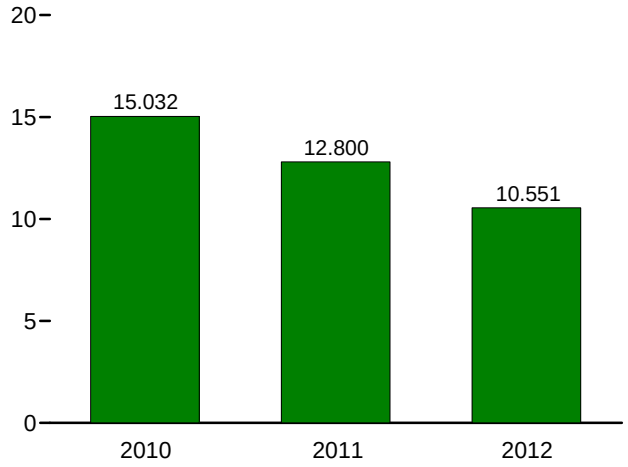
Consumption, Production, and Imports, Monthly



Overview, August 2012



Net Imports, January-August



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

Table 1.1 Primary Energy Overview

(Quadrillion Btu)

	Production				Trade			Stock Change and Other[d]	Consumption			
	Fossil Fuels[a]	Nuclear Electric Power	Renewable Energy[b]	Total	Imports	Exports	Net Imports[c]		Fossil Fuels[e]	Nuclear Electric Power	Renewable Energy[b]	Total[f]
1973 Total	**58.241**	**0.910**	**4.411**	**63.563**	**14.613**	**2.033**	**12.580**	**-0.459**	**70.314**	**0.910**	**4.411**	**75.684**
1975 Total	**54.733**	**1.900**	**4.687**	**61.320**	**14.032**	**2.323**	**11.709**	**-1.065**	**65.357**	**1.900**	**4.687**	**71.965**
1980 Total	**59.008**	**2.739**	**5.428**	**67.175**	**15.796**	**3.695**	**12.101**	**-1.210**	**69.828**	**2.739**	**5.428**	**78.067**
1985 Total	**57.539**	**4.076**	**6.084**	**67.698**	**11.781**	**4.196**	**7.584**	**1.110**	**66.093**	**4.076**	**6.084**	**76.392**
1990 Total	**58.560**	**6.104**	**6.041**	**70.705**	**18.817**	**4.752**	**14.065**	**-.284**	**72.332**	**6.104**	**6.041**	**84.485**
1995 Total	**57.540**	**7.075**	**6.558**	**71.174**	**22.260**	**4.511**	**17.750**	**2.105**	**77.259**	**7.075**	**6.560**	**91.029**
1996 Total	**58.387**	**7.087**	**7.012**	**72.486**	**23.702**	**4.633**	**19.069**	**2.468**	**79.785**	**7.087**	**7.014**	**94.022**
1997 Total	**58.857**	**6.597**	**7.018**	**72.472**	**25.215**	**4.514**	**20.701**	**1.429**	**80.873**	**6.597**	**7.016**	**94.602**
1998 Total	**59.314**	**7.068**	**6.494**	**72.876**	**26.581**	**4.299**	**22.281**	**-.140**	**81.369**	**7.068**	**6.493**	**95.018**
1999 Total	**57.614**	**7.610**	**6.517**	**71.742**	**27.252**	**3.715**	**23.537**	**1.372**	**82.427**	**7.610**	**6.516**	**96.652**
2000 Total	**57.366**	**7.862**	**6.104**	**71.332**	**28.973**	**4.006**	**24.967**	**2.515**	**84.731**	**7.862**	**6.106**	**98.814**
2001 Total	**58.541**	**8.029**	**5.164**	**71.735**	**30.157**	**3.771**	**26.386**	**-1.953**	**82.902**	**8.029**	**5.163**	**96.168**
2002 Total	**56.834**	**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**	**5.982**	**69.962**	**31.061**	**4.054**	**27.007**	**1.009**	**84.014**	**7.959**	**5.983**	**97.978**
2004 Total	**55.930**	**8.222**	**6.070**	**70.222**	**33.544**	**4.434**	**29.110**	**.830**	**85.819**	**8.222**	**6.082**	**100.162**
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**	**6.509**	**71.400**	**34.703**	**5.482**	**29.221**	**.675**	**86.211**	**8.455**	**6.523**	**101.296**
2008 Total	**57.588**	**8.427**	**7.202**	**73.217**	**32.992**	**7.060**	**25.932**	**.125**	**83.549**	**8.427**	**7.186**	**99.275**
2009 Total	**56.669**	**8.356**	**7.616**	**72.641**	**29.706**	**6.965**	**22.741**	**-.822**	**78.488**	**8.356**	**7.600**	**94.559**
2010 January	4.734	.758	.672	6.164	2.516	.590	1.926	1.042	7.697	.758	.662	9.132
February	4.446	.682	.610	5.738	2.237	.556	1.681	.793	R 6.914	.682	.605	8.213
March	5.032	.676	.682	6.389	2.519	.654	1.865	R -.050	6.846	.676	.673	8.205
April	4.774	.602	.661	6.036	2.580	.686	1.894	-.558	6.104	.602	.657	7.372
May	4.777	.697	.717	6.191	2.578	.704	1.874	R -.388	6.261	.697	.715	R 7.677
June	4.716	.714	.753	6.182	2.556	.684	1.872	-.047	6.530	.714	.755	R 8.007
July	4.888	.752	.701	6.341	2.705	.716	1.989	R .052	6.920	.752	.701	R 8.382
August	4.987	.748	.662	6.396	2.627	.698	1.929	.119	7.030	.748	.660	R 8.444
September	4.930	.725	.626	6.280	2.431	.675	1.757	R -.344	R 6.344	.725	.622	7.694
October	5.004	.656	.646	6.306	2.390	.714	1.676	-.473	R 6.208	.656	.643	7.509
November	4.896	.655	.682	6.233	2.289	.760	1.529	.035	6.464	.655	.676	7.797
December	5.058	.770	.726	6.554	2.447	.797	1.650	1.027	7.732	.770	.720	9.231
Total	**58.241**	**8.434**	**8.136**	**74.812**	**29.877**	**8.234**	**21.643**	R **1.208**	R **81.051**	**8.434**	**8.090**	R **97.664**
2011 January	R 5.005	R .761	R .747	R 6.514	2.655	.841	1.814	R .993	R 7.819	R .761	R .731	R 9.321
February	4.533	R .678	R .710	R 5.921	2.122	.759	1.363	R .840	R 6.736	R .678	R .703	8.125
March	R 5.176	R .687	R .816	R 6.679	2.543	.880	1.663	R .039	R 6.880	R .687	R .805	8.381
April	R 4.923	R .571	R .813	R 6.306	2.412	.878	1.534	R -.308	R 6.151	R .571	R .804	R 7.533
May	R 5.009	R .597	R .832	R 6.438	2.497	.847	1.650	R -.478	R 6.175	R .597	R .826	R 7.610
June	R 4.936	R .683	R .824	R 6.443	2.417	.818	1.599	R -.125	R 6.400	R .683	R .824	R 7.917
July	R 4.948	R .757	R .792	R 6.497	2.505	.854	1.651	R .259	R 6.851	R .757	R .782	R 8.407
August	R 5.197	.746	R .742	R 6.685	2.405	.879	1.526	R .215	R 6.923	.746	R .741	R 8.426
September	R 5.067	R .700	R .677	R 6.444	2.294	.892	1.402	R -.264	R 6.201	R .700	R .670	R 7.581
October	R 5.290	R .663	R .708	R 6.660	2.351	.891	1.460	R -.511	R 6.238	R .663	R .699	R 7.609
November	5.226	R .675	R .738	R 6.638	2.272	.894	1.378	R -.214	R 6.394	R .675	R .727	7.803
December	R 5.330	R .752	R .770	R 6.852	2.370	1.026	1.344	R .404	R 7.076	R .752	R .760	R 8.599
Total	R **60.640**	R **8.269**	R **9.169**	R **78.077**	**28.842**	**10.458**	**18.384**	R **.850**	R **79.842**	R **8.269**	R **9.073**	R **97.311**
2012 January	R 5.382	.757	R .785	R 6.924	2.326	.864	1.462	R .312	R 7.168	.757	R .763	R 8.699
February	R 4.964	R .668	R .701	R 6.333	2.099	.838	1.262	R .419	R 6.646	R .668	R .690	R 8.014
March	R 5.193	R .646	R .795	R 6.633	2.255	.964	1.291	R -.218	R 6.264	R .646	R .786	R 7.706
April	R 4.923	R .585	R .770	R 6.278	2.174	1.000	1.174	R -.180	R 5.908	R .585	R .767	R 7.272
May	R 5.126	R .650	R .816	R 6.592	R 2.350	1.012	R 1.339	R -.266	R 6.184	R .650	R .816	R 7.665
June	R 4.995	R .682	R .780	R 6.457	2.321	.999	1.322	R -.011	6.293	R .682	R .779	R 7.768
July	R 5.222	.723	.751	R 6.696	2.303	.982	1.320	R .323	R 6.845	.723	.753	R 8.340
August	5.282	.728	.713	6.724	2.322	.941	1.381	.156	6.795	.728	.719	8.261
8-Month Total	**41.086**	**5.439**	**6.113**	**52.637**	**18.151**	**7.600**	**10.551**	**.536**	**52.104**	**5.439**	**6.071**	**63.724**
2011 8-Month Total	**39.727**	**5.480**	**6.276**	**51.483**	**19.556**	**6.756**	**12.800**	**1.436**	**53.934**	**5.480**	**6.217**	**65.718**
2010 8-Month Total	**38.353**	**5.628**	**5.457**	**49.438**	**20.319**	**5.287**	**15.032**	**.963**	**54.302**	**5.628**	**5.428**	**65.433**

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

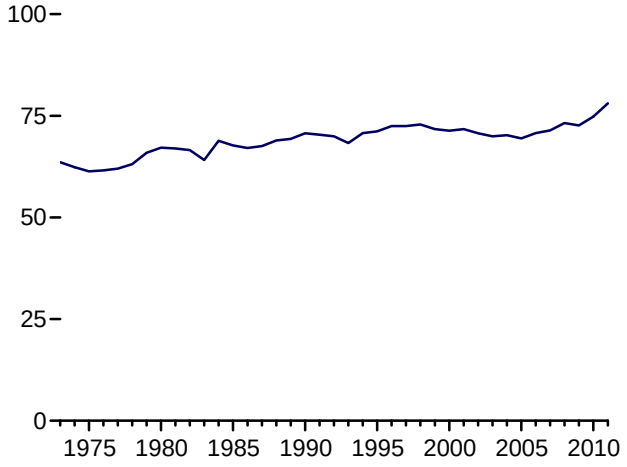
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

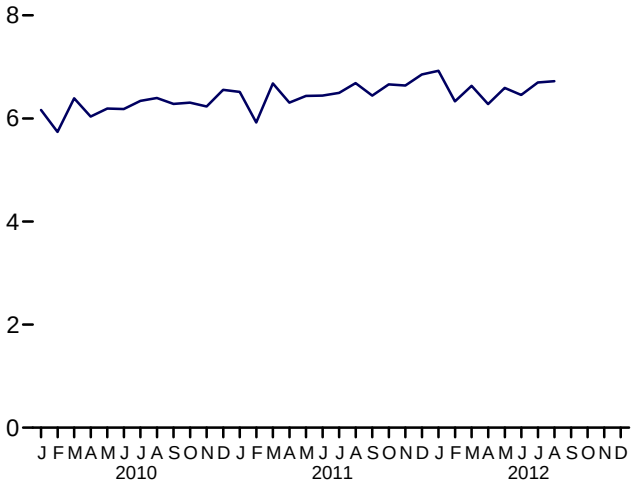
Sources: • **Production:** Table 1.2. • **Trade:** Tables 1.4a and 1.4b. • **Stock Change and Other:** Calculated as consumption minus production and net imports. • **Consumption:** Table 1.3.

Figure 1.2 Primary Energy Production
(Quadrillion Btu)

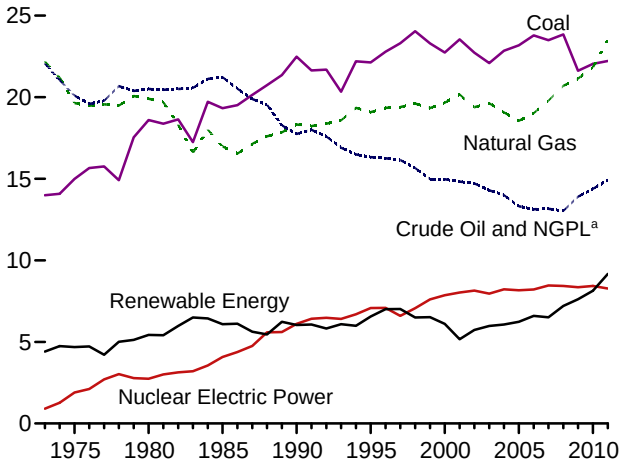
Total, 1973-2011



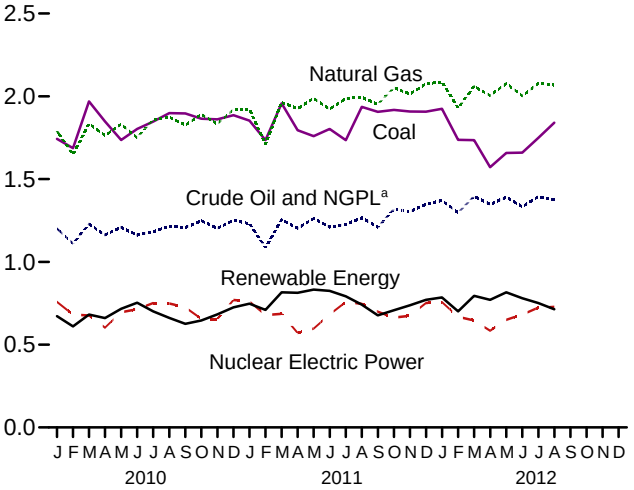
Total, Monthly



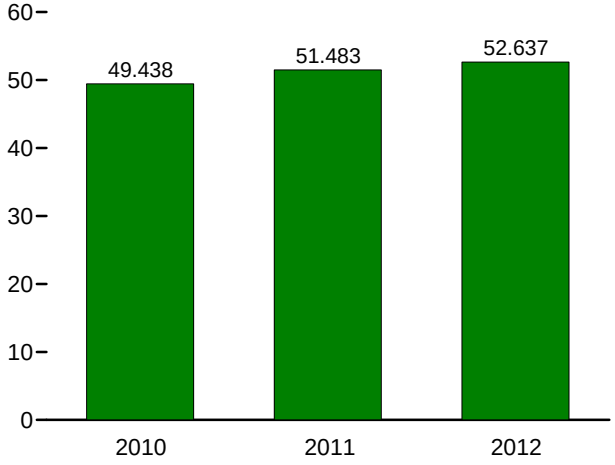
By Source, 1973-2011



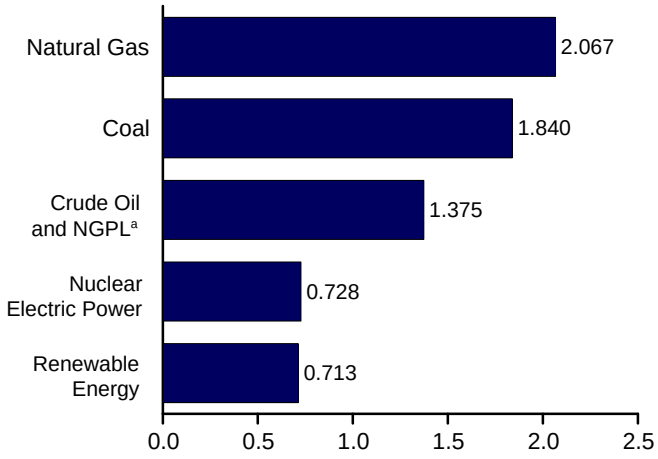
By Source, Monthly



Total, January-August



By Source, August 2012



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

Table 1.2 Primary Energy Production by Source

(Quadrillion Btu)

	Fossil Fuels					Nuclear Electric Power	Renewable Energy[a]						Total
	Coal[b]	Natural Gas (Dry)	Crude Oil[c]	NGPL[d]	Total		Hydro-electric Power[e]	Geo-thermal	Solar/ PV	Wind	Bio-mass	Total	
1973 Total	**13.992**	**22.187**	**19.493**	**2.569**	**58.241**	**0.910**	**2.861**	**0.020**	**NA**	**NA**	**1.529**	**4.411**	**63.563**
1975 Total	**14.989**	**19.640**	**17.729**	**2.374**	**54.733**	**1.900**	**3.155**	**.034**	**NA**	**NA**	**1.499**	**4.687**	**61.320**
1980 Total	**18.598**	**19.908**	**18.249**	**2.254**	**59.008**	**2.739**	**2.900**	**.053**	**NA**	**NA**	**2.475**	**5.428**	**67.175**
1985 Total	**19.325**	**16.980**	**18.992**	**2.241**	**57.539**	**4.076**	**2.970**	**.097**	**(s)**	**(s)**	**3.016**	**6.084**	**67.698**
1990 Total	**22.488**	**18.326**	**15.571**	**2.175**	**58.560**	**6.104**	**3.046**	**.171**	**.059**	**.029**	**2.735**	**6.041**	**70.705**
1995 Total	**22.130**	**19.082**	**13.887**	**2.442**	**57.540**	**7.075**	**3.205**	**.152**	**.069**	**.033**	**3.099**	**6.558**	**71.174**
1996 Total	**22.790**	**19.344**	**13.723**	**2.530**	**58.387**	**7.087**	**3.590**	**.163**	**.070**	**.033**	**3.155**	**7.012**	**72.486**
1997 Total	**23.310**	**19.394**	**13.658**	**2.495**	**58.857**	**6.597**	**3.640**	**.167**	**.070**	**.034**	**3.108**	**7.018**	**72.472**
1998 Total	**24.045**	**19.613**	**13.235**	**2.420**	**59.314**	**7.068**	**3.297**	**.168**	**.069**	**.031**	**2.929**	**6.494**	**72.876**
1999 Total	**23.295**	**19.341**	**12.451**	**2.528**	**57.614**	**7.610**	**3.268**	**.171**	**.068**	**.046**	**2.965**	**6.517**	**71.742**
2000 Total	**22.735**	**19.662**	**12.358**	**2.611**	**57.366**	**7.862**	**2.811**	**.164**	**.066**	**.057**	**3.006**	**6.104**	**71.332**
2001 Total	**23.547**	**20.166**	**12.282**	**2.547**	**58.541**	**8.029**	**2.242**	**.164**	**.064**	**.070**	**2.624**	**5.164**	**71.735**
2002 Total	**22.732**	**19.382**	**12.160**	**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**	**2.825**	**.175**	**.062**	**.115**	**2.805**	**5.982**	**69.962**
2004 Total	**22.852**	**19.074**	**11.538**	**2.466**	**55.930**	**8.222**	**2.690**	**.178**	**.063**	**.142**	**2.998**	**6.070**	**70.222**
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**	**3.461**	**6.509**	**71.400**
2008 Total	**23.851**	**20.703**	**10.615**	**2.419**	**57.588**	**8.427**	**2.511**	**.192**	**.089**	**.546**	**3.864**	**7.202**	**73.217**
2009 Total	**21.624**	**21.139**	**11.332**	**2.574**	**56.669**	**8.356**	**2.669**	**.200**	**.098**	**.721**	**3.928**	**7.616**	**72.641**
2010 January	1.743	1.790	.971	.230	4.734	.758	.218	.018	.010	.067	.359	.672	6.164
February	1.687	1.648	.901	.210	4.446	.682	.201	.016	.009	.053	.332	.610	5.738
March	1.969	1.835	.991	.236	5.032	.676	.204	.018	.010	.084	.366	.682	6.389
April	1.848	1.763	.936	.227	4.774	.602	.186	.017	.010	.095	.351	.661	6.036
May	1.736	1.832	.971	.238	4.777	.697	.245	.018	.011	.085	.358	.717	6.191
June	1.802	1.751	.937	.226	4.716	.714	.291	.017	.011	.079	.355	.753	6.182
July	1.847	1.859	.955	.227	4.888	.752	.239	.017	.011	.066	.367	.701	6.341
August	1.898	1.874	.979	.236	4.987	.748	.196	.018	.011	.065	.371	.662	6.396
September	1.897	1.826	.976	.232	4.930	.725	.168	.017	.011	.069	.360	.626	6.280
October	1.864	1.892	1.006	.242	5.004	.656	.173	.017	.010	.077	.369	.646	6.306
November	1.860	1.833	.967	.235	4.896	.655	.191	.017	.010	.095	.369	.682	6.233
December	1.886	1.920	1.009	.242	5.058	.770	.226	.018	.010	.088	.383	.726	6.554
Total	**22.038**	**21.823**	**11.598**	**2.781**	**58.241**	**8.434**	**2.539**	**.208**	**.126**	**.923**	**4.341**	**8.136**	**74.812**
2011 January	1.853	E 1.922	R .990	.241	R 5.005	R .761	R .248	R .019	.012	R .083	R .385	R .747	R 6.514
February	1.735	E 1.711	R .880	.207	4.533	R .678	R .234	R .017	.012	R .102	R .346	R .710	R 5.921
March	R 1.957	E 1.963	R 1.005	.250	R 5.176	R .687	R .303	R .018	.013	R .102	R .380	R .816	R 6.679
April	R 1.795	E 1.925	R .962	.241	R 4.923	R .571	R .303	R .017	.013	.121	.359	R .813	R 6.306
May	1.759	E 1.988	R 1.008	.254	R 5.009	R .597	R .317	R .018	.014	.114	R .369	R .832	R 6.438
June	1.803	E 1.923	.969	.241	R 4.936	R .683	R .312	R .017	.014	R .107	R .375	R .824	R 6.443
July	R 1.736	E 1.987	R .974	.251	R 4.948	R .757	R .304	R .018	.014	R .073	R .384	R .792	R 6.497
August	R 1.937	E 1.994	R 1.013	.254	R 5.197	.746	R .250	R .018	.014	R .073	R .387	R .742	R 6.685
September	1.906	E 1.952	R .970	.239	R 5.067	R .700	R .208	R .017	.013	.067	R .372	R .677	R 6.444
October	R 1.918	E 2.052	R 1.056	.263	R 5.290	R .663	R .192	R .018	R .013	R .102	R .382	R .708	R 6.660
November	R 1.908	E 2.014	R 1.043	.261	5.226	R .675	R .201	R .018	R .013	.121	R .386	R .738	R 6.638
December	R 1.907	E 2.075	R 1.079	.268	R 5.330	R .752	R .231	R .018	.013	R .104	R .405	R .770	R 6.852
Total	**R 22.215**	**E 23.506**	**R 11.949**	**2.970**	**R 60.640**	**R 8.269**	**R 3.103**	**R .213**	**.158**	**1.168**	**R 4.527**	**R 9.169**	**R 78.077**
2012 January	1.924	E 2.087	RE 1.100	.270	R 5.382	.757	R .227	.019	.015	R .134	R .390	R .785	R 6.924
February	1.737	E 1.930	RE 1.042	.254	R 4.964	R .668	R .198	.018	.015	.108	.362	R .701	R 6.333
March	1.735	RE 2.060	RE 1.127	.270	R 5.193	R .646	R .250	.019	R .017	R .135	R .373	R .795	R 6.633
April	1.571	RE 2.005	RE 1.084	.262	R 4.923	R .585	R .254	.018	.017	R .124	R .356	R .770	R 6.278
May	1.658	RE 2.078	RE 1.120	.270	R 5.126	R .650	R .277	.019	.019	R .122	R .378	R .816	R 6.592
June	1.659	RE 2.003	RE 1.076	.257	R 4.995	R .682	R .259	.019	.019	R .116	R .368	R .780	R 6.457
July	1.749	RE 2.079	RE 1.130	.264	R 5.222	.723	R .260	.019	.019	R .085	R .368	.751	R 6.696
August	1.840	E 2.067	E 1.105	.269	5.282	.728	.225	.019	.019	.081	.370	.713	6.724
8-Month Total	**13.875**	**E 16.309**	**E 8.783**	**2.119**	**41.086**	**5.439**	**1.950**	**.150**	**.141**	**.906**	**2.966**	**6.113**	**52.637**
2011 8-Month Total	**14.575**	**E 15.413**	**7.801**	**1.938**	**39.727**	**5.480**	**2.271**	**.142**	**.106**	**.774**	**2.983**	**6.276**	**51.483**
2010 8-Month Total	**14.531**	**14.352**	**7.640**	**1.830**	**38.353**	**5.628**	**1.781**	**.139**	**.085**	**.593**	**2.860**	**5.457**	**49.438**

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

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

[c] Includes lease condensate.

[d] Natural gas plant liquids.

[e] Conventional hydroelectric power.

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

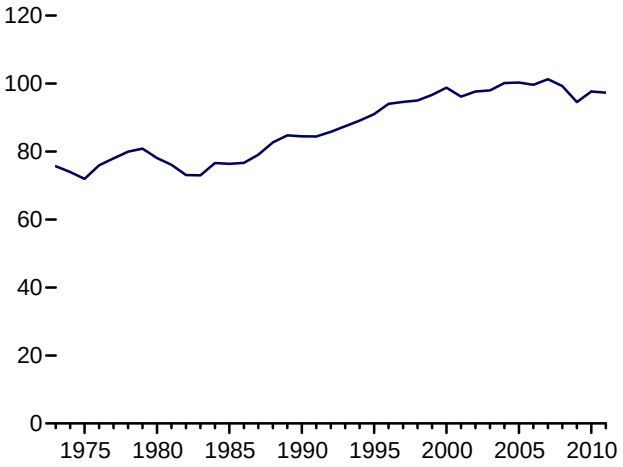
Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

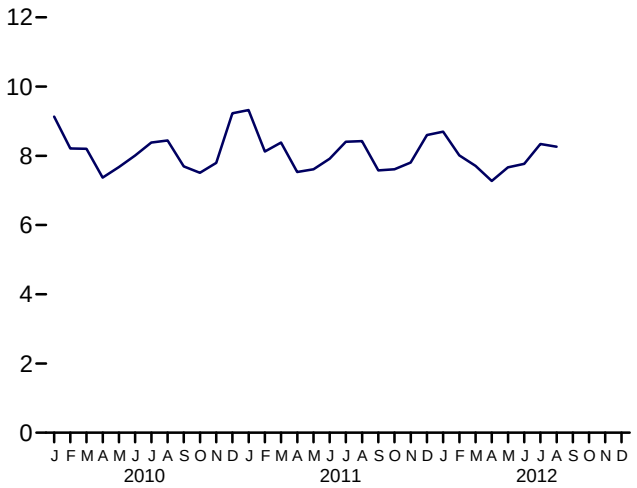
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas (Dry):** Tables 4.1 and A4. • **Crude Oil** and **Natural Gas Plant Liquids:** Tables 3.1 and A2. • **Nuclear Electric Power:** Tables 7.2a and A6 ("Nuclear Plants" heat rate). • **Renewable Energy:** Table 10.1.

Figure 1.3 Primary Energy Consumption
(Quadrillion Btu)

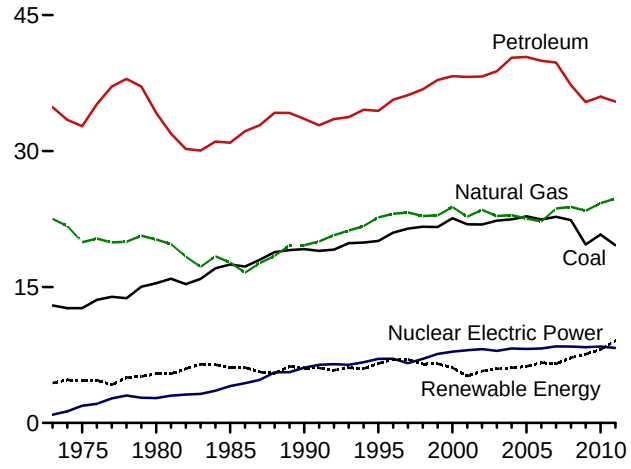
Total, 1973-2011



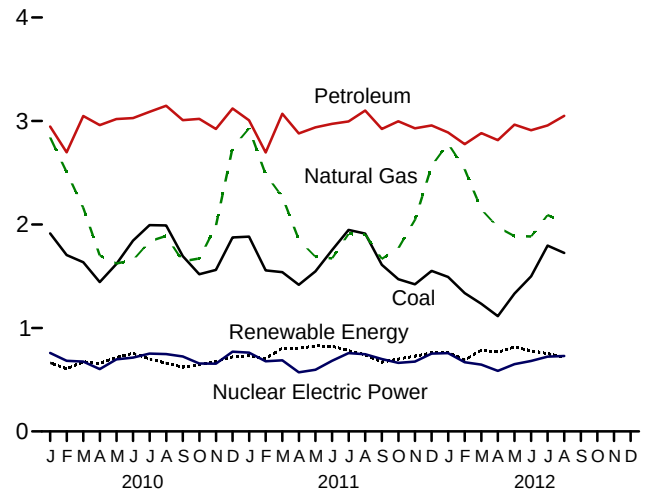
Total, Monthly



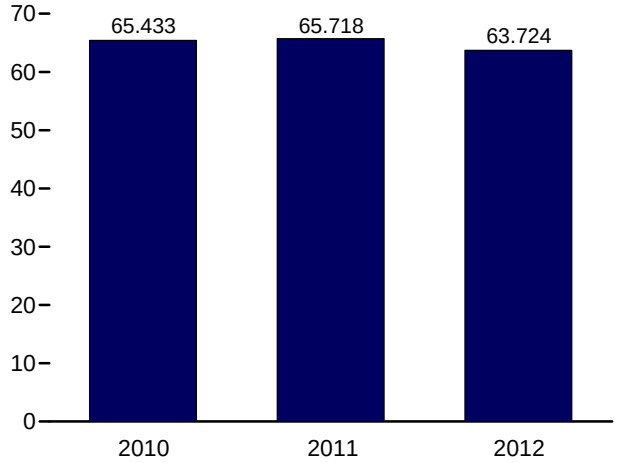
By Source,[a] 1973-2011



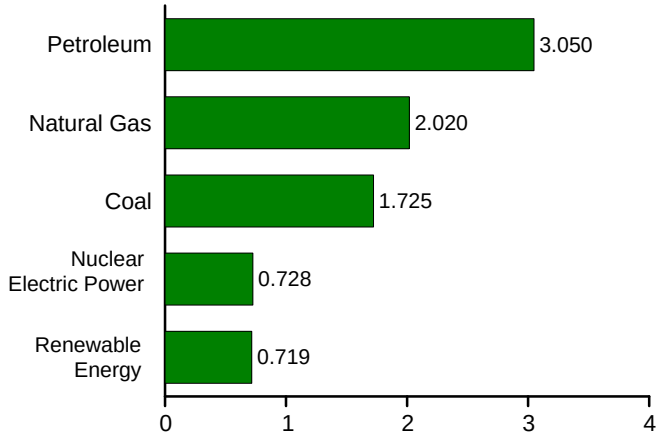
By Source,[a] Monthly



Total, January-August



By Source,[a] August 2012



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

Table 1.3 Primary Energy Consumption by Source

(Quadrillion Btu)

	Fossil Fuels					Renewable Energy[a]						
	Coal	Natural Gas[b]	Petro-leum[c]	Total[d]	Nuclear Electric Power	Hydro-electric Power[e]	Geo-thermal	Solar/ PV	Wind	Bio-mass	Total	Total[f]
1973 Total	**12.971**	**22.512**	**34.837**	**70.314**	**0.910**	**2.861**	**0.020**	**NA**	**NA**	**1.529**	**4.411**	**75.684**
1975 Total	**12.663**	**19.948**	**32.732**	**65.357**	**1.900**	**3.155**	**.034**	**NA**	**NA**	**1.499**	**4.687**	**71.965**
1980 Total	**15.423**	**20.235**	**34.205**	**69.828**	**2.739**	**2.900**	**.053**	**NA**	**NA**	**2.475**	**5.428**	**78.067**
1985 Total	**17.478**	**17.703**	**30.925**	**66.093**	**4.076**	**2.970**	**.097**	**(s)**	**(s)**	**3.016**	**6.084**	**76.392**
1990 Total	**19.173**	**19.603**	**33.552**	**72.332**	**6.104**	**3.046**	**.171**	**.059**	**.029**	**2.735**	**6.041**	**84.485**
1995 Total	**20.089**	**22.671**	**34.438**	**77.259**	**7.075**	**3.205**	**.152**	**.069**	**.033**	**3.101**	**6.560**	**91.029**
1996 Total	**21.002**	**23.085**	**35.675**	**79.785**	**7.087**	**3.590**	**.163**	**.070**	**.033**	**3.157**	**7.014**	**94.022**
1997 Total	**21.445**	**23.223**	**36.159**	**80.873**	**6.597**	**3.640**	**.167**	**.070**	**.034**	**3.105**	**7.016**	**94.602**
1998 Total	**21.656**	**22.830**	**36.816**	**81.369**	**7.068**	**3.297**	**.168**	**.069**	**.031**	**2.927**	**6.493**	**95.018**
1999 Total	**21.623**	**22.909**	**37.838**	**82.427**	**7.610**	**3.268**	**.171**	**.068**	**.046**	**2.963**	**6.516**	**96.652**
2000 Total	**22.580**	**23.824**	**38.262**	**84.731**	**7.862**	**2.811**	**.164**	**.066**	**.057**	**3.008**	**6.106**	**98.814**
2001 Total	**21.914**	**22.773**	**38.186**	**82.902**	**8.029**	**2.242**	**.164**	**.064**	**.070**	**2.622**	**5.163**	**96.168**
2002 Total	**21.904**	**23.510**	**38.224**	**83.699**	**8.145**	**2.689**	**.171**	**.063**	**.105**	**2.701**	**5.729**	**97.645**
2003 Total	**22.321**	**22.831**	**38.811**	**84.014**	**7.959**	**2.825**	**.175**	**.062**	**.115**	**2.807**	**5.983**	**97.978**
2004 Total	**22.466**	**22.923**	**40.292**	**85.819**	**8.222**	**2.690**	**.178**	**.063**	**.142**	**3.010**	**6.082**	**100.162**
2005 Total	**22.797**	**22.565**	**40.388**	**85.794**	**8.161**	**2.703**	**.181**	**.063**	**.178**	**3.117**	**6.242**	**100.282**
2006 Total	**22.447**	**22.239**	**39.955**	**84.702**	**8.215**	**2.869**	**.181**	**.068**	**.264**	**3.267**	**6.649**	**99.629**
2007 Total	**22.749**	**23.663**	**39.774**	**86.211**	**8.455**	**2.446**	**.186**	**.076**	**.341**	**3.474**	**6.523**	**101.296**
2008 Total	**22.385**	**23.843**	**37.280**	**83.549**	**8.427**	**2.511**	**.192**	**.089**	**.546**	**3.849**	**7.186**	**99.275**
2009 Total	**19.692**	**23.416**	**35.403**	**78.488**	**8.356**	**2.669**	**.200**	**.098**	**.721**	**3.912**	**7.600**	**94.559**
2010 January	R 1.913	2.841	2.947	7.697	.758	.218	.018	.010	.067	.349	.662	9.132
February	R 1.705	2.507	2.698	R 6.914	.682	.201	.016	.009	.053	.326	.605	8.213
March	1.635	2.160	3.048	6.846	.676	.204	.018	.010	.084	.357	.673	8.205
April	R 1.443	1.700	2.960	6.104	.602	.186	.017	.010	.095	.348	.657	7.372
May	R 1.617	1.622	3.020	6.261	.697	.245	.018	.011	.085	.356	.715	R 7.677
June	1.844	1.656	3.029	6.530	.714	.291	.017	.011	.079	.357	.755	R 8.007
July	R 1.994	1.836	3.089	6.920	.752	.239	.017	.011	.066	.368	.701	R 8.382
August	1.991	1.890	3.148	7.030	.748	.196	.018	.011	.065	.370	.660	R 8.444
September	1.693	1.644	3.008	R 6.344	.725	.168	.017	.011	.069	.357	.622	7.694
October	1.519	1.671	3.020	R 6.208	.656	.173	.017	.010	.077	.366	.643	7.509
November	R 1.560	1.986	2.923	6.464	.655	.191	.017	.010	.095	.363	.676	7.797
December	R 1.875	2.741	3.120	7.732	.770	.226	.018	.010	.088	.377	.720	9.231
Total	R **20.791**	**24.256**	**36.010**	R **81.051**	**8.434**	**2.539**	**.208**	**.126**	**.923**	**4.294**	**8.090**	R **97.664**
2011 January	R 1.883	R 2.930	3.006	R 7.819	R .761	R .248	R .019	.012	R .083	R .369	R .731	R 9.321
February	R 1.556	R 2.483	2.696	R 6.736	R .678	R .234	R .017	.012	R .102	R .339	R .703	8.125
March	R 1.540	R 2.268	3.070	R 6.880	R .687	R .303	R .018	.013	R .102	R .369	R .805	8.381
April	R 1.417	R 1.853	2.879	R 6.151	R .571	R .303	R .017	.013	.121	R .349	R .804	R 7.533
May	R 1.546	R 1.688	2.938	R 6.175	R .597	R .317	R .018	.014	.114	R .363	R .826	R 7.610
June	R 1.753	R 1.672	2.973	R 6.400	R .683	R .312	R .017	.014	R .107	R .374	R .824	R 7.917
July	R 1.948	R 1.909	2.995	R 6.851	R .757	R .304	R .018	.014	R .073	.374	R .782	R 8.407
August	R 1.911	R 1.906	3.101	R 6.923	.746	R .250	R .018	.014	R .073	R .386	R .741	R 8.426
September	R 1.610	R 1.668	2.923	R 6.201	R .700	R .208	R .017	.013	.067	R .365	R .670	R 7.581
October	R 1.471	R 1.769	2.998	R 6.238	R .663	R .192	R .018	R .013	R .102	R .373	R .699	R 7.609
November	R 1.421	2.045	2.929	R 6.394	R .675	R .201	R .018	R .013	.121	R .375	R .727	7.803
December	R 1.552	R 2.565	2.957	R 7.076	R .752	R .231	R .018	.013	R .104	R .395	R .760	R 8.599
Total	R **19.609**	R **24.757**	**35.465**	R **79.842**	R **8.269**	R **3.103**	R **.213**	**.158**	**1.168**	R **4.432**	R **9.073**	R **97.311**
2012 January	R 1.493	R 2.784	2.889	R 7.168	.757	R .227	.019	.015	R .134	.367	R .763	R 8.699
February	R 1.337	R 2.533	2.776	R 6.646	R .668	R .198	.018	.015	.108	R .351	R .690	R 8.014
March	1.233	R 2.145	2.883	R 6.264	R .646	R .250	.019	R .017	R .135	R .365	R .786	R 7.706
April	R 1.114	R 1.973	2.815	R 5.908	R .585	R .254	.018	.017	R .124	.353	R .767	R 7.272
May	R 1.333	R 1.887	2.964	R 6.184	R .650	R .277	.019	.019	R .122	R .378	R .816	R 7.665
June	R 1.499	R 1.883	2.911	6.293	R .682	R .259	.019	.019	R .116	R .366	R .779	R 7.768
July	R 1.796	R 2.092	2.957	R 6.845	.723	R .260	.019	.019	R .085	R .369	.753	R 8.340
August	1.725	2.020	3.050	6.795	.728	.225	.019	.019	.081	.375	.719	8.261
8-Month Total	**11.529**	**17.318**	**23.245**	**52.104**	**5.439**	**1.950**	**.150**	**.141**	**.906**	**2.924**	**6.071**	**63.724**
2011 8-Month Total	**13.554**	**16.710**	**23.659**	**53.934**	**5.480**	**2.271**	**.142**	**.106**	**.774**	**2.924**	**6.217**	**65.718**
2010 8-Month Total	**14.143**	**16.214**	**23.938**	**54.302**	**5.628**	**1.781**	**.139**	**.085**	**.593**	**2.831**	**5.428**	**65.433**

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

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

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

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

[e] Conventional hydroelectric power.

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

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

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

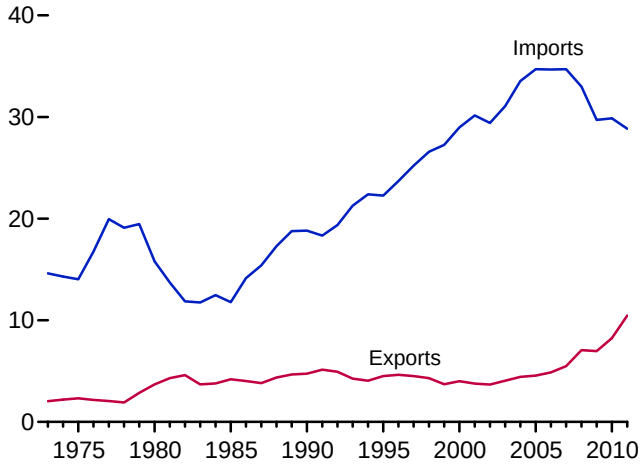
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available data beginning in 1973.

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

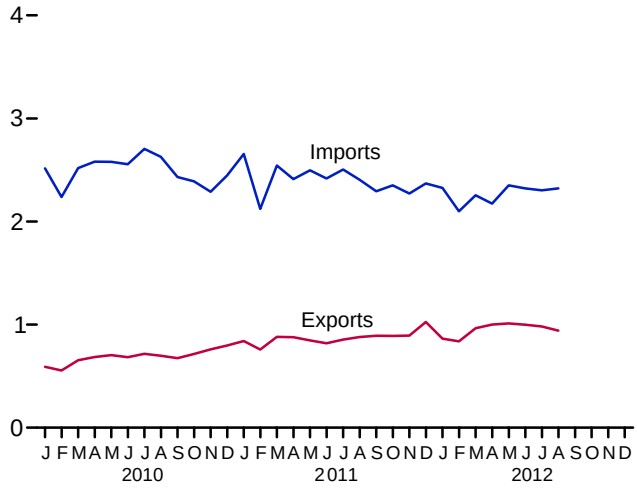
Figure 1.4a Primary Energy Imports and Exports

(Quadrillion Btu)

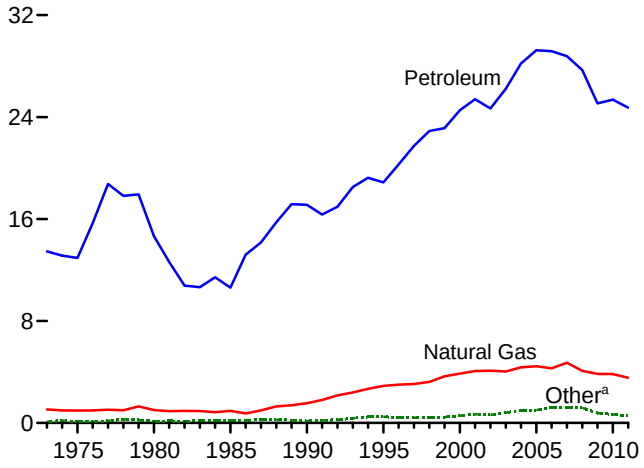
Total Imports and Exports, 1973-2011



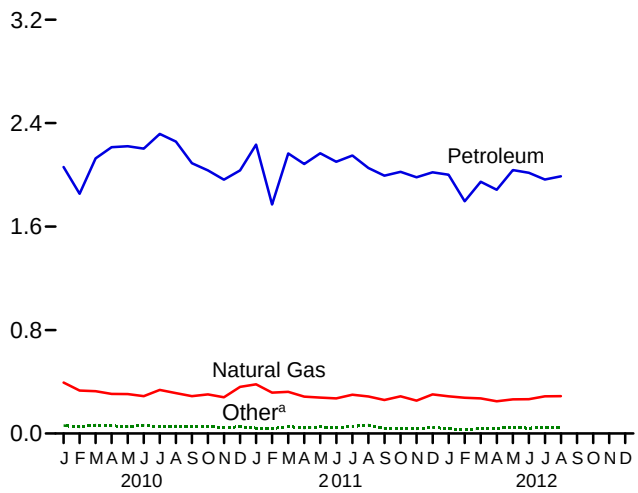
Total Imports and Exports, Monthly



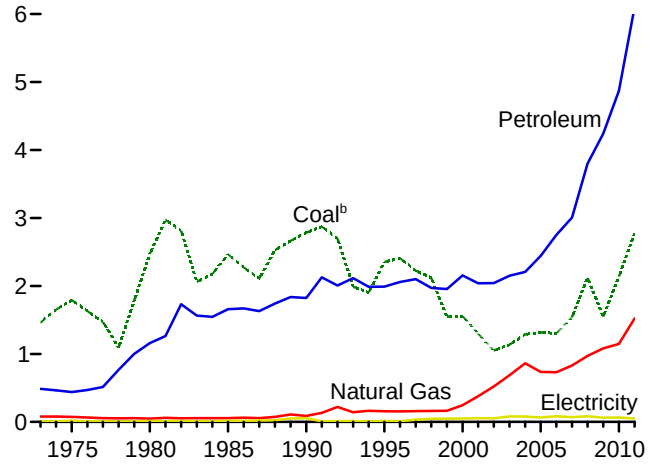
Imports by Source, 1973-2011



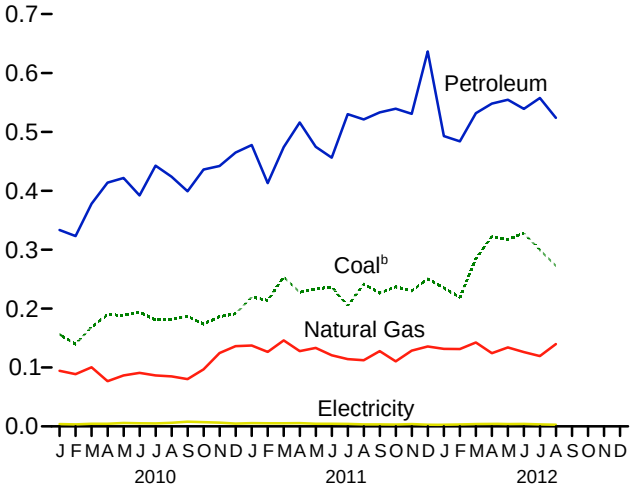
Imports by Source, Monthly



Exports by Source, 1973-2011



Exports by Major Source, Monthly



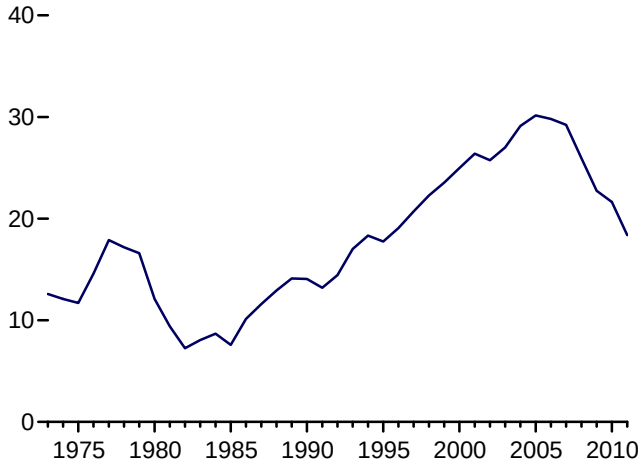
[a] Coal, coal coke, biofuels, and electricity.
[b] Includes coal coke.

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

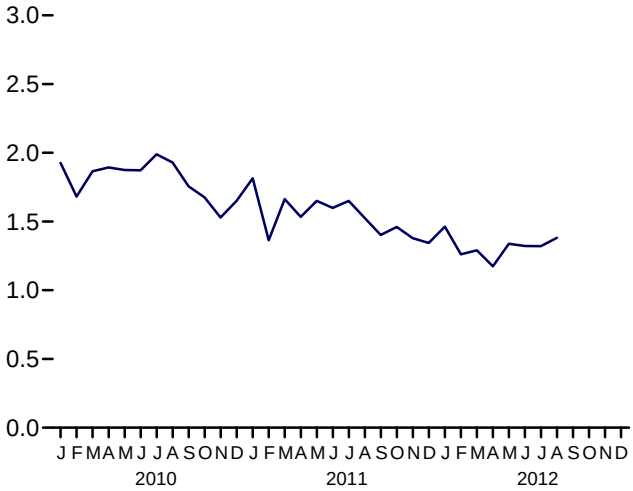
Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu, Except as noted)

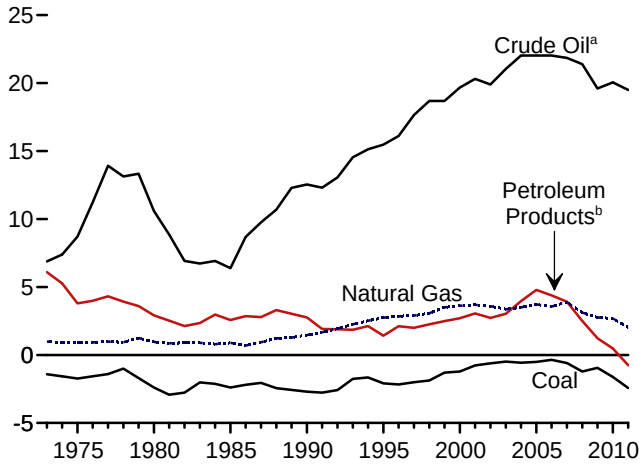
Total, 1973-2011



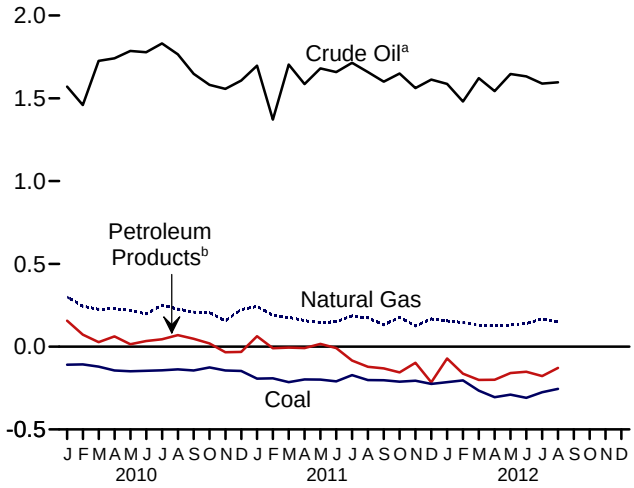
Total, Monthly



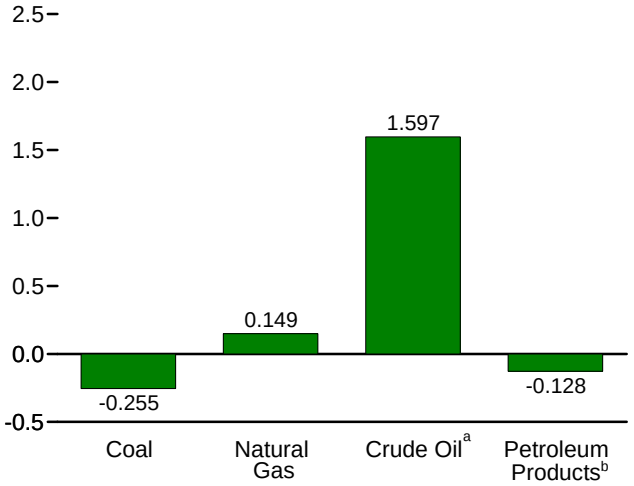
By Major Source, 1973-2011



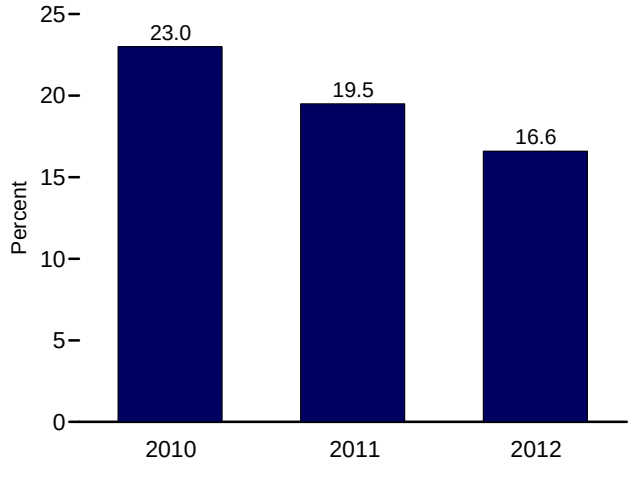
By Major Source, Monthly



By Major Source, August 2012



As Share of Consumption, January-August



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

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

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

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

Table 1.4a Primary Energy Imports by Source

(Quadrillion Btu)

	Imports								
				Petroleum					
	Coal	Coal Coke	Natural Gas	Crude Oil[a]	Petroleum Products[b]	Total	Biofuels[c]	Electricity	Total
1973 Total	**0.003**	**0.027**	**1.060**	**6.887**	**6.578**	**13.466**	**NA**	**0.057**	**14.613**
1975 Total	**.024**	**.045**	**.978**	**8.721**	**4.227**	**12.948**	**NA**	**.038**	**14.032**
1980 Total	**.030**	**.016**	**1.006**	**11.195**	**3.463**	**14.658**	**NA**	**.085**	**15.796**
1985 Total	**.049**	**.014**	**.952**	**6.814**	**3.796**	**10.609**	**NA**	**.157**	**11.781**
1990 Total	**.067**	**.019**	**1.551**	**12.766**	**4.351**	**17.117**	**NA**	**.063**	**18.817**
1995 Total	**.237**	**.095**	**2.901**	**15.669**	**3.211**	**18.881**	**.001**	**.146**	**22.260**
1996 Total	**.203**	**.063**	**3.002**	**16.341**	**3.943**	**20.284**	**.001**	**.148**	**23.702**
1997 Total	**.187**	**.078**	**3.063**	**17.876**	**3.864**	**21.740**	**(s)**	**.147**	**25.215**
1998 Total	**.218**	**.095**	**3.225**	**18.916**	**3.992**	**22.908**	**(s)**	**.135**	**26.581**
1999 Total	**.227**	**.080**	**3.664**	**18.935**	**4.198**	**23.133**	**(s)**	**.147**	**27.252**
2000 Total	**.313**	**.094**	**3.869**	**19.783**	**4.749**	**24.531**	**(s)**	**.166**	**28.973**
2001 Total	**.495**	**.063**	**4.068**	**20.348**	**5.051**	**25.398**	**.002**	**.131**	**30.157**
2002 Total	**.422**	**.080**	**4.104**	**19.920**	**4.754**	**24.674**	**.002**	**.125**	**29.408**
2003 Total	**.626**	**.068**	**4.042**	**21.060**	**5.159**	**26.219**	**.002**	**.104**	**31.061**
2004 Total	**.682**	**.170**	**4.365**	**22.082**	**6.114**	**28.197**	**.013**	**.117**	**33.544**
2005 Total	**.762**	**.088**	**4.450**	**22.091**	**7.157**	**29.248**	**.012**	**.150**	**34.709**
2006 Total	**.906**	**.101**	**4.291**	**22.085**	**7.084**	**29.169**	**.066**	**.146**	**34.679**
2007 Total	**.909**	**.061**	**4.723**	**21.914**	**6.868**	**28.781**	**.054**	**.175**	**34.703**
2008 Total	**.855**	**.089**	**4.084**	**21.448**	**6.237**	**27.685**	**.084**	**.195**	**32.992**
2009 Total	**.566**	**.009**	**3.845**	**19.699**	**5.383**	**25.082**	**.026**	**.178**	**29.706**
2010 January	.042	.001	.394	1.577	.483	2.060	.001	.018	2.516
February	.031	.005	.332	1.469	.384	1.853	(s)	.015	2.237
March	.047	.003	.327	1.734	.393	2.127	.001	.015	2.519
April	.045	.001	.306	1.747	.466	2.214	(s)	.013	2.580
May	.037	.005	.305	1.793	.428	2.221	.001	.010	2.578
June	.044	.005	.289	1.784	.419	2.203	(s)	.014	2.556
July	.035	.003	.337	1.844	.472	2.316	(s)	.015	2.705
August	.043	.003	.313	1.772	.484	2.256	(s)	.012	2.627
September	.040	.002	.289	1.658	.432	2.090	(s)	.010	2.431
October	.044	.001	.302	1.585	.448	2.034	(s)	.009	2.390
November	.037	(s)	.280	1.563	.400	1.963	(s)	.009	2.289
December	.039	(s)	.361	1.614	.420	2.034	(s)	.013	2.447
Total	**.484**	**.030**	**3.834**	**20.140**	**5.231**	**25.371**	**.004**	**.154**	**29.877**
2011 January	.025	.001	.380	1.710	.523	2.233	(s)	.015	2.655
February	.021	.002	.316	1.377	.394	1.771	(s)	.013	2.122
March	.038	.004	.322	1.710	.455	2.166	(s)	.014	2.543
April	.028	.001	.285	1.593	.490	2.084	(s)	.013	2.412
May	.033	.004	.277	1.687	.479	2.166	(s)	.017	2.497
June	.024	.004	.272	1.665	.436	2.101	.001	.015	2.417
July	.030	.003	.300	1.728	.422	2.150	.001	.021	2.505
August	.039	.005	.286	1.664	.389	2.053	.002	.019	2.405
September	.021	.003	.260	1.607	.386	1.993	.003	.014	2.294
October	.023	.002	.288	1.659	.364	2.023	.002	.013	2.351
November	.020	.002	.254	1.572	.409	1.981	.003	.012	2.272
December	.024	.004	.303	1.622	.397	2.019	.005	.015	2.370
Total	**.327**	**.035**	**3.542**	**19.595**	**5.145**	**24.740**	**.019**	**.178**	**28.842**
2012 January	.020	.003	.288	1.597	.405	2.001	(s)	.014	2.326
February	.013	.002	.276	1.491	.304	1.795	(s)	.012	2.099
March	.017	.004	.272	1.633	.313	1.946	.002	.014	2.255
April	.016	.007	.249	1.549	.336	1.885	.001	.017	2.174
May	.025	.004	R .265	1.659	.378	2.037	.002	.019	R 2.350
June	.018	.001	R .266	1.640	.375	2.015	.003	.018	2.321
July	.022	.001	.288	1.603	.361	1.964	.004	.023	2.303
August	.017	.001	.288	1.608	.380	1.988	.007	.022	2.322
8-Month Total	**.148**	**.022**	**2.191**	**12.779**	**2.852**	**15.631**	**.019**	**.139**	**18.151**
2011 8-Month Total	**.239**	**.024**	**2.439**	**13.134**	**3.589**	**16.723**	**.006**	**.126**	**19.556**
2010 8-Month Total	**.324**	**.026**	**2.603**	**13.719**	**3.531**	**17.250**	**.003**	**.113**	**20.319**

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

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

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

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

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

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

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

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

(Quadrillion Btu)

	Exports									Net Imports[a]
				Petroleum						
	Coal	Coal Coke	Natural Gas	Crude Oil[b]	Petroleum Products[c]	Total	Biofuels[d]	Electricity	Total	Total
1973 Total	**1.425**	**0.035**	**0.079**	**0.004**	**0.482**	**0.486**	**NA**	**0.009**	**2.033**	**12.580**
1975 Total	**1.761**	**.032**	**.074**	**.012**	**.427**	**.439**	**NA**	**.017**	**2.323**	**11.709**
1980 Total	**2.421**	**.051**	**.049**	**.609**	**.551**	**1.160**	**NA**	**.014**	**3.695**	**12.101**
1985 Total	**2.438**	**.028**	**.056**	**.432**	**1.225**	**1.657**	**NA**	**.017**	**4.196**	**7.584**
1990 Total	**2.772**	**.014**	**.087**	**.230**	**1.594**	**1.824**	**NA**	**.055**	**4.752**	**14.065**
1995 Total	**2.318**	**.034**	**.156**	**.200**	**1.791**	**1.991**	**NA**	**.012**	**4.511**	**17.750**
1996 Total	**2.368**	**.040**	**.155**	**.233**	**1.825**	**2.059**	**NA**	**.011**	**4.633**	**19.069**
1997 Total	**2.193**	**.031**	**.159**	**.228**	**1.872**	**2.100**	**NA**	**.031**	**4.514**	**20.701**
1998 Total	**2.092**	**.028**	**.161**	**.233**	**1.740**	**1.972**	**NA**	**.047**	**4.299**	**22.281**
1999 Total	**1.525**	**.022**	**.164**	**.250**	**1.705**	**1.955**	**NA**	**.049**	**3.715**	**23.537**
2000 Total	**1.528**	**.028**	**.245**	**.106**	**2.048**	**2.154**	**NA**	**.051**	**4.006**	**24.967**
2001 Total	**1.265**	**.033**	**.377**	**.043**	**1.996**	**2.039**	**(s)**	**.056**	**3.771**	**26.386**
2002 Total	**1.032**	**.020**	**.520**	**.019**	**2.023**	**2.042**	**(s)**	**.054**	**3.669**	**25.739**
2003 Total	**1.117**	**.018**	**.686**	**.026**	**2.124**	**2.151**	**.001**	**.082**	**4.054**	**27.007**
2004 Total	**1.253**	**.033**	**.862**	**.057**	**2.151**	**2.208**	**.001**	**.078**	**4.434**	**29.110**
2005 Total	**1.273**	**.043**	**.735**	**.067**	**2.374**	**2.442**	**.001**	**.065**	**4.560**	**30.149**
2006 Total	**1.264**	**.040**	**.730**	**.052**	**2.699**	**2.751**	**.004**	**.083**	**4.872**	**29.806**
2007 Total	**1.507**	**.036**	**.830**	**.058**	**2.949**	**3.007**	**.035**	**.069**	**5.482**	**29.221**
2008 Total	**2.071**	**.049**	**.972**	**.061**	**3.739**	**3.800**	**.086**	**.083**	**7.060**	**25.932**
2009 Total	**1.515**	**.032**	**1.082**	**.093**	**4.147**	**4.240**	**.034**	**.062**	**6.965**	**22.741**
2010 January	.151	.006	.094	.006	.327	.332	.003	.004	.590	1.926
February	.138	.001	.089	.009	.312	.321	.003	.003	.556	1.681
March	.169	(s)	.100	.008	.366	.374	.006	.004	.654	1.865
April	.189	.001	.077	.006	.404	.411	.005	.004	.686	1.894
May	.186	.003	.086	.007	.414	.420	.003	.006	.704	1.874
June	.190	.004	.091	.005	.385	.391	.003	.005	.684	1.872
July	.178	.003	.087	.012	.428	.440	.003	.005	.716	1.989
August	.180	.002	.085	.006	.415	.421	.004	.006	.698	1.929
September	.184	.003	.080	.011	.385	.396	.004	.008	.675	1.757
October	.170	.003	.097	.004	.429	.433	.004	.007	.714	1.676
November	.180	.006	.125	.006	.433	.439	.004	.006	.760	1.529
December	.186	.005	.136	.007	.452	.459	.007	.005	.797	1.650
Total	**2.101**	**.036**	**1.147**	**.088**	**4.750**	**4.838**	**.046**	**.065**	**8.234**	**21.643**
2011 January	.218	.001	.137	.013	.460	.473	.006	.005	.841	1.814
February	.212	.002	.126	.005	.403	.408	.005	.005	.759	1.363
March	.252	.001	.146	.007	.461	.467	.008	.005	.880	1.663
April	.227	.001	.128	.007	.499	.506	.011	.005	.878	1.534
May	.232	.002	.133	.007	.462	.469	.007	.004	.847	1.650
June	.233	.003	.121	.006	.444	.451	.006	.004	.818	1.599
July	.202	.003	.114	.013	.506	.520	.011	.004	.854	1.651
August	.241	.001	.112	.006	.511	.517	.005	.003	.879	1.526
September	.224	.003	.128	.006	.518	.524	.010	.003	.892	1.402
October	.235	.002	.110	.009	.520	.529	.011	.003	.891	1.460
November	.226	.004	.129	.011	.507	.518	.013	.004	.894	1.378
December	.249	.001	.136	.010	.613	.622	.014	.003	1.026	1.344
Total	**2.751**	**.024**	**1.521**	**.100**	**5.904**	**6.004**	**.108**	**.051**	**10.458**	**18.384**
2012 January	.234	.001	.132	.010	.476	.487	.008	.003	.864	1.462
February	.217	.002	.131	.010	.468	.478	.007	.003	.838	1.262
March	.284	.002	.142	.011	.514	.525	.008	.004	.964	1.291
April	.321	.001	.124	.006	.536	.542	.007	.004	1.000	1.174
May	.314	.003	R .134	.012	.537	.550	.006	.004	1.012	R 1.339
June	.327	.001	.126	.008	.526	.534	.007	.004	.999	1.322
July	.298	.001	.119	.014	.538	.552	.007	.003	.982	1.320
August	.272	.001	.140	.011	.509	.520	.006	.003	.941	1.381
8-Month Total	**2.267**	**.012**	**1.049**	**.082**	**4.105**	**4.187**	**.057**	**.029**	**7.600**	**10.551**
2011 8-Month Total	**1.817**	**.014**	**1.018**	**.064**	**3.746**	**3.810**	**.060**	**.038**	**6.756**	**12.800**
2010 8-Month Total	**1.381**	**.019**	**.709**	**.060**	**3.051**	**3.111**	**.029**	**.039**	**5.287**	**15.032**

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

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

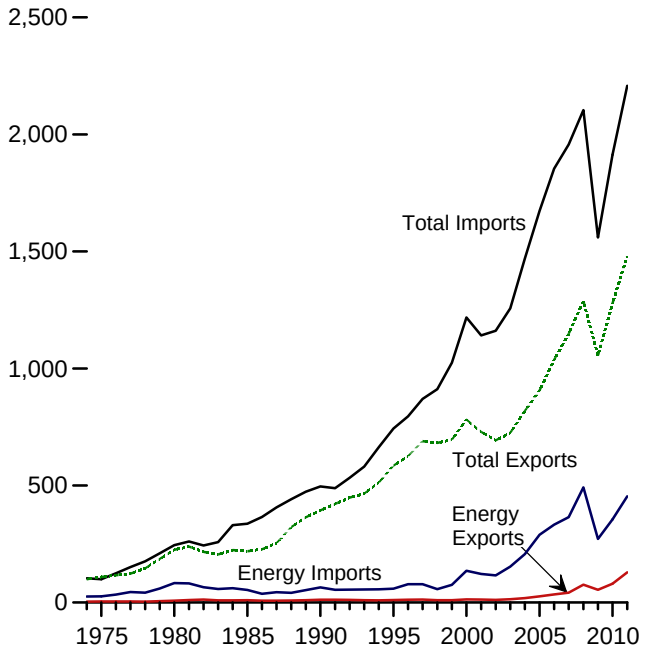
Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

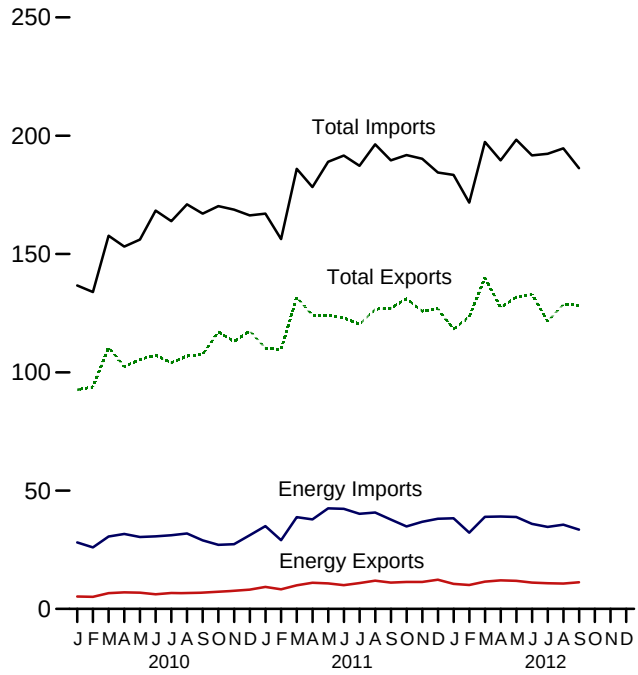
Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke: 1973-1975**—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook,* "Coke and Coal Chemicals" chapter. **1976-1980**—U.S. Energy Information Administration (EIA), *Energy Data Report,* "Coke and Coal Chemicals," annual reports. **1981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

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

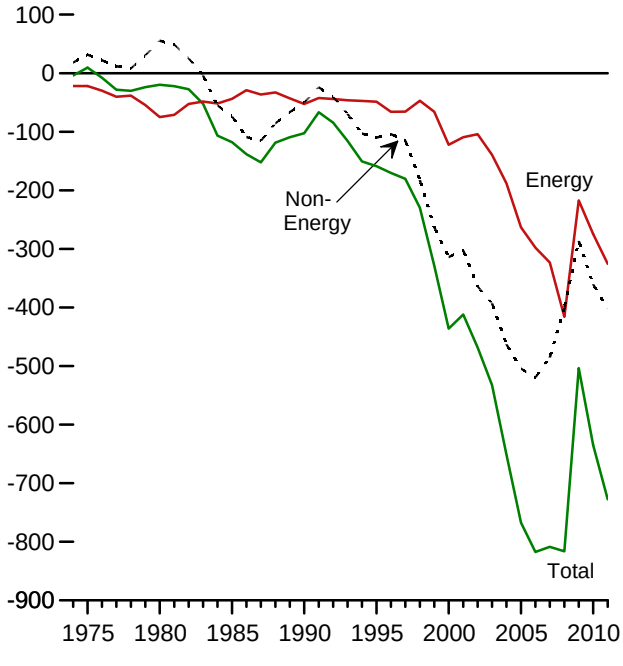
Imports and Exports, 1974-2011



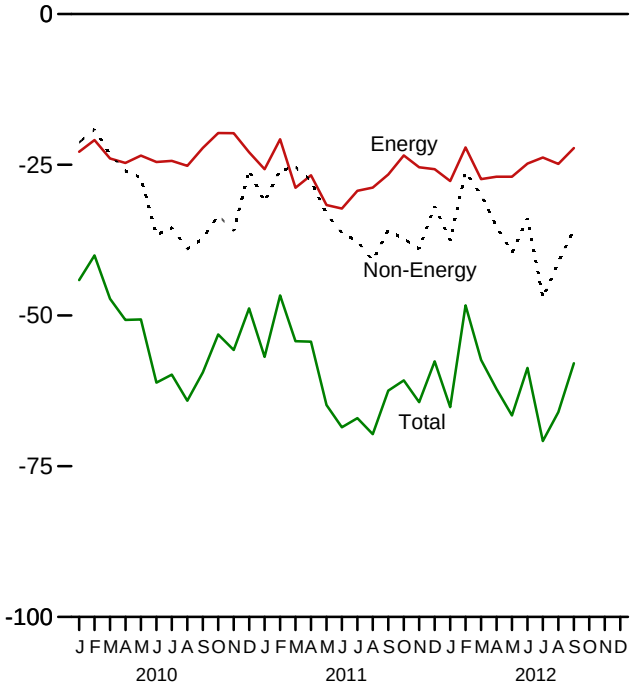
Imports and Exports, Monthly



Trade Balance, 1974-2011



Trade Balance, Monthly



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

Table 1.5 Merchandise Trade Value

(Million Dollars[a])

	Petroleum[b]			Energy[c]			Non-Energy Balance	Total Merchandise		
	Exports	Imports	Balance	Exports	Imports	Balance		Exports	Imports	Balance
1974 Total	**792**	**24,668**	**-23,876**	**3,444**	**25,454**	**-22,010**	**18,126**	**99,437**	**103,321**	**-3,884**
1975 Total	**907**	**25,197**	**-24,289**	**4,470**	**26,476**	**-22,006**	**31,557**	**108,856**	**99,305**	**9,551**
1980 Total	**2,833**	**78,637**	**-75,803**	**7,982**	**82,924**	**-74,942**	**55,246**	**225,566**	**245,262**	**-19,696**
1985 Total	**4,707**	**50,475**	**-45,768**	**9,971**	**53,917**	**-43,946**	**-73,765**	**218,815**	**336,526**	**-117,712**
1990 Total	**6,901**	**61,583**	**-54,682**	**12,233**	**64,661**	**-52,428**	**-50,068**	**393,592**	**496,088**	**-102,496**
1995 Total	**6,321**	**54,368**	**-48,047**	**10,358**	**59,109**	**-48,751**	**-110,050**	**584,742**	**743,543**	**-158,801**
1996 Total	**7,984**	**72,022**	**-64,038**	**12,181**	**78,086**	**-65,905**	**-104,309**	**625,075**	**795,289**	**-170,214**
1997 Total	**8,592**	**71,152**	**-62,560**	**12,682**	**78,277**	**-65,595**	**-114,927**	**689,182**	**869,704**	**-180,522**
1998 Total	**6,574**	**50,264**	**-43,690**	**10,251**	**57,323**	**-47,072**	**-182,686**	**682,138**	**911,896**	**-229,758**
1999 Total	**7,118**	**67,173**	**-60,055**	**9,880**	**75,803**	**-65,923**	**-262,898**	**695,797**	**1,024,618**	**-328,821**
2000 Total	**10,192**	**119,251**	**-109,059**	**13,179**	**135,367**	**-122,188**	**-313,916**	**781,918**	**1,218,022**	**-436,104**
2001 Total	**8,868**	**102,747**	**-93,879**	**12,494**	**121,923**	**-109,429**	**-302,470**	**729,100**	**1,140,999**	**-411,899**
2002 Total	**8,569**	**102,663**	**-94,094**	**11,541**	**115,748**	**-104,207**	**-364,056**	**693,103**	**1,161,366**	**-468,263**
2003 Total	**10,209**	**132,433**	**-122,224**	**13,768**	**153,298**	**-139,530**	**-392,820**	**724,771**	**1,257,121**	**-532,350**
2004 Total	**13,130**	**179,266**	**-166,136**	**18,642**	**206,660**	**-188,018**	**-462,912**	**818,775**	**1,469,704**	**-650,930**
2005 Total	**19,155**	**250,068**	**-230,913**	**26,488**	**289,723**	**-263,235**	**-504,242**	**905,978**	**1,673,455**	**-767,477**
2006 Total	**28,171**	**299,714**	**-271,543**	**34,711**	**332,500**	**-297,789**	**-519,515**	**1,036,635**	**1,853,938**	**-817,304**
2007 Total	**33,293**	**327,620**	**-294,327**	**41,725**	**364,987**	**-323,262**	**-485,501**	**1,148,199**	**1,956,962**	**-808,763**
2008 Total	**61,695**	**449,847**	**-388,152**	**76,075**	**491,885**	**-415,810**	**-400,389**	**1,287,442**	**2,103,641**	**-816,199**
2009 Total	**44,509**	**251,833**	**-207,324**	**54,536**	**271,739**	**-217,203**	**-286,379**	**1,056,043**	**1,559,625**	**-503,582**
2010 January	4,083	25,234	-21,151	5,236	28,075	-22,839	-21,285	92,601	136,725	-44,124
February	4,003	23,666	-19,663	5,115	26,018	-20,903	-19,141	93,854	133,898	-40,044
March	5,348	28,549	-23,201	6,667	30,613	-23,946	-23,271	110,511	157,728	-47,217
April	5,680	30,016	-24,336	6,970	31,657	-24,687	-26,034	102,443	153,163	-50,721
May	5,484	28,733	-23,249	6,887	30,369	-23,482	-27,165	105,477	156,124	-50,647
June	4,798	29,011	-24,213	6,170	30,698	-24,528	-36,592	107,202	168,321	-61,120
July	5,505	29,218	-23,713	6,760	31,113	-24,353	-35,451	104,057	163,861	-59,804
August	5,346	30,130	-24,784	6,744	31,907	-25,163	-38,957	106,846	170,966	-64,120
September	5,482	27,479	-21,997	6,802	28,992	-22,190	-37,244	107,644	167,078	-59,434
October	6,084	25,556	-19,472	7,318	27,056	-19,738	-33,397	117,104	170,239	-53,135
November	6,272	25,982	-19,710	7,610	27,363	-19,753	-35,966	113,046	168,765	-55,719
December	6,694	29,892	-23,198	8,182	31,107	-22,925	-25,888	117,480	166,293	-48,813
Total	**64,778**	**333,465**	**-268,687**	**80,460**	**354,968**	**-274,508**	**-360,389**	**1,278,263**	**1,913,160**	**-634,897**
2011 January	7,446	33,050	-25,604	9,275	35,010	-25,735	-31,134	110,179	167,048	-56,869
February	6,604	27,551	-20,947	8,291	29,062	-20,771	-25,897	109,647	156,315	-46,668
March	7,841	37,096	-29,255	9,958	38,763	-28,805	-25,442	131,728	185,975	-54,247
April	9,016	36,457	-27,441	11,059	37,803	-26,744	-27,589	123,959	178,293	-54,333
May	8,767	41,002	-32,235	10,795	42,470	-31,675	-33,171	124,107	188,953	-64,846
June	8,032	40,872	-32,840	10,039	42,305	-32,266	-36,274	123,039	191,579	-68,540
July	9,069	38,622	-29,553	10,902	40,224	-29,322	-37,702	120,239	187,263	-67,024
August	9,912	39,063	-29,151	11,940	40,732	-28,792	-40,896	126,633	196,321	-69,688
September	9,202	36,467	-27,265	11,141	37,741	-26,600	-35,855	127,107	189,562	-62,455
October	9,573	33,467	-23,894	11,410	34,857	-23,447	-37,306	131,058	191,811	-60,753
November	9,533	35,665	-26,132	11,401	36,821	-25,420	-38,944	125,899	190,263	-64,364
December	10,501	36,831	-26,330	12,353	38,083	-25,730	-31,876	126,837	184,443	-57,606
Total	**105,499**	**436,145**	**-330,646**	**128,564**	**453,872**	**-325,308**	**-402,084**	**1,480,432**	**2,207,824**	**-727,392**
2012 January	8,730	37,044	-28,314	10,606	38,290	-27,684	-37,519	118,209	183,411	-65,203
February	8,605	31,171	-22,566	10,124	32,250	-22,126	-26,181	123,428	171,735	-48,307
March	9,709	37,933	-28,224	11,552	38,937	-27,385	-29,974	139,965	197,324	-57,359
April	10,152	38,129	-27,977	12,057	39,043	-26,986	-35,179	127,411	189,577	-62,165
May	10,056	37,835	-27,779	11,858	38,829	-26,971	-39,590	131,735	198,296	-66,561
June	9,228	35,043	-25,815	11,100	35,910	-24,810	-33,876	133,018	191,704	-58,686
July	9,154	33,604	-24,450	10,887	34,683	-23,796	-47,011	121,558	192,366	-70,807
August	9,090	34,640	-25,550	10,748	35,594	-24,846	R -41,178	R 128,632	R 194,656	R -66,024
September	9,772	32,562	-22,790	11,263	33,497	-22,234	-35,681	128,338	186,253	-57,915
9-Month Total	**84,496**	**317,961**	**-233,465**	**100,196**	**327,034**	**-226,838**	**-326,189**	**1,152,293**	**1,705,322**	**-553,028**
2011 9-Month Total	**75,889**	**330,180**	**-254,291**	**93,401**	**344,110**	**-250,710**	**-293,960**	**1,096,638**	**1,641,307**	**-544,669**
2010 9-Month Total	**45,729**	**252,036**	**-206,307**	**57,351**	**269,442**	**-212,091**	**-265,140**	**930,634**	**1,407,864**	**-477,230**

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

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

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

R=Revised.

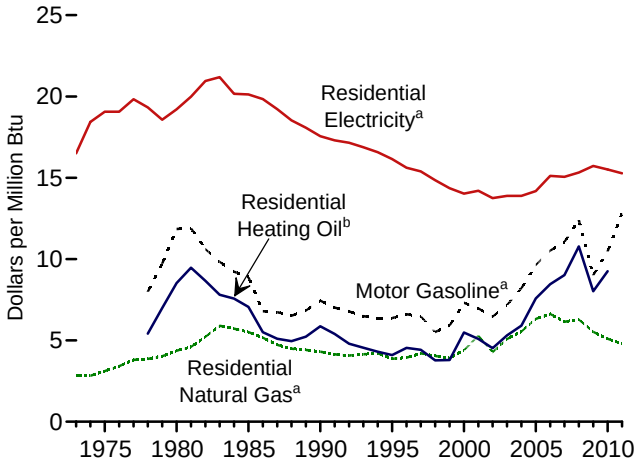
Notes: • Monthly data are not adjusted for seasonal variations. • See Note, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries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

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

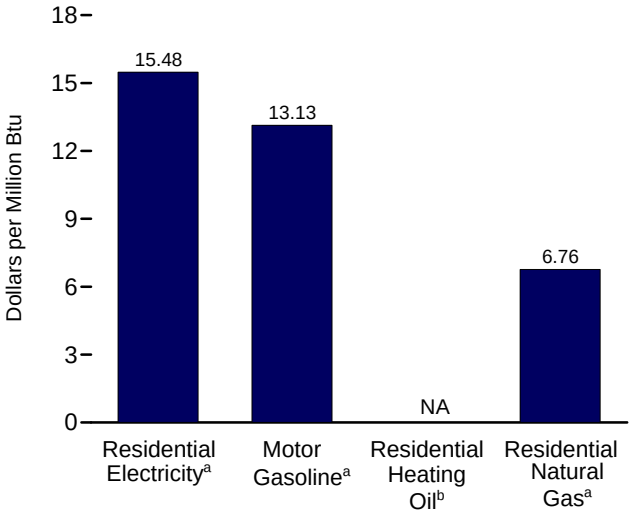
Sources: See end of section.

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

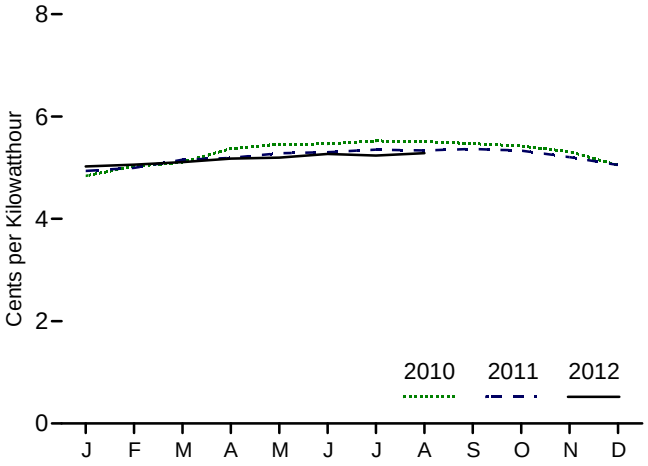
Costs, 1973-2011



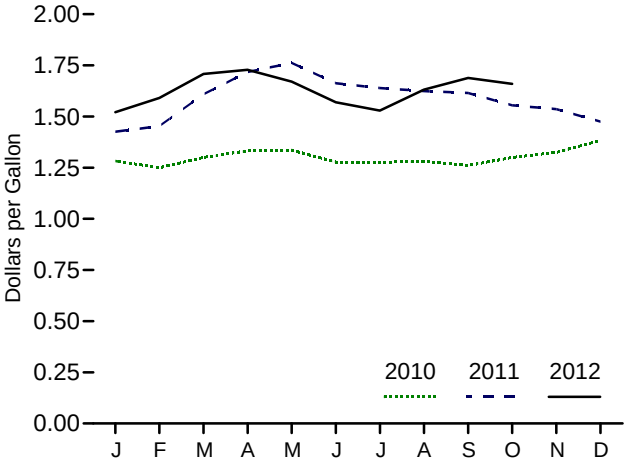
Costs, August 2012



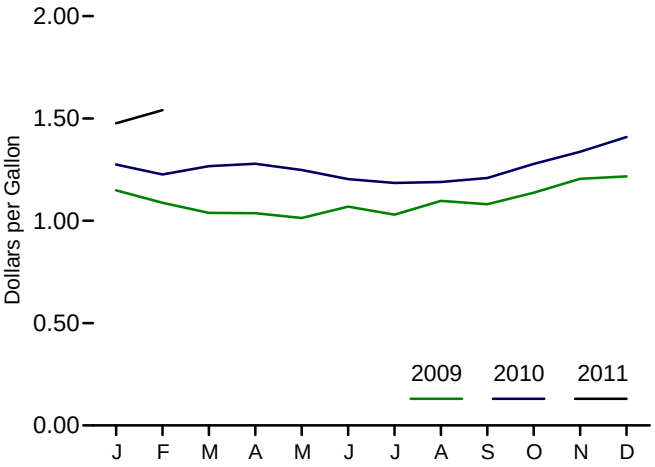
Residential Electricity,[a] Monthly



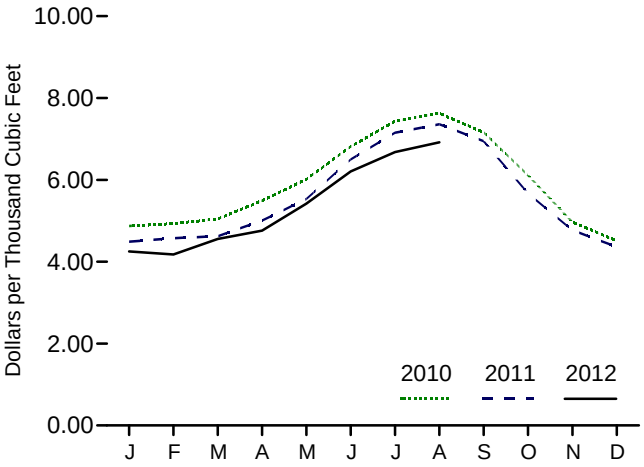
Motor Gasoline,[a] Monthly



Residential Heating Oil,[b] Monthly



Residential Natural Gas,[a] Monthly



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

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

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

	Consumer Price Index, All Urban Consumers[a]	Motor Gasoline[b]		Residential Heating Oil[c]		Residential Natural Gas[b]		Residential Electricity[b]	
	Index 1982-1984=100	Dollars per Gallon	Dollars per Million Btu	Dollars per Gallon	Dollars per Million Btu	Dollars per Thousand Cubic Feet	Dollars per Million Btu	Cents per Kilowatthour	Dollars per Million Btu
1973 Average	**44.4**	**NA**	**NA**	**NA**	**NA**	**2.91**	**2.85**	**5.6**	**16.50**
1975 Average	**53.8**	**NA**	**NA**	**NA**	**NA**	**3.18**	**3.12**	**6.5**	**19.07**
1980 Average	**82.4**	**1.482**	**11.85**	**1.182**	**8.52**	**4.47**	**4.36**	**6.6**	**19.21**
1985 Average	**107.6**	**1.112**	**8.89**	**0.979**	**7.06**	**5.69**	**5.52**	**6.87**	**20.13**
1990 Average	**130.7**	**0.931**	**7.44**	**0.813**	**5.86**	**4.44**	**4.31**	**5.99**	**17.56**
1995 Average	**152.4**	**0.791**	**6.37**	**0.569**	**4.10**	**3.98**	**3.87**	**5.51**	**16.15**
1996 Average	**156.9**	**0.821**	**6.61**	**0.630**	**4.54**	**4.04**	**3.94**	**5.33**	**15.62**
1997 Average	**160.5**	**0.804**	**6.48**	**0.613**	**4.42**	**4.32**	**4.21**	**5.25**	**15.39**
1998 Average	**163.0**	**0.684**	**5.51**	**0.523**	**3.77**	**4.18**	**4.05**	**5.07**	**14.85**
1999 Average	**166.6**	**0.733**	**5.91**	**0.526**	**3.79**	**4.02**	**3.91**	**4.90**	**14.36**
2000 Average	**172.2**	**0.908**	**7.32**	**0.761**	**5.49**	**4.51**	**4.39**	**4.79**	**14.02**
2001 Average	**177.1**	**0.864**	**6.97**	**0.706**	**5.09**	**5.44**	**5.28**	**4.84**	**14.20**
2002 Average	**179.9**	**0.801**	**6.46**	**0.628**	**4.52**	**4.39**	**4.28**	**4.69**	**13.75**
2003 Average	**184.0**	**0.890**	**7.18**	**0.736**	**5.31**	**5.23**	**5.09**	**4.74**	**13.89**
2004 Average	**188.9**	**1.018**	**8.20**	**0.819**	**5.91**	**5.69**	**5.55**	**4.74**	**13.89**
2005 Average	**195.3**	**1.197**	**9.64**	**1.051**	**7.58**	**6.50**	**6.33**	**4.84**	**14.18**
2006 Average	**201.6**	**1.307**	**10.52**	**1.173**	**8.46**	**6.81**	**6.63**	**5.16**	**15.12**
2007 Average	**207.342**	**1.374**	**11.06**	**1.250**	**9.01**	**6.31**	**6.14**	**5.14**	**15.05**
2008 Average	**215.303**	**1.541**	**12.40**	**1.495**	**10.78**	**6.45**	**6.28**	**5.23**	**15.33**
2009 Average	**214.537**	**1.119**	**9.01**	**1.112**	**8.02**	**5.66**	**5.52**	**5.37**	**15.72**
2010 January	216.687	1.282	10.32	1.275	9.19	4.87	4.76	4.84	14.19
February	216.741	1.250	10.06	1.226	8.84	4.93	4.82	5.02	14.73
March	217.631	1.300	10.46	1.267	9.13	5.05	4.93	5.10	14.96
April	218.009	1.333	10.73	1.278	9.22	5.49	5.37	5.37	15.74
May	218.178	1.336	10.75	1.248	9.00	6.01	5.88	5.46	16.00
June	217.965	1.277	10.28	1.203	8.68	6.82	6.66	5.46	16.01
July	218.011	1.277	10.27	1.185	8.55	7.44	7.27	5.52	16.19
August	218.312	1.280	10.31	1.190	8.58	7.63	7.46	5.51	16.15
September	218.439	1.261	10.15	1.209	8.72	7.16	7.00	5.47	16.03
October	218.711	1.300	10.46	1.278	9.21	6.11	5.98	5.42	15.89
November	218.803	1.325	10.66	1.337	9.64	4.97	4.86	5.31	15.56
December	219.179	1.383	11.13	1.409	10.16	4.51	4.41	5.05	14.79
Average	**218.056**	**1.301**	**10.47**	**1.283**	**9.25**	**5.22**	**5.11**	**5.29**	**15.51**
2011 January	220.223	1.425	11.47	1.476	10.64	4.49	4.39	R 4.94	R 14.47
February	221.309	1.453	11.69	1.540	11.11	4.58	4.47	R 5.00	R 14.65
March	223.467	1.608	12.95	NA	NA	4.62	4.52	R 5.16	R 15.11
April	224.906	1.718	13.83	NA	NA	5.01	4.89	R 5.19	R 15.21
May	225.964	1.762	14.18	NA	NA	5.53	5.41	R 5.28	R 15.47
June	225.722	1.663	13.38	NA	NA	6.50	6.35	R 5.30	R 15.54
July	225.922	1.639	13.19	NA	NA	7.15	6.99	R 5.35	R 15.68
August	226.545	1.624	13.07	NA	NA	7.36	7.19	R 5.34	R 15.64
September	226.889	1.615	13.00	NA	NA	6.95	6.79	R 5.36	R 15.72
October	226.421	1.555	12.52	NA	NA	5.67	5.54	R 5.34	R 15.64
November	226.230	1.536	12.36	NA	NA	4.77	4.66	R 5.21	R 15.26
December	225.672	1.475	11.87	NA	NA	4.36	4.26	R 5.05	R 14.81
Average	**224.939**	**1.590**	**12.80**	**NA**	**NA**	**4.90**	**4.79**	R **5.21**	R **15.27**
2012 January	226.665	1.521	12.24	NA	NA	4.25	4.16	R 5.03	R 14.73
February	227.663	1.591	12.81	NA	NA	4.18	4.08	R 5.06	R 14.83
March	229.392	1.708	13.75	NA	NA	4.56	4.45	R 5.11	R 14.97
April	230.085	1.728	13.91	NA	NA	4.76	4.65	R 5.18	R 15.17
May	229.815	1.670	13.45	NA	NA	5.42	5.30	R 5.20	R 15.23
June	229.478	1.570	12.63	NA	NA	R 6.21	R 6.07	R 5.27	R 15.44
July	229.104	1.529	12.30	NA	NA	R 6.68	R 6.53	R 5.24	R 15.35
August	230.379	1.632	13.13	NA	NA	R 6.92	R 6.76	R 5.28	R 15.48
September	231.407	1.689	13.59	NA	NA	NA	NA	NA	NA
October	231.317	1.660	13.36	NA	NA	NA	NA	NA	NA

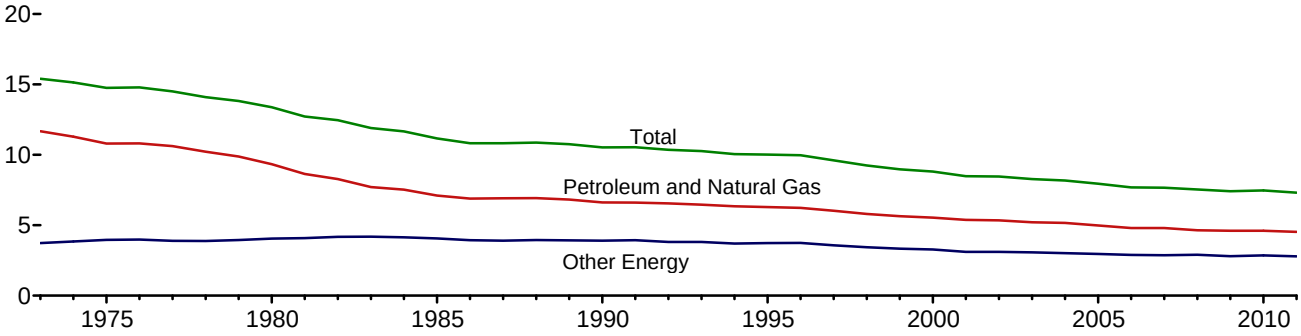
[a] Data are U.S. city averages for all items, and are not seasonally adjusted.
[b] Includes taxes.
[c] Excludes taxes.
R=Revised. NA=Not available.

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

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

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

Figure 1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product, 1973-2011
(Thousand Btu per Chained (2005) Dollar)



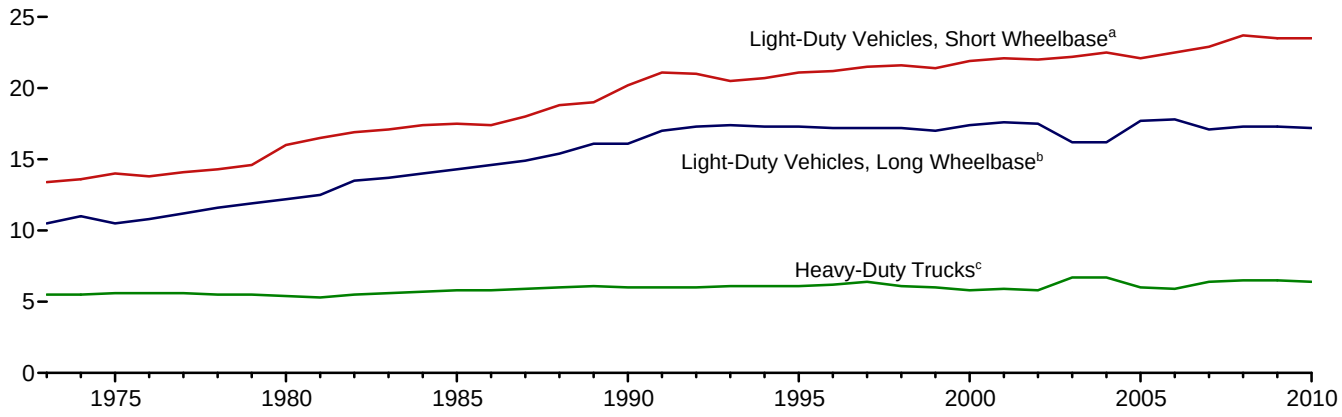
Note: See "Real Dollars" in Glossary.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 1.7.

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

	Energy Consumption			Gross Domestic Product (GDP)	Energy Consumption per Real Dollar of GDP		
	Petroleum and Natural Gas	Other Energy[a]	Total		Petroleum and Natural Gas	Other Energy[a]	Total
	Quadrillion Btu			Billion Chained (2005) Dollars	Thousand Btu per Chained (2005) Dollar		
1973 Year	57.350	18.334	75.684	4,912.8	11.67	3.73	15.41
1974 Year	55.186	18.776	73.962	4,885.7	11.30	3.84	15.14
1975 Year	52.680	19.284	71.965	4,875.4	10.81	3.96	14.76
1976 Year	55.523	20.452	75.975	5,136.9	10.81	3.98	14.79
1977 Year	57.054	20.907	77.961	5,373.1	10.62	3.89	14.51
1978 Year	57.963	21.987	79.950	5,672.8	10.22	3.88	14.09
1979 Year	57.788	23.070	80.859	5,850.1	9.88	3.94	13.82
1980 Year	54.440	23.627	78.067	5,834.0	9.33	4.05	13.38
1981 Year	51.680	24.426	76.106	5,982.1	8.64	4.08	12.72
1982 Year	48.588	24.511	73.099	5,865.9	8.28	4.18	12.46
1983 Year	47.273	25.698	72.971	6,130.9	7.71	4.19	11.90
1984 Year	49.447	27.185	76.632	6,571.5	7.52	4.14	11.66
1985 Year	48.628	27.764	76.392	6,843.4	7.11	4.06	11.16
1986 Year	48.790	27.857	76.647	7,080.5	6.89	3.93	10.83
1987 Year	50.504	28.551	79.054	7,307.0	6.91	3.91	10.82
1988 Year	52.671	30.038	82.709	7,607.4	6.92	3.95	10.87
1989 Year	53.811	30.975	84.786	7,879.2	6.83	3.93	10.76
1990 Year	53.155	31.330	84.485	8,027.1	6.62	3.90	10.52
1991 Year	52.879	31.559	84.438	8,008.3	6.60	3.94	10.54
1992 Year	54.239	31.544	85.783	8,280.0	6.55	3.81	10.36
1993 Year	54.973	32.450	87.424	8,516.2	6.46	3.81	10.27
1994 Year	56.289	32.803	89.091	8,863.1	6.35	3.70	10.05
1995 Year	57.110	33.920	91.029	9,086.0	6.29	3.73	10.02
1996 Year	58.760	35.262	94.022	9,425.8	6.23	3.74	9.97
1997 Year	59.382	35.221	94.602	9,845.9	6.03	3.58	9.61
1998 Year	59.646	35.372	95.018	10,274.7	5.81	3.44	9.25
1999 Year	60.747	35.905	96.652	10,770.7	5.64	3.33	8.97
2000 Year	62.086	36.729	98.814	11,216.4	5.54	3.27	8.81
2001 Year	60.958	35.210	96.168	11,337.5	5.38	3.11	8.48
2002 Year	61.734	35.911	97.645	11,543.1	5.35	3.11	8.46
2003 Year	61.642	36.336	97.978	11,836.4	5.21	3.07	8.28
2004 Year	63.215	36.947	100.162	12,246.9	5.16	3.02	8.18
2005 Year	62.953	37.328	100.282	12,623.0	4.99	2.96	7.94
2006 Year	62.194	37.435	99.629	12,958.5	4.80	2.89	7.69
2007 Year	63.437	37.859	101.296	13,206.4	4.80	2.87	7.67
2008 Year	61.123	38.152	99.275	13,161.9	4.64	2.90	7.54
2009 Year	58.819	35.740	94.559	12,757.9	4.61	2.80	7.41
2010 Year	60.266	R 37.398	R 97.664	13,063.0	4.61	2.86	7.48
2011 Year	R 60.222	R 37.089	R 97.311	13,299.1	4.53	2.79	7.32

[a] Coal, coal coke net imports, nuclear electric power, renewable energy, and electricity net imports.
R=Revised.
Notes: • See "Primary Energy Consumption" and "Real Dollars" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Sources: • **Energy Consumption:** Table 1.3. • **Gross Domestic Product:** U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts (October 26, 2012), Table 1.1.6.

Figure 1.8 Motor Vehicle Fuel Economy, 1973-2010
(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 (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)
1973	9,884	737	13.4	9,779	931	10.5	15,370	2,775	5.5	10,099	850	11.9
1974	9,221	677	13.6	9,452	862	11.0	14,995	2,708	5.5	9,493	788	12.0
1975	9,309	665	14.0	9,829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
1976	9,418	681	13.8	10,127	934	10.8	15,438	2,764	5.6	9,774	806	12.1
1977	9,517	676	14.1	10,607	947	11.2	16,700	3,002	5.6	9,978	814	12.3
1978	9,500	665	14.3	10,968	948	11.6	18,045	3,263	5.5	10,077	816	12.4
1979	9,062	620	14.6	10,802	905	11.9	18,502	3,380	5.5	9,722	776	12.5
1980	8,813	551	16.0	10,437	854	12.2	18,736	3,447	5.4	9,458	712	13.3
1981	8,873	538	16.5	10,244	819	12.5	19,016	3,565	5.3	9,477	697	13.6
1982	9,050	535	16.9	10,276	762	13.5	19,931	3,647	5.5	9,644	686	14.1
1983	9,118	534	17.1	10,497	767	13.7	21,083	3,769	5.6	9,760	686	14.2
1984	9,248	530	17.4	11,151	797	14.0	22,550	3,967	5.7	10,017	691	14.5
1985	9,419	538	17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1986	9,464	543	17.4	10,764	738	14.6	22,143	3,821	5.8	10,143	692	14.7
1987	9,720	539	18.0	11,114	744	14.9	23,349	3,937	5.9	10,453	694	15.1
1988	9,972	531	18.8	11,465	745	15.4	22,485	3,736	6.0	10,721	688	15.6
1989	10,157	533	19.0	11,676	724	16.1	22,926	3,776	6.1	10,932	688	15.9
1990	10,504	520	20.2	11,902	738	16.1	23,603	3,953	6.0	11,107	677	16.4
1991	10,571	501	21.1	12,245	721	17.0	24,229	4,047	6.0	11,294	669	16.9
1992	10,857	517	21.0	12,381	717	17.3	25,373	4,210	6.0	11,558	683	16.9
1993	10,804	527	20.5	12,430	714	17.4	26,262	4,309	6.1	11,595	693	16.7
1994	10,992	531	20.7	12,156	701	17.3	25,838	4,202	6.1	11,683	698	16.7
1995	11,203	530	21.1	12,018	694	17.3	26,514	4,315	6.1	11,793	700	16.8
1996	11,330	534	21.2	11,811	685	17.2	26,092	4,221	6.2	11,813	700	16.9
1997	11,581	539	21.5	12,115	703	17.2	27,032	4,218	6.4	12,107	711	17.0
1998	11,754	544	21.6	12,173	707	17.2	25,397	4,135	6.1	12,211	721	16.9
1999	11,848	553	21.4	11,957	701	17.0	26,014	4,352	6.0	12,206	732	16.7
2000	11,976	547	21.9	11,672	669	17.4	25,617	4,391	5.8	12,164	720	16.9
2001	11,831	534	22.1	11,204	636	17.6	26,602	4,477	5.9	11,887	695	17.1
2002	12,202	555	22.0	11,364	650	17.5	27,071	4,642	5.8	12,171	719	16.9
2003	12,325	556	22.2	11,287	697	16.2	28,093	4,215	6.7	12,208	718	17.0
2004	12,460	553	22.5	11,184	690	16.2	27,023	4,057	6.7	12,200	714	17.1
2005	12,510	567	22.1	10,920	617	17.7	26,235	4,385	6.0	12,082	706	17.1
2006	12,485	554	22.5	10,920	612	17.8	25,231	4,304	5.9	12,017	698	17.2
2007	[a]10,710	[a]468	[a]22.9	[b]14,970	[b]877	[b]17.1	[c]28,290	[c]4,398	6.4	11,915	693	17.2
2008	10,290	435	23.7	15,256	880	17.3	28,573	4,387	6.5	11,631	667	17.4
2009	10,391	442	23.5	15,252	882	17.3	26,274	4,037	6.5	11,631	661	17.6
2010[P]	10,649	453	23.5	15,463	898	17.2	26,609	4,174	6.4	11,853	678	17.5

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

[b] Through 2006, data are for vans, pickup trucks, sport utility vehicles, and a small number of trucks with 2 axles and 4 tires, such as step vans. Beginning in 2007, data are for large passenger cars, vans, pickup trucks, and sport utility vehicles with a wheelbase larger than 121 inches.

[c] Through 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 shown separately.

P=Preliminary.

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

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

Sources: • **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:** • **1973-1994—**Federal Highway Administration (FHWA), *Highway Statistics Summary to 1995,* Table VM-201A. • **1995 forward—**FHWA, *Highway Statistics,* annual reports, Table VM-1.

Table 1.9 Heating Degree-Days by Census Division

Census Divisions	October					Cumulative July through October				
				Percent Change					Percent Change	
	Normal[a]	2011	2012	Normal to 2012	2011 to 2012	Normal[a]	2011	2012	Normal to 2012	2011 to 2012
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	467	393	355	-24	-10	657	499	509	-23	2
Middle Atlantic										
New Jersey, New York, Pennsylvania	399	351	319	-20	-9	526	418	408	-22	-2
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	424	391	451	6	15	580	573	636	10	11
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	424	368	493	16	34	607	568	671	11	18
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	164	177	154	-6	-13	189	195	180	-5	-8
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	213	247	237	11	-4	246	292	278	13	-5
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	83	92	115	NM	NM	92	100	119	NM	NM
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	360	308	324	-10	5	543	377	398	-27	6
Pacific[b]										
California, Oregon, Washington	186	151	149	-20	-1	294	202	193	-34	-4
U.S. Average[b]	**282**	**260**	**270**	**-4**	**4**	**383**	**336**	**351**	**-8**	**4**

[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	October					Cumulative January through October				
				Percent Change					Percent Change	
	Normal[a]	2011	2012	Normal to 2012	2011 to 2012	Normal[a]	2011	2012	Normal to 2012	2011 to 2012
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	0	0	0	NM	NM	417	607	611	47	1
Middle Atlantic										
New Jersey, New York, Pennsylvania	5	1	4	NM	NM	656	886	895	36	1
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	8	2	3	NM	NM	709	897	999	41	11
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	12	14	7	NM	NM	927	1,118	1,218	31	9
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	120	89	125	4	40	1,877	2,239	2,142	14	-4
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	53	14	21	NM	NM	1,539	1,811	1,783	16	-2
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	134	145	150	12	3	2,409	3,117	2,850	18	-9
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	55	70	68	NM	NM	1,239	1,385	1,507	22	9
Pacific[b]										
California, Oregon, Washington	36	41	55	NM	NM	699	717	899	29	25
U.S. Average[b]	**53**	**46**	**56**	**NM**	**NM**	**1,195**	**1,454**	**1,465**	**23**	**1**

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

[b] Excludes Alaska and Hawaii.

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

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

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

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

Note. Merchandise Trade Value. Imports data presented are based on the customs values. Those values do not include insurance and freight and are consequently lower than the cost, insurance, and freight (CIF) values, which are also reported by the Bureau of the Census. All exports data, and imports data prior to 1981, are on a free alongside ship (f.a.s.) basis.

"Balance" is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. "Energy" includes mineral fuels, lubricants, and related material. "Non-Energy Balance" and "Total Merchandise" include foreign exports (i.e., re-exports) and nonmonetary gold and U.S. Department of Defense Grant-Aid shipments. The "Non-Energy Balance" is calculated by subtracting the "Energy" from the "Total Merchandise Balance."

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

Table 1.5 Sources

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

Petroleum Exports
1974–1987: "U.S. Exports," FT-410, December issues.
1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.
1990–1992: "U.S. Merchandise Trade," Final Report.
1993–2007: "U.S. International Trade in Goods and Services," Annual Revision.
2008 forward: "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.
1994–2007: "U.S. International Trade in Goods and Services," Annual Revision.
2008 forward: "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.
1993–2007: "U.S. International Trade in Goods and Services," Annual Revision.
2008 forward: "U.S. International Trade in Goods and Services," FT-900, monthly.

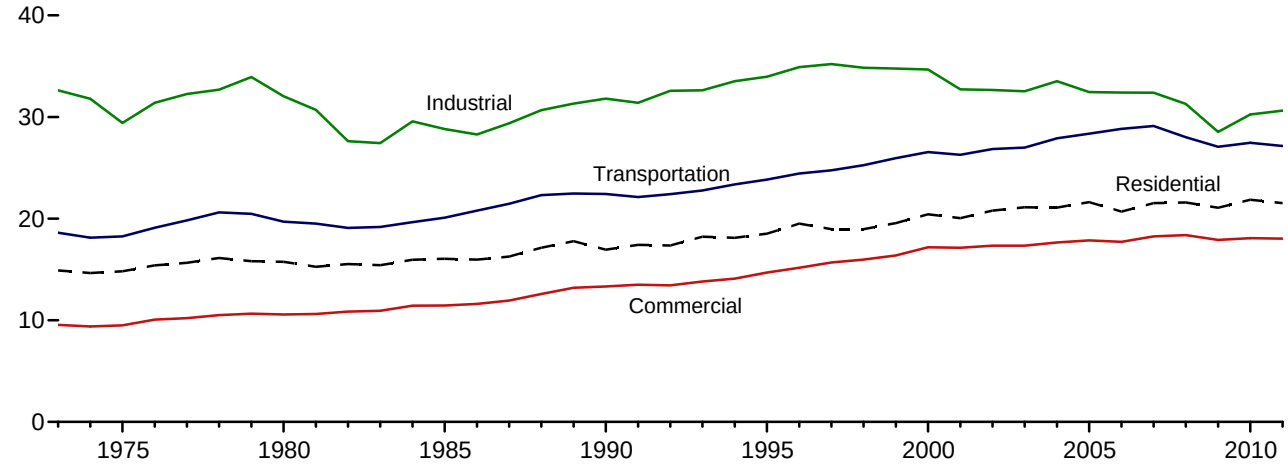
Petroleum, Energy, and Non-Energy Balances
Calculated by the U.S. Energy Information Administration.

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.
1992–2007: "U.S. International Trade in Goods and Services," Annual Revision.
2008 forward: "U.S. International Trade in Goods and Services," FT-900, monthly.

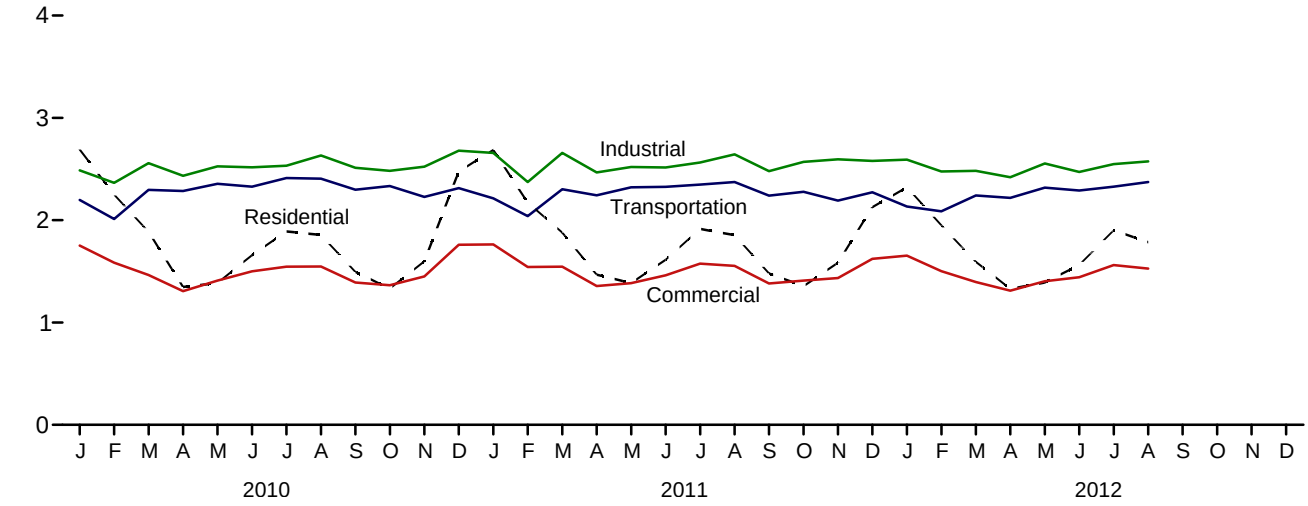
2. Energy Consumption by Sector

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

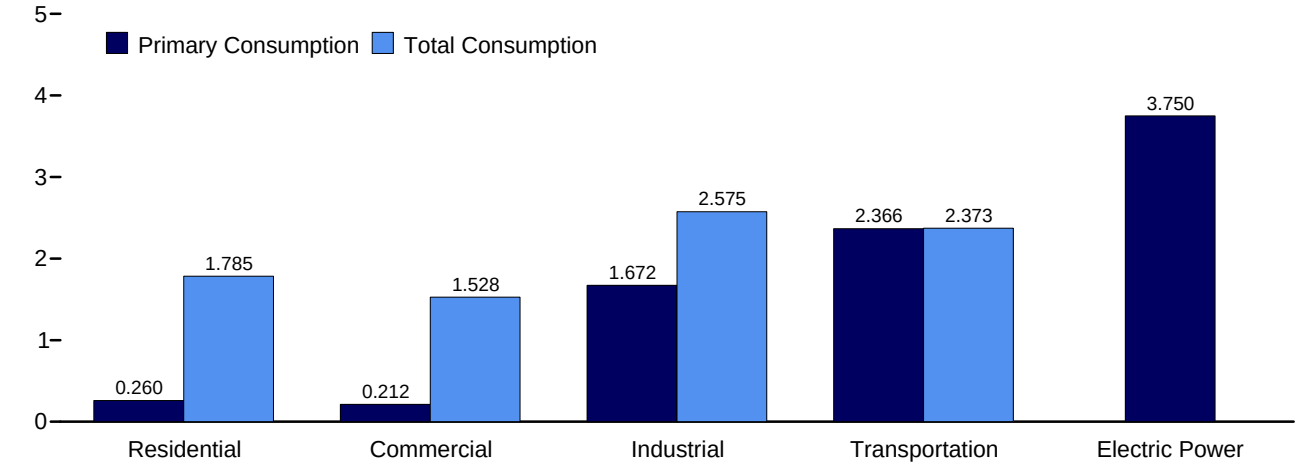
Total Consumption by End-Use Sector, 1973-2011



Total Consumption by End-Use Sector, Monthly



By Sector, August 2012



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

Table 2.1 Energy Consumption by Sector

(Trillion Btu)

	End-Use Sectors								Electric Power Sector[c,d]		
	Residential		Commercial[a]		Industrial[b]		Transportation			Balancing Item[g]	Primary Total[h]
	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]		
1973 Total	**8,225**	**14,897**	**4,423**	**9,543**	**24,720**	**32,623**	**18,577**	**18,613**	**19,731**	**7**	**75,684**
1975 Total	**7,990**	**14,813**	**4,059**	**9,492**	**21,434**	**29,413**	**18,210**	**18,245**	**20,270**	**1**	**71,965**
1980 Total	**7,439**	**15,753**	**4,105**	**10,578**	**22,595**	**32,039**	**19,659**	**19,697**	**24,269**	**-1**	**78,067**
1985 Total	**7,148**	**16,041**	**3,732**	**11,451**	**19,443**	**28,816**	**20,041**	**20,088**	**26,032**	**-4**	**76,392**
1990 Total	**6,557**	**16,945**	**3,896**	**13,320**	**21,180**	**31,810**	**22,366**	**22,420**	**30,495**	**-9**	**84,485**
1995 Total	**6,936**	**18,519**	**4,101**	**14,690**	**22,719**	**33,971**	**23,791**	**23,846**	**33,479**	**3**	**91,029**
1996 Total	**7,467**	**19,504**	**4,273**	**15,172**	**23,410**	**34,904**	**24,383**	**24,437**	**34,485**	**4**	**94,022**
1997 Total	**7,033**	**18,965**	**4,295**	**15,681**	**23,686**	**35,200**	**24,695**	**24,750**	**34,886**	**6**	**94,602**
1998 Total	**6,413**	**18,955**	**4,005**	**15,968**	**23,177**	**34,843**	**25,201**	**25,256**	**36,225**	**-3**	**95,018**
1999 Total	**6,775**	**19,557**	**4,053**	**16,376**	**22,950**	**34,764**	**25,891**	**25,949**	**36,976**	**6**	**96,652**
2000 Total	**7,159**	**20,425**	**4,278**	**17,175**	**22,824**	**34,664**	**26,489**	**26,548**	**38,062**	**2**	**98,814**
2001 Total	**6,868**	**20,042**	**4,084**	**17,137**	**21,794**	**32,720**	**26,213**	**26,275**	**37,215**	**-6**	**96,168**
2002 Total	**6,912**	**20,791**	**4,132**	**17,345**	**21,799**	**32,662**	**26,781**	**26,842**	**38,016**	**5**	**97,645**
2003 Total	**7,211**	**21,110**	**4,283**	**17,343**	**21,503**	**32,532**	**26,920**	**26,994**	**38,062**	**-1**	**97,978**
2004 Total	**6,993**	**21,093**	**4,232**	**17,659**	**22,412**	**33,520**	**27,817**	**27,895**	**38,713**	**-6**	**100,162**
2005 Total	**6,909**	**21,626**	**4,051**	**17,857**	**21,411**	**32,446**	**28,272**	**28,353**	**39,638**	**(s)**	**100,282**
2006 Total	**6,168**	**20,688**	**3,747**	**17,711**	**21,536**	**32,401**	**28,751**	**28,830**	**39,428**	**(s)**	**99,629**
2007 Total	**6,598**	**21,531**	**3,922**	**18,255**	**21,370**	**32,394**	**29,029**	**29,117**	**40,377**	**-1**	**101,296**
2008 Total	**6,817**	**21,596**	**4,073**	**18,381**	**20,480**	**31,290**	**27,925**	**28,008**	**39,978**	**(s)**	**99,275**
2009 Total	**6,619**	**21,064**	**4,061**	**17,899**	**18,813**	**28,525**	**26,989**	**27,071**	**38,077**	**(s)**	**94,559**
2010 January	1,142	2,691	617	1,752	1,695	2,487	2,190	2,198	3,484	4	9,132
February	985	2,250	548	1,585	1,601	2,365	2,004	2,012	3,073	1	8,213
March	737	1,887	419	1,465	1,752	2,557	2,290	2,297	3,008	-1	8,205
April	439	1,347	277	1,307	1,624	2,435	2,280	2,286	2,755	-2	7,372
May	328	1,386	226	1,410	1,612	2,527	2,349	2,356	3,163	R -1	R 7,677
June	268	1,659	198	1,501	1,608	2,517	2,320	2,328	3,611	2	R 8,007
July	240	1,889	182	1,546	1,618	2,532	2,404	2,411	3,934	4	R 8,382
August	232	1,855	186	1,547	1,707	2,633	2,399	2,406	3,917	R 3	R 8,444
September	237	1,494	189	1,390	1,671	2,512	2,291	2,298	3,306	(s)	7,694
October	343	1,331	256	1,364	1,644	2,482	2,327	2,333	2,942	-1	7,509
November	599	1,597	364	1,451	1,671	2,523	2,221	2,228	2,944	-1	7,797
December	1,054	2,476	579	1,761	1,802	2,679	2,307	2,314	3,488	1	9,231
Total	**6,603**	**21,862**	**4,039**	**18,078**	**20,003**	**30,250**	**27,384**	**27,466**	**39,626**	R **8**	R **97,664**
2011 January	1,177	R 2,686	637	R 1,764	R 1,824	R 2,657	R 2,205	2,213	R 3,477	1	R 9,321
February	956	R 2,172	532	R 1,542	R 1,600	R 2,373	2,033	2,039	R 3,005	R -2	8,125
March	777	R 1,879	R 450	1,545	R 1,793	R 2,657	2,296	2,303	R 3,069	-3	8,381
April	482	R 1,468	R 299	R 1,357	R 1,622	R 2,468	2,236	2,243	R 2,895	-2	R 7,533
May	331	R 1,386	222	R 1,385	R 1,633	R 2,520	2,314	2,321	R 3,111	R -2	R 7,610
June	263	R 1,614	R 194	1,461	R 1,616	R 2,515	2,320	2,327	R 3,524	1	R 7,917
July	242	R 1,915	R 190	R 1,575	R 1,620	R 2,564	2,341	2,348	R 4,008	R 4	R 8,407
August	253	R 1,854	205	R 1,553	1,716	R 2,643	2,366	2,373	R 3,883	3	R 8,426
September	264	R 1,481	R 212	R 1,381	R 1,637	R 2,479	2,234	2,240	R 3,234	-1	R 7,581
October	382	R 1,355	292	1,410	R 1,703	R 2,570	2,271	2,277	R 2,964	-2	R 7,609
November	596	R 1,584	369	R 1,435	R 1,738	R 2,595	2,186	2,192	R 2,916	-3	7,803
December	888	R 2,127	505	1,622	R 1,728	R 2,579	R 2,266	R 2,273	R 3,214	-3	R 8,599
Total	**6,612**	R **21,523**	R **4,109**	R **18,028**	R **20,231**	R **30,620**	R **27,068**	R **27,149**	R **39,301**	R **-9**	R **97,311**
2012 January	1,010	R 2,322	R 561	R 1,654	1,773	R 2,592	2,127	2,134	R 3,230	-2	R 8,699
February	849	R 1,951	R 484	R 1,502	R 1,681	R 2,477	2,080	2,087	R 2,922	R -4	R 8,014
March	575	R 1,593	R 348	R 1,395	R 1,651	R 2,482	2,235	2,241	R 2,903	R -6	R 7,706
April	424	R 1,329	277	R 1,310	1,593	2,419	R 2,212	2,219	R 2,770	-5	R 7,272
May	309	R 1,391	218	1,403	R 1,647	R 2,555	2,312	R 2,318	R 3,181	-3	R 7,665
June	264	R 1,564	R 199	R 1,442	1,592	R 2,471	2,284	R 2,290	R 3,429	R (s)	R 7,768
July	251	R 1,901	R 194	1,561	R 1,622	R 2,548	2,320	2,327	R 3,951	R 2	R 8,340
August	260	1,785	212	1,528	1,672	2,575	2,366	2,373	3,750	2	8,261
8-Month Total	**3,942**	**13,836**	**2,493**	**11,796**	**13,232**	**20,119**	**17,936**	**17,989**	**26,137**	**-15**	**63,724**
2011 8-Month Total	**4,481**	**14,975**	**2,730**	**12,181**	**13,425**	**20,397**	**18,111**	**18,166**	**26,972**	**(s)**	**65,718**
2010 8-Month Total	**4,371**	**14,964**	**2,652**	**12,112**	**13,216**	**20,054**	**18,237**	**18,293**	**26,946**	**10**	**65,433**

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

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

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

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

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

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

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

[h] Primary energy consumption total. See Table 1.3.

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

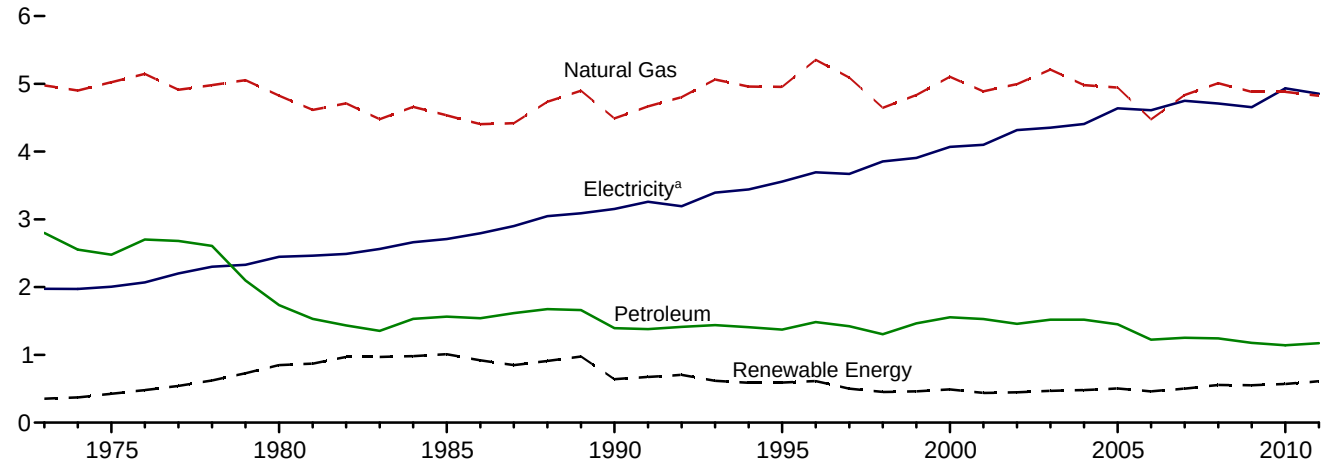
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

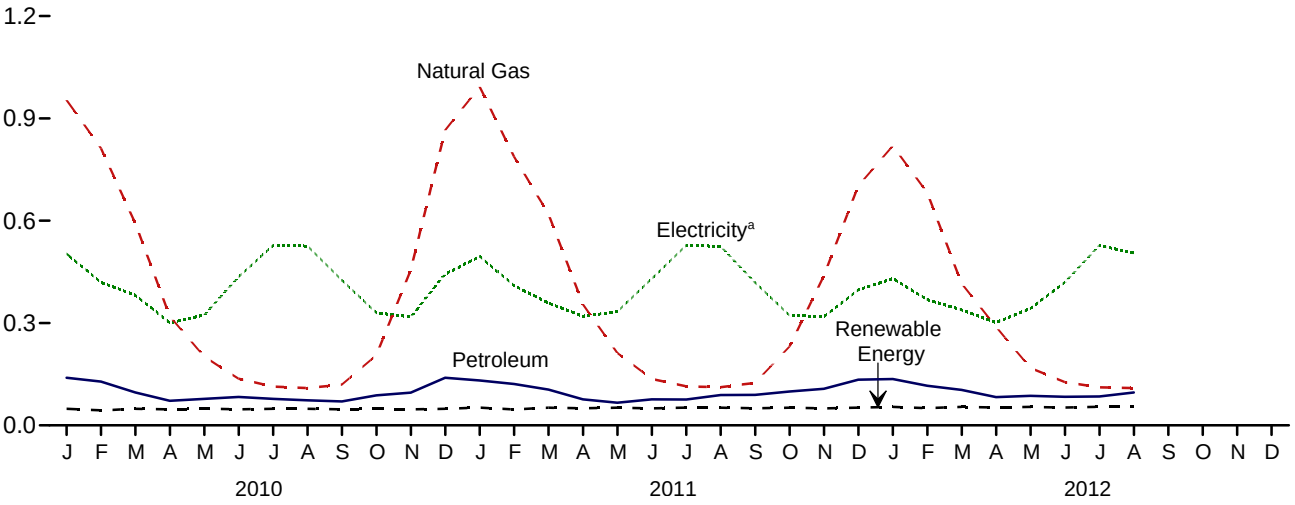
Sources: Tables 1.3 and 2.2–2.6.

Figure 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

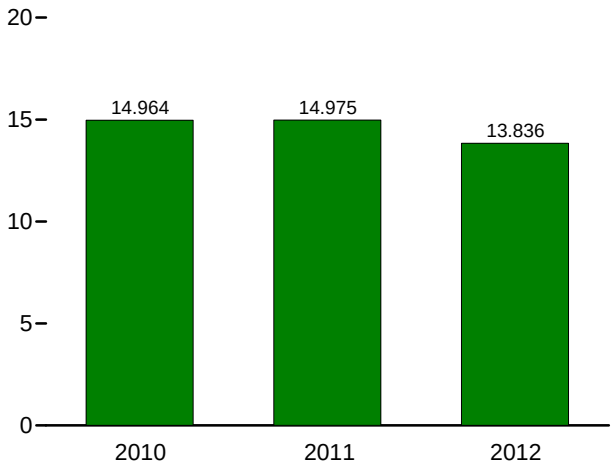
By Major Source, 1973-2011



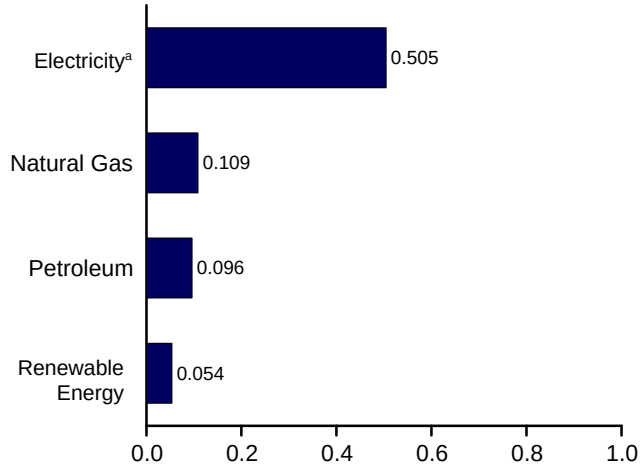
By Major Source, Monthly



Total, January-August



By Major Source, August 2012



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

Table 2.2 Residential Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]											
	Fossil Fuels				Renewable Energy[b]							
	Coal	Natural Gas[c]	Petro-leum	Total	Geo-thermal	Solar/ PV	Bio-mass	Total	Total Primary	Electricity Retail Sales[d]	Electrical System Energy Losses[e]	Total
1973 Total	**94**	**4,977**	**2,800**	**7,871**	**NA**	**NA**	**354**	**354**	**8,225**	**1,976**	**4,696**	**14,897**
1975 Total	**63**	**5,023**	**2,479**	**7,564**	**NA**	**NA**	**425**	**425**	**7,990**	**2,007**	**4,817**	**14,813**
1980 Total	**31**	**4,825**	**1,734**	**6,589**	**NA**	**NA**	**850**	**850**	**7,439**	**2,448**	**5,866**	**15,753**
1985 Total	**39**	**4,534**	**1,565**	**6,138**	**NA**	**NA**	**1,010**	**1,010**	**7,148**	**2,709**	**6,184**	**16,041**
1990 Total	**31**	**4,491**	**1,394**	**5,916**	**6**	**56**	**580**	**641**	**6,557**	**3,153**	**7,235**	**16,945**
1995 Total	**17**	**4,954**	**1,374**	**6,345**	**7**	**64**	**520**	**591**	**6,936**	**3,557**	**8,026**	**18,519**
1996 Total	**17**	**5,354**	**1,484**	**6,854**	**7**	**65**	**540**	**612**	**7,467**	**3,694**	**8,344**	**19,504**
1997 Total	**16**	**5,093**	**1,422**	**6,531**	**8**	**64**	**430**	**502**	**7,033**	**3,671**	**8,261**	**18,965**
1998 Total	**12**	**4,646**	**1,304**	**5,962**	**8**	**64**	**380**	**452**	**6,413**	**3,856**	**8,686**	**18,955**
1999 Total	**14**	**4,835**	**1,465**	**6,314**	**9**	**63**	**390**	**461**	**6,775**	**3,906**	**8,875**	**19,557**
2000 Total	**11**	**5,105**	**1,554**	**6,670**	**9**	**61**	**420**	**489**	**7,159**	**4,069**	**9,197**	**20,425**
2001 Total	**12**	**4,889**	**1,529**	**6,430**	**9**	**59**	**370**	**438**	**6,868**	**4,100**	**9,074**	**20,042**
2002 Total	**12**	**4,995**	**1,457**	**6,464**	**10**	**57**	**380**	**448**	**6,912**	**4,317**	**9,562**	**20,791**
2003 Total	**12**	**5,209**	**1,519**	**6,741**	**13**	**57**	**400**	**470**	**7,211**	**4,353**	**9,546**	**21,110**
2004 Total	**11**	**4,981**	**1,520**	**6,513**	**14**	**57**	**410**	**481**	**6,993**	**4,408**	**9,691**	**21,093**
2005 Total	**8**	**4,946**	**1,451**	**6,406**	**16**	**58**	**430**	**504**	**6,909**	**4,638**	**10,079**	**21,626**
2006 Total	**6**	**4,476**	**1,224**	**5,706**	**18**	**63**	**380**	**462**	**6,168**	**4,611**	**9,909**	**20,688**
2007 Total	**8**	**4,835**	**1,254**	**6,097**	**22**	**70**	**410**	**502**	**6,598**	**4,750**	**10,182**	**21,531**
2008 Total	**8**	**5,010**	**1,243**	**6,261**	**26**	**80**	**450**	**557**	**6,817**	**4,708**	**10,071**	**21,596**
2009 Total	**8**	**4,883**	**1,176**	**6,067**	**33**	**89**	**430**	**552**	**6,619**	**4,656**	**9,789**	**21,064**
2010 January	1	953	140	1,094	3	10	36	48	1,142	503	1,045	2,691
February	1	812	128	941	3	9	32	44	985	419	846	2,250
March	1	592	96	689	3	10	36	48	737	381	768	1,887
April	(s)	320	72	392	3	9	35	47	439	300	608	1,347
May	(s)	201	78	280	3	10	36	48	328	324	734	1,386
June	1	137	83	221	3	9	35	47	268	435	956	1,659
July	1	114	78	192	3	10	36	48	240	528	1,121	1,889
August	1	109	74	183	3	10	36	48	232	526	1,098	1,855
September	(s)	120	70	190	3	9	35	47	237	425	832	1,494
October	1	206	88	294	3	10	36	48	343	330	658	1,331
November	1	456	96	552	3	9	35	47	599	318	680	1,597
December	1	865	140	1,006	3	10	36	48	1,054	444	978	2,476
Total	**7**	**4,883**	**1,142**	**6,032**	**37**	**114**	**420**	**571**	**6,603**	**4,933**	**10,326**	**21,862**
2011 January	1	993	132	1,125	3	12	37	52	1,177	R 495	R 1,015	R 2,686
February	1	787	121	909	3	11	33	47	956	R 410	R 806	R 2,172
March	1	620	105	725	3	12	37	52	777	358	R 744	R 1,879
April	(s)	355	76	432	3	12	35	50	482	R 320	R 666	R 1,468
May	(s)	212	67	279	3	12	37	52	331	R 333	R 722	R 1,386
June	R 1	136	76	213	3	12	35	50	263	430	R 921	R 1,614
July	(s)	114	76	190	3	12	37	52	242	528	R 1,145	R 1,915
August	(s)	112	89	201	3	12	37	52	253	R 525	R 1,077	R 1,854
September	(s)	124	89	214	3	12	35	50	264	419	R 798	R 1,481
October	(s)	231	99	331	3	12	37	52	382	323	R 650	R 1,355
November	(s)	439	107	546	3	12	35	50	596	318	R 670	R 1,584
December	1	702	134	836	3	12	37	52	888	R 397	R 842	R 2,127
Total	**6**	**4,824**	**1,171**	**6,002**	**40**	**140**	**430**	**610**	**6,612**	**R 4,855**	**R 10,057**	**R 21,523**
2012 January	1	820	136	956	3	14	36	54	1,010	R 431	R 881	R 2,322
February	1	682	116	798	3	13	34	51	849	R 368	R 734	R 1,951
March	(s)	416	104	520	3	14	36	54	575	R 338	R 680	R 1,593
April	(s)	289	83	372	3	14	35	52	424	R 301	R 603	R 1,329
May	(s)	168	87	255	3	14	36	54	309	343	R 739	R 1,391
June	(s)	127	84	211	3	14	35	52	264	R 420	R 880	R 1,564
July	(s)	R 112	85	197	3	14	36	54	251	528	R 1,123	R 1,901
August	1	109	96	206	3	14	36	54	260	505	1,020	1,785
8-Month Total	**3**	**2,722**	**791**	**3,516**	**26**	**113**	**287**	**426**	**3,942**	**3,234**	**6,661**	**13,836**
2011 8-Month Total	**5**	**3,329**	**742**	**4,075**	**26**	**94**	**286**	**406**	**4,481**	**3,398**	**7,096**	**14,975**
2010 8-Month Total	**5**	**3,238**	**748**	**3,991**	**24**	**76**	**280**	**380**	**4,371**	**3,416**	**7,177**	**14,964**

[a] See "Primary Energy Consumption" in Glossary.
[b] Data are estimates. See Table 10.2a for notes on series components.
[c] Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
[d] Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
[e] Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.

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

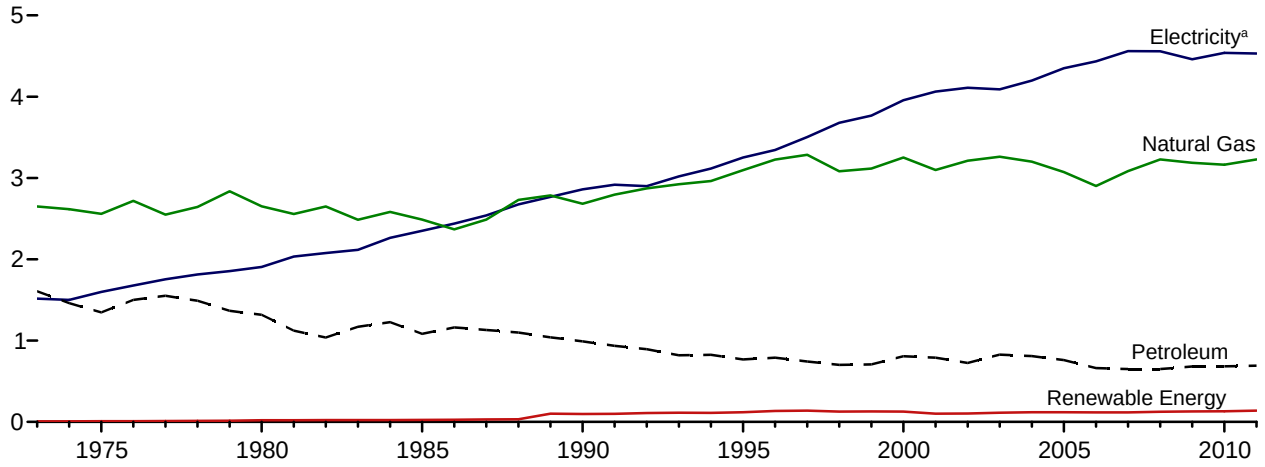
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

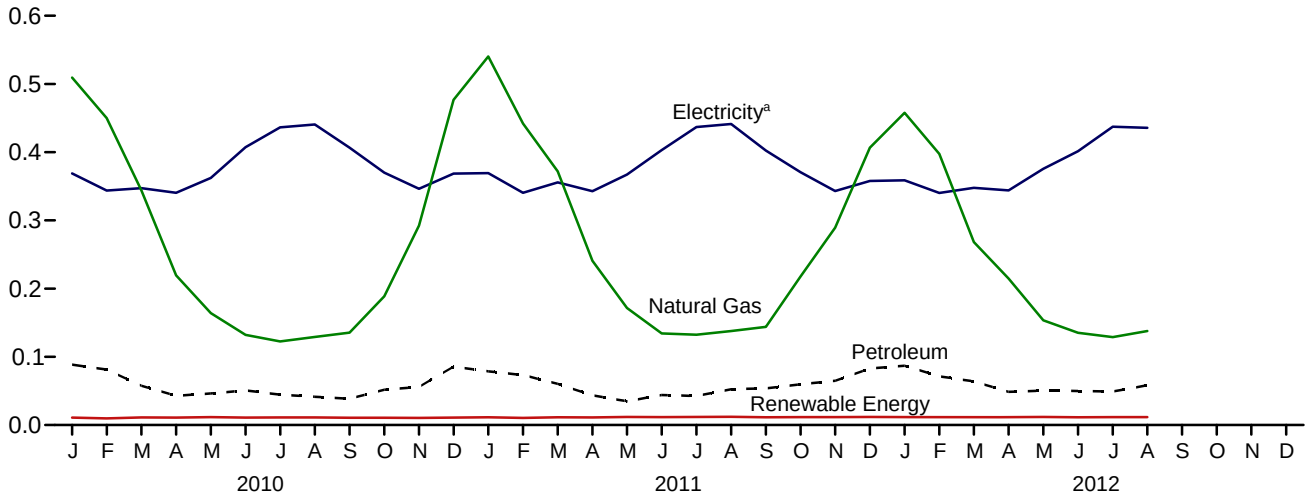
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

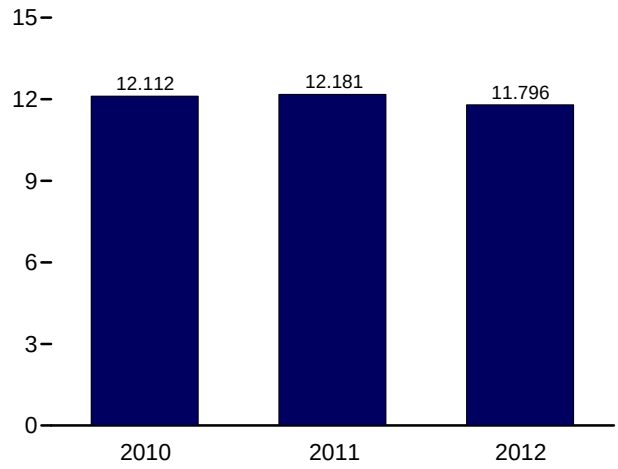
By Major Source, 1973-2011



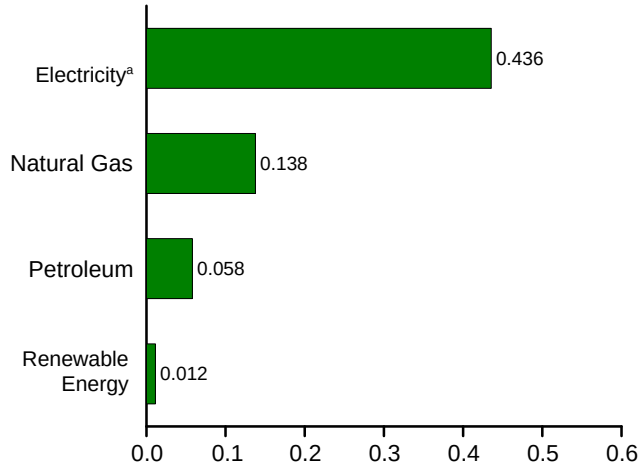
By Major Source, Monthly



Total, January-August



By Major Source, August 2012



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

.

Table 2.3 Commercial Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]													
	Fossil Fuels				Renewable Energy[b]									
	Coal	Natural Gas[c]	Petroleum[d]	Total	Hydroelectric Power[e]	Geothermal	Solar/PV	Wind	Biomass	Total	Total Primary	Electricity Retail Sales[f]	Electrical System Energy Losses[g]	Total
1973 Total	**160**	**2,649**	**1,607**	**4,416**	**NA**	**NA**	**NA**	**NA**	**7**	**7**	**4,423**	**1,517**	**3,604**	**9,543**
1975 Total	**147**	**2,558**	**1,346**	**4,051**	**NA**	**NA**	**NA**	**NA**	**8**	**8**	**4,059**	**1,598**	**3,835**	**9,492**
1980 Total	**115**	**2,651**	**1,318**	**4,084**	**NA**	**NA**	**NA**	**NA**	**21**	**21**	**4,105**	**1,906**	**4,567**	**10,578**
1985 Total	**137**	**2,488**	**1,083**	**3,708**	**NA**	**NA**	**NA**	**NA**	**24**	**24**	**3,732**	**2,351**	**5,368**	**11,451**
1990 Total	**124**	**2,682**	**991**	**3,798**	**1**	**3**	**–**	**–**	**94**	**98**	**3,896**	**2,860**	**6,564**	**13,320**
1995 Total	**117**	**3,096**	**769**	**3,982**	**1**	**5**	**–**	**–**	**113**	**118**	**4,101**	**3,252**	**7,338**	**14,690**
1996 Total	**122**	**3,226**	**790**	**4,138**	**1**	**5**	**–**	**–**	**129**	**135**	**4,273**	**3,344**	**7,555**	**15,172**
1997 Total	**129**	**3,285**	**743**	**4,157**	**1**	**6**	**–**	**–**	**131**	**138**	**4,295**	**3,503**	**7,883**	**15,681**
1998 Total	**93**	**3,083**	**702**	**3,878**	**1**	**7**	**–**	**–**	**118**	**127**	**4,005**	**3,678**	**8,285**	**15,968**
1999 Total	**103**	**3,115**	**707**	**3,925**	**1**	**7**	**–**	**–**	**121**	**129**	**4,053**	**3,766**	**8,557**	**16,376**
2000 Total	**92**	**3,252**	**807**	**4,150**	**1**	**8**	**–**	**–**	**119**	**128**	**4,278**	**3,956**	**8,942**	**17,175**
2001 Total	**97**	**3,097**	**790**	**3,984**	**1**	**8**	**–**	**–**	**92**	**101**	**4,084**	**4,062**	**8,990**	**17,137**
2002 Total	**90**	**3,212**	**726**	**4,028**	**(s)**	**9**	**–**	**–**	**95**	**104**	**4,132**	**4,110**	**9,104**	**17,345**
2003 Total	**82**	**3,261**	**827**	**4,170**	**1**	**11**	**–**	**–**	**101**	**113**	**4,283**	**4,090**	**8,969**	**17,343**
2004 Total	**103**	**3,201**	**809**	**4,113**	**1**	**12**	**–**	**–**	**105**	**118**	**4,232**	**4,198**	**9,229**	**17,659**
2005 Total	**97**	**3,073**	**761**	**3,932**	**1**	**14**	**–**	**–**	**105**	**120**	**4,051**	**4,351**	**9,455**	**17,857**
2006 Total	**65**	**2,902**	**663**	**3,629**	**1**	**14**	**–**	**–**	**103**	**118**	**3,747**	**4,435**	**9,529**	**17,711**
2007 Total	**70**	**3,085**	**649**	**3,805**	**1**	**14**	**–**	**–**	**103**	**118**	**3,922**	**4,560**	**9,773**	**18,255**
2008 Total	**69**	**3,228**	**651**	**3,948**	**1**	**15**	**(s)**	**–**	**109**	**125**	**4,073**	**4,558**	**9,749**	**18,381**
2009 Total	**63**	**3,187**	**682**	**3,932**	**1**	**17**	**(s)**	**(s)**	**112**	**129**	**4,061**	**4,460**	**9,378**	**17,899**
2010 January	8	509	89	606	(s)	2	(s)	(s)	9	11	617	369	766	1,752
February	7	450	81	538	(s)	1	(s)	(s)	8	10	548	344	694	1,585
March	6	344	58	407	(s)	2	(s)	(s)	9	11	419	347	699	1,465
April	4	220	43	266	(s)	2	(s)	(s)	9	11	277	340	689	1,307
May	4	164	46	214	(s)	2	(s)	(s)	10	12	226	362	822	1,410
June	4	132	51	187	(s)	2	(s)	(s)	9	11	198	407	896	1,501
July	4	123	44	171	(s)	2	(s)	(s)	9	11	182	436	927	1,546
August	4	129	41	175	(s)	2	(s)	(s)	10	11	186	441	920	1,547
September	4	135	39	178	(s)	2	(s)	(s)	9	11	189	406	795	1,390
October	5	189	52	245	(s)	2	(s)	(s)	9	11	256	370	738	1,364
November	5	292	56	353	(s)	2	(s)	(s)	9	10	364	346	741	1,451
December	6	477	85	568	(s)	2	(s)	(s)	9	11	579	369	813	1,761
Total	**60**	**3,164**	**685**	**3,908**	**1**	**19**	**(s)**	**(s)**	**111**	**130**	**4,039**	**4,539**	**9,501**	**18,078**
2011 January	7	540	79	626	(s)	2	(s)	(s)	R 10	11	637	R 369	R 757	R 1,764
February	6	442	73	522	(s)	2	(s)	(s)	9	10	532	R 340	670	R 1,542
March	6	372	60	438	(s)	2	(s)	(s)	R 10	11	R 450	R 356	R 740	1,545
April	4	241	43	288	(s)	2	(s)	(s)	9	R 11	R 299	R 343	R 714	R 1,357
May	4	R 172	35	210	(s)	2	(s)	(s)	R 10	R 12	222	R 367	R 795	R 1,385
June	4	134	44	182	(s)	2	(s)	(s)	R 10	R 12	R 194	R 403	R 863	1,461
July	R 4	132	42	178	(s)	2	(s)	(s)	R 10	R 12	R 190	R 437	R 948	R 1,575
August	3	138	52	R 193	(s)	2	(s)	(s)	R 10	R 12	205	R 441	R 906	R 1,553
September	3	144	54	201	(s)	2	(s)	(s)	R 10	11	R 212	R 402	R 767	R 1,381
October	3	218	60	281	(s)	2	(s)	(s)	R 10	R 12	292	R 371	R 747	1,410
November	4	289	65	358	(s)	2	(s)	(s)	R 10	R 12	369	R 343	R 722	R 1,435
December	4	R 407	83	494	(s)	2	(s)	(s)	10	R 12	505	R 358	R 759	1,622
Total	**52**	**3,228**	**691**	**3,971**	R **(s)**	**20**	R **1**	**(s)**	R **117**	R **138**	R **4,109**	R **4,531**	R **9,387**	R **18,028**
2012 January	5	458	87	549	(s)	2	(s)	(s)	R 10	R 12	R 561	359	734	R 1,654
February	4	398	71	473	(s)	2	(s)	(s)	R 10	R 11	R 484	R 340	R 678	R 1,502
March	4	268	64	336	(s)	2	(s)	(s)	R 10	R 12	R 348	R 348	R 699	R 1,395
April	3	215	49	266	(s)	2	(s)	(s)	R 10	11	277	344	R 689	R 1,310
May	3	153	51	207	(s)	2	(s)	(s)	R 10	R 12	218	R 376	R 809	1,403
June	2	135	50	187	(s)	2	(s)	(s)	R 9	R 11	R 199	R 401	R 842	R 1,442
July	4	129	R 49	182	(s)	2	(s)	(s)	R 10	R 12	R 194	437	931	1,561
August	4	138	58	200	(s)	2	(s)	(s)	10	12	212	436	880	1,528
8-Month Total	**28**	**1,893**	**479**	**2,400**	**(s)**	**13**	**1**	**(s)**	**78**	**93**	**2,493**	**3,041**	**6,262**	**11,796**
2011 8-Month Total	**37**	**2,171**	**430**	**2,638**	**(s)**	**13**	**1**	**(s)**	**77**	**92**	**2,730**	**3,057**	**6,394**	**12,181**
2010 8-Month Total	**41**	**2,071**	**453**	**2,564**	**1**	**12**	**(s)**	**(s)**	**75**	**88**	**2,652**	**3,047**	**6,413**	**12,112**

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

[b] Most data are estimates. See Table 10.2a for notes on series components and estimation.

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

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

[e] Conventional hydroelectric power.

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

[g] Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.

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

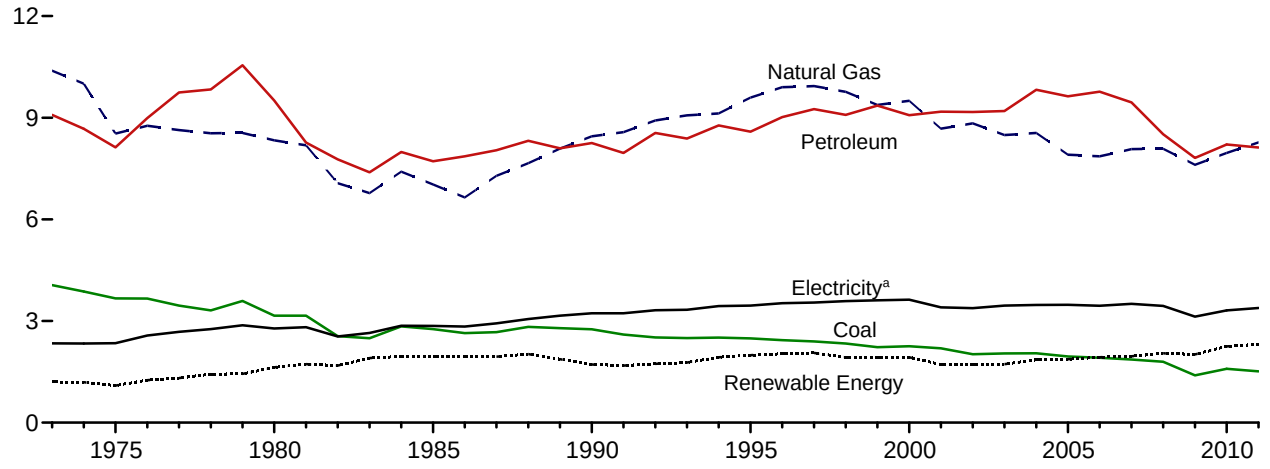
Notes: • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal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

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

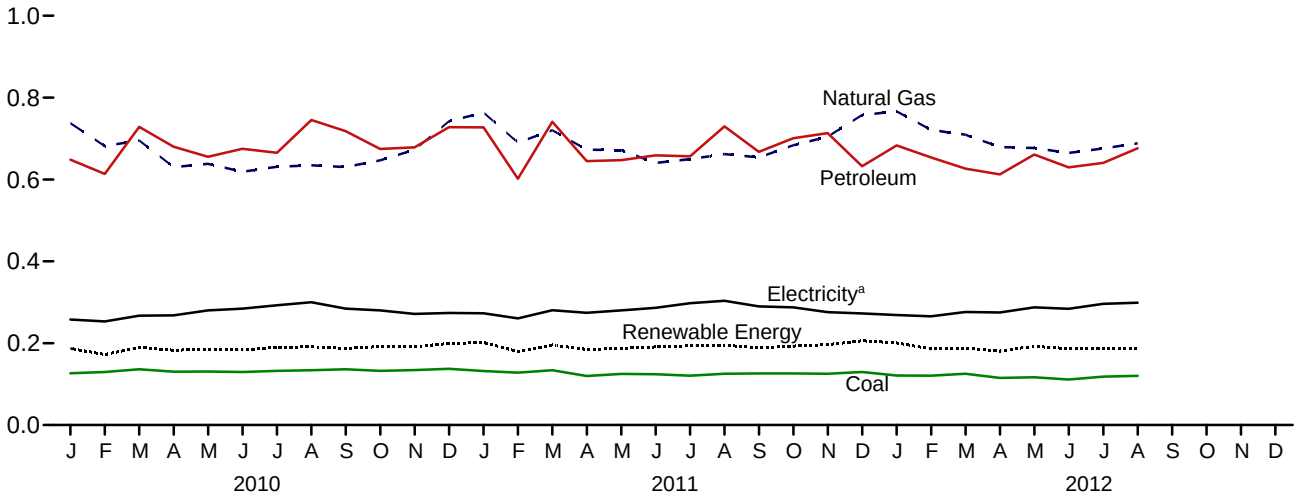
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

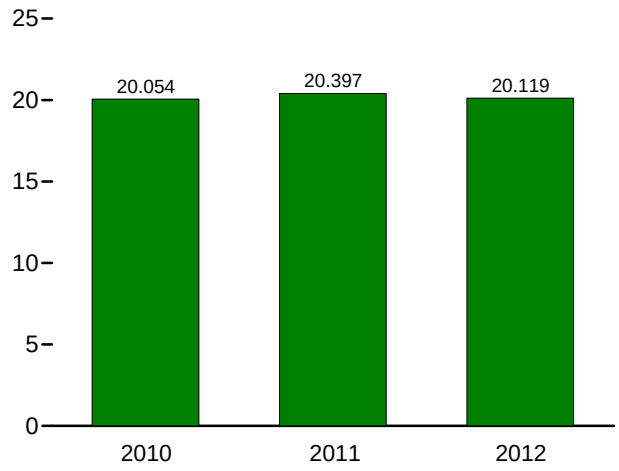
By Major Source, 1973-2011



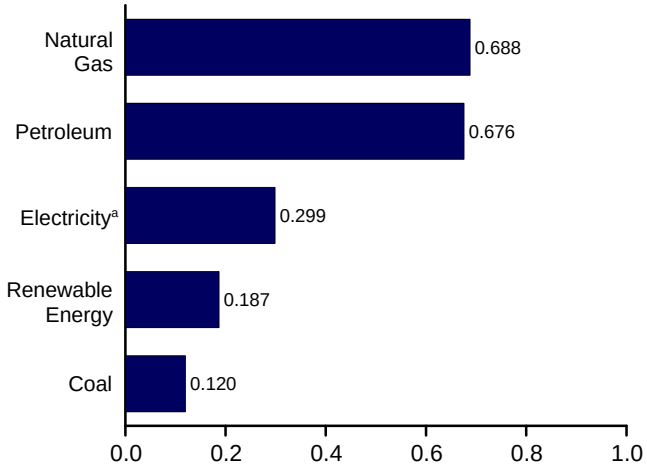
By Major Source, Monthly



Total, January-August



By Major Source, August 2012



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

Table 2.4 Industrial Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]													
	Fossil Fuels				Renewable Energy[b]									
	Coal	Natural Gas[c]	Petro-leum[d]	Total[e]	Hydro-electric Power[f]	Geo-thermal	Solar/ PV	Wind	Bio-mass	Total	Total Primary	Elec-tricity Retail Sales[g]	Electrical System Energy Losses[h]	Total[e]
1973 Total	**4,057**	**10,388**	**9,083**	**23,521**	**35**	**NA**	**NA**	**NA**	**1,165**	**1,200**	**24,720**	**2,341**	**5,562**	**32,623**
1975 Total	**3,667**	**8,532**	**8,127**	**20,339**	**32**	**NA**	**NA**	**NA**	**1,063**	**1,096**	**21,434**	**2,346**	**5,632**	**29,413**
1980 Total	**3,155**	**8,333**	**9,509**	**20,962**	**33**	**NA**	**NA**	**NA**	**1,600**	**1,633**	**22,595**	**2,781**	**6,664**	**32,039**
1985 Total	**2,760**	**7,032**	**7,714**	**17,492**	**33**	**NA**	**NA**	**NA**	**1,918**	**1,951**	**19,443**	**2,855**	**6,518**	**28,816**
1990 Total	**2,756**	**8,451**	**8,251**	**19,463**	**31**	**2**	**–**	**–**	**1,684**	**1,717**	**21,180**	**3,226**	**7,404**	**31,810**
1995 Total	**2,488**	**9,592**	**8,586**	**20,727**	**55**	**3**	**–**	**–**	**1,934**	**1,992**	**22,719**	**3,455**	**7,796**	**33,971**
1996 Total	**2,434**	**9,901**	**9,019**	**21,377**	**61**	**3**	**–**	**–**	**1,969**	**2,033**	**23,410**	**3,527**	**7,968**	**34,904**
1997 Total	**2,395**	**9,933**	**9,255**	**21,629**	**58**	**3**	**–**	**–**	**1,996**	**2,057**	**23,686**	**3,542**	**7,972**	**35,200**
1998 Total	**2,335**	**9,763**	**9,082**	**21,248**	**55**	**3**	**–**	**–**	**1,872**	**1,929**	**23,177**	**3,587**	**8,079**	**34,843**
1999 Total	**2,227**	**9,375**	**9,356**	**21,016**	**49**	**4**	**–**	**–**	**1,882**	**1,934**	**22,950**	**3,611**	**8,203**	**34,764**
2000 Total	**2,256**	**9,500**	**9,075**	**20,896**	**42**	**4**	**–**	**–**	**1,881**	**1,928**	**22,824**	**3,631**	**8,208**	**34,664**
2001 Total	**2,192**	**8,676**	**9,178**	**20,075**	**33**	**5**	**–**	**–**	**1,681**	**1,719**	**21,794**	**3,400**	**7,526**	**32,720**
2002 Total	**2,019**	**8,832**	**9,168**	**20,079**	**39**	**5**	**–**	**–**	**1,676**	**1,720**	**21,799**	**3,379**	**7,484**	**32,662**
2003 Total	**2,041**	**8,488**	**9,197**	**19,777**	**43**	**3**	**–**	**–**	**1,679**	**1,726**	**21,503**	**3,454**	**7,575**	**32,532**
2004 Total	**2,047**	**8,550**	**9,825**	**20,559**	**33**	**4**	**–**	**–**	**1,817**	**1,853**	**22,412**	**3,473**	**7,635**	**33,520**
2005 Total	**1,954**	**7,907**	**9,633**	**19,538**	**32**	**4**	**–**	**–**	**1,837**	**1,873**	**21,411**	**3,477**	**7,557**	**32,446**
2006 Total	**1,914**	**7,861**	**9,770**	**19,606**	**29**	**4**	**–**	**–**	**1,897**	**1,930**	**21,536**	**3,451**	**7,415**	**32,401**
2007 Total	**1,865**	**8,074**	**9,451**	**19,414**	**16**	**5**	**–**	**–**	**1,936**	**1,956**	**21,370**	**3,507**	**7,517**	**32,394**
2008 Total	**1,796**	**8,083**	**8,511**	**18,431**	**17**	**5**	**–**	**–**	**2,028**	**2,049**	**20,480**	**3,444**	**7,365**	**31,290**
2009 Total	**1,396**	**7,609**	**7,816**	**16,797**	**18**	**4**	**–**	**–**	**1,994**	**2,016**	**18,813**	**3,130**	**6,582**	**28,525**
2010 January	126	737	648	1,508	2	(s)	(s)	–	185	187	1,695	258	535	2,487
February	130	681	614	1,429	2	(s)	(s)	–	170	172	1,601	253	511	2,365
March	136	695	728	1,562	2	(s)	(s)	–	188	190	1,752	267	538	2,557
April	130	630	680	1,441	2	(s)	(s)	–	181	183	1,624	268	543	2,435
May	131	638	655	1,427	2	(s)	(s)	–	183	185	1,612	280	635	2,527
June	130	619	675	1,424	1	(s)	(s)	–	182	183	1,608	284	625	2,517
July	132	631	665	1,429	1	(s)	(s)	–	188	190	1,618	292	621	2,532
August	134	635	745	1,515	1	(s)	(s)	–	190	191	1,707	300	626	2,633
September	136	630	718	1,484	1	(s)	(s)	–	185	187	1,671	284	557	2,512
October	132	647	675	1,452	1	(s)	(s)	–	190	192	1,644	280	559	2,482
November	134	672	679	1,479	1	(s)	(s)	–	190	191	1,671	272	581	2,523
December	138	742	728	1,602	1	(s)	(s)	–	198	199	1,802	274	604	2,679
Total	**1,590**	**7,959**	**8,210**	**17,753**	**16**	**4**	**(s)**	**–**	**2,230**	**2,250**	**20,003**	**3,313**	**6,934**	**30,250**
2011 January	132	763	R 727	R 1,622	1	(s)	(s)	(s)	R 200	R 202	R 1,824	R 273	R 560	R 2,657
February	128	690	R 602	R 1,420	2	(s)	(s)	(s)	R 178	R 180	R 1,600	R 261	R 512	R 2,373
March	134	720	R 741	R 1,597	2	(s)	(s)	(s)	R 193	R 196	R 1,793	R 280	R 583	R 2,657
April	120	673	R 645	R 1,437	2	(s)	(s)	(s)	R 183	R 185	R 1,622	R 274	R 571	R 2,468
May	125	672	R 647	R 1,446	2	(s)	(s)	(s)	185	187	R 1,633	R 280	R 607	R 2,520
June	124	R 640	R 659	R 1,425	1	(s)	(s)	(s)	R 189	R 191	R 1,616	R 286	R 613	R 2,515
July	120	650	R 657	R 1,427	1	(s)	(s)	(s)	192	R 194	R 1,620	R 298	R 646	R 2,564
August	125	R 662	R 730	R 1,521	1	(s)	(s)	(s)	R 193	R 195	1,716	R 304	R 623	R 2,643
September	126	654	R 668	R 1,448	1	(s)	(s)	(s)	R 188	R 189	R 1,637	R 290	R 552	R 2,479
October	126	683	R 701	R 1,510	1	(s)	(s)	(s)	R 191	R 193	R 1,703	R 288	R 579	R 2,570
November	125	705	713	1,542	1	(s)	(s)	(s)	R 195	R 197	R 1,738	R 276	R 581	R 2,595
December	130	757	R 632	R 1,522	2	(s)	(s)	(s)	R 204	R 206	R 1,728	R 273	R 579	R 2,579
Total	**1,516**	**R 8,270**	**R 8,121**	**R 17,918**	**R 17**	**4**	**(s)**	**(s)**	**R 2,291**	**R 2,313**	**R 20,231**	**R 3,382**	**R 7,007**	**R 30,620**
2012 January	121	766	R 683	R 1,572	2	(s)	(s)	(s)	R 199	R 201	1,773	R 269	R 550	R 2,592
February	121	721	R 654	R 1,496	2	(s)	(s)	(s)	R 184	R 186	R 1,681	266	R 530	R 2,477
March	125	709	626	1,463	2	(s)	(s)	(s)	R 185	R 187	R 1,651	R 276	R 555	R 2,482
April	115	679	613	1,413	2	(s)	(s)	(s)	R 179	R 181	1,593	R 275	R 551	2,419
May	117	677	661	1,455	2	(s)	(s)	(s)	R 190	R 192	R 1,647	288	R 620	R 2,555
June	111	665	R 630	R 1,406	1	(s)	(s)	R (s)	R 185	R 186	1,592	R 284	R 596	R 2,471
July	118	R 676	640	R 1,434	1	(s)	(s)	(s)	R 186	R 188	R 1,622	R 296	R 630	R 2,548
August	120	688	676	1,484	1	(s)	(s)	(s)	186	187	1,672	299	604	2,575
8-Month Total	**948**	**5,582**	**5,183**	**11,723**	**12**	**3**	**(s)**	**(s)**	**1,494**	**1,508**	**13,232**	**2,252**	**4,635**	**20,119**
2011 8-Month Total	**1,009**	**5,470**	**5,407**	**11,896**	**12**	**3**	**(s)**	**(s)**	**1,514**	**1,528**	**13,425**	**2,256**	**4,716**	**20,397**
2010 8-Month Total	**1,050**	**5,267**	**5,411**	**11,735**	**12**	**3**	**(s)**	**–**	**1,467**	**1,481**	**13,216**	**2,203**	**4,635**	**20,054**

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

[b] Most data are estimates. See Table 10.2b for notes on series components and estimation.

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

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

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

[f] Conventional hydroelectric power.

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

[h] Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.

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

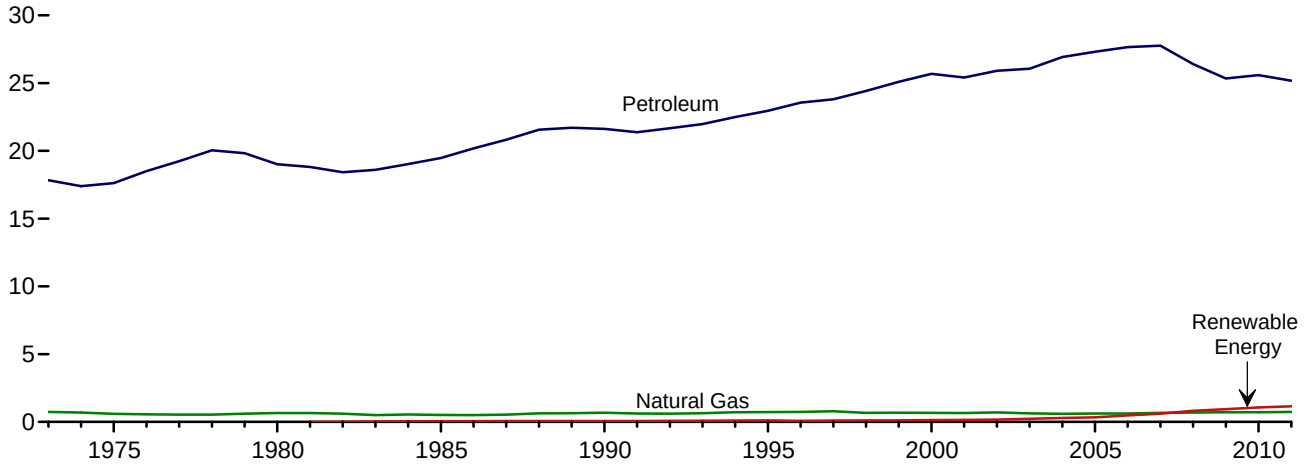
Notes: • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal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

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

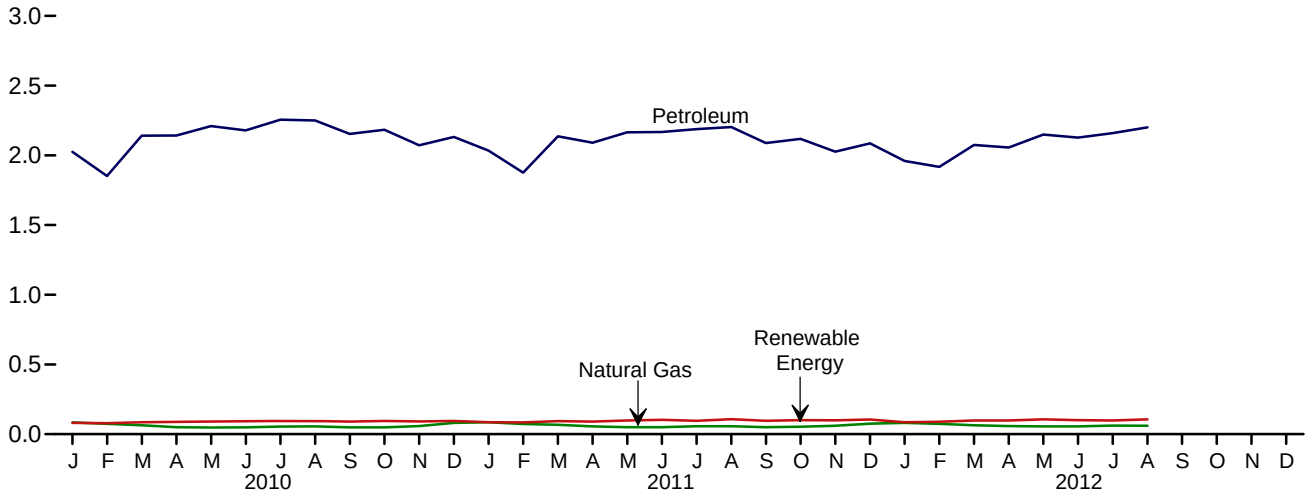
Sources: Tables 1.4a, 1.4b, 2.6, 3.8b, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

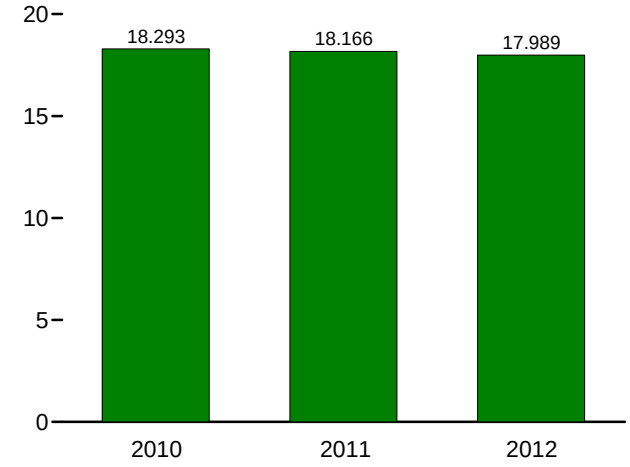
By Major Source, 1973-2011



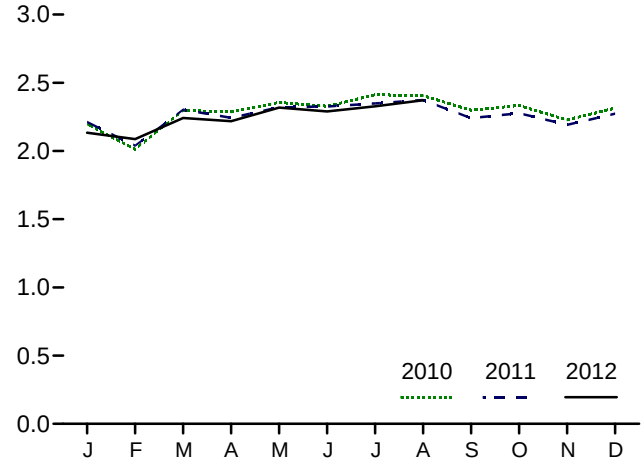
By Major Source, Monthly



Total, January-August



Total, Monthly



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

.

Table 2.5 Transportation Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]						Electricity Retail Sales[e]	Electrical System Energy Losses[f]	Total
	Fossil Fuels				Renewable Energy[b]	Total Primary			
	Coal	Natural Gas[c]	Petroleum[d]	Total	Biomass				
1973 Total	**3**	**743**	**17,832**	**18,577**	**NA**	**18,577**	**11**	**25**	**18,613**
1975 Total	**1**	**595**	**17,615**	**18,210**	**NA**	**18,210**	**10**	**24**	**18,245**
1980 Total	**(g)**	**650**	**19,009**	**19,659**	**NA**	**19,659**	**11**	**27**	**19,697**
1985 Total	**(g)**	**519**	**19,472**	**19,992**	**50**	**20,041**	**14**	**32**	**20,088**
1990 Total	**(g)**	**680**	**21,626**	**22,306**	**60**	**22,366**	**16**	**37**	**22,420**
1995 Total	**(g)**	**724**	**22,955**	**23,679**	**112**	**23,791**	**17**	**38**	**23,846**
1996 Total	**(g)**	**737**	**23,565**	**24,302**	**81**	**24,383**	**17**	**38**	**24,437**
1997 Total	**(g)**	**780**	**23,813**	**24,593**	**102**	**24,695**	**17**	**38**	**24,750**
1998 Total	**(g)**	**666**	**24,422**	**25,088**	**113**	**25,201**	**17**	**38**	**25,256**
1999 Total	**(g)**	**675**	**25,098**	**25,774**	**118**	**25,891**	**17**	**40**	**25,949**
2000 Total	**(g)**	**672**	**25,682**	**26,354**	**135**	**26,489**	**18**	**42**	**26,548**
2001 Total	**(g)**	**658**	**25,412**	**26,070**	**142**	**26,213**	**20**	**43**	**26,275**
2002 Total	**(g)**	**699**	**25,913**	**26,612**	**170**	**26,781**	**19**	**42**	**26,842**
2003 Total	**(g)**	**627**	**26,063**	**26,690**	**230**	**26,920**	**23**	**51**	**26,994**
2004 Total	**(g)**	**602**	**26,925**	**27,527**	**290**	**27,817**	**25**	**54**	**27,895**
2005 Total	**(g)**	**624**	**27,309**	**27,933**	**339**	**28,272**	**26**	**56**	**28,353**
2006 Total	**(g)**	**625**	**27,651**	**28,276**	**475**	**28,751**	**25**	**54**	**28,830**
2007 Total	**(g)**	**663**	**27,763**	**28,427**	**602**	**29,029**	**28**	**60**	**29,117**
2008 Total	**(g)**	**692**	**26,407**	**27,099**	**826**	**27,925**	**26**	**56**	**28,008**
2009 Total	**(g)**	**715**	**25,339**	**26,054**	**935**	**26,989**	**27**	**56**	**27,071**
2010 January	(g)	84	2,025	2,109	81	2,190	2	5	2,198
February	(g)	74	1,851	1,926	79	2,004	2	5	2,012
March	(g)	64	2,141	2,205	85	2,290	2	5	2,297
April	(g)	50	2,142	2,193	87	2,280	2	4	2,286
May	(g)	48	2,209	2,257	92	2,349	2	5	2,356
June	(g)	49	2,179	2,228	93	2,320	2	5	2,328
July	(g)	54	2,256	2,310	94	2,404	2	5	2,411
August	(g)	56	2,250	2,306	94	2,399	2	4	2,406
September	(g)	48	2,153	2,202	90	2,291	2	4	2,298
October	(g)	49	2,184	2,233	94	2,327	2	4	2,333
November	(g)	59	2,072	2,131	91	2,221	2	4	2,228
December	(g)	81	2,132	2,213	94	2,307	2	5	2,314
Total	**(g)**	**716**	**25,595**	**26,310**	**1,074**	**27,384**	**26**	**55**	**27,466**
2011 January	(g)	86	R 2,034	2,120	86	R 2,205	2	5	2,213
February	(g)	73	1,876	1,949	84	2,033	2	4	2,039
March	(g)	67	2,136	2,203	93	2,296	2	5	2,303
April	(g)	55	2,091	2,146	90	2,236	2	4	2,243
May	(g)	R 50	R 2,165	2,216	98	2,314	2	5	2,321
June	(g)	50	2,167	R 2,217	102	2,320	2	5	2,327
July	(g)	57	2,188	2,245	96	2,341	2	5	2,348
August	(g)	57	2,203	2,260	107	2,366	2	4	2,373
September	(g)	50	2,088	2,138	96	2,234	2	4	2,240
October	(g)	53	2,118	2,171	100	2,271	2	4	2,277
November	(g)	R 60	2,026	R 2,086	99	2,186	2	4	2,192
December	(g)	75	2,086	2,161	105	R 2,266	2	5	R 2,273
Total	**(g)**	**733**	**R 25,179**	**R 25,911**	**1,157**	**R 27,068**	**26**	**54**	**R 27,149**
2012 January	(g)	R 81	1,960	R 2,041	86	2,127	2	5	2,134
February	(g)	74	1,917	1,991	89	2,080	2	4	2,087
March	(g)	R 63	2,074	2,137	98	2,235	2	4	2,241
April	(g)	R 58	2,056	R 2,114	98	R 2,212	2	4	2,219
May	(g)	56	2,149	2,205	107	2,312	2	R 4	R 2,318
June	(g)	56	2,127	2,183	101	2,284	2	4	R 2,290
July	(g)	62	2,160	R 2,222	98	2,320	2	5	2,327
August	(g)	60	2,200	2,260	106	2,366	2	4	2,373
8-Month Total	**(g)**	**511**	**16,643**	**17,154**	**782**	**17,936**	**17**	**35**	**17,989**
2011 8-Month Total	**(g)**	**494**	**16,861**	**17,355**	**756**	**18,111**	**18**	**37**	**18,166**
2010 8-Month Total	**(g)**	**479**	**17,054**	**17,533**	**705**	**18,237**	**18**	**37**	**18,293**

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

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

[c] Natural gas only; does not include supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

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

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

[f] Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of section.

[g] Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

R=Revised. NA=Not available.

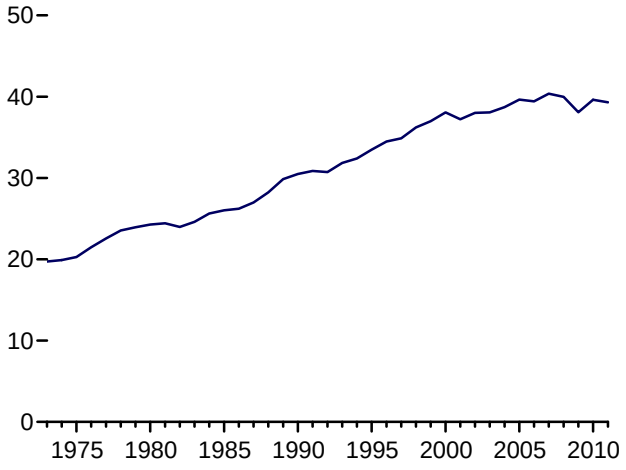
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

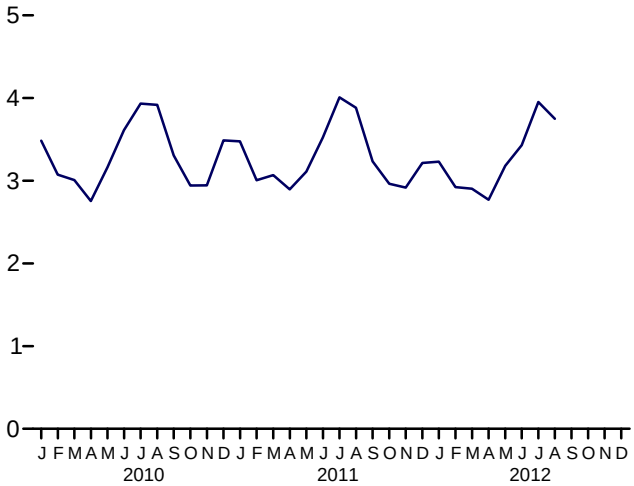
Sources: Tables 2.6, 3.8c, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

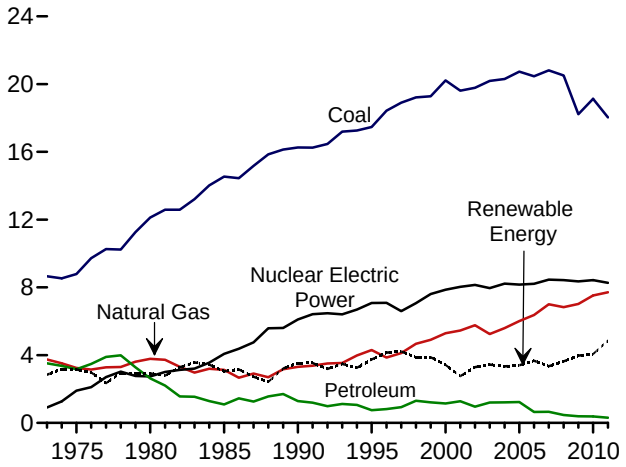
Total, 1973-2011



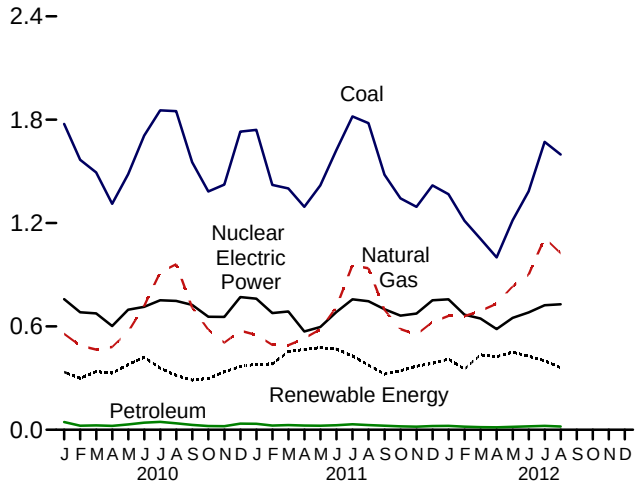
Total, Monthly



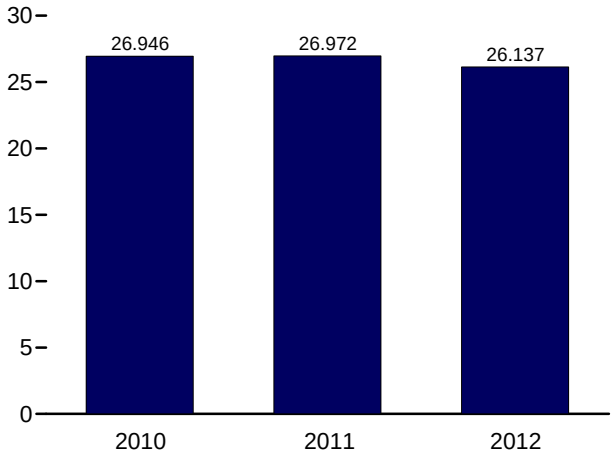
By Major Source, 1973-2011



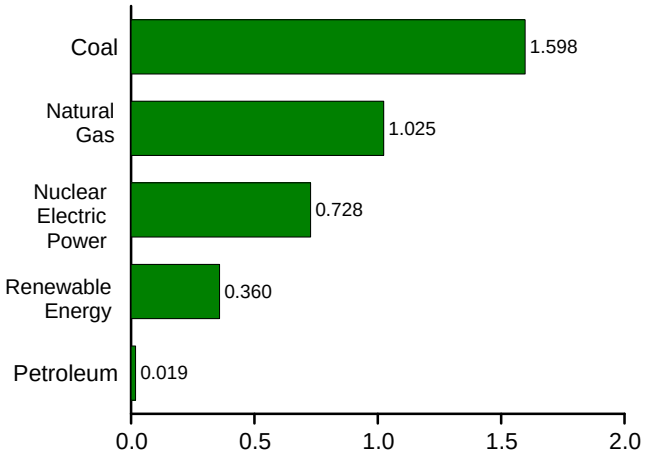
By Major Source, Monthly



Total, January-August



By Major Source, August 2012



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

.

Table 2.6 Electric Power Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]												
	Fossil Fuels					Renewable Energy[b]							
	Coal	Natural Gas[c]	Petro-leum	Total	Nuclear Electric Power	Hydro-electric Power[d]	Geo-thermal	Solar/ PV	Wind	Bio-mass	Total	Elec-tricity Net Imports	Total Primary
1973 Total	**8,658**	**3,748**	**3,515**	**15,921**	**910**	**2,827**	**20**	**NA**	**NA**	**3**	**2,851**	**49**	**19,731**
1975 Total	**8,786**	**3,240**	**3,166**	**15,191**	**1,900**	**3,122**	**34**	**NA**	**NA**	**2**	**3,158**	**21**	**20,270**
1980 Total	**12,123**	**3,778**	**2,634**	**18,534**	**2,739**	**2,867**	**53**	**NA**	**NA**	**4**	**2,925**	**71**	**24,269**
1985 Total	**14,542**	**3,135**	**1,090**	**18,767**	**4,076**	**2,937**	**97**	**(s)**	**(s)**	**14**	**3,049**	**140**	**26,032**
1990 Total[e]	**16,261**	**3,309**	**1,289**	**20,859**	**6,104**	**3,014**	**161**	**4**	**29**	**317**	**3,524**	**8**	**30,495**
1995 Total	**17,466**	**4,302**	**755**	**22,523**	**7,075**	**3,149**	**138**	**5**	**33**	**422**	**3,747**	**134**	**33,479**
1996 Total	**18,429**	**3,862**	**817**	**23,109**	**7,087**	**3,528**	**148**	**5**	**33**	**438**	**4,153**	**137**	**34,485**
1997 Total	**18,905**	**4,126**	**927**	**23,957**	**6,597**	**3,581**	**150**	**5**	**34**	**446**	**4,216**	**116**	**34,886**
1998 Total	**19,216**	**4,675**	**1,306**	**25,197**	**7,068**	**3,241**	**151**	**5**	**31**	**444**	**3,872**	**88**	**36,225**
1999 Total	**19,279**	**4,902**	**1,211**	**25,393**	**7,610**	**3,218**	**152**	**5**	**46**	**453**	**3,874**	**99**	**36,976**
2000 Total	**20,220**	**5,293**	**1,144**	**26,658**	**7,862**	**2,768**	**144**	**5**	**57**	**453**	**3,427**	**115**	**38,062**
2001 Total	**19,614**	**5,458**	**1,277**	**26,348**	**8,029**	**2,209**	**142**	**6**	**70**	**337**	**2,763**	**75**	**37,215**
2002 Total	**19,783**	**5,767**	**961**	**26,511**	**8,145**	**2,650**	**147**	**6**	**105**	**380**	**3,288**	**72**	**38,016**
2003 Total	**20,185**	**5,246**	**1,205**	**26,636**	**7,959**	**2,781**	**148**	**5**	**115**	**397**	**3,445**	**22**	**38,062**
2004 Total	**20,305**	**5,595**	**1,212**	**27,112**	**8,222**	**2,656**	**148**	**6**	**142**	**388**	**3,340**	**39**	**38,713**
2005 Total	**20,737**	**6,015**	**1,235**	**27,986**	**8,161**	**2,670**	**147**	**6**	**178**	**406**	**3,406**	**85**	**39,638**
2006 Total	**20,462**	**6,375**	**648**	**27,485**	**8,215**	**2,839**	**145**	**5**	**264**	**412**	**3,665**	**63**	**39,428**
2007 Total	**20,808**	**7,005**	**657**	**28,470**	**8,455**	**2,430**	**145**	**6**	**341**	**423**	**3,345**	**107**	**40,377**
2008 Total	**20,513**	**6,829**	**468**	**27,810**	**8,427**	**2,494**	**146**	**9**	**546**	**435**	**3,630**	**112**	**39,978**
2009 Total	**18,225**	**7,022**	**390**	**25,638**	**8,356**	**2,650**	**146**	**9**	**721**	**441**	**3,967**	**116**	**38,077**
2010 January	1,775	557	45	2,377	758	217	13	(s)	67	39	335	14	3,484
February	1,568	489	23	2,080	682	199	11	(s)	53	36	300	12	3,073
March	1,494	466	25	1,984	676	202	13	1	84	39	338	10	3,008
April	1,312	480	23	1,815	602	184	12	1	95	36	329	9	2,755
May	1,483	570	31	2,084	697	243	13	1	85	36	378	5	3,163
June	1,708	719	41	2,468	714	290	12	2	79	39	421	9	3,611
July	1,855	914	46	2,815	752	238	12	2	66	40	358	10	3,934
August	1,849	961	37	2,847	748	195	13	2	65	41	315	6	3,917
September	1,554	709	28	2,291	725	168	12	1	69	38	288	2	3,306
October	1,383	581	22	1,986	656	171	12	1	77	37	298	1	2,942
November	1,423	506	21	1,950	655	190	12	1	95	39	337	3	2,944
December	1,731	575	36	2,341	770	225	13	(s)	88	41	367	9	3,488
Total	**19,133**	**7,527**	**378**	**27,039**	**8,434**	**2,521**	**148**	**12**	**923**	**459**	**4,064**	**89**	**39,626**
2011 January	R 1,741	R 550	R 35	R 2,326	R 761	R 247	R 13	(s)	R 83	R 37	R 381	9	R 3,477
February	R 1,421	R 493	R 24	R 1,938	R 678	R 233	R 12	1	R 102	35	R 382	8	R 3,005
March	R 1,401	491	R 28	R 1,920	R 687	R 301	R 13	1	R 102	R 36	R 453	8	R 3,069
April	R 1,294	R 531	R 24	R 1,850	R 571	R 301	R 12	2	121	R 32	R 467	7	R 2,895
May	R 1,418	R 583	R 24	R 2,025	R 597	R 315	R 13	2	R 114	R 34	R 477	12	R 3,111
June	R 1,623	R 712	R 26	R 2,361	R 683	R 311	R 12	2	R 107	R 37	R 469	11	R 3,524
July	R 1,819	R 955	R 32	R 2,806	R 757	R 303	R 12	2	R 73	R 39	R 429	16	R 4,008
August	R 1,780	R 938	R 27	R 2,745	746	R 249	R 12	2	R 73	39	R 376	16	R 3,883
September	R 1,481	R 696	R 24	R 2,201	R 700	R 207	R 12	2	67	37	R 323	10	R 3,234
October	R 1,343	R 585	R 20	R 1,949	R 663	R 191	R 12	R 1	R 102	36	R 343	10	R 2,964
November	R 1,294	R 552	R 18	R 1,864	R 675	R 199	R 12	1	R 121	36	R 369	8	R 2,916
December	R 1,419	R 625	R 22	R 2,066	R 752	R 229	R 13	1	R 103	39	R 386	12	R 3,214
Total	**R 18,035**	**R 7,712**	**R 303**	**R 26,050**	**R 8,269**	**R 3,085**	**R 149**	**R 17**	**R 1,167**	**R 437**	**R 4,855**	**127**	**R 39,301**
2012 January	R 1,368	R 660	R 23	R 2,051	757	R 225	14	1	R 134	R 37	R 410	11	R 3,230
February	R 1,214	R 660	R 18	R 1,892	R 668	R 196	13	1	108	R 34	R 353	9	R 2,922
March	1,108	R 689	15	R 1,812	R 646	R 249	14	2	R 135	R 35	R 435	10	R 2,903
April	R 1,001	R 733	R 15	R 1,748	R 585	R 252	13	3	R 124	R 31	R 424	13	R 2,770
May	R 1,216	R 832	R 17	R 2,065	R 650	R 276	14	R 5	R 122	R 35	R 451	15	R 3,181
June	1,385	R 901	R 20	R 2,306	R 682	R 257	R 13	5	R 116	R 36	R 428	14	R 3,429
July	R 1,672	R 1,113	23	R 2,808	723	R 259	14	R 5	R 85	R 38	R 401	19	R 3,951
August	1,598	1,025	19	2,643	728	224	13	4	80	38	360	19	3,750
8-Month Total	**10,561**	**6,614**	**150**	**17,325**	**5,439**	**1,938**	**108**	**27**	**905**	**284**	**3,262**	**110**	**26,137**
2011 8-Month Total	**12,498**	**5,252**	**220**	**17,970**	**5,480**	**2,259**	**100**	**11**	**774**	**290**	**3,434**	**88**	**26,972**
2010 8-Month Total	**13,043**	**5,155**	**272**	**18,469**	**5,628**	**1,768**	**99**	**9**	**593**	**305**	**2,774**	**74**	**26,946**

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

[b] See Table 10.2c for notes on series components.

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

[d] Conventional hydroelectric power.

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

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

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

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

Energy Consumption by Sector

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

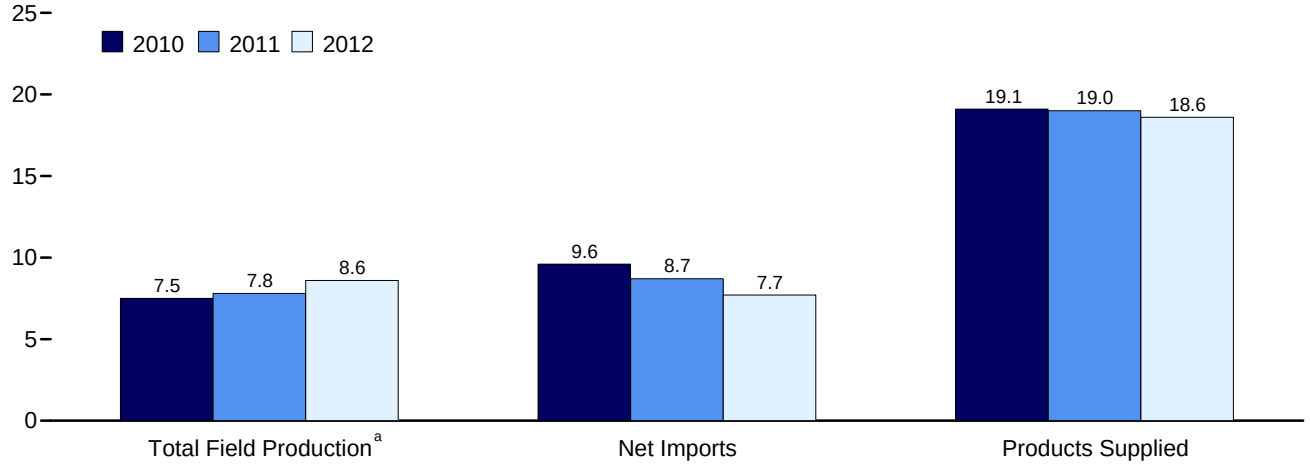
Users of EIA's energy consumption statistics should be aware of a second group of energy-related surveys, typically called "consumption surveys." Consumption surveys gather information on the types of energy consumed by end users of energy, along with the characteristics of those end users that can be associated with energy use. For example, the Manufacturing Energy Consumption Survey belongs to the consumption survey group because it collects information directly from end users (the manufacturing establishments). There are important differences between the supply and consumption surveys that need to be taken into account in any analysis that uses both data sources. For information on those differences, see Energy Consumption by End-Use Sector, A Comparison of Measures by Consumption and Supply Surveys, DOE/EIA-0533, U.S. Energy Information Administration, Washington, DC, April 6, 1990.

Note 2. Electrical System Energy Losses. Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector (see Table 2.6) and the total energy content of electricity retail sales (see Tables 7.6 and A6). Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring those thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, about two thirds of total energy input is lost in conversion. Currently, of electricity generated, approximately 5 percent is lost in plant use and 7 percent is lost in transmission and distribution.

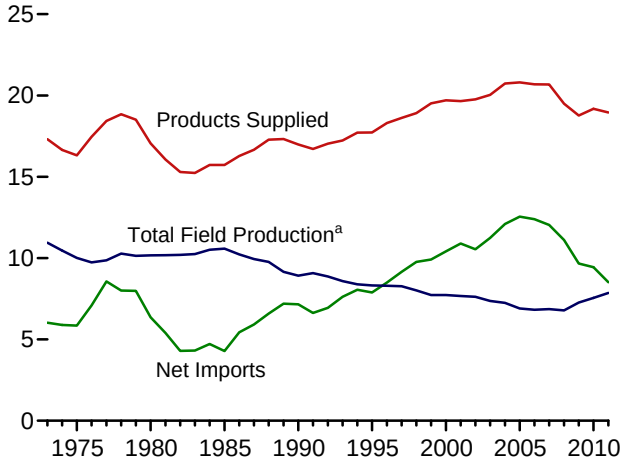
3. Petroleum

Figure 3.1 Petroleum Overview
(Million Barrels per Day)

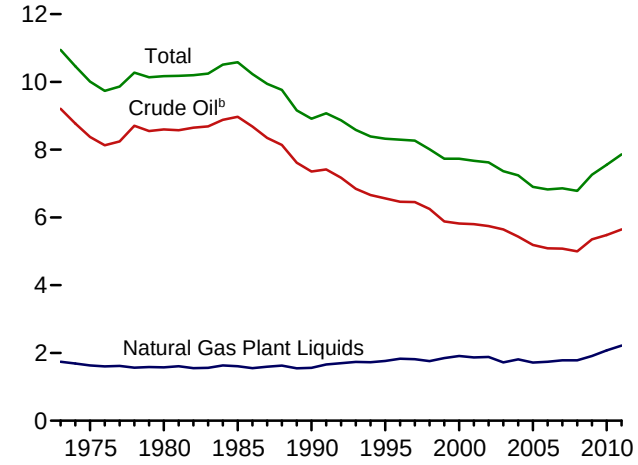
Overview, January-October



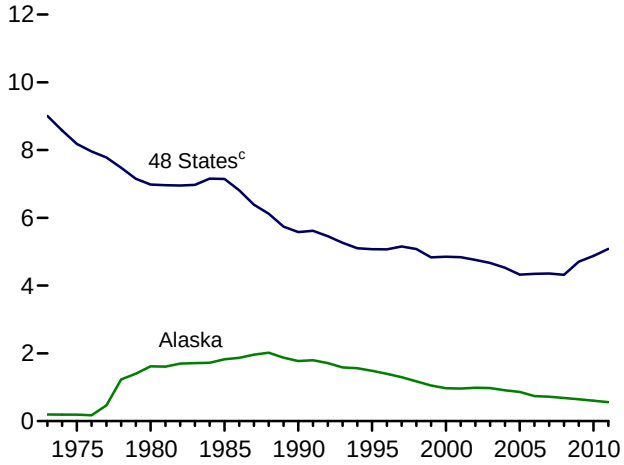
Overview, 1973-2011



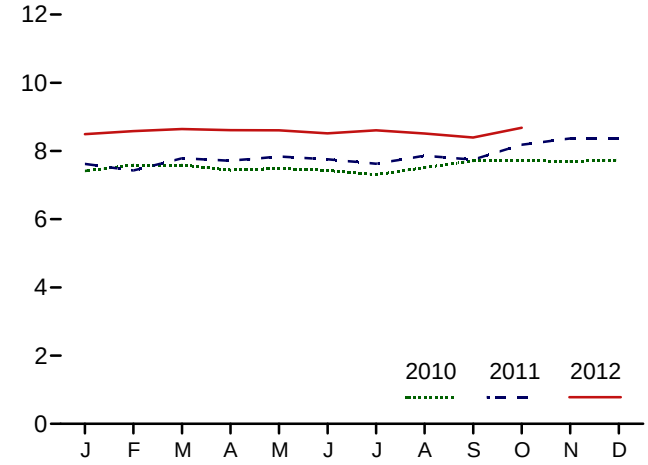
Total Field Production, 1973-2011



Crude Oil[b] Field Production, 1973-2011



Total Field Production,[a] Monthly



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

Table 3.1 Petroleum Overview

(Thousand Barrels per Day)

	Field Production[a]					Renewable Fuels and Oxygenates[g]	Processing Gain[h]	Trade			Stock Change[k]	Adjustments[c,l]	Petroleum Products Supplied
	Crude Oil[b,c]			NGPL[e,f]	Total[c]			Imports[i]	Exports[f]	Net Imports[j]			
	48 States[d]	Alaska	Total										
1973 Average	**9,010**	**198**	**9,208**	**1,738**	**10,946**	**NA**	**453**	**6,256**	**231**	**6,025**	**135**	**18**	**17,308**
1975 Average	**8,183**	**191**	**8,375**	**1,633**	**10,007**	**NA**	**460**	**6,056**	**209**	**5,846**	**32**	**41**	**16,322**
1980 Average	**6,980**	**1,617**	**8,597**	**1,573**	**10,170**	**NA**	**597**	**6,909**	**544**	**6,365**	**140**	**64**	**17,056**
1985 Average	**7,146**	**1,825**	**8,971**	**1,609**	**10,581**	**NA**	**557**	**5,067**	**781**	**4,286**	**-103**	**200**	**15,726**
1990 Average	**5,582**	**1,773**	**7,355**	**1,559**	**8,914**	**NA**	**683**	**8,018**	**857**	**7,161**	**107**	**338**	**16,988**
1995 Average	**5,076**	**1,484**	**6,560**	**1,762**	**8,322**	**NA**	**774**	**8,835**	**949**	**7,886**	**-246**	**496**	**17,725**
1996 Average	**5,071**	**1,393**	**6,465**	**1,830**	**8,295**	**NA**	**837**	**9,478**	**981**	**8,498**	**-151**	**528**	**18,309**
1997 Average	**5,156**	**1,296**	**6,452**	**1,817**	**8,269**	**NA**	**850**	**10,162**	**1,003**	**9,158**	**143**	**487**	**18,620**
1998 Average	**5,077**	**1,175**	**6,252**	**1,759**	**8,011**	**NA**	**886**	**10,708**	**945**	**9,764**	**239**	**495**	**18,917**
1999 Average	**4,832**	**1,050**	**5,881**	**1,850**	**7,731**	**NA**	**886**	**10,852**	**940**	**9,912**	**-422**	**567**	**19,519**
2000 Average	**4,851**	**970**	**5,822**	**1,911**	**7,733**	**NA**	**948**	**11,459**	**1,040**	**10,419**	**-69**	**532**	**19,701**
2001 Average	**4,839**	**963**	**5,801**	**1,868**	**7,670**	**NA**	**903**	**11,871**	**971**	**10,900**	**325**	**501**	**19,649**
2002 Average	**4,759**	**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 January	4,758	640	5,399	2,017	7,416	846	961	11,300	1,897	9,404	309	334	18,652
February	4,911	635	5,546	2,043	7,589	874	1,060	11,230	2,034	9,197	-46	85	18,850
March	4,867	646	5,513	2,076	7,589	895	1,064	11,621	2,149	9,472	77	156	19,099
April	4,738	640	5,377	2,061	7,438	878	1,028	12,526	2,432	10,093	762	368	19,044
May	4,827	571	5,398	2,091	7,489	893	1,069	12,141	2,399	9,742	661	334	18,866
June	4,849	534	5,384	2,046	7,430	905	1,085	12,444	2,304	10,140	373	350	19,537
July	4,769	545	5,313	1,994	7,307	906	1,109	12,675	2,516	10,159	440	279	19,319
August	4,906	538	5,445	2,071	7,515	911	1,123	12,356	2,410	9,946	214	380	19,662
September	4,994	614	5,608	2,104	7,712	915	1,062	11,823	2,345	9,478	-23	249	19,438
October	4,978	618	5,596	2,125	7,721	924	1,012	11,142	2,480	8,662	-451	203	18,974
November	4,952	606	5,558	2,136	7,694	967	1,051	11,096	2,598	8,498	-667	100	18,977
December	4,982	632	5,614	2,124	7,739	961	1,187	11,132	2,644	8,488	-1,068	279	19,722
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	5,042	R 464	R 5,506	2,114	R 7,620	982	1,019	12,248	2,750	9,497	484	R 359	18,993
February	R 4,810	611	5,422	2,009	R 7,430	972	954	10,738	2,634	8,104	-1,033	380	18,873
March	4,980	R 611	R 5,591	2,195	R 7,785	1,002	1,019	11,850	2,733	9,117	-139	R 266	19,329
April	R 4,921	606	R 5,527	2,186	R 7,714	996	1,013	11,808	3,071	8,736	105	R 297	18,650
May	5,022	R 582	R 5,604	2,234	R 7,837	992	1,085	11,866	2,735	9,131	884	R 318	18,479
June	5,017	553	5,570	2,188	7,758	1,015	1,106	11,877	2,716	9,161	59	272	19,253
July	R 4,966	R 453	R 5,419	2,206	R 7,625	1,004	1,122	11,757	3,053	8,704	231	R 553	18,778
August	5,108	R 526	R 5,634	2,227	R 7,861	1,027	1,133	11,227	3,002	8,224	-644	R 525	19,415
September	R 4,991	585	R 5,575	2,171	R 7,746	1,011	1,123	11,270	3,174	8,095	-492	R 424	18,892
October	R 5,306	R 566	R 5,872	2,313	R 8,185	1,023	1,084	11,053	3,107	7,946	-371	R 236	18,844
November	R 5,399	593	R 5,992	2,373	R 8,365	1,076	1,113	11,217	3,159	8,059	23	R 489	19,080
December	R 5,408	R 592	R 6,000	2,358	R 8,359	1,085	1,134	11,064	3,667	7,397	-646	R 181	18,803
Average	**R 5,083**	**R 561**	**R 5,644**	**2,216**	**R 7,860**	**1,016**	**1,076**	**11,504**	**2,986**	**8,518**	**-121**	**R 358**	**18,949**
2012 January	RE 5,526	RE 593	RE 6,119	2,376	RE 8,494	1,021	1,053	10,944	2,839	8,104	655	R 262	18,280
February	RE 5,612	E 582	RE 6,194	2,388	RE 8,582	1,012	1,068	10,464	2,980	7,484	-228	R 386	18,760
March	RE 5,701	E 567	RE 6,268	2,375	RE 8,643	994	1,023	10,610	3,064	7,547	409	R 414	18,213
April	RE 5,675	E 553	RE 6,229	2,382	RE 8,610	1,001	1,047	10,634	3,263	7,370	-18	R 283	18,330
May	RE 5,684	E 546	RE 6,230	2,376	RE 8,606	1,018	1,089	11,132	3,194	7,939	524	R 580	18,707
June	RE 5,688	E 493	RE 6,181	2,335	RE 8,517	1,004	1,099	11,393	3,209	8,184	493	R 605	18,915
July	RE 5,867	E 415	RE 6,282	2,323	RE 8,605	929	1,060	10,748	3,211	7,537	33	R 503	18,601
August	RE 5,742	RE 404	RE 6,147	R 2,367	RE 8,514	R 957	R 1,102	R 10,898	R 3,017	R 7,881	R -272	R 501	R 19,226
September	E 5,770	E 500	E 6,270	E 2,123	E 8,393	E 887	E 1,072	E 10,544	E 2,904	E 7,640	E 215	E 614	E 18,391
October	E 6,088	E 546	E 6,634	E 2,045	E 8,679	E 886	E 1,073	E 10,295	E 2,795	E 7,500	E -22	E 678	E 18,838
10-Month Average	**E 5,736**	**E 520**	**E 6,256**	**E 2,309**	**E 8,565**	**E 971**	**E 1,069**	**E 10,767**	**E 3,047**	**E 7,720**	**E 181**	**E 483**	**E 18,626**
2011 10-Month Average	**5,019**	**555**	**5,574**	**2,186**	**7,760**	**1,003**	**1,067**	**11,577**	**2,899**	**8,677**	**-82**	**363**	**18,952**
2010 10-Month Average	**4,859**	**598**	**5,457**	**2,063**	**7,520**	**895**	**1,057**	**11,929**	**2,299**	**9,631**	**233**	**275**	**19,145**

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

[b] Includes lease condensate.

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

[d] United States excluding Alaska and Hawaii.

[e] Natural gas plant liquids.

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

[g] Renewable fuels and oxygenate plant net production.

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

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

[j] Net imports equal imports minus exports.

[k] A negative value indicates a decrease in stocks and a positive value indicates an increase. The current month stock change estimate is based on the change from the previous month's estimate, rather than the stocks values shown in Table 3.4. Includes crude oil stocks in the Strategic Petroleum Reserve, but excludes distillate fuel oil stocks in the Northeast Heating Oil Reserve. See Table 3.4. Also see Note 4, "Petroleum New Stock Basis," at end of section.

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

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

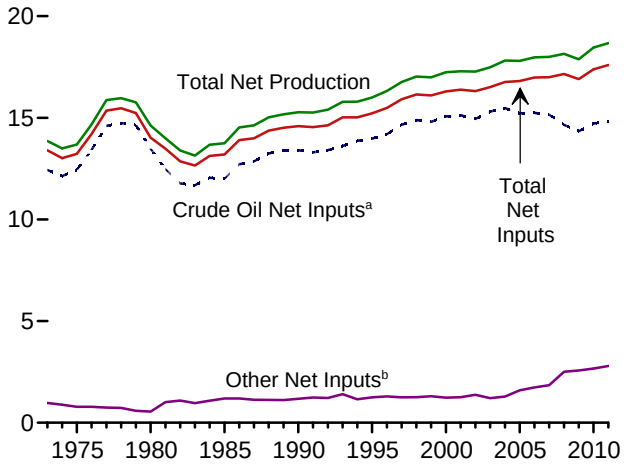
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

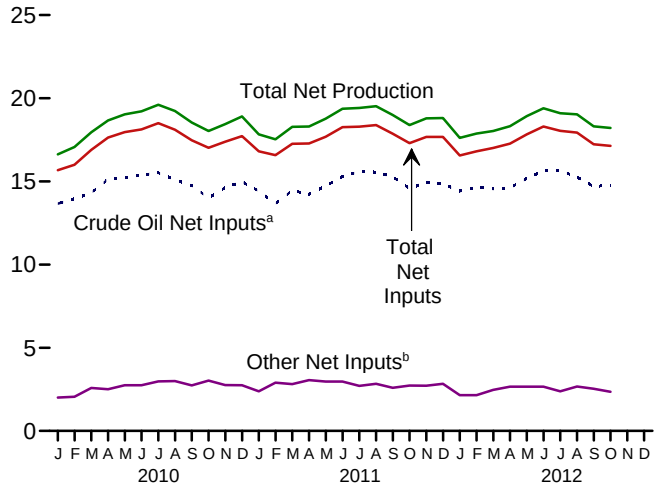
Sources: See end of section.

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

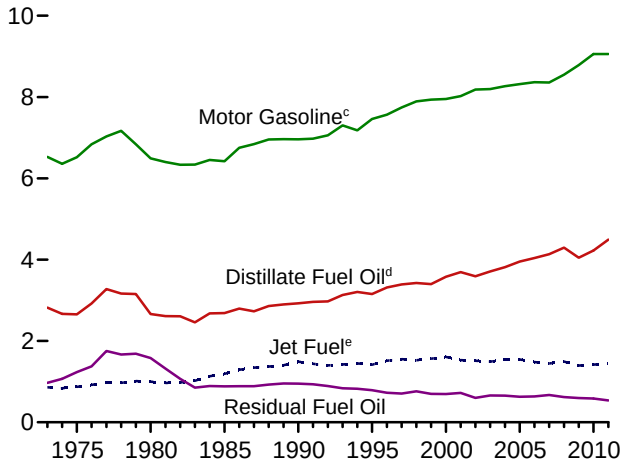
Net Inputs and Net Production, 1973-2011



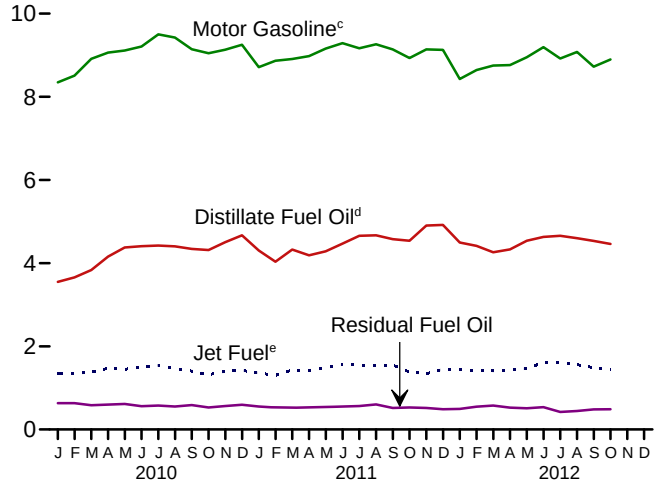
Net Inputs and Net Production, Monthly



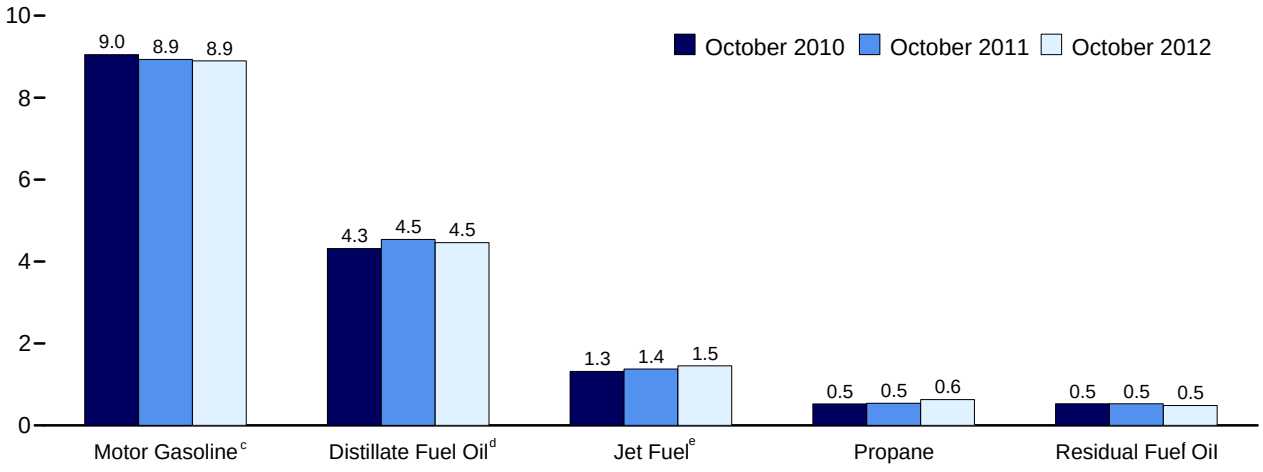
Net Production, Selected Products, 1973-2011



Net Production, Selected Products, Monthly



Net Production, Selected Products



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

Table 3.2 Refinery and Blender Net Inputs and Net Production

(Thousand Barrels per Day)

	Refinery and Blender Net Inputs[a]				Refinery and Blender Net Production[b]							
							LPG[c]					
	Crude Oil[d]	NGPL[e]	Other Liquids[f]	Total	Distillate Fuel Oil[g]	Jet Fuel[h]	Propane[i]	Total	Motor Gasoline[j]	Residual Fuel Oil	Other Products[k]	Total
1973 Average	**12,431**	**815**	**155**	**13,401**	**2,820**	**859**	**271**	**375**	**6,527**	**971**	**2,301**	**13,854**
1975 Average	**12,442**	**710**	**72**	**13,225**	**2,653**	**871**	**234**	**311**	**6,518**	**1,235**	**2,097**	**13,685**
1980 Average	**13,481**	**462**	**81**	**14,025**	**2,661**	**999**	**269**	**330**	**6,492**	**1,580**	**2,559**	**14,622**
1985 Average	**12,002**	**509**	**681**	**13,192**	**2,686**	**1,189**	**295**	**391**	**6,419**	**882**	**2,183**	**13,750**
1990 Average	**13,409**	**467**	**713**	**14,589**	**2,925**	**1,488**	**404**	**499**	**6,959**	**950**	**2,452**	**15,272**
1995 Average	**13,973**	**471**	**775**	**15,220**	**3,155**	**1,416**	**503**	**654**	**7,459**	**788**	**2,522**	**15,994**
1996 Average	**14,195**	**450**	**843**	**15,487**	**3,316**	**1,515**	**520**	**662**	**7,565**	**726**	**2,541**	**16,324**
1997 Average	**14,662**	**416**	**832**	**15,909**	**3,392**	**1,554**	**565**	**691**	**7,743**	**708**	**2,671**	**16,759**
1998 Average	**14,889**	**403**	**853**	**16,144**	**3,424**	**1,526**	**550**	**674**	**7,892**	**762**	**2,753**	**17,030**
1999 Average	**14,804**	**372**	**927**	**16,103**	**3,399**	**1,565**	**569**	**684**	**7,934**	**698**	**2,709**	**16,989**
2000 Average	**15,067**	**380**	**849**	**16,295**	**3,580**	**1,606**	**583**	**705**	**7,951**	**696**	**2,705**	**17,243**
2001 Average	**15,128**	**429**	**825**	**16,382**	**3,695**	**1,530**	**556**	**667**	**8,022**	**721**	**2,651**	**17,285**
2002 Average	**14,947**	**429**	**941**	**16,316**	**3,592**	**1,514**	**572**	**671**	**8,183**	**601**	**2,712**	**17,273**
2003 Average	**15,304**	**419**	**791**	**16,513**	**3,707**	**1,488**	**570**	**658**	**8,194**	**660**	**2,780**	**17,487**
2004 Average	**15,475**	**422**	**866**	**16,762**	**3,814**	**1,547**	**584**	**645**	**8,265**	**655**	**2,887**	**17,814**
2005 Average	**15,220**	**441**	**1,149**	**16,811**	**3,954**	**1,546**	**540**	**573**	**8,318**	**628**	**2,782**	**17,800**
2006 Average	**15,242**	**501**	**1,238**	**16,981**	**4,040**	**1,481**	**543**	**627**	**8,364**	**635**	**2,827**	**17,975**
2007 Average	**15,156**	**505**	**1,337**	**16,999**	**4,133**	**1,448**	**562**	**655**	**8,358**	**673**	**2,728**	**17,994**
2008 Average	**14,648**	**485**	**2,019**	**17,153**	**4,294**	**1,493**	**519**	**630**	**8,548**	**620**	**2,561**	**18,146**
2009 Average	**14,336**	**485**	**2,082**	**16,904**	**4,048**	**1,396**	**537**	**623**	**8,786**	**598**	**2,431**	**17,882**
2010 January	13,666	503	1,501	15,670	3,551	1,338	531	480	8,348	633	2,281	16,631
February	13,950	402	1,654	16,005	3,658	1,340	562	540	8,510	632	2,385	17,065
March	14,314	413	2,166	16,893	3,835	1,379	575	726	8,913	581	2,523	17,957
April	15,131	374	2,135	17,640	4,156	1,470	585	850	9,062	598	2,531	18,668
May	15,215	399	2,348	17,963	4,375	1,449	571	857	9,113	615	2,622	19,031
June	15,382	397	2,349	18,127	4,408	1,495	572	870	9,211	559	2,670	19,212
July	15,519	384	2,595	18,498	4,425	1,542	574	860	9,500	576	2,704	19,607
August	15,110	390	2,607	18,107	4,404	1,463	552	778	9,426	554	2,605	19,230
September	14,740	443	2,294	17,477	4,341	1,404	551	614	9,143	588	2,449	18,539
October	14,000	504	2,517	17,021	4,315	1,317	526	501	9,049	528	2,323	18,033
November	14,637	531	2,223	17,391	4,503	1,394	543	390	9,134	564	2,457	18,442
December	14,976	563	2,185	17,724	4,670	1,417	572	430	9,252	595	2,547	18,911
Average	**14,724**	**442**	**2,219**	**17,385**	**4,223**	**1,418**	**560**	**659**	**9,059**	**585**	**2,509**	**18,452**
2011 January	14,423	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	R 15,259	R 435	R 2,239	R 17,932	R 4,599	R 1,559	R 543	R 777	R 9,079	R 443	R 2,577	R 19,034
September	E 14,696	F 503	RE 2,035	RF 17,234	E 4,536	E 1,485	RE 628	F 596	E 8,723	E 482	RE 2,485	RE 18,306
October	E 14,784	F 549	E 1,807	F 17,140	E 4,462	E 1,453	E 630	F 466	E 8,898	E 486	E 2,447	E 18,213
10-Month Average	**E 14,945**	**E 472**	**E 1,997**	**E 17,415**	**E 4,494**	**E 1,487**	**E 567**	**E 680**	**E 8,836**	**E 502**	**E 2,484**	**E 18,483**
2011 10-Month Average	**14,788**	**472**	**2,321**	**17,580**	**4,408**	**1,459**	**549**	**669**	**9,042**	**545**	**2,524**	**18,647**
2010 10-Month Average	**14,706**	**421**	**2,222**	**17,349**	**4,150**	**1,420**	**560**	**709**	**9,031**	**586**	**2,510**	**18,406**

[a] See "Refinery and Blender Net Inputs," in Glossary.
[b] See "Refinery and Blender Net Production," in Glossary.
[c] Liquefied petroleum gases.
[d] Includes lease condensate.
[e] Natural gas plant liquids (liquefied petroleum gases and pentanes plus).
[f] Unfinished oils (net), other hydrocarbons, and hydrogen. Beginning in 1981, also includes aviation and motor gasoline blending components (net). Beginning in 1993, also includes oxygenates (net), including fuel ethanol. Beginning in 2009, also includes renewable diesel fuel (including biodiesel).
[g] Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[h] Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other Products."
[i] Includes propylene.
[j] Finished motor gasoline. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.
[k] Asphalt and road oil, finished aviation gasoline, kerosene, lubricants, petrochemical feedstocks, petroleum coke, special naphthas, still gas, waxes, and miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel.

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

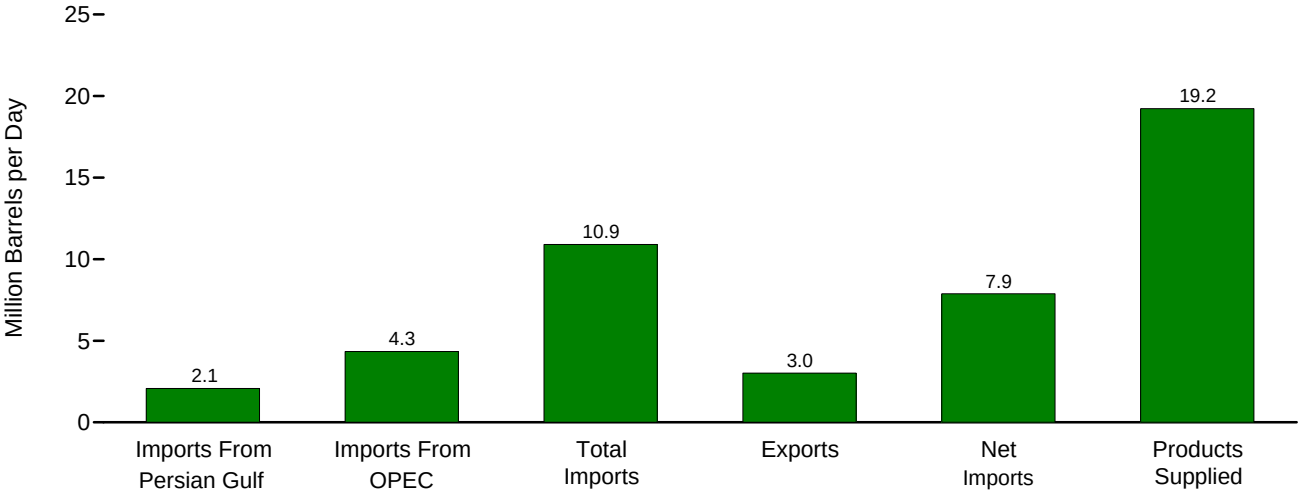
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

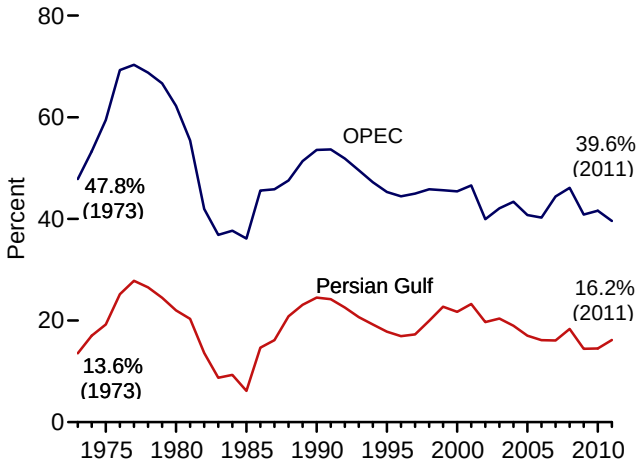
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system, Short-Term Integrated Forecasting System, and *Monthly Energy Review* data system calculations.

Figure 3.3a Petroleum Trade: Overview

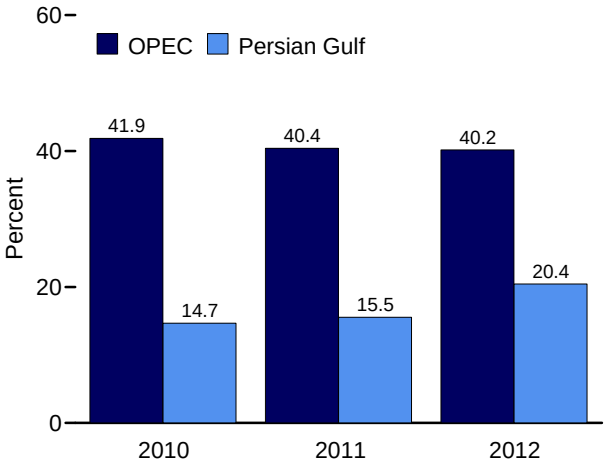
Overview, August 2012



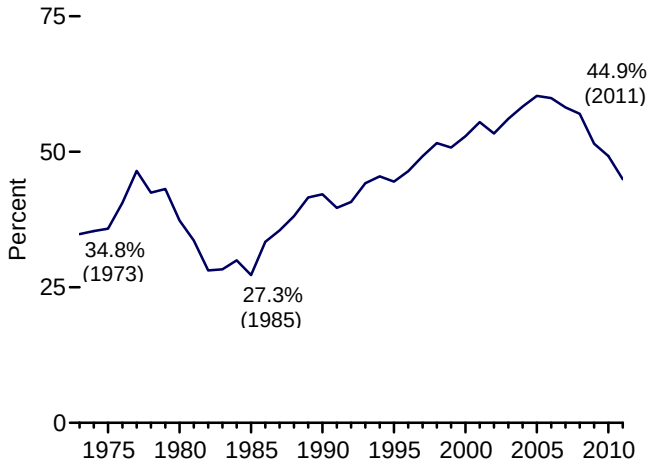
Imports From OPEC and Persian Gulf as Share of Total Imports, 1973-2011



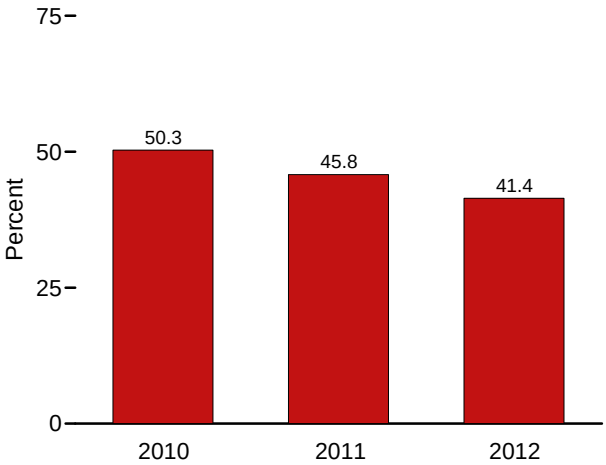
Imports From OPEC and Persian Gulf as Share of Total Imports, January-August



Net Imports as Share of Products Supplied, 1973-2011



Net Imports as Share of Products Supplied, January-October



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

Table 3.3a Petroleum Trade: Overview

	Imports From Persian Gulf[a]	Imports From OPEC[b]	Imports	Exports	Net Imports	Products Supplied	As Share of Products Supplied: Imports From Persian Gulf[a]	As Share of Products Supplied: Imports From OPEC[b]	As Share of Products Supplied: Imports	As Share of Products Supplied: Net Imports	As Share of Total Imports: Imports From Persian Gulf[a]	As Share of Total Imports: Imports From OPEC[b]
	Thousand Barrels per Day						Percent					
1973 Average	**848**	**2,993**	**6,256**	**231**	**6,025**	**17,308**	**4.9**	**17.3**	**36.1**	**34.8**	**13.6**	**47.8**
1975 Average	**1,165**	**3,601**	**6,056**	**209**	**5,846**	**16,322**	**7.1**	**22.1**	**37.1**	**35.8**	**19.2**	**59.5**
1980 Average	**1,519**	**4,300**	**6,909**	**544**	**6,365**	**17,056**	**8.9**	**25.2**	**40.5**	**37.3**	**22.0**	**62.2**
1985 Average	**311**	**1,830**	**5,067**	**781**	**4,286**	**15,726**	**2.0**	**11.6**	**32.2**	**27.3**	**6.1**	**36.1**
1990 Average	**1,966**	**4,296**	**8,018**	**857**	**7,161**	**16,988**	**11.6**	**25.3**	**47.2**	**42.2**	**24.5**	**53.6**
1995 Average	**1,573**	**4,002**	**8,835**	**949**	**7,886**	**17,725**	**8.9**	**22.6**	**49.8**	**44.5**	**17.8**	**45.3**
1996 Average	**1,604**	**4,211**	**9,478**	**981**	**8,498**	**18,309**	**8.8**	**23.0**	**51.8**	**46.4**	**16.9**	**44.4**
1997 Average	**1,755**	**4,569**	**10,162**	**1,003**	**9,158**	**18,620**	**9.4**	**24.5**	**54.6**	**49.2**	**17.3**	**45.0**
1998 Average	**2,136**	**4,905**	**10,708**	**945**	**9,764**	**18,917**	**11.3**	**25.9**	**56.6**	**51.6**	**19.9**	**45.8**
1999 Average	**2,464**	**4,953**	**10,852**	**940**	**9,912**	**19,519**	**12.6**	**25.4**	**55.6**	**50.8**	**22.7**	**45.6**
2000 Average	**2,488**	**5,203**	**11,459**	**1,040**	**10,419**	**19,701**	**12.6**	**26.4**	**58.2**	**52.9**	**21.7**	**45.4**
2001 Average	**2,761**	**5,528**	**11,871**	**971**	**10,900**	**19,649**	**14.1**	**28.1**	**60.4**	**55.5**	**23.3**	**46.6**
2002 Average	**2,269**	**4,605**	**11,530**	**984**	**10,546**	**19,761**	**11.5**	**23.3**	**58.3**	**53.4**	**19.7**	**39.9**
2003 Average	**2,501**	**5,162**	**12,264**	**1,027**	**11,238**	**20,034**	**12.5**	**25.8**	**61.2**	**56.1**	**20.4**	**42.1**
2004 Average	**2,493**	**5,701**	**13,145**	**1,048**	**12,097**	**20,731**	**12.0**	**27.5**	**63.4**	**58.4**	**19.0**	**43.4**
2005 Average	**2,334**	**5,587**	**13,714**	**1,165**	**12,549**	**20,802**	**11.2**	**26.9**	**65.9**	**60.3**	**17.0**	**40.7**
2006 Average	**2,211**	**5,517**	**13,707**	**1,317**	**12,390**	**20,687**	**10.7**	**26.7**	**66.3**	**59.9**	**16.1**	**40.2**
2007 Average	**2,163**	**5,980**	**13,468**	**1,433**	**12,036**	**20,680**	**10.5**	**28.9**	**65.1**	**58.2**	**16.1**	**44.4**
2008 Average	**2,370**	**5,954**	**12,915**	**1,802**	**11,114**	**19,498**	**12.2**	**30.5**	**66.2**	**57.0**	**18.4**	**46.1**
2009 Average	**1,689**	**4,776**	**11,691**	**2,024**	**9,667**	**18,771**	**9.0**	**25.4**	**62.3**	**51.5**	**14.4**	**40.9**
2010 January	1,563	4,554	11,300	1,897	9,404	18,652	8.4	24.4	60.6	50.4	13.8	40.3
February	1,666	4,659	11,230	2,034	9,197	18,850	8.8	24.7	59.6	48.8	14.8	41.5
March	1,842	5,084	11,621	2,149	9,472	19,099	9.6	26.6	60.8	49.6	15.9	43.7
April	2,026	5,376	12,526	2,432	10,093	19,044	10.6	28.2	65.8	53.0	16.2	42.9
May	1,724	5,055	12,141	2,399	9,742	18,866	9.1	26.8	64.4	51.6	14.2	41.6
June	1,972	5,297	12,444	2,304	10,140	19,537	10.1	27.1	63.7	51.9	15.8	42.6
July	1,679	5,178	12,675	2,516	10,159	19,319	8.7	26.8	65.6	52.6	13.2	40.8
August	1,663	5,117	12,356	2,410	9,946	19,662	8.5	26.0	62.8	50.6	13.5	41.4
September	1,698	5,111	11,823	2,345	9,478	19,438	8.7	26.3	60.8	48.8	14.4	43.2
October	1,490	4,305	11,142	2,480	8,662	18,974	7.9	22.7	58.7	45.7	13.4	38.6
November	1,662	4,525	11,096	2,598	8,498	18,977	8.8	23.8	58.5	44.8	15.0	40.8
December	1,564	4,614	11,132	2,644	8,488	19,722	7.9	23.4	56.4	43.0	14.0	41.4
Average	**1,711**	**4,906**	**11,793**	**2,353**	**9,441**	**19,180**	**8.9**	**25.6**	**61.5**	**49.2**	**14.5**	**41.6**
2011 January	1,681	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	R 2,071	R 4,344	R 10,898	R 3,017	R 7,881	R 19,226	R 10.8	R 22.6	R 56.7	R 41.0	R 19.0	R 39.9
September	NA	NA	E 10,544	E 2,904	E 7,640	E 18,391	NA	NA	E 57.3	E 41.5	NA	NA
October	NA	NA	E 10,295	E 2,795	E 7,500	E 18,838	NA	NA	E 54.7	E 39.8	NA	NA
10-Month Average	**NA**	**NA**	**E 10,767**	**E 3,047**	**E 7,720**	**E 18,626**	**NA**	**NA**	**E 57.8**	**E 41.4**	**NA**	**NA**
2011 10-Month Average	**1,847**	**4,637**	**11,577**	**2,899**	**8,677**	**18,952**	**9.7**	**24.5**	**61.1**	**45.8**	**16.0**	**40.1**
2010 10-Month Average	**1,731**	**4,974**	**11,929**	**2,299**	**9,631**	**19,145**	**9.0**	**26.0**	**62.3**	**50.3**	**14.5**	**41.7**

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

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

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

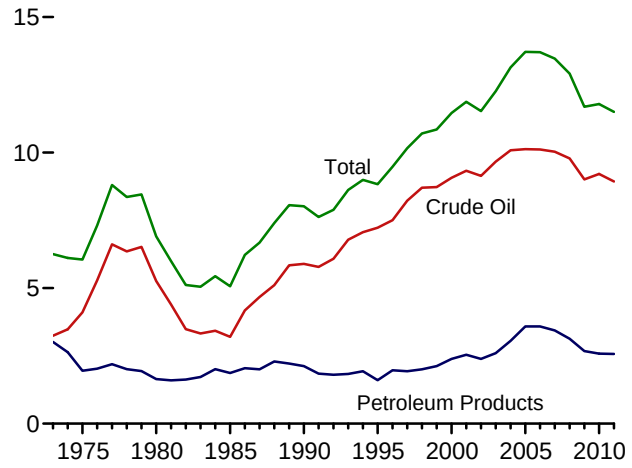
Notes: • Readers of this table may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 *Monthly Energy Review.* See http://www.eia.gov/totalenergy/data/monthly/pdf/historical/imported_oil.pdf. • Beginning in October 1977, data include Strategic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

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

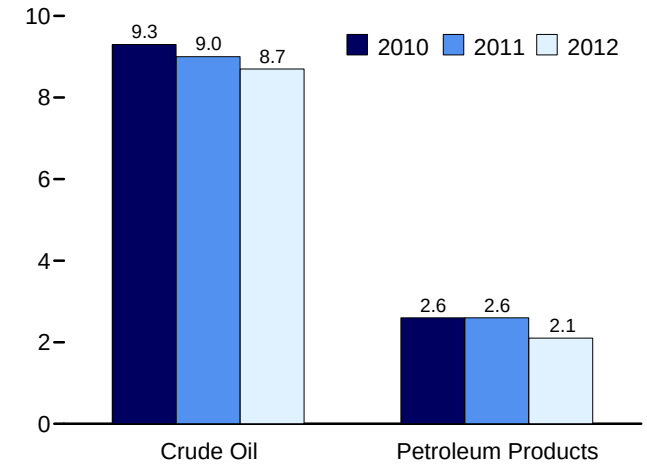
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

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

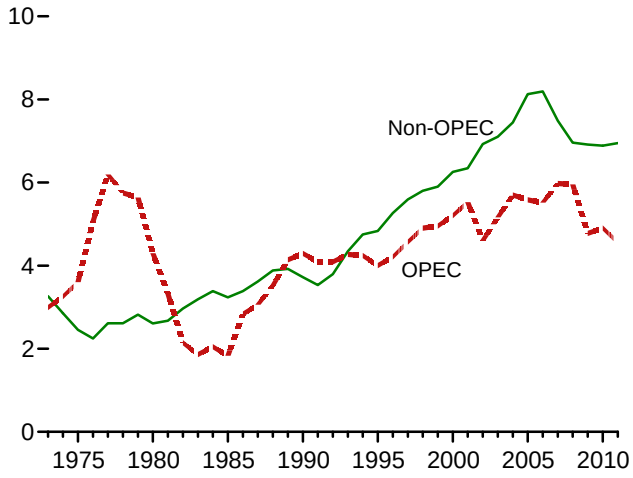
Overview, 1973-2011



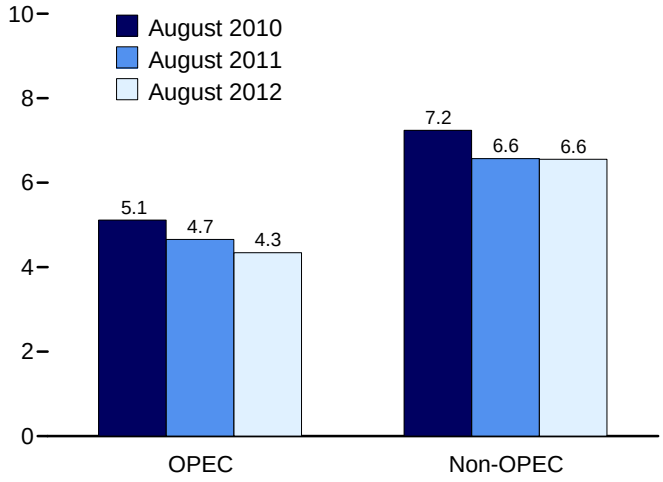
Crude Oil and Petroleum Products, January-October



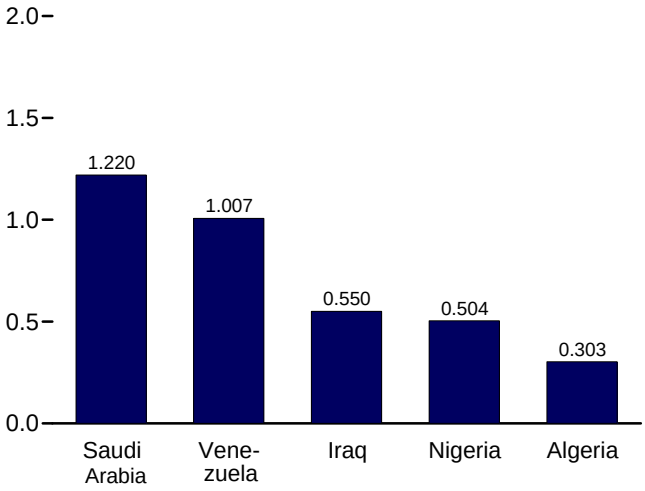
OPEC and Non-OPEC, 1973-2011



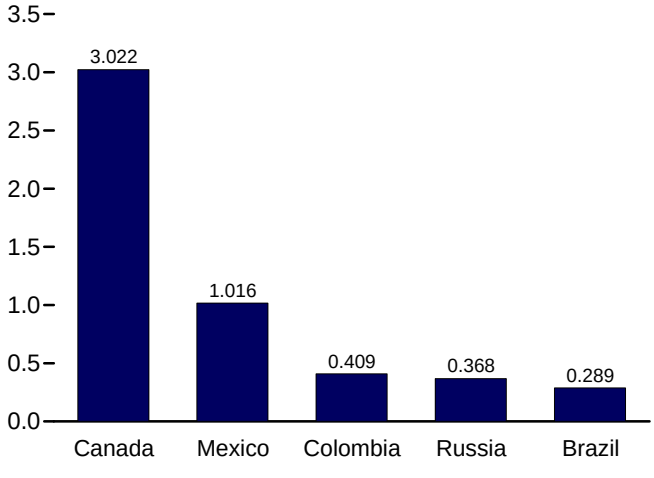
OPEC and Non-OPEC



From Selected OPEC Countries, August 2012



From Selected Non-OPEC Countries, August 2012



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

Table 3.3b Petroleum Trade: Imports and Exports by Type

(Thousand Barrels per Day)

	Imports										Exports		
	Crude Oil[a]		Distillate Fuel Oil	Jet Fuel[e]	LPG[b]		Motor Gasoline[g]	Residual Fuel Oil	Other[h]	Total	Crude Oil[a]	Petroleum Products	Total
	SPR[c,d]	Total			Propane[f]	Total							
1973 Average	**– –**	**3,244**	**392**	**212**	**71**	**132**	**134**	**1,853**	**290**	**6,256**	**2**	**229**	**231**
1975 Average	**– –**	**4,105**	**155**	**133**	**60**	**112**	**184**	**1,223**	**144**	**6,056**	**6**	**204**	**209**
1980 Average	**44**	**5,263**	**142**	**80**	**69**	**216**	**140**	**939**	**130**	**6,909**	**287**	**258**	**544**
1985 Average	**118**	**3,201**	**200**	**39**	**67**	**187**	**381**	**510**	**550**	**5,067**	**204**	**577**	**781**
1990 Average	**27**	**5,894**	**278**	**108**	**115**	**188**	**342**	**504**	**705**	**8,018**	**109**	**748**	**857**
1995 Average	**–**	**7,230**	**193**	**106**	**102**	**146**	**265**	**187**	**708**	**8,835**	**95**	**855**	**949**
1996 Average	**–**	**7,508**	**230**	**111**	**119**	**166**	**336**	**248**	**879**	**9,478**	**110**	**871**	**981**
1997 Average	**–**	**8,225**	**228**	**91**	**113**	**169**	**309**	**194**	**945**	**10,162**	**108**	**896**	**1,003**
1998 Average	**–**	**8,706**	**210**	**124**	**137**	**194**	**311**	**275**	**888**	**10,708**	**110**	**835**	**945**
1999 Average	**8**	**8,731**	**250**	**128**	**122**	**182**	**382**	**237**	**943**	**10,852**	**118**	**822**	**940**
2000 Average	**8**	**9,071**	**295**	**162**	**161**	**215**	**427**	**352**	**938**	**11,459**	**50**	**990**	**1,040**
2001 Average	**11**	**9,328**	**344**	**148**	**145**	**206**	**454**	**295**	**1,095**	**11,871**	**20**	**951**	**971**
2002 Average	**16**	**9,140**	**267**	**107**	**145**	**183**	**498**	**249**	**1,085**	**11,530**	**9**	**975**	**984**
2003 Average	**–**	**9,665**	**333**	**109**	**168**	**225**	**518**	**327**	**1,087**	**12,264**	**12**	**1,014**	**1,027**
2004 Average	**77**	**10,088**	**325**	**127**	**209**	**263**	**496**	**426**	**1,419**	**13,145**	**27**	**1,021**	**1,048**
2005 Average	**52**	**10,126**	**329**	**190**	**233**	**328**	**603**	**530**	**1,609**	**13,714**	**32**	**1,133**	**1,165**
2006 Average	**8**	**10,118**	**365**	**186**	**228**	**332**	**475**	**350**	**1,881**	**13,707**	**25**	**1,292**	**1,317**
2007 Average	**7**	**10,031**	**304**	**217**	**182**	**247**	**413**	**372**	**1,885**	**13,468**	**27**	**1,405**	**1,433**
2008 Average	**19**	**9,783**	**213**	**103**	**185**	**253**	**302**	**349**	**1,913**	**12,915**	**29**	**1,773**	**1,802**
2009 Average	**56**	**9,013**	**225**	**81**	**147**	**182**	**223**	**331**	**1,635**	**11,691**	**44**	**1,980**	**2,024**
2010 January	–	8,492	462	131	192	225	179	376	1,435	11,300	33	1,864	1,897
February	–	8,761	293	75	217	242	196	382	1,282	11,230	58	1,976	2,034
March	–	9,341	179	79	137	155	120	376	1,370	11,621	45	2,104	2,149
April	–	9,726	220	88	79	102	178	480	1,732	12,526	37	2,396	2,432
May	–	9,655	189	81	82	108	107	404	1,599	12,141	36	2,363	2,399
June	–	9,927	237	114	73	113	163	283	1,607	12,444	31	2,273	2,304
July	–	9,932	170	113	56	104	114	400	1,841	12,675	69	2,447	2,516
August	–	9,543	246	103	62	107	129	330	1,899	12,356	36	2,374	2,410
September	–	9,229	189	122	85	124	130	367	1,662	11,823	61	2,283	2,345
October	–	8,540	163	94	131	165	86	337	1,758	11,142	23	2,457	2,480
November	–	8,699	178	101	132	165	117	345	1,491	11,096	32	2,567	2,598
December	–	8,695	219	73	214	231	99	315	1,501	11,132	40	2,604	2,644
Average	**–**	**9,213**	**228**	**98**	**121**	**153**	**134**	**366**	**1,600**	**11,793**	**42**	**2,311**	**2,353**
2011 January	–	9,183	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	–	R 8,631	R 110	R 124	R 142	R 186	R 37	R 233	R 1,577	R 10,898	R 60	R 2,957	R 3,017
September	–	E 8,497	E 116	E 84	E 99	NA	E 52	E 248	NA	E 10,544	E 41	E 2,863	E 2,904
October	–	E 8,277	E 65	E 95	E 103	NA	E 25	E 257	NA	E 10,295	E 41	E 2,754	E 2,795
10-Month Average	**–**	**E 8,651**	**E 113**	**E 55**	**E 128**	**NA**	**E 58**	**E 260**	**NA**	**E 10,767**	**E 54**	**E 2,993**	**E 3,047**
2011 10-Month Average	**–**	**8,979**	**183**	**73**	**154**	**198**	**112**	**327**	**1,704**	**11,577**	**45**	**2,855**	**2,899**
2010 10-Month Average	**–**	**9,317**	**234**	**100**	**111**	**144**	**140**	**373**	**1,621**	**11,929**	**43**	**2,256**	**2,299**

[a] Includes lease condensate.
[b] Liquefied petroleum gases.
[c] "SPR" is the Strategic Petroleum Reserve, which began in October 1977. Through 2003, includes crude oil imports by SPR only; beginning in 2004, includes crude oil imports by SPR, and crude oil imports into SPR by others.
[d] See Note 6, "Petroleum Data Discrepancies," at end of section.
[e] Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other."
[f] Includes propylene.
[g] Finished motor gasoline. Through 1980, also includes motor gasoline blending components.
[h] Asphalt and road oil, finished aviation gasoline, gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, special naphthas, unfinished oils, waxes, other hydrocarbons and oxygenates, and miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel.

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

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

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

Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

Table 3.3c Petroleum Trade: Imports From OPEC Countries

(Thousand Barrels per Day)

	Algeria	Angola[a]	Ecuador[b]	Iraq	Kuwait[c]	Libya	Nigeria	Saudi Arabia[c]	Vene-zuela	Other[d]	Total OPEC
1973 Average	**136**	**([a])**	**48**	**4**	**47**	**164**	**459**	**486**	**1,135**	**514**	**2,993**
1975 Average	**282**	**([a])**	**57**	**2**	**16**	**232**	**762**	**715**	**702**	**832**	**3,601**
1980 Average	**488**	**([a])**	**27**	**28**	**27**	**554**	**857**	**1,261**	**481**	**577**	**4,300**
1985 Average	**187**	**([a])**	**67**	**46**	**21**	**4**	**293**	**168**	**605**	**439**	**1,830**
1990 Average	**280**	**([a])**	**49**	**518**	**86**	**0**	**800**	**1,339**	**1,025**	**199**	**4,296**
1995 Average	**234**	**([a])**	**([b])**	**0**	**218**	**0**	**627**	**1,344**	**1,480**	**98**	**4,002**
1996 Average	**256**	**([a])**	**([b])**	**1**	**236**	**0**	**617**	**1,363**	**1,676**	**62**	**4,211**
1997 Average	**285**	**([a])**	**([b])**	**89**	**253**	**0**	**698**	**1,407**	**1,773**	**64**	**4,569**
1998 Average	**290**	**([a])**	**([b])**	**336**	**301**	**0**	**696**	**1,491**	**1,719**	**73**	**4,905**
1999 Average	**259**	**([a])**	**([b])**	**725**	**248**	**0**	**657**	**1,478**	**1,493**	**93**	**4,953**
2000 Average	**225**	**([a])**	**([b])**	**620**	**272**	**0**	**896**	**1,572**	**1,546**	**72**	**5,203**
2001 Average	**278**	**([a])**	**([b])**	**795**	**250**	**0**	**885**	**1,662**	**1,553**	**105**	**5,528**
2002 Average	**264**	**([a])**	**([b])**	**459**	**228**	**0**	**621**	**1,552**	**1,398**	**83**	**4,605**
2003 Average	**382**	**([a])**	**([b])**	**481**	**220**	**0**	**867**	**1,774**	**1,376**	**61**	**5,162**
2004 Average	**452**	**([a])**	**([b])**	**656**	**250**	**20**	**1,140**	**1,558**	**1,554**	**70**	**5,701**
2005 Average	**478**	**([a])**	**([b])**	**531**	**243**	**56**	**1,166**	**1,537**	**1,529**	**47**	**5,587**
2006 Average	**657**	**([a])**	**([b])**	**553**	**185**	**87**	**1,114**	**1,463**	**1,419**	**38**	**5,517**
2007 Average	**670**	**508**	**([b])**	**484**	**181**	**117**	**1,134**	**1,485**	**1,361**	**39**	**5,980**
2008 Average	**548**	**513**	**221**	**627**	**210**	**103**	**988**	**1,529**	**1,189**	**26**	**5,954**
2009 Average	**493**	**460**	**185**	**450**	**182**	**79**	**809**	**1,004**	**1,063**	**50**	**4,776**
2010 January	498	280	215	523	77	40	1,048	963	911	–	4,554
February	498	360	152	540	228	40	932	898	1,010	–	4,659
March	455	502	183	475	218	79	962	1,149	1,061	–	5,084
April	464	509	225	490	278	142	1,060	1,257	951	–	5,376
May	518	448	182	394	225	39	1,026	1,097	1,117	10	5,055
June	550	425	245	630	217	98	1,108	1,125	899	–	5,297
July	518	374	239	430	189	110	1,174	1,053	1,084	7	5,178
August	565	484	276	281	251	123	985	1,132	1,022	–	5,117
September	543	417	229	422	172	43	1,174	1,093	1,008	10	5,111
October	451	324	203	143	215	36	872	1,131	930	–	4,305
November	572	276	194	340	170	23	856	1,152	942	–	4,525
December	484	319	192	336	125	66	1,070	1,093	917	9	4,614
Average	**510**	**393**	**212**	**415**	**197**	**70**	**1,023**	**1,096**	**988**	**3**	**4,906**
2011 January	565	316	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
8-Month Average	**271**	**262**	**188**	**460**	**322**	**70**	**442**	**1,427**	**909**	**10**	**4,360**
2011 8-Month Average	**410**	**339**	**213**	**480**	**168**	**20**	**914**	**1,151**	**1,007**	**17**	**4,719**
2010 8-Month Average	**509**	**423**	**215**	**469**	**210**	**84**	**1,038**	**1,086**	**1,007**	**2**	**5,042**

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

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

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

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

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

Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. Petroleum imports not classified as "OPEC" on this table are included on Table 3.3d. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil. • Includes imports for the Strategic Petroleum Reserve, which began in October 1977. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

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

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

(Thousand Barrels per Day)

	Brazil	Canada	Colombia	Mexico	Nether-lands	Norway	Russia[a]	United Kingdom	U.S. Virgin Islands	Other	Total Non-OPEC
1973 Average	**9**	**1,325**	**9**	**16**	**53**	**1**	**26**	**15**	**329**	**1,480**	**3,263**
1975 Average	**5**	**846**	**9**	**71**	**19**	**17**	**14**	**14**	**406**	**1,052**	**2,454**
1980 Average	**3**	**455**	**4**	**533**	**2**	**144**	**1**	**176**	**388**	**903**	**2,609**
1985 Average	**61**	**770**	**23**	**816**	**58**	**32**	**8**	**310**	**247**	**913**	**3,237**
1990 Average	**49**	**934**	**182**	**755**	**55**	**102**	**45**	**189**	**282**	**1,128**	**3,721**
1995 Average	**8**	**1,332**	**219**	**1,068**	**15**	**273**	**25**	**383**	**278**	**1,233**	**4,833**
1996 Average	**9**	**1,424**	**234**	**1,244**	**19**	**313**	**25**	**308**	**313**	**1,377**	**5,267**
1997 Average	**5**	**1,563**	**271**	**1,385**	**25**	**309**	**13**	**226**	**300**	**1,495**	**5,593**
1998 Average	**26**	**1,598**	**354**	**1,351**	**31**	**236**	**24**	**250**	**293**	**1,640**	**5,803**
1999 Average	**26**	**1,539**	**468**	**1,324**	**27**	**304**	**89**	**365**	**280**	**1,478**	**5,899**
2000 Average	**51**	**1,807**	**342**	**1,373**	**30**	**343**	**72**	**366**	**291**	**1,581**	**6,257**
2001 Average	**82**	**1,828**	**296**	**1,440**	**43**	**341**	**90**	**324**	**268**	**1,631**	**6,343**
2002 Average	**116**	**1,971**	**260**	**1,547**	**66**	**393**	**210**	**478**	**236**	**1,649**	**6,925**
2003 Average	**108**	**2,072**	**195**	**1,623**	**87**	**270**	**254**	**440**	**288**	**1,766**	**7,103**
2004 Average	**104**	**2,138**	**176**	**1,665**	**101**	**244**	**298**	**380**	**330**	**2,008**	**7,444**
2005 Average	**156**	**2,181**	**196**	**1,662**	**151**	**233**	**410**	**396**	**328**	**2,413**	**8,127**
2006 Average	**193**	**2,353**	**155**	**1,705**	**174**	**196**	**369**	**272**	**328**	**2,446**	**8,190**
2007 Average	**200**	**2,455**	**155**	**1,532**	**128**	**142**	**414**	**277**	**346**	**1,839**	**7,489**
2008 Average	**258**	**2,493**	**200**	**1,302**	**168**	**102**	**465**	**236**	**320**	**1,416**	**6,961**
2009 Average	**309**	**2,479**	**276**	**1,210**	**140**	**108**	**563**	**245**	**277**	**1,307**	**6,915**
2010 January	353	2,596	322	1,133	116	126	463	282	298	1,057	6,747
February	226	2,491	386	1,137	126	99	423	413	196	1,074	6,571
March	306	2,505	251	1,306	136	59	494	267	235	977	6,538
April	318	2,472	423	1,282	89	166	587	304	331	1,178	7,149
May	319	2,528	315	1,428	108	119	719	176	195	1,180	7,087
June	308	2,717	407	1,211	87	52	760	269	246	1,090	7,146
July	332	2,549	404	1,289	207	119	719	351	239	1,287	7,497
August	251	2,489	372	1,282	137	57	786	266	301	1,298	7,239
September	181	2,479	363	1,254	45	62	648	178	302	1,200	6,712
October	169	2,347	422	1,347	108	111	655	152	270	1,255	6,837
November	198	2,513	492	1,363	57	79	561	187	234	886	6,571
December	295	2,736	231	1,365	71	26	514	236	191	855	6,518
Average	**272**	**2,535**	**365**	**1,284**	**108**	**89**	**612**	**256**	**253**	**1,112**	**6,887**
2011 January	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
8-Month Average	**282**	**2,998**	**450**	**1,017**	**115**	**82**	**455**	**170**	**17**	**907**	**6,495**
2011 8-Month Average	**249**	**2,761**	**394**	**1,224**	**114**	**102**	**615**	**169**	**188**	**1,146**	**6,963**
2010 8-Month Average	**302**	**2,544**	**359**	**1,260**	**126**	**99**	**621**	**290**	**256**	**1,144**	**7,001**

[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.

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

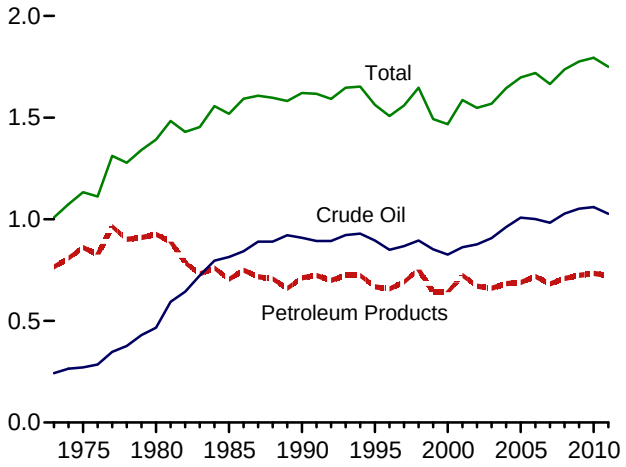
Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for membership. Petroleum imports not classified as "OPEC" on Table 3.3c are included on this table. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil. • Includes imports for the Strategic Petroleum Reserve, which began in October 1977. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

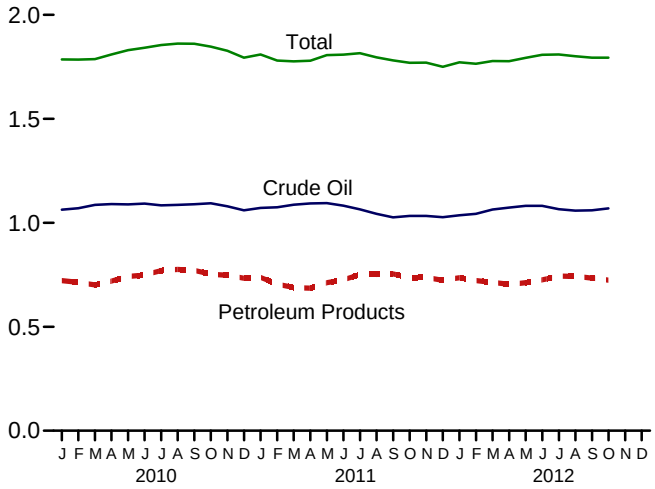
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2011:** EIA, *Petroleum Supply Annual,* annual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

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

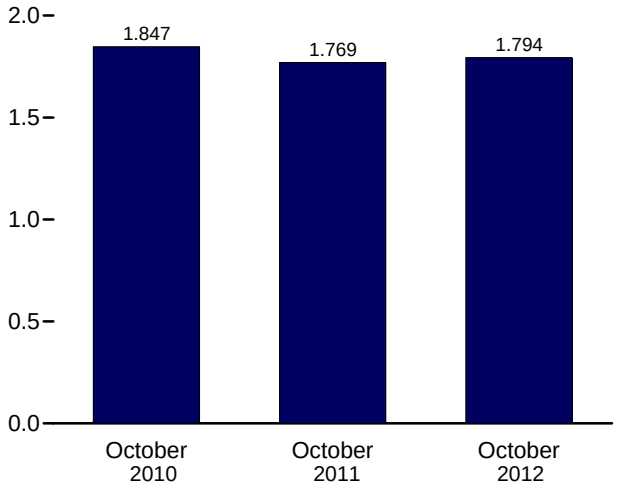
Overview, 1973-2011



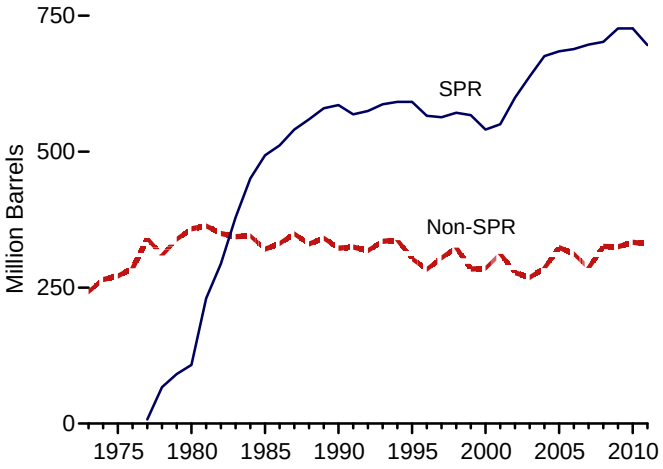
Overview, Monthly



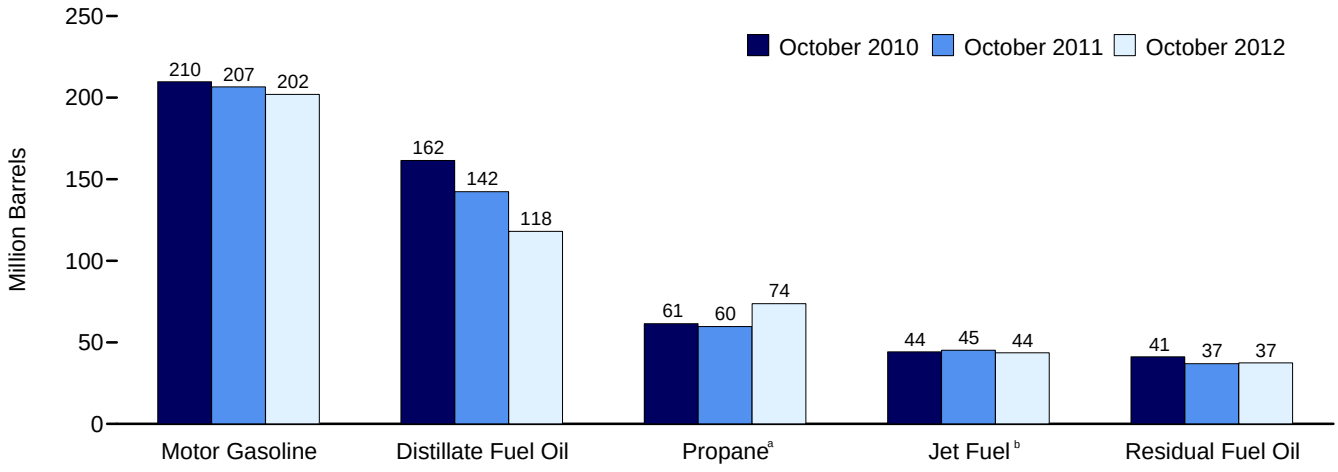
Total Stocks (Crude Oil and Petroleum Products)



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



Selected Products



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

Table 3.4 Petroleum Stocks

(Million Barrels)

	Crude Oil[a]			Distillate Fuel Oil[f,g]	Jet Fuel[h]	LPG[b]		Motor Gasoline[f,j]	Residual Fuel Oil[f]	Other[k]	Total[f]
	SPR[c]	Non-SPR[d,e,f]	Total[e,f]			Propane[f,i]	Total[f]				
1973 Year	**– –**	**242**	**242**	**196**	**29**	**65**	**99**	**209**	**53**	**179**	**1,008**
1975 Year	**– –**	**271**	**271**	**209**	**30**	**82**	**125**	**235**	**74**	**188**	**1,133**
1980 Year	**108**	**358**	**466**	**205**	**42**	**65**	**120**	**261**	**92**	**205**	**1,392**
1985 Year	**493**	**321**	**814**	**144**	**40**	**39**	**74**	**223**	**50**	**174**	**1,519**
1990 Year	**586**	**323**	**908**	**132**	**52**	**49**	**98**	**220**	**49**	**162**	**1,621**
1995 Year	**592**	**303**	**895**	**130**	**40**	**43**	**93**	**202**	**37**	**165**	**1,563**
1996 Year	**566**	**284**	**850**	**127**	**40**	**43**	**86**	**195**	**46**	**164**	**1,507**
1997 Year	**563**	**305**	**868**	**138**	**44**	**44**	**89**	**210**	**40**	**169**	**1,560**
1998 Year	**571**	**324**	**895**	**156**	**45**	**65**	**115**	**216**	**45**	**176**	**1,647**
1999 Year	**567**	**284**	**852**	**125**	**41**	**43**	**89**	**193**	**36**	**157**	**1,493**
2000 Year	**541**	**286**	**826**	**118**	**45**	**41**	**83**	**196**	**36**	**164**	**1,468**
2001 Year	**550**	**312**	**862**	**145**	**42**	**66**	**121**	**210**	**41**	**166**	**1,586**
2002 Year	**599**	**278**	**877**	**134**	**39**	**53**	**106**	**209**	**31**	**152**	**1,548**
2003 Year	**638**	**269**	**907**	**137**	**39**	**50**	**94**	**207**	**38**	**147**	**1,568**
2004 Year	**676**	**286**	**961**	**126**	**40**	**55**	**104**	**218**	**42**	**153**	**1,645**
2005 Year	**685**	**324**	**1,008**	**136**	**42**	**57**	**109**	**208**	**37**	**157**	**1,698**
2006 Year	**689**	**312**	**1,001**	**144**	**39**	**62**	**113**	**212**	**42**	**169**	**1,720**
2007 Year	**697**	**286**	**983**	**134**	**39**	**52**	**96**	**218**	**39**	**156**	**1,665**
2008 Year	**702**	**326**	**1,028**	**146**	**38**	**55**	**113**	**214**	**36**	**162**	**1,737**
2009 Year	**727**	**325**	**1,052**	**166**	**43**	**50**	**102**	**223**	**37**	**153**	**1,776**
2010 January	727	337	1,063	164	44	35	80	232	40	162	1,786
February	727	343	1,070	155	44	28	70	235	41	170	1,785
March	727	359	1,086	147	42	28	73	225	41	174	1,787
April	727	363	1,090	145	44	35	89	220	44	178	1,810
May	727	362	1,089	150	45	42	105	218	46	178	1,830
June	727	365	1,092	158	45	49	120	216	43	169	1,842
July	727	358	1,084	167	47	55	130	220	41	166	1,855
August	727	359	1,086	170	47	59	139	221	39	159	1,862
September	727	363	1,089	167	47	61	141	219	40	158	1,861
October	727	368	1,094	162	44	61	138	210	41	158	1,847
November	727	352	1,079	162	44	61	131	213	41	158	1,827
December	**727**	**333**	**1,060**	**164**	**43**	**49**	**108**	**219**	**41**	**158**	**1,794**
2011 January	727	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	R 363	R 1,058	127	43	73	R 171	R 201	R 34	R 166	R 1,801
September	E 695	E 365	E 1,060	E 123	E 44	E 76	F 171	E 196	E 35	RE 166	E 1,795
October	E 695	E 375	E 1,070	E 118	E 44	E 74	F 164	E 202	E 37	E 159	E 1,794

[a] Includes lease condensate.
[b] Liquefied petroleum gases.
[c] "SPR" is the Strategic Petroleum Reserve, which began in October 1977. Crude oil stocks in the SPR include non-U.S. stocks held under foreign or commercial storage agreements.
[d] All crude oil stocks other than those in "SPR."
[e] Beginning in 1981, includes stocks of Alaskan crude oil in transit. See Note 5, "Stocks of Alaskan Crude Oil," at end of section.
[f] See Note 4, "Petroleum New Stock Basis," at end of section.
[g] Excludes stocks in the Northeast Heating Oil Reserve. Beginning in 2009, includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[h] Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other."
[i] Includes propylene.
[j] Includes finished motor gasoline and motor gasoline blending components; excludes oxygenates.
[k] Asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks, petroleum coke, special naphthas, unfinished oils, waxes, miscellaneous products, oxygenates, renewable fuels, and other hydrocarbons. Beginning in 2005, also includes naphtha-type jet fuel.

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

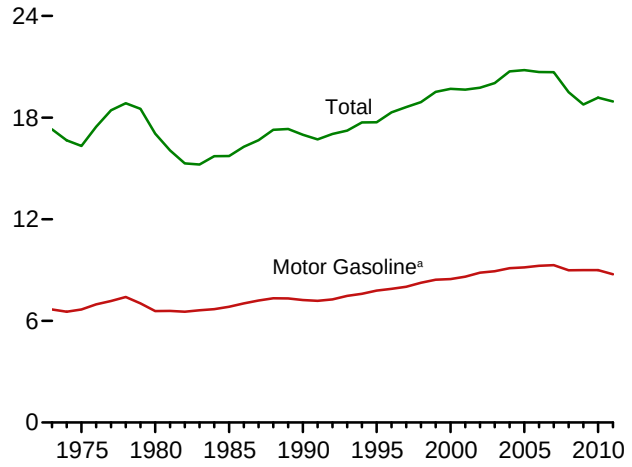
Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

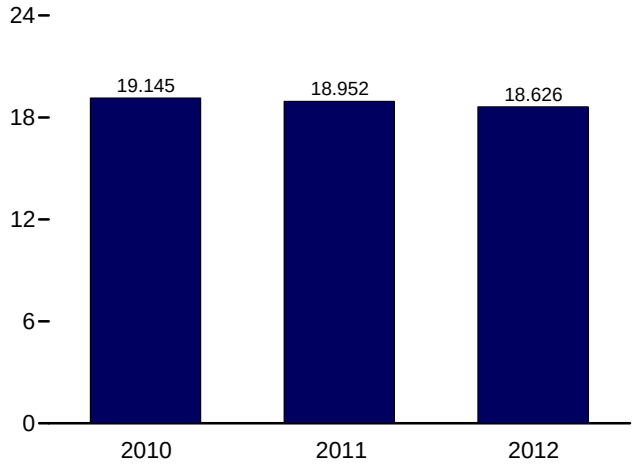
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system, Short-Term Integrated Forecasting System, and *Monthly Energy Review* data system calculations.

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

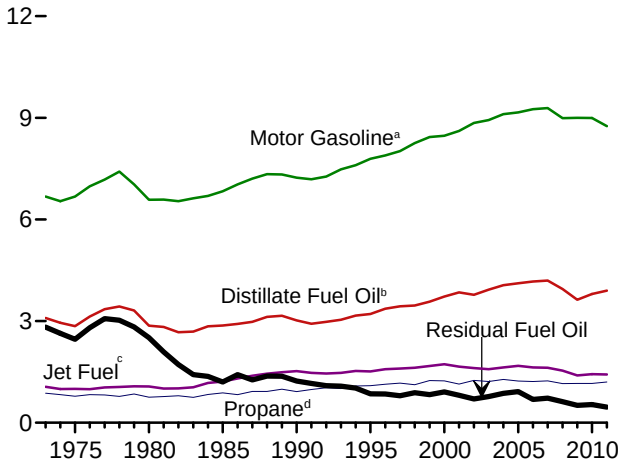
Total and Motor Gasoline, 1973-2011



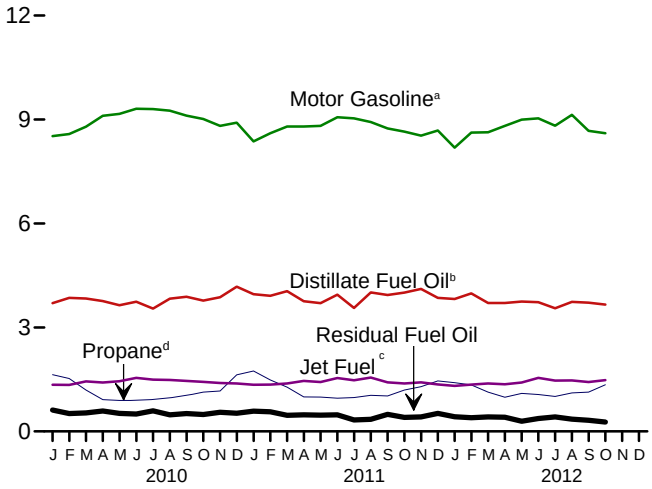
Total, January-October



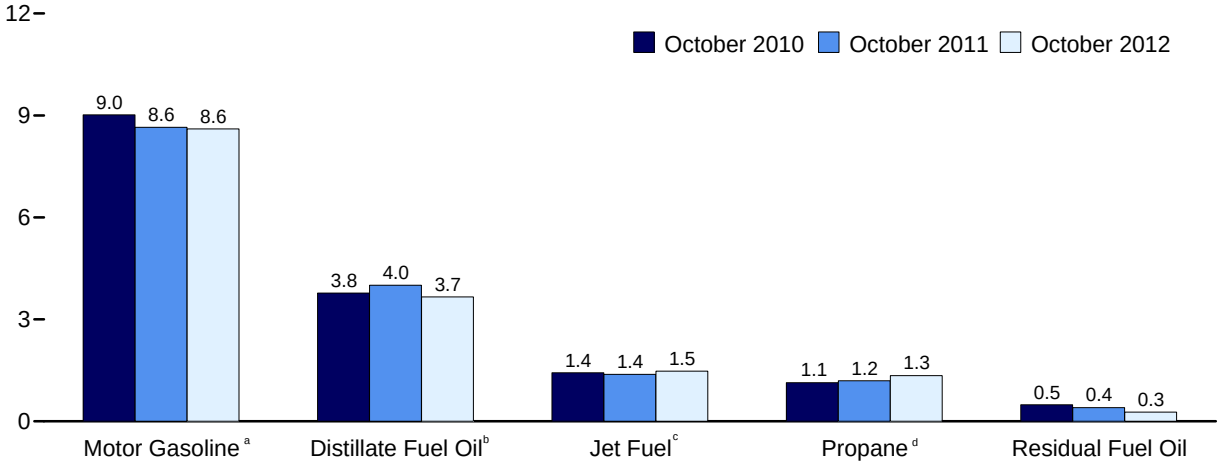
Selected Products,1973-2011



Selected Products, Monthly



Selected Products



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

Table 3.5 Petroleum Products Supplied by Type

(Thousand Barrels per Day)

	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel Oil[b]	Jet Fuel[c]	Kero-sene	LPG[a]		Lubri-cants	Motor Gasoline[e]	Petro-leum Coke	Residual Fuel Oil	Other[f]	Total
						Propane[d]	Total						
1973 Average	**522**	**45**	**3,092**	**1,059**	**216**	**872**	**1,449**	**162**	**6,674**	**261**	**2,822**	**1,005**	**17,308**
1975 Average	**419**	**39**	**2,851**	**1,001**	**159**	**783**	**1,333**	**137**	**6,675**	**247**	**2,462**	**1,001**	**16,322**
1980 Average	**396**	**35**	**2,866**	**1,068**	**158**	**754**	**1,469**	**159**	**6,579**	**237**	**2,508**	**1,581**	**17,056**
1985 Average	**425**	**27**	**2,868**	**1,218**	**114**	**883**	**1,599**	**145**	**6,831**	**264**	**1,202**	**1,032**	**15,726**
1990 Average	**483**	**24**	**3,021**	**1,522**	**43**	**917**	**1,556**	**164**	**7,235**	**339**	**1,229**	**1,373**	**16,988**
1995 Average	**486**	**21**	**3,207**	**1,514**	**54**	**1,096**	**1,899**	**156**	**7,789**	**365**	**852**	**1,381**	**17,725**
1996 Average	**484**	**20**	**3,365**	**1,578**	**62**	**1,136**	**2,012**	**151**	**7,891**	**379**	**848**	**1,518**	**18,309**
1997 Average	**505**	**22**	**3,435**	**1,599**	**66**	**1,170**	**2,038**	**160**	**8,017**	**377**	**797**	**1,605**	**18,620**
1998 Average	**521**	**19**	**3,461**	**1,622**	**78**	**1,120**	**1,952**	**168**	**8,253**	**447**	**887**	**1,508**	**18,917**
1999 Average	**547**	**21**	**3,572**	**1,673**	**73**	**1,246**	**2,195**	**169**	**8,431**	**477**	**830**	**1,532**	**19,519**
2000 Average	**525**	**20**	**3,722**	**1,725**	**67**	**1,235**	**2,231**	**166**	**8,472**	**406**	**909**	**1,458**	**19,701**
2001 Average	**519**	**19**	**3,847**	**1,655**	**72**	**1,142**	**2,044**	**153**	**8,610**	**437**	**811**	**1,481**	**19,649**
2002 Average	**512**	**18**	**3,776**	**1,614**	**43**	**1,248**	**2,163**	**151**	**8,848**	**463**	**700**	**1,474**	**19,761**
2003 Average	**503**	**16**	**3,927**	**1,578**	**55**	**1,215**	**2,074**	**140**	**8,935**	**455**	**772**	**1,579**	**20,034**
2004 Average	**537**	**17**	**4,058**	**1,630**	**64**	**1,276**	**2,132**	**141**	**9,105**	**524**	**865**	**1,657**	**20,731**
2005 Average	**546**	**19**	**4,118**	**1,679**	**70**	**1,229**	**2,030**	**141**	**9,159**	**515**	**920**	**1,605**	**20,802**
2006 Average	**521**	**18**	**4,169**	**1,633**	**54**	**1,215**	**2,052**	**137**	**9,253**	**522**	**689**	**1,640**	**20,687**
2007 Average	**494**	**17**	**4,196**	**1,622**	**32**	**1,235**	**2,085**	**142**	**9,286**	**490**	**723**	**1,593**	**20,680**
2008 Average	**417**	**15**	**3,945**	**1,539**	**14**	**1,154**	**1,954**	**131**	**8,989**	**464**	**622**	**1,408**	**19,498**
2009 Average	**360**	**14**	**3,631**	**1,393**	**18**	**1,160**	**2,051**	**118**	**8,997**	**427**	**511**	**1,251**	**18,771**
2010 January	203	10	3,701	1,344	15	1,638	2,644	116	8,520	268	615	1,218	18,652
February	249	10	3,854	1,343	34	1,526	2,531	137	8,579	334	515	1,263	18,850
March	264	14	3,835	1,443	11	1,193	2,225	138	8,793	425	531	1,421	19,099
April	331	17	3,759	1,410	7	916	1,843	132	9,108	385	590	1,463	19,044
May	378	15	3,639	1,446	11	891	1,878	128	9,162	339	519	1,351	18,866
June	517	18	3,743	1,543	16	901	1,938	155	9,311	411	500	1,386	19,537
July	470	20	3,544	1,494	19	915	1,978	141	9,301	385	595	1,373	19,319
August	537	14	3,830	1,486	9	973	2,025	129	9,255	434	476	1,467	19,662
September	463	20	3,886	1,457	8	1,040	2,084	136	9,112	433	513	1,326	19,438
October	434	15	3,773	1,430	15	1,135	2,126	127	9,016	335	489	1,215	18,974
November	295	11	3,873	1,396	46	1,168	2,141	125	8,816	389	552	1,333	18,977
December	204	12	4,176	1,383	50	1,634	2,677	113	8,911	371	525	1,301	19,722
Average	**362**	**15**	**3,800**	**1,432**	**20**	**1,160**	**2,173**	**131**	**8,993**	**376**	**535**	**1,343**	**19,180**
2011 January	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	R 485	R 13	R 3,740	R 1,469	R 1	R 1,110	R 2,190	R 111	R 9,135	R 409	R 353	R 1,320	R 19,226
September	F 471	RF 15	E 3,715	E 1,424	RF 7	E 1,135	RF 2,113	RF 117	E 8,673	F 365	E 321	RE 1,170	E 18,391
October	F 430	F 12	E 3,660	E 1,478	F 10	E 1,345	F 2,222	F 120	E 8,602	F 361	E 271	E 1,672	E 18,838
10-Month Average	**E 368**	**E 14**	**E 3,734**	**E 1,420**	**E 5**	**E 1,162**	**E 2,205**	**E 117**	**E 8,752**	**E 355**	**E 367**	**E 1,289**	**E 18,626**
2011 10-Month Average	**378**	**15**	**3,883**	**1,434**	**13**	**1,166**	**2,225**	**126**	**8,781**	**373**	**459**	**1,265**	**18,952**
2010 10-Month Average	**385**	**15**	**3,755**	**1,440**	**14**	**1,110**	**2,125**	**134**	**9,018**	**375**	**534**	**1,349**	**19,145**

[a] Liquefied petroleum gases.

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

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

[d] Includes propylene.

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

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

R=Revised. E=Estimate. F=Forecast. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

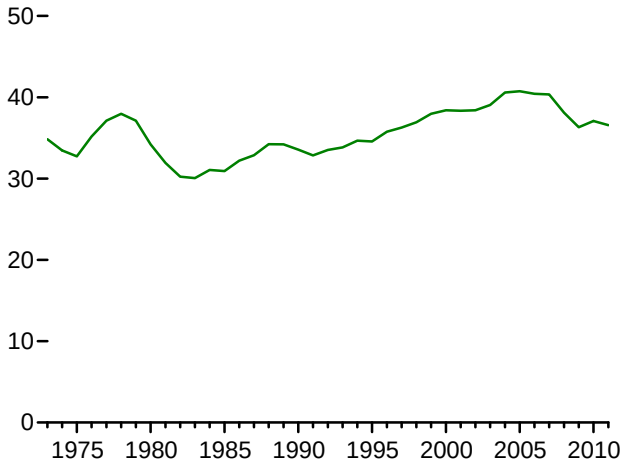
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent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

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

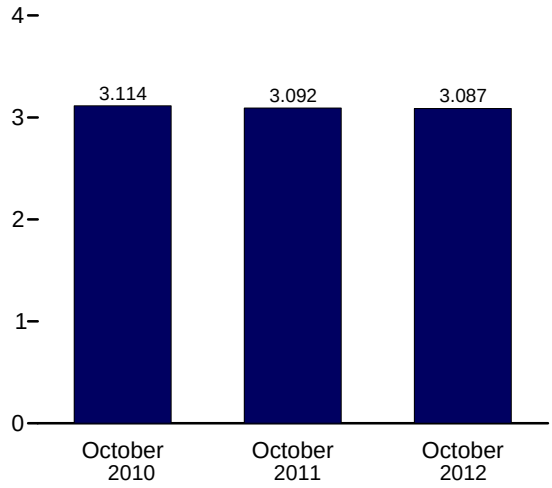
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2011:** EIA, *Petroleum Supply Annual,* annual reports. • **2012:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system, Short-Term Integrated Forecasting System, and *Monthly Energy Review* data system calculations.

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

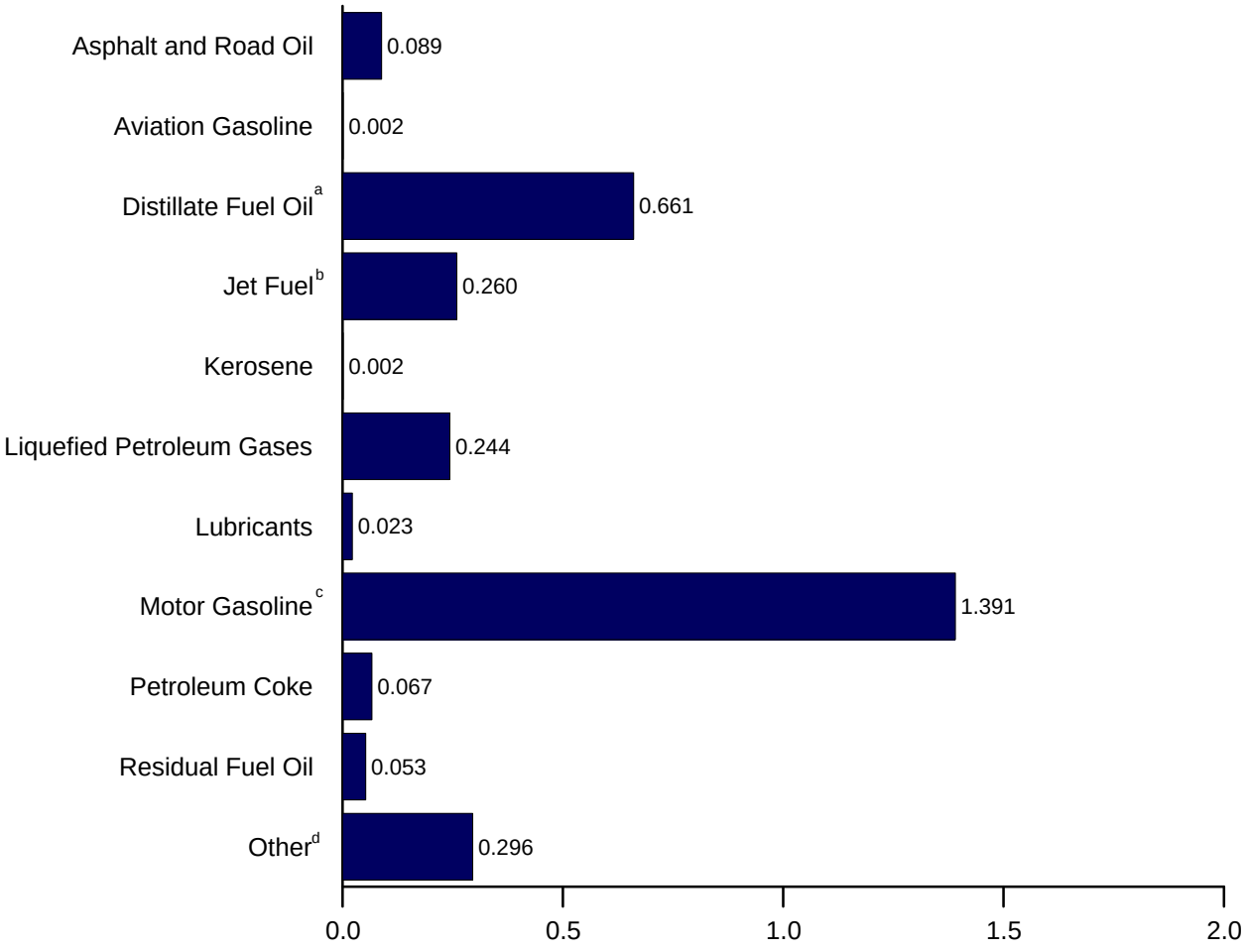
Total, 1973-2011



Total



By Product, October 2012



[a] Includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[b] Includes kerosene-type jet fuel only.
[c] Includes fuel ethanol blended into motor gasoline.
[d] All petroleum products not shown above.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.6.

Table 3.6 Heat Content of Petroleum Products Supplied by Type

(Trillion Btu)

	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel Oil[b]	Jet Fuel[c]	Kero-sene	LPG[a]		Lubri-cants	Motor Gasoline[e]	Petro-leum Coke	Residual Fuel Oil	Other[f]	Total
						Propane[d]	Total						
1973 Total	**1,264**	**83**	**6,575**	**2,167**	**447**	**1,221**	**1,981**	**359**	**12,797**	**573**	**6,477**	**2,114**	**34,837**
1975 Total	**1,014**	**71**	**6,061**	**2,047**	**329**	**1,097**	**1,807**	**304**	**12,798**	**542**	**5,649**	**2,109**	**32,732**
1980 Total	**962**	**64**	**6,110**	**2,190**	**329**	**1,059**	**1,976**	**354**	**12,648**	**522**	**5,772**	**3,278**	**34,205**
1985 Total	**1,029**	**50**	**6,098**	**2,497**	**236**	**1,236**	**2,103**	**322**	**13,098**	**582**	**2,759**	**2,152**	**30,925**
1990 Total	**1,170**	**45**	**6,422**	**3,129**	**88**	**1,284**	**2,059**	**362**	**13,872**	**745**	**2,820**	**2,839**	**33,552**
1995 Total	**1,178**	**40**	**6,818**	**3,132**	**112**	**1,534**	**2,512**	**346**	**14,825**	**802**	**1,955**	**2,837**	**34,556**
1996 Total	**1,176**	**37**	**7,175**	**3,274**	**128**	**1,594**	**2,660**	**335**	**15,064**	**837**	**1,952**	**3,121**	**35,759**
1997 Total	**1,224**	**40**	**7,304**	**3,308**	**136**	**1,638**	**2,690**	**354**	**15,254**	**829**	**1,828**	**3,298**	**36,265**
1998 Total	**1,263**	**35**	**7,359**	**3,357**	**162**	**1,568**	**2,575**	**371**	**15,701**	**982**	**2,036**	**3,093**	**36,934**
1999 Total	**1,324**	**39**	**7,595**	**3,462**	**151**	**1,745**	**2,897**	**375**	**16,036**	**1,048**	**1,905**	**3,129**	**37,960**
2000 Total	**1,276**	**36**	**7,935**	**3,580**	**140**	**1,734**	**2,945**	**369**	**16,155**	**895**	**2,091**	**2,979**	**38,402**
2001 Total	**1,257**	**35**	**8,179**	**3,426**	**150**	**1,598**	**2,697**	**338**	**16,373**	**961**	**1,861**	**3,056**	**38,333**
2002 Total	**1,240**	**34**	**8,028**	**3,340**	**90**	**1,747**	**2,852**	**334**	**16,819**	**1,018**	**1,605**	**3,040**	**38,400**
2003 Total	**1,220**	**30**	**8,349**	**3,265**	**113**	**1,701**	**2,748**	**309**	**16,981**	**1,000**	**1,772**	**3,264**	**39,051**
2004 Total	**1,304**	**31**	**8,652**	**3,383**	**133**	**1,791**	**2,824**	**313**	**17,379**	**1,156**	**1,990**	**3,428**	**40,593**
2005 Total	**1,323**	**35**	**8,755**	**3,475**	**144**	**1,721**	**2,682**	**312**	**17,444**	**1,133**	**2,111**	**3,318**	**40,732**
2006 Total	**1,261**	**33**	**8,864**	**3,379**	**111**	**1,701**	**2,700**	**303**	**17,622**	**1,148**	**1,581**	**3,416**	**40,420**
2007 Total	**1,197**	**32**	**8,921**	**3,358**	**67**	**1,729**	**2,733**	**313**	**17,689**	**1,077**	**1,659**	**3,313**	**40,358**
2008 Total	**1,012**	**28**	**8,411**	**3,193**	**30**	**1,620**	**2,574**	**291**	**17,168**	**1,022**	**1,432**	**2,941**	**38,101**
2009 Total	**873**	**27**	**7,720**	**2,883**	**36**	**1,624**	**2,664**	**262**	**17,135**	**938**	**1,173**	**2,611**	**36,321**
2010 January	42	2	668	236	3	195	294	22	1,378	50	120	215	3,029
February	46	1	629	213	5	164	255	23	1,253	56	91	202	2,776
March	54	2	692	254	2	142	246	26	1,422	79	103	252	3,134
April	66	3	657	240	1	105	198	24	1,426	70	111	251	3,046
May	78	2	657	254	2	106	207	24	1,482	63	101	240	3,111
June	103	3	654	263	3	104	206	28	1,458	74	94	237	3,122
July	97	3	640	263	3	109	217	27	1,504	72	116	242	3,183
August	110	2	692	261	2	116	220	24	1,497	81	93	259	3,241
September	92	3	679	248	1	120	219	25	1,426	78	97	227	3,097
October	89	2	681	251	3	135	233	24	1,458	63	95	215	3,114
November	59	2	677	238	8	134	228	23	1,380	70	104	227	3,014
December	42	2	754	243	9	194	298	21	1,441	69	102	233	3,214
Total	**878**	**27**	**8,080**	**2,963**	**41**	**1,624**	**2,821**	**291**	**17,127**	**826**	**1,228**	**2,800**	**37,082**
2011 January	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	2,975
February	42	2	672	222	4	149	250	24	1,305	52	72	219	2,863
March	49	2	669	243	(s)	135	245	21	1,396	60	81	209	2,976
April	65	2	647	231	1	113	219	22	1,380	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	1,414	67	70	211	3,007
July	95	3	641	258	(s)	120	230	20	1,427	63	81	232	3,051
August	R 100	R 2	R 675	R 258	R (s)	R 132	R 239	R 21	R 1,478	R 76	R 69	R 233	R 3,152
September	F 94	F 2	E 649	E 242	F 1	E 131	RF 224	RF 21	E 1,358	F 66	E 61	RE 198	E 2,916
October	F 89	F 2	E 661	E 260	F 2	E 160	F 244	F 23	E 1,391	F 67	E 53	E 296	E 3,087
10-Month Total	**E 746**	**E 22**	**E 6,634**	**E 2,455**	**E 9**	**E 1,360**	**E 2,377**	**E 217**	**E 13,928**	**E 652**	**E 703**	**E 2,254**	**E 29,997**
2011 10-Month Total	**762**	**24**	**6,876**	**2,471**	**22**	**1,360**	**2,394**	**232**	**13,929**	**683**	**878**	**2,218**	**30,488**
2010 10-Month Total	**777**	**24**	**6,649**	**2,482**	**25**	**1,295**	**2,295**	**247**	**14,306**	**686**	**1,022**	**2,341**	**30,853**

[a] Liquefied petroleum gases.

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

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

[d] Includes propylene.

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

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

R=Revised. E=Estimate. F=Forecast. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

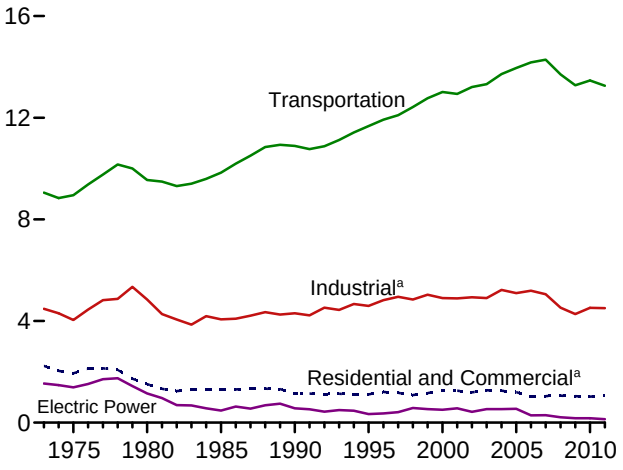
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent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

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

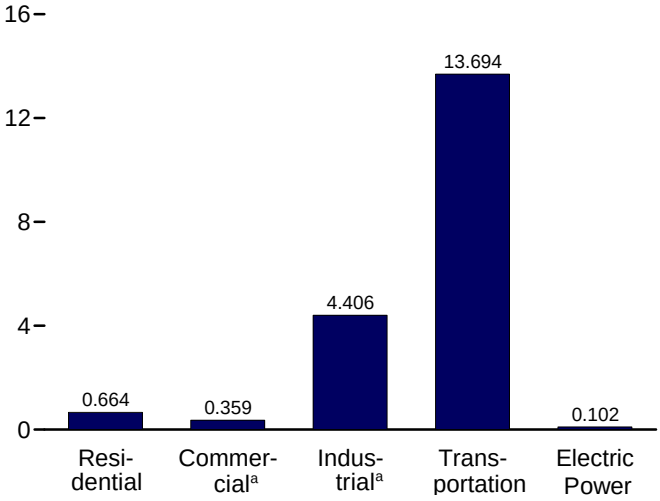
Sources: See end of section.

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

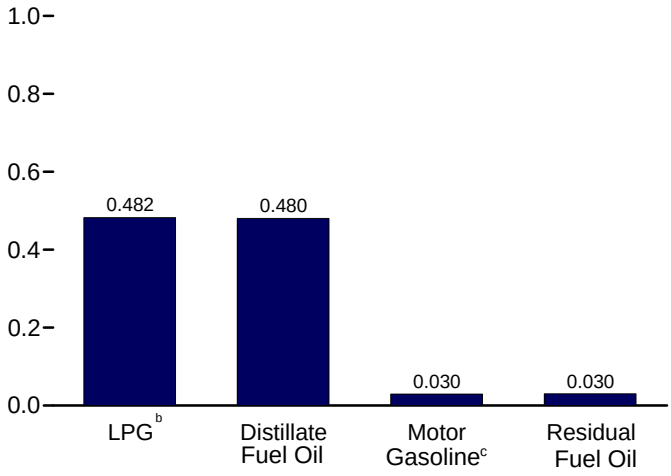
By Sector, 1973-2011



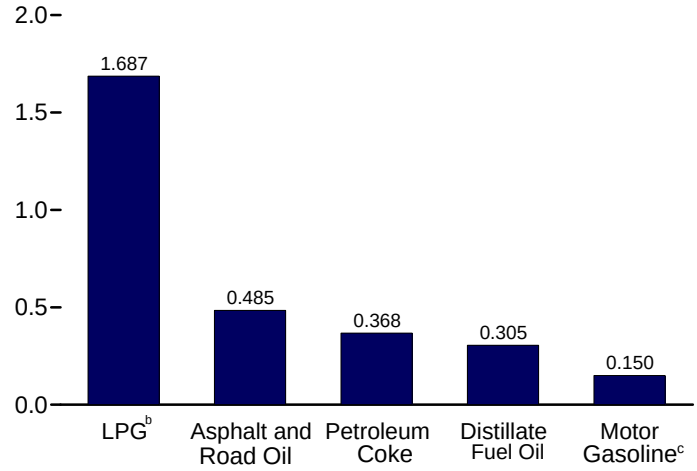
By Sector, August 2012



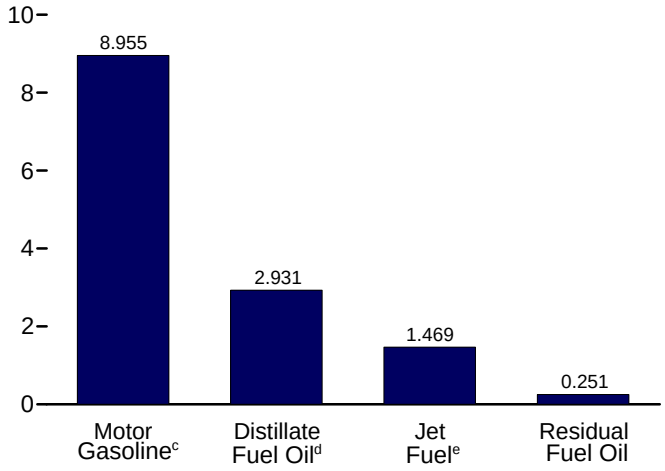
Residential and Commercial Sectors,[a] Selected Products, August 2012



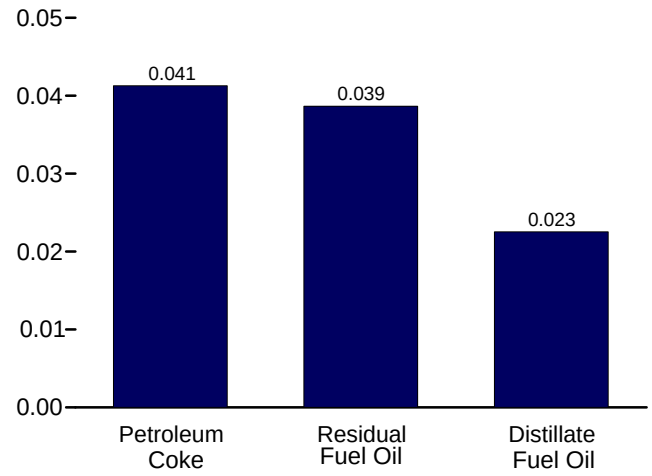
Industrial Sector,[a] Selected Products, August 2012



Transportation Sector, Selected Products, August 2012



Electric Power Sector, August 2012



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

Table 3.7a Petroleum Consumption: Residential and Commercial Sectors

(Thousand Barrels per Day)

	Residential Sector				Commercial Sector[a]						
	Distillate Fuel Oil	Kero-sene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kero-sene	Liquefied Petroleum Gases	Motor Gasoline[b]	Petro-leum Coke	Residual Fuel Oil	Total
1973 Average	**942**	**110**	**407**	**1,459**	**303**	**31**	**105**	**45**	**NA**	**290**	**774**
1975 Average	**850**	**78**	**365**	**1,293**	**276**	**24**	**92**	**46**	**NA**	**214**	**653**
1980 Average	**617**	**51**	**222**	**890**	**243**	**20**	**63**	**56**	**NA**	**245**	**626**
1985 Average	**514**	**77**	**224**	**815**	**297**	**16**	**68**	**50**	**NA**	**99**	**530**
1990 Average	**460**	**31**	**252**	**742**	**252**	**6**	**73**	**58**	**0**	**100**	**489**
1995 Average	**426**	**36**	**282**	**743**	**225**	**11**	**78**	**10**	**(s)**	**62**	**385**
1996 Average	**434**	**43**	**334**	**811**	**227**	**10**	**87**	**14**	**(s)**	**60**	**397**
1997 Average	**411**	**45**	**325**	**781**	**209**	**12**	**86**	**22**	**(s)**	**48**	**378**
1998 Average	**363**	**52**	**303**	**718**	**202**	**15**	**84**	**20**	**(s)**	**37**	**358**
1999 Average	**389**	**54**	**376**	**819**	**206**	**13**	**100**	**15**	**(s)**	**32**	**366**
2000 Average	**424**	**46**	**395**	**865**	**230**	**14**	**107**	**23**	**(s)**	**40**	**415**
2001 Average	**427**	**46**	**375**	**849**	**239**	**15**	**102**	**20**	**(s)**	**30**	**406**
2002 Average	**404**	**29**	**384**	**817**	**209**	**8**	**101**	**24**	**(s)**	**35**	**376**
2003 Average	**425**	**34**	**389**	**848**	**226**	**9**	**112**	**32**	**(s)**	**48**	**428**
2004 Average	**433**	**41**	**364**	**839**	**221**	**10**	**108**	**23**	**(s)**	**53**	**416**
2005 Average	**402**	**40**	**366**	**809**	**210**	**10**	**94**	**24**	**(s)**	**50**	**389**
2006 Average	**335**	**32**	**318**	**685**	**189**	**7**	**88**	**26**	**(s)**	**33**	**343**
2007 Average	**342**	**21**	**345**	**708**	**181**	**4**	**87**	**32**	**(s)**	**33**	**337**
2008 Average	**314**	**10**	**394**	**718**	**174**	**2**	**113**	**24**	**(s)**	**32**	**345**
2009 Average	**283**	**13**	**391**	**687**	**194**	**2**	**99**	**28**	**(s)**	**33**	**357**
2010 January	460	10	461	931	324	2	122	28	(s)	57	532
February	471	24	441	936	332	4	116	28	(s)	58	538
March	270	8	388	666	190	1	102	28	(s)	33	356
April	196	5	321	521	138	1	85	29	(s)	24	277
May	207	8	327	542	146	1	86	30	0	25	289
June	244	11	338	593	172	2	89	30	0	30	323
July	189	13	345	547	133	2	91	30	0	23	280
August	169	7	353	528	119	1	93	30	(s)	21	264
September	157	6	363	526	111	1	96	29	(s)	19	256
October	233	10	370	614	164	2	98	29	(s)	29	322
November	271	32	373	676	190	5	99	29	(s)	33	356
December	432	35	466	934	304	6	123	29	(s)	53	516
Average	**274**	**14**	**379**	**667**	**193**	**2**	**100**	**29**	**(s)**	**34**	**358**
2011 January	400	13	480	893	281	2	127	27	(s)	43	481
February	419	35	440	895	295	6	116	28	(s)	45	490
March	286	19	420	725	201	3	111	28	(s)	31	375
April	197	6	356	559	139	1	94	28	0	21	283
May	130	(s)	362	492	91	(s)	96	29	0	14	230
June	202	3	353	558	142	1	93	29	0	22	287
July	180	6	355	542	127	1	94	29	0	19	270
August	246	4	366	616	174	1	97	29	0	26	326
September	270	5	357	632	190	1	94	28	0	29	342
October	293	1	388	682	206	(s)	102	28	0	31	368
November	336	4	417	757	236	1	110	28	(s)	36	411
December	433	9	456	898	305	1	120	28	(s)	46	502
Average	**282**	**9**	**396**	**686**	**198**	**1**	**105**	**28**	**(s)**	**30**	**363**
2012 January	469	1	429	899	330	(s)	113	26	(s)	50	521
February	394	16	422	832	277	3	111	28	(s)	42	462
March	320	1	388	709	225	(s)	102	28	(s)	34	391
April	234	2	361	597	165	(s)	95	29	(s)	25	314
May	232	(s)	375	608	164	(s)	99	29	0	25	317
June	241	1	361	603	169	(s)	95	29	0	26	320
July	R 224	2	369	R 596	R 158	(s)	98	29	(s)	24	R 309
August	282	1	382	664	198	(s)	101	30	(s)	30	359
8-Month Average	**299**	**3**	**386**	**688**	**211**	**(s)**	**102**	**28**	**(s)**	**32**	**374**
2011 8-Month Average	**256**	**11**	**391**	**658**	**180**	**2**	**103**	**28**	**(s)**	**27**	**341**
2010 8-Month Average	**274**	**11**	**371**	**656**	**193**	**2**	**98**	**29**	**(s)**	**34**	**356**

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

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

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 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Table 3.7b Petroleum Consumption: Industrial Sector

(Thousand Barrels per Day)

	Industrial Sector[a]									
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline[b]	Petroleum Coke	Residual Fuel Oil	Other[c]	Total
1973 Average	**522**	**691**	**75**	**902**	**88**	**133**	**254**	**809**	**1,005**	**4,479**
1975 Average	**419**	**630**	**58**	**844**	**68**	**116**	**246**	**658**	**1,001**	**4,038**
1980 Average	**396**	**621**	**87**	**1,172**	**82**	**82**	**234**	**586**	**1,581**	**4,842**
1985 Average	**425**	**526**	**21**	**1,285**	**75**	**114**	**261**	**326**	**1,032**	**4,065**
1990 Average	**483**	**541**	**6**	**1,215**	**84**	**97**	**325**	**179**	**1,373**	**4,304**
1995 Average	**486**	**532**	**7**	**1,527**	**80**	**105**	**328**	**147**	**1,381**	**4,594**
1996 Average	**484**	**557**	**9**	**1,580**	**78**	**105**	**343**	**146**	**1,518**	**4,819**
1997 Average	**505**	**566**	**9**	**1,617**	**82**	**111**	**331**	**127**	**1,605**	**4,953**
1998 Average	**521**	**570**	**11**	**1,553**	**86**	**105**	**390**	**100**	**1,508**	**4,844**
1999 Average	**547**	**558**	**6**	**1,709**	**87**	**80**	**426**	**90**	**1,532**	**5,035**
2000 Average	**525**	**563**	**8**	**1,720**	**86**	**79**	**361**	**105**	**1,458**	**4,903**
2001 Average	**519**	**611**	**11**	**1,557**	**79**	**155**	**390**	**89**	**1,481**	**4,892**
2002 Average	**512**	**566**	**7**	**1,668**	**78**	**163**	**383**	**83**	**1,474**	**4,934**
2003 Average	**503**	**534**	**12**	**1,561**	**72**	**171**	**375**	**96**	**1,579**	**4,903**
2004 Average	**537**	**570**	**14**	**1,646**	**73**	**195**	**423**	**108**	**1,657**	**5,222**
2005 Average	**546**	**594**	**19**	**1,549**	**72**	**187**	**404**	**123**	**1,605**	**5,100**
2006 Average	**521**	**594**	**14**	**1,627**	**71**	**198**	**425**	**104**	**1,640**	**5,193**
2007 Average	**494**	**595**	**6**	**1,637**	**73**	**161**	**412**	**84**	**1,593**	**5,056**
2008 Average	**417**	**599**	**2**	**1,419**	**67**	**131**	**394**	**86**	**1,408**	**4,523**
2009 Average	**360**	**521**	**2**	**1,541**	**61**	**128**	**363**	**46**	**1,251**	**4,274**
2010 January	203	484	3	2,036	60	140	201	59	1,218	4,403
February	249	531	6	1,949	70	141	264	55	1,263	4,528
March	264	686	2	1,714	71	144	356	54	1,421	4,712
April	331	623	1	1,419	68	149	323	61	1,463	4,438
May	378	472	2	1,446	66	150	274	51	1,351	4,190
June	517	427	3	1,492	80	153	333	43	1,386	4,433
July	470	331	3	1,523	73	153	303	53	1,373	4,282
August	537	544	2	1,559	66	152	370	42	1,467	4,738
September	463	701	1	1,604	70	150	371	51	1,326	4,738
October	434	548	3	1,637	66	148	279	51	1,215	4,380
November	295	664	8	1,648	64	145	339	57	1,333	4,553
December	204	700	9	2,061	58	146	307	51	1,301	4,838
Average	**362**	**559**	**4**	**1,673**	**68**	**148**	**310**	**52**	**1,343**	**4,519**
2011 January	221	R 715	3	2,123	64	137	R 275	R 62	1,244	R 4,844
February	248	R 586	9	1,946	62	141	R 218	59	1,185	R 4,455
March	282	R 764	5	1,856	77	144	R 266	48	1,405	R 4,847
April	311	R 562	2	1,573	70	144	R 302	R 49	1,301	R 4,314
May	357	R 555	(s)	1,600	63	145	R 359	49	1,082	R 4,209
June	454	572	1	1,561	64	149	R 309	R 50	1,213	R 4,372
July	465	R 307	2	1,570	61	148	R 287	32	1,363	R 4,235
August	545	529	1	1,618	70	146	R 388	34	1,311	R 4,643
September	462	R 557	1	1,579	64	143	R 276	R 51	1,299	R 4,432
October	423	R 587	(s)	1,715	53	142	R 343	42	1,239	R 4,544
November	297	R 705	1	1,842	64	140	336	R 43	1,391	4,819
December	187	R 454	2	2,014	57	142	R 173	R 53	1,228	R 4,311
Average	**355**	R **574**	**2**	**1,749**	**64**	**144**	R **295**	R **48**	**1,272**	R **4,503**
2012 January	216	R 552	(s)	1,896	66	134	R 303	R 41	1,349	R 4,558
February	218	R 723	4	1,864	71	141	R 242	R 39	1,306	R 4,609
March	236	R 498	(s)	1,715	57	142	R 292	41	1,163	R 4,145
April	329	R 490	1	1,594	63	145	311	41	1,166	4,139
May	378	R 468	(s)	1,657	59	148	R 343	29	1,224	R 4,307
June	454	R 378	(s)	1,596	55	148	R 336	35	1,214	R 4,217
July	461	R 253	(s)	1,632	54	145	R 298	R 40	1,298	R 4,181
August	485	305	(s)	1,687	57	150	368	34	1,320	4,406
8-Month Average	**348**	**456**	**1**	**1,705**	**60**	**144**	**312**	**38**	**1,255**	**4,319**
2011 8-Month Average	**362**	**574**	**3**	**1,730**	**66**	**144**	**302**	**48**	**1,264**	**4,492**
2010 8-Month Average	**369**	**512**	**3**	**1,640**	**69**	**148**	**303**	**52**	**1,368**	**4,465**

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

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

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

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 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Table 3.7c Petroleum Consumption: Transportation and Electric Power Sectors

(Thousand Barrels per Day)

	Transportation Sector								Electric Power Sector[a]			
	Aviation Gasoline	Distillate Fuel Oil[b]	Jet Fuel[c]	Liquefied Petroleum Gases	Lubricants	Motor Gasoline[d]	Residual Fuel Oil	Total	Distillate Fuel Oil[e]	Petroleum Coke	Residual Fuel Oil[f]	Total
1973 Average	**45**	**1,045**	**1,042**	**35**	**74**	**6,496**	**317**	**9,054**	**129**	**7**	**1,406**	**1,542**
1975 Average	**39**	**998**	**992**	**31**	**70**	**6,512**	**310**	**8,951**	**107**	**1**	**1,280**	**1,388**
1980 Average	**35**	**1,311**	**1,062**	**13**	**77**	**6,441**	**608**	**9,546**	**79**	**2**	**1,069**	**1,151**
1985 Average	**27**	**1,491**	**1,218**	**21**	**71**	**6,667**	**342**	**9,838**	**40**	**3**	**435**	**478**
1990 Average	**24**	**1,722**	**1,522**	**16**	**80**	**7,080**	**443**	**10,888**	**45**	**14**	**507**	**566**
1995 Average	**21**	**1,973**	**1,514**	**13**	**76**	**7,674**	**397**	**11,668**	**51**	**37**	**247**	**334**
1996 Average	**20**	**2,096**	**1,578**	**11**	**73**	**7,772**	**370**	**11,921**	**51**	**36**	**273**	**360**
1997 Average	**22**	**2,198**	**1,599**	**10**	**78**	**7,883**	**310**	**12,099**	**52**	**46**	**311**	**410**
1998 Average	**19**	**2,263**	**1,622**	**13**	**81**	**8,128**	**294**	**12,420**	**64**	**56**	**456**	**576**
1999 Average	**21**	**2,352**	**1,673**	**10**	**82**	**8,336**	**290**	**12,765**	**66**	**51**	**418**	**535**
2000 Average	**20**	**2,422**	**1,725**	**8**	**81**	**8,370**	**386**	**13,012**	**82**	**45**	**378**	**505**
2001 Average	**19**	**2,489**	**1,655**	**10**	**74**	**8,435**	**255**	**12,938**	**80**	**47**	**437**	**564**
2002 Average	**18**	**2,536**	**1,614**	**10**	**73**	**8,662**	**295**	**13,208**	**60**	**80**	**287**	**427**
2003 Average	**16**	**2,665**	**1,578**	**12**	**68**	**8,733**	**249**	**13,321**	**76**	**79**	**379**	**534**
2004 Average	**17**	**2,783**	**1,630**	**14**	**69**	**8,887**	**321**	**13,720**	**52**	**101**	**382**	**535**
2005 Average	**19**	**2,858**	**1,679**	**20**	**68**	**8,948**	**365**	**13,957**	**54**	**111**	**382**	**547**
2006 Average	**18**	**3,017**	**1,633**	**20**	**67**	**9,029**	**395**	**14,178**	**35**	**97**	**157**	**289**
2007 Average	**17**	**3,037**	**1,622**	**16**	**69**	**9,093**	**433**	**14,287**	**42**	**78**	**173**	**293**
2008 Average	**15**	**2,824**	**1,539**	**29**	**64**	**8,834**	**400**	**13,704**	**34**	**70**	**104**	**209**
2009 Average	**14**	**2,600**	**1,393**	**20**	**57**	**8,840**	**353**	**13,279**	**33**	**63**	**79**	**175**
2010 January	10	2,353	1,344	26	57	8,352	407	12,547	79	67	93	239
February	10	2,490	1,343	24	66	8,411	364	12,709	30	69	38	138
March	14	2,663	1,443	22	67	8,620	403	13,231	24	69	41	134
April	17	2,779	1,410	18	64	8,929	465	13,682	23	62	40	125
May	15	2,781	1,446	18	62	8,983	377	13,681	33	64	66	164
June	18	2,858	1,543	19	75	9,128	322	13,963	41	78	105	224
July	20	2,848	1,494	19	69	9,118	399	13,966	42	81	120	244
August	14	2,963	1,486	20	63	9,074	315	13,934	34	63	98	196
September	20	2,888	1,457	20	66	8,933	381	13,766	29	62	61	153
October	15	2,803	1,430	21	62	8,839	371	13,540	25	56	37	118
November	11	2,719	1,396	21	60	8,643	427	13,277	30	50	35	114
December	12	2,679	1,383	26	55	8,736	355	13,245	60	63	67	189
Average	**15**	**2,737**	**1,432**	**21**	**64**	**8,816**	**382**	**13,466**	**38**	**65**	**67**	**170**
2011 January	11	R 2,520	1,346	27	60	8,206	R 421	R 12,591	R 43	R 85	R 56	R 184
February	14	2,580	1,352	24	59	8,435	R 425	R 12,889	R 33	R 75	R 37	R 144
March	18	R 2,765	1,385	23	73	8,626	346	R 13,235	R 29	R 82	R 37	R 147
April	10	R 2,823	1,457	20	66	8,623	360	R 13,360	R 33	R 54	46	R 133
May	18	R 2,892	1,424	20	59	8,644	R 363	R 13,420	R 31	R 55	41	R 128
June	17	3,000	1,540	20	61	8,889	R 364	13,891	32	R 70	R 43	R 145
July	19	2,914	1,473	20	58	8,854	226	13,562	R 36	R 81	52	R 169
August	18	3,034	1,554	20	67	8,750	R 243	13,686	26	R 73	R 44	R 143
September	13	2,895	1,416	20	61	8,572	378	R 13,355	R 24	R 73	R 33	R 130
October	16	2,894	1,384	22	50	8,479	R 300	13,143	R 24	R 52	32	R 107
November	12	R 2,807	1,416	23	60	8,369	R 308	R 12,996	R 25	40	32	R 97
December	10	R 2,633	1,353	25	54	8,513	389	R 12,977	R 28	R 56	31	R 116
Average	**15**	**R 2,814**	**1,425**	**22**	**61**	**8,581**	**343**	**R 13,260**	**R 30**	**R 66**	**41**	**R 137**
2012 January	12	R 2,445	1,313	24	62	8,026	R 295	12,179	R 26	R 63	34	R 123
February	11	R 2,562	1,350	23	67	8,452	R 285	R 12,752	R 23	R 55	27	R 105
March	14	2,644	1,382	22	54	8,463	R 311	R 12,889	R 19	R 31	29	R 79
April	14	2,790	1,359	20	59	8,644	314	R 13,200	R 26	27	28	R 80
May	17	R 2,852	1,409	21	56	8,819	212	R 13,385	R 29	R 33	29	R 91
June	13	2,912	1,545	20	52	8,857	R 265	R 13,664	R 29	R 37	45	R 111
July	20	R 2,889	1,468	20	51	8,646	301	R 13,395	R 28	R 40	53	R 121
August	13	2,931	1,469	21	54	8,955	251	13,694	23	41	39	102
8-Month Average	**14**	**2,754**	**1,412**	**21**	**57**	**8,608**	**279**	**13,146**	**25**	**41**	**36**	**102**
2011 8-Month Average	**16**	**2,818**	**1,442**	**22**	**63**	**8,630**	**342**	**13,332**	**33**	**72**	**45**	**149**
2010 8-Month Average	**15**	**2,719**	**1,439**	**21**	**65**	**8,830**	**381**	**13,471**	**39**	**69**	**76**	**184**

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

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

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

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

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

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

R=Revised.

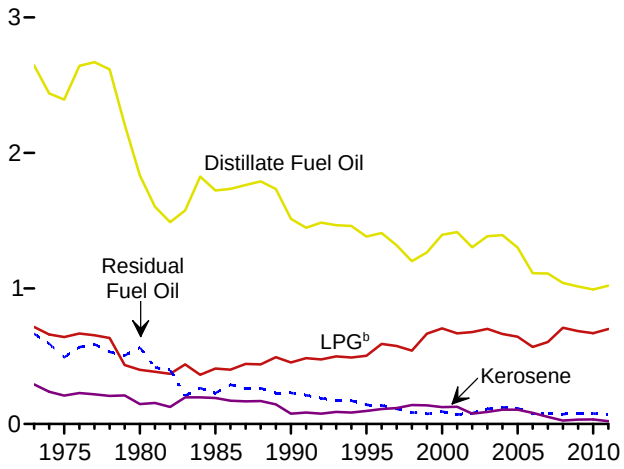
Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

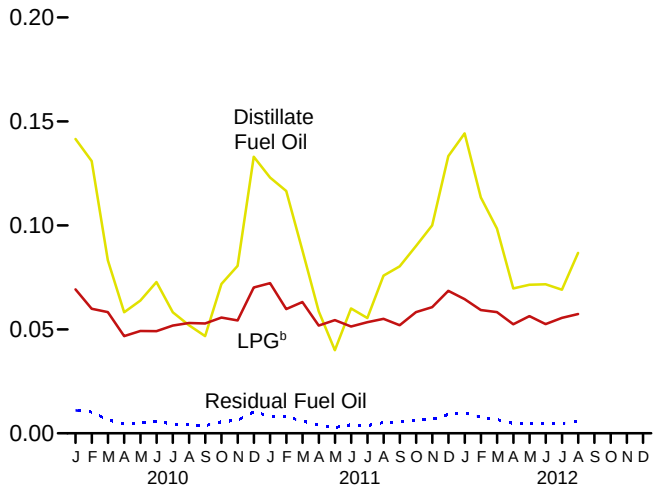
Sources: See end of section.

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

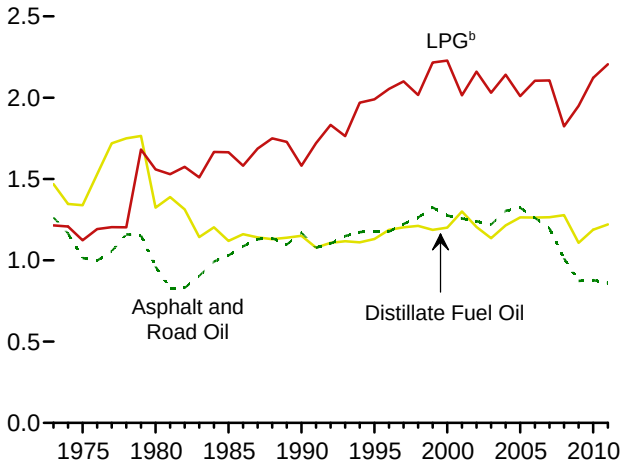
Residential and Commercial Sectors,[a] 1973-2011



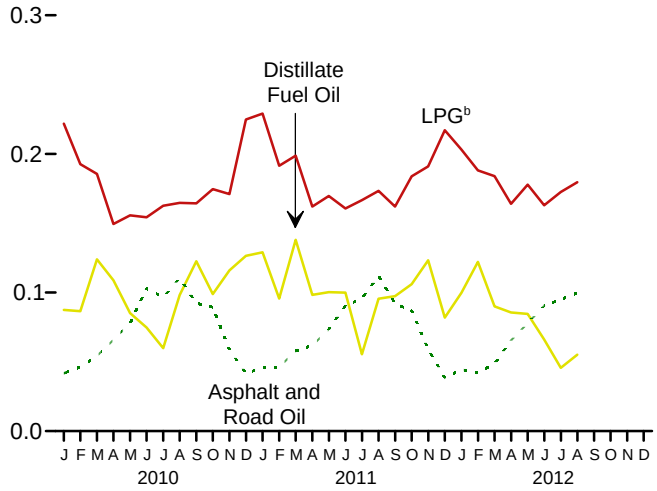
Residential and Commercial Sectors,[a] Monthly



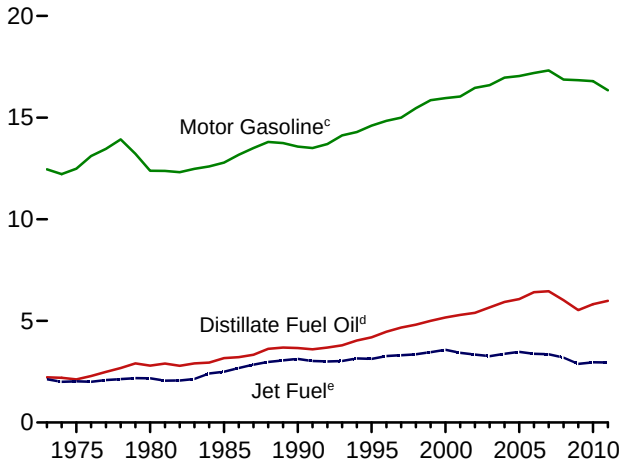
Industrial Sector,[a] 1973-2011



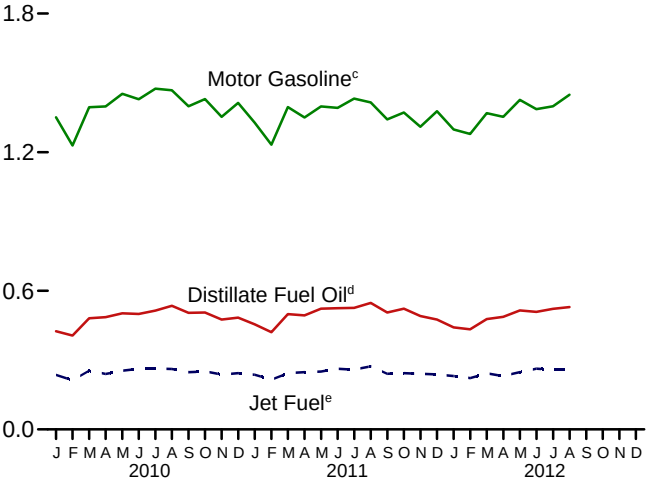
Industrial Sector,[a] Monthly



Transportation Sector, 1973-2011



Transportation Sector, Monthly



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

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

(Trillion Btu)

	Residential Sector				Commercial Sector[a]						
	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Motor Gasoline[b]	Petroleum Coke	Residual Fuel Oil	Total
1973 Total	**2,003**	**227**	**570**	**2,800**	**644**	**65**	**147**	**87**	**NA**	**665**	**1,607**
1975 Total	**1,807**	**161**	**512**	**2,479**	**587**	**49**	**129**	**89**	**NA**	**492**	**1,346**
1980 Total	**1,316**	**107**	**311**	**1,734**	**518**	**41**	**88**	**107**	**NA**	**565**	**1,318**
1985 Total	**1,092**	**159**	**314**	**1,565**	**631**	**33**	**95**	**96**	**NA**	**228**	**1,083**
1990 Total	**978**	**64**	**352**	**1,394**	**536**	**12**	**102**	**111**	**0**	**230**	**991**
1995 Total	**905**	**74**	**395**	**1,374**	**479**	**22**	**109**	**18**	**(s)**	**141**	**769**
1996 Total	**926**	**89**	**469**	**1,484**	**483**	**21**	**122**	**27**	**(s)**	**137**	**790**
1997 Total	**874**	**93**	**455**	**1,422**	**444**	**25**	**120**	**43**	**(s)**	**111**	**743**
1998 Total	**772**	**108**	**424**	**1,304**	**429**	**31**	**118**	**39**	**(s)**	**85**	**702**
1999 Total	**828**	**111**	**526**	**1,465**	**438**	**27**	**140**	**28**	**(s)**	**73**	**707**
2000 Total	**905**	**95**	**555**	**1,554**	**491**	**30**	**150**	**45**	**(s)**	**92**	**807**
2001 Total	**908**	**95**	**526**	**1,529**	**508**	**31**	**143**	**37**	**(s)**	**70**	**790**
2002 Total	**860**	**60**	**537**	**1,457**	**444**	**16**	**141**	**45**	**(s)**	**80**	**726**
2003 Total	**905**	**70**	**544**	**1,519**	**481**	**19**	**157**	**60**	**(s)**	**111**	**828**
2004 Total	**924**	**85**	**512**	**1,520**	**470**	**20**	**152**	**45**	**(s)**	**122**	**810**
2005 Total	**854**	**84**	**513**	**1,451**	**447**	**22**	**131**	**46**	**(s)**	**116**	**762**
2006 Total	**712**	**66**	**446**	**1,224**	**401**	**15**	**123**	**49**	**(s)**	**75**	**664**
2007 Total	**726**	**44**	**484**	**1,254**	**384**	**9**	**121**	**61**	**(s)**	**75**	**651**
2008 Total	**669**	**21**	**553**	**1,243**	**372**	**4**	**158**	**46**	**(s)**	**73**	**653**
2009 Total	**602**	**28**	**547**	**1,176**	**413**	**4**	**139**	**53**	**(s)**	**76**	**685**
2010 January	83	2	55	140	58	(s)	14	4	(s)	11	89
February	77	4	47	128	54	1	13	4	(s)	10	82
March	49	1	46	96	34	(s)	12	5	(s)	6	58
April	34	1	37	72	24	(s)	10	5	(s)	5	43
May	37	1	39	78	26	(s)	10	5	0	5	47
June	43	2	39	83	30	(s)	10	5	0	6	51
July	34	2	41	78	24	(s)	11	5	0	5	45
August	31	1	42	74	21	(s)	11	5	(s)	4	42
September	27	1	42	70	19	(s)	11	5	(s)	4	39
October	42	2	44	88	30	(s)	12	5	(s)	6	52
November	47	6	43	96	33	1	11	4	(s)	6	56
December	78	6	55	140	55	1	15	5	(s)	10	86
Total	**583**	**29**	**530**	**1,142**	**410**	**5**	**140**	**55**	**(s)**	**77**	**688**
2011 January	72	2	57	132	51	(s)	15	4	(s)	8	79
February	68	6	47	121	48	1	12	4	(s)	8	74
March	52	3	50	105	36	1	13	5	(s)	6	61
April	34	1	41	76	24	(s)	11	4	0	4	44
May	23	(s)	43	67	17	(s)	11	5	0	3	35
June	35	1	41	76	25	(s)	11	5	0	4	44
July	33	1	42	76	23	(s)	11	5	0	4	43
August	45	1	44	89	31	(s)	12	5	0	5	53
September	47	1	41	89	33	(s)	11	4	0	5	54
October	53	(s)	46	99	37	(s)	12	5	0	6	60
November	59	1	48	107	41	(s)	13	4	(s)	7	65
December	78	2	54	134	55	(s)	14	5	(s)	9	83
Total	**599**	**18**	**554**	**1,171**	**422**	**3**	**146**	**54**	**(s)**	**69**	**695**
2012 January	85	(s)	51	136	60	(s)	13	4	(s)	10	87
February	67	3	47	116	47	(s)	12	4	(s)	8	72
March	58	(s)	46	104	41	(s)	12	5	(s)	7	64
April	41	(s)	41	83	29	(s)	11	4	(s)	5	49
May	42	(s)	45	87	30	(s)	12	5	0	5	51
June	42	(s)	42	84	30	(s)	11	5	0	5	50
July	41	(s)	44	85	29	(s)	12	5	(s)	5	50
August	51	(s)	45	96	36	(s)	12	5	(s)	6	59
8-Month Total	**425**	**4**	**361**	**791**	**299**	**1**	**95**	**36**	**(s)**	**49**	**481**
2011 8-Month Total	**362**	**15**	**365**	**742**	**255**	**2**	**96**	**36**	**(s)**	**42**	**432**
2010 8-Month Total	**388**	**15**	**346**	**748**	**273**	**2**	**91**	**37**	**(s)**	**51**	**455**

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

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

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

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

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

Sources: See end of section.

Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector

(Trillion Btu)

	Industrial Sector[a]									
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline[b]	Petroleum Coke	Residual Fuel Oil	Other[c]	Total
1973 Total	**1,264**	**1,469**	**156**	**1,215**	**195**	**255**	**558**	**1,858**	**2,114**	**9,083**
1975 Total	**1,014**	**1,339**	**119**	**1,123**	**149**	**223**	**540**	**1,509**	**2,109**	**8,127**
1980 Total	**962**	**1,324**	**181**	**1,559**	**182**	**158**	**516**	**1,349**	**3,278**	**9,509**
1985 Total	**1,029**	**1,119**	**44**	**1,664**	**166**	**218**	**575**	**748**	**2,152**	**7,714**
1990 Total	**1,170**	**1,150**	**12**	**1,582**	**186**	**185**	**714**	**411**	**2,839**	**8,251**
1995 Total	**1,178**	**1,131**	**15**	**1,990**	**178**	**200**	**721**	**337**	**2,837**	**8,588**
1996 Total	**1,176**	**1,187**	**18**	**2,054**	**173**	**200**	**757**	**335**	**3,121**	**9,020**
1997 Total	**1,224**	**1,203**	**19**	**2,100**	**182**	**212**	**727**	**291**	**3,298**	**9,256**
1998 Total	**1,263**	**1,211**	**22**	**2,016**	**191**	**199**	**858**	**230**	**3,093**	**9,083**
1999 Total	**1,324**	**1,187**	**13**	**2,217**	**193**	**152**	**936**	**207**	**3,129**	**9,357**
2000 Total	**1,276**	**1,200**	**16**	**2,228**	**190**	**150**	**796**	**241**	**2,979**	**9,076**
2001 Total	**1,257**	**1,300**	**23**	**2,014**	**174**	**295**	**858**	**203**	**3,056**	**9,181**
2002 Total	**1,240**	**1,204**	**14**	**2,160**	**172**	**309**	**842**	**190**	**3,040**	**9,171**
2003 Total	**1,220**	**1,136**	**24**	**2,030**	**159**	**324**	**825**	**220**	**3,264**	**9,202**
2004 Total	**1,304**	**1,214**	**28**	**2,141**	**161**	**372**	**934**	**249**	**3,428**	**9,831**
2005 Total	**1,323**	**1,264**	**39**	**2,009**	**160**	**356**	**889**	**281**	**3,318**	**9,640**
2006 Total	**1,261**	**1,263**	**30**	**2,104**	**156**	**376**	**934**	**239**	**3,416**	**9,780**
2007 Total	**1,197**	**1,265**	**13**	**2,106**	**161**	**306**	**906**	**193**	**3,313**	**9,461**
2008 Total	**1,012**	**1,277**	**4**	**1,823**	**150**	**250**	**868**	**198**	**2,941**	**8,523**
2009 Total	**873**	**1,107**	**4**	**1,950**	**135**	**244**	**799**	**106**	**2,611**	**7,829**
2010 January	42	87	(s)	222	11	23	38	11	215	650
February	46	87	1	193	12	21	45	10	202	615
March	54	124	(s)	186	13	23	67	11	252	730
April	66	109	(s)	149	12	23	58	11	251	681
May	78	85	(s)	156	12	24	51	10	240	657
June	103	75	(s)	154	14	24	60	8	237	676
July	97	60	1	163	14	25	57	10	242	667
August	110	98	(s)	165	12	25	69	8	259	747
September	92	123	(s)	164	13	23	67	10	227	719
October	89	99	(s)	175	12	24	52	10	215	676
November	59	116	1	171	12	23	61	11	227	680
December	42	126	2	225	11	24	57	10	233	729
Total	**878**	**1,188**	**7**	**2,121**	**149**	**281**	**682**	**120**	**2,800**	**8,227**
2011 January	45	129	1	229	12	22	R 51	12	227	R 729
February	46	96	1	191	11	21	R 37	10	190	R 603
March	58	138	1	199	14	23	R 50	9	250	R 743
April	62	98	(s)	162	13	23	55	9	224	R 646
May	73	R 100	(s)	170	12	23	R 67	R 10	194	R 649
June	90	100	(s)	161	12	23	R 56	9	209	R 660
July	96	55	(s)	167	11	24	R 54	6	245	R 658
August	112	96	(s)	173	13	24	R 73	7	234	R 731
September	92	97	(s)	162	12	22	R 50	R 10	224	R 669
October	87	106	(s)	184	10	23	R 64	8	220	R 702
November	59	123	(s)	191	12	22	61	8	239	715
December	38	82	(s)	217	11	23	R 32	10	220	R 634
Total	**859**	R **1,221**	**4**	**2,205**	**142**	**274**	R **648**	R **109**	**2,676**	R **8,139**
2012 January	44	100	(s)	203	12	22	R 57	8	238	R 684
February	42	122	1	188	13	21	R 42	7	219	R 655
March	49	90	(s)	184	11	23	R 55	8	209	R 628
April	65	86	(s)	164	11	23	56	8	201	614
May	78	85	(s)	178	11	24	64	6	217	R 662
June	90	66	(s)	163	10	23	R 61	7	211	R 631
July	95	R 46	(s)	172	10	23	56	8	232	R 642
August	100	55	(s)	180	11	24	69	7	233	678
8-Month Total	**563**	**649**	**1**	**1,432**	**89**	**183**	**459**	**58**	**1,761**	**5,194**
2011 8-Month Total	**583**	**812**	**4**	**1,451**	**98**	**183**	**441**	**73**	**1,773**	**5,419**
2010 8-Month Total	**596**	**725**	**4**	**1,387**	**102**	**187**	**444**	**80**	**1,899**	**5,422**

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

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

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

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

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

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

Sources: See end of section.

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

	Transportation Sector								Electric Power Sector[a]			
	Aviation Gasoline	Distillate Fuel Oil[b]	Jet Fuel[c]	Liquefied Petroleum Gases	Lubricants	Motor Gasoline[d]	Residual Fuel Oil	Total	Distillate Fuel Oil[e]	Petroleum Coke	Residual Fuel Oil[f]	Total
1973 Total	**83**	**2,222**	**2,131**	**49**	**163**	**12,455**	**727**	**17,832**	**273**	**15**	**3,226**	**3,515**
1975 Total	**71**	**2,121**	**2,029**	**43**	**155**	**12,485**	**711**	**17,615**	**226**	**2**	**2,937**	**3,166**
1980 Total	**64**	**2,795**	**2,179**	**18**	**172**	**12,383**	**1,398**	**19,009**	**169**	**5**	**2,459**	**2,634**
1985 Total	**50**	**3,170**	**2,497**	**30**	**156**	**12,784**	**786**	**19,472**	**85**	**7**	**998**	**1,090**
1990 Total	**45**	**3,661**	**3,129**	**23**	**176**	**13,575**	**1,016**	**21,626**	**97**	**30**	**1,163**	**1,289**
1995 Total	**40**	**4,195**	**3,132**	**18**	**168**	**14,607**	**911**	**23,070**	**108**	**81**	**566**	**755**
1996 Total	**37**	**4,469**	**3,274**	**16**	**163**	**14,837**	**851**	**23,648**	**109**	**80**	**628**	**817**
1997 Total	**40**	**4,672**	**3,308**	**14**	**172**	**14,999**	**712**	**23,918**	**111**	**102**	**715**	**927**
1998 Total	**35**	**4,812**	**3,357**	**18**	**180**	**15,463**	**674**	**24,538**	**136**	**124**	**1,047**	**1,306**
1999 Total	**39**	**5,001**	**3,462**	**14**	**182**	**15,855**	**665**	**25,219**	**140**	**112**	**959**	**1,211**
2000 Total	**36**	**5,165**	**3,580**	**12**	**179**	**15,960**	**888**	**25,820**	**175**	**99**	**871**	**1,144**
2001 Total	**35**	**5,292**	**3,426**	**14**	**164**	**16,041**	**586**	**25,557**	**171**	**103**	**1,003**	**1,277**
2002 Total	**34**	**5,392**	**3,340**	**14**	**162**	**16,465**	**677**	**26,085**	**127**	**175**	**659**	**961**
2003 Total	**30**	**5,666**	**3,265**	**17**	**150**	**16,597**	**571**	**26,297**	**161**	**175**	**869**	**1,205**
2004 Total	**31**	**5,932**	**3,383**	**19**	**152**	**16,962**	**740**	**27,219**	**111**	**222**	**879**	**1,212**
2005 Total	**35**	**6,076**	**3,475**	**28**	**151**	**17,043**	**837**	**27,645**	**115**	**243**	**876**	**1,235**
2006 Total	**33**	**6,414**	**3,379**	**27**	**147**	**17,197**	**906**	**28,105**	**74**	**214**	**361**	**648**
2007 Total	**32**	**6,457**	**3,358**	**22**	**152**	**17,321**	**994**	**28,335**	**89**	**171**	**397**	**657**
2008 Total	**28**	**6,020**	**3,193**	**40**	**141**	**16,872**	**920**	**27,214**	**73**	**154**	**240**	**468**
2009 Total	**27**	**5,528**	**2,883**	**28**	**127**	**16,837**	**810**	**26,240**	**70**	**139**	**181**	**390**
2010 January	2	425	236	3	11	1,351	79	2,107	14	12	18	45
February	1	406	213	3	11	1,229	64	1,928	5	12	7	23
March	2	481	254	3	13	1,394	79	2,225	4	13	8	25
April	3	486	240	2	12	1,398	88	2,227	4	11	8	23
May	2	502	254	2	12	1,453	73	2,299	6	12	13	31
June	3	499	263	2	14	1,429	61	2,270	7	14	20	41
July	3	514	263	2	13	1,475	78	2,348	8	15	23	46
August	2	535	261	2	12	1,468	61	2,342	6	12	19	37
September	3	505	248	2	12	1,398	72	2,240	5	11	12	28
October	2	506	251	2	12	1,430	72	2,276	4	10	7	22
November	2	475	238	2	11	1,353	80	2,161	5	9	7	21
December	2	484	243	3	10	1,413	69	2,224	11	12	13	36
Total	**27**	**5,818**	**2,963**	**29**	**141**	**16,791**	**877**	**26,646**	**80**	**144**	**154**	**378**
2011 January	2	455	237	3	11	1,327	82	R 2,117	R 8	R 16	11	R 35
February	2	421	215	3	10	1,232	75	R 1,957	5	R 13	6	R 24
March	3	499	243	3	14	1,395	67	2,225	5	R 15	7	R 28
April	2	493	248	2	12	1,350	68	2,175	R 6	R 10	9	R 24
May	3	522	250	2	11	1,398	71	2,258	R 6	R 10	8	R 24
June	3	524	262	2	11	1,391	69	2,262	6	R 13	8	R 26
July	3	526	259	2	11	1,432	44	2,277	7	R 15	10	R 32
August	3	548	273	2	13	1,415	47	2,301	5	R 14	9	R 27
September	2	506	241	2	11	1,342	71	2,175	4	R 13	6	R 24
October	2	523	243	3	9	1,371	58	2,210	4	R 10	6	R 20
November	2	491	241	3	11	1,310	58	2,115	4	7	6	R 18
December	2	R 475	238	3	10	1,377	76	2,181	5	R 11	6	R 22
Total	**27**	**R 5,983**	**2,950**	**31**	**134**	**16,343**	**787**	**R 26,254**	**R 64**	**R 146**	**R 93**	**R 303**
2012 January	2	442	231	3	12	1,298	58	2,045	R 5	R 12	7	R 23
February	2	433	222	3	12	1,279	52	2,002	4	R 10	5	R 18
March	2	477	243	3	10	1,369	61	2,165	3	6	6	15
April	2	488	231	2	11	1,353	59	2,146	4	5	5	R 15
May	3	515	248	2	11	1,427	41	2,246	5	6	6	R 17
June	2	509	263	2	9	1,387	50	2,222	5	R 7	9	R 20
July	3	R 522	258	2	10	1,399	59	2,252	5	7	10	23
August	2	529	258	3	10	1,449	49	2,300	4	8	8	19
8-Month Total	**18**	**3,914**	**1,953**	**20**	**84**	**10,960**	**428**	**17,377**	**36**	**60**	**55**	**150**
2011 8-Month Total	**19**	**3,989**	**1,987**	**20**	**92**	**10,942**	**523**	**17,573**	**46**	**105**	**68**	**220**
2010 8-Month Total	**18**	**3,849**	**1,983**	**19**	**96**	**11,197**	**583**	**17,745**	**55**	**101**	**116**	**272**

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

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

[c] Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Industrial Sector Other" on Table 3.8b.

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

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

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

R=Revised.

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

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

Sources: See end of section.

Petroleum

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

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

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

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

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

Note 3. Distillate and Residual Fuel Oils. The requirement to report crude oil in pipelines or burned on leases as either distillate or residual fuel oil was eliminated. Prior to January 1981, the refinery input of unfinished oils typically exceeded the available supply of unfinished oils. That discrepancy was assumed to be due to the redesignation of distillate and residual fuel oils received as such but used as unfinished oil inputs by the receiving refinery. The imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of that difference was subtracted from distillate and one-third from residual. Beginning in January 1981, EIA modified its survey forms to account for redesignated product and discontinued the above-mentioned adjustment.

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

Note 4. Petroleum New Stock Basis. In January 1975, 1979, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, affecting subsequent stocks reported and stock change calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:
Crude Oil: 1982—645 (Total) and 351 (Non-SPR).
Distillate Fuel Oil: 1974—224; 1980—205; and 1982—186.
Jet Fuel (Total): 1974—30; 1980—42; and 1982—39.
Liquefied Petroleum Gases: 1974—113; 1978—136; 1980—128; and 1982—102.
Propane and Propylene: 1978—86; 1980—69; and 1982—57.
Motor Gasoline (Total): 1974—225; 1980—263; 1982—244.
Residual Fuel Oil: 1974—75; 1980—91; and 1982—69.
Total Petroleum: 1974—1,121; 1980—1,425; and 1982—1,461.

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

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

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

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

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

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

Table 3.1 Sources

1973–1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports.

1976–1980: U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual*, annual reports.

1981–2001: 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 in these tables are derived from data for "petroleum products supplied" from the following sources:
1973–1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual."
1976–1980: U.S. Energy Information Administration's (EIA), *Energy Data Reports*, "Petroleum Statement, Annual."
1981–2011: EIA, *Petroleum Supply Annual*.
2012: EIA, *Petroleum Supply Monthly*.

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

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

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

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

Distillate Fuel Oil Consumed by the Electric Power Sector
See sources for Table 7.4b. For 1973–1979, electric utility consumption of distillate fuel oil is assumed to be the amount of petroleum (minus small amounts of kerosene and kerosene-type jet fuel deliveries) consumed in gas turbine and internal combustion plants. For 1980–2000, electric utility consumption of distillate fuel oil is assumed to be the amount of light oil (fuel oil nos. 1 and 2, plus small amounts of kerosene and jet fuel) consumed.

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

Following are notes on the individual sector groupings:

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

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

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

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

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

The transportation highway use portion is allocated into the months in proportion to each month's share of the

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

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

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

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

Jet Fuel

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

Kerosene

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

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

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

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

Liquefied Petroleum Gases (LPG)

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

Sales of LPG to the residential and commercial sectors combined are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the combined sectors. Since 2003, residential sector LPG consumption is assumed to equal propane retail sales, with the remainder of the combined residential and commercial LPG consumption being assigned to the commercial sector. Prior to 2003, residential sector LPG consumption is based on the average of the State residential shares for 2003–2008, with the remainder of the combined residential and commercial LPG consumption being assigned to the commercial sector.

The quantity of LPG sold each year for consumption in internal combustion engines is allocated between the transportation and industrial sectors on the basis of data for special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration, in *Highway Statistics*. The allocations of LPG sold for internal combustion engine use to the transportation sector range from a low of 20 percent (in 2001) to a high of 78 percent (in 2008).

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

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

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

to remove quantities of pentanes plus and to estimate withheld values.

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

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

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

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

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

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

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

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

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

Following are notes on the individual sector groupings:

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

Since 1979, industrial sales data are the sum of sales for industrial, oil company, and all other uses. Prior to 1979, each year's sales subtotal of the heating plus industrial category is allocated to the commercial and industrial sectors in proportion to the 1979 shares, and the estimated industrial portion is added to oil company and all other uses.

Transportation sales are the sum of sales for railroad, vessel bunkering, and military uses for all years.

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

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

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

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

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

Table 3.8a Sources

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

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

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

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

Table 3.8b Sources

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

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

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

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

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

Table 3.8c Sources

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

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

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

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

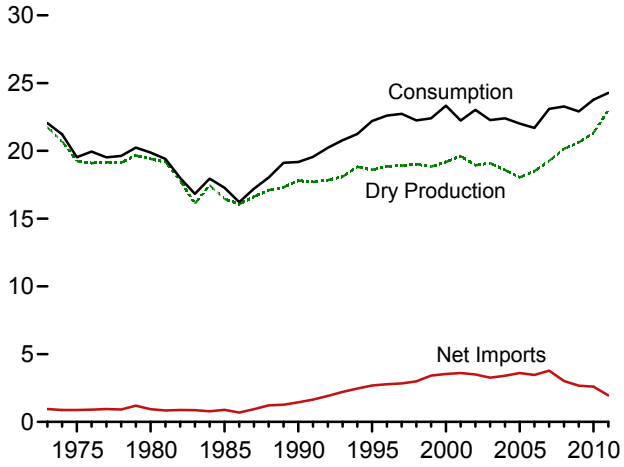
Total Petroleum
Transportation sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Transportation Sector" in Table 3.8c. Electric power sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown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

THIS PAGE INTENTIONALLY LEFT BLANK

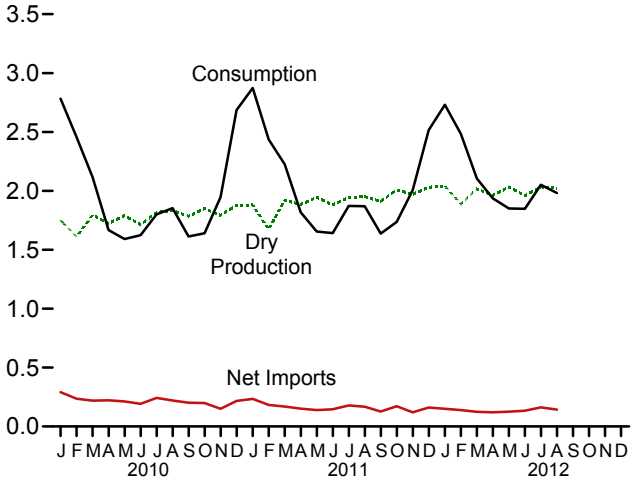
4. Natural Gas

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

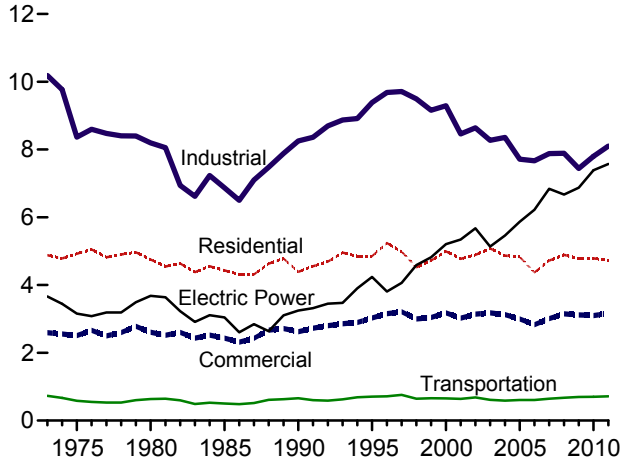
Overview, 1973-2011



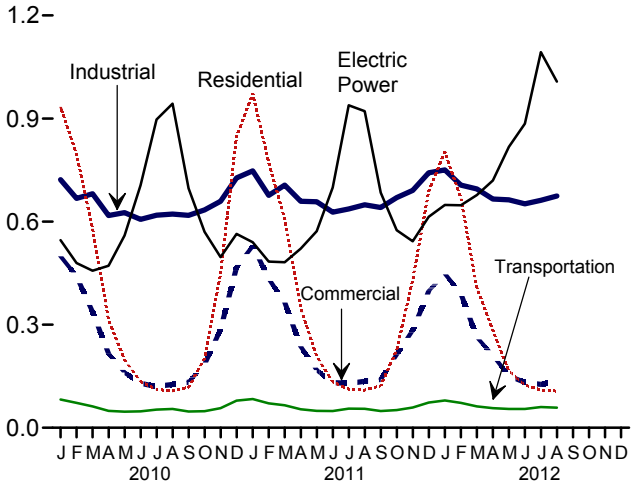
Overview, Monthly



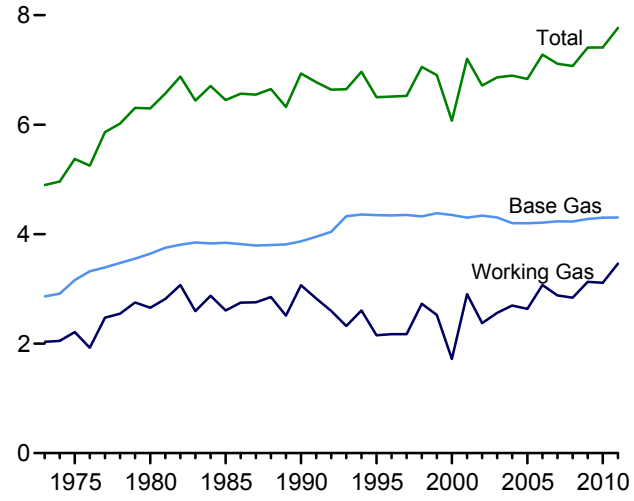
Consumption by Sector, 1973-2011



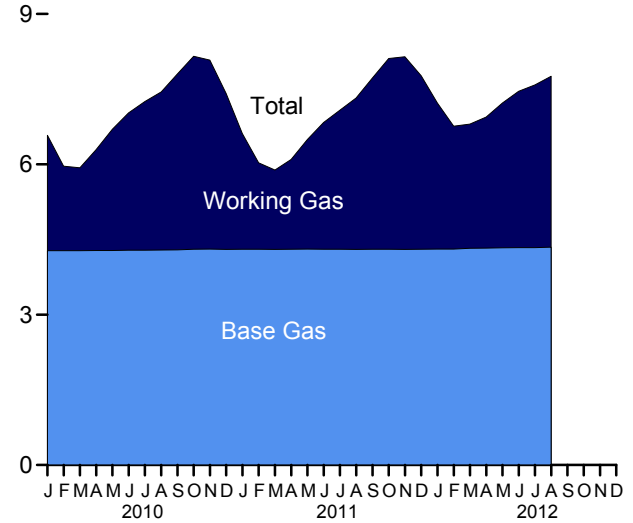
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2011



Underground Storage, End of Month



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

Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Gross Withdrawals[a]	Marketed Production (Wet)[b]	Extraction Loss[c]	Dry Gas Production[d]	Supplemental Gaseous Fuels[e]	Trade			Net Storage Withdrawals[f]	Balancing Item[g]	Consumption[h]
						Imports	Exports	Net Imports			
1973 Total	**24,067**	**[i]22,648**	**917**	**[i]21,731**	**NA**	**1,033**	**77**	**956**	**-442**	**-196**	**22,049**
1975 Total	**21,104**	**[i]20,109**	**872**	**[i]19,236**	**NA**	**953**	**73**	**880**	**-344**	**-235**	**19,538**
1980 Total	**21,870**	**20,180**	**777**	**19,403**	**155**	**985**	**49**	**936**	**23**	**-640**	**19,877**
1985 Total	**19,607**	**17,270**	**816**	**16,454**	**126**	**950**	**55**	**894**	**235**	**-428**	**17,281**
1990 Total	**21,523**	**18,594**	**784**	**17,810**	**123**	**1,532**	**86**	**1,447**	**-513**	**307**	**[j]19,174**
1995 Total	**23,744**	**19,506**	**908**	**18,599**	**110**	**2,841**	**154**	**2,687**	**415**	**396**	**22,207**
1996 Total	**24,114**	**19,812**	**958**	**18,854**	**109**	**2,937**	**153**	**2,784**	**2**	**860**	**22,609**
1997 Total	**24,213**	**19,866**	**964**	**18,902**	**103**	**2,994**	**157**	**2,837**	**24**	**871**	**22,737**
1998 Total	**24,108**	**19,961**	**938**	**19,024**	**102**	**3,152**	**159**	**2,993**	**-530**	**657**	**22,246**
1999 Total	**23,823**	**19,805**	**973**	**18,832**	**98**	**3,586**	**163**	**3,422**	**172**	**-119**	**22,405**
2000 Total	**24,174**	**20,198**	**1,016**	**19,182**	**90**	**3,782**	**244**	**3,538**	**829**	**-306**	**23,333**
2001 Total	**24,501**	**20,570**	**954**	**19,616**	**86**	**3,977**	**373**	**3,604**	**-1,166**	**99**	**22,239**
2002 Total	**23,941**	**19,885**	**957**	**18,928**	**68**	**4,015**	**516**	**3,499**	**467**	**65**	**23,027**
2003 Total	**24,119**	**19,974**	**876**	**19,099**	**68**	**3,944**	**680**	**3,264**	**-197**	**44**	**22,277**
2004 Total	**23,970**	**19,517**	**927**	**18,591**	**60**	**4,259**	**854**	**3,404**	**-114**	**461**	**22,403**
2005 Total	**23,457**	**18,927**	**876**	**18,051**	**64**	**4,341**	**729**	**3,612**	**52**	**236**	**22,014**
2006 Total	**23,535**	**19,410**	**906**	**18,504**	**66**	**4,186**	**724**	**3,462**	**-436**	**103**	**21,699**
2007 Total	**24,664**	**20,196**	**930**	**19,266**	**63**	**4,608**	**822**	**3,785**	**192**	**-203**	**23,104**
2008 Total	**25,636**	**21,112**	**953**	**20,159**	**61**	**3,984**	**963**	**3,021**	**34**	**2**	**23,277**
2009 Total	**26,057**	**21,648**	**1,024**	**20,624**	**65**	**3,751**	**1,072**	**2,679**	**-355**	**-103**	**22,910**
2010 January	2,224	1,838	88	1,750	5	385	94	291	822	-86	2,783
February	2,057	1,692	81	1,611	5	324	88	236	628	-24	2,456
March	2,296	1,884	90	1,794	5	319	100	219	34	65	2,117
April	2,187	1,810	86	1,723	5	298	76	223	-364	80	1,667
May	2,231	1,881	90	1,791	5	298	86	212	-416	-2	1,591
June	2,134	1,797	86	1,712	5	282	90	192	-326	41	1,624
July	2,221	1,908	91	1,817	6	329	86	243	-231	-35	1,800
August	2,241	1,924	92	1,832	6	305	84	221	-190	-15	1,853
September	2,251	1,874	89	1,785	5	282	79	202	-363	-16	1,612
October	2,343	1,942	93	1,849	6	295	96	199	-360	-54	1,639
November	2,266	1,882	90	1,792	5	273	124	150	77	-78	1,947
December	2,388	1,971	94	1,877	6	352	135	217	675	-89	2,685
Total	**26,836**	**22,402**	**1,070**	**21,332**	**65**	**3,741**	**1,137**	**2,604**	**-13**	**-213**	**23,775**
2011 January	2,309	[E] 1,972	92	[E] 1,880	6	371	136	235	799	[R] -47	[R] 2,873
February	2,109	[E] 1,752	79	[E] 1,674	5	308	125	183	584	[R] -11	[R] 2,435
March	2,423	[E] 2,020	99	[E] 1,921	6	314	145	170	145	-16	[R] 2,225
April	2,363	[E] 1,979	95	[E] 1,884	5	278	127	152	-212	[R] -10	[R] 1,818
May	2,420	[E] 2,046	101	[E] 1,945	3	271	132	139	-398	[R] -34	[R] 1,655
June	2,330	[E] 1,977	95	[E] 1,881	5	265	120	146	-340	[R] -50	[R] 1,641
July	2,344	[E] 2,044	99	[E] 1,944	5	293	113	179	-244	[R] -12	[R] 1,872
August	2,371	[E] 2,051	99	[E] 1,951	5	279	111	168	-244	[R] -10	[R] 1,870
September	2,371	[E] 2,005	95	[E] 1,910	5	253	127	127	-398	[R] -6	[R] 1,637
October	2,496	[E] 2,112	104	[E] 2,008	5	281	110	171	-385	[R] -63	[R] 1,736
November	2,483	[E] 2,074	104	[E] 1,971	5	247	128	120	-37	[R] -53	[R] 2,006
December	2,557	[E] 2,138	107	[E] 2,031	6	295	134	161	384	[R] -65	[R] 2,516
Total	**28,576**	**[E] 24,170**	**1,169**	**[E] 23,000**	**61**	**3,456**	**1,507**	**1,949**	**-348**	**[R] -377**	**[R] 24,285**
2012 January	2,575	[RE] 2,151	109	[E] 2,042	6	281	130	150	545	[R] -13	[R] 2,730
February	2,380	[E] 1,991	102	[E] 1,889	5	269	130	139	459	[R] -9	[R] 2,484
March	2,539	[E] 2,125	109	[E] 2,016	6	265	141	124	-39	[R] -2	[R] 2,105
April	2,447	[RE] 2,067	105	[RE] 1,962	5	243	123	[R] 120	-137	[R] -13	[R] 1,935
May	2,532	[RE] 2,141	108	[E] 2,033	4	[R] 258	[R] 133	[R] 125	-283	[R] -29	[R] 1,851
June	2,422	[RE] 2,063	103	[RE] 1,960	5	259	125	134	-230	-21	[R] 1,848
July	[R] 2,459	[RE] 2,140	[R] 106	[RE] 2,034	5	281	118	162	-134	[R] -16	[R] 2,051
August	2,374	[E] 2,130	107	[E] 2,023	5	281	138	143	-168	-21	1,982
8-Month Total	**19,728**	**[E] 16,807**	**849**	**[E] 15,958**	**41**	**2,138**	**1,040**	**1,098**	**12**	**-123**	**16,987**
2011 8-Month Total	**18,669**	**[E] 15,841**	**760**	**[E] 15,081**	**40**	**2,379**	**1,009**	**1,370**	**89**	**-189**	**16,390**
2010 8-Month Total	**17,589**	**14,733**	**704**	**14,029**	**42**	**2,540**	**703**	**1,837**	**-41**	**24**	**15,892**

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

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

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

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

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

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

[g] See Note 5, "Natural Gas Balancing Item," at end of section. Since 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

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

[i] May include unknown quantities of nonhydrocarbon gases.

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

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

Notes: • See Note 8, "Natural Gas Adjustments, 1993-2000," at end of section.
• Totals may not equal sum of components due to independent rounding.
• Geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **Imports and Exports:** Table 4.2. • **Consumption:** Table 4.3. • **Balancing Item:** Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals. • **All Other Data: 1973-2006—**U.S. Energy Information Administration (EIA), *Natural Gas Annual,* annual reports. **2007 forward—**EIA, *Natural Gas Monthly,* October 2012, Table 1.

Table 4.2 Natural Gas Trade by Country

(Billion Cubic Feet)

	Imports									Exports				
	Algeria[a]	Canada[b]	Egypt[a]	Mexico[b]	Nigeria[a]	Qatar[a]	Trinidad and Tobago[a]	Other[a,c]	Total	Canada[b]	Japan[a]	Mexico[b]	Other[a,d]	Total
1973 Total	**3**	**1,028**	**0**	**2**	**0**	**0**	**0**	**0**	**1,033**	**15**	**48**	**14**	**0**	**77**
1975 Total	**5**	**948**	**0**	**0**	**0**	**0**	**0**	**0**	**953**	**10**	**53**	**9**	**0**	**73**
1980 Total	**86**	**797**	**0**	**102**	**0**	**0**	**0**	**0**	**985**	**0**	**45**	**4**	**0**	**49**
1985 Total	**24**	**926**	**0**	**0**	**0**	**0**	**0**	**0**	**950**	**0**	**53**	**2**	**0**	**55**
1990 Total	**84**	**1,448**	**0**	**0**	**0**	**0**	**0**	**0**	**1,532**	**17**	**53**	**16**	**0**	**86**
1995 Total	**18**	**2,816**	**0**	**7**	**0**	**0**	**0**	**0**	**2,841**	**28**	**65**	**61**	**0**	**154**
1996 Total	**35**	**2,883**	**0**	**14**	**0**	**0**	**0**	**5**	**2,937**	**52**	**68**	**34**	**0**	**153**
1997 Total	**66**	**2,899**	**0**	**17**	**0**	**0**	**0**	**12**	**2,994**	**56**	**62**	**38**	**0**	**157**
1998 Total	**69**	**3,052**	**0**	**15**	**0**	**0**	**0**	**17**	**3,152**	**40**	**66**	**53**	**0**	**159**
1999 Total	**76**	**3,368**	**0**	**55**	**0**	**20**	**51**	**17**	**3,586**	**39**	**64**	**61**	**0**	**163**
2000 Total	**47**	**3,544**	**0**	**12**	**13**	**46**	**99**	**21**	**3,782**	**73**	**66**	**106**	**0**	**244**
2001 Total	**65**	**3,729**	**0**	**10**	**38**	**23**	**98**	**14**	**3,977**	**167**	**66**	**141**	**0**	**373**
2002 Total	**27**	**3,785**	**0**	**2**	**8**	**35**	**151**	**8**	**4,015**	**189**	**63**	**263**	**0**	**516**
2003 Total	**53**	**3,437**	**0**	**0**	**50**	**14**	**378**	**11**	**3,944**	**271**	**66**	**343**	**0**	**680**
2004 Total	**120**	**3,607**	**0**	**0**	**12**	**12**	**462**	**46**	**4,259**	**395**	**62**	**397**	**0**	**854**
2005 Total	**97**	**3,700**	**73**	**9**	**8**	**3**	**439**	**11**	**4,341**	**358**	**65**	**305**	**0**	**729**
2006 Total	**17**	**3,590**	**120**	**13**	**57**	**0**	**389**	**0**	**4,186**	**341**	**61**	**322**	**0**	**724**
2007 Total	**77**	**3,783**	**115**	**54**	**95**	**18**	**448**	**18**	**4,608**	**482**	**47**	**292**	**2**	**822**
2008 Total	**0**	**3,589**	**55**	**43**	**12**	**3**	**267**	**15**	**3,984**	**559**	**39**	**365**	**0**	**963**
2009 Total	**0**	**3,271**	**160**	**28**	**13**	**13**	**236**	**29**	**3,751**	**701**	**31**	**338**	**3**	**1,072**
2010 January	0	327	17	1	0	12	22	6	385	68	2	23	0	94
February	0	277	12	1	0	6	16	12	324	60	2	22	3	88
March	0	276	9	5	3	1	16	9	319	77	2	21	0	100
April	0	252	6	5	9	9	15	3	298	50	4	22	0	76
May	0	257	9	4	9	0	16	3	298	55	2	29	0	86
June	0	248	6	2	11	0	11	5	282	51	2	34	3	90
July	0	291	6	1	5	0	17	8	329	50	4	32	0	86
August	0	282	0	1	0	0	17	5	305	49	2	33	0	84
September	0	250	6	3	3	0	16	3	282	50	7	23	0	79
October	0	257	3	4	2	5	15	9	295	63	2	25	6	96
November	0	242	0	(s)	0	9	14	9	273	84	2	30	8	124
December	0	322	0	1	0	4	15	9	352	82	3	38	12	135
Total	**0**	**3,280**	**73**	**30**	**42**	**46**	**190**	**81**	**3,741**	**739**	**33**	**333**	**32**	**1,137**
2011 January	0	331	3	(s)	0	13	16	9	371	85	2	37	13	136
February	0	276	6	(s)	0	0	11	15	308	84	2	37	3	125
March	0	275	6	(s)	0	14	10	9	314	98	2	41	3	145
April	0	245	6	(s)	0	4	11	13	278	76	2	43	6	127
May	0	235	3	(s)	0	24	8	0	271	80	3	44	6	132
June	0	238	6	(s)	0	5	11	6	265	71	2	47	0	120
July	0	272	0	(s)	0	5	13	3	293	64	0	47	3	113
August	0	249	0	(s)	2	8	11	9	279	67	2	42	0	111
September	0	233	0	(s)	0	4	8	9	253	77	2	39	8	127
October	0	249	3	1	0	8	8	12	281	64	0	43	3	110
November	0	232	0	(s)	0	3	12	0	247	84	2	39	3	128
December	0	269	3	(s)	0	4	10	9	295	87	0	42	5	134
Total	**0**	**3,104**	**35**	**3**	**2**	**91**	**129**	**92**	**3,456**	**937**	**18**	**500**	**52**	**1,507**
2012 January	0	265	0	(s)	0	4	9	3	281	84	3	40	3	130
February	0	249	3	(s)	0	0	11	6	269	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	R 242	0	(s)	0	6	11	0	R 258	R 78	3	52	0	R 133
June	0	251	0	(s)	0	0	8	0	259	64	2	58	0	125
July	0	265	0	(s)	0	3	12	0	281	62	0	57	0	118
August	0	262	0	(s)	0	3	16	0	281	77	2	59	0	138
8-Month Total	**0**	**2,016**	**3**	**(s)**	**0**	**22**	**83**	**14**	**2,138**	**622**	**13**	**400**	**6**	**1,040**
2011 8-Month Total	**0**	**2,121**	**29**	**1**	**2**	**73**	**90**	**63**	**2,379**	**625**	**14**	**337**	**33**	**1,009**
2010 8-Month Total	**0**	**2,209**	**64**	**22**	**37**	**28**	**129**	**50**	**2,540**	**460**	**19**	**217**	**6**	**703**

[a] As liquefied natural gas.

[b] By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 9, "Natural Gas Imports and Exports," at end of section.

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

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

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

Notes: • See Note 9, "Natural Gas Imports and Exports," at end of section. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **1973-1987:** U.S. Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • **1988-2009:** EIA, *Natural Gas Annual,* annual reports. • **2010 forward:** EIA, *Natural Gas Monthly,* October 2012, Tables 4 and 5; and U.S. Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
			Industrial					Transportation				
				Other Industrial								
	Residential	Commercial[a]	Lease and Plant Fuel	CHP[b]	Non-CHP[c]	Total	Total	Pipelines[d] and Distribution[e]	Vehicle Fuel	Total	Electric Power Sector[f,g]	Total
1973 Total	**4,879**	**2,597**	**1,496**	**([h])**	**8,689**	**8,689**	**10,185**	**728**	**NA**	**728**	**3,660**	**22,049**
1975 Total	**4,924**	**2,508**	**1,396**	**([h])**	**6,968**	**6,968**	**8,365**	**583**	**NA**	**583**	**3,158**	**19,538**
1980 Total	**4,752**	**2,611**	**1,026**	**([h])**	**7,172**	**7,172**	**8,198**	**635**	**NA**	**635**	**3,682**	**19,877**
1985 Total	**4,433**	**2,432**	**966**	**([h])**	**5,901**	**5,901**	**6,867**	**504**	**NA**	**504**	**3,044**	**17,281**
1990 Total	**4,391**	**2,623**	**1,236**	**1,055**	**[i] 5,963**	**[i] 7,018**	**8,255**	**660**	**(s)**	**660**	**[i] 3,245**	**[i] 19,174**
1995 Total	**4,850**	**3,031**	**1,220**	**1,258**	**6,906**	**8,164**	**9,384**	**700**	**5**	**705**	**4,237**	**22,207**
1996 Total	**5,241**	**3,158**	**1,250**	**1,289**	**7,146**	**8,435**	**9,685**	**711**	**6**	**718**	**3,807**	**22,609**
1997 Total	**4,984**	**3,215**	**1,203**	**1,282**	**7,229**	**8,511**	**9,714**	**751**	**8**	**760**	**4,065**	**22,737**
1998 Total	**4,520**	**2,999**	**1,173**	**1,355**	**6,965**	**8,320**	**9,493**	**635**	**9**	**645**	**4,588**	**22,246**
1999 Total	**4,726**	**3,045**	**1,079**	**1,401**	**6,678**	**8,079**	**9,158**	**645**	**12**	**657**	**4,820**	**22,405**
2000 Total	**4,996**	**3,182**	**1,151**	**1,386**	**6,757**	**8,142**	**9,293**	**642**	**13**	**655**	**5,206**	**23,333**
2001 Total	**4,771**	**3,023**	**1,119**	**1,310**	**6,035**	**7,344**	**8,463**	**625**	**15**	**640**	**5,342**	**22,239**
2002 Total	**4,889**	**3,144**	**1,113**	**1,240**	**6,287**	**7,527**	**8,640**	**667**	**15**	**682**	**5,672**	**23,027**
2003 Total	**5,079**	**3,179**	**1,122**	**1,144**	**6,007**	**7,150**	**8,273**	**591**	**18**	**610**	**5,135**	**22,277**
2004 Total	**4,869**	**3,129**	**1,098**	**1,191**	**6,066**	**7,256**	**8,354**	**566**	**21**	**587**	**5,464**	**22,403**
2005 Total	**4,827**	**2,999**	**1,112**	**1,084**	**5,518**	**6,601**	**7,713**	**584**	**23**	**607**	**5,869**	**22,014**
2006 Total	**4,368**	**2,832**	**1,142**	**1,115**	**5,412**	**6,527**	**7,669**	**584**	**24**	**608**	**6,222**	**21,699**
2007 Total	**4,722**	**3,013**	**1,226**	**1,050**	**5,604**	**6,655**	**7,881**	**621**	**25**	**646**	**6,841**	**23,104**
2008 Total	**4,892**	**3,153**	**1,220**	**955**	**5,715**	**6,670**	**7,890**	**648**	**26**	**674**	**6,668**	**23,277**
2009 Total	**4,779**	**3,119**	**1,275**	**990**	**5,178**	**6,167**	**7,443**	**670**	**27**	**697**	**6,873**	**22,910**
2010 January	934	499	106	90	526	616	722	80	3	82	546	2,783
February	796	441	98	80	490	570	667	70	2	72	480	2,456
March	580	337	109	84	488	572	681	60	3	62	457	2,117
April	313	215	104	79	435	514	618	46	3	49	471	1,667
May	198	161	107	82	437	519	626	44	3	47	560	1,591
June	134	130	102	84	420	504	607	45	3	48	706	1,624
July	111	120	107	91	420	512	619	50	3	53	897	1,800
August	107	127	108	95	419	514	622	52	3	55	943	1,853
September	117	133	107	87	424	511	618	45	3	47	697	1,612
October	202	185	112	84	438	522	634	45	3	48	570	1,639
November	447	287	108	82	469	551	659	55	3	57	497	1,947
December	848	467	114	92	521	613	727	76	3	79	564	2,685
Total	**4,787**	**3,102**	**1,282**	**1,029**	**5,488**	**6,517**	**7,800**	**669**	**31**	**700**	**7,387**	**23,775**
2011 January	R 972	529	E 113	R 90	545	635	748	E 81	E 3	E 84	R 540	R 2,873
February	771	433	E 100	R 81	R 495	576	676	RE 69	E 3	E 71	R 484	R 2,435
March	607	365	E 116	R 82	509	590	706	E 63	E 3	E 65	R 482	R 2,225
April	348	236	E 113	R 83	R 463	546	659	E 51	E 3	E 54	R 521	R 1,818
May	208	168	E 117	87	454	541	658	E 47	E 3	RE 49	R 572	R 1,655
June	134	132	E 113	R 88	R 427	R 514	R 627	E 46	E 3	E 49	R 699	R 1,641
July	112	130	E 117	R 97	R 422	520	637	E 53	E 3	RE 55	R 939	R 1,872
August	109	135	E 117	R 99	R 432	R 531	649	E 53	E 3	E 55	R 921	R 1,870
September	122	141	E 115	R 91	R 435	526	641	E 46	E 3	E 49	R 684	R 1,637
October	227	213	E 121	R 85	R 465	549	670	E 49	E 3	E 52	R 575	R 1,736
November	430	284	E 119	86	486	572	691	E 56	E 3	E 59	543	R 2,006
December	688	398	E 122	R 96	R 524	620	742	E 71	E 3	E 74	R 614	R 2,516
Total	**4,729**	**3,164**	**E 1,383**	**R 1,063**	**R 5,657**	**R 6,719**	**R 8,103**	**RE 683**	**E 33**	**RE 716**	**R 7,574**	**R 24,285**
2012 January	803	448	E 123	R 98	R 529	627	751	E 77	E 3	E 80	R 648	R 2,730
February	668	389	E 114	R 90	R 502	592	706	E 70	E 3	E 72	R 648	R 2,484
March	408	263	E 122	R 90	R 483	574	695	E 59	E 3	E 62	R 677	R 2,105
April	283	210	E 118	R 87	R 460	547	665	RE 54	E 3	E 57	R 720	R 1,935
May	165	150	E 123	R 93	R 448	541	663	E 52	E 3	E 55	R 817	R 1,851
June	125	133	E 118	R 94	R 439	534	652	E 52	E 3	E 55	R 885	R 1,848
July	109	126	E 122	R 101	R 439	539	R 662	E 58	E 3	E 61	R 1,093	R 2,051
August	107	135	E 122	98	455	552	674	E 56	E 3	E 59	1,007	1,982
8-Month Total	**2,667**	**1,856**	**E 962**	**752**	**3,755**	**4,507**	**5,469**	**E 478**	**E 22**	**E 500**	**6,495**	**16,987**
2011 8-Month Total	**3,262**	**2,128**	**E 907**	**706**	**3,747**	**4,453**	**5,359**	**E 461**	**E 22**	**E 483**	**5,158**	**16,390**
2010 8-Month Total	**3,173**	**2,030**	**841**	**684**	**3,636**	**4,320**	**5,161**	**448**	**20**	**468**	**5,059**	**15,892**

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

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

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

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

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

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

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

[h] Included in "Non-CHP."

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

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

Notes: • Data are for natural gas, plus a small amount of supplemental gaseous fuels. • See Note 8, "Natural Gas Adjustments, 1993-2000," at end of section. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total** and **Pipelines and Distribution: 1973-2006—**U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA),* annual reports and unpublished revisions. **2007 forward—**EIA, *Natural Gas Monthly (NGM),* October 2012, Table 2. • **Industrial CHP:** Table 7.4c. • **Vehicle Fuel: 1990 and 1991—**EIA, NGA 2000, (November 2001), Table 95. **1992-1998—**EIA, "Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4). **1999-2006—**EIA, NGA, annual reports. **2007 forward—**EIA, NGM, October 2012, Table 2. • **Electric Power Sector:** Table 7.4b.

Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period			Change in Working Gas From Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[a]	Volume	Percent	Withdrawals	Injections	Net[b,c]
1973 Total	**2,864**	**2,034**	**4,898**	**305**	**17.6**	**1,533**	**1,974**	**-442**
1975 Total	**3,162**	**2,212**	**5,374**	**162**	**7.9**	**1,760**	**2,104**	**-344**
1980 Total	**3,642**	**2,655**	**6,297**	**-99**	**-3.6**	**1,910**	**1,896**	**14**
1985 Total	**3,842**	**2,607**	**6,448**	**-270**	**-9.4**	**2,359**	**2,128**	**231**
1990 Total	**3,868**	**3,068**	**6,936**	**555**	**22.1**	**1,934**	**2,433**	**-499**
1995 Total	**4,349**	**2,153**	**6,503**	**-453**	**-17.4**	**2,974**	**2,566**	**408**
1996 Total	**4,341**	**2,173**	**6,513**	**19**	**.9**	**2,911**	**2,906**	**6**
1997 Total	**4,350**	**2,175**	**6,525**	**2**	**.1**	**2,824**	**2,800**	**24**
1998 Total	**4,326**	**2,730**	**7,056**	**554**	**25.5**	**2,379**	**2,905**	**-526**
1999 Total	**4,383**	**2,523**	**6,906**	**-207**	**-7.6**	**2,772**	**2,598**	**174**
2000 Total	**4,352**	**1,719**	**6,071**	**-806**	**-31.9**	**3,498**	**2,684**	**814**
2001 Total	**4,301**	**2,904**	**7,204**	**1,185**	**68.9**	**2,309**	**3,464**	**-1,156**
2002 Total	**4,340**	**2,375**	**6,715**	**-528**	**-18.2**	**3,138**	**2,670**	**468**
2003 Total	**4,303**	**2,563**	**6,866**	**187**	**7.9**	**3,099**	**3,292**	**-193**
2004 Total	**4,201**	**2,696**	**6,897**	**133**	**5.2**	**3,037**	**3,150**	**-113**
2005 Total	**4,200**	**2,635**	**6,835**	**-61**	**-2.3**	**3,057**	**3,002**	**55**
2006 Total	**4,211**	**3,070**	**7,281**	**435**	**16.5**	**2,493**	**2,924**	**-431**
2007 Total	**4,234**	**2,879**	**7,113**	**-191**	**-6.2**	**3,325**	**3,133**	**192**
2008 Total	**4,232**	**2,840**	**7,073**	**-39**	**-1.4**	**3,374**	**3,340**	**34**
2009 Total	**4,277**	**3,130**	**7,407**	**290**	**10.2**	**2,966**	**3,315**	**-349**
2010 January	4,276	2,304	6,580	171	8.0	873	63	811
February	4,278	1,683	5,961	-75	-4.2	657	38	619
March	4,278	1,652	5,930	-7	-.4	238	207	31
April	4,278	2,011	6,289	101	5.3	68	427	-360
May	4,279	2,420	6,699	45	1.9	53	463	-410
June	4,287	2,740	7,027	-20	-.7	64	385	-321
July	4,287	2,966	7,253	-125	-4.0	112	339	-227
August	4,290	3,153	7,443	-206	-6.1	137	323	-186
September	4,294	3,508	7,801	-138	-3.8	52	411	-359
October	4,305	3,851	8,156	41	1.1	52	407	-355
November	4,309	3,769	8,078	-69	-1.8	237	163	74
December	4,301	3,111	7,412	-19	-.6	731	66	665
Total	**4,301**	**3,111**	**7,412**	**-19**	**-.6**	**3,274**	**3,291**	**-17**
2011 January	4,306	2,308	6,614	4	.2	852	53	799
February	4,306	1,724	6,029	40	2.4	668	84	584
March	4,304	1,581	5,884	-72	-4.3	317	172	145
April	4,307	1,789	6,096	-222	-11.0	108	320	-212
May	4,308	2,188	6,495	-232	-9.6	66	464	-398
June	4,305	2,530	6,835	-210	-7.7	90	430	-340
July	4,304	2,774	7,079	-192	-6.5	124	368	-244
August	4,304	3,020	7,323	-133	-4.2	138	382	-244
September	4,305	3,416	7,721	-92	-2.6	64	462	-398
October	4,305	3,804	8,109	-46	-1.2	62	448	-385
November	4,302	3,843	8,145	74	2.0	198	235	-37
December	4,305	3,462	7,767	351	11.3	488	105	384
Total	**4,305**	**3,462**	**7,767**	**351**	**11.3**	**3,175**	**3,523**	**-348**
2012 January	4,307	2,916	7,223	608	26.4	633	88	545
February	4,307	2,455	6,762	731	42.4	526	67	459
March	4,325	2,477	6,802	896	56.7	217	256	-39
April	4,329	2,613	6,942	824	46.1	144	282	-137
May	4,334	2,890	7,225	703	32.1	92	375	-283
June	4,337	3,118	7,456	589	23.3	109	339	-230
July	4,339	3,246	7,585	472	17.0	129	263	-134
August	4,348	3,409	7,757	389	12.9	134	302	-168
8-Month Total	– –	– –	– –	– –	– –	**1,984**	**1,972**	**12**
2011 8-Month Total	– –	– –	– –	– –	– –	**2,362**	**2,274**	**89**
2010 8-Month Total	– –	– –	– –	– –	– –	**2,202**	**2,244**	**-42**

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

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

[c] Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 4, "Natural Gas Storage," at end of section.

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

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

Sources: • **Storage Activity: 1973-1975—**U.S. Energy Information Administration (EIA), *Natural Gas Annual 1994, Volume 2,* Table 9. **1976-1979—**EIA, *Natural Gas Production and Consumption 1979,* Table 1. **1980-1995—**EIA, *Historical Natural Gas Annual 1930 Through 2000,* Table 11. **1996-2006—**EIA, *Natural Gas Monthly (NGM),* monthly issues. **2007 forward—**EIA, NGM, October 2012, Table 8. • **All Other Data: 1973 and 1974—**American Gas Association, *Gas Facts, 1972 Data,* Table 57, *Gas Facts, 1973 Data,* Table 57, and *Gas Facts, 1974 Data,* Table 40. **1975 and 1976—**Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report." **1977 and 1978—**EIA, Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report." **1979-1995—**EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report." **1996-2006—**EIA, NGM, monthly issues. **2007 forward—**EIA, NGM, October 2012, Table 8.

Natural Gas

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

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

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

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

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

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

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

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

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

Annual data beginning with 1980 are from the EIA NGA. Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years. Monthly data are considered preliminary until after the publication of the EIA NGA. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

Although the total amount of supplemental gaseous fuels consumed is known for 1980 forward, the amount consumed by each energy-use sector is estimated by EIA. These estimates are used to create natural gas (without supplemental gaseous fuels) data for Tables 1.3, 2.2, 2.3, 2.4, and 2.6 (note: to avoid double-counting in these tables, supplemental gaseous fuels are accounted for in their primary energy category: "Coal," "Petroleum," or "Biomass"). It is assumed that supplemental gaseous fuels are commingled with natural gas consumed by the residential, commercial, other industrial, and electric power sectors, but are not commingled with natural gas used for lease and plant fuel, pipelines and distribution, or vehicle fuel. The estimated consumption of supplemental gaseous fuels by each sector (residential, commercial, other industrial, and electric power) is calculated as that sector's natural gas consumption (see Table 4.3) divided by the sum of natural gas consumption by the residential, commercial, other industrial, and electric power sectors (see Table 4.3), and then multiplied by total supplemental gaseous fuels consumption (see Table 4.1). For estimated sectoral consumption of supplemental gaseous fuels in Btu, the residential, commercial, and other industrial values in cubic feet are multiplied by the "End-Use Sectors" conversion factors (see Table A4), and the electric power values in cubic feet are multiplied by the "Electric Power Sector" conversion factors (see Table A4). Total supplemental gaseous fuels consumption in Btu is calculated as the sum of the Btu values for the sectors.

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

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

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

P=Preliminary

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

The final monthly and annual storage and withdrawal data for 1980–2010 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

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

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

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

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

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

Note 8. Natural Gas Data Adjustments, 1993–2000. For 1993–2000, the original data for natural gas delivered to industrial consumers (now "Other Industrial" in Table 4.3) included deliveries to both industrial users and independent power producers (IPPs). These data were adjusted to remove the estimated consumption at IPPs from "Other Industrial" and include it with electric utilities under "Electric Power Sector." (To estimate the monthly IPP consumption, the monthly pattern for Other Industrial CHP in Table 4.3 was used.)

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

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

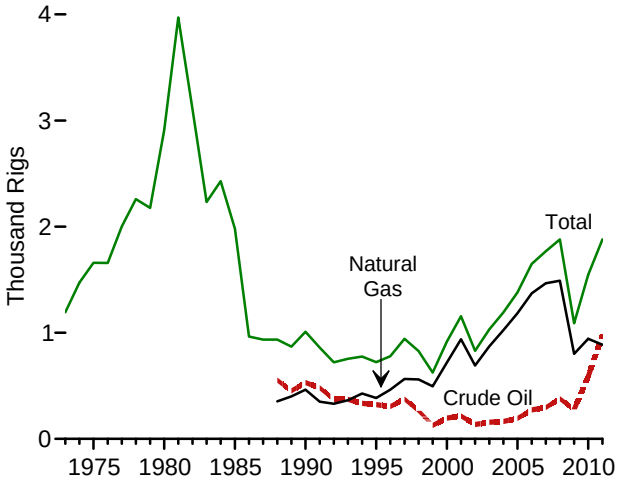
Annual and final monthly data are from the annual EIA Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be reported by month for the calendar year.

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

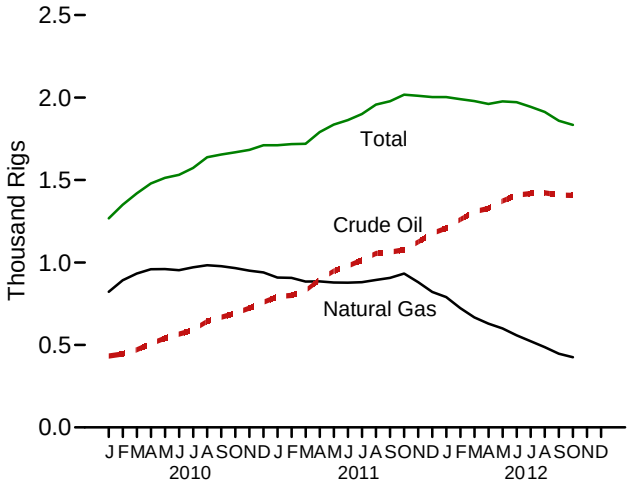
5. Crude Oil and Natural Gas Resource Development

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

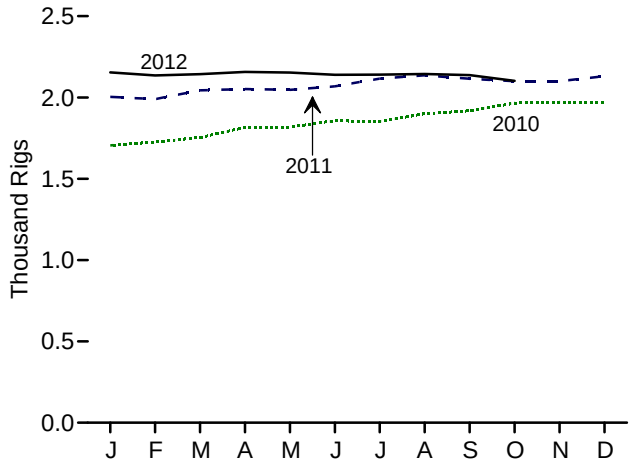
Rotary Rigs in Operation by Type, 1973-2011



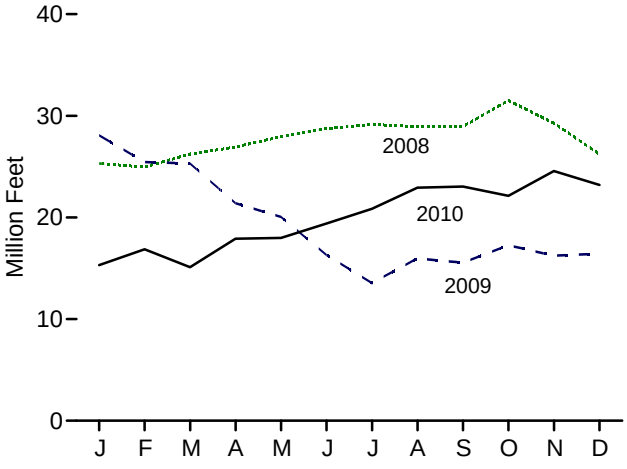
Rotary Rigs in Operation by Type, Monthly



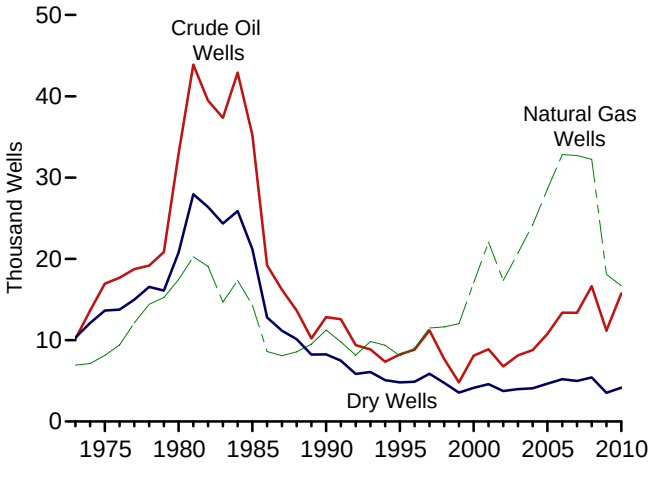
Active Well Service Rig Count, Monthly



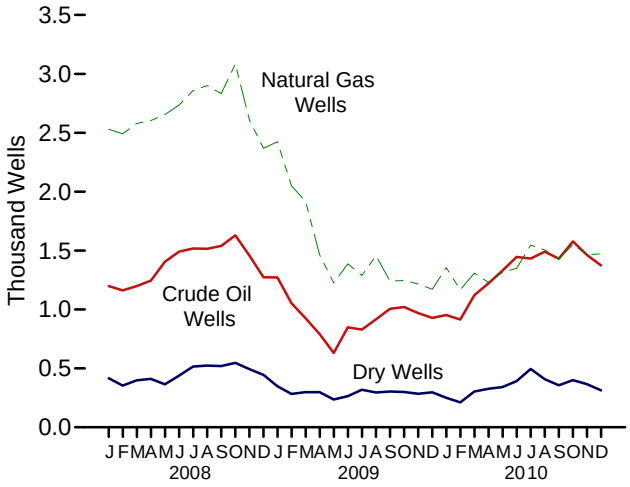
Footage Drilled, Monthly



Total Wells Drilled by Type, 1973-2010



Total Wells Drilled by Type, Monthly



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

Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements

(Number of Rigs)

	Rotary Rigs in Operation[a]					Active Well Service Rig Count[c]
	By Site		By Type			
	Onshore	Offshore	Crude Oil	Natural Gas	Total[b]	
1973 Average	**1,110**	**84**	**NA**	**NA**	**1,194**	**2,008**
1975 Average	**1,554**	**106**	**NA**	**NA**	**1,660**	**2,486**
1980 Average	**2,678**	**231**	**NA**	**NA**	**2,909**	**4,089**
1985 Average	**1,774**	**206**	**NA**	**NA**	**1,980**	**4,716**
1990 Average	**902**	**108**	**532**	**464**	**1,010**	**3,658**
1995 Average	**622**	**101**	**323**	**385**	**723**	**3,041**
1996 Average	**671**	**108**	**306**	**464**	**779**	**3,445**
1997 Average	**821**	**122**	**376**	**564**	**943**	**3,499**
1998 Average	**703**	**123**	**264**	**560**	**827**	**3,014**
1999 Average	**519**	**106**	**128**	**496**	**625**	**2,232**
2000 Average	**778**	**140**	**197**	**720**	**918**	**2,692**
2001 Average	**1,003**	**153**	**217**	**939**	**1,156**	**2,267**
2002 Average	**717**	**113**	**137**	**691**	**830**	**1,830**
2003 Average	**924**	**108**	**157**	**872**	**1,032**	**1,967**
2004 Average	**1,095**	**97**	**165**	**1,025**	**1,192**	**2,064**
2005 Average	**1,287**	**94**	**194**	**1,184**	**1,381**	**2,222**
2006 Average	**1,559**	**90**	**274**	**1,372**	**1,649**	**2,364**
2007 Average	**1,695**	**72**	**297**	**1,466**	**1,768**	**2,388**
2008 Average	**1,814**	**65**	**379**	**1,491**	**1,879**	**2,515**
2009 Average	**1,046**	**44**	**278**	**801**	**1,089**	**1,722**
2010 January	1,225	42	433	822	1,267	1,706
February	1,305	45	446	892	1,350	1,726
March	1,369	50	471	933	1,419	1,754
April	1,426	53	508	959	1,479	1,816
May	1,464	49	541	960	1,513	1,818
June	1,511	20	566	953	1,531	1,857
July	1,558	15	591	971	1,573	1,852
August	1,619	20	644	983	1,638	1,900
September	1,635	19	668	977	1,655	1,918
October	1,647	21	693	966	1,668	1,965
November	1,661	22	723	950	1,683	1,971
December	1,687	24	759	940	1,711	1,968
Average	**1,514**	**31**	**591**	**943**	**1,546**	**1,854**
2011 January	1,686	26	793	909	1,711	2,004
February	1,692	26	801	907	1,718	1,990
March	1,694	26	830	884	1,720	2,044
April	1,762	28	896	885	1,790	2,052
May	1,804	32	948	878	1,836	2,047
June	1,829	34	979	877	1,863	2,069
July	1,865	35	1,014	880	1,900	2,116
August	1,923	35	1,055	894	1,957	2,136
September	1,946	32	1,063	907	1,978	2,115
October	1,982	35	1,077	933	2,017	2,100
November	1,974	37	1,125	880	2,011	2,100
December	1,961	42	1,177	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
10-Month Average	**1,897**	**47**	**1,356**	**584**	**1,944**	**2,133**
2011 10-Month Average	**1,821**	**31**	**949**	**895**	**1,852**	**2,067**
2010 10-Month Average	**1,481**	**33**	**559**	**943**	**1,514**	**1,831**

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

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

[c] The number of rigs doing true workovers (where tubing is pulled from the well), or doing rod string and pump repair operations, and that are, on average, crewed and working every day of the month.

NA=Not available.

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

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

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

Table 5.2 Crude Oil and Natural Gas Exploratory and Development Wells

	Wells Drilled												Total Footage Drilled
	Exploratory				Development				Total				
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	
	Number												Thousand Feet
1973 Total	**642**	**1,067**	**5,952**	**7,661**	**9,525**	**5,866**	**4,368**	**19,759**	**10,167**	**6,933**	**10,320**	**27,420**	**138,223**
1975 Total	**982**	**1,248**	**7,129**	**9,359**	**15,966**	**6,879**	**6,517**	**29,362**	**16,948**	**8,127**	**13,646**	**38,721**	**180,494**
1980 Total	**1,777**	**2,099**	**9,081**	**12,957**	**31,182**	**15,362**	**11,704**	**58,248**	**32,959**	**17,461**	**20,785**	**71,205**	**316,943**
1985 Total	**1,680**	**1,200**	**8,954**	**11,834**	**33,581**	**13,124**	**12,257**	**58,962**	**35,261**	**14,324**	**21,211**	**70,796**	**314,409**
1990 Total	**778**	**811**	**3,652**	**5,241**	**12,061**	**10,435**	**4,593**	**27,089**	**12,839**	**11,246**	**8,245**	**32,330**	**156,044**
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**
1996 Total	**489**	**576**	**1,956**	**3,021**	**8,347**	**8,451**	**2,934**	**19,732**	**8,836**	**9,027**	**4,890**	**22,753**	**126,365**
1997 Total	**491**	**562**	**2,113**	**3,166**	**10,715**	**10,936**	**3,761**	**25,412**	**11,206**	**11,498**	**5,874**	**28,578**	**161,249**
1998 Total	**327**	**566**	**1,590**	**2,483**	**7,355**	**11,073**	**3,171**	**21,599**	**7,682**	**11,639**	**4,761**	**24,082**	**137,202**
1999 Total	**197**	**570**	**1,157**	**1,924**	**4,608**	**11,457**	**2,393**	**18,458**	**4,805**	**12,027**	**3,550**	**20,382**	**102,861**
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. • Prior to 1990, these well counts include only the original drilling of a hole intended to discover or further develop already discovered crude oil or natural gas resources. Other drilling activities, such as drilling an old well deeper, drilling of laterals from the original well, drilling of service and injection wells, and drilling for resources other than crude oil or natural gas are excluded. After 1990, a new well is defined as the first hole in the ground whether it is lateral or not. Due to the methodology used to estimate ultimate well counts from the available partially reported data, the counts shown on this page are frequently revised. See Note, "Crude Oil and Natural Gas Exploratory and Development Wells," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

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

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

2011 and 2012 data in this table have been removed while EIA evaluates the quality of the data and the estimation methodology.

Crude Oil and Natural Gas Resource Development

Note. Crude Oil and Natural Gas Exploratory and Development Wells. Three well types are considered in the *Monthly Energy Review* (*MER*) drilling statistics: "completed for crude oil," "completed for natural gas," and "dry hole." Wells that productively encounter both crude oil and natural gas are categorized as "completed for crude oil." Both development wells and exploratory wells (new field wildcats, new pool tests, and extension tests) are included in the statistics. All other classes of wells drilled in connection with the search for producible hydrocarbons are excluded. If a lateral is drilled at the same time as the original hole it is not counted separately, but its footage is included.

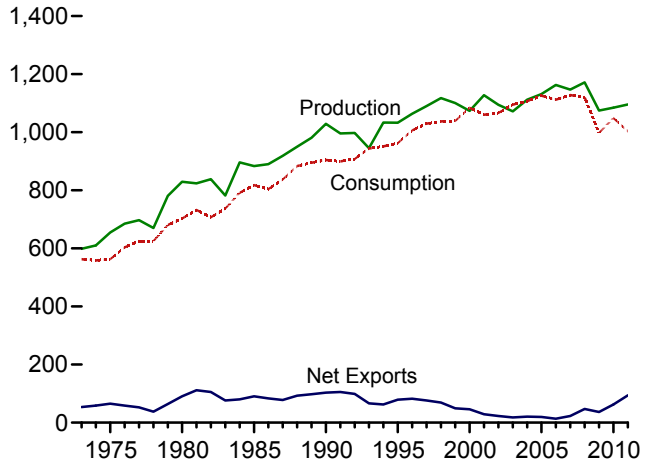
Prior to the March 1985 MER, drilling statistics consisted of completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported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

THIS PAGE INTENTIONALLY LEFT BLANK

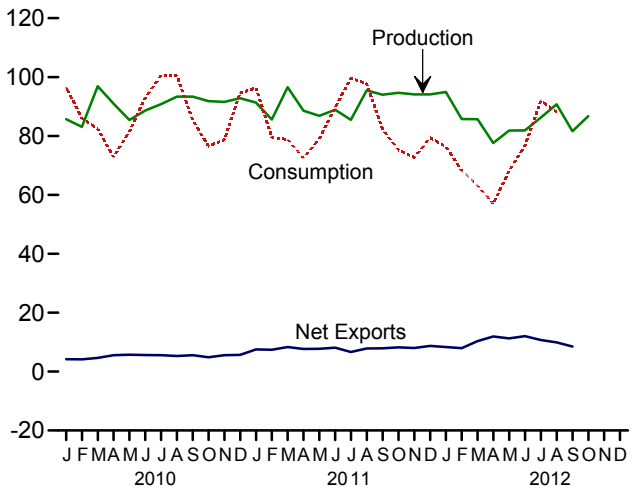
6. Coal

Figure 6.1 Coal
(Million Short Tons)

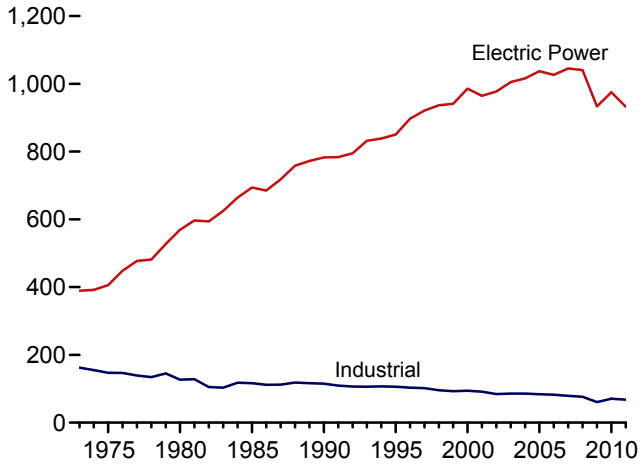
Overview, 1973-2011



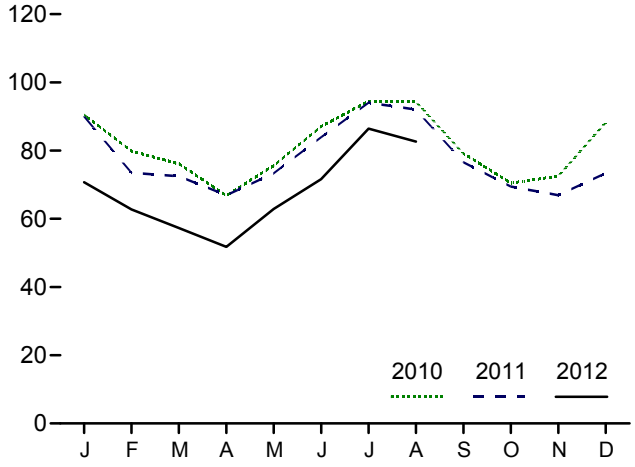
Overview, Monthly



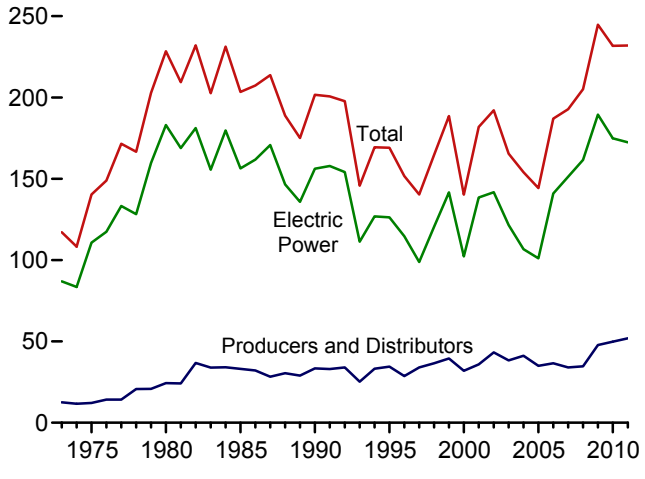
Consumption by Sector, 1973-2011



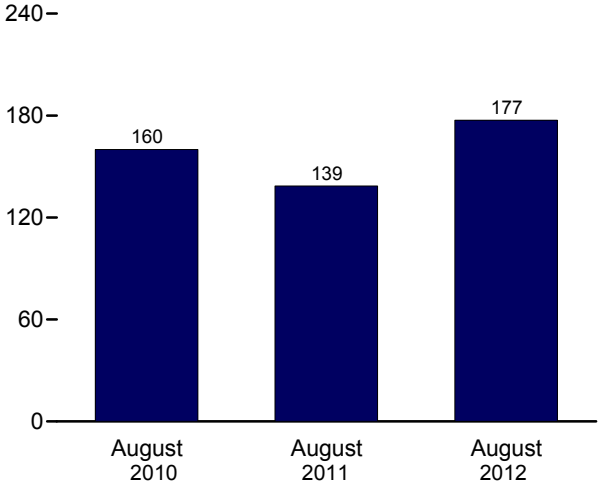
Electric Power Sector Consumption, Monthly



Stocks, End of Year, 1973-2011



Electric Power Sector Stocks, End of Month



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

Table 6.1 Coal Overview

(Thousand Short Tons)

	Production[a]	Waste Coal Supplied[b]	Trade			Stock Change[d,e]	Losses and Unaccounted for[f]	Consumption
			Imports	Exports	Net Imports[c]			
1973 Total	**598,568**	**NA**	**127**	**53,587**	**-53,460**	**402**	**-17,878**	**562,584**
1975 Total	**654,641**	**NA**	**940**	**66,309**	**-65,369**	**32,154**	**-5,522**	**562,640**
1980 Total	**829,700**	**NA**	**1,194**	**91,742**	**-90,548**	**25,595**	**10,827**	**702,730**
1985 Total	**883,638**	**NA**	**1,952**	**92,680**	**-90,727**	**-27,934**	**2,796**	**818,049**
1990 Total	**1,029,076**	**3,339**	**2,699**	**105,804**	**-103,104**	**26,542**	**-1,730**	**904,498**
1995 Total	**1,032,974**	**8,561**	**9,473**	**88,547**	**-79,074**	**-275**	**632**	**962,104**
1996 Total	**1,063,856**	**8,778**	**8,115**	**90,473**	**-82,357**	**-17,456**	**1,411**	**1,006,321**
1997 Total	**1,089,932**	**8,096**	**7,487**	**83,545**	**-76,058**	**-11,253**	**3,678**	**1,029,544**
1998 Total	**1,117,535**	**8,690**	**8,724**	**78,048**	**-69,324**	**24,228**	**-4,430**	**1,037,103**
1999 Total	**1,100,431**	**8,683**	**9,089**	**58,476**	**-49,387**	**23,988**	**-2,906**	**1,038,647**
2000 Total	**1,073,612**	**9,089**	**12,513**	**58,489**	**-45,976**	**-48,309**	**938**	**1,084,095**
2001 Total	**1,127,689**	**10,085**	**19,787**	**48,666**	**-28,879**	**41,630**	**7,120**	**1,060,146**
2002 Total	**1,094,283**	**9,052**	**16,875**	**39,601**	**-22,726**	**10,215**	**4,040**	**1,066,355**
2003 Total	**1,071,753**	**10,016**	**25,044**	**43,014**	**-17,970**	**-26,659**	**-4,403**	**1,094,861**
2004 Total	**1,112,099**	**11,299**	**27,280**	**47,998**	**-20,718**	**-11,462**	**6,887**	**1,107,255**
2005 Total	**1,131,498**	**13,352**	**30,460**	**49,942**	**-19,482**	**-9,702**	**9,092**	**1,125,978**
2006 Total	**1,162,750**	**14,409**	**36,246**	**49,647**	**-13,401**	**42,642**	**8,824**	**1,112,292**
2007 Total	**1,146,635**	**14,076**	**36,347**	**59,163**	**-22,816**	**5,812**	**4,085**	**1,127,998**
2008 Total	**1,171,809**	**14,146**	**34,208**	**81,519**	**-47,311**	**12,354**	**5,740**	**1,120,548**
2009 Total	**1,074,923**	**13,666**	**22,639**	**59,097**	**-36,458**	**39,668**	**14,985**	**997,478**
2010 January	85,711	1,187	1,665	5,866	-4,202	-10,695	-3,103	96,494
February	83,087	908	1,239	5,386	-4,146	-7,306	1,154	86,001
March	96,904	1,192	1,899	6,554	-4,655	8,127	2,870	82,444
April	90,960	1,071	1,812	7,358	-5,545	11,519	2,176	72,790
May	85,401	1,138	1,475	7,220	-5,745	2,723	-3,500	81,570
June	88,621	1,219	1,771	7,387	-5,616	-9,407	647	92,983
July	90,795	1,273	1,390	6,928	-5,539	-15,499	1,446	100,582
August	93,350	1,261	1,702	7,001	-5,299	-8,766	-2,316	100,393
September	93,360	1,102	1,588	7,145	-5,556	5,111	-1,591	85,386
October	91,831	982	1,775	6,623	-4,849	11,463	-90	76,591
November	91,558	1,121	1,473	7,015	-5,542	8,878	-437	78,697
December	92,791	1,197	1,563	7,232	-5,669	-9,187	2,925	94,582
Total	**1,084,368**	**13,651**	**19,353**	**81,716**	**-62,363**	**-13,039**	**182**	**1,048,514**
2011 January	91,355	R 1,182	1,014	8,509	-7,496	R -11,679	R 418	R 96,303
February	85,575	R 1,046	843	8,275	-7,432	R -3,306	R 2,917	R 79,577
March	96,548	R 1,126	1,524	9,832	-8,308	R 3,991	R 6,608	R 78,767
April	88,563	R 996	1,136	8,843	-7,706	R 8,966	R 390	R 72,497
May	86,850	R 910	1,313	9,042	-7,730	R 2,393	R -1,461	R 79,098
June	88,878	R 1,162	970	9,102	-8,132	R -9,803	R 2,060	R 89,652
July	85,498	R 1,202	1,208	7,865	-6,657	R -15,788	R -3,788	R 99,618
August	95,495	R 1,181	1,545	9,387	-7,843	R -10,739	R 1,809	R 97,762
September	94,013	R 1,117	835	8,723	-7,888	R 5,015	R -113	R 82,341
October	94,643	R 1,078	917	9,159	-8,242	R 13,552	R -1,334	R 75,261
November	94,109	R 1,133	807	8,808	-8,001	R 11,911	R 2,623	R 72,707
December	94,101	R 1,076	976	9,713	-8,737	R 5,698	R 1,377	R 79,365
Total	**1,095,628**	**R 13,209**	**13,088**	**107,259**	**-94,171**	**R 211**	**R 11,506**	**R 1,002,948**
2012 January	94,944	1,068	789	9,126	-8,337	R 2,835	R 8,471	R 76,368
February	85,763	891	534	8,460	-7,927	R 8,065	R 2,290	R 68,373
March	85,698	837	699	11,055	-10,356	R 9,722	R 3,389	R 63,068
April	77,624	725	623	12,529	-11,905	R 7,292	R 2,169	R 56,983
May	81,825	892	986	12,257	-11,271	R 496	R 2,790	R 68,160
June	81,911	854	719	12,749	-12,030	R -5,246	R -693	R 76,676
July	86,244	F 1,069	894	11,623	-10,729	R -14,888	R -400	R 91,872
August	90,768	RF 1,069	667	10,597	-9,930	R -7,206	R 899	R 88,213
September	81,605	NA	R 855	R 9,344	R -8,489	NA	NA	NA
October	86,744	NA	NA	NA	NA	NA	NA	NA
10-Month Total	**853,126**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
2011 10-Month Total	**907,418**	**11,000**	**11,305**	**88,738**	**-77,433**	**-17,399**	**7,506**	**850,877**
2010 10-Month Total	**900,019**	**11,333**	**16,316**	**67,469**	**-51,153**	**-12,730**	**-2,305**	**875,235**

[a] Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine and cleaned to reduce the concentration of noncombustible materials).

[b] Waste coal (including fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and industrial sectors. Beginning in 1989, waste coal supplied is counted as a supply-side item to balance the same amount of waste coal included in "Consumption."

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

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

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

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

R=Revised. NA=Not available. 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 include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

	End-Use Sectors											
		Commercial			Industrial							
						Other Industrial						
	Resi-dential	CHP[a]	Other[b]	Total	Coke Plants	CHP[c]	Non-CHP[d]	Total	Total	Trans-portation	Electric Power Sector[e,f]	Total
1973 Total	**4,113**	**([g])**	**7,004**	**7,004**	**94,101**	**([h])**	**68,038**	**68,038**	**162,139**	**116**	**389,212**	**562,584**
1975 Total	**2,823**	**([g])**	**6,587**	**6,587**	**83,598**	**([h])**	**63,646**	**63,646**	**147,244**	**24**	**405,962**	**562,640**
1980 Total	**1,355**	**([g])**	**5,097**	**5,097**	**66,657**	**([h])**	**60,347**	**60,347**	**127,004**	**([h])**	**569,274**	**702,730**
1985 Total	**1,711**	**([g])**	**6,068**	**6,068**	**41,056**	**([h])**	**75,372**	**75,372**	**116,429**	**([h])**	**693,841**	**818,049**
1990 Total	**1,345**	**1,191**	**4,189**	**5,379**	**38,877**	**27,781**	**48,549**	**76,330**	**115,207**	**([h])**	**782,567**	**904,498**
1995 Total	**755**	**1,419**	**3,633**	**5,052**	**33,011**	**29,363**	**43,693**	**73,055**	**106,067**	**([h])**	**850,230**	**962,104**
1996 Total	**721**	**1,660**	**3,625**	**5,285**	**31,706**	**29,434**	**42,254**	**71,689**	**103,395**	**([h])**	**896,921**	**1,006,321**
1997 Total	**711**	**1,738**	**4,015**	**5,752**	**30,203**	**29,853**	**41,661**	**71,515**	**101,718**	**([h])**	**921,364**	**1,029,544**
1998 Total	**534**	**1,443**	**2,879**	**4,322**	**28,189**	**28,553**	**38,887**	**67,439**	**95,628**	**([h])**	**936,619**	**1,037,103**
1999 Total	**585**	**1,490**	**2,803**	**4,293**	**28,108**	**27,763**	**36,975**	**64,738**	**92,846**	**([h])**	**940,922**	**1,038,647**
2000 Total	**454**	**1,547**	**2,126**	**3,673**	**28,939**	**28,031**	**37,177**	**65,208**	**94,147**	**([h])**	**985,821**	**1,084,095**
2001 Total	**481**	**1,448**	**2,441**	**3,888**	**26,075**	**25,755**	**39,514**	**65,268**	**91,344**	**([h])**	**964,433**	**1,060,146**
2002 Total	**533**	**1,405**	**2,506**	**3,912**	**23,656**	**26,232**	**34,515**	**60,747**	**84,403**	**([h])**	**977,507**	**1,066,355**
2003 Total	**551**	**1,816**	**1,869**	**3,685**	**24,248**	**24,846**	**36,415**	**61,261**	**85,509**	**([h])**	**1,005,116**	**1,094,861**
2004 Total	**512**	**1,917**	**2,693**	**4,610**	**23,670**	**26,613**	**35,582**	**62,195**	**85,865**	**([h])**	**1,016,268**	**1,107,255**
2005 Total	**378**	**1,922**	**2,420**	**4,342**	**23,434**	**25,875**	**34,465**	**60,340**	**83,774**	**([h])**	**1,037,485**	**1,125,978**
2006 Total	**290**	**1,886**	**1,050**	**2,936**	**22,957**	**25,262**	**34,210**	**59,472**	**82,429**	**([h])**	**1,026,636**	**1,112,292**
2007 Total	**353**	**1,927**	**1,247**	**3,173**	**22,715**	**22,537**	**34,078**	**56,615**	**79,331**	**([h])**	**1,045,141**	**1,127,998**
2008 Total	**351**	**2,021**	**1,134**	**3,155**	**22,070**	**21,902**	**32,491**	**54,393**	**76,463**	**([h])**	**1,040,580**	**1,120,548**
2009 Total	**353**	**1,798**	**1,059**	**2,857**	**15,326**	**19,766**	**25,549**	**45,314**	**60,641**	**([h])**	**933,627**	**997,478**
2010 January	43	193	156	349	1,472	2,094	2,084	4,178	5,650	([h])	90,452	96,494
February	37	167	136	303	1,584	1,978	2,215	4,193	5,777	([h])	79,884	86,001
March	33	149	121	271	1,801	2,124	2,106	4,230	6,030	([h])	76,110	82,444
April	21	117	54	171	1,786	2,220	1,749	3,969	5,755	([h])	66,842	72,790
May	21	118	55	173	1,794	2,010	1,975	3,985	5,779	([h])	75,597	81,570
June	24	135	62	197	1,772	1,898	2,061	3,959	5,732	([h])	87,030	92,983
July	24	142	48	190	1,783	2,122	1,944	4,066	5,849	([h])	94,519	100,582
August	25	152	52	203	1,814	2,194	1,909	4,103	5,917	([h])	94,247	100,393
September	22	133	45	178	1,894	1,941	2,174	4,115	6,010	([h])	79,176	85,386
October	26	121	86	207	1,731	1,958	2,178	4,136	5,866	([h])	70,492	76,591
November	27	128	90	218	1,787	1,854	2,297	4,151	5,938	([h])	72,514	78,697
December	35	165	116	281	1,874	2,246	1,957	4,203	6,077	([h])	88,189	94,582
Total	**339**	**1,720**	**1,022**	**2,742**	**21,092**	**24,638**	**24,650**	**49,289**	**70,381**	**([h])**	**975,052**	**1,048,514**
2011 January	40	R 189	R 136	R 324	1,746	R 2,082	R 2,090	4,172	5,917	([h])	R 90,021	R 96,303
February	37	R 173	R 124	298	1,623	R 1,800	R 2,345	4,145	5,769	([h])	R 73,474	R 79,577
March	35	R 164	R 118	R 283	1,819	R 1,891	R 2,281	4,173	5,991	([h])	R 72,458	R 78,767
April	23	124	R 63	R 187	1,668	R 1,787	R 1,902	3,689	5,357	([h])	R 66,930	R 72,497
May	R 23	R 124	R 64	R 188	1,878	R 1,836	R 1,836	3,672	5,550	([h])	R 73,338	R 79,098
June	R 24	R 130	R 67	R 197	1,846	R 1,843	R 1,833	3,676	5,522	([h])	R 83,908	R 89,652
July	21	R 145	R 27	R 172	1,670	R 1,946	R 1,772	3,718	5,388	([h])	R 94,037	R 99,618
August	19	R 129	R 24	R 153	1,863	R 1,962	R 1,753	3,715	5,578	([h])	R 92,012	R 97,762
September	R 18	R 122	R 23	R 145	1,874	R 1,788	R 1,947	3,735	5,609	([h])	R 76,569	R 82,341
October	R 20	R 110	R 52	R 162	1,784	R 1,748	R 2,088	3,836	5,621	([h])	R 69,458	R 75,261
November	R 21	R 117	R 55	R 173	1,772	R 1,712	R 2,110	3,822	5,594	([h])	R 66,919	R 72,707
December	R 25	R 139	R 65	R 204	1,891	R 1,923	R 1,962	3,885	5,776	([h])	R 73,359	R 79,365
Total	**307**	**R 1,668**	**R 818**	**2,485**	**21,434**	**R 22,319**	**R 23,919**	**46,238**	**67,671**	**([h])**	**R 932,484**	**R 1,002,948**
2012 January	28	R 162	R 62	224	1,701	R 1,913	R 1,783	3,696	5,397	([h])	R 70,720	R 76,368
February	25	R 141	R 57	199	1,687	R 1,708	R 2,000	3,708	5,395	([h])	R 62,755	R 68,373
March	23	R 135	R 55	190	1,895	R 1,707	R 1,952	3,659	5,554	([h])	R 57,300	R 63,068
April	15	R 115	R 6	121	1,765	R 1,542	R 1,789	3,331	5,096	([h])	R 51,751	R 56,983
May	16	R 121	R 6	127	1,839	R 1,689	R 1,621	3,310	5,149	([h])	R 62,868	R 68,160
June	15	R 114	R 6	120	1,641	R 1,634	R 1,671	3,305	4,946	([h])	R 71,595	R 76,676
July	F 22	R 118	RF 61	F 180	F 1,793	R 1,773	RF 1,676	F 3,449	F 5,242	([h])	R 86,429	R 91,872
August	F 25	126	F 73	F 199	F 1,764	1,827	F 1,754	F 3,582	F 5,346	([h])	82,643	88,213
8-Month Total	**E 168**	**1,032**	**E 327**	**E 1,359**	**E 14,085**	**13,792**	**E 14,247**	**E 28,039**	**E 42,124**	**([h])**	**546,062**	**589,712**
2011 8-Month Total	**223**	**1,179**	**623**	**1,802**	**14,112**	**15,147**	**15,812**	**30,959**	**45,071**	**([h])**	**646,179**	**693,275**
2010 8-Month Total	**230**	**1,173**	**685**	**1,858**	**13,806**	**16,640**	**16,044**	**32,684**	**46,490**	**([h])**	**664,681**	**713,258**

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

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

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

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

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

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

[g] Included in "Commercial Other."

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

R=Revised. 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 include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

	Producers and Distributors	End-Use Sectors					Electric Power Sector[b,c]	Total
		Residential and Commercial	Industrial			Total		
			Coke Plants	Other[a]	Total			
1973 Year	**12,530**	**290**	**6,998**	**10,370**	**17,368**	**17,658**	**86,967**	**117,155**
1975 Year	**12,108**	**233**	**8,797**	**8,529**	**17,326**	**17,559**	**110,724**	**140,391**
1980 Year	**24,379**	**NA**	**9,067**	**11,951**	**21,018**	**21,018**	**183,010**	**228,407**
1985 Year	**33,133**	**NA**	**3,420**	**10,438**	**13,857**	**13,857**	**156,376**	**203,367**
1990 Year	**33,418**	**NA**	**3,329**	**8,716**	**12,044**	**12,044**	**156,166**	**201,629**
1995 Year	**34,444**	**NA**	**2,632**	**5,702**	**8,334**	**8,334**	**126,304**	**169,083**
1996 Year	**28,648**	**NA**	**2,667**	**5,688**	**8,355**	**8,355**	**114,623**	**151,627**
1997 Year	**33,973**	**NA**	**1,978**	**5,597**	**7,576**	**7,576**	**98,826**	**140,374**
1998 Year	**36,530**	**NA**	**2,026**	**5,545**	**7,571**	**7,571**	**120,501**	**164,602**
1999 Year	**39,475**	**NA**	**1,943**	**5,569**	**7,511**	**7,511**	[c] **141,604**	**188,590**
2000 Year	**31,905**	**NA**	**1,494**	**4,587**	**6,081**	**6,081**	**102,296**	**140,282**
2001 Year	**35,900**	**NA**	**1,510**	**6,006**	**7,516**	**7,516**	**138,496**	**181,912**
2002 Year	**43,257**	**NA**	**1,364**	**5,792**	**7,156**	**7,156**	**141,714**	**192,127**
2003 Year	**38,277**	**NA**	**905**	**4,718**	**5,623**	**5,623**	**121,567**	**165,468**
2004 Year	**41,151**	**NA**	**1,344**	**4,842**	**6,186**	**6,186**	**106,669**	**154,006**
2005 Year	**34,971**	**NA**	**2,615**	**5,582**	**8,196**	**8,196**	**101,137**	**144,304**
2006 Year	**36,548**	**NA**	**2,928**	**6,506**	**9,434**	**9,434**	**140,964**	**186,946**
2007 Year	**33,977**	**NA**	**1,936**	**5,624**	**7,560**	**7,560**	**151,221**	**192,758**
2008 Year	**34,688**	**498**	**2,331**	**6,007**	**8,338**	**8,836**	**161,589**	**205,112**
2009 Year	**47,718**	**529**	**1,957**	**5,109**	**7,066**	**7,595**	**189,467**	**244,780**
2010 January	48,854	510	1,832	4,798	6,630	7,140	178,091	234,085
February	49,069	490	1,708	4,486	6,194	6,684	171,026	226,779
March	50,936	471	1,583	4,175	5,758	6,229	177,742	234,906
April	50,761	482	1,715	4,207	5,922	6,404	189,260	246,425
May	50,900	494	1,846	4,239	6,086	6,579	191,669	249,148
June	51,497	505	1,978	4,272	6,250	6,755	181,490	239,741
July	47,935	509	1,948	4,345	6,294	6,803	169,504	224,242
August	48,638	513	1,918	4,419	6,337	6,851	159,987	215,476
September	49,913	517	1,889	4,492	6,381	6,899	163,776	220,587
October	49,430	529	1,901	4,503	6,404	6,933	175,686	232,050
November	50,571	541	1,913	4,514	6,428	6,968	183,389	240,928
December	**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	[R] 164,575	[R] 220,061
February	49,140	520	1,948	4,084	6,032	6,552	[R] 161,064	[R] 216,755
March	48,165	503	1,959	3,864	5,823	6,326	[R] 166,255	[R] 220,746
April	49,852	505	1,958	3,969	5,927	6,433	[R] 173,427	[R] 229,712
May	51,473	508	1,957	4,075	6,032	6,539	[R] 174,093	[R] 232,105
June	50,507	510	1,956	4,181	6,136	6,646	[R] 165,149	[R] 222,302
July	52,420	513	2,082	4,203	6,285	6,798	[R] 147,296	[R] 206,514
August	50,287	515	2,221	4,225	6,446	6,961	[R] 138,527	[R] 195,775
September	49,909	518	2,405	4,247	6,652	7,170	[R] 143,711	[R] 200,790
October	50,810	546	2,473	4,316	6,790	7,336	[R] 156,196	[R] 214,342
November	50,997	575	2,541	4,386	6,927	7,502	[R] 167,754	[R] 226,253
December	**51,897**	**603**	**2,610**	**4,455**	**7,065**	**7,668**	[R] **172,387**	[R] **231,951**
2012 January	[F] 48,424	587	2,507	4,238	6,745	7,332	[R] 179,030	[R] 234,787
February	[F] 49,954	572	2,403	4,021	6,425	6,997	[R] 185,901	[R] 242,852
March	[F] 51,458	557	2,300	3,804	6,105	6,661	[R] 194,455	[R] 252,574
April	[F] 51,705	566	2,316	3,911	6,227	6,793	[R] 201,368	[R] 259,866
May	[F] 51,253	575	2,331	4,018	6,349	6,925	[R] 202,184	[R] 260,362
June	[F] 51,007	585	2,347	4,125	6,472	7,057	[R] 197,052	[R] 255,115
July	[F] 49,859	[F] 586	[F] 2,308	[F] 4,356	[F] 6,664	[F] 7,250	[R] 183,119	[R] 240,227
August	[F] 48,343	[F] 586	[F] 2,269	[F] 4,578	[F] 6,847	[F] 7,433	177,246	233,021

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

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

[c] Through 1998, data are for stocks at electric utilities only. Beginning in 1999, data also include stocks at independent power producers.

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

Notes: • Stocks are at end of period. • Electric power sector monthly values are from Table 7.5; producers and distributors monthly values are estimates derived from collected annual data; all other monthly values are estimates derived from collected quarterly values. • Data include refined coal. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Coal

Note 1. Coal Production. Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the U.S. Energy Information Administration (EIA) and published in the *Weekly Coal Production* report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly estimates are based on Association of American Railroads (AAR) data showing the number of railcars loaded with coal during the week by Class I and certain other railroads.

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

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

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

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

Residential and Commercial—Coal consumption by the residential and commercial sectors is reported to EIA for the two sectors combined; EIA estimates the amount consumed by the sectors individually. To create the estimates, it is first assumed that an occupied coal-heated housing unit consumes fuel at the same Btu rate as an oil-heated housing unit. Then, for the years in which data are available on the number of occupied housing units by heating source (1973–1981 and subsequent odd-numbered years), residential consumption of coal is estimated by the following steps: a ratio is created of the number of occupied housing units heated by coal to the number of occupied housing units heated by oil; that ratio is then multiplied by the Btu quantity of oil consumed by the residential sector to derive an estimate of the Btu quantity of coal consumed by the residential sector; and, finally, the amount estimated as the residential sector consumption is subtracted from the residential and commercial sectors' combined consumption to derive the commercial sector's estimated consumption. The 2007 share is applied to 2008 forward, and the other missing years' shares are interpolated.

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

Industrial Other—Prior to 1978, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. For 1980–1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Beginning in January 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the

Federal Reserve System. Indices for six major industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 311; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; non-metallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights. Prior to 2008, quarterly consumption data for the other industrial sector were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts are the greater of either reported receipts from manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, and construction consumption data were included where appropriate. Beginning in 2008, quarterly consumption totals for other industrial coal include data for manufacturing and mining only. Over time, surveyed coal consumption data for agriculture, forestry, fishing, and construction dwindled to about 20,000 to 30,000 tons annually. Therefore, in 2008, EIA consolidated its programs by eliminating agriculture, forestry, fishing, and construction as surveyed sectors.

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

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

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

Residential and Commercial—Prior to 1980, stock estimates for the residential and commercial sector were taken directly from reported data. For 1980–2007, stock estimates were not collected. Beginning in 2008, quarterly stocks data are collected on Form EIA-3 (data for "Commercial and Institutional Coal Users").

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

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

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

Note 4. Coal Forecast Values. Data values preceded by "F" in this section are forecast values. They are derived from EIA Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

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

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

Table 6.1 Sources

Production
1973–September 1977: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977 forward: U.S. Energy Information Administration (EIA), *Weekly Coal Production*.

Waste Coal Supplied
1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."
2001–2003: EIA, Form EIA-906, "Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and

Quality Report—Manufacturing Plants."
2004–2007: EIA, Form EIA-906, "Power Plant Report," Form EIA-920, "Combined Heat and Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."
2008 forward: EIA, Form EIA-923, "Power Plant Operations Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users"; and, for forecast values, EIA, Short-Term Integrated Forecasting System.

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

Stock Change
Calculated from data in Table 6.3. (The 1973 stock change value is calculated using the 1972 total stocks value of 116,753 thousand short tons from EIA, *Annual Energy Review*, Table 7.6. The 1972 stocks value excludes stocks at producers and distributors.)

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

Consumption
Table 6.2.

Table 6.2 Sources

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

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
1980–1997: EIA, Form EIA-6, "Coal Distribution Report," quarterly.
1998–2007: DOI, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users" (data for "Commercial and Institutional Coal Users"); and, for forecast values, EIA, Short-Term Integrated Forecasting System (STIFS).

Commercial CHP
Table 7.4c.

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

Industrial Coke Plants
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual Supplement."
1981–1984: EIA, Form EIA-5/5A, "Coke Plant Report—Quarterly/Annual Supplement."
1985 forward: EIA, Form EIA–5, "Coke Plant Report—Quarterly"; and, for forecast values, EIA, STIFS.

Other Industrial Total
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."
1980–1997: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.
1998–2007: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," Form EIA-6A, "Coal Distribution Report," annual, and Form EIA-7A, "Coal Production Report," annual.
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users," and Form EIA-7A, "Coal Production Report," annual; and, for forecast values, EIA, STIFS.

Other Industrial CHP
Table 7.4c.

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

Transportation
1973–1976: DOI, BOM, *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
October–December 1977: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

Electric Power
Table 7.4b.

Table 6.3 Sources

Producers and Distributors
1973–1979: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), Form 6-1419Q, "Distribution of Bituminous Coal and Lignite Shipments."
1980–1997: U.S. Energy Information Administration

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

Residential and Commercial
1973–1976: DOI, BOM, *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users" (data for "Commercial and Institutional Coal Users"); and, for forecast values, EIA, STIFS**.**

Industrial Coke Plants
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual."
1981–1984: EIA, Form EIA 5/5A, "Coke Plant Report—Quarterly/Annual Supplement."
1985 forward: EIA, Form EIA-5, "Coke Plant Report—Quarterly"; and, for forecast values, EIA, STIFS.

Industrial Other
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."
1998–2007: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants."
2008 forward: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users"; and, for forecast values, EIA, STIFS.

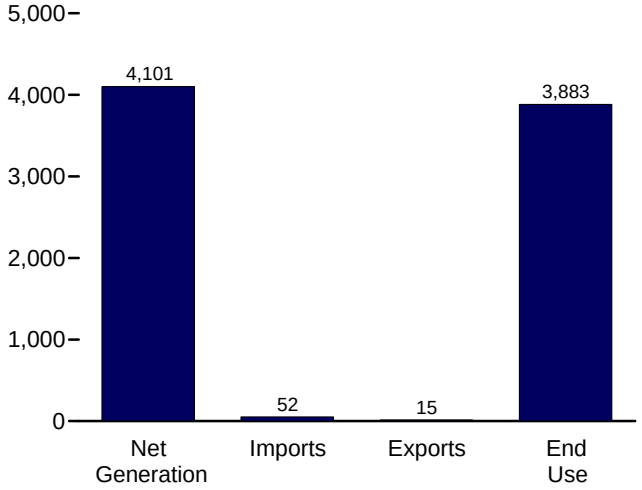
Electric Power
Table 7.5.

THIS PAGE INTENTIONALLY LEFT BLANK

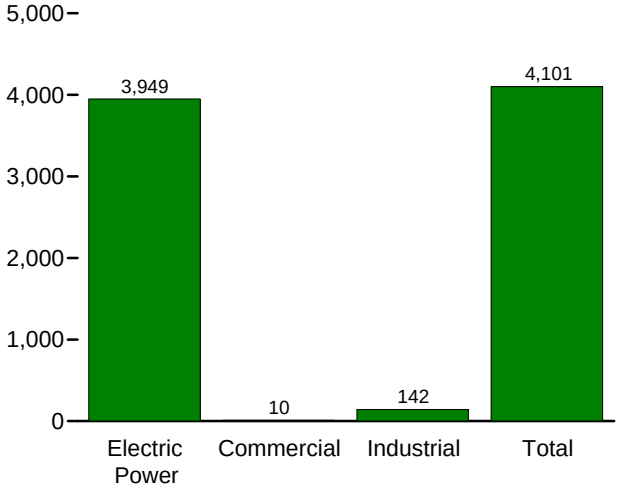
7. Electricity

Figure 7.1 Electricity Overview
(Billion Kilowatthours)

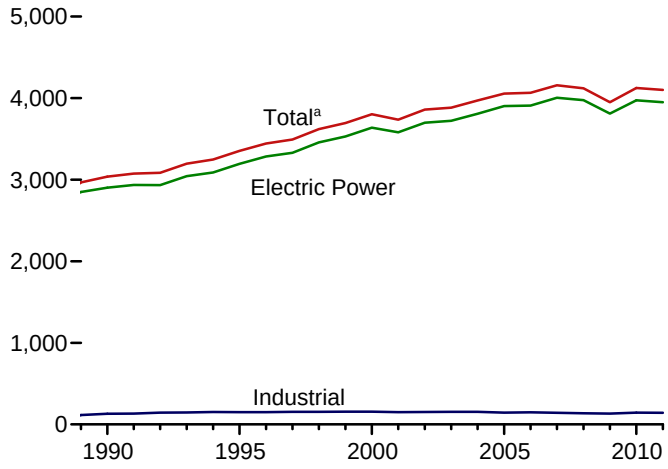
Overview, 2011



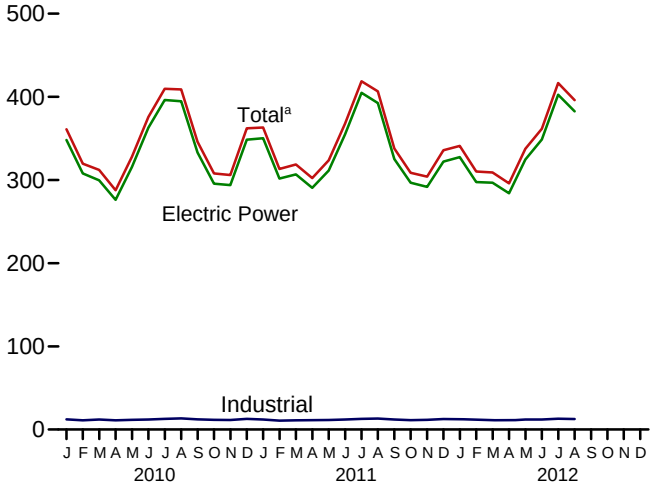
Net Generation, 2011



Net Generation by Sector, 1989-2011

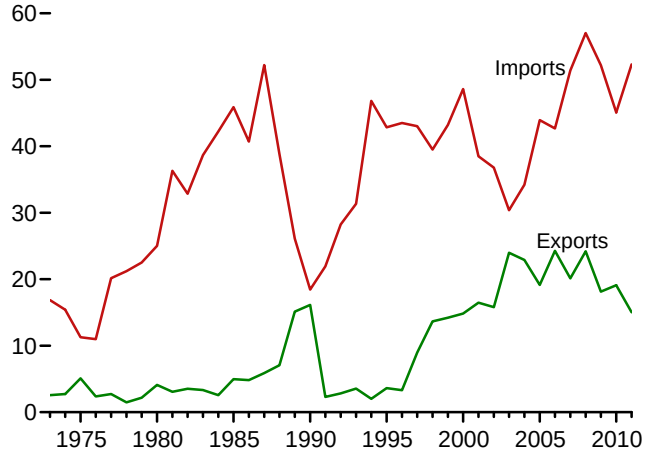


Net Generation by Sector, Monthly



End Use, 2011

Trade, 1973-2011



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

Table 7.1 Electricity Overview

(Billion Kilowatthours)

	Net Generation				Trade			T&D Losses[e] and Unaccounted for[f]	End Use		
	Electric Power Sector[a]	Commercial Sector[b]	Industrial Sector[c]	Total	Imports[d]	Exports[d]	Net Imports[d]		Retail Sales[g]	Direct Use[h]	Total
1973 Total	**1,861**	**NA**	**3**	**1,864**	**17**	**3**	**14**	**165**	**1,713**	**NA**	**1,713**
1975 Total	**1,918**	**NA**	**3**	**1,921**	**11**	**5**	**6**	**180**	**1,747**	**NA**	**1,747**
1980 Total	**2,286**	**NA**	**3**	**2,290**	**25**	**4**	**21**	**216**	**2,094**	**NA**	**2,094**
1985 Total	**2,470**	**NA**	**3**	**2,473**	**46**	**5**	**41**	**190**	**2,324**	**NA**	**2,324**
1990 Total	**2,901**	**6**	**131**	**3,038**	**18**	**16**	**2**	**203**	**2,713**	**125**	**2,837**
1995 Total	**3,194**	**8**	**151**	**3,353**	**43**	**4**	**39**	**229**	**3,013**	**151**	**3,164**
1996 Total	**3,284**	**9**	**151**	**3,444**	**43**	**3**	**40**	**231**	**3,101**	**153**	**3,254**
1997 Total	**3,329**	**9**	**154**	**3,492**	**43**	**9**	**34**	**224**	**3,146**	**156**	**3,302**
1998 Total	**3,457**	**9**	**154**	**3,620**	**40**	**14**	**26**	**221**	**3,264**	**161**	**3,425**
1999 Total	**3,530**	**9**	**156**	**3,695**	**43**	**14**	**29**	**240**	**3,312**	**172**	**3,484**
2000 Total	**3,638**	**8**	**157**	**3,802**	**49**	**15**	**34**	**244**	**3,421**	**171**	**3,592**
2001 Total	**3,580**	**7**	**149**	**3,737**	**39**	**16**	**22**	**202**	**3,394**	**163**	**3,557**
2002 Total	**3,698**	**7**	**153**	**3,858**	**37**	**16**	**21**	**248**	**3,465**	**166**	**3,632**
2003 Total	**3,721**	**7**	**155**	**3,883**	**30**	**24**	**6**	**228**	**3,494**	**168**	**3,662**
2004 Total	**3,808**	**8**	**154**	**3,971**	**34**	**23**	**11**	**266**	**3,547**	**168**	**3,716**
2005 Total	**3,902**	**8**	**145**	**4,055**	**44**	**19**	**25**	**269**	**3,661**	**150**	**3,811**
2006 Total	**3,908**	**8**	**148**	**4,065**	**43**	**24**	**18**	**266**	**3,670**	**147**	**3,817**
2007 Total	**4,005**	**8**	**143**	**4,157**	**51**	**20**	**31**	**298**	**3,765**	**126**	**3,890**
2008 Total	**3,974**	**8**	**137**	**4,119**	**57**	**24**	**33**	**287**	**3,733**	**132**	**3,865**
2009 Total	**3,810**	**8**	**132**	**3,950**	**52**	**18**	**34**	**261**	**3,597**	**127**	**3,724**
2010 January	348	1	12	361	5	1	4	22	332	E 11	343
February	308	1	11	320	4	1	3	15	298	E 10	309
March	300	1	12	312	4	1	3	12	293	E 11	303
April	276	1	11	288	4	1	3	13	267	E 10	277
May	316	1	12	328	3	2	1	35	284	E 11	294
June	363	1	12	376	4	2	2	36	331	E 11	342
July	396	1	13	410	4	1	3	32	369	E 12	381
August	395	1	13	409	4	2	2	27	372	E 12	384
September	333	1	12	346	3	2	1	8	328	E 11	339
October	296	1	12	308	3	2	(s)	10	288	E 11	298
November	294	1	11	306	3	2	1	21	275	E 11	285
December	349	1	13	362	4	1	3	34	319	E 12	331
Total	**3,972**	**9**	**144**	**4,125**	**45**	**19**	**26**	**265**	**3,754**	**132**	**3,886**
2011 January	R 350	1	12	R 363	4	2	3	R 20	R 334	E 11	R 345
February	302	1	11	313	4	2	2	R 9	R 297	E 10	R 307
March	307	1	11	319	4	2	2	R 19	R 292	RE 10	R 302
April	291	1	11	R 302	4	2	2	R 19	R 275	E 10	R 286
May	R 311	1	R 11	R 324	5	1	4	R 29	R 288	E 11	R 299
June	R 355	1	12	368	4	1	3	R 31	R 329	E 11	R 340
July	R 405	1	13	419	6	1	5	R 41	R 371	E 12	R 383
August	R 392	1	13	R 407	6	1	5	R 26	R 373	E 12	R 385
September	325	1	12	338	4	1	3	R 4	R 326	E 11	R 337
October	297	1	11	309	4	1	3	R 13	R 288	RE 11	R 299
November	292	1	12	304	3	1	2	R 20	R 275	E 11	R 286
December	R 322	1	13	336	4	1	3	R 25	R 302	E 12	R 314
Total	**R 3,949**	**R 10**	**142**	**R 4,101**	**52**	**15**	**37**	**R 255**	**R 3,750**	**R 133**	**R 3,883**
2012 January	R 328	1	R 12	341	4	1	3	22	311	E 12	R 323
February	298	1	12	310	4	1	3	16	286	E 11	297
March	297	1	R 11	R 309	4	1	3	R 19	R 283	E 11	293
April	R 284	1	11	296	5	1	4	R 19	270	E 10	R 281
May	325	1	12	338	5	1	4	35	R 295	E 11	307
June	349	1	12	362	5	1	4	30	R 324	E 11	336
July	R 403	1	13	R 417	7	1	6	40	370	E 12	382
August	383	1	13	396	6	1	5	26	364	E 12	376
8-Month Total	**2,664**	**7**	**96**	**2,768**	**41**	**8**	**32**	**206**	**2,504**	**E 90**	**2,594**
2011 8-Month Total	**2,713**	**7**	**94**	**2,814**	**37**	**11**	**26**	**193**	**2,558**	**E 88**	**2,647**
2010 8-Month Total	**2,701**	**6**	**96**	**2,803**	**33**	**11**	**22**	**192**	**2,545**	**E 88**	**2,633**

[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.

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

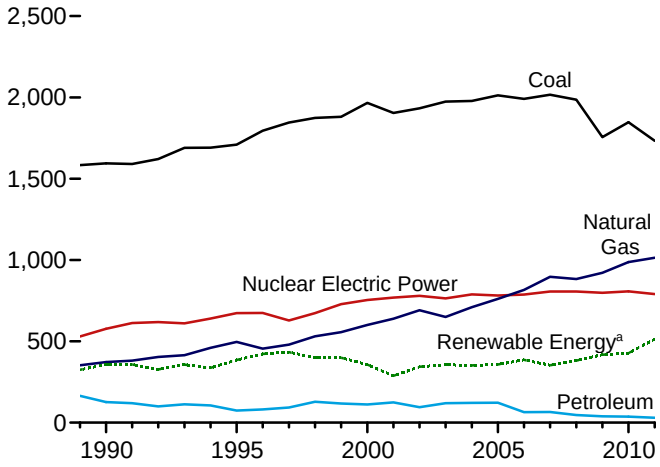
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

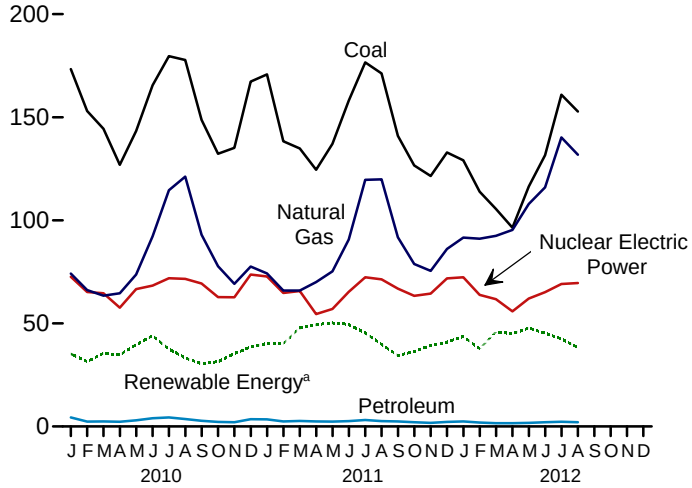
Sources: See end of section.

Figure 7.2 Electricity Net Generation
(Billion Kilowatthours)

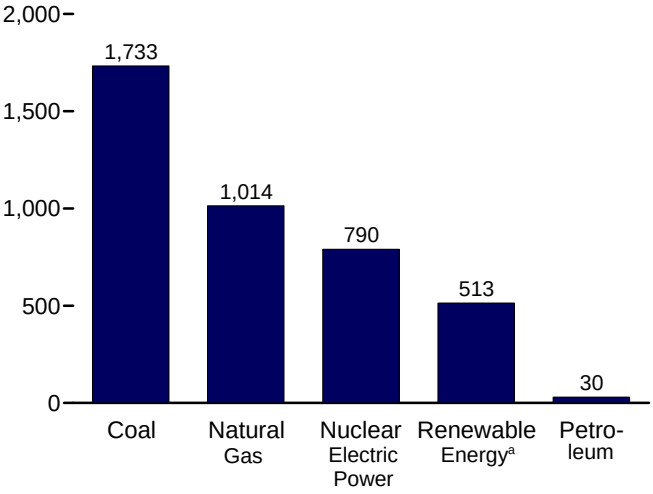
Total (All Sectors), Major Sources, 1989-2011



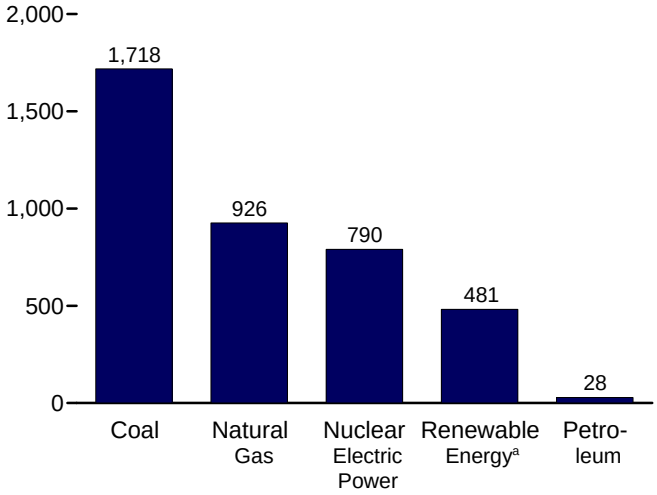
Total (All Sectors), Major Sources, Monthly



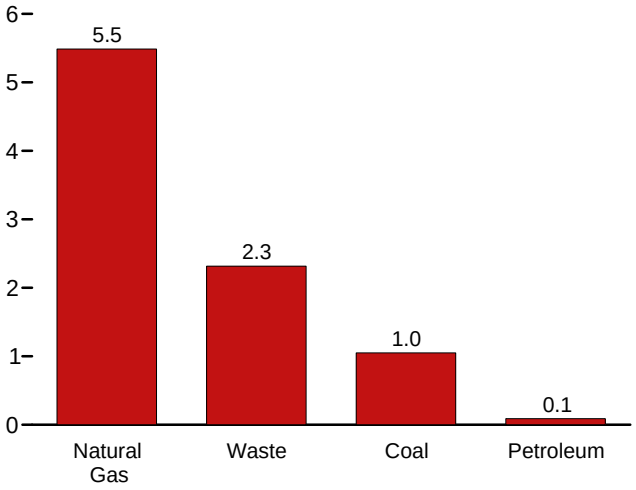
Total (All Sectors), Major Sources, 2011



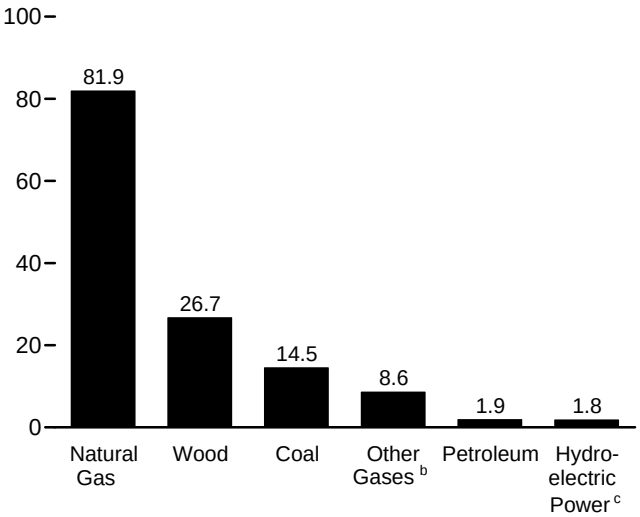
Electric Power Sector, Major Sources, 2011



Commercial Sector, Major Sources, 2011



Industrial Sector, Major Sources, 2011



[a] Conventional hydroelectric power, wood, waste, geothermal, solar/PV, and wind.
[b] Blast furnace gas, 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						Renewable Energy						
								Biomass					
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Gases[d]	Nuclear Electric Power	Hydroelectric Pumped Storage[e]	Conventional Hydroelectric Power[f]	Wood[g]	Waste[h]	Geothermal	Solar/PV[i]	Wind	Total[j]
1973 Total	**847,651**	**314,343**	**340,858**	**NA**	**83,479**	**(f)**	**275,431**	**130**	**198**	**1,966**	**NA**	**NA**	**1,864,057**
1975 Total	**852,786**	**289,095**	**299,778**	**NA**	**172,505**	**(f)**	**303,153**	**18**	**174**	**3,246**	**NA**	**NA**	**1,920,755**
1980 Total	**1,161,562**	**245,994**	**346,240**	**NA**	**251,116**	**(f)**	**279,182**	**275**	**158**	**5,073**	**NA**	**NA**	**2,289,600**
1985 Total	**1,402,128**	**100,202**	**291,946**	**NA**	**383,691**	**(f)**	**284,311**	**743**	**640**	**9,325**	**11**	**6**	**2,473,002**
1990 Total[k]	**1,594,011**	**126,460**	**372,765**	**10,383**	**576,862**	**-3,508**	**292,866**	**32,522**	**13,260**	**15,434**	**367**	**2,789**	**3,037,827**
1995 Total	**1,709,426**	**74,554**	**496,058**	**13,870**	**673,402**	**-2,725**	**310,833**	**36,521**	**20,405**	**13,378**	**497**	**3,164**	**3,353,487**
1996 Total	**1,795,196**	**81,411**	**455,056**	**14,356**	**674,729**	**-3,088**	**347,162**	**36,800**	**20,911**	**14,329**	**521**	**3,234**	**3,444,188**
1997 Total	**1,845,016**	**92,555**	**479,399**	**13,351**	**628,644**	**-4,040**	**356,453**	**36,948**	**21,709**	**14,726**	**511**	**3,288**	**3,492,172**
1998 Total	**1,873,516**	**128,800**	**531,257**	**13,492**	**673,702**	**-4,467**	**323,336**	**36,338**	**22,448**	**14,774**	**502**	**3,026**	**3,620,295**
1999 Total	**1,881,087**	**118,061**	**556,396**	**14,126**	**728,254**	**-6,097**	**319,536**	**37,041**	**22,572**	**14,827**	**495**	**4,488**	**3,694,810**
2000 Total	**1,966,265**	**111,221**	**601,038**	**13,955**	**753,893**	**-5,539**	**275,573**	**37,595**	**23,131**	**14,093**	**493**	**5,593**	**3,802,105**
2001 Total	**1,903,956**	**124,880**	**639,129**	**9,039**	**768,826**	**-8,823**	**216,961**	**35,200**	**14,548**	**13,741**	**543**	**6,737**	**3,736,644**
2002 Total	**1,933,130**	**94,567**	**691,006**	**11,463**	**780,064**	**-8,743**	**264,329**	**38,665**	**15,044**	**14,491**	**555**	**10,354**	**3,858,452**
2003 Total	**1,973,737**	**119,406**	**649,908**	**15,600**	**763,733**	**-8,535**	**275,806**	**37,529**	**15,812**	**14,424**	**534**	**11,187**	**3,883,185**
2004 Total	**1,978,301**	**121,145**	**710,100**	**15,252**	**788,528**	**-8,488**	**268,417**	**38,117**	**15,421**	**14,811**	**575**	**14,144**	**3,970,555**
2005 Total	**2,012,873**	**122,225**	**760,960**	**13,464**	**781,986**	**-6,558**	**270,321**	**38,856**	**15,420**	**14,692**	**550**	**17,811**	**4,055,423**
2006 Total	**1,990,511**	**64,166**	**816,441**	**14,177**	**787,219**	**-6,558**	**289,246**	**38,762**	**16,099**	**14,568**	**508**	**26,589**	**4,064,702**
2007 Total	**2,016,456**	**65,739**	**896,590**	**13,453**	**806,425**	**-6,896**	**247,510**	**39,014**	**16,525**	**14,637**	**612**	**34,450**	**4,156,745**
2008 Total	**1,985,801**	**46,243**	**882,981**	**11,707**	**806,208**	**-6,288**	**254,831**	**37,300**	**17,734**	**14,840**	**864**	**55,363**	**4,119,388**
2009 Total	**1,755,904**	**38,937**	**920,979**	**10,632**	**798,855**	**-4,627**	**273,445**	**36,050**	**18,443**	**15,009**	**891**	**73,886**	**3,950,331**
2010 January	173,320	4,348	74,173	909	72,569	-565	22,383	3,126	1,503	1,312	10	6,854	360,957
February	153,044	2,373	66,198	825	65,245	-351	20,590	2,895	1,382	1,159	33	5,432	319,735
March	144,406	2,470	63,431	1,010	64,635	-325	20,886	3,090	1,592	1,307	76	8,589	312,168
April	126,952	2,286	64,644	943	57,611	-335	19,097	2,932	1,558	1,240	112	9,764	287,800
May	143,272	2,994	73,665	1,017	66,658	-441	25,079	2,893	1,577	1,311	153	8,698	327,936
June	165,491	3,989	92,268	964	68,301	-472	29,854	3,094	1,627	1,264	176	8,049	375,759
July	179,600	4,411	114,624	963	71,913	-557	24,517	3,308	1,640	1,274	161	6,724	409,725
August	177,745	3,575	121,151	1,061	71,574	-600	20,119	3,319	1,642	1,297	156	6,686	408,884
September	148,746	2,783	93,004	954	69,371	-421	17,265	3,157	1,575	1,253	138	7,106	346,045
October	132,270	2,228	77,738	808	62,751	-438	17,683	3,003	1,547	1,222	75	7,944	307,921
November	135,185	2,079	69,227	907	62,655	-467	19,562	3,080	1,625	1,252	77	9,748	306,010
December	167,258	3,523	77,573	952	73,683	-530	23,169	3,275	1,650	1,330	44	9,059	362,119
Total	**1,847,290**	**37,061**	**987,697**	**11,313**	**806,968**	**-5,501**	**260,203**	**37,172**	**18,917**	**15,219**	**1,212**	**94,652**	**4,125,060**
2011 January	R 170,803	R 3,457	R 74,254	R 930	72,743	-426	R 25,531	R 3,290	R 1,515	R 1,351	R 40	R 8,550	R 363,105
February	R 138,311	R 2,434	R 65,924	R 807	64,789	-247	R 24,131	R 2,937	R 1,427	R 1,219	R 85	R 10,452	R 313,293
March	R 134,845	R 2,692	R 65,947	R 945	65,662	R -349	R 31,134	R 3,081	R 1,565	R 1,342	R 122	R 10,545	R 318,710
April	R 124,488	R 2,424	R 70,029	R 918	54,547	R -466	R 31,194	R 2,798	R 1,503	R 1,243	R 164	R 12,422	R 302,400
May	R 137,102	R 2,378	R 75,243	R 875	R 57,013	R -418	R 32,587	R 2,794	R 1,563	R 1,322	R 191	R 11,772	R 323,627
June	R 158,055	R 2,594	R 90,691	R 1,013	65,270	R -567	R 32,151	R 3,230	R 1,632	R 1,218	R 223	R 10,985	R 367,727
July	R 176,586	R 3,154	R 119,624	R 1,098	72,345	R -708	R 31,285	R 3,362	R 1,690	R 1,273	R 191	R 7,489	R 418,693
August	R 171,281	R 2,594	R 119,856	R 1,087	71,339	-663	R 25,764	R 3,384	R 1,692	R 1,279	R 229	R 7,474	R 406,541
September	R 140,941	R 2,424	R 91,739	R 1,004	66,849	R -553	R 21,378	R 3,178	R 1,589	R 1,229	R 186	R 6,869	R 337,961
October	R 126,627	R 2,062	R 78,819	R 941	R 63,337	-572	R 19,787	R 2,954	R 1,631	R 1,285	R 159	R 10,525	R 308,727
November	R 121,463	R 1,783	R 75,441	R 943	64,474	-441	R 20,681	R 3,088	R 1,684	R 1,275	R 107	R 12,439	R 304,119
December	R 132,929	R 2,186	R 86,122	1,005	71,837	-496	R 23,732	R 3,353	R 1,731	R 1,329	R 121	R 10,656	R 335,753
Total	**R 1,733,430**	**R 30,182**	**R 1013689**	**R 11,566**	**R 790,204**	**R -5,905**	**R 319,355**	**R 37,449**	**R 19,222**	**R 15,364**	**R 1,818**	**R 120,177**	**R 4,100,656**
2012 January	R 129,115	R 2,444	R 91,641	R 980	R 72,381	-330	R 23,359	R 3,366	R 1,629	R 1,415	R 86	R 13,806	R 340,919
February	R 113,908	R 1,926	R 91,091	R 1,005	R 63,847	-226	R 20,361	R 3,126	R 1,537	R 1,339	R 137	R 11,164	R 310,151
March	R 105,546	R 1,561	R 92,503	R 1,010	R 61,729	-268	R 25,770	R 2,938	R 1,663	R 1,413	R 249	R 13,897	R 309,040
April	R 96,466	R 1,564	R 95,346	R 980	55,871	-242	R 26,136	R 2,666	R 1,668	R 1,335	R 346	R 12,812	R 295,940
May	R 116,345	R 1,727	R 107,927	R 969	62,081	-343	R 28,542	R 2,997	R 1,713	R 1,422	R 511	R 12,573	R 337,530
June	R 131,569	R 2,056	R 116,015	R 945	65,140	R -475	R 26,611	R 3,060	R 1,687	R 1,380	R 561	R 11,944	R 361,506
July	R 160,938	R 2,288	R 140,202	R 968	69,129	-587	R 26,758	R 3,296	R 1,769	R 1,421	R 522	R 8,724	R 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
8-Month Total	**1,006,627**	**15,639**	**866,552**	**7,881**	**519,781**	**-2,967**	**200,684**	**24,759**	**13,342**	**11,113**	**2,876**	**93,206**	**2,767,709**
2011 8-Month Total	**1,211,470**	**21,728**	**681,568**	**7,673**	**523,707**	**-3,843**	**233,777**	**24,876**	**12,586**	**10,246**	**1,245**	**79,688**	**2,814,095**
2010 8-Month Total	**1,263,832**	**26,448**	**670,155**	**7,692**	**538,508**	**-3,645**	**182,524**	**24,657**	**12,520**	**10,162**	**878**	**60,796**	**2,802,965**

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

[b] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

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

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

[e] Pumped storage facility production minus energy used for pumping.

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

[g] Wood and wood-derived fuels.

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

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

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

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

R=Revised. NA=Not available.

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

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

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

Table 7.2b Electricity Net Generation: Electric Power Sector

(Subset of Table 7.2a; Million Kilowatthours)

	Fossil Fuels						Renewable Energy						
								Biomass					
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Gases[d]	Nuclear Electric Power	Hydroelectric Pumped Storage[e]	Conventional Hydroelectric Power[f]	Wood[g]	Waste[h]	Geothermal	Solar/PV[i]	Wind	Total[j]
1973 Total	**847,651**	**314,343**	**340,858**	**NA**	**83,479**	**(f)**	**272,083**	**130**	**198**	**1,966**	**NA**	**NA**	**1,860,710**
1975 Total	**852,786**	**289,095**	**299,778**	**NA**	**172,505**	**(f)**	**300,047**	**18**	**174**	**3,246**	**NA**	**NA**	**1,917,649**
1980 Total	**1,161,562**	**245,994**	**346,240**	**NA**	**251,116**	**(f)**	**276,021**	**275**	**158**	**5,073**	**NA**	**NA**	**2,286,439**
1985 Total	**1,402,128**	**100,202**	**291,946**	**NA**	**383,691**	**(f)**	**281,149**	**743**	**640**	**9,325**	**11**	**6**	**2,469,841**
1990 Total[k]	**1,572,109**	**118,864**	**309,486**	**621**	**576,862**	**-3,508**	**289,753**	**7,032**	**11,500**	**15,434**	**367**	**2,789**	**2,901,322**
1995 Total	**1,686,056**	**68,146**	**419,179**	**1,927**	**673,402**	**-2,725**	**305,410**	**7,597**	**17,986**	**13,378**	**497**	**3,164**	**3,194,230**
1996 Total	**1,771,973**	**74,783**	**378,757**	**1,341**	**674,729**	**-3,088**	**341,159**	**8,386**	**17,816**	**14,329**	**521**	**3,234**	**3,284,141**
1997 Total	**1,820,762**	**86,479**	**399,596**	**1,533**	**628,644**	**-4,040**	**350,648**	**8,680**	**18,485**	**14,726**	**511**	**3,288**	**3,329,375**
1998 Total	**1,850,193**	**122,211**	**449,293**	**2,315**	**673,702**	**-4,467**	**317,867**	**8,608**	**19,233**	**14,774**	**502**	**3,026**	**3,457,416**
1999 Total	**1,858,618**	**111,539**	**472,996**	**1,607**	**728,254**	**-6,097**	**314,663**	**8,961**	**19,493**	**14,827**	**495**	**4,488**	**3,529,982**
2000 Total	**1,943,111**	**105,192**	**517,978**	**2,028**	**753,893**	**-5,539**	**271,338**	**8,916**	**20,307**	**14,093**	**493**	**5,593**	**3,637,529**
2001 Total	**1,882,826**	**119,149**	**554,940**	**586**	**768,826**	**-8,823**	**213,749**	**8,294**	**12,944**	**13,741**	**543**	**6,737**	**3,580,053**
2002 Total	**1,910,613**	**89,733**	**607,683**	**1,970**	**780,064**	**-8,743**	**260,491**	**9,009**	**13,145**	**14,491**	**555**	**10,354**	**3,698,458**
2003 Total	**1,952,714**	**113,697**	**567,303**	**2,647**	**763,733**	**-8,535**	**271,512**	**9,528**	**13,808**	**14,424**	**534**	**11,187**	**3,721,159**
2004 Total	**1,957,188**	**114,678**	**627,172**	**3,568**	**788,528**	**-8,488**	**265,064**	**9,736**	**13,062**	**14,811**	**575**	**14,144**	**3,808,360**
2005 Total	**1,992,054**	**116,482**	**683,829**	**3,777**	**781,986**	**-6,558**	**267,040**	**10,570**	**13,031**	**14,692**	**550**	**17,811**	**3,902,192**
2006 Total	**1,969,737**	**59,708**	**734,417**	**4,254**	**787,219**	**-6,558**	**286,254**	**10,341**	**13,927**	**14,568**	**508**	**26,589**	**3,908,077**
2007 Total	**1,998,390**	**61,306**	**814,752**	**4,042**	**806,425**	**-6,896**	**245,843**	**10,711**	**14,294**	**14,637**	**612**	**34,450**	**4,005,343**
2008 Total	**1,968,838**	**42,881**	**802,372**	**3,200**	**806,208**	**-6,288**	**253,096**	**10,638**	**15,379**	**14,840**	**864**	**55,363**	**3,974,349**
2009 Total	**1,741,123**	**35,811**	**841,006**	**3,058**	**798,855**	**-4,627**	**271,506**	**10,738**	**15,954**	**15,009**	**891**	**73,886**	**3,809,837**
2010 January	171,660	4,111	66,847	275	72,569	-565	22,207	1,011	1,294	1,312	10	6,853	348,128
February	151,461	2,166	59,556	247	65,245	-351	20,421	926	1,207	1,159	33	5,431	307,994
March	142,665	2,299	56,492	275	64,635	-325	20,691	939	1,391	1,307	76	8,588	299,571
April	125,615	2,109	58,124	273	57,611	-335	18,898	837	1,334	1,240	112	9,763	276,121
May	141,669	2,801	66,862	279	66,658	-441	24,903	830	1,359	1,311	153	8,696	315,656
June	163,912	3,792	85,033	265	68,301	-472	29,711	955	1,409	1,264	175	8,048	362,985
July	177,778	4,199	106,961	267	71,913	-557	24,405	1,061	1,419	1,274	161	6,723	396,195
August	175,848	3,375	112,961	249	71,574	-600	20,019	1,074	1,413	1,297	156	6,685	394,651
September	147,157	2,608	85,498	240	69,371	-421	17,188	974	1,364	1,253	137	7,104	333,057
October	130,663	2,037	70,876	170	62,751	-438	17,561	887	1,330	1,222	75	7,942	295,646
November	133,815	1,879	62,305	219	62,655	-467	19,426	934	1,412	1,252	76	9,746	293,833
December	165,494	3,302	69,875	208	73,683	-530	23,024	1,018	1,443	1,330	43	9,058	348,549
Total	**1,827,738**	**34,679**	**901,389**	**2,967**	**806,968**	**-5,501**	**258,455**	**11,446**	**16,376**	**15,219**	**1,206**	**94,636**	**3,972,386**
2011 January	R 169,390	R 3,229	R 66,932	R 243	72,743	-426	R 25,386	R 981	R 1,247	R 1,351	R 37	R 8,547	R 350,234
February	R 137,082	R 2,255	R 59,380	R 207	64,789	-247	R 23,970	R 886	R 1,180	R 1,219	R 81	R 10,448	R 301,798
March	R 133,584	R 2,526	R 59,362	R 252	65,662	R -349	R 30,945	R 897	R 1,299	R 1,342	R 116	R 10,540	R 306,808
April	R 123,272	R 2,257	R 63,257	R 244	54,547	R -466	R 31,008	R 705	R 1,251	R 1,243	R 155	R 12,417	R 290,519
May	R 135,820	R 2,218	R 68,175	R 242	R 57,013	R -418	R 32,386	R 760	R 1,296	R 1,322	R 181	R 11,767	R 311,401
June	R 156,716	R 2,438	R 83,426	R 259	65,270	R -567	R 31,999	R 936	R 1,365	R 1,218	R 210	R 10,981	R 354,929
July	R 175,129	R 3,006	R 111,502	R 262	72,345	R -708	R 31,173	R 1,048	R 1,413	R 1,273	R 181	R 7,486	R 404,802
August	R 169,798	R 2,449	R 111,540	R 264	71,339	-663	R 25,666	R 1,038	R 1,407	R 1,279	R 218	R 7,471	R 392,471
September	R 139,648	R 2,272	R 84,300	R 252	66,849	R -553	R 21,254	R 916	R 1,319	R 1,229	R 177	R 6,865	R 325,143
October	R 125,442	R 1,894	R 71,962	R 240	R 63,337	-572	R 19,660	R 807	R 1,354	R 1,285	R 151	R 10,519	R 296,704
November	R 120,323	R 1,632	R 68,262	R 227	64,474	-441	R 20,533	R 800	R 1,403	R 1,275	R 103	R 12,431	R 291,657
December	R 131,686	R 2,025	R 78,193	R 247	71,837	-496	R 23,552	R 959	R 1,455	R 1,329	R 117	R 10,649	R 322,237
Total	**R 1,717,891**	**R 28,202**	**R 926,290**	**R 2,939**	**R 790,204**	**R -5,905**	**R 317,531**	**R 10,733**	**R 15,989**	**R 15,364**	**R 1,727**	**R 120,121**	**R 3,948,701**
2012 January	R 127,857	R 2,144	R 83,819	R 237	R 72,381	-330	R 23,181	R 952	R 1,349	R 1,415	R 83	R 13,798	R 327,525
February	R 112,775	R 1,727	R 83,629	R 233	R 63,847	-226	R 20,201	R 879	R 1,264	R 1,339	R 132	R 11,157	R 297,543
March	R 104,379	R 1,358	R 85,311	R 241	R 61,729	-268	R 25,580	R 830	R 1,394	R 1,413	R 240	R 13,888	R 296,736
April	R 95,403	R 1,344	R 88,356	R 234	55,871	-242	R 25,973	R 642	R 1,395	R 1,335	R 334	R 12,804	R 284,075
May	R 115,212	R 1,541	R 100,212	R 226	62,081	-343	R 28,357	R 802	R 1,426	R 1,422	R 493	R 12,565	R 324,644
June	R 130,371	R 1,842	R 108,256	R 228	65,140	R -475	R 26,476	R 869	R 1,414	R 1,380	R 544	R 11,936	R 348,626
July	R 159,516	R 2,071	R 131,757	R 237	69,129	-587	R 26,646	R 989	R 1,467	R 1,421	R 506	R 8,719	R 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
8-Month Total	**996,885**	**13,841**	**805,135**	**1,880**	**519,781**	**-2,967**	**199,458**	**6,979**	**11,088**	**11,113**	**2,782**	**93,148**	**2,664,204**
2011 8-Month Total	**1,200,792**	**20,379**	**623,573**	**1,972**	**523,707**	**-3,843**	**232,532**	**7,251**	**10,458**	**10,246**	**1,179**	**79,656**	**2,712,961**
2010 8-Month Total	**1,250,609**	**24,852**	**612,835**	**2,130**	**538,508**	**-3,645**	**181,256**	**7,633**	**10,826**	**10,162**	**875**	**60,786**	**2,701,301**

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

[b] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

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

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

[e] Pumped storage facility production minus energy used for pumping.

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

[g] Wood and wood-derived fuels.

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

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

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

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

R=Revised. NA=Not available.

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

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

Sources: See end of section.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Subset of Table 7.2a; Million Kilowatthours)

	Commercial Sector[a]					Industrial Sector[b]							
				Biomass							Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Total[g]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[h]	Hydroelectric Power[i]	Wood[j]	Waste[f]	Total[k]
1973 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,347**	**NA**	**NA**	**3,347**
1975 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,106**	**NA**	**NA**	**3,106**
1980 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,161**	**NA**	**NA**	**3,161**
1985 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3,161**	**NA**	**NA**	**3,161**
1990 Total	**796**	**589**	**3,272**	**812**	**5,837**	**21,107**	**7,008**	**60,007**	**9,641**	**2,975**	**25,379**	**949**	**130,830**
1995 Total	**998**	**379**	**5,162**	**1,519**	**8,232**	**22,372**	**6,030**	**71,717**	**11,943**	**5,304**	**28,868**	**900**	**151,025**
1996 Total	**1,051**	**369**	**5,249**	**2,176**	**9,030**	**22,172**	**6,260**	**71,049**	**13,015**	**5,878**	**28,354**	**919**	**151,017**
1997 Total	**1,040**	**427**	**4,725**	**2,342**	**8,701**	**23,214**	**5,649**	**75,078**	**11,814**	**5,685**	**28,225**	**882**	**154,097**
1998 Total	**985**	**383**	**4,879**	**2,335**	**8,748**	**22,337**	**6,206**	**77,085**	**11,170**	**5,349**	**27,693**	**880**	**154,132**
1999 Total	**995**	**434**	**4,607**	**2,393**	**8,563**	**21,474**	**6,088**	**78,793**	**12,519**	**4,758**	**28,060**	**686**	**156,264**
2000 Total	**1,097**	**432**	**4,262**	**1,985**	**7,903**	**22,056**	**5,597**	**78,798**	**11,927**	**4,135**	**28,652**	**839**	**156,673**
2001 Total	**995**	**438**	**4,434**	**1,007**	**7,416**	**20,135**	**5,293**	**79,755**	**8,454**	**3,145**	**26,888**	**596**	**149,175**
2002 Total	**992**	**431**	**4,310**	**1,053**	**7,415**	**21,525**	**4,403**	**79,013**	**9,493**	**3,825**	**29,643**	**846**	**152,580**
2003 Total	**1,206**	**423**	**3,899**	**1,289**	**7,496**	**19,817**	**5,285**	**78,705**	**12,953**	**4,222**	**27,988**	**715**	**154,530**
2004 Total	**1,340**	**499**	**3,969**	**1,562**	**8,270**	**19,773**	**5,967**	**78,959**	**11,684**	**3,248**	**28,367**	**797**	**153,925**
2005 Total	**1,353**	**375**	**4,249**	**1,657**	**8,492**	**19,466**	**5,368**	**72,882**	**9,687**	**3,195**	**28,271**	**733**	**144,739**
2006 Total	**1,310**	**235**	**4,355**	**1,599**	**8,371**	**19,464**	**4,223**	**77,669**	**9,923**	**2,899**	**28,400**	**572**	**148,254**
2007 Total	**1,371**	**189**	**4,257**	**1,599**	**8,273**	**16,694**	**4,243**	**77,580**	**9,411**	**1,590**	**28,287**	**631**	**143,128**
2008 Total	**1,261**	**142**	**4,188**	**1,534**	**7,926**	**15,703**	**3,219**	**76,421**	**8,507**	**1,676**	**26,641**	**821**	**137,113**
2009 Total	**1,096**	**163**	**4,225**	**1,748**	**8,165**	**13,686**	**2,963**	**75,748**	**7,574**	**1,868**	**25,292**	**740**	**132,329**
2010 January	116	13	367	137	709	1,544	225	6,959	634	169	2,114	72	12,120
February	102	11	339	111	623	1,481	197	6,303	578	162	1,967	64	11,118
March	91	8	351	134	661	1,649	163	6,588	735	188	2,149	67	11,936
April	80	9	326	144	645	1,258	169	6,194	669	187	2,094	80	11,034
May	84	12	326	149	666	1,519	181	6,477	738	164	2,061	69	11,614
June	97	10	350	150	699	1,482	187	6,885	700	132	2,137	68	12,075
July	110	18	459	146	812	1,713	194	7,205	696	107	2,246	75	12,718
August	105	11	490	152	838	1,792	189	7,701	812	99	2,243	78	13,395
September	89	9	421	148	750	1,499	165	7,085	713	76	2,182	62	12,238
October	80	7	419	133	712	1,527	184	6,443	637	117	2,114	84	11,562
November	69	4	401	134	683	1,301	196	6,520	688	130	2,145	79	11,493
December	88	12	476	136	793	1,677	209	7,223	744	134	2,255	71	12,777
Total	**1,111**	**124**	**4,725**	**1,672**	**8,592**	**18,441**	**2,258**	**81,583**	**8,343**	**1,668**	**25,706**	**869**	**144,082**
2011 January	R 108	R 21	R 421	R 186	R 817	R 1,304	R 207	R 6,901	R 687	R 143	R 2,307	R 82	R 12,054
February	R 104	R 11	R 367	R 169	R 725	R 1,125	R 168	R 6,177	R 600	160	R 2,048	R 78	R 10,770
March	R 100	7	R 373	R 188	R 753	R 1,161	R 160	R 6,212	R 693	R 187	R 2,181	R 78	R 11,149
April	R 77	R 4	R 357	R 179	R 706	R 1,139	R 163	R 6,416	R 674	R 184	R 2,090	R 73	R 11,175
May	R 82	R 5	R 471	R 202	R 867	R 1,199	R 156	R 6,597	R 633	R 198	R 2,033	R 66	R 11,359
June	R 90	R 3	R 463	R 200	R 860	R 1,249	R 152	R 6,802	R 753	R 150	R 2,292	R 67	R 11,938
July	R 104	R 7	R 605	R 205	R 1,023	R 1,353	R 141	R 7,517	R 836	R 109	R 2,312	R 71	R 12,868
August	R 94	7	R 571	R 210	R 985	R 1,389	R 138	R 7,745	R 823	R 96	R 2,343	76	R 13,085
September	R 84	R 7	R 487	R 195	R 870	R 1,209	R 145	R 6,953	R 752	R 122	R 2,260	R 75	R 11,948
October	R 65	R 6	R 438	R 190	R 799	R 1,120	R 162	R 6,419	R 700	126	R 2,146	R 86	R 11,224
November	R 62	R 7	R 437	R 195	R 800	R 1,077	R 143	R 6,742	R 715	R 146	R 2,286	R 86	R 11,663
December	78	6	R 499	R 195	R 874	R 1,165	R 155	R 7,429	R 758	R 178	R 2,392	R 81	R 12,642
Total	**R 1,049**	**R 89**	**R 5,487**	**R 2,315**	**R 10,080**	**R 14,490**	**R 1,891**	**R 81,911**	**R 8,624**	**R 1,799**	**R 26,691**	**R 917**	**R 141,875**
2012 January	R 84	R 7	R 528	R 203	R 913	R 1,175	R 294	R 7,293	R 743	R 175	R 2,412	R 77	R 12,480
February	R 78	R 5	R 499	R 202	R 875	R 1,055	R 194	R 6,963	R 771	R 157	R 2,246	R 72	R 11,733
March	R 70	R 5	R 476	R 199	R 853	R 1,097	197	R 6,716	R 769	R 186	R 2,106	R 70	R 11,452
April	R 64	6	R 468	R 202	R 843	R 998	R 214	R 6,522	R 745	R 160	R 2,022	R 72	R 11,022
May	R 70	6	R 480	R 210	R 880	R 1,063	R 180	R 7,235	R 742	R 182	R 2,193	R 77	R 12,006
June	R 68	10	R 493	R 202	R 880	R 1,130	R 204	R 7,266	R 717	R 131	R 2,188	71	R 12,000
July	R 78	12	R 553	R 219	R 980	R 1,344	205	R 7,892	R 731	R 109	R 2,304	R 82	R 13,003
August	71	10	498	220	917	1,299	249	7,535	779	97	2,293	77	12,669
8-Month Total	**583**	**60**	**3,994**	**1,657**	**7,141**	**9,159**	**1,738**	**57,422**	**5,998**	**1,196**	**17,763**	**597**	**96,364**
2011 8-Month Total	**760**	**63**	**3,627**	**1,539**	**6,737**	**9,919**	**1,286**	**54,368**	**5,698**	**1,227**	**17,607**	**589**	**94,398**
2010 8-Month Total	**785**	**92**	**3,008**	**1,121**	**5,653**	**12,438**	**1,504**	**54,311**	**5,560**	**1,210**	**17,010**	**573**	**96,012**

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

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

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

[d] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

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

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

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

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

[i] Conventional hydroelectric power.

[j] Wood and wood-derived fuels.

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

R=Revised. NA=Not available.

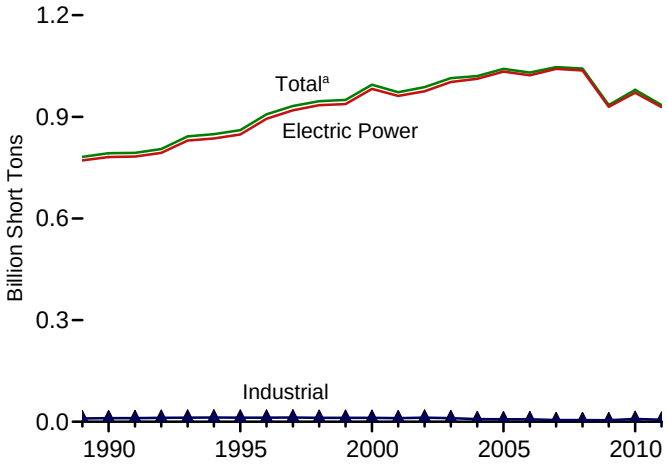
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

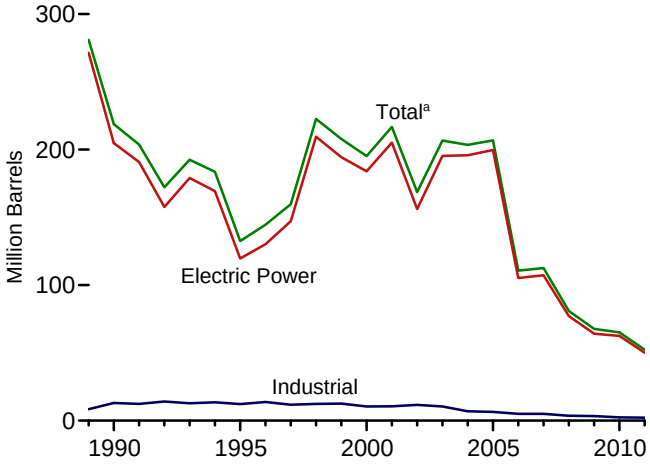
Sources: See end of section.

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation

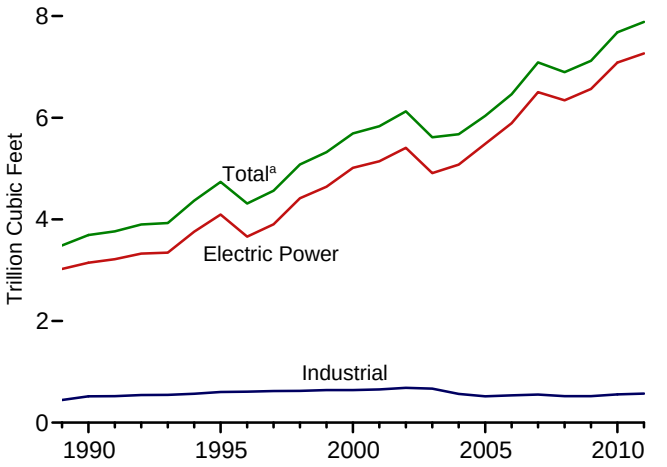
Coal by Sector, 1989-2011



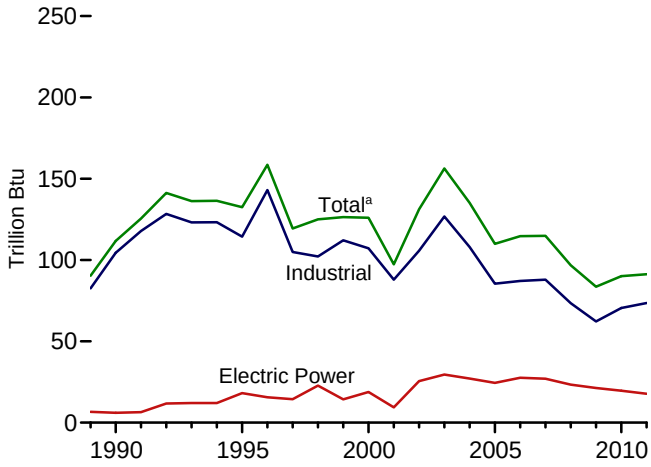
Petroleum by Sector, 1989-2011



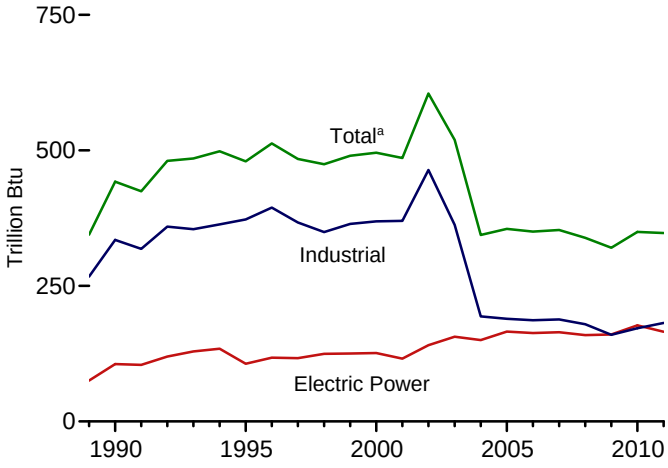
Natural Gas by Sector, 1989-2011



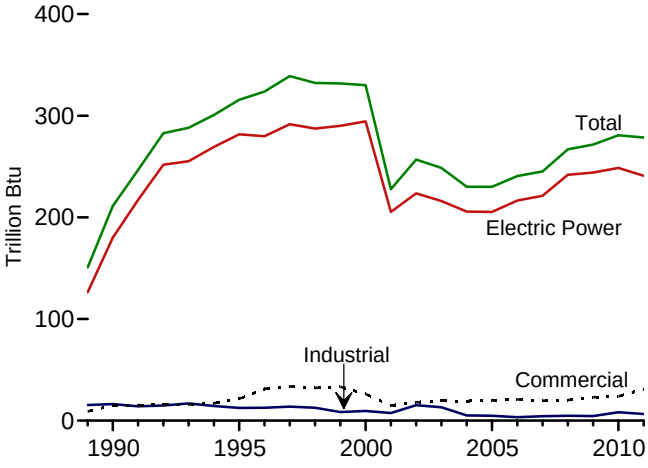
Other Gases[b] by Sector, 1989-2011



Wood by Sector, 1989-2011



Waste by Sector, 1989-2011



[a] Includes commercial sector.
[b] Blast furnace gas, 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			
1973 Total	**389,212**	**47,058**	**513,190**	**NA**	**507**	**562,781**	**3,660**	**NA**	**1**	**2**	**NA**
1975 Total	**405,962**	**38,907**	**467,221**	**NA**	**70**	**506,479**	**3,158**	**NA**	**(s)**	**2**	**NA**
1980 Total	**569,274**	**29,051**	**391,163**	**NA**	**179**	**421,110**	**3,682**	**NA**	**3**	**2**	**NA**
1985 Total	**693,841**	**14,635**	**158,779**	**NA**	**231**	**174,571**	**3,044**	**NA**	**8**	**7**	**NA**
1990 Total[k]	**792,457**	**18,143**	**190,652**	**437**	**1,914**	**218,800**	**3,692**	**112**	**442**	**211**	**36**
1995 Total	**860,594**	**19,615**	**95,507**	**680**	**3,355**	**132,578**	**4,738**	**133**	**480**	**316**	**42**
1996 Total	**907,209**	**20,252**	**106,055**	**1,712**	**3,322**	**144,626**	**4,312**	**159**	**513**	**324**	**37**
1997 Total	**931,949**	**20,309**	**118,741**	**237**	**4,086**	**159,715**	**4,565**	**119**	**484**	**339**	**36**
1998 Total	**946,295**	**25,062**	**172,728**	**549**	**4,860**	**222,640**	**5,081**	**125**	**475**	**332**	**36**
1999 Total	**949,802**	**25,951**	**158,187**	**974**	**4,552**	**207,871**	**5,322**	**126**	**490**	**332**	**41**
2000 Total	**994,933**	**31,675**	**143,381**	**1,450**	**3,744**	**195,228**	**5,691**	**126**	**496**	**330**	**46**
2001 Total	**972,691**	**31,150**	**165,312**	**855**	**3,871**	**216,672**	**5,832**	**97**	**486**	**228**	**160**
2002 Total	**987,583**	**23,286**	**109,235**	**1,894**	**6,836**	**168,597**	**6,126**	**131**	**605**	**257**	**191**
2003 Total	**1,014,058**	**29,672**	**142,518**	**2,947**	**6,303**	**206,653**	**5,616**	**156**	**519**	**249**	**193**
2004 Total	**1,020,523**	**20,163**	**142,088**	**2,856**	**7,677**	**203,494**	**5,675**	**135**	**344**	**230**	**183**
2005 Total	**1,041,448**	**20,651**	**141,518**	**2,968**	**8,330**	**206,785**	**6,036**	**110**	**355**	**230**	**173**
2006 Total	**1,030,556**	**13,174**	**58,473**	**2,174**	**7,363**	**110,634**	**6,462**	**115**	**350**	**241**	**172**
2007 Total	**1,046,795**	**15,683**	**63,833**	**2,917**	**6,036**	**112,615**	**7,089**	**115**	**353**	**245**	**168**
2008 Total	**1,042,335**	**12,832**	**38,191**	**2,822**	**5,417**	**80,932**	**6,896**	**97**	**339**	**267**	**172**
2009 Total	**934,683**	**12,658**	**28,576**	**2,328**	**4,821**	**67,668**	**7,121**	**84**	**320**	**272**	**170**
2010 January	90,767	2,485	2,860	241	433	7,751	570	7	30	22	15
February	80,209	869	1,075	212	404	4,174	502	6	28	20	13
March	76,544	785	1,245	147	438	4,370	479	8	29	24	15
April	67,037	726	1,160	126	382	3,923	494	8	27	23	15
May	76,061	1,050	1,997	121	415	5,244	582	8	27	24	15
June	87,395	1,244	3,087	154	493	6,950	731	8	29	24	16
July	94,993	1,347	3,681	200	524	7,849	923	8	31	24	16
August	94,786	1,093	2,987	164	423	6,358	972	8	32	24	16
September	79,573	905	1,789	151	394	4,813	723	8	30	23	16
October	70,918	787	1,113	129	362	3,840	594	6	28	23	15
November	72,756	876	982	143	317	3,588	519	7	29	24	15
December	88,645	1,883	2,021	266	408	6,210	591	8	31	24	16
Total	**979,684**	**14,050**	**23,997**	**2,056**	**4,994**	**65,071**	**7,680**	**90**	**350**	**281**	**184**
2011 January	R 90,208	R 1,347	R 1,723	R 255	R 552	R 6,086	564	7	R 31	22	R 16
February	R 73,614	R 913	R 1,020	R 144	R 431	R 4,230	R 505	6	R 28	21	R 15
March	R 72,645	R 907	R 1,113	R 140	R 517	R 4,746	R 503	7	R 29	R 23	R 17
April	R 67,128	R 1,005	R 1,333	R 111	R 336	R 4,130	R 546	7	R 25	R 22	R 17
May	R 73,522	R 973	R 1,230	R 88	R 357	R 4,078	R 599	7	R 26	R 23	R 18
June	R 84,156	R 968	R 1,249	R 138	R 432	R 4,514	R 727	8	R 30	R 24	R 18
July	R 94,304	R 1,138	R 1,550	R 238	R 510	R 5,476	R 967	R 9	R 31	R 25	R 19
August	R 92,297	R 831	R 1,313	R 146	R 464	R 4,610	R 951	R 9	R 32	25	R 18
September	R 76,790	R 736	R 942	R 156	R 454	R 4,105	R 712	8	R 30	R 23	R 17
October	R 69,605	R 753	R 938	R 143	R 338	R 3,522	600	R 7	R 27	24	R 17
November	R 67,059	R 768	R 917	R 147	R 257	R 3,115	568	8	R 28	24	R 17
December	R 73,610	R 892	R 922	R 138	R 365	R 3,775	R 642	8	R 31	25	R 18
Total	**R 934,938**	**R 11,231**	**R 14,251**	**R 1,844**	**R 5,012**	**R 52,387**	**R 7,884**	**91**	**R 348**	**R 279**	**R 205**
2012 January	R 70,846	R 816	R 994	R 78	R 465	R 4,213	R 675	R 8	R 33	R 22	R 15
February	R 62,906	R 689	R 760	R 118	R 354	R 3,340	R 673	R 8	R 31	R 21	R 14
March	R 57,442	R 599	R 875	R 128	R 234	R 2,771	R 702	R 8	R 28	R 23	R 15
April	R 51,893	R 789	R 799	R 141	R 202	R 2,741	R 742	8	R 26	R 23	R 14
May	R 62,978	R 907	R 839	R 166	R 245	R 3,138	R 844	8	R 29	R 24	R 16
June	R 71,750	R 899	R 1,299	R 177	R 265	R 3,698	R 911	R 8	R 30	R 23	R 15
July	R 86,667	R 894	R 1,608	R 174	R 291	R 4,131	R 1,123	8	32	R 25	16
August	82,862	723	1,143	154	319	3,617	1,034	8	33	23	16
8-Month Total	**547,344**	**6,316**	**8,317**	**1,136**	**2,376**	**27,648**	**6,705**	**64**	**242**	**183**	**120**
2011 8-Month Total	**647,874**	**8,082**	**10,532**	**1,261**	**3,599**	**37,869**	**5,362**	**61**	**231**	**183**	**136**
2010 8-Month Total	**667,792**	**9,600**	**18,092**	**1,367**	**3,512**	**46,620**	**5,253**	**61**	**232**	**186**	**122**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[b] Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.
[c] Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.
[d] Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.
[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.
[f] Natural gas, plus a small amount of supplemental gaseous fuels.
[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
[h] Wood and wood-derived fuels.
[i] Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[j] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[k] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

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

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

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

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

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

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1973 Total	**389,212**	**47,058**	**513,190**	**NA**	**507**	**562,781**	**3,660**	**NA**	**1**	**2**	**NA**
1975 Total	**405,962**	**38,907**	**467,221**	**NA**	**70**	**506,479**	**3,158**	**NA**	**(s)**	**2**	**NA**
1980 Total	**569,274**	**29,051**	**391,163**	**NA**	**179**	**421,110**	**3,682**	**NA**	**3**	**2**	**NA**
1985 Total	**693,841**	**14,635**	**158,779**	**NA**	**231**	**174,571**	**3,044**	**NA**	**8**	**7**	**NA**
1990 Total[k]	**781,301**	**16,394**	**183,285**	**25**	**1,008**	**204,745**	**3,147**	**6**	**106**	**180**	**(s)**
1995 Total	**847,854**	**18,066**	**88,895**	**441**	**2,452**	**119,663**	**4,094**	**18**	**106**	**282**	**2**
1996 Total	**894,400**	**18,472**	**98,795**	**567**	**2,467**	**130,168**	**3,660**	**16**	**117**	**280**	**2**
1997 Total	**919,009**	**18,646**	**112,423**	**130**	**3,201**	**147,202**	**3,903**	**14**	**117**	**292**	**1**
1998 Total	**934,126**	**23,166**	**165,875**	**411**	**3,999**	**209,447**	**4,416**	**23**	**125**	**287**	**2**
1999 Total	**937,888**	**23,875**	**151,921**	**514**	**3,607**	**194,345**	**4,644**	**14**	**125**	**290**	**1**
2000 Total	**982,713**	**29,722**	**138,047**	**403**	**3,155**	**183,946**	**5,014**	**19**	**126**	**294**	**1**
2001 Total	**961,523**	**29,056**	**159,150**	**374**	**3,308**	**205,119**	**5,142**	**9**	**116**	**205**	**109**
2002 Total	**975,251**	**21,810**	**104,577**	**1,243**	**5,705**	**156,154**	**5,408**	**25**	**141**	**224**	**137**
2003 Total	**1,003,036**	**27,441**	**137,361**	**1,937**	**5,719**	**195,336**	**4,909**	**30**	**156**	**216**	**136**
2004 Total	**1,012,459**	**18,793**	**138,831**	**2,511**	**7,135**	**195,809**	**5,075**	**27**	**150**	**206**	**131**
2005 Total	**1,033,567**	**19,450**	**138,337**	**2,591**	**7,877**	**199,760**	**5,485**	**24**	**166**	**205**	**116**
2006 Total	**1,022,802**	**12,578**	**56,347**	**1,783**	**6,905**	**105,235**	**5,891**	**28**	**163**	**216**	**117**
2007 Total	**1,041,346**	**15,135**	**62,072**	**2,496**	**5,523**	**107,316**	**6,502**	**27**	**165**	**221**	**117**
2008 Total	**1,036,891**	**12,318**	**37,222**	**2,608**	**5,000**	**77,149**	**6,342**	**23**	**159**	**242**	**122**
2009 Total	**929,692**	**11,848**	**27,768**	**2,110**	**4,485**	**64,151**	**6,567**	**21**	**160**	**244**	**115**
2010 January	90,080	2,441	2,804	219	404	7,482	519	2	16	20	9
February	79,537	833	1,023	196	379	3,946	456	2	15	18	8
March	75,772	756	1,214	130	415	4,176	432	2	15	21	9
April	66,559	695	1,132	112	360	3,741	449	2	14	20	9
May	75,311	1,021	1,964	104	390	5,040	536	2	13	21	10
June	86,725	1,220	3,059	137	463	6,733	681	2	15	21	10
July	94,194	1,306	3,643	185	495	7,610	869	2	16	22	10
August	93,922	1,066	2,962	149	392	6,136	915	2	16	22	10
September	78,881	880	1,760	136	371	4,628	671	1	15	21	10
October	70,205	762	1,076	112	337	3,634	547	1	13	20	10
November	72,206	849	949	125	290	3,373	473	1	15	21	10
December	87,854	1,847	1,973	244	383	5,978	538	1	16	22	10
Total	**971,245**	**13,677**	**23,560**	**1,848**	**4,679**	**62,477**	**7,085**	**20**	**177**	**249**	**116**
2011 January	R 89,681	R 1,314	R 1,660	R 238	R 524	R 5,833	512	1	15	R 19	R 10
February	R 73,167	R 886	R 977	R 127	R 409	R 4,033	R 459	1	14	18	R 10
March	R 72,148	R 882	R 1,082	R 124	R 495	R 4,563	457	R 2	R 14	R 20	R 11
April	R 66,643	R 989	R 1,302	R 96	R 312	R 3,948	R 498	R 1	11	R 19	R 11
May	R 73,010	R 955	R 1,206	R 72	R 333	R 3,899	R 548	R 1	12	R 20	R 11
June	R 83,622	R 951	R 1,223	R 123	R 409	R 4,344	R 675	2	14	R 21	R 12
July	R 93,724	R 1,117	R 1,524	R 223	R 491	R 5,317	R 909	2	R 16	R 21	R 12
August	R 91,707	R 812	R 1,287	R 130	R 440	R 4,430	R 893	2	R 16	R 21	R 12
September	R 76,286	R 714	R 915	R 140	R 428	R 3,911	R 659	R 1	R 14	R 20	R 11
October	R 69,165	R 727	R 906	R 128	R 312	R 3,321	R 551	R 1	R 13	R 20	R 11
November	R 66,642	R 745	R 889	R 132	R 232	R 2,926	518	R 1	12	21	R 11
December	R 73,063	R 868	R 891	R 123	R 339	R 3,579	R 586	R 1	15	22	R 12
Total	**R 928,857**	**R 10,961**	**R 13,861**	**R 1,655**	**R 4,726**	**R 50,105**	**R 7,265**	**R 18**	**R 166**	**R 241**	**R 132**
2012 January	R 70,382	R 797	R 958	R 62	R 382	R 3,727	R 620	R 1	15	R 19	R 11
February	R 62,486	R 674	R 725	R 102	R 306	R 3,032	R 621	R 1	14	R 17	R 10
March	R 57,010	R 582	R 845	R 119	R 183	R 2,463	R 652	R 1	R 12	R 20	10
April	R 51,504	R 766	R 773	R 113	R 153	R 2,415	R 693	R 1	10	R 20	10
May	R 62,569	R 885	R 808	R 158	R 196	R 2,831	R 789	R 1	12	R 21	11
June	R 71,310	R 871	R 1,276	R 159	R 215	R 3,380	856	R 1	13	R 20	R 11
July	R 86,138	R 867	R 1,579	R 166	R 237	R 3,796	R 1,063	R 1	15	R 21	12
August	82,344	696	1,119	147	247	3,195	977	1	15	20	11
8-Month Total	**543,742**	**6,139**	**8,084**	**1,026**	**1,918**	**24,839**	**6,272**	**11**	**106**	**158**	**86**
2011 8-Month Total	**643,701**	**7,907**	**10,260**	**1,133**	**3,414**	**36,368**	**4,951**	**12**	**111**	**158**	**88**
2010 8-Month Total	**662,100**	**9,338**	**17,802**	**1,231**	**3,298**	**44,864**	**4,856**	**14**	**119**	**165**	**77**

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

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

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

[d] Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.

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

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

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

[h] Wood and wood-derived fuels.

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

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

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

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

Notes: • Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

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

	Commercial Sector[a]				Industrial Sector[b]						
				Biomass					Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[g]	Wood[h]	Waste[f]	Other[i]
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1989 Total	**414**	**1,165**	**18**	**9**	**9,707**	**8,482**	**444**	**83**	**267**	**15**	**37**
1990 Total	**417**	**953**	**28**	**15**	**10,740**	**13,103**	**517**	**104**	**335**	**16**	**36**
1995 Total	**569**	**649**	**43**	**21**	**12,171**	**12,265**	**601**	**114**	**373**	**13**	**40**
1996 Total	**656**	**645**	**42**	**31**	**12,153**	**13,813**	**610**	**143**	**394**	**13**	**35**
1997 Total	**630**	**790**	**39**	**34**	**12,311**	**11,723**	**623**	**105**	**367**	**14**	**36**
1998 Total	**440**	**802**	**41**	**32**	**11,728**	**12,392**	**625**	**102**	**349**	**13**	**35**
1999 Total	**481**	**931**	**39**	**33**	**11,432**	**12,595**	**639**	**112**	**364**	**8**	**39**
2000 Total	**514**	**823**	**37**	**26**	**11,706**	**10,459**	**640**	**107**	**369**	**10**	**45**
2001 Total	**532**	**1,023**	**36**	**15**	**10,636**	**10,530**	**654**	**88**	**370**	**7**	**44**
2002 Total	**477**	**834**	**33**	**18**	**11,855**	**11,608**	**685**	**106**	**464**	**15**	**43**
2003 Total	**582**	**894**	**38**	**19**	**10,440**	**10,424**	**668**	**127**	**362**	**13**	**46**
2004 Total	**377**	**766**	**33**	**19**	**7,687**	**6,919**	**566**	**108**	**194**	**5**	**41**
2005 Total	**377**	**585**	**34**	**20**	**7,504**	**6,440**	**518**	**85**	**189**	**5**	**46**
2006 Total	**347**	**333**	**35**	**21**	**7,408**	**5,066**	**536**	**87**	**187**	**3**	**45**
2007 Total	**361**	**258**	**34**	**19**	**5,089**	**5,041**	**554**	**88**	**188**	**4**	**41**
2008 Total	**369**	**166**	**33**	**20**	**5,075**	**3,617**	**520**	**73**	**179**	**5**	**39**
2009 Total	**317**	**190**	**34**	**23**	**4,674**	**3,328**	**520**	**62**	**160**	**4**	**42**
2010 January	32	18	3	2	654	252	48	5	14	1	4
February	28	16	3	2	643	212	43	5	13	1	4
March	26	12	3	2	746	182	44	6	14	1	4
April	23	11	3	2	456	171	42	6	14	1	4
May	23	14	3	2	727	190	44	6	14	1	4
June	27	13	3	2	643	204	47	6	14	1	5
July	30	26	4	2	769	213	50	6	15	1	5
August	29	15	4	2	835	207	53	7	15	1	5
September	26	13	3	2	666	171	48	6	15	1	5
October	23	11	3	2	690	195	44	5	14	1	5
November	21	7	3	2	529	208	43	6	14	1	4
December	26	15	4	2	765	217	48	6	15	1	5
Total	**314**	**172**	**39**	**24**	**8,125**	**2,422**	**555**	**70**	**172**	**8**	**55**
2011 January	R 40	R 27	R 4	R 3	R 487	R 226	R 48	6	R 16	1	R 4
February	R 39	R 16	3	2	R 409	R 180	R 43	5	R 14	1	R 4
March	R 37	R 11	3	R 3	R 460	R 173	R 43	R 5	R 15	1	R 5
April	R 25	R 5	3	2	R 460	R 177	45	6	14	1	R 5
May	R 25	R 5	R 4	R 3	R 487	R 174	R 47	R 6	R 14	1	R 5
June	R 27	R 5	R 4	R 3	R 507	R 165	R 48	R 7	R 16	1	R 5
July	R 32	R 14	R 5	R 3	R 548	R 145	R 53	7	R 16	1	R 5
August	R 29	R 12	R 5	R 3	R 562	R 168	R 54	R 7	R 16	1	R 5
September	R 26	R 13	R 4	R 3	R 479	R 181	R 49	6	R 15	1	R 4
October	R 21	R 10	R 4	R 3	R 419	R 191	R 45	6	R 15	1	R 5
November	R 21	R 11	R 4	R 3	R 397	R 179	47	6	R 16	1	R 5
December	R 26	R 9	R 4	R 3	R 521	R 187	51	6	16	1	R 5
Total	R **347**	R **137**	R **47**	R **31**	R **5,735**	R **2,145**	R **572**	R **74**	R **182**	R **7**	R **57**
2012 January	R 29	R 9	R 4	R 3	R 435	R 476	50	6	R 18	1	R 3
February	R 27	R 7	R 4	R 3	R 393	R 301	R 48	R 7	R 17	1	R 3
March	R 25	R 8	R 4	R 3	R 407	R 300	46	7	R 15	1	R 3
April	R 22	R 10	R 4	2	R 366	R 316	R 45	R 6	R 16	1	R 3
May	R 24	R 9	R 4	R 3	R 385	R 298	51	R 6	R 17	1	3
June	R 26	R 15	4	R 2	R 413	R 303	51	6	R 17	1	R 3
July	R 30	R 18	R 5	R 3	R 500	R 318	55	R 6	R 18	1	3
August	28	16	4	2	491	407	53	7	18	1	3
8-Month Total	**212**	**91**	**33**	**20**	**3,391**	**2,718**	**400**	**52**	**136**	**4**	**23**
2011 8-Month Total	**254**	**95**	**31**	**21**	**3,919**	**1,407**	**380**	**49**	**120**	**4**	**38**
2010 8-Month Total	**218**	**125**	**25**	**16**	**5,474**	**1,631**	**372**	**47**	**113**	**5**	**36**

[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[d] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.
[e] Natural gas, plus a small amount of supplemental gaseous fuels.
[f] Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
[h] Wood and wood-derived fuels.
[i] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

R=Revised.

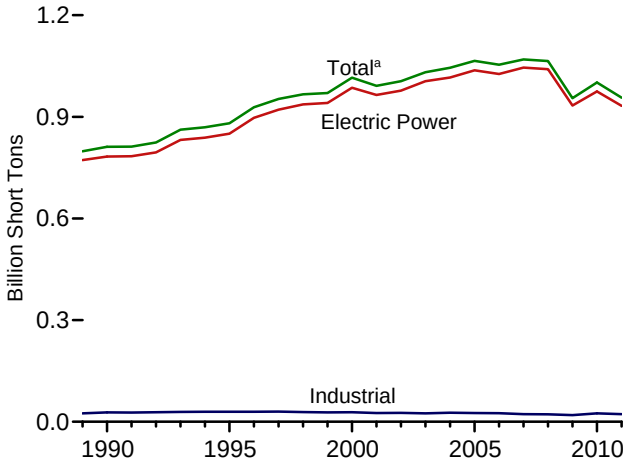
Notes: • Data are for fuels consumed to produce electricity. Through 1988, data are not available. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and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

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

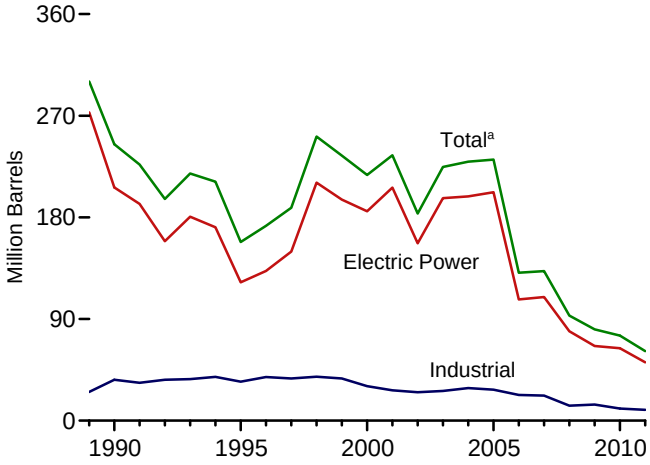
Sources: • **1989-1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906,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

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

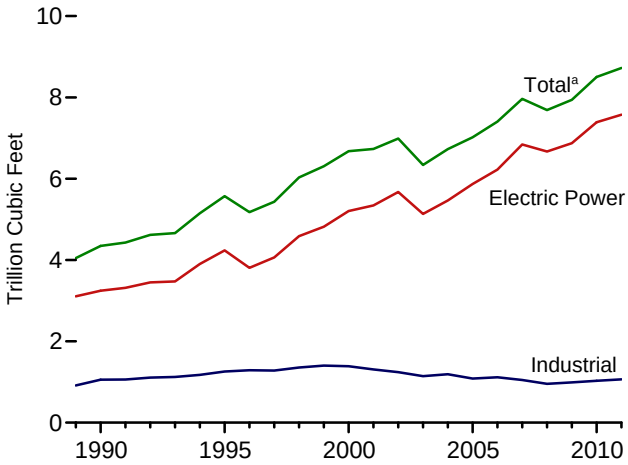
Coal by Sector, 1989-2011



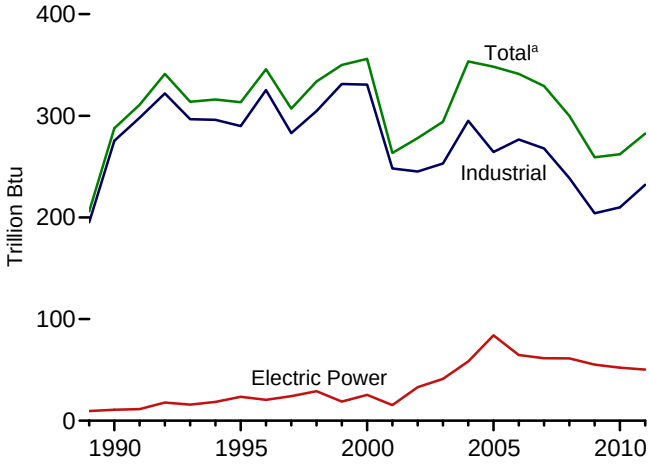
Petroleum by Sector, 1989-2011



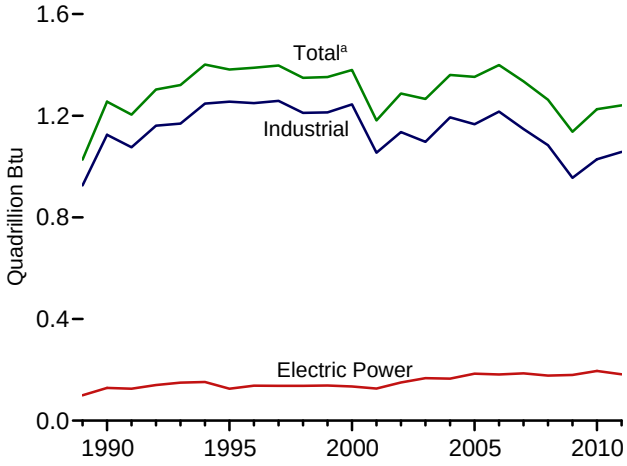
Natural Gas by Sector, 1989-2011



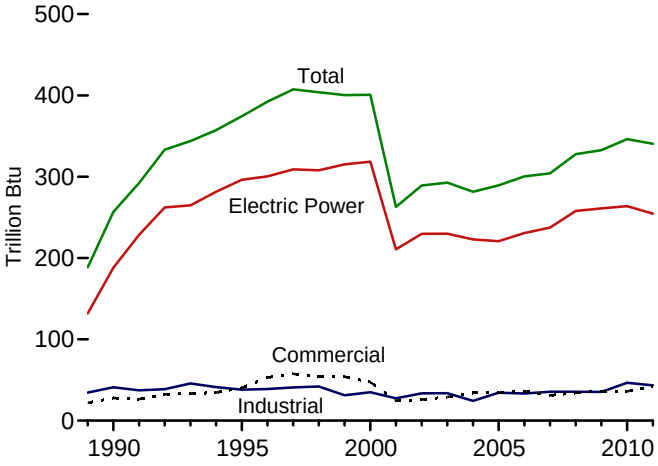
Other Gases[b] by Sector, 1989-2011



Wood by Sector, 1989-2011



Waste by Sector, 1989-2011



[a] Includes commercial sector.
[b] Blast furnace gas, 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			
1973 Total	**389,212**	**47,058**	**513,190**	**NA**	**507**	**562,781**	**3,660**	**NA**	**1**	**2**	**NA**
1975 Total	**405,962**	**38,907**	**467,221**	**NA**	**70**	**506,479**	**3,158**	**NA**	**0**	**2**	**NA**
1980 Total	**569,274**	**29,051**	**391,163**	**NA**	**179**	**421,110**	**3,682**	**NA**	**3**	**2**	**NA**
1985 Total	**693,841**	**14,635**	**158,779**	**NA**	**231**	**174,571**	**3,044**	**NA**	**8**	**7**	**NA**
1990 Total[k]	**811,538**	**20,194**	**209,081**	**1,332**	**2,832**	**244,765**	**4,346**	**288**	**1,256**	**257**	**86**
1995 Total	**881,012**	**21,697**	**112,168**	**1,322**	**4,590**	**158,140**	**5,572**	**313**	**1,382**	**374**	**97**
1996 Total	**928,015**	**22,444**	**124,607**	**2,468**	**4,596**	**172,499**	**5,178**	**346**	**1,389**	**392**	**91**
1997 Total	**952,955**	**22,893**	**134,623**	**526**	**6,095**	**188,517**	**5,433**	**307**	**1,397**	**407**	**103**
1998 Total	**966,615**	**30,006**	**189,267**	**1,230**	**6,196**	**251,486**	**6,030**	**334**	**1,349**	**404**	**95**
1999 Total	**970,175**	**30,616**	**172,319**	**1,812**	**5,989**	**234,694**	**6,305**	**350**	**1,352**	**400**	**101**
2000 Total	**1,015,398**	**34,572**	**156,673**	**2,904**	**4,669**	**217,494**	**6,677**	**356**	**1,380**	**401**	**109**
2001 Total	**991,635**	**33,724**	**177,137**	**1,418**	**4,532**	**234,940**	**6,731**	**263**	**1,182**	**263**	**229**
2002 Total	**1,005,144**	**24,749**	**118,637**	**3,257**	**7,353**	**183,409**	**6,986**	**278**	**1,287**	**289**	**252**
2003 Total	**1,031,778**	**31,825**	**152,859**	**4,576**	**7,067**	**224,593**	**6,337**	**294**	**1,266**	**293**	**262**
2004 Total	**1,044,798**	**23,520**	**157,478**	**4,764**	**8,721**	**229,364**	**6,727**	**353**	**1,360**	**282**	**254**
2005 Total	**1,065,281**	**24,446**	**156,915**	**4,270**	**9,113**	**231,193**	**7,021**	**348**	**1,353**	**289**	**237**
2006 Total	**1,053,783**	**14,655**	**69,846**	**3,396**	**8,622**	**131,005**	**7,404**	**341**	**1,399**	**300**	**247**
2007 Total	**1,069,606**	**17,042**	**74,616**	**4,237**	**7,299**	**132,389**	**7,962**	**329**	**1,336**	**304**	**239**
2008 Total	**1,064,503**	**14,137**	**43,477**	**3,765**	**6,314**	**92,948**	**7,689**	**300**	**1,263**	**328**	**212**
2009 Total	**955,190**	**14,800**	**33,672**	**3,218**	**5,828**	**80,830**	**7,938**	**259**	**1,137**	**333**	**228**
2010 January	92,738	2,643	3,212	338	525	8,819	643	21	103	29	18
February	82,029	978	1,397	286	497	5,143	566	19	96	26	17
March	78,383	866	1,439	207	522	5,124	547	23	103	30	19
April	69,179	837	1,355	176	458	4,656	556	22	98	29	19
May	77,725	1,111	2,221	176	500	6,005	647	23	98	29	20
June	89,063	1,295	3,291	204	586	7,721	796	23	101	29	21
July	96,783	1,455	3,921	244	613	8,684	997	22	105	29	21
August	96,593	1,185	3,190	206	510	7,132	1,047	23	106	29	21
September	81,250	961	2,006	191	475	5,534	791	22	103	27	20
October	72,571	871	1,370	186	453	4,693	662	20	101	29	20
November	74,496	1,017	1,212	204	414	4,503	586	21	102	30	20
December	90,600	2,029	2,332	361	499	7,218	665	23	109	30	21
Total	**1,001,411**	**15,247**	**26,944**	**2,777**	**6,053**	**75,231**	**8,502**	**262**	**1,226**	**346**	**237**
2011 January	R 92,292	R 1,411	R 2,123	R 329	R 645	R 7,087	R 636	R 23	R 111	R 28	R 20
February	R 75,447	R 986	R 1,247	R 213	R 521	R 5,052	R 570	R 22	R 99	26	R 19
March	R 74,514	R 965	1,327	R 201	R 603	R 5,506	570	24	R 104	R 28	R 22
April	R 68,841	R 1,034	R 1,537	R 166	R 428	R 4,876	R 610	R 22	R 96	R 26	R 21
May	R 75,298	R 1,016	R 1,416	R 146	R 452	R 4,838	R 666	23	R 95	R 27	R 22
June	R 85,881	R 1,001	R 1,450	R 191	R 521	R 5,246	794	24	104	R 28	R 23
July	R 96,128	R 1,169	R 1,738	R 292	R 599	R 6,194	R 1,045	R 25	R 107	R 29	R 24
August	R 94,103	R 855	R 1,515	R 204	R 545	R 5,298	R 1,030	R 25	R 107	R 29	R 23
September	R 78,479	R 770	R 1,136	R 207	R 545	R 4,837	R 782	R 24	R 104	R 28	R 21
October	R 71,317	R 797	R 1,147	R 201	R 429	R 4,289	666	R 24	R 100	R 30	R 22
November	R 68,748	R 805	R 1,118	R 201	R 345	R 3,848	636	23	R 103	30	R 22
December	R 75,422	R 926	R 1,123	R 189	R 460	R 4,537	R 718	R 24	R 111	31	R 23
Total	**R 956,470**	**R 11,735**	**R 16,877**	**R 2,540**	**R 6,092**	**R 61,610**	**R 8,724**	**R 282**	**R 1,241**	**R 340**	**R 261**
2012 January	R 72,795	R 847	R 1,188	R 131	R 561	R 4,970	R 755	26	R 109	R 28	R 18
February	R 64,604	R 710	R 892	R 168	R 449	R 4,015	R 746	R 25	R 101	R 26	R 16
March	R 59,142	R 626	R 994	R 198	R 360	R 3,617	775	R 27	R 96	29	R 17
April	R 53,407	R 814	R 920	R 219	R 317	R 3,538	814	25	R 91	R 27	R 17
May	R 64,678	R 938	R 991	R 206	R 355	R 3,909	R 917	R 26	R 100	R 29	R 18
June	R 73,344	R 943	R 1,458	R 234	R 365	R 4,458	R 987	R 25	R 100	R 28	R 18
July	R 88,319	R 937	R 1,767	R 205	R 385	R 4,836	R 1,203	R 25	R 105	R 29	18
August	84,597	754	1,303	180	412	4,297	1,113	26	103	28	18
8-Month Total	**560,886**	**6,569**	**9,512**	**1,541**	**3,204**	**33,639**	**7,310**	**205**	**806**	**225**	**139**
2011 8-Month Total	**662,505**	**8,437**	**12,353**	**1,741**	**4,313**	**44,098**	**5,921**	**187**	**823**	**222**	**173**
2010 8-Month Total	**682,494**	**10,369**	**20,025**	**1,836**	**4,211**	**53,283**	**5,799**	**176**	**809**	**229**	**157**

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

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

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

[d] Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.

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

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

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

[h] Wood and wood-derived fuels.

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

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

[k] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

R=Revised. NA=Not available.

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

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

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

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

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1973 Total	**389,212**	**47,058**	**513,190**	**NA**	**507**	**562,781**	**3,660**	**NA**	**1**	**2**	**NA**
1975 Total	**405,962**	**38,907**	**467,221**	**NA**	**70**	**506,479**	**3,158**	**NA**	**(s)**	**2**	**NA**
1980 Total	**569,274**	**29,051**	**391,163**	**NA**	**179**	**421,110**	**3,682**	**NA**	**3**	**2**	**NA**
1985 Total	**693,841**	**14,635**	**158,779**	**NA**	**231**	**174,571**	**3,044**	**NA**	**8**	**7**	**NA**
1990 Total[k]	**782,567**	**16,567**	**184,915**	**26**	**1,008**	**206,550**	**3,245**	**11**	**129**	**188**	**(s)**
1995 Total	**850,230**	**18,553**	**90,023**	**499**	**2,674**	**122,447**	**4,237**	**24**	**125**	**296**	**2**
1996 Total	**896,921**	**18,780**	**99,951**	**653**	**2,642**	**132,593**	**3,807**	**20**	**138**	**300**	**2**
1997 Total	**921,364**	**18,989**	**113,669**	**152**	**3,372**	**149,668**	**4,065**	**24**	**137**	**309**	**1**
1998 Total	**936,619**	**23,300**	**166,528**	**431**	**4,102**	**210,769**	**4,588**	**29**	**137**	**308**	**2**
1999 Total	**940,922**	**24,058**	**152,493**	**544**	**3,735**	**195,769**	**4,820**	**19**	**138**	**315**	**1**
2000 Total	**985,821**	**30,016**	**138,513**	**454**	**3,275**	**185,358**	**5,206**	**25**	**134**	**318**	**1**
2001 Total	**964,433**	**29,274**	**159,504**	**377**	**3,427**	**206,291**	**5,342**	**15**	**126**	**211**	**113**
2002 Total	**977,507**	**21,876**	**104,773**	**1,267**	**5,816**	**156,996**	**5,672**	**33**	**150**	**230**	**143**
2003 Total	**1,005,116**	**27,632**	**138,279**	**2,026**	**5,799**	**196,932**	**5,135**	**41**	**167**	**230**	**140**
2004 Total	**1,016,268**	**19,107**	**139,816**	**2,713**	**7,372**	**198,498**	**5,464**	**58**	**165**	**223**	**138**
2005 Total	**1,037,485**	**19,675**	**139,409**	**2,685**	**8,083**	**202,184**	**5,869**	**84**	**185**	**221**	**123**
2006 Total	**1,026,636**	**12,646**	**57,345**	**1,870**	**7,101**	**107,365**	**6,222**	**65**	**182**	**231**	**125**
2007 Total	**1,045,141**	**15,327**	**63,086**	**2,594**	**5,685**	**109,431**	**6,841**	**61**	**186**	**237**	**124**
2008 Total	**1,040,580**	**12,547**	**38,241**	**2,670**	**5,119**	**79,056**	**6,668**	**61**	**177**	**258**	**131**
2009 Total	**933,627**	**12,035**	**28,782**	**2,210**	**4,611**	**66,081**	**6,873**	**55**	**180**	**261**	**124**
2010 January	90,452	2,459	2,887	222	413	7,636	546	5	17	21	10
February	79,884	851	1,061	219	389	4,076	480	4	16	20	9
March	76,110	759	1,256	131	427	4,281	457	5	16	22	10
April	66,842	699	1,214	112	369	3,871	471	5	15	21	10
May	75,597	1,023	2,055	104	400	5,181	560	5	14	22	10
June	87,030	1,222	3,147	137	471	6,860	706	5	16	23	11
July	94,519	1,309	3,730	185	503	7,742	897	5	17	23	11
August	94,247	1,068	3,051	149	394	6,236	943	4	18	23	11
September	79,176	883	1,845	136	372	4,726	697	4	16	22	10
October	70,492	772	1,161	112	346	3,773	570	3	15	22	10
November	72,514	890	1,035	126	301	3,557	497	4	16	23	10
December	88,189	1,854	2,062	245	391	6,118	564	4	17	23	11
Total	**975,052**	**13,790**	**24,503**	**1,877**	**4,777**	**64,055**	**7,387**	**52**	**196**	**264**	**124**
2011 January	R 90,021	R 1,322	R 1,745	R 239	R 529	R 5,953	R 540	4	R 17	21	R 11
February	R 73,474	R 911	R 1,024	R 127	R 417	R 4,148	R 484	4	R 16	R 19	R 10
March	R 72,458	R 885	R 1,153	R 124	R 506	R 4,692	R 482	5	15	R 21	R 12
April	R 66,930	R 991	R 1,384	R 96	R 321	R 4,078	R 521	4	12	R 20	R 12
May	R 73,338	R 957	R 1,286	R 72	R 344	R 4,034	R 572	4	13	R 21	R 12
June	R 83,908	R 954	R 1,303	R 123	R 419	R 4,474	R 699	R 4	R 16	R 22	R 12
July	R 94,037	R 1,120	R 1,609	R 223	R 501	R 5,458	R 939	R 4	R 17	R 22	R 13
August	R 92,012	R 816	R 1,375	R 130	R 451	R 4,575	R 921	R 4	R 17	R 22	R 13
September	R 76,569	R 716	R 1,002	R 140	R 439	R 4,052	R 684	R 4	15	R 21	R 12
October	R 69,458	R 730	R 990	R 128	R 319	R 3,445	R 575	R 4	R 14	R 22	R 12
November	R 66,919	R 748	R 968	R 134	R 241	R 3,052	543	R 4	R 14	R 22	R 12
December	R 73,359	R 870	R 965	R 123	R 350	R 3,707	R 614	R 4	16	23	R 12
Total	**R 932,484**	**R 11,021**	**R 14,803**	**R 1,658**	**R 4,837**	**R 51,667**	**R 7,574**	**R 50**	**R 182**	**R 255**	**R 142**
2012 January	R 70,720	R 800	R 1,050	R 63	R 393	R 3,877	R 648	R 4	16	R 21	R 12
February	R 62,755	R 676	R 787	R 102	R 317	R 3,149	R 648	R 4	15	R 19	10
March	R 57,300	R 585	R 895	R 119	R 194	R 2,568	R 677	R 4	14	R 21	11
April	R 51,751	R 769	R 836	R 113	R 162	R 2,526	R 720	4	11	R 20	11
May	R 62,868	R 890	R 889	R 158	R 207	R 2,971	R 817	R 4	13	R 22	R 12
June	R 71,595	R 874	R 1,362	R 159	R 221	R 3,497	R 885	R 4	15	R 21	R 12
July	R 86,429	R 871	R 1,656	R 166	R 246	R 3,922	R 1,093	R 4	16	R 22	12
August	82,643	699	1,199	147	256	3,324	1,007	4	16	21	12
8-Month Total	**546,062**	**6,164**	**8,672**	**1,027**	**1,994**	**25,832**	**6,495**	**33**	**116**	**168**	**93**
2011 8-Month Total	**646,179**	**7,957**	**10,879**	**1,133**	**3,489**	**37,412**	**5,158**	**33**	**123**	**167**	**95**
2010 8-Month Total	**664,681**	**9,391**	**18,400**	**1,259**	**3,366**	**45,881**	**5,059**	**37**	**131**	**175**	**82**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[b] Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.
[c] Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.
[d] Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.
[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.
[f] Natural gas, plus a small amount of supplemental gaseous fuels.
[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
[h] Wood and wood-derived fuels.
[i] Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[j] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[k] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

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

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

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

Sources: See end of section.

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

	Commercial Sector[a]				Industrial Sector[b]						
				Biomass					Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[g]	Wood[h]	Waste[f]	Other[i]
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1989 Total	**1,125**	**1,967**	**30**	**22**	**24,867**	**25,444**	**914**	**195**	**926**	**35**	**85**
1990 Total	**1,191**	**2,056**	**46**	**28**	**27,781**	**36,159**	**1,055**	**275**	**1,125**	**41**	**86**
1995 Total	**1,419**	**1,245**	**78**	**40**	**29,363**	**34,448**	**1,258**	**290**	**1,255**	**38**	**95**
1996 Total	**1,660**	**1,246**	**82**	**53**	**29,434**	**38,661**	**1,289**	**325**	**1,249**	**39**	**89**
1997 Total	**1,738**	**1,584**	**87**	**58**	**29,853**	**37,265**	**1,282**	**283**	**1,259**	**41**	**102**
1998 Total	**1,443**	**1,807**	**87**	**54**	**28,553**	**38,910**	**1,355**	**305**	**1,211**	**42**	**93**
1999 Total	**1,490**	**1,613**	**84**	**54**	**27,763**	**37,312**	**1,401**	**331**	**1,213**	**31**	**99**
2000 Total	**1,547**	**1,615**	**85**	**47**	**28,031**	**30,520**	**1,386**	**331**	**1,244**	**35**	**108**
2001 Total	**1,448**	**1,832**	**79**	**25**	**25,755**	**26,817**	**1,310**	**248**	**1,054**	**27**	**101**
2002 Total	**1,405**	**1,250**	**74**	**26**	**26,232**	**25,163**	**1,240**	**245**	**1,136**	**34**	**92**
2003 Total	**1,816**	**1,449**	**58**	**29**	**24,846**	**26,212**	**1,144**	**253**	**1,097**	**34**	**103**
2004 Total	**1,917**	**2,009**	**72**	**34**	**26,613**	**28,857**	**1,191**	**295**	**1,193**	**24**	**94**
2005 Total	**1,922**	**1,630**	**68**	**34**	**25,875**	**27,380**	**1,084**	**264**	**1,166**	**34**	**94**
2006 Total	**1,886**	**935**	**68**	**36**	**25,262**	**22,706**	**1,115**	**277**	**1,216**	**33**	**102**
2007 Total	**1,927**	**752**	**70**	**31**	**22,537**	**22,207**	**1,050**	**268**	**1,148**	**36**	**98**
2008 Total	**2,021**	**671**	**66**	**34**	**21,902**	**13,222**	**955**	**239**	**1,084**	**35**	**60**
2009 Total	**1,798**	**521**	**76**	**36**	**19,766**	**14,228**	**990**	**204**	**955**	**35**	**82**
2010 January	193	55	7	3	2,094	1,128	90	17	86	4	6
February	167	47	7	3	1,978	1,021	80	15	79	4	7
March	149	26	7	3	2,124	817	84	18	86	4	7
April	117	24	6	3	2,220	761	79	18	83	5	7
May	118	28	6	4	2,010	796	82	18	83	3	7
June	135	26	6	3	1,898	835	84	18	85	3	8
July	142	59	8	3	2,122	883	91	17	88	3	8
August	152	46	9	3	2,194	849	95	19	88	3	8
September	133	27	7	3	1,941	780	87	18	87	3	8
October	121	21	7	3	1,958	899	84	17	86	5	8
November	128	22	7	3	1,854	924	82	17	86	5	8
December	165	55	8	3	2,246	1,045	92	19	91	4	8
Total	**1,720**	**437**	**86**	**36**	**24,638**	**10,740**	**1,029**	**210**	**1,029**	**47**	**91**
2011 January	R 189	R 103	R 7	3	R 2,082	R 1,031	R 90	18	R 94	4	R 7
February	R 173	R 48	R 6	3	R 1,800	R 856	R 81	R 18	R 83	4	R 7
March	R 164	R 26	6	3	R 1,891	R 788	R 82	R 19	R 88	R 4	R 8
April	124	R 8	6	3	R 1,787	R 791	R 83	R 18	R 84	3	R 8
May	R 124	R 12	7	R 4	R 1,836	R 791	87	R 19	R 82	R 3	R 8
June	R 130	R 9	R 7	R 4	R 1,843	R 764	R 88	R 20	R 88	R 3	R 8
July	R 145	R 23	R 9	R 4	R 1,946	R 714	R 97	R 20	R 90	R 3	R 9
August	R 129	20	R 9	R 4	R 1,962	R 703	R 99	R 20	R 90	R 3	R 8
September	R 122	R 23	R 8	R 4	R 1,788	R 762	R 91	R 20	R 88	R 3	R 7
October	R 110	R 14	R 7	R 4	R 1,748	R 830	R 85	20	R 86	4	R 8
November	R 117	R 28	7	R 4	R 1,712	767	86	19	R 90	R 5	R 8
December	R 139	R 19	8	R 4	R 1,923	R 812	R 96	20	R 95	4	R 8
Total	**R 1,668**	**R 333**	**R 87**	**R 43**	**R 22,319**	**R 9,610**	**R 1,063**	**R 232**	**R 1,057**	**R 43**	**R 94**
2012 January	R 162	R 27	R 9	R 4	R 1,913	R 1,065	R 98	21	R 93	4	R 4
February	R 141	R 20	R 8	R 4	R 1,708	R 847	R 90	R 21	R 86	4	3
March	R 135	R 23	R 8	R 4	R 1,707	R 1,026	R 90	R 22	R 82	R 4	R 4
April	R 115	R 16	R 7	3	R 1,542	R 997	R 87	R 21	R 80	4	3
May	R 121	R 17	R 7	R 4	R 1,689	R 921	R 93	R 22	R 87	4	4
June	R 114	R 29	8	R 3	R 1,634	R 932	R 94	21	R 85	R 3	R 4
July	R 118	R 38	8	R 4	R 1,773	R 876	R 101	21	R 89	R 4	4
August	126	32	8	3	1,827	942	98	22	86	4	4
8-Month Total	**1,032**	**201**	**63**	**29**	**13,792**	**7,606**	**752**	**171**	**689**	**29**	**29**
2011 8-Month Total	**1,179**	**248**	**57**	**28**	**15,147**	**6,438**	**706**	**154**	**699**	**27**	**62**
2010 8-Month Total	**1,173**	**311**	**55**	**25**	**16,640**	**7,091**	**684**	**140**	**678**	**30**	**60**

[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[d] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.
[e] Natural gas, plus a small amount of supplemental gaseous fuels.
[f] Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
[h] Wood and wood-derived fuels.
[i] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

R=Revised.

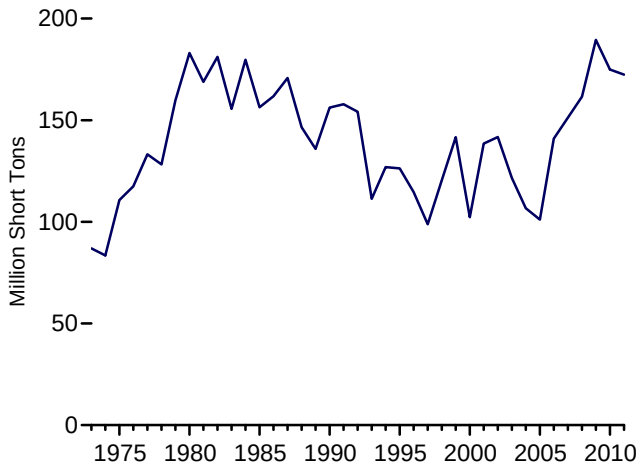
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

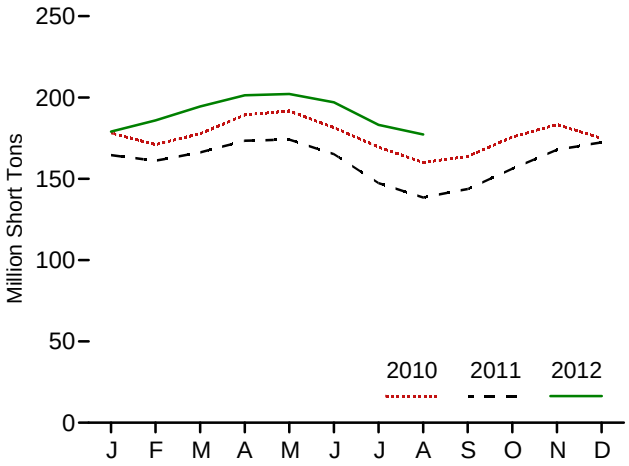
Sources: • **1989-1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906,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

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

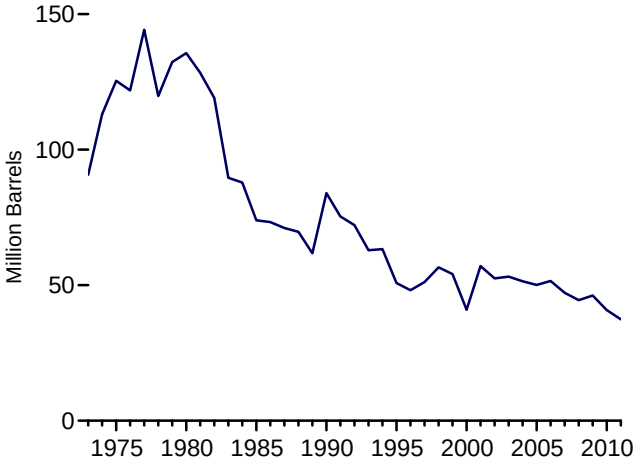
Coal, 1973-2011



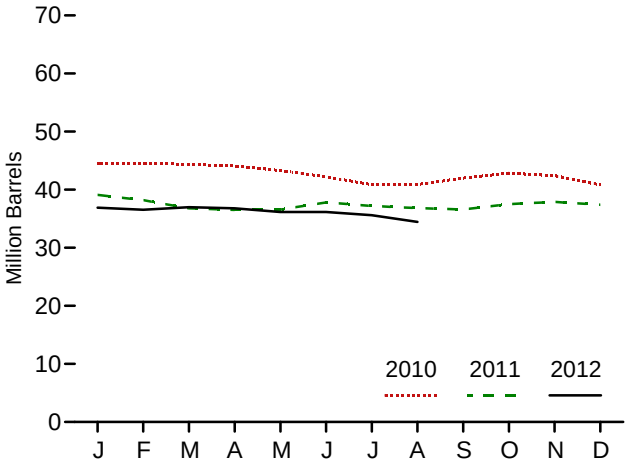
Coal, Monthly



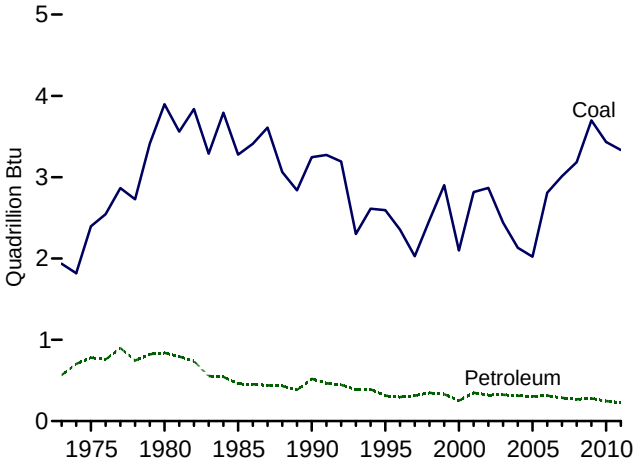
Total Petroleum, 1973-2011



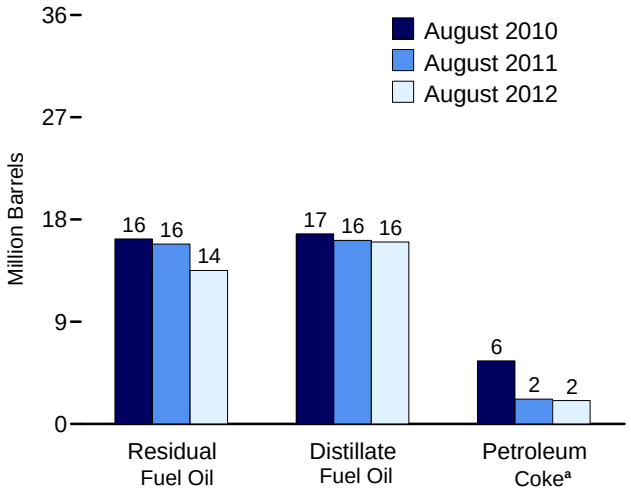
Total Petroleum, Monthly



Coal and Petroleum Stocks, 1973-2011



Petroleum by Major Type, End of Month



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

Table 7.5 Stocks of Coal and Petroleum: Electric Power Sector

	Coal[a]	Petroleum				
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels
1973 Year	**86,967**	**10,095**	**79,121**	**NA**	**312**	**90,776**
1975 Year	**110,724**	**16,432**	**108,825**	**NA**	**31**	**125,413**
1980 Year	**183,010**	**30,023**	**105,351**	**NA**	**52**	**135,635**
1985 Year	**156,376**	**16,386**	**57,304**	**NA**	**49**	**73,933**
1990 Year	**156,166**	**16,471**	**67,030**	**NA**	**94**	**83,970**
1995 Year	**126,304**	**15,392**	**35,102**	**NA**	**65**	**50,821**
1996 Year	**114,623**	**15,216**	**32,473**	**NA**	**91**	**48,146**
1997 Year	**98,826**	**15,456**	**33,336**	**NA**	**469**	**51,138**
1998 Year	**120,501**	**16,343**	**37,451**	**NA**	**559**	**56,591**
1999 Year[f]	**141,604**	**17,995**	**34,256**	**NA**	**372**	**54,109**
2000 Year	**102,296**	**15,127**	**24,748**	**NA**	**211**	**40,932**
2001 Year	**138,496**	**20,486**	**34,594**	**NA**	**390**	**57,031**
2002 Year	**141,714**	**17,413**	**25,723**	**800**	**1,711**	**52,490**
2003 Year	**121,567**	**19,153**	**25,820**	**779**	**1,484**	**53,170**
2004 Year	**106,669**	**19,275**	**26,596**	**879**	**937**	**51,434**
2005 Year	**101,137**	**18,778**	**27,624**	**1,012**	**530**	**50,062**
2006 Year	**140,964**	**18,013**	**28,823**	**1,380**	**674**	**51,583**
2007 Year	**151,221**	**18,395**	**24,136**	**1,902**	**554**	**47,203**
2008 Year	**161,589**	**17,761**	**21,088**	**1,955**	**739**	**44,498**
2009 Year	**189,467**	**17,886**	**19,068**	**2,257**	**1,394**	**46,181**
2010 January	178,091	17,193	18,035	2,198	1,406	44,454
February	171,026	17,409	18,532	2,222	1,280	44,562
March	177,742	17,353	18,679	2,105	1,240	44,337
April	189,260	17,295	18,353	2,228	1,243	44,090
May	191,669	17,185	17,935	2,235	1,188	43,294
June	181,490	17,040	17,411	2,172	1,117	42,209
July	169,504	16,917	16,441	2,268	1,046	40,856
August	159,987	16,737	16,288	2,292	1,112	40,878
September	163,776	16,608	17,269	2,330	1,158	41,996
October	175,686	16,698	17,781	2,377	1,197	42,840
November	183,389	17,024	17,492	2,410	1,098	42,414
December	**174,917**	**16,758**	**16,629**	**2,319**	**1,019**	**40,800**
2011 January	R 164,575	R 16,613	R 16,012	R 2,492	R 799	R 39,111
February	R 161,064	R 16,565	R 15,552	R 2,545	707	R 38,198
March	R 166,255	R 16,367	R 15,405	R 2,546	R 495	R 36,794
April	R 173,427	R 16,153	R 15,181	R 2,561	R 526	R 36,525
May	R 174,093	R 15,997	R 15,209	R 2,539	R 563	R 36,558
June	R 165,149	R 16,379	R 16,359	R 2,601	R 496	R 37,820
July	R 147,296	R 16,170	R 16,111	R 2,622	R 463	R 37,218
August	R 138,527	R 16,162	R 15,843	R 2,631	R 437	R 36,822
September	R 143,711	R 16,311	R 15,726	R 2,628	R 385	R 36,593
October	R 156,196	R 16,567	R 16,044	R 2,681	R 440	R 37,495
November	R 167,754	R 16,729	R 15,964	R 2,744	R 494	R 37,906
December	**R 172,387**	**R 16,649**	**R 15,491**	**R 2,707**	**R 508**	**R 37,387**
2012 January	R 179,030	R 16,712	R 15,232	R 2,735	R 443	R 36,893
February	R 185,901	R 16,532	R 15,121	R 2,778	R 420	R 36,532
March	R 194,455	R 16,423	R 15,244	R 2,815	R 500	R 36,984
April	R 201,368	R 16,325	R 15,082	R 2,856	R 507	R 36,795
May	R 202,184	R 16,232	R 14,747	R 2,872	R 459	R 36,147
June	R 197,052	R 16,152	R 14,500	R 2,900	R 519	R 36,145
July	R 183,119	R 16,581	R 13,728	R 2,941	474	R 35,617
August	177,246	16,023	13,509	2,840	413	34,439

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

[b] Fuel oil nos. 1, 2 and 4. For 1973-1979, data are for gas turbine and internal combustion plant stocks of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.

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

[d] Jet fuel and kerosene. Through 2003, data also include a small amount of waste oil.

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

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

R=Revised. NA=Not available.

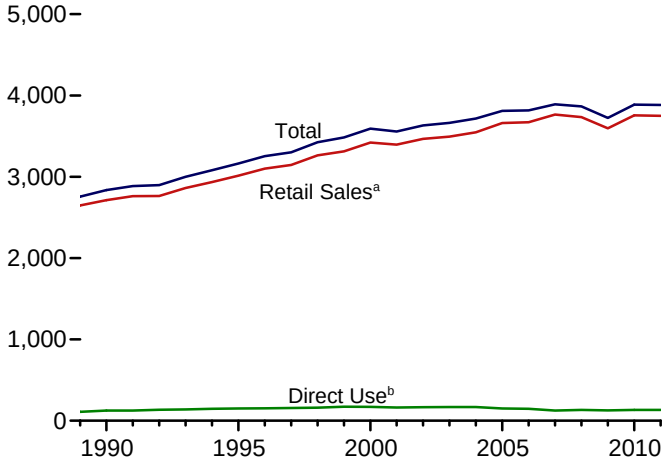
Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks are at end of period. • Totals may not equal sum of components due to independent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

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

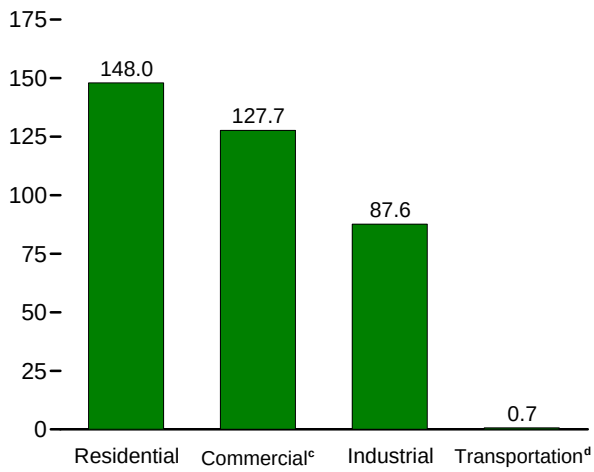
Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977-1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982-1988:** U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report." • **1989-1997:** EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 forward:** EIA, Form EIA-923, "Power Plant Operations Report."

Figure 7.6 Electricity End Use
(Billion Kilowatthours)

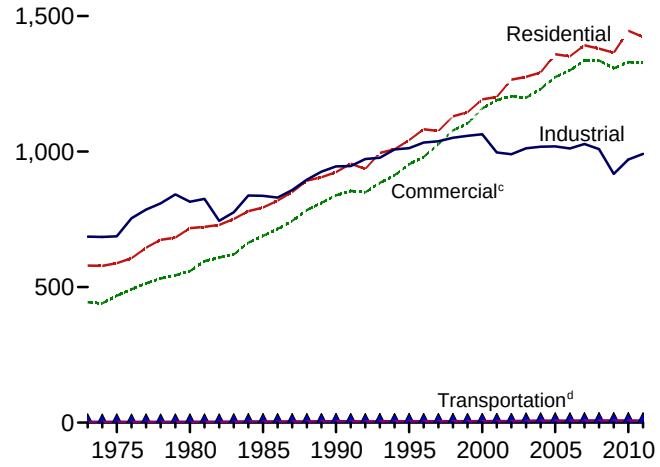
Electricity End Use Overview, 1989-2011



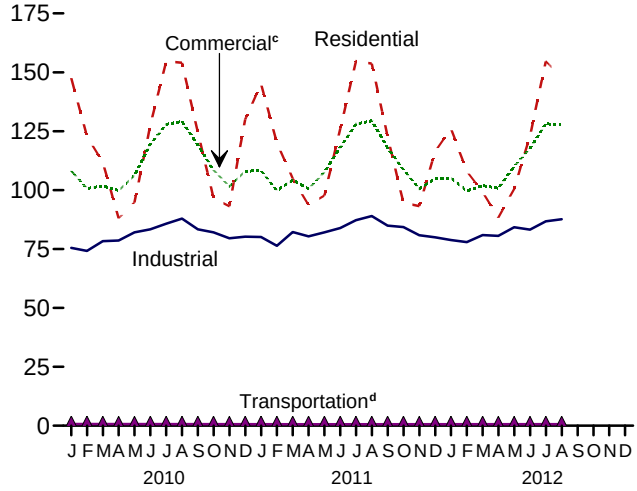
Retail Sales[a] by Sector, August 2012



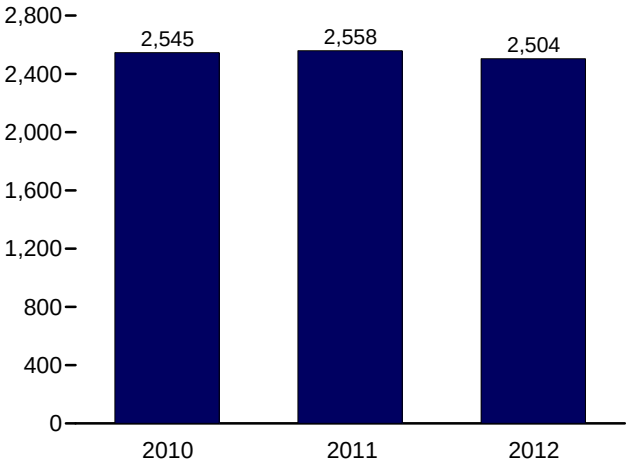
Retail Sales[a] by Sector, 1973-2011



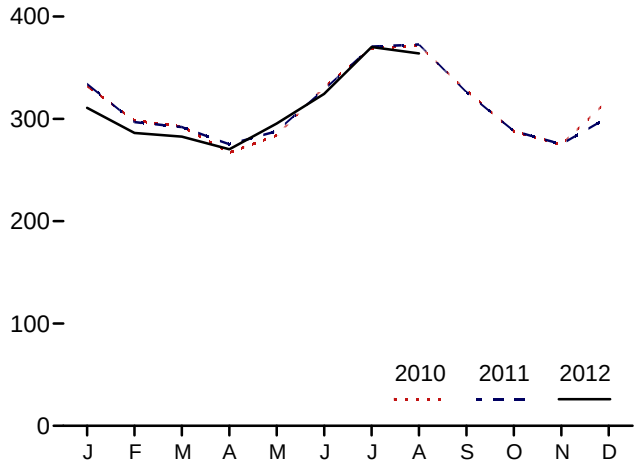
Retail Sales[a] by Sector, Monthly



Retail Sales[a] Total, January-August



Retail Sales[a] Total, Monthly



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

Table 7.6 Electricity End Use

(Million Kilowatthours)

	Retail Sales[a]							*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]
1973 Total	**579,231**	[E] **444,505**	**686,085**	[E] **3,087**	**1,712,909**	**NA**	**1,712,909**	***388,266***	***59,326***
1975 Total	**588,140**	[E] **468,296**	**687,680**	[E] **2,974**	**1,747,091**	**NA**	**1,747,091**	***403,049***	***68,222***
1980 Total	**717,495**	**558,643**	**815,067**	**3,244**	**2,094,449**	**NA**	**2,094,449**	***488,155***	***73,732***
1985 Total	**793,934**	**689,121**	**836,772**	**4,147**	**2,323,974**	**NA**	**2,323,974**	***605,989***	***87,279***
1990 Total	**924,019**	**838,263**	**945,522**	**4,751**	**2,712,555**	**124,529**	**2,837,084**	***751,027***	***91,988***
1995 Total	**1,042,501**	**953,117**	**1,012,693**	**4,975**	**3,013,287**	**150,677**	**3,163,963**	***862,685***	***95,407***
1996 Total	**1,082,512**	**980,061**	**1,033,631**	**4,923**	**3,101,127**	**152,638**	**3,253,765**	***887,445***	***97,539***
1997 Total	**1,075,880**	**1,026,626**	**1,038,197**	**4,907**	**3,145,610**	**156,239**	**3,301,849**	***928,633***	***102,901***
1998 Total	**1,130,109**	**1,077,957**	**1,051,203**	**4,962**	**3,264,231**	**160,866**	**3,425,097**	***979,401***	***103,518***
1999 Total	**1,144,923**	**1,103,821**	**1,058,217**	**5,126**	**3,312,087**	**171,629**	**3,483,716**	***1,001,996***	***106,952***
2000 Total	**1,192,446**	**1,159,347**	**1,064,239**	**5,382**	**3,421,414**	**170,943**	**3,592,357**	***1,055,232***	***109,496***
2001 Total	**1,201,607**	**1,190,518**	**996,609**	**5,724**	**3,394,458**	**162,649**	**3,557,107**	***1,083,069***	***113,174***
2002 Total	**1,265,180**	**1,204,531**	**990,238**	**5,517**	**3,465,466**	**166,184**	**3,631,650**	***1,104,497***	***105,552***
2003 Total	**1,275,824**	**1,198,728**	**1,012,373**	**6,810**	**3,493,734**	**168,295**	**3,662,029**	**– –**	**– –**
2004 Total	**1,291,982**	**1,230,425**	**1,017,850**	**7,224**	**3,547,479**	**168,470**	**3,715,949**	**– –**	**– –**
2005 Total	**1,359,227**	**1,275,079**	**1,019,156**	**7,506**	**3,660,969**	**150,016**	**3,810,984**	**– –**	**– –**
2006 Total	**1,351,520**	**1,299,744**	**1,011,298**	**7,358**	**3,669,919**	**146,927**	**3,816,845**	**– –**	**– –**
2007 Total	**1,392,241**	**1,336,315**	**1,027,832**	**8,173**	**3,764,561**	**125,670**	**3,890,231**	**– –**	**– –**
2008 Total	**1,379,981**	**1,335,981**	**1,009,300**	**7,700**	**3,732,962**	**132,197**	**3,865,159**	**– –**	**– –**
2009 Total	**1,364,474**	**1,307,168**	**917,442**	**7,781**	**3,596,865**	**126,938**	**3,723,803**	**– –**	**– –**
2010 January	147,500	108,120	75,506	715	331,841	[E] 11,084	342,925	– –	– –
February	122,840	100,747	74,164	689	298,440	[E] 10,144	308,585	– –	– –
March	111,790	101,756	78,303	656	292,505	[E] 10,884	303,389	– –	– –
April	88,046	99,791	78,597	600	267,034	[E] 10,091	277,125	– –	– –
May	94,843	106,176	82,088	606	283,712	[E] 10,611	294,323	– –	– –
June	127,496	119,388	83,347	658	330,889	[E] 11,037	341,927	– –	– –
July	154,688	127,925	85,725	667	369,006	[E] 11,690	380,696	– –	– –
August	154,053	129,143	87,904	628	371,728	[E] 12,298	384,026	– –	– –
September	124,582	119,137	83,353	639	327,711	[E] 11,221	338,932	– –	– –
October	96,688	108,461	82,046	615	287,811	[E] 10,605	298,416	– –	– –
November	93,166	101,524	79,575	607	274,871	[E] 10,520	285,392	– –	– –
December	130,015	108,031	80,264	633	318,943	[E] 11,725	330,668	– –	– –
Total	**1,445,708**	**1,330,199**	**970,873**	**7,712**	**3,754,493**	**131,910**	**3,886,403**	**– –**	**– –**
2011 January	[R] 145,054	[R] 108,247	[R] 80,074	710	[R] 334,085	[RE] 11,245	[R] 345,330	– –	– –
February	[R] 120,121	[R] 99,791	[R] 76,360	[R] 637	[R] 296,908	[RE] 10,042	[R] 306,951	– –	– –
March	[R] 104,921	[R] 104,263	[R] 82,204	[R] 664	[R] 292,051	[RE] 10,398	[R] 302,449	– –	– –
April	[R] 93,700	[R] 100,505	[R] 80,349	[R] 629	[R] 275,184	[RE] 10,380	[R] 285,564	– –	– –
May	[R] 97,688	[R] 107,627	[R] 82,088	[R] 619	[R] 288,022	[RE] 10,681	[R] 298,703	– –	– –
June	[R] 125,983	[R] 118,169	[R] 83,922	[R] 643	[R] 328,716	[RE] 11,181	[R] 339,898	– –	– –
July	[R] 154,729	[R] 128,066	[R] 87,246	[R] 650	[R] 370,690	[RE] 12,136	[R] 382,826	– –	– –
August	[R] 153,739	[R] 129,369	[R] 88,994	[R] 625	[R] 372,726	[RE] 12,292	[R] 385,019	– –	– –
September	[R] 122,720	[R] 117,946	[R] 84,947	[R] 634	[R] 326,246	[RE] 11,199	[R] 337,445	– –	– –
October	[R] 94,585	[R] 108,654	[R] 84,291	[R] 616	[R] 288,146	[RE] 10,504	[R] 298,650	– –	– –
November	[R] 93,220	[R] 100,552	[R] 80,870	[R] 590	[R] 275,232	[RE] 10,888	[R] 286,120	– –	– –
December	[R] 116,341	[R] 104,870	[R] 79,972	[R] 656	[R] 301,838	[RE] 11,808	[R] 313,646	– –	– –
Total	[R] **1,422,801**	[R] **1,328,057**	[R] **991,316**	[R] **7,672**	[R] **3,749,846**	[R] **132,754**	[R] **3,882,600**	**– –**	**– –**
2012 January	[R] 126,208	[R] 105,118	[R] 78,821	[R] 666	[R] 310,813	[E] 11,702	[R] 322,515	– –	– –
February	[R] 107,951	[R] 99,682	[R] 77,898	646	[R] 286,177	[E] 11,014	[R] 297,191	– –	– –
March	[R] 99,153	[R] 101,930	[R] 80,911	[R] 619	[R] 282,613	[E] 10,750	[R] 293,363	– –	– –
April	[R] 88,300	[R] 100,839	[R] 80,604	[R] 604	[R] 270,348	[E] 10,366	[R] 280,713	– –	– –
May	[R] 100,478	[R] 110,062	[R] 84,273	[R] 606	[R] 295,420	[E] 11,258	[R] 306,678	– –	– –
June	[R] 122,992	[R] 117,651	[R] 83,202	[R] 610	[R] 324,455	[E] 11,252	[R] 335,708	– –	– –
July	[R] 154,649	[R] 128,157	[R] 86,762	642	[R] 370,210	[E] 12,216	[R] 382,426	– –	– –
August	147,991	127,713	87,629	650	363,984	[E] 11,869	375,853	– –	– –
8-Month Total	**947,721**	**891,153**	**660,102**	**5,043**	**2,504,020**	[E] **90,427**	**2,594,446**	**– –**	**– –**
2011 8-Month Total	**995,935**	**896,036**	**661,236**	**5,177**	**2,558,383**	[E] **88,355**	**2,646,738**	**– –**	**– –**
2010 8-Month Total	**1,001,257**	**893,046**	**645,635**	**5,219**	**2,545,157**	[E] **87,838**	**2,632,995**	**– –**	**– –**

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

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

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

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

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

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

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

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

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

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

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

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

Sources: See end of section.

Electricity

Note. Classification of Power Plants Into Energy-Use Sectors. The U.S. Energy Information Administration (EIA) classifies power plants (both electricity-only and combined-heat-and-power plants) into energy-use sectors based on the North American Industry Classification System (NAICS), which replaced the Standard Industrial Classification (SIC) system in 1997. Plants with a NAICS code of 22 are assigned to the Electric Power Sector. Those with NAICS codes beginning with 11 (agriculture, forestry, fishing, and hunting); 21 (mining, including oil and gas extraction); 23 (construction); 31–33 (manufacturing); 2212 (natural gas distribution); and 22131 (water supply and irrigation systems) are assigned to the Industrial Sector. Those with all other codes are assigned to the Commercial Sector. Form EIA-860, "Annual Electric Generator Report," asks respondents to indicate the primary purpose of the facility by assigning a NAICS code from the list at

http://www.eia.gov/survey/form/eia_860/instructions.doc

Table 7.1 Sources

Net Generation, Electric Power Sector

Table 7.2b.

Net Generation, Commercial and Industrial Sectors

Table 7.2c.

Imports and Exports, Electricity Trade With Canada and Mexico, 1973–1989

1973–September 1977: Unpublished Federal Power Commission data.
October 1977–1980: Unpublished Economic Regulatory Administration (ERA) data.
1981: U.S. Department of Energy (DOE), Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).
1982 and 1983: DOE, ERA, *Electricity Exchanges Across International Borders*.
1984–1986: DOE, ERA, *Electricity Transactions Across International Borders*.
1987 and 1988: DOE, ERA, Form ERA-781R, "Annual Report of International Electrical Export/Import Data."
1989: DOE, Fossil Energy, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

Imports and Exports, Electricity Trade with Canada, 1990 Forward

National Energy Board of Canada, data for total sales (firm and interruptible; which exclude non-revenue, inadvertent, and service) from Canada to the United States, and data for total purchases (which exclude non-revenue, inadvertent, and service) by Canada from the United States.

Imports and Exports, Electricity Trade with Mexico, 1990 Forward

DOE, Office of Electricity Delivery and Energy Reliability, Form OE-781R, "Monthly Electricity Imports and Exports Report," and predecessor form. For 2001 forward, data from the California Independent System Operator are used in combination with the Form OE-781 values to estimate electricity trade with Mexico.

T&D Losses and Unaccounted for

Calculated as the sum of total net generation and imports minus end use and exports.

End Use

Table 7.6.

Table 7.2b Sources

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."
October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."
1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."
1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."
1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."
2001–2003: EIA, Form EIA-906, "Power Plant Report."
2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."

Table 7.2c Sources

Industrial Sector, Hydroelectric Power, 1973–1988

1973–September 1977: Federal Power Commission (FPC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FPC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.
October 1977–1978: Federal Energy Regulatory Commission (FERC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FERC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.
1979: FERC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and U.S. Energy Information Administration (EIA) estimates for all other plants.

1980–1988: Estimated by EIA as the average generation over the 6-year period of 1974–1979.

All Data, 1989 Forward

1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."
2001–2003: EIA, Form EIA-906, "Power Plant Report."
2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."

Table 7.3b Sources

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."
October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."
1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."
1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."
1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."
2001–2003: EIA, Form EIA-906, "Power Plant Report."
2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."

Table 7.4b Sources

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."
October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."
1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."
1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."
1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."
2001–2003: EIA, Form EIA-906, "Power Plant Report."
2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."
2008 forward: EIA, Form EIA-923, "Power Plant Operations Report."

Table 7.6 Sources

Retail Sales, Residential and Industrial

1973–September 1977: Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."
October 1977–February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."
March 1980–1982: FERC, Form FPC-5, "Electric Utility Company Monthly Statement."
1983: U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement."
1984–1997: EIA, Form EIA-861, "Annual Electric Utility Report."
1998 forward: EIA, *Electric Power Monthly*, October 2012, Table 5.1.

Retail Sales, Commercial

1973–2002: Estimated by EIA as the sum of "Commercial (Old)" and the non-transportation portion of "Other (Old)." See estimation methodology at http://www.eia.gov/state/seds/sep_use/notes/use_elec.pdf.
2003 forward: EIA, *Electric Power Monthly*, October 2012, Table 5.1.

Retail Sales, Transportation

1973–2002: Estimated by EIA as the transportation portion of "Other (Old)." See estimation methodology at http://www.eia.gov/states/sep_use/notes/use_elec.pdf.
2003 forward: EIA, *Electric Power Monthly*, October 2012, Table 5.1.

Direct Use, Annual

1989–1996: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1997–2010: EIA, *Electric Power Annual 2010*, November 2011, Table 7.2.
2011: EIA, Form EIA-923, "Power Plant Operations Report."

Direct Use, Monthly

Annual shares are calculated as annual direct use divided by annual commercial and industrial net generation (on Table 7.1). Then monthly direct use estimates are calculated as the annual share multiplied by the monthly commercial and industrial net generation values. For 2012, the 2011 annual share is used.

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

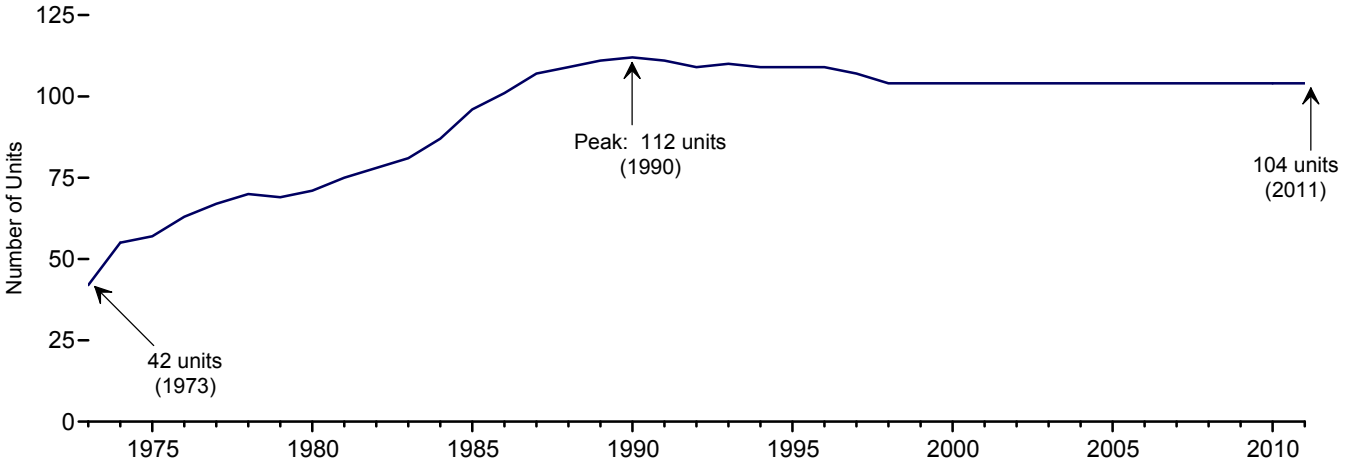
1973–2002: See sources for "Residential" and "Industrial."

THIS PAGE INTENTIONALLY LEFT BLANK

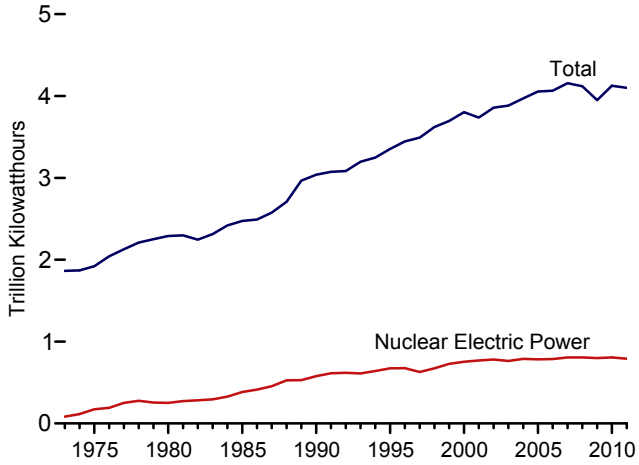
8. Nuclear Energy

Figure 8.1 Nuclear Energy Overview

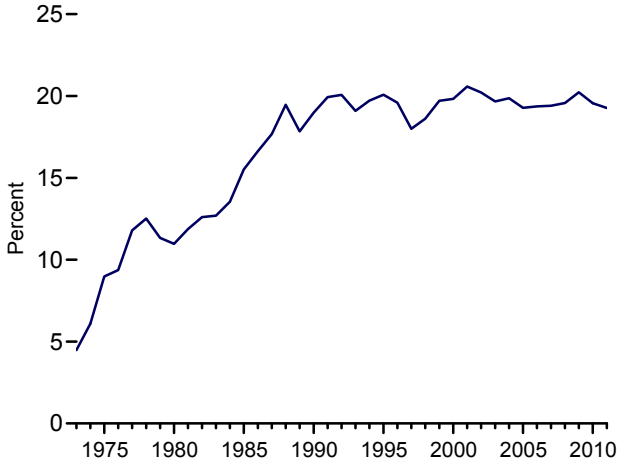
Operable Units, End of Year, 1973-2011



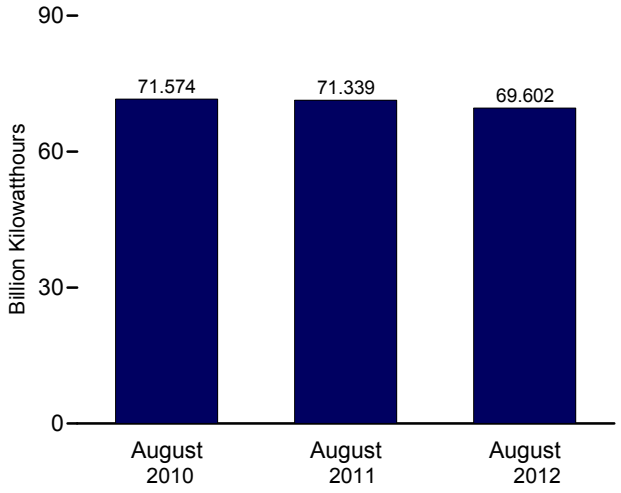
Electricity Net Generation, 1973-2011



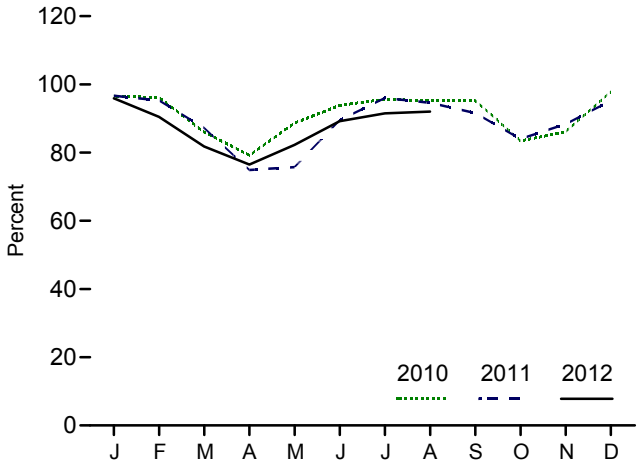
Nuclear Share of Electricity Net Generation, 1973-2011



Nuclear Electricity Net Generation



Capacity Factor, Monthly



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

Table 8.1 Nuclear Energy Overview

	Total Operable Units[a,b]	Net Summer Capacity of Operable Units[b,c]	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factor[d]
	Number	Million Kilowatts	Million Kilowatthours	Percent	
1973 Total	**42**	**22.683**	**83,479**	**4.5**	**53.5**
1975 Total	**57**	**37.267**	**172,505**	**9.0**	**55.9**
1980 Total	**71**	**51.810**	**251,116**	**11.0**	**56.3**
1985 Total	**96**	**79.397**	**383,691**	**15.5**	**58.0**
1990 Total	**112**	**99.624**	**576,862**	**19.0**	**66.0**
1995 Total	**109**	**99.515**	**673,402**	**20.1**	**77.4**
1996 Total	**109**	**100.784**	**674,729**	**19.6**	**76.2**
1997 Total	**107**	**99.716**	**628,644**	**18.0**	**71.1**
1998 Total	**104**	**97.070**	**673,702**	**18.6**	**78.2**
1999 Total	**104**	**97.411**	**728,254**	**19.7**	**85.3**
2000 Total	**104**	**97.860**	**753,893**	**19.8**	**88.1**
2001 Total	**104**	**98.159**	**768,826**	**20.6**	**89.4**
2002 Total	**104**	**98.657**	**780,064**	**20.2**	**90.3**
2003 Total	**104**	**99.209**	**763,733**	**19.7**	**87.9**
2004 Total	**104**	**99.628**	**788,528**	**19.9**	**90.1**
2005 Total	**104**	**99.988**	**781,986**	**19.3**	**89.3**
2006 Total	**104**	**100.334**	**787,219**	**19.4**	**89.6**
2007 Total	**104**	**100.266**	**806,425**	**19.4**	**91.8**
2008 Total	**104**	**100.755**	**806,208**	**19.6**	**91.1**
2009 Total	**104**	**101.004**	**798,855**	**20.2**	**90.3**
2010 January	104	[e E] 101.002	72,569	20.1	[E] 96.6
February	104	[E] 101.000	65,245	20.4	[E] 96.1
March	104	[E] 100.998	64,635	20.7	[E] 86.0
April	104	[E] 100.996	57,611	20.0	[E] 79.2
May	104	[E] 101.063	66,658	20.3	[E] 88.7
June	104	[E] 101.094	68,301	18.2	[E] 93.8
July	104	[E] 101.092	71,913	17.6	[E] 95.6
August	104	[E] 101.090	71,574	17.5	[E] 95.2
September	104	[E] 101.088	69,371	20.0	[E] 95.3
October	104	[E] 101.104	62,751	20.4	[E] 83.4
November	104	[E] 101.129	62,655	20.5	[E] 86.0
December	104	101.167	73,683	20.3	97.9
Total	**104**	**101.167**	**806,968**	**19.6**	**91.1**
2011 January	104	[E] 101.167	72,743	20.0	[E] 96.6
February	104	[E] 101.167	64,789	20.7	[E] 95.3
March	104	[E] 101.167	65,662	20.6	[E] 87.2
April	104	[E] 101.167	54,547	18.0	[E] 74.9
May	104	[E] 101.167	[R] 57,013	17.6	[RE] 75.7
June	104	[E] 101.281	65,270	17.7	[E] 89.5
July	104	[E] 101.281	72,345	[R] 17.3	[E] 96.0
August	104	[E] 101.351	71,339	[R] 17.5	[E] 94.6
September	104	[E] 101.351	66,849	19.8	[E] 91.6
October	104	[E] 101.351	[R] 63,337	20.5	[E] 84.0
November	104	[E] 101.351	64,474	21.2	[E] 88.4
December	104	[R] 101.419	71,837	21.4	95.2
Total	**104**	**[R] 101.419**	**[R] 790,204**	**[R] 19.3**	**89.1**
2012 January	104	[RE] 101.419	[R] 72,381	21.2	[E] 95.9
February	104	[RE] 101.419	[R] 63,847	20.6	[E] 90.5
March	104	[RE] 101.419	[R] 61,729	[R] 20.0	[E] 81.8
April	104	[RE] 101.419	55,871	18.9	[E] 76.5
May	104	[RE] 101.442	62,081	18.4	[E] 82.3
June	104	[RE] 101.442	65,140	18.0	[E] 89.2
July	104	[RE] 101.564	69,129	16.6	[E] 91.5
August	104	[E] 101.673	69,602	17.6	[E] 92.0
8-Month Total	**104**	**[E] 101.673**	**519,781**	**18.8**	**[E] 87.5**
2011 8-Month Total	**104**	**[E] 101.351**	**523,707**	**18.6**	**[E] 88.7**
2010 8-Month Total	**104**	**[E] 101.090**	**538,508**	**19.2**	**[E] 91.4**

[a] Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at end of period. See Note 1, "Operable Nuclear Reactors," at end of section. For additional information on nuclear generating units, see *Annual Energy Review 2011*, September 2012, Table 9.1, http://www.eia.gov/totalenergy/data/annual/#nuclear.

[b] At end of period.

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

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

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

R=Revised. E=Estimate.

Notes: • For a discussion of nuclear reactor unit coverage, see Note 1, "Operable Nuclear Reactors," at end of section. • Nuclear electricity net generation totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Nuclear Energy

Note 1. Operable Nuclear Reactors. A reactor is generally defined as operable while it possessed a full-power license from the Nuclear Regulatory Commission or its predecessor the Atomic Energy Commission, or equivalent permission to operate, at the end of the year or month shown. The definition is liberal in that it does not exclude units retaining full-power licenses during long, non-routine shutdowns that for a time rendered them unable to generate electricity. Examples are:

(a) In 1985 the five then-active Tennessee Valley Authority (TVA) units (Browns Ferry 1, 2, and 3, and Sequoyah 1 and 2) were shut down under a regulatory forced outage. All five units were idle for several years, restarting in 2007, 1991, 1995, 1988, and 1988, respectively and were counted as operable during the shutdowns.

(b) Shippingport was shut down from 1974 through 1976 for conversion to a light-water breeder reactor, but is counted as operable from 1957 until its retirement in 1982.

(c) Calvert Cliffs 2 was shut down in 1989 and 1990 for replacement of pressurizer heater sleeves but is counted as operable during those years.

Exceptions to the definition are Shoreham and Three Mile Island 2. Shoreham was granted a full-power license in April 1989, but was shut down two months later and never restarted. In 1991, the license was changed to Possession Only. Although not operable at the end of the year, Shoreham is counted as operable during 1989. A major accident closed Three Mile Island 2 in 1979, and although the unit retained its full-power license for several years, it is considered permanently shut down since that year.

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

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

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

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

Table 8.1 Sources

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

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

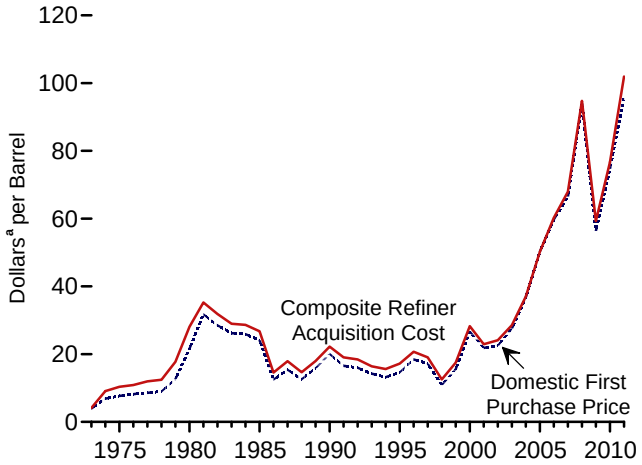
Nuclear Electricity Net Generation and **Nuclear Share of Electricity Net Generation**
See Table 7.2a.

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

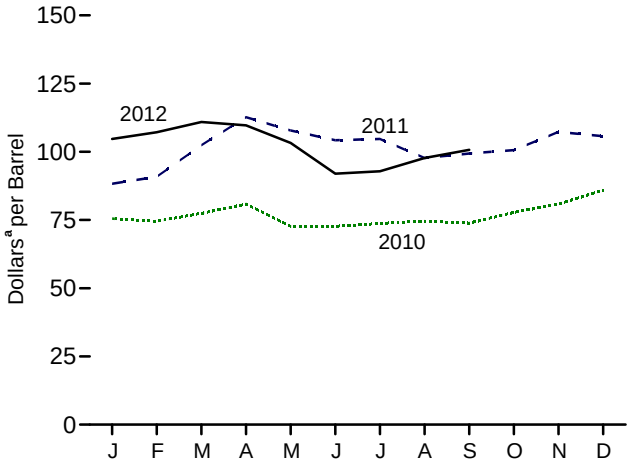
9. Energy Prices

Figure 9.1 Petroleum Prices

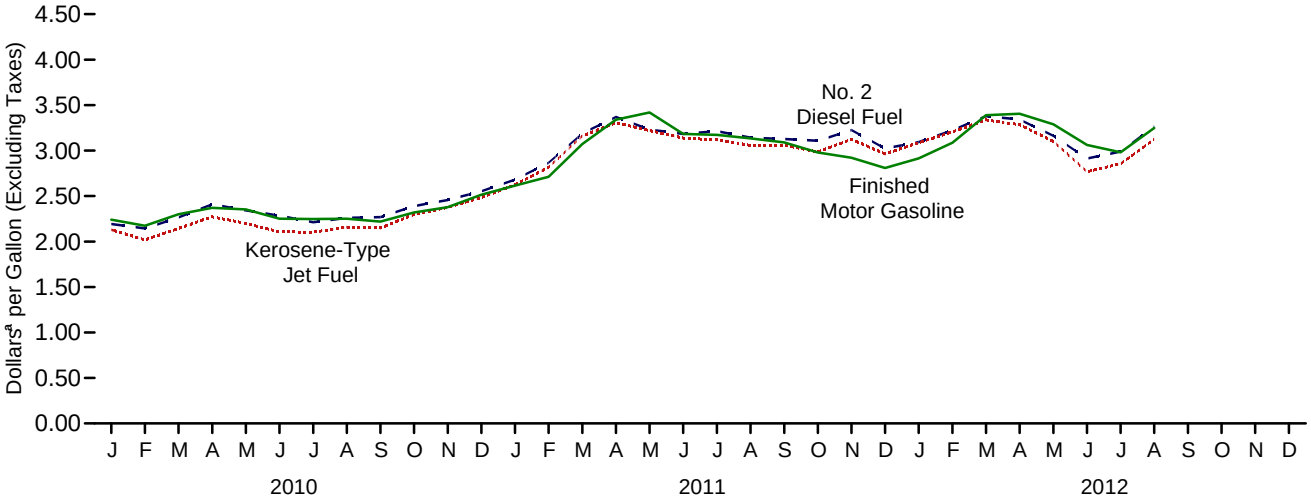
Crude Oil Prices, 1973-2011



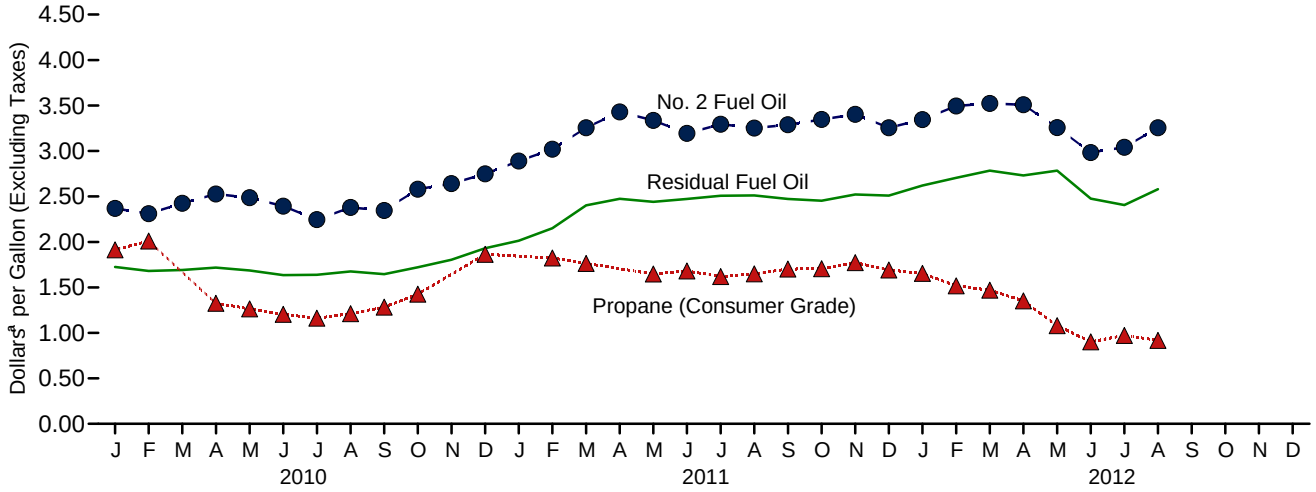
Composite Refiner Acquisition Cost, Monthly



Refiner Prices to End Users: Motor Gasoline, Diesel Fuel, and Jet Fuel, Monthly



Refiner Prices to End Users: No. 2 Fuel Oil, Propane, and Residual Fuel, Monthly



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

Table 9.1 Crude Oil Price Summary

(Dollars[a] per Barrel)

	Domestic First Purchase Price[c]	F.O.B. Cost of Imports[d]	Landed Cost of Imports[e]	Refiner Acquisition Cost[b]		
				Domestic	Imported	Composite
1973 Average	**3.89**	[f] **5.21**	[f] **6.41**	[E] **4.17**	[E] **4.08**	[E] **4.15**
1975 Average	**7.67**	**11.18**	**12.70**	**8.39**	**13.93**	**10.38**
1980 Average	**21.59**	**32.37**	**33.67**	**24.23**	**33.89**	**28.07**
1985 Average	**24.09**	**25.84**	**26.67**	**26.66**	**26.99**	**26.75**
1990 Average	**20.03**	**20.37**	**21.13**	**22.59**	**21.76**	**22.22**
1995 Average	**14.62**	**15.69**	**16.78**	**17.33**	**17.14**	**17.23**
1996 Average	**18.46**	**19.32**	**20.31**	**20.77**	**20.64**	**20.71**
1997 Average	**17.23**	**16.94**	**18.11**	**19.61**	**18.53**	**19.04**
1998 Average	**10.87**	**10.76**	**11.84**	**13.18**	**12.04**	**12.52**
1999 Average	**15.56**	**16.47**	**17.23**	**17.90**	**17.26**	**17.51**
2000 Average	**26.72**	**26.27**	**27.53**	**29.11**	**27.70**	**28.26**
2001 Average	**21.84**	**20.46**	**21.82**	**24.33**	**22.00**	**22.95**
2002 Average	**22.51**	**22.63**	**23.91**	**24.65**	**23.71**	**24.10**
2003 Average	**27.56**	**25.86**	**27.69**	**29.82**	**27.71**	**28.53**
2004 Average	**36.77**	**33.75**	**36.07**	**38.97**	**35.90**	**36.98**
2005 Average	**50.28**	**47.60**	**49.29**	**52.94**	**48.86**	**50.24**
2006 Average	**59.69**	**57.03**	**59.11**	**62.62**	**59.02**	**60.24**
2007 Average	**66.52**	**66.36**	**67.97**	**69.65**	**67.04**	**67.94**
2008 Average	**94.04**	**90.32**	**93.33**	**98.47**	**92.77**	**94.74**
2009 Average	**56.35**	**57.78**	**60.23**	**59.49**	**59.17**	**59.29**
2010 January	72.89	72.96	74.78	76.04	75.07	75.48
February	72.74	71.50	75.01	75.91	73.73	74.58
March	75.77	75.41	77.65	78.52	76.77	77.43
April	78.80	78.27	79.34	82.12	80.03	80.83
May	70.90	69.21	72.00	75.23	71.15	72.66
June	70.77	70.17	72.62	73.93	71.91	72.66
July	71.37	71.01	73.43	74.54	73.25	73.73
August	72.07	71.27	73.63	76.21	73.50	74.58
September	71.23	71.72	74.25	74.87	73.20	73.85
October	76.02	75.52	77.26	78.88	77.02	77.77
November	79.20	79.56	81.56	82.05	80.07	80.85
December	83.98	83.95	86.64	86.48	85.59	85.95
Average	**74.71**	**74.20**	**76.49**	**77.96**	**75.88**	**76.69**
2011 January	85.66	86.80	89.61	88.73	87.99	88.28
February	86.69	92.07	94.25	89.50	91.72	90.85
March	99.19	104.19	104.80	102.34	102.48	102.43
April	108.80	111.52	112.54	111.96	113.08	112.65
May	102.46	105.92	108.28	107.55	107.99	107.82
June	97.30	104.35	105.19	102.53	105.36	104.23
July	97.82	105.60	106.19	102.67	105.94	104.68
August	89.00	97.72	99.27	95.89	99.01	97.70
September	90.22	100.84	101.03	96.89	101.05	99.39
October	92.28	101.92	102.55	98.34	102.00	100.57
November	100.18	105.79	105.98	106.69	107.67	107.28
December	98.71	103.09	105.62	104.51	106.52	105.69
Average	**95.73**	**101.68**	**102.99**	**100.74**	**102.70**	**101.93**
2012 January	98.99	103.96	105.27	103.97	105.25	104.70
February	102.05	108.56	109.24	105.93	108.08	107.18
March	105.42	110.72	110.68	110.80	111.00	110.92
April	103.62	107.17	107.58	111.26	108.53	109.70
May	95.57	100.79	101.56	103.17	103.26	103.23
June	83.59	[R] 87.89	[R] 91.90	91.66	92.18	91.96
July	[R] 86.10	[R] 92.60	[R] 93.09	92.64	92.98	92.83
August	[R] 92.53	[R] 99.77	[R] 96.81	[R] 98.57	[R] 97.06	[R] 97.71
September	NA	NA	NA	[E] 100.40	[E] 100.90	[E] 100.70

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

Notes: • Values for Domestic First Purchase Price and Refiner Acquisition Cost for the current two months and for F.O.B. and Landed Costs of Imports for the current three months are preliminary. • F.O.B. and landed costs through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are the averages of the monthly prices, weighted by volume. • Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.

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

Sources: See end of section.

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

(Dollars[a] per Barrel)

	Selected Countries							Persian Gulf Nations[b]	Total OPEC[c]	Total Non-OPEC[c]
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[d]	**W**	**W**	**–**	**7.81**	**3.25**	**–**	**5.39**	**3.68**	**5.43**	**4.80**
1975 Average	**10.97**	**–**	**11.44**	**11.82**	**10.87**	**–**	**11.04**	**10.88**	**11.34**	**10.62**
1980 Average	**33.45**	**W**	**31.06**	**35.93**	**28.17**	**34.36**	**24.81**	**28.92**	**32.21**	**32.85**
1985 Average	**26.30**	**–**	**25.33**	**28.04**	**22.04**	**27.64**	**23.64**	**23.31**	**25.67**	**25.96**
1990 Average	**20.23**	**20.75**	**19.26**	**22.46**	**20.36**	**23.43**	**19.55**	**18.54**	**20.40**	**20.32**
1995 Average	**16.58**	**16.73**	**15.64**	**17.40**	**W**	**16.94**	**13.86**	**W**	**15.36**	**16.02**
1996 Average	**20.71**	**21.33**	**19.14**	**21.27**	**19.28**	**19.43**	**17.73**	**19.22**	**18.94**	**19.65**
1997 Average	**18.81**	**18.85**	**16.72**	**19.43**	**15.16**	**18.59**	**15.33**	**15.24**	**16.26**	**17.51**
1998 Average	**12.11**	**12.56**	**10.49**	**12.97**	**8.87**	**12.52**	**9.31**	**9.09**	**10.20**	**11.21**
1999 Average	**17.46**	**17.20**	**15.89**	**17.32**	**17.65**	**19.14**	**14.33**	**17.15**	**15.90**	**16.84**
2000 Average	**27.90**	**29.04**	**25.39**	**28.70**	**24.62**	**27.21**	**24.45**	**24.72**	**25.56**	**26.77**
2001 Average	**23.25**	**24.25**	**18.89**	**24.85**	**18.98**	**23.30**	**18.01**	**18.89**	**19.73**	**21.04**
2002 Average	**24.09**	**24.64**	**21.60**	**25.38**	**23.92**	**24.50**	**20.13**	**23.38**	**22.18**	**22.93**
2003 Average	**28.22**	**28.89**	**24.83**	**29.40**	**25.03**	**28.76**	**23.81**	**25.17**	**25.36**	**26.21**
2004 Average	**37.26**	**37.73**	**31.55**	**38.71**	**34.08**	**37.30**	**31.78**	**33.08**	**33.95**	**33.58**
2005 Average	**52.48**	**51.89**	**43.00**	**55.95**	**47.96**	**54.48**	**46.39**	**47.21**	**49.60**	**45.79**
2006 Average	**62.23**	**59.77**	**52.91**	**65.69**	**56.09**	**66.03**	**55.80**	**56.02**	**59.18**	**55.35**
2007 Average	**67.80**	**67.93**	**61.35**	**76.64**	**W**	**69.96**	**64.10**	**69.93**	**69.58**	**62.69**
2008 Average	**95.66**	**91.17**	**84.61**	**102.06**	**93.03**	**96.33**	**88.06**	**91.44**	**93.15**	**87.15**
2009 Average	**57.07**	**57.90**	**56.47**	**64.61**	**57.87**	**65.63**	**55.58**	**59.53**	**58.53**	**57.16**
2010 January	74.62	70.08	72.96	75.91	W	–	70.86	W	73.42	72.49
February	W	68.70	69.16	76.07	W	–	68.83	71.89	71.77	71.14
March	78.11	73.90	72.76	81.27	W	–	70.88	76.10	75.83	74.91
April	84.40	74.85	75.57	85.94	W	W	72.59	80.01	78.88	77.73
May	71.86	64.32	68.30	74.28	W	–	66.37	73.60	70.45	68.24
June	72.90	67.19	67.64	75.61	W	–	66.19	72.49	71.39	69.20
July	74.77	70.00	68.53	79.63	W	–	67.25	71.76	72.16	69.87
August	77.11	69.88	69.53	75.70	W	W	68.27	72.79	72.38	70.35
September	W	69.71	69.90	80.93	74.06	–	67.59	73.34	73.24	70.24
October	W	76.06	73.93	84.59	W	–	72.10	78.28	77.55	73.80
November	85.99	78.92	77.14	86.61	W	–	75.03	80.99	80.95	78.49
December	W	81.62	81.75	93.68	W	–	77.78	W	85.72	82.40
Average	**78.18**	**72.56**	**72.46**	**80.83**	**76.44**	**W**	**70.30**	**75.65**	**75.23**	**73.24**
2011 January	95.97	83.36	84.36	99.86	W	–	81.25	W	89.74	83.92
February	W	87.23	88.77	109.07	W	–	85.11	97.25	96.01	88.67
March	113.63	101.29	102.55	117.98	W	–	97.56	107.36	106.19	102.44
April	122.52	114.17	109.90	126.05	W	–	106.56	114.82	115.15	107.71
May	113.33	106.15	105.13	117.66	W	–	101.60	110.29	108.50	103.81
June	115.13	102.78	103.43	119.13	W	–	100.59	106.39	108.22	100.42
July	114.80	100.30	104.84	119.68	W	–	100.62	109.06	110.09	100.90
August	W	95.01	98.21	115.61	W	–	97.17	106.98	104.19	93.57
September	112.49	97.45	100.28	115.43	109.99	–	95.72	108.41	105.82	97.08
October	109.74	102.37	101.48	114.46	W	–	96.93	105.62	105.20	98.65
November	112.49	106.97	107.94	115.35	W	–	105.44	106.51	108.16	104.17
December	111.26	103.10	105.96	W	W	–	105.75	104.48	106.42	100.80
Average	**111.82**	**100.19**	**100.92**	**115.35**	**107.08**	**–**	**97.23**	**106.49**	**105.34**	**98.51**
2012 January	111.10	106.69	107.79	114.12	W	–	105.08	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	104.75
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	R 91.90	–	87.64	90.55	90.63	R 85.28
July	W	96.83	R 95.03	R 103.86	W	–	R 93.81	95.47	R 96.30	R 88.59
August	W	106.19	101.20	114.47	W	–	99.68	105.21	104.45	95.31

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

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

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

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

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

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See "F.O.B." in Glossary, and Note 3, "Crude Oil F.O.B. Costs," at end of section. • Values for the current two months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Dollars[a] per Barrel)

	Selected Countries								Persian Gulf Nations[b]	Total OPEC[c]	Total Non-OPEC[c]
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[d]	**W**	**5.33**	**W**	**–**	**9.08**	**5.37**	**–**	**5.99**	**5.91**	**6.85**	**5.64**
1975 Average	**11.81**	**12.84**	**–**	**12.61**	**12.70**	**12.50**	**–**	**12.36**	**12.64**	**12.70**	**12.70**
1980 Average	**34.76**	**30.11**	**W**	**31.77**	**37.15**	**29.80**	**35.68**	**25.92**	**30.59**	**33.56**	**33.99**
1985 Average	**27.39**	**25.71**	**–**	**25.63**	**28.96**	**24.72**	**28.36**	**24.43**	**25.50**	**26.86**	**26.53**
1990 Average	**21.51**	**20.48**	**22.34**	**19.64**	**23.33**	**21.82**	**22.65**	**20.31**	**20.55**	**21.23**	**20.98**
1995 Average	**17.66**	**16.65**	**17.45**	**16.19**	**18.25**	**16.84**	**17.91**	**14.81**	**16.78**	**16.61**	**16.95**
1996 Average	**21.86**	**19.94**	**22.02**	**19.64**	**21.95**	**20.49**	**20.88**	**18.59**	**20.45**	**20.14**	**20.47**
1997 Average	**20.24**	**17.63**	**19.71**	**17.30**	**20.64**	**17.52**	**20.64**	**16.35**	**17.44**	**17.73**	**18.45**
1998 Average	**13.37**	**11.62**	**13.26**	**11.04**	**14.14**	**11.16**	**13.55**	**10.16**	**11.18**	**11.46**	**12.22**
1999 Average	**18.37**	**17.54**	**18.09**	**16.12**	**17.63**	**17.48**	**18.26**	**15.58**	**17.37**	**16.94**	**17.51**
2000 Average	**29.57**	**26.69**	**29.68**	**26.03**	**30.04**	**26.58**	**29.26**	**26.05**	**26.77**	**27.29**	**27.80**
2001 Average	**25.13**	**20.72**	**25.88**	**19.37**	**26.55**	**20.98**	**25.32**	**19.81**	**20.73**	**21.52**	**22.17**
2002 Average	**25.43**	**22.98**	**25.28**	**22.09**	**26.45**	**24.77**	**26.35**	**21.93**	**24.13**	**23.83**	**23.97**
2003 Average	**30.14**	**26.76**	**30.55**	**25.48**	**31.07**	**27.50**	**30.62**	**25.70**	**27.54**	**27.70**	**27.68**
2004 Average	**39.62**	**34.51**	**39.03**	**32.25**	**40.95**	**37.11**	**39.28**	**33.79**	**36.53**	**36.84**	**35.29**
2005 Average	**54.31**	**44.73**	**53.42**	**43.47**	**57.55**	**50.31**	**55.28**	**47.87**	**49.68**	**51.36**	**47.31**
2006 Average	**64.85**	**53.90**	**62.13**	**53.76**	**68.26**	**59.19**	**67.44**	**57.37**	**58.92**	**61.21**	**57.14**
2007 Average	**71.27**	**60.38**	**70.91**	**62.31**	**78.01**	**70.78**	**72.47**	**66.13**	**69.83**	**71.14**	**63.96**
2008 Average	**98.18**	**90.00**	**93.43**	**85.97**	**104.83**	**94.75**	**96.95**	**90.76**	**93.59**	**95.49**	**90.59**
2009 Average	**61.32**	**57.60**	**58.50**	**57.35**	**68.01**	**62.14**	**63.87**	**57.78**	**62.15**	**61.90**	**58.58**
2010 January	77.32	72.59	74.26	73.23	78.58	76.63	77.97	72.63	76.34	75.91	73.59
February	79.06	73.37	73.11	69.48	79.25	77.29	77.84	70.91	77.27	76.24	73.33
March	80.93	76.82	76.08	73.07	83.68	77.57	79.07	72.92	77.55	78.40	76.84
April	82.26	78.36	76.33	75.03	86.80	79.53	80.25	75.21	79.15	80.07	78.61
May	74.80	69.16	66.52	68.71	76.90	77.52	W	68.53	76.20	73.95	70.20
June	76.54	69.14	69.64	68.02	78.14	76.01	77.67	68.30	75.14	74.55	70.92
July	77.20	70.25	71.61	69.31	81.07	75.46	76.60	69.59	74.75	74.81	72.03
August	78.40	70.10	71.49	69.95	79.15	76.06	79.52	70.14	75.81	75.42	71.81
September	80.49	68.66	70.85	70.47	81.58	77.15	W	68.88	76.64	76.39	71.89
October	85.33	69.23	76.72	74.73	86.01	81.81	W	74.29	81.24	80.52	74.15
November	86.98	75.40	80.24	77.55	89.15	84.62	87.10	77.53	84.09	84.38	78.96
December	91.77	80.76	82.76	82.37	95.44	90.45	92.50	80.79	89.99	89.25	83.97
Average	**80.63**	**72.80**	**74.25**	**72.86**	**83.15**	**79.25**	**80.12**	**72.43**	**78.58**	**78.27**	**74.67**
2011 January	99.58	81.43	85.88	85.00	101.24	96.59	W	84.70	96.57	94.03	85.02
February	110.07	80.65	90.14	89.08	108.94	103.20	W	89.88	101.81	99.96	89.03
March	114.40	89.32	105.74	103.03	117.17	110.12	118.42	101.22	109.56	109.23	101.20
April	124.01	99.26	112.47	110.55	126.47	116.13	124.67	107.95	115.18	116.64	108.91
May	116.76	98.29	109.70	105.62	119.95	112.19	W	104.04	111.48	111.90	105.06
June	116.73	92.36	104.31	103.71	120.81	110.00	W	102.32	108.97	109.87	100.83
July	117.98	91.76	101.35	105.38	121.80	111.06	W	103.04	110.19	111.58	100.38
August	113.36	84.05	95.08	98.78	115.83	109.38	W	99.54	108.26	106.24	93.81
September	112.63	85.19	99.17	99.90	117.19	109.91	W	99.10	108.82	107.67	95.59
October	114.82	88.21	104.14	101.97	116.09	108.90	W	99.89	108.07	107.98	97.91
November	115.14	93.80	108.52	108.46	117.05	108.61	W	106.90	108.35	110.09	102.90
December	115.65	95.74	106.64	106.31	117.10	108.27	W	108.02	107.53	109.63	102.52
Average	**114.05**	**90.03**	**102.53**	**101.22**	**116.40**	**108.81**	**118.35**	**100.14**	**108.06**	**107.85**	**98.75**
2012 January	115.13	93.43	110.54	108.38	115.41	110.49	W	106.23	110.61	110.32	101.31
February	121.40	92.14	115.19	111.24	126.42	114.73	W	111.72	114.22	115.76	103.02
March	128.35	88.73	119.93	115.20	130.46	117.55	–	114.29	117.14	118.26	103.98
April	120.60	85.55	113.78	111.55	124.06	115.65	W	110.58	115.98	116.21	99.94
May	114.94	82.78	105.04	103.79	113.89	108.39	W	103.02	108.52	108.26	95.20
June	103.10	R 78.11	93.85	90.89	103.24	R 99.38	–	89.41	R 99.24	R 97.29	R 87.15
July	R 106.95	R 75.48	R 97.70	R 95.24	R 106.95	R 97.27	R W	R 94.91	R 97.55	R 98.86	R 87.97
August	115.29	79.58	105.91	102.07	114.65	103.42	–	101.16	103.16	104.78	91.26

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

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

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

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

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

Notes: • See "Landed Costs" in Glossary, and Note 4, "Crude Oil Landed Costs," at end of section. • Values for the current two months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **October 1973-September 1977:** Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • **October 1977-December 1977:** U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 22. • **2010 forward:** EIA, *Petroleum Marketing Monthly,* November 2012, Table 22.

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

(Dollars[a] per Gallon, Including Taxes)

	Leaded Regular	Unleaded Regular	Unleaded Premium[b]	All Types[c]
1973 Average	**0.388**	**NA**	**NA**	**NA**
1975 Average	**0.567**	**NA**	**NA**	**NA**
1980 Average	**1.191**	**1.245**	**NA**	**1.221**
1985 Average	**1.115**	**1.202**	**1.340**	**1.196**
1990 Average	**1.149**	**1.164**	**1.349**	**1.217**
1995 Average	**NA**	**1.147**	**1.336**	**1.205**
1996 Average	**NA**	**1.231**	**1.413**	**1.288**
1997 Average	**NA**	**1.234**	**1.416**	**1.291**
1998 Average	**NA**	**1.059**	**1.250**	**1.115**
1999 Average	**NA**	**1.165**	**1.357**	**1.221**
2000 Average	**NA**	**1.510**	**1.693**	**1.563**
2001 Average	**NA**	**1.461**	**1.657**	**1.531**
2002 Average	**NA**	**1.358**	**1.556**	**1.441**
2003 Average	**NA**	**1.591**	**1.777**	**1.638**
2004 Average	**NA**	**1.880**	**2.068**	**1.923**
2005 Average	**NA**	**2.295**	**2.491**	**2.338**
2006 Average	**NA**	**2.589**	**2.805**	**2.635**
2007 Average	**NA**	**2.801**	**3.033**	**2.849**
2008 Average	**NA**	**3.266**	**3.519**	**3.317**
2009 Average	**NA**	**2.350**	**2.607**	**2.401**
2010 January	NA	2.731	2.987	2.779
February	NA	2.659	2.922	2.709
March	NA	2.780	3.035	2.829
April	NA	2.858	3.113	2.906
May	NA	2.869	3.124	2.915
June	NA	2.736	3.000	2.783
July	NA	2.736	2.997	2.783
August	NA	2.745	3.015	2.795
September	NA	2.704	2.968	2.754
October	NA	2.795	3.055	2.843
November	NA	2.852	3.109	2.899
December	NA	2.985	3.234	3.031
Average	**NA**	**2.788**	**3.047**	**2.836**
2011 January	NA	3.091	3.345	3.139
February	NA	3.167	3.424	3.215
March	NA	3.546	3.807	3.594
April	NA	3.816	4.074	3.863
May	NA	3.933	4.192	3.982
June	NA	3.702	3.972	3.753
July	NA	3.654	3.915	3.703
August	NA	3.630	3.893	3.680
September	NA	3.612	3.887	3.664
October	NA	3.468	3.745	3.521
November	NA	3.423	3.700	3.475
December	NA	3.278	3.553	3.329
Average	**NA**	**3.527**	**3.792**	**3.577**
2012 January	NA	3.399	3.663	3.447
February	NA	3.572	3.840	3.622
March	NA	3.868	4.138	3.918
April	NA	3.927	4.194	3.976
May	NA	3.792	4.062	3.839
June	NA	3.552	3.825	3.602
July	NA	3.451	3.726	3.502
August	NA	3.707	3.991	3.759
September	NA	3.856	4.140	3.908
October	NA	3.786	4.079	3.839

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

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

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

NA=Not available.

Notes: • See Note 5, "Motor Gasoline Prices," at end of section. • In September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. From September 1981 forward, gasohol is included in the average for all types, and unleaded premium is weighted more heavily. • Geographic coverage for 1973-1977 is 56 urban areas. Geographic coverage for 1978 forward is 85 urban areas.

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

Sources: • **Monthly Data:** U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Prices: Energy.* • **Annual Data: 1973**—*Platt's Oil Price Handbook and Oilmanac,* 1974, 51st Edition. **1974 forward**—calculated by the U.S. Energy Information Administration as the simple averages of monthly data.

Table 9.5 Refiner Prices of Residual Fuel Oil

(Dollars[a] per Gallon, Excluding Taxes)

	Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent		Residual Fuel Oil Sulfur Content Greater Than 1 Percent		Average	
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
1978 Average	**0.293**	**0.314**	**0.245**	**0.275**	**0.263**	**0.298**
1980 Average	**0.608**	**0.675**	**0.479**	**0.523**	**0.528**	**0.607**
1985 Average	**0.610**	**0.644**	**0.560**	**0.582**	**0.577**	**0.610**
1990 Average	**0.472**	**0.505**	**0.372**	**0.400**	**0.413**	**0.444**
1995 Average	**0.383**	**0.436**	**0.338**	**0.377**	**0.363**	**0.392**
1996 Average	**0.456**	**0.526**	**0.389**	**0.433**	**0.420**	**0.455**
1997 Average	**0.415**	**0.488**	**0.366**	**0.403**	**0.387**	**0.423**
1998 Average	**0.299**	**0.354**	**0.269**	**0.287**	**0.280**	**0.305**
1999 Average	**0.382**	**0.405**	**0.329**	**0.362**	**0.354**	**0.374**
2000 Average	**0.627**	**0.708**	**0.512**	**0.566**	**0.566**	**0.602**
2001 Average	**0.523**	**0.642**	**0.428**	**0.492**	**0.476**	**0.531**
2002 Average	**0.546**	**0.640**	**0.508**	**0.544**	**0.530**	**0.569**
2003 Average	**0.728**	**0.804**	**0.588**	**0.651**	**0.661**	**0.698**
2004 Average	**0.764**	**0.835**	**0.601**	**0.692**	**0.681**	**0.739**
2005 Average	**1.115**	**1.168**	**0.842**	**0.974**	**0.971**	**1.048**
2006 Average	**1.202**	**1.342**	**1.085**	**1.173**	**1.136**	**1.218**
2007 Average	**1.406**	**1.436**	**1.314**	**1.350**	**1.350**	**1.374**
2008 Average	**1.918**	**2.144**	**1.843**	**1.889**	**1.866**	**1.964**
2009 Average	**1.337**	**1.413**	**1.344**	**1.306**	**1.342**	**1.341**
2010 January	1.767	1.852	1.705	1.660	1.721	1.725
February	1.725	1.862	1.650	1.574	1.666	1.681
March	1.739	1.862	1.700	1.609	1.711	1.692
April	1.827	1.887	1.725	1.655	1.748	1.718
May	1.675	1.898	1.675	1.601	1.675	1.686
June	1.629	1.874	1.604	1.555	1.612	1.636
July	1.686	1.858	1.604	1.536	1.629	1.639
August	1.705	1.895	1.625	1.571	1.642	1.676
September	1.716	1.883	1.612	1.558	1.632	1.645
October	1.793	1.913	1.688	1.637	1.712	1.721
November	1.865	2.025	1.741	1.701	1.768	1.804
December	2.036	2.215	1.814	1.784	1.865	1.931
Average	**1.756**	**1.920**	**1.679**	**1.619**	**1.697**	**1.713**
2011 January	NA	2.302	1.896	1.870	1.918	2.013
February	2.100	2.451	2.079	2.019	2.086	2.150
March	2.344	2.654	2.307	2.245	2.321	2.403
April	2.555	2.741	2.427	2.370	2.448	2.475
May	2.463	2.786	2.374	2.325	2.392	2.440
June	2.467	2.905	2.377	2.312	2.402	2.473
July	2.547	2.877	2.430	2.362	2.474	2.508
August	2.394	2.896	2.392	2.342	2.392	2.512
September	2.368	2.882	2.370	2.318	2.369	2.473
October	2.512	2.891	2.375	2.276	2.406	2.454
November	2.566	2.853	2.424	2.368	2.459	2.521
December	2.473	2.891	2.335	2.348	2.371	2.509
Average	**2.389**	**2.736**	**2.316**	**2.257**	**2.336**	**2.401**
2012 January	2.591	2.965	2.480	2.452	2.512	2.620
February	2.739	3.070	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	2.582	3.041	2.458	2.442	2.483	2.579

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

NA=Not available.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. • Values for the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

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

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

Table 9.6 Refiner Prices of Petroleum Products for Resale

(Dollars[a] per Gallon, Excluding Taxes)

	Finished Motor Gasoline[b]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	**0.434**	**0.537**	**0.386**	**0.404**	**0.369**	**0.365**	**0.237**
1980 Average	**0.941**	**1.128**	**0.868**	**0.864**	**0.803**	**0.801**	**0.415**
1985 Average	**0.835**	**1.130**	**0.794**	**0.874**	**0.776**	**0.772**	**0.398**
1990 Average	**0.786**	**1.063**	**0.773**	**0.839**	**0.697**	**0.694**	**0.386**
1995 Average	**0.626**	**0.975**	**0.539**	**0.580**	**0.511**	**0.538**	**0.344**
1996 Average	**0.713**	**1.055**	**0.646**	**0.714**	**0.639**	**0.659**	**0.461**
1997 Average	**0.700**	**1.065**	**0.613**	**0.653**	**0.590**	**0.606**	**0.416**
1998 Average	**0.526**	**0.912**	**0.450**	**0.465**	**0.422**	**0.444**	**0.288**
1999 Average	**0.645**	**1.007**	**0.533**	**0.550**	**0.493**	**0.546**	**0.342**
2000 Average	**0.963**	**1.330**	**0.880**	**0.969**	**0.886**	**0.898**	**0.595**
2001 Average	**0.886**	**1.256**	**0.763**	**0.821**	**0.756**	**0.784**	**0.540**
2002 Average	**0.828**	**1.146**	**0.716**	**0.752**	**0.694**	**0.724**	**0.431**
2003 Average	**1.002**	**1.288**	**0.871**	**0.955**	**0.881**	**0.883**	**0.607**
2004 Average	**1.288**	**1.627**	**1.208**	**1.271**	**1.125**	**1.187**	**0.751**
2005 Average	**1.670**	**2.076**	**1.723**	**1.757**	**1.623**	**1.737**	**0.933**
2006 Average	**1.969**	**2.490**	**1.961**	**2.007**	**1.834**	**2.012**	**1.031**
2007 Average	**2.182**	**2.758**	**2.171**	**2.249**	**2.072**	**2.203**	**1.194**
2008 Average	**2.586**	**3.342**	**3.020**	**2.851**	**2.745**	**2.994**	**1.437**
2009 Average	**1.767**	**2.480**	**1.719**	**1.844**	**1.657**	**1.713**	**0.921**
2010 January	2.097	2.759	2.121	2.282	2.075	2.078	1.332
February	2.033	2.662	1.999	2.216	1.986	2.025	1.324
March	2.197	2.906	2.129	2.219	2.100	2.163	1.179
April	2.265	2.999	2.247	2.281	2.214	2.312	1.144
May	2.152	2.945	2.186	2.110	2.129	2.177	1.098
June	2.113	2.835	2.094	2.103	2.037	2.120	1.049
July	2.113	2.891	2.100	2.046	2.001	2.098	1.012
August	2.095	2.842	2.138	2.125	2.041	2.161	1.084
September	2.088	2.805	2.131	2.163	2.093	2.190	1.151
October	2.198	2.890	2.263	2.384	2.221	2.325	1.253
November	2.243	2.868	2.342	NA	2.308	2.392	1.277
December	2.383	3.024	2.459	2.744	2.435	2.486	1.322
Average	**2.165**	**2.874**	**2.185**	**2.299**	**2.147**	**2.214**	**1.212**
2011 January	2.472	3.161	2.585	2.804	2.585	2.621	1.380
February	2.584	3.248	2.783	2.974	2.737	2.820	1.401
March	2.934	3.607	3.095	3.196	2.996	3.134	1.403
April	3.218	4.035	3.259	3.296	3.167	3.296	1.433
May	3.174	4.096	3.188	W	3.039	3.116	1.515
June	2.970	3.847	3.101	3.054	2.956	3.079	1.503
July	3.058	4.011	3.090	3.158	3.024	3.135	1.513
August	2.949	3.899	3.040	3.089	2.927	3.032	1.522
September	2.896	3.878	3.025	3.073	2.927	3.035	1.557
October	2.805	3.616	2.962	3.096	2.915	3.035	1.511
November	2.701	3.494	3.089	3.258	3.050	3.157	1.498
December	2.614	3.424	2.951	3.006	2.928	2.927	1.444
Average	**2.867**	**3.739**	**3.014**	**3.065**	**2.907**	**3.034**	**1.467**
2012 January	2.747	3.576	3.059	3.197	3.027	3.018	1.341
February	2.936	3.788	3.186	3.293	3.166	3.163	1.282
March	3.203	4.052	3.296	3.306	3.211	3.308	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	0.950
June	2.757	3.883	2.747	2.697	2.635	2.741	0.762
July	2.806	3.877	2.850	2.936	R 2.774	R 2.907	R 0.809
August	3.087	4.124	3.129	3.195	2.988	3.213	0.876

[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 for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. • Values for the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

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

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

Table 9.7 Refiner Prices of Petroleum Products to End Users

(Dollars[a] per Gallon, Excluding Taxes)

	Finished Motor Gasoline[b]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	**0.484**	**0.516**	**0.387**	**0.421**	**0.400**	**0.377**	**0.335**
1980 Average	**1.035**	**1.084**	**0.868**	**0.902**	**0.788**	**0.818**	**0.482**
1985 Average	**0.912**	**1.201**	**0.796**	**1.030**	**0.849**	**0.789**	**0.717**
1990 Average	**0.883**	**1.120**	**0.766**	**0.923**	**0.734**	**0.725**	**0.745**
1995 Average	**0.765**	**1.005**	**0.540**	**0.589**	**0.562**	**0.560**	**0.492**
1996 Average	**0.847**	**1.116**	**0.651**	**0.740**	**0.673**	**0.681**	**0.605**
1997 Average	**0.839**	**1.128**	**0.613**	**0.745**	**0.636**	**0.642**	**0.552**
1998 Average	**0.673**	**0.975**	**0.452**	**0.501**	**0.482**	**0.494**	**0.405**
1999 Average	**0.781**	**1.059**	**0.543**	**0.605**	**0.558**	**0.584**	**0.458**
2000 Average	**1.106**	**1.306**	**0.899**	**1.123**	**0.927**	**0.935**	**0.603**
2001 Average	**1.032**	**1.323**	**0.775**	**1.045**	**0.829**	**0.842**	**0.506**
2002 Average	**0.947**	**1.288**	**0.721**	**0.990**	**0.737**	**0.762**	**0.419**
2003 Average	**1.156**	**1.493**	**0.872**	**1.224**	**0.933**	**0.944**	**0.577**
2004 Average	**1.435**	**1.819**	**1.207**	**1.160**	**1.173**	**1.243**	**0.839**
2005 Average	**1.829**	**2.231**	**1.735**	**1.957**	**1.705**	**1.786**	**1.089**
2006 Average	**2.128**	**2.682**	**1.998**	**2.244**	**1.982**	**2.096**	**1.358**
2007 Average	**2.345**	**2.849**	**2.165**	**2.263**	**2.241**	**2.267**	**1.489**
2008 Average	**2.775**	**3.273**	**3.052**	**3.283**	**2.986**	**3.150**	**1.892**
2009 Average	**1.888**	**2.442**	**1.704**	**2.675**	**1.962**	**1.834**	**1.220**
2010 January	2.240	2.914	2.129	2.986	2.369	2.192	1.913
February	2.173	2.855	2.018	2.974	2.310	2.144	2.009
March	2.301	3.103	2.144	2.978	2.425	2.265	NA
April	2.370	3.201	2.272	3.040	2.527	2.410	1.326
May	2.353	3.129	2.199	2.938	2.487	2.343	1.264
June	2.251	2.981	2.105	2.965	2.393	2.284	1.204
July	2.247	3.028	2.103	NA	2.246	2.212	1.162
August	2.250	2.967	2.158	2.772	2.379	2.260	1.211
September	2.219	2.893	2.148	2.898	2.346	2.269	1.283
October	2.319	3.000	2.298	3.058	2.580	2.389	1.425
November	2.378	3.095	2.374	3.130	2.641	2.457	NA
December	2.514	3.218	2.484	3.276	2.749	2.554	1.863
Average	**2.301**	**3.028**	**2.201**	**3.063**	**2.462**	**2.314**	**1.481**
2011 January	2.615	3.323	2.623	3.358	2.889	2.681	NA
February	2.712	3.374	2.818	3.506	3.020	2.867	1.823
March	3.072	3.767	3.161	3.697	3.255	3.189	1.763
April	3.340	4.132	3.306	3.796	3.430	3.370	NA
May	3.419	4.091	3.220	3.894	3.337	3.231	1.648
June	3.184	3.913	3.138	3.802	3.193	3.183	1.681
July	3.172	4.027	3.118	3.812	3.294	3.214	1.620
August	3.134	3.920	3.057	3.851	3.251	3.143	1.650
September	3.090	3.915	3.059	3.873	3.288	3.127	1.702
October	2.980	3.697	2.987	3.823	3.346	3.108	1.706
November	2.922	3.620	3.124	3.892	3.403	3.225	1.773
December	2.808	W	2.963	3.824	3.255	3.024	1.691
Average	**3.050**	**3.803**	**3.054**	**3.616**	**3.193**	**3.117**	**1.709**
2012 January	2.914	3.732	3.087	3.848	3.345	3.093	1.655
February	3.087	W	3.206	3.874	3.495	3.224	1.518
March	3.389	4.133	3.337	3.919	3.522	3.378	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	0.902
July	2.981	W	2.856	3.612	[R]3.041	2.989	0.972
August	3.248	4.091	3.123	3.575	3.256	3.265	0.918

[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. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

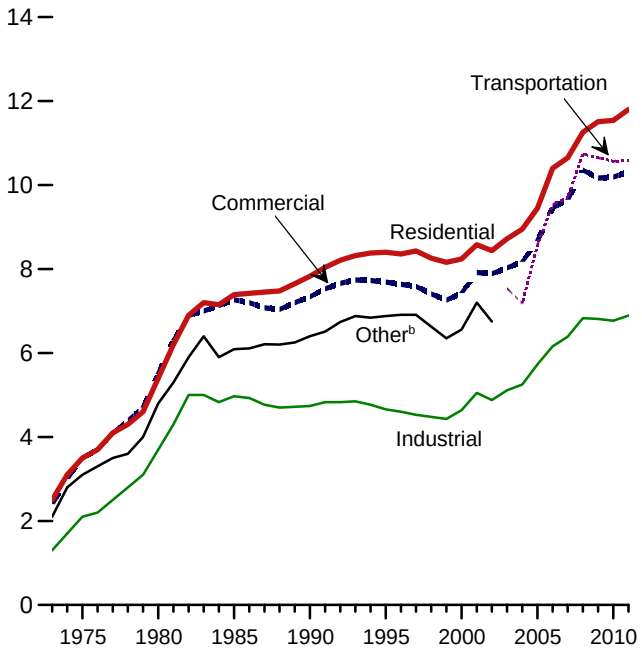
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1978.

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

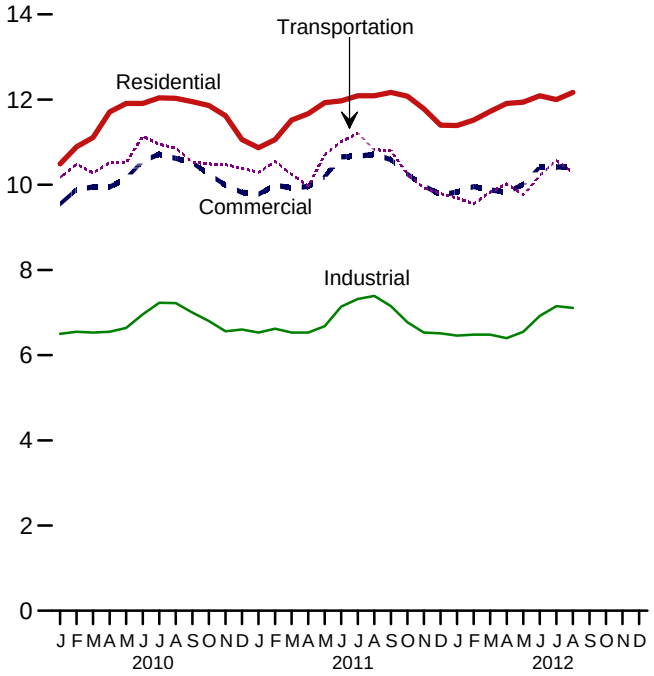
Figure 9.2 Average Retail Prices of Electricity

(Cents[a] per Kilowatthour)

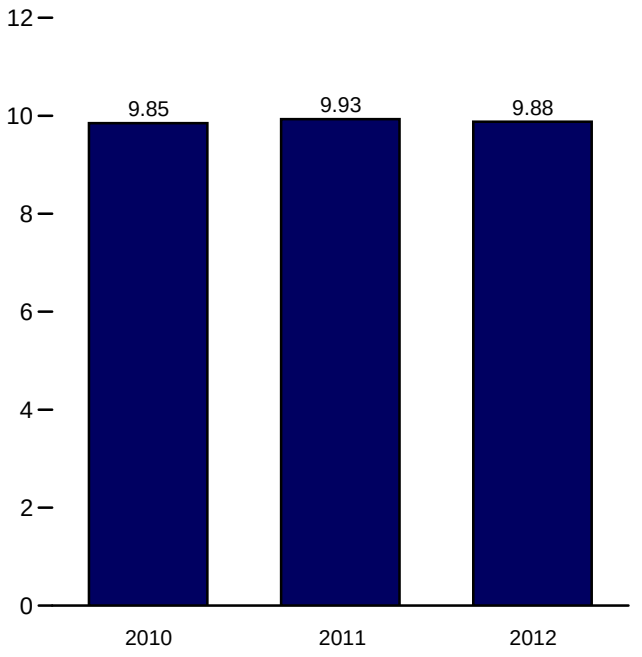
By Sector, 1973-2011



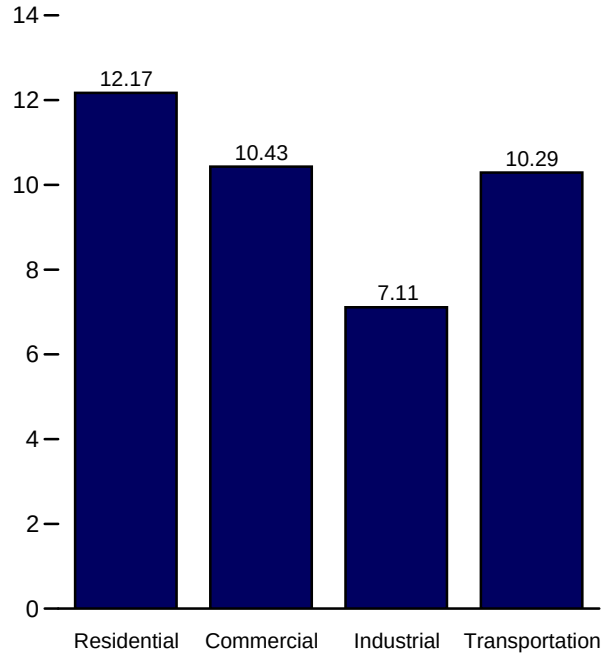
By Sector, Monthly



Total, January-August



By Sector, August 2012



[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
1973 Average	**2.50**	**2.40**	**1.30**	**NA**	**2.10**	**2.00**
1975 Average	**3.50**	**3.50**	**2.10**	**NA**	**3.10**	**2.90**
1980 Average	**5.40**	**5.50**	**3.70**	**NA**	**4.80**	**4.70**
1985 Average	**7.39**	**7.27**	**4.97**	**NA**	**6.09**	**6.44**
1990 Average	**7.83**	**7.34**	**4.74**	**NA**	**6.40**	**6.57**
1995 Average	**8.40**	**7.69**	**4.66**	**NA**	**6.88**	**6.89**
1996 Average	**8.36**	**7.64**	**4.60**	**NA**	**6.91**	**6.86**
1997 Average	**8.43**	**7.59**	**4.53**	**NA**	**6.91**	**6.85**
1998 Average	**8.26**	**7.41**	**4.48**	**NA**	**6.63**	**6.74**
1999 Average	**8.16**	**7.26**	**4.43**	**NA**	**6.35**	**6.64**
2000 Average	**8.24**	**7.43**	**4.64**	**NA**	**6.56**	**6.81**
2001 Average	**8.58**	**7.92**	**5.05**	**NA**	**7.20**	**7.29**
2002 Average	**8.44**	**7.89**	**4.88**	**NA**	**6.75**	**7.20**
2003 Average	**8.72**	**8.03**	**5.11**	**7.54**	**– –**	**7.44**
2004 Average	**8.95**	**8.17**	**5.25**	**7.18**	**– –**	**7.61**
2005 Average	**9.45**	**8.67**	**5.73**	**8.57**	**– –**	**8.14**
2006 Average	**10.40**	**9.46**	**6.16**	**9.54**	**– –**	**8.90**
2007 Average	**10.65**	**9.65**	**6.39**	**9.70**	**– –**	**9.13**
2008 Average	**11.26**	**10.36**	**6.83**	**10.74**	**– –**	**9.74**
2009 Average	**11.51**	**10.17**	**6.81**	**10.65**	**– –**	**9.82**
2010 January	10.49	9.55	6.50	10.17	– –	9.28
February	10.89	9.89	6.55	10.48	– –	9.47
March	11.11	9.95	6.53	10.28	– –	9.48
April	11.71	9.95	6.55	10.52	– –	9.53
May	11.91	10.15	6.64	10.52	– –	9.72
June	11.91	10.56	6.96	11.14	– –	10.18
July	12.04	10.72	7.23	10.95	– –	10.46
August	12.03	10.62	7.22	10.86	– –	10.40
September	11.95	10.52	7.00	10.53	– –	10.17
October	11.86	10.25	6.80	10.49	– –	9.81
November	11.62	9.99	6.56	10.47	– –	9.55
December	11.06	9.82	6.60	10.39	– –	9.52
Average	**11.54**	**10.19**	**6.77**	**10.57**	**– –**	**9.83**
2011 January	R 10.87	R 9.78	R 6.53	R 10.29	– –	R 9.48
February	R 11.06	R 9.99	R 6.62	R 10.55	– –	R 9.56
March	R 11.52	R 9.93	R 6.53	R 10.24	– –	R 9.55
April	R 11.67	R 9.96	R 6.53	R 9.97	– –	R 9.54
May	R 11.93	R 10.19	R 6.68	R 10.70	– –	R 9.78
June	R 11.97	R 10.66	R 7.14	R 11.01	– –	R 10.26
July	R 12.09	R 10.67	R 7.32	R 11.21	– –	R 10.47
August	R 12.09	R 10.72	R 7.39	R 10.82	– –	R 10.49
September	R 12.17	R 10.59	R 7.15	R 10.80	– –	R 10.29
October	R 12.08	R 10.25	R 6.77	R 10.25	– –	R 9.84
November	R 11.78	R 9.98	R 6.53	R 9.93	– –	R 9.58
December	R 11.40	R 9.77	R 6.51	R 9.79	– –	R 9.53
Average	R **11.72**	R **10.21**	R **6.81**	R **10.46**	**– –**	R **9.86**
2012 January	R 11.39	R 9.83	R 6.46	R 9.69	– –	R 9.61
February	R 11.52	R 9.96	R 6.48	R 9.55	– –	R 9.60
March	R 11.72	R 9.88	R 6.48	R 9.83	– –	R 9.56
April	R 11.91	R 9.83	R 6.40	R 10.02	– –	R 9.49
May	R 11.94	R 10.01	R 6.55	R 9.76	– –	R 9.68
June	R 12.09	R 10.42	R 6.92	R 10.22	– –	R 10.15
July	R 12.00	R 10.42	R 7.15	R 10.57	– –	R 10.31
August	12.17	10.43	7.11	10.29	– –	10.34
8-Month Average	**11.86**	**10.12**	**6.70**	**9.99**	**– –**	**9.88**
2011 8-Month Average	**11.66**	**10.27**	**6.86**	**10.59**	**– –**	**9.93**
2010 8-Month Average	**11.51**	**10.21**	**6.79**	**10.61**	**– –**	**9.85**

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

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

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

[d] Transportation sector, including railroads and railways.

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

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

Notes: • Beginning in 2003, the category "Other" has been replaced by "Transportation," and the categories "Commercial" and "Industrial" have been redefined. • Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of energy service provider billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. • Prices include State and local taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments, and other miscellaneous charges applied to end-use customers during normal billing operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods. • See Note 7, "Electricity Retail Prices," at end of section for plant coverage, and for information on preliminary and final values. • Geographic coverage is the 50 States and the District of Columbia.

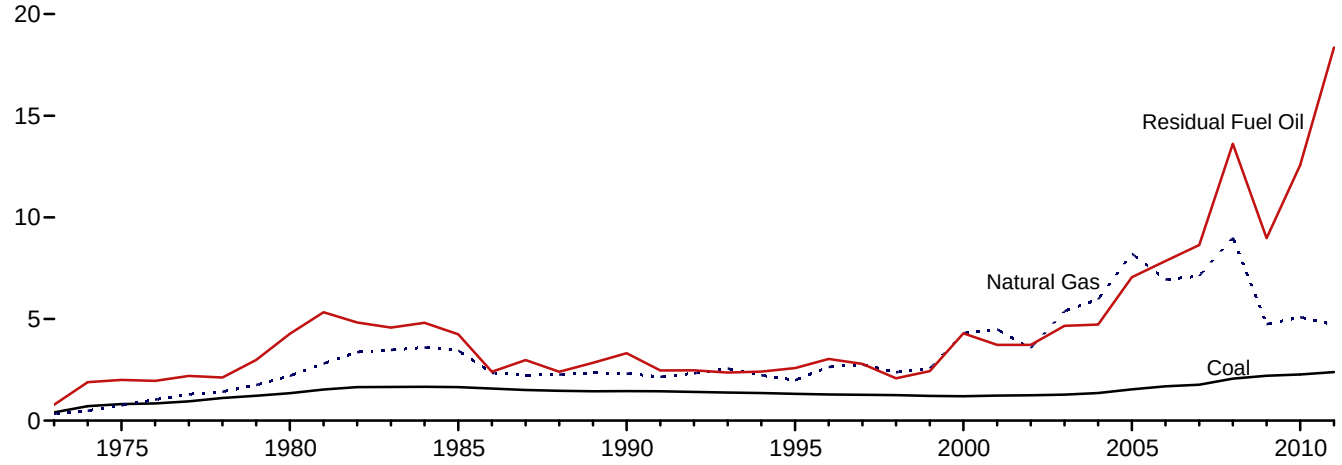
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **October 1977-February 1980:** Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **March 1980-1982:** FERC, Form FERC-5, "Electric Utility Company Monthly Statement." • **1983:** U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." • **1984-1997:** EIA, Form EIA-861, "Annual Electric Utility Report." • **1998 forward:** EIA, *Electric Power Monthly,* October 2012, Table 5.3.

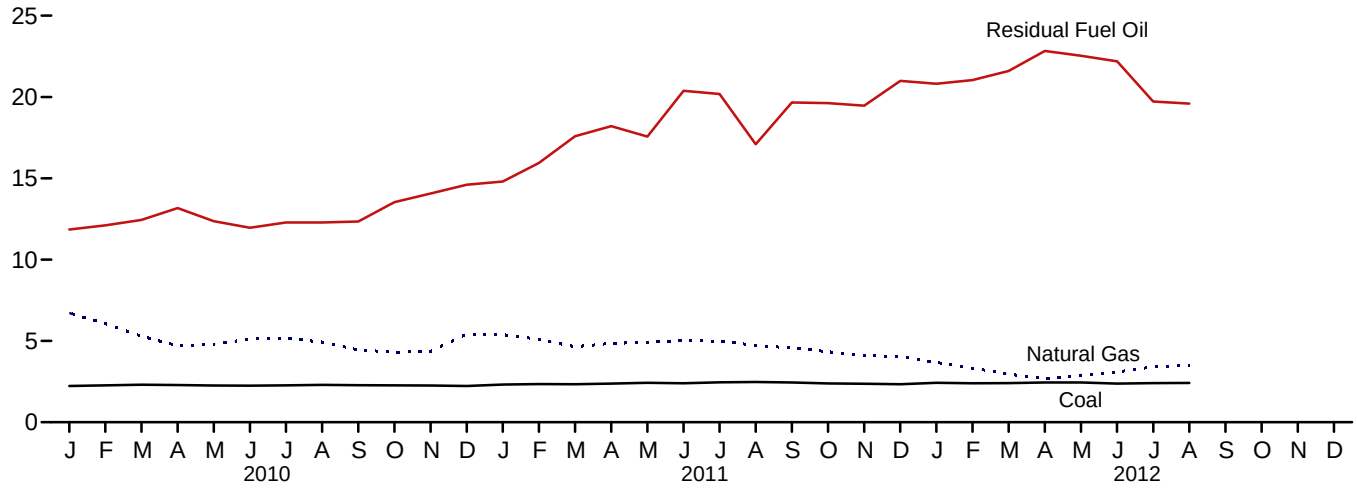
Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants

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

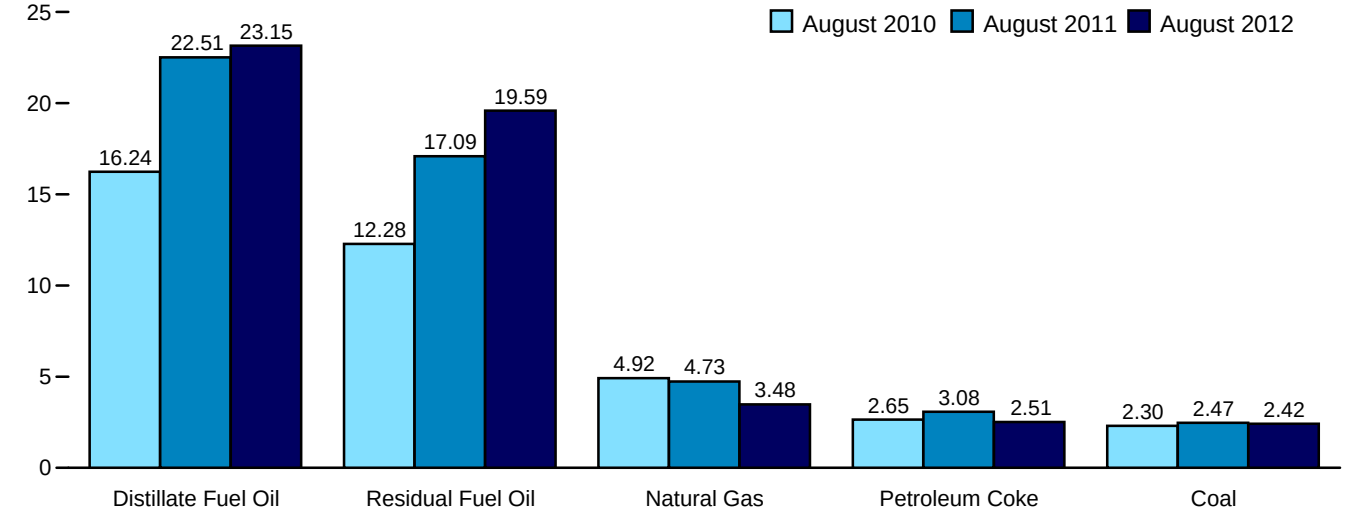
Costs, 1973-2011



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**
1996 Average	**1.29**	**3.03**	**4.87**	**.78**	**3.03**	**2.64**	**1.52**
1997 Average	**1.27**	**2.79**	**4.49**	**.91**	**2.73**	**2.76**	**1.52**
1998 Average	**1.25**	**2.08**	**3.30**	**.71**	**2.02**	**2.38**	**1.44**
1999 Average	**1.22**	**2.44**	**4.03**	**.65**	**2.36**	**2.57**	**1.44**
2000 Average	**1.20**	**4.29**	**6.65**	**.58**	**4.18**	**4.30**	**1.74**
2001 Average	**1.23**	**3.73**	**6.30**	**.78**	**3.69**	**4.49**	**1.73**
2002 Average[g]	**1.25**	**3.73**	**5.34**	**.78**	**3.34**	**3.56**	**1.86**
2003 Average	**1.28**	**4.66**	**6.82**	**.72**	**4.33**	**5.39**	**2.28**
2004 Average	**1.36**	**4.73**	**8.02**	**.83**	**4.29**	**5.96**	**2.48**
2005 Average	**1.54**	**7.06**	**11.72**	**1.11**	**6.44**	**8.21**	**3.25**
2006 Average	**1.69**	**7.85**	**13.28**	**1.33**	**6.23**	**6.94**	**3.02**
2007 Average	**1.77**	**8.64**	**14.85**	**1.51**	**7.17**	**7.11**	**3.23**
2008 Average	**2.07**	**13.62**	**21.46**	**2.11**	**10.87**	**9.01**	**4.12**
2009 Average	**2.21**	**8.98**	**13.22**	**1.61**	**7.02**	**4.74**	**3.04**
2010 January	2.23	11.85	15.73	1.72	9.72	6.71	3.74
February	2.27	12.11	15.69	1.80	9.51	6.07	3.45
March	2.31	12.44	16.42	2.09	8.95	5.29	3.16
April	2.29	13.17	17.10	2.18	7.95	4.71	3.01
May	2.26	12.36	16.54	2.22	9.47	4.79	3.12
June	2.25	11.96	16.12	2.15	9.26	5.12	3.34
July	2.27	12.28	15.89	2.42	9.63	5.18	3.51
August	2.30	12.28	16.24	2.65	9.18	4.92	3.39
September	2.28	12.34	16.53	2.67	9.35	4.45	3.10
October	2.27	13.53	17.14	2.43	9.13	4.30	2.94
November	2.26	14.06	17.43	2.22	10.86	4.35	2.94
December	2.23	14.61	18.56	2.57	11.29	5.43	3.32
Average	**2.27**	**12.57**	**16.61**	**2.28**	**9.54**	**5.09**	**3.26**
2011 January	2.33	R 14.80	R 19.59	R 3.13	R 11.83	R 5.39	R 3.37
February	R 2.35	R 15.94	20.93	R 2.84	R 11.60	R 5.09	R 3.27
March	2.34	R 17.59	R 22.59	R 3.09	R 12.98	R 4.64	3.12
April	R 2.38	R 18.21	24.06	R 3.20	R 13.04	R 4.86	3.29
May	R 2.43	R 17.57	R 23.04	R 3.31	R 13.21	R 4.89	R 3.39
June	R 2.40	R 20.38	R 23.13	R 2.78	R 14.29	R 5.04	R 3.52
July	2.45	R 20.18	R 22.95	R 3.30	R 12.13	R 4.98	R 3.62
August	R 2.47	R 17.09	R 22.51	R 3.08	R 10.52	R 4.73	3.44
September	2.44	R 19.66	R 22.73	R 2.93	R 11.51	R 4.56	3.26
October	2.39	R 19.62	R 23.20	R 3.32	R 13.20	R 4.33	R 3.14
November	2.37	R 19.47	R 23.38	R 2.58	R 13.03	R 4.10	R 3.04
December	R 2.34	R 20.99	R 22.45	R 2.74	R 12.11	R 4.04	R 3.02
Average	**R 2.39**	**R 18.35**	**R 22.46**	**R 3.03**	**R 12.48**	**R 4.72**	**R 3.30**
2012 January	2.43	R 20.81	R 22.87	R 2.71	R 12.76	3.67	R 2.98
February	R 2.40	R 21.04	R 23.73	R 2.57	R 12.61	3.32	2.83
March	R 2.41	R 21.60	R 24.80	R 2.43	R 12.31	2.96	R 2.73
April	2.44	R 22.83	R 24.30	R 2.64	R 13.17	R 2.68	R 2.65
May	2.44	R 22.54	R 23.23	R 2.68	R 13.88	2.90	R 2.75
June	2.38	R 22.19	21.66	R 2.73	R 13.41	3.08	2.81
July	R 2.41	R 19.72	R 21.80	R 2.93	R 13.95	3.41	2.98
August	2.42	19.59	23.15	2.51	13.24	3.48	2.97
8-Month Average	**2.42**	**21.14**	**23.09**	**2.65**	**13.16**	**3.20**	**2.85**
2011 8-Month Average	**2.39**	**17.74**	**22.21**	**3.10**	**12.48**	**4.94**	**3.39**
2010 8-Month Average	**2.27**	**12.22**	**16.12**	**2.18**	**9.28**	**5.31**	**3.35**

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

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

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

[d] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil. For 1973–1982, data do not include refined motor oil, bunker oil, and liquefied petroleum gases. For 1973–1989, data do not include petroleum coke.

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

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

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

R=Revised. NA=Not available.

Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • Geographic coverage is the 50 States and the District of Columbia.

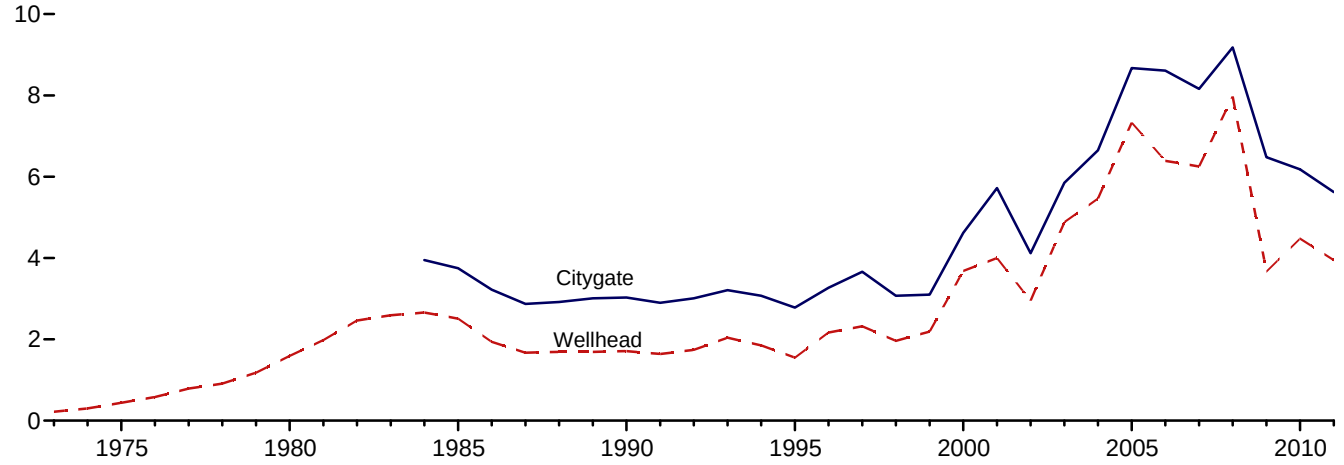
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices for all available data beginning in 1973.

Sources: See end of section.

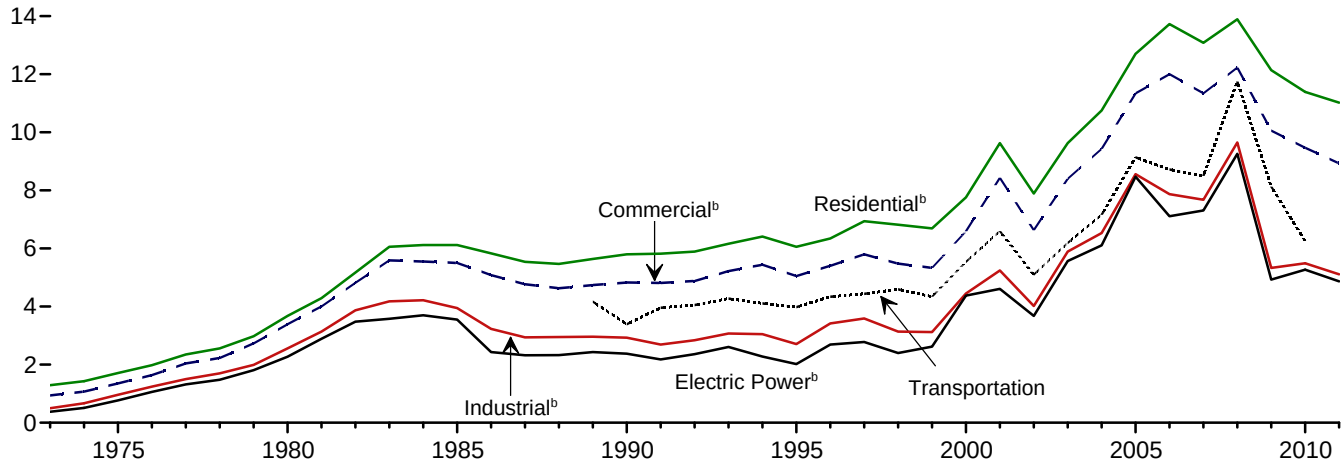
Figure 9.4 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

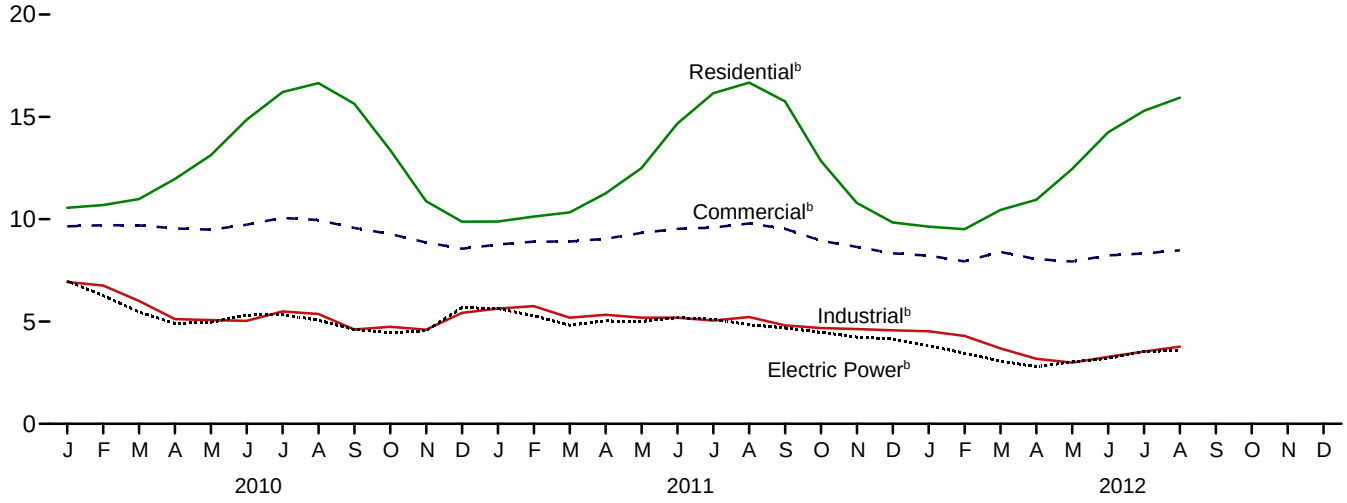
Selected Prices, 1973-2011



Consuming Sectors, 1973-2011



Consuming Sectors, Monthly



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

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

Table 9.10 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

	Wellhead Price	City-gate Price	Consuming Sectors[b]								
			Residential		Commercial[c]		Industrial[d]		Transportation	Electric Power[e]	
			Price[f]	Percentage of Sector[g]	Price[f]	Percentage of Sector[g]	Price[f]	Percentage of Sector[g]	Vehicle Fuel[h] Price[f]	Price[f]	Percentage of Sector[g,i]
1973 Average	**0.22**	**NA**	**1.29**	**NA**	**0.94**	**NA**	**0.50**	**NA**	**NA**	**0.38**	**92.1**
1975 Average	**.44**	**NA**	**1.71**	**NA**	**1.35**	**NA**	**.96**	**NA**	**NA**	**.77**	**96.1**
1980 Average	**1.59**	**NA**	**3.68**	**NA**	**3.39**	**NA**	**2.56**	**NA**	**NA**	**2.27**	**96.9**
1985 Average	**2.51**	**3.75**	**6.12**	**NA**	**5.50**	**NA**	**3.95**	**68.8**	**NA**	**3.55**	**94.0**
1990 Average	**1.71**	**3.03**	**5.80**	**99.2**	**4.83**	**86.6**	**2.93**	**35.2**	**3.39**	**2.38**	**76.8**
1995 Average	**1.55**	**2.78**	**6.06**	**99.0**	**5.05**	**76.7**	**2.71**	**24.5**	**3.98**	**2.02**	**71.4**
1996 Average	**2.17**	**3.27**	**6.34**	**99.0**	**5.40**	**77.6**	**3.42**	**19.4**	**4.34**	**2.69**	**68.4**
1997 Average	**2.32**	**3.66**	**6.94**	**98.8**	**5.80**	**70.8**	**3.59**	**18.1**	**4.44**	**2.78**	**68.0**
1998 Average	**1.96**	**3.07**	**6.82**	**97.7**	**5.48**	**67.0**	**3.14**	**16.1**	**4.59**	**2.40**	**63.7**
1999 Average	**2.19**	**3.10**	**6.69**	**95.2**	**5.33**	**66.1**	**3.12**	**18.8**	**4.34**	**2.62**	**58.3**
2000 Average	**3.68**	**4.62**	**7.76**	**92.6**	**6.59**	**63.9**	**4.45**	**19.8**	**5.54**	**4.38**	**50.5**
2001 Average	**4.00**	**5.72**	**9.63**	**92.4**	**8.43**	**66.0**	**5.24**	**20.8**	**6.60**	**4.61**	**40.2**
2002 Average	**2.95**	**4.12**	**7.89**	**97.9**	**6.63**	**77.4**	**4.02**	**22.7**	**5.10**	**e3.68**	**83.9**
2003 Average	**4.88**	**5.85**	**9.63**	**97.5**	**8.40**	**78.2**	**5.89**	**22.1**	**6.19**	**5.57**	**91.2**
2004 Average	**5.46**	**6.65**	**10.75**	**97.7**	**9.43**	**78.0**	**6.53**	**23.6**	**7.16**	**6.11**	**89.8**
2005 Average	**7.33**	**8.67**	**12.70**	**98.1**	**11.34**	**82.1**	**8.56**	**24.0**	**9.14**	**8.47**	**91.3**
2006 Average	**6.39**	**8.61**	**13.73**	**98.1**	**12.00**	**80.8**	**7.87**	**23.4**	**8.72**	**7.11**	**93.4**
2007 Average	**6.25**	**8.16**	**13.08**	**98.0**	**11.34**	**80.4**	**7.68**	**22.2**	**8.50**	**7.31**	**92.2**
2008 Average	**7.97**	**9.18**	**13.89**	**97.5**	**12.23**	**79.9**	**9.65**	**20.5**	**11.75**	**9.26**	**101.1**
2009 Average	**3.67**	**6.48**	**12.14**	**97.4**	**10.06**	**77.8**	**5.33**	**18.8**	**8.13**	**4.93**	**101.1**
2010 January	5.69	6.84	10.56	97.4	9.65	81.2	6.93	19.0	NA	6.98	101.0
February	5.30	6.64	10.69	97.8	9.71	81.8	6.76	18.6	NA	6.27	100.5
March	4.70	6.50	10.98	97.6	9.70	79.7	6.01	18.4	NA	5.47	101.0
April	4.10	5.88	11.97	96.2	9.55	75.7	5.12	17.7	NA	4.91	100.9
May	4.24	5.81	13.12	97.1	9.49	73.0	5.07	17.9	NA	4.96	100.9
June	4.27	6.02	14.86	96.9	9.73	71.9	5.03	18.0	NA	5.31	100.6
July	4.44	6.31	16.21	96.8	10.07	70.6	5.49	18.3	NA	5.34	100.6
August	4.38	6.22	16.65	96.4	9.96	69.8	5.37	17.8	NA	5.06	100.5
September	3.83	5.72	15.64	96.7	9.57	68.5	4.61	17.5	NA	4.61	100.7
October	4.05	5.70	13.37	96.8	9.28	71.8	4.74	16.8	NA	4.45	101.3
November	4.12	5.48	10.88	97.4	8.86	77.7	4.60	17.6	NA	4.55	101.0
December	4.68	5.74	9.88	97.4	8.56	80.2	5.42	17.8	NA	5.68	101.3
Average	**4.48**	**6.18**	**11.39**	**97.4**	**9.47**	**77.5**	**5.49**	**18.0**	**6.25**	**5.27**	**100.8**
2011 January	E 4.37	5.68	9.89	96.5	8.76	72.9	5.63	R 17.6	NA	R 5.66	R 101.7
February	E 4.34	5.75	10.13	96.6	8.90	72.1	5.75	17.5	NA	R 5.29	R 101.8
March	E 3.95	5.68	10.33	96.2	8.91	69.7	5.19	17.4	NA	R 4.84	R 101.0
April	E 4.05	5.62	11.26	96.0	9.04	66.5	5.33	16.8	NA	5.03	R 101.6
May	E 4.12	5.79	12.50	96.2	R 9.33	64.0	R 5.19	17.2	NA	R 5.04	R 101.3
June	E 4.20	6.09	14.67	96.3	9.53	63.1	5.19	16.7	NA	R 5.20	R 101.1
July	E 4.27	6.15	16.16	96.3	9.59	R 59.3	5.05	17.5	NA	R 5.13	R 100.5
August	E 4.20	6.19	16.67	95.7	9.79	58.2	5.22	16.9	NA	R 4.85	R 101.0
September	E 3.82	5.93	15.76	95.6	9.53	57.9	4.81	16.6	NA	R 4.71	R 101.4
October	E 3.62	5.43	12.84	95.7	8.95	58.4	4.68	16.7	NA	R 4.49	R 101.5
November	E 3.35	5.28	10.79	95.2	8.64	66.2	4.63	17.0	NA	R 4.26	R 101.1
December	E 3.14	5.03	9.84	96.4	8.33	69.2	4.57	17.5	NA	R 4.18	101.4
Average	**E 3.95**	**5.62**	**11.02**	**96.2**	**8.93**	**67.2**	**5.11**	**17.1**	**NA**	**R 4.89**	**101.2**
2012 January	E 2.89	4.86	9.64	96.2	8.22	70.4	4.52	16.9	NA	3.81	R 100.8
February	E 2.46	4.74	9.51	96.2	7.94	69.2	4.30	16.9	NA	3.45	R 100.4
March	E 2.25	4.84	10.45	96.2	8.40	66.9	3.69	16.9	NA	3.07	R 100.3
April	E 1.89	4.20	10.95	95.6	8.05	63.5	3.18	16.2	NA	R 2.79	R 101.1
May	E 1.94	4.31	12.46	95.7	7.93	60.7	2.99	16.6	NA	R 3.03	R 100.8
June	E 2.54	4.65	R 14.24	95.6	8.23	60.4	3.27	16.5	NA	3.20	100.7
July	E 2.59	4.86	R 15.30	95.6	8.32	59.0	3.53	16.9	NA	3.53	R 100.7
August	E 2.86	5.17	15.94	95.1	8.48	57.0	3.77	17.9	NA	3.59	100.5
8-Month Average	**E 2.43**	**4.72**	**10.75**	**96.0**	**8.17**	**65.6**	**3.69**	**16.9**	**NA**	**3.32**	**100.7**
2011 8-Month Average	**E 4.19**	**5.78**	**11.00**	**96.3**	**9.04**	**68.4**	**5.33**	**17.2**	**NA**	**5.11**	**101.2**
2010 8-Month Average	**4.64**	**6.45**	**11.54**	**97.3**	**9.70**	**77.9**	**5.79**	**18.2**	**NA**	**5.48**	**100.7**

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

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

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

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

[e] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers. See Note 8, "Costs of Fossil-Fuel Receipts at Electric Generating Plants," at end of section for plant coverage.

[f] Includes taxes.

[g] The percentage of the sector's consumption in Table 4.3 for which price data are available. For details on how the percentages are derived, see Table 9.10 Sources at end of section.

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

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

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

Notes: • Prices are for natural gas, plus a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 9, "Natural Gas Prices," at end of section. • Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Energy Prices

Note 1. Crude Oil Domestic First Purchase Prices. The average domestic first purchase price represents the average price at which all domestic crude oil is purchased. Prior to February 1976, the price represented an estimate of the average of posted prices; beginning with February 1976, the price represents an average of actual first purchase prices. The data series was previously called "Actual Domestic Wellhead Price."

Note 2. Crude Oil F.O.B. Costs. F.O.B. literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

Note 3. Crude Oil Landed Costs. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to April 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries that export only small amounts to the United States were also excluded. Beginning in April 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

Note 4. Crude Oil Refinery Acquisition Costs. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on U.S. Energy Information Administration (EIA) Form EIA-14, "Refiners' Monthly Cost Report." Those costs were previously published from data collected on Economic Regulatory Administration (ERA) Form ERA-49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report." Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. The respondents for the two forms are also essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken when comparing the data collected on the two forms.

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1331. Imported crude oil is either that oil reported on Form ERA-51, "Transfer Pricing Report," or any crude oil that is not domestic oil. The composite cost is the weighted average of domestic and imported crude oil costs.

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

Note 5. Motor Gasoline Prices. Several different series of motor gasoline prices are published in this section. U.S. city average retail prices of motor gasoline are calculated monthly by the Bureau of Labor Statistics during the development of the Consumer Price Index (CPI). These prices include all Federal, State, and local taxes paid at the time of sale. From 1974–1977, prices were collected in 56 urban areas. From 1978 forward, prices are collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-serve).

Refiner prices of finished motor gasoline for resale and to end users are determined by the EIA in a monthly survey of refiners and gas plant operators (Form EIA-782A). The prices do not include any Federal, State, or local taxes paid at the time of sale. Estimates of prices prior to January 1983 are based on Form FEA-P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices," and also exclude all Federal, State, or local taxes paid at the time of sale. Sales for resale are those made to purchasers who are other-than-ultimate consumers. Sales to end users are sales made directly to the consumer of the product, including bulk consumers (such as agriculture, industry, and utilities) and residential and commercial consumers.

Note 6. Historical Petroleum Prices. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous series were generated for annual data 1978–1982 and for monthly data 1981 and 1982 by estimating the prices that would have been published had Form EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment was made for product and sales type matching and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale and between retail and end user. The resale category continues to include sales among resellers. However, sales to bulk consumers, such as utility, industrial, and commercial accounts previously included in

the wholesale category, are now counted as made to end users. The end-user category continues to include retail sales through company-owned and operated outlets but also includes sales to the bulk consumers such as agriculture, industry, and electric utilities. Additional information may be found in "Estimated Historic Time Series for the EIA-782," a feature article by Paula Weir, printed in the December 1983 [3] *Petroleum Marketing Monthly*, published by EIA.

Note 7. Electricity Retail Prices. Average annual retail prices of electricity have the following plant coverage: Through 1979, annual data are for Classes A and B privately owned electric utilities only. For 1980–1982, annual data are for selected Class A utilities whose electric operating revenues were $100 million or more during the previous year. For 1983, annual data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, annual data also include energy service providers selling to retail customers.

Average monthly retail prices of electricity have the following plant coverage: Through 1985, monthly data are derived from selected privately owned electric utilities and, therefore, are not national averages. Beginning in 1986, monthly data are based on a sample of publicly and privately owned electric utilities. Beginning in 1996, monthly data also include energy service providers selling to retail customers.

Preliminary monthly data are from Form EIA-826, "Monthly Electric Sales and Revenue Report With State Distributions Report," which is a monthly collection of data from approximately 450 of the largest publicly and privately owned electric utilities as well as a census of energy service providers with retail sales in deregulated States; a model is then applied to the collected data to estimate for the entire universe of U.S. electric utilities. Preliminary annual data are the sum of the monthly revenues divided by the sum of the monthly sales. When final annual data become available each year from Form EIA-861, "Annual Electric Power Industry Report," their ratios to the preliminary Form EIA-826 values are used to derive adjusted final monthly values.

Note 8. Costs of Fossil-Fuel Receipts at Electric Generating Plants. Data for 1973–1982 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 25 megawatts or greater. From 1974–1982, peaking units were included in the data and counted towards the 25-megawatt-or-greater total. Data for 1983–1990 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 50 megawatts or greater. Data for 1991–2001 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units and combined-cycle units together totaled 50 megawatts or greater. Data for 2002 forward cover the aforementioned regulated generating plants plus unregulated generating plants (independent power producers, as well as combined-heat-and-power generating plants and electricity-only plants in the commercial and industrial sector) whose total facility fossil-fueled nameplate generating capacity is 50 or more megawatts, regardless of unit type.

Note 9. Natural Gas Prices. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all Federal, State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers' bills are sometimes excluded by the reporting utilities. Delivered-to-consumers prices for 1987 forward represent natural gas delivered and sold to residential, commercial, industrial, vehicle fuel, and electric power consumers. They do not include the price of natural gas delivered on behalf of third parties to residential, commercial, industrial, and vehicle fuel customers except for certain States in the residential and commercial sectors for 2002 forward. Volumes of natural gas delivered on behalf of third parties are included in the consumption data shown in Table 4.3. Additional information is available in the EIA *Natural Gas Monthly*, Appendix C.

Table 9.1 Sources

Domestic First Purchase Price
1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.
1977: Federal Energy Administration, based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report."
1978–2009: U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual 2009*, Table 1.
2010 forward: EIA, *Petroleum Marketing Monthly*, November 2012, Table 1.

F.O.B. and Landed Cost of Imports
October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."
October–December 1977: EIA, Form FEA-F701-M-0, "Transfer Pricing Report."
1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 1.
2010 forward: EIA, *Petroleum Marketing Monthly*, November 2012, Table 1.

Refiner Acquisition Cost
1973: EIA estimates. The domestic price was derived by adding estimated transportation costs to the reported domestic first purchase price. The imported price was derived by adding an estimated ocean transport cost to the average "Free Alongside Ship" value published by the U.S. Bureau of the Census.

1974–1976: DOI, BOM, *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.
1977: January–September, FEA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report." October–December, EIA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."
1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 1.
2010 forward: EIA, *Petroleum Marketing Monthly*, November 2012, Table 1.

Table 9.2 Sources

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." October 1977–December 1977: U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report."
1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 21.
2010 forward: EIA, *Petroleum Marketing Monthly*, November 2012, 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*, October 2012, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

Table 9.10 Sources

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

Vehicle Fuel Price
EIA, NGA, annual reports.

Electric Power Sector Price
1973–1998: EIA, NGA 2000, Table 96.
1999–2002: EIA, NGM, October 2004, Table 4.
2003–2007: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants," and EIA, Form EIA-423 "Monthly Cost and Quality of Fuels for Electric Plants Report."
2008 forward: Form EIA-923, "Power Plant Operations Report."

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

Percentage of Commercial Sector
1987–2006: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to commercial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to commercial consumers.
2007 forward: EIA, NGM, October 2012, Table 3.

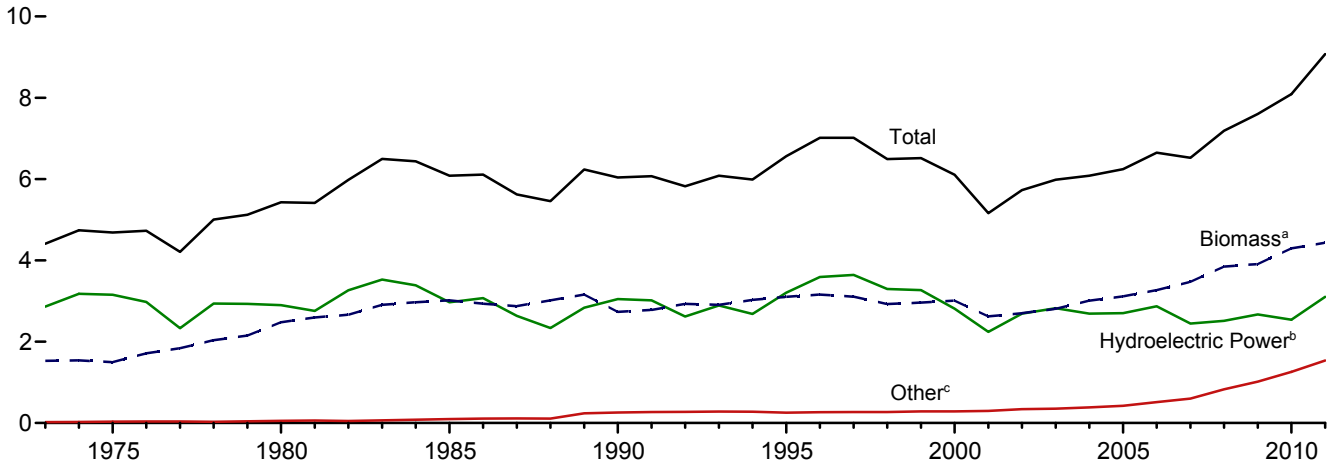
Percentage of Industrial Sector
1982–2006: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers.
2007 forward: EIA, NGM, October 2012, Table 3.

Percentage of Electric Power Sector
1973–2001: Calculated by EIA as the quantity of natural gas receipts by electric utilities reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants" (and predecessor forms) divided by the quantity of natural gas consumed by the electric power sector (for 1973-1988, see *Monthly Energy Review*, Table 7.3b; for 1989-2001, see *Monthly Energy Review*, Table 7.4b).
2002–2007: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants," and EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).
2008 forward: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form EIA-923, "Power Plant Operations Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).

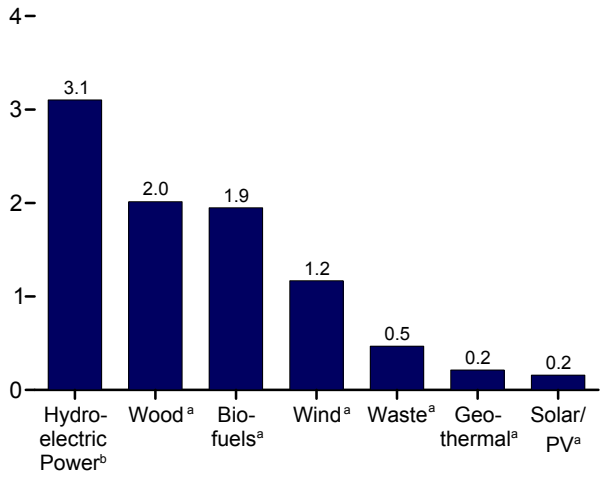
10. Renewable Energy

Figure 10.1 Renewable Energy Consumption
(Quadrillion Btu)

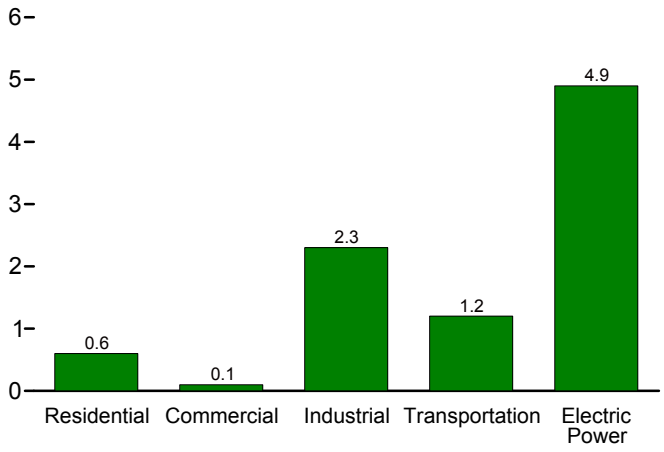
Total and Major Sources, 1973-2011



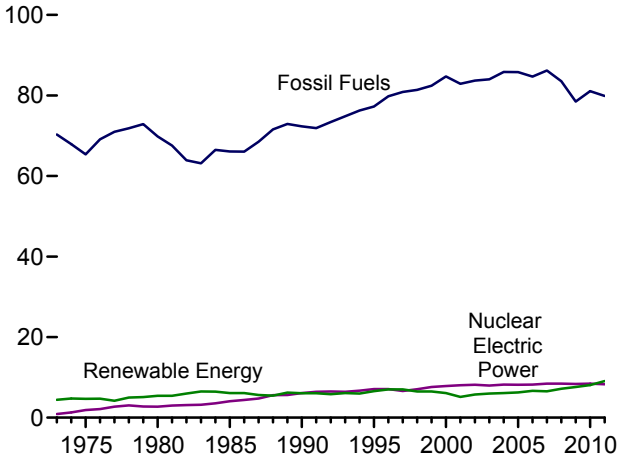
By Source, 2011



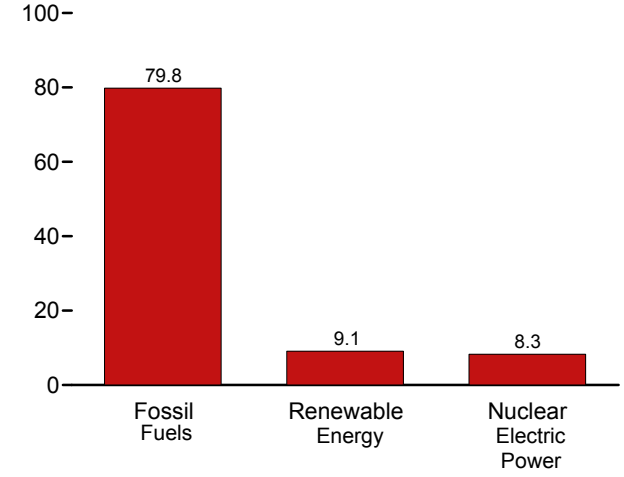
By Sector, 2011



Compared With Other Resources, 1973-2011



Compared With Other Resources, 2011



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

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

Table 10.1 Renewable Energy Production and Consumption by Source

(Trillion Btu)

	Production[a]			Consumption								
	Biomass		Total Renewable Energy[d]	Hydroelectric Power[e]	Geothermal[f]	Solar/PV[g]	Wind[h]	Biomass				Total Renewable Energy
	Biofuels[b]	Total[c]						Wood[i]	Waste[j]	Biofuels[k]	Total	
1973 Total	**NA**	**1,529**	**4,411**	**2,861**	**20**	**NA**	**NA**	**1,527**	**2**	**NA**	**1,529**	**4,411**
1975 Total	**NA**	**1,499**	**4,687**	**3,155**	**34**	**NA**	**NA**	**1,497**	**2**	**NA**	**1,499**	**4,687**
1980 Total	**NA**	**2,475**	**5,428**	**2,900**	**53**	**NA**	**NA**	**2,474**	**2**	**NA**	**2,475**	**5,428**
1985 Total	**93**	**3,016**	**6,084**	**2,970**	**97**	**(s)**	**(s)**	**2,687**	**236**	**93**	**3,016**	**6,084**
1990 Total	**111**	**2,735**	**6,041**	**3,046**	**171**	**59**	**29**	**2,216**	**408**	**111**	**2,735**	**6,041**
1995 Total	**198**	**3,099**	**6,558**	**3,205**	**152**	**69**	**33**	**2,370**	**531**	**200**	**3,101**	**6,560**
1996 Total	**141**	**3,155**	**7,012**	**3,590**	**163**	**70**	**33**	**2,437**	**577**	**143**	**3,157**	**7,014**
1997 Total	**186**	**3,108**	**7,018**	**3,640**	**167**	**70**	**34**	**2,371**	**551**	**184**	**3,105**	**7,016**
1998 Total	**202**	**2,929**	**6,494**	**3,297**	**168**	**69**	**31**	**2,184**	**542**	**201**	**2,927**	**6,493**
1999 Total	**211**	**2,965**	**6,517**	**3,268**	**171**	**68**	**46**	**2,214**	**540**	**209**	**2,963**	**6,516**
2000 Total	**233**	**3,006**	**6,104**	**2,811**	**164**	**66**	**57**	**2,262**	**511**	**236**	**3,008**	**6,106**
2001 Total	**254**	**2,624**	**5,164**	**2,242**	**164**	**64**	**70**	**2,006**	**364**	**253**	**2,622**	**5,163**
2002 Total	**308**	**2,705**	**5,734**	**2,689**	**171**	**63**	**105**	**1,995**	**402**	**303**	**2,701**	**5,729**
2003 Total	**402**	**2,805**	**5,982**	**2,825**	**175**	**62**	**115**	**2,002**	**401**	**404**	**2,807**	**5,983**
2004 Total	**487**	**2,998**	**6,070**	**2,690**	**178**	**63**	**142**	**2,121**	**389**	**499**	**3,010**	**6,082**
2005 Total	**564**	**3,104**	**6,229**	**2,703**	**181**	**63**	**178**	**2,137**	**403**	**577**	**3,117**	**6,242**
2006 Total	**720**	**3,216**	**6,599**	**2,869**	**181**	**68**	**264**	**2,099**	**397**	**771**	**3,267**	**6,649**
2007 Total	**978**	**3,461**	**6,509**	**2,446**	**186**	**76**	**341**	**2,070**	**413**	**991**	**3,474**	**6,523**
2008 Total	**1,387**	**3,864**	**7,202**	**2,511**	**192**	**89**	**546**	**2,040**	**436**	**1,372**	**3,849**	**7,186**
2009 Total	**1,584**	**3,928**	**7,616**	**2,669**	**200**	**98**	**721**	**1,891**	**453**	**1,568**	**3,912**	**7,600**
2010 January	152	359	672	218	18	10	67	168	39	142	349	662
February	142	332	610	201	16	9	53	154	35	136	326	605
March	158	366	682	204	18	10	84	168	40	149	357	673
April	152	351	661	186	17	10	95	160	39	149	348	657
May	157	358	717	245	18	11	85	162	39	155	356	715
June	152	355	753	291	17	11	79	164	39	155	357	755
July	158	367	701	239	17	11	66	170	40	158	368	701
August	160	371	662	196	18	11	65	171	40	159	370	660
September	156	360	626	168	17	11	69	166	38	153	357	622
October	163	369	646	173	17	10	77	166	39	160	366	643
November	164	369	682	191	17	10	95	165	40	157	363	676
December	168	383	726	226	18	10	88	174	41	163	377	720
Total	**1,884**	**4,341**	**8,136**	**2,539**	**208**	**126**	**923**	**1,988**	**469**	**1,837**	**4,294**	**8,090**
2011 January	169	R 385	R 747	R 248	R 19	12	R 83	R 177	R 39	153	R 369	R 731
February	151	R 346	R 710	R 234	R 17	12	R 102	R 158	36	145	R 339	R 703
March	171	R 380	R 816	R 303	R 18	13	R 102	R 170	R 39	160	R 369	R 805
April	163	359	R 813	R 303	R 17	13	121	R 160	R 36	154	R 349	R 804
May	170	R 369	R 832	R 317	R 18	14	114	R 161	R 38	164	R 363	R 826
June	168	R 375	R 824	R 312	R 17	14	R 107	168	R 39	168	R 374	R 824
July	171	R 384	R 792	R 304	R 18	14	R 73	R 172	R 40	162	374	R 782
August	174	R 387	R 742	R 250	R 18	14	R 73	R 173	R 40	174	R 386	R 741
September	166	R 372	R 677	R 208	R 17	13	67	R 167	R 38	160	R 365	R 670
October	176	R 382	R 708	R 192	R 18	R 13	R 102	R 166	40	167	R 373	R 699
November	178	R 386	R 738	R 201	R 18	R 13	121	R 167	41	167	R 375	R 727
December	186	R 405	R 770	R 231	R 18	13	R 104	R 177	42	176	R 395	R 760
Total	**2,044**	**R 4,527**	**R 9,169**	**R 3,103**	**R 213**	**158**	**1,168**	**R 2,014**	**R 469**	**1,948**	**R 4,432**	**R 9,073**
2012 January	177	R 390	R 785	R 227	19	15	R 134	R 174	R 39	154	367	R 763
February	164	362	R 701	R 198	18	15	108	R 162	R 36	152	R 351	R 690
March	172	R 373	R 795	R 250	19	R 17	R 135	R 162	40	163	R 365	R 786
April	164	R 356	R 770	R 254	18	17	R 124	R 155	R 38	160	353	R 767
May	173	R 378	R 816	R 277	19	19	R 122	R 166	40	172	R 378	R 816
June	165	R 368	R 780	R 259	19	19	R 116	R 164	R 39	164	R 366	R 779
July	157	R 368	751	R 260	19	19	R 85	R 171	R 40	158	R 369	753
August	163	370	713	225	19	19	81	169	39	168	375	719
8-Month Total	**1,334**	**2,966**	**6,113**	**1,950**	**150**	**141**	**906**	**1,322**	**311**	**1,292**	**2,924**	**6,071**
2011 8-Month Total	**1,338**	**2,983**	**6,276**	**2,271**	**142**	**106**	**774**	**1,338**	**307**	**1,279**	**2,924**	**6,217**
2010 8-Month Total	**1,232**	**2,860**	**5,457**	**1,781**	**139**	**85**	**593**	**1,317**	**311**	**1,203**	**2,831**	**5,428**

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

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

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

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

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

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

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

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

[i] Wood and wood-derived fuels.

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

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

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

Notes: • Most data for the residential, commercial, industrial, and transportation sectors are estimates. See notes and sources for Tables 10.2a and 10.2b. • See Note, "Renewable Energy Production and Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: Tables 10.2a–10.4.

Table 10.2a Renewable Energy Consumption: Residential and Commercial Sectors

(Trillion Btu)

	Residential Sector				Commercial Sector[a]								
			Biomass						Biomass				
	Geo-thermal[b]	Solar/ PV[c]	Wood[d]	Total	Hydro-electric Power[e]	Geo-thermal[b]	Solar/ PV[f]	Wind[g]	Wood[d]	Waste[h]	Fuel Ethanol[i]	Total	Total
1973 Total	NA	NA	354	354	NA	NA	NA	NA	7	NA	NA	7	7
1975 Total	NA	NA	425	425	NA	NA	NA	NA	8	NA	NA	8	8
1980 Total	NA	NA	850	850	NA	NA	NA	NA	21	NA	NA	21	21
1985 Total	NA	NA	1,010	1,010	NA	NA	NA	NA	24	NA	(s)	24	24
1990 Total	6	56	580	641	1	3	–	–	66	28	(s)	94	98
1995 Total	7	64	520	591	1	5	–	–	72	40	(s)	113	118
1996 Total	7	65	540	612	1	5	–	–	76	53	(s)	129	135
1997 Total	8	64	430	502	1	6	–	–	73	58	(s)	131	138
1998 Total	8	64	380	452	1	7	–	–	64	54	(s)	118	127
1999 Total	9	63	390	461	1	7	–	–	67	54	(s)	121	129
2000 Total	9	61	420	489	1	8	–	–	71	47	(s)	119	128
2001 Total	9	59	370	438	1	8	–	–	67	25	(s)	92	101
2002 Total	10	57	380	448	(s)	9	–	–	69	26	(s)	95	104
2003 Total	13	57	400	470	1	11	–	–	71	29	1	101	113
2004 Total	14	57	410	481	1	12	–	–	70	34	1	105	118
2005 Total	16	58	430	504	1	14	–	–	70	34	1	105	120
2006 Total	18	63	380	462	1	14	–	–	65	36	1	103	118
2007 Total	22	70	410	502	1	14	–	–	70	31	2	103	118
2008 Total	26	80	450	557	1	15	(s)	–	73	34	2	109	125
2009 Total	33	89	430	552	1	17	(s)	(s)	72	36	3	112	129
2010 January	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
February	3	9	32	44	(s)	1	(s)	(s)	5	3	(s)	8	10
March	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
April	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	11
May	3	10	36	48	(s)	2	(s)	(s)	6	4	(s)	10	12
June	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	11
July	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
August	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	10	11
September	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	11
October	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
November	3	9	35	47	(s)	2	(s)	(s)	6	3	(s)	9	10
December	3	10	36	48	(s)	2	(s)	(s)	6	3	(s)	9	11
Total	37	114	420	571	1	19	(s)	(s)	72	36	3	111	130
2011 January	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	R 10	11
February	3	11	33	47	(s)	2	(s)	(s)	5	3	(s)	9	10
March	3	12	37	52	(s)	2	(s)	(s)	6	3	(s)	R 10	11
April	3	12	35	50	(s)	2	(s)	(s)	6	3	(s)	9	R 11
May	3	12	37	52	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
June	3	12	35	50	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
July	3	12	37	52	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
August	3	12	37	52	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
September	3	12	35	50	(s)	2	(s)	(s)	6	R 4	(s)	R 10	11
October	3	12	37	52	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
November	3	12	35	50	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
December	3	12	37	52	(s)	2	(s)	(s)	6	R 4	(s)	10	R 12
Total	40	140	430	610	R (s)	20	R 1	(s)	71	R 43	3	R 117	R 138
2012 January	3	14	36	54	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
February	3	13	34	51	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 11
March	3	14	36	54	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
April	3	14	35	52	(s)	2	(s)	(s)	6	3	(s)	R 10	11
May	3	14	36	54	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
June	3	14	35	52	(s)	2	(s)	(s)	6	R 3	(s)	R 9	R 11
July	3	14	36	54	(s)	2	(s)	(s)	6	R 4	(s)	R 10	R 12
August	3	14	36	54	(s)	2	(s)	(s)	6	3	(s)	10	12
8-Month Total	26	113	287	426	(s)	13	1	(s)	47	29	2	78	93
2011 8-Month Total	26	94	286	406	(s)	13	1	(s)	47	28	2	77	92
2010 8-Month Total	24	76	280	380	1	12	(s)	(s)	48	25	2	75	88

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

[b] Geothermal heat pump and direct use energy.

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

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

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

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

Sources: See end of section.

Table 10.2b Renewable Energy Consumption: Industrial and Transportation Sectors

(Trillion Btu)

	Industrial Sector[a]										Transportation Sector		
					Biomass						Biomass		
	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
1973 Total	**35**	**NA**	**NA**	**NA**	**1,165**	**NA**	**NA**	**NA**	**1,165**	**1,200**	**NA**	**NA**	**NA**
1975 Total	**32**	**NA**	**NA**	**NA**	**1,063**	**NA**	**NA**	**NA**	**1,063**	**1,096**	**NA**	**NA**	**NA**
1980 Total	**33**	**NA**	**NA**	**NA**	**1,600**	**NA**	**NA**	**NA**	**1,600**	**1,633**	**NA**	**NA**	**NA**
1985 Total	**33**	**NA**	**NA**	**NA**	**1,645**	**230**	**1**	**42**	**1,918**	**1,951**	**50**	**NA**	**50**
1990 Total	**31**	**2**	**–**	**–**	**1,442**	**192**	**1**	**49**	**1,684**	**1,717**	**60**	**NA**	**60**
1995 Total	**55**	**3**	**–**	**–**	**1,652**	**195**	**2**	**86**	**1,934**	**1,992**	**112**	**NA**	**112**
1996 Total	**61**	**3**	**–**	**–**	**1,683**	**224**	**1**	**61**	**1,969**	**2,033**	**81**	**NA**	**81**
1997 Total	**58**	**3**	**–**	**–**	**1,731**	**184**	**1**	**80**	**1,996**	**2,057**	**102**	**NA**	**102**
1998 Total	**55**	**3**	**–**	**–**	**1,603**	**180**	**1**	**86**	**1,872**	**1,929**	**113**	**NA**	**113**
1999 Total	**49**	**4**	**–**	**–**	**1,620**	**171**	**1**	**90**	**1,882**	**1,934**	**118**	**NA**	**118**
2000 Total	**42**	**4**	**–**	**–**	**1,636**	**145**	**1**	**99**	**1,881**	**1,928**	**135**	**NA**	**135**
2001 Total	**33**	**5**	**–**	**–**	**1,443**	**129**	**3**	**108**	**1,681**	**1,719**	**141**	**1**	**142**
2002 Total	**39**	**5**	**–**	**–**	**1,396**	**146**	**3**	**130**	**1,676**	**1,720**	**168**	**2**	**170**
2003 Total	**43**	**3**	**–**	**–**	**1,363**	**142**	**4**	**169**	**1,679**	**1,726**	**228**	**2**	**230**
2004 Total	**33**	**4**	**–**	**–**	**1,476**	**132**	**6**	**203**	**1,817**	**1,853**	**286**	**3**	**290**
2005 Total	**32**	**4**	**–**	**–**	**1,452**	**148**	**7**	**230**	**1,837**	**1,873**	**327**	**12**	**339**
2006 Total	**29**	**4**	**–**	**–**	**1,472**	**130**	**10**	**285**	**1,897**	**1,930**	**442**	**33**	**475**
2007 Total	**16**	**5**	**–**	**–**	**1,405**	**144**	**10**	**377**	**1,936**	**1,956**	**557**	**46**	**602**
2008 Total	**17**	**5**	**–**	**–**	**1,340**	**144**	**12**	**532**	**2,028**	**2,049**	**786**	**40**	**826**
2009 Total	**18**	**4**	**–**	**–**	**1,208**	**155**	**13**	**617**	**1,994**	**2,016**	**894**	**42**	**935**
2010 January	2	(s)	(s)	–	109	15	1	60	185	187	81	(s)	81
February	2	(s)	(s)	–	100	13	1	56	170	172	76	3	79
March	2	(s)	(s)	–	110	15	1	62	188	190	83	2	85
April	2	(s)	(s)	–	105	15	1	60	181	183	84	4	87
May	2	(s)	(s)	–	106	14	1	62	183	185	89	3	92
June	1	(s)	(s)	–	107	13	2	60	182	183	90	2	93
July	1	(s)	(s)	–	111	14	2	62	188	190	91	3	94
August	1	(s)	(s)	–	111	14	2	63	190	191	91	3	94
September	1	(s)	(s)	–	110	13	1	61	185	187	86	4	90
October	1	(s)	(s)	–	110	15	2	64	190	192	91	3	94
November	1	(s)	(s)	–	108	15	1	65	190	191	88	3	91
December	1	(s)	(s)	–	114	15	2	67	198	199	92	3	94
Total	**16**	**4**	**(s)**	**–**	**1,301**	**169**	**17**	**742**	**2,230**	**2,250**	**1,040**	**34**	**1,074**
2011 January	1	(s)	(s)	(s)	R 117	15	1	66	R 200	R 202	82	3	86
February	2	(s)	(s)	(s)	R 104	14	1	59	R 178	R 180	80	4	84
March	2	(s)	(s)	(s)	R 112	R 15	1	65	R 193	R 196	87	6	93
April	2	(s)	(s)	(s)	R 106	R 13	1	62	R 183	R 185	82	8	90
May	2	(s)	(s)	(s)	105	14	2	64	185	187	90	8	98
June	1	(s)	(s)	(s)	R 111	R 13	2	63	R 189	R 191	92	10	102
July	1	(s)	(s)	(s)	R 113	14	1	64	192	R 194	86	10	96
August	1	(s)	(s)	(s)	R 113	14	2	65	R 193	R 195	95	12	107
September	1	(s)	(s)	(s)	R 111	14	1	62	R 188	R 189	83	13	96
October	1	(s)	(s)	(s)	R 109	15	1	65	R 191	R 193	89	11	100
November	1	(s)	(s)	(s)	R 112	15	1	66	R 195	R 197	86	13	99
December	2	(s)	(s)	(s)	R 118	15	2	69	R 204	R 206	91	14	105
Total	**R 17**	**4**	**(s)**	**(s)**	**R 1,332**	**R 171**	**17**	**771**	**R 2,291**	**R 2,313**	**1,044**	**113**	**1,157**
2012 January	2	(s)	(s)	(s)	R 116	15	1	67	R 199	R 201	81	5	86
February	2	(s)	(s)	(s)	R 108	14	1	61	R 184	R 186	82	8	89
March	2	(s)	(s)	(s)	R 106	14	1	64	R 185	R 187	87	10	98
April	2	(s)	(s)	(s)	R 103	14	1	61	R 179	R 181	86	11	98
May	2	(s)	(s)	(s)	R 110	14	2	64	R 190	R 192	93	14	107
June	1	(s)	(s)	R (s)	R 108	14	2	61	R 185	R 186	90	11	101
July	1	(s)	(s)	(s)	R 112	R 15	1	58	R 186	R 188	88	10	98
August	1	(s)	(s)	(s)	110	15	2	60	186	187	95	11	106
8-Month Total	**12**	**3**	**(s)**	**(s)**	**871**	**114**	**12**	**496**	**1,494**	**1,508**	**702**	**80**	**782**
2011 8-Month Total	**12**	**3**	**(s)**	**(s)**	**882**	**112**	**12**	**509**	**1,514**	**1,528**	**695**	**61**	**756**
2010 8-Month Total	**12**	**3**	**(s)**	**–**	**859**	**112**	**11**	**485**	**1,467**	**1,481**	**684**	**21**	**705**

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

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

[c] Geothermal heat pump and direct use energy.

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

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

[f] Wood and wood-derived fuels.

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

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

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

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

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

Notes: • Data are estimates, except for industrial sector hydroelectric power in 1973-1978 and 1989 forward, solar/PV, and wind. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Table 10.2c Renewable Energy Consumption: Electric Power Sector

(Trillion Btu)

	Hydro-electric Power[a]	Geo-thermal[b]	Solar/PV[c]	Wind[d]	Biomass			Total
					Wood[e]	Waste[f]	Total	
1973 Total	**2,827**	**20**	**NA**	**NA**	**1**	**2**	**3**	**2,851**
1975 Total	**3,122**	**34**	**NA**	**NA**	**(s)**	**2**	**2**	**3,158**
1980 Total	**2,867**	**53**	**NA**	**NA**	**3**	**2**	**4**	**2,925**
1985 Total	**2,937**	**97**	**(s)**	**(s)**	**8**	**7**	**14**	**3,049**
1990 Total[g]	**3,014**	**161**	**4**	**29**	**129**	**188**	**317**	**3,524**
1995 Total	**3,149**	**138**	**5**	**33**	**125**	**296**	**422**	**3,747**
1996 Total	**3,528**	**148**	**5**	**33**	**138**	**300**	**438**	**4,153**
1997 Total	**3,581**	**150**	**5**	**34**	**137**	**309**	**446**	**4,216**
1998 Total	**3,241**	**151**	**5**	**31**	**137**	**308**	**444**	**3,872**
1999 Total	**3,218**	**152**	**5**	**46**	**138**	**315**	**453**	**3,874**
2000 Total	**2,768**	**144**	**5**	**57**	**134**	**318**	**453**	**3,427**
2001 Total	**2,209**	**142**	**6**	**70**	**126**	**211**	**337**	**2,763**
2002 Total	**2,650**	**147**	**6**	**105**	**150**	**230**	**380**	**3,288**
2003 Total	**2,781**	**148**	**5**	**115**	**167**	**230**	**397**	**3,445**
2004 Total	**2,656**	**148**	**6**	**142**	**165**	**223**	**388**	**3,340**
2005 Total	**2,670**	**147**	**6**	**178**	**185**	**221**	**406**	**3,406**
2006 Total	**2,839**	**145**	**5**	**264**	**182**	**231**	**412**	**3,665**
2007 Total	**2,430**	**145**	**6**	**341**	**186**	**237**	**423**	**3,345**
2008 Total	**2,494**	**146**	**9**	**546**	**177**	**258**	**435**	**3,630**
2009 Total	**2,650**	**146**	**9**	**721**	**180**	**261**	**441**	**3,967**
2010 January	217	13	(s)	67	17	21	39	335
February	199	11	(s)	53	16	20	36	300
March	202	13	1	84	16	22	39	338
April	184	12	1	95	15	21	36	329
May	243	13	1	85	14	22	36	378
June	290	12	2	79	16	23	39	421
July	238	12	2	66	17	23	40	358
August	195	13	2	65	18	23	41	315
September	168	12	1	69	16	22	38	288
October	171	12	1	77	15	22	37	298
November	190	12	1	95	16	23	39	337
December	225	13	(s)	88	17	23	41	367
Total	**2,521**	**148**	**12**	**923**	**196**	**264**	**459**	**4,064**
2011 January	R 247	R 13	(s)	R 83	R 17	21	R 37	R 381
February	R 233	R 12	1	R 102	R 16	R 19	35	R 382
March	R 301	R 13	1	R 102	15	R 21	R 36	R 453
April	R 301	R 12	2	121	12	R 20	R 32	R 467
May	R 315	R 13	2	R 114	13	R 21	R 34	R 477
June	R 311	R 12	2	R 107	R 16	R 22	R 37	R 469
July	R 303	R 12	2	R 73	R 17	R 22	R 39	R 429
August	R 249	R 12	2	R 73	R 17	R 22	39	R 376
September	R 207	R 12	2	67	15	R 21	37	R 323
October	R 191	R 12	R 1	R 102	R 14	R 22	36	R 343
November	R 199	R 12	1	R 121	R 14	R 22	36	R 369
December	R 229	R 13	1	R 103	16	23	39	R 386
Total	**R 3,085**	**R 149**	**R 17**	**R 1,167**	**R 182**	**R 255**	**R 437**	**R 4,855**
2012 January	R 225	14	1	R 134	16	R 21	R 37	R 410
February	R 196	13	1	108	15	R 19	R 34	R 353
March	R 249	14	2	R 135	14	R 21	R 35	R 435
April	R 252	13	3	R 124	11	R 20	R 31	R 424
May	R 276	14	R 5	R 122	13	R 22	R 35	R 451
June	R 257	R 13	5	R 116	15	R 21	R 36	R 428
July	R 259	14	R 5	R 85	16	R 22	R 38	R 401
August	224	13	4	80	16	21	38	360
8-Month Total	**1,938**	**108**	**27**	**905**	**116**	**168**	**284**	**3,262**
2011 8-Month Total	**2,259**	**100**	**11**	**774**	**123**	**167**	**290**	**3,434**
2010 8-Month Total	**1,768**	**99**	**9**	**593**	**131**	**175**	**305**	**2,774**

[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.

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

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

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

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

Table 10.3 Fuel Ethanol Overview

	Feedstock[a]	Losses and Co-products[b]	Denaturant[c]	Production[d]			Trade[d] Net Imports[e]	Stocks[d,f]	Stock Change[d,g]	Consumption[d]			*Consumption Minus Denaturant*[h]
	TBtu	TBtu	Mbbl	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu	*TBtu*
1981 Total	**13**	**6**	**40**	**1,978**	**83**	**7**	**NA**	**NA**	**NA**	**1,978**	**83**	**7**	***7***
1985 Total	**93**	**42**	**294**	**14,693**	**617**	**52**	**NA**	**NA**	**NA**	**14,693**	**617**	**52**	***51***
1990 Total	**111**	**49**	**356**	**17,802**	**748**	**63**	**NA**	**NA**	**NA**	**17,802**	**748**	**63**	***62***
1995 Total	**198**	**86**	**647**	**32,325**	**1,358**	**115**	**387**	**2,186**	**-207**	**32,919**	**1,383**	**117**	***114***
1996 Total	**141**	**61**	**464**	**23,178**	**973**	**83**	**313**	**2,065**	**-121**	**23,612**	**992**	**84**	***82***
1997 Total	**186**	**80**	**613**	**30,674**	**1,288**	**109**	**85**	**2,925**	**860**	**29,899**	**1,256**	**107**	***104***
1998 Total	**202**	**86**	**669**	**33,453**	**1,405**	**119**	**66**	**3,406**	**481**	**33,038**	**1,388**	**118**	***115***
1999 Total	**211**	**90**	**698**	**34,881**	**1,465**	**124**	**87**	**4,024**	**618**	**34,350**	**1,443**	**122**	***119***
2000 Total	**233**	**99**	**773**	**38,627**	**1,622**	**138**	**116**	**3,400**	**-624**	**39,367**	**1,653**	**140**	***137***
2001 Total	**253**	**108**	**841**	**42,028**	**1,765**	**150**	**315**	**4,298**	**898**	**41,445**	**1,741**	**148**	***144***
2002 Total	**307**	**130**	**1,019**	**50,956**	**2,140**	**182**	**306**	**6,200**	**1,902**	**49,360**	**2,073**	**176**	***171***
2003 Total	**400**	**169**	**1,335**	**66,772**	**2,804**	**238**	**292**	**5,978**	**-222**	**67,286**	**2,826**	**240**	***233***
2004 Total	**484**	**203**	**1,621**	**81,058**	**3,404**	**289**	**3,542**	**6,002**	**24**	**84,576**	**3,552**	**301**	***293***
2005 Total	**552**	**230**	**1,859**	**92,961**	**3,904**	**331**	**3,234**	**5,563**	**-439**	**96,634**	**4,059**	**344**	***335***
2006 Total	**688**	**285**	**2,326**	**116,294**	**4,884**	**414**	**17,408**	**8,760**	**3,197**	**130,505**	**5,481**	**465**	***453***
2007 Total	**914**	**376**	**3,105**	**155,263**	**6,521**	**553**	**10,457**	**10,535**	**1,775**	**163,945**	**6,886**	**584**	***569***
2008 Total	**1,300**	**531**	**4,433**	**221,637**	**9,309**	**790**	**12,610**	**14,226**	**3,691**	**230,556**	**9,683**	**821**	***800***
2009 Total	**1,517**	**616**	**5,688**	**260,424**	**10,938**	**928**	**4,720**	**16,594**	**2,368**	**262,776**	**11,037**	**936**	***910***
2010 January	149	60	541	25,625	1,076	91	-234	18,251	1,657	23,734	997	85	*82*
February	138	56	496	23,802	1,000	85	-482	19,297	1,046	22,274	936	79	*77*
March	154	62	537	26,486	1,112	94	-1,104	20,222	925	24,457	1,027	87	*85*
April	147	59	522	25,384	1,066	90	-927	20,042	-180	24,637	1,035	88	*85*
May	152	61	534	26,244	1,102	93	-368	19,851	-191	26,067	1,095	93	*90*
June	149	60	522	25,632	1,077	91	-341	18,565	-1,286	26,577	1,116	95	*92*
July	154	62	543	26,584	1,117	95	-578	17,809	-756	26,762	1,124	95	*93*
August	157	63	538	26,964	1,132	96	-695	17,380	-429	26,698	1,121	95	*93*
September	152	61	533	26,221	1,101	93	-924	17,437	57	25,240	1,060	90	*88*
October	160	64	563	27,471	1,154	98	-830	17,278	-159	26,800	1,126	95	*93*
November	161	65	585	27,747	1,165	99	-923	18,150	872	25,952	1,090	92	*90*
December	165	67	592	28,457	1,195	101	-1,711	17,941	-209	26,955	1,132	96	*93*
Total	**1,839**	**742**	**6,506**	**316,617**	**13,298**	**1,127**	**-9,115**	**17,941**	**1,347**	**306,155**	**12,858**	**1,090**	***1,061***
2011 January	165	66	581	28,467	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*
8-Month Total	**1,243**	**495**	**4,180**	**215,642**	**9,057**	**768**	**-8,223**	**19,369**	**1,108**	**206,311**	**8,665**	**734**	***716***
2011 8-Month Total	**1,267**	**508**	**4,392**	**218,944**	**9,196**	**779**	**-14,324**	**18,123**	**182**	**204,438**	**8,586**	**728**	***709***
2010 8-Month Total	**1,201**	**484**	**4,233**	**206,721**	**8,682**	**736**	**-4,728**	**17,380**	**786**	**201,207**	**8,451**	**716**	***697***

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

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

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

[d] Includes denaturant.

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

[f] Stocks are at end of period.

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

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

[i] Derived from the preliminary 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 January	3	(s)	633	27	3	41	296	-256	1,049	338	0	40	2	(s)
February	4	(s)	696	29	4	31	139	-108	1,039	-10	0	599	25	3
March	4	(s)	804	34	4	60	433	-374	1,057	18	0	412	17	2
April	4	(s)	814	34	4	45	227	-182	1,009	-48	0	680	29	4
May	4	(s)	760	32	4	80	251	-171	1,016	7	0	582	24	3
June	4	(s)	644	27	3	54	304	-249	968	-48	0	443	19	2
July	4	(s)	657	28	4	32	199	-167	830	-138	0	628	26	3
August	4	(s)	653	27	3	52	225	-173	771	-59	0	539	23	3
September	4	(s)	723	30	4	69	131	-62	682	-89	0	749	31	4
October	4	(s)	676	28	4	18	132	-114	650	-32	0	594	25	3
November	3	(s)	528	22	3	30	57	-27	676	26	0	475	20	3
December	3	(s)	588	25	3	34	109	-75	672	-4	0	517	22	3
Total	**44**	**1**	**8,177**	**343**	**44**	**546**	**2,503**	**-1,958**	**672**	**-39**	**0**	**6,258**	**263**	**34**
2011 January	5	(s)	842	35	5	49	217	-169	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
8-Month Total	**90**	**1**	**16,650**	**699**	**89**	**606**	**2,212**	**-1,606**	**2,003**	**101**	**0**	**14,943**	**628**	**80**
2011 8-Month Total	**71**	**1**	**13,145**	**552**	**70**	**414**	**1,246**	**-832**	**1,834**	**857**	**0**	**11,456**	**481**	**61**
2010 8-Month Total	**31**	**(s)**	**5,662**	**238**	**30**	**395**	**2,074**	**-1,680**	**771**	**60**	**0**	**3,923**	**165**	**21**

[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 production is assumed to equal consumption for all renewable energy sources except biofuels (biofuels production comprises biomass inputs to the production of fuel ethanol and biodiesel).

Table 10.2a Sources

Residential Sector, Geothermal

Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

Residential Sector, Solar/PV

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

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

Residential Sector, Wood

1973–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

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

Commercial Sector, Hydroelectric Power

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

Commercial Sector, Geothermal

Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

Commercial Sector, Solar/PV

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

Commercial Sector, Wind

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

Commercial Sector, Wood

1973–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

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

1984: EIA estimate based on the 1983 value.

1985–1988: Values interpolated.

1989 forward: EIA, *Monthly Energy Review* (*MER*), Tables 7.4a–7.4c; and EIA estimates based on Form EIA-871, "Commercial Buildings Energy Consumption Survey." Data for wood consumption at commercial combined-heat-and-power (CHP) plants are calculated as total wood consumption at electricity-only and CHP plants (MER, Table 7.4a) minus wood consumption in the electric power sector (MER, Table 7.4b) and at industrial CHP plants (MER, Table 7.4c). Annual estimates for wood consumption at other commercial plants are based on Form EIA-871 (the annual estimate for the current year is set equal to that of the previous year); monthly estimates are created by dividing

the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

Commercial Sector, Biomass Waste
EIA, MER, Table 7.4c.

Commercial Sector, Fuel Ethanol (Minus Denaturant)
EIA, MER, Tables 3.5, 3.7a, and 10.3. Calculated as commercial sector motor gasoline consumption (Table 3.7a) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

Table 10.2b Sources

Industrial Sector, Hydroelectric Power
Industrial sector conventional hydroelectricity net generation data from Table 7.2c are converted to Btu by multiplying by the fossil-fuels heat rate—see Table A6.

Industrial Sector, Geothermal
Oregon Institute of Technology, Geo-Heat Center. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. (The annual estimate for the current year is set equal to that of the previous year.)

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

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

Industrial Sector, Wood
1973–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

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

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

1985 and 1986: Values interpolated.

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

1988: Value interpolated.

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

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

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

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

1985 and 1986: Values interpolated.

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

1988: Value interpolated.

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

Industrial Sector, Fuel Ethanol (Minus Denaturant)
EIA, MER, Tables 3.5, 3.7b, and 10.3. Calculated as industrial sector motor gasoline consumption (Table 3.7b) divided by total motor gasoline product supplied (Table

3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

Industrial Sector, Losses and Co-products
Calculated as fuel ethanol losses and co-products (Table 10.3) plus biodiesel losses and co-products (Table 10.4).

Transportation Sector, Fuel Ethanol (Minus Denaturant)
EIA, MER, Tables 3.5, 3.7c, and 10.3. Calculated as transportation sector motor gasoline consumption (Table 3.7c) divided by total motor gasoline product supplied (Table 3.5), and then multiplied by fuel ethanol (minus denaturant) consumption (Table 10.3).

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

Table 10.3 Sources

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

Losses and Co-products
Calculated as fuel ethanol feedstock plus denaturant minus fuel ethanol production.

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

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

Consumption Minus Denaturant

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

Table 10.4 Sources

Feedstock

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

Losses and Co-products

Calculated as biodiesel feedstock minus biodiesel production.

Production

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

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

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

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

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

Trade

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

Stocks and Stock Change

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

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

Balancing Item

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

Consumption

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

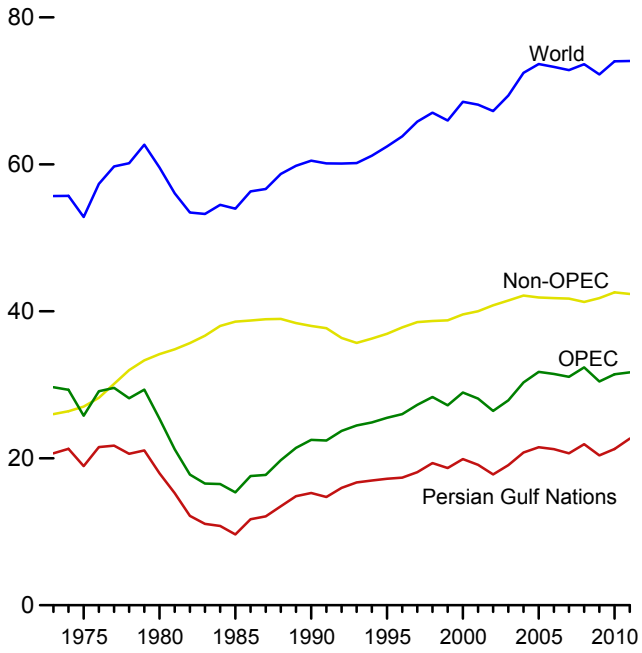
January and February 2009: EIA, PSA, Table 1, data for refinery and blender net inputs of renewable fuels except fuel ethanol.

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

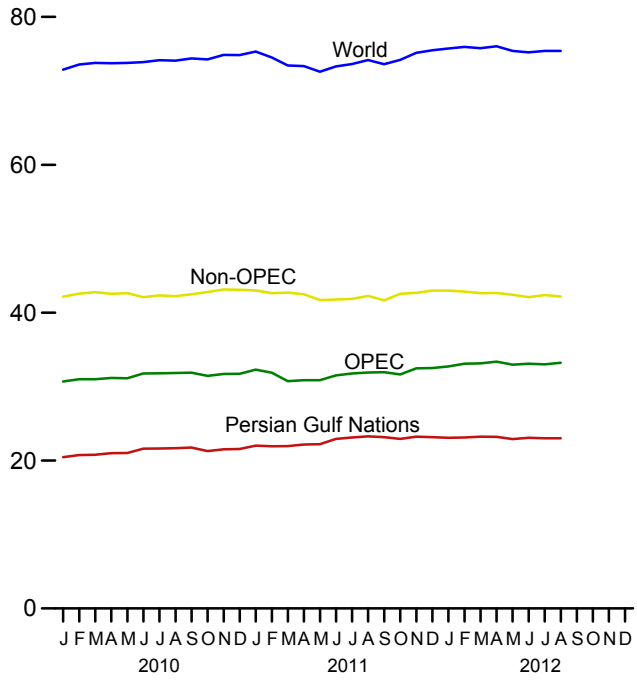
11. International Petroleum

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

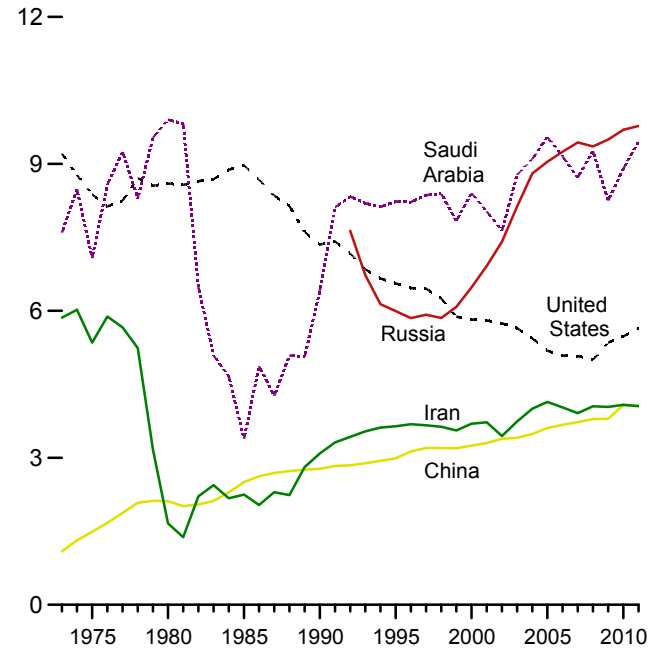
World Production, 1973-2011



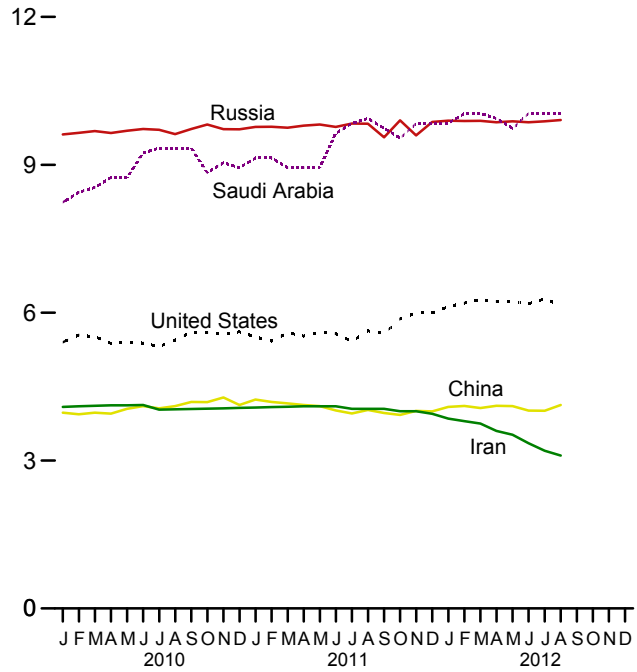
World Production, Monthly



Selected Producers, 1973-2011



Selected Producers, Monthly

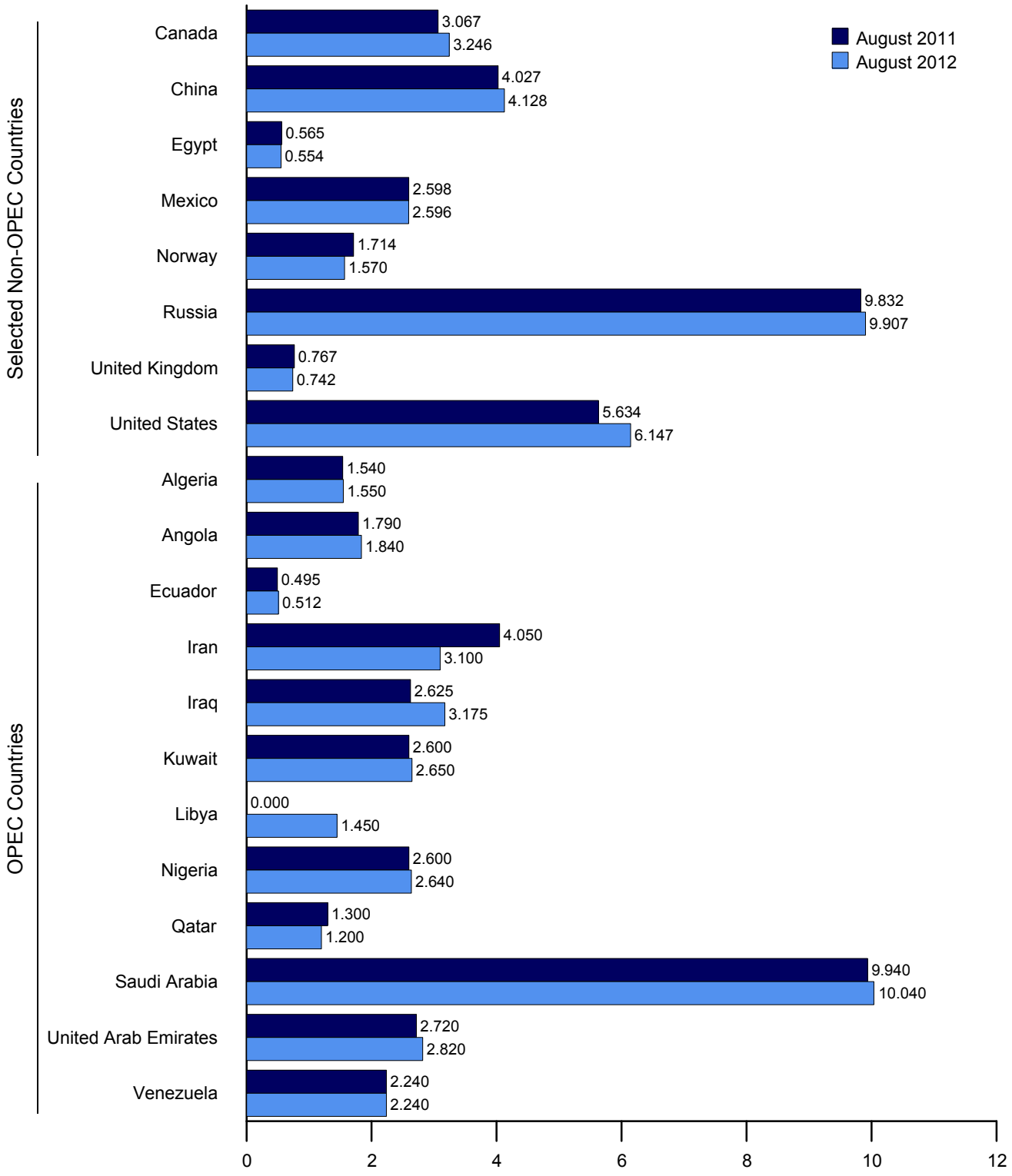


Notes: • OPEC is the Organization of the Petroleum Exporting Countries. • The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

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

Sources: Tables 11.1a and 11.1b.

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



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

Table 11.1a World Crude Oil Production: OPEC Members

(Thousand Barrels per Day)

	Algeria	Angola	Ecuador	Iran	Iraq	Kuwait[a]	Libya	Nigeria	Qatar	Saudi Arabia[a]	United Arab Emirates	Vene-zuela	Total OPEC[b]
1973 Average	**1,097**	**162**	**209**	**5,861**	**2,018**	**3,020**	**2,175**	**2,054**	**570**	**7,596**	**1,533**	**3,366**	**29,661**
1975 Average	**983**	**165**	**161**	**5,350**	**2,262**	**2,084**	**1,480**	**1,783**	**438**	**7,075**	**1,664**	**2,346**	**25,790**
1980 Average	**1,106**	**150**	**204**	**1,662**	**2,514**	**1,656**	**1,787**	**2,055**	**472**	**9,900**	**1,709**	**2,168**	**25,383**
1985 Average	**1,036**	**231**	**281**	**2,250**	**1,433**	**1,023**	**1,059**	**1,495**	**301**	**3,388**	**1,193**	**1,677**	**15,367**
1990 Average	**1,180**	**475**	**285**	**3,088**	**2,040**	**1,175**	**1,375**	**1,810**	**406**	**6,410**	**2,117**	**2,137**	**22,498**
1995 Average	**1,162**	**646**	**392**	**3,643**	**560**	**2,057**	**1,390**	**1,993**	**442**	**8,231**	**2,233**	**2,750**	**25,500**
1996 Average	**1,227**	**709**	**396**	**3,686**	**579**	**2,062**	**1,401**	**2,001**	**510**	**8,218**	**2,278**	**2,938**	**26,003**
1997 Average	**1,259**	**714**	**388**	**3,664**	**1,155**	**2,007**	**1,446**	**2,132**	**550**	**8,362**	**2,316**	**3,280**	**27,274**
1998 Average	**1,226**	**735**	**375**	**3,634**	**2,150**	**2,085**	**1,390**	**2,153**	**696**	**8,389**	**2,345**	**3,167**	**28,346**
1999 Average	**1,177**	**745**	**373**	**3,557**	**2,508**	**1,898**	**1,319**	**2,130**	**665**	**7,833**	**2,169**	**2,826**	**27,199**
2000 Average	**1,214**	**746**	**395**	**3,696**	**2,571**	**2,079**	**1,410**	**2,165**	**737**	**8,404**	**2,368**	**3,155**	**28,940**
2001 Average	**1,265**	**742**	**412**	**3,724**	**2,390**	**1,998**	**1,367**	**2,256**	**714**	**8,031**	**2,205**	**3,010**	**28,114**
2002 Average	**1,349**	**896**	**393**	**3,444**	**2,023**	**1,894**	**1,319**	**2,118**	**679**	**7,634**	**2,082**	**2,604**	**26,435**
2003 Average	**1,516**	**903**	**411**	**3,743**	**1,308**	**2,136**	**1,421**	**2,275**	**715**	**8,775**	**2,348**	**2,335**	**27,885**
2004 Average	**1,582**	**1,052**	**528**	**4,001**	**2,011**	**2,376**	**1,515**	**2,329**	**783**	**9,101**	**2,478**	**2,557**	**30,313**
2005 Average	**1,692**	**1,250**	**532**	**4,139**	**1,878**	**2,529**	**1,633**	**2,627**	**835**	**9,550**	**2,535**	**2,565**	**31,766**
2006 Average	**1,699**	**1,413**	**536**	**4,028**	**1,996**	**2,535**	**1,681**	**2,440**	**850**	**9,152**	**2,636**	**2,511**	**31,476**
2007 Average	**1,708**	**1,744**	**511**	**3,912**	**2,086**	**2,464**	**1,702**	**2,350**	**851**	**8,722**	**2,603**	**2,433**	**31,085**
2008 Average	**1,705**	**1,981**	**505**	**4,050**	**2,375**	**2,586**	**1,736**	**2,165**	**924**	**9,261**	**2,681**	**2,394**	**32,363**
2009 Average	**1,585**	**1,907**	**486**	**4,037**	**2,391**	**2,350**	**1,650**	**2,208**	**927**	**8,250**	**2,413**	**2,239**	**30,442**
2010 January	1,540	2,040	464	4,088	2,475	2,250	1,650	2,480	969	8,240	2,414	2,090	30,699
February	1,540	2,060	470	4,100	2,475	2,250	1,650	2,420	1,036	8,440	2,414	2,140	30,995
March	1,540	2,070	478	4,112	2,375	2,250	1,650	2,430	1,055	8,540	2,414	2,090	31,004
April	1,540	2,070	480	4,120	2,375	2,250	1,650	2,360	1,072	8,740	2,414	2,110	31,181
May	1,540	2,030	478	4,120	2,375	2,250	1,650	2,310	1,091	8,740	2,415	2,140	31,138
June	1,540	1,980	491	4,127	2,425	2,250	1,650	2,410	1,113	9,240	2,415	2,140	31,780
July	1,540	1,970	492	4,033	2,325	2,350	1,650	2,410	1,136	9,340	2,415	2,140	31,801
August	1,540	1,890	485	4,040	2,325	2,350	1,650	2,510	1,164	9,340	2,415	2,140	31,849
September	1,540	1,790	490	4,047	2,375	2,350	1,650	2,550	1,193	9,340	2,415	2,140	31,880
October	1,540	1,790	497	4,053	2,375	2,350	1,650	2,580	1,216	8,840	2,415	2,140	31,446
November	1,540	1,790	508	4,060	2,375	2,350	1,650	2,510	1,235	9,040	2,415	2,240	31,713
December	1,540	1,790	499	4,068	2,525	2,350	1,650	2,490	1,235	8,940	2,415	2,240	31,742
Average	**1,540**	**1,939**	**486**	**4,080**	**2,399**	**2,300**	**1,650**	**2,455**	**1,127**	**8,900**	**2,415**	**2,146**	**31,437**
2011 January	1,540	1,790	500	4,076	2,625	2,350	1,650	2,580	1,280	9,140	2,520	2,240	32,291
February	1,540	1,790	509	4,084	2,525	2,350	1,340	2,570	1,280	9,140	2,520	2,240	31,888
March	1,540	1,790	501	4,092	2,525	2,450	300	2,450	1,290	8,940	2,620	2,240	30,738
April	1,540	1,740	504	4,100	2,525	2,550	200	2,500	1,300	8,940	2,720	2,240	30,859
May	1,540	1,640	497	4,100	2,575	2,550	200	2,570	1,300	8,940	2,720	2,240	30,872
June	1,540	1,690	495	4,100	2,575	2,550	100	2,570	1,300	9,640	2,720	2,240	31,520
July	1,540	1,740	492	4,050	2,625	2,550	100	2,570	1,300	9,840	2,720	2,240	31,767
August	1,540	1,790	495	4,050	2,625	2,600	0	2,600	1,300	9,940	2,720	2,240	31,900
September	1,540	1,840	496	4,050	2,725	2,600	100	2,600	1,300	9,740	2,720	2,240	31,951
October	1,540	1,790	502	4,000	2,725	2,600	300	2,400	1,300	9,540	2,720	2,240	31,657
November	1,540	1,940	504	4,000	2,725	2,600	550	2,500	1,300	9,840	2,720	2,240	32,459
December	1,540	1,890	501	3,950	2,725	2,600	800	2,400	1,300	9,840	[R] 2,720	2,240	[R] 32,506
Average	**1,540**	**1,786**	**500**	**4,054**	**2,626**	**2,530**	**465**	**2,525**	**1,296**	**9,458**	[R] **2,679**	**2,240**	[R] **31,699**
2012 January	1,550	1,890	504	3,850	2,675	2,650	1,000	2,520	1,300	9,840	[R] 2,720	2,240	[R] 32,739
February	1,550	1,940	503	3,800	2,575	2,650	1,200	2,580	1,300	[R] 10,040	[R] 2,720	2,240	[R] 33,098
March	1,550	1,790	499	3,750	2,725	2,650	1,350	2,520	1,200	10,040	2,820	2,240	33,134
April	1,550	1,890	500	3,600	2,965	2,650	1,400	2,640	1,190	[R] 9,940	2,820	2,240	[R] 33,385
May	1,550	1,840	498	3,525	2,925	2,650	1,400	2,580	1,200	[R] 9,740	2,820	2,240	[R] 32,968
June	1,550	1,790	502	3,350	2,975	2,650	1,400	2,580	1,200	[R] 10,040	2,820	2,240	[R] 33,097
July	1,550	1,740	508	3,200	3,075	2,650	1,400	2,580	1,200	10,040	2,820	2,240	33,003
August	1,550	1,840	512	3,100	3,175	2,650	1,450	2,640	1,200	10,040	2,820	2,240	33,217
8-Month Average	**1,550**	**1,839**	**503**	**3,520**	**2,888**	**2,650**	**1,325**	**2,580**	**1,223**	**9,964**	**2,795**	**2,240**	**33,079**
2011 8-Month Average	**1,540**	**1,746**	**499**	**4,081**	**2,576**	**2,495**	**478**	**2,551**	**1,294**	**9,317**	**2,659**	**2,240**	**31,477**
2010 8-Month Average	**1,540**	**2,013**	**480**	**4,092**	**2,392**	**2,276**	**1,650**	**2,416**	**1,080**	**8,831**	**2,414**	**2,124**	**31,308**

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

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

R=Revised.

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

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#international 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**	**41,793**	**73,269**
2007 Average	**20,672**	**2,628**	**3,729**	**530**	**3,143**	**2,270**	**– –**	**9,437**	**1,498**	**5,077**	**41,730**	**72,815**
2008 Average	**21,913**	**2,579**	**3,790**	**566**	**2,839**	**2,182**	**– –**	**9,357**	**1,391**	**5,000**	**41,265**	**73,628**
2009 Average	**20,402**	**2,579**	**3,796**	**587**	**2,646**	**2,067**	– –	**9,495**	**1,328**	**5,353**	R **41,786**	R **72,228**
2010 January	20,471	2,499	3,971	579	2,660	2,060	– –	9,615	1,379	5,399	R 42,170	R 72,869
February	20,750	2,714	3,940	578	2,655	2,038	– –	9,648	1,274	5,546	R 42,570	R 73,565
March	20,781	2,621	3,973	577	2,641	1,983	– –	9,683	1,429	5,513	R 42,769	R 73,773
April	21,007	2,693	3,953	576	2,639	1,967	– –	9,646	1,378	5,377	R 42,564	R 73,746
May	21,025	2,742	4,049	576	2,639	1,921	– –	9,691	1,297	5,398	R 42,637	73,775
June	21,604	2,770	4,105	575	2,592	1,611	– –	9,727	1,076	5,384	R 42,101	R 73,881
July	21,634	2,762	4,060	575	2,618	1,864	– –	9,710	1,055	5,313	42,347	R 74,148
August	21,669	2,779	4,104	574	2,604	1,648	– –	9,623	1,070	5,445	42,222	74,071
September	21,755	2,646	4,187	574	2,615	1,637	– –	9,725	1,194	5,608	42,497	74,377
October	21,284	2,688	4,186	573	2,615	1,952	– –	9,816	1,195	5,596	R 42,801	74,247
November	21,510	2,937	4,281	573	2,556	1,868	– –	9,723	1,248	5,558	R 43,143	R 74,856
December	21,568	2,929	4,126	572	2,620	1,886	**– –**	9,719	1,207	5,614	43,089	74,831
Average	**21,257**	**2,732**	**4,078**	**575**	**2,621**	**1,869**	– –	**9,694**	**1,233**	**5,479**	**42,576**	**74,013**
2011 January	22,026	2,869	4,238	572	2,632	1,905	– –	9,769	1,316	R 5,506	R 43,016	R 75,307
February	21,934	2,906	4,188	571	2,602	1,861	– –	9,773	1,085	5,422	R 42,635	R 74,523
March	21,952	2,854	4,160	570	2,620	1,808	– –	9,753	1,073	R 5,591	R 42,697	R 73,435
April	22,170	2,848	4,127	569	2,621	1,874	– –	9,795	1,164	R 5,527	R 42,488	R 73,346
May	22,220	2,564	4,106	568	2,603	1,607	– –	9,818	1,017	R 5,604	R 41,707	R 72,579
June	22,920	2,664	4,017	567	2,592	1,660	– –	9,770	1,018	5,570	R 41,783	R 73,303
July	23,120	2,916	3,956	566	2,580	1,737	– –	9,837	946	R 5,419	R 41,857	R 73,624
August	23,270	3,067	R 4,027	565	2,598	1,714	– –	9,832	767	R 5,634	R 42,263	R 74,164
September	23,170	2,987	3,964	564	2,534	1,636	– –	9,557	890	R 5,575	R 41,663	R 73,613
October	22,920	3,030	3,926	563	2,598	1,756	– –	9,902	998	R 5,872	R 42,544	R 74,200
November	23,220	3,021	4,006	562	2,573	1,764	– –	9,595	1,039	R 5,992	R 42,677	R 75,136
December	R 23,170	3,121	3,998	561	2,601	1,713	**– –**	9,869	1,010	R 6,000	R 42,982	R 75,488
Average	R **22,678**	**2,904**	**4,059**	**566**	**2,596**	**1,752**	– –	**9,774**	**1,026**	R **5,644**	R **42,359**	R **74,058**
2012 January	R 23,070	3,105	4,089	560	2,562	1,761	– –	9,894	999	RE 6,119	R 42,994	R 75,733
February	R 23,120	3,237	4,109	560	2,588	1,745	– –	9,889	1,016	RE 6,194	R 42,854	R 75,951
March	23,220	3,042	4,066	560	2,596	1,715	– –	9,891	968	RE 6,268	R 42,637	R 75,772
April	R 23,200	3,145	4,111	560	2,586	1,720	– –	9,861	981	RE 6,229	R 42,652	R 76,037
May	R 22,895	3,078	4,105	560	2,587	1,699	– –	9,882	893	RE 6,230	R 42,434	R 75,402
June	R 23,070	R 3,002	4,015	556	2,584	1,583	– –	9,861	949	RE 6,181	R 42,106	R 75,203
July	23,020	R 3,119	4,010	R 554	2,568	1,553	– –	9,882	954	RE 6,282	R 42,390	R 75,393
August	23,020	3,246	4,128	554	2,596	1,570	– –	9,907	742	E 6,147	42,176	75,393
8-Month Average	**23,076**	**3,121**	**4,079**	**558**	**2,583**	**1,668**	**– –**	**9,884**	**937**	E **6,206**	**42,529**	**75,608**
2011 8-Month Average	**22,457**	**2,836**	**4,102**	**568**	**2,606**	**1,770**	**– –**	**9,794**	**1,047**	**5,535**	**42,303**	**73,780**
2010 8-Month Average	**21,120**	**2,697**	**4,020**	**576**	**2,631**	**1,885**	**– –**	**9,668**	**1,244**	**5,421**	**42,421**	**73,730**

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

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

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

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

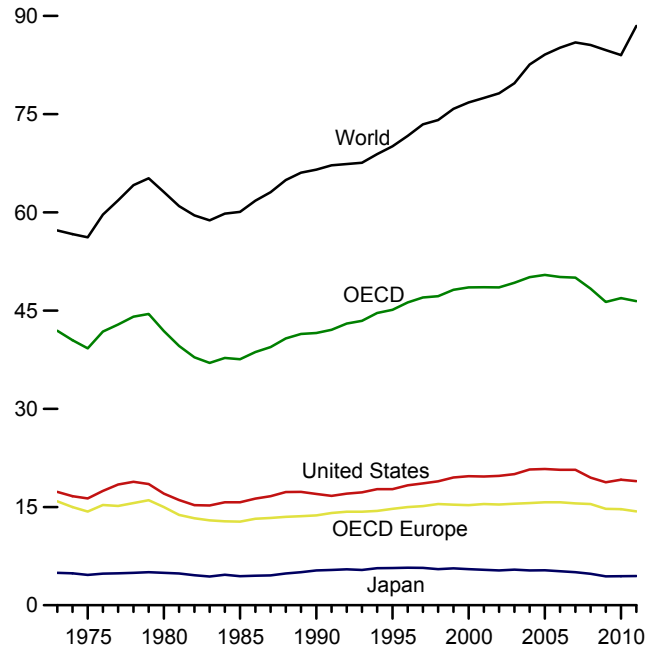
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#international for all available data beginning in 1973.

Sources: See end of section.

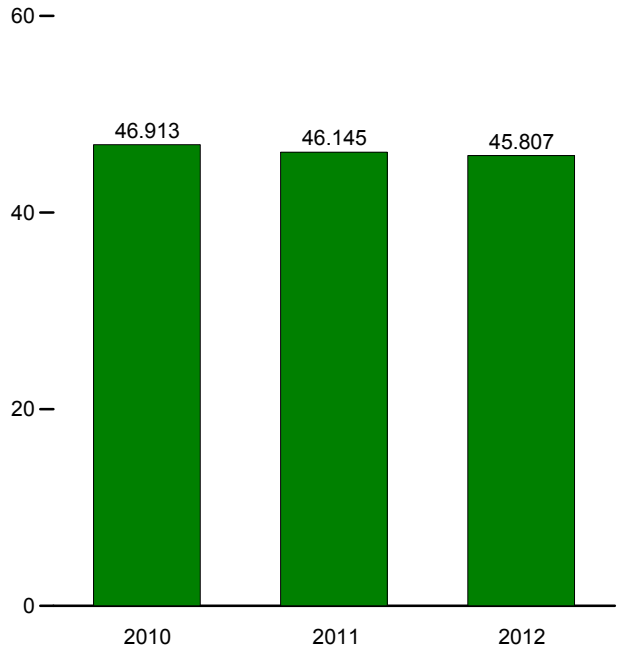
Figure 11.2 Petroleum Consumption in OECD Countries

(Million Barrels per Day)

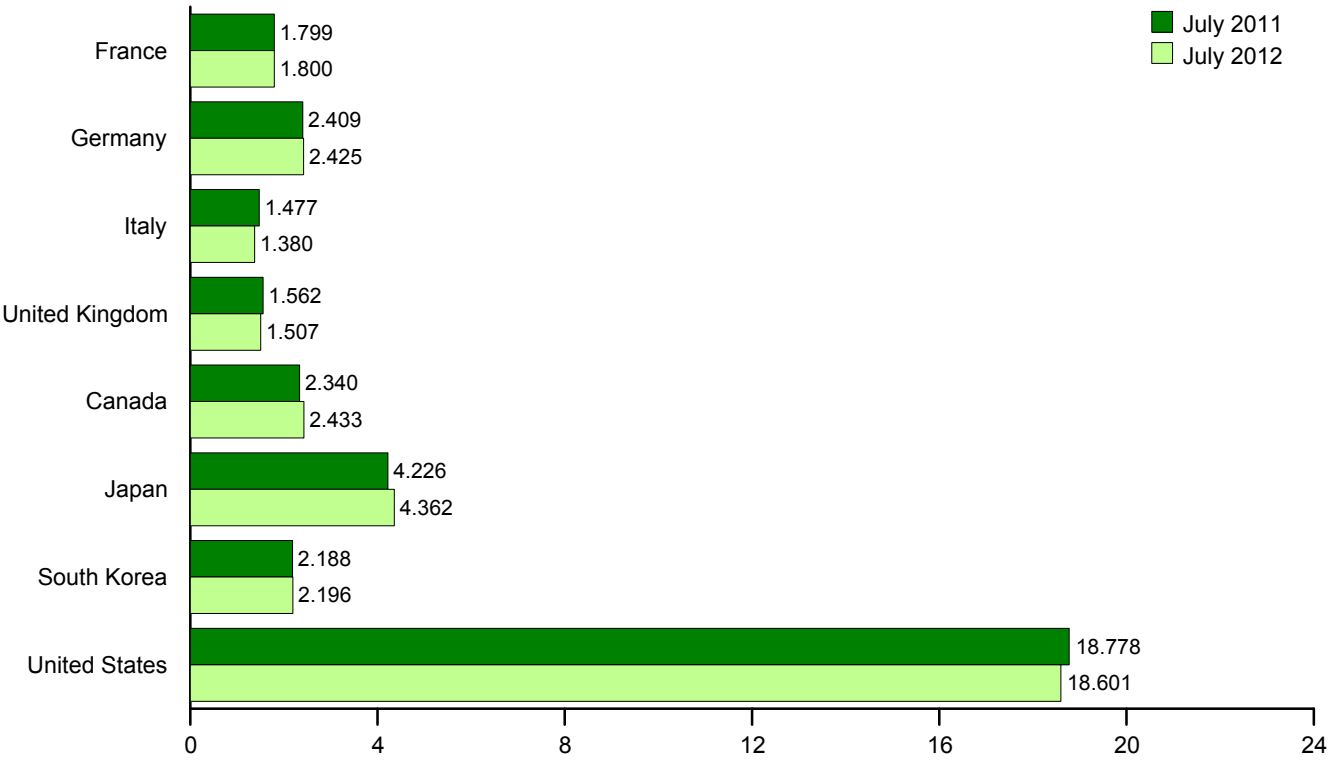
Overview, 1973-2011



OECD Total, July



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**	**2,564**	**37,565**	**60,074**
1990 Average	**1,826**	**2,682**	**1,868**	**1,776**	**13,726**	**1,722**	**5,315**	**1,048**	**16,988**	**2,786**	**41,585**	**66,517**
1995 Average	**1,920**	**2,882**	**1,942**	**1,816**	**14,714**	**1,799**	**5,693**	**2,008**	**17,725**	**3,184**	**45,123**	**70,099**
1996 Average	**1,949**	**2,922**	**1,920**	**1,852**	**14,999**	**1,853**	**5,739**	**2,101**	**18,309**	**3,247**	**46,248**	**71,689**
1997 Average	**1,969**	**2,917**	**1,934**	**1,810**	**15,140**	**1,940**	**5,702**	**2,255**	**18,620**	**3,355**	**47,013**	**73,450**
1998 Average	**2,043**	**2,923**	**1,943**	**1,792**	**15,448**	**1,931**	**5,507**	**1,917**	**18,917**	**3,486**	**47,206**	**74,105**
1999 Average	**2,031**	**2,836**	**1,891**	**1,811**	**15,357**	**2,016**	**5,642**	**2,084**	**19,519**	**3,567**	**48,185**	**75,819**
2000 Average	**2,000**	**2,767**	**1,854**	**1,765**	**15,276**	**2,014**	**5,515**	**2,135**	**19,701**	**3,902**	**48,543**	**76,788**
2001 Average	**2,054**	**2,807**	**1,832**	**1,747**	**15,447**	**2,043**	**5,412**	**2,132**	**19,649**	**3,892**	**48,575**	**77,481**
2002 Average	**1,985**	**2,710**	**1,870**	**1,739**	**15,386**	**2,065**	**5,319**	**2,149**	**19,761**	**3,873**	**48,553**	**78,175**
2003 Average	**2,001**	**2,662**	**1,860**	**1,759**	**15,494**	**2,191**	**5,428**	**2,175**	**20,034**	**3,918**	**49,241**	**79,720**
2004 Average	**2,009**	**2,649**	**1,829**	**1,785**	**15,598**	**2,282**	**5,319**	**2,155**	**20,731**	**4,015**	**50,100**	**82,583**
2005 Average	**1,991**	**2,621**	**1,781**	**1,820**	**15,716**	**2,315**	**5,328**	**2,191**	**20,802**	**4,093**	**50,445**	**84,089**
2006 Average	**1,991**	**2,639**	**1,777**	**1,806**	**15,723**	**2,229**	**5,197**	**2,180**	**20,687**	**4,128**	**50,144**	**85,156**
2007 Average	**1,979**	**2,416**	**1,729**	**1,753**	**15,546**	**2,283**	**5,037**	**2,241**	**20,680**	**4,250**	**50,037**	**85,944**
2008 Average	**1,945**	**2,542**	**1,667**	**1,727**	**15,457**	**2,225**	**4,795**	**2,142**	**19,498**	**4,237**	**48,355**	**85,554**
2009 Average	**1,868**	**2,453**	**1,544**	**1,641**	**14,715**	**2,153**	**4,406**	**2,188**	**18,771**	R **4,095**	**46,328**	R **84,781**
2010 January	1,756	2,161	1,369	1,586	13,588	2,128	4,779	2,361	18,652	R 3,840	R 45,347	NA
February	1,955	2,454	1,535	1,688	14,812	2,256	5,002	2,383	18,850	R 4,217	R 47,520	NA
March	1,913	2,505	1,563	1,683	14,884	R 2,149	4,738	2,253	19,099	R 4,030	47,153	NA
April	1,845	2,260	1,520	1,646	14,334	R 2,180	4,327	2,249	19,044	R 4,120	R 46,253	NA
May	1,693	2,354	1,451	1,615	13,966	R 2,202	3,841	2,170	18,866	R 4,047	R 45,091	NA
June	1,836	2,510	1,578	1,599	14,775	R 2,346	3,967	2,177	19,537	R 4,200	R 47,002	NA
July	1,829	2,571	1,658	1,631	14,980	R 2,205	4,170	2,111	19,319	R 4,128	R 46,913	NA
August	1,741	2,547	1,506	1,643	14,616	R 2,378	4,388	2,221	19,662	R 4,007	R 47,272	NA
September	1,945	2,747	1,624	1,640	15,438	R 2,325	4,441	2,192	19,438	R 4,030	R 47,864	NA
October	1,753	2,622	1,532	1,667	15,006	R 2,249	4,035	2,225	18,974	R 4,007	R 46,497	NA
November	1,788	2,585	1,567	1,647	15,083	R 2,317	4,595	2,392	18,977	R 4,110	R 47,473	NA
December	1,939	2,324	1,630	1,526	14,669	R 2,360	5,005	2,495	19,722	R 4,204	R 48,455	NA
Average	**1,831**	**2,470**	**1,544**	**1,630**	**14,676**	R **2,258**	**4,437**	**2,268**	**19,180**	R **4,077**	R **46,896**	R **84,035**
2011 January	1,773	2,230	1,352	1,600	13,688	2,258	4,899	2,429	18,993	3,821	46,088	NA
February	1,916	2,433	1,554	1,652	14,819	2,316	5,067	2,349	18,873	4,261	47,685	NA
March	1,789	2,393	1,445	1,635	14,360	2,390	4,551	2,295	19,329	4,270	47,196	NA
April	1,747	2,258	1,461	1,621	13,996	2,144	3,994	2,011	18,650	4,079	44,874	NA
May	1,734	2,403	1,425	1,555	14,070	2,184	3,787	2,022	18,479	4,092	44,634	NA
June	1,786	2,270	1,510	1,687	14,468	2,340	3,943	2,112	19,253	4,218	R 46,334	NA
July	1,799	2,409	1,477	1,562	14,447	2,340	4,226	2,188	18,778	4,166	46,145	NA
August	1,804	2,638	1,400	1,617	14,765	2,447	4,425	2,212	19,415	4,230	47,494	NA
September	1,919	2,551	1,541	1,671	15,066	2,306	4,278	2,241	18,892	4,216	46,998	NA
October	1,777	2,508	1,465	1,578	14,420	2,196	4,394	2,216	18,844	4,016	46,086	NA
November	1,730	2,447	1,405	1,595	14,224	2,292	4,602	2,252	19,080	4,288	46,738	NA
December	1,737	2,262	1,423	1,531	13,809	2,299	5,429	2,436	18,803	4,316	47,092	NA
Average	**1,792**	**2,400**	**1,454**	**1,608**	**14,339**	**2,293**	**4,464**	**2,230**	**18,949**	**4,163**	**46,439**	**88,480**
2012 January	1,745	2,133	1,263	1,440	13,138	2,142	5,161	2,366	18,280	R 4,110	R 45,196	NA
February	1,950	2,483	1,306	1,565	14,460	2,137	5,550	2,410	18,760	R 4,287	R 47,603	NA
March	1,725	2,219	1,316	1,614	13,697	R 2,386	5,156	2,153	18,213	R 4,342	R 45,947	NA
April	1,686	2,231	1,293	1,600	13,620	R 2,266	4,390	2,099	18,330	R 4,131	R 44,835	NA
May	1,671	2,305	1,304	1,517	R 13,660	R 2,308	4,367	2,181	18,707	R 4,205	R 45,429	NA
June	1,780	2,466	1,367	1,526	R 14,128	R 2,384	4,129	2,304	18,915	R 4,220	R 46,080	NA
July	1,800	2,425	1,380	1,507	14,033	2,433	4,362	2,196	18,601	4,183	45,807	NA
7-Month Average	**1,764**	**2,321**	**1,319**	**1,538**	**13,813**	**2,295**	**4,727**	**2,243**	**18,541**	**4,211**	**45,830**	**NA**
2011 7-Month Average	**1,791**	**2,342**	**1,459**	**1,615**	**14,256**	**2,282**	**4,346**	**2,200**	**18,908**	**4,128**	**46,120**	**NA**
2010 7-Month Average	**1,831**	**2,402**	**1,525**	**1,635**	**14,471**	**2,208**	**4,397**	**2,242**	**19,053**	**4,081**	**46,452**	**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.

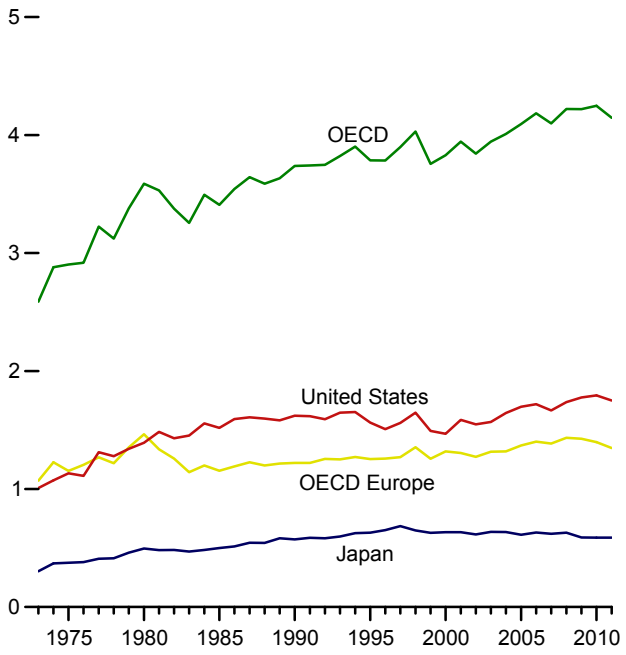
Notes: • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

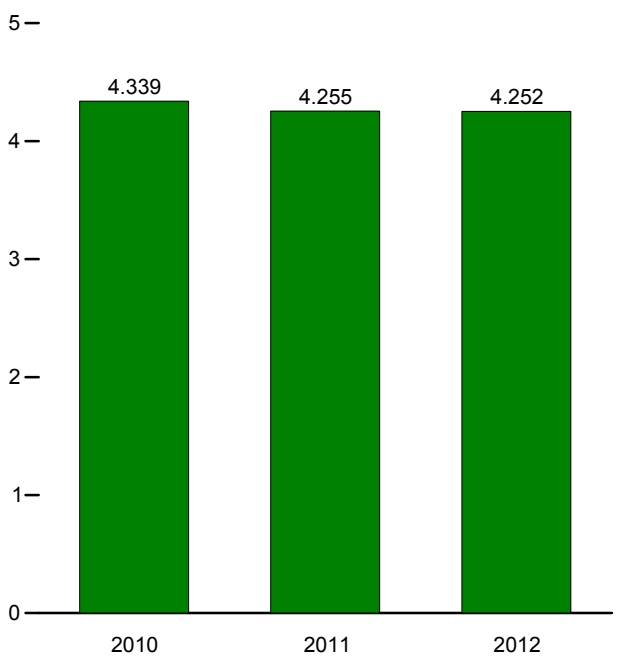
Sources: • **United States:** Table 3.1. • **Chile, East Germany, Former Czechoslovakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries, U.S. Territories,** and **World: 1973-1979—**U.S. Energy Information Administration (EIA), International Energy Database. • **Countries Other Than United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

Figure 11.3 Petroleum Stocks in OECD Countries
(Billion Barrels)

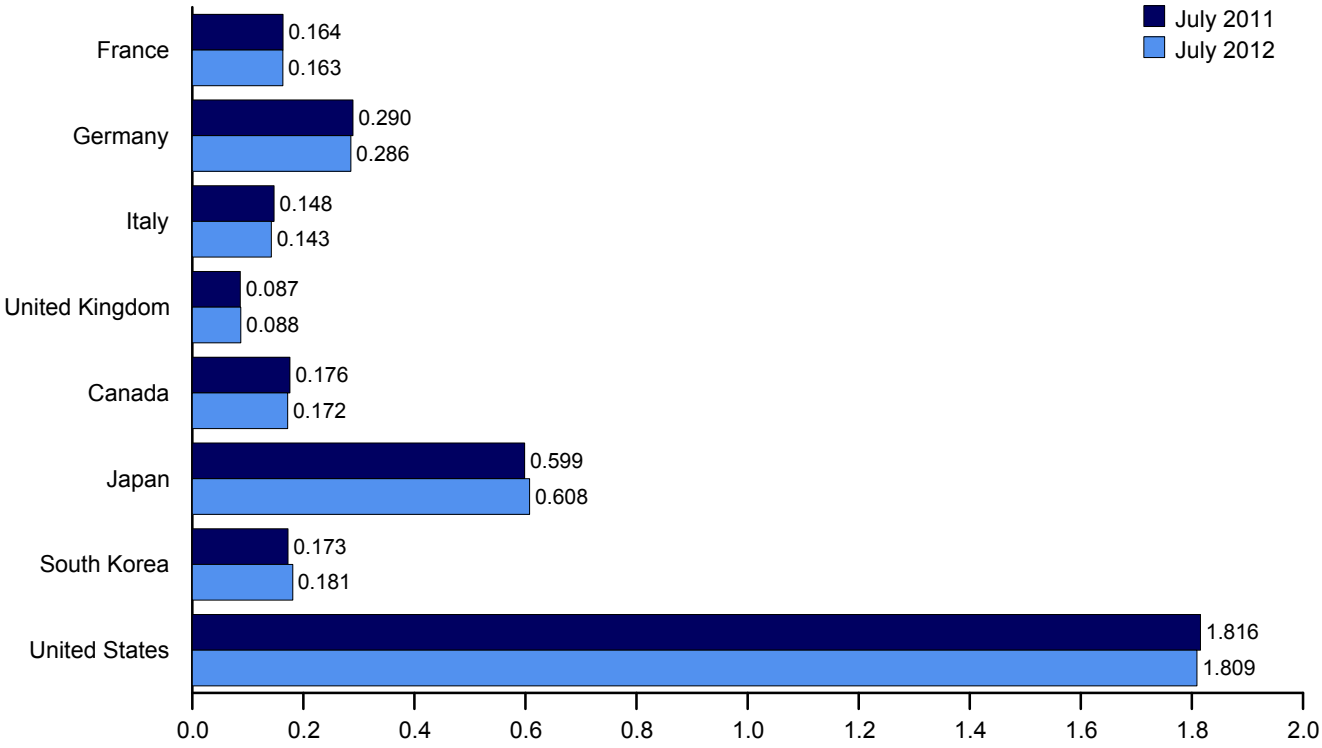
Overview, End of Year, 1973-2011



OECD Stocks, End of Month, July



By Selected OECD Country, End of Month



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

Table 11.3 Petroleum Stocks in OECD Countries

(Million Barrels)

	France	Germany[a]	Italy	United Kingdom	OECD Europe[b]	Canada	Japan	South Korea	United States	Other OECD[c]	OECD[d]
1973 Year	**201**	**181**	**152**	**156**	**1,070**	**140**	**303**	**NA**	**1,008**	**67**	**2,588**
1975 Year	**225**	**187**	**143**	**165**	**1,154**	**174**	**375**	**NA**	**1,133**	**67**	**2,903**
1980 Year	**243**	**319**	**170**	**168**	**1,464**	**164**	**495**	**NA**	**1,392**	**72**	**3,587**
1985 Year	**139**	**277**	**156**	**131**	**1,154**	**112**	**500**	**13**	**1,519**	**110**	**3,408**
1990 Year	**143**	**280**	**171**	**103**	**1,221**	**143**	**572**	**64**	**1,621**	**117**	**3,739**
1995 Year	**155**	**302**	**162**	**101**	**1,254**	**132**	**631**	**92**	**1,563**	**113**	**3,785**
1996 Year	**154**	**303**	**152**	**103**	**1,258**	**127**	**651**	**123**	**1,507**	**118**	**3,785**
1997 Year	**161**	**299**	**147**	**100**	**1,270**	**144**	**685**	**124**	**1,560**	**115**	**3,898**
1998 Year	**169**	**323**	**153**	**104**	**1,354**	**139**	**649**	**129**	**1,647**	**111**	**4,029**
1999 Year	**160**	**290**	**148**	**101**	**1,256**	**141**	**629**	**132**	**1,493**	**105**	**3,756**
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**	**155**	**104**	**1,272**	**155**	**615**	**140**	**1,548**	**112**	**3,842**
2003 Year	**179**	**273**	**153**	**100**	**1,316**	**165**	**636**	**155**	**1,568**	**105**	**3,945**
2004 Year	**177**	**267**	**153**	**101**	**1,318**	**154**	**635**	**149**	**1,645**	**108**	**4,009**
2005 Year	**185**	**283**	**149**	**95**	**1,369**	**168**	**612**	**135**	**1,698**	**112**	**4,094**
2006 Year	**182**	**283**	**151**	**103**	**1,401**	**169**	**631**	**152**	**1,720**	**113**	**4,185**
2007 Year	**180**	**275**	**150**	**90**	**1,386**	**163**	**621**	**143**	**1,665**	**121**	**4,099**
2008 Year	**179**	**279**	**145**	**99**	**1,435**	**162**	**630**	**135**	**1,737**	**124**	**4,221**
2009 Year	**175**	**284**	**143**	**94**	**1,426**	**157**	**589**	**155**	**1,776**	**117**	**4,220**
2010 January	182	295	144	95	1,466	160	593	162	1,786	122	4,289
February	175	290	151	99	1,451	161	587	163	1,785	128	4,275
March	172	289	147	93	1,432	167	581	164	1,787	127	4,258
April	172	284	152	95	1,441	168	590	166	1,810	123	4,298
May	173	286	149	99	1,449	164	599	166	1,830	120	4,329
June	170	280	150	96	1,432	166	597	167	1,842	131	4,334
July	168	282	144	96	1,417	173	598	170	1,855	127	4,339
August	171	289	151	93	1,432	182	597	169	1,862	127	4,369
September	163	286	144	95	1,392	180	582	174	1,861	123	4,311
October	161	285	147	94	1,402	183	599	170	1,847	125	4,325
November	170	287	143	92	1,394	184	604	171	1,827	121	4,302
December	**168**	**287**	**151**	**89**	**1,398**	**184**	**588**	**165**	**1,794**	**119**	**4,248**
2011 January	173	291	158	97	1,439	174	596	168	1,809	117	4,304
February	170	288	149	95	1,410	169	591	162	1,780	121	4,234
March	167	286	149	93	1,398	172	575	170	1,776	116	4,207
April	163	291	149	93	1,384	179	601	173	1,779	123	4,238
May	168	288	147	91	1,387	177	599	170	1,807	122	4,262
June	167	286	147	85	1,379	177	593	175	1,809	120	4,253
July	164	290	148	87	1,370	176	599	173	1,816	122	4,255
August	162	283	149	89	1,374	176	598	171	1,796	123	4,237
September	160	277	148	85	1,353	176	601	174	1,781	119	4,203
October	165	278	147	86	1,342	179	599	174	1,769	118	4,181
November	164	277	148	93	1,357	180	603	170	1,770	116	4,196
December	**165**	**279**	**146**	**88**	**1,347**	**178**	**589**	**167**	**1,750**	**116**	**4,146**
2012 January	166	284	150	90	1,369	179	594	164	1,772	119	4,197
February	165	283	149	90	1,367	179	583	171	1,765	110	4,176
March	165	281	148	89	1,375	171	580	164	1,778	111	4,179
April	163	280	148	91	1,368	176	592	174	1,777	113	4,200
May	162	281	148	88	1,351	177	597	183	1,794	115	[R] 4,216
June	164	280	145	89	1,354	[R] 173	601	177	1,808	112	[R] 4,225
July	163	286	143	88	1,365	172	608	181	1,809	117	4,252

[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, October 12, 2012.

International Petroleum

Tables 11.1a and 11.1b Sources

United States
Table 3.1.

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

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

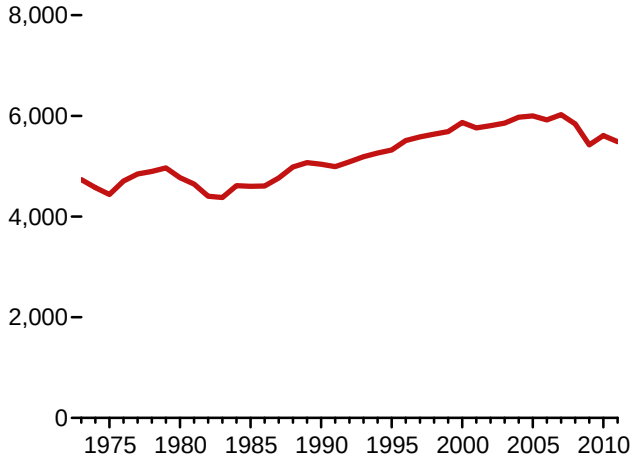
.

12. Environment

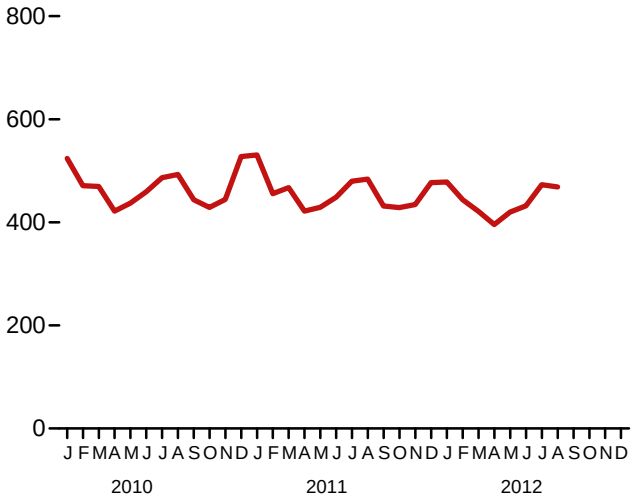
Figure 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide)

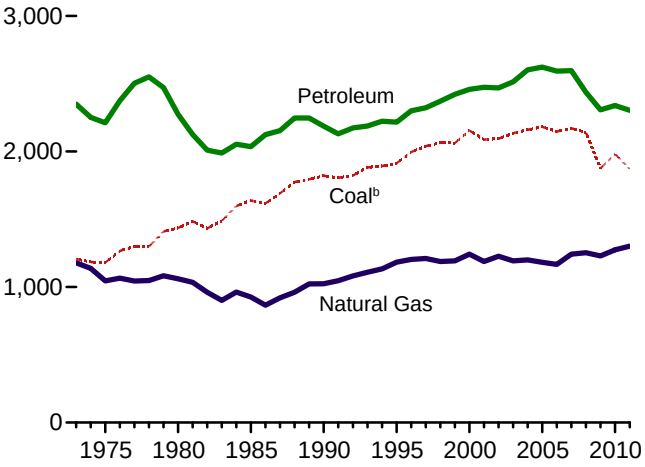
Total,[a] 1973-2011



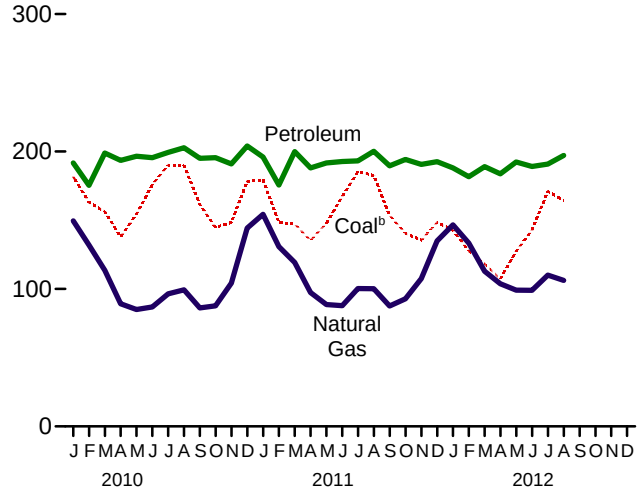
Total,[a] Monthly



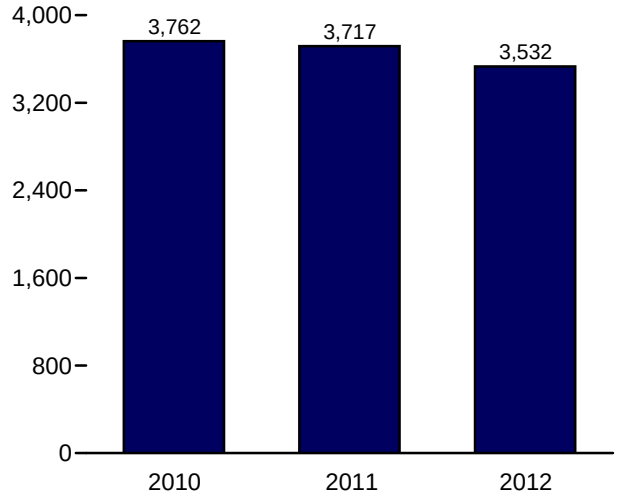
By Major Source, 1973-2011



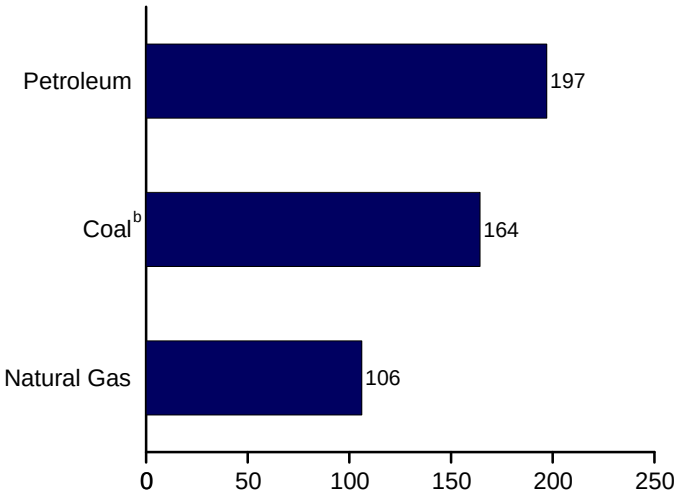
By Major Source, Monthly



Total,[a] January-August



By Major Source, August 2012



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

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

Table 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide[a])

			Petroleum											
	Coal[b]	Natural Gas[c]	Aviation Gasoline	Distillate Fuel Oil[d]	Jet Fuel	Kero-sene	LPG[e]	Lubri-cants	Motor Gasoline[f]	Petroleum Coke	Residual Fuel Oil	Other[g]	Total	Total[h,i]
1973 Total	**1,207**	**1,178**	**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**	**5,425**
2010 January	182	150	(s)	49	17	(s)	9	1	92	5	9	9	192	524
February	163	132	(s)	46	15	(s)	8	1	84	6	7	9	175	471
March	156	114	(s)	51	18	(s)	7	1	95	8	8	11	199	470
April	138	89	(s)	48	17	(s)	5	1	96	7	9	11	194	422
May	155	85	(s)	48	18	(s)	5	1	99	6	8	11	197	437
June	176	87	(s)	48	19	(s)	5	1	97	7	7	10	196	459
July	190	96	(s)	47	19	(s)	6	1	101	7	9	10	199	487
August	190	99	(s)	50	19	(s)	6	1	100	8	7	11	203	493
September	161	86	(s)	50	18	(s)	6	1	96	8	8	10	195	444
October	145	88	(s)	50	18	(s)	7	1	97	6	7	9	196	429
November	148	104	(s)	49	17	1	7	1	92	7	8	10	191	444
December	178	144	(s)	55	17	1	9	1	96	7	8	10	204	527
Total	**1,982**	**1,274**	**2**	**590**	**210**	**3**	**79**	**11**	**1,146**	**81**	**96**	**122**	**2,339**	**5,607**
2011 January	179	154	(s)	52	17	(s)	10	1	91	7	9	10	196	R 531
February	148	131	(s)	47	15	1	8	1	84	5	8	8	176	R 456
March	147	119	(s)	53	17	(s)	8	1	95	6	7	11	200	467
April	135	R 97	(s)	48	18	(s)	6	1	92	6	7	10	188	422
May	148	89	(s)	49	18	(s)	6	1	95	8	7	8	192	429
June	167	88	(s)	50	19	(s)	6	1	95	7	7	9	193	449
July	185	R 100	(s)	47	18	(s)	6	1	98	7	5	11	193	480
August	R 183	100	(s)	53	19	(s)	7	1	96	8	5	10	200	484
September	R 154	88	(s)	50	17	(s)	6	1	92	6	7	10	190	R 432
October	140	93	(s)	53	17	(s)	7	1	93	7	6	10	194	R 429
November	R 136	R 107	(s)	52	17	(s)	8	1	89	7	6	11	191	R 435
December	148	135	(s)	51	17	(s)	9	1	94	4	8	10	193	R 477
Total	**R 1,871**	**R 1,302**	**2**	**603**	**209**	**2**	**87**	**10**	**1,113**	**78**	**82**	**118**	**2,304**	**R 5,489**
2012 January	R 143	147	(s)	50	16	(s)	8	1	89	7	6	11	188	478
February	R 128	133	(s)	49	16	(s)	8	1	87	5	6	10	182	R 444
March	118	113	(s)	49	17	(s)	7	1	93	6	6	9	189	421
April	107	104	(s)	47	16	(s)	6	1	92	6	6	9	184	R 396
May	127	99	(s)	49	18	(s)	7	1	97	7	4	9	192	420
June	143	99	(s)	47	19	(s)	6	1	94	7	5	10	189	432
July	171	110	(s)	47	18	(s)	7	1	95	6	6	10	191	473
August	164	106	(s)	49	18	(s)	7	1	99	7	5	11	197	469
8-Month Total	**1,102**	**911**	**1**	**387**	**138**	**(s)**	**57**	**6**	**746**	**51**	**46**	**79**	**1,512**	**3,532**
2011 8-Month Total	**1,293**	**879**	**1**	**398**	**141**	**1**	**57**	**7**	**746**	**54**	**55**	**77**	**1,537**	**3,717**
2010 8-Month Total	**1,349**	**852**	**1**	**386**	**141**	**1**	**51**	**7**	**765**	**54**	**65**	**83**	**1,554**	**3,762**

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

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

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

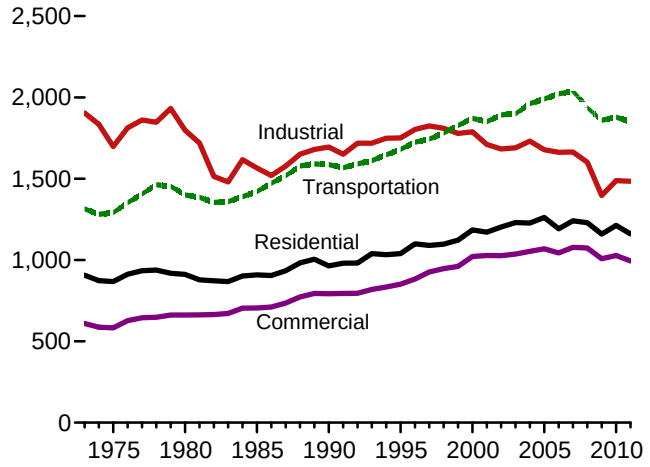
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#environment for all available data beginning in 1973.

Sources: See end of section.

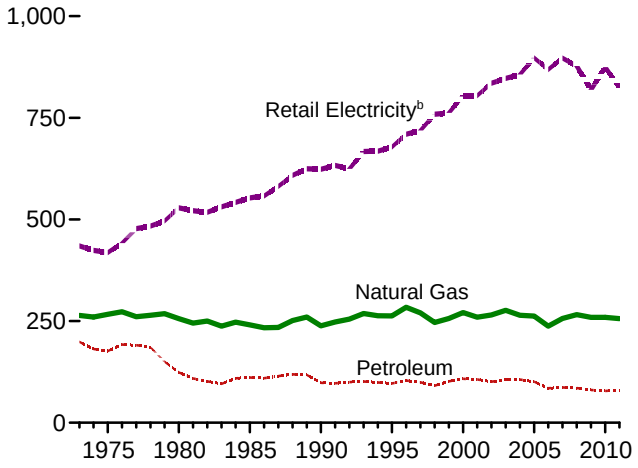
Figure 12.2 Carbon Dioxide Emissions From Energy Consumption by Sector

(Million Metric Tons of Carbon Dioxide)

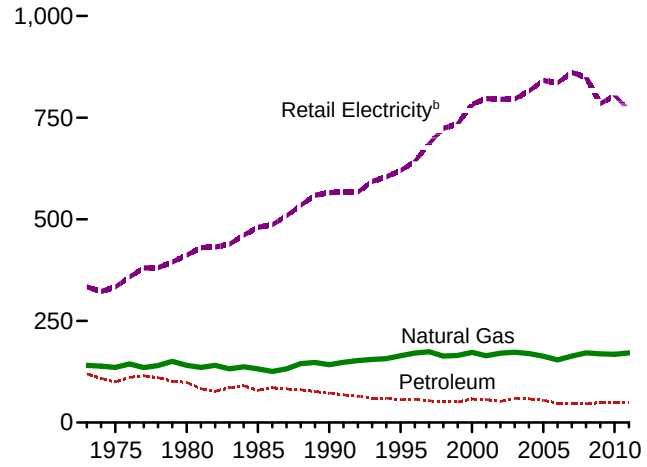
Total[a] by End-Use Sector,[b] 1973-2011



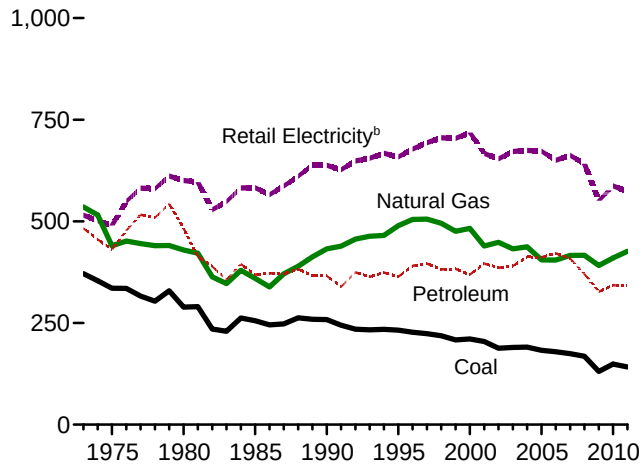
Residential Sector by Major Source, 1973-2011



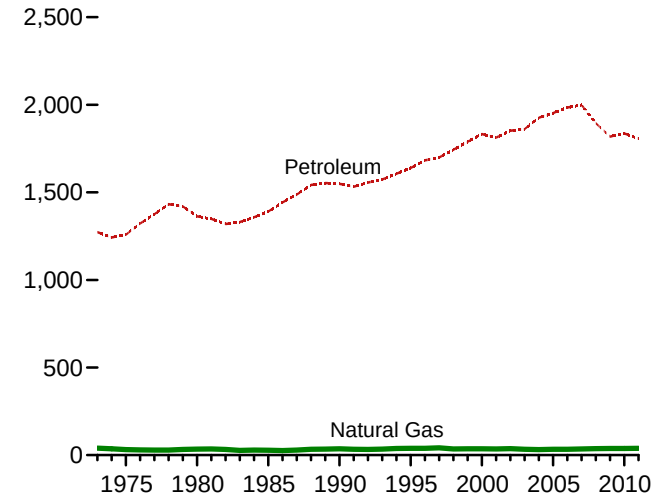
Commercial Sector by Major Source, 1973-2011



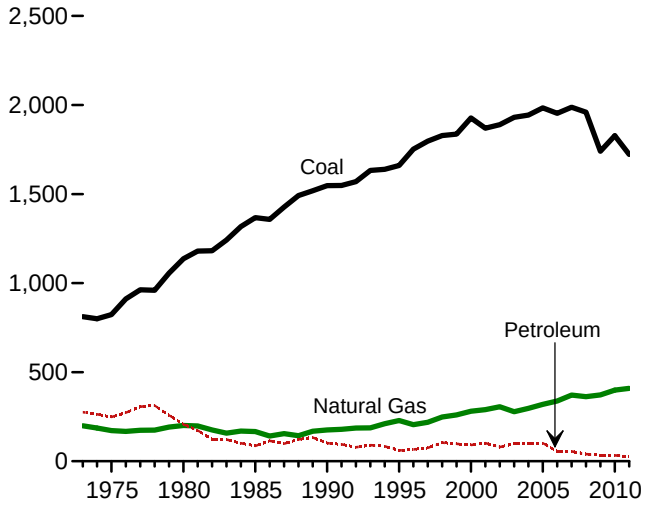
Industrial Sector by Major Source, 1973-2011



Transportation Sector by Major Source, 1973-2011



Electric Power Sector by Major Source, 1973-2011



[a] Excludes emissions from biomass energy consumption.

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

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

Sources: Tables 12.2–12.6.

Table 12.2 Carbon Dioxide Emissions From Energy Consumption: Residential Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum				Retail Electricity[e]	Total[f]
			Distillate Fuel Oil[c]	Kerosene	LPG[d]	Total		
1973 Total	**9**	**264**	**147**	**16**	**36**	**199**	**435**	**907**
1975 Total	**6**	**266**	**132**	**12**	**32**	**176**	**419**	**867**
1980 Total	**3**	**256**	**96**	**8**	**20**	**124**	**529**	**911**
1985 Total	**4**	**241**	**80**	**11**	**20**	**111**	**553**	**909**
1990 Total	**3**	**238**	**72**	**5**	**22**	**98**	**624**	**963**
1995 Total	**2**	**263**	**66**	**5**	**25**	**96**	**678**	**1,039**
1996 Total	**2**	**284**	**68**	**6**	**30**	**104**	**710**	**1,099**
1997 Total	**2**	**270**	**64**	**7**	**29**	**99**	**719**	**1,090**
1998 Total	**1**	**247**	**56**	**8**	**27**	**91**	**759**	**1,097**
1999 Total	**1**	**257**	**61**	**8**	**33**	**102**	**762**	**1,122**
2000 Total	**1**	**271**	**66**	**7**	**35**	**108**	**805**	**1,185**
2001 Total	**1**	**259**	**66**	**7**	**33**	**106**	**805**	**1,172**
2002 Total	**1**	**265**	**63**	**4**	**34**	**101**	**835**	**1,203**
2003 Total	**1**	**276**	**66**	**5**	**34**	**106**	**847**	**1,230**
2004 Total	**1**	**264**	**68**	**6**	**32**	**106**	**856**	**1,228**
2005 Total	**1**	**262**	**62**	**6**	**32**	**101**	**897**	**1,261**
2006 Total	**1**	**237**	**52**	**5**	**28**	**85**	**869**	**1,192**
2007 Total	**1**	**257**	**53**	**3**	**31**	**87**	**897**	**1,241**
2008 Total	**1**	**266**	**49**	**2**	**35**	**85**	**878**	**1,229**
2009 Total	**1**	**259**	**44**	**2**	**35**	**81**	**819**	**1,159**
2010 January	(s)	51	6	(s)	3	10	91	151
February	(s)	43	6	(s)	3	9	74	126
March	(s)	31	4	(s)	3	7	65	103
April	(s)	17	2	(s)	2	5	51	73
May	(s)	11	3	(s)	2	5	59	75
June	(s)	7	3	(s)	2	6	79	92
July	(s)	6	2	(s)	3	5	97	108
August	(s)	6	2	(s)	3	5	96	107
September	(s)	6	2	(s)	3	5	72	83
October	(s)	11	3	(s)	3	6	56	73
November	(s)	24	3	(s)	3	7	56	87
December	(s)	46	6	(s)	3	10	81	137
Total	**1**	**259**	**43**	**2**	**33**	**78**	**875**	**1,212**
2011 January	(s)	53	5	(s)	4	9	87	R 148
February	(s)	42	5	(s)	3	8	67	117
March	(s)	33	4	(s)	3	7	59	99
April	(s)	19	3	(s)	3	5	53	77
May	(s)	11	2	(s)	3	4	R 57	R 73
June	(s)	7	3	(s)	3	5	R 75	88
July	(s)	6	2	(s)	3	5	R 95	R 106
August	(s)	6	3	(s)	3	6	92	104
September	(s)	7	3	(s)	3	6	R 68	81
October	(s)	12	4	(s)	3	7	R 53	R 72
November	(s)	23	4	(s)	3	7	53	R 83
December	(s)	37	6	(s)	3	9	66	113
Total	**1**	**256**	**44**	**1**	**35**	**80**	R **823**	R **1,160**
2012 January	(s)	43	6	(s)	3	9	R 69	121
February	(s)	36	5	(s)	3	8	58	102
March	(s)	22	4	(s)	3	7	51	80
April	(s)	15	3	(s)	3	6	45	66
May	(s)	9	3	(s)	3	6	55	70
June	(s)	7	3	(s)	3	6	69	82
July	(s)	6	3	(s)	3	6	93	104
August	(s)	6	4	(s)	3	7	85	98
8-Month Total	**(s)**	**144**	**31**	**(s)**	**23**	**54**	**524**	**723**
2011 8-Month Total	**(s)**	**177**	**27**	**1**	**23**	**51**	**585**	**812**
2010 8-Month Total	**(s)**	**172**	**28**	**1**	**22**	**51**	**611**	**834**

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

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

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

Sources: See end of section.

Table 12.3 Carbon Dioxide Emissions From Energy Consumption: Commercial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum							Retail Electricity[f]	Total[g]
			Distillate Fuel Oil[c]	Kerosene	LPG[d]	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Total		
1973 Total	**15**	**141**	**47**	**5**	**9**	**6**	**NA**	**52**	**120**	**334**	**609**
1975 Total	**14**	**136**	**43**	**4**	**8**	**6**	**NA**	**39**	**100**	**333**	**583**
1980 Total	**11**	**141**	**38**	**3**	**6**	**8**	**NA**	**44**	**98**	**412**	**662**
1985 Total	**13**	**132**	**46**	**2**	**6**	**7**	**NA**	**18**	**79**	**480**	**704**
1990 Total	**12**	**142**	**39**	**1**	**6**	**8**	**0**	**18**	**73**	**566**	**793**
1995 Total	**11**	**164**	**35**	**2**	**7**	**1**	**(s)**	**11**	**56**	**620**	**851**
1996 Total	**12**	**171**	**35**	**2**	**8**	**2**	**(s)**	**11**	**57**	**643**	**883**
1997 Total	**12**	**174**	**32**	**2**	**8**	**3**	**(s)**	**9**	**54**	**686**	**926**
1998 Total	**9**	**164**	**31**	**2**	**7**	**3**	**(s)**	**7**	**51**	**724**	**947**
1999 Total	**10**	**165**	**32**	**2**	**9**	**2**	**(s)**	**6**	**51**	**735**	**960**
2000 Total	**9**	**173**	**36**	**2**	**9**	**3**	**(s)**	**7**	**58**	**783**	**1,022**
2001 Total	**9**	**164**	**37**	**2**	**9**	**3**	**(s)**	**6**	**57**	**797**	**1,027**
2002 Total	**9**	**170**	**32**	**1**	**9**	**3**	**(s)**	**6**	**52**	**795**	**1,026**
2003 Total	**8**	**173**	**35**	**1**	**10**	**4**	**(s)**	**9**	**59**	**796**	**1,036**
2004 Total	**10**	**170**	**34**	**1**	**10**	**3**	**(s)**	**10**	**58**	**816**	**1,054**
2005 Total	**9**	**163**	**33**	**2**	**8**	**3**	**(s)**	**9**	**55**	**842**	**1,069**
2006 Total	**6**	**154**	**29**	**1**	**8**	**3**	**(s)**	**6**	**48**	**836**	**1,043**
2007 Total	**7**	**164**	**28**	**1**	**8**	**4**	**(s)**	**6**	**47**	**861**	**1,078**
2008 Total	**7**	**171**	**27**	**(s)**	**10**	**3**	**(s)**	**6**	**46**	**850**	**1,074**
2009 Total	**6**	**169**	**30**	**(s)**	**9**	**4**	**(s)**	**6**	**49**	**785**	**1,008**
2010 January	1	27	4	(s)	1	(s)	(s)	1	6	66	101
February	1	24	4	(s)	1	(s)	(s)	1	6	60	91
March	1	18	3	(s)	1	(s)	(s)	1	4	59	82
April	(s)	12	2	(s)	1	(s)	(s)	(s)	3	57	73
May	(s)	9	2	(s)	1	(s)	0	(s)	3	66	78
June	(s)	7	2	(s)	1	(s)	0	(s)	4	74	85
July	(s)	6	2	(s)	1	(s)	0	(s)	3	80	90
August	(s)	7	2	(s)	1	(s)	(s)	(s)	3	81	91
September	(s)	7	1	(s)	1	(s)	(s)	(s)	3	69	79
October	(s)	10	2	(s)	1	(s)	(s)	(s)	4	63	77
November	(s)	16	2	(s)	1	(s)	(s)	(s)	4	61	81
December	1	25	4	(s)	1	(s)	(s)	1	6	68	100
Total	**6**	**168**	**30**	**(s)**	**9**	**4**	**(s)**	**6**	**49**	**805**	**1,027**
2011 January	1	29	4	(s)	1	(s)	(s)	1	6	65	100
February	1	23	4	(s)	1	(s)	(s)	1	5	55	R 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)	12	3	(s)	1	(s)	0	(s)	4	61	77
November	(s)	15	3	(s)	1	(s)	(s)	1	5	57	77
December	(s)	22	4	(s)	1	(s)	(s)	1	6	R 60	R 88
Total	**5**	**171**	**31**	**(s)**	**9**	**4**	**(s)**	**5**	**49**	**R 769**	**R 994**
2012 January	(s)	24	4	(s)	1	(s)	(s)	1	6	57	88
February	(s)	21	3	(s)	1	(s)	(s)	1	5	53	80
March	(s)	14	3	(s)	1	(s)	(s)	1	5	52	71
April	(s)	11	2	(s)	1	(s)	(s)	(s)	3	51	66
May	(s)	8	2	(s)	1	(s)	0	(s)	4	61	73
June	(s)	7	2	(s)	1	(s)	0	(s)	4	66	77
July	(s)	7	2	(s)	1	(s)	(s)	(s)	4	77	87
August	(s)	7	3	(s)	1	(s)	(s)	(s)	4	74	85
8-Month Total	**3**	**100**	**22**	**(s)**	**6**	**2**	**(s)**	**4**	**34**	**491**	**628**
2011 8-Month Total	**4**	**115**	**19**	**(s)**	**6**	**2**	**(s)**	**3**	**31**	**525**	**674**
2010 8-Month Total	**4**	**110**	**20**	**(s)**	**6**	**2**	**(s)**	**4**	**32**	**544**	**690**

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

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

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

Sources: See end of section.

Table 12.4 Carbon Dioxide Emissions From Energy Consumption: Industrial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Coal Coke Net Imports	Natural Gas[b]	Petroleum									Retail Electricity[g]	Total[h]
				Distillate Fuel Oil[c]	Kerosene	LPG[d]	Lubricants	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total		
1973 Total	**371**	**-1**	**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**	**83**	**2**	**42**	**6**	**23**	**78**	**16**	**142**	**390**	**672**	**1,690**
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**	**93**	**(s)**	**32**	**6**	**17**	**77**	**14**	**132**	**371**	**642**	**1,602**
2009 Total	**131**	**-3**	**391**	**80**	**(s)**	**33**	**5**	**17**	**72**	**7**	**112**	**327**	**551**	**1,397**
2010 January	12	(s)	38	6	(s)	4	(s)	2	4	1	9	27	46	122
February	12	(s)	35	6	(s)	4	(s)	1	4	1	9	26	44	118
March	13	(s)	36	9	(s)	3	(s)	2	6	1	11	32	46	127
April	12	(s)	32	8	(s)	2	(s)	2	6	1	11	30	45	120
May	12	(s)	33	6	(s)	2	(s)	2	5	1	11	27	51	123
June	12	(s)	32	5	(s)	2	1	2	6	1	10	27	52	122
July	12	(s)	33	4	(s)	2	1	2	6	1	10	25	54	124
August	13	(s)	33	7	(s)	2	(s)	2	7	1	11	30	55	130
September	13	(s)	33	9	(s)	2	(s)	2	7	1	10	31	48	124
October	12	(s)	33	7	(s)	3	(s)	2	5	1	9	27	47	120
November	13	-1	35	8	(s)	3	(s)	2	6	1	10	30	48	124
December	13	-1	38	9	(s)	4	(s)	2	6	1	10	32	50	133
Total	**149**	**-1**	**410**	**86**	**1**	**35**	**6**	**19**	**67**	**8**	**122**	**343**	**587**	**1,488**
2011 January	12	(s)	39	9	(s)	5	(s)	1	5	1	10	32	R 48	R 132
February	12	(s)	36	7	(s)	4	(s)	1	4	1	8	25	42	115
March	13	(s)	37	10	(s)	4	1	2	5	1	11	33	R 46	R 129
April	11	(s)	35	7	(s)	3	(s)	2	5	1	10	28	45	R 119
May	12	(s)	35	7	(s)	3	(s)	2	7	1	8	27	48	122
June	12	(s)	33	7	(s)	3	(s)	2	R 5	1	9	27	50	121
July	11	(s)	34	4	(s)	3	(s)	2	5	(s)	11	R 25	R 54	R 124
August	12	(s)	34	7	(s)	3	(s)	2	7	(s)	10	30	53	R 130
September	12	(s)	34	7	(s)	3	(s)	2	5	1	10	28	R 47	120
October	12	(s)	35	8	(s)	3	(s)	2	6	1	10	29	47	R 124
November	12	(s)	36	9	(s)	4	(s)	1	6	1	11	32	R 46	125
December	12	(s)	39	6	(s)	4	(s)	2	3	1	10	26	45	R 123
Total	**142**	**1**	**427**	**89**	**(s)**	**41**	**5**	**18**	R **63**	**7**	**118**	R **341**	R **574**	R **1,485**
2012 January	11	(s)	40	7	(s)	4	(s)	1	R 5	1	11	30	43	R 124
February	11	(s)	37	9	(s)	4	(s)	1	4	(s)	10	30	42	120
March	12	(s)	37	7	(s)	3	(s)	2	5	1	9	27	41	117
April	11	1	35	6	(s)	3	(s)	2	5	1	9	26	41	113
May	11	(s)	35	6	(s)	3	(s)	2	6	(s)	9	27	R 46	120
June	10	(s)	34	5	(s)	3	(s)	2	6	(s)	10	26	47	117
July	11	(s)	35	3	(s)	3	(s)	2	5	1	10	25	52	R 123
August	11	(s)	36	4	(s)	3	(s)	2	7	(s)	11	27	50	124
8-Month Total	**89**	**1**	**288**	**47**	**(s)**	**27**	**3**	**12**	**45**	**4**	**79**	**217**	**362**	**957**
2011 8-Month Total	**94**	**1**	**282**	**59**	**(s)**	**27**	**4**	**12**	**43**	**5**	**77**	**227**	**387**	**991**
2010 8-Month Total	**98**	**1**	**271**	**53**	**(s)**	**22**	**4**	**13**	**43**	**5**	**83**	**223**	**393**	**986**

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

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

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

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

Sources: See end of section.

Table 12.5 Carbon Dioxide Emissions From Energy Consumption: Transportation Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum								Retail Electricity[f]	Total[g]
			Aviation Gasoline	Distillate Fuel Oil[c]	Jet Fuel	LPG[d]	Lubricants	Motor Gasoline[e]	Residual Fuel Oil	Total		
1973 Total	**(s)**	**39**	**6**	**163**	**152**	**3**	**6**	**886**	**57**	**1,273**	**2**	**1,315**
1975 Total	**(s)**	**32**	**5**	**155**	**145**	**3**	**6**	**889**	**56**	**1,258**	**2**	**1,292**
1980 Total	**(h)**	**34**	**4**	**204**	**155**	**1**	**6**	**881**	**110**	**1,363**	**2**	**1,400**
1985 Total	**(h)**	**28**	**3**	**232**	**178**	**2**	**6**	**908**	**62**	**1,391**	**3**	**1,421**
1990 Total	**(h)**	**36**	**3**	**268**	**223**	**1**	**7**	**967**	**80**	**1,548**	**3**	**1,588**
1995 Total	**(h)**	**38**	**3**	**307**	**222**	**1**	**6**	**1,029**	**72**	**1,639**	**3**	**1,681**
1996 Total	**(h)**	**39**	**3**	**327**	**232**	**1**	**6**	**1,047**	**67**	**1,683**	**3**	**1,725**
1997 Total	**(h)**	**41**	**3**	**342**	**234**	**1**	**6**	**1,057**	**56**	**1,699**	**3**	**1,744**
1998 Total	**(h)**	**35**	**2**	**352**	**238**	**1**	**7**	**1,090**	**53**	**1,743**	**3**	**1,782**
1999 Total	**(h)**	**36**	**3**	**366**	**245**	**1**	**7**	**1,115**	**52**	**1,789**	**3**	**1,828**
2000 Total	**(h)**	**36**	**3**	**378**	**254**	**1**	**7**	**1,121**	**70**	**1,833**	**4**	**1,872**
2001 Total	**(h)**	**35**	**2**	**387**	**243**	**1**	**6**	**1,127**	**46**	**1,813**	**4**	**1,852**
2002 Total	**(h)**	**37**	**2**	**394**	**237**	**1**	**6**	**1,158**	**53**	**1,851**	**4**	**1,892**
2003 Total	**(h)**	**33**	**2**	**414**	**231**	**1**	**6**	**1,161**	**45**	**1,861**	**5**	**1,899**
2004 Total	**(h)**	**32**	**2**	**434**	**240**	**1**	**6**	**1,185**	**58**	**1,926**	**5**	**1,962**
2005 Total	**(h)**	**33**	**2**	**444**	**246**	**2**	**6**	**1,186**	**66**	**1,953**	**5**	**1,991**
2006 Total	**(h)**	**33**	**2**	**469**	**240**	**2**	**5**	**1,194**	**71**	**1,984**	**5**	**2,022**
2007 Total	**(h)**	**35**	**2**	**472**	**238**	**1**	**6**	**1,201**	**78**	**1,999**	**5**	**2,040**
2008 Total	**(h)**	**37**	**2**	**440**	**226**	**3**	**5**	**1,146**	**72**	**1,895**	**5**	**1,937**
2009 Total	**(h)**	**38**	**2**	**404**	**204**	**2**	**5**	**1,137**	**64**	**1,818**	**5**	**1,860**
2010 January	(h)	4	(s)	31	17	(s)	(s)	91	6	145	(s)	150
February	(h)	4	(s)	30	15	(s)	(s)	82	5	133	(s)	137
March	(h)	3	(s)	35	18	(s)	(s)	94	6	154	(s)	157
April	(h)	3	(s)	35	17	(s)	(s)	94	7	154	(s)	157
May	(h)	3	(s)	37	18	(s)	(s)	97	6	159	(s)	161
June	(h)	3	(s)	36	19	(s)	1	95	5	156	(s)	159
July	(h)	3	(s)	38	19	(s)	(s)	99	6	162	(s)	165
August	(h)	3	(s)	39	19	(s)	(s)	98	5	161	(s)	165
September	(h)	3	(s)	37	18	(s)	(s)	94	6	155	(s)	157
October	(h)	3	(s)	37	18	(s)	(s)	95	6	157	(s)	160
November	(h)	3	(s)	35	17	(s)	(s)	90	6	149	(s)	152
December	(h)	4	(s)	35	17	(s)	(s)	94	5	153	(s)	158
Total	**(h)**	**38**	**2**	**425**	**210**	**2**	**5**	**1,124**	**69**	**1,836**	**5**	**1,879**
2011 January	(h)	5	(s)	33	17	(s)	(s)	89	6	146	(s)	151
February	(h)	4	(s)	31	15	(s)	(s)	82	6	135	(s)	139
March	(h)	4	(s)	36	17	(s)	1	93	5	153	(s)	157
April	(h)	3	(s)	36	18	(s)	(s)	90	5	150	(s)	153
May	(h)	3	(s)	38	18	(s)	(s)	93	6	155	(s)	R 158
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)	161
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)	155
November	(h)	3	(s)	36	17	(s)	(s)	87	5	145	(s)	149
December	(h)	4	(s)	R 34	17	(s)	(s)	92	6	150	(s)	154
Total	**(h)**	**39**	**2**	**435**	**209**	**2**	**5**	**1,091**	**62**	**1,807**	**4**	**1,850**
2012 January	(h)	4	(s)	32	16	(s)	(s)	87	5	141	(s)	145
February	(h)	4	(s)	31	16	(s)	(s)	85	4	137	(s)	142
March	(h)	3	(s)	35	17	(s)	(s)	91	5	149	(s)	152
April	(h)	3	(s)	35	16	(s)	(s)	90	5	R 147	(s)	151
May	(h)	3	(s)	37	18	(s)	(s)	95	3	154	(s)	157
June	(h)	3	(s)	37	19	(s)	(s)	93	4	153	(s)	156
July	(h)	3	(s)	38	18	(s)	(s)	93	5	155	(s)	159
August	(h)	3	(s)	38	18	(s)	(s)	97	4	158	(s)	161
8-Month Total	**(h)**	**27**	**1**	**284**	**138**	**1**	**3**	**732**	**34**	**1,194**	**3**	**1,223**
2011 8-Month Total	**(h)**	**26**	**1**	**291**	**141**	**1**	**3**	**731**	**41**	**1,210**	**3**	**1,239**
2010 8-Month Total	**(h)**	**25**	**1**	**281**	**141**	**1**	**4**	**750**	**46**	**1,224**	**3**	**1,252**

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

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

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

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

Sources: See end of section.

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

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum				Geo-thermal	Non-Biomass Waste[d]	Total[e]
			Distillate Fuel Oil[c]	Petroleum Coke	Residual Fuel Oil	Total			
1973 Total	**812**	**199**	**20**	**2**	**254**	**276**	**NA**	**NA**	**1,286**
1975 Total	**824**	**172**	**17**	**(s)**	**231**	**248**	**NA**	**NA**	**1,244**
1980 Total	**1,137**	**200**	**12**	**1**	**194**	**207**	**NA**	**NA**	**1,544**
1985 Total	**1,367**	**166**	**6**	**1**	**79**	**86**	**NA**	**NA**	**1,619**
1990 Total	**1,548**	**176**	**7**	**3**	**92**	**102**	**(s)**	**6**	**1,831**
1995 Total	**1,661**	**228**	**8**	**8**	**45**	**61**	**(s)**	**10**	**1,960**
1996 Total	**1,752**	**205**	**8**	**8**	**50**	**66**	**(s)**	**10**	**2,033**
1997 Total	**1,797**	**219**	**8**	**10**	**56**	**75**	**(s)**	**10**	**2,101**
1998 Total	**1,828**	**248**	**10**	**13**	**82**	**105**	**(s)**	**10**	**2,192**
1999 Total	**1,836**	**260**	**10**	**11**	**76**	**97**	**(s)**	**10**	**2,204**
2000 Total	**1,927**	**281**	**13**	**10**	**69**	**91**	**(s)**	**10**	**2,310**
2001 Total	**1,870**	**290**	**12**	**11**	**79**	**102**	**(s)**	**11**	**2,273**
2002 Total	**1,890**	**306**	**9**	**18**	**52**	**79**	**(s)**	**13**	**2,288**
2003 Total	**1,931**	**278**	**12**	**18**	**69**	**98**	**(s)**	**11**	**2,319**
2004 Total	**1,943**	**297**	**8**	**23**	**69**	**100**	**(s)**	**11**	**2,352**
2005 Total	**1,984**	**319**	**8**	**25**	**69**	**102**	**(s)**	**11**	**2,417**
2006 Total	**1,954**	**338**	**5**	**22**	**28**	**56**	**(s)**	**12**	**2,359**
2007 Total	**1,987**	**372**	**7**	**17**	**31**	**55**	**(s)**	**11**	**2,426**
2008 Total	**1,959**	**362**	**5**	**16**	**19**	**40**	**(s)**	**12**	**2,374**
2009 Total	**1,741**	**373**	**5**	**14**	**14**	**34**	**(s)**	**11**	**2,159**
2010 January	170	30	1	1	1	4	(s)	1	204
February	150	26	(s)	1	1	2	(s)	1	179
March	143	25	(s)	1	1	2	(s)	1	171
April	125	25	(s)	1	1	2	(s)	1	154
May	142	30	(s)	1	1	3	(s)	1	176
June	163	38	1	1	2	4	(s)	1	206
July	177	48	1	2	2	4	(s)	1	231
August	177	51	(s)	1	2	3	(s)	1	232
September	148	38	(s)	1	1	2	(s)	1	189
October	132	31	(s)	1	1	2	(s)	1	166
November	136	27	(s)	1	1	2	(s)	1	166
December	165	31	1	1	1	3	(s)	1	200
Total	**1,828**	**399**	**6**	**15**	**12**	**33**	**(s)**	**11**	**2,271**
2011 January	166	29	1	2	1	3	(s)	1	R 200
February	R 136	26	(s)	1	1	2	(s)	1	R 165
March	R 134	26	(s)	R 2	1	R 3	(s)	1	163
April	R 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	R 174	51	(s)	R 2	1	3	(s)	1	228
August	170	50	(s)	1	1	2	(s)	1	223
September	141	37	(s)	1	R (s)	2	(s)	1	181
October	128	31	(s)	1	(s)	2	(s)	1	162
November	R 124	29	(s)	1	(s)	2	(s)	1	155
December	R 136	33	(s)	1	(s)	2	(s)	1	R 172
Total	**R 1,723**	**R 409**	**5**	**R 15**	**7**	**R 27**	**(s)**	**11**	**R 2,170**
2012 January	R 131	35	(s)	1	1	2	(s)	1	R 169
February	116	35	(s)	1	(s)	2	(s)	1	153
March	106	37	(s)	1	(s)	1	(s)	1	145
April	R 96	39	(s)	R (s)	(s)	1	(s)	1	R 137
May	116	44	(s)	1	(s)	1	(s)	1	163
June	132	48	(s)	1	1	2	(s)	1	183
July	160	59	(s)	1	1	2	(s)	1	222
August	153	54	(s)	1	1	2	(s)	1	210
8-Month Total	**1,009**	**351**	**3**	**6**	**4**	**13**	**(s)**	**7**	**1,380**
2011 8-Month Total	**1,194**	**279**	**3**	**11**	**5**	**20**	**(s)**	**7**	**1,500**
2010 8-Month Total	**1,246**	**273**	**4**	**10**	**9**	**23**	**(s)**	**7**	**1,550**

[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.

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

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

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

Sources: See end of section.

Table 12.7 Carbon Dioxide Emissions From Biomass Energy Consumption

(Million Metric Tons of Carbon Dioxide[a])

	By Source					By Sector					
	Wood[b]	Biomass Waste[c]	Fuel Ethanol[d]	Bio-diesel	Total	Resi-dential	Com-mercial[e]	Indus-trial[f]	Trans-portation	Electric Power[g]	Total
1973 Total	**143**	**(s)**	**NA**	**NA**	**143**	**33**	**1**	**109**	**NA**	**(s)**	**143**
1975 Total	**140**	**(s)**	**NA**	**NA**	**141**	**40**	**1**	**100**	**NA**	**(s)**	**141**
1980 Total	**232**	**(s)**	**NA**	**NA**	**232**	**80**	**2**	**150**	**NA**	**(s)**	**232**
1985 Total	**252**	**14**	**3**	**NA**	**270**	**95**	**2**	**168**	**3**	**1**	**270**
1990 Total	**208**	**24**	**4**	**NA**	**237**	**54**	**8**	**147**	**4**	**23**	**237**
1995 Total	**222**	**30**	**8**	**NA**	**260**	**49**	**9**	**166**	**8**	**28**	**260**
1996 Total	**229**	**32**	**6**	**NA**	**266**	**51**	**10**	**170**	**6**	**30**	**266**
1997 Total	**222**	**30**	**7**	**NA**	**259**	**40**	**10**	**172**	**7**	**30**	**259**
1998 Total	**205**	**30**	**8**	**NA**	**242**	**36**	**9**	**160**	**8**	**30**	**242**
1999 Total	**208**	**29**	**8**	**NA**	**245**	**37**	**9**	**161**	**8**	**30**	**245**
2000 Total	**212**	**27**	**9**	**NA**	**248**	**39**	**9**	**161**	**9**	**29**	**248**
2001 Total	**188**	**33**	**10**	**(s)**	**231**	**35**	**9**	**147**	**10**	**31**	**231**
2002 Total	**187**	**36**	**12**	**(s)**	**235**	**36**	**9**	**144**	**12**	**35**	**235**
2003 Total	**188**	**36**	**16**	**(s)**	**240**	**38**	**9**	**141**	**16**	**37**	**240**
2004 Total	**199**	**35**	**20**	**(s)**	**255**	**38**	**10**	**151**	**20**	**36**	**255**
2005 Total	**200**	**37**	**23**	**1**	**261**	**40**	**10**	**150**	**23**	**37**	**261**
2006 Total	**197**	**36**	**31**	**2**	**266**	**36**	**9**	**151**	**33**	**38**	**266**
2007 Total	**194**	**37**	**39**	**3**	**274**	**38**	**9**	**146**	**41**	**39**	**274**
2008 Total	**191**	**40**	**55**	**3**	**289**	**42**	**10**	**140**	**57**	**40**	**289**
2009 Total	**177**	**41**	**62**	**3**	**284**	**40**	**10**	**128**	**64**	**41**	**284**
2010 January	16	4	6	(s)	25	3	1	12	6	4	25
February	14	3	5	(s)	23	3	1	11	5	3	23
March	16	4	6	(s)	25	3	1	12	6	4	25
April	15	4	6	(s)	25	3	1	11	6	3	25
May	15	4	6	(s)	25	3	1	11	6	3	25
June	15	4	6	(s)	25	3	1	11	6	4	25
July	16	4	6	(s)	26	3	1	12	6	4	26
August	16	4	6	(s)	26	3	1	12	6	4	26
September	16	3	6	(s)	25	3	1	12	6	3	25
October	16	4	6	(s)	26	3	1	12	6	3	26
November	15	4	6	(s)	25	3	1	12	6	4	25
December	16	4	6	(s)	27	3	1	12	6	4	27
Total	**186**	**43**	**73**	**2**	**304**	**39**	**10**	**139**	**74**	**42**	**304**
2011 January	R 17	4	6	(s)	26	3	1	12	6	3	26
February	15	3	6	(s)	24	3	1	11	6	3	24
March	16	4	6	(s)	26	3	1	12	6	3	26
April	15	3	6	1	25	3	1	11	6	3	25
May	15	R 3	6	1	R 25	3	1	11	7	3	R 25
June	16	4	6	1	R 26	3	1	12	7	3	R 26
July	16	4	6	1	R 27	3	1	12	7	4	R 27
August	16	4	7	1	27	3	1	12	7	4	27
September	R 16	R 3	6	1	26	3	1	12	7	3	26
October	R 16	4	6	1	26	3	1	R 12	7	3	26
November	R 16	4	6	1	26	3	1	12	7	3	26
December	R 17	4	6	1	28	3	1	R 13	7	4	28
Total	**R 189**	**43**	**73**	**8**	**R 313**	**40**	**R 11**	**R 142**	**80**	**R 40**	**R 313**
2012 January	16	4	6	(s)	26	3	1	12	6	R 3	26
February	15	3	6	1	25	3	1	11	6	3	25
March	15	4	6	1	26	3	1	11	7	3	26
April	14	R 3	6	1	25	3	1	11	7	3	25
May	R 16	4	6	1	27	3	1	12	7	3	27
June	15	R 3	6	1	26	3	1	11	7	3	26
July	16	4	6	1	R 27	3	1	12	7	R 4	R 27
August	16	4	7	1	27	3	1	12	7	3	27
8-Month Total	**124**	**28**	**49**	**6**	**207**	**27**	**7**	**93**	**54**	**26**	**207**
2011 8-Month Total	**125**	**28**	**49**	**5**	**206**	**27**	**7**	**94**	**52**	**27**	**206**
2010 8-Month Total	**124**	**28**	**48**	**2**	**201**	**26**	**7**	**91**	**48**	**28**	**201**

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

[b] Wood and wood-derived fuels.

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

[d] Fuel ethanol minus denaturant.

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

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

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

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

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

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

Sources: See end of section.

Environment

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

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

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

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

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

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

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

Section 12 Methodology and Sources

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

Step 1. Determine Fuel Consumption

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

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

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

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

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

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

Step 2. Remove Biofuels From Petroleum

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

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

Step 3. Remove Carbon Sequestered by Nonfuel Use

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

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

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

Step 4. Determine Carbon Dioxide Emissions From Energy Consumption

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

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

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

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

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

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

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

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix A

British Thermal Unit Conversion Factors

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

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

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

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

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

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

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

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

(Million Btu per Barrel)

	Production		Imports			Exports		
	Crude Oil[a]	Natural Gas Plant Liquids	Crude Oil[a]	Petroleum Products	Total	Crude Oil[a]	Petroleum Products	Total
1973	5.800	4.049	5.817	5.983	5.897	5.800	5.752	5.752
1974	5.800	4.011	5.827	5.959	5.884	5.800	5.773	5.774
1975	5.800	3.984	5.821	5.935	5.858	5.800	5.747	5.748
1976	5.800	3.964	5.808	5.980	5.856	5.800	5.743	5.745
1977	5.800	3.941	5.810	5.908	5.834	5.800	5.796	5.797
1978	5.800	3.925	5.802	5.955	5.839	5.800	5.814	5.808
1979	5.800	3.955	5.810	5.811	5.810	5.800	5.864	5.832
1980	5.800	3.914	5.812	5.748	5.796	5.800	5.841	5.820
1981	5.800	3.930	5.818	5.659	5.775	5.800	5.837	5.821
1982	5.800	3.872	5.826	5.664	5.775	5.800	5.829	5.820
1983	5.800	3.839	5.825	5.677	5.774	5.800	5.800	5.800
1984	5.800	3.812	5.823	5.613	5.745	5.800	5.867	5.850
1985	5.800	3.815	5.832	5.572	5.736	5.800	5.819	5.814
1986	5.800	3.797	5.903	5.624	5.808	5.800	5.839	5.832
1987	5.800	3.804	5.901	5.599	5.820	5.800	5.860	5.858
1988	5.800	3.800	5.900	5.618	5.820	5.800	5.842	5.840
1989	5.800	3.826	5.906	5.641	5.833	5.800	5.869	5.857
1990	5.800	3.822	5.934	5.614	5.849	5.800	5.838	5.833
1991	5.800	3.807	5.948	5.636	5.873	5.800	5.827	5.823
1992	5.800	3.804	5.953	5.623	5.877	5.800	5.774	5.777
1993	5.800	3.801	5.954	5.620	5.883	5.800	5.777	5.779
1994	5.800	3.794	5.950	5.534	5.861	5.800	5.777	5.779
1995	5.800	3.796	5.938	5.483	5.855	5.800	5.740	5.746
1996	5.800	3.777	5.947	5.468	5.847	5.800	5.728	5.736
1997	5.800	3.762	5.954	5.469	5.862	5.800	5.726	5.734
1998	5.800	3.769	5.953	5.462	5.861	5.800	5.710	5.720
1999	5.800	3.744	5.942	5.421	5.840	5.800	5.684	5.699
2000	5.800	3.733	5.959	5.432	5.849	5.800	5.651	5.658
2001	5.800	3.735	5.976	5.443	5.862	5.800	5.751	5.752
2002	5.800	3.729	5.971	5.451	5.863	5.800	5.687	5.688
2003	5.800	3.739	5.970	5.438	5.857	5.800	5.739	5.740
2004	5.800	3.724	5.981	5.475	5.863	5.800	5.753	5.754
2005	5.800	3.724	5.977	5.474	5.845	5.800	5.741	5.743
2006	5.800	3.712	5.980	5.454	5.842	5.800	5.723	5.724
2007	5.800	3.701	5.985	5.503	5.862	5.800	5.749	5.750
2008	5.800	3.706	5.990	5.479	5.866	5.800	5.762	5.762
2009	5.800	3.692	5.988	5.525	5.882	5.800	5.737	5.738
2010	5.800	3.674	5.989	5.557	5.894	5.800	5.670	5.672
2011	5.800	3.672	6.008	5.507	5.896	5.800	5.596	5.599
2012[E]	5.800	3.672	6.008	5.507	5.896	5.800	5.596	5.599

[a] Includes lease condensate.

E=Estimate.

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

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

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

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

(Million Btu per Barrel)

	Total Petroleum[a] Consumption by Sector						Liquefied Petroleum Gases Consumption[f]	Motor Gasoline Consumption[g]	Fuel Ethanol[h]	*Fuel Ethanol Feedstock Factor*[i]	Biodiesel	*Biodiesel Feedstock Factor*[j]
	Residential	Commercial[b]	Industrial[b]	Transportation[b,c]	Electric Power[d,e]	Total[b,c]						
1973	5.258	5.689	5.557	5.396	6.245	5.515	3.746	5.253	NA	*NA*	NA	*NA*
1974	5.253	5.683	5.525	5.394	6.238	5.504	3.730	5.253	NA	*NA*	NA	*NA*
1975	5.253	5.649	5.513	5.392	6.250	5.494	3.715	5.253	NA	*NA*	NA	*NA*
1976	5.277	5.672	5.523	5.396	6.251	5.504	3.711	5.253	NA	*NA*	NA	*NA*
1977	5.285	5.682	5.539	5.401	6.249	5.518	3.677	5.253	NA	*NA*	NA	*NA*
1978	5.287	5.665	5.536	5.405	6.251	5.519	3.669	5.253	NA	*NA*	NA	*NA*
1979	5.365	5.717	5.409	5.429	6.258	5.494	3.680	5.253	NA	*NA*	NA	*NA*
1980	5.321	5.751	5.366	5.441	6.254	5.479	3.674	5.253	3.563	*6.586*	NA	*NA*
1981	5.283	5.693	5.299	5.433	6.258	5.448	3.643	5.253	3.563	*6.562*	NA	*NA*
1982	5.266	5.698	5.247	5.423	6.258	5.415	3.615	5.253	3.563	*6.539*	NA	*NA*
1983	5.140	5.591	5.254	5.416	6.255	5.406	3.614	5.253	3.563	*6.515*	NA	*NA*
1984	5.307	5.657	5.207	5.418	6.251	5.395	3.599	5.253	3.563	*6.492*	NA	*NA*
1985	5.263	5.598	5.199	5.423	6.247	5.387	3.603	5.253	3.563	*6.469*	NA	*NA*
1986	5.268	5.632	5.269	5.426	6.257	5.418	3.640	5.253	3.563	*6.446*	NA	*NA*
1987	5.239	5.594	5.233	5.429	6.249	5.403	3.659	5.253	3.563	*6.423*	NA	*NA*
1988	5.257	5.597	5.228	5.433	6.250	5.410	3.652	5.253	3.563	*6.400*	NA	*NA*
1989	5.194	5.549	5.219	5.438	[d]6.240	5.410	3.683	5.253	3.563	*6.377*	NA	*NA*
1990	5.145	5.553	5.253	5.442	6.244	5.411	3.625	5.253	3.563	*6.355*	NA	*NA*
1991	5.094	5.528	5.167	5.441	6.246	5.384	3.614	5.253	3.563	*6.332*	NA	*NA*
1992	5.124	5.513	5.168	5.443	6.238	5.378	3.624	5.253	3.563	*6.309*	NA	*NA*
1993	5.102	[b]5.505	[b]5.178	[b]5.436	6.230	[b]5.379	3.606	5.253	3.563	*6.287*	NA	*NA*
1994	5.098	5.515	5.150	5.424	6.213	5.361	3.635	5.230	3.563	*6.264*	NA	*NA*
1995	5.063	5.478	5.121	5.417	6.188	5.341	3.623	5.215	3.563	*6.242*	NA	*NA*
1996	4.998	5.433	5.114	5.420	6.195	5.336	3.613	5.216	3.563	*6.220*	NA	*NA*
1997	4.989	5.391	5.120	5.416	6.199	5.336	3.616	5.213	3.563	*6.198*	NA	*NA*
1998	4.975	5.365	5.137	5.413	6.210	5.349	3.614	5.212	3.563	*6.176*	NA	*NA*
1999	4.902	5.291	5.092	5.413	6.205	5.328	3.616	5.211	3.563	*6.167*	NA	*NA*
2000	4.908	5.316	5.057	5.422	6.189	5.326	3.607	5.210	3.563	*6.159*	NA	*NA*
2001	4.937	5.325	5.142	5.412	6.199	5.345	3.614	5.210	3.563	*6.151*	5.359	*5.433*
2002	4.886	5.293	5.093	5.411	6.173	5.324	3.613	5.208	3.563	*6.143*	5.359	*5.433*
2003	4.907	5.307	5.142	5.409	6.182	5.340	3.629	5.207	3.563	*6.116*	5.359	*5.433*
2004	4.953	5.328	5.144	5.421	6.192	5.350	3.618	5.215	3.563	*6.089*	5.359	*5.433*
2005	4.916	5.364	5.178	5.427	6.188	5.365	3.620	5.218	3.563	*6.063*	5.359	*5.433*
2006	4.894	5.310	5.160	5.431	6.143	5.353	3.605	5.218	3.563	*6.036*	5.359	*5.433*
2007	4.850	5.298	5.127	5.434	6.151	5.346	3.591	5.219	3.563	*6.009*	5.359	*5.433*
2008	4.732	5.175	5.149	5.426	6.123	5.339	3.600	5.218	3.563	*5.983*	5.359	*5.433*
2009	4.691	5.266	5.018	[c]5.414	6.105	[c]5.301	3.558	5.218	3.563	*5.957*	5.359	*5.433*
2010	4.692	5.263	4.988	5.421	6.084	5.297	3.557	5.218	3.561	*5.931*	5.359	*5.433*
2011	[E]4.676	[E]5.243	[RE]4.952	[E]5.424	[R]6.058	5.286	3.541	5.218	3.560	*5.905*	5.359	*5.433*
2012	[E]4.676	[E]5.243	[RE]4.952	[E]5.424	[RE]6.058	[E]5.286	[E]3.541	[E]5.218	[E]3.560	*5.880*	5.359	*5.433*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Production		Consumption[a]				
	Marketed	Dry	End-Use Sectors[b]	Electric Power Sector[c]	Total	Imports	Exports
1973	1,093	1,021	1,020	1,024	1,021	1,026	1,023
1974	1,097	1,024	1,024	1,022	1,024	1,027	1,016
1975	1,095	1,021	1,020	1,026	1,021	1,026	1,014
1976	1,093	1,020	1,019	1,023	1,020	1,025	1,013
1977	1,093	1,021	1,019	1,029	1,021	1,026	1,013
1978	1,088	1,019	1,016	1,034	1,019	1,030	1,013
1979	1,092	1,021	1,018	1,035	1,021	1,037	1,013
1980	1,098	1,026	1,024	1,035	1,026	1,022	1,013
1981	1,103	1,027	1,025	1,035	1,027	1,014	1,011
1982	1,107	1,028	1,026	1,036	1,028	1,018	1,011
1983	1,115	1,031	1,031	1,030	1,031	1,024	1,010
1984	1,109	1,031	1,030	1,035	1,031	1,005	1,010
1985	1,112	1,032	1,031	1,038	1,032	1,002	1,011
1986	1,110	1,030	1,029	1,034	1,030	997	1,008
1987	1,112	1,031	1,031	1,032	1,031	999	1,011
1988	1,109	1,029	1,029	1,028	1,029	1,002	1,018
1989	1,107	1,031	1,031	[c]1,028	1,031	1,004	1,019
1990	1,105	1,029	1,030	1,027	1,029	1,012	1,018
1991	1,108	1,030	1,031	1,025	1,030	1,014	1,022
1992	1,110	1,030	1,031	1,025	1,030	1,011	1,018
1993	1,106	1,027	1,028	1,025	1,027	1,020	1,016
1994	1,105	1,028	1,029	1,025	1,028	1,022	1,011
1995	1,106	1,026	1,027	1,021	1,026	1,021	1,011
1996	1,109	1,026	1,027	1,020	1,026	1,022	1,011
1997	1,107	1,026	1,027	1,020	1,026	1,023	1,011
1998	1,109	1,031	1,033	1,024	1,031	1,023	1,011
1999	1,107	1,027	1,028	1,022	1,027	1,022	1,006
2000	1,107	1,025	1,026	1,021	1,025	1,023	1,006
2001	1,105	1,028	1,029	1,026	1,028	1,023	1,010
2002	1,103	1,024	1,025	1,020	1,024	1,022	1,008
2003	1,103	1,028	1,029	1,025	1,028	1,025	1,009
2004	1,104	1,026	1,026	1,027	1,026	1,025	1,009
2005	1,104	1,028	1,028	1,028	1,028	1,025	1,009
2006	1,103	1,028	1,028	1,028	1,028	1,025	1,009
2007	1,102	1,027	1,027	1,027	1,027	1,025	1,009
2008	1,100	1,027	1,027	1,027	1,027	1,025	1,009
2009	1,101	1,025	1,025	1,025	1,025	1,025	1,009
2010	1,097	1,023	1,023	1,022	1,023	1,025	1,009
2011	[E]1,097	[E]1,022	[E]1,023	1,021	[E]1,022	[E]1,025	[E]1,009
2012	[E]1,097	[E]1,022	[E]1,023	[E]1,021	[E]1,022	[E]1,025	[E]1,009

[a] Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels.
[b] Residential, commercial, industrial, and transportation sectors.
[c] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.
E=Estimate.
Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

	Coal									Coal Coke
			Consumption							
				Industrial Sector						
	Production[a]	Waste Coal Supplied[b]	Residential and Commercial Sectors	Coke Plants	Other[c]	Electric Power Sector[d,e]	Total	Imports	Exports	Imports and Exports
1973	23.376	NA	22.831	26.780	22.586	22.246	23.057	25.000	26.596	24.800
1974	23.072	NA	22.479	26.778	22.419	21.781	22.677	25.000	26.700	24.800
1975	22.897	NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	24.800
1976	22.855	NA	22.774	26.781	22.530	21.679	22.498	25.000	26.601	24.800
1977	22.597	NA	22.919	26.787	22.322	21.508	22.265	25.000	26.548	24.800
1978	22.248	NA	22.466	26.789	22.207	21.275	22.017	25.000	26.478	24.800
1979	22.454	NA	22.242	26.788	22.452	21.364	22.100	25.000	26.548	24.800
1980	22.415	NA	22.543	26.790	22.690	21.295	21.947	25.000	26.384	24.800
1981	22.308	NA	22.474	26.794	22.585	21.085	21.713	25.000	26.160	24.800
1982	22.239	NA	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
1983	22.052	NA	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
1984	22.010	NA	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
1985	21.870	NA	22.646	26.798	22.020	20.959	21.366	25.000	26.307	24.800
1986	21.913	NA	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
1987	21.922	NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
1988	21.823	NA	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
1989	21.765	[b]10.391	23.650	26.800	22.347	[d]20.898	21.307	25.000	26.160	24.800
1990	21.822	9.303	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
1991	21.681	10.758	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
1992	21.682	10.396	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
1993	21.418	10.638	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
1994	21.394	11.097	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
1995	21.326	11.722	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
1996	21.322	12.147	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
1997	21.296	12.158	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
1998	21.418	12.639	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
1999	21.070	12.552	23.880	27.426	22.489	20.490	20.818	25.000	26.081	24.800
2000	21.072	12.360	25.020	27.426	22.433	20.511	20.828	25.000	26.117	24.800
2001	[a]20.772	12.169	24.909	27.426	22.622	20.337	20.671	25.000	25.998	24.800
2002	20.673	12.165	22.962	27.426	22.562	20.238	20.541	25.000	26.062	24.800
2003	20.499	12.360	22.242	27.425	22.468	20.082	20.387	25.000	25.972	24.800
2004	20.424	12.266	22.324	27.426	22.473	19.980	20.290	25.000	26.108	24.800
2005	20.348	12.093	22.342	26.279	22.178	19.988	20.246	25.000	25.494	24.800
2006	20.310	12.080	22.066	26.271	22.050	19.931	20.181	25.000	25.453	24.800
2007	20.340	12.090	22.069	26.329	22.371	19.909	20.168	25.000	25.466	24.800
2008	20.208	12.121	21.887	26.281	22.348	19.713	19.977	25.000	25.399	24.800
2009	19.963	12.076	22.059	26.334	21.893	19.521	19.742	25.000	25.633	24.800
2010	20.173	11.960	21.826	26.296	21.005	19.623	[R]19.829	25.000	25.713	24.800
2011	[P]20.136	[P]11.604	[P]20.724	[P]26.300	[P]20.588	[R]19.341	[RP]19.551	[P]25.000	[P]25.645	[P]24.800
2012	[E]20.136	[E]11.604	[E]20.724	[E]26.300	[E]20.588	[RE]19.341	[RE]19.551	[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] Includes transportation. Excludes coal synfuel plants.

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

[e] Electric power sector factors are for anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and, beginning in 1998, coal synfuel.

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

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

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

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

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

(Btu per Kilowatthour)

	Approximate Heat Rates[a] for Electricity Net Generation						
	Fossil Fuels[b]						
	Coal[c]	Petroleum[d]	Natural Gas[e]	Total Fossil Fuels[f,g]	Nuclear[h]	Noncombustible Renewable Energy[g,i]	Heat Content[j] of Electricity[k]
1973	NA	NA	NA	10,389	10,903	10,389	3,412
1974	NA	NA	NA	10,442	11,161	10,442	3,412
1975	NA	NA	NA	10,406	11,013	10,406	3,412
1976	NA	NA	NA	10,373	11,047	10,373	3,412
1977	NA	NA	NA	10,435	10,769	10,435	3,412
1978	NA	NA	NA	10,361	10,941	10,361	3,412
1979	NA	NA	NA	10,353	10,879	10,353	3,412
1980	NA	NA	NA	10,388	10,908	10,388	3,412
1981	NA	NA	NA	10,453	11,030	10,453	3,412
1982	NA	NA	NA	10,454	11,073	10,454	3,412
1983	NA	NA	NA	10,520	10,905	10,520	3,412
1984	NA	NA	NA	10,440	10,843	10,440	3,412
1985	NA	NA	NA	10,447	10,622	10,447	3,412
1986	NA	NA	NA	10,446	10,579	10,446	3,412
1987	NA	NA	NA	10,419	10,442	10,419	3,412
1988	NA	NA	NA	10,324	10,602	10,324	3,412
1989	NA	NA	NA	10,432	10,583	10,432	3,412
1990	NA	NA	NA	10,402	10,582	10,402	3,412
1991	NA	NA	NA	10,436	10,484	10,436	3,412
1992	NA	NA	NA	10,342	10,471	10,342	3,412
1993	NA	NA	NA	10,309	10,504	10,309	3,412
1994	NA	NA	NA	10,316	10,452	10,316	3,412
1995	NA	NA	NA	10,312	10,507	10,312	3,412
1996	NA	NA	NA	10,340	10,503	10,340	3,412
1997	NA	NA	NA	10,213	10,494	10,213	3,412
1998	NA	NA	NA	10,197	10,491	10,197	3,412
1999	NA	NA	NA	10,226	10,450	10,226	3,412
2000	NA	NA	NA	10,201	10,429	10,201	3,412
2001	10,378	10,742	10,051	[b]10,333	10,443	10,333	3,412
2002	10,314	10,641	9,533	10,173	10,442	10,173	3,412
2003	10,297	10,610	9,207	10,241	10,421	10,241	3,412
2004	10,331	10,571	8,647	10,022	10,427	10,022	3,412
2005	10,373	10,631	8,551	9,999	10,436	9,999	3,412
2006	10,351	10,809	8,471	9,919	10,436	9,919	3,412
2007	10,375	10,794	8,403	9,884	10,485	9,884	3,412
2008	10,378	11,015	8,305	9,854	10,453	9,854	3,412
2009	10,414	10,923	8,160	9,760	10,460	9,760	3,412
2010	10,415	10,984	8,185	9,756	10,452	9,756	3,412
2011	[R] 10,444	[R] 10,829	[R] 8,152	[R] 9,716	[R] 10,464	[R] 9,716	3,412
2012	[RE] 10,444	[RE] 10,829	[RE] 8,152	[RE] 9,716	[RE] 10,464	[RE] 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.

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

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

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

Thermal Conversion Factor Source Documentation

Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Liquefied Petroleum Gases Consumption. Calculated annually by EIA as the average of the thermal conversion factors for all liquefied petroleum gases consumed (see Table A1) weighted by the quantities consumed. The component products of liquefied petroleum gases are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. For 1973–1980, quantities consumed are from EIA, Energy Data Reports, "Petroleum Statement, Annual," Table 1. For 1981 forward, quantities consumed are from EIA, *Petroleum Supply Annual*, Table 2.

Lubricants. EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Miscellaneous Products. EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Motor Gasoline Consumption. 1973–1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947–1985*, a 1968 release of historical and projected statistics. 1994 forward: EIA calculated national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (see Table A3). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for

previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, "Fuel Economy Impact Analysis of Reformulated Gasoline." See **Fuel Ethanol (Denatured).**

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

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

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

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

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

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

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

Petroleum Consumption, Commercial Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the commercial sector weighted by the estimated quantities consumed by the commercial sector. The quantities of petroleum products consumed by the commercial sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/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. 1973–1979: EIA adopted the thermal conversion factor calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual publication. 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity consumed.

Natural Gas Exports. Calculated annually by EIA by dividing the heat content of natural gas exported by the quantity exported. For 1973–1995, data are from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Beginning in 1996, data are from U.S. Department of Energy, Office of Fossil Energy, *Natural Gas Imports and Exports*.

Natural Gas Imports. Calculated annually by EIA by dividing the heat content of natural gas imported by the quantity imported. For 1973–1995, data are from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Beginning in 1996, data are from U.S. Department of Energy, Office of Fossil Energy, *Natural Gas Imports and Exports*.

Natural Gas Production, Dry. Assumed by EIA to be equal to the thermal conversion factor for dry natural gas consumed. See **Natural Gas Consumption, Total**.

Natural Gas Production, Marketed. Calculated annually by EIA by dividing the heat content of dry natural gas produced (see **Natural Gas Production, Dry**) and natural gas plant liquids produced (see **Natural Gas Plant Liquids Production**) by the total quantity of marketed natural gas produced.

Approximate Heat Content of Coal and Coal Coke

Coal Coke Imports and Exports. EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

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

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

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

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

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

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

Coal Imports. Assumed by EIA to be 25.000 million Btu per short ton**.**

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

Waste Coal Supplied. Calculated annually by EIA by dividing the total heat content of waste coal supplied by the quantity supplied. For 1989–1997, data are from Form EIA-867, "Annual Nonutility Power Producer Report." For 1998–2000, data are from Form EIA-860B, "Annual Electric Generator Report—Nonutility." For 2001 forward, data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants"; Form EIA-923, "Power Plant Operations Report"; and predecessor forms.

Approximate Heat Rates for Electricity

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

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

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

Electricity Net Generation, Nuclear. 1973–1984: Calculated annually by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation were reported on Form FERC-1, "Annual Report of Major Electric Utilities, Licensees, and Others"; Form EIA-412, "Annual Report of Public Electric Utilities"; and predecessor forms. For 1982, the factors were published in EIA, *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215. For 1983 and 1984, the factors were published in EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 13. 1985 forward: Calculated annually by EIA by using the heat rate data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms).

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

Electricity Net Generation, Total Fossil Fuels. 1973–1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published in EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9. 1989–2000: Calculated annually by EIA by using the heat rate data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and net generation data reported on Form EIA-759, "Monthly Power Plant Report." The computation includes data for all electric utility steam-electric plants using fossil fuels. 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-923, "Power Plant Operations Report," and predecessor forms. The computation includes data for electric utilities and electricity-only independent power producers using coal, petroleum, natural gas, and other gases (blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels).

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix B

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

Data presented in the *Monthly Energy Review* and in other U.S. Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. Customary units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table B2.

The conversion factors presented in Table B3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

Table B1. Metric Conversion Factors

Type of Unit	U.S. Unit		Equivalent in	Metric Units
Mass	1 short ton (2,000 lb)	=	0.907 184 7	metric tons (t)
	1 long ton	=	1.016 047	metric tons (t)
	1 pound (lb)	=	0.453 592 37[a]	kilograms (kg)
	1 pound uranium oxide (lb U_3O_8)	=	0.384 647[b]	kilograms uranium (kgU)
	1 ounce, avoirdupois (avdp oz)	=	28.349 52	grams (g)
Volume	1 barrel of oil (bbl)	=	0.158 987 3	cubic meters (m^3)
	1 cubic yard (yd^3)	=	0.764 555	cubic meters (m^3)
	1 cubic foot (ft^3)	=	0.028 316 85	cubic meters (m^3)
	1 U.S. gallon (gal)	=	3.785 412	liters (L)
	1 ounce, fluid (fl oz)	=	29.573 53	milliliters (mL)
	1 cubic inch (in^3)	=	16.387 06	milliliters (mL)
Length	1 mile (mi)	=	1.609 344[a]	kilometers (km)
	1 yard (yd)	=	0.914 4[a]	meters (m)
	1 foot (ft)	=	0.304 8[a]	meters (m)
	1 inch (in)	=	2.54[a]	centimeters (cm)
Area	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi^2)	=	2.589 988	square kilometers (km^2)
	1 square yard (yd^2)	=	0.836 127 4	square meters (m^2)
	1 square foot (ft^2)	=	0.092 903 04[a]	square meters (m^2)
	1 square inch (in^2)	=	6.451 6[a]	square centimeters (cm^2)
Energy	1 British thermal unit (Btu)[c]	=	1,055.055 852 62[a]	joules (J)
	1 calorie (cal)	=	4.186 8[a]	joules (J)
	1 kilowatthour (kWh)	=	3.6[a]	megajoules (MJ)
Temperature[d]	32 degrees Fahrenheit (ºF)	=	0[a]	degrees Celsius (ºC)
	212 degrees Fahrenheit (ºF)	=	100[a]	degrees Celsius (ºC)

[a]Exact conversion.
[b]Calculated by the U.S. Energy Information Administration.
[c]The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.
[d]To convert degrees Fahrenheit (ºF) to degrees Celsius (ºC) exactly, subtract 32, then multiply by 5/9.

Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading. • Most metric units belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units. For more information about the SI units, see http://physics.nist.gov/cuu/Units/index.html.

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

Sources: • General Services Administration, Federal Standard 376B, *Preferred Metric Units for General Use by the Federal Government* (Washington, DC, January 1993), pp. 9-11, 13, and 16. • U.S. Department of Commerce, National Institute of Standards and Technology, Special Publications 330, 811, and 814. • American National Standards Institute/Institute of Electrical and Electronic Engineers, ANSI/IEEE Std 268-1992, pp. 28 and 29.

Table B2. Metric Prefixes

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

Web Page: http ://www.eia.gov/totalenergy/data/monthly/#appendices.
Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p.10.

Table B3. Other Physical Conversion Factors

Energy Source	Original Unit		Equivalent in Final Units	
Petroleum	1 barrel (bbl)	=	42[a]	U.S. gallons (gal)
Coal	1 short ton	=	2,000[a]	pounds (lb)
	1 long ton	=	2,240[a]	pounds (lb)
	1 metric ton (t)	=	1,000[a]	kilograms (kg)
Wood	1 cord (cd)	=	1.25[b]	shorts tons
	1 cord (cd)	=	128[a]	cubic feet (ft^3)

[a]Exact conversion.
[b]Calculated by the U.S. Energy Information Administration.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#appendices.
Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B-10, C-17 and C-21.

THIS PAGE INTENTIONALLY LEFT BLANK

Glossary

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

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

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

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

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

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

ASTM: The American Society for Testing and Materials.

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

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

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

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

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

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

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

Biomass: Organic non-fossil material of biological origin constituting a **renewable energy** source. See **Biodiesel**,

Biofuels, **Biomass Waste, Fuel Ethanol**, and **Wood and Wood-Derived Fuels.**

Biomass Waste: Organic non-fossil material of biological origin that is a byproduct or a discarded product. "Biomass waste" includes municipal solid waste from **biogenic** sources, landfill gas, sludge waste, agricultural crop byproducts, straw, and other **biomass** solids, liquids, and gases; but excludes **wood and wood-derived fuels** (including **black liquor**), **biofuels** feedstock, **biodiesel**, and **fuel ethanol**. **Note:** EIA "biomass waste" data also include energy crops grown specifically for energy production, which would not normally constitute waste.

Bituminous Coal: A dense **coal**, usually black, sometimes dark brown, often with well-defined bands of bright and dull material, used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make **coke**. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Black Liquor: A byproduct of the paper production process, alkaline spent liquor, that can be used as a source of energy. Alkaline spent liquor is removed from the digesters in the process of chemically pulping wood. After evaporation, the residual "black" liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.

British Thermal Unit (Btu): The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit). See **Heat Content**.

Btu: See **British Thermal Unit.**

Btu Conversion Factor: A factor for converting **energy** data between one unit of measurement and **British thermal units (Btu)**. Btu conversion factors are generally used to convert energy data from physical units of measure (such as **barrels**, **cubic feet**, or **short tons**) into the energy-equivalent measure of Btu. (See http://www.eia.gov/totalenergy/data/monthly/#appendices for further information on Btu conversion factors.)

Butane: A normally gaseous straight-chain or branched-chain hydrocarbon (C_4H_{10}). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Isobutane: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9º F. It is extracted from natural gas or refinery gas streams.

Normal Butane: A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1º F. It is extracted from natural gas or refinery gas streams.

Butylene: An olefinic hydrocarbon (C_4H_8) recovered from refinery processes.

Capacity Factor: The ratio of the electrical energy produced by a generating unit for a given period of time to the electrical energy that could have been produced at continuous full-power operation during the same period.

Carbon Dioxide (CO_2): A colorless, odorless, non-poisonous gas that is a normal part of Earth's atmosphere. Carbon dioxide is a product of **fossil-fuel** combustion as well as other processes. It is considered a **greenhouse gas** as it traps heat (infrared energy) radiated by the Earth into the atmosphere and thereby contributes to the potential for **global warming**. The **global warming potential** (GWP) of other greenhouse gases is measured in relation to that of carbon dioxide, which by international scientific convention is assigned a value of one (1).

Chained Dollars: A measure used to express **real prices**. Real prices are those that have been adjusted to remove the effect of changes in the purchasing power of the dollar; they usually reflect buying power relative to a reference year. Prior to 1996, real prices were expressed in constant dollars, a measure based on the weights of goods and services in a single year, usually a recent year. In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period and is therefore subject to less distortion over time.

CIF: See **Cost, Insurance, Freight**.

Citygate: A point or measuring station at which a distribution gas utility receives gas from a natural gas pipeline company or transmission system.

Climate Change: A term used to refer to all forms of climatic inconsistency, but especially to significant change from one prevailing climatic condition to another. In some cases, "climate change" has been used synonymously with the term **"global warming"**; scientists, however, tend to use the term in a wider sense inclusive of natural changes in climate, including climatic cooling.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time. See **Anthracite, Bituminous Coal**, **Lignite**, **Subbituminous Coal**, **Waste Coal**, and **Coal Synfuel**.

Coal Coke: See **Coke, Coal**.

Coal Stocks: Coal quantities that are held in storage for future use and disposition. Note: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of the period.

Coal Synfuel: **Coal**-based solid fuel that has been processed by a **coal synfuel plant**; and coal-based fuels such as briquettes, pellets, or extrusions, which are formed from fresh or recycled coal and binding materials.

Coal Synfuel Plant: A plant engaged in the chemical transformation of **coal** into **coal synfuel**.

Coke, Coal: A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000º F so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke (coal) has a heating value of 24.8 million Btu per ton.

Coke, Petroleum: A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (42 U.S. gallons each) per short ton. Coke (petroleum) has a heating value of 6.024 million Btu per barrel.

Coking Coal: Bituminous coal suitable for making coke. See **Coke, Coal**.

Combined-Heat-and-Power (CHP) Plant: A plant designed to produce both heat and electricity from a single heat source. Note: This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

Commercial Sector: An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. *Note*: This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments. Various EIA programs differ in sectoral coverage-for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebcom.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

Completion: The installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir, the definition of a well (classified as an oil well or gas well) and the definition of a completion are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a well is not synonymous with a completion.

Conventional Gasoline: Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. *Note*: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

Conventional Hydroelectric Power: Hydroelectric power generated from flowing water that is not created by **hydroelectric pumped storage**.

Conversion Factor: A factor for converting data between one unit of measurement and another (such as between **short tons** and **British thermal units**, or between **barrels** and gallons). (See http://www.eia.gov/totalenergy/data/monthly/#appendices for further information on conversion factors.) See **Btu Conversion Factor** and **Thermal Conversion Factor**.

Cost, Insurance, Freight (CIF): A sales transaction in which the seller pays for the transportation and insurance of the goods to the port of destination specified by the buyer.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include: 1) small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included; 2) small amounts of nonhydrocarbons produced with the oil, such as sulfur and

various metals; and 3) drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude Oil F.O.B. Price: The crude oil price actually charged at the oil-producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

Crude Oil Landed Cost: The price of crude oil at the port of discharge, including charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).

Crude Oil Refinery Input: The total crude oil put into processing units at refineries.

Crude Oil Stocks: Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

Crude Oil Used Directly: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

Crude Oil Well: A well completed for the production of crude oil from one or more oil zones or reservoirs. Wells producing both crude oil and natural gas are classified as oil wells.

Cubic Foot (Natural Gas): A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60º F.

Degree-Day Normals: Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1961-1990). The averages may be simple degree-day normals or population-weighted degree-day normals.

Degree-Days, Cooling (CDD): A measure of how warm a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the base temperature (65 degrees) from the average of the day's high and low temperatures, with negative values set equal to zero. Each day's cooling degree-days are summed to create a cooling degree-day measure for a specified reference period. Cooling degree-days are used in energy analysis as an indicator of air conditioning energy requirements or use.

Degree-Days, Heating (HDD): A measure of how cold a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the average of the day's high and low temperatures from the base temperature (65 degrees), with negative values set equal to zero. Each day's heating degree-days are summed to create a heating degree-day measure for a specified reference period. Heating degree-days are used in energy analysis as an indicator of space heating energy requirements or use.

Degree-Days, Population-Weighted: Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree-days, each State is divided into from one to nine climatically homogeneous divisions, which are assigned weights based on the ratio of the population of the division to the total population of the State. Degree-day readings for each division are multiplied by the corresponding population weight for each division and those products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions, each comprising from three to eight States, which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and those products are then summed to arrive at the national population-weighted degree-day figure.

Denaturant: **Petroleum**, typically **pentanes plus** or **conventional motor gasoline**, added to **fuel ethanol** to make it unfit for human consumption. Fuel ethanol is denatured, usually prior to transport from the ethanol production facility, by adding 2 to 5 volume percent denaturant. See **Fuel Ethanol** and **Fuel Ethanol Minus Denaturant**.

Design Electrical Rating, Net: The nominal net electrical output of a nuclear unit as specified by the electric utility for the purpose of plant design.

Development Well: A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

Diesel Fuel: A fuel composed of **distillate fuel oils** obtained in petroleum refining operation or blends of such distillate fuel oils with **residual fuel oil** used in motor vehicles. The boiling point and specific gravity are higher for diesel fuels than for gasoline.

Direct Use: Use of electricity that 1) is self-generated, 2) is produced by either the same entity that consumes the power or an affiliate, and 3) is used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of **station use**.

Distillate Fuel Oil: A general classification for one of the **petroleum** fractions produced in conventional distillation operations. It includes **diesel fuels** and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and **electricity generation**.

Dry Hole: An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

Dry Natural Gas Production: See **Natural Gas (Dry) Production**.

E85: A fuel containing a mixture of 85 percent **ethanol** and 15 percent **motor gasoline**.

Electric Power Plant: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Power Sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public-i.e., North American Industry Classification System 22 plants. See also **Combined-Heat-and-Power (CHP) Plant**, **Electricity-Only Plant**, **Electric Utility**, and **Independent Power Producer**.

Electric Utility: Any entity that generates, transmits, or distributes **electricity** and recovers the cost of its generation, transmission or distribution assets and operations, either directly or indirectly, through cost-based rates set by a separate regulatory authority (e.g., State Public Service Commission), or is owned by a governmental unit or the consumers that the entity serves. Examples of these entities include: investor-owned entities, public power districts, public utility districts, municipalities, rural electric cooperatives, and State and Federal agencies. Electric utilities may have Federal Energy Regulatory Commission approval for interconnection agreements and wholesale trade tariffs covering either cost-of-service and/or market-based rates under the authority of the Federal Power Act. See **Electric Power Sector**.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

Electricity: A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.

Electricity Generation: The process of producing electric energy, or the amount of electric energy produced by transforming other forms of energy, commonly expressed in **kilowatthours** (kWh) or megawatthours (Mwh).

Electricity Generation, Gross: The total amount of electric energy produced by generating units and measured at the generating terminal in **kilowatthours** (kWh) or megawatthours (MWh).

Electricity Generation, Net: The amount of **gross electricity generation** less **station use** (the **electric energy** consumed at the generating station(s) for station service or auxiliaries). *Note*: Electricity required for pumping at **hydroelectric pumped-storage** plants is regarded as electricity for station service and is deducted from gross generation.

Electricity-Only Plant: A plant designed to produce electricity only. See also **Combined-Heat-and-Power (CHP) Plant**.

Electricity Retail Sales: The amount of electricity sold to customers purchasing electricity for their own use and not for resale.

End-Use Sectors: The **residential**, **commercial**, **industrial**, and **transportation** sectors of the economy.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy Consumption: The use of energy as a source of heat or power or as an input in the manufacturing process.

Energy Service Provider: An energy entity that provides service to a retail or end-use customer.

Energy-Use Sectors: A group of major energy-consuming components of U.S. society developed to measure and

analyze energy use. The sectors most commonly referred to in EIA are: **residential**, **commercial**, **industrial**, **transportation**, and **electric power**.

Ethane: A normally gaseous straight-chain hydrocarbon (C_2H_6). It is a colorless, paraffinic gas that boils at a temperature of -127.48º F. It is extracted from natural gas and refinery gas streams.

Ethanol (C_2H_5OH): A clear, colorless, flammable **alcohol**. Ethanol is typically produced biologically from **biomass** feedstocks such as agricultural crops and cellulosic residues from agricultural crops or wood. Ethanol can also be produced chemically from **ethylene**. See **Biomass**, **Fuel Ethanol**, and **Fuel Ethanol Minus Denaturant**.

Ethylene: An olefinic hydrocarbon (C2H4) recovered from refinery processes or petrochemical processes.

Exploratory Well: A well drilled to find and produce oil or gas in an area previously considered an unproductive area, to find a new reservoir in a known field (i.e., one previously found to be producing oil or gas in another reservoir), or to extend the limit of a known oil or gas reservoir.

Exports: Shipments of goods from within the 50 States and the District of Columbia to U.S. possessions and territories or to foreign countries.

Extraction Loss: The reduction in volume of natural gas due to the removal of natural gas liquid constituents, such as ethane, propane, and butane, at natural gas processing plants.

Federal Energy Administration (FEA): A predecessor of the U.S. Energy Information Administration.

Federal Energy Regulatory Commission (FERC): The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the U.S. Department of Energy and is the successor to the Federal Power Commission.

Federal Power Commission (FPC): The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the U.S. Department of Energy was created. Its functions were divided between the U.S. Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

First Purchase Price: The price for domestic crude oil reported by the company that owns the crude oil the first time it is removed from the lease boundary.

Flared Natural Gas: Natural gas burned in flares on the base site or at gas processing plants.

F.O.B. (Free on Board): A sales transaction in which the seller makes the product available for pick up at a specified port or terminal at a specified price and the buyer pays for the subsequent transportation and insurance.

Footage Drilled: Total footage for wells in various categories, as reported for any specified period, includes (1) the deepest total depth (length of well bores) of all wells drilled from the surface, (2) the total of all bypassed footage drilled in connection with reported wells, and (3) all new footage drilled for directional sidetrack wells. Footage reported for directional sidetrack wells does not include footage in the common bore, which is reported as footage for the original well. In the case of old wells drilled deeper, the reported footage is that which was drilled below the total depth of the old well.

Former U.S.S.R.: See **Union of Soviet Socialist Republics (U.S.S.R.).**

Fossil Fuel: An energy source formed in the Earth's crust from decayed organic material, such as **petroleum**, **coal**, and **natural gas**.

Fossil-Fueled Steam-Electric Power Plant: An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

Fuel Ethanol: Ethanol intended for fuel use. Fuel ethanol in the United States must be anhydrous (less than 1 percent water). Fuel ethanol is denatured (made unfit for human consumption), usually prior to transport from the ethanol production facility, by adding 2 to 5 volume percent petroleum, typically **pentanes plus** or **conventional motor gasoline**. Fuel ethanol is used principally for blending in low concentrations with **motor gasoline** as an **oxygenate** or octane enhancer. In high concentrations, it is used to fuel **alternative-fuel vehicles** specially designed for its use. See **Alternative-Fuel Vehicle**, **Denaturant**, **E85**, **Ethanol**, **Fuel Ethanol Minus Denaturant**, and **Oxygenates**.

Fuel Ethanol Minus Denaturant: An unobserved quantity of anhydrous, **biomass**-derived, undenatured **ethanol** for fuel use. The quantity is obtained by subtracting the estimated **denaturant** volume from **fuel ethanol** volume. Fuel ethanol minus denaturant is counted as **renewable energy**, while denaturant is counted as **nonrenewable fuel**. See **Denaturant**, **Ethanol**, **Fuel Ethanol**, **Nonrenewable Fuels**, **Oxygenates**, and **Renewable Energy**.

Full-Power Operation: Operation of a nuclear generating unit at 100 percent of its design capacity. Full-power operation precedes commercial operation.

Gasohol: A blend of finished motor gasoline containing alcohol (generally **ethanol** but sometimes methanol) at a concentration between 5.7 percent and 10 percent by volume. See **Motor Gasoline, Oxygenated**.

Gas Well: A well completed for the production of natural gas from one or more gas zones or reservoirs. (Wells producing both crude oil and natural gas are classified as oil wells.)

Geothermal Energy: Hot water or steam extracted from geothermal reservoirs in the earth's crust and used for geothermal heat pumps, water heating, or electricity generation.

Global Warming: An increase in the near-surface temperature of the Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is today most often used to refer to the warming some scientists predict will occur as a result of increased **anthropogenic** emissions of **greenhouse gases**. See **Climate Change**.

Global Warming Potential (GWP): An index used to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. GWPs are calculated as the ratio of the radiative forcing that would result from the emission of one kilogram of a **greenhouse gas** to that from the emission of one kilogram of **carbon dioxide** over a fixed period of time, such as 100 years.

Greenhouse Gases: Those gases, such as water vapor, **carbon dioxide**, nitrous oxide, **methane**, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride, that are transparent to solar (short-wave) radiation but opaque to long-wave (infrared) radiation, thus preventing long-wave radiant energy from leaving Earth's atmosphere. The net effect is a trapping of absorbed radiation and a tendency to warm the planet's surface.

Gross Domestic Product (GDP): The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.

GT/IC: Gas turbine and internal combustion plants.

Heat Content: The amount of heat energy available to be released by the transformation or use of a specified physical unit of an energy form (e.g., a ton of coal, a barrel of oil, a kilowatthour of electricity, a cubic foot of natural gas, or a pound of steam). The amount of heat energy is commonly expressed in **British thermal units (Btu)**. *Note*: Heat content of combustible energy forms can be expressed in terms of either gross heat content (higher or upper heating value) or net heat content (lower heating value), depending upon whether or not the available heat energy includes or excludes the energy used to vaporize water (contained in the original energy form or created during the combustion process). The U.S. Energy Information Administration typically uses gross heat content values.

Heat Rate: A measure of generating station thermal efficiency commonly stated as **Btu** per **kilowatthour**. *Note:* Heat rates can be expressed as either gross or net heat rates, depending whether the electricity output is gross or net generation. Heat rates are typically expressed as net heat rates.

Hydrocarbon: An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from the simplest (methane, the primary constituent of natural gas) to the very heavy and very complex.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Hydroelectric Power Plant: A plant in which the turbine generators are driven by falling water.

Hydroelectric Pumped Storage: Hydroelectricity that is generated during peak load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Hydrogen (H): The lightest of all gases, hydrogen occurs chiefly in combination with oxygen in water. It also exists in acids, bases, **alcohols**, **petroleum**, and other **hydrocarbons**.

Imports: Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

Independent Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an **electric utility**.

Industrial Sector: An **energy**-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (**NAICS** codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes **generators** that produce **electricity** and/or **useful thermal output** primarily to support the

above-mentioned industrial activities. Various EIA programs differ in sectoral coverage-for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebind.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

Injections (Natural Gas): Natural gas injected into storage reservoirs.

Isobutane: A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams. See **Butane**.

Isobutylene: An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isopentane: A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Jet Fuel: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

Jet Fuel, Kerosene-Type: A kerosene-based product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It isused primarily for commercial turbojet and turboprop aircraft engines.

Jet Fuel, Naphtha-Type: A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290° to 470° F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

Kerosene: A petroleum distillate having a maximum distillation temperature of 401º F at the 10-percent recovery point, a final boiling point of 572º F, and a minimum flash point of 100º F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

Kilowatt: A unit of electrical power equal to 1,000 **watts**.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 **kilowatt** (1,000 **watts**) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu. See **Watthour**.

Landed Costs: The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).

Lease and Plant Fuel: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. Note: This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

Lignite: The lowest rank of **coal**, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Liquefied Natural Gas (LNG): Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260º F at atmospheric pressure.

Liquefied Petroleum Gases (LPG): Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

Low-Power Testing: The period of time between a nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during that period is 5 percent of the unit's design thermal rating.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Lubricant categories are paraffinic and naphthenic.

Marketed Production (Natural Gas): Gross withdrawals less gas used for repressuring, quantities vented and

flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations.

Methane: A colorless, flammable, odorless, hydrocarbon gas (CH_4) that is the principal constituent of natural gas. It is also an important source of hydrogen in various industrial processes.

Methyl Tertiary Butyl Ether (MTBE): An ether, $(CH_3)_3COCH_3$, intended for motor gasoline blending. See **Oxygenates**.

Methanol: A light, volatile alcohol (CH_3OH) eligible for motor gasoline blending. See **Oxygenates**.

Miscellaneous Petroleum Products: All finished petroleum products not classified elsewhere-for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline Blending: Mechanical mixing of **motor gasoline blending components** and **oxygenates** as required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components: Naphtha (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. *Note*: oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Motor Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122ºF to 158ºF at the 10-percent recovery point to 365ºF to 374ºF at the 90-percent recovery point. "Motor gasoline" includes conventional gasoline, all types of oxygenated gasoline including gasohol, and reformulated gasoline, but excludes aviation gasoline. Note: Volumetric data on blending components, as well as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

Motor Gasoline Grades: The classification of gasoline by octane ratings. Each type of gasoline (conventional, oxygenated, and reformulated) is classified by three grades: regular, midgrade, and premium. *Note*: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.

Regular Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Midgrade Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Premium Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Motor Gasoline, Oxygenated: Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 2.7 percent or higher by weight and required by the U.S. Environmental Protection Agency (EPA) to be sold in areas designated by EPA as carbon monoxide (CO) nonattainment areas. Note: Oxygenated gasoline excludes oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB). Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside CO nonattainment areas are included in data on oxygenated gasoline. Other data on gasohol are included in data on conventional gasoline.

Motor Gasoline, Reformulated: Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. Note: This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Motor Gasoline Retail Prices: Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). Those prices are collected in 85 urban areas selected to represent all urban consumers-about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service.

Motor Gasoline (Total): For stock level data, a sum including finished motor gasoline stocks plus stocks of

motor gasoline blending components but excluding stocks of oxygenates.

MTBE: See **Methyl Tertiary Butyl Ether**.

NAICS (North American Industry Classification System): A coding system developed jointly by the United States, Canada, and Mexico to classify businesses and industries according to the type of economic activity in which they are engaged. NAICS replaces the Standard Industrial Classification (SIC) codes. For additional information on NAICS, go to http://www.census.gov/eos/www/naics/.

Naphtha: A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400º F.

Natural Gas: A gaseous mixture of hydrocarbon compounds, primarily methane, used as a fuel for electricity generation and in a variety of ways in buildings, and as raw material input and fuel for industrial processes.

Natural Gas, Dry: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. *Note:* Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Natural Gas (Dry) Production: The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the production site include 1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and 2) gas vented and flared. Processing losses include 1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and 2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less extraction loss.

Natural Gas Marketed Production: Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring; nonhydrocarbon gases removed in treating and processing operations; and quantities vented and flared.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Material as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Wellhead Price: The wellhead price of natural gas is calculated by dividing the total reported value at the wellhead by the total quantity produced as reported by the appropriate agencies of individual producing States and the U.S. Minerals Management Service. The price includes all costs prior to shipment from the lease, including gathering and compression costs, in addition to State production, severance, and similar charges.

Natural Gasoline: A mixture of hydrocarbons (mostly pentanes and heavier) extracted from natural gas that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Summer Capacity: The maximum output, commonly expressed in **kilowatts** (kW) or megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of June 1 through September 30). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

Neutral Zone: A 6,200 square-mile area shared equally between Kuwait and Saudi Arabia under a 1992 agreement. The Neutral Zone contains an estimated 5 billion barrels of oil and 8 trillion cubic feet of natural gas.

Nominal Dollars: A measure used to express **nominal price**.

Nominal Price: The price paid for a product or service at the time of the transaction. Nominal prices are those that have not been adjusted to remove the effect of changes in the purchasing power of the dollar; they reflect buying power in the year in which the transaction occurred.

Non-Biomass Waste: Material of non-biological origin that is a byproduct or a discarded product. "Non-biomass waste" includes municipal solid waste from non-biogenic sources**,** such as plastics, and tire-derived fuels.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Nonrenewable Fuels: Fuels that cannot be easily made or "renewed," such as **crude oil**, **natural gas**, and **coal**.

Nuclear Electric Power (Nuclear Power): Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.

Nuclear Electric Power Plant: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

Nuclear Reactor: An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

OECD: See **Organization for Economic Cooperation and Development**.

Offshore: That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

Oil: See **Crude Oil**.

OPEC: See **Organization of the Petroleum Exporting Countries.**

Operable Unit (Nuclear): In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

Organization for Economic Cooperation and Development (OECD): An international organization helping governments tackle the economic, social and governance challenges of a globalized economy. Its membership comprises about 30 member countries. With active relationships with some 70 other countries, non-governmental organizations (NGOs) and civil society, it has a global reach. For details about the organization, see http://www.oecd.org.

Organization of the Petroleum Exporting Countries (OPEC): An intergovernmental organization whose stated objective is to "coordinate and unify the petroleum policies of member countries." It was created at the Baghdad Conference on September 10–14, 1960. Current members (with years of membership) include Algeria (1969–present), Angola (2007–present), Ecuador (1973–1992 and 2007–present), Iran (1960–present), Iraq (1960–present), Kuwait (1960–present), Libya (1962–present), Nigeria (1971–present), Qatar (1961–present), Saudi Arabia (1960–present), United Arab Emirates (1967–present), and Venezuela (1960–present). Countries no longer members of OPEC include Gabon (1975–1994) and Indonesia (1962–2008).

Oxygenates: Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. **Ethanol, Methyl Tertiary Butyl Ether (MTBE),** Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

PAD Districts: Petroleum Administration for Defense Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

Pentanes Plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Petrochemical Feedstocks: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics.

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: See **Coke, Petroleum**.

Petroleum Consumption: See **Products Supplied (Petroleum).**

Petroleum Imports: Imports of petroleum into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas,

lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Stocks, Primary: For individual products, quantities that are held at refineries, in pipelines, and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.

Photovoltaic Energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquid at gas inlet separators or scrubbers in processing plants.

Primary Energy: **Energy** in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy. For example, **coal** can be converted to synthetic gas, which can be converted to **electricity**; in this example, coal is primary energy, synthetic gas is secondary energy, and electricity is tertiary energy. See **Primary Energy Production** and **Primary Energy Consumption**.

Primary Energy Consumption: Consumption of **primary energy**. (Energy sources that are produced from other energy sources—e.g., **coal coke** from **coal**—are included in primary energy consumption only if their energy content has not already been included as part of the original energy source. Thus, U.S. primary energy consumption does include net imports of coal coke, but not the coal coke produced from domestic coal.) The U.S. Energy Information Administration includes the following in U.S. primary energy consumption: coal consumption; coal coke net imports; **petroleum consumption** (**petroleum products supplied**, including **natural gas plant liquids** and **crude oil** burned as fuel); **dry natural gas**—excluding **supplemental gaseous fuels**—consumption; **nuclear electricity net generation** (converted to **Btu** using the nuclear plants **heat rate**); **conventional hydroelectricity** net generation (converted to Btu using the fossil-fueled plants heat rate); **geothermal** electricity net generation (converted to Btu using the 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.