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February 2011

Monthly Energy Review

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U.S. Energy Information Administration

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...."*

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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.

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- 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/mer/.

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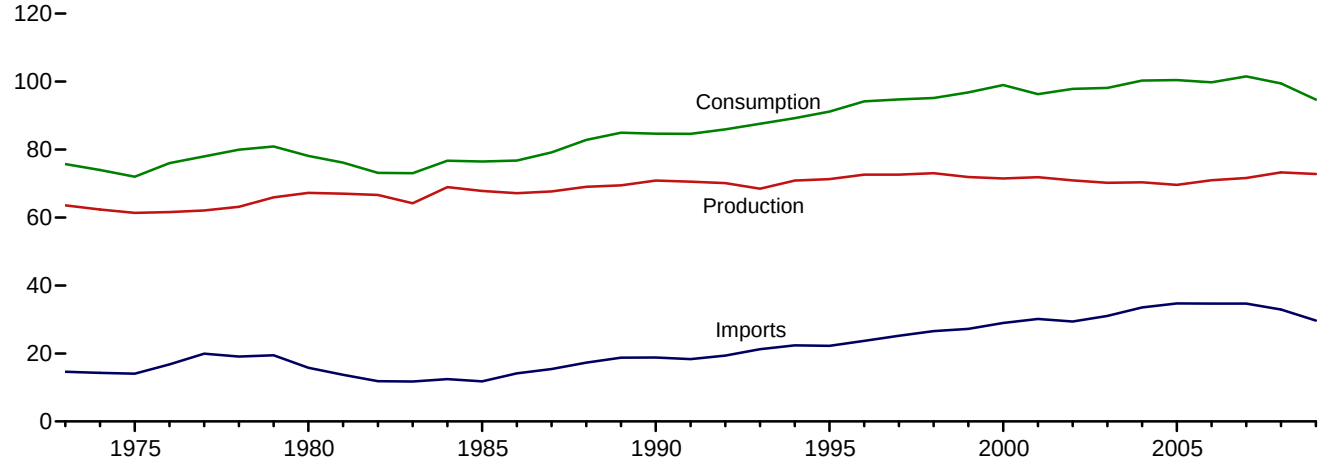
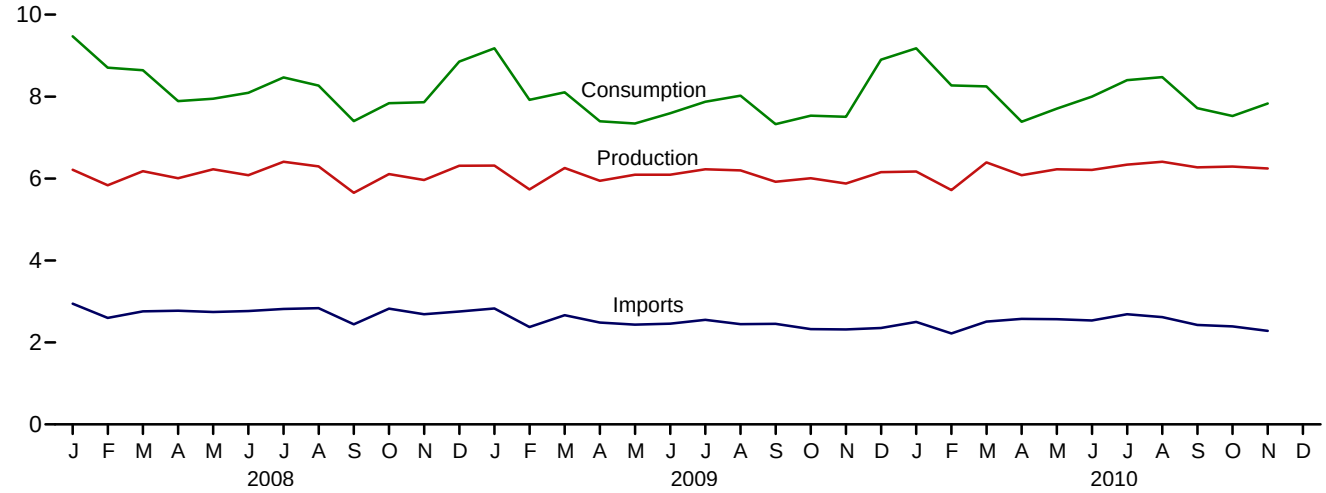
The continental United States at night from orbit. Source: National Oceanic and Atmospheric Administration satellite imagery; mosaic provided by U.S. Geological Survey.

Figure 1.1 Primary Energy Overview
(Quadrillion Btu)

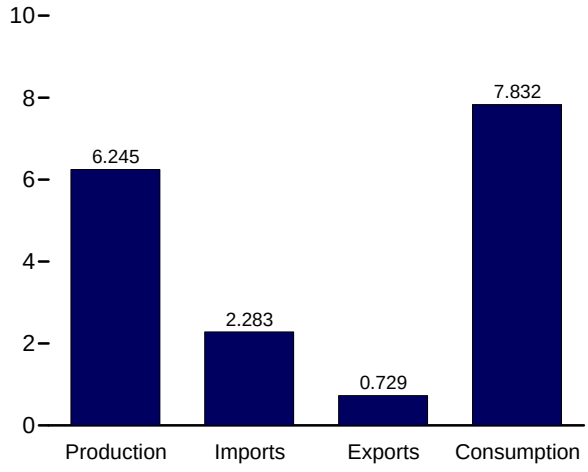
Consumption, Production, and Imports, 1973-2009



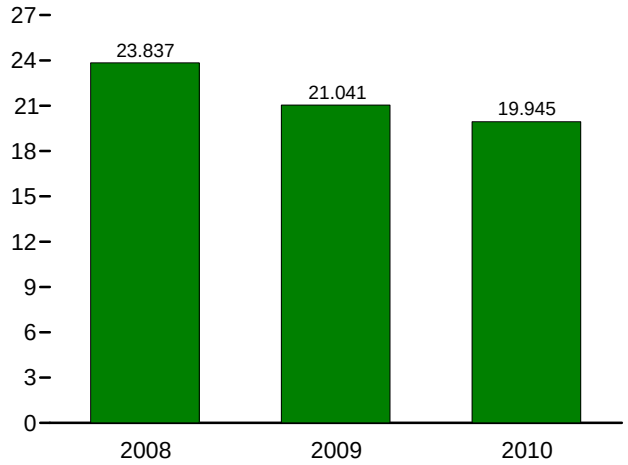
Consumption, Production, and Imports, Monthly



Overview, November 2010



Net Imports, January-November



Web Page: http://www.eia.gov/mer/overview.html.
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**	**4.433**	**63.585**	**14.613**	**2.033**	**12.580**	**-0.459**	**70.314**	**0.910**	**4.433**	**75.706**
1975 Total	**54.733**	**1.900**	**4.723**	**61.357**	**14.032**	**2.323**	**11.709**	**-1.065**	**65.357**	**1.900**	**4.723**	**72.001**
1980 Total	**59.008**	**2.739**	**5.485**	**67.232**	**15.796**	**3.695**	**12.101**	**-1.210**	**69.828**	**2.739**	**5.485**	**78.124**
1985 Total	**57.539**	**4.076**	**6.185**	**67.799**	**11.781**	**4.196**	**7.584**	**1.110**	**66.093**	**4.076**	**6.185**	**76.493**
1990 Total	**58.560**	**6.104**	**6.206**	**70.870**	**18.817**	**4.752**	**14.065**	**-.284**	**72.332**	**6.104**	**6.206**	**84.651**
1995 Total	**57.540**	**7.075**	**6.701**	**71.316**	**22.260**	**4.511**	**17.750**	**2.106**	**77.259**	**7.075**	**6.703**	**91.171**
1996 Total	**58.387**	**7.087**	**7.165**	**72.639**	**23.702**	**4.633**	**19.069**	**2.468**	**79.785**	**7.087**	**7.166**	**94.175**
1997 Total	**58.857**	**6.597**	**7.177**	**72.631**	**25.215**	**4.514**	**20.701**	**1.429**	**80.873**	**6.597**	**7.175**	**94.761**
1998 Total	**59.314**	**7.068**	**6.655**	**73.037**	**26.581**	**4.299**	**22.281**	**-.140**	**81.369**	**7.068**	**6.654**	**95.179**
1999 Total	**57.614**	**7.610**	**6.678**	**71.903**	**27.252**	**3.715**	**23.537**	**1.373**	**82.427**	**7.610**	**6.677**	**96.813**
2000 Total	**57.366**	**7.862**	**6.257**	**71.485**	**28.973**	**4.006**	**24.967**	**2.515**	**84.731**	**7.862**	**6.260**	**98.968**
2001 Total	**58.541**	**8.029**	**5.312**	**71.883**	**30.157**	**3.770**	**26.386**	**-1.952**	**82.902**	**8.029**	**5.311**	**96.316**
2002 Total	**56.894**	**8.145**	**5.892**	**70.931**	**29.407**	**3.668**	**25.739**	**1.182**	**83.747**	**8.145**	**5.888**	**97.852**
2003 Total	**56.099**	**7.959**	**6.139**	**70.197**	**31.061**	**4.054**	**27.007**	**.931**	**84.014**	**7.959**	**6.141**	**98.135**
2004 Total	**55.895**	**8.222**	**6.235**	**70.352**	**33.543**	**4.433**	**29.110**	**.850**	**85.805**	**8.222**	**6.247**	**100.313**
2005 Total	**55.038**	**8.161**	**6.393**	**69.592**	**34.708**	**4.559**	**30.149**	**.701**	**85.790**	**8.161**	**6.406**	**100.442**
2006 Total	**55.968**	**8.215**	**6.774**	**70.957**	**34.673**	**4.868**	**29.805**	**-.972**	**84.687**	**8.215**	**6.824**	**99.790**
2007 Total	**56.447**	**8.455**	**6.706**	**71.608**	**34.685**	**5.448**	**29.238**	**.686**	**86.251**	**8.455**	**6.719**	**101.532**
2008 January	4.862	.739	.615	6.216	2.947	.533	2.414	.841	8.109	.739	.611	9.470
February	4.597	.681	.557	5.835	2.600	.525	2.075	.795	7.457	.681	.557	8.706
March	4.881	.676	.620	6.178	2.759	.604	2.155	.311	7.348	.676	.613	8.645
April	4.786	.599	.622	6.007	2.774	.586	2.188	-.305	6.659	.599	.621	7.889
May	4.866	.678	.684	6.227	2.742	.618	2.124	-.403	6.583	.678	.680	7.949
June	4.657	.735	.690	6.082	2.766	.619	2.147	-.137	6.659	.735	.689	8.093
July	4.972	.777	.661	6.410	2.816	.603	2.212	-.154	7.016	.777	.661	8.468
August	4.924	.759	.614	6.297	2.836	.581	2.254	-.283	6.882	.759	.613	8.269
September	4.403	.701	.547	5.650	2.443	.514	1.929	-.178	6.143	.701	.548	7.402
October	4.884	.657	.568	6.109	2.825	.586	2.238	-.508	6.607	.657	.570	7.839
November	4.733	.663	.568	5.964	2.689	.589	2.100	-.202	6.629	.663	.566	7.862
December	4.917	.762	.632	6.311	2.756	.615	2.141	.399	7.447	.762	.635	8.852
Total	**57.482**	**8.427**	**7.379**	**73.288**	**32.952**	**6.973**	**25.978**	**.176**	**83.540**	**8.427**	**7.364**	**99.443**
2009 January	4.899	.775	.640	6.314	2.828	.592	2.236	.628	7.761	.775	.635	9.178
February	4.507	.672	.556	5.735	2.378	.499	1.879	.306	6.692	.672	.548	7.920
March	4.914	.703	.641	6.258	2.664	.557	2.106	-.260	6.758	.703	.639	8.104
April	4.655	.621	.667	5.944	2.487	.506	1.981	-.528	6.098	.621	.671	7.397
May	4.701	.684	.709	6.095	2.436	.534	1.902	-.652	5.937	.684	.714	7.344
June	4.664	.729	.701	6.094	2.457	.564	1.894	-.395	6.149	.729	.703	7.592
July	4.800	.763	.662	6.224	2.551	.617	1.934	-.286	6.434	.763	.662	7.873
August	4.808	.756	.634	6.197	2.446	.594	1.852	-.029	6.615	.756	.634	8.021
September	4.648	.688	.587	5.922	2.454	.598	1.856	-.450	6.044	.688	.585	7.327
October	4.757	.607	.645	6.009	2.326	.646	1.681	-.157	6.268	.607	.646	7.533
November	4.600	.618	.662	5.879	2.316	.597	1.720	-.090	6.225	.618	.657	7.508
December	4.702	.740	.713	6.154	2.352	.627	1.725	1.022	7.444	.740	.707	8.901
Total	**56.653**	**8.356**	**7.816**	**72.826**	**29.697**	**6.931**	**22.766**	**-.893**	**78.426**	**8.356**	**7.800**	**94.698**
2010 January	4.734	.759	.680	6.173	2.501	.589	1.911	R 1.095	R 7.733	.759	.673	R 9.179
February	4.423	.682	.614	5.719	2.220	.555	1.665	R .887	R 6.967	.682	.609	R 8.271
March	5.032	.676	.687	6.396	2.510	.648	1.861	R -.006	6.882	.676	.682	8.250
April	4.816	.603	.662	6.081	2.574	R .682	1.892	-.589	6.112	.603	.661	7.384
May	4.804	.697	.726	6.227	2.568	.702	1.867	-.386	6.282	.697	.724	7.708
June	4.738	.714	.758	6.210	2.535	.681	1.854	R -.067	6.513	.714	.761	R 7.997
July	4.882	.752	.706	6.340	R 2.689	.713	R 1.976	R .085	6.930	.752	.709	8.400
August	4.995	.749	.666	6.409	2.620	R .694	1.926	R .141	R 7.055	.749	.667	R 8.476
September	4.923	.726	.626	6.274	2.426	.670	R 1.756	-.311	R 6.366	.726	.626	R 7.719
October	R 4.991	.656	.646	R 6.293	R 2.393	R .711	R 1.682	R -.448	R 6.225	.656	.646	R 7.527
November	4.901	.655	.688	6.245	2.283	.729	1.554	.032	6.493	.655	.686	7.832
11-Month Total	**53.238**	**7.670**	**7.457**	**68.366**	**27.319**	**7.374**	**19.945**	**.433**	**73.558**	**7.670**	**7.443**	**88.744**
2009 11-Month Total	**51.952**	**7.616**	**7.103**	**66.671**	**27.345**	**6.304**	**21.041**	**-1.915**	**70.982**	**7.616**	**7.093**	**85.797**
2008 11-Month Total	**52.565**	**7.665**	**6.747**	**66.977**	**30.196**	**6.359**	**23.837**	**-.223**	**76.092**	**7.665**	**6.728**	**90.591**

[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.

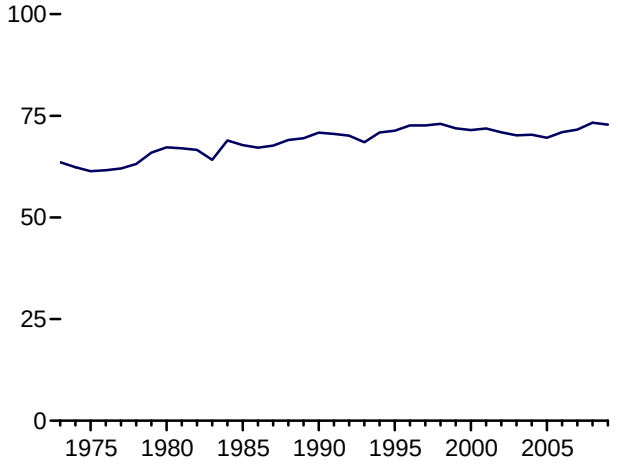
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

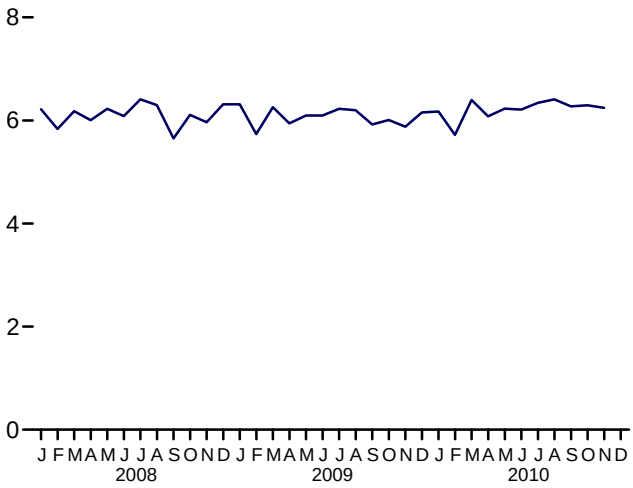
Sources: • **Production:** Table 1.2. • **Trade:** Tables 1.4a and 1.4b. • **Stock Change and Other:** Calculated as consumption minus production and net imports. • **Consumption:** Table 1.3.

Figure 1.2 Primary Energy Production
(Quadrillion Btu)

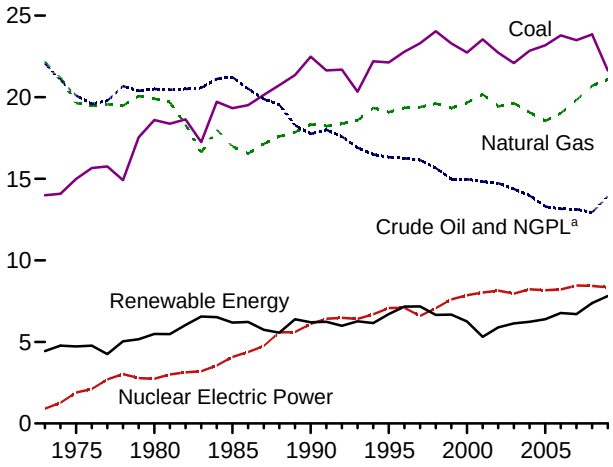
Total, 1973-2009



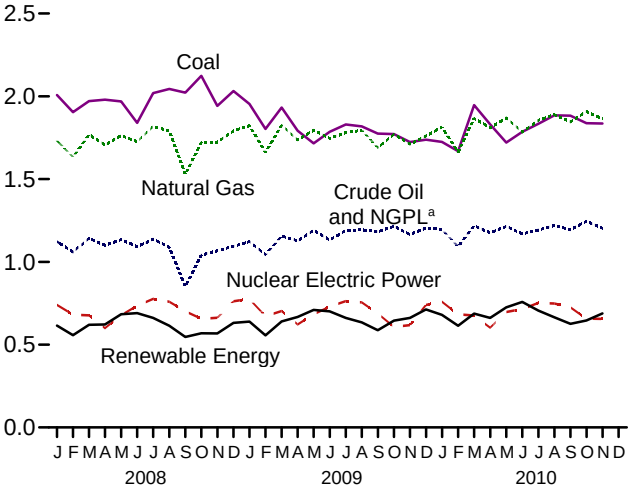
Total, Monthly



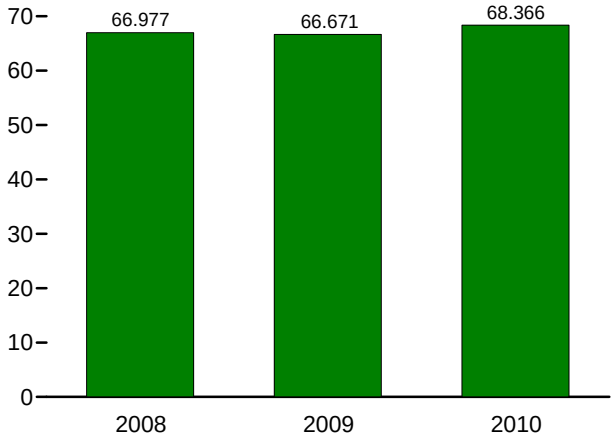
By Source, 1973-2009



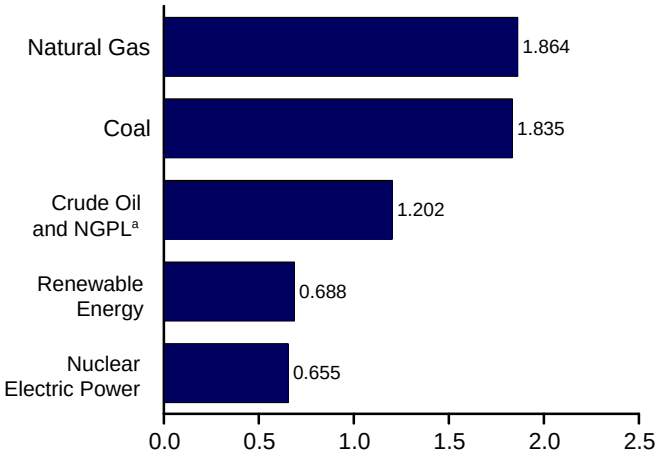
By Source, Monthly



Total, January-November



By Source, November 2010



[a] Natural gas plant liquids.
Web Page: http://www.eia.gov/mer/overview.html.
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**	**0.043**	**NA**	**NA**	**1.529**	**4.433**	**63.585**
1975 Total	**14.989**	**19.640**	**17.729**	**2.374**	**54.733**	**1.900**	**3.155**	**.070**	**NA**	**NA**	**1.499**	**4.723**	**61.357**
1980 Total	**18.598**	**19.908**	**18.249**	**2.254**	**59.008**	**2.739**	**2.900**	**.110**	**NA**	**NA**	**2.475**	**5.485**	**67.232**
1985 Total	**19.325**	**16.980**	**18.992**	**2.241**	**57.539**	**4.076**	**2.970**	**.198**	**(s)**	**(s)**	**3.016**	**6.185**	**67.799**
1990 Total	**22.488**	**18.326**	**15.571**	**2.175**	**58.560**	**6.104**	**3.046**	**.336**	**.060**	**.029**	**2.735**	**6.206**	**70.870**
1995 Total	**22.130**	**19.082**	**13.887**	**2.442**	**57.540**	**7.075**	**3.205**	**.294**	**.070**	**.033**	**3.099**	**6.701**	**71.316**
1996 Total	**22.790**	**19.344**	**13.723**	**2.530**	**58.387**	**7.087**	**3.590**	**.316**	**.071**	**.033**	**3.155**	**7.165**	**72.639**
1997 Total	**23.310**	**19.394**	**13.658**	**2.495**	**58.857**	**6.597**	**3.640**	**.325**	**.070**	**.034**	**3.108**	**7.177**	**72.631**
1998 Total	**24.045**	**19.613**	**13.235**	**2.420**	**59.314**	**7.068**	**3.297**	**.328**	**.070**	**.031**	**2.929**	**6.655**	**73.037**
1999 Total	**23.295**	**19.341**	**12.451**	**2.528**	**57.614**	**7.610**	**3.268**	**.331**	**.069**	**.046**	**2.965**	**6.678**	**71.903**
2000 Total	**22.735**	**19.662**	**12.358**	**2.611**	**57.366**	**7.862**	**2.811**	**.317**	**.066**	**.057**	**3.006**	**6.257**	**71.485**
2001 Total	**23.547**	**20.166**	**12.282**	**2.547**	**58.541**	**8.029**	**2.242**	**.311**	**.065**	**.070**	**2.624**	**5.312**	**71.883**
2002 Total	**22.732**	**19.439**	**12.163**	**2.559**	**56.894**	**8.145**	**2.689**	**.328**	**.064**	**.105**	**2.705**	**5.892**	**70.931**
2003 Total	**22.094**	**19.633**	**12.026**	**2.346**	**56.099**	**7.959**	**2.825**	**.331**	**.064**	**.115**	**2.805**	**6.139**	**70.197**
2004 Total	**22.852**	**19.074**	**11.503**	**2.466**	**55.895**	**8.222**	**2.690**	**.341**	**.064**	**.142**	**2.998**	**6.235**	**70.352**
2005 Total	**23.185**	**18.556**	**10.963**	**2.334**	**55.038**	**8.161**	**2.703**	**.343**	**.066**	**.178**	**3.104**	**6.393**	**69.592**
2006 Total	**23.790**	**19.022**	**10.801**	**2.356**	**55.968**	**8.215**	**2.869**	**.343**	**.072**	**.264**	**3.226**	**6.774**	**70.957**
2007 Total	**23.493**	**19.825**	**10.721**	**2.409**	**56.447**	**8.455**	**2.446**	**.349**	**.081**	**.341**	**3.489**	**6.706**	**71.608**
2008 January	2.008	1.731	.917	.206	4.862	.739	.205	.029	.008	.042	.331	.615	6.216
February	1.904	1.634	.862	.198	4.597	.681	.185	.026	.007	.038	.300	.557	5.835
March	1.970	1.769	.926	.215	4.881	.676	.214	.030	.008	.047	.321	.620	6.178
April	1.979	1.707	.890	.210	4.786	.599	.219	.029	.008	.051	.314	.622	6.007
May	1.969	1.763	.917	.217	4.866	.678	.268	.030	.008	.053	.324	.684	6.227
June	1.839	1.727	.887	.204	4.657	.735	.288	.030	.008	.051	.313	.690	6.082
July	2.019	1.817	.923	.214	4.972	.777	.252	.031	.009	.039	.330	.661	6.410
August	2.044	1.791	.880	.208	4.924	.759	.209	.031	.009	.032	.334	.614	6.297
September	2.022	1.529	.684	.168	4.403	.701	.159	.030	.008	.031	.319	.547	5.650
October	2.123	1.720	.840	.201	4.884	.657	.152	.031	.008	.047	.330	.568	6.109
November	1.942	1.724	.874	.193	4.733	.663	.154	.030	.008	.049	.327	.568	5.964
December	2.032	1.792	.909	.185	4.917	.762	.206	.030	.008	.065	.323	.632	6.311
Total	**23.851**	**20.703**	**10.509**	**2.419**	**57.482**	**8.427**	**2.511**	**.358**	**.097**	**.546**	**3.867**	**7.379**	**73.288**
2009 January	1.953	1.823	.927	.196	4.899	.775	.229	.032	.009	.058	.312	.640	6.314
February	1.803	1.661	.854	.189	4.507	.672	.174	.029	.008	.057	.289	.556	5.735
March	1.932	1.825	.940	.216	4.914	.703	.213	.032	.009	.069	.317	.641	6.258
April	1.792	1.737	.918	.209	4.655	.621	.252	.030	.009	.073	.304	.667	5.944
May	1.715	1.795	.967	.224	4.701	.684	.289	.031	.010	.061	.320	.709	6.095
June	1.785	1.746	.919	.213	4.664	.729	.285	.030	.009	.055	.322	.701	6.094
July	1.830	1.780	.971	.218	4.800	.763	.228	.031	.010	.048	.344	.662	6.224
August	1.818	1.795	.974	.220	4.808	.756	.191	.031	.010	.053	.349	.634	6.197
September	1.775	1.690	.965	.217	4.648	.688	.169	.030	.009	.045	.333	.587	5.922
October	1.772	1.770	.989	.226	4.757	.607	.192	.030	.009	.067	.347	.645	6.009
November	1.723	1.711	.944	.221	4.600	.618	.205	.031	.009	.067	.350	.662	5.879
December	1.738	1.760	.980	.224	4.702	.740	.241	.033	.009	.067	.362	.713	6.154
Total	**21.637**	**21.095**	**11.348**	**2.574**	**56.653**	**8.356**	**2.669**	**.369**	**.109**	**.721**	**3.948**	**7.816**	**72.826**
2010 January	1.724	E 1.814	E .977	.219	4.734	.759	.216	.033	.009	.068	.353	.680	6.173
February	1.668	E 1.663	E .887	.205	4.423	.682	.200	.030	.008	.054	.322	.614	5.719
March	1.947	E 1.867	E .989	.229	5.032	.676	.201	.033	.009	.085	.359	.687	6.396
April	1.831	E 1.810	E .956	.219	4.816	.603	.182	.031	.009	.096	.343	.662	6.081
May	1.721	E 1.869	E .983	.231	4.804	.697	.243	.033	.010	.085	.355	.726	6.227
June	1.786	E 1.783	E .951	.218	4.738	.714	.288	.032	.010	.078	.351	.758	6.210
July	1.834	E 1.855	E .972	.221	4.882	.752	.236	.032	.010	.065	.363	.706	6.340
August	1.885	E 1.890	E .990	.230	4.995	.749	.193	.032	.010	.065	.366	.666	6.409
September	1.883	E 1.845	E .969	.225	4.923	.726	.165	.031	.010	.069	.351	.626	6.274
October	1.838	RE 1.908	E 1.010	.235	R 4.991	.656	.170	.030	.009	.078	.359	.646	R 6.293
November	1.835	RE 1.864	E .973	.229	4.901	.655	.190	.032	.009	.096	.361	.688	6.245
11-Month Total	**19.952**	**E 20.168**	**E 10.658**	**2.461**	**53.238**	**7.670**	**2.283**	**.349**	**.104**	**.838**	**3.883**	**7.457**	**68.366**
2009 11-Month Total	**19.899**	**19.335**	**10.368**	**2.350**	**51.952**	**7.616**	**2.427**	**.336**	**.101**	**.654**	**3.586**	**7.103**	**66.671**
2008 11-Month Total	**21.820**	**18.911**	**9.599**	**2.235**	**52.565**	**7.665**	**2.306**	**.328**	**.089**	**.480**	**3.544**	**6.747**	**66.977**

[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.

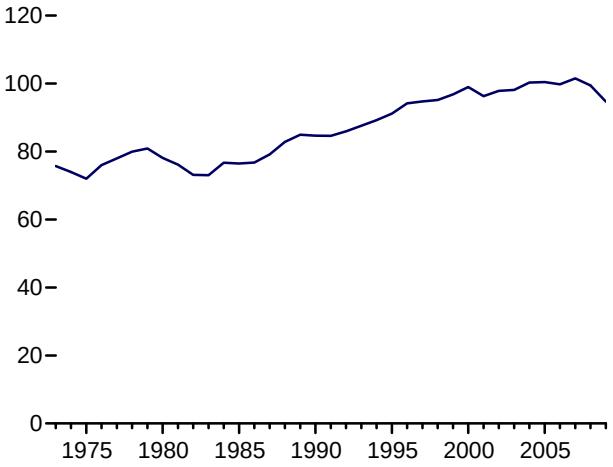
Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

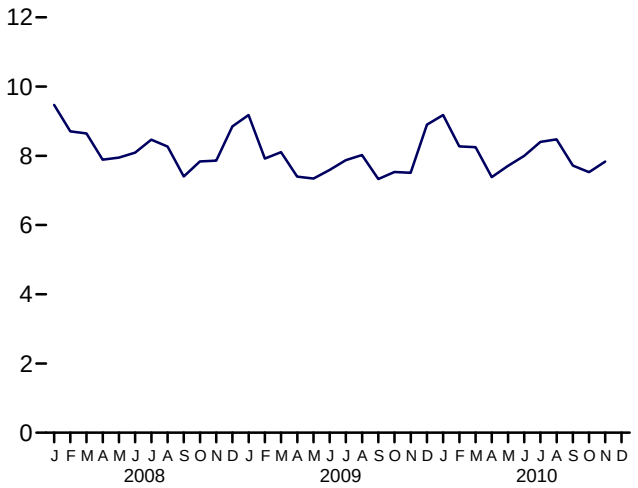
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas (Dry):** Tables 4.1 and A4. • **Crude Oil** and **Natural Gas Plant Liquids:** Tables 3.1 and A2. • **Nuclear Electric Power:** Tables 7.2a and A6 ("Nuclear Plants" heat rate). • **Renewable Energy:** Table 10.1.

Figure 1.3 Primary Energy Consumption
(Quadrillion Btu)

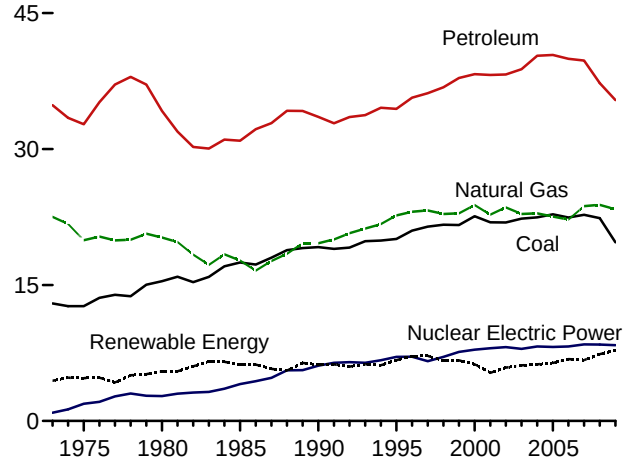
Total, 1973-2009



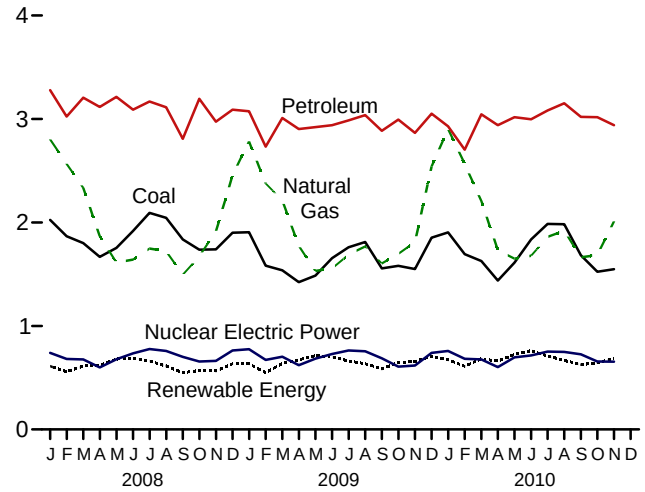
Total, Monthly



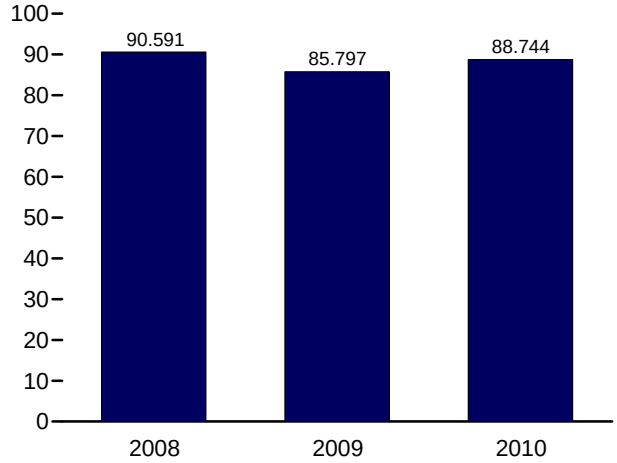
By Source,[a] 1973-2009



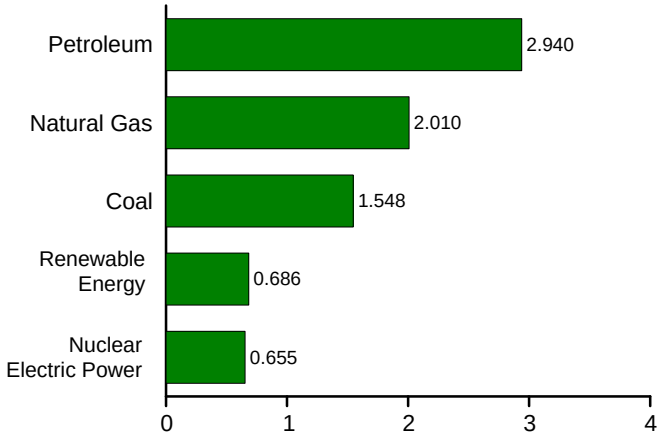
By Source,[a] Monthly



Total, January-November



By Source,[a] November 2010



[a] Small quantities of net imports of coal coke and electricity are not shown.
Web Page: http://www.eia.gov/mer/overview.html.
Source: Table 1.3.

Table 1.3 Primary Energy Consumption by Source

(Quadrillion Btu)

	Fossil Fuels					Renewable Energy[a]						
	Coal	Natural Gas[b]	Petroleum[c]	Total[d]	Nuclear Electric Power	Hydroelectric Power[e]	Geothermal	Solar/PV	Wind	Biomass	Total	Total[f]
1973 Total	**12.971**	**22.512**	**34.837**	**70.314**	**0.910**	**2.861**	**0.043**	**NA**	**NA**	**1.529**	**4.433**	**75.706**
1975 Total	**12.663**	**19.948**	**32.732**	**65.357**	**1.900**	**3.155**	**.070**	**NA**	**NA**	**1.499**	**4.723**	**72.001**
1980 Total	**15.423**	**20.235**	**34.205**	**69.828**	**2.739**	**2.900**	**.110**	**NA**	**NA**	**2.475**	**5.485**	**78.124**
1985 Total	**17.478**	**17.703**	**30.925**	**66.093**	**4.076**	**2.970**	**.198**	**(s)**	**(s)**	**3.016**	**6.185**	**76.493**
1990 Total	**19.173**	**19.603**	**33.552**	**72.332**	**6.104**	**3.046**	**.336**	**.060**	**.029**	**2.735**	**6.206**	**84.651**
1995 Total	**20.089**	**22.671**	**34.438**	**77.259**	**7.075**	**3.205**	**.294**	**.070**	**.033**	**3.101**	**6.703**	**91.171**
1996 Total	**21.002**	**23.085**	**35.675**	**79.785**	**7.087**	**3.590**	**.316**	**.071**	**.033**	**3.157**	**7.166**	**94.175**
1997 Total	**21.445**	**23.223**	**36.159**	**80.873**	**6.597**	**3.640**	**.325**	**.070**	**.034**	**3.105**	**7.175**	**94.761**
1998 Total	**21.656**	**22.830**	**36.816**	**81.369**	**7.068**	**3.297**	**.328**	**.070**	**.031**	**2.928**	**6.654**	**95.179**
1999 Total	**21.623**	**22.909**	**37.838**	**82.427**	**7.610**	**3.268**	**.331**	**.069**	**.046**	**2.963**	**6.677**	**96.813**
2000 Total	**22.580**	**23.824**	**38.262**	**84.731**	**7.862**	**2.811**	**.317**	**.066**	**.057**	**3.008**	**6.260**	**98.968**
2001 Total	**21.914**	**22.773**	**38.186**	**82.902**	**8.029**	**2.242**	**.311**	**.065**	**.070**	**2.622**	**5.311**	**96.316**
2002 Total	**21.904**	**23.558**	**38.224**	**83.747**	**8.145**	**2.689**	**.328**	**.064**	**.105**	**2.701**	**5.888**	**97.852**
2003 Total	**22.321**	**22.831**	**38.811**	**84.014**	**7.959**	**2.825**	**.331**	**.064**	**.115**	**2.807**	**6.141**	**98.135**
2004 Total	**22.466**	**22.909**	**40.292**	**85.805**	**8.222**	**2.690**	**.341**	**.064**	**.142**	**3.010**	**6.247**	**100.313**
2005 Total	**22.797**	**22.561**	**40.388**	**85.790**	**8.161**	**2.703**	**.343**	**.066**	**.178**	**3.117**	**6.406**	**100.442**
2006 Total	**22.447**	**22.224**	**39.955**	**84.687**	**8.215**	**2.869**	**.343**	**.072**	**.264**	**3.277**	**6.824**	**99.790**
2007 Total	**22.749**	**23.702**	**39.774**	**86.251**	**8.455**	**2.446**	**.349**	**.081**	**.341**	**3.503**	**6.719**	**101.532**
2008 January	2.025	2.802	3.278	8.109	.739	.205	.029	.008	.042	.327	.611	9.470
February	1.867	2.565	3.024	7.457	.681	.185	.026	.007	.038	.300	.557	8.706
March	1.801	2.333	3.206	7.348	.676	.214	.030	.008	.047	.314	.613	8.645
April	1.667	1.867	3.117	6.659	.599	.219	.029	.008	.051	.313	.621	7.889
May	1.754	1.613	3.213	6.583	.678	.268	.030	.008	.053	.320	.680	7.949
June	1.919	1.642	3.090	6.659	.735	.288	.030	.008	.051	.312	.689	8.093
July	2.092	1.749	3.169	7.016	.777	.252	.031	.009	.039	.330	.661	8.468
August	2.045	1.722	3.114	6.882	.759	.209	.031	.009	.032	.332	.613	8.269
September	1.836	1.495	2.809	6.143	.701	.159	.030	.008	.031	.320	.548	7.402
October	1.737	1.674	3.195	6.607	.657	.152	.031	.008	.047	.332	.570	7.839
November	1.741	1.913	2.973	6.629	.663	.154	.030	.008	.049	.325	.566	7.862
December	1.901	2.458	3.091	7.447	.762	.206	.030	.008	.065	.326	.635	8.852
Total	**22.385**	**23.834**	**37.280**	**83.540**	**8.427**	**2.511**	**.358**	**.097**	**.546**	**3.852**	**7.364**	**99.443**
2009 January	1.905	2.783	3.075	7.761	.775	.229	.032	.009	.058	.307	.635	9.178
February	1.583	2.378	2.732	6.692	.672	.174	.029	.008	.057	.280	.548	7.920
March	1.537	2.212	3.010	6.758	.703	.213	.032	.009	.069	.315	.639	8.104
April	1.423	1.774	2.904	6.098	.621	.252	.030	.009	.073	.308	.671	7.397
May	1.487	1.531	2.921	5.937	.684	.289	.031	.010	.061	.324	.714	7.344
June	1.656	1.556	2.939	6.149	.729	.285	.030	.009	.055	.324	.703	7.592
July	1.761	1.689	2.987	6.434	.763	.228	.031	.010	.048	.344	.662	7.873
August	1.812	1.769	3.038	6.615	.756	.191	.031	.010	.053	.349	.634	8.021
September	1.556	1.604	2.886	6.044	.688	.169	.030	.009	.045	.331	.585	7.327
October	1.581	1.698	2.994	6.268	.607	.192	.030	.009	.067	.348	.646	7.533
November	1.551	1.810	2.866	6.225	.618	.205	.031	.009	.067	.345	.657	7.508
December	1.853	2.541	3.052	7.444	.740	.241	.033	.009	.067	.356	.707	8.901
Total	**19.703**	**23.343**	**35.403**	**78.426**	**8.356**	**2.669**	**.369**	**.109**	**.721**	**3.932**	**7.800**	**94.698**
2010 January	1.903	R 2.904	2.929	R 7.733	.759	.216	.033	.009	.068	.347	.673	R 9.179
February	1.694	R 2.565	2.704	R 6.967	.682	.200	.030	.008	.054	.318	.609	R 8.271
March	1.627	2.207	3.045	6.882	.676	.201	.033	.009	.085	.354	.682	8.250
April	1.439	1.732	2.940	6.112	.603	.182	.031	.009	.096	.343	.661	7.384
May	1.612	1.651	3.017	6.282	.697	.243	.033	.010	.085	.353	.724	7.708
June	1.836	1.678	2.998	6.513	.714	.288	.032	.010	.078	.354	.761	R 7.997
July	1.987	1.861	3.082	6.930	.752	.236	.032	.010	.065	.366	.709	8.400
August	1.983	R 1.919	3.152	R 7.055	.749	.193	.032	.010	.065	.367	.667	R 8.476
September	1.683	1.664	3.020	R 6.366	.726	.165	.031	.010	.069	.351	.626	R 7.719
October	R 1.523	1.686	3.018	R 6.225	.656	.170	.030	.009	.078	.359	.646	R 7.527
November	1.548	2.010	2.940	6.493	.655	.190	.032	.009	.096	.358	.686	7.832
11-Month Total	**18.836**	**21.878**	**32.845**	**73.558**	**7.670**	**2.283**	**.349**	**.104**	**.838**	**3.869**	**7.443**	**88.744**
2009 11-Month Total	**17.850**	**20.803**	**32.351**	**70.982**	**7.616**	**2.427**	**.336**	**.101**	**.654**	**3.576**	**7.093**	**85.797**
2008 11-Month Total	**20.484**	**21.376**	**34.189**	**76.092**	**7.665**	**2.306**	**.328**	**.089**	**.480**	**3.526**	**6.728**	**90.591**

[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.

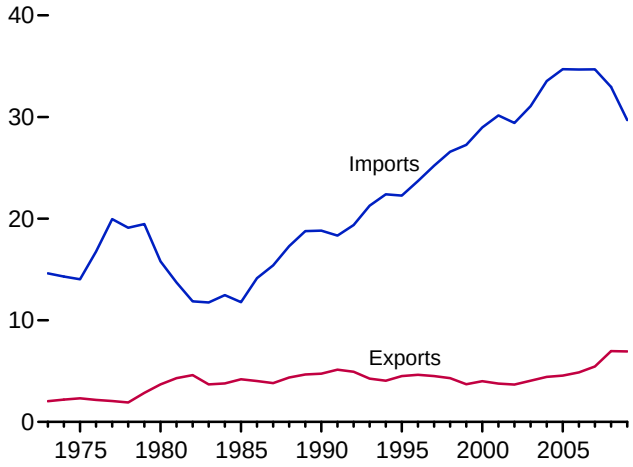
Web Page: See http://www.eia.gov/mer/overview.html for all available data beginning in 1973.

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

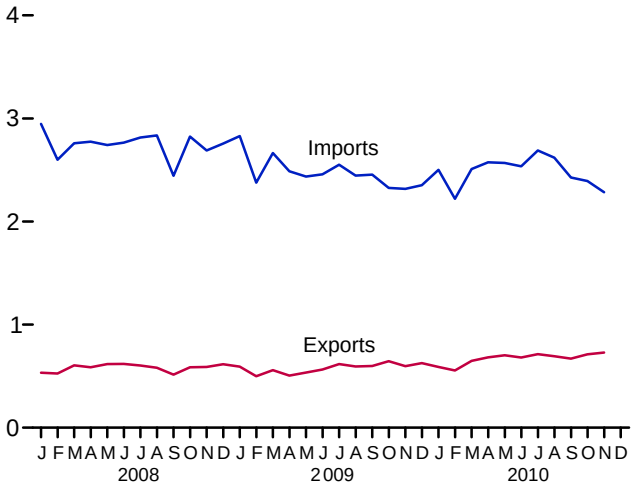
Figure 1.4a Primary Energy Imports and Exports

(Quadrillion Btu)

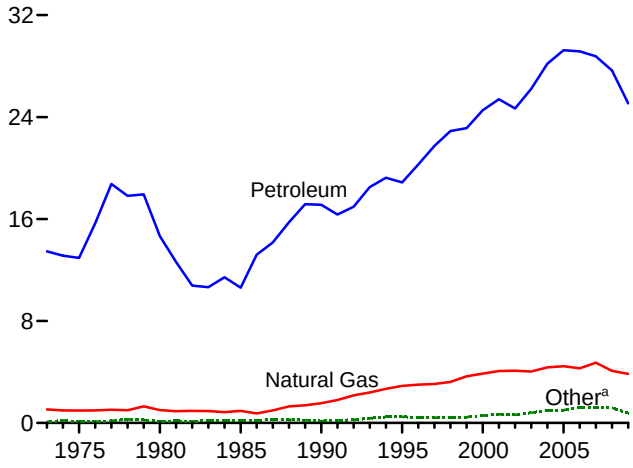
Total Imports and Exports, 1973-2009



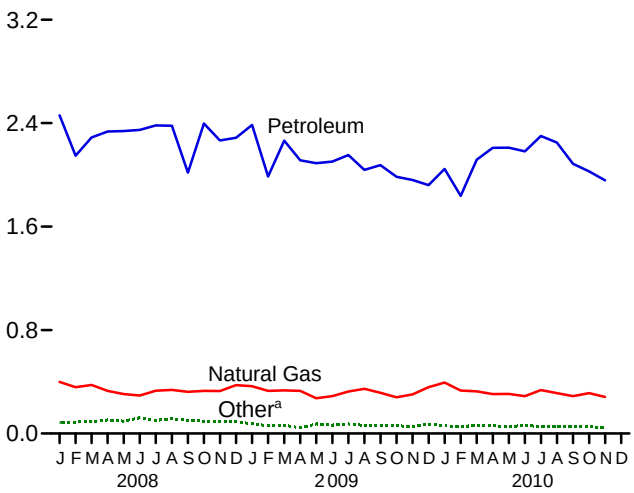
Total Imports and Exports, Monthly



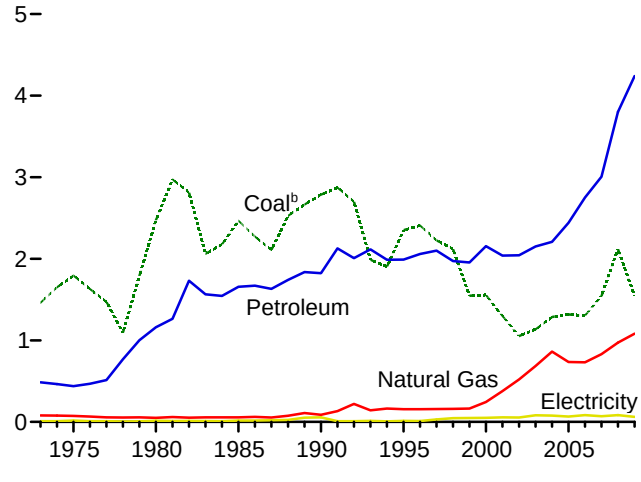
Imports by Source, 1973-2009



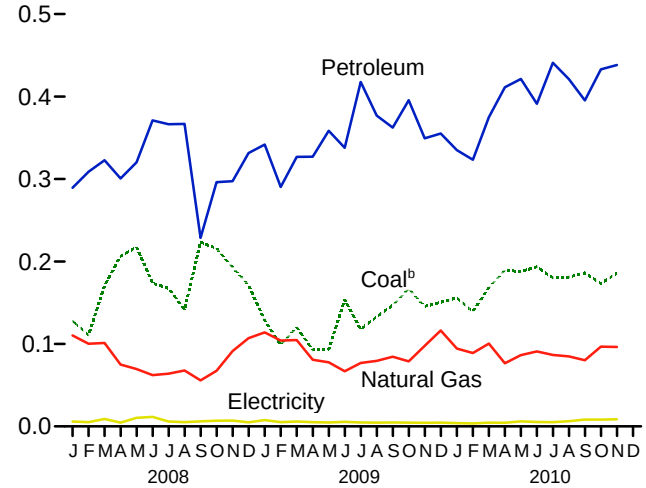
Imports by Source, Monthly



Exports by Source, 1973-2009



Exports by Major Source, Monthly



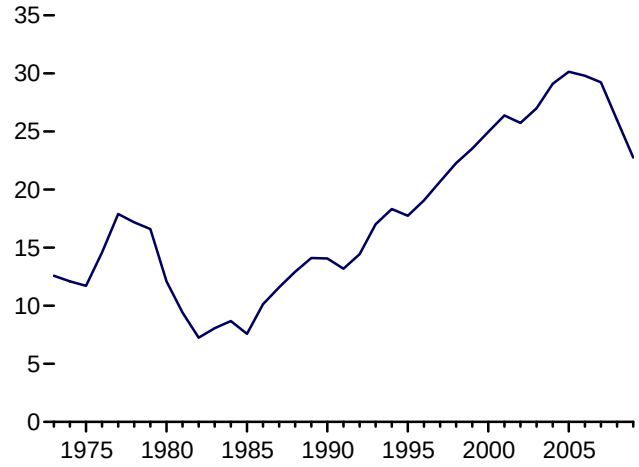
[a] Coal, coal coke, biofuels, and electricity.
[b] Includes coal coke.

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

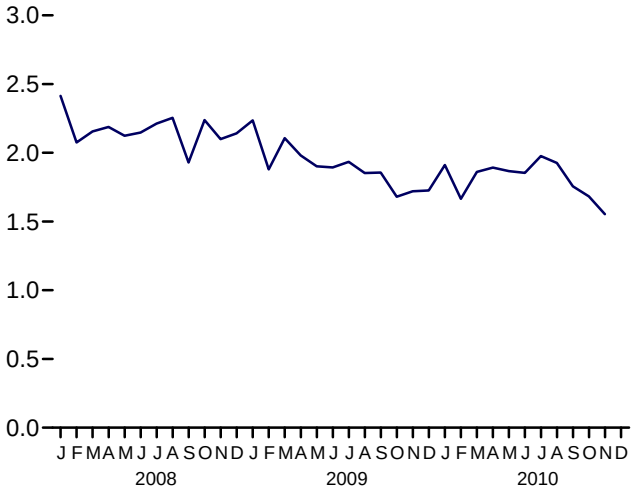
Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu, Except as noted)

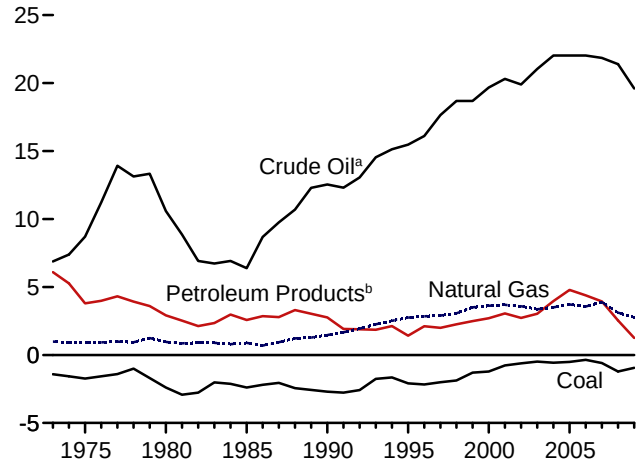
Total, 1973-2009



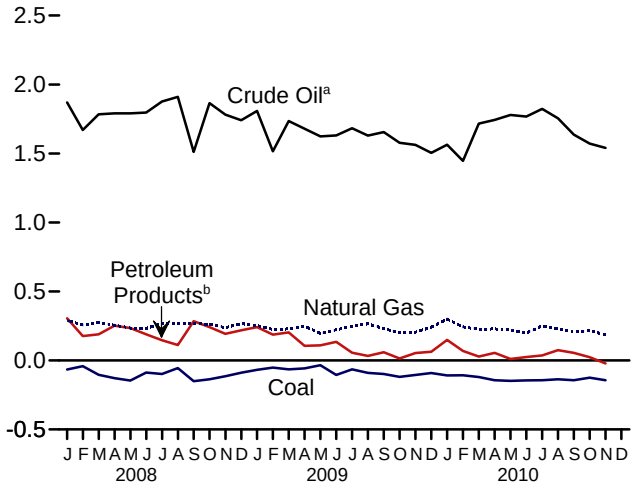
Total, Monthly



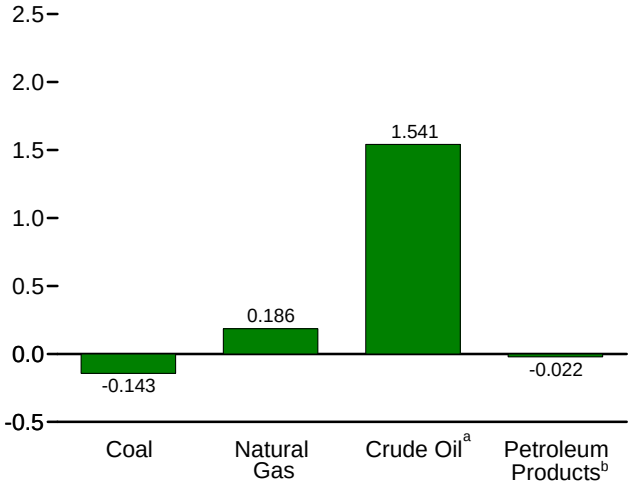
By Major Source, 1973-2009



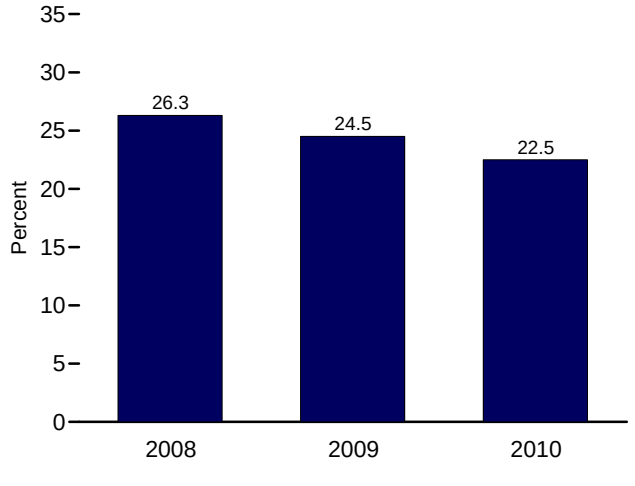
By Major Source, Monthly



By Major Source, November 2010



As Share of Consumption, January-November



[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/mer/overview.html.
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**	**5.050**	**25.398**	**.002**	**.131**	**30.157**
2002 Total	**.422**	**.080**	**4.104**	**19.920**	**4.753**	**24.673**	**.002**	**.125**	**29.407**
2003 Total	**.626**	**.068**	**4.042**	**21.060**	**5.158**	**26.218**	**.002**	**.104**	**31.061**
2004 Total	**.682**	**.170**	**4.365**	**22.082**	**6.114**	**28.196**	**.013**	**.117**	**33.543**
2005 Total	**.762**	**.088**	**4.450**	**22.091**	**7.156**	**29.247**	**.013**	**.150**	**34.708**
2006 Total	**.906**	**.101**	**4.291**	**22.085**	**7.077**	**29.162**	**.068**	**.146**	**34.673**
2007 Total	**.909**	**.061**	**4.723**	**21.914**	**6.849**	**28.762**	**.055**	**.175**	**34.685**
2008 January	.060	.007	.399	1.872	.587	2.459	.005	.017	2.947
February	.065	.006	.358	1.674	.474	2.148	.006	.016	2.600
March	.066	.009	.376	1.789	.500	2.290	.003	.016	2.759
April	.075	.011	.330	1.793	.542	2.335	.009	.014	2.774
May	.068	.007	.305	1.795	.544	2.338	.006	.018	2.742
June	.082	.013	.294	1.800	.547	2.347	.008	.021	2.766
July	.064	.010	.331	1.881	.500	2.382	.008	.021	2.816
August	.079	.009	.337	1.917	.463	2.380	.012	.020	2.836
September	.069	.006	.322	1.518	.498	2.016	.014	.017	2.443
October	.073	.008	.329	1.873	.523	2.396	.006	.012	2.825
November	.075	.005	.328	1.787	.478	2.265	.004	.011	2.689
December	.080	(s)	.374	1.749	.538	2.287	.004	.012	2.756
Total	**.855**	**.089**	**4.084**	**21.448**	**6.195**	**27.644**	**.085**	**.195**	**32.952**
2009 January	.058	.001	.366	1.815	.571	2.386	.003	.015	2.828
February	.046	(s)	.330	1.521	.466	1.988	.001	.013	2.378
March	.054	(s)	.333	1.741	.523	2.264	.002	.010	2.664
April	.033	(s)	.330	1.684	.428	2.112	.001	.011	2.487
May	.057	.001	.272	1.633	.456	2.089	.002	.014	2.436
June	.046	.001	.289	1.641	.461	2.102	.003	.016	2.457
July	.050	.001	.325	1.688	.465	2.153	.004	.019	2.551
August	.039	(s)	.345	1.636	.401	2.038	.004	.020	2.446
September	.046	.001	.315	1.662	.413	2.075	.002	.015	2.454
October	.044	(s)	.280	1.590	.394	1.984	.002	.016	2.326
November	.038	.001	.302	1.570	.390	1.960	.002	.013	2.316
December	.054	.002	.358	1.517	.404	1.921	.001	.016	2.352
Total	**.566**	**.009**	**3.845**	**19.699**	**5.374**	**25.072**	**.027**	**.178**	**29.697**
2010 January	.042	.001	.394	1.569	.476	2.045	(s)	.018	2.501
February	.031	.005	.332	1.455	.382	1.837	(s)	.015	2.220
March	.047	.003	.326	1.725	.393	2.118	(s)	.015	2.510
April	.045	.001	.305	1.750	.458	2.208	(s)	.013	2.574
May	.037	.005	.306	1.786	.424	2.210	.001	.010	2.568
June	.044	.005	.289	1.773	.408	2.182	(s)	.014	2.535
July	.035	.003	.336	1.836	.464	2.300	(s)	.015	R 2.689
August	.043	.003	.312	1.761	.489	2.250	(s)	.012	2.620
September	.040	.002	.289	1.647	.439	2.085	(s)	.010	2.426
October	.044	.001	R .313	1.576	.451	2.027	(s)	.008	R 2.393
November	.037	(s)	E .282	1.546	.411	1.957	(s)	.006	2.283
11-Month Total	**.445**	**.030**	E **3.484**	**18.425**	**4.795**	**23.219**	**.004**	**.137**	**27.319**
2009 11-Month Total	**.511**	**.007**	**3.487**	**18.182**	**4.970**	**23.152**	**.026**	**.162**	**27.345**
2008 11-Month Total	**.775**	**.089**	**3.710**	**19.699**	**5.658**	**25.357**	**.081**	**.183**	**30.196**

[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 (including denaturant) and biodiesel.

R=Revised. E=Estimate. 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/mer/overview.html for all available data beginning in 1973.

Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke: 1973-1975**—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook,* "Coke and Coal Chemicals" chapter. **1976-1980**—U.S. Energy Information Administration (EIA), *Energy Data Report,* "Coke and Coal Chemicals," annual reports. **1981 forward**—EIA, *Quarterly Coal Report,* quarterly reports. • **Natural Gas:** Tables 4.1 and A4. • **Crude Oil** and **Petroleum Products:** Tables 3.3b, 10.3, 10.4, and A2. • **Biofuels:** Tables 10.3 and 10.4. • **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**	**2.038**	**(s)**	**.056**	**3.770**	**26.386**
2002 Total	**1.032**	**.020**	**.520**	**.019**	**2.023**	**2.042**	**(s)**	**.054**	**3.668**	**25.739**
2003 Total	**1.117**	**.018**	**.686**	**.026**	**2.124**	**2.150**	**.001**	**.082**	**4.054**	**27.007**
2004 Total	**1.253**	**.033**	**.862**	**.057**	**2.150**	**2.207**	**.001**	**.078**	**4.433**	**29.110**
2005 Total	**1.273**	**.043**	**.735**	**.067**	**2.373**	**2.441**	**.001**	**.065**	**4.559**	**30.149**
2006 Total	**1.264**	**.040**	**.730**	**.052**	**2.694**	**2.747**	**.004**	**.083**	**4.868**	**29.805**
2007 Total	**1.507**	**.036**	**.830**	**.058**	**2.914**	**2.972**	**.035**	**.069**	**5.448**	**29.238**
2008 January	.125	.003	.110	.002	.281	.283	.006	.006	.533	2.414
February	.107	.004	.100	.003	.298	.301	.007	.005	.525	2.075
March	.170	.001	.101	.005	.311	.317	.006	.009	.604	2.155
April	.203	.004	.075	.002	.290	.292	.009	.005	.586	2.188
May	.213	.004	.070	.003	.310	.313	.007	.010	.618	2.124
June	.170	.004	.062	.004	.358	.362	.009	.012	.619	2.147
July	.163	.005	.064	.005	.354	.359	.008	.006	.603	2.212
August	.134	.008	.068	.007	.351	.358	.009	.005	.581	2.254
September	.220	.004	.056	.007	.214	.221	.008	.006	.514	1.929
October	.209	.007	.067	.008	.281	.289	.007	.007	.586	2.238
November	.189	.004	.091	.005	.286	.291	.006	.007	.589	2.100
December	.169	.003	.107	.008	.319	.327	.004	.005	.615	2.141
Total	**2.071**	**.049**	**.972**	**.061**	**3.653**	**3.713**	**.086**	**.083**	**6.973**	**25.978**
2009 January	.126	.003	.114	.007	.329	.336	.006	.008	.592	2.236
February	.098	.001	.104	.005	.279	.284	.006	.005	.499	1.879
March	.118	.002	.105	.005	.320	.326	.001	.006	.557	2.106
April	.090	.003	.081	.005	.322	.326	.001	.005	.506	1.981
May	.091	.002	.078	.009	.347	.356	.002	.005	.534	1.902
June	.151	.002	.067	.010	.326	.336	.002	.006	.564	1.894
July	.115	.003	.077	.006	.409	.415	.003	.005	.617	1.934
August	.130	.003	.079	.006	.368	.375	.002	.005	.594	1.852
September	.144	.003	.085	.007	.354	.361	.001	.005	.598	1.856
October	.163	.004	.079	.013	.380	.393	.002	.005	.646	1.681
November	.143	.002	.098	.008	.337	.345	.004	.004	.597	1.720
December	.146	.004	.116	.012	.341	.353	.002	.005	.627	1.725
Total	**1.515**	**.032**	**1.082**	**.093**	**4.113**	**4.206**	**.034**	**.062**	**6.931**	**22.766**
2010 January	.150	.006	.094	.006	.328	.333	.002	.004	.589	1.911
February	.138	.001	.089	.009	.313	.323	.001	.004	.555	1.665
March	.168	(s)	.100	.008	.365	.373	.002	.005	.648	1.861
April	.189	.001	R .077	.006	.404	.410	.001	.004	R .682	1.892
May	.185	.003	.086	.007	.414	.420	.001	.006	.702	1.867
June	.189	.004	.091	.005	.384	.390	.002	.005	.681	1.854
July	.178	.003	.087	.012	.427	.440	.001	.005	.713	R 1.976
August	.179	.002	.085	.006	.414	.420	.001	.006	R .694	1.926
September	.183	.003	.080	.011	.384	.395	.001	.008	.670	R 1.756
October	.170	.003	R .097	.004	.428	.432	.001	.008	R .711	R 1.682
November	.180	.006	E .096	.006	.432	.438	(s)	.009	.729	1.554
11-Month Total	**1.909**	**.031**	E **.983**	**.081**	**4.292**	**4.373**	**.013**	**.065**	**7.374**	**19.945**
2009 11-Month Total	**1.369**	**.028**	**.966**	**.081**	**3.772**	**3.853**	**.032**	**.057**	**6.304**	**21.041**
2008 11-Month Total	**1.902**	**.046**	**.865**	**.052**	**3.333**	**3.386**	**.082**	**.078**	**6.359**	**23.837**

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

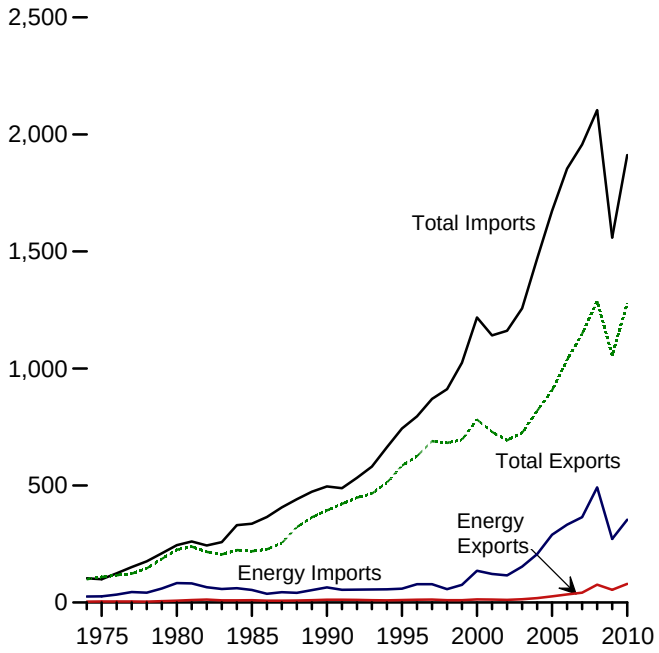
Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

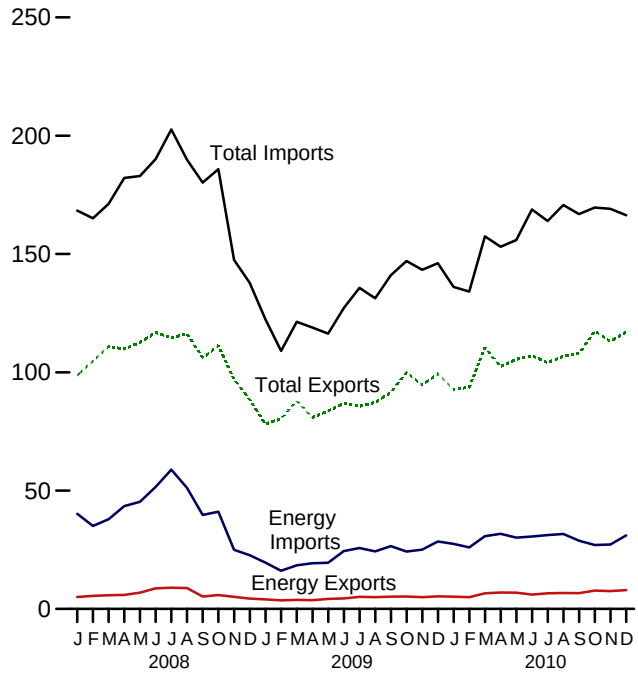
Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke: 1973-1975**—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook,* "Coke and Coal Chemicals" chapter. **1976-1980**—U.S. Energy Information Administration (EIA), *Energy Data Report,* "Coke and Coal Chemicals," annual reports. **1981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

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

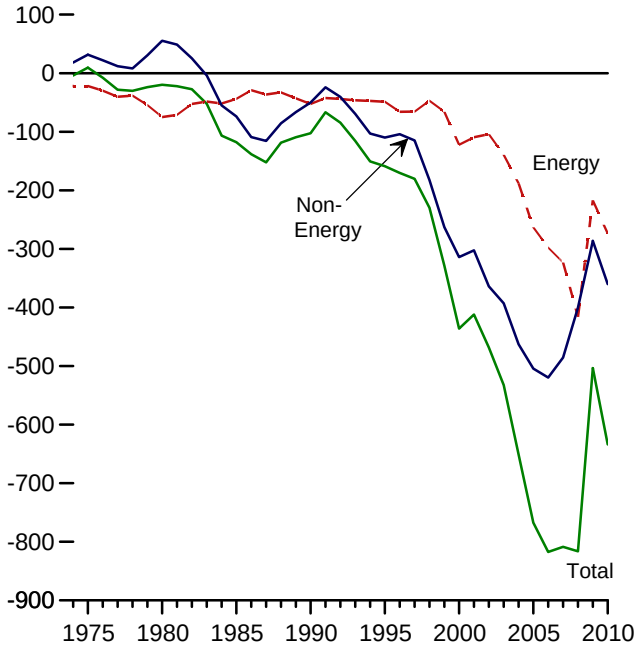
Imports and Exports, 1974-2010



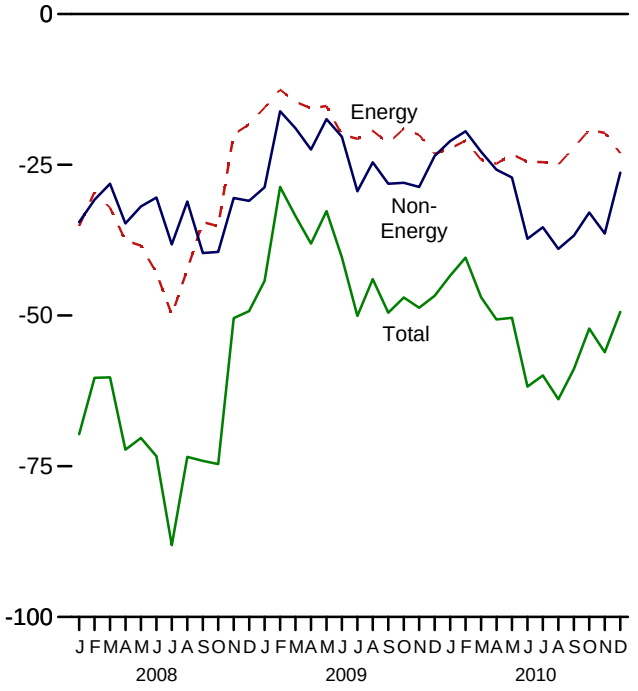
Imports and Exports, Monthly



Trade Balance, 1974-2010



Trade Balance, Monthly



[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
Web Page: http://www.eia.gov/mer/overview.html.
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 January	4,061	36,617	-32,556	5,049	40,206	-35,157	-34,516	98,677	168,350	-69,673
February	4,683	31,609	-26,926	5,508	35,033	-29,525	-30,805	104,740	165,070	-60,330
March	4,477	33,769	-29,292	5,755	37,875	-32,120	-28,142	110,932	171,194	-60,262
April	4,473	39,481	-35,008	5,899	43,440	-37,541	-34,717	109,857	182,115	-72,258
May	5,420	41,344	-35,924	6,861	45,266	-38,405	-31,924	112,627	182,956	-70,329
June	7,365	47,392	-40,027	8,694	51,594	-42,900	-30,430	116,787	190,117	-73,330
July	7,760	53,966	-46,206	8,948	58,841	-49,893	-38,199	114,522	202,614	-88,092
August	7,650	47,473	-39,823	8,791	51,150	-42,359	-31,098	116,418	189,875	-73,457
September	3,916	36,768	-32,852	5,217	39,701	-34,484	-39,633	106,072	180,189	-74,117
October	4,597	38,270	-33,673	5,876	41,064	-35,188	-39,456	111,239	185,882	-74,644
November	3,858	22,661	-18,803	5,084	25,019	-19,935	-30,495	97,085	147,515	-50,430
December	3,439	20,494	-17,055	4,394	22,697	-18,303	-30,974	88,486	137,763	-49,277
Total	**61,695**	**449,847**	**-388,152**	**76,075**	**491,885**	**-415,810**	**-400,389**	**1,287,442**	**2,103,641**	**-816,199**
2009 January	3,029	16,924	-13,895	4,037	19,559	-15,522	-28,742	78,151	122,415	-44,264
February	2,549	14,006	-11,457	3,589	16,120	-12,531	-16,132	80,349	109,012	-28,663
March	2,878	16,658	-13,780	3,835	18,398	-14,563	-18,948	87,848	121,359	-33,511
April	2,988	17,884	-14,896	3,664	19,275	-15,611	-22,462	80,822	118,896	-38,073
May	3,596	18,179	-14,583	4,227	19,484	-15,257	-17,433	83,651	116,341	-32,690
June	3,625	23,119	-19,494	4,459	24,467	-20,008	-20,336	86,830	127,173	-40,344
July	4,390	24,295	-19,905	5,077	25,754	-20,677	-29,384	85,635	135,696	-50,061
August	4,234	23,026	-18,792	4,947	24,312	-19,365	-24,591	87,315	131,272	-43,956
September	4,329	25,259	-20,930	5,152	26,546	-21,394	-28,152	91,458	141,004	-49,546
October	4,359	22,826	-18,467	5,230	24,255	-19,025	-27,996	100,005	147,027	-47,021
November	4,140	23,393	-19,253	4,994	25,047	-20,053	-28,665	94,607	143,324	-48,718
December	4,391	26,264	-21,873	5,326	28,521	-23,195	-23,539	99,372	146,106	-46,734
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	4,093	25,255	-21,162	5,185	27,504	-22,319	-21,052	92,716	136,087	-43,371
February	3,953	23,685	-19,732	4,995	25,984	-20,989	-19,428	93,691	134,108	-40,417
March	5,357	28,630	-23,273	6,567	30,705	-24,138	-22,834	110,454	157,426	-46,972
April	5,703	29,943	-24,240	6,903	31,737	-24,834	-25,811	102,436	153,082	-50,645
May	5,580	28,558	-22,978	6,832	30,098	-23,266	-27,118	105,492	155,877	-50,384
June	4,831	28,926	-24,095	6,080	30,600	-24,520	-37,265	107,043	168,828	-61,785
July	5,469	29,464	-23,995	6,612	31,175	-24,563	-35,374	104,026	163,963	-59,937
August	5,372	30,109	-24,737	6,712	31,682	-24,970	-38,936	106,775	170,680	-63,906
September	5,398	27,352	-21,954	6,671	28,810	-22,139	-36,735	107,972	166,846	-58,874
October	6,069	25,663	-19,594	7,772	26,987	-19,215	-32,935	117,513	169,663	-52,150
November	6,189	25,958	-19,769	7,508	27,210	-19,702	R -36,387	R 113,006	R 169,095	R -56,089
December	6,527	29,812	-23,285	7,964	31,049	-23,085	-26,323	116,990	166,398	-49,408
Total	**64,540**	**333,354**	**-268,814**	**79,801**	**353,540**	**-273,739**	**-360,199**	**1,278,115**	**1,912,053**	**-633,938**

[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.

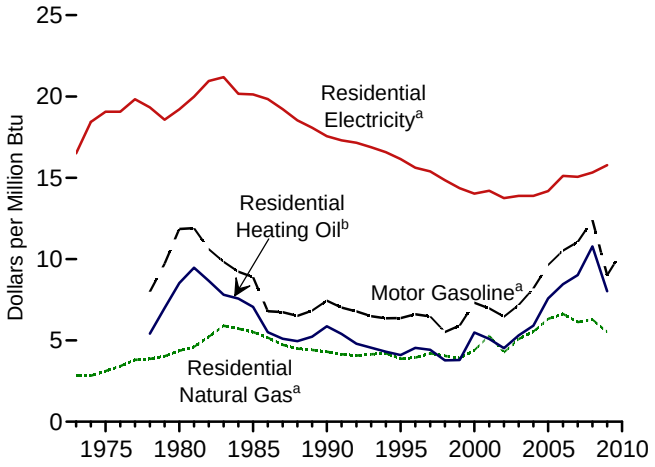
Notes: • Monthly data are not adjusted for seasonal variations. • See Note, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries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

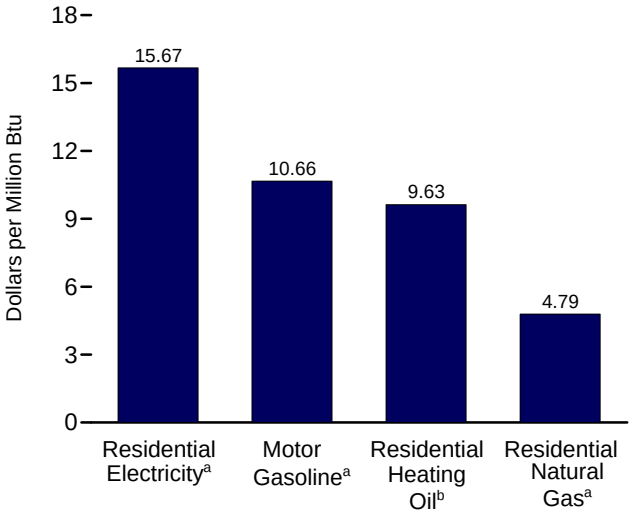
Sources: See end of section.

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

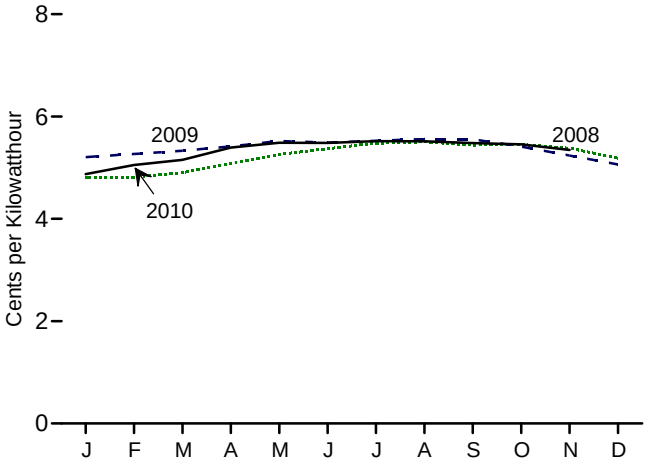
Costs, 1973-2010



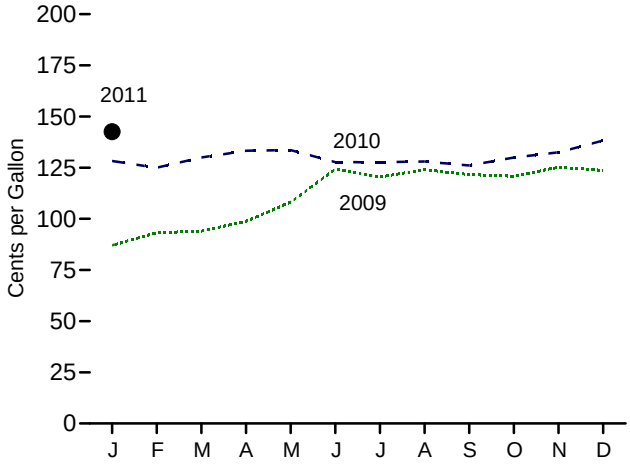
Costs, November 2010



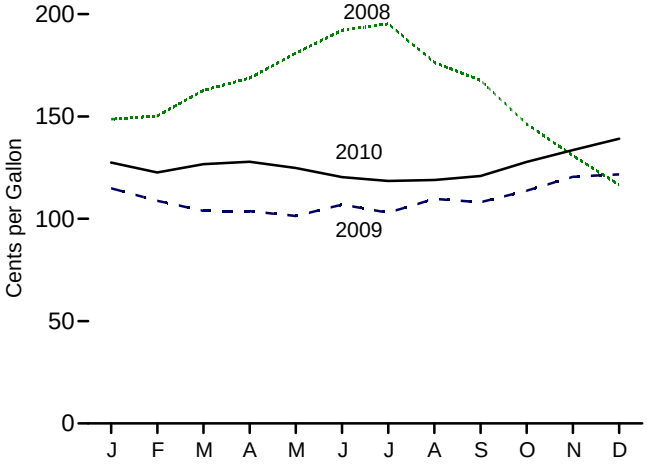
Residential Electricity,[a] Monthly



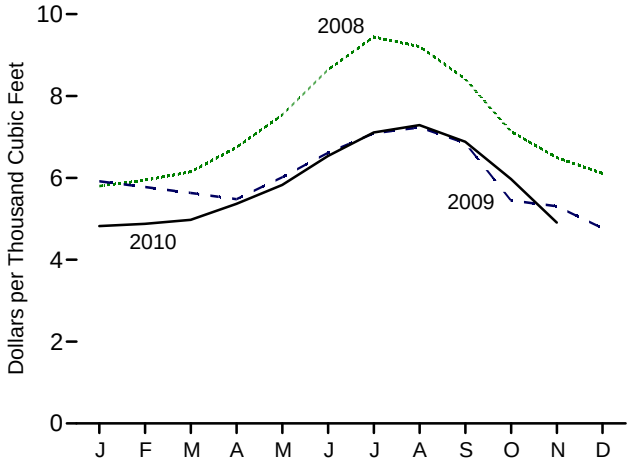
Motor Gasoline,[a] Monthly



Residential Heating Oil,[b] Monthly



Residential Natural Gas,[a] Monthly



[a] Includes taxes.
[b] Excludes taxes.
Note: See "Real Dollars" in Glossary.

Web Page: http://www.eia.gov/mer/overview.html.
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**	**4.26**	**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**	**6.12**	**5.14**	**15.05**
2008 January	211.080	1.467	11.81	1.487	10.72	5.80	5.65	4.81	14.09
February	211.693	1.456	11.72	1.503	10.83	5.94	5.79	4.81	14.11
March	213.528	1.549	12.47	1.627	11.73	6.15	5.99	4.90	14.37
April	214.823	1.625	13.08	1.688	12.17	6.75	6.57	5.08	14.90
May	216.632	1.760	14.17	1.810	13.05	7.54	7.34	5.26	15.41
June	218.815	1.881	15.14	1.921	13.85	8.64	8.41	5.37	15.74
July	219.964	1.883	15.16	1.953	14.08	9.44	9.19	5.48	16.06
August	219.086	1.752	14.10	1.765	12.72	9.21	8.96	5.50	16.13
September	218.783	1.714	13.79	1.676	12.09	8.42	8.19	5.44	15.94
October	216.573	1.489	11.99	1.463	10.55	7.13	6.95	5.45	15.98
November	212.425	1.039	8.37	1.308	9.43	6.50	6.33	5.38	15.77
December	210.228	0.829	6.67	1.165	8.40	6.11	5.95	5.18	15.20
Average	**215.303**	**1.541**	**12.40**	**1.495**	**10.78**	**6.45**	**6.28**	**5.23**	**15.33**
2009 January	211.143	0.871	7.01	1.149	8.28	5.92	5.77	R 5.21	R 15.25
February	212.193	0.933	7.51	1.088	7.85	5.78	5.64	R 5.27	R 15.44
March	212.709	0.940	7.57	1.039	7.49	5.63	5.49	R 5.33	R 15.62
April	213.240	0.988	7.95	1.037	7.48	5.48	5.34	R 5.42	R 15.87
May	213.856	1.082	8.71	1.013	7.31	6.01	5.87	R 5.52	R 16.19
June	215.693	1.243	10.00	1.070	7.71	6.61	6.45	R 5.49	R 16.09
July	215.351	1.205	9.70	1.030	7.43	7.09	6.92	R 5.53	R 16.20
August	215.834	1.240	9.98	1.098	7.91	7.23	7.06	R 5.56	R 16.29
September	215.969	1.216	9.79	1.081	7.79	6.85	6.69	R 5.56	R 16.28
October	216.177	1.209	9.73	1.137	8.20	5.45	5.32	R 5.41	R 15.86
November	216.330	1.252	10.08	1.206	8.69	5.31	5.18	R 5.24	R 15.35
December	215.949	1.237	9.96	1.217	8.77	4.77	4.65	R 5.06	R 14.83
Average	**214.537**	**1.119**	**9.01**	**1.112**	**8.02**	**5.66**	**5.52**	**R 5.38**	**R 15.78**
2010 January	216.687	1.282	10.32	1.275	9.19	4.82	4.70	4.87	14.28
February	216.741	1.250	10.06	1.226	8.84	4.88	4.76	5.05	14.81
March	217.631	1.300	10.46	1.267	9.13	4.98	4.85	5.15	15.10
April	218.009	1.333	10.73	1.278	9.22	5.37	5.24	5.39	15.81
May	218.178	1.336	10.75	1.248	9.00	5.83	5.68	5.49	16.08
June	217.965	1.277	10.28	1.203	8.68	6.53	6.37	5.48	16.07
July	218.011	1.277	10.27	1.185	8.55	7.11	6.94	5.52	16.17
August	218.312	1.280	10.31	1.190	8.58	7.29	7.11	5.52	16.16
September	218.439	1.261	10.15	1.209	8.72	6.88	6.71	5.48	16.06
October	218.711	1.300	10.46	R 1.278	9.21	5.97	5.83	5.45	15.99
November	218.803	1.325	10.66	R 1.335	R 9.63	R 4.91	R 4.79	R 5.35	R 15.67
December	219.179	1.383	11.13	RE 1.392	RE 10.03	NA	NA	NA	NA
Average	**218.056**	**1.301**	**10.47**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
2011 January	220.223	1.425	11.47	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. E=Estimate. NA=Not available.

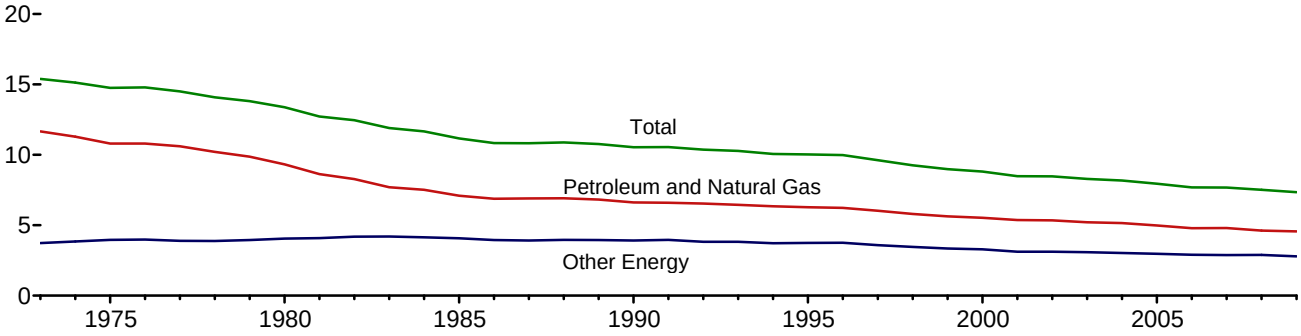
Notes: • See "Real Dollars" in Glossary. • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **Fuel Prices:** Tables 9.4 (All Types), 9.8c, 9.9, and 9.11, adjusted by the CPI. • **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.

The units for columns 2 and 4 have been changed from cents per gallon to dollars per gallon. The units for column 6 have been changed from cents per thousand cubic feet to dollars per thousand cubic feet.

Figure 1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product, 1973-2009
(Thousand Btu per Chained (2005) Dollar)



Note: See "Real Dollars" in Glossary.
Web Page: http://www.eia.gov/mer/overview.html.
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	18.356	75.706	4,917.0	11.66	3.73	15.40
1974 Year	55.186	18.804	73.990	4,889.9	11.29	3.85	15.13
1975 Year	52.680	19.321	72.001	4,879.5	10.80	3.96	14.76
1976 Year	55.523	20.492	76.015	5,141.3	10.80	3.99	14.79
1977 Year	57.054	20.947	78.001	5,377.7	10.61	3.90	14.50
1978 Year	57.963	22.021	79.984	5,677.6	10.21	3.88	14.09
1979 Year	57.788	23.114	80.902	5,855.0	9.87	3.95	13.82
1980 Year	54.440	23.684	78.124	5,839.0	9.32	4.06	13.38
1981 Year	51.680	24.490	76.169	5,987.2	8.63	4.09	12.72
1982 Year	48.588	24.565	73.153	5,870.9	8.28	4.18	12.46
1983 Year	47.273	25.763	73.036	6,136.2	7.70	4.20	11.90
1984 Year	49.447	27.269	76.716	6,577.1	7.52	4.15	11.66
1985 Year	48.628	27.865	76.493	6,849.3	7.10	4.07	11.17
1986 Year	48.790	27.969	76.759	7,086.5	6.88	3.95	10.83
1987 Year	50.504	28.668	79.171	7,313.3	6.91	3.92	10.83
1988 Year	52.671	30.149	82.820	7,613.9	6.92	3.96	10.88
1989 Year	53.811	31.131	84.942	7,885.9	6.82	3.95	10.77
1990 Year	53.155	31.496	84.651	8,033.9	6.62	3.92	10.54
1991 Year	52.879	31.728	84.607	8,015.1	6.60	3.96	10.56
1992 Year	54.239	31.715	85.954	8,287.1	6.54	3.83	10.37
1993 Year	54.973	32.629	87.602	8,523.4	6.45	3.83	10.28
1994 Year	56.289	32.968	89.256	8,870.7	6.35	3.72	10.06
1995 Year	57.110	34.062	91.171	9,093.7	6.28	3.75	10.03
1996 Year	58.760	35.415	94.175	9,433.9	6.23	3.75	9.98
1997 Year	59.382	35.380	94.761	9,854.3	6.03	3.59	9.62
1998 Year	59.646	35.532	95.179	10,283.5	5.80	3.46	9.26
1999 Year	60.747	36.066	96.813	10,779.8	5.64	3.35	8.98
2000 Year	62.086	36.882	98.968	11,226.0	5.53	3.29	8.82
2001 Year	60.958	35.358	96.316	11,347.2	5.37	3.12	8.49
2002 Year	61.783	36.070	97.852	11,553.0	5.35	3.12	8.47
2003 Year	61.642	36.493	98.135	11,840.7	5.21	3.08	8.29
2004 Year	63.201	37.112	100.313	12,263.8	5.15	3.03	8.18
2005 Year	62.950	37.492	100.442	12,638.4	4.98	2.97	7.95
2006 Year	62.179	37.611	99.790	12,976.2	4.79	2.90	7.69
2007 Year	63.476	38.056	101.532	13,228.9	4.80	2.88	7.67
2008 Year	61.114	38.329	99.443	13,228.8	4.62	2.90	7.52
2009 Year	58.747	35.952	94.698	12,880.6	4.56	2.79	7.35

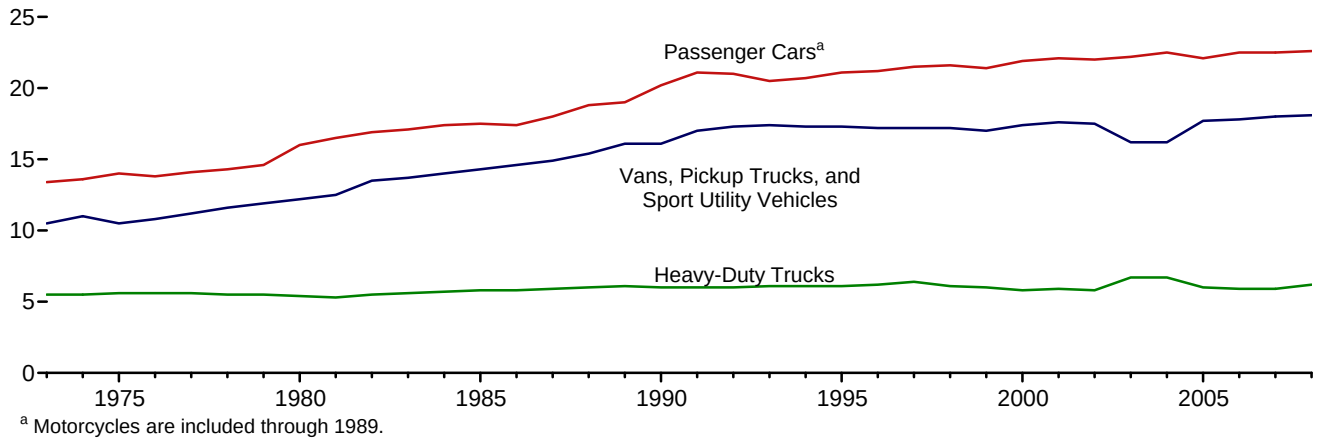
[a] Coal, coal coke net imports, nuclear electric power, renewable energy, and electricity net imports.

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

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

Sources: • **Energy Consumption:** Table 1.3. • **Gross Domestic Product:** U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts (Feb. 25, 2011), Table 1.1.6.

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



[a] Motorcycles are included through 1989.
Web Page: http://www.eia.gov/mer/overview.html.
Source: Table 1.8.

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

	Passenger Cars[a]			Vans, Pickup Trucks, and Sport Utility Vehicles[b]			Heavy-Duty Trucks[c]			All Motor Vehicles[d]		
	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Economy (miles per gallon)
1973	9,884	737	13.4	9,779	931	10.5	15,370	2,775	5.5	10,099	850	11.9
1974	9,221	677	13.6	9,452	862	11.0	14,995	2,708	5.5	9,493	788	12.0
1975	9,309	665	14.0	9,829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
1976	9,418	681	13.8	10,127	934	10.8	15,438	2,764	5.6	9,774	806	12.1
1977	9,517	676	14.1	10,607	947	11.2	16,700	3,002	5.6	9,978	814	12.3
1978	9,500	665	14.3	10,968	948	11.6	18,045	3,263	5.5	10,077	816	12.4
1979	9,062	620	14.6	10,802	905	11.9	18,502	3,380	5.5	9,722	776	12.5
1980	8,813	551	16.0	10,437	854	12.2	18,736	3,447	5.4	9,458	712	13.3
1981	8,873	538	16.5	10,244	819	12.5	19,016	3,565	5.3	9,477	697	13.6
1982	9,050	535	16.9	10,276	762	13.5	19,931	3,647	5.5	9,644	686	14.1
1983	9,118	534	17.1	10,497	767	13.7	21,083	3,769	5.6	9,760	686	14.2
1984	9,248	530	17.4	11,151	797	14.0	22,550	3,967	5.7	10,017	691	14.5
1985	9,419	538	17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1986	9,464	543	17.4	10,764	738	14.6	22,143	3,821	5.8	10,143	692	14.7
1987	9,720	539	18.0	11,114	744	14.9	23,349	3,937	5.9	10,453	694	15.1
1988	9,972	531	18.8	11,465	745	15.4	22,485	3,736	6.0	10,721	688	15.6
1989	[a]10,157	[a]533	[a]19.0	11,676	724	16.1	22,926	3,776	6.1	10,932	688	15.9
1990	10,504	520	20.2	11,902	738	16.1	23,603	3,953	6.0	11,107	677	16.4
1991	10,571	501	21.1	12,245	721	17.0	24,229	4,047	6.0	11,294	669	16.9
1992	10,857	517	21.0	12,381	717	17.3	25,373	4,210	6.0	11,558	683	16.9
1993	10,804	527	20.5	12,430	714	17.4	26,262	4,309	6.1	11,595	693	16.7
1994	10,992	531	20.7	12,156	701	17.3	25,838	4,202	6.1	11,683	698	16.7
1995	11,203	530	21.1	12,018	694	17.3	26,514	4,315	6.1	11,793	700	16.8
1996	11,330	534	21.2	11,811	685	17.2	26,092	4,221	6.2	11,813	700	16.9
1997	11,581	539	21.5	12,115	703	17.2	27,032	4,218	6.4	12,107	711	17.0
1998	11,754	544	21.6	12,173	707	17.2	25,397	4,135	6.1	12,211	721	16.9
1999	11,848	553	21.4	11,957	701	17.0	26,014	4,352	6.0	12,206	732	16.7
2000	11,976	547	21.9	11,672	669	17.4	25,617	4,391	5.8	12,164	720	16.9
2001	11,831	534	22.1	11,204	636	17.6	26,602	4,477	5.9	11,887	695	17.1
2002	12,202	555	22.0	11,364	650	17.5	27,071	4,642	5.8	12,171	719	16.9
2003	12,325	556	22.2	11,287	697	16.2	28,093	4,215	6.7	12,208	718	17.0
2004	12,460	553	22.5	11,184	690	16.2	27,023	4,057	6.7	12,200	714	17.1
2005	12,510	567	22.1	10,920	617	17.7	26,235	4,385	6.0	12,082	706	17.1
2006	12,485	554	22.5	10,920	612	17.8	25,231	4,304	5.9	12,017	698	17.2
2007	12,304	547	22.5	10,962	609	18.0	25,152	4,275	5.9	11,920	693	17.2
2008[P]	11,788	522	22.6	10,951	605	18.1	25,254	4,075	6.2	11,619	667	17.4

[a] Through 1989, includes motorcycles.
[b] Includes a small number of trucks with 2 axles and 4 tires, such as step vans.
[c] Single-unit trucks with 2 axles and 6 or more tires, and combination trucks.
[d] Includes buses and motorcycles, which are not shown separately.
P=Preliminary.
Note: Geographic coverage is the 50 States and the District of Columbia.

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

Table 1.9 Heating Degree-Days by Census Division

Census Divisions	January					Cumulative July through January				
				Percent Change					Percent Change	
	Normal[a]	2010	2011	Normal to 2011	2010 to 2011	Normal[a]	2010	2011	Normal to 2011	2010 to 2011
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	1,246	1,203	1,309	5	9	3,708	3,683	3,708	0	1
Middle Atlantic										
New Jersey, New York, Pennsylvania	1,158	1,131	1,228	6	9	3,349	3,231	3,373	1	4
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	1,302	1,320	1,363	5	3	3,774	3,780	3,851	2	2
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	1,390	1,456	1,470	6	1	4,085	4,180	4,057	-1	-3
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	643	724	710	10	-2	1,726	1,785	1,960	14	10
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	820	924	893	9	-3	2,230	2,355	2,399	8	2
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	593	643	617	4	-4	1,498	1,644	1,455	-3	-11
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	951	902	936	-2	4	3,098	3,065	2,787	-10	-9
Pacific[b]										
California, Oregon, Washington	564	490	511	-9	4	1,817	1,713	1,710	-6	(s)
U.S. Average[b]	**917**	**931**	**956**	**4**	**3**	**2,656**	**2,662**	**2,682**	**1**	**1**

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

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. 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/mer/overview.html for current data.
• See http://www.eia.gov/aer/overview.html for historical data.

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

Table 1.10 Cooling Degree-Days by Census Division

Census Divisions	January				
				Percent Change	
	Normal[a]	2010	2011	Normal to 2011	2010 to 2011
New England					
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	0	0	0	NM	NM
Middle Atlantic					
New Jersey, New York, Pennsylvania	0	0	0	NM	NM
East North Central					
Illinois, Indiana, Michigan, Ohio, Wisconsin	0	0	0	NM	NM
West North Central					
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	0	0	0	NM	NM
South Atlantic					
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	34	16	15	NM	NM
East South Central					
Alabama, Kentucky, Mississippi, Tennessee	8	0	0	NM	NM
West South Central					
Arkansas, Louisiana, Oklahoma, Texas	14	4	1	NM	NM
Mountain					
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	1	0	0	NM	NM
Pacific[b]					
California, Oregon, Washington	2	0	0	NM	NM
U.S. Average[b]	**9**	**3**	**3**	**NM**	**NM**

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

[b] Excludes Alaska and Hawaii.

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

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. 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/mer/overview.html for current data. • See http://www.eia.gov/aer/overview.html for historical data.

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

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," FT410, 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," FT900, December issues, 1975-1988.
1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.
1990-1993: "U.S. Merchandise Trade," Final Report.
1994-2007: "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.

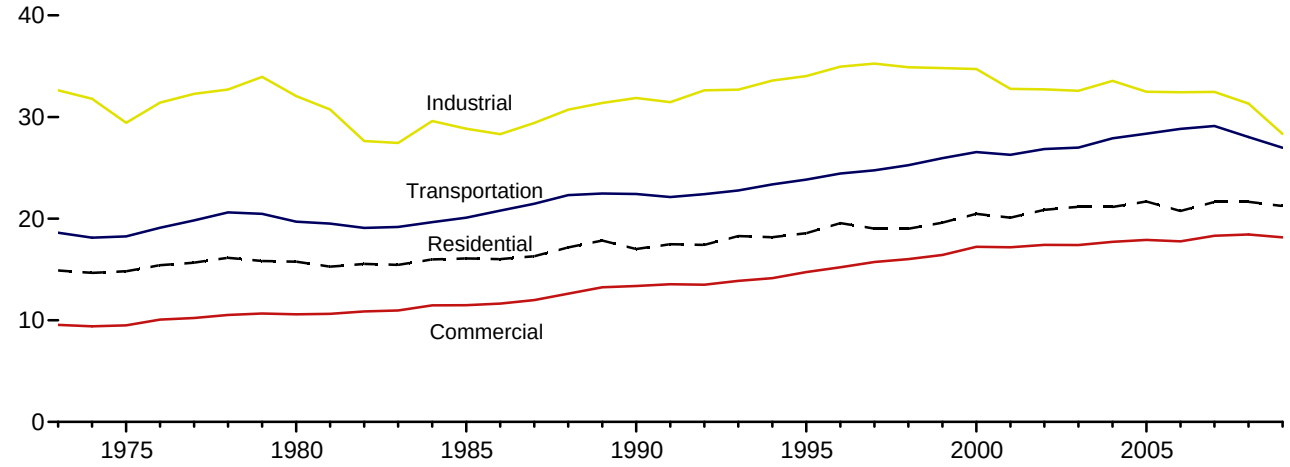
Total Merchandise
1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.
1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.
1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990.
1990: "U.S. Merchandise Trade, 1990 Final 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

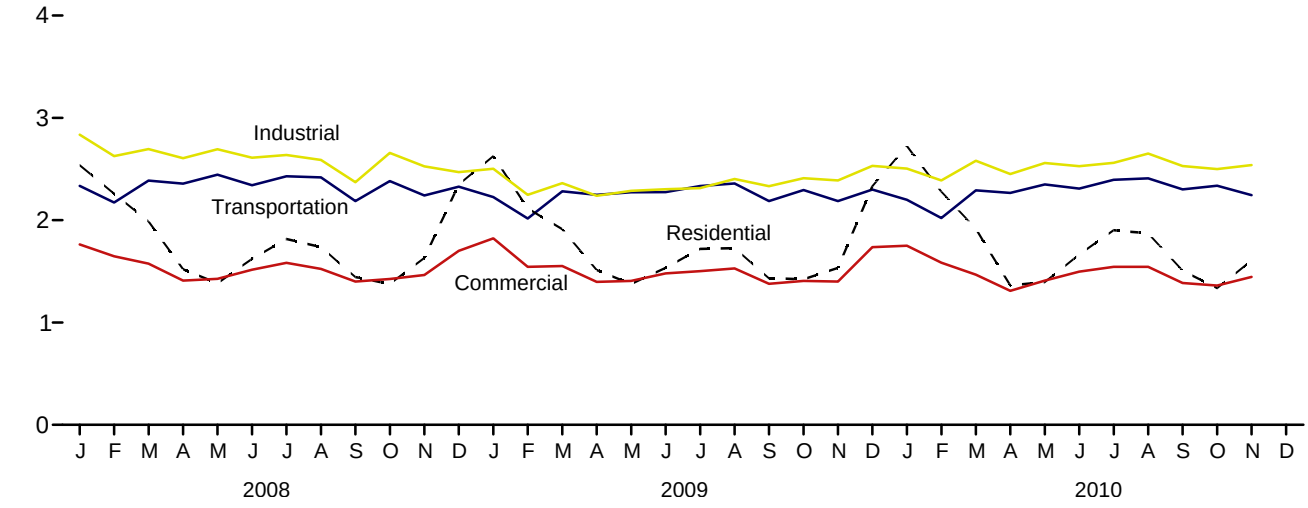
Office buildings, industries, residences, and transport systems, Baltimore, Maryland; east view from the inner harbor.
Source: U.S. Department of Energy.

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

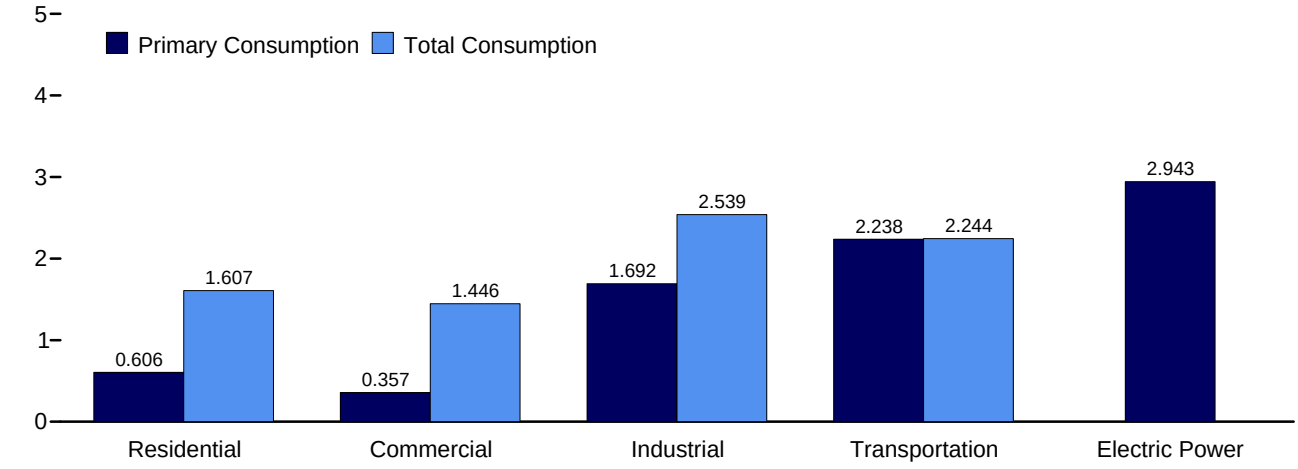
Total Consumption by End-Use Sector, 1973-2009



Total Consumption by End-Use Sector, Monthly



By Sector, November 2010



Web Page: http://www.eia.gov/mer/consump.html.
Source: Table 2.1.

Table 2.1 Energy Consumption by Sector

(Trillion Btu)

	End-Use Sectors								Electric Power Sector[c,d]	Balancing Item[g]	Primary Total[h]
	Residential		Commercial[a]		Industrial[b]		Transportation				
	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]		
1973 Total	**8,225**	**14,905**	**4,423**	**9,549**	**24,720**	**32,632**	**18,577**	**18,613**	**19,753**	**7**	**75,706**
1975 Total	**7,990**	**14,826**	**4,059**	**9,502**	**21,434**	**29,427**	**18,210**	**18,245**	**20,307**	**1**	**72,001**
1980 Total	**7,439**	**15,773**	**4,105**	**10,593**	**22,595**	**32,062**	**19,659**	**19,697**	**24,327**	**-1**	**78,124**
1985 Total	**7,148**	**16,076**	**3,732**	**11,481**	**19,443**	**28,852**	**20,041**	**20,088**	**26,132**	**-4**	**76,493**
1990 Total	**6,558**	**17,002**	**3,896**	**13,371**	**21,180**	**31,867**	**22,366**	**22,420**	**30,660**	**-9**	**84,651**
1995 Total	**6,937**	**18,569**	**4,101**	**14,735**	**22,719**	**34,018**	**23,791**	**23,847**	**33,621**	**3**	**91,171**
1996 Total	**7,467**	**19,558**	**4,273**	**15,220**	**23,410**	**34,955**	**24,383**	**24,438**	**34,638**	**4**	**94,175**
1997 Total	**7,034**	**19,020**	**4,295**	**15,733**	**23,686**	**35,253**	**24,695**	**24,750**	**35,045**	**6**	**94,761**
1998 Total	**6,414**	**19,011**	**4,005**	**16,020**	**23,177**	**34,894**	**25,201**	**25,256**	**36,385**	**-3**	**95,179**
1999 Total	**6,776**	**19,613**	**4,053**	**16,430**	**22,950**	**34,815**	**25,891**	**25,949**	**37,136**	**6**	**96,813**
2000 Total	**7,160**	**20,479**	**4,278**	**17,227**	**22,824**	**34,711**	**26,489**	**26,549**	**38,214**	**2**	**98,968**
2001 Total	**6,869**	**20,095**	**4,084**	**17,188**	**21,794**	**32,763**	**26,213**	**26,276**	**37,362**	**-6**	**96,316**
2002 Total	**6,933**	**20,869**	**4,144**	**17,413**	**21,813**	**32,721**	**26,784**	**26,845**	**38,173**	**5**	**97,852**
2003 Total	**7,212**	**21,168**	**4,283**	**17,396**	**21,503**	**32,577**	**26,920**	**26,994**	**38,218**	**-1**	**98,135**
2004 Total	**6,995**	**21,154**	**4,232**	**17,716**	**22,398**	**33,553**	**27,817**	**27,896**	**38,876**	**-6**	**100,313**
2005 Total	**6,912**	**21,689**	**4,051**	**17,913**	**21,407**	**32,487**	**28,272**	**28,354**	**39,800**	**(s)**	**100,442**
2006 Total	**6,182**	**20,762**	**3,746**	**17,768**	**21,521**	**32,431**	**28,751**	**28,830**	**39,590**	**(s)**	**99,790**
2007 Total	**6,638**	**21,631**	**3,931**	**18,321**	**21,395**	**32,464**	**29,031**	**29,119**	**40,540**	**-3**	**101,532**
2008 January	1,107	2,537	590	1,763	1,936	2,835	2,327	2,335	3,509	1	9,470
February	1,029	2,258	566	1,648	1,780	2,626	2,166	2,173	3,165	(s)	8,706
March	844	1,989	472	1,576	1,800	2,696	2,379	2,386	3,151	-2	8,645
April	539	1,520	326	1,409	1,709	2,605	2,351	2,358	2,966	-3	7,889
May	366	1,383	241	1,427	1,720	2,694	2,439	2,446	3,185	-2	7,949
June	279	1,623	196	1,516	1,643	2,611	2,335	2,342	3,639	1	8,093
July	255	1,816	189	1,584	1,674	2,636	2,423	2,430	3,925	3	8,468
August	243	1,736	185	1,524	1,642	2,588	2,412	2,419	3,785	1	8,269
September	239	1,444	184	1,401	1,494	2,371	2,180	2,186	3,305	(s)	7,402
October	359	1,377	250	1,426	1,767	2,657	2,376	2,383	3,090	-4	7,839
November	588	1,630	349	1,464	1,661	2,526	2,235	2,242	3,029	(s)	7,862
December	973	2,349	523	1,700	1,638	2,470	2,321	2,328	3,394	4	8,852
Total	**6,820**	**21,660**	**4,070**	**18,437**	**20,465**	**31,319**	**27,944**	**28,027**	**40,144**	**(s)**	**99,443**
2009 January	1,155	R 2,627	621	R 1,822	1,722	R 2,503	2,217	2,225	3,462	1	9,178
February	936	R 2,115	515	R 1,544	1,547	R 2,247	2,009	2,016	2,916	-3	7,920
March	779	R 1,911	445	R 1,552	1,606	R 2,363	2,275	2,282	3,004	-4	8,104
April	542	R 1,514	319	R 1,398	1,486	R 2,239	2,241	2,247	2,810	-1	7,397
May	333	R 1,378	224	R 1,407	1,484	R 2,287	2,266	2,273	3,037	(s)	7,344
June	265	R 1,534	188	R 1,480	1,497	R 2,302	2,267	2,274	3,374	2	7,592
July	250	R 1,720	187	R 1,502	1,512	R 2,314	2,326	2,334	3,594	3	7,873
August	249	R 1,728	190	R 1,528	1,558	R 2,403	2,352	2,359	3,669	3	8,021
September	259	R 1,431	195	R 1,379	1,550	R 2,332	2,180	2,186	3,145	-1	7,327
October	401	R 1,423	264	R 1,407	1,614	R 2,410	2,288	2,294	2,967	-2	7,533
November	533	R 1,534	320	R 1,400	1,601	R 2,389	2,180	2,187	2,876	-1	7,508
December	967	R 2,333	525	R 1,736	1,710	R 2,531	2,292	2,300	3,406	1	8,901
Total	**6,667**	**R 21,245**	**3,991**	**R 18,154**	**18,887**	**R 28,322**	**26,894**	**26,977**	**38,260**	**(s)**	**94,698**
2010 January	R 1,168	R 2,725	613	R 1,750	R 1,716	R 2,505	R 2,192	2,199	3,490	1	R 9,179
February	R 1,007	2,279	R 548	R 1,584	R 1,631	R 2,389	2,014	2,021	3,074	-2	R 8,271
March	759	R 1,915	420	R 1,467	1,780	R 2,581	2,285	2,291	3,012	-5	8,250
April	448	1,362	276	R 1,310	1,643	R 2,452	2,260	2,266	2,764	-6	7,384
May	330	R 1,396	221	R 1,409	1,643	R 2,558	2,342	2,349	3,176	-4	7,708
June	265	1,665	187	R 1,497	1,627	R 2,528	2,302	2,309	3,618	-1	R 7,997
July	241	R 1,902	176	R 1,544	1,654	R 2,560	2,387	2,394	3,942	(s)	8,400
August	233	R 1,872	R 181	R 1,544	1,733	R 2,652	2,403	2,409	3,927	(s)	R 8,476
September	240	R 1,507	185	R 1,386	1,697	R 2,529	2,295	2,301	3,307	-4	R 7,719
October	R 344	R 1,337	R 248	R 1,361	1,664	R 2,499	R 2,331	R 2,337	2,948	R -7	R 7,526
November	606	1,607	357	1,446	1,692	2,539	2,238	2,244	2,943	-4	7,832
11-Month Total	**5,641**	**19,565**	**3,410**	**16,299**	**18,479**	**27,792**	**25,047**	**25,121**	**36,201**	**-34**	**88,743**
2009 11-Month Total	**5,701**	**18,914**	**3,466**	**16,419**	**17,177**	**25,788**	**24,601**	**24,677**	**34,852**	**-1**	**85,797**
2008 11-Month Total	**5,849**	**19,312**	**3,548**	**16,737**	**18,827**	**28,847**	**25,623**	**25,699**	**36,749**	**-4**	**90,591**

[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.

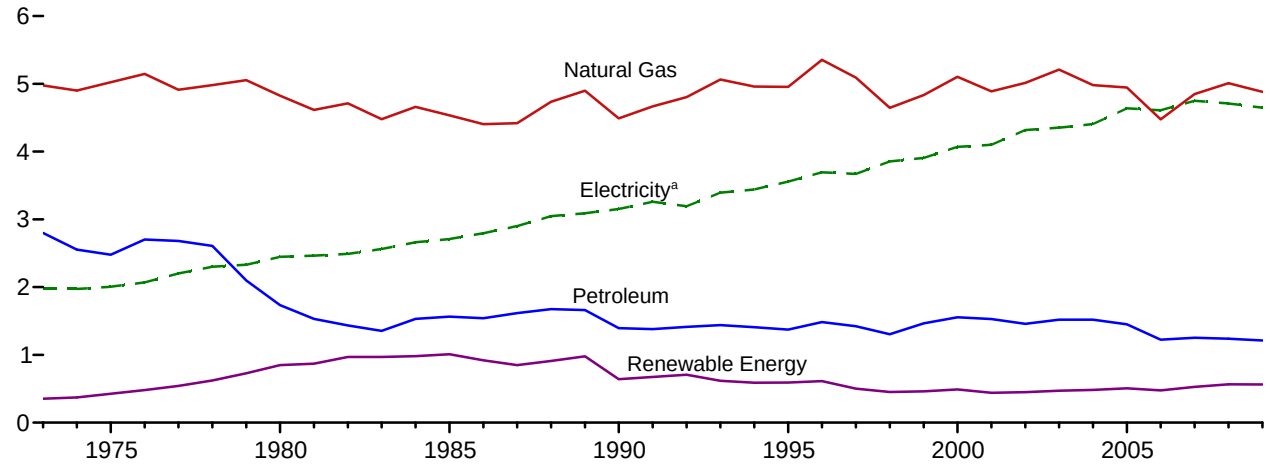
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

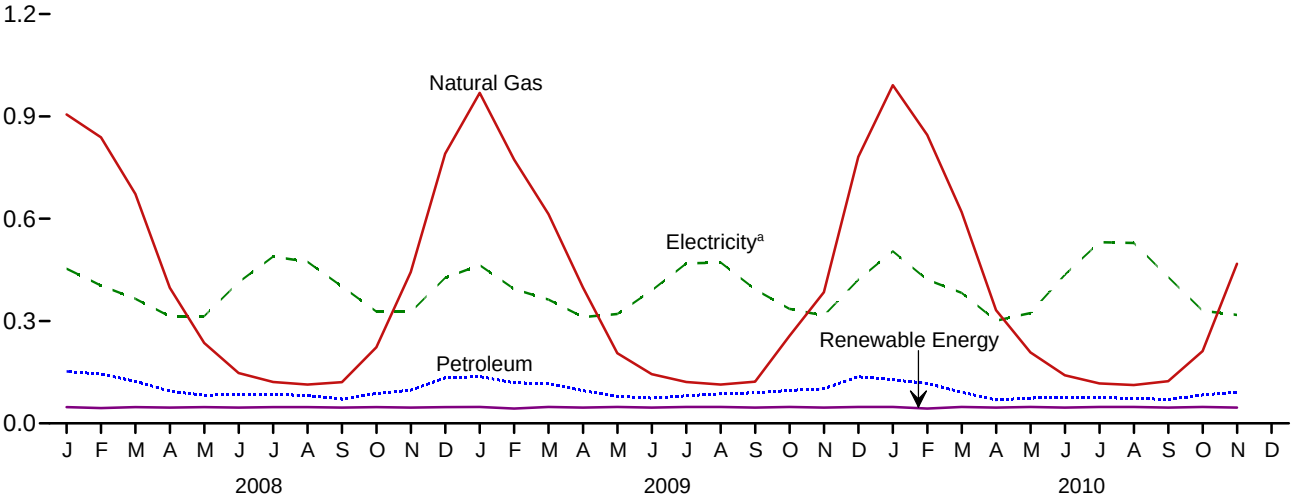
Sources: Tables 1.3 and 2.2–2.6.

Figure 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

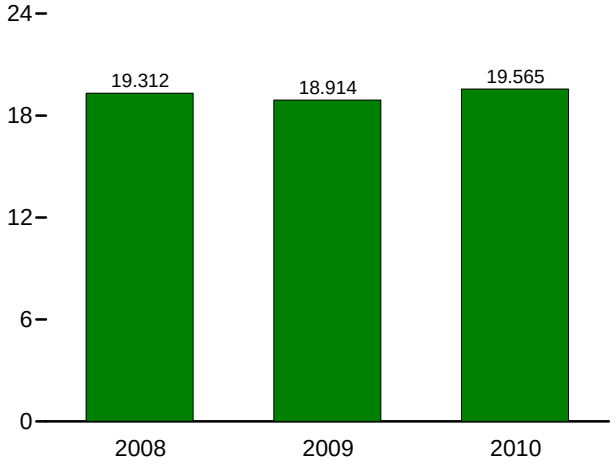
By Major Source, 1973-2009



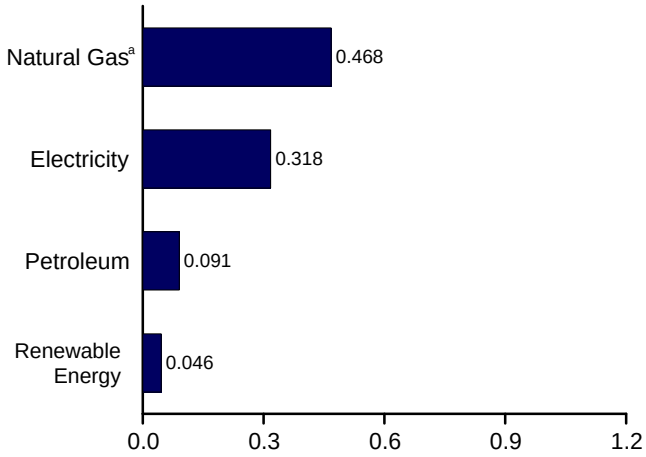
By Major Source, Monthly



Total, January-November



By Major Source, November 2010



[a] Electricity retail sales.
Web Page: http://www.eia.gov/mer/consump.html.
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**	**4,703**	**14,905**
1975 Total	**63**	**5,023**	**2,479**	**7,564**	**NA**	**NA**	**425**	**425**	**7,990**	**2,007**	**4,829**	**14,826**
1980 Total	**31**	**4,825**	**1,734**	**6,589**	**NA**	**NA**	**850**	**850**	**7,439**	**2,448**	**5,885**	**15,773**
1985 Total	**39**	**4,534**	**1,565**	**6,138**	**NA**	**NA**	**1,010**	**1,010**	**7,148**	**2,709**	**6,219**	**16,076**
1990 Total	**31**	**4,491**	**1,394**	**5,916**	**6**	**56**	**580**	**641**	**6,558**	**3,153**	**7,291**	**17,002**
1995 Total	**17**	**4,954**	**1,374**	**6,345**	**7**	**65**	**520**	**591**	**6,937**	**3,557**	**8,075**	**18,569**
1996 Total	**17**	**5,354**	**1,484**	**6,854**	**7**	**65**	**540**	**612**	**7,467**	**3,694**	**8,397**	**19,558**
1997 Total	**16**	**5,093**	**1,422**	**6,531**	**8**	**65**	**430**	**503**	**7,034**	**3,671**	**8,315**	**19,020**
1998 Total	**12**	**4,646**	**1,304**	**5,962**	**8**	**65**	**380**	**452**	**6,414**	**3,856**	**8,741**	**19,011**
1999 Total	**14**	**4,835**	**1,465**	**6,314**	**9**	**64**	**390**	**462**	**6,776**	**3,906**	**8,931**	**19,613**
2000 Total	**11**	**5,105**	**1,554**	**6,670**	**9**	**61**	**420**	**490**	**7,160**	**4,069**	**9,250**	**20,479**
2001 Total	**12**	**4,889**	**1,529**	**6,430**	**9**	**60**	**370**	**439**	**6,869**	**4,100**	**9,126**	**20,095**
2002 Total	**12**	**5,014**	**1,457**	**6,484**	**10**	**59**	**380**	**449**	**6,933**	**4,317**	**9,620**	**20,869**
2003 Total	**12**	**5,209**	**1,519**	**6,741**	**13**	**58**	**400**	**471**	**7,212**	**4,353**	**9,603**	**21,168**
2004 Total	**11**	**4,981**	**1,520**	**6,513**	**14**	**59**	**410**	**483**	**6,995**	**4,408**	**9,750**	**21,154**
2005 Total	**8**	**4,946**	**1,451**	**6,406**	**16**	**61**	**430**	**507**	**6,912**	**4,638**	**10,139**	**21,689**
2006 Total	**6**	**4,476**	**1,224**	**5,706**	**18**	**67**	**390**	**475**	**6,182**	**4,611**	**9,968**	**20,762**
2007 Total	**8**	**4,850**	**1,254**	**6,111**	**22**	**75**	**430**	**527**	**6,638**	**4,750**	**10,242**	**21,631**
2008 January	1	906	152	1,059	2	7	38	48	1,107	454	976	2,537
February	1	839	145	984	2	7	36	45	1,029	404	825	2,258
March	1	672	123	796	2	7	38	48	844	365	780	1,989
April	1	398	94	493	2	7	37	46	539	314	667	1,520
May	1	236	82	319	2	7	38	48	366	314	703	1,383
June	1	148	85	233	2	7	37	46	279	413	930	1,623
July	1	121	85	207	2	7	38	48	255	489	1,072	1,816
August	1	114	81	196	2	7	38	48	243	473	1,019	1,736
September	(s)	121	71	192	2	7	37	46	239	401	804	1,444
October	1	223	87	311	2	7	38	48	359	328	690	1,377
November	1	444	97	542	2	7	37	46	588	326	716	1,630
December	1	791	133	925	2	7	38	48	973	427	950	2,349
Total	**8**	**5,010**	**1,238**	**6,255**	**26**	**88**	**450**	**565**	**6,820**	**4,708**	**10,132**	**21,660**
2009 January	1	969	137	1,107	3	9	37	48	1,155	464	R 1,008	R 2,627
February	1	773	119	893	3	8	33	43	936	394	R 785	R 2,115
March	1	614	116	731	3	9	37	48	779	R 363	R 770	R 1,911
April	(s)	399	96	495	3	8	35	46	542	312	R 661	R 1,514
May	(s)	206	79	285	3	9	37	48	333	321	R 724	R 1,378
June	1	144	74	218	3	8	35	46	265	390	R 880	R 1,534
July	(s)	121	81	203	3	9	37	48	250	R 469	R 1,000	R 1,720
August	(s)	114	87	201	3	9	37	48	249	472	R 1,007	R 1,728
September	(s)	122	90	213	3	8	35	46	259	R 393	R 779	R 1,431
October	1	256	96	353	3	9	37	48	401	336	R 687	R 1,423
November	1	385	101	487	3	8	35	46	533	316	R 685	R 1,534
December	1	781	137	919	3	9	37	48	967	R 421	R 945	R 2,333
Total	**7**	**4,883**	**1,214**	**6,103**	**33**	**101**	**430**	**563**	**6,667**	**R 4,648**	**R 9,931**	**R 21,245**
2010 January	1	R 991	128	R 1,120	3	9	37	48	R 1,168	505	1,052	R 2,725
February	1	R 845	117	R 963	3	8	33	43	R 1,007	421	R 851	2,279
March	1	619	91	711	3	9	37	48	759	383	R 774	R 1,915
April	(s)	332	69	401	3	8	35	46	448	301	614	1,362
May	(s)	208	74	282	3	9	37	48	330	324	R 742	R 1,396
June	(s)	141	77	218	3	8	35	46	265	436	965	1,665
July	(s)	117	75	193	3	9	37	48	241	531	R 1,130	R 1,902
August	(s)	112	73	185	3	9	37	48	233	529	R 1,110	R 1,872
September	(s)	124	70	194	3	8	35	46	240	429	837	R 1,507
October	(s)	R 212	R 83	R 296	3	9	37	48	R 344	330	663	R 1,337
November	1	468	91	560	3	8	35	46	606	318	683	1,607
11-Month Total	**6**	**4,170**	**949**	**5,125**	**30**	**92**	**393**	**516**	**5,641**	**4,505**	**9,419**	**19,565**
2009 11-Month Total	**6**	**4,103**	**1,077**	**5,186**	**30**	**92**	**393**	**516**	**5,701**	**4,227**	**8,985**	**18,914**
2008 11-Month Total	**7**	**4,221**	**1,104**	**5,332**	**24**	**81**	**412**	**517**	**5,849**	**4,282**	**9,182**	**19,312**

[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.

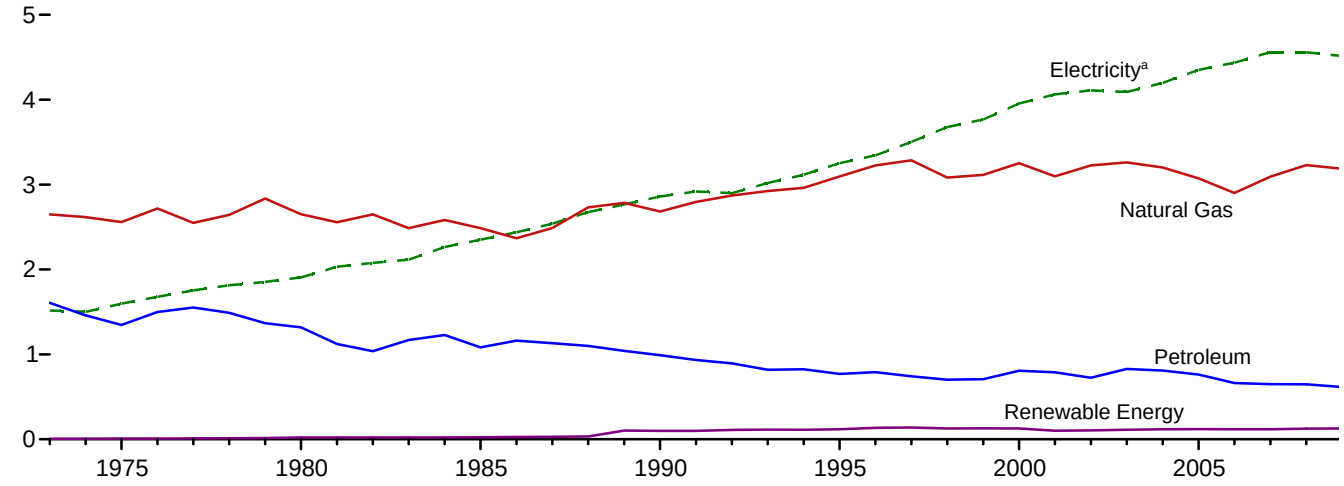
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

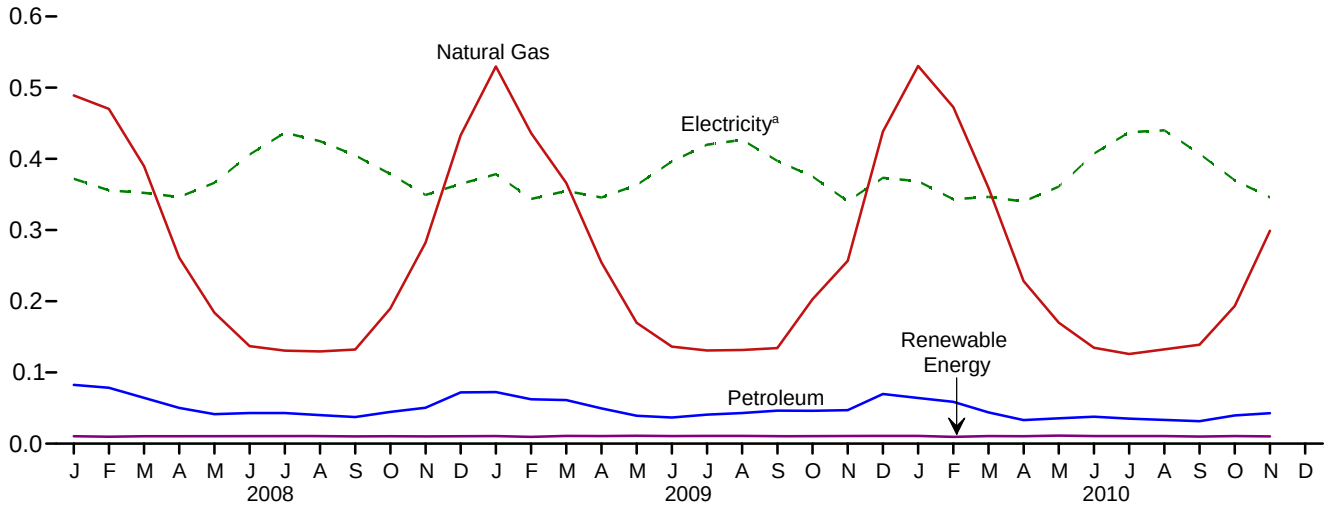
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

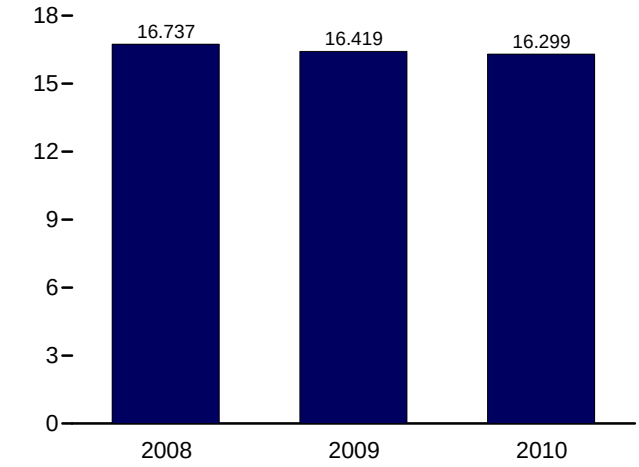
By Major Source, 1973-2009



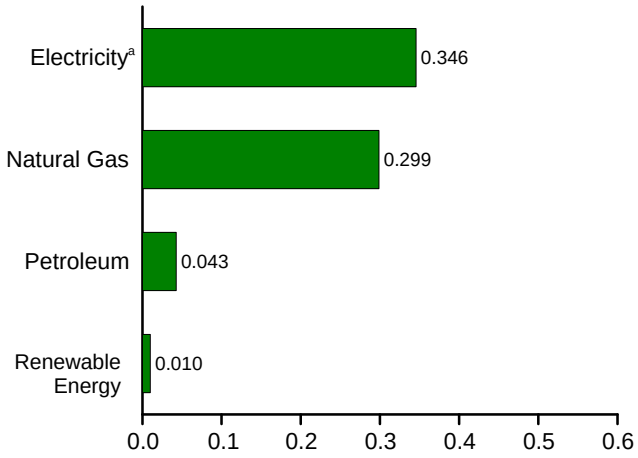
By Major Source, Monthly



Total, January-November



By Major Source, November 2010



[a] Electricity retail sales.
Web Page: http://www.eia.gov/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**	**3,609**	**9,549**
1975 Total	**147**	**2,558**	**1,346**	**4,051**	**NA**	**NA**	**NA**	**NA**	**8**	**8**	**4,059**	**1,598**	**3,845**	**9,502**
1980 Total	**115**	**2,651**	**1,318**	**4,084**	**NA**	**NA**	**NA**	**NA**	**21**	**21**	**4,105**	**1,906**	**4,582**	**10,593**
1985 Total	**137**	**2,488**	**1,083**	**3,708**	**NA**	**NA**	**NA**	**NA**	**24**	**24**	**3,732**	**2,351**	**5,398**	**11,481**
1990 Total	**124**	**2,682**	**991**	**3,798**	**1**	**3**	**–**	**–**	**94**	**98**	**3,896**	**2,860**	**6,615**	**13,371**
1995 Total	**117**	**3,096**	**769**	**3,982**	**1**	**5**	**–**	**–**	**113**	**118**	**4,101**	**3,252**	**7,382**	**14,735**
1996 Total	**122**	**3,226**	**790**	**4,138**	**1**	**5**	**–**	**–**	**129**	**135**	**4,273**	**3,344**	**7,603**	**15,220**
1997 Total	**129**	**3,285**	**743**	**4,157**	**1**	**6**	**–**	**–**	**131**	**138**	**4,295**	**3,503**	**7,935**	**15,733**
1998 Total	**93**	**3,083**	**702**	**3,878**	**1**	**7**	**–**	**–**	**118**	**127**	**4,005**	**3,678**	**8,338**	**16,020**
1999 Total	**103**	**3,115**	**707**	**3,925**	**1**	**7**	**–**	**–**	**121**	**129**	**4,053**	**3,766**	**8,610**	**16,430**
2000 Total	**92**	**3,252**	**807**	**4,150**	**1**	**8**	**–**	**–**	**119**	**128**	**4,278**	**3,956**	**8,993**	**17,227**
2001 Total	**97**	**3,097**	**790**	**3,984**	**1**	**8**	**–**	**–**	**92**	**101**	**4,084**	**4,062**	**9,042**	**17,188**
2002 Total	**90**	**3,225**	**726**	**4,040**	**(s)**	**9**	**–**	**–**	**95**	**104**	**4,144**	**4,110**	**9,159**	**17,413**
2003 Total	**82**	**3,261**	**827**	**4,170**	**1**	**11**	**–**	**–**	**101**	**113**	**4,283**	**4,090**	**9,023**	**17,396**
2004 Total	**103**	**3,201**	**809**	**4,113**	**1**	**12**	**–**	**–**	**105**	**118**	**4,232**	**4,198**	**9,286**	**17,716**
2005 Total	**97**	**3,073**	**761**	**3,932**	**1**	**14**	**–**	**–**	**105**	**119**	**4,051**	**4,351**	**9,511**	**17,913**
2006 Total	**65**	**2,902**	**663**	**3,629**	**1**	**14**	**–**	**–**	**102**	**117**	**3,746**	**4,435**	**9,587**	**17,768**
2007 Total	**70**	**3,094**	**649**	**3,814**	**1**	**14**	**–**	**–**	**102**	**118**	**3,931**	**4,560**	**9,831**	**18,321**
2008 January	8	489	82	579	(s)	1	(s)	–	9	10	590	372	801	1,763
February	7	470	79	556	(s)	1	(s)	–	9	10	566	356	726	1,648
March	7	390	64	461	(s)	1	(s)	–	9	10	472	352	752	1,576
April	5	261	50	316	(s)	1	(s)	–	9	10	326	346	736	1,409
May	5	184	42	230	(s)	1	(s)	–	9	11	241	366	820	1,427
June	6	137	43	185	(s)	1	(s)	–	9	10	196	406	914	1,516
July	5	131	43	179	(s)	1	(s)	–	9	11	189	437	958	1,584
August	5	130	40	175	(s)	1	(s)	–	9	11	185	425	914	1,524
September	4	132	37	174	(s)	1	(s)	–	9	10	184	405	812	1,401
October	5	190	45	240	(s)	1	(s)	–	9	10	250	379	797	1,426
November	6	282	51	339	(s)	1	(s)	–	9	10	349	349	766	1,464
December	7	433	72	512	(s)	1	(s)	–	9	11	523	365	813	1,700
Total	**69**	**3,228**	**648**	**3,945**	**1**	**15**	**(s)**	**–**	**109**	**125**	**4,070**	**4,558**	**9,809**	**18,437**
2009 January	8	530	73	610	(s)	1	(s)	(s)	9	11	621	R 379	R 823	R 1,822
February	7	436	62	505	(s)	1	(s)	(s)	8	10	515	R 344	R 686	R 1,544
March	6	366	61	434	(s)	1	(s)	(s)	9	11	445	R 355	R 753	R 1,552
April	4	255	50	308	(s)	1	(s)	(s)	9	11	319	R 346	R 733	R 1,398
May	4	170	39	213	(s)	1	(s)	(s)	10	11	224	R 363	R 820	R 1,407
June	5	136	37	178	(s)	1	(s)	(s)	9	11	188	R 396	R 896	R 1,480
July	4	131	41	176	(s)	1	(s)	(s)	9	11	187	R 420	R 895	R 1,502
August	4	132	43	179	(s)	1	(s)	(s)	10	11	190	R 427	R 911	R 1,528
September	4	134	46	184	(s)	1	(s)	(s)	9	10	195	R 397	R 787	R 1,379
October	5	203	46	254	(s)	1	(s)	(s)	9	11	264	R 375	R 768	R 1,407
November	5	257	47	309	(s)	1	(s)	(s)	9	11	320	R 341	R 739	R 1,400
December	6	438	70	514	(s)	1	(s)	(s)	9	11	525	R 373	R 838	R 1,736
Total	**61**	**3,187**	**615**	**3,863**	**1**	**17**	**(s)**	**(s)**	**111**	**128**	**3,991**	**R 4,515**	**R 9,648**	**R 18,154**
2010 January	7	R 531	64	602	(s)	1	(s)	(s)	9	11	613	R 369	R 768	R 1,750
February	6	R 473	59	538	(s)	1	(s)	(s)	8	10	R 548	R 343	R 693	R 1,584
March	6	359	44	409	(s)	1	(s)	(s)	9	11	420	R 347	R 701	R 1,467
April	4	228	33	265	(s)	1	(s)	(s)	9	10	276	R 340	R 694	R 1,310
May	4	170	36	209	(s)	1	(s)	(s)	10	11	221	R 361	R 827	R 1,409
June	4	135	38	177	(s)	1	(s)	(s)	9	11	187	R 407	R 902	R 1,497
July	4	126	35	165	(s)	1	(s)	(s)	9	11	176	R 437	R 931	R 1,544
August	4	R 132	33	R 170	(s)	1	(s)	(s)	9	11	R 181	R 440	R 924	R 1,544
September	4	139	32	R 174	(s)	1	(s)	(s)	9	10	185	R 407	R 794	R 1,386
October	4	193	R 40	R 237	(s)	1	(s)	(s)	9	11	R 248	R 370	R 743	R 1,361
November	5	299	43	347	(s)	1		–	9	10	357	346	743	1,446
11-Month Total	**53**	**2,785**	**456**	**3,294**	**1**	**15**	**(s)**	**(s)**	**100**	**116**	**3,410**	**4,168**	**8,722**	**16,299**
2009 11-Month Total	**55**	**2,749**	**545**	**3,349**	**1**	**15**	**(s)**	**(s)**	**101**	**117**	**3,466**	**4,142**	**8,810**	**16,419**
2008 11-Month Total	**62**	**2,796**	**576**	**3,434**	**1**	**14**	**(s)**	**–**	**100**	**114**	**3,548**	**4,194**	**8,996**	**16,737**

[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.

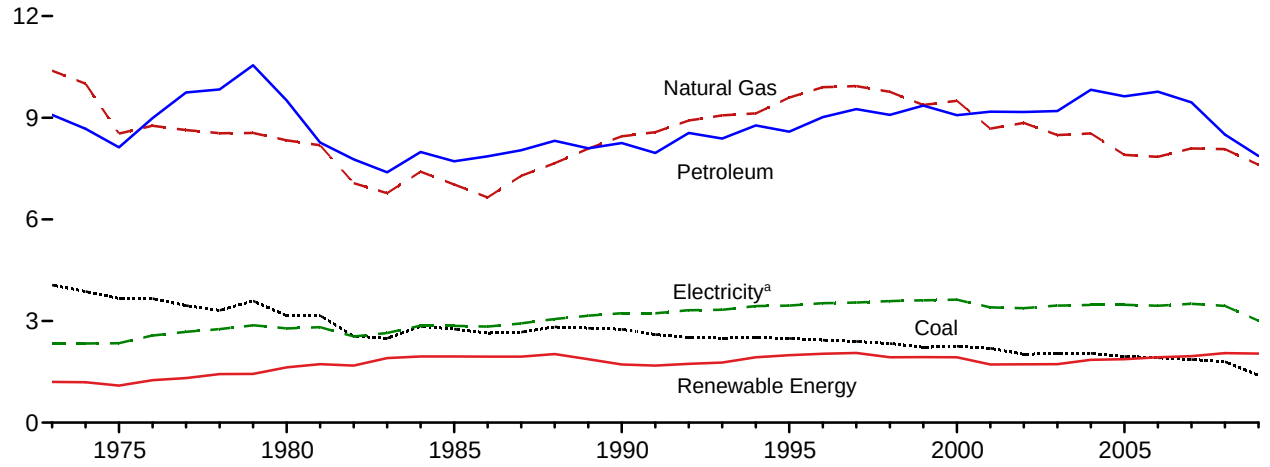
Web Page: See http://www.eia.gov/mer/consump.html for all available data beginning in 1973.

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

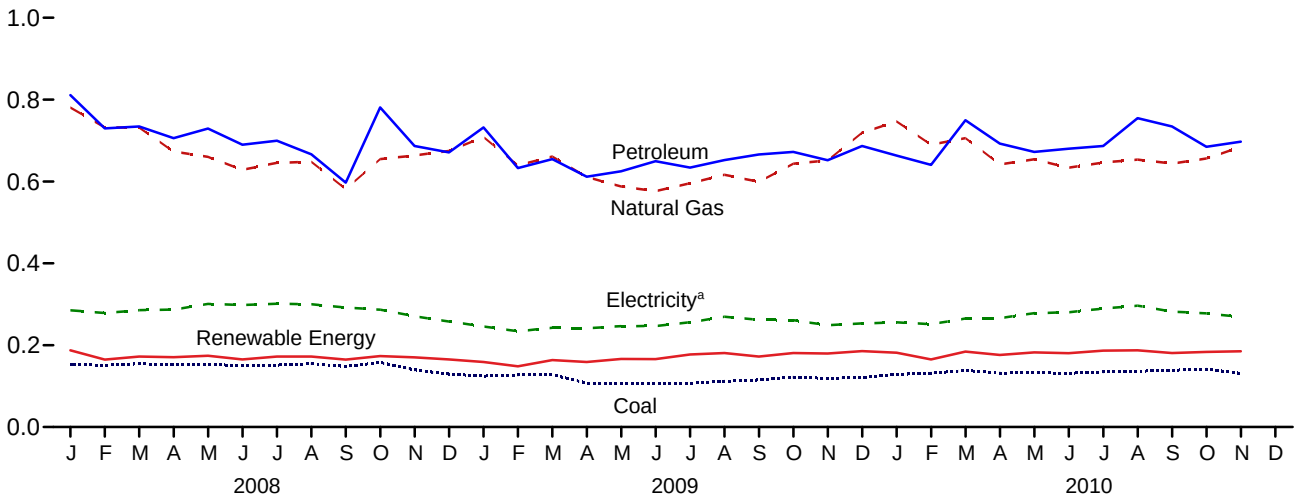
This table has been modified to include a column for "Wind."

Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

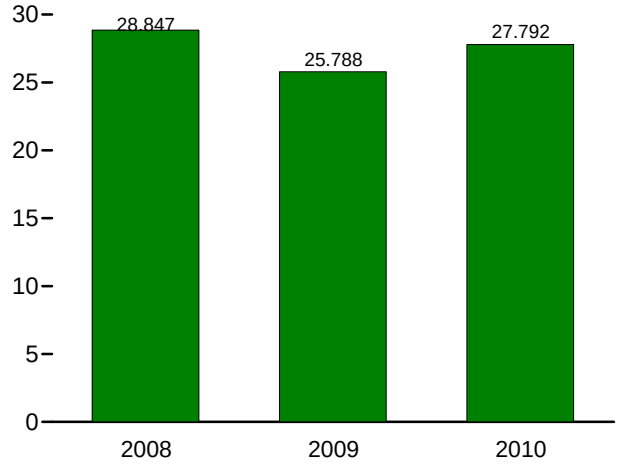
By Major Source, 1973-2009



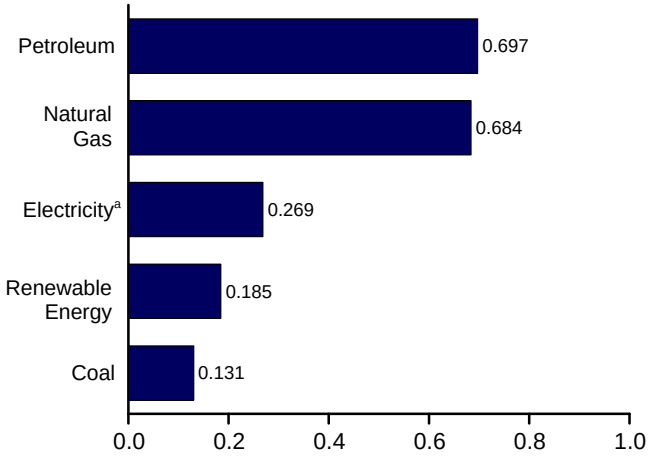
By Major Source, Monthly



Total, January-November



By Major Source, November 2010



[a] Electricity retail sales.
Web Page: http://www.eia.gov/mer/consump.html.
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	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**	**1,165**	**1,200**	**24,720**	**2,341**	**5,571**	**32,632**
1975 Total	**3,667**	**8,532**	**8,127**	**20,339**	**32**	**NA**	**NA**	**1,063**	**1,096**	**21,434**	**2,346**	**5,647**	**29,427**
1980 Total	**3,155**	**8,333**	**9,509**	**20,962**	**33**	**NA**	**NA**	**1,600**	**1,633**	**22,595**	**2,781**	**6,686**	**32,062**
1985 Total	**2,760**	**7,032**	**7,714**	**17,492**	**33**	**NA**	**NA**	**1,918**	**1,951**	**19,443**	**2,855**	**6,554**	**28,852**
1990 Total	**2,756**	**8,451**	**8,251**	**19,463**	**31**	**2**	**–**	**1,684**	**1,717**	**21,180**	**3,226**	**7,461**	**31,867**
1995 Total	**2,488**	**9,592**	**8,586**	**20,727**	**55**	**3**	**–**	**1,934**	**1,992**	**22,719**	**3,455**	**7,844**	**34,018**
1996 Total	**2,434**	**9,901**	**9,019**	**21,377**	**61**	**3**	**–**	**1,969**	**2,033**	**23,410**	**3,527**	**8,018**	**34,955**
1997 Total	**2,395**	**9,933**	**9,255**	**21,629**	**58**	**3**	**–**	**1,996**	**2,057**	**23,686**	**3,542**	**8,024**	**35,253**
1998 Total	**2,335**	**9,763**	**9,082**	**21,248**	**55**	**3**	**–**	**1,872**	**1,929**	**23,177**	**3,587**	**8,131**	**34,894**
1999 Total	**2,227**	**9,375**	**9,356**	**21,016**	**49**	**4**	**–**	**1,882**	**1,934**	**22,950**	**3,611**	**8,254**	**34,815**
2000 Total	**2,256**	**9,500**	**9,075**	**20,896**	**42**	**4**	**–**	**1,881**	**1,928**	**22,824**	**3,631**	**8,255**	**34,711**
2001 Total	**2,192**	**8,676**	**9,178**	**20,075**	**33**	**5**	**–**	**1,681**	**1,719**	**21,794**	**3,400**	**7,569**	**32,763**
2002 Total	**2,019**	**8,845**	**9,168**	**20,093**	**39**	**5**	**–**	**1,676**	**1,720**	**21,813**	**3,379**	**7,529**	**32,721**
2003 Total	**2,041**	**8,488**	**9,197**	**19,777**	**43**	**3**	**–**	**1,679**	**1,726**	**21,503**	**3,454**	**7,620**	**32,577**
2004 Total	**2,047**	**8,536**	**9,825**	**20,545**	**33**	**4**	**–**	**1,817**	**1,853**	**22,398**	**3,473**	**7,682**	**33,553**
2005 Total	**1,954**	**7,903**	**9,633**	**19,534**	**32**	**4**	**–**	**1,837**	**1,873**	**21,407**	**3,477**	**7,602**	**32,487**
2006 Total	**1,914**	**7,846**	**9,770**	**19,591**	**29**	**4**	**–**	**1,897**	**1,930**	**21,521**	**3,451**	**7,459**	**32,431**
2007 Total	**1,865**	**8,090**	**9,451**	**19,431**	**16**	**5**	**–**	**1,944**	**1,964**	**21,395**	**3,507**	**7,562**	**32,464**
2008 January	153	781	811	1,749	2	(s)	–	185	188	1,936	285	614	2,835
February	151	732	730	1,615	2	(s)	–	163	165	1,780	278	568	2,626
March	155	732	734	1,628	2	(s)	–	170	172	1,800	286	610	2,696
April	152	673	706	1,539	2	(s)	–	168	171	1,709	287	609	2,605
May	153	660	729	1,545	2	(s)	–	172	174	1,720	301	674	2,694
June	150	629	690	1,477	1	(s)	–	163	165	1,643	298	671	2,611
July	152	646	699	1,502	1	(s)	–	171	172	1,674	301	661	2,636
August	154	648	667	1,470	1	(s)	–	171	172	1,642	300	646	2,588
September	148	582	597	1,329	1	(s)	–	163	165	1,494	292	585	2,371
October	158	654	781	1,594	1	(s)	–	172	173	1,767	287	603	2,657
November	140	663	687	1,491	1	(s)	–	169	170	1,661	271	594	2,526
December	129	675	671	1,472	2	(s)	–	163	165	1,638	258	575	2,470
Total	**1,796**	**8,074**	**8,501**	**18,412**	**17**	**5**	**–**	**2,031**	**2,053**	**20,465**	**3,444**	**7,410**	**31,319**
2009 January	125	709	732	1,563	2	(s)	–	157	159	1,722	R 246	R 535	R 2,503
February	127	639	633	1,398	1	(s)	–	147	148	1,547	R 234	R 467	R 2,247
March	128	661	655	1,442	2	(s)	–	162	164	1,606	R 243	R 514	R 2,363
April	107	611	612	1,327	2	(s)	–	157	159	1,486	R 241	R 512	R 2,239
May	106	588	625	1,318	2	(s)	–	164	166	1,484	R 247	R 556	R 2,287
June	107	576	650	1,331	2	(s)	–	164	166	1,497	R 247	R 558	R 2,302
July	107	596	634	1,335	1	(s)	–	176	177	1,512	R 256	R 546	R 2,314
August	112	616	652	1,377	1	(s)	–	179	181	1,558	R 270	R 576	R 2,403
September	115	599	666	1,378	1	(s)	–	171	172	1,550	R 262	R 520	R 2,332
October	122	643	672	1,433	1	(s)	–	179	181	1,614	R 261	R 534	R 2,410
November	118	651	652	1,421	1	(s)	–	178	180	1,601	R 249	R 540	R 2,389
December	121	719	687	1,524	2	(s)	–	183	185	1,710	R 253	R 568	R 2,531
Total	**1,396**	**7,609**	**7,869**	**16,849**	**18**	**4**	**–**	**2,016**	**2,038**	**18,887**	**R 3,008**	**R 6,426**	**R 28,322**
2010 January	128	R 747	663	R 1,534	2	(s)	(s)	180	182	R 1,716	R 256	R 533	R 2,505
February	132	R 690	640	R 1,466	2	(s)	(s)	163	165	R 1,631	R 251	R 507	R 2,389
March	138	706	750	1,596	2	(s)	(s)	182	184	1,780	R 265	R 536	R 2,581
April	132	642	692	1,467	2	(s)	(s)	174	176	1,643	R 266	R 543	R 2,452
May	133	654	672	1,461	2	(s)	(s)	180	182	1,643	R 278	R 637	R 2,558
June	131	633	680	1,446	1	(s)	(s)	179	181	1,627	R 280	R 621	R 2,528
July	135	646	687	1,468	1	(s)	(s)	185	187	1,654	R 289	R 616	R 2,560
August	136	653	755	1,546	1	(s)	(s)	186	187	1,733	R 296	R 622	R 2,652
September	139	644	734	1,516	1	(s)	(s)	180	181	1,697	R 282	R 550	R 2,529
October	R 141	656	R 685	1,480	1	(s)	(s)	182	184	1,664	R 278	R 558	R 2,499
November	131	684	697	1,507	1	(s)	–	184	185	1,692	269	578	2,539
11-Month Total	**1,476**	**7,355**	**7,656**	**16,486**	**15**	**4**	**(s)**	**1,975**	**1,993**	**18,479**	**3,011**	**6,301**	**27,792**
2009 11-Month Total	**1,275**	**6,889**	**7,182**	**15,324**	**17**	**4**	**–**	**1,832**	**1,853**	**17,177**	**2,755**	**5,857**	**25,788**
2008 11-Month Total	**1,666**	**7,399**	**7,830**	**16,939**	**15**	**5**	**–**	**1,868**	**1,887**	**18,827**	**3,186**	**6,834**	**28,847**

[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. (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.

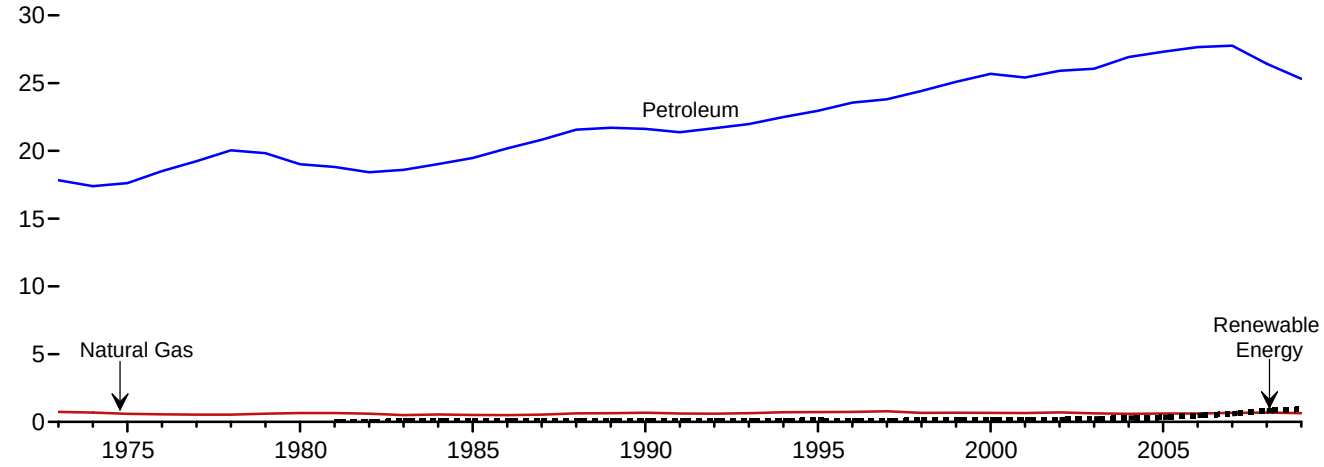
Web Page: See http://www.eia.gov/mer/consump.html for all available data beginning in 1973.

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

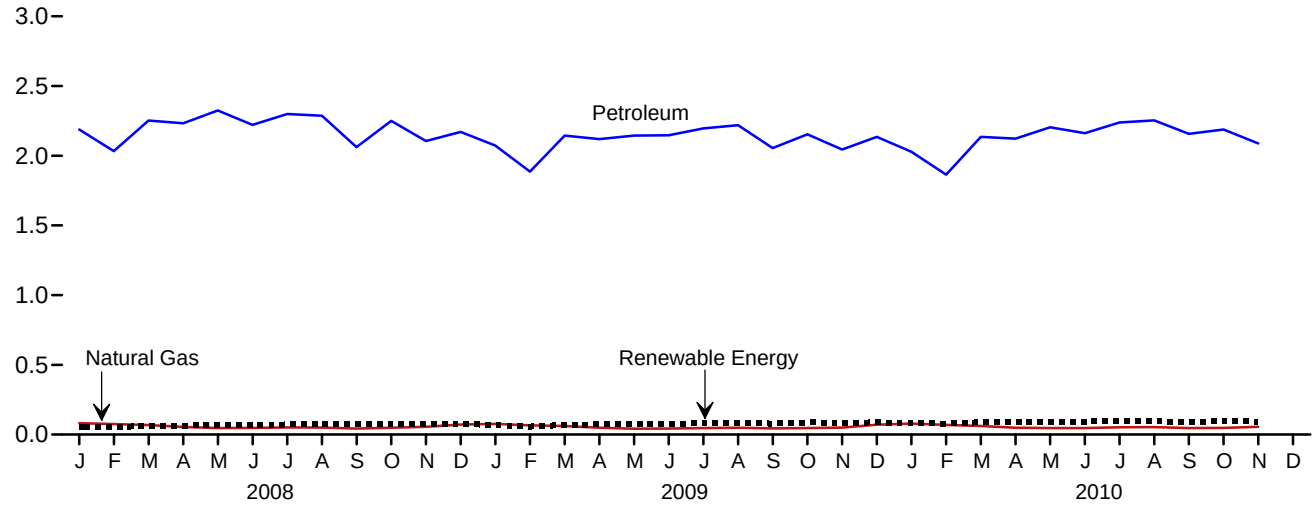
This table has been modified to include a column for "Solar/PV."

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

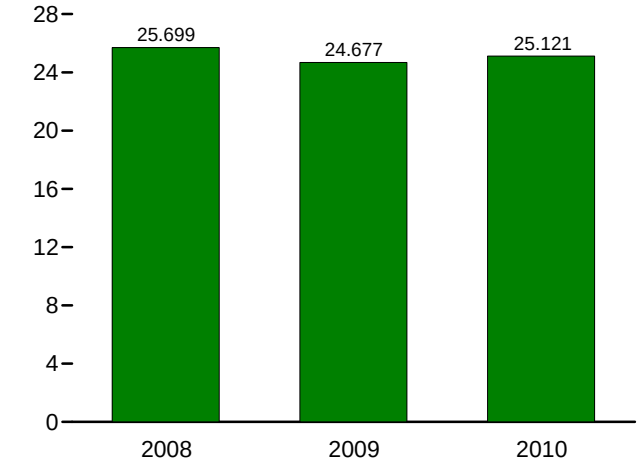
By Major Source, 1973-2009



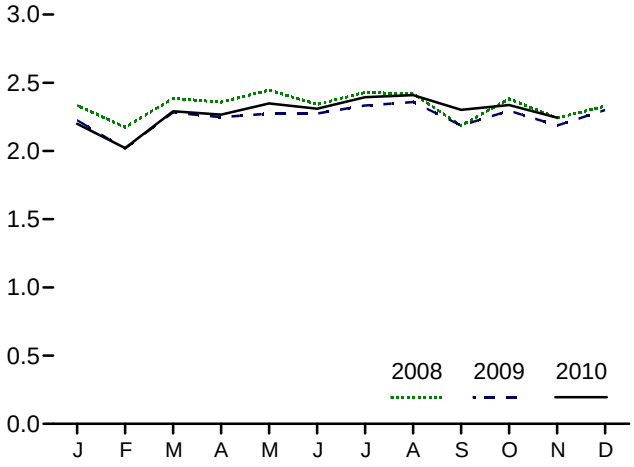
By Major Source, Monthly



Total, January-November



Total, Monthly



Web Page: http://www.eia.gov/mer/consump.html.
Source: Table 2.5.

Table 2.5 Transportation Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]								
	Fossil Fuels				Renewable Energy[b]		Electricity Retail Sales[e]	Electrical System Energy Losses[f]	Total
	Coal	Natural Gas[c]	Petroleum[d]	Total	Biomass	Total Primary			
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**	**113**	**23,791**	**17**	**39**	**23,847**
1996 Total	**(g)**	**737**	**23,565**	**24,302**	**81**	**24,383**	**17**	**38**	**24,438**
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**	**26,549**
2001 Total	**(g)**	**658**	**25,412**	**26,070**	**142**	**26,213**	**20**	**43**	**26,276**
2002 Total	**(g)**	**702**	**25,913**	**26,614**	**170**	**26,784**	**19**	**42**	**26,845**
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**	**55**	**27,896**
2005 Total	**(g)**	**624**	**27,309**	**27,933**	**339**	**28,272**	**26**	**56**	**28,354**
2006 Total	**(g)**	**625**	**27,651**	**28,276**	**475**	**28,751**	**25**	**54**	**28,830**
2007 Total	**(g)**	**665**	**27,763**	**28,429**	**603**	**29,031**	**28**	**60**	**29,119**
2008 January	(g)	82	2,188	2,270	57	2,327	2	5	2,335
February	(g)	75	2,034	2,108	58	2,166	2	5	2,173
March	(g)	68	2,253	2,321	59	2,379	2	5	2,386
April	(g)	54	2,232	2,286	65	2,351	2	4	2,358
May	(g)	47	2,325	2,372	67	2,439	2	5	2,446
June	(g)	48	2,221	2,269	67	2,335	2	5	2,342
July	(g)	51	2,299	2,349	73	2,423	2	5	2,430
August	(g)	50	2,287	2,337	75	2,412	2	5	2,419
September	(g)	44	2,062	2,105	75	2,180	2	4	2,186
October	(g)	49	2,250	2,298	78	2,376	2	5	2,383
November	(g)	55	2,105	2,161	74	2,235	2	5	2,242
December	(g)	71	2,171	2,242	78	2,321	2	5	2,328
Total	**(g)**	**692**	**26,425**	**27,118**	**827**	**27,944**	**26**	**57**	**28,027**
2009 January	(g)	77	2,073	2,150	67	2,217	3	6	2,225
February	(g)	66	1,886	1,951	58	2,009	2	5	2,016
March	(g)	61	2,144	2,205	70	2,275	2	5	2,282
April	(g)	49	2,119	2,167	73	2,241	2	4	2,247
May	(g)	42	2,145	2,187	79	2,266	2	5	2,273
June	(g)	43	2,147	2,189	78	2,267	2	5	2,274
July	(g)	47	2,197	2,243	83	2,326	2	5	2,334
August	(g)	49	2,218	2,267	85	2,352	2	5	2,359
September	(g)	44	2,055	2,100	80	2,180	2	4	2,186
October	(g)	47	2,153	2,200	88	2,288	2	4	2,294
November	(g)	50	2,045	2,095	85	2,180	2	4	2,187
December	(g)	70	2,135	2,205	87	2,292	2	5	2,300
Total	**(g)**	**643**	**25,316**	**25,960**	**934**	**26,894**	**27**	**R 57**	**26,977**
2010 January	(g)	79	2,029	2,108	84	R 2,192	3	5	2,199
February	(g)	70	1,864	1,934	79	2,014	2	5	2,021
March	(g)	61	2,135	2,196	89	2,285	2	5	2,291
April	(g)	48	2,123	2,171	88	2,260	2	4	2,266
May	(g)	46	2,204	2,251	92	2,342	2	5	2,349
June	(g)	47	2,162	2,209	93	2,302	2	5	2,309
July	(g)	52	2,239	2,290	97	2,387	2	5	2,394
August	(g)	53	2,253	2,307	96	2,403	2	4	2,409
September	(g)	R 46	2,157	2,203	92	2,295	2	4	2,301
October	(g)	47	R 2,187	R 2,235	96	R 2,331	2	4	R 2,337
November	(g)	56	2,088	2,144	94	2,238	2	4	2,244
11-Month Total	**(g)**	**606**	**23,442**	**24,047**	**1,000**	**25,047**	**24**	**50**	**25,121**
2009 11-Month Total	**(g)**	**573**	**23,182**	**23,754**	**847**	**24,601**	**24**	**52**	**24,677**
2008 11-Month Total	**(g)**	**621**	**24,254**	**24,875**	**748**	**25,623**	**24**	**51**	**25,699**

[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.

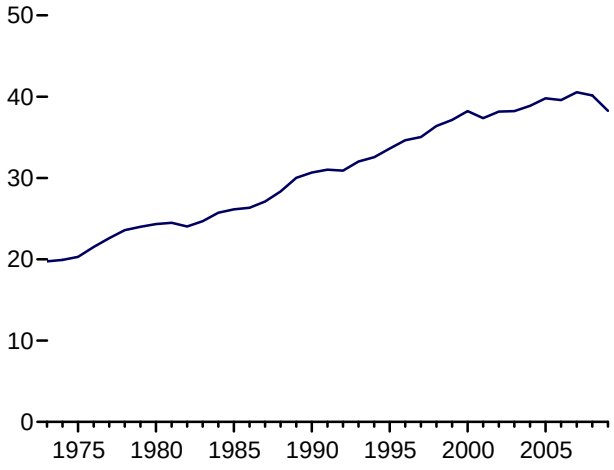
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

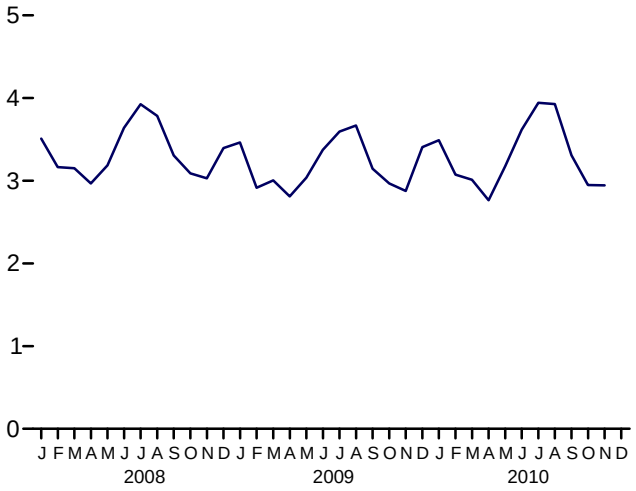
Sources: Tables 2.6, 3.8c, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

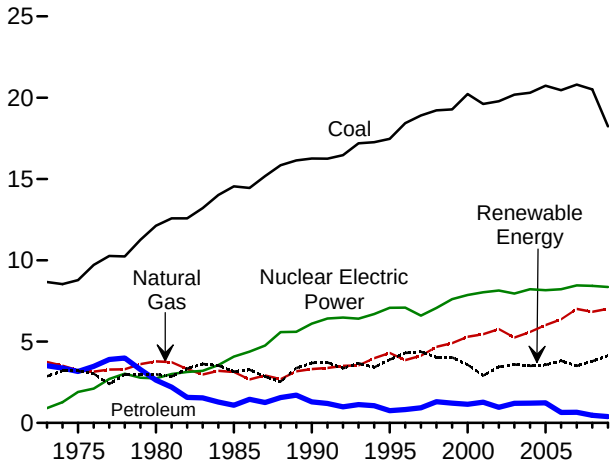
Total, 1973-2009



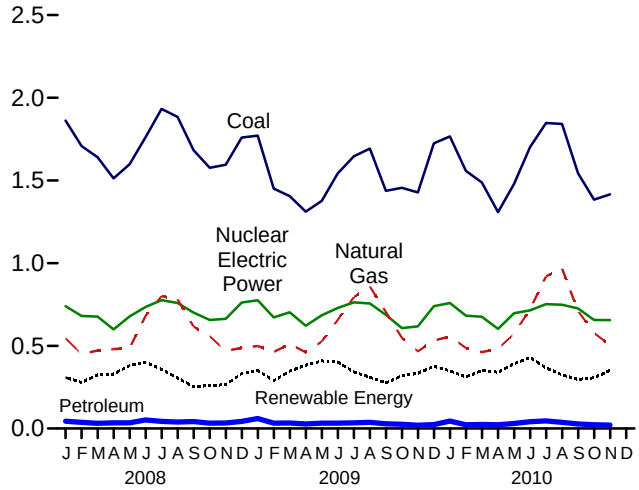
Total, Monthly



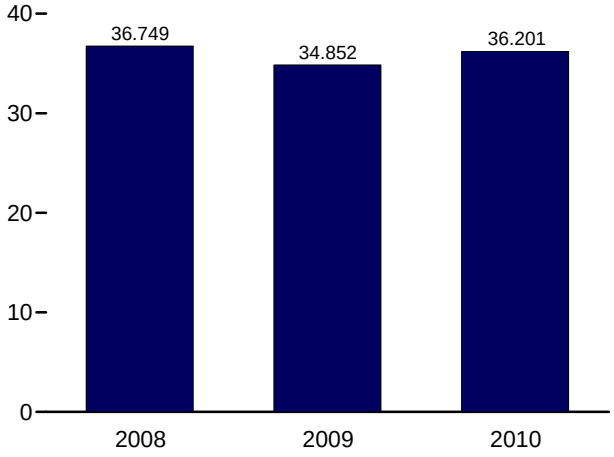
By Major Source, 1973-2009



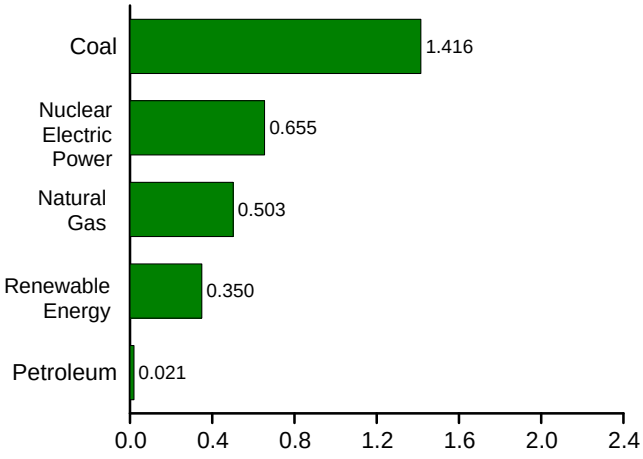
By Major Source, Monthly



Total, January-November



By Major Source, November 2010



Web Page: http://www.eia.gov/mer/consump.html.
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**	**43**	**NA**	**NA**	**3**	**2,873**	**49**	**19,753**
1975 Total	**8,786**	**3,240**	**3,166**	**15,191**	**1,900**	**3,122**	**70**	**NA**	**NA**	**2**	**3,194**	**21**	**20,307**
1980 Total	**12,123**	**3,778**	**2,634**	**18,534**	**2,739**	**2,867**	**110**	**NA**	**NA**	**4**	**2,982**	**71**	**24,327**
1985 Total	**14,542**	**3,135**	**1,090**	**18,767**	**4,076**	**2,937**	**198**	**(s)**	**(s)**	**14**	**3,150**	**140**	**26,132**
1990 Total[e]	**16,261**	**3,309**	**1,289**	**20,859**	**6,104**	**3,014**	**326**	**4**	**29**	**317**	**3,689**	**8**	**30,660**
1995 Total	**17,466**	**4,302**	**755**	**22,523**	**7,075**	**3,149**	**280**	**5**	**33**	**422**	**3,889**	**134**	**33,621**
1996 Total	**18,429**	**3,862**	**817**	**23,109**	**7,087**	**3,528**	**300**	**5**	**33**	**438**	**4,305**	**137**	**34,638**
1997 Total	**18,905**	**4,126**	**927**	**23,957**	**6,597**	**3,581**	**309**	**5**	**34**	**446**	**4,375**	**116**	**35,045**
1998 Total	**19,216**	**4,675**	**1,306**	**25,197**	**7,068**	**3,241**	**311**	**5**	**31**	**444**	**4,032**	**88**	**36,385**
1999 Total	**19,279**	**4,902**	**1,211**	**25,393**	**7,610**	**3,218**	**312**	**5**	**46**	**453**	**4,034**	**99**	**37,136**
2000 Total	**20,220**	**5,293**	**1,144**	**26,658**	**7,862**	**2,768**	**296**	**5**	**57**	**453**	**3,579**	**115**	**38,214**
2001 Total	**19,614**	**5,458**	**1,277**	**26,348**	**8,029**	**2,209**	**289**	**6**	**70**	**337**	**2,910**	**75**	**37,362**
2002 Total	**19,783**	**5,767**	**961**	**26,511**	**8,145**	**2,650**	**305**	**6**	**105**	**380**	**3,445**	**72**	**38,173**
2003 Total	**20,185**	**5,246**	**1,205**	**26,636**	**7,959**	**2,781**	**303**	**5**	**115**	**397**	**3,601**	**22**	**38,218**
2004 Total	**20,305**	**5,595**	**1,212**	**27,112**	**8,222**	**2,656**	**311**	**6**	**142**	**388**	**3,503**	**39**	**38,876**
2005 Total	**20,737**	**6,015**	**1,235**	**27,986**	**8,161**	**2,670**	**309**	**6**	**178**	**406**	**3,568**	**85**	**39,800**
2006 Total	**20,462**	**6,375**	**648**	**27,485**	**8,215**	**2,839**	**306**	**5**	**264**	**412**	**3,827**	**63**	**39,590**
2007 Total	**20,808**	**7,005**	**657**	**28,470**	**8,455**	**2,430**	**308**	**6**	**341**	**423**	**3,508**	**107**	**40,540**
2008 January	1,862	545	44	2,451	739	203	25	(s)	42	37	308	11	3,509
February	1,708	450	37	2,194	681	184	23	(s)	38	35	279	10	3,165
March	1,640	472	31	2,144	676	212	26	1	47	38	324	7	3,151
April	1,513	481	34	2,028	599	217	26	1	51	34	330	9	2,966
May	1,598	487	35	2,119	678	267	26	1	53	34	380	8	3,185
June	1,761	681	52	2,494	735	286	26	1	51	36	400	9	3,639
July	1,933	800	43	2,776	777	251	27	1	39	39	357	15	3,925
August	1,884	781	39	2,704	759	208	27	1	32	38	306	15	3,785
September	1,683	617	42	2,342	701	158	26	1	31	36	252	10	3,305
October	1,577	558	33	2,167	657	151	27	1	47	35	260	5	3,090
November	1,594	469	34	2,097	663	153	26	(s)	49	36	265	4	3,029
December	1,760	488	44	2,291	762	204	27	(s)	65	38	333	7	3,394
Total	**20,513**	**6,829**	**468**	**27,810**	**8,427**	**2,494**	**312**	**9**	**546**	**435**	**3,795**	**112**	**40,144**
2009 January	1,771	498	61	2,330	775	228	27	(s)	58	37	350	7	3,462
February	1,451	464	33	1,947	672	172	25	(s)	57	34	289	8	2,916
March	1,406	511	34	1,950	703	211	27	1	69	38	346	4	3,004
April	1,311	461	28	1,800	621	250	26	1	73	33	382	6	2,810
May	1,376	526	32	1,934	684	287	26	1	61	34	409	9	3,037
June	1,542	656	33	2,231	729	284	25	1	55	37	402	11	3,374
July	1,646	794	34	2,474	763	227	26	1	48	39	342	14	3,594
August	1,692	858	37	2,588	756	190	26	1	53	39	310	15	3,669
September	1,437	705	29	2,170	688	168	26	1	45	36	276	11	3,145
October	1,456	548	26	2,030	607	191	26	1	67	35	319	11	2,967
November	1,427	467	20	1,914	618	204	27	(s)	67	37	335	9	2,876
December	1,724	532	24	2,280	740	240	29	(s)	67	40	375	11	3,406
Total	**18,239**	**7,022**	**390**	**25,651**	**8,356**	**2,650**	**315**	**9**	**721**	**441**	**4,136**	**116**	**38,260**
2010 January	1,766	557	45	2,368	759	214	29	(s)	68	37	349	14	3,490
February	1,558	487	23	2,068	682	198	26	(s)	54	34	312	12	3,074
March	1,487	462	25	1,975	676	199	28	1	85	37	350	10	3,012
April	1,308	482	23	1,813	603	180	27	1	96	36	340	9	2,764
May	1,479	573	31	2,083	697	241	28	2	85	35	391	4	3,176
June	1,702	722	41	2,464	714	286	27	2	78	37	430	8	3,618
July	1,848	920	46	2,814	752	234	27	2	65	38	367	10	3,942
August	1,842	968	37	2,847	749	192	28	2	65	39	325	6	3,927
September	1,544	711	28	2,283	726	164	27	1	69	35	297	2	3,307
October	1,384	578	22	1,984	656	169	26	1	78	35	308	-1	2,948
November	1,416	503	21	1,940	655	188	28	1	96	37	350	-2	2,943
11-Month Total	**17,335**	**6,963**	**342**	**24,640**	**7,670**	**2,268**	**300**	**12**	**838**	**401**	**3,819**	**72**	**36,201**
2009 11-Month Total	**16,515**	**6,489**	**366**	**23,370**	**7,616**	**2,410**	**287**	**8**	**654**	**401**	**3,761**	**105**	**34,852**
2008 11-Month Total	**18,753**	**6,340**	**424**	**25,517**	**7,665**	**2,290**	**285**	**8**	**480**	**398**	**3,462**	**105**	**36,749**

[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/mer/consump.html for all available data beginning in 1973.

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

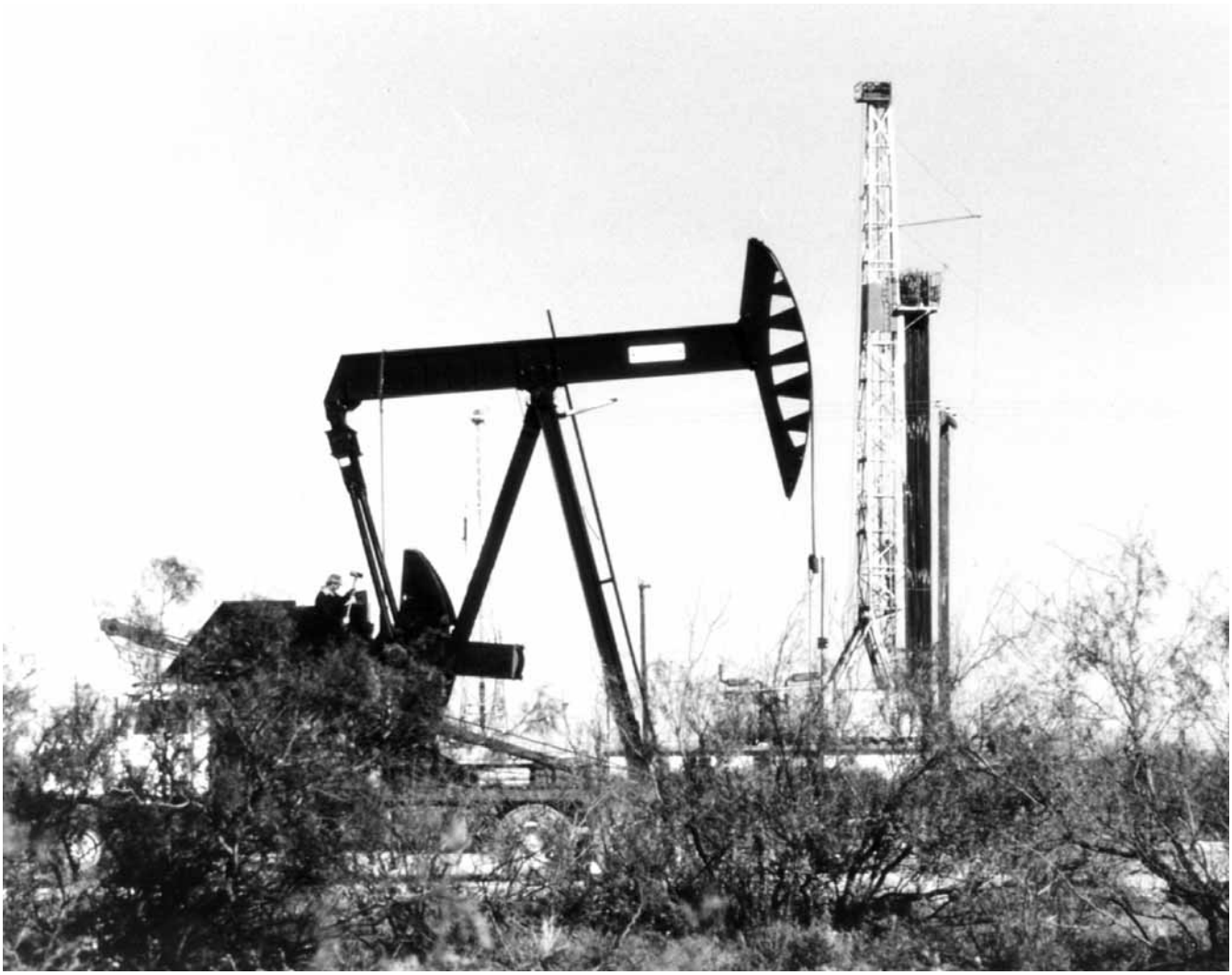
Energy Consumption by Sector

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.

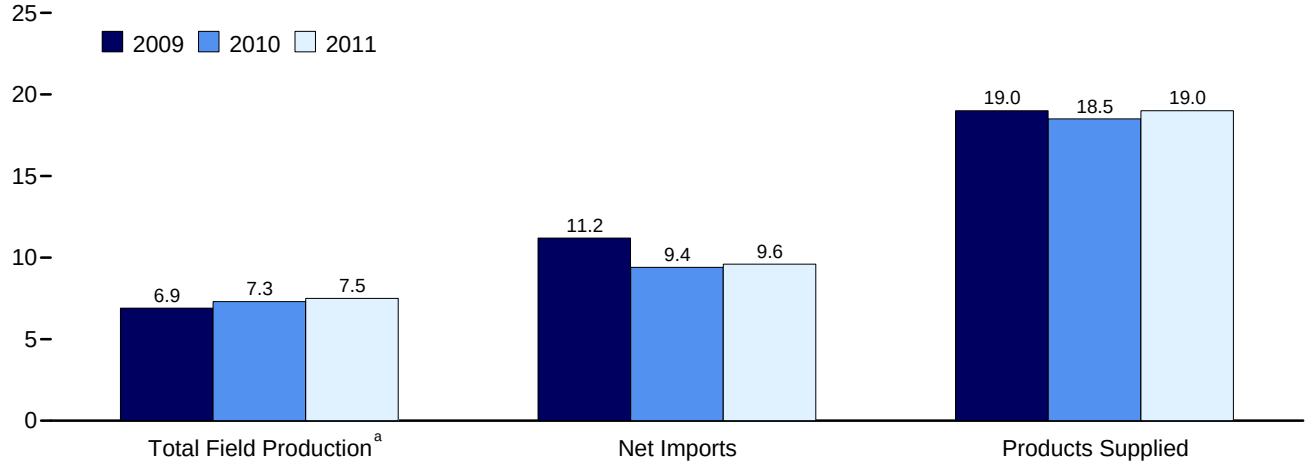
3 Petroleum



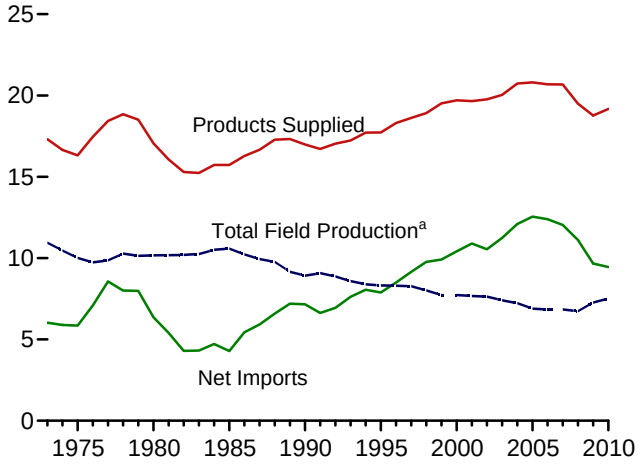
Oil pumping unit and drilling rig, Texas. Source: U.S. Department of Energy.

Figure 3.1 Petroleum Overview
(Million Barrels per Day)

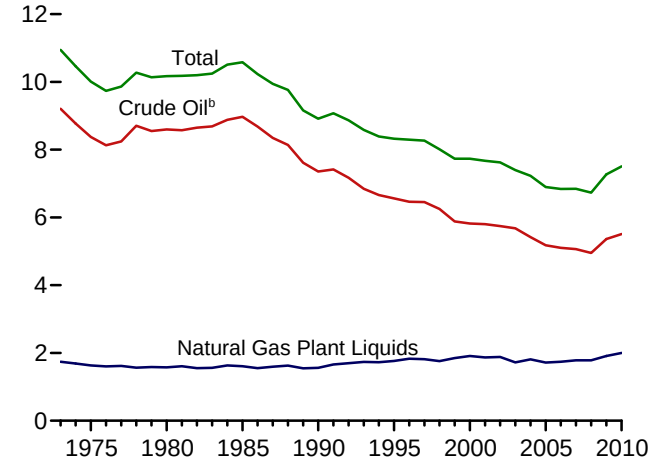
Overview, January



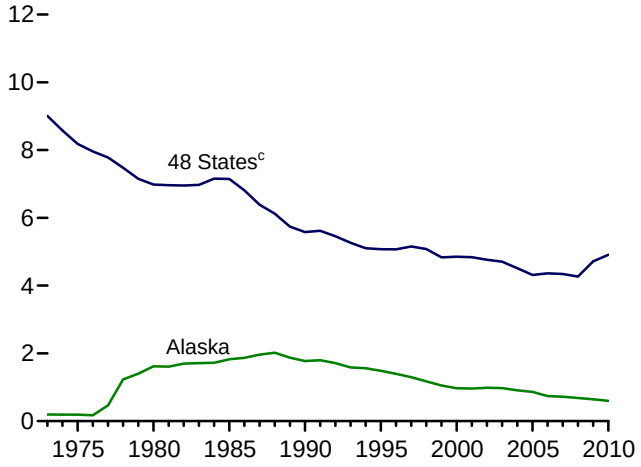
Overview, 1973-2010



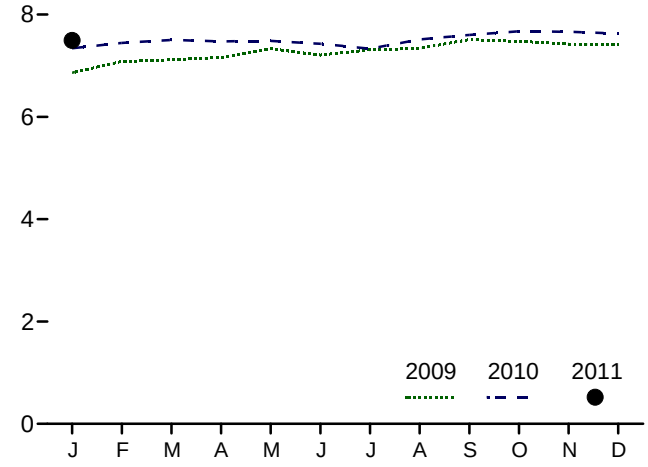
Total Field Production, 1973-2010



Crude Oil[b] Field Production, 1973-2010



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/mer/petro.html.
Source: Table 3.1.

Table 3.1 Petroleum Overview

(Thousand Barrels per Day)

	Field Production[a]					Renewable Fuels and Oxygenates[f]	Processing Gain[g]	Trade			Stock Change[j]	Adjustments[k]	Petroleum Products Supplied
	Crude Oil[b]			NGPL[d,e]	Total			Imports[h]	Exports[e]	Net Imports[i]			
	48 States[c]	Alaska	Total										
1973 Average	**9,010**	**198**	**9,208**	**1,738**	**10,946**	**NA**	**453**	**6,256**	**231**	**6,025**	**135**	**18**	**17,308**
1975 Average	**8,183**	**191**	**8,375**	**1,633**	**10,007**	**NA**	**460**	**6,056**	**209**	**5,846**	**32**	**41**	**16,322**
1980 Average	**6,980**	**1,617**	**8,597**	**1,573**	**10,170**	**NA**	**597**	**6,909**	**544**	**6,365**	**140**	**64**	**17,056**
1985 Average	**7,146**	**1,825**	**8,971**	**1,609**	**10,581**	**NA**	**557**	**5,067**	**781**	**4,286**	**-103**	**200**	**15,726**
1990 Average	**5,582**	**1,773**	**7,355**	**1,559**	**8,914**	**NA**	**683**	**8,018**	**857**	**7,161**	**107**	**338**	**16,988**
1995 Average	**5,076**	**1,484**	**6,560**	**1,762**	**8,322**	**NA**	**774**	**8,835**	**949**	**7,886**	**-246**	**496**	**17,725**
1996 Average	**5,071**	**1,393**	**6,465**	**1,830**	**8,295**	**NA**	**837**	**9,478**	**981**	**8,498**	**-151**	**528**	**18,309**
1997 Average	**5,156**	**1,296**	**6,452**	**1,817**	**8,269**	**NA**	**850**	**10,162**	**1,003**	**9,158**	**143**	**487**	**18,620**
1998 Average	**5,077**	**1,175**	**6,252**	**1,759**	**8,011**	**NA**	**886**	**10,708**	**945**	**9,764**	**239**	**495**	**18,917**
1999 Average	**4,832**	**1,050**	**5,881**	**1,850**	**7,731**	**NA**	**886**	**10,852**	**940**	**9,912**	**-422**	**567**	**19,519**
2000 Average	**4,851**	**970**	**5,822**	**1,911**	**7,733**	**NA**	**948**	**11,459**	**1,040**	**10,419**	**-69**	**532**	**19,701**
2001 Average	**4,839**	**963**	**5,801**	**1,868**	**7,670**	**NA**	**903**	**11,871**	**971**	**10,900**	**325**	**501**	**19,649**
2002 Average	**4,761**	**984**	**5,746**	**1,880**	**7,626**	**NA**	**957**	**11,530**	**984**	**10,546**	**-105**	**527**	**19,761**
2003 Average	**4,706**	**974**	**5,681**	**1,719**	**7,400**	**NA**	**974**	**12,264**	**1,027**	**11,238**	**56**	**478**	**20,034**
2004 Average	**4,510**	**908**	**5,419**	**1,809**	**7,228**	**NA**	**1,051**	**13,145**	**1,048**	**12,097**	**209**	**564**	**20,731**
2005 Average	**4,314**	**864**	**5,178**	**1,717**	**6,895**	**NA**	**989**	**13,714**	**1,165**	**12,549**	**145**	**513**	**20,802**
2006 Average	**4,361**	**741**	**5,102**	**1,739**	**6,841**	**NA**	**994**	**13,707**	**1,317**	**12,390**	**60**	**522**	**20,687**
2007 Average	**4,342**	**722**	**5,064**	**1,783**	**6,847**	**NA**	**996**	**13,468**	**1,433**	**12,036**	**-148**	**653**	**20,680**
2008 January	4,389	711	5,100	1,791	6,891	NA	1,071	13,568	1,620	11,949	361	699	20,247
February	4,416	706	5,122	1,845	6,967	NA	962	12,660	1,848	10,812	-446	841	20,029
March	4,424	726	5,151	1,875	7,026	NA	929	12,598	1,807	10,791	-287	799	19,831
April	4,416	701	5,117	1,885	7,002	NA	938	13,331	1,739	11,593	389	672	19,815
May	4,417	685	5,102	1,885	6,987	NA	1,067	12,902	1,793	11,109	248	883	19,798
June	4,443	655	5,098	1,836	6,934	NA	1,014	13,398	2,146	11,252	397	875	19,678
July	4,493	640	5,133	1,861	6,994	NA	1,031	13,124	2,051	11,073	390	849	19,557
August	4,349	544	4,894	1,815	6,708	NA	1,044	13,118	2,053	11,064	403	859	19,272
September	3,249	681	3,930	1,514	5,444	NA	865	11,562	1,323	10,239	-206	1,084	17,839
October	3,953	716	4,669	1,749	6,418	NA	1,016	13,202	1,658	11,545	213	932	19,698
November	4,296	728	5,024	1,740	6,764	NA	1,000	12,881	1,720	11,160	700	827	19,052
December	4,354	702	5,056	1,607	6,663	NA	970	12,607	1,856	10,751	152	910	19,142
Average	**4,268**	**683**	**4,950**	**1,784**	**6,734**	**NA**	**993**	**12,915**	**1,802**	**11,114**	**195**	**852**	**19,498**
2009 January	4,475	679	5,154	1,711	6,865	663	950	13,127	1,922	11,205	933	290	19,040
February	4,552	708	5,260	1,824	7,083	686	931	12,095	1,808	10,287	394	229	18,822
March	4,518	709	5,227	1,891	7,118	684	912	12,446	1,838	10,609	839	236	18,719
April	4,621	653	5,273	1,888	7,161	681	982	11,962	1,900	10,061	445	231	18,672
May	4,701	678	5,379	1,954	7,333	714	974	11,477	2,015	9,461	488	217	18,211
June	4,711	571	5,281	1,927	7,208	741	1,038	11,936	1,963	9,973	441	308	18,828
July	4,851	551	5,402	1,908	7,310	773	986	11,830	2,348	9,482	180	256	18,626
August	4,846	572	5,418	1,920	7,337	783	1,003	11,183	2,119	9,064	-525	238	18,949
September	4,895	652	5,547	1,962	7,509	771	1,027	11,756	2,105	9,651	488	124	18,594
October	4,842	658	5,501	1,976	7,477	785	961	10,878	2,223	8,655	-748	177	18,803
November	4,765	662	5,427	1,996	7,423	833	945	11,105	2,029	9,076	-374	103	18,753
December	4,796	655	5,451	1,959	7,411	838	1,030	10,534	1,996	8,538	-1,213	208	19,237
Average	**4,715**	**645**	**5,361**	**1,910**	**7,270**	**746**	**979**	**11,691**	**2,024**	**9,667**	**109**	**218**	**18,771**
2010 January	E 4,792	E 640	E 5,433	1,910	E 7,343	838	932	11,236	1,883	9,352	172	234	18,528
February	E 4,830	E 635	E 5,465	1,979	E 7,444	857	1,065	11,148	2,012	9,136	-100	258	18,860
March	E 4,856	E 646	E 5,502	2,003	E 7,505	889	1,064	11,588	2,108	9,480	24	157	19,070
April	E 4,856	E 640	E 5,496	1,980	E 7,475	864	1,025	12,508	2,389	10,119	831	259	18,910
May	E 4,899	E 569	E 5,468	2,019	E 7,486	893	1,066	12,100	2,369	9,731	617	267	18,827
June	E 4,933	E 533	E 5,465	1,965	E 7,430	905	1,074	12,339	2,273	10,066	507	345	19,314
July	E 4,861	E 545	E 5,406	1,927	E 7,333	906	1,129	12,602	2,479	10,123	446	233	19,278
August	E 4,968	E 538	E 5,506	2,007	E 7,513	911	1,097	12,341	2,368	9,973	155	353	19,692
September	E 4,953	E 614	E 5,567	2,036	E 7,602	909	1,043	11,816	2,297	9,519	-18	415	19,507
October	E 4,998	E 618	E 5,616	2,057	E 7,673	922	1,000	11,126	2,434	8,692	-361	290	18,939
November	RE 4,989	E 606	RE 5,595	R 2,068	RE 7,662	R 967	R 1,070	R 11,088	R 2,546	R 8,542	-665	R 168	R 19,074
December	E 4,982	E 610	E 5,592	E 2,037	E 7,629	E 961	E 1,066	E 10,928	E 2,244	E 8,685	E -1,242	E 417	E 20,000
Average	RE **4,910**	E **599**	RE **5,509**	RE **1,999**	RE **7,508**	RE **902**	RE **1,052**	RE **11,737**	RE **2,285**	RE **9,453**	E **30**	RE **283**	RE **19,169**
2011 January	E 4,980	E 455	E 5,435	E 2,058	E 7,494	E 948	E 1,024	E 11,802	E 2,243	E 9,559	E 417	E 420	E 19,029

[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] United States excluding Alaska and Hawaii.

[d] Natural gas plant liquids.

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

[f] Renewable fuels and oxygenate plant net production.

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

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

[i] Net imports equal imports minus exports.

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

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

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

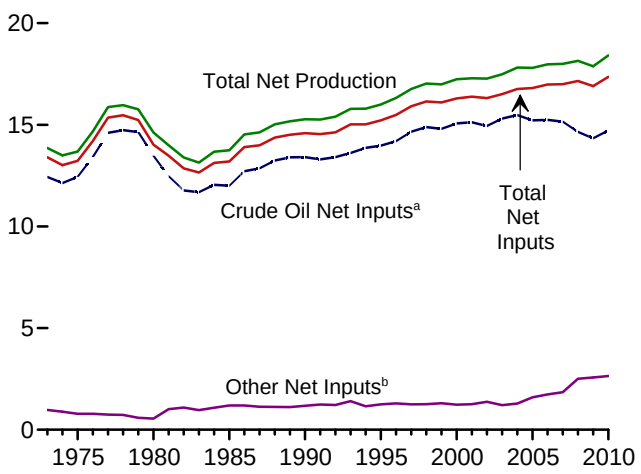
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

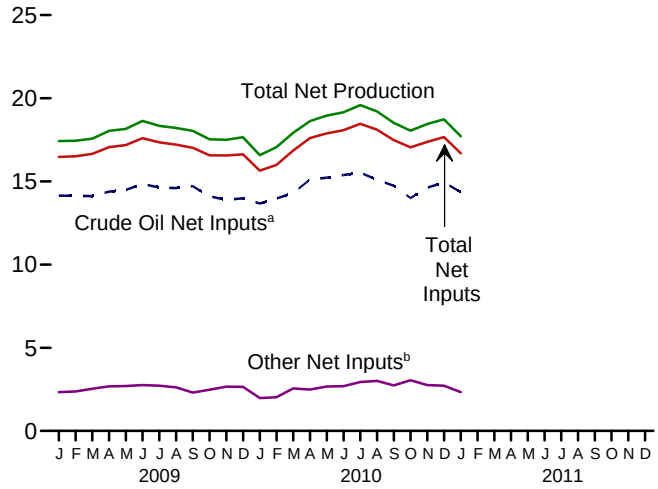
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** EIA, Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual,* annual reports. • **2010 and 2011:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

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

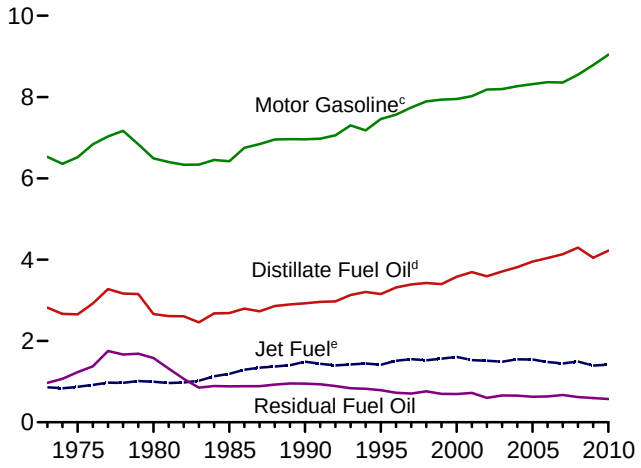
Net Inputs and Net Production, 1973-2010



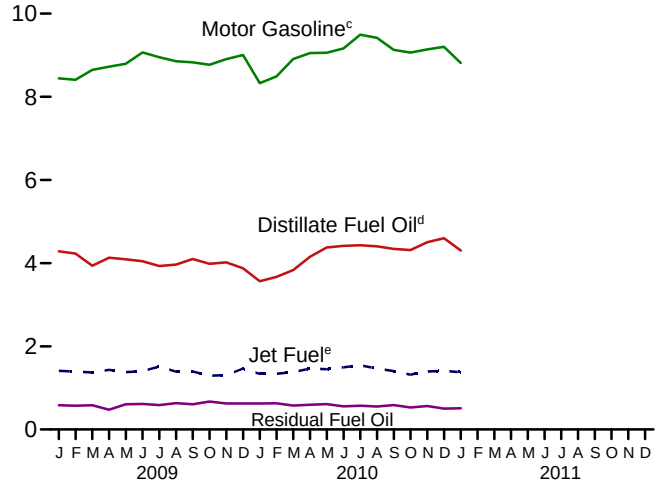
Net Inputs and Net Production, Monthly



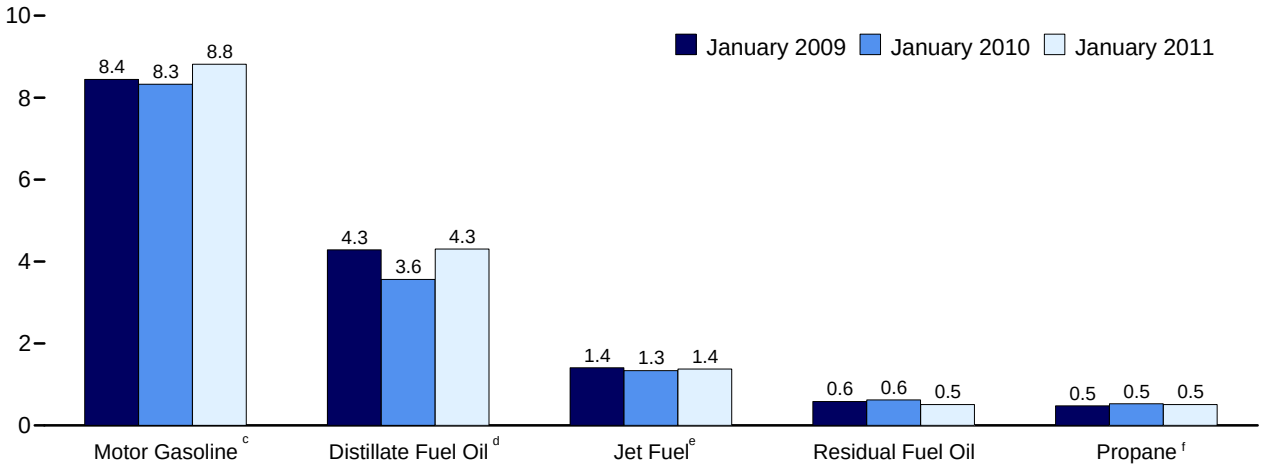
Net Production, Selected Products, 1973-2010



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/mer/petro.html.
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 January	14,804	540	1,414	16,758	4,130	1,535	569	478	8,516	588	2,582	17,829
February	14,625	502	1,538	16,665	3,980	1,467	535	507	8,495	643	2,536	17,627
March	14,364	461	1,901	16,727	3,953	1,475	526	676	8,373	662	2,518	17,656
April	14,799	449	2,279	17,527	4,287	1,492	520	809	8,560	710	2,607	18,465
May	15,263	445	2,211	17,919	4,459	1,558	546	878	8,700	734	2,658	18,986
June	15,417	435	2,183	18,036	4,587	1,605	544	867	8,564	695	2,731	19,050
July	15,255	439	2,144	17,838	4,523	1,647	534	837	8,523	584	2,754	18,869
August	14,947	413	2,236	17,596	4,466	1,609	526	814	8,513	579	2,660	18,641
September	12,759	409	2,040	15,208	3,681	1,312	420	513	7,855	485	2,227	16,073
October	14,552	563	2,162	17,277	4,435	1,401	503	460	8,889	575	2,533	18,293
November	14,606	576	1,925	17,107	4,489	1,425	515	369	8,722	588	2,516	18,108
December	14,352	589	2,178	17,119	4,511	1,383	489	341	8,850	597	2,406	18,089
Average	**14,648**	**485**	**2,019**	**17,153**	**4,294**	**1,493**	**519**	**630**	**8,548**	**620**	**2,561**	**18,146**
2009 January	14,146	552	1,777	16,476	4,284	1,409	479	383	8,445	585	2,321	17,426
February	14,134	493	1,883	16,509	4,231	1,391	483	471	8,408	571	2,367	17,440
March	14,118	447	2,089	16,654	3,939	1,373	519	618	8,646	583	2,407	17,566
April	14,382	416	2,264	17,062	4,132	1,432	542	782	8,724	475	2,499	18,044
May	14,483	432	2,266	17,181	4,093	1,378	554	798	8,793	605	2,488	18,155
June	14,850	429	2,323	17,602	4,047	1,404	566	847	9,068	613	2,662	18,641
July	14,636	437	2,279	17,352	3,929	1,515	554	809	8,952	586	2,546	18,337
August	14,593	404	2,218	17,214	3,965	1,389	554	838	8,856	631	2,537	18,218
September	14,710	482	1,825	17,018	4,099	1,396	559	624	8,829	604	2,493	18,045
October	14,095	545	1,933	16,573	3,984	1,291	527	476	8,770	672	2,341	17,535
November	13,898	609	2,051	16,558	4,018	1,311	550	379	8,905	624	2,264	17,502
December	13,983	580	2,066	16,629	3,877	1,465	554	442	9,006	624	2,246	17,660
Average	**14,336**	**485**	**2,082**	**16,904**	**4,048**	**1,396**	**537**	**623**	**8,786**	**598**	**2,431**	**17,882**
2010 January	13,671	497	1,482	15,650	3,563	1,339	529	465	8,327	625	2,262	16,581
February	13,967	405	1,623	15,995	3,670	1,343	562	535	8,489	630	2,392	17,060
March	14,302	397	2,161	16,860	3,833	1,377	575	710	8,910	576	2,519	17,925
April	15,120	363	2,123	17,607	4,152	1,468	585	841	9,053	593	2,525	18,631
May	15,219	385	2,282	17,886	4,375	1,449	567	840	9,059	611	2,618	18,952
June	15,389	384	2,305	18,078	4,416	1,495	572	856	9,165	556	2,665	19,152
July	15,518	373	2,570	18,461	4,431	1,543	574	859	9,493	570	2,695	19,591
August	15,110	384	2,618	18,112	4,404	1,463	552	772	9,417	551	2,603	19,208
September	14,741	441	2,299	17,481	4,341	1,404	552	613	9,128	588	2,450	18,524
October	13,999	497	2,551	17,047	4,315	1,317	526	493	9,062	528	2,333	18,047
November	R 14,629	R 530	R 2,221	R 17,380	R 4,503	R 1,394	R 543	R 389	R 9,142	R 564	R 2,458	R 18,450
December	E 14,944	F 581	RE 2,139	RF 17,664	E 4,602	E 1,410	RE 481	F 394	E 9,203	E 501	RE 2,620	RE 18,730
Average	RE **14,721**	RE **437**	RE **2,202**	RE **17,360**	RE **4,220**	RE **1,417**	RE **551**	RE **648**	RE **9,041**	RE **574**	RE **2,512**	RE **18,412**
2011 January	E 14,359	F 549	E 1,786	F 16,694	E 4,305	E 1,378	E 508	F 428	E 8,815	E 510	E 2,283	E 17,718

[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.

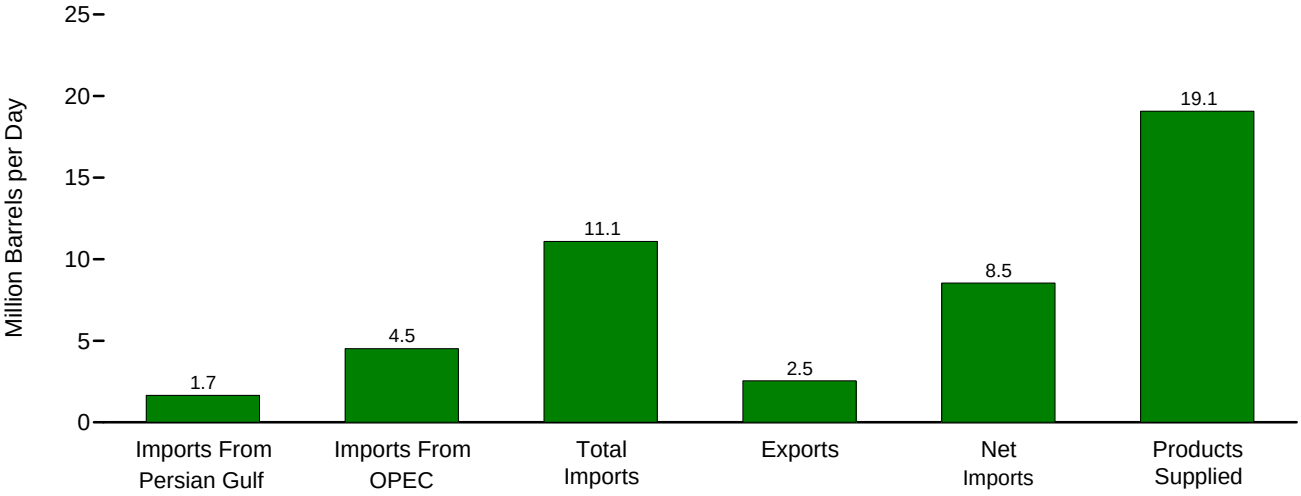
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

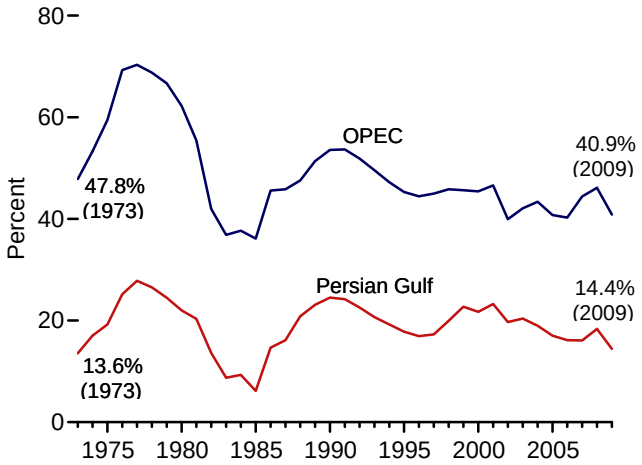
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual,* annual reports. • **2010 and 2011:** 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

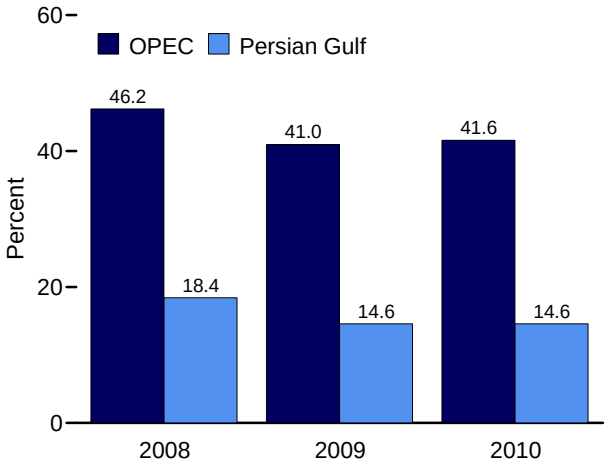
Overview, November 2010



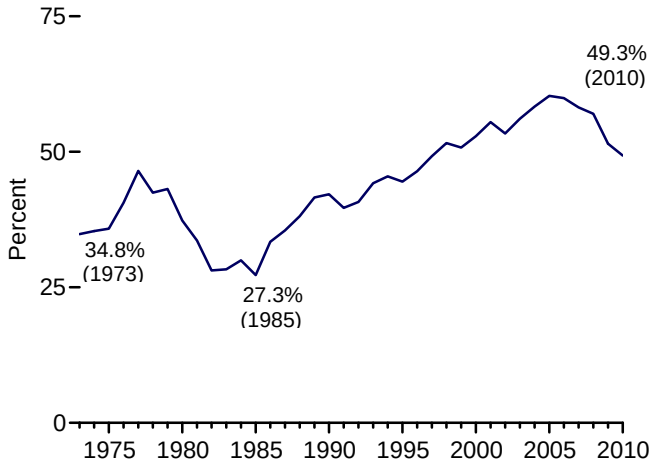
Imports From OPEC and Persian Gulf as Share of Total Imports, 1973-2009



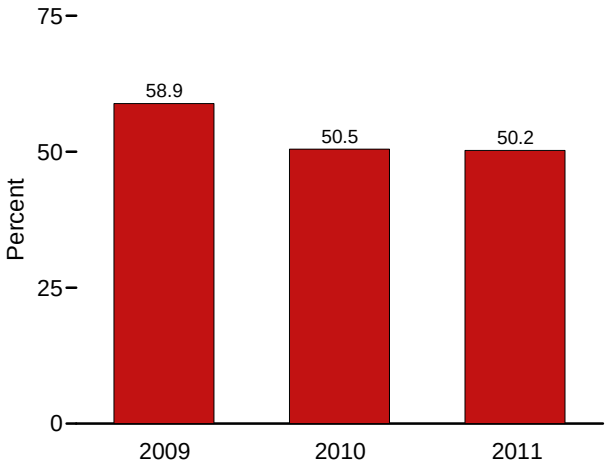
Imports From OPEC and Persian Gulf as Share of Total Imports, January-November



Net Imports as Share of Products Supplied, 1973-2010



Net Imports as Share of Products Supplied, January



Note: OPEC=Organization of the Petroleum Exporting Countries.
Web Page: http://www.eia.gov/mer/petro.html.
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 January	2,307	6,415	13,568	1,620	11,949	20,247	11.4	31.7	67.0	59.0	17.0	47.3
February	2,663	5,834	12,660	1,848	10,812	20,029	13.3	29.1	63.2	54.0	21.0	46.1
March	2,518	5,934	12,598	1,807	10,791	19,831	12.7	29.9	63.5	54.4	20.0	47.1
April	2,323	6,262	13,331	1,739	11,593	19,815	11.7	31.6	67.3	58.5	17.4	47.0
May	2,450	5,931	12,902	1,793	11,109	19,798	12.4	30.0	65.2	56.1	19.0	46.0
June	2,363	6,054	13,398	2,146	11,252	19,678	12.0	30.8	68.1	57.2	17.6	45.2
July	2,507	6,125	13,124	2,051	11,073	19,557	12.8	31.3	67.1	56.6	19.1	46.7
August	2,438	6,391	13,118	2,053	11,064	19,272	12.7	33.2	68.1	57.4	18.6	48.7
September	2,086	5,127	11,562	1,323	10,239	17,839	11.7	28.7	64.8	57.4	18.0	44.3
October	2,304	5,875	13,202	1,658	11,545	19,698	11.7	29.8	67.0	58.6	17.5	44.5
November	2,283	5,799	12,881	1,720	11,160	19,052	12.0	30.4	67.6	58.6	17.7	45.0
December	2,208	5,679	12,607	1,856	10,751	19,142	11.5	29.7	65.9	56.2	17.5	45.0
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 January	2,218	5,689	13,127	1,922	11,205	19,040	11.6	29.9	68.9	58.9	16.9	43.3
February	1,974	4,958	12,095	1,808	10,287	18,822	10.5	26.3	64.3	54.7	16.3	41.0
March	1,823	5,212	12,446	1,838	10,609	18,719	9.7	27.8	66.5	56.7	14.6	41.9
April	1,735	4,803	11,962	1,900	10,061	18,672	9.3	25.7	64.1	53.9	14.5	40.2
May	1,548	4,372	11,477	2,015	9,461	18,211	8.5	24.0	63.0	52.0	13.5	38.1
June	1,602	4,825	11,936	1,963	9,973	18,828	8.5	25.6	63.4	53.0	13.4	40.4
July	1,730	4,554	11,830	2,348	9,482	18,626	9.3	24.4	63.5	50.9	14.6	38.5
August	1,428	4,530	11,183	2,119	9,064	18,949	7.5	23.9	59.0	47.8	12.8	40.5
September	1,718	5,052	11,756	2,105	9,651	18,594	9.2	27.2	63.2	51.9	14.6	43.0
October	1,545	4,581	10,878	2,223	8,655	18,803	8.2	24.4	57.9	46.0	14.2	42.1
November	1,606	4,585	11,105	2,029	9,076	18,753	8.6	24.5	59.2	48.4	14.5	41.3
December	1,362	4,171	10,534	1,996	8,538	19,237	7.1	21.7	54.8	44.4	12.9	39.6
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	1,546	4,503	11,236	1,883	9,352	18,528	8.3	24.3	60.6	50.5	13.8	40.1
February	1,666	4,587	11,148	2,012	9,136	18,860	8.8	24.3	59.1	48.4	14.9	41.1
March	1,842	5,068	11,588	2,108	9,480	19,070	9.7	26.6	60.8	49.7	15.9	43.7
April	2,026	5,414	12,508	2,389	10,119	18,910	10.7	28.6	66.1	53.5	16.2	43.3
May	1,724	5,024	12,100	2,369	9,731	18,827	9.2	26.7	64.3	51.7	14.3	41.5
June	1,972	5,263	12,339	2,273	10,066	19,314	10.2	27.2	63.9	52.1	16.0	42.7
July	1,679	5,144	12,602	2,479	10,123	19,278	8.7	26.7	65.4	52.5	13.3	40.8
August	1,663	5,083	12,341	2,368	9,973	19,692	8.4	25.8	62.7	50.6	13.5	41.2
September	1,698	5,111	11,816	2,297	9,519	19,507	8.7	26.2	60.6	48.8	14.4	43.3
October	1,479	4,294	11,126	2,434	8,692	18,939	7.8	22.7	58.7	45.9	13.3	38.6
November	R 1,651	R 4,517	R 11,088	R 2,546	R 8,542	R 19,074	R 8.7	R 23.7	R 58.1	R 44.8	R 14.9	R 40.7
December	NA	NA	E 10,928	E 2,244	E 8,685	E 20,000	NA	NA	E 54.6	E 43.4	NA	NA
Average	**NA**	**NA**	RE **11,737**	RE **2,285**	RE **9,453**	RE **19,169**	**NA**	**NA**	RE **61.2**	RE **49.3**	**NA**	**NA**
2011 January	NA	NA	E 11,802	E 2,243	E 9,559	E 19,029	NA	NA	E 62.0	E 50.2	NA	NA

[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.

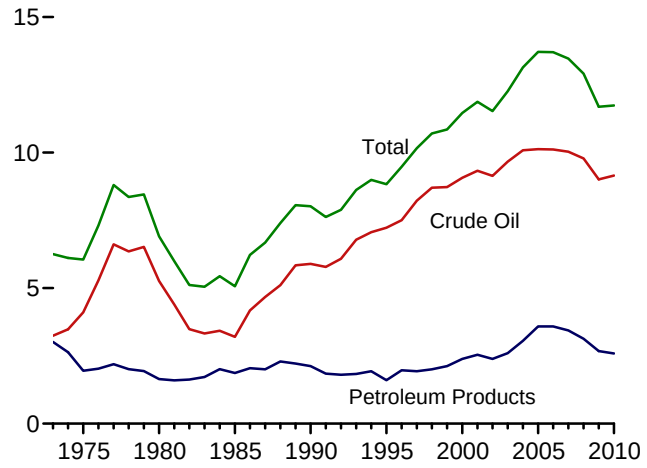
Notes: • Readers of this table may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 *Monthly Energy Review.* See http://www.eia.gov/mer/pdf/historical/imported_oil.pdf. • Beginning in October 1977, data include Strategic Petroleum Reserve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

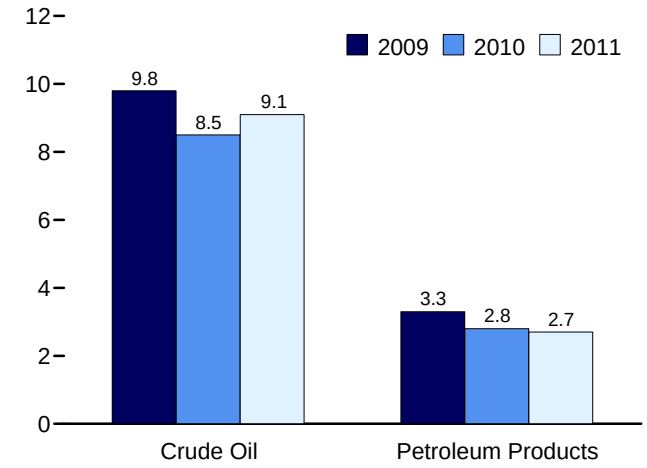
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual,* annual reports. • **2010 and 2011:** 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)

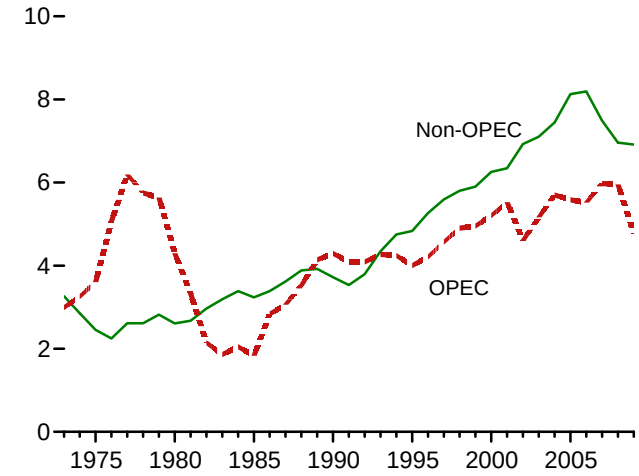
Total, 1973-2010



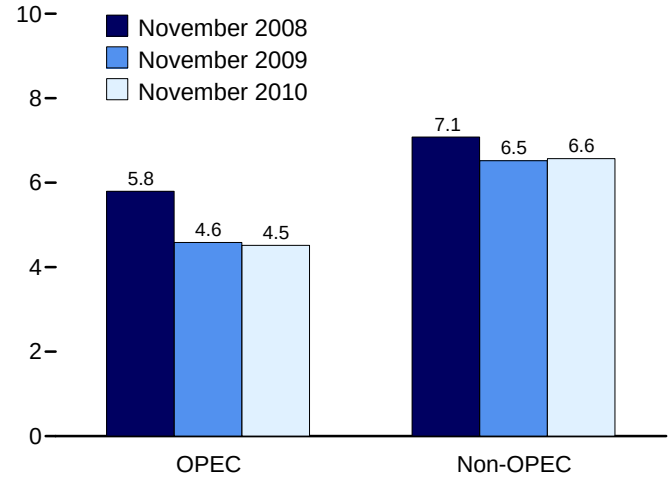
Crude Oil and Petroleum Products, January



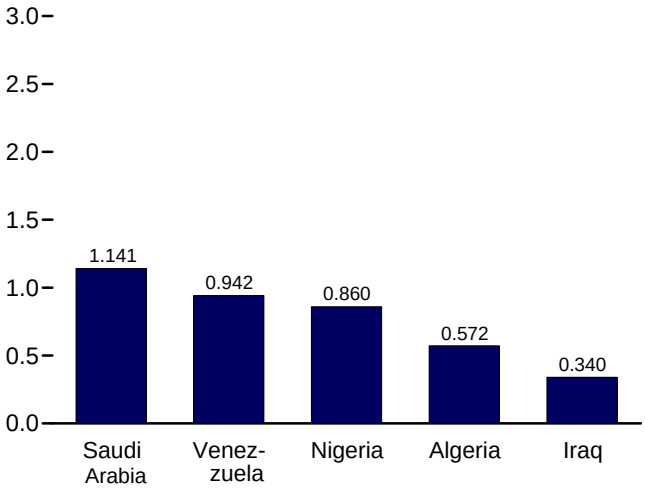
OPEC and Non-OPEC, 1973-2009



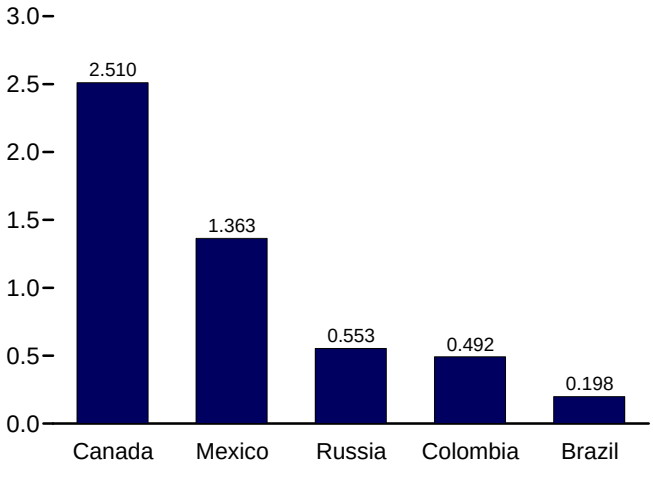
OPEC and Non-OPEC



From Selected OPEC Countries, November 2010



From Selected Non-OPEC Countries, November 2010



Note: OPEC=Organization of the Petroleum Exporting Countries.
Web Page: http://www.eia.gov/mer/petro.html.
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	**0**	**7,230**	**193**	**106**	**102**	**146**	**265**	**187**	**708**	**8,835**	**95**	**855**	**949**
1996 Average	**0**	**7,508**	**230**	**111**	**119**	**166**	**336**	**248**	**879**	**9,478**	**110**	**871**	**981**
1997 Average	**0**	**8,225**	**228**	**91**	**113**	**169**	**309**	**194**	**945**	**10,162**	**108**	**896**	**1,003**
1998 Average	**0**	**8,706**	**210**	**124**	**137**	**194**	**311**	**275**	**888**	**10,708**	**110**	**835**	**945**
1999 Average	**8**	**8,731**	**250**	**128**	**122**	**182**	**382**	**237**	**943**	**10,852**	**118**	**822**	**940**
2000 Average	**8**	**9,071**	**295**	**162**	**161**	**215**	**427**	**352**	**938**	**11,459**	**50**	**990**	**1,040**
2001 Average	**11**	**9,328**	**344**	**148**	**145**	**206**	**454**	**295**	**1,095**	**11,871**	**20**	**951**	**971**
2002 Average	**16**	**9,140**	**267**	**107**	**145**	**183**	**498**	**249**	**1,085**	**11,530**	**9**	**975**	**984**
2003 Average	**0**	**9,665**	**333**	**109**	**168**	**225**	**518**	**327**	**1,087**	**12,264**	**12**	**1,014**	**1,027**
2004 Average	**77**	**10,088**	**325**	**127**	**209**	**263**	**496**	**426**	**1,419**	**13,145**	**27**	**1,021**	**1,048**
2005 Average	**52**	**10,126**	**329**	**190**	**233**	**328**	**603**	**530**	**1,609**	**13,714**	**32**	**1,133**	**1,165**
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 January	17	10,082	309	156	263	327	381	435	1,879	13,568	12	1,608	1,620
February	0	9,636	249	106	214	288	354	308	1,719	12,660	20	1,828	1,848
March	35	9,636	249	110	218	252	374	416	1,561	12,598	29	1,778	1,807
April	17	9,979	266	180	155	232	386	361	1,927	13,331	14	1,725	1,739
May	94	9,664	188	140	164	225	383	351	1,951	12,902	19	1,774	1,793
June	43	10,018	180	91	99	186	461	383	2,080	13,398	22	2,124	2,146
July	26	10,132	181	72	130	194	323	282	1,940	13,124	29	2,022	2,051
August	0	10,324	109	76	186	306	205	334	1,763	13,118	40	2,013	2,053
September	0	8,447	195	88	186	268	253	289	2,023	11,562	39	1,283	1,323
October	0	10,086	166	98	179	225	239	355	2,033	13,202	43	1,615	1,658
November	0	9,944	203	47	196	250	115	285	2,036	12,881	31	1,690	1,720
December	0	9,419	262	68	229	281	148	383	2,045	12,607	46	1,810	1,856
Average	**19**	**9,783**	**213**	**103**	**185**	**253**	**302**	**349**	**1,913**	**12,915**	**29**	**1,773**	**1,802**
2009 January	33	9,779	368	89	223	253	236	424	1,978	13,127	36	1,885	1,922
February	34	9,074	327	71	207	234	263	349	1,776	12,095	30	1,778	1,808
March	221	9,378	269	92	218	249	274	381	1,804	12,446	30	1,807	1,838
April	154	9,374	166	90	124	164	227	396	1,545	11,962	27	1,874	1,900
May	52	8,797	206	66	105	172	244	341	1,650	11,477	53	1,962	2,015
June	77	9,135	245	65	70	98	218	363	1,812	11,936	57	1,906	1,963
July	–	9,094	191	102	100	128	230	268	1,818	11,830	31	2,317	2,348
August	16	8,814	166	92	63	105	304	256	1,446	11,183	35	2,084	2,119
September	32	9,254	205	91	95	124	142	309	1,631	11,756	42	2,063	2,105
October	–	8,566	177	84	145	182	161	303	1,404	10,878	72	2,151	2,223
November	35	8,740	164	71	206	238	149	282	1,462	11,105	46	1,983	2,029
December	16	8,170	224	55	212	241	232	307	1,305	10,534	65	1,931	1,996
Average	**56**	**9,013**	**225**	**81**	**147**	**182**	**223**	**331**	**1,635**	**11,691**	**44**	**1,980**	**2,024**
2010 January	–	8,454	429	150	191	216	179	373	1,433	11,236	33	1,851	1,883
February	–	8,680	293	75	216	234	196	378	1,291	11,148	58	1,954	2,012
March	–	9,292	179	74	136	149	120	395	1,378	11,588	45	2,063	2,108
April	–	9,741	201	74	78	101	178	474	1,739	12,508	37	2,352	2,389
May	–	9,622	191	63	81	108	107	404	1,606	12,100	36	2,333	2,369
June	–	9,872	237	79	69	109	163	279	1,599	12,339	31	2,242	2,273
July	–	9,890	166	76	55	103	114	400	1,851	12,602	69	2,410	2,479
August	–	9,486	236	103	62	106	129	329	1,952	12,341	36	2,332	2,368
September	–	9,168	189	117	84	123	130	418	1,671	11,816	61	2,235	2,297
October	–	8,489	163	94	131	163	86	363	1,768	11,126	23	2,410	2,434
November	R –	R 8,608	R 178	R 101	R 131	R 164	R 128	R 419	R 1,491	R 11,088	R 32	R 2,515	R 2,546
December	NA	E 8,478	E 229	E 59	E 178	NA	E 86	E 382	NA	E 10,928	E 33	E 2,210	E 2,244
Average	**NA**	RE **9,150**	RE **224**	RE **89**	RE **117**	**NA**	RE **134**	RE **385**	**NA**	E **11,737**	E **41**	RE **2,244**	E **2,285**
2011 January	NA	E 9,058	E 293	E 70	E 151	NA	E 91	E 415	NA	E 11,802	E 33	E 2,210	E 2,243

[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/mer/petro.html. • For related information, see http://www.eia.gov/oil_gas/petroleum/info_glance/petroleum.html.

Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual,* annual reports. • **2010 and 2011:** 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]	Venezuela	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 January	651	578	260	543	239	105	1,191	1,503	1,276	70	6,415
February	380	351	186	780	272	87	1,025	1,608	1,131	14	5,834
March	441	388	238	773	203	124	1,174	1,542	1,033	18	5,934
April	632	591	170	679	181	133	1,221	1,462	1,189	4	6,262
May	620	476	162	583	263	116	918	1,604	1,171	19	5,931
June	492	649	184	693	183	117	1,016	1,464	1,215	43	6,054
July	456	652	227	696	122	128	822	1,690	1,329	5	6,125
August	530	495	298	663	203	113	1,166	1,573	1,305	47	6,391
September	657	416	233	543	110	63	591	1,431	1,051	32	5,127
October	558	539	200	577	240	132	963	1,487	1,162	16	5,875
November	677	450	229	476	292	79	827	1,514	1,236	20	5,799
December	484	562	258	519	219	43	939	1,471	1,159	27	5,679
Average	**548**	**513**	**221**	**627**	**210**	**103**	**988**	**1,529**	**1,189**	**26**	**5,954**
2009 January	720	541	278	568	242	64	524	1,362	1,353	38	5,689
February	375	671	243	554	251	60	496	1,118	1,139	51	4,958
March	463	653	215	587	181	61	891	967	1,106	88	5,212
April	626	462	237	484	105	118	733	1,057	891	90	4,803
May	272	505	193	295	106	99	626	1,102	1,141	33	4,372
June	433	447	154	390	179	103	830	959	1,256	75	4,825
July	383	320	198	321	187	69	879	1,046	976	176	4,554
August	551	364	131	500	148	68	917	729	1,070	51	4,530
September	655	414	153	428	246	54	912	1,045	1,146	–	5,052
October	491	450	180	499	104	91	869	943	955	–	4,581
November	400	431	155	461	287	140	980	858	874	–	4,585
December	544	278	86	325	160	23	1,029	877	849	–	4,171
Average	**493**	**460**	**185**	**450**	**182**	**79**	**809**	**1,004**	**1,063**	**50**	**4,776**
2010 January	498	280	215	506	77	40	1,013	963	911	–	4,503
February	461	326	152	540	228	40	932	898	1,009	–	4,587
March	455	502	183	475	218	63	962	1,149	1,061	–	5,068
April	464	508	179	490	278	163	1,125	1,257	950	–	5,414
May	518	448	160	394	225	39	1,026	1,097	1,109	10	5,024
June	550	425	211	630	217	98	1,108	1,125	899	–	5,263
July	518	374	205	430	189	110	1,174	1,053	1,084	7	5,144
August	565	484	242	281	251	123	985	1,132	1,022	–	5,083
September	543	417	229	422	172	43	1,174	1,093	1,008	10	5,111
October	451	324	203	143	215	36	872	1,121	930	–	4,294
November	572	276	194	340	170	23	860	1,141	942	–	4,517
11-Month Average	**509**	**397**	**198**	**421**	**203**	**71**	**1,021**	**1,094**	**993**	**2**	**4,911**
2009 11-Month Average	**488**	**477**	**194**	**462**	**184**	**84**	**789**	**1,016**	**1,082**	**55**	**4,832**
2008 11-Month Average	**554**	**509**	**217**	**636**	**210**	**109**	**993**	**1,535**	**1,191**	**26**	**5,980**

[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.

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/mer/petro.html. • For related information, see http://www.eia.gov/oil_gas/petroleum/info_glance/petroleum.html.

Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual,* annual reports. • **2010:** 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 January	225	2,654	198	1,308	94	86	392	213	383	1,600	7,153
February	172	2,530	240	1,328	141	100	451	155	351	1,357	6,826
March	191	2,563	165	1,359	129	80	402	218	289	1,268	6,664
April	235	2,582	170	1,382	185	137	402	229	340	1,406	7,069
May	338	2,367	278	1,220	199	183	460	237	340	1,347	6,971
June	315	2,430	180	1,256	262	122	764	286	314	1,416	7,344
July	275	2,417	192	1,292	152	94	572	187	294	1,524	6,999
August	208	2,247	257	1,401	143	84	490	222	298	1,378	6,727
September	271	2,399	149	1,003	197	74	433	281	345	1,282	6,435
October	354	2,585	200	1,434	176	70	394	386	267	1,463	7,328
November	286	2,534	176	1,406	138	114	445	245	338	1,403	7,082
December	225	2,604	198	1,228	203	80	382	176	289	1,543	6,928
Average	**258**	**2,493**	**200**	**1,302**	**168**	**102**	**465**	**236**	**320**	**1,416**	**6,961**
2009 January	450	2,549	269	1,377	127	90	516	148	367	1,545	7,438
February	381	2,529	241	1,364	189	74	472	281	337	1,269	7,137
March	338	2,446	283	1,199	141	179	642	208	264	1,534	7,235
April	278	2,287	347	1,289	117	112	759	401	290	1,278	7,158
May	386	2,215	243	1,186	150	179	809	250	313	1,373	7,105
June	299	2,538	313	1,190	157	173	618	268	276	1,279	7,111
July	408	2,664	289	1,076	118	101	758	203	273	1,387	7,276
August	275	2,523	269	1,159	160	52	505	225	223	1,263	6,653
September	268	2,358	301	1,271	122	59	486	295	280	1,263	6,703
October	174	2,367	292	1,136	84	97	385	278	215	1,268	6,297
November	268	2,565	237	1,084	227	110	415	190	205	1,219	6,520
December	184	2,710	231	1,204	99	65	385	199	289	998	6,363
Average	**309**	**2,479**	**276**	**1,210**	**140**	**108**	**563**	**245**	**277**	**1,307**	**6,915**
2010 January	353	2,593	322	1,131	116	126	463	282	308	1,039	6,733
February	226	2,490	386	1,134	126	99	423	413	187	1,077	6,562
March	302	2,517	251	1,265	136	59	488	267	228	1,008	6,520
April	307	2,486	423	1,276	92	166	587	304	316	1,137	7,093
May	320	2,527	315	1,428	108	119	719	176	193	1,172	7,076
June	308	2,711	407	1,208	87	52	760	269	244	1,030	7,076
July	332	2,534	404	1,289	211	119	719	351	239	1,258	7,457
August	251	2,483	372	1,282	135	57	786	266	339	1,286	7,258
September	181	2,475	363	1,256	45	62	648	178	302	1,195	6,705
October	169	2,345	422	1,345	107	111	655	152	270	1,256	6,832
November	198	2,510	492	1,363	57	79	553	187	234	896	6,571
11-Month Average	**269**	**2,516**	**377**	**1,272**	**111**	**95**	**620**	**258**	**260**	**1,124**	**6,902**
2009 11-Month Average	**320**	**2,458**	**281**	**1,211**	**144**	**112**	**580**	**249**	**276**	**1,336**	**6,966**
2008 11-Month Average	**261**	**2,482**	**201**	**1,308**	**165**	**104**	**473**	**242**	**323**	**1,405**	**6,964**

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

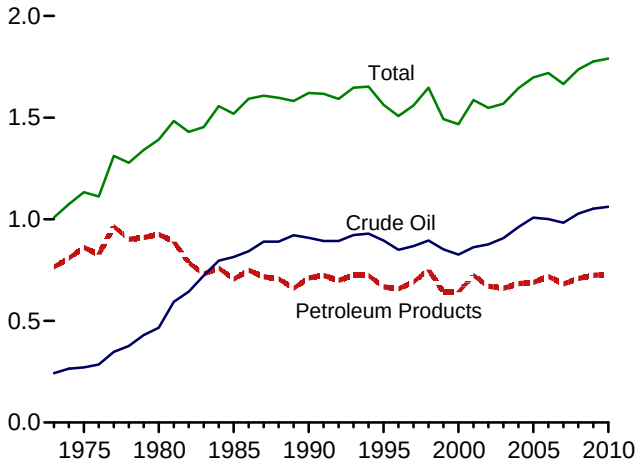
Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for membership. Petroleum imports not classified as "OPEC" on Table 3.3c are included on this table. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products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

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

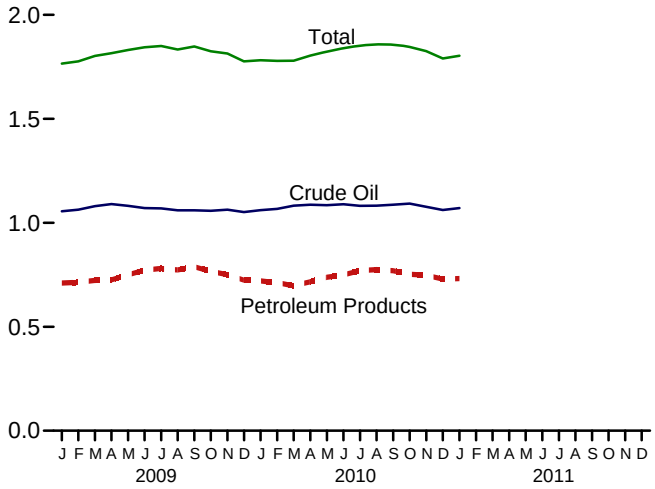
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual,* annual reports. • **2010:** EIA, *Petroleum Supply Monthly,* monthly reports.

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

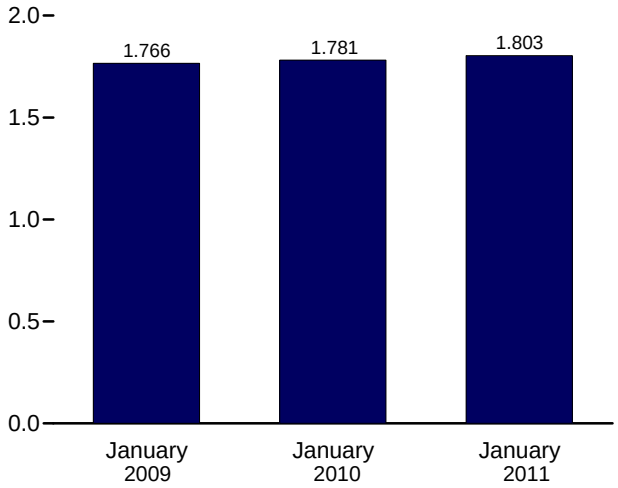
Overview, 1973-2010



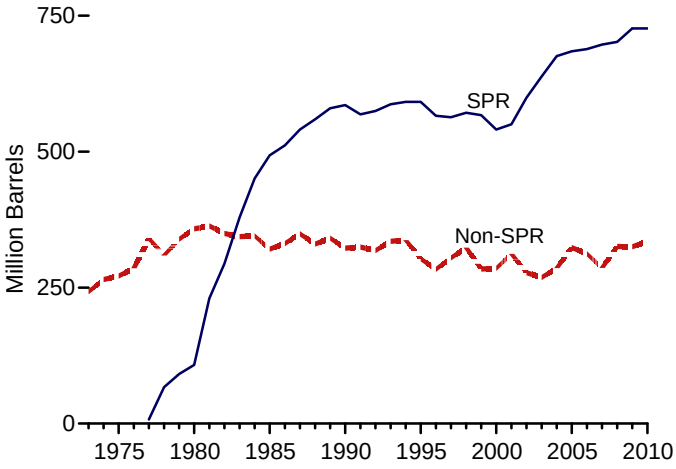
Overview, Monthly



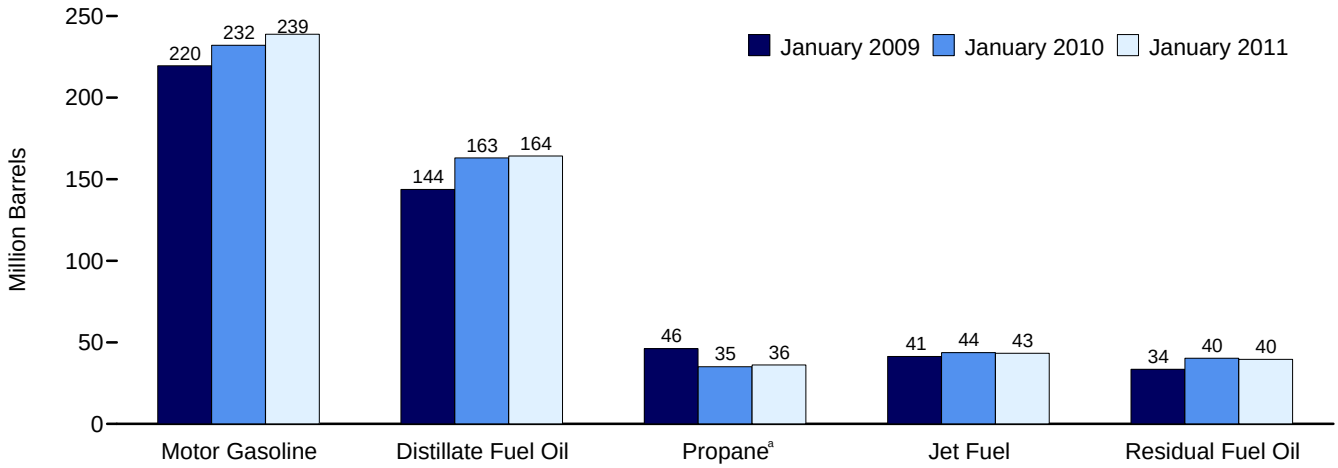
Total Stocks (Crude Oil and Petroleum Products)



SPR and Non-SPR Crude Oil Stocks, 1973-2010



Selected Products



[a] Includes propylene.

Notes: • SPR= Strategic Petroleum Reserve. • Stocks are at end of period.

Web Page: http://www.eia.gov/mer/petro.html.
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 January	698	296	995	131	41	39	77	233	39	160	1,677
February	699	302	1,001	118	40	29	65	235	39	165	1,664
March	700	315	1,015	108	39	26	64	222	40	167	1,655
April	701	320	1,021	107	39	30	77	211	39	171	1,666
May	704	304	1,008	114	40	38	92	208	40	172	1,674
June	706	296	1,002	122	40	43	103	211	41	168	1,686
July	707	295	1,002	131	41	48	113	207	37	167	1,698
August	707	303	1,010	133	41	54	127	196	39	165	1,711
September	702	304	1,006	128	38	59	137	190	39	167	1,704
October	702	313	1,014	128	38	60	133	195	39	163	1,711
November	702	322	1,023	136	38	61	126	204	39	166	1,732
December	**702**	**326**	**1,028**	**146**	**38**	**55**	**113**	**214**	**36**	**162**	**1,737**
2009 January	704	351	1,055	144	41	46	98	220	34	174	1,766
February	706	358	1,063	148	43	40	89	216	38	178	1,777
March	713	367	1,080	145	43	40	91	217	38	188	1,803
April	719	371	1,090	150	44	45	100	211	34	187	1,816
May	722	360	1,081	157	45	56	117	204	38	189	1,831
June	724	347	1,071	163	45	64	133	214	37	182	1,844
July	724	345	1,070	166	47	70	145	212	35	175	1,850
August	724	336	1,060	169	46	71	153	208	33	165	1,834
September	725	335	1,060	173	46	75	156	214	35	164	1,848
October	725	333	1,058	171	44	72	146	211	35	161	1,825
November	726	337	1,063	171	42	63	123	220	36	158	1,814
December	**727**	**325**	**1,052**	**166**	**43**	**50**	**102**	**223**	**37**	**153**	**1,776**
2010 January	727	334	1,061	163	44	35	80	232	40	162	1,781
February	727	340	1,067	155	44	28	70	233	41	169	1,779
March	727	355	1,082	146	42	28	73	224	41	172	1,779
April	727	361	1,087	145	44	35	89	220	43	176	1,804
May	727	358	1,085	150	45	42	106	216	46	176	1,823
June	727	363	1,089	158	45	51	122	215	42	168	1,839
July	727	355	1,082	166	47	55	132	220	41	164	1,853
August	727	355	1,082	170	47	59	140	221	39	158	1,857
September	727	360	1,087	167	47	61	141	219	40	156	1,857
October	727	366	1,092	162	44	62	139	210	41	158	1,846
November	727	R 351	R 1,077	R 162	R 44	R 61	R 132	213	R 41	158	R 1,826
December	**E 727**	**E 335**	**E 1,062**	**E 162**	**E 44**	**E 52**	**RF 114**	**E 219**	**E 39**	**E 151**	**E 1,790**
2011 January	E 727	E 344	E 1,071	E 164	E 43	E 36	F 91	E 239	E 40	E 155	E 1,803

[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, motor gasoline blending components, and gasohol; excludes oxygenates.

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

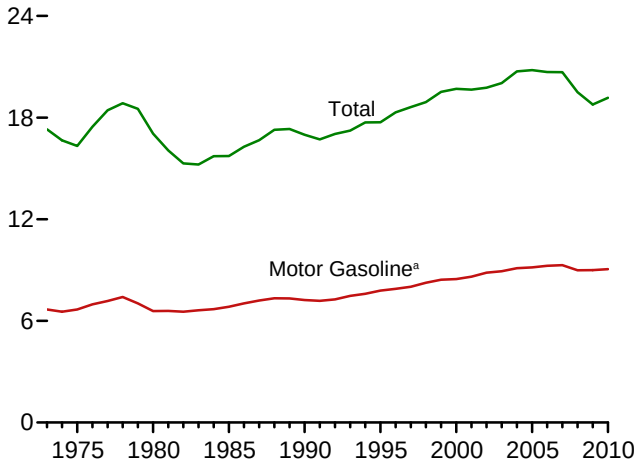
Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

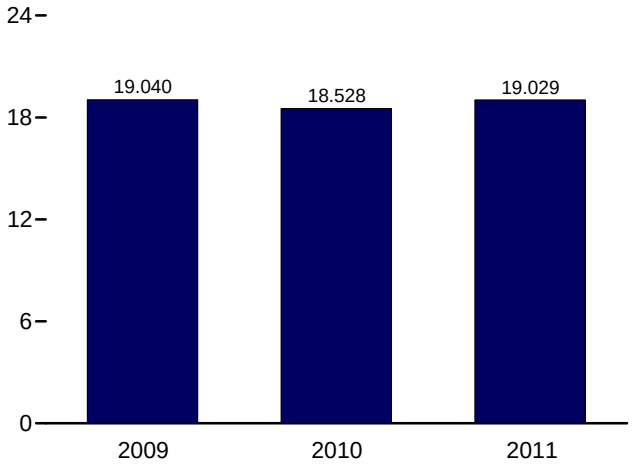
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual,* annual reports. • **2010 and 2011:** 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)

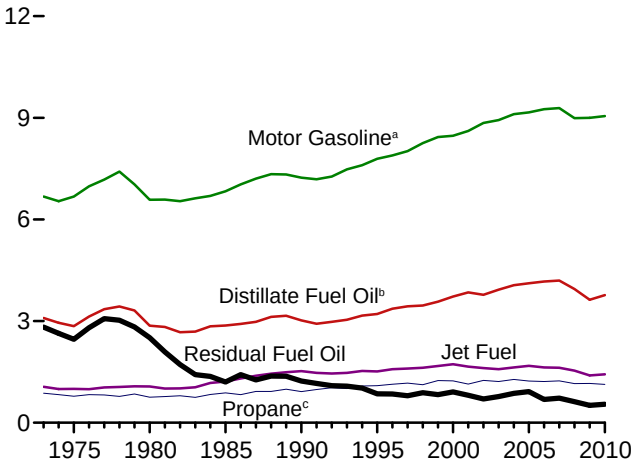
Total and Motor Gasoline, 1973-2010



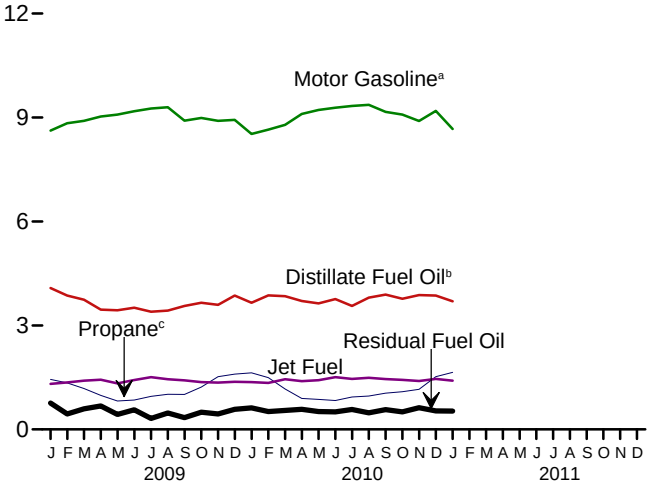
Total, January



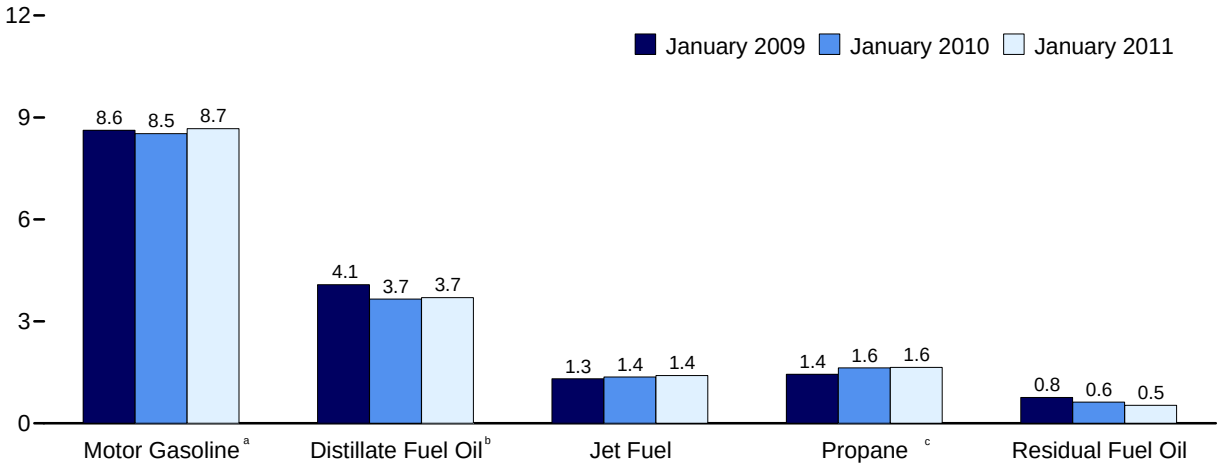
Selected Products,1973-2010



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] Includes propylene.

Note: SPR= Strategic Petroleum Reserve.
Web Page: http://www.eia.gov/mer/petro.html.
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 January	354	13	4,192	1,581	14	1,630	2,399	137	8,810	501	683	1,564	20,247
February	301	12	4,281	1,553	29	1,514	2,320	131	8,866	425	539	1,570	20,029
March	295	16	4,161	1,552	25	1,301	2,166	144	9,066	473	589	1,345	19,831
April	360	17	4,106	1,622	1	1,001	1,860	145	9,112	482	707	1,403	19,815
May	461	19	3,931	1,590	7	919	1,845	143	9,251	456	673	1,422	19,798
June	570	16	3,763	1,623	5	998	1,914	138	9,110	451	683	1,405	19,678
July	556	16	3,688	1,574	-1	1,017	1,939	139	9,150	538	684	1,274	19,557
August	517	18	3,659	1,639	3	1,000	1,915	157	9,134	471	511	1,249	19,272
September	531	16	3,740	1,478	12	857	1,429	97	8,497	353	520	1,167	17,839
October	465	12	4,182	1,417	10	1,106	1,832	146	9,024	466	597	1,547	19,698
November	314	15	3,872	1,440	20	1,167	1,899	91	8,904	438	521	1,540	19,052
December	271	14	3,783	1,395	47	1,343	1,931	104	8,927	503	753	1,414	19,142
Average	**417**	**15**	**3,945**	**1,539**	**14**	**1,154**	**1,954**	**131**	**8,989**	**464**	**622**	**1,408**	**19,498**
2009 January	195	13	4,079	1,312	44	1,444	2,094	120	8,623	426	760	1,373	19,040
February	277	10	3,864	1,356	40	1,341	2,139	96	8,836	425	448	1,330	18,822
March	300	14	3,744	1,406	16	1,181	2,043	112	8,903	420	591	1,170	18,719
April	299	15	3,455	1,432	14	981	1,906	125	9,029	498	677	1,222	18,672
May	371	13	3,436	1,329	14	818	1,774	101	9,084	501	433	1,154	18,211
June	512	18	3,513	1,425	11	849	1,731	124	9,180	536	566	1,213	18,828
July	495	19	3,395	1,506	1	955	1,807	122	9,260	369	319	1,333	18,626
August	542	15	3,426	1,449	6	1,012	1,956	138	9,295	407	472	1,244	18,949
September	461	19	3,560	1,414	-4	1,009	1,929	124	8,911	470	340	1,372	18,594
October	377	11	3,654	1,362	21	1,219	2,208	123	8,986	329	495	1,236	18,803
November	287	10	3,596	1,352	22	1,523	2,531	117	8,906	356	445	1,132	18,753
December	204	15	3,861	1,372	26	1,597	2,504	114	8,931	385	582	1,241	19,237
Average	**360**	**14**	**3,631**	**1,393**	**18**	**1,160**	**2,051**	**118**	**8,997**	**427**	**511**	**1,251**	**18,771**
2010 January	213	11	3,656	1,365	16	1,630	2,545	106	8,525	266	622	1,204	18,528
February	249	10	3,866	1,342	35	1,495	2,450	125	8,651	334	513	1,285	18,860
March	272	14	3,842	1,446	12	1,168	2,153	138	8,787	428	545	1,432	19,070
April	335	17	3,707	1,391	8	894	1,774	127	9,103	387	578	1,484	18,910
May	389	15	3,635	1,422	11	865	1,800	140	9,217	339	514	1,345	18,827
June	481	18	3,759	1,507	12	832	1,812	160	9,284	411	505	1,367	19,314
July	467	20	3,561	1,458	16	933	1,943	142	9,332	381	574	1,384	19,278
August	543	14	3,800	1,487	9	964	1,993	131	9,366	432	479	1,438	19,692
September	462	20	3,890	1,451	9	1,046	2,049	135	9,163	433	570	1,325	19,507
October	427	15	3,769	1,429	15	1,085	2,027	128	9,086	334	506	1,203	18,939
November	R 297	R 11	R 3,877	R 1,397	R 46	R 1,154	R 2,089	R 124	R 8,901	R 389	R 625	R 1,317	R 19,074
December	F 197	F 10	E 3,862	E 1,456	RF 42	E 1,519	F 2,287	RF 85	E 9,189	RF 424	E 533	RE 1,916	E 20,000
Average	RE **362**	E **15**	RE **3,768**	RE **1,430**	RE **19**	RE **1,131**	RE **2,075**	RE **128**	RE **9,053**	RE **380**	RE **547**	RE **1,393**	RE **19,169**
2011 January	F 211	F 11	E 3,698	E 1,405	F 29	E 1,647	F 2,465	F 115	E 8,668	F 377	E 528	E 1,522	E 19,029

[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.

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.

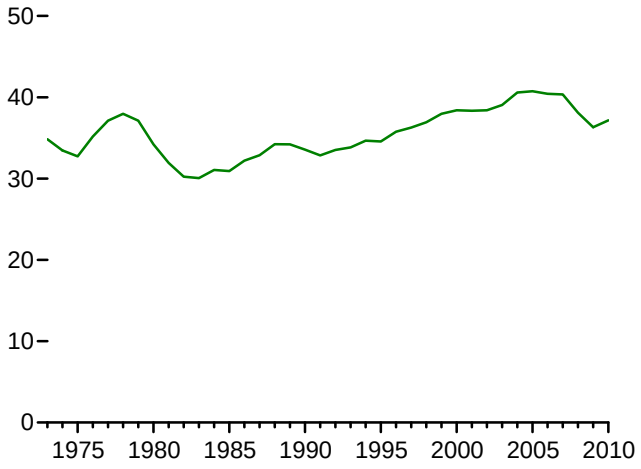
Web Pages: • For all available data beginning in 1973, see http://www.eia.gov/mer/petro.html. • For related information, see http://www.eia.gov/oil_gas/petroleum/info_glance/petroleum.html.

Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2009:** EIA, *Petroleum Supply Annual,* annual reports. • **2010 and 2011:** 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.

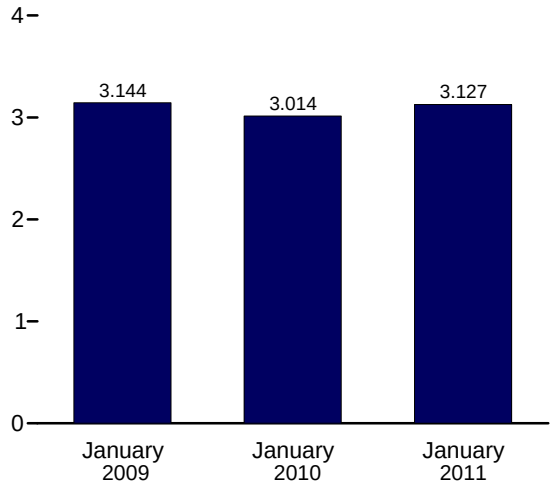
Figure 3.6 Heat Content of Petroleum Products Supplied by Type

(Quadrillion Btu)

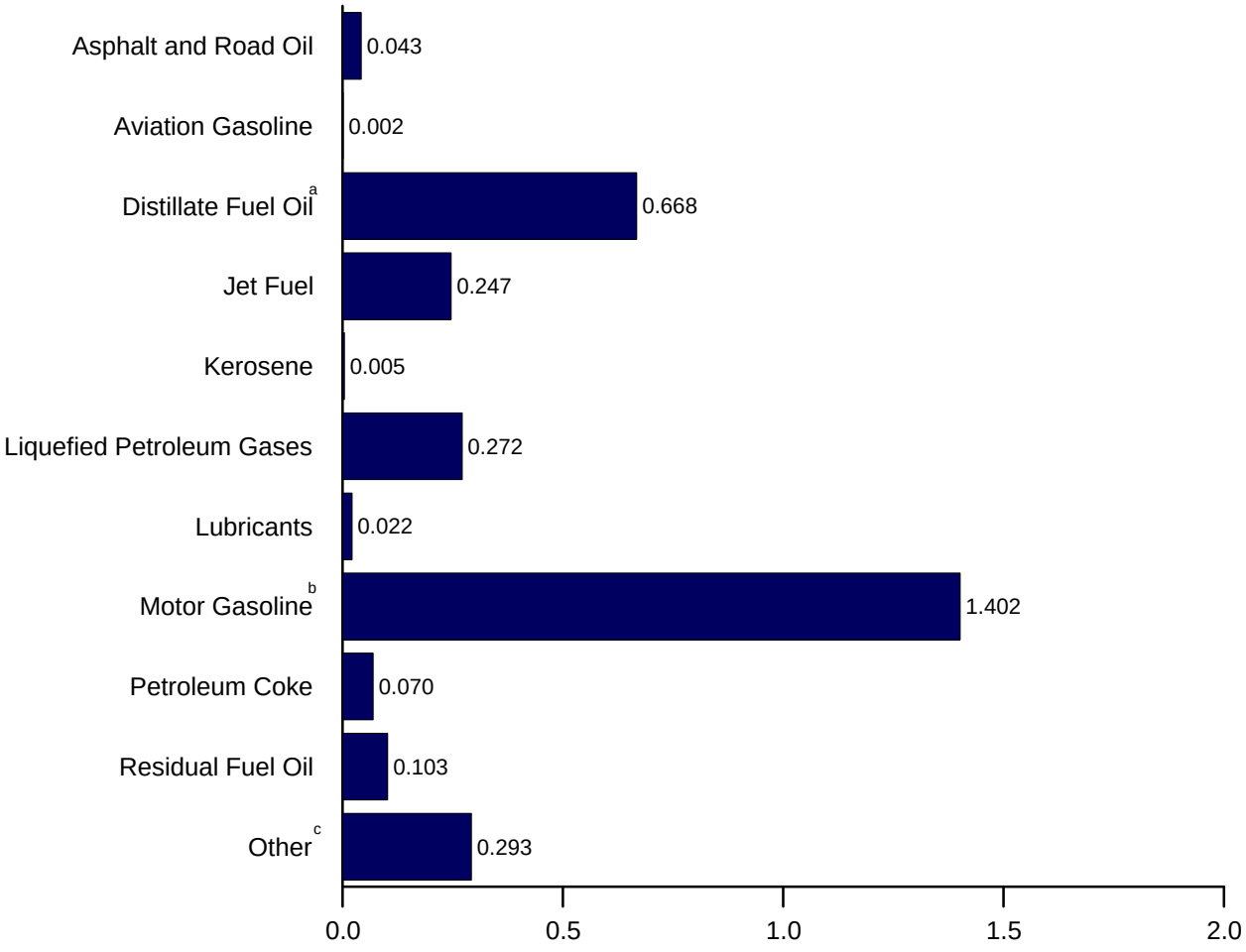
Total, 1973-2010



Total



By Product, January 2011



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

Web Page: http://www.eia.gov/mer/petro.html.
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 January	73	2	757	278	2	194	268	26	1,425	93	133	277	3,334
February	58	2	723	255	5	168	243	23	1,342	74	98	259	3,081
March	61	2	751	273	4	155	240	27	1,467	88	115	237	3,266
April	72	3	717	276	(s)	115	200	26	1,426	87	133	242	3,182
May	95	3	710	279	1	109	202	27	1,496	85	131	251	3,281
June	114	2	658	276	1	115	206	25	1,426	81	129	241	3,159
July	114	2	666	277	(s)	121	217	26	1,480	101	133	225	3,242
August	106	3	661	288	(s)	119	215	30	1,478	88	100	219	3,187
September	106	2	654	251	2	99	155	18	1,330	64	98	202	2,882
October	96	2	755	249	2	132	206	27	1,460	87	116	272	3,272
November	63	2	677	245	3	134	205	17	1,394	79	98	263	3,046
December	56	2	683	245	8	160	217	20	1,444	94	147	253	3,169
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 January	40	2	736	231	8	172	235	23	1,395	80	148	247	3,144
February	51	1	630	215	6	144	215	16	1,291	72	79	214	2,792
March	62	2	676	247	3	140	226	21	1,440	78	115	208	3,079
April	59	2	604	244	2	113	201	23	1,413	90	128	209	2,976
May	76	2	621	234	2	97	193	19	1,469	94	84	206	3,000
June	102	3	614	242	2	98	183	23	1,437	97	107	208	3,016
July	102	3	613	265	(s)	114	198	23	1,498	69	62	236	3,069
August	111	2	619	255	1	120	215	26	1,504	76	92	220	3,121
September	92	3	622	241	-1	116	205	23	1,395	85	64	234	2,963
October	78	2	660	239	4	145	243	23	1,454	61	96	218	3,078
November	57	1	628	230	4	175	272	21	1,394	64	84	192	2,949
December	42	2	697	241	5	190	278	22	1,445	72	113	219	3,136
Total	**873**	**27**	**7,720**	**2,883**	**36**	**1,624**	**2,664**	**262**	**17,135**	**938**	**1,173**	**2,611**	**36,321**
2010 January	44	2	660	240	3	194	283	20	1,379	50	121	213	3,014
February	46	1	631	213	5	161	247	21	1,264	56	90	206	2,781
March	56	2	694	254	2	139	238	26	1,421	80	106	254	3,134
April	67	3	648	237	1	103	191	23	1,425	70	109	255	3,028
May	80	2	656	250	2	103	198	26	1,491	63	100	239	3,109
June	96	3	657	256	2	96	192	29	1,453	74	95	234	3,092
July	96	3	643	256	3	111	213	27	1,509	71	112	244	3,178
August	112	2	686	261	2	115	217	25	1,515	81	93	254	3,248
September	92	3	680	247	1	120	216	24	1,434	78	107	228	3,112
October	88	2	681	251	3	129	222	24	1,470	62	99	213	3,114
November	R 59	2	R 677	R 238	R 8	R 133	R 222	R 23	R 1,393	R 70	R 118	R 225	R 3,035
December	F 41	F 2	E 697	E 256	RF 7	E 181	F 252	RF 16	E 1,486	RF 79	E 104	RE 346	E 3,287
Total	RE **876**	E **27**	RE **8,010**	RE **2,959**	RE **39**	RE **1,583**	RE **2,692**	RE **284**	RE **17,242**	RE **835**	RE **1,255**	RE **2,912**	RE **37,132**
2011 January	F 43	F 2	E 668	E 247	F 5	E 196	F 272	F 22	E 1,402	F 70	E 103	E 293	E 3,127

[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.

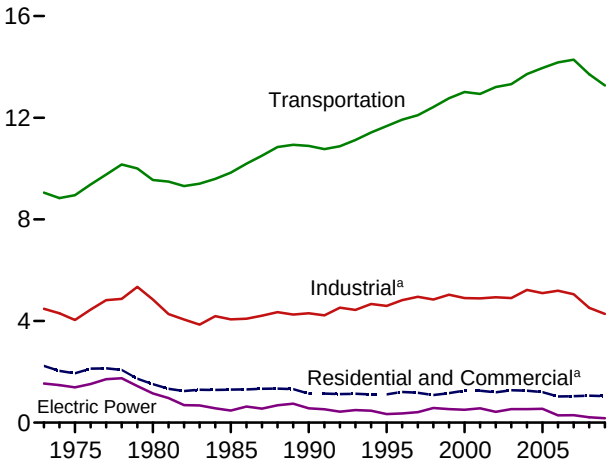
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent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

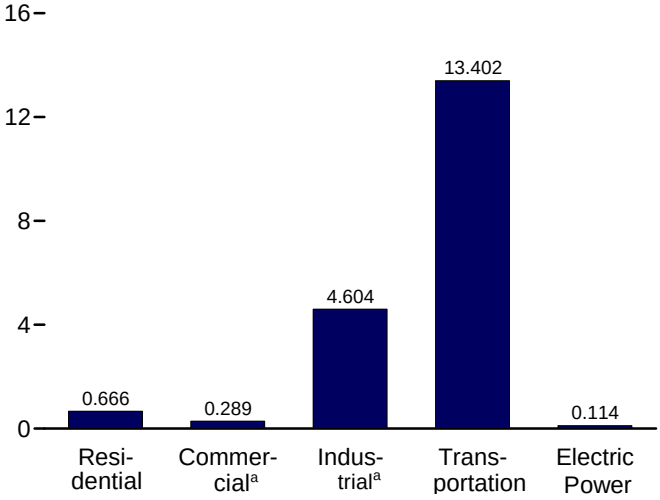
Sources: See end of section.

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

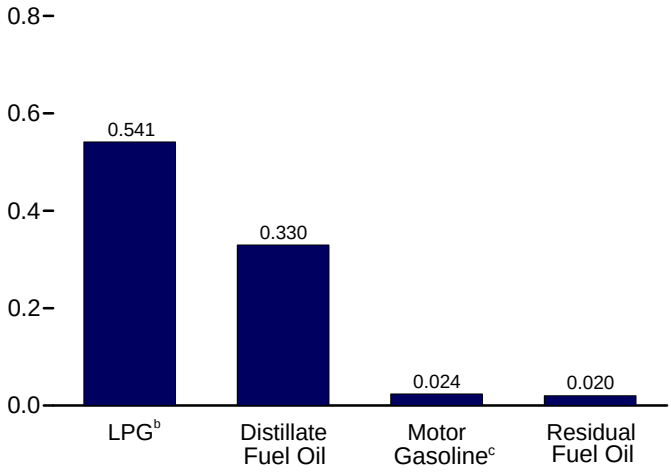
By Sector, 1973-2009



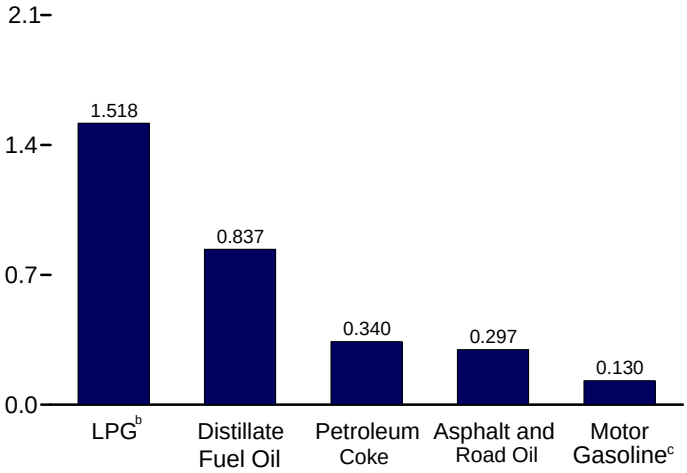
By Sector, November 2010



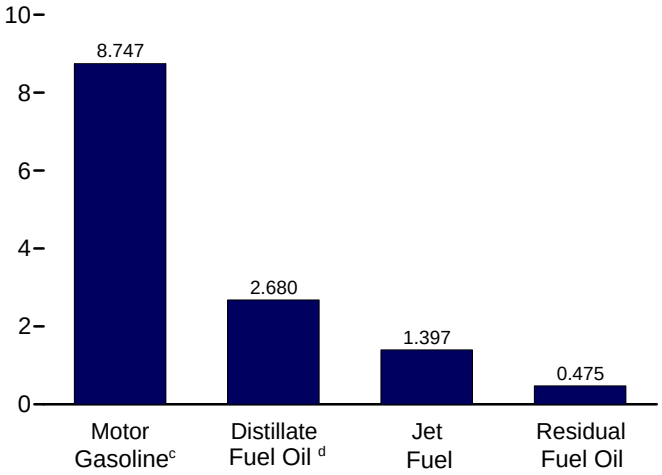
Residential and Commercial Sectors,[a] Selected Products, November 2010



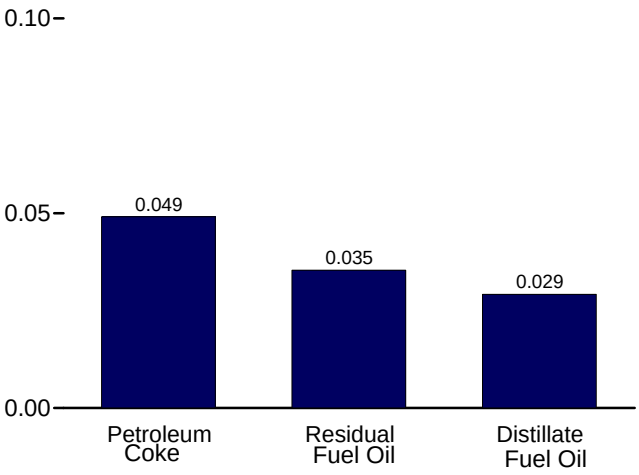
Industrial Sector,[a] Selected Products, November 2010



Transportation Sector, Selected Products, November 2010



Electric Power Sector, November 2010



[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.
Web Page: http://www.eia.gov/mer/petro.html.
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 January	516	10	483	1,009	287	2	138	23	(s)	53	503
February	530	21	467	1,018	294	4	134	24	(s)	54	510
March	376	18	436	830	209	4	125	24	(s)	38	400
April	293	1	375	668	163	(s)	107	24	(s)	30	324
May	207	5	372	584	115	1	106	25	0	21	268
June	228	4	386	618	127	1	110	24	0	23	285
July	216	-1	391	606	120	(s)	112	24	0	22	278
August	194	2	386	582	108	(s)	110	24	0	20	262
September	208	9	288	505	116	2	82	23	(s)	21	244
October	233	7	369	610	130	1	106	24	(s)	24	285
November	292	14	383	689	162	3	109	24	(s)	30	328
December	449	34	389	872	249	7	111	24	(s)	46	437
Average	**311**	**10**	**394**	**715**	**173**	**2**	**113**	**24**	**(s)**	**32**	**343**
2009 January	451	32	422	904	250	6	121	23	(s)	43	443
February	418	29	431	878	232	6	123	24	(s)	40	425
March	363	12	412	786	201	2	118	24	(s)	34	380
April	287	10	384	681	159	2	110	24	0	27	322
May	194	10	357	561	108	2	102	24	0	18	254
June	185	8	349	542	103	2	100	24	0	18	246
July	208	1	364	573	115	(s)	104	25	0	20	264
August	217	4	394	615	120	1	113	25	(s)	21	279
September	262	-3	389	648	146	-1	111	24	(s)	25	305
October	225	15	445	686	125	3	127	24	0	21	301
November	229	16	510	755	127	3	146	24	(s)	22	322
December	405	19	504	929	225	4	144	24	(s)	39	436
Average	**286**	**13**	**413**	**712**	**159**	**3**	**118**	**24**	**(s)**	**27**	**331**
2010 January	360	11	513	884	200	2	147	23	(s)	34	406
February	369	25	494	888	205	5	141	23	(s)	35	409
March	212	9	434	655	118	2	124	23	(s)	20	287
April	153	5	358	516	85	1	102	24	(s)	15	227
May	162	8	363	533	90	2	104	25	0	15	235
June	191	8	365	565	106	2	104	25	0	18	255
July	148	12	391	551	82	2	112	25	0	14	235
August	132	6	402	540	74	1	115	25	(s)	13	227
September	123	6	413	542	68	1	118	24	(s)	12	224
October	R 183	11	408	R 602	R 102	2	117	24	(s)	R 17	R 262
November	212	33	421	666	118	7	120	24	(s)	20	289
11-Month Average	**203**	**12**	**414**	**630**	**113**	**2**	**118**	**24**	**(s)**	**19**	**277**
2009 11-Month Average	**275**	**12**	**405**	**692**	**153**	**2**	**116**	**24**	**(s)**	**26**	**321**
2008 11-Month Average	**299**	**8**	**394**	**701**	**166**	**2**	**113**	**24**	**(s)**	**30**	**335**

[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/mer/petro.html 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 January	354	774	2	1,743	71	128	422	99	1,564	5,157
February	301	801	4	1,686	67	129	348	77	1,570	4,983
March	295	764	3	1,574	74	132	413	87	1,345	4,685
April	360	710	(s)	1,351	75	133	413	102	1,403	4,547
May	461	633	1	1,341	73	135	394	97	1,422	4,556
June	570	418	1	1,391	71	133	372	88	1,405	4,448
July	556	366	(s)	1,408	71	133	470	91	1,274	4,369
August	517	359	(s)	1,391	81	133	399	68	1,249	4,197
September	531	501	2	1,038	50	124	282	65	1,167	3,761
October	465	789	1	1,331	75	131	394	84	1,547	4,819
November	314	610	3	1,379	47	130	371	71	1,540	4,464
December	271	414	6	1,403	53	130	437	107	1,414	4,236
Average	**417**	**594**	**2**	**1,420**	**67**	**131**	**394**	**86**	**1,408**	**4,518**
2009 January	195	884	6	1,522	62	126	360	101	1,373	4,628
February	277	712	5	1,554	49	129	358	65	1,330	4,480
March	300	623	2	1,484	58	130	345	89	1,170	4,201
April	299	422	2	1,385	64	131	429	102	1,222	4,057
May	371	459	2	1,289	52	132	434	69	1,154	3,962
June	512	457	2	1,258	64	134	466	83	1,213	4,188
July	495	333	(s)	1,313	63	135	299	42	1,333	4,013
August	542	332	1	1,421	71	135	339	62	1,244	4,147
September	461	475	-1	1,401	64	130	400	47	1,372	4,349
October	377	586	3	1,604	63	131	288	70	1,236	4,357
November	287	630	3	1,839	60	130	314	67	1,132	4,462
December	204	656	4	1,819	59	130	331	89	1,241	4,532
Average	**360**	**547**	**2**	**1,490**	**61**	**131**	**363**	**74**	**1,251**	**4,280**
2010 January	213	679	2	1,849	54	124	197	88	1,204	4,412
February	249	773	5	1,780	64	126	264	78	1,285	4,624
March	272	861	2	1,564	71	128	359	81	1,432	4,770
April	335	738	1	1,289	65	133	325	86	1,484	4,456
May	389	627	2	1,308	72	134	274	74	1,345	4,226
June	481	612	2	1,316	82	135	333	69	1,367	4,396
July	467	500	2	1,411	73	136	299	78	1,384	4,352
August	543	674	1	1,448	67	136	370	65	1,438	4,742
September	462	842	1	1,489	69	133	373	84	1,325	4,779
October	427	[R] 709	2	1,473	66	132	279	77	1,203	[R] 4,368
November	297	837	6	1,518	64	130	340	94	1,317	4,604
11-Month Average	**377**	**713**	**2**	**1,494**	**68**	**132**	**310**	**79**	**1,344**	**4,519**
2009 11-Month Average	**375**	**537**	**2**	**1,460**	**61**	**131**	**366**	**73**	**1,252**	**4,256**
2008 11-Month Average	**430**	**611**	**2**	**1,421**	**69**	**131**	**390**	**84**	**1,407**	**4,544**

[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/mer/petro.html 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 January	13	2,564	1,581	34	67	8,658	426	13,343	51	78	105	235
February	12	2,616	1,553	33	64	8,713	318	13,309	41	77	91	209
March	16	2,783	1,552	31	70	8,910	389	13,750	30	60	75	165
April	17	2,908	1,622	27	71	8,955	488	14,088	31	68	88	187
May	19	2,945	1,590	26	69	9,092	465	14,206	30	62	91	183
June	16	2,945	1,623	27	67	8,953	414	14,046	45	79	158	281
July	16	2,955	1,574	28	67	8,992	445	14,078	32	68	125	226
August	18	2,971	1,639	27	76	8,977	318	14,026	28	72	106	205
September	16	2,886	1,478	21	47	8,351	302	13,100	29	70	131	230
October	12	3,005	1,417	26	71	8,869	412	13,812	25	72	76	173
November	15	2,780	1,440	27	44	8,750	332	13,388	28	67	88	183
December	14	2,629	1,395	28	50	8,774	480	13,369	43	66	121	229
Average	**15**	**2,833**	**1,539**	**28**	**64**	**8,834**	**400**	**13,712**	**34**	**70**	**104**	**209**
2009 January	13	2,434	1,312	30	58	8,474	424	12,746	60	66	193	319
February	10	2,462	1,356	31	47	8,684	258	12,848	40	67	85	191
March	14	2,517	1,406	29	55	8,749	403	13,173	40	75	65	180
April	15	2,561	1,432	27	61	8,874	491	13,461	26	69	57	152
May	13	2,644	1,329	25	49	8,927	274	13,262	32	67	72	171
June	18	2,736	1,425	25	60	9,022	387	13,672	31	70	78	179
July	19	2,710	1,506	26	59	9,101	175	13,596	28	70	83	180
August	15	2,727	1,449	28	67	9,135	292	13,712	30	68	97	195
September	19	2,654	1,414	28	60	8,757	205	13,137	24	69	63	156
October	11	2,692	1,362	32	60	8,832	335	13,323	26	41	68	136
November	10	2,583	1,352	36	57	8,752	314	13,104	27	42	42	111
December	15	2,541	1,372	36	56	8,777	414	13,211	33	54	41	128
Average	**14**	**2,606**	**1,393**	**29**	**57**	**8,842**	**331**	**13,273**	**33**	**63**	**79**	**175**
2010 January	11	2,337	1,365	37	51	8,378	407	12,586	79	68	92	240
February	10	2,491	1,342	35	61	8,502	362	12,803	29	69	38	136
March	14	2,628	1,446	31	67	8,636	403	13,225	23	69	41	133
April	17	2,709	1,391	25	62	8,946	437	13,586	22	61	41	124
May	15	2,724	1,422	26	68	9,058	357	13,669	32	65	67	163
June	18	2,809	1,507	26	78	9,124	312	13,873	41	78	106	224
July	20	2,789	1,458	28	69	9,171	361	13,895	42	82	121	245
August	14	2,887	1,487	29	63	9,205	302	13,986	34	62	99	196
September	20	2,826	1,451	29	65	9,005	412	13,809	30	60	62	153
October	15	[R] 2,750	1,429	29	62	8,929	[R] 374	[R] 13,588	26	56	38	119
November	11	2,680	1,397	30	60	8,747	475	13,402	29	49	35	114
11-Month Average	**15**	**2,695**	**1,427**	**30**	**64**	**8,884**	**382**	**13,497**	**35**	**65**	**68**	**168**
2009 11-Month Average	**14**	**2,612**	**1,395**	**29**	**58**	**8,847**	**324**	**13,279**	**33**	**64**	**82**	**179**
2008 11-Month Average	**15**	**2,852**	**1,552**	**28**	**65**	**8,840**	**392**	**13,744**	**33**	**70**	**103**	**207**

[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.

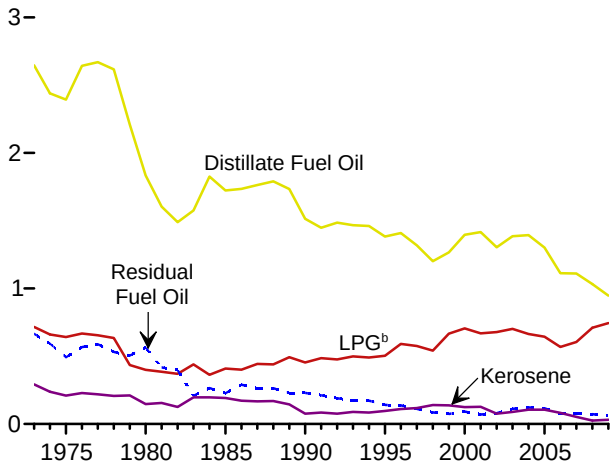
Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c.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

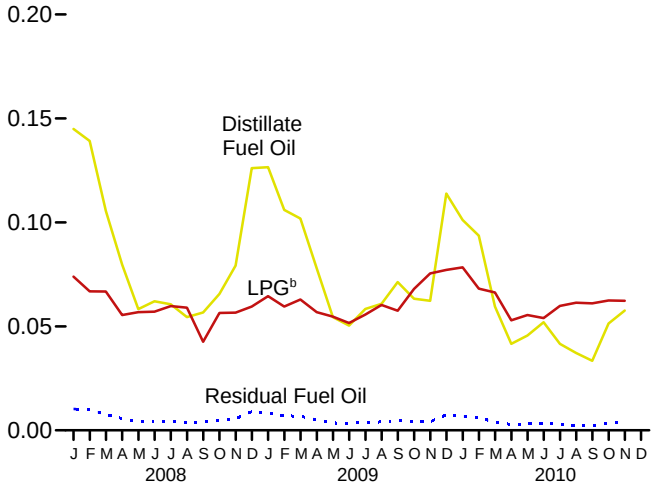
Sources: See end of section.

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

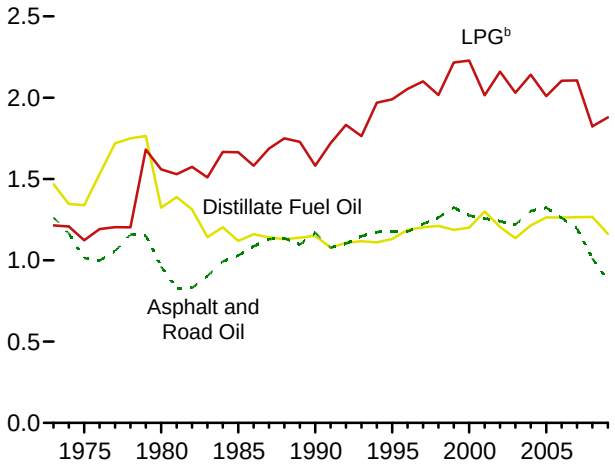
Residential and Commercial Sectors,[a] 1973-2009



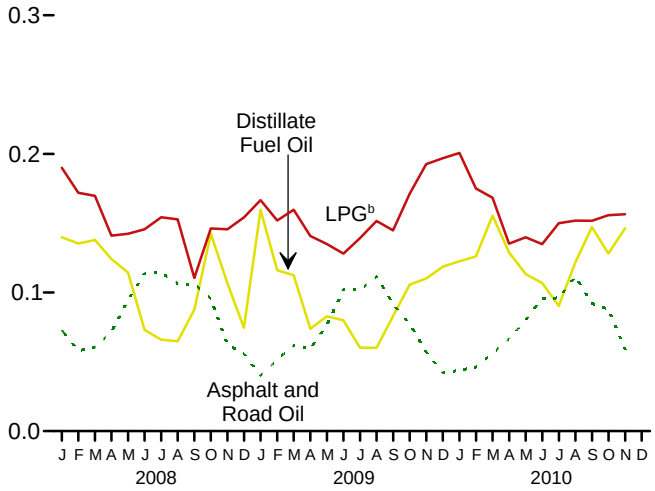
Residential and Commercial Sectors,[a] Monthly



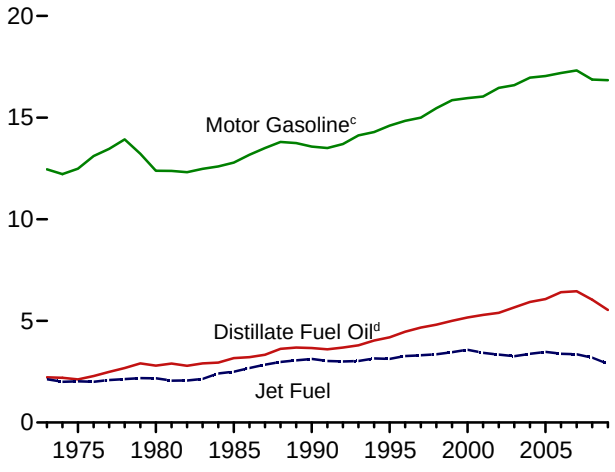
Industrial Sector,[a] 1973-2009



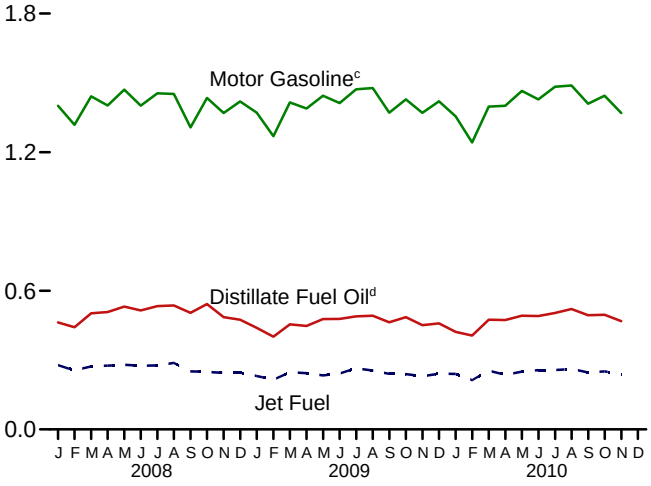
Industrial Sector,[a] Monthly



Transportation Sector, 1973-2009



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.
Web Page: http://www.eia.gov/mer/petro.html.
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 January	93	2	57	152	52	(s)	16	4	(s)	10	83
February	89	3	52	145	50	1	15	4	(s)	10	79
March	68	3	52	123	38	1	15	4	(s)	7	65
April	51	(s)	43	94	28	(s)	12	4	(s)	6	50
May	37	1	44	82	21	(s)	13	4	0	4	42
June	40	1	44	85	22	(s)	13	4	0	4	43
July	39	(s)	46	85	22	(s)	13	4	0	4	43
August	35	(s)	46	81	19	(s)	13	4	0	4	40
September	36	1	33	71	20	(s)	9	4	(s)	4	38
October	42	1	44	87	23	(s)	13	4	(s)	5	45
November	51	2	44	97	28	(s)	13	4	(s)	6	51
December	81	6	46	133	45	1	13	4	(s)	9	72
Total	**664**	**21**	**553**	**1,238**	**369**	**4**	**158**	**46**	**(s)**	**73**	**650**
2009 January	81	6	50	137	45	1	14	4	(s)	8	73
February	68	5	46	119	38	1	13	3	(s)	7	62
March	65	2	49	116	36	(s)	14	4	(s)	7	61
April	50	2	44	96	28	(s)	13	4	0	5	50
May	35	2	43	79	19	(s)	12	4	0	4	39
June	32	1	40	74	18	(s)	11	4	0	3	37
July	38	(s)	43	81	21	(s)	12	4	0	4	41
August	39	1	47	87	22	(s)	13	4	(s)	4	43
September	46	-1	45	90	25	(s)	13	4	(s)	5	47
October	41	3	53	96	23	1	15	4	0	4	46
November	40	3	59	101	22	1	17	4	(s)	4	47
December	73	3	60	137	41	1	17	4	(s)	8	70
Total	**609**	**26**	**579**	**1,214**	**338**	**5**	**165**	**46**	**(s)**	**62**	**617**
2010 January	65	2	61	128	36	(s)	17	4	(s)	7	64
February	60	4	53	117	33	1	15	3	(s)	6	59
March	38	2	52	91	21	(s)	15	4	(s)	4	44
April	27	1	41	69	15	(s)	12	4	(s)	3	33
May	29	1	43	74	16	(s)	12	4	0	3	36
June	33	1	42	77	19	(s)	12	4	0	3	38
July	27	2	47	75	15	(s)	13	4	0	3	35
August	24	1	48	73	13	(s)	14	4	(s)	2	34
September	21	1	48	70	12	(s)	14	4	(s)	2	32
October	R 33	2	49	R 83	R 18	(s)	14	4	(s)	3	R 40
November	37	6	48	91	21	1	14	4	(s)	4	43
11-Month Total	**395**	**23**	**531**	**949**	**220**	**5**	**152**	**42**	**(s)**	**41**	**459**
2009 11-Month Total	**536**	**23**	**519**	**1,077**	**297**	**5**	**148**	**42**	**(s)**	**55**	**547**
2008 11-Month Total	**583**	**15**	**506**	**1,104**	**324**	**3**	**145**	**42**	**(s)**	**64**	**578**

[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 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/mer/petro.html 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 January	73	140	(s)	190	13	21	79	19	277	812
February	58	135	1	172	12	20	61	14	259	730
March	61	138	1	170	14	21	77	17	237	735
April	72	124	(s)	141	14	21	75	19	242	707
May	95	114	(s)	142	14	22	74	19	251	730
June	114	73	(s)	146	13	21	67	17	241	691
July	114	66	(s)	154	13	22	88	18	225	700
August	106	65	(s)	153	15	22	75	13	219	668
September	106	88	(s)	110	9	19	51	12	202	598
October	96	142	(s)	146	14	21	74	16	272	782
November	63	107	(s)	146	9	20	67	13	263	688
December	56	75	1	154	10	21	82	21	253	672
Total	**1,012**	**1,267**	**4**	**1,824**	**150**	**250**	**868**	**198**	**2,941**	**8,513**
2009 January	40	160	1	167	12	20	67	20	247	733
February	51	116	1	152	8	19	60	11	214	634
March	62	113	(s)	160	11	21	64	17	208	656
April	59	74	(s)	141	12	21	78	19	209	613
May	76	83	(s)	135	10	21	81	14	206	626
June	102	80	(s)	128	12	21	84	16	208	651
July	102	60	(s)	139	12	22	56	8	236	635
August	111	60	(s)	152	13	22	63	12	220	654
September	92	83	(s)	145	12	20	72	9	234	667
October	78	106	1	171	12	21	54	14	218	673
November	57	110	(s)	193	11	20	57	13	192	653
December	42	119	1	197	11	21	62	17	219	688
Total	**873**	**1,162**	**5**	**1,878**	**135**	**250**	**799**	**170**	**2,611**	**7,882**
2010 January	44	123	(s)	201	10	20	37	17	213	665
February	46	126	1	175	11	18	45	14	206	642
March	56	155	(s)	168	13	21	67	16	254	751
April	67	129	(s)	135	12	21	59	16	255	694
May	80	113	(s)	140	13	22	51	14	239	673
June	96	107	(s)	135	15	21	60	13	234	682
July	96	90	(s)	150	14	22	56	15	244	688
August	112	122	(s)	152	13	22	69	13	254	756
September	92	147	(s)	152	13	21	67	16	228	736
October	88	[R] 128	(s)	156	12	21	52	15	213	[R] 686
November	59	146	1	157	12	20	61	18	225	699
11-Month Total	**835**	**1,387**	**4**	**1,720**	**138**	**229**	**624**	**167**	**2,566**	**7,670**
2009 11-Month Total	**831**	**1,044**	**4**	**1,681**	**123**	**228**	**737**	**152**	**2,392**	**7,194**
2008 11-Month Total	**956**	**1,192**	**3**	**1,670**	**140**	**229**	**786**	**178**	**2,688**	**7,841**

[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/mer/petro.html 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 January	2	463	278	4	13	1,401	83	2,243	9	15	21	44
February	2	442	255	4	11	1,319	58	2,090	7	14	17	37
March	2	503	273	4	13	1,441	76	2,312	5	11	15	31
April	3	508	276	3	13	1,402	92	2,296	5	12	17	34
May	3	532	279	3	13	1,471	91	2,392	5	12	18	35
June	2	515	276	3	12	1,401	78	2,288	8	14	30	52
July	2	534	277	3	13	1,455	87	2,370	6	13	24	43
August	3	536	288	3	14	1,452	62	2,359	5	13	21	39
September	2	504	251	2	9	1,307	57	2,133	5	13	25	42
October	2	543	249	3	13	1,435	80	2,325	4	13	15	33
November	2	486	245	3	8	1,370	63	2,177	5	12	17	34
December	2	475	245	3	9	1,419	94	2,247	8	12	24	44
Total	**28**	**6,039**	**3,193**	**39**	**141**	**16,872**	**920**	**27,233**	**73**	**154**	**240**	**468**
2009 January	2	439	231	4	11	1,371	83	2,140	11	12	38	61
February	1	402	215	3	8	1,269	45	1,944	6	11	15	33
March	2	454	247	3	10	1,415	78	2,211	7	14	13	34
April	2	448	244	3	11	1,389	93	2,189	5	12	11	28
May	2	478	234	3	9	1,444	53	2,223	6	13	14	32
June	3	478	242	3	11	1,412	73	2,222	5	13	15	33
July	3	489	265	3	11	1,472	34	2,278	5	13	16	34
August	2	492	255	3	13	1,478	57	2,300	5	13	19	37
September	3	464	241	3	11	1,371	39	2,131	4	13	12	29
October	2	486	239	4	11	1,429	65	2,236	5	8	13	26
November	1	451	230	4	10	1,370	59	2,127	5	8	8	20
December	2	459	241	4	10	1,420	81	2,218	6	10	8	24
Total	**27**	**5,541**	**2,883**	**41**	**127**	**16,839**	**760**	**26,218**	**70**	**139**	**181**	**390**
2010 January	2	422	240	4	10	1,355	79	2,112	14	13	18	45
February	1	406	213	4	10	1,242	64	1,941	5	12	7	23
March	2	475	254	4	13	1,397	79	2,223	4	13	8	25
April	3	473	237	3	11	1,400	82	2,209	4	11	8	23
May	2	492	250	3	13	1,465	70	2,295	6	12	13	31
June	3	491	256	3	14	1,428	59	2,254	7	14	20	41
July	3	504	256	3	13	1,483	70	2,333	8	15	24	46
August	2	521	261	3	12	1,489	59	2,348	6	12	19	37
September	3	494	247	3	12	1,410	78	2,246	5	11	12	28
October	2	[R] 497	251	3	12	1,444	73	[R] 2,282	5	10	7	22
November	2	468	238	3	11	1,369	90	2,181	5	9	7	21
11-Month Total	**25**	**5,243**	**2,703**	**38**	**130**	**15,484**	**802**	**24,425**	**69**	**132**	**142**	**342**
2009 11-Month Total	**24**	**5,082**	**2,642**	**37**	**117**	**15,420**	**679**	**24,001**	**64**	**129**	**173**	**366**
2008 11-Month Total	**26**	**5,565**	**2,948**	**36**	**132**	**15,453**	**826**	**24,985**	**65**	**142**	**217**	**424**

[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/mer/petro.html 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*. 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 *Petroleum Supply Monthly* (*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* (*MER*) and the *Petroleum Supply Annual* (*PSA*) and *Petroleum Supply Monthly* (*PSM*). The data that have discrepancies are footnoted in Section 3 tables. The corresponding PSA/PSM values, in thousand barrels per day, are: Natural Gas Plant Liquids Production, 1976: 1,603; Total Exports, 1979: 472; Petroleum Products Exports, 1979: 237; and SPR Crude Oil Imports, 1978: 162.

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

Table 3.6 Sources

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

Jet Fuel
Product supplied data in thousand barrels per day for kerosene-type jet fuel and, through 2004, naphtha-type jet fuel are from EIA's *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: EIA, *Energy Data Reports*, "Petroleum Statement, Annual."
1981–2009: EIA, *Petroleum Supply Annual*.
2010: 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 into the individual end-use sectors (residential, commercial, industrial, and transportation) in proportion to each sector's share of sales as reported in EIA's *Fuel Oil and Kerosene Sales* (*Sales*) report series (DOE/EIA-0535), which is based primarily on data collected by Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report" (previously Form EIA-172). Shares for the current year are based on the most recent Sales report.

Following are notes on the individual sector groupings:

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

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

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

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

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

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

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

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

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

Jet Fuel

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

Kerosene

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

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

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

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

Liquefied Petroleum Gases (LPG)

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

Sales of LPG to the residential and commercial 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 into the individual end-use sectors (commercial, industrial, and transportation) in proportion to each sector's share of sales as reported in EIA's *Fuel Oil and Kerosene Sales* (*Sales*) report series (DOE/EIA-535), which is based primarily on data collected by Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report" (previously Form EIA-172). Shares for the current year are based on the most recent Sales report.

Following are notes on the individual sector groupings:

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

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

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

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

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

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

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

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

Table 3.8a Sources

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

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

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

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

Table 3.8b Sources

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

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

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

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

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

Table 3.8c Sources

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

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

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

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

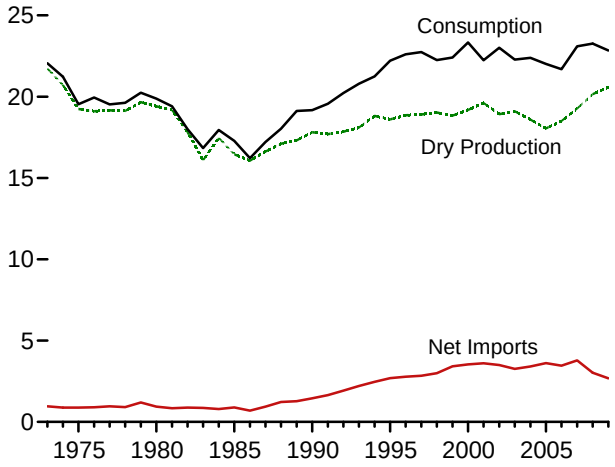
Total Petroleum
Transportation sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Transportation Sector" in Table 3.8c. Electric power sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown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

4 Natural Gas

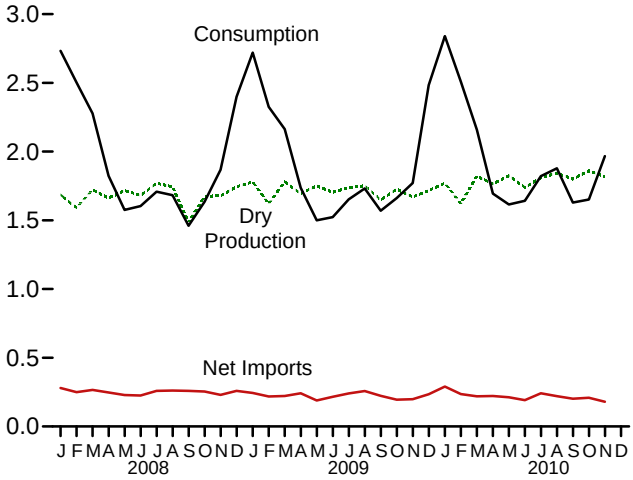
Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

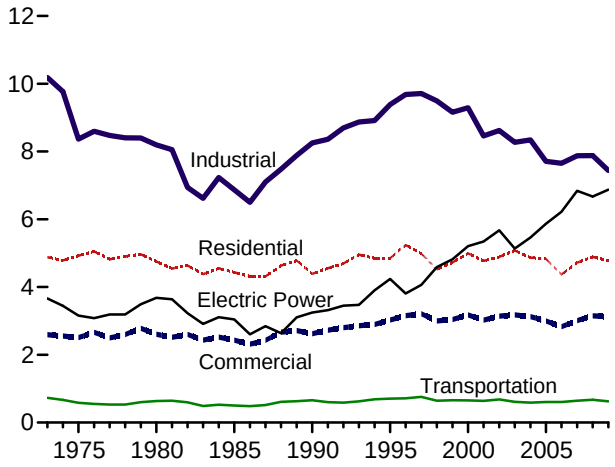
Overview, 1973-2009



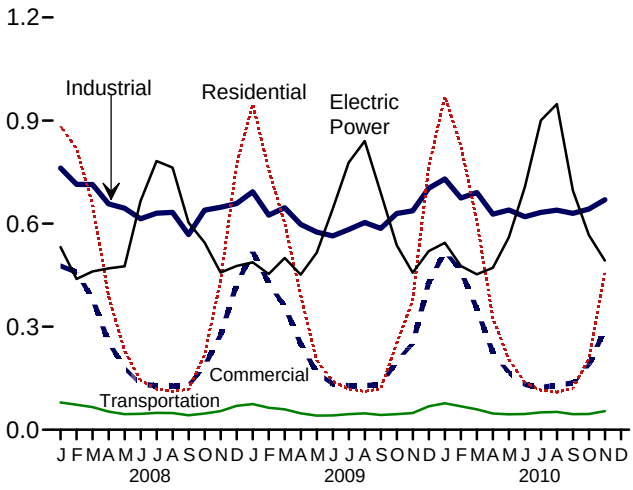
Overview, Monthly



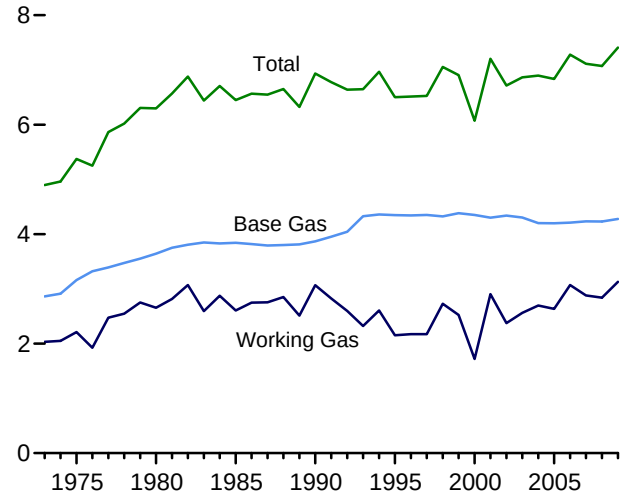
Consumption by Sector, 1973-2009



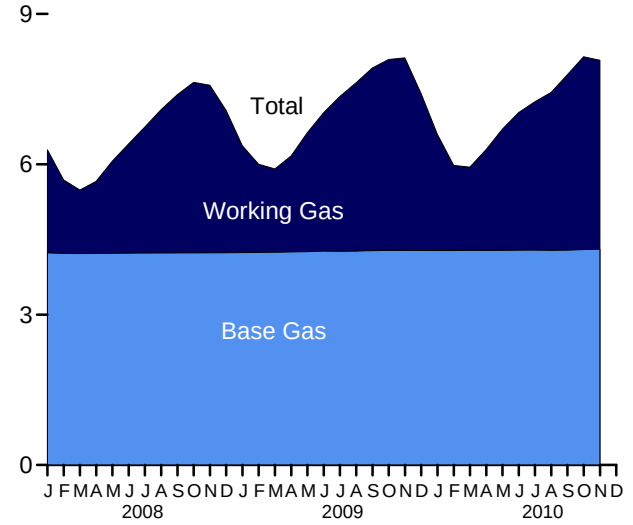
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2009



Underground Storage, End of Month



Web Page: http://www.eia.gov/mer/natgas.html.
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**	**468**	**44**	**23,007**
2003 Total	**24,119**	**19,974**	**876**	**19,099**	**68**	**3,944**	**680**	**3,264**	**-197**	**44**	**22,277**
2004 Total	**23,970**	**19,517**	**927**	**18,591**	**60**	**4,259**	**854**	**3,404**	**-114**	**448**	**22,389**
2005 Total	**23,457**	**18,927**	**876**	**18,051**	**64**	**4,341**	**729**	**3,612**	**52**	**232**	**22,011**
2006 Total	**23,535**	**19,410**	**906**	**18,504**	**66**	**4,186**	**724**	**3,462**	**-436**	**89**	**21,685**
2007 Total	**24,664**	**20,196**	**930**	**19,266**	**63**	**4,608**	**822**	**3,785**	**192**	**-209**	**23,097**
2008 January	2,155	1,765	80	1,686	5	390	109	280	838	-76	2,733
February	2,044	1,666	75	1,591	5	350	99	250	603	53	2,503
March	2,204	1,804	81	1,723	5	367	100	266	225	58	2,277
April	2,113	1,740	79	1,662	5	322	74	248	-195	104	1,823
May	2,153	1,798	81	1,717	5	297	69	228	-412	38	1,576
June	2,119	1,761	80	1,681	5	287	62	225	-349	41	1,604
July	2,205	1,853	84	1,769	5	323	63	259	-349	23	1,708
August	2,194	1,826	82	1,744	5	329	67	262	-357	29	1,682
September	1,920	1,559	70	1,489	4	314	55	259	-307	15	1,460
October	2,153	1,754	79	1,675	5	321	67	254	-248	-52	1,635
November	2,150	1,758	79	1,679	5	320	90	230	61	-107	1,868
December	2,227	1,827	83	1,744	5	365	106	259	523	-133	2,399
Total	**25,636**	**21,112**	**953**	**20,159**	**61**	**3,984**	**963**	**3,021**	**34**	**-7**	**23,268**
2009 January	2,249	1,867	89	1,779	6	357	113	244	719	-27	2,721
February	2,071	1,701	81	1,621	5	322	103	218	380	101	2,325
March	2,257	1,869	89	1,781	6	325	104	221	98	58	2,164
April	2,143	1,779	84	1,694	5	322	80	242	-257	51	1,736
May	2,186	1,838	87	1,751	6	266	77	189	-475	29	1,499
June	2,137	1,788	85	1,703	5	282	66	216	-393	-8	1,523
July	2,166	1,823	86	1,737	5	317	76	240	-345	15	1,653
August	2,189	1,839	87	1,752	6	337	79	258	-280	-4	1,731
September	2,086	1,731	82	1,649	5	307	84	223	-301	-6	1,570
October	2,195	1,813	86	1,727	5	273	78	195	-172	-94	1,662
November	2,139	1,752	83	1,669	5	295	97	198	-36	-66	1,771
December	2,196	1,802	85	1,717	5	350	115	234	707	-180	2,484
Total	**26,013**	**21,604**	**1,024**	**20,580**	**65**	**3,751**	**1,072**	**2,679**	**-355**	**-130**	**22,839**
2010 January	2,225	[E]1,850	80	[E]1,770	6	384	[R]94	291	812	[R]-39	[R]2,840
February	2,051	[E]1,697	75	[E]1,622	6	324	88	236	620	[R]25	[R]2,508
March	2,304	[E]1,906	84	[E]1,821	6	318	[R]100	219	36	77	2,159
April	2,208	[E]1,847	81	[E]1,766	5	298	76	222	-355	57	1,695
May	2,251	[E]1,909	85	[E]1,824	4	298	86	213	-409	[R]-17	1,615
June	2,142	[E]1,820	80	[E]1,740	6	282	90	192	-321	26	1,643
July	2,194	[E]1,891	81	[E]1,810	6	328	86	242	-227	-10	1,821
August	2,231	[E]1,928	84	[E]1,844	6	304	84	220	-186	-5	[R]1,878
September	2,241	[E]1,883	83	[E]1,800	6	282	79	202	-353	-26	1,629
October	[R]2,333	[RE]1,948	[R]86	[RE]1,861	6	[R]305	[R]96	[R]209	-352	[R]-73	[R]1,651
November	2,281	[E]1,905	87	[E]1,818	6	[E]276	[E]96	[E]180	74	-111	1,967
11-Month Total	**24,462**	**[E]20,583**	**907**	**[E]19,676**	**62**	**[E]3,399**	**[E]974**	**[E]2,425**	**-660**	**-96**	**21,406**
2009 11-Month Total	**23,817**	**19,802**	**939**	**18,863**	**60**	**3,402**	**957**	**2,445**	**-1,062**	**49**	**20,355**
2008 11-Month Total	**23,409**	**19,285**	**871**	**18,414**	**56**	**3,619**	**857**	**2,762**	**-489**	**126**	**20,869**

[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 1980-2009, 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/mer/natgas.html for all available data beginning in 1973.

Sources: • **Imports and Exports:** Table 4.2. • **Consumption:** Table 4.3. • **Balancing Item:** Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals. • **All Other Data: 1973-2004—**U.S. Energy Information Administration (EIA), *Natural Gas Annual,* annual reports. **2005 forward—**EIA, *Natural Gas Monthly,* January 2011, 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 January	0	360	3	1	0	0	25	0	390	67	3	40	0	109
February	0	326	0	0	0	0	21	3	350	59	3	37	0	99
March	0	342	0	1	0	0	21	3	367	66	3	31	0	100
April	0	290	3	(s)	3	0	26	0	322	43	3	28	0	74
May	0	261	3	4	0	0	25	3	297	40	3	25	0	69
June	0	251	6	3	3	3	21	0	287	27	4	30	0	62
July	0	288	6	4	0	0	25	0	323	30	4	30	0	63
August	0	289	3	4	3	0	26	3	329	28	5	35	0	67
September	0	276	9	7	3	0	20	0	314	26	3	27	0	55
October	0	288	3	6	0	0	24	0	321	35	3	28	0	67
November	0	291	9	6	0	0	14	0	320	61	3	26	0	90
December	0	327	9	7	0	0	19	3	365	76	3	28	0	106
Total	**0**	**3,589**	**55**	**43**	**12**	**3**	**267**	**15**	**3,984**	**559**	**39**	**365**	**0**	**963**
2009 January	0	324	5	6	0	0	19	3	357	84	2	28	0	113
February	0	293	6	(s)	0	0	16	6	322	75	3	25	0	103
March	0	293	12	1	0	0	17	3	325	77	3	24	0	104
April	0	259	22	7	8	0	20	6	322	55	2	23	0	80
May	0	216	15	1	0	0	31	3	266	46	2	29	0	77
June	0	230	14	1	0	0	34	3	282	37	2	28	0	66
July	0	270	14	2	3	0	21	6	317	42	4	31	0	76
August	0	299	17	3	0	0	17	0	337	45	2	32	0	79
September	0	274	14	1	2	0	15	0	307	47	4	33	0	84
October	0	244	15	2	0	0	13	0	273	47	2	29	0	78
November	0	258	12	(s)	0	8	17	0	295	66	2	29	0	97
December	0	311	14	3	0	4	17	0	350	81	4	28	3	115
Total	**0**	**3,271**	**160**	**28**	**13**	**13**	**236**	**29**	**3,751**	**701**	**31**	**338**	**3**	**1,072**
2010 January	0	326	17	1	0	12	22	6	384	68	2	23	0	R 94
February	0	277	12	1	0	6	16	12	324	R 61	2	22	3	88
March	0	276	9	5	3	1	16	9	318	77	2	21	0	R 100
April	0	251	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	290	6	1	5	0	17	8	328	50	4	32	0	86
August	0	281	0	1	0	0	17	5	304	49	2	33	0	84
September	0	250	6	3	3	0	16	3	282	50	7	23	0	79
October	0	R 267	3	R 4	2	5	15	9	R 305	R 63	2	R 25	6	R 96
November	0	E 242	0	E 2	0	9	14	9	E 276	E 61	2	E 25	8	E 96
11-Month Total	**0**	**E 2,966**	**73**	**E 30**	**42**	**41**	**175**	**72**	**E 3,399**	**E 634**	**30**	**E 290**	**21**	**E 974**
2009 11-Month Total	**0**	**2,960**	**146**	**25**	**13**	**8**	**220**	**29**	**3,402**	**620**	**27**	**310**	**0**	**957**
2008 11-Month Total	**0**	**3,262**	**46**	**36**	**12**	**3**	**248**	**12**	**3,619**	**483**	**37**	**338**	**0**	**857**

[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; United Arab Emirates in 1996-2000; Yemen in 2010; and Other (unassigned) in 2004.

[d] Brazil in 2010; Russia in 2007; South Korea in 2009 and 2010; Spain in 2010; and United Kingdom in 2010.

R=Revised. E=Estimate. (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/mer/natgas.html 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." • **1988-2007:** EIA, *Natural Gas Annual,* annual reports. • **2008 forward:** EIA, *Natural Gas Monthly,* January 2011, Table 4; 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**	**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**	**6,267**	**7,507**	**8,620**	**667**	**15**	**682**	**5,672**	**23,007**
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**	**6,052**	**7,243**	**8,341**	**566**	**21**	**587**	**5,464**	**22,389**
2005 Total	**4,827**	**2,999**	**1,112**	**1,084**	**5,514**	**6,597**	**7,709**	**584**	**23**	**607**	**5,869**	**22,011**
2006 Total	**4,368**	**2,832**	**1,142**	**1,115**	**5,398**	**6,512**	**7,654**	**584**	**24**	**608**	**6,222**	**21,685**
2007 Total	**4,722**	**3,013**	**1,226**	**1,050**	**5,598**	**6,648**	**7,874**	**621**	**25**	**646**	**6,841**	**23,097**
2008 January	884	477	102	87	572	659	761	77	2	80	531	2,733
February	818	459	97	78	539	617	714	71	2	73	439	2,503
March	656	380	105	80	529	609	714	64	2	66	461	2,277
April	388	255	101	75	482	557	657	51	2	53	470	1,823
May	230	180	103	79	463	542	645	43	2	45	475	1,576
June	144	134	101	80	433	513	614	44	2	46	665	1,604
July	118	128	106	88	437	525	630	47	2	49	782	1,708
August	111	127	105	89	439	528	633	46	2	49	763	1,682
September	118	129	91	71	406	477	568	40	2	42	603	1,460
October	218	185	102	80	457	537	639	45	2	47	545	1,635
November	433	276	102	74	472	546	648	52	2	54	458	1,868
December	772	423	106	75	478	552	658	67	2	70	476	2,399
Total	**4,892**	**3,153**	**1,220**	**955**	**5,706**	**6,661**	**7,881**	**648**	**26**	**674**	**6,668**	**23,268**
2009 January	948	518	110	81	502	582	693	72	2	75	487	2,721
February	756	427	101	71	452	524	625	62	2	64	453	2,325
March	600	358	111	79	457	536	646	57	2	59	500	2,164
April	390	249	105	74	419	492	597	45	2	48	451	1,736
May	201	166	108	77	391	468	575	39	2	41	515	1,499
June	141	134	105	82	377	459	564	39	2	42	643	1,523
July	119	128	107	89	387	476	583	43	2	45	778	1,653
August	111	129	108	92	403	495	603	45	2	48	840	1,731
September	120	131	102	88	396	484	586	41	2	43	690	1,570
October	251	199	107	85	437	522	629	43	2	46	537	1,662
November	376	251	104	81	452	533	637	46	2	49	457	1,771
December	764	429	107	91	505	596	703	66	2	68	520	2,484
Total	**4,778**	**3,119**	**1,275**	**990**	**5,177**	**6,167**	**7,442**	**598**	**29**	**627**	**6,872**	**22,839**
2010 January	R 970	R 519	E 109	90	R 531	R 621	R 730	E 74	E 3	E 77	544	R 2,840
February	R 827	462	E 100	78	R 496	R 574	R 674	E 66	E 3	E 68	477	R 2,508
March	606	352	E 112	84	494	578	690	E 57	E 3	E 59	452	2,159
April	325	224	E 109	79	440	519	628	E 44	E 3	E 47	472	1,695
May	204	166	E 113	81	446	527	640	E 42	E 3	E 45	560	1,615
June	138	132	E 107	83	430	512	620	E 43	E 3	E 46	707	1,643
July	115	R 123	E 112	88	433	521	632	E 48	E 3	E 50	900	1,821
August	110	130	E 114	87	438	525	639	E 49	E 3	E 52	948	R 1,878
September	121	136	E 111	85	434	519	630	E 43	E 3	E 45	696	1,629
October	207	189	E 115	82	445	527	642	E 43	E 3	E 46	566	R 1,651
November	458	293	E 112	81	476	557	669	E 52	E 3	E 54	493	1,967
11-Month Total	**4,080**	**2,725**	**E 1,215**	**917**	**5,063**	**5,980**	**7,195**	**E 561**	**E 30**	**E 591**	**6,815**	**21,406**
2009 11-Month Total	**4,014**	**2,690**	**1,168**	**899**	**4,673**	**5,571**	**6,739**	**532**	**27**	**559**	**6,352**	**20,355**
2008 11-Month Total	**4,120**	**2,730**	**1,114**	**880**	**5,229**	**6,109**	**7,223**	**581**	**24**	**604**	**6,192**	**20,869**

[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/mer/natgas.html for all available data beginning in 1973.

Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total** and **Pipelines and Distribution: 1973-2004—**U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA),* annual reports. **2005 forward—**EIA, *Natural Gas Monthly (NGM),* January 2011, 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). **1999-2004—**EIA, NGA, annual reports. **2005 forward—**EIA, NGM, January 2011, 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 January	4,232	2,056	6,288	-327	-13.7	891	67	824
February	4,222	1,465	5,686	-187	-11.3	648	56	593
March	4,221	1,266	5,487	-337	-21.0	350	131	219
April	4,222	1,436	5,659	-286	-16.6	106	296	-190
May	4,225	1,840	6,065	-342	-15.7	56	461	-405
June	4,230	2,178	6,407	-405	-15.7	81	423	-342
July	4,228	2,517	6,745	-379	-13.1	88	430	-342
August	4,228	2,866	7,094	-155	-5.1	92	442	-350
September	4,230	3,161	7,391	-155	-4.7	98	398	-300
October	4,235	3,399	7,634	-166	-4.7	91	334	-242
November	4,232	3,346	7,577	-96	-2.8	250	193	57
December	4,232	2,840	7,073	-39	-1.4	622	110	513
Total	**4,232**	**2,840**	**7,073**	**-39**	**-1.4**	**3,374**	**3,340**	**34**
2009 January	4,237	2,133	6,370	77	3.8	783	78	705
February	4,243	1,758	6,001	293	20.0	472	100	372
March	4,248	1,660	5,908	394	31.1	294	202	93
April	4,255	1,910	6,165	474	33.0	106	356	-251
May	4,257	2,375	6,632	535	29.1	45	512	-467
June	4,268	2,760	7,028	583	26.8	62	448	-386
July	4,263	3,090	7,354	573	22.8	83	421	-338
August	4,267	3,359	7,626	493	17.2	88	362	-274
September	4,276	3,646	7,922	485	15.3	57	352	-295
October	4,281	3,810	8,091	410	12.1	99	266	-167
November	4,288	3,837	8,125	492	14.7	140	173	-33
December	4,277	3,130	7,407	290	10.2	738	44	694
Total	**4,277**	**3,130**	**7,407**	**290**	**10.2**	**2,966**	**3,315**	**-349**
2010 January	4,278	2,319	6,597	185	8.7	877	65	812
February	4,281	1,696	5,978	-62	-3.5	660	40	620
March	4,282	1,662	5,944	3	.2	240	204	36
April	4,281	2,012	6,293	102	5.4	70	425	-355
May	4,282	2,421	6,703	47	2.0	55	464	-409
June	4,289	2,741	7,030	-19	-.7	64	385	-321
July	4,283	2,967	7,249	-123	-4.0	114	340	-227
August	4,283	3,150	7,433	-209	-6.2	143	329	-186
September	4,287	3,500	7,787	-146	-4.0	56	409	-353
October	4,300	3,847	8,146	37	1.0	52	405	-352
November	4,304	3,773	8,077	-65	-1.7	238	163	74
11-Month Total	– –	– –	– –	– –	– –	**2,571**	**3,231**	**-660**
2009 11-Month Total	– –	– –	– –	– –	– –	**2,228**	**3,271**	**-1,043**
2008 11-Month Total	– –	– –	– –	– –	– –	**2,752**	**3,231**	**-479**

[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 1980-2009, 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.

– – =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/mer/natgas.html 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. **1996-2004—**EIA, *Natural Gas Monthly (NGM),* monthly issues. **2005 forward—**EIA, NGM, January 2011, Table 6. • **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, January 2011, Table 6.

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

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

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 1980–2009 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 *Natural Gas Annual.* In the *Monthly Energy Review*, monthly data for these series were adjusted so that the monthly data sum to the final annual values. The Table 4.1 data series (and years) that were adjusted are: Gross Withdrawals (1996, 1997), Marketed Production (1997), Extraction Loss (1997, 1998, 2000), Dry Gas Production (1996, 1997), Supplemental Gaseous Fuels (1997–2000), Balancing Item (1997–2000), and Total Consumption (1997–2000). The Table 4.3 data series (and years) that were adjusted are: Lease and Plant Fuel (1997–2000), Total Industrial (1997–2000), Pipelines and Distribution (2000), Total Transportation (2000), and Total Consumption (1997–2000).

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

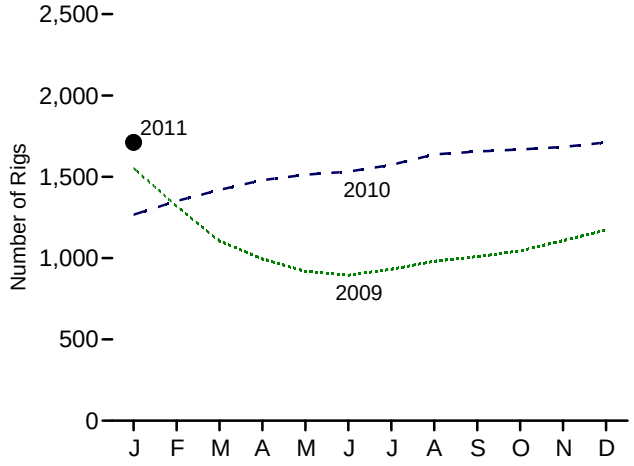
Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA NGM. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas.*

5 Crude Oil and Natural Gas Resource Development

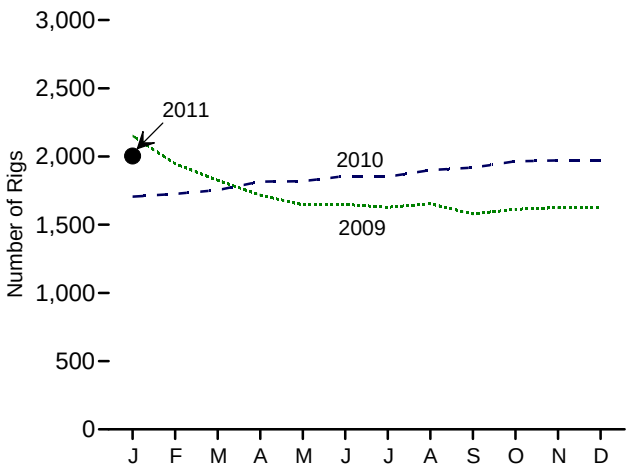
New oil and gas drilling activity in Wyoming. Source: Dreamstime Stock Photos.

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

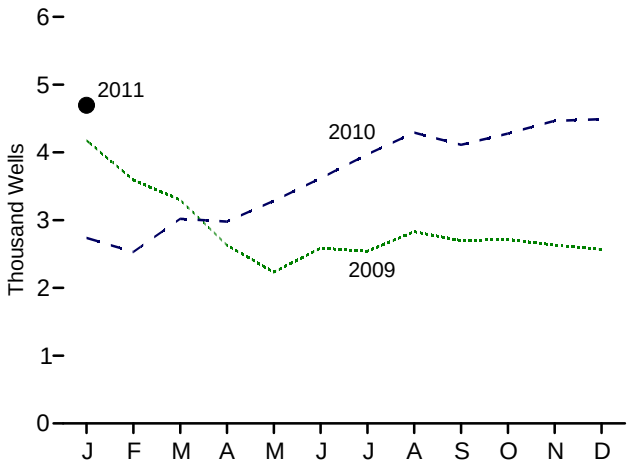
Rotary Rigs in Operation, Monthly



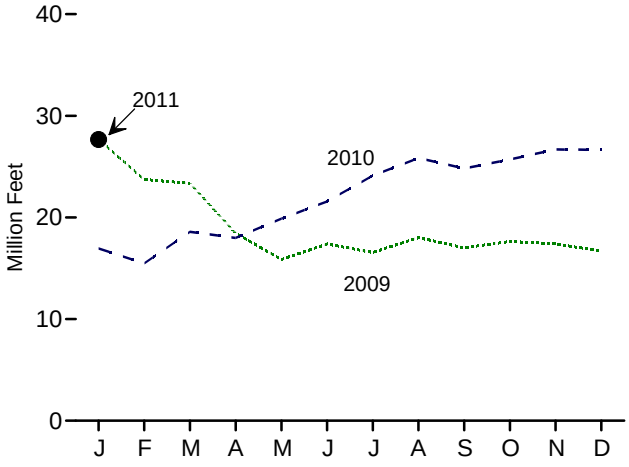
Active Well Service Rig Count, Monthly



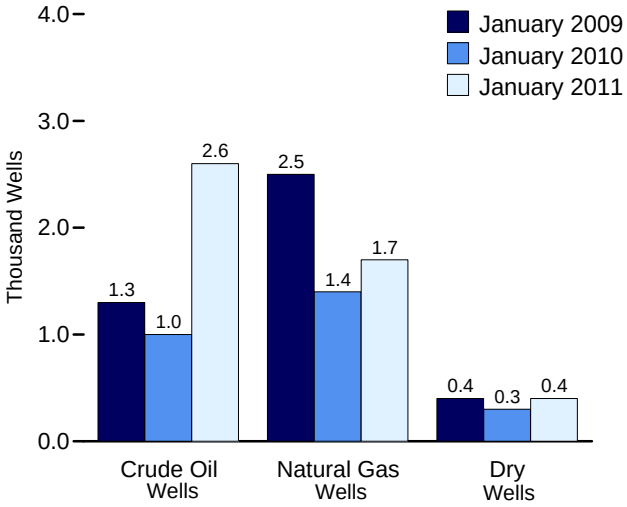
Wells Drilled, Monthly



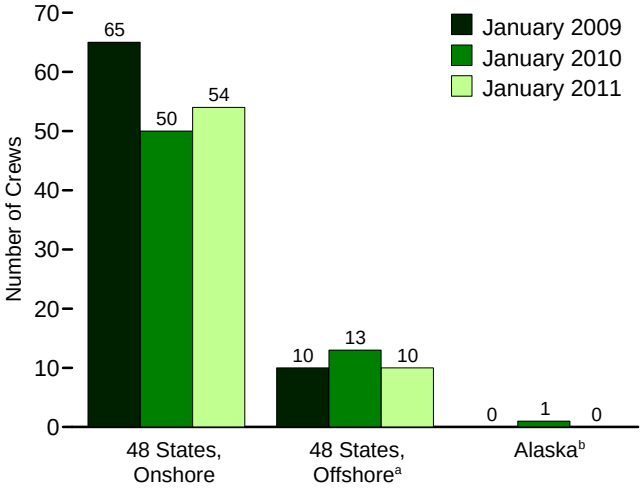
Footage Drilled, Monthly



Wells Drilled by Type



Maximum U.S. Active Seismic Crew Counts



[a] Federal and State Jurisdiction waters of the Gulf of Mexico.
[b] All onshore.

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

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 January	1,690	60	321	1,421	1,749	2,476
February	1,709	56	331	1,426	1,765	2,455
March	1,737	60	343	1,444	1,797	2,457
April	1,765	64	358	1,461	1,829	2,498
May	1,794	68	375	1,478	1,863	2,546
June	1,834	67	383	1,510	1,902	2,554
July	1,865	67	380	1,543	1,932	2,567
August	1,920	67	397	1,581	1,987	2,611
September	1,942	72	417	1,585	2,014	2,612
October	1,903	73	422	1,542	1,976	2,591
November	1,872	63	426	1,498	1,935	2,469
December	1,716	66	391	1,380	1,782	2,342
Average	**1,814**	**65**	**379**	**1,491**	**1,879**	**2,515**
2009 January	1,487	66	328	1,215	1,553	2,152
February	1,263	57	271	1,037	1,320	1,947
March	1,059	46	225	867	1,105	1,825
April	947	48	209	775	995	1,718
May	864	54	187	723	918	1,646
June	848	47	194	691	895	1,648
July	893	38	245	675	931	1,629
August	949	31	279	691	980	1,653
September	976	33	293	704	1,009	1,579
October	1,011	33	312	722	1,044	1,613
November	1,071	36	362	734	1,107	1,625
December	1,136	37	404	758	1,172	1,625
Average	**1,046**	**44**	**278**	**801**	**1,089**	**1,722**
2010 January	1,225	42	433	822	1,267	1,706
February	1,305	45	446	892	1,350	1,726
March	1,368	51	471	933	1,419	1,754
April	1,426	53	508	959	1,479	1,816
May	1,464	49	541	960	1,513	1,818
June	1,511	20	566	953	1,531	1,857
July	1,558	15	591	971	1,573	1,852
August	1,619	20	644	983	1,638	1,900
September	1,635	19	668	977	1,655	1,918
October	1,647	21	693	966	1,668	1,965
November	1,662	22	723	950	1,683	1,971
December	R 1,687	24	759	940	R 1,711	1,968
Average	R **1,514**	**31**	**591**	**943**	R **1,546**	**1,854**
2011 January	1,686	26	793	909	1,711	2,004

[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. R=Revised.

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

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

Sources: • **Rotary Rigs in Operation: By Site**–Baker Hughes, Inc., Houston, Texas, *Rotary Rigs Running–by State.* **By Type**–Baker Hughes, Inc., Houston, Texas, weekly phone recording. • **Active Well Service Rig Count:** Cameron International Corporation, Houston, Texas. 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**	**812**	**3,652**	**5,242**	**12,060**	**10,431**	**4,591**	**27,082**	**12,838**	**11,243**	**8,243**	**32,324**	R **156,187**
1995 Total	**570**	**558**	**2,023**	**3,151**	**7,679**	**7,524**	**2,790**	**17,993**	**8,249**	**8,082**	**4,813**	**21,144**	**117,376**
1996 Total	**489**	**576**	**1,956**	**3,021**	**8,347**	**8,445**	**2,934**	**19,726**	**8,836**	**9,021**	**4,890**	**22,747**	R **126,603**
1997 Total	**491**	**562**	**2,113**	**3,166**	**10,715**	**10,935**	**3,761**	**25,411**	**11,206**	**11,497**	**5,874**	**28,577**	R **161,719**
1998 Total	**327**	**566**	**1,590**	**2,483**	**7,354**	**11,069**	**3,170**	**21,593**	**7,681**	**11,635**	**4,760**	**24,076**	**137,603**
1999 Total	**197**	**570**	**1,157**	**1,924**	**4,608**	**11,454**	**2,392**	**18,454**	**4,805**	**12,024**	**3,549**	**20,378**	R **103,035**
2000 Total	**287**	**657**	**1,340**	**2,284**	**7,804**	**16,383**	**2,800**	**26,987**	**8,091**	**17,040**	**4,140**	**29,271**	R **144,506**
2001 Total	**357**	**1,052**	**1,729**	**3,138**	**8,530**	**21,011**	**2,842**	**32,383**	**8,887**	**22,063**	**4,571**	**35,521**	R **180,150**
2002 Total	**258**	**845**	**1,281**	**2,384**	**6,514**	**16,487**	**2,456**	**25,457**	**6,772**	**17,332**	**3,737**	**27,841**	R **145,259**
2003 Total	**350**	**996**	**1,298**	**2,644**	**7,780**	**19,705**	**2,679**	**30,164**	**8,130**	**20,701**	**3,977**	**32,808**	R **177,440**
2004 Total	**383**	**1,671**	**1,347**	**3,401**	**8,405**	**22,486**	**2,731**	**33,622**	**8,788**	**24,157**	**4,078**	**37,023**	R **204,623**
2005 Total	**540**	**2,134**	**1,467**	**4,141**	**10,229**	**26,482**	**3,190**	**39,901**	**10,769**	**28,616**	**4,657**	**44,042**	R **241,081**
2006 Total	**648**	**2,447**	**1,525**	**4,620**	R **12,602**	**30,388**	**3,612**	R **46,602**	R **13,250**	**32,835**	**5,137**	R **51,222**	R **282,954**
2007 Total	**822**	**2,777**	**1,585**	**5,184**	R **12,478**	**30,108**	**3,344**	R **45,930**	R **13,300**	**32,885**	**4,929**	R **51,114**	R **303,455**
2008 January	90	209	149	448	1,099	2,382	264	3,745	1,189	2,591	413	4,193	R 25,856
February	82	234	107	423	1,098	2,304	240	3,642	1,180	2,538	347	4,065	R 25,513
March	70	224	134	428	1,101	2,407	272	3,780	1,171	2,631	406	4,208	R 26,988
April	67	200	131	398	1,209	2,488	274	3,971	1,276	2,688	405	4,369	R 27,822
May	91	216	131	438	1,341	2,580	236	4,157	1,432	2,796	367	4,595	R 29,351
June	67	202	142	411	1,463	2,649	300	4,412	1,530	2,851	442	4,823	R 30,031
July	77	170	173	420	1,432	2,746	334	4,512	1,509	2,916	507	4,932	R 30,042
August	66	179	153	398	1,490	2,902	382	4,774	1,556	3,081	535	5,172	R 30,556
September	51	177	174	402	1,501	2,707	346	4,554	1,552	2,884	520	4,956	R 29,753
October	90	261	178	529	1,592	2,980	R 364	R 4,936	1,682	3,241	R 542	R 5,465	R 32,973
November	103	211	169	483	1,374	2,515	340	4,229	1,477	2,726	509	4,712	R 30,665
December	67	184	146	397	1,208	2,299	328	3,835	1,275	2,483	474	4,232	R 27,808
Total	**921**	**2,467**	**1,787**	**5,175**	**15,908**	**30,959**	R **3,680**	R **50,547**	**16,829**	**33,426**	R **5,467**	R **55,722**	R **347,358**
2009 January	86	187	111	384	1,196	2,340	255	3,791	1,282	2,527	366	4,175	R 27,671
February	63	146	98	307	1,021	2,030	235	3,286	1,084	2,176	333	3,593	R 23,736
March	59	167	94	320	904	1,851	224	2,979	963	2,018	318	3,299	R 23,352
April	38	72	102	212	768	1,429	223	2,420	806	1,501	325	2,632	R 18,452
May	55	101	88	244	R 621	1,206	161	R 1,988	R 676	1,307	249	R 2,232	R 15,853
June	46	95	83	224	804	1,361	198	2,363	850	1,456	281	2,587	R 17,385
July	44	94	114	252	779	1,275	237	2,291	823	1,369	351	2,543	R 16,547
August	R 49	89	99	R 237	924	1,441	229	2,594	R 973	1,530	328	R 2,831	R 18,023
September	58	77	105	240	990	1,238	229	2,457	1,048	1,315	334	2,697	R 17,007
October	55	82	84	221	1,023	1,219	251	2,493	1,078	1,301	335	2,714	R 17,634
November	40	88	87	215	1,040	1,178	198	2,416	1,080	1,266	285	2,631	R 17,407
December	33	92	94	219	987	1,144	217	2,348	1,020	1,236	311	2,567	R 16,679
Total	R **626**	**1,290**	**1,159**	R **3,075**	R **11,057**	**17,712**	**2,657**	R **31,426**	R **11,683**	**19,002**	**3,816**	R **34,501**	R **229,746**
2010 January	59	90	103	252	R 963	1,328	196	R 2,487	R 1,022	1,418	299	R 2,739	R 16,950
February	52	69	80	201	1,003	R 1,157	168	R 2,328	1,055	R 1,226	248	R 2,529	R 15,475
March	68	R 88	102	R 258	1,109	1,426	225	2,760	1,177	R 1,514	327	R 3,018	R 18,586
April	54	90	81	225	1,231	R 1,246	277	R 2,754	1,285	R 1,336	358	R 2,979	R 17,989
May	61	112	97	270	R 1,389	1,379	245	R 3,013	R 1,450	1,491	342	R 3,283	R 19,870
June	61	131	122	314	1,640	R 1,340	R 324	R 3,304	1,701	R 1,471	R 446	R 3,618	R 21,571
July	83	R 117	124	R 324	R 1,476	1,707	R 464	R 3,647	R 1,559	R 1,824	R 588	R 3,971	R 24,111
August	90	110	129	329	1,934	1,749	280	3,963	2,024	1,859	409	4,292	R 25,848
September	96	R 113	132	R 341	1,817	1,675	280	3,772	1,913	R 1,788	412	R 4,113	R 24,819
October	101	118	130	349	1,960	1,684	285	3,929	2,061	1,802	415	4,278	R 25,702
November	106	R 122	132	R 360	2,133	1,685	288	4,106	2,239	R 1,807	420	R 4,466	R 26,691
December	107	109	R 132	R 348	2,257	1,597	289	4,143	2,364	1,706	R 421	R 4,491	R 26,636
Total	**938**	R **1,269**	R **1,364**	R **3,571**	R **18,912**	R **17,973**	R **3,321**	R **40,206**	R **19,850**	R **19,242**	R **4,685**	R **43,777**	R **264,248**
2011 January	104	115	132	351	2,465	1,588	292	4,345	2,569	1,703	424	4,696	27,671

R=Revised.

Notes: • 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/mer/resource.html for all available data beginning in 1973.

Sources: • **1973-1989:** U.S. Energy Information Administration (EIA) computations based on well reports submitted to the American Petroleum Institute.

• **1990 forward:** EIA computations based on well reports submitted to IHS, Inc., Denver, CO.

Table 5.3 Maximum U.S. Active Seismic Crew Counts

(Number of Crews)

	48 States, Onshore				48 States, Offshore[a]				Alaska[b]				
	Dimensions[c]				Dimensions[c]				Dimensions[c]				
	2	3	4	Total[d]	2	3	4	Total[d]	2	3	4	Total[d]	Total
2001 January	5	38	1	44	9	7	0	17	0	0	0	0	61
2002 January	6	32	0	38	8	6	0	14	1	1	0	2	54
2003 January	8	19	1	28	8	4	0	12	0	0	0	0	40
2004 January	8	25	0	33	5	5	0	10	0	0	0	0	43
2005 January	8	33	0	41	5	4	0	9	0	2	0	2	52
2006 January	5	38	0	43	6	5	0	11	0	1	0	1	55
2007 January	3	51	0	54	3	5	0	8	0	1	0	1	63
February	3	51	0	54	3	5	0	8	0	1	0	1	63
March	4	55	0	59	3	5	0	8	0	1	0	1	68
April	4	55	0	59	4	6	1	11	0	1	0	1	71
May	3	55	0	58	4	6	1	11	0	1	0	1	70
June	3	55	0	58	3	6	1	10	0	1	0	1	69
July	2	57	0	59	3	6	1	10	0	0	0	0	69
August	2	56	0	58	4	8	1	13	0	0	0	0	71
September	3	58	0	61	3	8	1	12	0	0	0	0	73
October	4	60	0	65	3	8	1	12	0	0	0	0	77
November	4	60	0	65	3	10	1	14	0	0	0	0	79
December	5	54	0	60	4	10	1	15	0	0	0	0	75
2008 January	6	55	0	61	4	10	1	15	0	0	0	0	76
February	6	55	0	61	4	11	1	16	0	0	0	0	77
March	6	54	0	60	3	11	1	15	0	0	0	0	75
April	4	53	0	57	3	11	1	15	0	0	0	0	72
May	4	54	0	58	3	11	1	15	0	0	0	0	73
June	2	56	0	58	3	11	1	15	0	0	0	0	73
July	2	58	0	60	3	8	1	12	0	0	0	0	72
August	2	58	0	60	3	8	1	12	0	0	0	0	72
September	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
October	4	60	0	65	3	8	1	12	0	0	0	0	77
November	2	61	0	63	1	7	1	9	0	0	0	0	72
December	2	62	0	64	2	7	0	9	0	0	0	0	73
2009 January	2	63	0	65	2	8	0	10	0	0	0	0	75
February	3	62	0	65	2	9	0	11	0	0	0	0	76
March	3	59	0	62	2	8	0	10	0	0	0	0	72
April	3	57	0	60	2	8	0	10	0	0	0	0	70
May	2	54	0	56	2	7	0	9	0	0	0	0	65
June	2	50	0	52	2	6	0	8	0	0	0	0	60
July	2	51	0	53	2	6	0	8	0	0	0	0	61
August	2	49	0	51	3	6	0	9	0	0	0	0	60
September	1	49	0	50	4	6	0	10	0	0	0	0	60
October	1	50	0	51	5	7	0	12	0	0	0	0	63
November	0	49	0	49	5	8	0	13	0	0	0	0	62
December	0	49	0	49	5	8	0	13	0	1	0	1	63
2010 January	0	50	0	50	5	8	0	13	0	1	0	1	64
February	0	51	0	51	5	8	0	13	0	1	0	1	65
March	0	49	0	49	5	8	0	13	0	1	0	1	63
April	1	51	0	52	5	8	0	13	0	1	0	1	66
May	1	50	0	52	5	9	0	14	0	1	0	1	67
June	2	50	0	52	4	10	0	14	0	1	0	1	67
July	2	51	0	53	3	10	0	13	0	1	0	1	67
August	2	50	0	52	4	9	0	13	0	0	0	0	65
September	2	49	0	51	4	9	0	13	0	0	0	0	64
October	1	50	0	51	4	7	0	11	0	0	0	0	62
November	1	50	0	51	4	7	0	11	0	0	0	0	62
December	1	51	0	52	4	6	0	10	0	0	0	0	62
2011 January	2	52	0	54	4	6	0	10	0	0	0	0	64

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

[b] All onshore.

[c] In **two-dimensional** (2D) reflection seismic surveying both the sound source and the sound detectors (numbering up to a hundred or more per shot) are moved along a straight line. The resultant product can be thought of as a vertical sonic cross-section of the subsurface beneath the survey line. It is constructed by summing many compressional (pressure) wave reflections from the various sound source and sound detector locations at the halfway sound path points beneath each location (common depth point stacking). In **three-dimensional** (3D) reflection seismic surveying the sound detectors (numbering up to a thousand or more) are spread out over an area and the sound source is moved from location to location through the area. The resultant product can be thought of as a cube of common depth point stacked reflections. Advantages over 2D include the additional dimension, the fact that many more reflections are available for stacking at each point, which provides greatly improved resolution of subsurface features, and elimination of the "ghost" or "side swipe" reflections from nearby offline features that 2D surveys are prone to (except, of course, along the outer faces of the cube). **Four dimensional** (4D) reflection seismic surveying is the exact repetition of a 3D survey at two or more time intervals. The primary application of 4D is mapping the movement of fluid interfaces in producing oil and gas reservoirs.

[d] Includes crews with unknown survey dimension.

NA=Not available.

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

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

Source: *World Geophysical News*, IHS, Inc., Denver, CO, used with permission.

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.

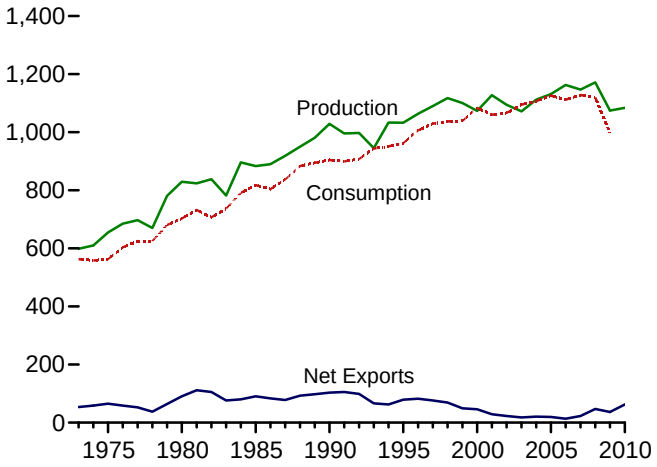
Prior to the March 1985 MER, drilling statistics consisted of completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported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

6 Coal

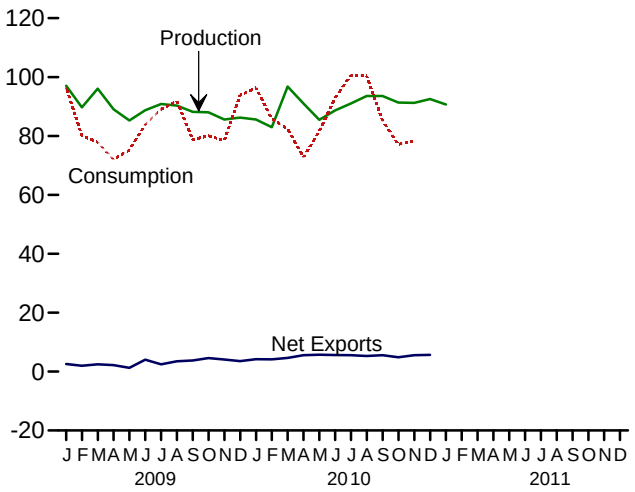
Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

Figure 6.1 Coal
(Million Short Tons)

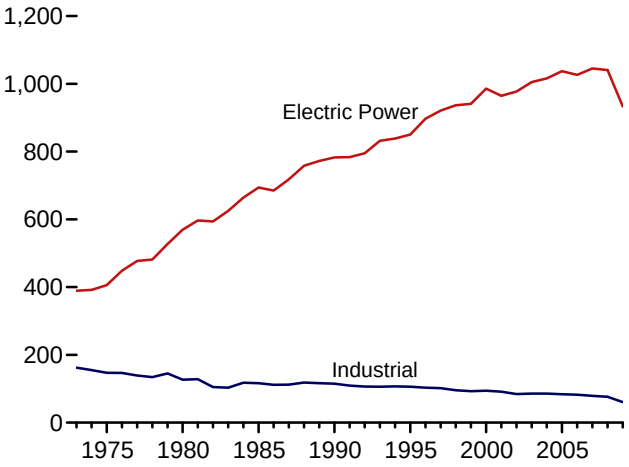
Overview, 1973-2010



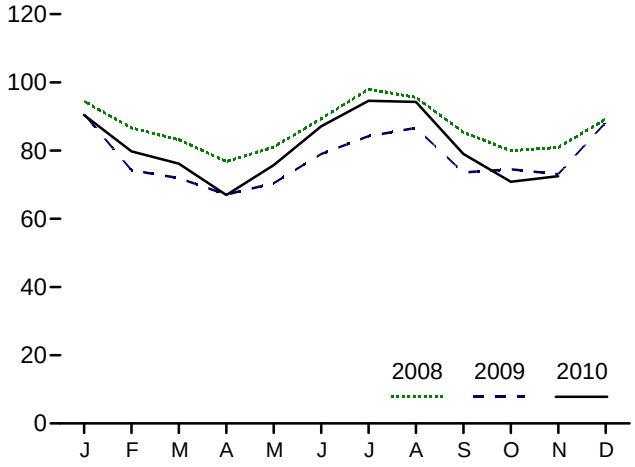
Overview, Monthly



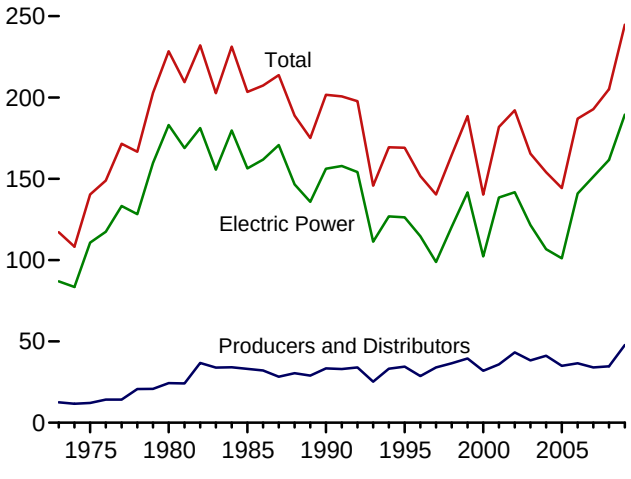
Consumption by Sector, 1973-2009



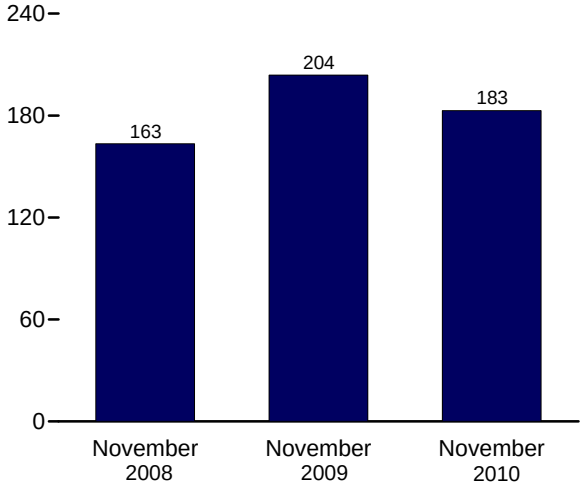
Electric Power Sector Consumption, Monthly



Stocks, End of Year, 1973-2009



Electric Power Sector Stocks, End of Month



Web Page: http://www.eia.gov/mer/coal.html.
Sources: Tables 6.1–6.3.

Table 6.1 Coal Overview

(Thousand Short Tons)

	Production[a]	Waste Coal Supplied[b]	Trade			Stock Change[d]	Losses and Unaccounted for[e]	Consumption
			Imports	Exports	Net Imports[c]			
1973 Total	**598,568**	**NA**	**127**	**53,587**	**-53,460**	**([f])**	**[f] -17,476**	**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 January	98,587	1,301	2,381	4,915	-2,535	-3,933	-102	101,389
February	93,525	1,138	2,619	4,205	-1,586	-3,769	3,405	93,442
March	96,903	1,014	2,640	6,682	-4,041	3,045	676	90,154
April	97,287	1,086	2,985	7,979	-4,994	9,314	604	83,462
May	96,725	1,175	2,702	8,394	-5,692	3,271	1,129	87,807
June	90,319	1,160	3,295	6,695	-3,401	-8,840	882	96,036
July	99,132	1,295	2,569	6,404	-3,835	-10,205	2,073	104,724
August	100,428	1,214	3,144	5,264	-2,120	-4,738	1,870	102,390
September	99,351	1,163	2,772	8,653	-5,881	6,047	-3,323	91,909
October	104,390	1,145	2,921	8,233	-5,312	13,226	69	86,927
November	95,405	1,153	2,988	7,460	-4,472	9,224	-4,287	87,149
December	99,758	1,303	3,192	6,636	-3,444	-289	2,744	95,162
Total	**1,171,809**	**14,146**	**34,208**	**81,519**	**-47,311**	**12,354**	**5,740**	**1,120,548**
2009 January	97,022	1,272	2,329	4,907	-2,578	-2,104	1,370	96,449
February	89,688	928	1,855	3,822	-1,968	7,901	626	80,121
March	96,062	1,121	2,141	4,605	-2,464	12,517	4,389	77,814
April	89,072	1,036	1,303	3,513	-2,210	13,303	2,577	72,019
May	85,236	1,065	2,283	3,552	-1,269	7,537	2,231	75,264
June	88,708	1,118	1,840	5,886	-4,045	2,746	-792	83,827
July	90,847	1,248	2,018	4,477	-2,459	-781	1,282	89,134
August	90,308	1,206	1,568	5,056	-3,488	-4,988	1,282	91,731
September	88,185	1,113	1,854	5,625	-3,771	4,868	1,902	78,757
October	88,002	1,142	1,762	6,364	-4,603	4,561	-54	80,035
November	85,564	1,164	1,506	5,586	-4,080	2,724	1,423	78,502
December	86,229	1,252	2,179	5,703	-3,524	-8,617	-1,252	93,826
Total	**1,074,923**	**13,666**	**22,639**	**59,097**	**-36,458**	**39,668**	**14,985**	**997,478**
2010 January	85,589	1,201	1,665	5,866	-4,202	-10,730	-3,046	96,364
February	82,968	903	1,239	5,386	-4,146	-7,971	1,917	85,779
March	96,760	1,165	1,899	6,554	-4,655	8,044	2,839	82,387
April	91,010	1,087	1,812	7,358	-5,545	12,077	1,633	72,841
May	85,456	1,163	1,475	7,220	-5,745	1,916	-2,650	81,607
June	88,666	1,193	1,771	7,387	-5,616	-11,631	2,916	92,958
July	91,020	1,288	1,390	6,928	-5,539	-15,363	1,555	100,578
August	93,587	1,295	1,702	7,001	-5,299	-8,661	-2,125	100,369
September	93,597	1,138	1,588	7,145	-5,556	-340	4,327	85,192
October	91,356	[F] 1,069	1,775	6,623	-4,849	[R] 13,734	[R] -3,263	[R] 77,105
November	91,229	[RF] 1,069	[R] 1,473	[R] 7,015	[R] -5,542	[R] 4,787	[R] 3,589	[R] 78,379
December	92,545	NA	[R] 1,563	[R] 7,232	[R] -5,669	NA	NA	NA
Total	**1,083,783**	**NA**	**[R] 19,353**	**[R] 81,716**	**[R] -62,363**	**NA**	**NA**	**NA**
2011 January	90,669	NA	NA	NA	NA	NA	NA	NA

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

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

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

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

[e] "Losses and Unaccounted for" is calculated as the sum of production, imports, and waste coal supplied, minus exports, stock change, and consumption.

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

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

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

Web Page: See http://www.eia.gov/mer/coal.html 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						
	Residential	CHP[a]	Other[b]	Total	Coke Plants	CHP[c]	Non-CHP[d]	Total	Total	Transportation	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 January	40	197	159	356	1,834	1,954	2,746	4,700	6,534	([h])	94,459	101,389
February	36	181	146	327	1,792	1,850	2,811	4,661	6,452	([h])	86,626	93,442
March	35	176	142	317	1,910	1,879	2,797	4,676	6,586	([h])	83,215	90,154
April	23	144	63	207	1,864	1,803	2,812	4,615	6,478	([h])	76,753	83,462
May	23	145	64	208	1,911	1,857	2,751	4,609	6,520	([h])	81,056	87,807
June	28	177	78	255	1,805	1,772	2,828	4,600	6,406	([h])	89,347	96,036
July	25	169	53	222	1,915	1,871	2,659	4,530	6,445	([h])	98,032	104,724
August	25	168	53	221	2,034	1,841	2,680	4,521	6,555	([h])	95,590	102,390
September	23	155	49	203	1,818	1,783	2,706	4,489	6,307	([h])	85,376	91,909
October	27	150	96	246	2,208	1,787	2,676	4,463	6,671	([h])	79,982	86,927
November	30	166	107	272	1,626	1,721	2,616	4,337	5,963	([h])	80,883	87,149
December	36	195	125	320	1,353	1,784	2,409	4,194	5,547	([h])	89,259	95,162
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 January	40	208	152	360	1,390	1,793	2,225	4,018	5,409	([h])	90,640	96,449
February	34	178	130	308	1,449	1,605	2,470	4,075	5,524	([h])	74,254	80,121
March	33	170	123	293	1,559	1,692	2,289	3,981	5,540	([h])	71,948	77,814
April	22	128	73	201	1,150	1,487	2,036	3,522	4,673	([h])	67,123	72,019
May	20	117	67	183	1,118	1,550	1,967	3,517	4,635	([h])	70,425	75,264
June	24	135	78	213	1,134	1,600	1,903	3,503	4,637	([h])	78,954	83,827
July	21	137	51	188	1,032	1,659	1,991	3,650	4,682	([h])	84,243	89,134
August	22	143	53	196	1,168	1,694	2,017	3,710	4,878	([h])	86,635	91,731
September	19	127	47	174	1,250	1,611	2,136	3,747	4,997	([h])	73,566	78,757
October	24	129	90	219	1,431	1,671	2,170	3,841	5,272	([h])	74,520	80,035
November	29	151	106	257	1,274	1,622	2,257	3,878	5,153	([h])	73,063	78,502
December	33	174	122	296	1,371	1,783	2,088	3,871	5,242	([h])	88,255	93,826
Total	**321**	**1,798**	**1,091**	**2,889**	**15,326**	**19,766**	**25,549**	**45,314**	**60,641**	**([h])**	**933,627**	**997,478**
2010 January	39	195	154	349	1,472	2,051	2,036	4,087	5,559	([h])	90,418	96,364
February	34	170	135	305	1,584	1,947	2,154	4,101	5,686	([h])	79,754	85,779
March	31	156	123	279	1,801	2,079	2,058	4,138	5,938	([h])	76,139	82,387
April	20	126	51	177	1,786	1,659	2,223	3,882	5,668	([h])	66,976	72,841
May	19	125	51	175	1,794	1,929	1,969	3,898	5,691	([h])	75,721	81,607
June	22	138	56	194	1,772	1,930	1,942	3,872	5,644	([h])	87,097	92,958
July	21	143	44	187	1,783	2,092	1,920	4,011	5,794	([h])	94,576	100,578
August	23	156	48	203	1,814	2,163	1,885	4,048	5,862	([h])	94,281	100,369
September	21	142	44	185	1,894	1,907	2,152	4,060	5,954	([h])	79,032	85,192
October	[RF] 23	132	[RF] 75	[RF] 208	[RF] 2,084	1,887	[RF] 2,065	[RF] 3,952	[RF] 6,036	([h])	70,838	[R] 77,105
November	[F] 26	136	[F] 97	[F] 233	[F] 1,682	1,776	[F] 2,184	[F] 3,959	[F] 5,641	([h])	72,479	78,379
11-Month Total	**[E] 277**	**1,618**	**[E] 879**	**[E] 2,496**	**[E] 19,466**	**21,420**	**[E] 22,588**	**[E] 44,008**	**[E] 63,474**	**([h])**	**887,311**	**953,559**
2009 11-Month Total	**288**	**1,624**	**969**	**2,593**	**13,956**	**17,982**	**23,461**	**41,443**	**55,399**	**([h])**	**845,371**	**903,651**
2008 11-Month Total	**315**	**1,826**	**1,009**	**2,835**	**20,717**	**20,117**	**30,082**	**50,199**	**70,916**	**([h])**	**951,321**	**1,025,387**

[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 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/mer/coal.html for all available data beginning in 1973.

Sources: See end of section.

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

	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 January	34,252	[F] 467	1,778	5,355	7,133	7,600	146,973	188,825
February	35,114	[F] 453	1,620	5,087	6,707	7,159	142,782	185,055
March	34,876	448	1,462	4,818	6,280	6,728	146,497	188,101
April	36,494	458	1,560	4,873	6,433	6,891	154,029	197,414
May	34,223	468	1,658	4,928	6,586	7,055	159,408	200,686
June	32,086	478	1,756	4,983	6,740	7,218	152,542	191,846
July	31,693	490	1,828	5,058	6,886	7,376	142,572	181,642
August	30,017	502	1,899	5,133	7,033	7,535	139,352	176,904
September	31,354	514	1,971	5,208	7,179	7,693	143,903	182,950
October	32,444	508	2,091	5,475	7,565	8,074	155,659	196,177
November	33,556	503	2,211	5,741	7,952	8,455	163,390	205,401
December	**34,688**	**498**	**2,331**	**6,007**	**8,338**	**8,836**	**161,589**	**205,112**
2009 January	38,394	490	2,260	5,788	8,049	8,539	156,075	203,008
February	42,066	483	2,190	5,570	7,760	8,243	160,601	210,909
March	41,257	475	2,119	5,352	7,471	7,946	174,223	223,426
April	43,195	477	2,000	5,266	7,266	7,744	185,790	236,729
May	41,622	480	1,880	5,181	7,061	7,541	195,103	244,266
June	44,018	482	1,760	5,096	6,856	7,338	195,656	247,012
July	45,372	496	1,702	5,099	6,800	7,297	193,563	246,232
August	42,457	510	1,644	5,101	6,745	7,255	191,532	241,244
September	41,690	524	1,585	5,104	6,690	7,214	197,208	246,112
October	43,882	526	1,683	5,106	6,789	7,314	199,477	250,673
November	42,217	527	1,780	5,108	6,888	7,415	203,765	253,397
December	**47,718**	**529**	**1,957**	**5,109**	**7,066**	**7,595**	**189,467**	**244,780**
2010 January	48,854	509	1,832	4,791	6,623	7,132	178,063	234,050
February	48,286	490	1,708	4,472	6,180	6,669	171,123	226,079
March	50,153	470	1,583	4,153	5,736	6,207	177,763	234,123
April	50,614	482	1,715	4,193	5,908	6,390	189,196	246,200
May	50,248	494	1,846	4,233	6,080	6,574	191,295	248,117
June	48,667	506	1,978	4,274	6,251	6,757	181,062	236,486
July	45,105	509	1,948	4,345	6,294	6,803	169,215	221,123
August	45,808	513	1,918	4,417	6,336	6,849	159,805	212,462
September	42,430	517	1,889	4,489	6,378	6,895	162,798	212,123
October	[F] 43,709	[RF] 517	[RF] 1,889	[RF] 4,595	[RF] 6,483	[RF] 7,001	175,147	[R] 225,857
November	[F] 40,688	[F] 518	[F] 1,894	[F] 4,696	[F] 6,590	[F] 7,108	182,848	230,644

[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 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/mer/coal.html 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 U.S. Energy Information Administration (EIA) *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Base Case." The monthly estimates are based on the quarterly values, which are released in March, June, September, and December. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Residential and Commercial—Coal consumption by the residential and commercial sectors is reported to EIA for the two sectors combined; EIA estimates the amount consumed by the sectors individually. To create the estimates, it is first assumed that an occupied coal-heated housing unit consumes fuel at the same Btu rate as an oil-heated housing unit. Then, for the years in which data are available on the number of occupied housing units by heating source (1973–1981 and subsequent odd-numbered years), residential consumption of coal is estimated by the following steps: a ratio is created of the number of occupied housing units heated by coal to the number of occupied housing units heated by oil; that ratio is then multiplied by the Btu quantity of oil consumed by the residential sector to derive an estimate of the Btu quantity of coal consumed by the residential sector; and, finally, the amount estimated as the residential sector consumption is subtracted from the residential and commercial sectors' combined consumption to derive the commercial sector's estimated consumption. The 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 U.S. Energy Information Administration (EIA) *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply and Demand: Base Case." The monthly estimates are based on the quarterly values (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

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

Residential and Commercial—Prior to 1980, stock estimates for the residential and commercial sector were taken directly from reported data. 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 the U.S. Energy Information Administration (EIA) Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

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

Note 5. Additional Coal Information. The U.S. Energy Information Administration'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.

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.

Commercial CHP
Table 7.4c.

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

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

Other Industrial Total
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."
1980–1997: EIA, Form EIA-3, "Quarterly Coal Consumption Report—Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.
1998-2007: 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, Short-Term Integrated Forecasting System.

Other Industrial CHP
Table 7.4c.

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

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

Electric Power
Table 7.4b.

Table 6.3 Sources

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

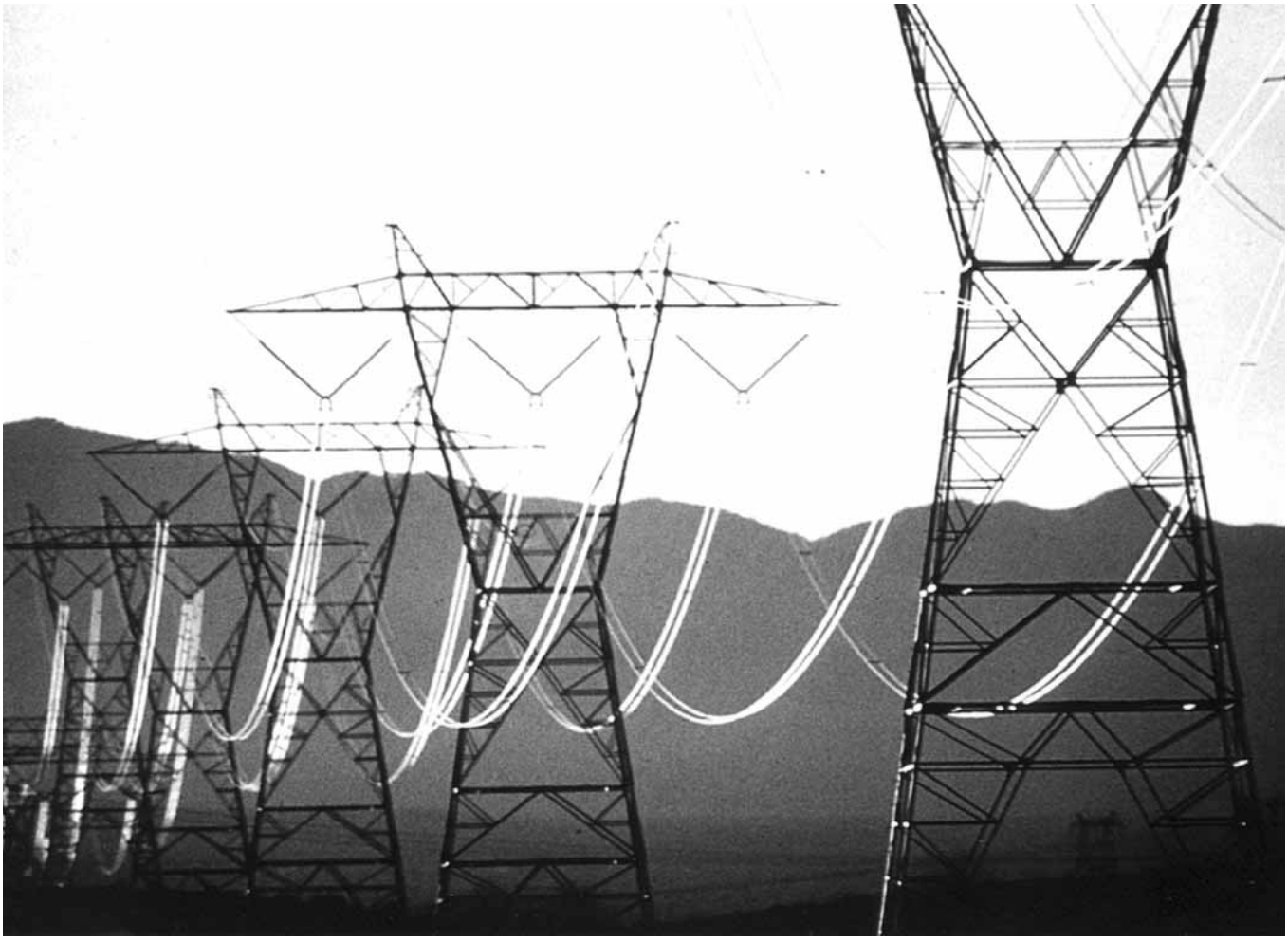
Residential and Commercial
1973–1976: DOI, BOM, *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."
2008 forward: EIA, Form EIA-3, "Quarterly 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, Short-Term Integrated Forecasting System**.**

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

Industrial Other
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report—Manufacturing Plants."
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, Short-Term Integrated Forecasting System.

Electric Power
Table 7.5.

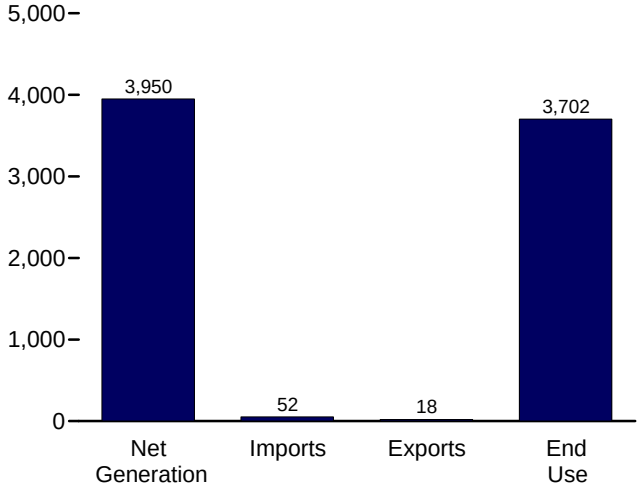
7 Electricity



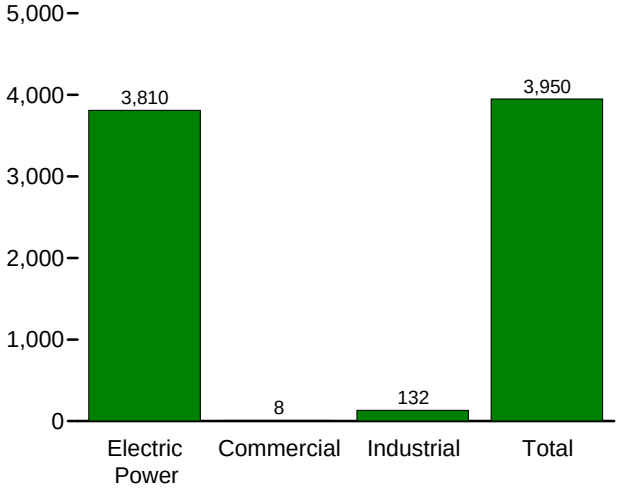
High-tension power lines and towers. Source: U.S. Department of Energy.

Figure 7.1 Electricity Overview
(Billion Kilowatthours)

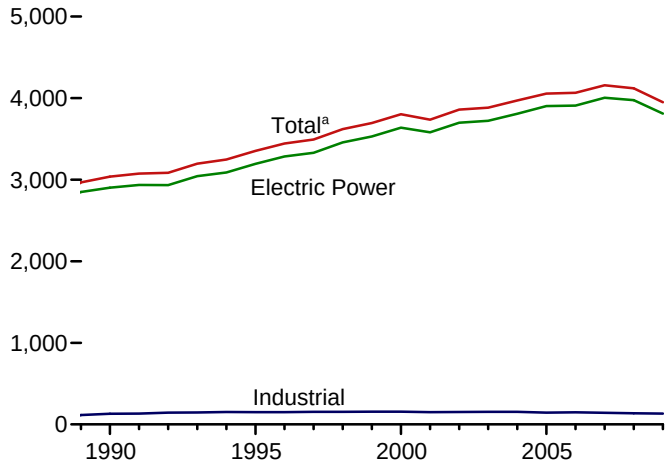
Overview, 2009



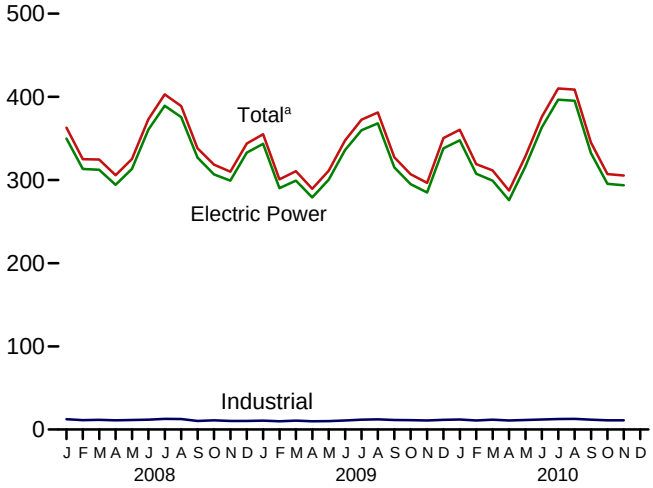
Net Generation, 2009



Net Generation by Sector, 1989-2009

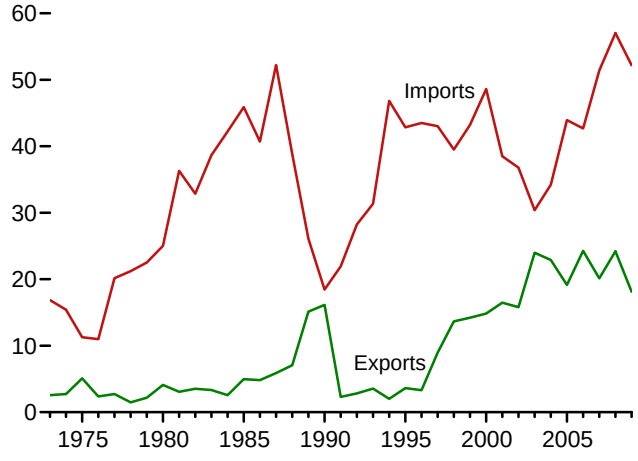


Net Generation by Sector, Monthly



End Use, 2009

Trade, 1973-2009



[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/mer/elect.html.
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 January	350	1	12	363	5	2	3	28	326	E 12	338
February	313	1	11	325	5	2	3	12	305	E 11	316
March	312	1	12	325	5	3	2	21	295	E 11	306
April	294	1	11	306	4	1	3	20	278	E 11	289
May	313	1	11	325	5	3	2	28	288	E 11	299
June	361	1	12	373	6	3	3	36	328	E 11	340
July	389	1	13	403	6	2	4	35	360	E 12	373
August	376	1	13	389	6	1	4	29	352	E 12	364
September	327	1	10	338	5	2	3	9	322	E 10	333
October	307	1	11	319	4	2	2	18	292	E 11	302
November	299	1	10	310	3	2	1	23	278	E 10	288
December	333	1	10	344	3	1	2	28	308	E 10	318
Total	**3,974**	**8**	**137**	**4,119**	**57**	**24**	**33**	**287**	**3,733**	**132**	**3,865**
2009 January	344	1	11	355	4	2	2	R 27	R 320	E 10	R 330
February	290	1	10	301	4	2	2	R 8	R 285	E 10	R 295
March	299	1	11	311	3	2	1	R 19	R 282	E 10	R 292
April	279	1	10	289	3	1	2	R 18	R 264	E 10	R 273
May	300	1	10	311	4	1	3	R 31	R 273	E 10	R 283
June	336	1	11	348	5	2	3	R 37	R 303	E 11	R 314
July	360	1	12	372	6	1	4	R 29	R 336	E 11	R 348
August	368	1	12	381	6	1	4	R 31	R 343	E 12	R 355
September	315	1	11	327	4	1	3	R 10	R 309	E 11	R 320
October	295	1	11	307	5	1	3	R 14	R 285	E 11	R 296
November	285	1	11	297	4	1	3	R 23	R 266	E 11	R 276
December	338	1	12	350	5	1	3	R 35	R 308	E 11	R 319
Total	**3,810**	**8**	**132**	**3,950**	**52**	**18**	**34**	**R 282**	**R 3,575**	**127**	**R 3,702**
2010 January	348	1	12	360	5	1	4	21	332	E 12	343
February	308	1	11	319	4	1	3	14	298	E 10	R 309
March	299	1	12	312	4	1	3	11	R 292	E 11	R 303
April	276	1	11	287	4	1	3	13	266	E 10	277
May	316	1	11	328	3	2	1	36	R 283	E 11	R 294
June	363	1	12	376	4	2	2	37	330	E 12	341
July	397	1	13	410	4	2	3	31	369	E 12	R 381
August	395	1	13	409	4	2	2	27	371	E 12	R 384
September	332	1	12	345	3	2	(s)	6	R 328	E 11	340
October	295	1	11	307	2	2	(s)	9	287	E 11	298
November	294	1	11	305	2	3	-1	20	274	E 11	285
11-Month Total	**3,623**	**8**	**128**	**3,759**	**40**	**19**	**21**	**225**	**3,431**	**E 123**	**3,554**
2009 11-Month Total	**3,472**	**7**	**120**	**3,599**	**48**	**17**	**31**	**247**	**3,267**	**E 116**	**3,383**
2008 11-Month Total	**3,642**	**7**	**127**	**3,775**	**54**	**23**	**31**	**259**	**3,425**	**E 122**	**3,547**

[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.

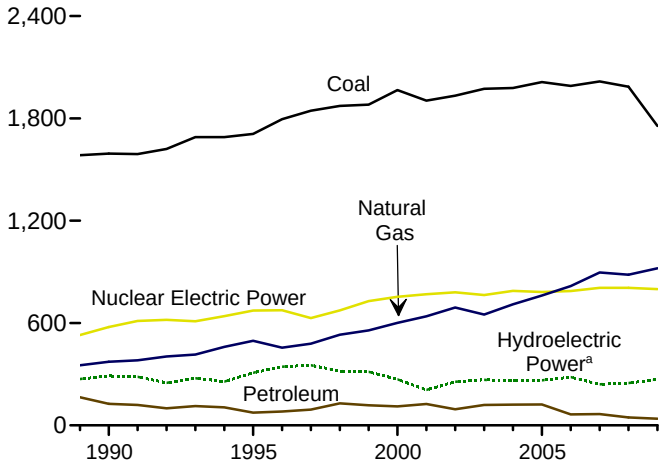
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

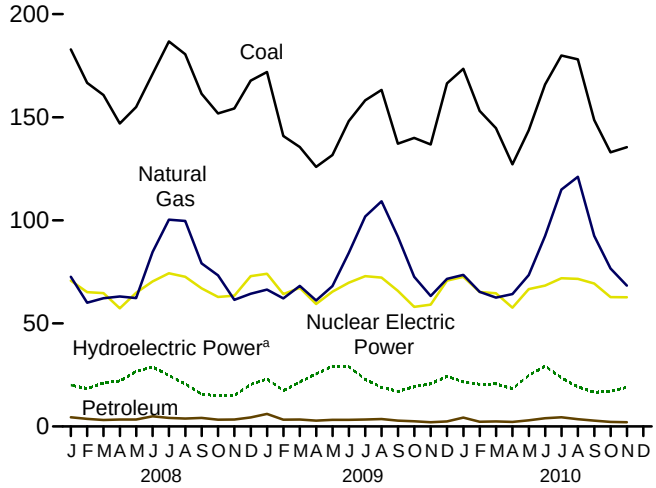
Sources: See end of section.

Figure 7.2 Electricity Net Generation
(Billion Kilowatthours)

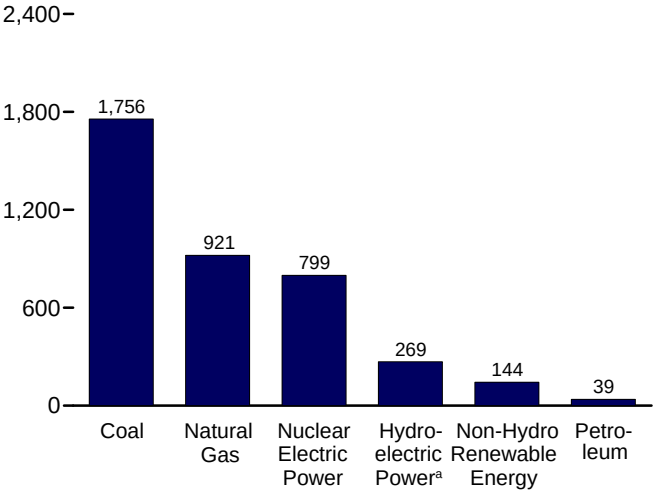
Total (All Sectors), Major Sources, 1989-2009



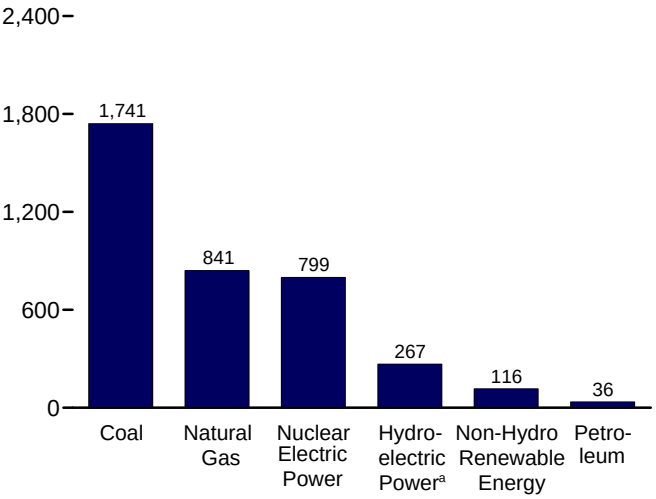
Total (All Sectors), Major Sources, Monthly



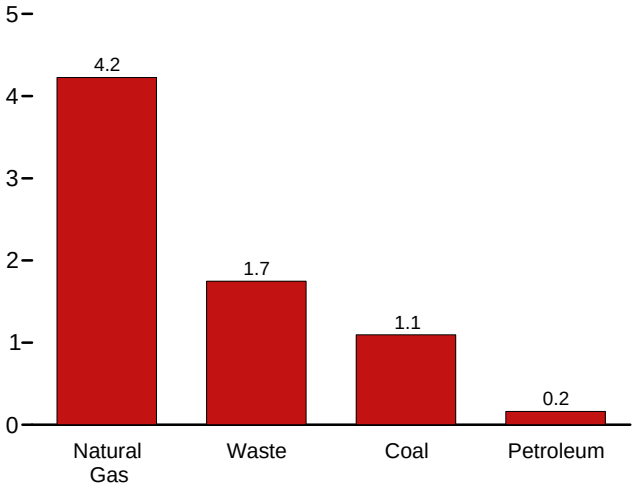
Total (All Sectors), Major Sources, 2009



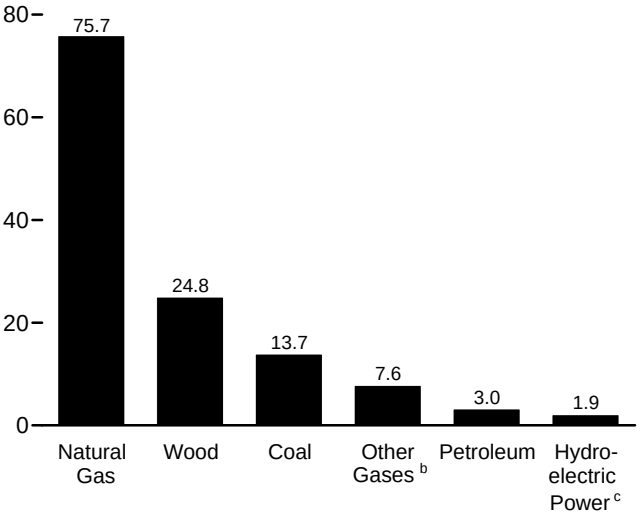
Electric Power Sector, Major Sources, 2009



Commercial Sector, Major Sources, 2009



Industrial Sector, Major Sources, 2009



[a] Conventional and pumped storage hydroelectric power.
[b] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
[c] Conventional hydroelectric power.
Web Page: http://www.eia.gov/mer/elect.html.
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 January	182,876	4,498	72,600	1,063	70,735	-746	20,779	3,338	1,407	1,209	16	4,273	362,998
February	166,666	3,669	60,042	972	65,130	-451	18,789	3,010	1,364	1,087	36	3,852	325,106
March	160,743	3,151	62,171	1,049	64,716	-553	21,669	3,123	1,472	1,251	75	4,782	324,630
April	146,983	3,400	63,046	1,021	57,333	-132	22,234	2,930	1,504	1,218	94	5,225	305,865
May	154,916	3,398	62,270	1,044	64,826	-587	27,221	2,927	1,475	1,259	99	5,340	325,245
June	171,043	4,962	84,620	1,132	70,319	-372	29,177	3,114	1,502	1,260	128	5,140	373,109
July	186,733	4,157	100,321	1,174	74,318	-799	25,555	3,327	1,608	1,279	111	4,008	402,900
August	180,576	3,811	99,673	1,147	72,617	-648	21,229	3,342	1,529	1,273	105	3,264	388,987
September	161,356	4,171	79,136	823	67,054	-517	16,178	3,059	1,427	1,234	93	3,111	338,056
October	151,841	3,286	73,283	806	62,820	-497	15,470	3,064	1,490	1,277	60	4,756	318,547
November	154,281	3,345	61,454	721	63,408	-489	15,668	3,077	1,449	1,233	29	4,994	310,046
December	167,786	4,394	64,364	753	72,931	-498	20,861	2,988	1,506	1,261	19	6,616	343,898
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 January	171,925	6,104	66,379	807	74,102	-501	23,490	2,995	1,462	1,289	7	5,951	354,947
February	140,916	3,318	62,129	784	64,227	-413	17,812	2,786	1,357	1,168	30	5,852	300,841
March	135,530	3,348	68,191	834	67,241	-315	21,827	2,872	1,553	1,300	78	7,099	310,543
April	125,935	2,807	61,145	758	59,408	-272	25,770	2,628	1,542	1,222	99	7,458	289,486
May	131,673	3,209	68,129	773	65,395	-349	29,560	2,697	1,522	1,235	110	6,262	311,252
June	148,087	3,243	84,193	876	69,735	-226	29,233	2,950	1,558	1,209	103	5,599	347,599
July	158,234	3,359	101,871	966	72,949	-491	23,385	3,190	1,628	1,255	121	4,955	372,483
August	163,260	3,643	109,216	1,012	72,245	-613	19,580	3,318	1,604	1,251	116	5,464	381,161
September	137,145	2,853	92,113	1,022	65,752	-348	17,359	3,019	1,501	1,217	95	4,651	327,345
October	139,956	2,560	72,587	960	58,021	-385	19,691	2,999	1,533	1,221	68	6,814	306,991
November	136,810	2,073	63,272	909	59,069	-330	21,008	3,013	1,572	1,273	40	6,875	296,586
December	166,434	2,422	71,574	928	70,710	-383	24,730	3,128	1,608	1,368	21	6,906	350,461
Total	**1,755,904**	**38,938**	**920,797**	**10,629**	**798,855**	**-4,627**	**273,445**	**35,596**	**18,443**	**15,009**	**891**	**73,886**	**3,949,694**
2010 January	173,505	4,301	73,558	909	72,569	-537	22,156	3,248	1,482	1,373	10	6,965	360,401
February	153,073	2,313	65,345	829	65,245	-96	20,513	2,958	1,315	1,217	34	5,494	319,004
March	144,703	2,436	62,548	997	64,635	-49	20,626	3,170	1,557	1,332	81	8,683	311,601
April	127,164	2,246	64,240	947	57,611	-303	18,630	2,998	1,596	1,262	124	9,838	287,279
May	143,686	2,991	73,427	992	66,658	-197	24,920	3,010	1,562	1,334	175	8,681	328,208
June	165,918	4,026	92,398	939	68,301	-227	29,489	3,198	1,577	1,294	196	7,992	376,100
July	179,933	4,454	114,883	950	71,913	-466	24,136	3,419	1,610	1,304	182	6,631	409,972
August	178,101	3,553	121,127	1,041	71,574	-533	19,748	3,403	1,606	1,319	173	6,613	408,761
September	148,667	2,817	92,503	973	69,371	-349	16,915	3,173	1,527	1,263	146	7,080	345,064
October	132,955	2,207	76,631	782	62,751	-374	17,382	2,954	1,518	1,224	75	7,963	307,054
November	135,496	2,050	68,332	897	62,655	-429	19,425	3,124	1,588	1,333	67	9,875	305,340
11-Month Total	**1,683,202**	**33,393**	**904,992**	**10,255**	**733,285**	**-3,561**	**233,940**	**34,656**	**16,937**	**14,254**	**1,262**	**85,814**	**3,758,784**
2009 11-Month Total	**1,589,470**	**36,516**	**849,223**	**9,701**	**728,144**	**-4,244**	**248,715**	**32,468**	**16,835**	**13,641**	**870**	**66,980**	**3,599,233**
2008 11-Month Total	**1,818,016**	**41,849**	**818,617**	**10,954**	**733,277**	**-5,790**	**233,970**	**34,312**	**16,227**	**13,579**	**846**	**48,747**	**3,775,490**

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

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

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

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

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

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

[g] Wood and wood-derived fuels.

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

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

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

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

NA=Not available.

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

Web Page: See http://www.eia.gov/mer/elect.html 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 January	181,337	4,145	65,197	293	70,735	-746	20,611	960	1,229	1,209	16	4,273	349,836
February	165,343	3,377	53,460	247	65,130	-451	18,627	872	1,169	1,087	36	3,852	313,292
March	159,284	2,856	55,499	274	64,716	-553	21,485	885	1,285	1,251	75	4,782	312,410
April	145,587	3,141	56,765	280	57,333	-132	22,050	754	1,301	1,218	94	5,225	294,203
May	153,473	3,155	55,665	312	64,826	-587	27,046	753	1,283	1,259	99	5,340	313,216
June	169,600	4,676	77,685	325	70,319	-372	29,043	883	1,309	1,260	128	5,140	360,612
July	185,208	3,904	92,534	342	74,318	-799	25,429	988	1,384	1,279	111	4,008	389,318
August	179,082	3,554	92,025	316	72,617	-648	21,111	983	1,325	1,273	105	3,264	375,612
September	159,933	3,888	73,270	193	67,054	-517	16,081	894	1,246	1,234	93	3,111	327,021
October	150,464	3,030	66,624	221	62,820	-497	15,372	802	1,286	1,277	60	4,756	306,769
November	153,016	3,105	55,482	172	63,408	-489	15,546	911	1,253	1,233	29	4,994	299,222
December	166,512	4,050	58,166	224	72,931	-498	20,696	953	1,308	1,261	19	6,616	332,839
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 January	170,626	5,736	59,966	220	74,102	-501	23,316	990	1,256	1,289	7	5,951	343,514
February	139,743	2,999	56,160	213	64,227	-413	17,662	903	1,178	1,168	30	5,852	290,217
March	134,314	3,077	61,831	240	67,241	-315	21,624	862	1,343	1,300	78	7,099	299,252
April	124,803	2,558	55,293	231	59,408	-272	25,570	721	1,334	1,222	99	7,458	278,986
May	130,527	2,965	62,114	234	65,395	-349	29,364	749	1,323	1,235	110	6,262	300,485
June	146,845	2,994	77,580	253	69,735	-226	29,055	928	1,358	1,209	103	5,599	336,000
July	156,943	3,112	94,472	288	72,949	-491	23,243	976	1,417	1,255	121	4,955	359,827
August	161,917	3,392	101,618	278	72,245	-613	19,444	1,021	1,395	1,251	116	5,464	368,122
September	135,950	2,607	84,933	298	65,752	-348	17,263	891	1,301	1,217	95	4,651	315,154
October	138,667	2,340	65,844	280	58,021	-385	19,552	825	1,315	1,221	68	6,814	295,084
November	135,644	1,847	56,729	255	59,069	-330	20,865	866	1,345	1,273	40	6,875	285,007
December	165,146	2,190	64,360	267	70,710	-383	24,548	1,004	1,388	1,368	21	6,906	338,089
Total	**1,741,123**	**35,816**	**840,900**	**3,055**	**798,855**	**-4,627**	**271,506**	**10,738**	**15,954**	**15,009**	**891**	**73,886**	**3,809,737**
2010 January	171,811	4,053	66,354	269	72,569	-537	21,976	1,039	1,278	1,373	10	6,964	347,699
February	151,487	2,111	58,953	242	65,245	-96	20,338	930	1,146	1,217	34	5,494	307,583
March	142,988	2,264	55,716	262	64,635	-49	20,435	931	1,367	1,332	81	8,683	299,184
April	125,900	2,068	57,804	259	57,611	-303	18,449	831	1,376	1,262	124	9,838	275,789
May	142,079	2,779	66,766	265	66,658	-197	24,739	872	1,341	1,334	174	8,681	316,096
June	164,235	3,783	85,264	252	68,301	-227	29,335	978	1,358	1,294	195	7,992	363,367
July	178,103	4,209	107,406	254	71,913	-466	24,024	1,077	1,390	1,304	181	6,631	396,648
August	176,200	3,335	113,577	232	71,574	-533	19,652	1,101	1,383	1,319	172	6,613	395,249
September	147,090	2,624	85,268	224	69,371	-349	16,840	946	1,311	1,263	146	7,080	332,413
October	131,361	2,031	70,141	157	62,751	-374	17,272	837	1,308	1,224	75	7,963	295,340
November	134,166	1,887	61,684	217	62,655	-429	19,302	927	1,388	1,333	66	9,875	293,670
11-Month Total	**1,665,420**	**31,142**	**828,934**	**2,635**	**733,285**	**-3,561**	**232,362**	**10,467**	**14,646**	**14,254**	**1,258**	**85,813**	**3,623,038**
2009 11-Month Total	**1,575,977**	**33,625**	**776,540**	**2,788**	**728,144**	**-4,244**	**246,958**	**9,733**	**14,566**	**13,641**	**870**	**66,980**	**3,471,648**
2008 11-Month Total	**1,802,325**	**38,832**	**744,205**	**2,976**	**733,277**	**-5,790**	**232,400**	**9,684**	**14,071**	**13,579**	**846**	**48,747**	**3,641,510**

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

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

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

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

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

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

[g] Wood and wood-derived fuels.

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

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

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

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

NA=Not available.

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

Web Page: See http://www.eia.gov/mer/elect.html 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 January	117	20	395	117	709	1,422	333	7,008	770	163	2,376	61	12,453
February	107	14	346	114	636	1,217	278	6,236	725	158	2,136	82	11,178
March	79	9	352	117	619	1,380	286	6,319	775	174	2,237	70	11,601
April	88	8	307	135	614	1,308	251	5,974	741	174	2,174	67	11,049
May	96	8	292	137	609	1,347	235	6,314	732	170	2,173	55	11,420
June	116	12	330	139	675	1,327	273	6,605	807	128	2,229	55	11,822
July	122	17	384	134	728	1,403	236	7,402	832	122	2,337	91	12,855
August	117	9	390	132	715	1,378	248	7,258	831	117	2,358	72	12,660
September	106	7	366	129	675	1,317	276	5,500	630	96	2,163	52	10,360
October	101	8	344	126	642	1,276	248	6,315	585	95	2,261	77	11,137
November	99	11	320	128	623	1,166	229	5,653	549	119	2,165	68	10,201
December	112	18	360	127	681	1,161	326	5,838	529	160	2,033	71	10,378
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 January	105	44	362	131	717	1,194	324	6,051	587	165	2,004	75	10,716
February	92	19	333	120	627	1,081	299	5,635	571	144	1,882	59	9,997
March	86	11	344	145	668	1,130	260	6,015	595	193	2,007	65	10,623
April	74	11	324	145	633	1,058	238	5,528	527	191	1,905	63	9,867
May	76	9	310	155	640	1,070	234	5,704	539	187	1,947	44	10,127
June	82	5	345	155	675	1,160	244	6,268	623	169	2,020	46	10,924
July	96	8	394	156	733	1,195	239	7,006	678	140	2,212	55	11,924
August	109	13	414	154	769	1,235	238	7,183	734	136	2,295	55	12,270
September	89	8	374	148	693	1,105	238	6,805	725	95	2,126	52	11,498
October	85	8	346	146	659	1,204	212	6,397	680	136	2,173	72	11,247
November	94	11	311	151	648	1,072	215	6,231	655	137	2,146	76	10,931
December	107	13	367	143	703	1,181	219	6,847	662	175	2,122	78	11,669
Total	**1,096**	**163**	**4,225**	**1,748**	**8,165**	**13,686**	**2,960**	**75,672**	**7,574**	**1,868**	**24,838**	**740**	**131,793**
2010 January	119	11	365	142	711	1,574	238	6,839	640	173	2,207	62	11,990
February	105	9	324	114	612	1,481	193	6,068	587	168	2,026	55	10,809
March	88	9	340	134	645	1,627	163	6,491	735	182	2,238	55	11,772
April	79	9	331	153	656	1,184	170	6,105	688	169	2,165	67	10,834
May	84	13	332	153	670	1,523	199	6,330	727	169	2,136	68	11,442
June	92	15	366	151	712	1,591	228	6,768	687	141	2,219	68	12,021
July	98	18	427	147	767	1,732	227	7,050	696	106	2,341	73	12,558
August	96	14	440	154	783	1,804	203	7,110	808	94	2,301	69	12,728
September	84	12	398	151	724	1,493	181	6,836	748	72	2,225	64	11,927
October	79	9	372	147	684	1,515	167	6,118	624	106	2,115	63	11,030
November	65	7	380	136	656	1,266	156	6,268	680	117	2,196	64	11,014
11-Month Total	**991**	**125**	**4,075**	**1,581**	**7,621**	**16,791**	**2,125**	**71,984**	**7,620**	**1,498**	**24,169**	**709**	**128,125**
2009 11-Month Total	**989**	**149**	**3,858**	**1,606**	**7,461**	**12,504**	**2,741**	**68,825**	**6,913**	**1,693**	**22,716**	**663**	**120,124**
2008 11-Month Total	**1,149**	**124**	**3,828**	**1,407**	**7,245**	**14,541**	**2,893**	**70,584**	**7,978**	**1,516**	**24,608**	**750**	**126,735**

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

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

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

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

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

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

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

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

[i] Conventional hydroelectric power.

[j] Wood and wood-derived fuels.

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

NA=Not available.

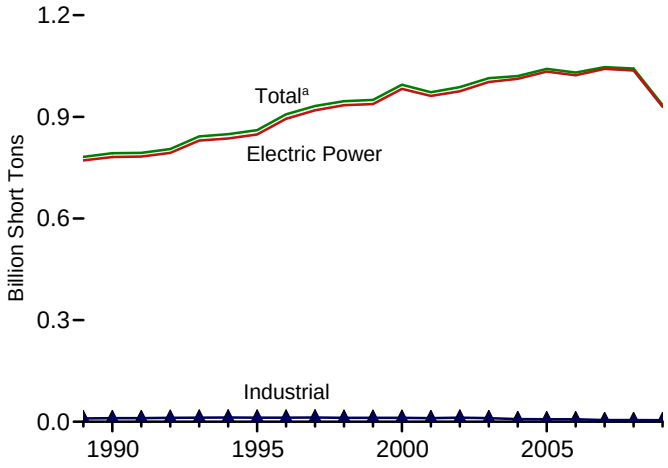
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

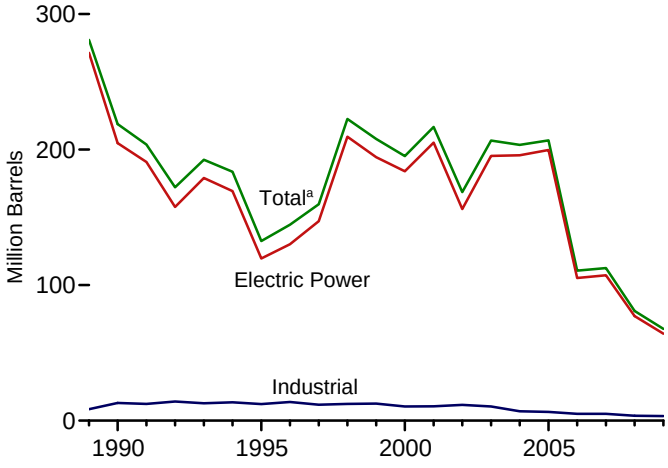
Sources: See end of section.

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation

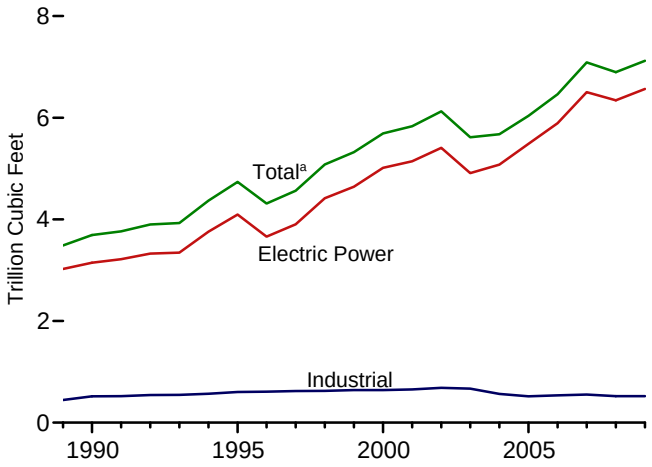
Coal by Sector, 1989-2009



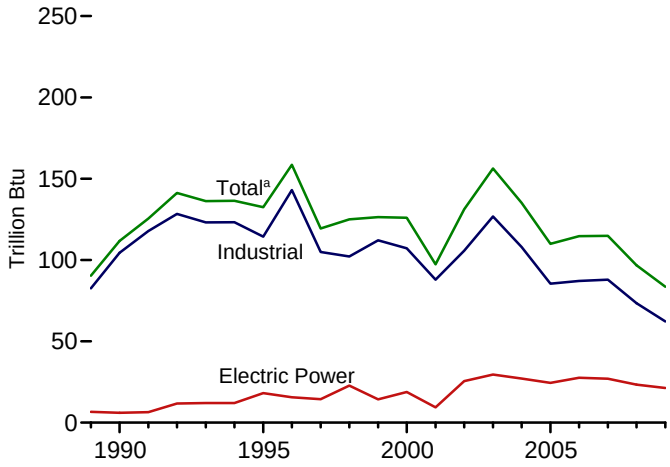
Petroleum by Sector, 1989-2009



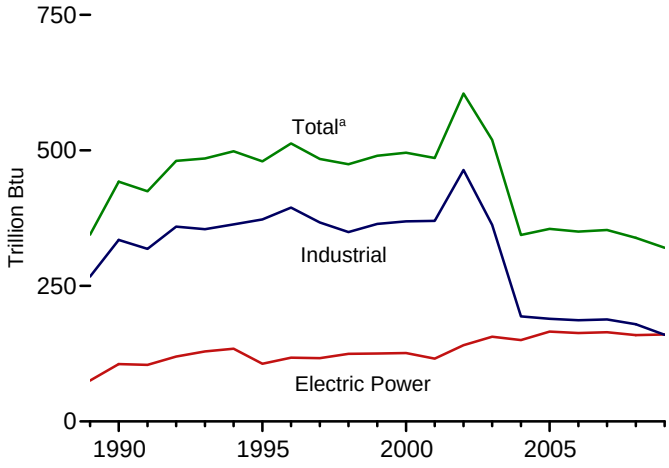
Natural Gas by Sector, 1989-2009



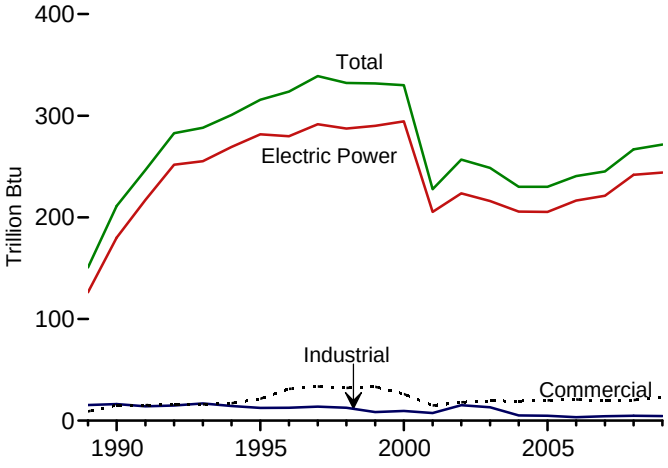
Other Gases[b] by Sector, 1989-2009



Wood by Sector, 1989-2009



Waste by Sector, 1989-2009



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

Web Page: http://www.eia.gov/mer/elect.html.
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 January	94,532	1,633	3,309	350	514	7,864	554	9	30	21	14
February	86,702	1,198	2,697	265	469	6,508	458	8	28	20	13
March	83,373	936	2,352	250	396	5,517	480	9	29	23	15
April	76,924	934	2,627	193	432	5,915	487	8	26	22	14
May	81,248	940	2,802	196	409	5,982	495	8	26	22	15
June	89,532	1,351	4,722	237	500	8,812	682	9	28	23	15
July	98,194	1,028	3,863	200	452	7,349	805	10	30	24	16
August	95,752	901	3,223	179	480	6,703	786	10	30	23	15
September	85,545	929	3,896	194	447	7,253	618	7	28	22	14
October	80,186	771	2,339	176	469	5,633	565	7	27	22	13
November	80,993	850	2,610	210	423	5,786	473	6	28	22	13
December	89,353	1,358	3,751	373	426	7,610	491	6	27	23	14
Total	**1,042,335**	**12,832**	**38,191**	**2,822**	**5,417**	**80,932**	**6,896**	**97**	**339**	**267**	**172**
2009 January	90,639	1,882	6,033	424	426	10,467	505	6	28	21	13
February	74,256	1,203	2,414	256	390	5,823	470	6	25	20	12
March	71,990	1,252	2,044	246	480	5,942	519	7	26	23	14
April	67,209	825	1,691	178	427	4,828	468	6	23	23	14
May	70,508	1,071	2,216	185	432	5,632	533	6	24	23	15
June	79,071	1,001	2,313	150	433	5,628	665	7	26	23	15
July	84,360	934	2,517	134	455	5,859	802	8	29	24	15
August	86,789	1,002	2,976	166	439	6,338	864	8	30	24	15
September	73,705	765	1,846	135	438	4,936	713	8	27	22	14
October	74,686	847	2,062	139	276	4,427	559	7	27	22	14
November	73,150	827	1,217	143	273	3,551	479	7	27	23	14
December	88,320	1,050	1,245	172	353	4,234	544	8	29	23	14
Total	**934,683**	**12,658**	**28,573**	**2,328**	**4,821**	**67,666**	**7,121**	**84**	**320**	**272**	**170**
2010 January	90,716	2,473	2,857	210	437	7,723	566	7	29	21	12
February	80,053	817	1,081	167	402	4,076	496	6	26	19	11
March	76,548	743	1,264	114	441	4,326	473	8	28	22	13
April	67,090	681	1,174	104	385	3,882	492	8	26	23	14
May	76,123	1,014	2,024	101	417	5,227	580	8	26	23	14
June	87,451	1,253	3,150	137	489	6,983	729	8	28	22	14
July	94,992	1,333	3,735	184	529	7,897	922	7	30	23	14
August	94,767	1,090	3,039	142	411	6,326	971	8	31	23	15
September	79,350	935	1,832	128	382	4,805	720	8	28	22	14
October	71,161	812	1,132	114	355	3,831	587	6	26	22	14
November	72,643	857	1,010	132	303	3,515	513	7	28	22	13
11-Month Total	**890,894**	**12,009**	**22,298**	**1,532**	**4,550**	**58,591**	**7,048**	**81**	**305**	**240**	**148**
2009 11-Month Total	**846,363**	**11,608**	**27,328**	**2,156**	**4,468**	**63,432**	**6,577**	**76**	**292**	**248**	**156**
2008 11-Month Total	**952,981**	**11,474**	**34,441**	**2,449**	**4,992**	**73,322**	**6,404**	**91**	**312**	**244**	**158**

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

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

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

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

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

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

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

[h] Wood and wood-derived fuels.

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

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

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

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

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

Web Page: See http://www.eia.gov/mer/elect.html 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 January	94,085	1,573	3,175	336	476	7,467	503	2	14	20	10
February	86,301	1,155	2,584	252	437	6,177	413	2	13	18	9
March	82,904	905	2,248	224	363	5,192	434	2	14	21	11
April	76,465	910	2,547	182	398	5,631	444	2	11	20	10
May	80,763	911	2,731	185	376	5,707	450	2	12	20	10
June	89,057	1,320	4,648	226	461	8,500	634	2	13	20	11
July	97,694	971	3,806	189	414	7,035	752	2	15	22	11
August	95,263	857	3,171	171	441	6,405	734	2	15	21	11
September	85,078	849	3,845	174	412	6,930	578	1	13	20	10
October	79,729	747	2,281	158	433	5,352	519	2	12	20	10
November	80,601	815	2,548	202	393	5,531	432	1	13	20	10
December	88,952	1,307	3,637	309	394	7,220	449	2	14	21	11
Total	**1,036,891**	**12,318**	**37,222**	**2,608**	**5,000**	**77,149**	**6,342**	**23**	**159**	**242**	**122**
2009 January	90,224	1,778	5,871	400	398	10,039	460	1	15	19	9
February	73,894	1,084	2,313	234	363	5,445	429	1	13	18	8
March	71,583	1,198	1,958	201	455	5,632	475	2	13	20	10
April	66,830	769	1,623	149	403	4,557	428	2	11	20	9
May	70,105	981	2,154	172	407	5,340	491	2	11	21	10
June	78,636	932	2,264	130	406	5,357	619	2	14	21	10
July	83,917	865	2,474	126	423	5,577	750	2	15	22	10
August	86,322	927	2,935	150	409	6,056	811	2	15	21	10
September	73,288	707	1,801	122	407	4,663	664	2	13	20	10
October	74,232	809	2,022	129	247	4,195	512	2	13	20	9
November	72,767	787	1,173	136	243	3,309	434	2	13	20	9
December	87,894	1,012	1,180	161	326	3,982	494	2	15	21	10
Total	**929,692**	**11,848**	**27,768**	**2,110**	**4,485**	**64,151**	**6,567**	**21**	**160**	**244**	**115**
2010 January	90,034	2,435	2,782	199	409	7,462	516	2	15	18	9
February	79,389	789	1,032	162	376	3,861	452	2	13	17	8
March	75,792	720	1,229	108	415	4,134	425	2	14	20	9
April	66,651	655	1,141	100	359	3,690	447	2	13	21	10
May	75,386	983	1,976	95	389	4,999	534	2	12	20	10
June	86,745	1,213	3,090	130	458	6,722	680	2	14	20	10
July	94,205	1,292	3,665	179	498	7,627	870	2	15	21	10
August	93,918	1,056	2,988	137	382	6,093	919	1	16	20	10
September	78,683	904	1,789	122	357	4,602	670	1	13	19	10
October	70,489	784	1,090	105	334	3,649	542	1	12	20	10
November	72,135	833	975	124	283	3,347	468	1	14	20	10
11-Month Total	**883,427**	**11,664**	**21,757**	**1,461**	**4,261**	**56,186**	**6,521**	**18**	**150**	**216**	**105**
2009 11-Month Total	**841,798**	**10,837**	**26,588**	**1,949**	**4,159**	**60,168**	**6,073**	**19**	**145**	**223**	**106**
2008 11-Month Total	**947,939**	**11,011**	**33,584**	**2,300**	**4,607**	**69,928**	**5,893**	**22**	**145**	**221**	**112**

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

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

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

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

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

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

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

[h] Wood and wood-derived fuels.

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

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

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

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

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

Web Page: See http://www.eia.gov/mer/elect.html 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 January	33	22	3	2	414	375	48	6	16	(s)	3
February	31	18	3	2	371	313	42	6	14	1	3
March	25	10	3	2	444	315	43	7	15	(s)	3
April	25	9	2	2	433	274	41	6	15	(s)	3
May	28	9	2	2	457	266	43	6	15	(s)	4
June	35	13	3	2	441	299	45	7	15	(s)	4
July	36	18	3	2	464	296	50	7	16	1	4
August	34	11	3	2	455	287	49	8	16	(s)	4
September	32	8	3	2	435	315	37	6	14	(s)	3
October	28	10	3	2	428	271	43	5	15	(s)	3
November	29	14	3	2	362	242	39	5	15	(s)	2
December	32	24	3	2	369	365	39	5	13	(s)	2
Total	**369**	**166**	**33**	**20**	**5,075**	**3,617**	**520**	**73**	**179**	**5**	**39**
2009 January	32	54	3	2	384	374	42	5	13	(s)	3
February	28	22	3	2	334	356	38	5	12	(s)	3
March	25	12	3	2	382	298	41	5	13	(s)	3
April	22	12	3	2	356	259	38	4	12	(s)	3
May	22	11	3	2	381	282	39	4	13	(s)	4
June	24	7	3	2	412	264	43	5	13	(s)	4
July	28	9	3	2	415	273	48	6	14	(s)	4
August	30	15	3	2	437	267	50	6	15	(s)	4
September	26	10	3	2	391	262	47	6	14	(s)	3
October	24	10	3	2	430	222	44	6	14	(s)	3
November	26	11	3	2	357	232	43	5	14	(s)	4
December	30	16	3	2	396	236	47	6	14	(s)	4
Total	**317**	**190**	**34**	**23**	**4,674**	**3,326**	**520**	**62**	**160**	**4**	**42**
2010 January	34	12	3	2	647	248	47	5	14	(s)	2
February	30	12	3	2	633	203	42	5	13	(s)	2
March	26	11	3	2	730	181	44	6	14	(s)	3
April	22	10	3	2	417	182	42	6	14	(s)	3
May	24	14	3	2	714	214	43	6	14	(s)	3
June	28	17	3	2	678	245	46	6	14	(s)	3
July	30	20	3	2	757	250	49	6	15	(s)	3
August	30	16	3	2	819	217	49	7	15	(s)	3
September	26	14	3	2	641	189	47	6	14	(s)	3
October	24	11	3	2	648	172	42	5	14	(s)	3
November	21	8	3	2	487	159	43	6	14	(s)	3
11-Month Total	**295**	**145**	**32**	**20**	**7,171**	**2,260**	**494**	**63**	**154**	**4**	**31**
2009 11-Month Total	**286**	**174**	**31**	**21**	**4,279**	**3,090**	**473**	**57**	**146**	**4**	**38**
2008 11-Month Total	**336**	**142**	**31**	**19**	**4,706**	**3,252**	**481**	**69**	**166**	**4**	**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, and waste oil.

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

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

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

[h] Wood and wood-derived fuels.

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

(s)=Less than 0.5 trillion Btu.

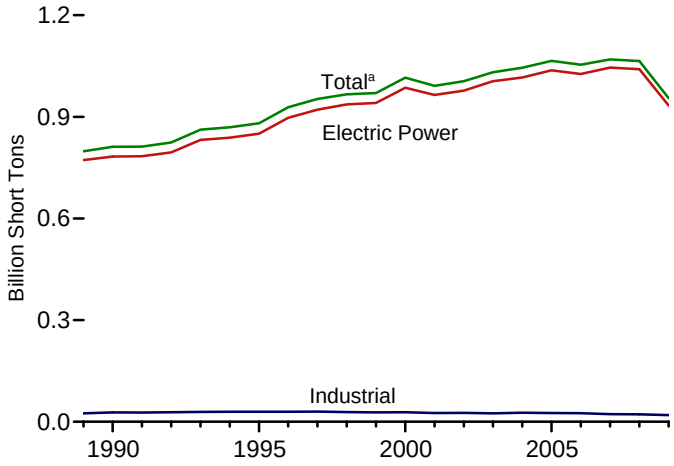
Notes: • Data are for fuels consumed to produce electricity. Through 1988, data are not available. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and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

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

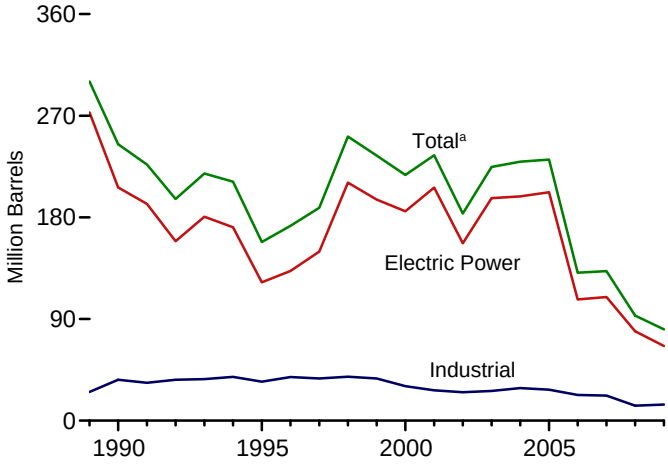
Sources: • **1989-1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906,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

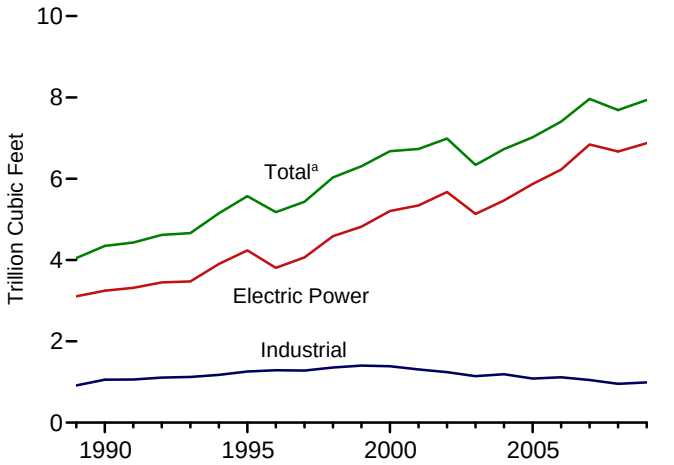
Coal by Sector, 1989-2009



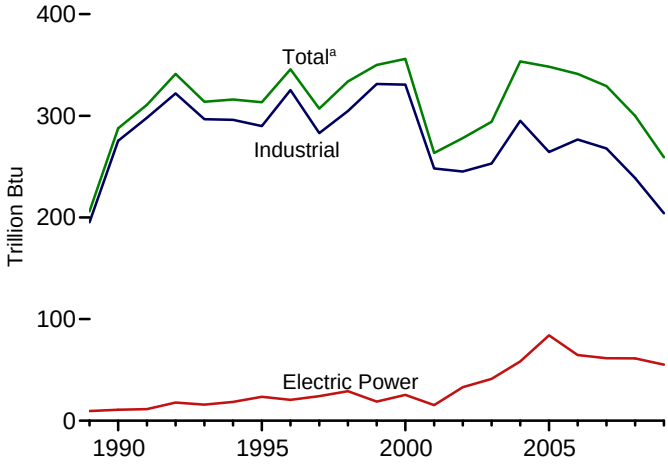
Petroleum by Sector, 1989-2009



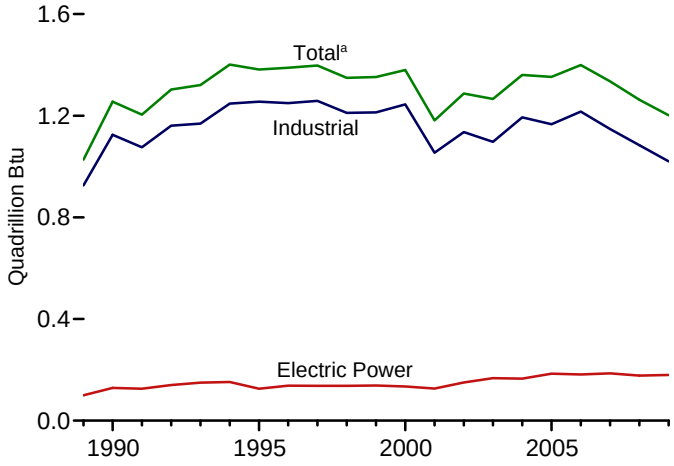
Natural Gas by Sector, 1989-2009



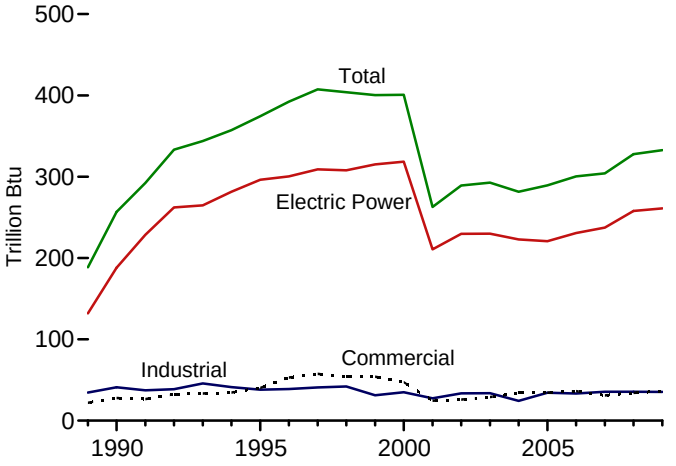
Other Gases[b] by Sector, 1989-2009



Wood by Sector, 1989-2009



Waste by Sector, 1989-2009



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

Web Page: http://www.eia.gov/mer/elect.html.
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 January	96,610	1,830	3,975	468	592	9,233	625	31	128	27	17
February	88,657	1,294	3,214	369	537	7,561	522	32	106	27	17
March	85,270	1,017	2,826	373	464	6,534	547	27	108	29	18
April	78,700	1,007	3,038	271	499	6,810	550	24	106	27	18
May	83,058	1,017	3,203	267	480	6,887	559	25	105	27	18
June	91,296	1,450	5,131	299	576	9,761	750	26	102	27	19
July	100,072	1,129	4,247	257	525	8,258	876	27	107	28	19
August	97,599	987	3,587	230	556	7,586	858	27	105	27	19
September	87,314	1,000	4,244	251	521	8,098	679	22	99	26	17
October	81,919	867	2,662	236	554	6,533	630	22	102	27	16
November	82,770	986	2,978	259	504	6,743	537	18	101	28	16
December	91,239	1,553	4,372	485	507	8,945	557	19	94	28	17
Total	**1,064,503**	**14,137**	**43,477**	**3,765**	**6,314**	**92,948**	**7,689**	**300**	**1,263**	**328**	**212**
2009 January	92,641	2,157	6,799	536	509	12,037	575	21	95	27	18
February	76,038	1,432	2,913	354	474	7,069	531	20	89	25	17
March	73,810	1,449	2,473	350	559	7,068	584	21	96	30	18
April	68,738	994	2,054	275	494	5,794	531	19	92	27	19
May	72,092	1,238	2,817	270	501	6,827	597	20	96	27	20
June	80,689	1,174	2,706	205	514	6,652	731	21	99	27	20
July	86,039	1,118	2,850	181	545	6,876	874	23	106	28	20
August	88,471	1,158	3,297	215	530	7,322	940	24	110	28	20
September	75,305	923	2,168	199	531	5,946	785	24	102	26	19
October	76,319	980	2,380	195	364	5,377	628	22	105	28	19
November	74,836	972	1,546	194	366	4,541	544	22	104	29	19
December	90,212	1,204	1,671	242	441	5,320	618	22	108	29	19
Total	**955,190**	**14,800**	**33,672**	**3,218**	**5,828**	**80,830**	**7,937**	**259**	**1,202**	**333**	**228**
2010 January	92,663	2,661	3,295	293	530	8,900	641	22	105	27	15
February	81,871	896	1,393	235	463	4,840	561	20	95	24	13
March	78,373	809	1,481	157	509	4,991	542	24	105	27	15
April	68,761	743	1,392	136	451	4,525	556	23	99	27	16
May	77,775	1,138	2,339	149	479	6,018	647	23	101	28	16
June	89,165	1,423	3,528	184	544	7,855	795	22	103	27	16
July	96,811	1,492	4,150	217	590	8,809	995	21	107	27	16
August	96,600	1,241	3,387	182	455	7,083	1,042	23	108	27	17
September	81,081	1,028	2,124	168	415	5,396	788	21	103	25	16
October	72,857	883	1,426	169	426	4,611	654	19	100	27	16
November	74,391	941	1,260	178	370	4,232	580	21	103	27	15
11-Month Total	**910,349**	**13,256**	**25,775**	**2,067**	**5,232**	**67,259**	**7,800**	**239**	**1,128**	**293**	**171**
2009 11-Month Total	**864,978**	**13,596**	**32,002**	**2,976**	**5,387**	**75,510**	**7,320**	**237**	**1,094**	**304**	**209**
2008 11-Month Total	**973,264**	**12,584**	**39,104**	**3,281**	**5,807**	**84,003**	**7,132**	**281**	**1,168**	**299**	**195**

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

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

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

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

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

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

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

[h] Wood and wood-derived fuels.

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

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

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

NA=Not available.

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

Web Page: See http://www.eia.gov/mer/elect.html 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 January	94,459	1,596	3,263	344	486	7,631	531	5	16	21	11
February	86,626	1,182	2,629	259	449	6,315	439	5	15	20	11
March	83,215	925	2,323	245	374	5,363	461	6	15	23	11
April	76,753	925	2,635	189	409	5,791	470	5	13	21	11
May	81,056	928	2,817	191	385	5,863	475	6	13	21	11
June	89,347	1,339	4,726	228	472	8,652	665	6	14	22	11
July	98,032	986	3,890	190	424	7,186	782	6	16	23	11
August	95,590	873	3,271	172	445	6,541	763	6	16	22	11
September	85,376	866	3,931	175	421	7,075	603	4	15	21	10
October	79,982	764	2,369	161	444	5,513	545	5	14	21	10
November	80,883	836	2,646	205	405	5,710	458	4	15	21	10
December	89,259	1,327	3,742	312	407	7,415	476	4	16	22	11
Total	**1,040,580**	**12,547**	**38,241**	**2,670**	**5,119**	**79,056**	**6,668**	**61**	**177**	**258**	**131**
2009 January	90,640	1,865	5,974	424	410	10,311	487	4	17	21	10
February	74,254	1,106	2,385	256	374	5,614	453	4	15	19	9
March	71,948	1,227	2,023	214	464	5,785	500	4	14	24	10
April	67,123	776	1,709	159	414	4,712	451	4	12	21	10
May	70,425	987	2,230	192	418	5,497	515	5	13	22	11
June	78,954	935	2,345	132	418	5,501	643	5	15	22	11
July	84,243	868	2,558	127	434	5,721	778	5	16	23	11
August	86,635	930	3,021	151	419	6,199	840	5	17	23	11
September	73,566	709	1,885	123	416	4,799	690	5	14	21	10
October	74,520	813	2,123	132	256	4,349	537	5	14	21	10
November	73,063	797	1,260	138	252	3,457	457	4	15	22	10
December	88,255	1,023	1,270	162	336	4,137	520	5	17	22	10
Total	**933,627**	**12,035**	**28,782**	**2,210**	**4,611**	**66,081**	**6,872**	**55**	**180**	**261**	**124**
2010 January	90,418	2,451	2,865	204	423	7,636	544	5	17	20	10
February	79,754	806	1,069	186	388	4,001	477	4	16	18	9
March	76,139	725	1,271	111	428	4,247	452	5	16	22	10
April	66,976	661	1,223	102	369	3,830	472	5	14	21	10
May	75,721	988	2,067	96	400	5,151	560	5	14	21	11
June	87,097	1,218	3,177	132	467	6,864	707	4	16	21	11
July	94,576	1,299	3,752	181	507	7,768	900	4	17	22	11
August	94,281	1,061	3,077	139	386	6,210	948	4	18	21	11
September	79,032	909	1,874	124	361	4,712	696	4	15	20	10
October	70,838	796	1,175	107	344	3,799	566	3	14	21	10
November	72,479	876	1,061	126	295	3,536	493	4	16	21	10
11-Month Total	**887,311**	**11,790**	**22,611**	**1,508**	**4,369**	**57,754**	**6,815**	**48**	**172**	**230**	**113**
2009 11-Month Total	**845,371**	**11,012**	**27,512**	**2,047**	**4,274**	**61,944**	**6,352**	**50**	**163**	**239**	**113**
2008 11-Month Total	**951,321**	**11,221**	**34,499**	**2,358**	**4,713**	**71,640**	**6,192**	**57**	**161**	**236**	**120**

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

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

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

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

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

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

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

[h] Wood and wood-derived fuels.

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

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

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

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

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

Web Page: See http://www.eia.gov/mer/elect.html 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 January	197	108	6	3	1,954	1,494	87	26	112	3	5
February	181	71	6	3	1,850	1,175	78	27	92	4	5
March	176	35	6	3	1,879	1,136	80	21	92	4	5
April	144	26	5	3	1,803	992	75	19	93	3	5
May	145	20	4	3	1,857	1,004	79	20	92	2	6
June	177	60	5	3	1,772	1,048	80	20	88	2	6
July	169	93	6	3	1,871	978	88	21	90	2	6
August	168	36	6	3	1,841	1,008	89	21	88	2	6
September	155	22	6	3	1,783	1,001	71	18	84	2	5
October	150	29	5	3	1,787	991	80	17	88	3	4
November	166	51	5	3	1,721	981	74	15	86	4	4
December	195	118	6	3	1,784	1,412	75	15	78	4	4
Total	**2,021**	**671**	**66**	**34**	**21,902**	**13,222**	**955**	**239**	**1,084**	**35**	**60**
2009 January	208	176	7	3	1,793	1,550	81	17	78	4	6
February	178	70	6	3	1,605	1,385	71	16	74	3	6
March	170	35	6	3	1,692	1,248	79	17	81	4	6
April	128	26	5	3	1,487	1,056	74	15	80	3	6
May	117	19	5	3	1,550	1,311	77	15	83	2	7
June	135	14	6	3	1,600	1,138	82	16	84	2	7
July	137	19	7	3	1,659	1,136	89	18	90	2	7
August	143	38	7	3	1,694	1,086	92	19	93	2	7
September	127	20	7	3	1,611	1,128	88	19	88	2	7
October	129	17	6	3	1,671	1,010	85	17	91	4	7
November	151	35	6	3	1,622	1,049	81	17	89	4	7
December	174	53	7	3	1,783	1,130	91	17	91	4	7
Total	**1,798**	**521**	**76**	**36**	**19,766**	**14,228**	**990**	**204**	**1,021**	**35**	**82**
2010 January	195	41	7	3	2,051	1,222	90	17	88	3	3
February	170	33	6	3	1,947	807	78	15	79	3	3
March	156	32	6	3	2,079	712	84	19	89	3	3
April	126	26	6	3	1,659	669	79	18	84	3	3
May	125	36	6	3	1,929	831	81	18	86	3	3
June	138	41	6	3	1,930	950	83	18	87	3	4
July	143	56	7	3	2,092	985	88	17	90	3	4
August	156	51	7	3	2,163	823	87	19	90	3	4
September	142	36	6	3	1,907	648	85	17	88	3	4
October	132	30	6	3	1,887	782	82	16	86	3	4
November	136	29	7	3	1,776	667	81	17	87	3	3
11-Month Total	**1,618**	**410**	**68**	**31**	**21,420**	**9,095**	**917**	**192**	**955**	**32**	**38**
2009 11-Month Total	**1,624**	**468**	**69**	**33**	**17,982**	**13,098**	**899**	**187**	**930**	**32**	**75**
2008 11-Month Total	**1,826**	**553**	**60**	**31**	**20,117**	**11,810**	**880**	**224**	**1,005**	**32**	**56**

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

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

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

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

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

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

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

[h] Wood and wood-derived fuels.

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

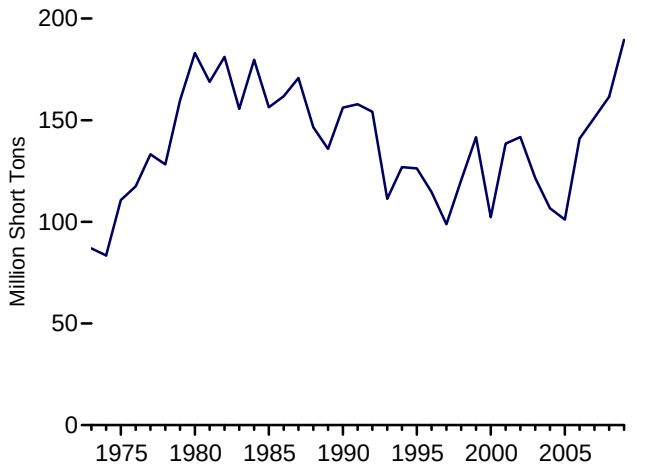
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

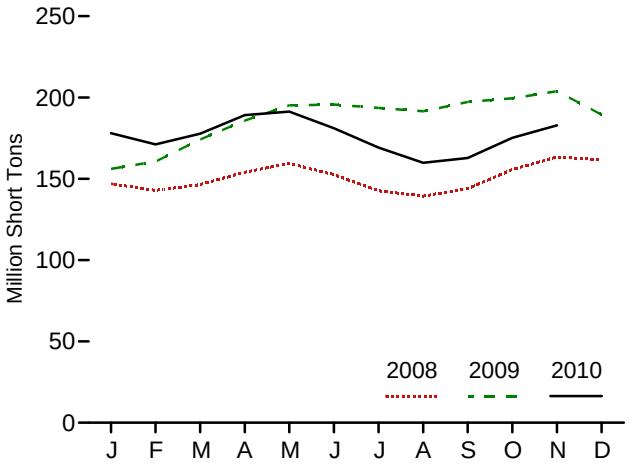
Sources: • **1989-1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906,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

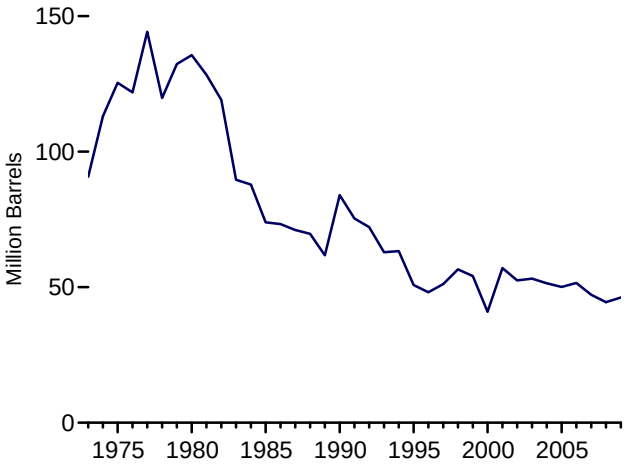
Coal, 1973-2009



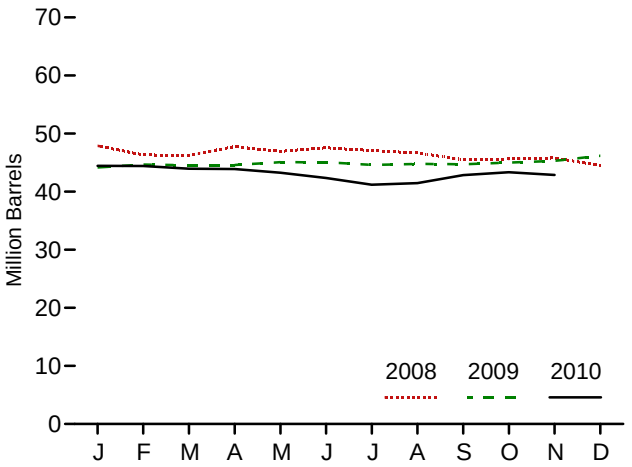
Coal, Monthly



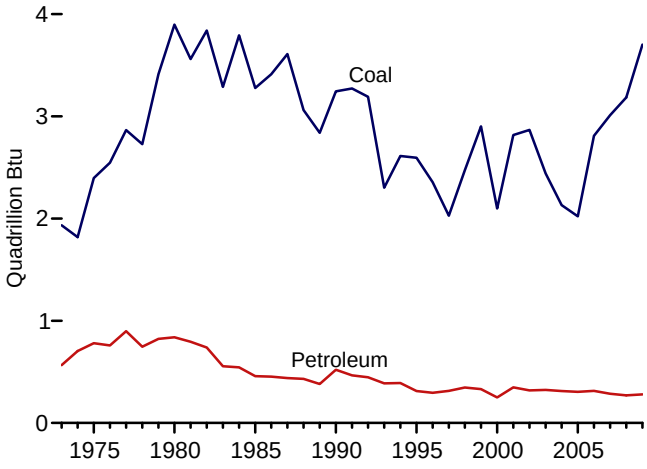
Total Petroleum, 1973-2009



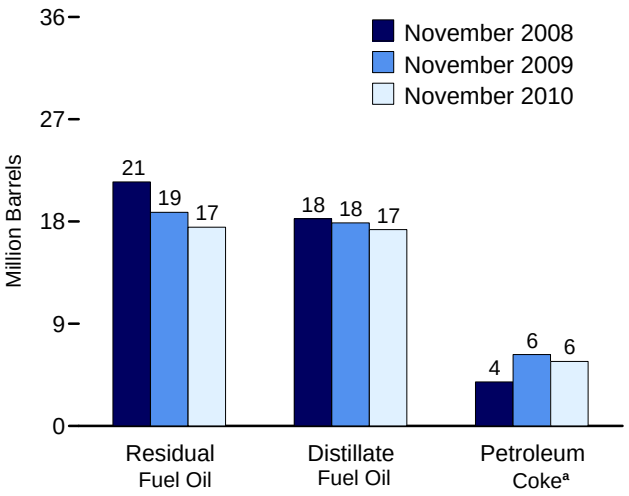
Total Petroleum, Monthly



Coal and Petroleum Stocks, 1973-2009



Petroleum by Major Type, End of Month



[a] Converted from short tons to barrels by multiplying by 5.
Web Page: http://www.eia.gov/mer/elect.html.
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 January	146,973	18,633	23,972	1,997	656	47,884
February	142,782	18,307	23,301	1,859	573	46,334
March	146,497	18,091	22,807	2,062	662	46,271
April	154,029	17,888	24,164	2,083	722	47,743
May	159,408	17,824	23,228	2,087	758	46,927
June	152,542	17,880	23,963	2,106	723	47,562
July	142,572	17,911	23,175	2,111	776	47,075
August	139,352	17,909	23,078	2,126	712	46,671
September	143,903	17,830	22,081	2,129	689	45,483
October	155,659	17,911	22,112	2,197	683	45,634
November	163,390	18,241	21,488	2,198	777	45,811
December	**161,589**	**17,761**	**21,088**	**1,955**	**739**	**44,498**
2009 January	156,075	17,882	20,501	2,061	746	44,175
February	160,601	17,737	21,141	2,102	738	44,668
March	174,223	17,691	21,160	2,118	715	44,544
April	185,790	18,055	20,890	2,129	705	44,598
May	195,103	17,958	21,022	2,195	779	45,072
June	195,656	17,866	21,131	2,234	763	45,048
July	193,563	17,971	20,734	2,252	729	44,604
August	191,532	18,040	20,093	2,265	876	44,777
September	197,208	18,162	19,454	2,292	963	44,726
October	199,477	18,009	18,931	2,307	1,152	45,007
November	203,765	17,880	18,806	2,316	1,258	45,294
December	**189,467**	**17,886**	**19,068**	**2,257**	**1,394**	**46,181**
2010 January	178,063	17,190	18,159	2,208	1,380	44,455
February	171,123	17,427	18,605	2,232	1,233	44,430
March	177,763	17,342	18,692	2,109	1,164	43,962
April	189,196	17,341	18,356	2,240	1,190	43,890
May	191,295	17,306	17,953	2,266	1,148	43,266
June	181,062	17,230	17,450	2,211	1,095	42,367
July	169,215	17,156	16,473	2,297	1,055	41,202
August	159,805	16,993	16,386	2,316	1,155	41,471
September	162,798	17,012	17,415	2,346	1,213	42,839
October	175,147	16,904	17,839	2,377	1,247	43,357
November	182,848	17,283	17,498	2,416	1,137	42,883

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

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

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

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

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

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

NA=Not available.

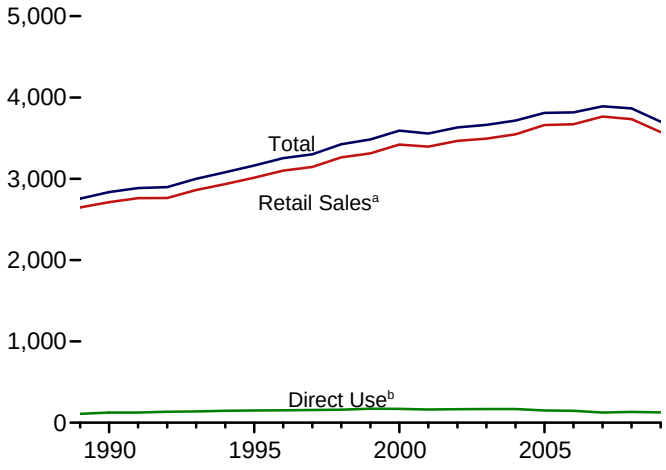
Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks are at end of period. • Totals may not equal sum of components due to independent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

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

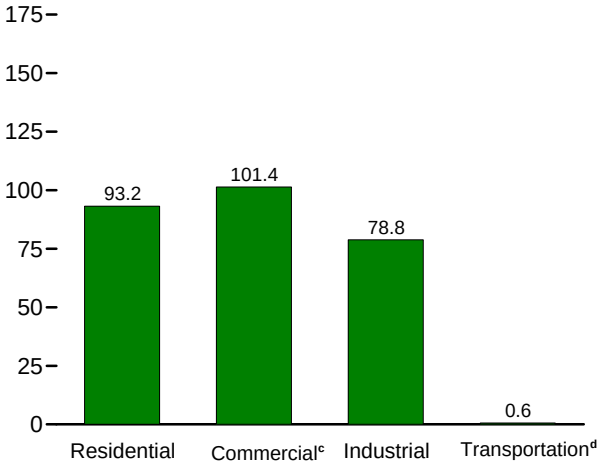
Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977-1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982-1988:** U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power 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)

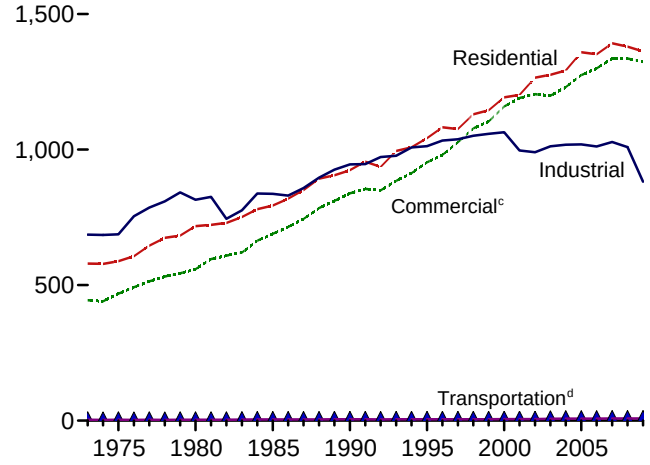
Electricity End Use Overview, 1989-2009



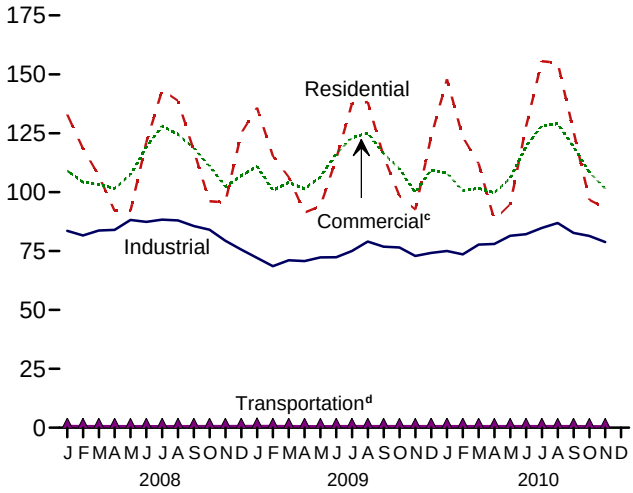
Retail Sales[a] by Sector, November 2010



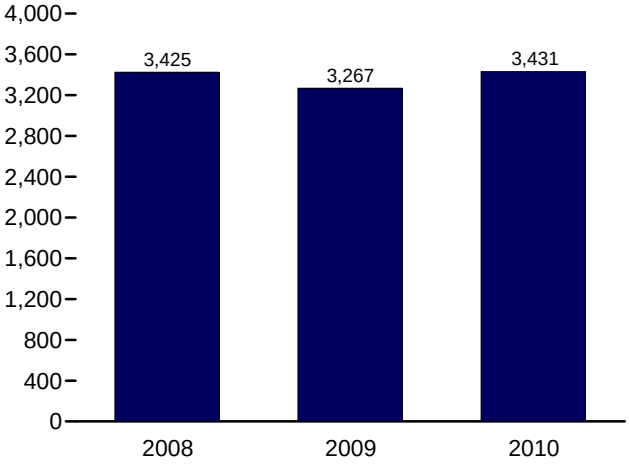
Retail Sales[a] by Sector, 1973-2009



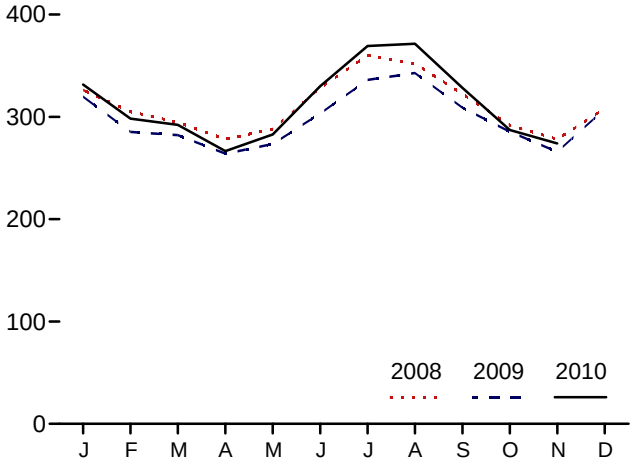
Retail Sales[a] by Sector, Monthly



Retail Sales[a] Total, January-November



Retail Sales[a] Total, Monthly



[a] Electricity retail sales to ultimate customers reported by electric 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 authorities.
[d] Transportation sector, including sales to railroads and railways.
Web Page: http://www.eia.gov/mer/elect.html.
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 January	132,938	109,028	83,582	714	326,263	E 11,997	338,260	– –	– –
February	118,471	104,288	81,603	658	305,021	E 10,768	315,789	– –	– –
March	107,057	103,239	83,714	638	294,647	E 11,138	305,785	– –	– –
April	91,977	101,502	83,999	617	278,095	E 10,630	288,725	– –	– –
May	92,018	107,379	88,166	598	288,162	E 10,964	299,126	– –	– –
June	121,137	119,063	87,345	625	328,170	E 11,391	339,561	– –	– –
July	143,269	128,028	88,310	653	360,261	E 12,380	372,641	– –	– –
August	138,765	124,496	87,990	647	351,898	E 12,191	364,089	– –	– –
September	117,589	118,677	85,565	626	322,457	E 10,058	332,514	– –	– –
October	96,093	110,988	84,032	635	291,748	E 10,735	302,483	– –	– –
November	95,665	102,384	79,373	615	278,037	E 9,866	287,903	– –	– –
December	125,003	106,909	75,619	672	308,203	E 10,080	318,283	– –	– –
Total	**1,379,981**	**1,335,981**	**1,009,300**	**7,700**	**3,732,962**	**132,197**	**3,865,159**	**– –**	**– –**
2009 January	R 135,872	R 110,959	R 72,060	R 776	R 319,667	E 10,370	R 330,036	– –	– –
February	R 115,356	R 100,742	R 68,583	R 675	R 285,356	E 9,635	R 294,991	– –	– –
March	R 106,371	R 104,036	R 71,074	R 673	R 282,154	E 10,241	R 292,395	– –	– –
April	R 91,314	R 101,325	R 70,710	611	R 263,961	E 9,523	R 273,484	– –	– –
May	R 94,017	R 106,491	R 72,280	R 602	R 273,390	E 9,766	R 283,156	– –	– –
June	R 114,165	R 116,179	R 72,389	R 613	R 303,346	E 10,520	R 313,866	– –	– –
July	R 137,464	R 123,053	R 75,003	R 677	R 336,199	E 11,479	R 347,677	– –	– –
August	R 138,226	R 125,052	R 78,987	R 646	R 342,911	E 11,826	R 354,737	– –	– –
September	R 115,180	R 116,383	R 76,871	R 640	R 309,073	E 11,057	R 320,130	– –	– –
October	R 98,348	R 109,943	R 76,511	R 610	R 285,412	E 10,799	R 296,211	– –	– –
November	R 92,565	R 99,839	R 72,899	R 594	R 265,897	E 10,501	R 276,398	– –	– –
December	R 123,380	R 109,403	R 74,168	R 692	R 307,643	E 11,221	R 318,864	– –	– –
Total	**R 1,362,259**	**R 1,323,406**	**R 881,534**	**R 7,808**	**R 3,575,007**	**126,938**	**R 3,701,945**	**– –**	**– –**
2010 January	147,895	R 108,031	R 74,972	738	R 331,635	E 11,520	R 343,155	– –	– –
February	123,425	R 100,588	R 73,602	722	R 298,337	E 10,359	R 308,696	– –	– –
March	R 112,151	R 101,603	R 77,726	657	R 292,137	E 11,262	R 303,399	– –	– –
April	R 88,175	R 99,709	R 77,977	604	R 266,465	E 10,421	R 276,886	– –	– –
May	94,838	R 105,813	R 81,482	595	R 282,728	E 10,985	R 293,713	– –	– –
June	127,692	R 119,394	R 82,166	654	R 329,906	E 11,548	R 341,455	– –	– –
July	R 155,554	R 128,192	R 84,809	658	R 369,214	E 12,085	R 381,299	– –	– –
August	154,954	R 128,967	R 86,889	608	R 371,418	E 12,254	R 383,672	– –	– –
September	125,770	R 119,324	R 82,677	628	R 328,399	E 11,474	R 339,873	– –	– –
October	96,755	R 108,437	R 81,373	607	R 287,172	E 10,625	R 297,797	– –	– –
November	93,170	101,399	78,805	595	273,969	E 10,585	284,554	– –	– –
11-Month Total	**1,320,378**	**1,221,458**	**882,477**	**7,067**	**3,431,380**	**E 123,119**	**3,554,499**	**– –**	**– –**
2009 11-Month Total	**1,238,879**	**1,214,003**	**807,366**	**7,117**	**3,267,364**	**E 115,717**	**3,383,081**	**– –**	**– –**
2008 11-Month Total	**1,254,978**	**1,229,072**	**933,681**	**7,027**	**3,424,759**	**E 122,117**	**3,546,876**	**NA**	**NA**

[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/mer/elect.html for all available data beginning in 1973.

Sources: See end of section.

Electricity

Note. Classification of Power Plants Into Energy-Use Sectors. The 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/cneaf/electricity/forms/eia860/eia860.doc.

Table 7.1 Sources

Net Generation, Electric Power Sector
Table 7.2b.

Net Generation, Commercial and Industrial Sectors
Table 7.2c.

Imports and Exports, Electricity Trade With Canada and Mexico, 1973–1989
1973–September 1977: Unpublished Federal Power Commission data.
October 1977–1980: Unpublished Economic Regulatory Administration (ERA) data.
1981: 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, Fossil Energy, Office of Fuels Programs, Form FE-781R, "Annual Report of International Electrical Export/Import Data." For 2001 forward, data from the California Independent System Operator were used in combination with the Form FE-781R values to estimate electricity trade with Mexico.

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

End Use
Table 7.6.

Table 7.2b Sources

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."
October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."
1982–1988: 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."
1984–1993: EIA, Form EIA-861, "Annual Electric Utility Report."
1994 forward: EIA, *Electric Power Monthly*, February 2011, Table 5.1.

Retail Sales, Commercial

1973–2002: Estimated by EIA as the sum of "Commercial (Old)" and the non-transportation portion of "Other (Old)." See estimation methodology at http://www.eia.gov/states/sep_use/notes/use_elec.pdf.
2003 forward: EIA, *Electric Power Monthly*, February 2011, 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*, February 2011, Table 5.1.

Direct Use, Annual

1989–1996: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1997–2009: EIA, *Electric Power Annual 2009*, November 2010, Table 7.2.

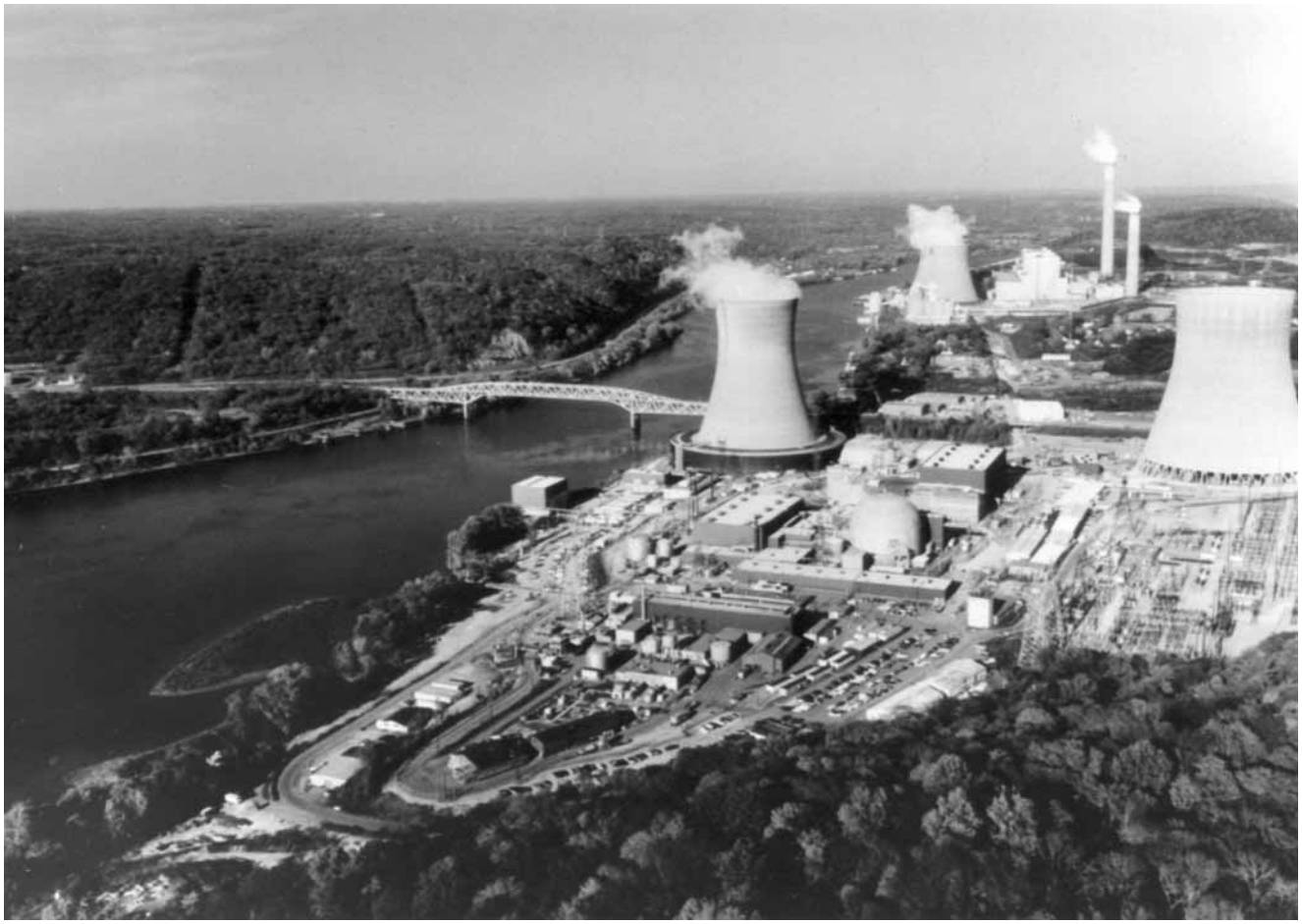
Direct Use, Monthly

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 2010, the 2009 annual share is used.

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

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

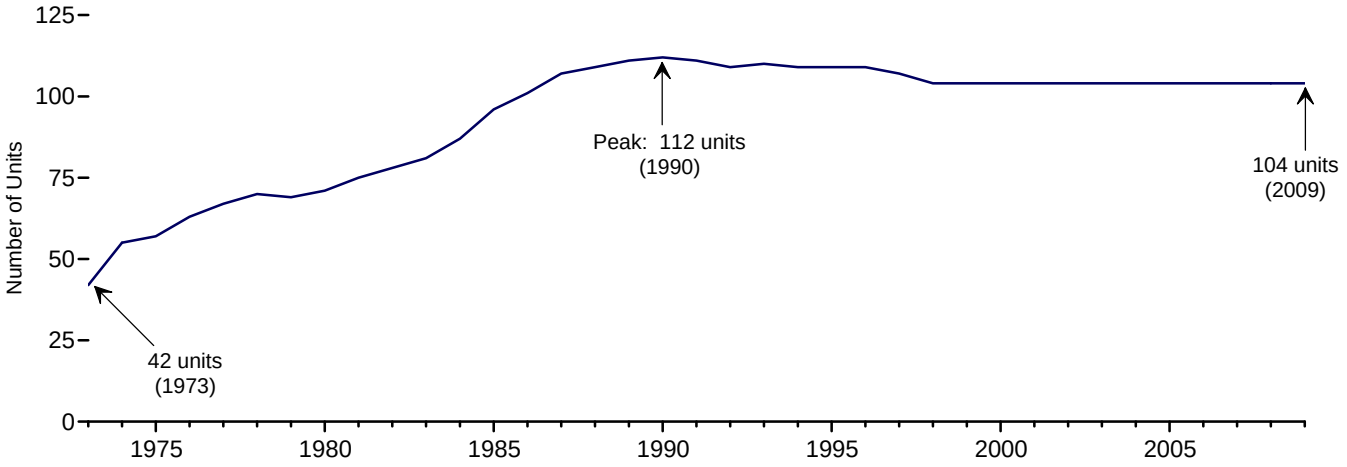
8 Nuclear Energy



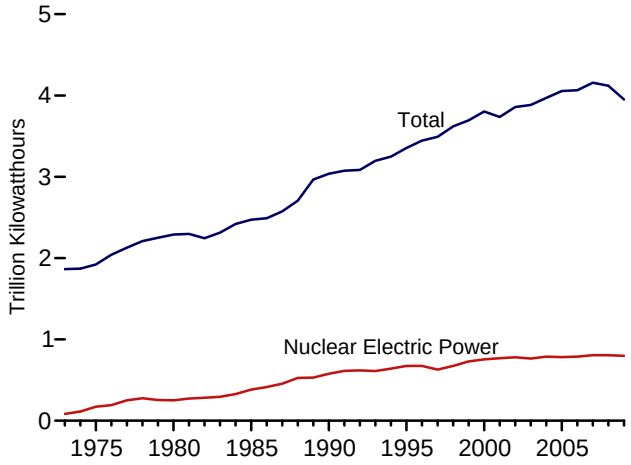
Site of Shippingport atomic power station, the first commercial nuclear power plant in the United States (rectangular reactor building and foreground); background, Beaver Valley 1 and 2 nuclear power plants and Bruce Mansfield coal-fired power plant (southwestern Pennsylvania). Source: U.S. Department of Energy.

Figure 8.1 Nuclear Energy Overview

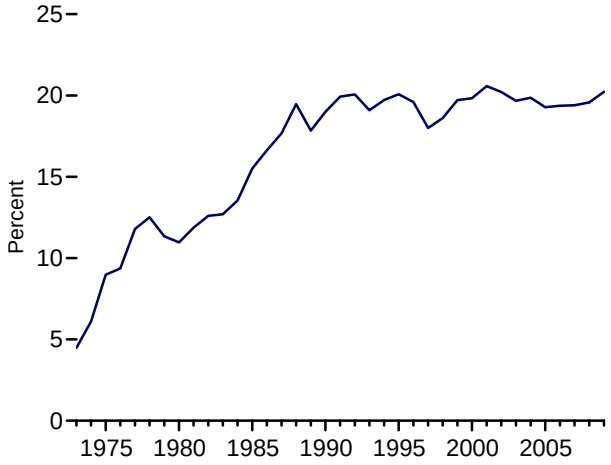
Operable Units, End of Year, 1973-2009



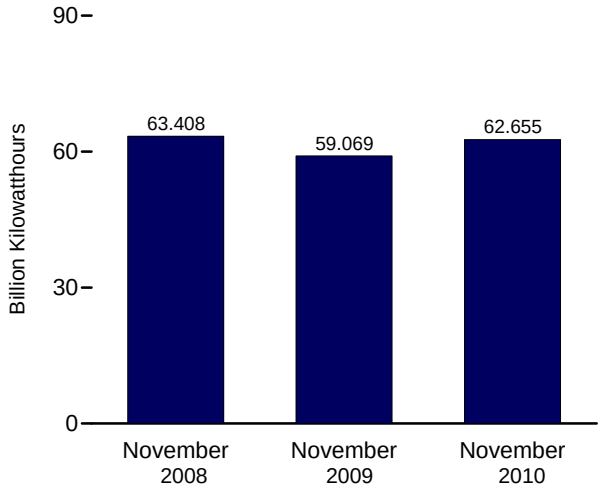
Electricity Net Generation, 1973-2009



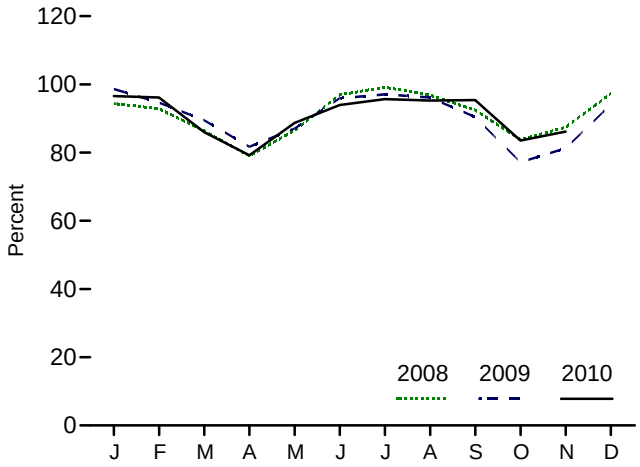
Nuclear Share of Electricity Net Generation, 1973-2009



Nuclear Electricity Net Generation



Capacity Factor, Monthly



Web Page: http://www.eia.gov/mer/nuclear.html.
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 January	104	100.755	70,735	19.5	94.4
February	104	100.755	65,130	20.0	92.9
March	104	100.755	64,716	19.9	86.3
April	104	100.755	57,333	18.7	79.0
May	104	100.755	64,826	19.9	86.5
June	104	100.755	70,319	18.8	96.9
July	104	100.755	74,318	18.4	99.1
August	104	100.755	72,617	18.7	96.9
September	104	100.755	67,054	19.8	92.4
October	104	100.755	62,820	19.7	83.8
November	104	100.755	63,408	20.5	87.4
December	104	100.755	72,931	21.2	97.3
Total	**104**	**100.755**	**806,208**	**19.6**	**91.1**
2009 January	104	101.004	74,102	20.9	98.6
February	104	101.004	64,227	21.3	94.6
March	104	101.004	67,241	21.7	89.5
April	104	101.004	59,408	20.5	81.7
May	104	101.004	65,395	21.0	87.0
June	104	101.004	69,735	20.1	95.9
July	104	101.004	72,949	19.6	97.1
August	104	101.004	72,245	19.0	96.1
September	104	101.004	65,752	20.1	90.4
October	104	101.004	58,021	18.9	77.2
November	104	101.004	59,069	19.9	81.2
December	104	101.004	70,710	20.2	94.1
Total	**104**	**101.004**	**798,855**	**20.2**	**90.3**
2010 January	104	101.004	72,569	20.1	96.6
February	104	101.004	65,245	20.5	96.1
March	104	101.004	64,635	20.7	86.0
April	104	101.004	57,611	20.1	79.2
May	104	101.004	66,658	20.3	88.7
June	104	101.004	68,301	18.2	93.9
July	104	101.004	71,913	17.5	95.7
August	104	101.004	71,574	17.5	95.2
September	104	101.004	69,371	20.1	95.4
October	104	101.004	62,751	20.4	83.5
November	104	101.004	62,655	20.5	86.2
11-Month Total	**104**	**101.004**	**733,285**	**19.5**	**90.6**
2009 11-Month Total	**104**	**101.004**	**728,144**	**20.2**	**89.9**
2008 11-Month Total	**104**	**100.755**	**733,277**	**19.4**	**90.5**

[a] Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at end of period. See Note 1, "Operable Nuclear Reactors," at end of section. For additional information on nuclear generating units, see *Annual Energy Review 2009*, August 2010, Table 9.1, http://www.eia.gov/aer/nuclear.html.

[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.

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/mer/nuclear.html 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," and monthly updates as appropriate. For a list of currently operable units, see http://www.eia.gov/cneaf/nuclear/page/nuc_reactors/operational.xls.

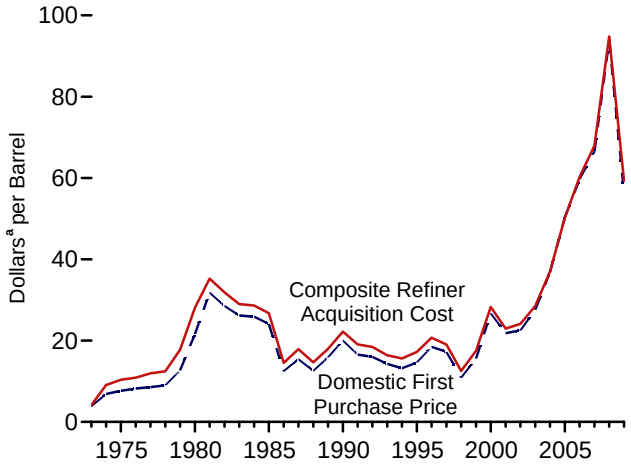
Nuclear Electricity Net Generation and **Nuclear Share of Electricity Net Generation**
See Table 7.2a.

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

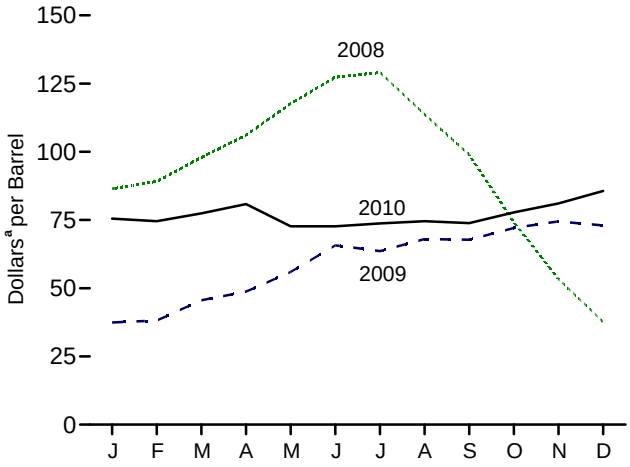
9 Energy Prices

Figure 9.1 Petroleum Prices

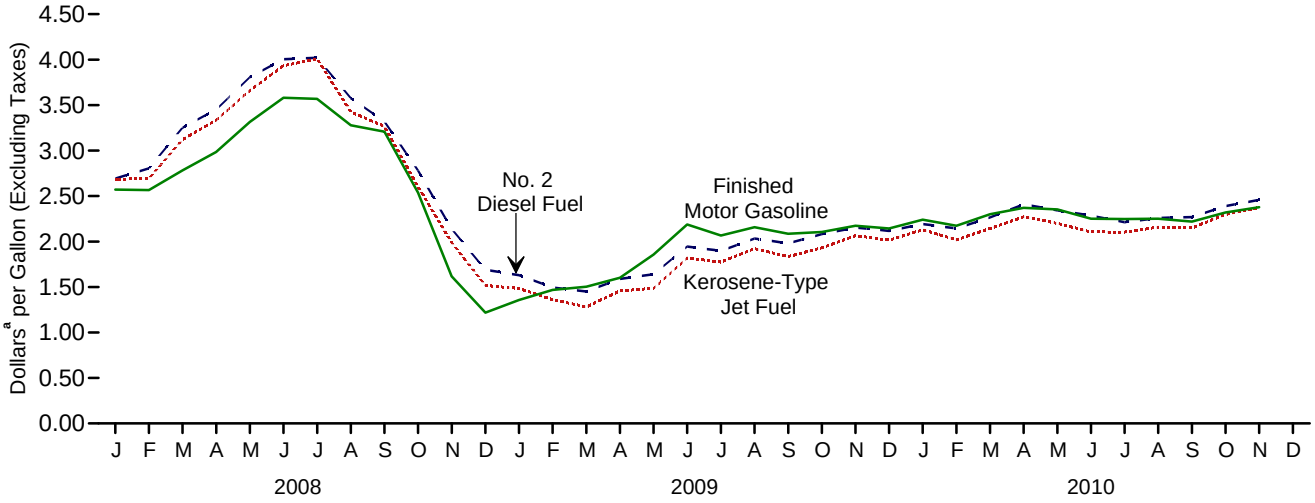
Crude Oil Prices, 1973-2009



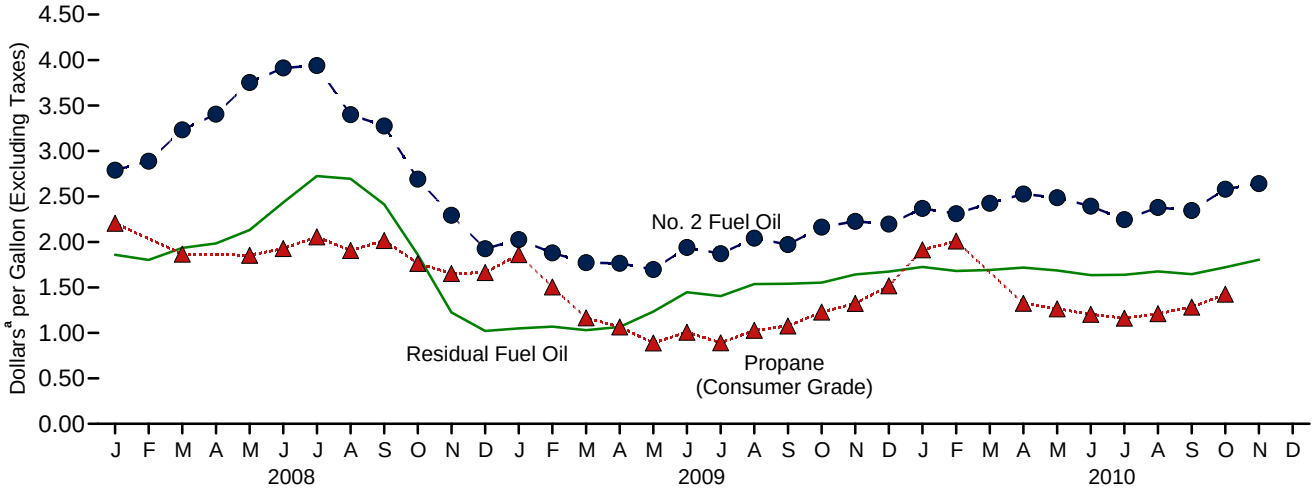
Composite Refiner Acquisition Cost, Monthly



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.

Sources: Tables 9.1, 9.5, and 9.7.

Web Page: http://www.eia.gov/mer/prices.html.

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 January	87.06	83.49	86.65	89.57	84.82	86.48
February	89.41	87.84	90.71	92.23	87.41	89.09
March	98.44	96.32	99.94	99.87	96.96	97.96
April	106.64	104.04	108.40	108.54	104.72	106.09
May	118.55	115.02	119.40	119.75	116.55	117.64
June	127.47	123.34	125.65	129.45	126.22	127.32
July	128.08	122.12	124.20	131.47	127.77	129.03
August	112.83	108.10	109.64	118.42	111.19	113.74
September	98.50	90.85	91.83	103.73	96.38	98.91
October	73.18	63.09	65.40	81.03	70.84	74.22
November	53.67	44.95	46.96	61.65	49.10	53.33
December	36.80	34.23	36.86	41.42	35.59	37.67
Average	**94.04**	**90.32**	**93.33**	**98.47**	**92.77**	**94.74**
2009 January	35.00	36.87	38.74	38.67	36.84	37.45
February	34.14	38.08	40.27	37.51	38.56	38.15
March	42.45	44.34	46.74	44.92	45.96	45.57
April	45.19	47.67	51.43	47.52	49.58	48.78
May	52.67	55.61	58.27	54.58	56.77	55.96
June	63.09	64.82	65.89	64.65	66.37	65.72
July	60.44	62.32	64.78	63.79	63.46	63.58
August	65.28	67.47	68.53	67.81	68.09	67.99
September	65.28	65.41	68.50	67.87	67.65	67.74
October	69.82	70.45	72.58	72.09	72.06	72.08
November	71.99	73.16	74.41	74.60	74.40	74.48
December	70.42	71.24	73.50	73.35	72.67	72.95
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	[R] 71.72	[R] 74.25	74.87	73.20	73.85
October	76.02	[R] 75.50	[R] 76.88	78.88	77.02	77.77
November	[R] 79.20	[R] 79.09	[R] 80.26	[R] 82.05	[R] 80.40	[R] 81.05
December	NA	NA	NA	[E] 86.47	[E] 84.85	[E] 85.65

[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/mer/prices.html 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 January	88.77	80.54	80.10	93.59	88.52	–	80.49	83.79	85.51	80.72
February	93.84	83.63	80.49	98.72	W	W	84.10	94.00	91.87	83.21
March	101.34	99.67	87.46	107.04	W	–	89.63	101.72	99.90	92.25
April	110.80	106.06	94.08	114.87	W	–	96.71	113.04	108.19	98.89
May	119.61	117.49	103.53	127.35	123.98	–	107.89	121.13	118.23	111.30
June	130.72	125.58	116.15	140.01	125.58	W	119.15	124.37	126.30	120.14
July	127.19	122.27	123.19	134.58	110.61	W	123.18	110.34	121.93	122.37
August	107.58	108.36	108.45	117.21	107.54	W	110.20	105.06	108.99	107.17
September	92.42	95.87	92.26	95.68	70.86	W	92.76	75.41	89.61	92.24
October	62.08	61.83	63.74	67.28	66.18	W	60.35	61.78	62.77	63.42
November	48.16	42.14	42.37	51.45	47.97	–	42.22	45.14	45.61	44.30
December	W	W	32.86	44.02	W	–	32.98	35.69	35.79	32.90
Average	**95.66**	**91.17**	**84.61**	**102.06**	**93.03**	**96.33**	**88.06**	**91.44**	**93.15**	**87.15**
2009 January	39.50	26.24	36.96	46.26	W	W	36.68	35.24	37.61	36.15
February	40.60	32.55	37.59	45.02	W	–	38.03	36.38	39.71	36.81
March	44.56	46.69	40.94	50.34	48.31	W	41.78	47.66	45.75	42.96
April	50.59	W	46.71	54.00	W	–	45.98	51.05	48.82	46.87
May	55.23	54.17	55.49	59.02	W	–	54.91	58.05	56.30	55.12
June	66.96	62.94	63.83	69.00	W	–	63.16	64.26	65.37	64.34
July	63.34	58.58	60.42	69.73	W	–	60.16	63.42	63.25	61.39
August	72.25	64.41	67.20	72.37	66.37	W	65.42	66.14	67.65	67.31
September	67.49	63.68	64.51	69.65	W	–	64.18	67.25	65.91	65.04
October	71.19	69.59	68.71	76.01	W	W	66.95	73.45	70.54	70.38
November	76.89	70.96	72.71	77.58	W	W	69.43	72.99	73.60	72.81
December	74.56	66.72	69.75	76.06	W	–	68.32	72.85	72.48	70.01
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	R 74.06	–	67.59	73.34	R 73.24	R 70.24
October	W	76.06	R 73.93	R 84.59	W	–	R 72.10	R 78.29	R 77.55	R 73.72
November	W	79.24	77.26	86.51	W	–	75.06	81.07	80.20	78.26

[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: • 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/mer/prices.html 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 January	93.21	77.83	85.22	81.28	97.03	92.42	W	83.23	89.70	89.66	82.10
February	97.79	81.40	85.20	81.33	101.23	97.64	W	86.34	96.04	94.71	85.13
March	106.19	93.34	102.88	88.49	109.73	108.26	W	93.01	105.39	103.78	94.65
April	117.34	103.08	105.95	95.27	117.83	118.54	W	100.13	115.56	112.11	103.30
May	127.06	111.83	118.43	104.42	130.89	126.38	128.95	111.77	124.49	122.98	114.83
June	133.68	119.41	127.35	117.29	142.66	125.38	W	122.29	125.28	128.10	122.57
July	128.58	122.83	126.22	124.28	137.22	116.22	W	124.91	116.43	124.20	124.20
August	110.00	110.63	113.17	109.61	123.02	104.42	104.13	111.78	103.92	109.56	109.74
September	94.05	96.38	97.72	93.59	98.82	77.92	88.13	95.67	78.65	89.55	94.43
October	62.74	69.52	62.09	65.65	72.38	62.89	69.17	62.47	60.47	64.33	66.68
November	49.22	49.00	44.28	43.05	55.13	47.77	60.68	44.08	46.29	47.34	46.52
December	40.13	33.39	35.28	33.94	47.15	38.28	–	34.95	37.86	38.36	35.17
Average	**98.18**	**90.00**	**93.43**	**85.97**	**104.83**	**94.75**	**96.95**	**90.76**	**93.59**	**95.49**	**90.59**
2009 January	43.58	34.17	32.08	38.08	48.98	39.78	W	39.12	39.41	40.26	36.96
February	42.83	35.83	34.49	38.16	47.00	44.46	W	39.58	43.17	42.75	38.08
March	47.58	44.22	46.70	41.76	53.02	52.14	47.76	43.87	50.54	48.55	45.09
April	53.45	47.60	46.43	47.26	59.03	57.32	52.41	48.40	57.10	54.22	48.78
May	56.44	54.42	54.90	56.22	63.48	62.40	60.43	56.78	62.11	60.06	56.79
June	68.46	63.97	65.65	64.39	69.29	66.27	68.54	64.52	66.28	66.63	65.19
July	67.21	62.18	63.24	60.99	71.46	66.14	W	62.11	66.20	66.27	63.23
August	72.52	64.23	66.71	67.71	73.94	69.37	73.66	67.23	69.23	70.00	66.96
September	72.63	66.59	66.27	65.00	71.98	72.77	W	65.85	72.05	70.02	66.84
October	74.94	70.28	71.24	69.40	77.72	74.20	W	68.85	74.18	73.71	71.46
November	78.25	71.95	72.70	73.29	79.00	73.92	W	71.41	73.99	75.18	73.67
December	77.11	70.01	70.18	70.20	78.63	73.08	78.33	70.46	74.54	75.01	71.88
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	R 80.49	R 68.66	70.85	70.47	81.58	R 77.15	W	68.88	R 76.64	R 76.39	R 71.89
October	R 85.33	R 68.96	76.72	R 74.73	R 86.03	R 80.17	W	R 74.29	R 79.64	R 79.86	R 74.16
November	85.72	74.76	80.42	77.66	88.77	82.63	W	77.62	81.93	82.63	78.49

[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/mer/prices.html 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:** EIA, *Petroleum Marketing Monthly,* February 2011, 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 January	NA	3.047	3.291	3.096
February	NA	3.033	3.272	3.083
March	NA	3.258	3.502	3.307
April	NA	3.441	3.690	3.491
May	NA	3.764	4.003	3.813
June	NA	4.065	4.319	4.115
July	NA	4.090	4.350	4.142
August	NA	3.786	4.045	3.838
September	NA	3.698	3.940	3.749
October	NA	3.173	3.432	3.225
November	NA	2.151	2.433	2.208
December	NA	1.689	1.951	1.742
Average	**NA**	**3.266**	**3.519**	**3.317**
2009 January	NA	1.787	2.036	1.838
February	NA	1.928	2.182	1.979
March	NA	1.949	2.197	2.000
April	NA	2.056	2.309	2.107
May	NA	2.265	2.511	2.314
June	NA	2.631	2.883	2.681
July	NA	2.543	2.806	2.594
August	NA	2.627	2.887	2.677
September	NA	2.574	2.845	2.626
October	NA	2.561	2.826	2.613
November	NA	2.660	2.917	2.709
December	NA	2.621	2.882	2.671
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

[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/mer/prices.html for all available data beginning in 1973.

Sources: • **Monthly Data:** U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Prices: Energy.* • **Annual Data: 1973**—*Platt's Oil Price Handbook and Oilmanac,* 1974, 51st Edition. **1974 forward**—calculated by the 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 January	1.997	2.039	1.662	1.783	1.764	1.859
February	1.870	2.004	1.625	1.720	1.714	1.802
March	1.956	2.048	1.717	1.881	1.769	1.934
April	2.139	2.221	1.822	1.904	1.880	1.983
May	2.322	2.349	1.989	2.069	2.042	2.132
June	2.578	2.658	2.181	2.333	2.274	2.434
July	2.833	2.945	2.542	2.657	2.636	2.724
August	2.546	3.005	2.445	2.554	2.486	2.694
September	2.175	2.666	2.180	2.300	2.179	2.412
October	1.574	2.166	1.603	1.759	1.592	1.859
November	1.036	1.654	0.971	1.055	1.004	1.225
December	1.010	1.211	0.784	0.877	0.876	1.021
Average	**1.918**	**2.144**	**1.843**	**1.889**	**1.866**	**1.964**
2009 January	1.035	1.164	0.861	0.953	0.926	1.049
February	1.011	1.200	0.918	0.974	0.954	1.068
March	1.019	1.183	0.917	0.952	0.952	1.030
April	1.077	1.174	0.992	1.027	1.017	1.066
May	1.205	1.213	1.191	1.245	1.195	1.234
June	1.401	1.440	1.373	1.451	1.381	1.447
July	1.417	1.488	1.400	1.369	1.405	1.404
August	1.584	1.641	1.567	1.488	1.572	1.536
September	1.531	1.689	1.556	1.491	1.549	1.540
October	1.619	1.717	1.549	1.501	1.560	1.552
November	1.743	1.739	1.700	1.602	1.711	1.642
December	1.723	1.813	1.673	1.614	1.685	1.674
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	1.744	1.701	1.771	1.804

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

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/emeu/mer/prices.html for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 16. • **2010:** EIA, *Petroleum Marketing Monthly,* February 2011, 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 January	2.395	2.969	2.665	2.832	2.564	2.580	1.519
February	2.436	3.007	2.674	2.842	2.607	2.738	1.469
March	2.640	3.263	3.106	3.281	2.977	3.158	1.495
April	2.861	3.468	3.315	3.543	3.195	3.356	1.571
May	3.172	3.751	3.642	3.767	3.536	3.712	1.675
June	3.416	4.018	3.912	3.973	3.761	3.859	1.761
July	3.347	3.946	3.978	3.980	3.802	3.876	1.833
August	3.078	3.737	3.393	3.456	3.287	3.338	1.667
September	3.000	3.705	3.278	3.365	3.003	3.160	1.565
October	2.149	2.790	2.569	2.681	2.400	2.514	1.242
November	1.393	2.140	1.974	2.288	1.947	1.955	1.005
December	1.061	1.799	1.470	1.715	1.579	1.469	0.916
Average	**2.586**	**3.342**	**3.020**	**2.851**	**2.745**	**2.994**	**1.437**
2009 January	1.246	1.851	1.472	1.810	1.548	1.480	0.974
February	1.333	2.040	1.352	1.607	1.427	1.326	0.890
March	1.397	2.031	1.266	1.456	1.358	1.315	0.805
April	1.482	2.225	1.425	1.480	1.397	1.456	0.719
May	1.763	2.478	1.460	1.540	1.468	1.531	0.728
June	2.022	2.743	1.780	1.849	1.744	1.828	0.838
July	1.867	2.548	1.759	1.773	1.658	1.745	0.760
August	2.026	2.759	1.894	1.951	1.804	1.937	0.837
September	1.915	2.592	1.822	1.857	1.774	1.848	0.923
October	1.975	2.611	1.917	2.053	1.918	1.978	1.004
November	2.039	2.701	2.060	2.067	2.004	2.037	1.088
December	1.999	2.655	2.012	2.148	1.989	1.997	1.178
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	2.242	2.868	2.343	2.377	2.308	2.392	1.277

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

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

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/mer/prices.html for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 4. • **2010:** EIA, *Petroleum Marketing Monthly,* February 2011, 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 January	2.571	2.987	2.685	3.381	2.790	2.692	2.206
February	2.566	2.954	2.693	3.404	2.888	2.805	NA
March	2.783	3.296	3.120	3.592	3.232	3.252	1.865
April	2.984	3.358	3.334	3.774	3.405	3.451	NA
May	3.316	3.615	3.661	3.950	3.753	3.808	1.853
June	3.580	3.965	3.933	4.159	3.914	4.004	1.928
July	3.568	3.929	4.008	4.393	3.939	4.021	2.055
August	3.279	3.792	3.425	4.055	3.399	3.576	1.906
September	3.207	3.837	3.266	4.013	3.275	3.320	2.015
October	2.537	2.975	2.603	2.993	2.690	2.781	1.763
November	1.617	2.230	1.988	3.085	2.293	2.139	1.652
December	1.219	1.814	1.518	2.823	1.926	1.690	1.664
Average	**2.775**	**3.273**	**3.052**	**3.283**	**2.986**	**3.150**	**1.892**
2009 January	1.358	1.857	1.483	2.626	2.026	1.630	1.861
February	1.468	1.974	1.360	2.627	1.879	1.495	1.505
March	1.503	1.977	1.281	2.565	1.772	1.450	1.166
April	1.601	2.150	1.458	2.540	1.765	1.589	1.065
May	1.856	2.423	1.486	2.497	1.697	1.640	0.889
June	2.187	2.707	1.818	2.490	1.939	1.945	1.008
July	2.067	2.607	1.774	2.462	1.871	1.897	0.891
August	2.157	2.764	1.922	2.545	2.041	2.032	1.029
September	2.086	2.684	1.834	NA	1.972	1.980	1.075
October	2.104	2.693	1.930	2.738	2.163	2.082	1.229
November	2.173	2.845	2.064	2.875	2.227	2.155	1.323
December	2.144	2.799	2.016	2.894	2.197	2.117	1.517
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	2.458	NA

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

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/mer/prices.html for all available data beginning in 1978.

Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 2. • **2010:** EIA, *Petroleum Marketing Monthly,* February 2011, Table 2.

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

(Dollars[a] per Gallon, Excluding Taxes)

	Maine	New Hampshire	Vermont	Massachusetts	Rhode Island	Connecticut	New York	New Jersey	Pennsylvania
1978 Average	**0.486**	**0.503**	**0.508**	**0.488**	**0.507**	**0.501**	**0.501**	**0.496**	**0.488**
1980 Average	**0.963**	**1.004**	**1.015**	**0.978**	**1.011**	**0.983**	**0.982**	**0.979**	**0.964**
1985 Average	**0.997**	**1.024**	**1.077**	**1.070**	**1.067**	**1.080**	**1.113**	**1.059**	**1.023**
1990 Average	**0.989**	**1.028**	**1.070**	**1.084**	**1.086**	**1.098**	**1.125**	**1.087**	**1.026**
1995 Average	**0.787**	**0.779**	**0.853**	**0.844**	**0.874**	**0.864**	**0.955**	**0.888**	**0.826**
1996 Average	**0.972**	**0.940**	**0.969**	**0.976**	**0.986**	**0.986**	**1.063**	**1.024**	**0.953**
1997 Average	**0.942**	**0.942**	**0.987**	**0.960**	**0.989**	**0.963**	**1.065**	**1.033**	**0.950**
1998 Average	**0.788**	**0.788**	**0.873**	**0.818**	**0.868**	**0.831**	**0.948**	**0.892**	**0.814**
1999 Average	**0.813**	**0.770**	**0.854**	**0.836**	**0.858**	**0.852**	**0.969**	**0.913**	**0.815**
2000 Average	**1.297**	**1.281**	**1.255**	**1.273**	**1.259**	**1.291**	**1.442**	**1.404**	**1.224**
2001 Average	**1.217**	**1.256**	**1.261**	**1.221**	**1.236**	**1.239**	**1.363**	**1.314**	**1.159**
2002 Average	**1.129**	**1.119**	**1.172**	**1.141**	**1.124**	**1.118**	**1.218**	**1.220**	**1.064**
2003 Average	**1.314**	**1.312**	**1.309**	**1.386**	**1.344**	**1.355**	**1.436**	**1.489**	**1.304**
2004 Average	**1.511**	**1.497**	**1.505**	**1.559**	**1.511**	**1.518**	**1.627**	**1.662**	**1.489**
2005 Average	**1.986**	**1.972**	**1.987**	**2.064**	**2.000**	**2.012**	**2.105**	**2.166**	**1.974**
2006 Average	**2.294**	**2.283**	**2.408**	**2.355**	**2.360**	**2.357**	**2.458**	**2.467**	**2.286**
2007 Average	**2.540**	**2.535**	**2.679**	**2.576**	**2.602**	**2.615**	**2.674**	**2.664**	**2.508**
2008 January	3.046	3.051	3.095	3.136	3.173	3.091	3.218	3.325	3.057
February	3.050	3.050	3.105	3.193	3.202	3.123	3.258	3.351	3.097
March	3.309	3.311	3.371	3.525	3.495	3.362	3.521	3.690	3.403
April	3.490	3.474	3.575	3.701	3.662	3.494	3.649	3.855	3.553
May	3.763	3.843	3.913	3.977	3.927	3.806	3.934	4.135	3.851
June	4.197	4.257	4.252	4.293	4.176	4.113	4.164	4.472	4.164
July	4.290	4.427	4.484	4.359	4.287	4.194	4.289	4.554	4.326
August	3.957	4.048	4.176	3.892	3.842	NA	3.889	4.023	NA
September	3.757	3.768	3.939	3.628	3.575	3.681	3.718	3.761	3.573
October	3.228	3.318	3.502	3.067	3.000	3.199	3.295	3.198	3.103
November	2.795	2.857	3.137	2.646	2.735	2.886	2.962	2.727	2.757
December	2.513	2.559	2.802	2.339	2.408	2.613	2.589	2.381	2.449
Average	**3.199**	**3.207**	**3.323**	**3.197**	**3.210**	**3.195**	**3.293**	**3.267**	**3.157**
2009 January	2.506	2.537	2.774	2.356	2.346	2.576	2.543	2.389	2.427
February	2.404	2.426	2.693	2.226	2.209	2.429	2.447	2.288	2.268
March	2.237	2.283	2.545	2.166	2.127	2.362	2.334	2.166	2.202
April	2.250	2.246	2.437	2.192	2.143	2.314	2.338	2.187	2.177
May	2.175	2.151	2.370	2.142	2.169	2.225	2.300	2.187	2.190
June	2.295	2.201	2.376	2.371	2.385	2.413	2.428	2.381	2.211
July	2.268	2.077	2.324	2.312	2.285	2.354	2.291	2.322	2.137
August	2.350	2.243	2.378	2.432	2.454	2.490	2.523	2.454	2.257
September	2.333	2.272	2.403	2.386	2.357	2.349	2.455	2.437	2.196
October	2.391	2.373	2.484	2.470	2.537	2.516	2.574	2.541	2.315
November	2.461	2.484	2.604	2.619	2.685	2.645	2.747	2.710	2.520
December	2.486	2.523	2.640	2.634	2.718	2.665	2.733	2.731	2.536
Average	**2.382**	**2.377**	**2.593**	**2.358**	**2.376**	**2.487**	**2.504**	**2.404**	**2.330**
2010 January	2.583	2.611	2.753	2.762	2.856	2.764	2.893	2.928	2.692
February	2.536	2.600	2.705	2.729	2.777	2.730	2.845	2.871	2.697
March	2.560	2.632	2.747	2.795	2.800	2.758	2.801	2.929	2.755
April	2.565	2.651	2.771	2.868	2.959	2.815	2.845	2.946	2.752
May	2.511	2.636	2.710	2.811	2.921	2.736	2.781	2.873	2.680
June	2.479	2.574	2.649	2.716	2.829	2.705	2.691	2.747	2.561
July	2.478	2.532	2.614	2.656	2.728	2.653	2.651	2.715	2.519
August	2.469	2.513	2.619	2.651	2.735	2.634	2.668	2.701	2.543
September	2.539	2.543	2.657	2.686	2.745	2.647	2.721	2.754	2.583
October	2.677	R 2.642	2.784	R 2.860	R 2.942	R 2.822	R 2.848	R 2.912	R 2.759
November	2.779	2.808	2.923	2.969	3.044	2.938	2.969	3.071	2.896

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

R=Revised. NA=Not available.

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

Web Page: See http://www.eia.gov/mer/prices.html for all available data beginning in 1978.

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

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

	Delaware	District of Columbia	Maryland	Virginia	West Virginia	Ohio	Michigan	Indiana	Illinois	Wisconsin	Minnesota
1978 Average	**0.478**	**0.507**	**0.492**	**0.491**	**0.462**	**0.474**	**0.479**	**0.485**	**0.465**	**0.447**	**0.478**
1980 Average	**0.954**	**1.026**	**0.979**	**0.985**	**0.922**	**0.919**	**0.978**	**0.996**	**0.958**	**0.915**	**0.999**
1985 Average	**1.046**	**1.143**	**1.088**	**1.063**	**0.980**	**0.997**	**1.021**	**0.991**	**0.975**	**0.983**	**1.019**
1990 Average	**1.058**	**1.078**	**1.119**	**1.106**	**0.991**	**0.981**	**1.009**	**0.993**	**0.961**	**0.942**	**1.014**
1995 Average	**0.870**	**1.010**	**0.936**	**0.844**	**0.815**	**0.808**	**0.860**	**0.816**	**0.785**	**0.812**	**0.801**
1996 Average	**0.984**	**1.178**	**1.063**	**0.952**	**0.960**	**0.921**	**0.977**	**0.912**	**0.893**	**0.899**	**0.909**
1997 Average	**0.984**	**1.174**	**1.057**	**0.948**	**0.962**	**0.913**	**0.942**	**0.865**	**0.870**	**0.933**	**0.899**
1998 Average	**0.858**	**1.022**	**0.902**	**0.856**	**0.818**	**0.767**	**0.804**	**0.748**	**0.735**	**0.801**	**0.738**
1999 Average	**0.884**	**1.011**	**0.907**	**0.870**	**0.789**	**0.820**	**0.883**	**0.793**	**0.716**	**0.847**	**0.774**
2000 Average	**1.270**	**W**	**1.351**	**1.269**	**1.251**	**1.220**	**NA**	**1.207**	**1.095**	**1.171**	**1.156**
2001 Average	**1.234**	**1.431**	**1.342**	**1.202**	**1.139**	**1.160**	**NA**	**1.133**	**1.121**	**1.180**	**1.122**
2002 Average	**1.164**	**W**	**1.201**	**1.057**	**1.054**	**1.058**	**1.109**	**1.025**	**0.975**	**1.073**	**1.051**
2003 Average	**1.433**	**W**	**1.455**	**1.311**	**1.304**	**1.284**	**1.321**	**1.202**	**1.198**	**1.269**	**1.218**
2004 Average	**1.570**	**W**	**1.632**	**1.462**	**1.493**	**1.475**	**1.539**	**1.537**	**1.405**	**1.465**	**1.433**
2005 Average	**2.075**	**W**	**2.127**	**2.044**	**2.043**	**2.009**	**2.053**	**2.017**	**2.021**	**1.993**	**1.987**
2006 Average	**2.381**	**W**	**2.398**	**2.268**	**2.261**	**2.244**	**2.329**	**2.317**	**2.312**	**2.297**	**2.268**
2007 Average	**2.584**	**W**	**2.668**	**2.407**	**2.478**	**2.494**	**2.588**	**2.557**	**2.528**	**2.571**	**2.587**
2008 January	3.228	W	3.264	3.064	3.115	3.046	3.046	3.063	3.005	3.039	2.971
February	3.260	W	3.311	3.148	3.163	3.184	3.169	3.123	3.100	3.114	3.111
March	3.548	W	3.545	3.406	3.479	3.548	3.591	3.453	3.574	3.512	3.528
April	3.626	W	3.672	3.528	3.639	3.726	3.702	3.643	3.685	3.657	3.713
May	3.903	W	4.029	3.848	3.916	4.076	4.000	4.091	4.050	3.956	3.997
June	4.231	W	4.246	4.126	4.252	4.175	4.214	4.274	NA	NA	4.171
July	4.345	W	4.414	4.123	4.306	4.147	4.178	4.264	4.011	3.993	4.163
August	3.898	W	4.087	3.764	3.863	3.794	3.738	3.797	NA	3.666	3.794
September	3.624	W	3.828	3.558	3.566	3.670	3.652	3.688	3.600	3.601	3.658
October	3.148	W	3.297	3.158	3.162	3.019	3.079	3.098	3.039	3.086	3.098
November	2.677	W	2.894	2.668	2.688	2.509	2.485	2.526	2.514	2.520	2.582
December	2.441	W	2.550	2.350	2.333	2.081	2.079	2.118	2.129	2.111	2.072
Average	**3.187**	**W**	**3.273**	**3.124**	**3.221**	**3.147**	**3.067**	**3.105**	**3.152**	**3.088**	**3.065**
2009 January	2.428	W	2.470	2.225	2.329	2.041	1.991	2.062	2.069	2.004	1.974
February	2.310	W	2.407	2.145	2.188	1.888	1.866	1.912	1.869	1.854	1.813
March	2.253	W	2.275	1.999	2.042	1.826	1.806	1.822	1.836	1.781	1.735
April	2.267	W	2.263	NA	2.035	1.917	1.810	1.922	1.983	1.870	1.890
May	2.253	W	2.224	1.824	2.008	1.941	1.807	1.972	NA	1.975	1.872
June	2.289	W	2.320	2.037	2.119	2.180	2.095	2.176	2.060	2.200	2.156
July	2.253	W	2.307	2.055	2.122	2.103	1.964	2.181	NA	2.166	2.092
August	2.340	W	2.397	2.140	2.217	2.279	2.153	2.321	2.147	2.284	2.297
September	2.309	W	2.396	2.118	2.253	2.205	2.179	2.318	NA	2.262	2.232
October	2.505	W	2.561	2.322	2.397	2.364	2.336	2.391	2.386	2.331	2.301
November	2.683	W	2.707	2.408	2.504	2.479	2.485	2.520	2.483	2.421	2.388
December	2.724	W	2.763	2.495	2.496	2.493	2.447	2.507	2.427	2.395	2.394
Average	**2.421**	**W**	**2.473**	**2.193**	**2.265**	**2.130**	**2.096**	**2.189**	**2.155**	**2.105**	**2.124**
2010 January	2.878	W	2.861	2.594	2.681	2.572	2.526	2.565	2.526	2.466	2.505
February	2.857	W	2.833	2.561	2.714	2.533	2.501	2.510	2.516	2.421	W
March	2.988	W	2.894	2.587	2.712	2.585	2.640	2.614	2.660	2.537	2.580
April	NA	W	2.858	NA	2.676	2.566	2.731	2.679	2.777	2.640	2.668
May	2.853	W	2.808	2.435	2.583	2.574	2.669	NA	2.783	2.567	2.581
June	2.695	W	2.705	2.356	2.501	2.436	2.505	2.482	NA	2.478	2.557
July	2.655	W	2.636	2.345	2.499	2.436	2.481	2.510	2.582	2.508	2.466
August	2.617	W	2.669	2.351	2.547	2.511	2.508	2.550	W	2.514	2.559
September	2.678	W	2.692	2.397	2.577	2.554	2.596	2.607	2.732	2.562	2.596
October	2.847	W	[R] 2.822	[R] 2.567	[R] 2.720	2.695	[R] 2.734	[R] 2.701	NA	2.702	[R] 2.719
November	NA	W	2.987	2.661	2.831	2.800	2.822	2.864	NA	2.787	2.856

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

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

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

Web Page: See http://www.eia.gov/mer/prices.html for all available data beginning in 1978.

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

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

	Idaho	Washington	Oregon	Alaska	U.S. Average
1978 Average	**0.436**	**0.486**	**0.458**	**0.532**	**0.490**
1980 Average	**0.916**	**1.008**	**0.973**	**0.978**	**0.974**
1985 Average	**0.972**	**1.011**	**0.971**	**1.083**	**1.053**
1990 Average	**0.974**	**1.029**	**0.970**	**1.101**	**1.063**
1995 Average	**0.839**	**0.962**	**0.894**	**0.834**	**0.867**
1996 Average	**0.933**	**1.080**	**0.989**	**0.909**	**0.989**
1997 Average	**0.953**	**1.139**	**1.031**	**0.973**	**0.984**
1998 Average	**0.784**	**0.978**	**0.861**	**0.852**	**0.852**
1999 Average	**0.762**	**1.065**	**0.938**	**0.966**	**0.876**
2000 Average	**1.170**	**1.445**	**1.368**	**1.337**	**1.311**
2001 Average	**1.038**	**1.336**	**1.211**	**1.377**	**1.250**
2002 Average	**0.919**	**1.204**	**1.060**	**1.087**	**1.129**
2003 Average	**1.188**	**1.487**	**1.303**	**1.243**	**1.355**
2004 Average	**1.495**	**1.749**	**1.594**	**1.524**	**1.548**
2005 Average	**2.123**	**2.385**	**2.146**	**2.061**	**2.052**
2006 Average	**2.391**	**2.681**	**2.411**	**2.395**	**2.365**
2007 Average	**2.598**	**2.909**	**2.500**	**2.518**	**2.592**
2008 January	2.960	3.291	2.993	3.013	3.138
February	3.057	3.398	3.115	3.084	3.181
March	3.487	3.823	3.495	3.377	3.475
April	3.755	4.043	3.740	3.658	3.626
May	3.998	4.320	3.991	3.999	3.921
June	4.178	4.545	4.237	4.309	4.204
July	4.216	4.525	4.293	4.465	4.296
August	3.844	4.124	3.836	4.221	3.866
September	3.582	3.824	3.552	3.897	3.667
October	3.127	3.279	3.007	NA	3.169
November	2.450	2.841	2.402	2.622	2.779
December	1.878	2.284	1.902	2.226	2.450
Average	**3.078**	**3.401**	**3.060**	**3.485**	**3.219**
2009 January	1.879	2.388	1.939	2.160	2.426
February	1.762	2.253	1.819	NA	2.309
March	1.674	2.124	1.727	1.946	2.210
April	1.863	2.414	1.986	2.140	2.211
May	1.878	2.473	2.050	2.256	2.167
June	2.148	2.544	2.278	2.506	2.307
July	2.123	2.335	2.149	2.362	2.219
August	2.158	2.489	2.326	2.554	2.369
September	2.273	2.658	2.357	NA	2.334
October	2.333	2.737	2.469	NA	2.458
November	2.459	2.871	2.551	NA	2.608
December	2.354	2.830	2.475	NA	2.628
Average	**2.048**	**2.491**	**2.132**	**2.503**	**2.386**
2010 January	2.392	2.918	2.583	NA	2.763
February	2.412	2.817	2.536	2.790	2.658
March	2.569	2.924	2.664	2.884	2.757
April	2.747	3.105	2.817	2.965	2.787
May	2.675	3.053	2.685	2.958	2.723
June	NA	2.892	2.653	2.891	2.623
July	2.540	NA	NA	2.878	2.584
August	2.598	2.757	2.625	2.901	2.597
September	2.676	NA	2.760	2.944	2.641
October	R 2.853	R 3.174	R 2.871	R 3.041	R 2.795
November	R 2.940	R 3.196	R 2.934	NA	R 2.922
December	NA	NA	NA	NA	E 3.050

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

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

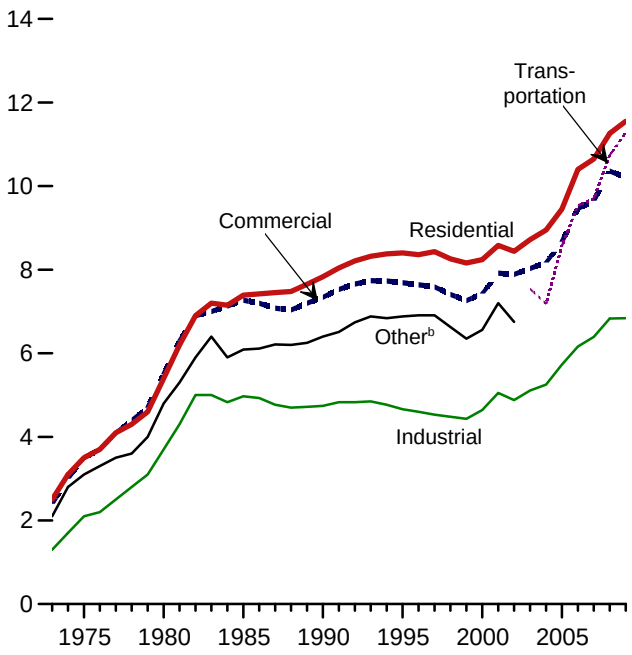
Notes: • States are grouped in Tables 9.8a–9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section.

Web Page: See http://www.eia.gov/mer/prices.html for all available data beginning in 1978.

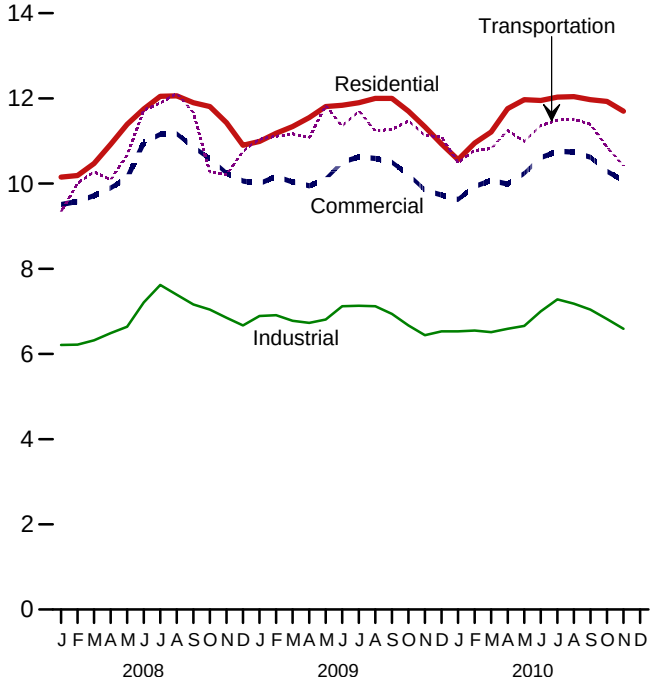
Sources: • **1978-2009:** EIA, *Petroleum Marketing Annual 2009,* Table 15. • **2010:** EIA, *Petroleum Marketing Monthly,* February 2011, Table 15.

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

By Sector, 1973-2009



By Sector, Monthly

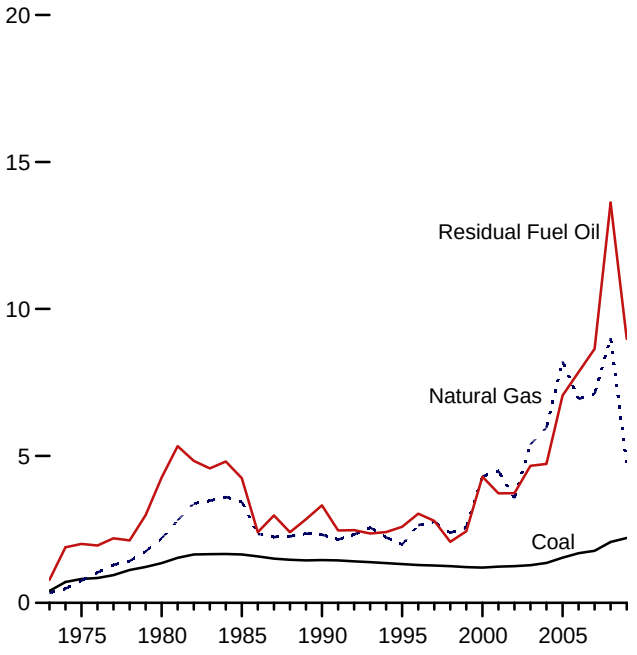


[a] Prices are not adjusted for inflation. See "Nominal Price" in Glossary.
[b] Public street and highway lighting, interdepartmental sales, other sales to public authorities, agricultural and irrigation, and transportation including railroads and railways.

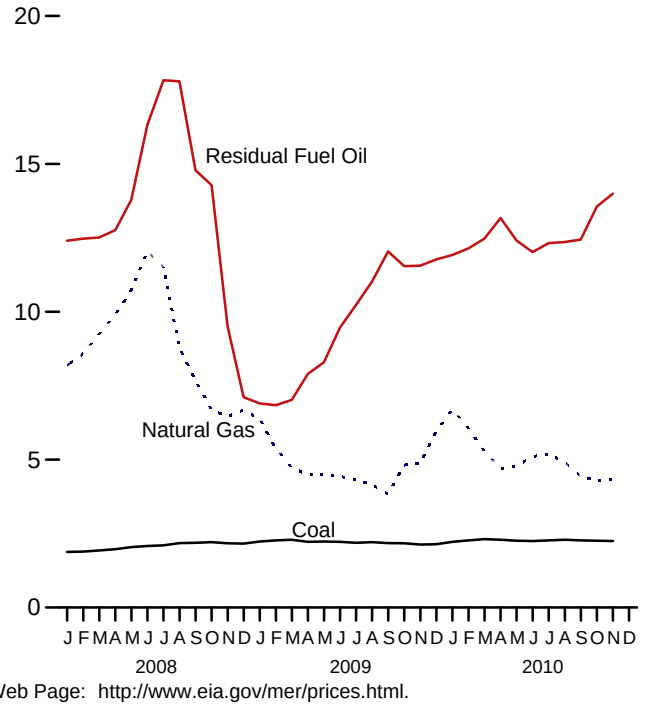
Note: Includes taxes.
Web Page: http://www.eia.gov/mer/prices.html.
Source: Table 9.9.

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

Costs, 1973-2009



Costs, Monthly



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

Web Page: http://www.eia.gov/mer/prices.html.
Source: Table 9.10.

Table 9.9 Average Retail Prices of Electricity

(Cents[a] per Kilowatthour, Including Taxes)

	Residential	Commercial[b]	Industrial[c]	Transportation[d]	Other[e]	Total
1973 Average	**2.5**	**2.4**	**1.3**	**NA**	**2.1**	**2.0**
1975 Average	**3.5**	**3.5**	**2.1**	**NA**	**3.1**	**2.9**
1980 Average	**5.4**	**5.5**	**3.7**	**NA**	**4.8**	**4.7**
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 January	10.15	9.51	6.21	9.34	– –	8.92
February	10.19	9.58	6.22	10.01	– –	8.92
March	10.47	9.72	6.32	10.27	– –	9.03
April	10.92	9.90	6.49	10.09	– –	9.21
May	11.39	10.13	6.64	10.67	– –	9.47
June	11.75	10.97	7.21	11.72	– –	10.26
July	12.05	11.16	7.62	11.89	– –	10.65
August	12.06	11.17	7.39	12.12	– –	10.58
September	11.90	10.86	7.16	11.67	– –	10.26
October	11.81	10.58	7.04	10.27	– –	9.96
November	11.43	10.25	6.85	10.21	– –	9.68
December	10.90	10.06	6.67	10.76	– –	9.57
Average	**11.26**	**10.36**	**6.83**	**10.74**	**– –**	**9.74**
2009 January	R 10.99	R 10.00	R 6.89	R 11.04	– –	R 9.72
February	R 11.18	R 10.17	R 6.91	R 11.11	– –	R 9.80
March	R 11.34	R 10.04	R 6.78	R 11.17	– –	R 9.71
April	R 11.55	R 9.95	R 6.73	R 11.08	– –	R 9.64
May	R 11.81	R 10.11	R 6.81	R 11.83	– –	R 9.83
June	R 11.84	R 10.50	R 7.12	R 11.35	– –	R 10.20
July	R 11.90	R 10.63	R 7.13	R 11.70	– –	R 10.37
August	R 12.00	R 10.59	R 7.12	R 11.24	– –	R 10.36
September	R 12.00	R 10.50	R 6.94	R 11.27	– –	R 10.18
October	R 11.70	R 10.21	R 6.67	R 11.47	– –	R 9.78
November	R 11.33	R 9.85	R 6.44	R 11.13	– –	R 9.43
December	R 10.93	R 9.73	R 6.53	R 11.10	– –	R 9.44
Average	R **11.55**	R **10.21**	R **6.84**	R **11.28**	**– –**	R **9.89**
2010 January	10.56	R 9.63	R 6.53	10.49	– –	R 9.34
February	10.95	R 9.93	R 6.55	10.78	– –	9.52
March	11.21	R 10.08	6.51	10.82	– –	R 9.57
April	11.76	R 9.99	6.59	11.25	– –	R 9.58
May	11.97	R 10.24	R 6.66	10.99	– –	R 9.79
June	11.95	R 10.61	R 7.00	11.36	– –	10.23
July	12.03	R 10.76	R 7.28	11.49	– –	10.50
August	12.04	R 10.74	R 7.18	11.51	– –	R 10.45
September	11.97	R 10.62	R 7.04	11.39	– –	10.24
October	11.93	R 10.29	R 6.82	10.86	– –	R 9.86
November	11.70	10.07	6.59	10.42	– –	9.62
11-Month Average	**11.63**	**10.30**	**6.81**	**11.03**	**– –**	**9.91**
2009 11-Month Average	**11.61**	**10.25**	**6.87**	**11.30**	**– –**	**9.93**
2008 11-Month Average	**11.30**	**10.39**	**6.84**	**10.74**	**– –**	**9.76**

[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/mer/prices.html for all available data beginning in 1973.

Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **October 1977-February 1980:** Federal Energy Regulatory Commission (FERC), Form FPC-5, "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." • **1984-1992:** EIA, Form EIA-861, "Annual Electric Utility Report." • **1993 forward:** EIA, *Electric Power Monthly,* February 2011, Table 5.3.

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

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

	Coal	Petroleum				Natural Gas[e]	All Fossil Fuels[f]
		Residual Fuel Oil[b]	Distillate Fuel Oil[c]	Petroleum Coke	Total[d]		
1973 Average	**0.41**	**0.79**	**NA**	**NA**	**0.80**	**0.34**	**0.48**
1975 Average	**.81**	**2.01**	**NA**	**NA**	**2.02**	**.75**	**1.04**
1980 Average	**1.35**	**4.27**	**NA**	**NA**	**4.35**	**2.20**	**1.93**
1985 Average	**1.65**	**4.24**	**NA**	**NA**	**4.32**	**3.44**	**2.09**
1990 Average	**1.45**	**3.32**	**5.38**	**.80**	**3.35**	**2.32**	**1.69**
1995 Average	**1.32**	**2.59**	**3.99**	**.65**	**2.57**	**1.98**	**1.45**
1996 Average	**1.29**	**3.03**	**4.87**	**.78**	**3.03**	**2.64**	**1.52**
1997 Average	**1.27**	**2.79**	**4.49**	**.91**	**2.73**	**2.76**	**1.52**
1998 Average	**1.25**	**2.08**	**3.30**	**.71**	**2.02**	**2.38**	**1.44**
1999 Average	**1.22**	**2.44**	**4.03**	**.65**	**2.36**	**2.57**	**1.44**
2000 Average	**1.20**	**4.29**	**6.65**	**.58**	**4.18**	**4.30**	**1.74**
2001 Average	**1.23**	**3.73**	**6.30**	**.78**	**3.69**	**4.49**	**1.73**
2002 Average[g]	**1.25**	**3.73**	**5.34**	**.78**	**3.34**	**3.56**	**1.86**
2003 Average	**1.28**	**4.66**	**6.82**	**.72**	**4.33**	**5.39**	**2.28**
2004 Average	**1.36**	**4.73**	**8.02**	**.83**	**4.29**	**5.96**	**2.48**
2005 Average	**1.54**	**7.06**	**11.72**	**1.11**	**6.44**	**8.21**	**3.25**
2006 Average	**1.69**	**7.85**	**13.28**	**1.33**	**6.23**	**6.94**	**3.02**
2007 Average	**1.77**	**8.64**	**14.85**	**1.51**	**7.17**	**7.11**	**3.23**
2008 January	1.88	12.40	19.43	1.62	9.80	8.19	3.73
February	1.89	12.47	20.16	1.82	10.59	8.58	3.66
March	1.93	12.51	21.09	1.82	9.00	9.25	3.83
April	1.97	12.76	23.09	1.79	10.56	9.89	4.11
May	2.04	13.78	25.99	1.96	11.55	10.73	4.33
June	2.08	16.31	26.44	2.01	14.19	12.04	5.45
July	2.10	17.83	27.76	1.96	13.78	11.51	5.45
August	2.18	17.79	25.04	2.75	13.91	8.79	4.46
September	2.19	14.79	23.35	2.49	12.01	7.68	3.91
October	2.21	14.28	19.53	2.39	10.33	6.69	3.50
November	2.17	9.50	15.75	2.38	7.64	6.45	3.28
December	2.16	7.11	12.39	2.30	6.40	6.68	3.37
Average	**2.07**	**13.62**	**21.46**	**2.11**	**10.87**	**9.01**	**4.12**
2009 January	2.23	6.90	11.67	2.06	6.76	6.38	3.42
February	2.27	6.84	11.36	1.82	6.28	5.38	3.14
March	2.29	7.02	10.75	1.63	5.83	4.73	2.98
April	2.22	7.90	11.54	1.20	5.82	4.48	2.85
May	2.23	8.29	12.00	1.68	6.30	4.48	2.93
June	2.22	9.46	13.66	1.58	7.43	4.44	3.01
July	2.19	10.23	14.00	1.63	7.59	4.32	3.02
August	2.21	11.02	14.94	1.81	7.83	4.15	2.99
September	2.18	12.04	15.22	1.36	6.81	3.84	2.80
October	2.17	11.54	15.79	1.55	7.50	4.82	3.04
November	2.13	11.56	15.50	1.30	8.01	4.87	2.96
December	2.14	11.77	15.88	1.61	8.37	5.96	3.40
Average	**2.21**	**8.98**	**13.22**	**1.61**	**7.02**	**4.74**	**3.04**
2010 January	2.22	11.92	15.71	1.69	9.87	6.70	3.73
February	2.27	12.14	15.60	1.79	9.61	6.06	3.43
March	2.31	12.47	16.52	2.05	8.87	5.28	3.14
April	2.29	13.17	17.05	2.13	7.76	4.70	3.00
May	2.26	12.41	16.54	2.17	9.57	4.77	3.12
June	2.25	12.02	16.13	2.09	9.36	5.11	3.35
July	2.27	12.32	15.89	2.36	9.68	5.18	3.51
August	2.29	12.36	16.22	2.59	9.32	4.92	3.40
September	2.27	12.44	16.53	2.61	9.62	4.44	3.11
October	2.26	13.56	17.09	2.36	9.14	4.29	2.94
November	2.25	13.99	17.50	2.14	11.11	4.34	2.94
11-Month Average	**2.27**	**12.46**	**16.35**	**2.21**	**9.48**	**5.05**	**3.25**
2009 11-Month Average	**2.21**	**8.77**	**12.96**	**1.61**	**6.90**	**4.64**	**3.01**
2008 11-Month Average	**2.06**	**14.47**	**22.55**	**2.08**	**11.41**	**9.20**	**4.18**

[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.

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.

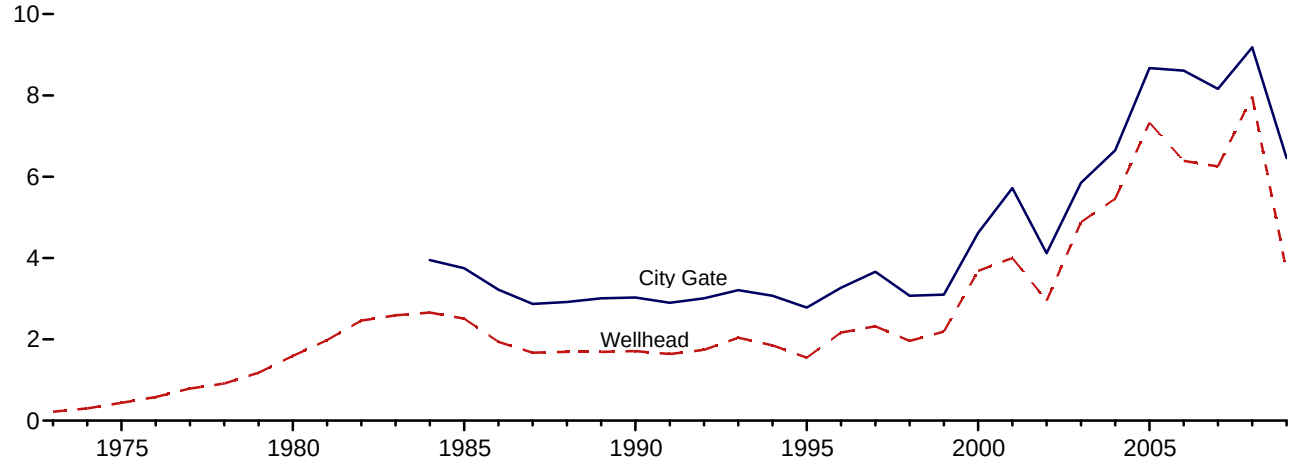
Web Page: See http://www.eia.gov/mer/prices.html for all available data beginning in 1973.

Sources: See end of section.

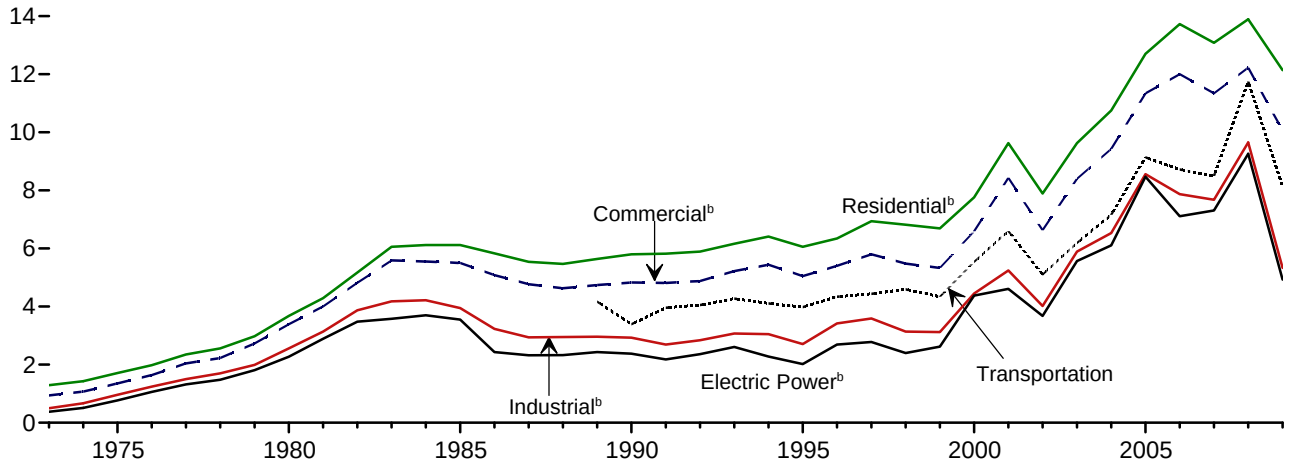
Figure 9.4 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

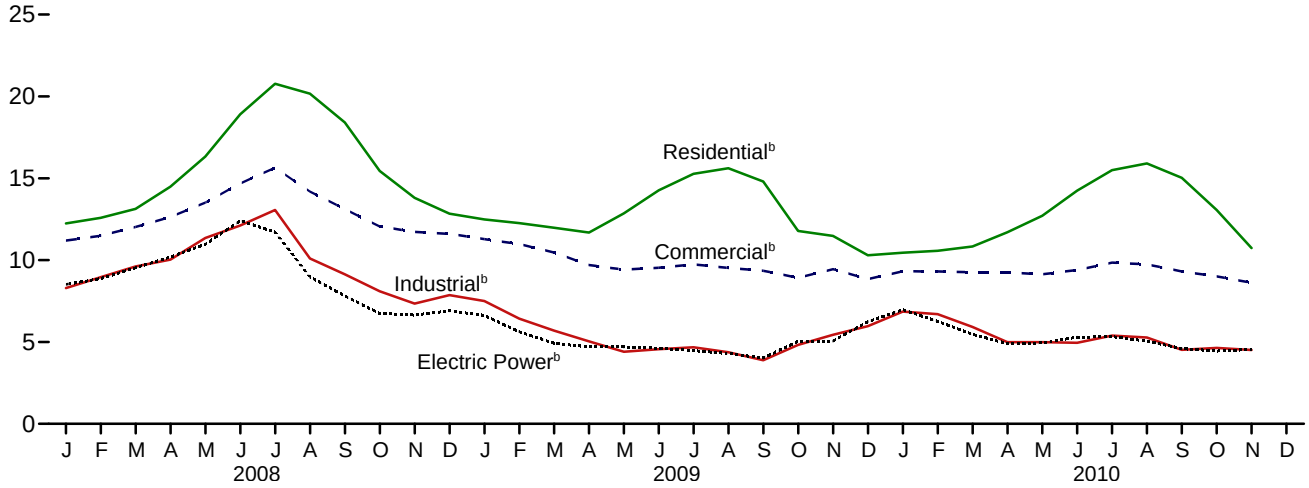
Selected Prices, 1973-2009



Consuming Sectors, 1973-2009



Consuming Sectors, Monthly



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

Web Page: http://www.eia.gov/mer/prices.html.
Source: Table 9.11.

Table 9.11 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

	Wellhead Price	City Gate Price	Consuming Sectors[b]								
			Residential		Commercial[c]		Industrial[d]		Transportation	Electric Power[e]	
			Price[f]	Percentage of Sector[g]	Price[f]	Percentage of Sector[g]	Price[f]	Percentage of Sector[g]	Vehicle Fuel[h] Price[f]	Price[f]	Percentage of Sector[g,i]
1973 Average	**0.22**	**NA**	**1.29**	**NA**	**0.94**	**NA**	**0.50**	**NA**	**NA**	**0.38**	**92.1**
1975 Average	**.44**	**NA**	**1.71**	**NA**	**1.35**	**NA**	**.96**	**NA**	**NA**	**.77**	**96.1**
1980 Average	**1.59**	**NA**	**3.68**	**NA**	**3.39**	**NA**	**2.56**	**NA**	**NA**	**2.27**	**96.9**
1985 Average	**2.51**	**3.75**	**6.12**	**NA**	**5.50**	**NA**	**3.95**	**68.8**	**NA**	**3.55**	**94.0**
1990 Average	**1.71**	**3.03**	**5.80**	**99.2**	**4.83**	**86.6**	**2.93**	**35.2**	**3.39**	**2.38**	**76.8**
1995 Average	**1.55**	**2.78**	**6.06**	**99.0**	**5.05**	**76.7**	**2.71**	**24.5**	**3.98**	**2.02**	**71.4**
1996 Average	**2.17**	**3.27**	**6.34**	**99.0**	**5.40**	**77.6**	**3.42**	**19.4**	**4.34**	**2.69**	**68.4**
1997 Average	**2.32**	**3.66**	**6.94**	**98.8**	**5.80**	**70.8**	**3.59**	**18.1**	**4.44**	**2.78**	**68.0**
1998 Average	**1.96**	**3.07**	**6.82**	**97.7**	**5.48**	**67.0**	**3.14**	**16.1**	**4.59**	**2.40**	**63.7**
1999 Average	**2.19**	**3.10**	**6.69**	**95.2**	**5.33**	**66.1**	**3.12**	**18.8**	**4.34**	**2.62**	**58.3**
2000 Average	**3.68**	**4.62**	**7.76**	**92.6**	**6.59**	**63.9**	**4.45**	**19.8**	**5.54**	**4.38**	**50.5**
2001 Average	**4.00**	**5.72**	**9.63**	**92.4**	**8.43**	**66.0**	**5.24**	**20.8**	**6.60**	**4.61**	**40.2**
2002 Average	**2.95**	**4.12**	**7.89**	**97.9**	**6.63**	**77.4**	**4.02**	**22.7**	**5.10**	**[e]3.68**	**83.9**
2003 Average	**4.88**	**5.85**	**9.63**	**97.5**	**8.40**	**78.2**	**5.89**	**22.1**	**6.19**	**5.57**	**91.2**
2004 Average	**5.46**	**6.65**	**10.75**	**97.7**	**9.43**	**78.0**	**6.53**	**23.7**	**7.16**	**6.11**	**89.8**
2005 Average	**7.33**	**8.67**	**12.70**	**98.2**	**11.34**	**82.1**	**8.56**	**24.1**	**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 January	7.38	8.37	12.24	NA	11.20	82.6	8.29	20.5	NA	8.52	100.7
February	8.02	8.91	12.58	NA	11.49	82.3	8.96	20.5	NA	8.87	101.4
March	8.63	9.49	13.13	NA	12.03	82.3	9.61	21.4	NA	9.53	101.4
April	8.87	9.84	14.49	NA	12.63	79.7	10.03	21.9	NA	10.19	101.9
May	9.96	11.05	16.33	NA	13.51	76.6	11.35	21.3	NA	10.97	101.5
June	10.36	11.85	18.91	NA	14.68	76.3	12.11	20.8	NA	12.41	100.9
July	10.79	12.48	20.77	NA	15.64	73.4	13.06	20.7	NA	11.71	100.3
August	8.21	10.20	20.17	NA	14.19	72.2	10.10	20.4	NA	8.97	100.8
September	6.71	8.99	18.41	NA	13.12	72.5	9.13	19.1	NA	7.81	101.1
October	5.64	7.80	15.45	NA	12.06	75.3	8.10	19.0	NA	6.74	101.5
November	5.23	7.93	13.80	NA	11.72	79.4	7.34	19.6	NA	6.64	101.3
December	5.94	8.16	12.84	NA	11.61	81.9	7.86	19.9	NA	6.90	101.1
Average	**7.97**	**9.18**	**13.89**	**97.5**	**12.23**	**79.9**	**9.65**	**20.5**	**11.75**	**9.26**	**101.1**
2009 January	4.60	7.98	12.49	NA	11.28	82.4	7.50	20.1	NA	6.62	100.9
February	3.70	7.25	12.26	NA	10.98	81.1	6.43	19.9	NA	5.62	101.1
March	3.38	6.83	11.98	NA	10.46	80.7	5.69	19.4	NA	4.92	101.8
April	3.18	5.68	11.68	NA	9.70	77.7	5.04	18.6	NA	4.70	101.6
May	3.23	5.47	12.86	NA	9.42	74.4	4.40	19.0	NA	4.70	101.5
June	3.38	5.53	14.26	NA	9.53	73.3	4.56	18.7	NA	4.62	101.0
July	3.45	5.67	15.27	NA	9.74	70.5	4.68	18.6	NA	4.47	100.8
August	3.37	5.58	15.61	NA	9.52	68.5	4.37	18.3	NA	4.30	100.7
September	2.98	5.32	14.80	NA	9.35	69.3	3.88	18.0	NA	4.02	100.6
October	3.83	5.62	11.78	NA	8.92	73.3	4.82	17.8	NA	5.04	102.4
November	4.20	6.31	11.48	NA	9.45	75.8	5.44	17.8	NA	5.06	101.0
December	4.66	6.23	10.30	NA	8.84	80.1	5.97	18.9	NA	6.24	100.7
Average	**3.67**	**6.46**	**12.14**	**97.4**	**10.06**	**77.8**	**5.33**	**18.8**	**8.13**	**4.93**	**101.1**
2010 January	[E] 5.14	6.82	10.45	NA	9.32	76.0	6.86	17.6	NA	6.97	100.8
February	[E] 4.89	6.61	10.57	NA	9.31	76.6	6.70	17.2	NA	6.26	100.5
March	[E] 4.36	6.42	10.83	NA	9.26	73.8	5.92	17.0	NA	5.47	101.0
April	[E] 3.92	5.86	11.70	NA	9.25	68.4	4.99	16.9	NA	4.89	100.8
May	[E] 4.04	5.82	12.71	NA	[R] 9.13	65.4	4.99	17.0	NA	4.94	100.9
June	[E] 4.25	6.08	14.24	NA	9.40	[R] 63.9	4.95	16.8	NA	5.29	100.6
July	[E] 4.36	6.32	15.50	NA	[R] 9.85	[R] 62.2	5.39	17.6	NA	5.33	100.5
August	[E] 4.22	[R] 6.22	15.91	NA	[R] 9.74	[R] 60.9	5.27	17.1	NA	5.05	100.3
September	[RE] 3.76	5.71	15.03	NA	[R] 9.31	60.0	4.52	16.6	NA	4.60	100.6
October	[RE] 3.69	[R] 5.81	13.06	NA	[R] 9.01	63.9	4.64	15.7	NA	4.44	101.3
November	[E] 3.34	5.58	10.74	NA	8.62	71.3	4.51	16.6	NA	4.54	100.9
11-Month Average	**[E] 4.18**	**6.26**	**11.47**	**NA**	**9.25**	**70.5**	**5.39**	**16.9**	**NA**	**5.22**	**100.7**
2009 11-Month Average	**3.57**	**6.51**	**12.47**	**NA**	**10.22**	**77.4**	**5.26**	**18.8**	**NA**	**4.82**	**101.2**
2008 11-Month Average	**8.16**	**9.35**	**14.09**	**NA**	**12.33**	**79.3**	**9.81**	**20.5**	**NA**	**9.44**	**101.1**

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

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

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

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

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

[f] Includes taxes.

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

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

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

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

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

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

Sources: See end of section.

Energy Prices

Note 1. Crude Oil Refinery Acquisition Costs. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on U.S. Energy Information Administration (EIA) Form EIA-14, "Refiners' Monthly Cost Report." Those costs were previously published from data collected on Economic Regulatory Administration (ERA) Form ERA-49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report." Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. The respondents for the two forms are also essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken when comparing the data collected on the two forms.

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

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

Note 2. Crude Oil Domestic First Purchase Prices. The average domestic first purchase price represents the average price at which all domestic crude oil is purchased. 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 3. Crude Oil F.O.B. Costs. F.O.B. literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

Note 4. Crude Oil Landed Costs. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to April 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries that export only small amounts to the United States were also excluded. Beginning in April 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

Note 5. Motor Gasoline Prices. Several different series of motor gasoline prices are published in this section. U.S. city average retail prices of motor gasoline 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 U.S. Energy Information Administration 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 consumers 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 U.S.Energy Information Administration.

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 U.S. Energy Information Administration *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 (FEA), based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report."
1978–2009: U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual 2009 (PMA)*, Table 1.
2010: EIA, *Petroleum Marketing Monthly (PMM)*, February 2011, Table 1.

F.O.B. and Landed Cost of Imports
October 1973–September 1977: FEA, Form FEA-F701-M-0, "Transfer Pricing Report."
October–December 1977: EIA, Form FEA-F701-M-0, "Transfer Pricing Report."
1978–2009: EIA, PMA 2009, Table 1.
2010: EIA, PMM, February 2011, 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, PMA 2009, Table 1.
2010: EIA, PMM, February 2011, 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: EIA, *Petroleum Marketing Monthly*, February 2011, Table 21.

Table 9.10 Sources

1973–September 1977: Federal Power Commission, Form FPC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."
October 1977–December 1977: Federal Energy Regulatory Commission (FERC), 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 (EPM)*, May issues.
1990–2000: EIA, EPM, March 2003, Table 26.
2001–2007: EIA, *Electric Power Monthly*, October 2008, Table 4.1; FERC, 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, EPM, February 2011, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

Table 9.11 Sources

All Prices Except Vehicle Fuel and Electric Power
1973–2002: U.S. Energy Information Administration (EIA), *Natural Gas Annual* (*NGA*), annual reports.
2003 forward: EIA, *Natural Gas Monthly* (*NGM*), January 2011, 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."

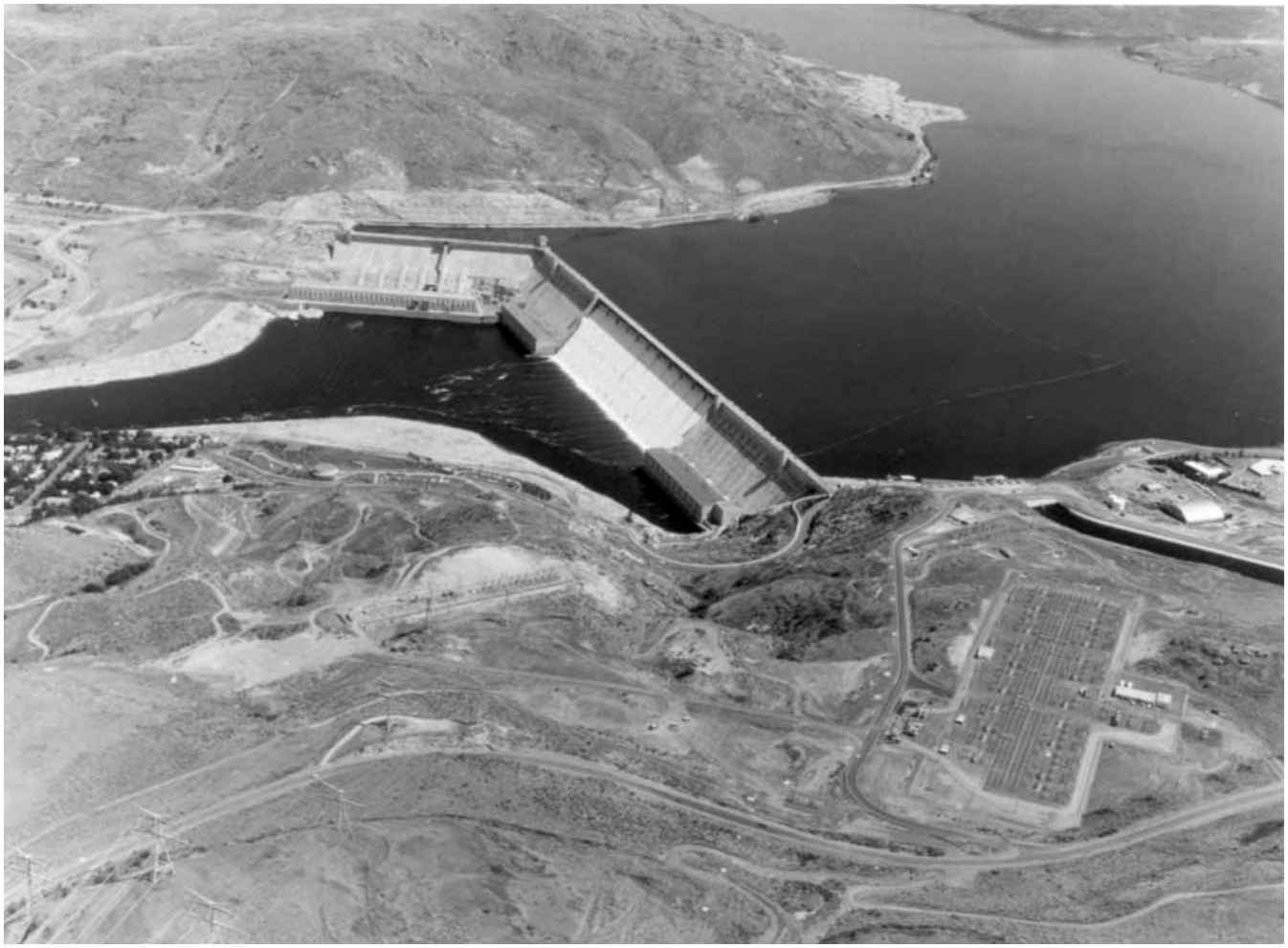
Percentage of Residential Sector
1989–2009: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Percentage of Commercial Sector
1987–2002: 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.
2003 forward: EIA, NGM, January 2011, Table 3.

Percentage of Industrial Sector
1982–2002: 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.
2003 forward: EIA, NGM, January 2011, 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 (MER)*, Table 7.3b; for 1989-2001, see MER, Table 7.4b).
2002–2007: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, "Monthly Report of Cost and 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 MER, Table 7.4b).
2008 forward: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form EIA-923, "Power Plant Operations Report," divided by the quantity of natural gas consumed by the electric power sector (see MER, Table 7.4b).

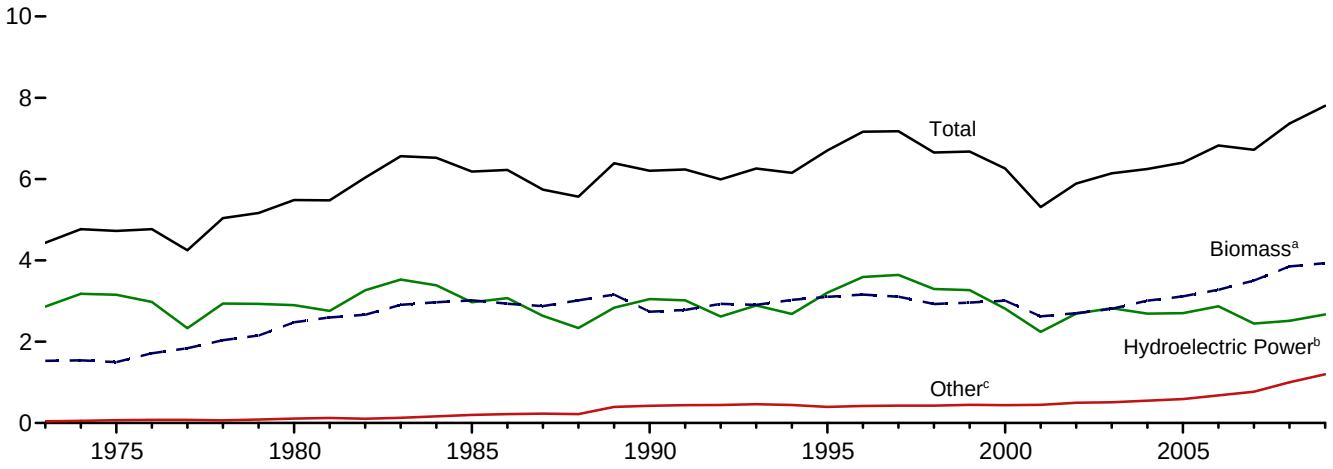
10 Renewable Energy



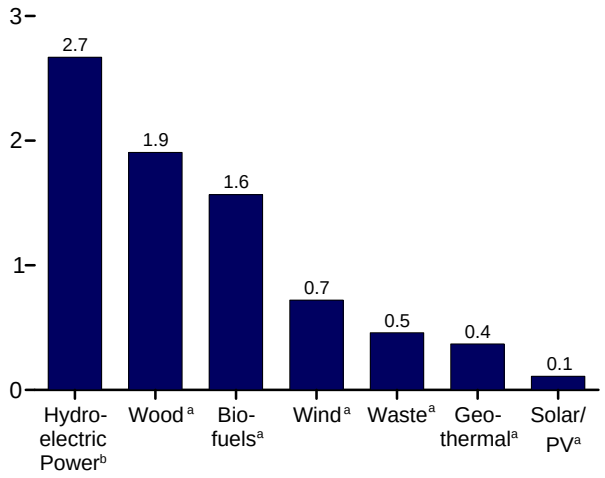
Grand Coulee Dam, Washington State. Source: U.S. Bureau of Reclamation.

Figure 10.1 Renewable Energy Consumption
(Quadrillion Btu)

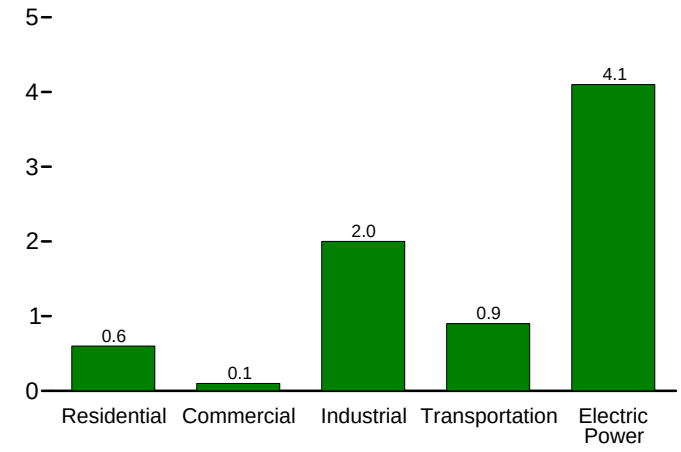
Total and Major Sources, 1973-2009



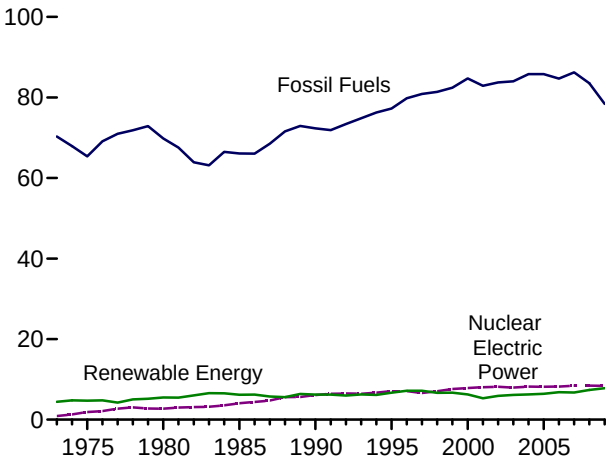
By Source, 2009



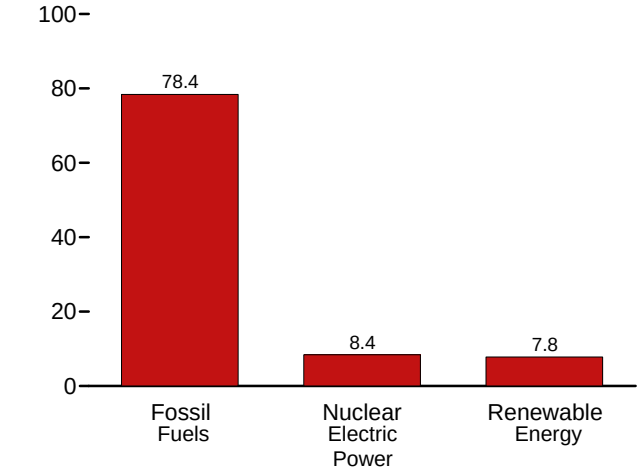
By Sector, 2009



Compared With Other Resources, 1973-2009



Compared With Other Resources, 2009



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

Web Page: http://www.eia.gov/mer/renew.html.
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**	**4,433**	**2,861**	**43**	**NA**	**NA**	**1,527**	**2**	**NA**	**1,529**	**4,433**
1975 Total	**NA**	**1,499**	**4,723**	**3,155**	**70**	**NA**	**NA**	**1,497**	**2**	**NA**	**1,499**	**4,723**
1980 Total	**NA**	**2,475**	**5,485**	**2,900**	**110**	**NA**	**NA**	**2,474**	**2**	**NA**	**2,475**	**5,485**
1985 Total	**93**	**3,016**	**6,185**	**2,970**	**198**	**(s)**	**(s)**	**2,687**	**236**	**93**	**3,016**	**6,185**
1990 Total	**111**	**2,735**	**6,206**	**3,046**	**336**	**60**	**29**	**2,216**	**408**	**111**	**2,735**	**6,206**
1995 Total	**198**	**3,099**	**6,701**	**3,205**	**294**	**70**	**33**	**2,370**	**531**	**200**	**3,101**	**6,703**
1996 Total	**141**	**3,155**	**7,165**	**3,590**	**316**	**71**	**33**	**2,437**	**577**	**143**	**3,157**	**7,166**
1997 Total	**186**	**3,108**	**7,177**	**3,640**	**325**	**70**	**34**	**2,371**	**551**	**184**	**3,105**	**7,175**
1998 Total	**202**	**2,929**	**6,655**	**3,297**	**328**	**70**	**31**	**2,184**	**542**	**201**	**2,928**	**6,654**
1999 Total	**211**	**2,965**	**6,678**	**3,268**	**331**	**69**	**46**	**2,214**	**540**	**209**	**2,963**	**6,677**
2000 Total	**233**	**3,006**	**6,257**	**2,811**	**317**	**66**	**57**	**2,262**	**511**	**236**	**3,008**	**6,260**
2001 Total	**254**	**2,624**	**5,312**	**2,242**	**311**	**65**	**70**	**2,006**	**364**	**253**	**2,622**	**5,311**
2002 Total	**308**	**2,705**	**5,892**	**2,689**	**328**	**64**	**105**	**1,995**	**402**	**303**	**2,701**	**5,888**
2003 Total	**402**	**2,805**	**6,139**	**2,825**	**331**	**64**	**115**	**2,002**	**401**	**404**	**2,807**	**6,141**
2004 Total	**487**	**2,998**	**6,235**	**2,690**	**341**	**64**	**142**	**2,121**	**389**	**500**	**3,010**	**6,247**
2005 Total	**564**	**3,104**	**6,393**	**2,703**	**343**	**66**	**178**	**2,136**	**403**	**577**	**3,117**	**6,406**
2006 Total	**720**	**3,226**	**6,774**	**2,869**	**343**	**72**	**264**	**2,109**	**397**	**771**	**3,277**	**6,824**
2007 Total	**978**	**3,489**	**6,706**	**2,446**	**349**	**81**	**341**	**2,098**	**413**	**991**	**3,503**	**6,719**
2008 January	101	331	615	205	29	8	42	194	36	97	327	611
February	97	300	557	185	26	7	38	168	35	96	300	557
March	109	321	620	214	30	8	47	174	38	102	314	613
April	107	314	622	219	29	8	51	170	36	107	313	621
May	117	324	684	268	30	8	53	171	36	113	320	680
June	111	313	690	288	30	8	51	167	35	110	312	689
July	120	330	661	252	31	9	39	173	37	120	330	661
August	126	334	614	209	31	9	32	171	36	125	332	613
September	122	319	547	159	30	8	31	163	34	123	320	548
October	126	330	568	152	31	8	47	168	36	127	332	570
November	126	327	568	154	30	8	49	165	37	124	325	566
December	125	323	632	206	30	8	65	161	37	128	326	635
Total	**1,387**	**3,867**	**7,379**	**2,511**	**358**	**97**	**546**	**2,044**	**436**	**1,372**	**3,852**	**7,364**
2009 January	120	312	640	229	32	9	58	154	38	115	307	635
February	111	289	556	174	29	8	57	143	35	102	280	548
March	120	317	641	213	32	9	69	156	41	118	315	639
April	116	304	667	252	30	9	73	150	37	120	308	671
May	126	320	709	289	31	10	61	156	38	131	324	714
June	127	322	701	285	30	9	55	157	38	129	324	703
July	139	344	662	228	31	10	48	166	39	139	344	662
August	141	349	634	191	31	10	53	169	39	141	349	634
September	136	333	587	169	30	9	45	160	37	134	331	585
October	144	347	645	192	30	9	67	165	39	145	348	646
November	149	350	662	205	31	9	67	161	39	144	345	657
December	154	362	713	241	33	9	67	168	40	148	356	707
Total	**1,583**	**3,948**	**7,816**	**2,669**	**369**	**109**	**721**	**1,906**	**459**	**1,567**	**3,932**	**7,800**
2010 January	151	353	680	216	33	9	68	165	37	145	347	673
February	140	322	614	200	30	8	54	149	33	135	318	609
March	157	359	687	201	33	9	85	164	38	152	354	682
April	149	343	662	182	31	9	96	157	38	148	343	661
May	156	355	726	243	33	10	85	160	38	155	353	724
June	152	351	758	288	32	10	78	161	37	155	354	761
July	158	363	706	236	32	10	65	167	38	161	366	709
August	160	366	666	193	32	10	65	168	38	161	367	667
September	154	351	626	165	31	10	69	161	36	154	351	626
October	162	359	646	170	30	9	78	159	37	162	359	646
November	163	361	688	190	32	9	96	161	37	160	358	686
11-Month Total	**1,702**	**3,883**	**7,457**	**2,283**	**349**	**104**	**838**	**1,772**	**409**	**1,688**	**3,869**	**7,443**
2009 11-Month Total	**1,429**	**3,586**	**7,103**	**2,427**	**336**	**101**	**654**	**1,738**	**419**	**1,418**	**3,576**	**7,093**
2008 11-Month Total	**1,262**	**3,544**	**6,747**	**2,306**	**328**	**89**	**480**	**1,884**	**398**	**1,244**	**3,526**	**6,728**

[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-fueled plants heat rate).

[f] Geothermal electricity net generation (converted to Btu using the geothermal energy plants heat rate), and geothermal heat pump and direct use energy.

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

[h] Wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate).

[i] Wood and wood-derived fuels.

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

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

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

Notes: • Most data for the residential, commercial, industrial, and transportation sectors are estimates. See notes and sources for Tables 10.2a and 10.2b. • See Note, "Renewable Energy Production and Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/mer/renew.html 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	Wood[d]	Waste[g]	Fuel Ethanol[h]	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**	**65**	**520**	**591**	**1**	**5**	**–**	**–**	**72**	**40**	**(s)**	**113**	**118**
1996 Total	**7**	**65**	**540**	**612**	**1**	**5**	**–**	**–**	**76**	**53**	**(s)**	**129**	**135**
1997 Total	**8**	**65**	**430**	**503**	**1**	**6**	**–**	**–**	**73**	**58**	**(s)**	**131**	**138**
1998 Total	**8**	**65**	**380**	**452**	**1**	**7**	**–**	**–**	**64**	**54**	**(s)**	**118**	**127**
1999 Total	**9**	**64**	**390**	**462**	**1**	**7**	**–**	**–**	**67**	**54**	**(s)**	**121**	**129**
2000 Total	**9**	**61**	**420**	**490**	**1**	**8**	**–**	**–**	**71**	**47**	**(s)**	**119**	**128**
2001 Total	**9**	**60**	**370**	**439**	**1**	**8**	**–**	**–**	**67**	**25**	**(s)**	**92**	**101**
2002 Total	**10**	**59**	**380**	**449**	**(s)**	**9**	**–**	**–**	**69**	**26**	**(s)**	**95**	**104**
2003 Total	**13**	**58**	**400**	**471**	**1**	**11**	**–**	**–**	**71**	**29**	**1**	**101**	**113**
2004 Total	**14**	**59**	**410**	**483**	**1**	**12**	**–**	**–**	**70**	**34**	**1**	**105**	**118**
2005 Total	**16**	**61**	**430**	**507**	**1**	**14**	**–**	**–**	**70**	**34**	**1**	**105**	**119**
2006 Total	**18**	**67**	**390**	**475**	**1**	**14**	**–**	**–**	**65**	**36**	**1**	**102**	**117**
2007 Total	**22**	**75**	**430**	**527**	**1**	**14**	**–**	**–**	**69**	**31**	**2**	**102**	**118**
2008 January	2	7	38	48	(s)	1	(s)	–	6	3	(s)	9	10
February	2	7	36	45	(s)	1	(s)	–	6	3	(s)	9	10
March	2	7	38	48	(s)	1	(s)	–	6	3	(s)	9	10
April	2	7	37	46	(s)	1	(s)	–	6	3	(s)	9	10
May	2	7	38	48	(s)	1	(s)	–	6	3	(s)	9	11
June	2	7	37	46	(s)	1	(s)	–	6	3	(s)	9	10
July	2	7	38	48	(s)	1	(s)	–	6	3	(s)	9	11
August	2	7	38	48	(s)	1	(s)	–	6	3	(s)	9	11
September	2	7	37	46	(s)	1	(s)	–	6	3	(s)	9	10
October	2	7	38	48	(s)	1	(s)	–	6	3	(s)	9	10
November	2	7	37	46	(s)	1	(s)	–	6	3	(s)	9	10
December	2	7	38	48	(s)	1	(s)	–	6	3	(s)	9	11
Total	**26**	**88**	**450**	**565**	**1**	**15**	**(s)**	**–**	**73**	**34**	**2**	**109**	**125**
2009 January	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
February	3	8	33	43	(s)	1	(s)	(s)	6	3	(s)	8	10
March	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
April	3	8	35	46	(s)	1	(s)	(s)	6	3	(s)	9	11
May	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	10	11
June	3	8	35	46	(s)	1	(s)	(s)	6	3	(s)	9	11
July	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
August	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	10	11
September	3	8	35	46	(s)	1	(s)	(s)	6	3	(s)	9	10
October	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
November	3	8	35	46	(s)	1	(s)	(s)	6	3	(s)	9	11
December	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
Total	**33**	**101**	**430**	**563**	**1**	**17**	**(s)**	**(s)**	**72**	**36**	**2**	**111**	**128**
2010 January	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
February	3	8	33	43	(s)	1	(s)	(s)	6	3	(s)	8	10
March	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
April	3	8	35	46	(s)	1	(s)	(s)	6	3	(s)	9	10
May	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	10	11
June	3	8	35	46	(s)	1	(s)	(s)	6	3	(s)	9	11
July	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
August	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
September	3	8	35	46	(s)	1	(s)	(s)	6	3	(s)	9	10
October	3	9	37	48	(s)	1	(s)	(s)	6	3	(s)	9	11
November	3	8	35	46	(s)	1	(s)	–	6	3	(s)	9	10
11-Month Total	**30**	**92**	**393**	**516**	**1**	**15**	**(s)**	**(s)**	**66**	**31**	**3**	**100**	**116**
2009 11-Month Total	**30**	**92**	**393**	**516**	**1**	**15**	**(s)**	**(s)**	**66**	**33**	**2**	**101**	**117**
2008 11-Month Total	**24**	**81**	**412**	**517**	**1**	**14**	**(s)**	**–**	**67**	**31**	**2**	**100**	**114**

[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-fueled plants heat rate). Includes small amounts of distributed solar thermal and PV energy used in the commercial, industrial, and electric power sectors.

[d] Wood and wood-derived fuels.

[e] Conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate).

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

[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 commercial sector.

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

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

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

Sources: See end of section.

This table has been modified to include a column for “Commercial Sector Wind.”

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]	Wood[e]	Waste[f]	Fuel Ethanol[g]	Losses and Co-products[h]	Total	Total	Fuel Ethanol[i]	Bio-diesel[j]	Total
1973 Total	**35**	**NA**	**NA**	**1,165**	**NA**	**NA**	**NA**	**1,165**	**1,200**	**NA**	**NA**	**NA**
1975 Total	**32**	**NA**	**NA**	**1,063**	**NA**	**NA**	**NA**	**1,063**	**1,096**	**NA**	**NA**	**NA**
1980 Total	**33**	**NA**	**NA**	**1,600**	**NA**	**NA**	**NA**	**1,600**	**1,633**	**NA**	**NA**	**NA**
1985 Total	**33**	**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**	**113**	**NA**	**113**
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**	**328**	**12**	**339**
2006 Total	**29**	**4**	**–**	**1,472**	**130**	**10**	**285**	**1,897**	**1,930**	**442**	**33**	**475**
2007 Total	**16**	**5**	**–**	**1,413**	**144**	**10**	**377**	**1,944**	**1,964**	**557**	**46**	**603**
2008 January	2	(s)	–	134	12	1	39	185	188	54	4	57
February	2	(s)	–	112	13	1	37	163	165	55	3	58
March	2	(s)	–	114	13	1	42	170	172	57	2	59
April	2	(s)	–	114	12	1	41	168	171	63	2	65
May	2	(s)	–	114	12	1	45	172	174	65	2	67
June	1	(s)	–	109	11	1	42	163	165	65	1	67
July	1	(s)	–	112	12	1	46	171	172	69	4	73
August	1	(s)	–	110	11	1	48	171	172	70	5	75
September	1	(s)	–	105	11	1	46	163	165	70	5	75
October	1	(s)	–	110	12	1	48	172	173	73	5	78
November	1	(s)	–	107	12	1	48	169	170	69	5	74
December	2	(s)	–	100	13	1	49	163	165	75	4	78
Total	**17**	**5**	**–**	**1,344**	**144**	**12**	**532**	**2,031**	**2,053**	**786**	**40**	**827**
2009 January	2	(s)	–	95	15	1	46	157	159	67	(s)	67
February	1	(s)	–	90	13	1	43	147	148	58	(s)	58
March	2	(s)	–	99	14	1	48	162	164	67	3	70
April	2	(s)	–	97	13	1	46	157	159	70	3	73
May	2	(s)	–	100	13	1	50	164	166	77	2	79
June	2	(s)	–	100	12	1	50	164	166	75	3	78
July	1	(s)	–	107	13	1	54	176	177	80	3	83
August	1	(s)	–	110	13	1	55	179	181	81	4	85
September	1	(s)	–	104	13	1	53	171	172	75	6	80
October	1	(s)	–	108	14	1	56	179	181	82	6	88
November	1	(s)	–	105	14	1	57	178	180	81	4	85
December	2	(s)	–	108	14	1	60	183	185	82	5	87
Total	**18**	**4**	**–**	**1,224**	**161**	**13**	**617**	**2,016**	**2,038**	**894**	**40**	**934**
2010 January	2	(s)	(s)	105	14	1	59	180	182	83	1	84
February	2	(s)	(s)	95	12	1	55	163	165	76	4	79
March	2	(s)	(s)	106	13	1	62	182	184	87	2	89
April	2	(s)	(s)	101	13	1	59	174	176	85	3	88
May	2	(s)	(s)	104	14	1	62	180	182	89	2	92
June	1	(s)	(s)	104	13	1	60	179	181	91	2	93
July	1	(s)	(s)	108	14	1	62	185	187	94	3	97
August	1	(s)	(s)	108	14	1	63	186	187	94	2	96
September	1	(s)	(s)	104	13	1	61	180	181	89	3	92
October	1	(s)	(s)	103	14	1	64	182	184	94	2	96
November	1	(s)	(s)	104	13	1	65	184	185	92	2	94
11-Month Total	**15**	**4**	**(s)**	**1,142**	**147**	**14**	**672**	**1,975**	**1,993**	**973**	**26**	**1,000**
2009 11-Month Total	**17**	**4**	**–**	**1,116**	**147**	**12**	**557**	**1,832**	**1,853**	**812**	**35**	**847**
2008 11-Month Total	**15**	**5**	**–**	**1,243**	**131**	**11**	**483**	**1,868**	**1,887**	**712**	**37**	**748**

[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-fueled plants heat rate).

[c] Geothermal heat pump and direct use energy.

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

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

[h] 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.

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

[j] "Biodiesel" is any liquid biofuel suitable as a diesel fuel substitute, additive, or extender. See "Biodiesel" in Glossary.

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, and solar/PV. • 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/mer/renew.html for all available data beginning in 1973.

Sources: See end of section.

This table has been modified to include a column for “Industrial Sector Solar/PV.”

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**	**43**	**NA**	**NA**	**1**	**2**	**3**	**2,873**
1975 Total	**3,122**	**70**	**NA**	**NA**	**(s)**	**2**	**2**	**3,194**
1980 Total	**2,867**	**110**	**NA**	**NA**	**3**	**2**	**4**	**2,982**
1985 Total	**2,937**	**198**	**(s)**	**(s)**	**8**	**7**	**14**	**3,150**
1990 Total [g]	**3,014**	**326**	**4**	**29**	**129**	**188**	**317**	**3,689**
1995 Total	**3,149**	**280**	**5**	**33**	**125**	**296**	**422**	**3,889**
1996 Total	**3,528**	**300**	**5**	**33**	**138**	**300**	**438**	**4,305**
1997 Total	**3,581**	**309**	**5**	**34**	**137**	**309**	**446**	**4,375**
1998 Total	**3,241**	**311**	**5**	**31**	**137**	**308**	**444**	**4,032**
1999 Total	**3,218**	**312**	**5**	**46**	**138**	**315**	**453**	**4,034**
2000 Total	**2,768**	**296**	**5**	**57**	**134**	**318**	**453**	**3,579**
2001 Total	**2,209**	**289**	**6**	**70**	**126**	**211**	**337**	**2,910**
2002 Total	**2,650**	**305**	**6**	**105**	**150**	**230**	**380**	**3,445**
2003 Total	**2,781**	**303**	**5**	**115**	**167**	**230**	**397**	**3,601**
2004 Total	**2,656**	**311**	**6**	**142**	**165**	**223**	**388**	**3,503**
2005 Total	**2,670**	**309**	**6**	**178**	**185**	**221**	**406**	**3,568**
2006 Total	**2,839**	**306**	**5**	**264**	**182**	**231**	**412**	**3,827**
2007 Total	**2,430**	**308**	**6**	**341**	**186**	**237**	**423**	**3,508**
2008 January	203	25	(s)	42	16	21	37	308
February	184	23	(s)	38	15	20	35	279
March	212	26	1	47	15	23	38	324
April	217	26	1	51	13	21	34	330
May	267	26	1	53	13	21	34	380
June	286	26	1	51	14	22	36	400
July	251	27	1	39	16	23	39	357
August	208	27	1	32	16	22	38	306
September	158	26	1	31	15	21	36	252
October	151	27	1	47	14	21	35	260
November	153	26	(s)	49	15	21	36	265
December	204	27	(s)	65	16	22	38	333
Total	**2,494**	**312**	**9**	**546**	**177**	**258**	**435**	**3,795**
2009 January	228	27	(s)	58	17	21	37	350
February	172	25	(s)	57	15	19	34	289
March	211	27	1	69	14	24	38	346
April	250	26	1	73	12	21	33	382
May	287	26	1	61	13	22	34	409
June	284	25	1	55	15	22	37	402
July	227	26	1	48	16	23	39	342
August	190	26	1	53	17	23	39	310
September	168	26	1	45	14	21	36	276
October	191	26	1	67	14	21	35	319
November	204	27	(s)	67	15	22	37	335
December	240	29	(s)	67	17	22	40	375
Total	**2,650**	**315**	**9**	**721**	**180**	**261**	**441**	**4,136**
2010 January	214	29	(s)	68	17	20	37	349
February	198	26	(s)	54	16	18	34	312
March	199	28	1	85	16	22	37	350
April	180	27	1	96	14	21	36	340
May	241	28	2	85	14	21	35	391
June	286	27	2	78	16	21	37	430
July	234	27	2	65	17	22	38	367
August	192	28	2	65	18	21	39	325
September	164	27	1	69	15	20	35	297
October	169	26	1	78	14	21	35	308
November	188	28	1	96	16	21	37	350
11-Month Total	**2,268**	**300**	**12**	**838**	**172**	**230**	**401**	**3,819**
2009 11-Month Total	**2,410**	**287**	**8**	**654**	**163**	**239**	**401**	**3,761**
2008 11-Month Total	**2,290**	**285**	**8**	**480**	**161**	**236**	**398**	**3,462**

[a] Conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate).

[b] Geothermal electricity net generation (converted to Btu using the geothermal energy plants heat rate).

[c] Solar thermal and photovoltaic (PV) electricity net generation (converted to Btu using the plants heat rate).

[d] Wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate).

[e] Wood and wood-derived fuels.

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

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

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

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

Web Page: See http://www.eia.gov/mer/renew.html 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

	Feed-stock[a]	Losses and Co-products[b]	Dena-turant[c]	Production[d]			Trade[d] Net Imports[e]	Stocks[d,f]	Stock Change[d,g]	Consumption[d]			*Consump-tion 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 January	94	38	321	16,058	674	57	510	11,383	848	15,720	660	56	*55*
February	91	37	311	15,527	652	55	505	11,173	-210	16,242	682	58	*56*
March	103	42	351	17,527	736	62	368	12,288	1,115	16,780	705	60	*58*
April	101	41	343	17,152	720	61	1,491	12,572	284	18,359	771	65	*64*
May	110	45	375	18,756	788	67	962	13,297	725	18,993	798	68	*66*
June	103	42	353	17,651	741	63	1,571	13,323	26	19,196	806	68	*67*
July	112	46	381	19,040	800	68	1,459	13,448	125	20,374	856	73	*71*
August	118	48	401	20,059	842	71	1,931	14,771	1,323	20,667	868	74	*72*
September	113	46	387	19,338	812	69	2,466	16,110	1,339	20,465	860	73	*71*
October	118	48	401	20,048	842	71	606	15,214	-896	21,550	905	77	*75*
November	118	48	403	20,139	846	72	278	15,286	72	20,345	854	72	*71*
December	119	49	407	20,342	854	72	463	14,226	-1,060	21,865	918	78	*76*
Total	**1,300**	**531**	**4,433**	**221,637**	**9,309**	**790**	**12,610**	**14,226**	**3,691**	**230,556**	**9,683**	**821**	***800***
2009 January	114	46	403	19,561	822	70	388	14,514	288	19,661	826	70	*68*
February	106	43	409	18,255	767	65	56	15,834	1,320	16,991	714	61	*59*
March	117	48	452	20,121	845	72	79	16,411	577	19,623	824	70	*68*
April	113	46	427	19,374	814	69	166	15,322	-1,089	20,629	866	74	*71*
May	123	50	459	21,024	883	75	507	14,173	-1,149	22,680	953	81	*79*
June	123	50	455	21,125	887	75	705	13,974	-199	22,029	925	78	*76*
July	133	54	503	22,887	961	82	960	14,223	249	23,598	991	84	*82*
August	135	55	494	23,136	972	82	983	14,671	448	23,671	994	84	*82*
September	129	53	479	22,218	933	79	310	15,283	612	21,916	920	78	*76*
October	137	55	515	23,467	986	84	269	14,933	-350	24,086	1,012	86	*83*
November	141	57	523	24,122	1,013	86	285	15,578	645	23,762	998	85	*82*
December	146	59	569	25,134	1,056	90	12	16,594	1,016	24,130	1,013	86	*83*
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	147	59	533	25,366	1,065	90	34	17,800	[i]1,089	24,311	1,021	87	*84*
February	135	55	488	23,328	980	83	27	18,897	1,097	22,258	935	79	*77*
March	153	62	527	26,270	1,103	94	27	19,691	794	25,503	1,071	91	*88*
April	145	58	512	24,962	1,048	89	36	19,682	-9	25,007	1,050	89	*87*
May	152	61	534	26,244	1,102	94	39	19,721	39	26,244	1,102	94	*91*
June	149	60	521	25,631	1,077	91	40	18,610	-1,111	26,782	1,125	95	*93*
July	154	62	540	26,581	1,116	95	18	17,784	-826	27,425	1,152	98	*95*
August	157	63	538	26,963	1,132	96	10	17,340	-444	27,417	1,152	98	*95*
September	151	61	530	26,061	1,095	93	5	17,408	68	25,998	1,092	93	*90*
October	159	64	563	27,410	1,151	98	1	17,295	-113	27,524	1,156	98	*95*
November	161	65	586	27,745	1,165	99	–	18,029	734	27,011	1,134	96	*94*
11-Month Total	**1,664**	**671**	**5,872**	**286,561**	**12,036**	**1,021**	**237**	**18,029**	**1,318**	**285,480**	**11,990**	**1,017**	***990***
2009 11-Month Total	**1,371**	**557**	**5,119**	**235,290**	**9,882**	**838**	**4,708**	**15,578**	**1,352**	**238,646**	**10,023**	**850**	***826***
2008 11-Month Total	**1,180**	**482**	**4,026**	**201,295**	**8,454**	**717**	**12,147**	**15,286**	**4,751**	**208,691**	**8,765**	**744**	***724***

[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] Fuel ethanol imports only. Data for fuel ethanol exports are not available.

[f] Stocks are at end of period.

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

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

[i] Derived from the preliminary December 2009 stocks value (16,711 thousand barrels), not the final December 2009 value (16,594 thousand barrels) that is shown under "Stocks."

NA=Not available. – =No data reported.

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/mer/renew.html 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 January	7	(s)	1,197	50	6	598	1,100	-501	NA	NA	NA	695	29	4
February	6	(s)	1,074	45	6	838	1,384	-546	NA	NA	NA	528	22	3
March	6	(s)	1,188	50	6	274	1,172	-898	NA	NA	NA	290	12	2
April	7	(s)	1,268	53	7	688	1,592	-904	NA	NA	NA	364	15	2
May	7	(s)	1,292	54	7	513	1,364	-850	NA	NA	NA	442	19	2
June	8	(s)	1,445	61	8	512	1,758	-1,246	NA	NA	NA	198	8	1
July	9	(s)	1,604	67	9	526	1,421	-894	NA	NA	NA	710	30	4
August	9	(s)	1,623	68	9	907	1,606	-699	NA	NA	NA	923	39	5
September	8	(s)	1,501	63	8	908	1,452	-544	NA	NA	NA	957	40	5
October	8	(s)	1,465	62	8	721	1,333	-612	NA	NA	NA	853	36	5
November	8	(s)	1,438	60	8	612	1,181	-569	NA	NA	NA	869	36	5
December	6	(s)	1,052	44	6	404	766	-362	NA	NA	NA	689	29	4
Total	**88**	**1**	**16,145**	**678**	**87**	**7,502**	**16,128**	**-8,626**	**NA**	**NA**	**NA**	**7,519**	**316**	**40**
2009 January	5	(s)	1,011	42	5	261	1,150	-889	664	664	621	79	3	(s)
February	4	(s)	780	33	4	158	1,166	-1,009	424	-240	61	73	3	(s)
March	3	(s)	599	25	3	383	203	180	665	241	0	538	23	3
April	3	(s)	624	26	3	52	154	-102	632	-33	0	554	23	3
May	4	(s)	689	29	4	117	417	-300	600	-32	0	421	18	2
June	4	(s)	761	32	4	138	366	-228	581	-19	0	552	23	3
July	6	(s)	1,030	43	6	58	581	-523	511	-70	0	576	24	3
August	6	(s)	1,070	45	6	126	397	-271	511	0	0	799	34	4
September	6	(s)	1,158	49	6	123	224	-101	527	16	0	1,041	44	6
October	7	(s)	1,364	57	7	159	424	-265	553	26	0	1,074	45	6
November	8	(s)	1,511	63	8	105	819	-714	531	-22	0	819	34	4
December	8	(s)	1,455	61	8	165	431	-265	711	180	0	1,010	42	5
Total	**65**	**1**	**12,054**	**506**	**65**	**1,844**	**6,332**	**-4,489**	**711**	**711**	**682**	**7,537**	**317**	**40**
2010 January	4	(s)	764	32	4	41	296	-256	834	[g]328	0	181	8	1
February	4	(s)	797	33	4	31	139	-108	844	10	0	679	29	4
March	4	(s)	812	34	4	60	433	-374	969	125	0	314	13	2
April	4	(s)	735	31	4	45	227	-182	931	-38	0	591	25	3
May	4	(s)	688	29	4	80	251	-171	1,060	129	0	387	16	2
June	3	(s)	554	23	3	54	304	-249	968	-92	0	397	17	2
July	4	(s)	670	28	4	32	199	-167	830	-138	0	641	27	3
August	3	(s)	543	23	3	52	225	-173	771	-59	0	429	18	2
September	3	(s)	556	23	3	69	131	-62	682	-89	0	582	24	3
October	3	(s)	497	21	3	18	132	-114	650	-32	0	415	17	2
November	2	(s)	376	16	2	30	57	-27	676	26	0	323	14	2
11-Month Total	**38**	**1**	**6,992**	**294**	**37**	**512**	**2,394**	**-1,883**	**676**	**170**	**0**	**4,939**	**207**	**26**
2009 11-Month Total	**58**	**1**	**10,599**	**445**	**57**	**1,678**	**5,901**	**-4,223**	**531**	**531**	**682**	**6,527**	**274**	**35**
2008 11-Month Total	**82**	**1**	**15,094**	**634**	**81**	**7,098**	**15,362**	**-8,264**	**NA**	**NA**	**NA**	**6,830**	**287**	**37**

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

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

[c] Net imports equal imports minus exports.

[d] Stocks are at end of period.

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

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

[g] Derived from the preliminary December 2009 stocks value (506 thousand barrels), not the final December 2009 value (711 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/mer/renew.html for all available data beginning in 2001.

Sources: See end of section.

Renewable Energy

Note. Renewable Energy Production and Consumption. In Table 1.1, 1.3, and 10.1, renewable energy consumption consists of: conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the geothermal plants heat rate), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; fuel ethanol (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
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. (The annual estimate for the current year is set equal to that of the previous year.)

Residential Sector, Wood
1973–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980 forward: EIA, Form EIA-457, "Residential Energy Consumption Survey"; and EIA 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-fueled plants heat rates in 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-fueled plants heat rates in Table A6.

Commercial Sector, Wind
2009 forward: Commercial sector wind electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the fossil-fueled plants heat rates in 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-fueled plants heat rates in 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-fueled plants heat rates in 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: U.S. Energy Information Administration (EIA), *Petroleum Supply Annual (PSA)*, 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 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 and conventional motor gasoline.

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

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

Trade, Stocks, and Stock Change
1992–2009: EIA, PSA, annual reports, Table 1.

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

2010: 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 and January 2010 forward: 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).

January 2008–December 2009: 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.

Trade

U.S. Department of Agriculture, imports data for Harmonized Tariff Schedule codes 3824.90.40.20, "Fatty Esters Animal/Vegetable/Mixture" (for data through June 2010), and 3824.90.40.30, "Biodiesel/Mixes" (for data beginning in July 2010); and exports data for Schedule B code 3824.90.40.00, "Fatty Substances Animal/Vegetable/Mixture." 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: EIA, *Petroleum Supply Annual (PSA)*, Table 1, data for renewable fuels except fuel ethanol.

2010: EIA, *Petroleum Supply Monthly*, 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.

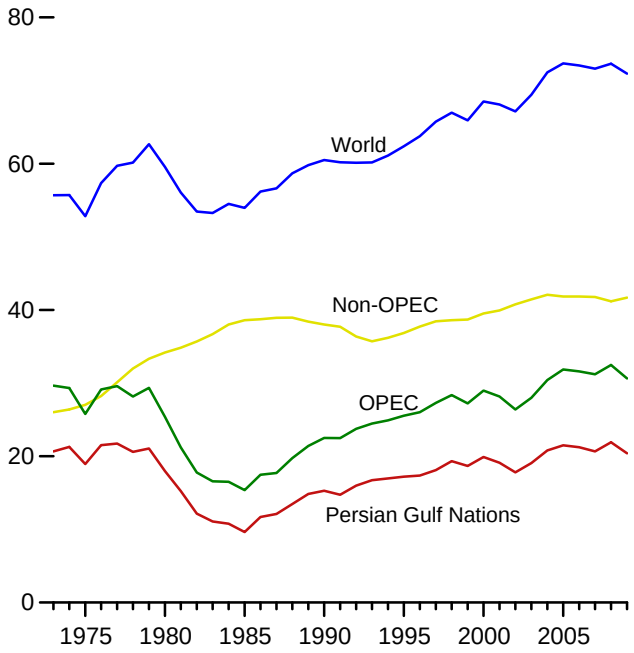
March 2009 forward: Calculated as biodiesel production plus biodiesel net imports minus biodiesel stock change.

11 International Petroleum

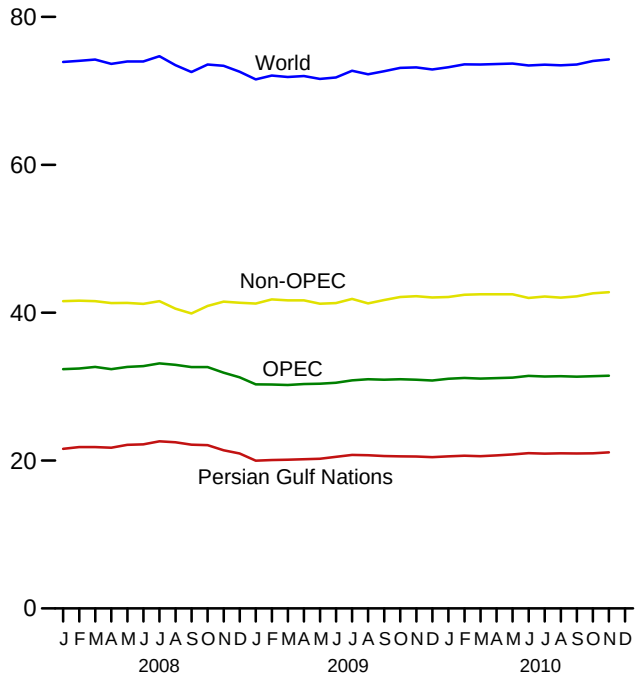
Drilling rig, Gansu Province, People's Republic of China. Source: U.S. Department of Energy.

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

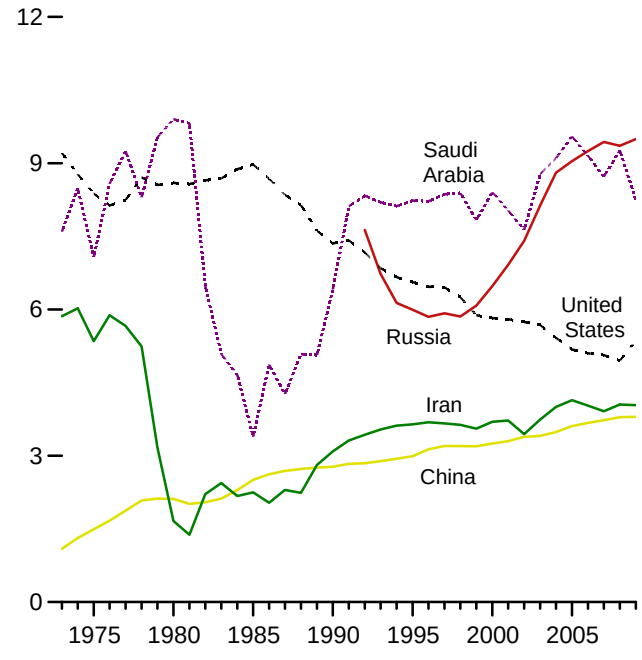
World Production, 1973-2010



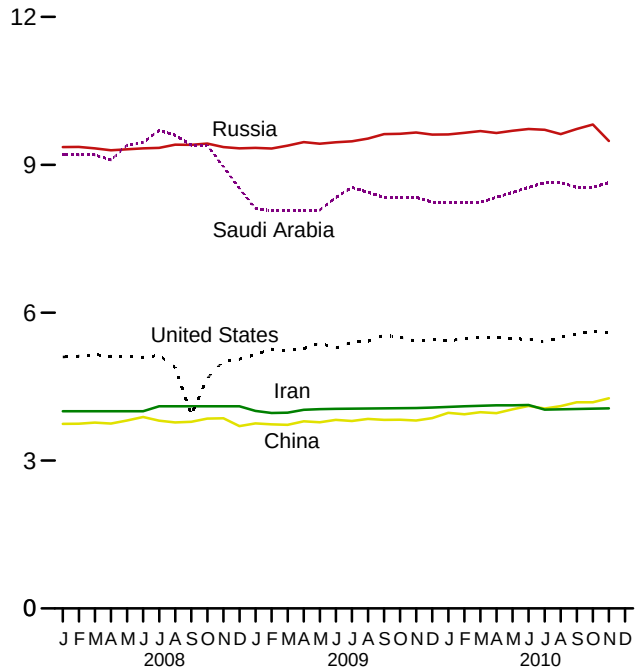
World Production, Monthly



Selected Producers, 1973-2010



Selected Producers, Monthly

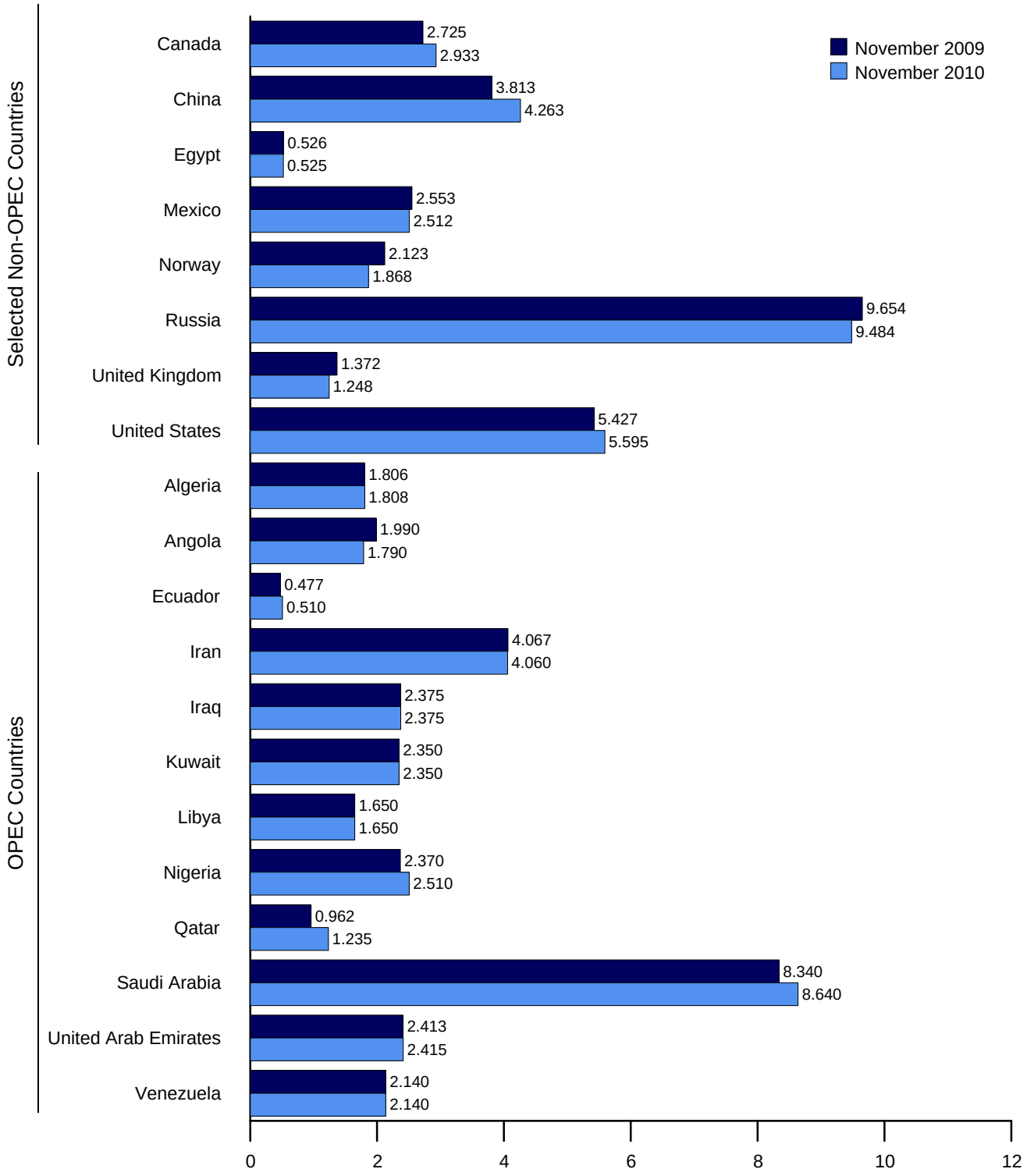


Notes: • OPEC is the Organization of the Petroleum Exporting Countries. • The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

Web Page: http://www.eia.gov/mer/inter.html.

Sources: Tables 11.1a and 11.1b.

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



Note: OPEC is the Organization of the Petroleum Exporting Countries.
Web Page: http://www.eia.gov/mer/inter.html.
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	**1,037**	**231**	**281**	**2,250**	**1,433**	**1,023**	**1,059**	**1,495**	**301**	**3,388**	**1,193**	**1,677**	**15,368**
1990 Average	**1,175**	**475**	**285**	**3,088**	**2,040**	**1,175**	**1,375**	**1,810**	**406**	**6,410**	**2,117**	**2,137**	**22,493**
1995 Average	**1,202**	**646**	**392**	**3,643**	**560**	**2,057**	**1,390**	**1,993**	**442**	**8,231**	**2,233**	**2,750**	**25,540**
1996 Average	**1,242**	**709**	**396**	**3,686**	**579**	**2,062**	**1,401**	**2,001**	**510**	**8,218**	**2,278**	**2,938**	**26,018**
1997 Average	**1,277**	**714**	**388**	**3,664**	**1,155**	**2,007**	**1,446**	**2,132**	**550**	**8,362**	**2,316**	**3,280**	**27,292**
1998 Average	**1,246**	**735**	**375**	**3,634**	**2,150**	**2,085**	**1,390**	**2,153**	**696**	**8,389**	**2,345**	**3,167**	**28,366**
1999 Average	**1,202**	**745**	**373**	**3,557**	**2,508**	**1,898**	**1,319**	**2,130**	**665**	**7,833**	**2,169**	**2,826**	**27,224**
2000 Average	**1,254**	**746**	**395**	**3,696**	**2,571**	**2,079**	**1,410**	**2,165**	**737**	**8,404**	**2,368**	**3,155**	**28,980**
2001 Average	**1,310**	**742**	**412**	**3,724**	**2,390**	**1,998**	**1,367**	**2,256**	**714**	**8,031**	**2,205**	**3,010**	**28,159**
2002 Average	**1,306**	**896**	**393**	**3,444**	**2,023**	**1,894**	**1,319**	**2,118**	**679**	**7,634**	**2,082**	**2,604**	**26,392**
2003 Average	**1,611**	**903**	**411**	**3,743**	**1,308**	**2,136**	**1,421**	**2,275**	**715**	**8,775**	**2,348**	**2,335**	**27,980**
2004 Average	**1,677**	**1,052**	**528**	**4,001**	**2,011**	**2,376**	**1,515**	**2,329**	**783**	**9,101**	**2,478**	**2,557**	**30,408**
2005 Average	**1,797**	**1,250**	**532**	**4,139**	**1,878**	**2,529**	**1,633**	**2,627**	**835**	**9,550**	**2,535**	**2,565**	**31,871**
2006 Average	**1,814**	**1,413**	**536**	**4,028**	**1,996**	**2,535**	**1,681**	**2,440**	**850**	**9,152**	**2,636**	**2,511**	**31,591**
2007 Average	**1,834**	**1,744**	**511**	**3,912**	**2,086**	**2,464**	**1,702**	**2,350**	**851**	**8,722**	**2,603**	**2,433**	**31,210**
2008 January	1,826	1,992	520	4,000	2,203	2,550	1,790	2,230	892	9,200	2,709	2,440	32,352
February	1,826	1,997	519	4,000	2,353	2,600	1,790	2,100	916	9,200	2,709	2,440	32,449
March	1,825	2,003	508	4,000	2,353	2,600	1,790	2,330	920	9,200	2,710	2,430	32,669
April	1,825	2,009	510	4,000	2,353	2,600	1,769	2,130	934	9,100	2,710	2,420	32,361
May	1,825	2,015	499	4,000	2,453	2,600	1,745	2,060	938	9,400	2,710	2,410	32,655
June	1,824	2,013	495	4,000	2,453	2,607	1,745	2,140	942	9,450	2,710	2,400	32,780
July	1,824	2,009	498	4,100	2,505	2,614	1,720	2,120	947	9,700	2,710	2,390	33,138
August	1,824	1,937	503	4,100	2,456	2,622	1,645	2,216	951	9,600	2,711	2,380	32,945
September	1,824	1,871	498	4,100	2,328	2,629	1,745	2,210	955	9,400	2,711	2,370	32,640
October	1,824	1,990	497	4,100	2,328	2,629	1,745	2,185	925	9,400	2,661	2,360	32,643
November	1,824	1,990	502	4,100	2,359	2,486	1,700	2,180	885	8,959	2,561	2,350	31,895
December	1,824	1,940	508	4,100	2,360	2,493	1,650	2,080	885	8,518	2,561	2,340	31,259
Average	**1,825**	**1,981**	**505**	**4,050**	**2,375**	**2,586**	**1,736**	**2,165**	**924**	**9,261**	**2,681**	**2,394**	**32,483**
2009 January	1,758	1,915	504	4,007	2,212	2,350	1,650	2,192	860	8,113	2,411	2,340	30,312
February	1,757	1,840	498	3,963	2,313	2,350	1,650	2,162	935	8,068	2,412	2,340	30,288
March	1,757	1,840	497	3,970	2,365	2,350	1,650	2,060	910	8,072	2,412	2,340	30,223
April	1,757	1,840	495	4,030	2,366	2,350	1,650	2,217	910	8,077	2,412	2,240	30,344
May	1,757	1,840	486	4,044	2,418	2,350	1,650	2,212	910	8,081	2,412	2,240	30,399
June	1,756	1,840	491	4,050	2,419	2,350	1,650	2,059	910	8,335	2,412	2,240	30,514
July	1,806	1,890	483	4,053	2,470	2,350	1,650	2,051	910	8,540	2,413	2,240	30,857
August	1,806	1,950	477	4,056	2,472	2,350	1,650	2,193	945	8,440	2,413	2,240	30,992
September	1,806	1,950	475	4,060	2,473	2,350	1,650	2,240	945	8,340	2,413	2,240	30,942
October	1,806	1,990	475	4,063	2,425	2,350	1,650	2,290	951	8,340	2,413	2,240	30,993
November	1,806	1,990	477	4,067	2,375	2,350	1,650	2,370	962	8,340	2,413	2,140	30,940
December	1,806	1,990	470	4,076	2,375	2,350	1,650	2,450	974	8,240	2,414	2,040	30,834
Average	**1,782**	**1,907**	**486**	**4,037**	**2,391**	**2,350**	**1,650**	**2,208**	**927**	**8,250**	**2,413**	**2,239**	**30,639**
2010 January	1,810	2,040	463	4,088	2,475	2,350	1,650	2,480	969	8,240	2,414	2,090	31,069
February	1,809	2,060	469	4,100	2,475	2,350	1,650	2,420	1,036	8,240	2,414	2,140	31,163
March	1,809	2,070	479	4,112	2,375	2,350	1,650	2,430	1,055	8,240	2,414	2,090	31,074
April	1,809	2,070	478	4,120	2,375	2,350	1,650	2,360	1,072	8,340	2,414	2,110	31,149
May	1,809	2,030	479	4,120	2,375	2,350	1,650	2,310	1,091	8,440	2,415	2,140	31,208
June	1,808	1,980	492	4,127	2,425	2,350	1,650	2,410	1,113	8,540	2,415	2,140	31,449
July	1,808	1,970	489	4,033	2,325	2,350	1,650	2,410	1,136	8,640	2,415	2,140	31,367
August	1,808	1,890	486	4,040	2,325	2,350	1,650	2,510	1,164	8,640	2,415	2,140	31,418
September	1,808	1,790	490	4,047	2,375	2,350	1,650	2,550	1,193	8,540	2,415	2,140	31,348
October	1,808	1,790	[R] 498	4,053	2,375	2,350	1,650	2,580	1,216	8,540	2,415	2,140	[R] 31,415
November	1,808	1,790	510	4,060	2,375	2,350	1,650	2,510	1,235	8,640	2,415	2,140	31,483
11-Month Average	**1,809**	**1,952**	**485**	**4,082**	**2,388**	**2,350**	**1,650**	**2,452**	**1,117**	**8,459**	**2,415**	**2,128**	**31,286**
2009 11-Month Average	**1,780**	**1,899**	**487**	**4,033**	**2,392**	**2,350**	**1,650**	**2,186**	**922**	**8,251**	**2,412**	**2,258**	**30,621**
2008 11-Month Average	**1,825**	**1,984**	**504**	**4,046**	**2,377**	**2,594**	**1,744**	**2,173**	**928**	**9,330**	**2,692**	**2,399**	**32,596**

[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 October 2010, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 538 thousand barrels per day. Data for Saudi Arabia include approximately 150 thousand barrels per day from the Abu Safah field produced on behalf of Bahrain.

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

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

Web Page: See http://www.eia.gov/mer/inter.html 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**	**53,966**
1990 Average	**15,278**	**1,553**	**2,774**	**873**	**2,553**	**1,630**	**10,975**	**NA**	**1,820**	**7,355**	**37,999**	**60,492**
1995 Average	**17,208**	**1,805**	**2,990**	**920**	**2,618**	**2,766**	**– –**	**5,995**	**2,489**	**6,560**	**36,845**	**62,385**
1996 Average	**17,367**	**1,837**	**3,131**	**922**	**2,855**	**3,091**	**– –**	**5,850**	**2,568**	**6,465**	**37,733**	**63,752**
1997 Average	**18,095**	**1,922**	**3,200**	**856**	**3,023**	**3,142**	**– –**	**5,920**	**2,518**	**6,452**	**38,452**	**65,744**
1998 Average	**19,337**	**1,981**	**3,198**	**834**	**3,070**	**3,011**	**– –**	**5,854**	**2,616**	**6,252**	**38,599**	**66,966**
1999 Average	**18,667**	**1,907**	**3,195**	**852**	**2,906**	**3,019**	**– –**	**6,079**	**2,684**	**5,881**	**38,698**	**65,922**
2000 Average	**19,892**	**1,977**	**3,249**	**768**	**3,012**	**3,222**	**– –**	**6,479**	**2,275**	**5,822**	**39,515**	**68,495**
2001 Average	**19,098**	**2,029**	**3,300**	**720**	**3,127**	**3,226**	**– –**	**6,917**	**2,282**	**5,801**	**39,940**	**68,099**
2002 Average	**17,794**	**2,171**	**3,390**	**715**	**3,177**	**3,131**	**– –**	**7,408**	**2,292**	**5,746**	**40,766**	**67,158**
2003 Average	**19,063**	**2,306**	**3,409**	**713**	**3,371**	**3,042**	**– –**	**8,132**	**2,093**	**5,681**	**41,452**	**69,433**
2004 Average	**20,787**	**2,398**	**3,485**	**673**	**3,383**	**2,954**	**– –**	**8,805**	**1,845**	**5,419**	**42,068**	**72,476**
2005 Average	**21,501**	**2,369**	**3,609**	**658**	**3,334**	**2,698**	**– –**	**9,043**	**1,649**	**5,178**	**41,847**	**73,718**
2006 Average	**21,232**	**2,525**	**3,673**	**633**	**3,256**	**2,491**	**– –**	**9,247**	**1,490**	**5,102**	**41,839**	**73,430**
2007 Average	**20,672**	**2,628**	**3,729**	**637**	**3,076**	**2,270**	**– –**	**9,437**	**1,498**	**5,064**	**41,778**	**72,988**
2008 January	21,588	2,534	3,744	609	2,928	2,209	– –	9,359	1,456	5,100	41,548	73,900
February	21,813	2,545	3,747	605	2,909	2,176	– –	9,362	1,491	5,122	41,613	74,063
March	21,818	2,631	3,769	601	2,839	2,209	– –	9,334	1,450	5,151	41,567	74,236
April	21,732	2,516	3,751	597	2,757	2,111	– –	9,296	1,491	5,117	41,299	73,659
May	22,136	2,439	3,811	593	2,791	2,247	– –	9,315	1,485	5,102	41,313	73,968
June	22,197	2,471	3,884	589	2,833	2,002	– –	9,334	1,363	5,098	41,197	73,977
July	22,610	2,650	3,808	576	2,778	2,302	– –	9,344	1,307	5,133	41,548	74,686
August	22,474	2,682	3,774	562	2,759	2,057	– –	9,409	1,099	4,894	40,531	73,476
September	22,157	2,562	3,788	563	2,722	2,057	– –	9,406	1,392	3,930	39,897	72,538
October	22,077	2,600	3,850	560	2,757	2,241	– –	9,430	1,352	4,669	40,910	73,553
November	21,384	2,683	3,859	557	2,711	2,276	– –	9,359	1,396	5,024	41,495	73,390
December	20,952	2,633	3,699	556	2,717	2,287	– –	9,333	1,423	5,056	41,332	72,591
Average	**21,913**	**2,579**	**3,790**	**581**	**2,792**	**2,182**	**– –**	**9,357**	**1,391**	**4,950**	**41,188**	**73,671**
2009 January	19,989	2,592	3,755	553	2,685	2,195	– –	9,343	1,425	5,154	41,242	71,554
February	20,076	2,684	3,733	550	2,663	2,260	– –	9,331	1,449	5,260	41,789	72,078
March	20,114	2,579	3,726	547	2,652	2,238	– –	9,388	1,451	5,227	41,656	71,880
April	20,179	2,459	3,795	547	2,642	2,072	– –	9,459	1,468	5,273	41,656	72,000
May	20,249	2,436	3,775	544	2,609	1,890	– –	9,429	1,390	5,379	41,218	71,617
June	20,511	2,559	3,824	541	2,519	1,850	– –	9,457	1,359	5,281	41,292	71,806
July	20,771	2,667	3,801	538	2,561	2,147	– –	9,476	1,342	5,402	41,858	72,715
August	20,711	2,575	3,844	535	2,542	1,970	– –	9,532	993	5,418	41,260	72,252
September	20,616	2,528	3,826	532	2,599	1,923	– –	9,623	1,119	5,547	41,718	72,660
October	20,577	2,594	3,828	529	2,602	2,077	– –	9,629	1,266	5,501	42,126	73,119
November	20,542	2,725	3,813	526	2,553	2,123	– –	9,654	1,372	5,427	42,233	73,173
December	20,464	2,564	3,863	523	2,593	2,073	– –	9,614	1,310	5,451	42,065	72,900
Average	**20,402**	**2,579**	**3,799**	**539**	**2,601**	**2,067**	**– –**	**9,495**	**1,328**	**5,361**	**41,675**	**72,314**
2010 January	20,571	R 2,490	3,968	523	2,615	2,060	– –	9,615	1,371	E 5,433	R 42,129	R 73,197
February	20,650	R 2,678	3,938	523	2,610	2,038	– –	9,648	1,284	E 5,465	R 42,429	R 73,592
March	20,581	R 2,527	3,981	523	2,595	1,983	– –	9,683	1,417	E 5,502	42,478	73,552
April	20,707	R 2,663	3,961	523	2,593	1,967	– –	9,646	1,386	E 5,496	R 42,484	R 73,633
May	20,825	R 2,744	4,040	523	2,593	1,921	– –	9,691	1,299	E 5,468	R 42,486	R 73,694
June	21,004	R 2,767	4,108	523	2,546	1,611	– –	9,727	1,076	E 5,465	R 41,986	R 73,435
July	20,934	R 2,765	4,056	522	2,573	1,864	– –	9,710	1,040	E 5,406	R 42,181	R 73,548
August	20,969	R 2,774	4,104	522	2,559	1,648	– –	9,623	1,053	E 5,506	R 42,040	R 73,458
September	20,955	R 2,649	4,183	522	2,570	1,637	– –	9,725	1,183	E 5,567	R 42,207	R 73,556
October	20,984	R 2,707	4,181	522	2,571	1,952	– –	9,816	R 1,196	E 5,616	R 42,626	R 74,041
November	21,110	2,933	4,263	525	2,512	1,868	– –	9,484	1,248	E 5,595	42,773	74,256
11-Month Average	**20,845**	**2,699**	**4,072**	**523**	**2,576**	**1,868**	**– –**	**9,670**	**1,232**	**5,502**	**42,346**	**73,632**
2009 11-Month Average	**20,396**	**2,581**	**3,793**	**540**	**2,602**	**2,067**	**– –**	**9,484**	**1,329**	**5,352**	**41,639**	**72,259**
2008 11-Month Average	**22,001**	**2,574**	**3,799**	**583**	**2,798**	**2,172**	**– –**	**9,359**	**1,388**	**4,940**	**41,174**	**73,771**

[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.

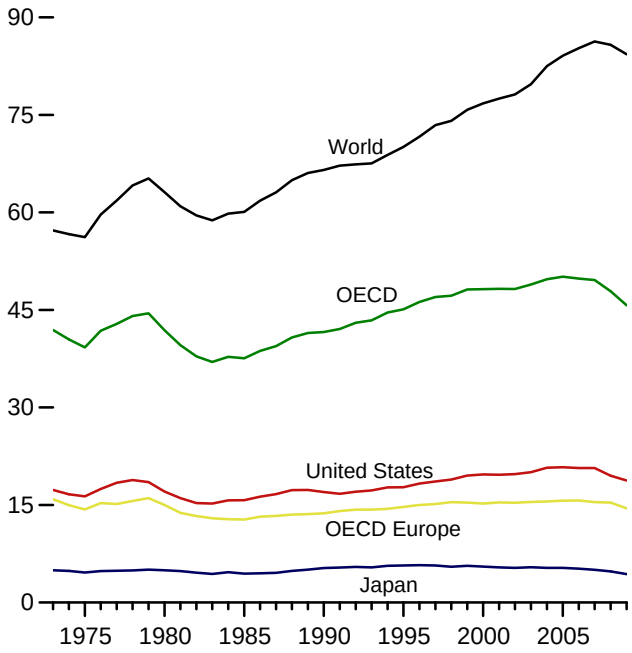
Web Page: See http://www.eia.gov/mer/inter.html for all available data beginning in 1973.

Sources: See end of section.

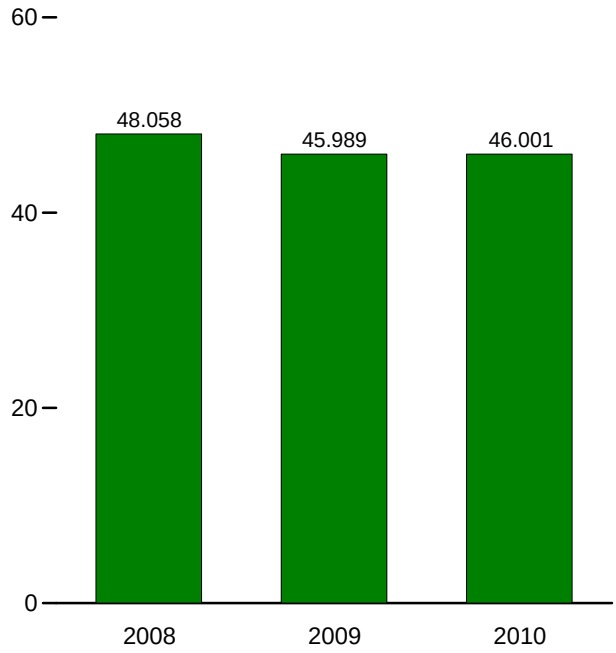
Figure 11.2 Petroleum Consumption in OECD Countries

(Million Barrels per Day)

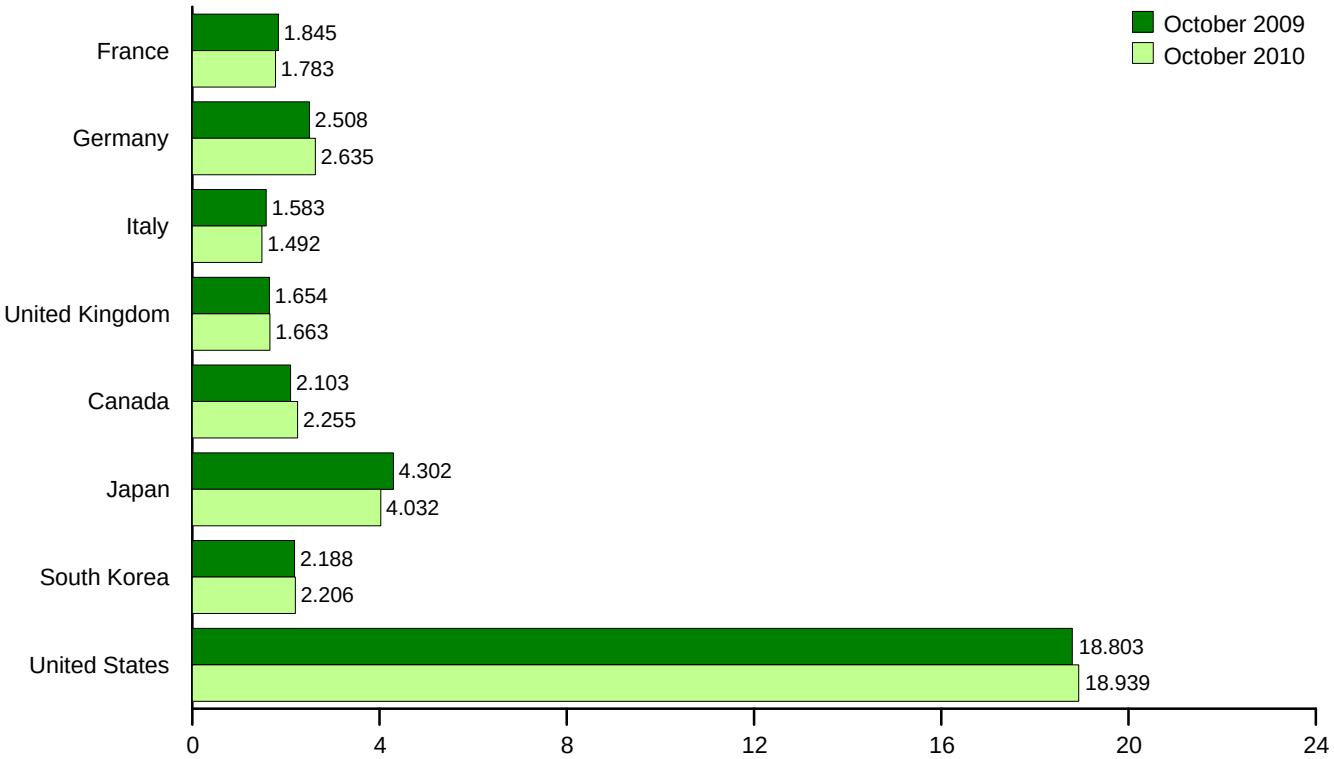
Overview, 1973-2009



OECD Total, October



By Selected OECD Country



Note: OECD is the Organization for Economic Cooperation and Development.
Web Page: http://www.eia.gov/mer/inter.html.
Source: Table 11.2.

Table 11.2 Petroleum Consumption in OECD Countries

(Thousand Barrels per Day)

	France	Germany[a]	Italy	United Kingdom	OECD Europe[b]	Canada	Japan	South Korea	United States	Other OECD[c]	OECD[d]	World
1973 Average	**2,601**	**3,324**	**2,068**	**2,341**	**15,879**	**1,729**	**4,949**	**281**	**17,308**	**1,768**	**41,913**	**57,237**
1975 Average	**2,252**	**2,957**	**1,855**	**1,911**	**14,314**	**1,779**	**4,621**	**311**	**16,322**	**1,885**	**39,232**	**56,198**
1980 Average	**2,256**	**3,082**	**1,934**	**1,725**	**14,995**	**1,873**	**4,960**	**537**	**17,056**	**2,449**	**41,870**	**63,113**
1985 Average	**1,753**	**2,651**	**1,705**	**1,617**	**12,770**	**1,526**	**4,436**	**552**	**15,726**	**2,564**	**37,575**	**60,083**
1990 Average	**1,826**	**2,682**	**1,868**	**1,776**	**13,729**	**1,737**	**5,315**	**1,048**	**16,988**	**2,784**	**41,601**	**66,533**
1995 Average	**1,920**	**2,882**	**1,942**	**1,816**	**14,714**	**1,817**	**5,693**	**2,008**	**17,725**	**3,135**	**45,092**	**70,067**
1996 Average	**1,949**	**2,922**	**1,920**	**1,852**	**14,998**	**1,871**	**5,739**	**2,101**	**18,309**	**3,206**	**46,224**	**71,665**
1997 Average	**1,969**	**2,917**	**1,934**	**1,810**	**15,140**	**1,959**	**5,702**	**2,255**	**18,620**	**3,322**	**46,999**	**73,436**
1998 Average	**2,043**	**2,923**	**1,943**	**1,792**	**15,447**	**1,949**	**5,507**	**1,917**	**18,917**	**3,443**	**47,180**	**74,079**
1999 Average	**2,031**	**2,838**	**1,891**	**1,811**	**15,364**	**2,036**	**5,642**	**2,084**	**19,519**	**3,512**	**48,157**	**75,791**
2000 Average	**2,000**	**2,772**	**1,854**	**1,765**	**15,219**	**2,035**	**5,515**	**2,135**	**19,701**	**3,591**	**48,197**	**76,772**
2001 Average	**2,054**	**2,815**	**1,832**	**1,747**	**15,393**	**2,066**	**5,412**	**2,132**	**19,649**	**3,605**	**48,257**	**77,512**
2002 Average	**1,985**	**2,722**	**1,870**	**1,739**	**15,342**	**2,087**	**5,319**	**2,149**	**19,761**	**3,558**	**48,217**	**78,160**
2003 Average	**2,001**	**2,679**	**1,860**	**1,759**	**15,461**	**2,217**	**5,429**	**2,175**	**20,034**	**3,598**	**48,913**	**79,722**
2004 Average	**2,009**	**2,665**	**1,794**	**1,785**	**15,531**	**2,310**	**5,319**	**2,155**	**20,731**	**3,687**	**49,733**	**82,511**
2005 Average	**1,991**	**2,647**	**1,755**	**1,823**	**15,667**	**2,341**	**5,328**	**2,191**	**20,802**	**3,800**	**50,129**	**84,105**
2006 Average	**1,991**	**2,692**	**1,743**	**1,804**	**15,684**	**2,253**	**5,198**	**2,180**	**20,687**	**3,816**	**49,818**	**85,255**
2007 Average	**1,979**	**2,468**	**1,688**	**1,738**	**15,453**	**2,307**	**5,037**	**2,241**	**20,680**	**3,874**	**49,593**	**86,288**
2008 January	2,049	2,496	1,652	1,726	15,485	2,315	5,410	2,362	20,247	3,827	49,645	NA
February	1,980	2,586	1,725	1,837	15,684	2,338	5,926	2,337	20,029	3,910	50,225	NA
March	1,871	2,414	1,579	1,705	14,873	2,237	5,062	2,256	19,831	3,764	48,023	NA
April	1,994	2,527	1,637	1,853	15,656	2,125	5,040	2,088	19,815	4,031	48,756	NA
May	1,840	2,323	1,633	1,651	14,734	2,187	4,494	2,171	19,798	3,944	47,327	NA
June	1,887	2,437	1,631	1,740	15,006	2,232	4,387	1,983	19,678	3,806	47,092	NA
July	1,914	2,649	1,726	1,654	15,522	2,276	4,483	2,017	19,557	4,016	47,871	NA
August	1,845	2,635	1,521	1,607	15,068	2,190	4,220	2,018	19,272	3,848	46,617	NA
September	1,983	2,844	1,661	1,753	16,151	2,250	4,337	2,157	17,839	3,743	46,476	NA
October	2,038	2,859	1,657	1,758	15,968	2,285	4,383	2,013	19,698	3,711	48,058	NA
November	1,870	2,623	1,554	1,741	14,986	2,261	4,613	2,049	19,052	3,644	46,605	NA
December	2,076	2,473	1,622	1,740	15,184	2,208	5,154	2,261	19,142	3,908	47,858	NA
Average	**1,945**	**2,572**	**1,633**	**1,729**	**15,357**	**2,242**	**4,788**	**2,142**	**19,498**	**3,846**	**47,874**	**85,776**
2009 January	1,990	2,392	1,491	1,744	R 14,702	2,231	4,850	2,297	19,040	3,578	R 46,697	NA
February	1,998	2,617	1,568	1,698	R 15,071	2,220	4,721	2,455	18,822	3,729	R 47,017	NA
March	1,920	2,726	1,506	1,739	14,925	2,154	4,615	2,187	18,719	3,700	46,299	NA
April	1,799	2,478	1,510	1,708	14,453	2,049	4,231	2,209	18,672	3,657	R 45,270	NA
May	1,669	2,332	1,465	1,614	13,804	2,053	3,823	2,128	18,211	3,677	43,695	NA
June	1,817	2,366	1,525	1,692	14,554	2,142	4,068	2,077	18,828	3,788	45,456	NA
July	1,839	2,411	1,676	1,660	R 14,688	2,170	4,000	2,005	18,626	3,813	R 45,303	NA
August	1,577	2,262	1,400	1,656	13,750	2,157	4,176	2,066	18,949	3,773	44,871	NA
September	1,884	2,548	1,580	1,674	R 14,975	2,138	4,146	2,034	18,594	3,715	R 45,602	NA
October	1,845	2,508	1,583	1,654	R 14,765	2,103	4,302	2,188	18,803	3,827	R 45,989	NA
November	1,714	2,359	1,484	1,637	R 14,134	2,151	4,400	2,227	18,753	3,854	45,519	NA
December	1,894	2,298	1,547	1,532	14,153	2,242	5,089	2,367	19,237	3,981	47,069	NA
Average	**1,828**	**2,440**	**1,528**	**1,667**	**14,493**	**2,151**	**4,367**	**2,185**	**18,771**	**3,758**	**45,725**	**84,337**
2010 January	1,739	2,168	1,328	1,582	R 13,343	2,152	4,731	2,342	18,528	3,560	R 44,655	NA
February	1,936	2,452	1,491	1,683	R 14,528	2,276	4,950	2,362	18,860	3,900	R 46,876	NA
March	1,896	2,514	1,523	1,678	R 14,662	2,163	4,690	2,234	19,070	3,802	R 46,621	NA
April	1,827	2,279	1,478	1,642	R 14,092	2,160	4,324	2,229	18,910	3,854	R 45,569	NA
May	1,676	2,364	1,411	1,611	R 13,746	2,190	3,838	2,150	18,827	3,814	R 44,566	NA
June	1,818	2,523	1,536	1,594	R 14,518	2,329	3,964	2,157	19,314	3,918	R 46,200	NA
July	1,811	2,584	1,618	1,627	R 14,782	R 2,197	4,167	2,092	19,278	3,835	R 46,351	NA
August	1,724	2,562	1,466	1,639	R 14,361	R 2,309	4,385	2,201	19,692	3,679	R 46,628	NA
September	1,927	2,762	1,583	1,636	R 15,232	R 2,278	4,438	2,172	19,507	R 3,765	R 47,392	NA
October	1,783	2,635	1,492	1,663	14,811	2,255	4,032	2,206	18,939	3,758	46,001	NA
10-Month Average	**1,812**	**2,484**	**1,492**	**1,635**	**14,404**	**2,230**	**4,347**	**2,213**	**19,093**	**3,787**	**46,075**	**NA**
2009 10-Month Average	**1,832**	**2,463**	**1,530**	**1,684**	**14,563**	**2,141**	**4,290**	**2,162**	**18,726**	**3,726**	**45,608**	**NA**
2008 10-Month Average	**1,940**	**2,577**	**1,642**	**1,727**	**15,411**	**2,243**	**4,768**	**2,139**	**19,578**	**3,860**	**48,000**	**NA**

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

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

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

[d] The Organization for Economic Cooperation and Development (OECD) consists of "OECD Europe," Canada, Japan, South Korea, the United States, and "Other OECD."

R=Revised. NA=Not available.

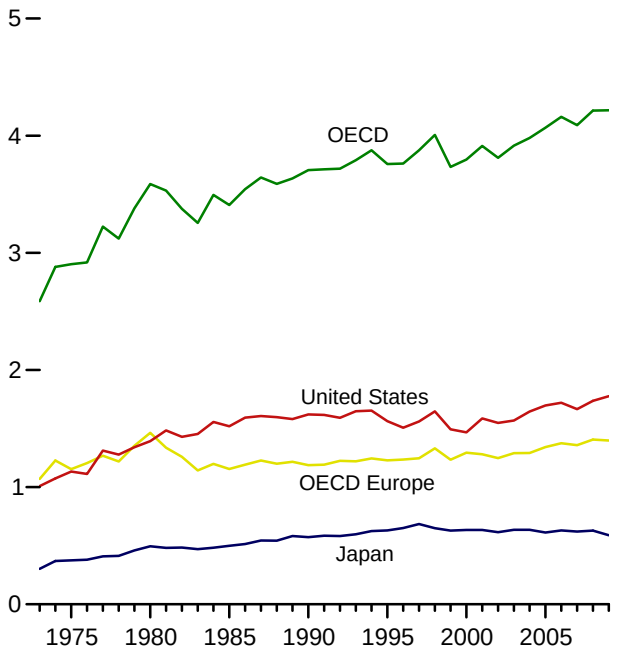
Notes: • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

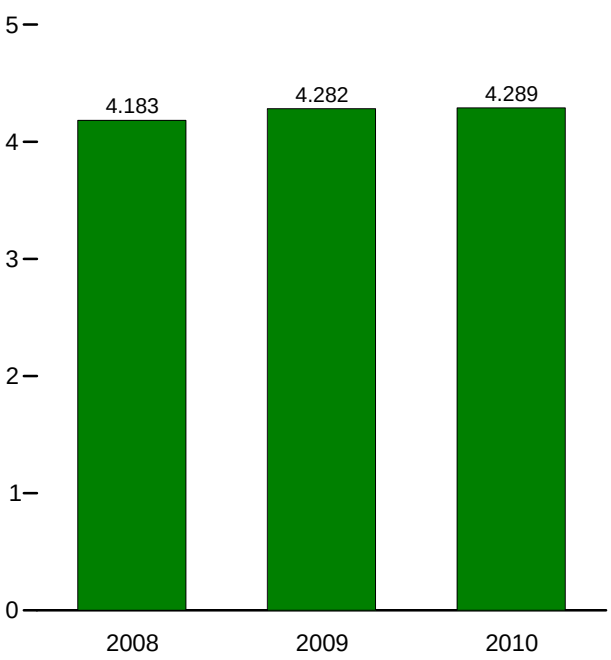
Sources: • **United States:** Table 3.1. • **Chile, East Germany, Former Czechoslavakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries, U.S. Territories,** and **World: 1973-1979—**U.S. Energy Information Administration (EIA), International Energy Database. • **Countries Other Than United States: 1980-2008—**EIA, International Energy Statistics (IES). • **OECD Countries,** and **U.S. Territories: 2009 forward—**EIA, IES. • **World: 2009—**EIA, *Short Term Energy Outlook,* Feb. 8, 2011, 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)

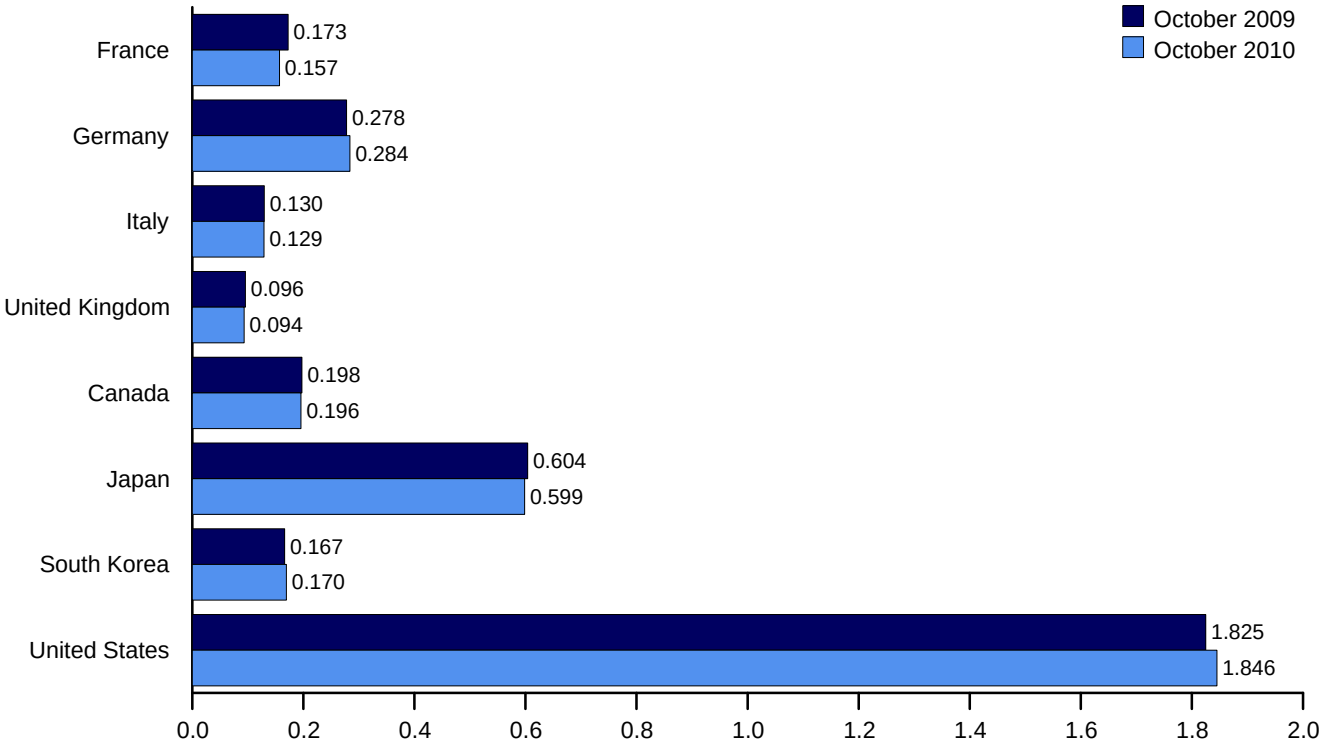
Overview, End of Year, 1973-2009



OECD Stocks, End of Month, October



By Selected OECD Country, End of Month



Note: OECD is the Organization for Economic Cooperation and Development.
Web Page: http://www.eia.gov/mer/inter.html.
Source: Table 11.3.

Table 11.3 Petroleum Stocks in OECD Countries

(Million Barrels)

	France	Germany[a]	Italy	United Kingdom	OECD Europe[b]	Canada	Japan	South Korea	United States	Other OECD[c]	OECD[d]
1973 Year	**201**	**181**	**152**	**156**	**1,070**	**140**	**303**	**NA**	**1,008**	**67**	**2,588**
1975 Year	**225**	**187**	**143**	**165**	**1,154**	**174**	**375**	**NA**	**1,133**	**67**	**2,903**
1980 Year	**243**	**319**	**170**	**168**	**1,464**	**164**	**495**	**NA**	**1,392**	**72**	**3,587**
1985 Year	**139**	**277**	**156**	**131**	**1,154**	**112**	**500**	**13**	**1,519**	**110**	**3,408**
1990 Year	**143**	**280**	**143**	**103**	**1,188**	**143**	**572**	**64**	**1,621**	**117**	**3,706**
1995 Year	**155**	**302**	**141**	**101**	**1,228**	**132**	**631**	**92**	**1,563**	**113**	**3,758**
1996 Year	**154**	**303**	**135**	**103**	**1,235**	**127**	**651**	**123**	**1,507**	**118**	**3,762**
1997 Year	**161**	**299**	**129**	**100**	**1,246**	**144**	**685**	**124**	**1,560**	**115**	**3,875**
1998 Year	**169**	**323**	**135**	**104**	**1,331**	**139**	**649**	**129**	**1,647**	**111**	**4,006**
1999 Year	**160**	**290**	**130**	**101**	**1,233**	**142**	**629**	**132**	**1,493**	**105**	**3,733**
2000 Year	**170**	**272**	**140**	**100**	**1,294**	**144**	**634**	**140**	**1,468**	**117**	**3,796**
2001 Year	**165**	**273**	**134**	**113**	**1,281**	**156**	**634**	**143**	**1,586**	**112**	**3,912**
2002 Year	**170**	**253**	**138**	**104**	**1,247**	**157**	**615**	**140**	**1,548**	**103**	**3,811**
2003 Year	**179**	**273**	**135**	**100**	**1,290**	**170**	**636**	**155**	**1,568**	**96**	**3,914**
2004 Year	**177**	**267**	**136**	**101**	**1,292**	**160**	**635**	**149**	**1,645**	**99**	**3,980**
2005 Year	**185**	**283**	**132**	**95**	**1,342**	**178**	**612**	**135**	**1,698**	**103**	**4,068**
2006 Year	**182**	**283**	**133**	**103**	**1,374**	**181**	**631**	**152**	**1,720**	**103**	**4,161**
2007 Year	**180**	**275**	**133**	**90**	**1,358**	**194**	**621**	**143**	**1,665**	**108**	**4,090**
2008 January	182	281	136	95	1,381	195	621	155	1,677	110	4,139
February	176	276	129	95	1,355	193	605	149	1,664	114	4,080
March	177	281	131	100	1,384	193	610	143	1,655	111	4,096
April	173	279	134	98	1,366	191	610	141	1,666	106	4,081
May	177	277	136	99	1,370	193	617	146	1,674	108	4,107
June	177	273	137	99	1,368	193	619	147	1,686	110	4,122
July	179	274	135	95	1,386	197	627	153	1,698	105	4,166
August	176	276	131	96	1,380	202	643	150	1,711	106	4,191
September	177	274	130	95	1,366	202	646	141	1,704	117	4,176
October	179	270	129	93	1,362	202	648	138	1,711	122	4,183
November	179	275	127	96	1,378	200	641	139	1,732	117	4,208
December	**179**	**277**	**128**	**99**	**1,405**	**194**	**630**	**135**	**1,737**	**114**	**4,214**
2009 January	179	280	136	100	1,411	196	618	149	1,766	115	4,254
February	178	279	128	98	[R] 1,410	196	619	157	1,777	107	[R] 4,266
March	178	278	131	100	[R] 1,413	198	611	155	1,803	109	[R] 4,290
April	173	279	132	98	[R] 1,403	199	606	152	1,816	114	[R] 4,290
May	176	281	133	92	[R] 1,398	198	609	149	1,831	112	[R] 4,296
June	173	280	129	92	[R] 1,398	198	611	149	1,844	110	[R] 4,311
July	174	277	127	97	[R] 1,392	202	607	157	1,850	108	[R] 4,315
August	178	284	130	96	[R] 1,412	201	610	160	1,834	111	[R] 4,328
September	174	277	129	94	1,397	195	607	167	1,848	117	4,331
October	173	278	130	96	1,379	198	604	167	1,825	109	4,282
November	179	286	130	96	1,408	198	606	162	1,814	109	4,296
December	**175**	**284**	**126**	**94**	**1,398**	**193**	**589**	**155**	**1,776**	**105**	**4,216**
2010 January	182	294	127	95	1,436	196	593	162	1,781	111	4,280
February	175	290	134	99	1,422	193	587	163	1,779	117	4,261
March	172	288	129	93	1,402	195	581	164	1,779	114	4,235
April	172	285	135	95	1,414	197	590	166	1,804	111	4,283
May	173	286	131	99	1,421	198	599	166	1,823	108	4,315
June	170	281	133	96	1,404	188	597	167	1,839	120	4,315
July	168	280	127	95	[R] 1,387	[R] 194	598	170	1,853	116	[R] 4,317
August	171	287	133	93	1,403	[R] 194	597	169	1,857	115	[R] 4,335
September	163	284	127	[R] 94	[R] 1,362	[R] 197	582	174	1,857	112	[R] 4,282
October	157	284	129	94	1,366	196	599	170	1,846	113	4,289

[a] Through December 1983, the data for Germany are for the former West Germany only. Beginning with January 1984, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

[b] "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom, and, for 1984 forward, Czech Republic, Hungary, Poland, and Slovakia.

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

[d] The Organization for Economic Cooperation and Development (OECD) consists of "OECD Europe," Canada, Japan, South Korea, the United States, and "Other OECD."

R=Revised. NA=Not available.

Notes: • Stocks are at end of period. • Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined products. • In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, thereby affecting subsequent stocks reported. New-basis end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.gov/mer/inter.html 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, Jan. 18, 2011.

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, February 2011.

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 Petroleum Monthly*, and International Energy Database, February 2011.

12 Environment

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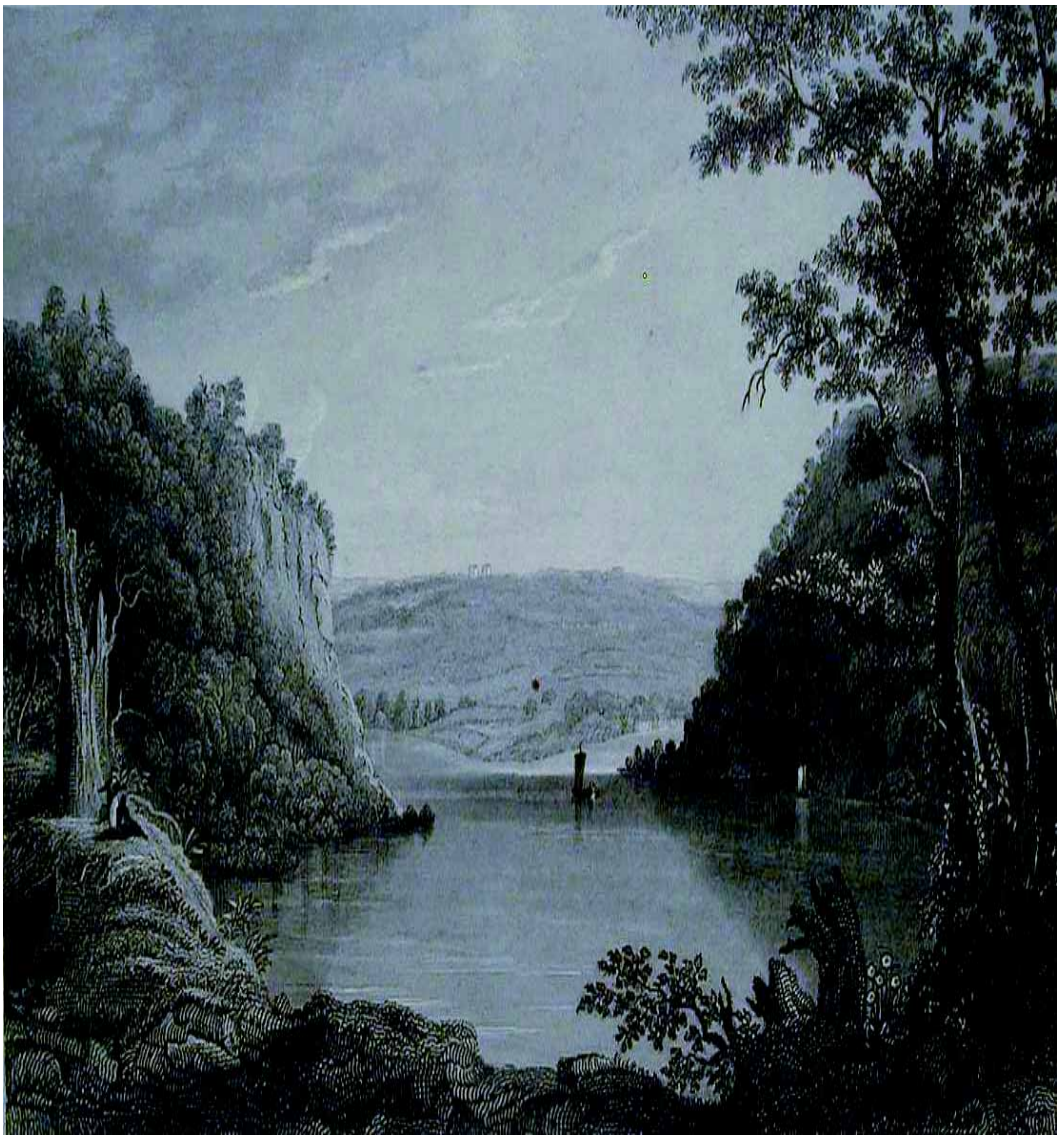
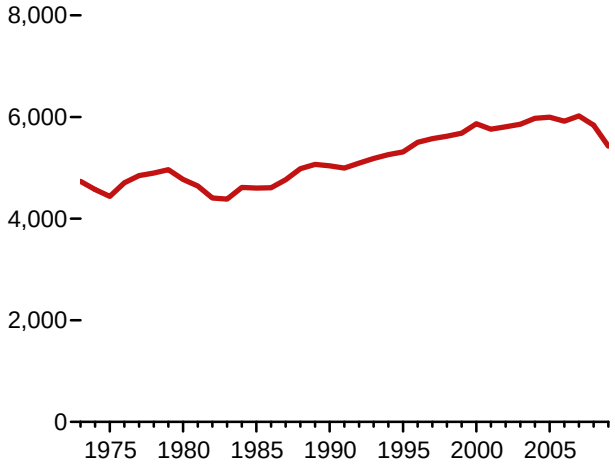


"Harpers Ferry, Junction of the Rivers Shenandoah and Potomac." Engraving by W. Goodacre and James Archer, published in *The History and Topography of the United States of North America*, by John Howard Hinton, 1852. From the collection of the National Park Service, Harpers Ferry National Historical Park, Accession #1297.

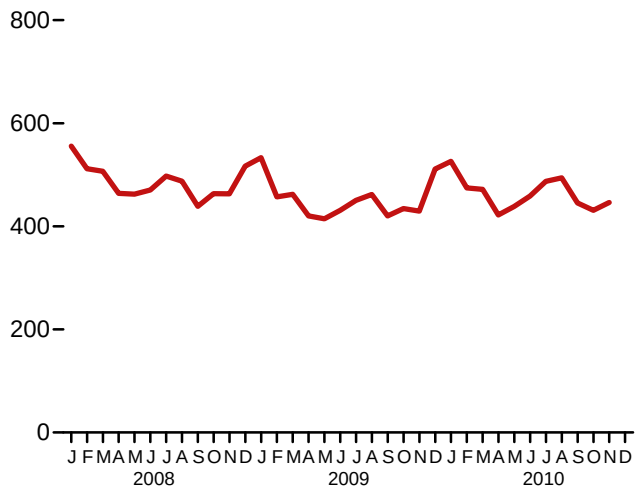
Figure 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide)

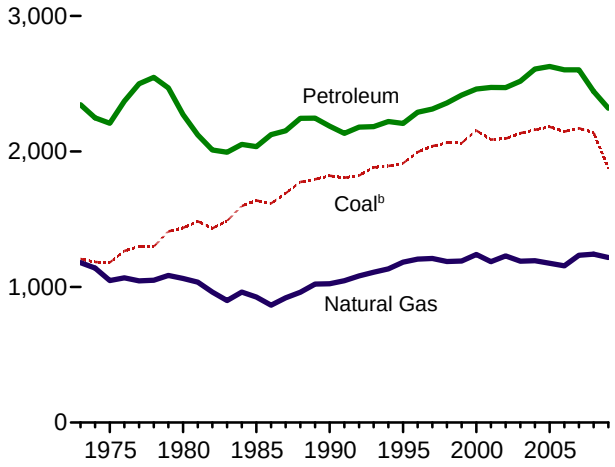
Total,[a] 1973-2009



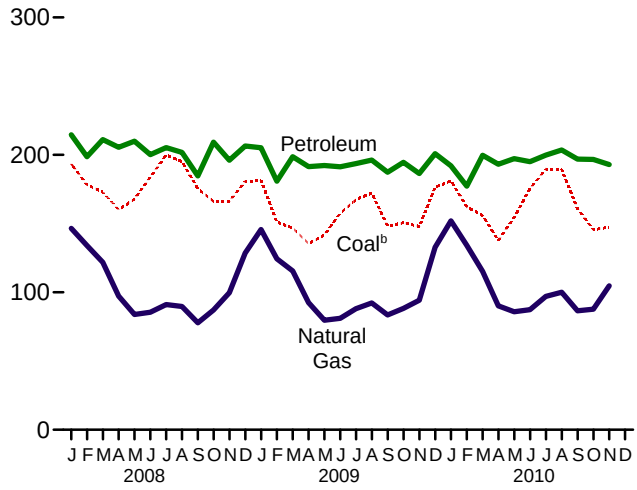
Total,[a] Monthly



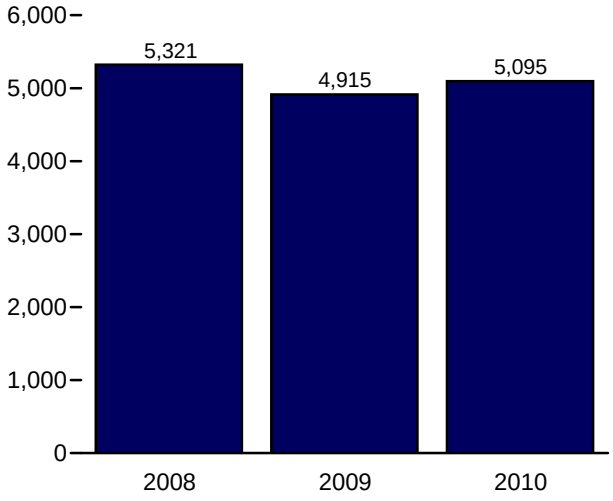
By Major Source, 1973-2009



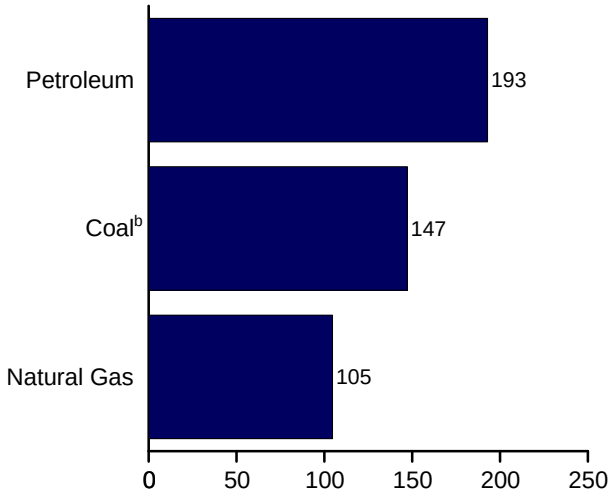
By Major Source, Monthly



Total,[a] January-November



By Major Source, November 2010



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

Web Page: http://www.eia.gov/mer/environ.html.
Source: Table 12.1.

Table 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide[a])

			Petroleum											
	Coal[b]	Natural Gas[c]	Aviation Gasoline	Distillate Fuel Oil[d]	Jet Fuel	Kero-sene	LPG[e]	Lubri-cants	Motor Gasoline[f]	Petroleum Coke	Residual Fuel Oil	Other[g]	Total	Total[h,i]
1973 Total	**1,207**	**1,181**	**6**	**480**	**155**	**32**	**91**	**13**	**911**	**51**	**508**	**100**	**2,346**	**4,733**
1975 Total	**1,181**	**1,047**	**5**	**443**	**146**	**24**	**82**	**11**	**911**	**48**	**443**	**97**	**2,209**	**4,437**
1980 Total	**1,436**	**1,063**	**4**	**446**	**156**	**24**	**87**	**13**	**900**	**46**	**453**	**142**	**2,272**	**4,770**
1985 Total	**1,638**	**926**	**3**	**445**	**178**	**17**	**86**	**12**	**930**	**55**	**216**	**93**	**2,035**	**4,600**
1990 Total	**1,821**	**1,025**	**3**	**470**	**223**	**6**	**69**	**13**	**988**	**67**	**220**	**127**	**2,187**	**5,039**
1995 Total	**1,913**	**1,184**	**3**	**498**	**222**	**8**	**78**	**13**	**1,044**	**75**	**152**	**114**	**2,207**	**5,314**
1996 Total	**1,995**	**1,205**	**3**	**524**	**232**	**9**	**84**	**12**	**1,063**	**78**	**152**	**132**	**2,290**	**5,501**
1997 Total	**2,040**	**1,211**	**3**	**534**	**234**	**10**	**85**	**13**	**1,075**	**79**	**142**	**138**	**2,313**	**5,575**
1998 Total	**2,064**	**1,189**	**2**	**538**	**238**	**12**	**75**	**14**	**1,107**	**89**	**158**	**125**	**2,358**	**5,622**
1999 Total	**2,062**	**1,192**	**3**	**555**	**245**	**11**	**91**	**14**	**1,127**	**93**	**148**	**130**	**2,417**	**5,682**
2000 Total	**2,155**	**1,241**	**3**	**580**	**254**	**10**	**102**	**14**	**1,135**	**84**	**163**	**117**	**2,461**	**5,867**
2001 Total	**2,088**	**1,187**	**2**	**598**	**243**	**11**	**92**	**13**	**1,151**	**88**	**145**	**132**	**2,473**	**5,759**
2002 Total	**2,095**	**1,229**	**2**	**587**	**237**	**6**	**98**	**12**	**1,183**	**94**	**125**	**127**	**2,472**	**5,809**
2003 Total	**2,136**	**1,191**	**2**	**610**	**231**	**8**	**95**	**11**	**1,188**	**94**	**138**	**140**	**2,518**	**5,857**
2004 Total	**2,160**	**1,194**	**2**	**632**	**240**	**10**	**98**	**12**	**1,214**	**105**	**155**	**142**	**2,609**	**5,975**
2005 Total	**2,182**	**1,175**	**2**	**640**	**246**	**10**	**94**	**12**	**1,214**	**105**	**164**	**141**	**2,628**	**5,996**
2006 Total	**2,147**	**1,157**	**2**	**648**	**240**	**8**	**93**	**11**	**1,224**	**104**	**122**	**150**	**2,603**	**5,918**
2007 Total	**2,172**	**1,235**	**2**	**652**	**238**	**5**	**94**	**12**	**1,227**	**98**	**129**	**148**	**2,603**	**6,022**
2008 January	193	146	(s)	55	20	(s)	10	1	98	8	10	12	215	556
February	178	134	(s)	53	18	(s)	9	1	92	7	8	12	199	512
March	173	122	(s)	55	19	(s)	8	1	100	8	9	10	211	507
April	160	97	(s)	52	20	(s)	7	1	97	8	10	11	206	464
May	168	84	(s)	52	20	(s)	6	1	102	8	10	11	210	463
June	184	85	(s)	48	20	(s)	7	1	97	7	10	10	200	471
July	200	91	(s)	49	20	(s)	7	1	100	9	10	9	205	497
August	195	90	(s)	48	20	(s)	7	1	100	8	8	9	202	488
September	175	78	(s)	48	18	(s)	5	1	90	6	8	10	185	439
October	166	87	(s)	55	18	(s)	7	1	99	8	9	12	209	463
November	166	100	(s)	49	17	(s)	7	1	94	7	8	12	196	463
December	181	129	(s)	50	17	1	8	1	97	8	11	12	206	517
Total	**2,139**	**1,243**	**2**	**615**	**226**	**2**	**89**	**11**	**1,166**	**92**	**111**	**130**	**2,444**	**5,838**
2009 January	181	146	(s)	54	16	1	9	1	95	7	11	11	205	533
February	151	124	(s)	46	15	(s)	8	1	88	7	6	10	181	457
March	147	116	(s)	49	18	(s)	8	1	98	7	9	9	199	462
April	135	92	(s)	44	17	(s)	7	1	96	8	10	8	191	420
May	142	80	(s)	45	17	(s)	6	1	99	9	7	9	192	415
June	158	81	(s)	45	17	(s)	6	1	97	9	8	8	191	431
July	167	88	(s)	45	19	(s)	7	1	101	6	5	10	194	450
August	172	92	(s)	45	18	(s)	7	1	101	7	7	9	196	462
September	148	84	(s)	45	17	(s)	7	1	94	8	5	10	187	420
October	151	88	(s)	48	17	(s)	8	1	98	6	7	9	195	435
November	148	94	(s)	46	16	(s)	10	1	94	6	6	8	186	430
December	176	133	(s)	51	17	(s)	10	1	97	7	9	9	201	511
Total	**1,877**	**1,218**	**2**	**564**	**204**	**3**	**91**	**10**	**1,157**	**87**	**91**	**111**	**2,319**	**5,426**
2010 January	181	152	(s)	48	17	(s)	10	1	92	5	9	9	192	526
February	162	134	(s)	46	15	(s)	9	1	85	5	7	9	177	R 475
March	156	115	(s)	51	18	(s)	8	1	95	7	8	11	200	472
April	138	90	(s)	47	17	(s)	6	1	95	7	8	11	193	422
May	154	86	(s)	48	18	(s)	6	1	100	6	8	10	197	438
June	175	87	(s)	48	18	(s)	6	1	97	7	7	10	195	459
July	190	97	(s)	47	18	(s)	7	1	101	7	9	10	200	487
August	189	100	(s)	50	19	(s)	7	1	101	8	7	11	204	494
September	161	87	(s)	50	17	(s)	7	1	96	7	8	10	197	445
October	R 146	88	(s)	50	18	(s)	7	1	98	6	8	9	197	431
November	147	105	(s)	49	17	1	7	1	93	7	9	9	193	446
11-Month Total	**1,799**	**1,141**	**2**	**533**	**192**	**2**	**82**	**10**	**1,053**	**71**	**89**	**111**	**2,144**	**5,095**
2009 11-Month Total	**1,700**	**1,085**	**2**	**513**	**187**	**2**	**81**	**9**	**1,060**	**81**	**82**	**102**	**2,118**	**4,915**
2008 11-Month Total	**1,959**	**1,114**	**2**	**565**	**209**	**2**	**81**	**10**	**1,069**	**84**	**99**	**117**	**2,237**	**5,321**

[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.

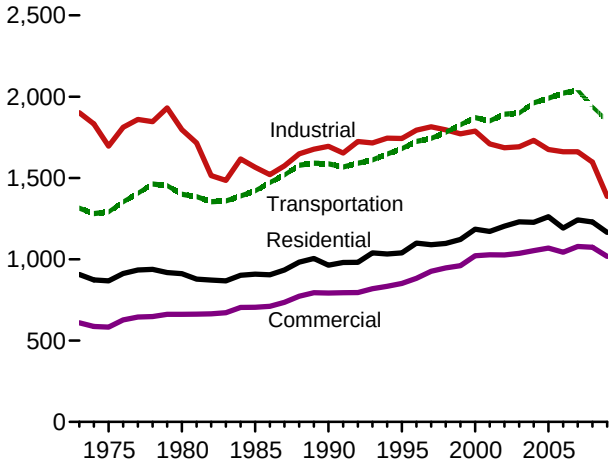
Web Page: See http://www.eia.gov/mer/environ.html for all available data beginning in 1973.

Sources: See end of section.

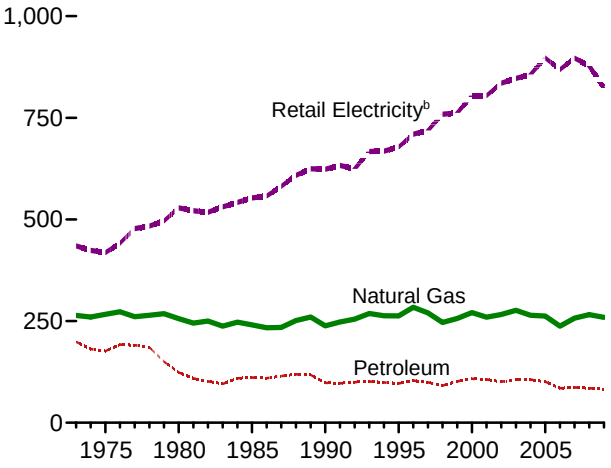
Figure 12.2 Carbon Dioxide Emissions From Energy Consumption by Sector

(Million Metric Tons of Carbon Dioxide)

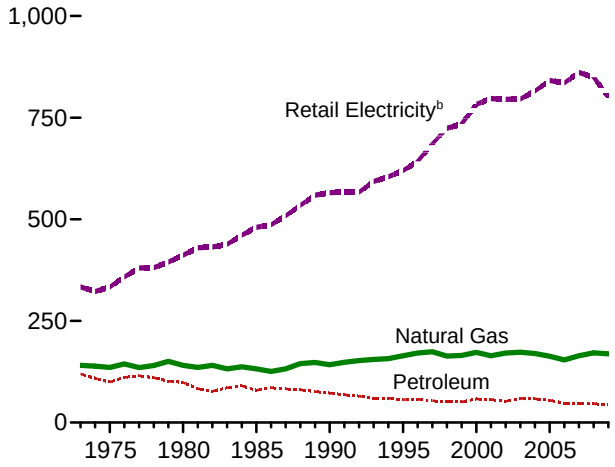
Total[a] by End-Use Sector,[b] 1973-2009



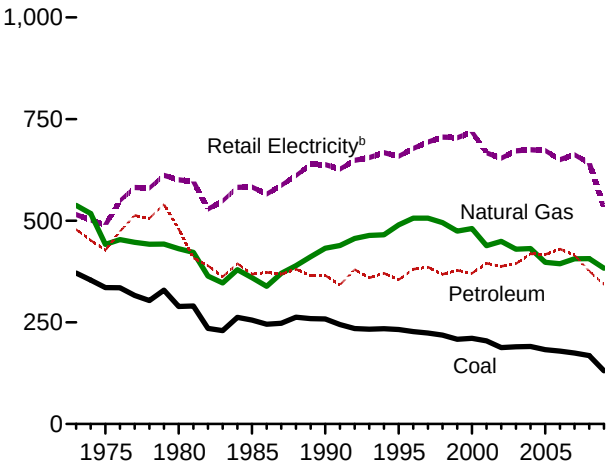
Residential Sector by Major Source, 1973-2009



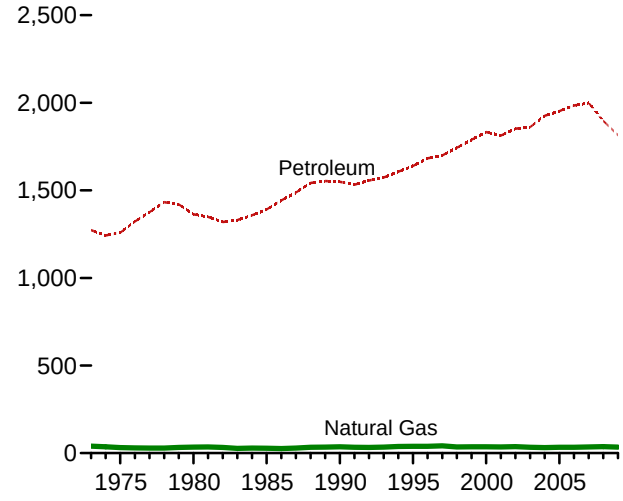
Commercial Sector by Major Source, 1973-2009



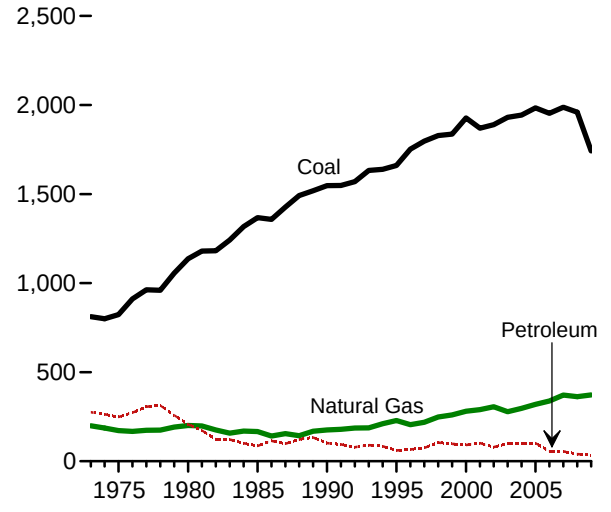
Industrial Sector by Major Source, 1973-2009



Transportation Sector by Major Source, 1973-2009



Electric Power Sector by Major Source, 1973-2009



[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/mer/environ.html.

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**	**266**	**63**	**4**	**34**	**101**	**835**	**1,204**
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**	**1,242**
2008 January	(s)	48	7	(s)	4	11	86	145
February	(s)	44	7	(s)	3	10	74	129
March	(s)	36	5	(s)	3	8	67	112
April	(s)	21	4	(s)	3	6	58	85
May	(s)	12	3	(s)	3	6	58	76
June	(s)	8	3	(s)	3	6	77	91
July	(s)	6	3	(s)	3	6	92	104
August	(s)	6	3	(s)	3	5	89	101
September	(s)	6	3	(s)	2	5	72	84
October	(s)	12	3	(s)	3	6	61	78
November	(s)	24	4	(s)	3	7	62	93
December	(s)	42	6	(s)	3	9	81	132
Total	**1**	**266**	**49**	**2**	**35**	**85**	**878**	**1,229**
2009 January	(s)	51	6	(s)	3	10	R 86	R 147
February	(s)	41	5	(s)	3	8	67	117
March	(s)	33	5	(s)	3	8	62	103
April	(s)	21	4	(s)	3	7	53	R 81
May	(s)	11	3	(s)	3	5	56	72
June	(s)	8	2	(s)	3	5	70	R 83
July	(s)	6	3	(s)	3	5	83	95
August	(s)	6	3	(s)	3	6	85	97
September	(s)	6	3	(s)	3	6	66	79
October	(s)	14	3	(s)	3	7	59	79
November	(s)	20	3	(s)	4	7	57	84
December	(s)	41	5	(s)	4	9	R 79	R 130
Total	**1**	**259**	**45**	**2**	**36**	**83**	R **823**	R **1,166**
2010 January	(s)	53	5	(s)	4	9	91	152
February	(s)	45	4	(s)	3	8	74	126
March	(s)	33	3	(s)	3	6	65	104
April	(s)	18	2	(s)	3	5	51	73
May	(s)	11	2	(s)	3	5	59	75
June	(s)	7	2	(s)	3	5	79	92
July	(s)	6	2	(s)	3	5	97	108
August	(s)	6	2	(s)	3	5	97	107
September	(s)	7	2	(s)	3	5	72	83
October	(s)	11	2	(s)	3	R 6	56	73
November	(s)	25	3	(s)	3	6	56	87
11-Month Total	**1**	**221**	**29**	**2**	**33**	**64**	**796**	**1,082**
2009 11-Month Total	**1**	**218**	**39**	**2**	**33**	**74**	**745**	**1,037**
2008 11-Month Total	**1**	**224**	**43**	**1**	**32**	**76**	**797**	**1,098**

[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/mer/environ.html 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**	**171**	**32**	**1**	**9**	**3**	**(s)**	**6**	**52**	**795**	**1,027**
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**	**1,079**
2008 January	1	26	4	(s)	1	(s)	(s)	1	6	71	103
February	1	25	4	(s)	1	(s)	(s)	1	6	65	97
March	1	21	3	(s)	1	(s)	(s)	1	5	65	91
April	(s)	14	2	(s)	1	(s)	(s)	(s)	4	63	81
May	(s)	10	2	(s)	1	(s)	0	(s)	3	68	81
June	1	7	2	(s)	1	(s)	0	(s)	3	76	87
July	(s)	7	2	(s)	1	(s)	0	(s)	3	82	93
August	(s)	7	1	(s)	1	(s)	0	(s)	3	80	90
September	(s)	7	1	(s)	1	(s)	(s)	(s)	3	73	83
October	1	10	2	(s)	1	(s)	(s)	(s)	3	70	84
November	1	15	2	(s)	1	(s)	(s)	(s)	4	67	86
December	1	23	3	(s)	1	(s)	(s)	1	5	69	98
Total	**7**	**171**	**27**	**(s)**	**10**	**3**	**(s)**	**6**	**46**	**850**	**1,073**
2009 January	1	28	3	(s)	1	(s)	(s)	1	5	R 70	R 104
February	1	23	3	(s)	1	(s)	(s)	1	4	R 59	R 87
March	1	19	3	(s)	1	(s)	(s)	1	4	R 61	R 85
April	(s)	14	2	(s)	1	(s)	0	(s)	4	R 59	R 76
May	(s)	9	1	(s)	1	(s)	0	(s)	3	R 64	R 76
June	(s)	7	1	(s)	1	(s)	0	(s)	3	R 71	R 81
July	(s)	7	2	(s)	1	(s)	0	(s)	3	R 74	R 85
August	(s)	7	2	(s)	1	(s)	(s)	(s)	3	R 77	R 88
September	(s)	7	2	(s)	1	(s)	(s)	(s)	3	R 67	R 78
October	(s)	11	2	(s)	1	(s)	0	(s)	3	R 66	R 80
November	1	14	2	(s)	1	(s)	(s)	(s)	3	R 62	R 79
December	1	23	3	(s)	1	(s)	(s)	1	5	R 70	R 99
Total	**6**	**169**	**25**	**(s)**	**10**	**3**	**(s)**	**5**	**44**	R **800**	R **1,018**
2010 January	1	28	3	(s)	1	(s)	(s)	1	5	R 66	R 100
February	1	25	2	(s)	1	(s)	(s)	(s)	4	R 60	R 90
March	1	19	2	(s)	1	(s)	(s)	(s)	3	R 59	R 82
April	(s)	12	1	(s)	1	(s)	(s)	(s)	2	R 57	R 72
May	(s)	9	1	(s)	1	(s)	0	(s)	2	R 66	R 77
June	(s)	7	1	(s)	1	(s)	0	(s)	3	R 74	R 85
July	(s)	7	1	(s)	1	(s)	0	(s)	2	R 80	R 89
August	(s)	7	1	(s)	1	(s)	(s)	(s)	2	R 80	R 90
September	(s)	7	1	(s)	1	(s)	(s)	(s)	2	R 69	R 78
October	(s)	10	1	(s)	1	(s)	(s)	(s)	3	R 63	R 76
November	(s)	16	2	(s)	1	(s)	(s)	(s)	3	61	80
11-Month Total	**5**	**148**	**16**	**(s)**	**10**	**3**	**(s)**	**3**	**32**	**735**	**920**
2009 11-Month Total	**5**	**146**	**22**	**(s)**	**9**	**3**	**(s)**	**4**	**39**	**730**	**919**
2008 11-Month Total	**6**	**148**	**24**	**(s)**	**9**	**3**	**(s)**	**5**	**41**	**780**	**976**

[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/mer/environ.html for all available data beginning in 1973.

Sources: See end of section.

Table 12.4 Carbon Dioxide Emissions From Energy Consumption: Industrial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Coal Coke Net Imports	Natural Gas[b]	Petroleum									Retail Electricity[g]	Total[h]
				Distillate Fuel Oil[c]	Kerosene	LPG[d]	Lubricants	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total		
1973 Total	**371**	**-1**	**538**	**106**	**11**	**43**	**7**	**18**	**49**	**144**	**100**	**478**	**515**	**1,902**
1975 Total	**336**	**2**	**442**	**97**	**9**	**39**	**6**	**16**	**48**	**117**	**97**	**427**	**490**	**1,696**
1980 Total	**289**	**-4**	**431**	**96**	**13**	**61**	**7**	**11**	**45**	**105**	**142**	**480**	**601**	**1,797**
1985 Total	**256**	**-2**	**360**	**81**	**3**	**58**	**6**	**15**	**54**	**57**	**93**	**369**	**583**	**1,566**
1990 Total	**258**	**1**	**432**	**84**	**1**	**39**	**7**	**13**	**64**	**31**	**127**	**366**	**638**	**1,695**
1995 Total	**233**	**7**	**490**	**82**	**1**	**45**	**7**	**14**	**67**	**24**	**114**	**355**	**659**	**1,743**
1996 Total	**227**	**3**	**506**	**86**	**1**	**46**	**6**	**14**	**70**	**24**	**132**	**381**	**678**	**1,795**
1997 Total	**224**	**5**	**506**	**88**	**1**	**48**	**7**	**15**	**68**	**21**	**138**	**386**	**694**	**1,815**
1998 Total	**219**	**8**	**495**	**88**	**2**	**39**	**7**	**14**	**77**	**16**	**125**	**368**	**706**	**1,796**
1999 Total	**208**	**7**	**474**	**86**	**1**	**48**	**7**	**11**	**81**	**14**	**130**	**378**	**704**	**1,772**
2000 Total	**211**	**7**	**481**	**87**	**1**	**56**	**7**	**11**	**74**	**17**	**117**	**370**	**719**	**1,788**
2001 Total	**204**	**3**	**439**	**95**	**2**	**49**	**6**	**21**	**77**	**14**	**132**	**395**	**667**	**1,709**
2002 Total	**188**	**7**	**449**	**88**	**1**	**54**	**6**	**22**	**76**	**13**	**127**	**388**	**654**	**1,686**
2003 Total	**190**	**6**	**430**	**83**	**2**	**50**	**6**	**23**	**76**	**15**	**140**	**394**	**672**	**1,692**
2004 Total	**191**	**16**	**431**	**88**	**2**	**55**	**6**	**26**	**82**	**17**	**142**	**419**	**675**	**1,731**
2005 Total	**183**	**5**	**398**	**92**	**3**	**51**	**6**	**25**	**80**	**20**	**141**	**417**	**673**	**1,675**
2006 Total	**179**	**7**	**394**	**92**	**2**	**56**	**6**	**26**	**82**	**16**	**150**	**430**	**650**	**1,661**
2007 Total	**175**	**3**	**406**	**92**	**1**	**54**	**6**	**21**	**80**	**13**	**148**	**415**	**662**	**1,662**
2008 January	14	(s)	39	10	(s)	5	(s)	1	7	1	12	37	54	146
February	14	(s)	37	10	(s)	4	(s)	1	5	1	12	34	51	136
March	14	1	37	10	(s)	4	1	1	7	1	10	34	53	139
April	14	1	34	9	(s)	3	1	1	7	1	11	32	53	134
May	14	(s)	33	8	(s)	3	1	1	6	1	11	32	56	135
June	14	1	32	5	(s)	3	(s)	1	6	1	10	28	56	130
July	14	1	33	5	(s)	3	(s)	1	8	1	9	28	57	132
August	14	(s)	33	5	(s)	3	1	1	7	1	9	26	56	130
September	14	(s)	29	6	(s)	3	(s)	1	4	1	10	26	53	122
October	15	(s)	33	10	(s)	3	1	1	6	1	12	36	53	137
November	13	(s)	33	8	(s)	3	(s)	1	6	1	12	32	52	130
December	12	(s)	34	5	(s)	4	(s)	1	7	1	12	32	49	127
Total	**168**	**5**	**407**	**92**	**(s)**	**42**	**6**	**17**	**76**	**14**	**130**	**376**	**642**	**1,598**
2009 January	12	(s)	36	12	(s)	4	(s)	1	6	1	11	37	R 45	R 129
February	12	(s)	32	8	(s)	4	(s)	1	6	1	10	30	R 40	R 114
March	12	(s)	33	8	(s)	4	(s)	1	6	1	9	29	R 42	R 116
April	10	(s)	31	5	(s)	3	(s)	1	7	1	8	27	R 41	R 108
May	10	(s)	30	6	(s)	2	(s)	1	7	1	9	27	R 43	R 110
June	10	(s)	29	6	(s)	2	(s)	1	8	1	8	27	R 44	R 110
July	10	(s)	30	4	(s)	3	(s)	1	5	1	10	25	R 45	R 110
August	11	(s)	31	4	(s)	3	(s)	1	6	1	9	25	R 49	R 115
September	11	(s)	30	6	(s)	3	(s)	1	7	1	10	28	R 44	R 113
October	11	(s)	32	8	(s)	4	(s)	1	5	1	9	28	R 46	R 118
November	11	(s)	33	8	(s)	5	(s)	1	5	1	8	28	R 45	R 117
December	11	(s)	36	9	(s)	5	(s)	1	6	1	9	31	R 47	R 126
Total	**131**	**-3**	**383**	**84**	**(s)**	**41**	**5**	**17**	**73**	**12**	**111**	**343**	**R 533**	**R 1,387**
2010 January	12	(s)	R 38	9	(s)	5	(s)	1	3	1	9	29	R 46	R 124
February	12	(s)	R 35	9	(s)	4	(s)	1	4	1	9	29	R 44	R 120
March	13	(s)	35	11	(s)	4	(s)	1	6	1	11	35	R 45	R 129
April	12	(s)	32	9	(s)	3	(s)	1	5	1	11	32	R 45	R 121
May	12	(s)	33	8	(s)	3	1	1	5	1	10	29	R 51	R 125
June	12	(s)	32	8	(s)	2	1	1	6	1	10	29	R 51	R 124
July	13	(s)	33	7	(s)	3	1	1	5	1	10	28	R 53	R 126
August	13	(s)	33	9	(s)	3	(s)	1	6	1	11	32	R 54	R 132
September	13	(s)	32	11	(s)	3	(s)	1	6	1	10	33	47	R 126
October	13	(s)	33	R 9	(s)	3	(s)	1	5	1	9	R 29	R 47	R 122
November	12	-1	34	11	(s)	3	(s)	1	6	1	9	32	47	125
11-Month Total	**138**	**(s)**	**370**	**101**	**(s)**	**36**	**5**	**15**	**57**	**11**	**111**	**337**	**530**	**1,376**
2009 11-Month Total	**120**	**-2**	**347**	**76**	**(s)**	**36**	**5**	**15**	**67**	**10**	**102**	**312**	**485**	**1,261**
2008 11-Month Total	**156**	**5**	**373**	**87**	**(s)**	**38**	**5**	**16**	**69**	**12**	**117**	**344**	**593**	**1,470**

[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/mer/environ.html 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 January	(h)	4	(s)	34	20	(s)	(s)	96	7	157	(s)	162
February	(h)	4	(s)	32	18	(s)	(s)	90	5	146	(s)	150
March	(h)	4	(s)	37	19	(s)	(s)	99	6	162	(s)	166
April	(h)	3	(s)	37	20	(s)	(s)	95	7	160	(s)	164
May	(h)	2	(s)	39	20	(s)	(s)	100	7	167	(s)	170
June	(h)	3	(s)	38	20	(s)	(s)	95	6	159	(s)	162
July	(h)	3	(s)	39	20	(s)	(s)	99	7	165	(s)	168
August	(h)	3	(s)	39	20	(s)	1	98	5	164	(s)	167
September	(h)	2	(s)	37	18	(s)	(s)	88	4	148	(s)	151
October	(h)	3	(s)	40	18	(s)	(s)	97	6	161	(s)	164
November	(h)	3	(s)	36	17	(s)	(s)	93	5	151	(s)	154
December	(h)	4	(s)	35	17	(s)	(s)	96	7	156	(s)	160
Total	**(h)**	**37**	**2**	**442**	**226**	**2**	**5**	**1,146**	**72**	**1,896**	**5**	**1,938**
2009 January	(h)	4	(s)	32	16	(s)	(s)	93	7	149	(s)	153
February	(h)	3	(s)	29	15	(s)	(s)	86	4	135	(s)	139
March	(h)	3	(s)	33	18	(s)	(s)	96	6	154	(s)	R 158
April	(h)	3	(s)	33	17	(s)	(s)	94	7	152	(s)	155
May	(h)	2	(s)	35	17	(s)	(s)	98	4	154	(s)	156
June	(h)	2	(s)	35	17	(s)	(s)	95	6	154	(s)	157
July	(h)	2	(s)	36	19	(s)	(s)	99	3	157	(s)	160
August	(h)	3	(s)	36	18	(s)	(s)	100	4	159	(s)	162
September	(h)	2	(s)	34	17	(s)	(s)	92	3	147	(s)	150
October	(h)	2	(s)	35	17	(s)	(s)	96	5	154	(s)	157
November	(h)	3	(s)	33	16	(s)	(s)	92	5	147	(s)	150
December	(h)	4	(s)	34	17	(s)	(s)	95	6	153	(s)	157
Total	**(h)**	**34**	**2**	**405**	**204**	**3**	**5**	**1,138**	**60**	**1,816**	**5**	**R 1,855**
2010 January	(h)	4	(s)	31	17	(s)	(s)	91	6	146	(s)	150
February	(h)	4	(s)	30	15	(s)	(s)	83	5	134	(s)	138
March	(h)	3	(s)	35	18	(s)	(s)	93	6	153	(s)	157
April	(h)	3	(s)	35	17	(s)	(s)	94	6	152	(s)	155
May	(h)	2	(s)	36	18	(s)	(s)	98	5	158	(s)	161
June	(h)	2	(s)	36	18	(s)	1	95	5	155	(s)	158
July	(h)	3	(s)	37	18	(s)	(s)	99	6	161	(s)	164
August	(h)	3	(s)	38	19	(s)	(s)	100	5	162	(s)	165
September	(h)	2	(s)	36	17	(s)	(s)	94	6	155	(s)	158
October	(h)	3	(s)	36	18	(s)	(s)	96	6	157	(s)	160
November	(h)	3	(s)	34	17	(s)	(s)	91	7	150	(s)	153
11-Month Total	**(h)**	**32**	**2**	**383**	**192**	**2**	**5**	**1,035**	**63**	**1,682**	**4**	**1,718**
2009 11-Month Total	**(h)**	**30**	**2**	**371**	**187**	**2**	**4**	**1,042**	**54**	**1,662**	**4**	**1,697**
2008 11-Month Total	**(h)**	**33**	**2**	**407**	**209**	**2**	**5**	**1,050**	**65**	**1,740**	**4**	**1,778**

[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/mer/environ.html 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 January	178	29	1	1	2	4	(s)	1	212
February	163	24	1	1	1	3	(s)	1	191
March	157	25	(s)	1	1	3	(s)	1	185
April	145	26	(s)	1	1	3	(s)	1	174
May	153	26	(s)	1	1	3	(s)	1	182
June	168	36	1	1	2	4	(s)	1	210
July	185	42	(s)	1	2	4	(s)	1	232
August	180	41	(s)	1	2	3	(s)	1	226
September	161	33	(s)	1	2	4	(s)	1	198
October	151	30	(s)	1	1	3	(s)	1	184
November	152	25	(s)	1	1	3	(s)	1	181
December	168	26	1	1	2	4	(s)	1	199
Total	**1,959**	**362**	**5**	**16**	**19**	**40**	**(s)**	**12**	**2,374**
2009 January	169	26	1	1	3	5	(s)	1	202
February	139	25	(s)	1	1	3	(s)	1	167
March	134	27	1	1	1	3	(s)	1	165
April	125	24	(s)	1	1	2	(s)	1	153
May	131	28	(s)	1	1	3	(s)	1	163
June	147	35	(s)	1	1	3	(s)	1	186
July	157	42	(s)	1	1	3	(s)	1	203
August	162	46	(s)	1	1	3	(s)	1	211
September	137	37	(s)	1	1	3	(s)	1	178
October	139	29	(s)	1	1	2	(s)	1	171
November	136	25	(s)	1	1	2	(s)	1	164
December	165	28	(s)	1	1	2	(s)	1	196
Total	**1,742**	**373**	**5**	**14**	**14**	**34**	**(s)**	**12**	**2,160**
2010 January	169	30	1	1	1	4	(s)	1	203
February	149	26	(s)	1	1	2	(s)	1	178
March	142	25	(s)	1	1	2	(s)	1	170
April	125	26	(s)	1	1	2	(s)	1	154
May	141	30	(s)	1	1	3	(s)	1	175
June	163	38	1	1	2	4	(s)	1	205
July	176	49	1	2	2	4	(s)	1	230
August	176	51	(s)	1	2	3	(s)	1	231
September	147	38	(s)	1	1	2	(s)	1	189
October	132	31	(s)	1	1	2	(s)	1	166
November	135	27	(s)	1	1	2	(s)	1	165
11-Month Total	**1,656**	**369**	**5**	**13**	**11**	**30**	**(s)**	**11**	**2,066**
2009 11-Month Total	**1,578**	**344**	**5**	**13**	**14**	**31**	**(s)**	**11**	**1,964**
2008 11-Month Total	**1,791**	**336**	**5**	**14**	**17**	**36**	**(s)**	**11**	**2,175**

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

[b] Natural gas, excluding supplemental gaseous fuels.

[c] Distillate fuel oil, excluding biodiesel.

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

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

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

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

Web Page: See http://www.eia.gov/mer/environ.html 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	**198**	**36**	**31**	**2**	**267**	**37**	**9**	**151**	**33**	**38**	**267**
2007 Total	**197**	**37**	**39**	**3**	**277**	**40**	**9**	**146**	**42**	**39**	**277**
2008 January	18	3	4	(s)	25	4	1	14	4	3	25
February	16	3	4	(s)	23	3	1	12	4	3	23
March	16	3	4	(s)	24	4	1	12	4	3	24
April	16	3	4	(s)	24	3	1	12	4	3	24
May	16	3	5	(s)	24	4	1	12	5	3	24
June	16	3	5	(s)	23	3	1	11	5	3	23
July	16	3	5	(s)	25	4	1	12	5	4	25
August	16	3	5	(s)	25	4	1	11	5	4	25
September	15	3	5	(s)	24	3	1	11	5	3	24
October	16	3	5	(s)	25	4	1	12	5	3	25
November	15	3	5	(s)	24	3	1	11	5	3	24
December	15	3	5	(s)	24	4	1	11	5	3	24
Total	**192**	**40**	**55**	**3**	**289**	**42**	**10**	**140**	**57**	**40**	**289**
2009 January	14	3	5	(s)	23	3	1	10	5	3	23
February	13	3	4	(s)	21	3	1	10	4	3	21
March	15	4	5	(s)	23	3	1	11	5	3	23
April	14	3	5	(s)	23	3	1	10	5	3	23
May	15	3	5	(s)	24	3	1	11	5	3	24
June	15	3	5	(s)	24	3	1	11	5	3	24
July	16	4	6	(s)	25	3	1	11	6	4	25
August	16	4	6	(s)	25	3	1	12	6	4	25
September	15	3	5	(s)	24	3	1	11	6	3	24
October	15	4	6	(s)	25	3	1	12	6	3	25
November	15	4	6	(s)	25	3	1	11	6	3	25
December	16	4	6	(s)	25	3	1	12	6	4	25
Total	**179**	**42**	**62**	**3**	**286**	**40**	**10**	**130**	**64**	**41**	**286**
2010 January	15	3	6	(s)	25	3	1	11	6	3	25
February	14	3	5	(s)	23	3	1	10	5	3	23
March	15	3	6	(s)	25	3	1	11	6	3	25
April	15	3	6	(s)	24	3	1	11	6	3	24
May	15	3	6	(s)	25	3	1	11	6	3	25
June	15	3	6	(s)	25	3	1	11	6	3	25
July	16	3	7	(s)	26	3	1	11	7	4	26
August	16	3	7	(s)	26	3	1	11	7	4	26
September	15	3	6	(s)	25	3	1	11	6	3	25
October	15	3	7	(s)	25	3	1	11	7	3	25
November	15	3	6	(s)	25	3	1	11	6	3	25
11-Month Total	**166**	**37**	**68**	**2**	**273**	**37**	**9**	**121**	**69**	**37**	**273**
2009 11-Month Total	**163**	**38**	**57**	**3**	**260**	**37**	**9**	**119**	**58**	**37**	**260**
2008 11-Month Total	**177**	**36**	**50**	**3**	**265**	**39**	**9**	**129**	**51**	**37**	**265**

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

[b] Wood and wood-derived fuels.

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

[d] Fuel ethanol minus denaturant.

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

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

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

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

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

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

Sources: See end of section.

This table is a new addition to the *Monthly Energy Review*.

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* 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/oiaf/1605/ggrpt/carbon.html.

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 the *Monthly Energy Review* 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(2008).pdf.

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

Step 4. Determine Carbon Dioxide Emissions From Energy Consumption

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

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

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

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

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

Geothermal and Non-Biomass Waste—Annual 1989–2008 CO_2 emissions data for geothermal and non-biomass waste are from EIA's *Annual Energy Review*, Table 12.7b. 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.

A Appendix

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/mer/append_a.html.
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[E]	5.800	3.692	5.988	5.525	5.882	5.800	5.737	5.738

[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/mer/append_a.html.

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

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

(Million Btu per Barrel)

	Total 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	[f]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	4.728	5.173	5.148	5.426	6.123	5.339	3.600	5.218	3.563	*5.983*	5.359	*5.433*
2009	[E]4.668	[E]5.108	[E]5.045	[c E]5.412	[P]6.105	5.301	3.558	5.218	3.563	*5.957*	5.359	*5.433*
2010	[E]4.668	[E]5.108	[E]5.045	[E]5.412	[E]6.105	[E]5.301	[E]3.558	[E]5.218	[E]3.563	*5.930*	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 A3.

[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 and 2010.

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

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

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

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

Web Page: http://www.eia.gov/mer/append_a.html.

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	1,106	1,027	1,029	1,020	1,027	1,022	1,008
2003	1,106	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	1,104	1,029	1,030	1,027	1,029	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	[E]1,101	[E]1,025	[E]1,025	[E]1,025	[E]1,025	[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/mer/append_a.html.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

	Coal									Coal Coke
			Consumption							
	Production[a]	Waste Coal Supplied[b]	Residential and Commercial Sectors	Industrial Sector		Electric Power Sector[d,e]	Total	Imports	Exports	Imports and Exports
				Coke Plants	Other[c]					
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[P]	19.973	12.245	21.285	26.334	21.893	19.536	19.753	25.000	25.633	24.800
2010[E]	19.973	12.245	21.285	26.334	21.893	19.536	19.753	25.000	25.633	24.800

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

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

[c] Includes transportation. Excludes coal synfuel plants.

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

[e] Electric power sector factors are for anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and, beginning in 1998, coal synfuel.

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

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

Web Page: http://www.eia.gov/mer/append_a.html.

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-Fueled Plants[b,c]	Nuclear Plants[d]	Geothermal Energy Plants[e]	Heat Content[f] of Electricity[g]
1973	10,389	10,903	21,674	3,412
1974	10,442	11,161	21,674	3,412
1975	10,406	11,013	21,611	3,412
1976	10,373	11,047	21,611	3,412
1977	10,435	10,769	21,611	3,412
1978	10,361	10,941	21,611	3,412
1979	10,353	10,879	21,545	3,412
1980	10,388	10,908	21,639	3,412
1981	10,453	11,030	21,639	3,412
1982	10,454	11,073	21,629	3,412
1983	10,520	10,905	21,290	3,412
1984	10,440	10,843	21,303	3,412
1985	10,447	10,622	21,263	3,412
1986	10,446	10,579	21,263	3,412
1987	10,419	10,442	21,263	3,412
1988	10,324	10,602	21,096	3,412
1989	10,432	10,583	21,096	3,412
1990	10,402	10,582	21,096	3,412
1991	10,436	10,484	20,997	3,412
1992	10,342	10,471	20,914	3,412
1993	10,309	10,504	20,914	3,412
1994	10,316	10,452	20,914	3,412
1995	10,312	10,507	20,914	3,412
1996	10,340	10,503	20,960	3,412
1997	10,213	10,494	20,960	3,412
1998	10,197	10,491	21,017	3,412
1999	10,226	10,450	21,017	3,412
2000	10,201	10,429	21,017	3,412
2001	[c]10,333	10,443	21,017	3,412
2002	10,173	10,442	21,017	3,412
2003	10,241	10,421	21,017	3,412
2004	10,022	10,427	21,017	3,412
2005	9,999	10,436	21,017	3,412
2006	9,919	10,436	21,017	3,412
2007	9,884	10,485	21,017	3,412
2008	9,854	10,453	21,017	3,412
2009	9,760	10,460	21,017	3,412
2010	[E] 9,760	[E] 10,460	[E] 21,017	3,412

[a] The values in columns 1-3 of this table are for net heat rates. See "Heat Rate" in Glossary.

[b] Used as the thermal conversion factor for hydro, solar/photovoltaic, and wind electricity net generation to approximate the quantity of fossil fuels replaced by these sources. Through 2000, also used as the thermal conversion factor for wood and waste electricity net generation at electric utilities; beginning in 2001, Btu data for wood and waste at electric utilities are available from surveys.

[c] 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.

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

[e] Used as the thermal conversion factor for geothermal electricity net generation.

[f] See "Heat Content" in Glossary.

[g] The value of 3,412 Btu per kilowatthour is a constant. It is used as the thermal conversion factor for electricity retail sales, and electricity imports and exports.

E=Estimate.

Web Page: http://www.eia.gov/mer/append_a.html.

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

Thermal Conversion Factor Source Documentation

Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Liquefied Petroleum Gases Consumption. Calculated annually by EIA as the average of the thermal conversion factors for all liquefied petroleum gases consumed (see Table A1) weighted by the quantities consumed. The component products of liquefied petroleum gases are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. For 1973–1980, quantities consumed are from EIA, Energy Data Reports, "Petroleum Statement, Annual," Table 1. For 1981 forward, quantities consumed are from EIA, *Petroleum Supply Annual*, Table 2.

Lubricants. EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Miscellaneous Products. EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Motor Gasoline Consumption. 1973–1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947–1985*, a 1968 release of historical and projected statistics. 1994 forward: EIA calculated national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (see Table A3). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for

previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, "Fuel Economy Impact Analysis of Reformulated Gasoline." See **Fuel Ethanol (Denatured).**

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

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

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

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

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

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

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

Petroleum Consumption, Commercial Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the commercial sector weighted by the estimated quantities consumed by the commercial sector. The quantities of petroleum products consumed by the commercial sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/states/sep_use/notes/use_petrol.pdf.

Petroleum Consumption, Electric Power Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the electric power sector weighted by the quantities consumed by the electric power sector. Data are from Form EIA-923, "Power Plant Operations Report," and predecessor forms.

Petroleum Consumption, Industrial Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the industrial sector weighted by the estimated quantities consumed by the industrial sector. The quantities of petroleum products consumed by the industrial sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/states/sep_use/notes/use_petrol.pdf.

Petroleum Consumption, Residential Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential sector weighted by the estimated quantities consumed by the residential sector. The quantities of petroleum products consumed by the residential sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/states/sep_use/notes/use_petrol.pdf.

Petroleum Consumption, Total. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed weighted by the quantities consumed.

Petroleum Consumption, Transportation Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the transportation sector weighted by the estimated quantities consumed by the transportation sector. The quantities of petroleum products consumed by the transportation sector are estimated in the State Energy Data System—see documentation at http://www.eia.gov/states/sep_use/notes/use_petrol.pdf.

Petroleum Products Exports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported weighted by the quantities exported.

Petroleum Products Imports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product imported weighted by the quantities imported.

Plant Condensate. Estimated to be 5.418 million Btu per barrel by EIA from data provided by McClanahan Consultants, Inc., Houston, Texas.

Propane. EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel as published in the *California Oil World and Petroleum Industry,* First Issue, April 1942.

Residual Fuel Oil. EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the

Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

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

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

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

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

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

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

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

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

Approximate Heat Content of Biofuels

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

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

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

Fuel Ethanol (Denatured). 1981–2008 and 2010: EIA used the 2009 factor. 2009: 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, *Petroleum Supply Annual (PSA)*, Table 1, data for renewable fuels and oxygenate plant net production of fuel ethanol. The quantity of pentanes plus used as denaturant is from EIA, PSA, 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 EIA, PSA, 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, Fossil-Fueled Plants. There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydro, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA calculates a rate factor that is equal to the annual average heat rate factor for fossil-fueled power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu. 1973–1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published in EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9. 1989–2000: Calculated annually by EIA by using the

heat rate data reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and net generation data reported on Form EIA-759, "Monthly Power Plant Report." The computation includes data for all electric utility steam-electric plants using fossil fuels. 2001 forward: Calculated annually by EIA by using fuel consumption and net generation data reported on Form EIA-923, "Power Plant Operations Report," and predecessor forms. The computation includes data for all electric utilities and electricity-only independent power producers using fossil fuels.

Electricity Net Generation, Geothermal Energy Plants. 1973–1981: Calculated annually by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12, "Power System Statement." 1982 forward: Estimated annually by EIA on the basis of an informal survey of relevant plants.

Electricity Net Generation, Nuclear Plants. 1973–1984: Calculated annually by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation were reported on Form FERC-1, "Annual Report of Major Electric Utilities, Licensees, and Others"; Form EIA-412, "Annual Report of Public Electric Utilities"; and predecessor forms. For 1982, the factors were published in EIA, *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215. For 1983 and 1984, the factors were published in EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 13. 1985 forward: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms), and the generation reported on Form EIA-923, "Power Plant Operations Report" (and predecessor forms).

B

Appendix

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. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. Customary units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table B2.

The conversion factors presented in Table B3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

Table B1. Metric Conversion Factors

Type of Unit	U.S. Unit		Equivalent in Metric Units	
Mass	1 short ton (2,000 lb)	=	0.907 184 7	metric tons (t)
	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 (°F)	=	0[a]	degrees Celsius (°C)
	212 degrees Fahrenheit (°F)	=	100[a]	degrees Celsius (°C)

[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 (°F) to degrees Celsius (°C) exactly, subtract 32, then multiply by 5/9.

Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading. • Most metric units belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units. For more information about the SI units, see http://physics.nist.gov/cuu/Units/index.html.

Web Page: http://www.eia.gov/mer/append_b.html.

Sources: • General Services Administration, Federal Standard 376B, *Preferred Metric Units for General Use by the Federal Government* (Washington, DC, January 1993), pp. 9-11, 13, and 16. • U.S. Department of Commerce, National Institute of Standards and Technology, Special Publications 330, 811, and 814. • American National Standards Institute/Institute of Electrical and Electronic Engineers, ANSI/IEEE Std 268-1992, pp. 28 and 29.

Table B2. Metric Prefixes

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10^{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/mer/append_b.html.
Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p.10.

Table B3. Other Physical Conversion Factors

Energy Source	Original Unit		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/mer/append_b.html.
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.

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

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

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

City Gate: 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/mer/append_a.html and http://www.eia.gov/mer/append_b.html for further information on conversion factors.) See **Btu Conversion Factor** and **Thermal Conversion Factor**.

Cost, Insurance, Freight (CIF): A sales transaction in which the seller pays for the transportation and insurance of the goods to the port of destination specified by the buyer.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include: 1) small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included; 2) small amounts of

nonhydrocarbons produced with the oil, such as sulfur and various metals; and 3) drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil shale.
Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude Oil F.O.B. Price: The crude oil price actually charged at the oil-producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

Crude Oil Landed Cost: The price of crude oil at the port of discharge, including charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).

Crude Oil Refinery Input: The total crude oil put into processing units at refineries.

Crude Oil Stocks: Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

Crude Oil Used Directly: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

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

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

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

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

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

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

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

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

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

Diesel Fuel: A fuel composed of **distillate fuel oils** obtained in petroleum refining operation or blends of such distillate fuel oils with **residual fuel oil** used in motor vehicles. The boiling point and specific gravity are higher for diesel fuels than for gasoline.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Gasohol: A blend of finished motor gasoline containing alcohol (generally **ethanol** but sometimes methanol) at a concentration between 5.7 percent and 10 percent by volume. See **Motor Gasoline, Oxygenated**.

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

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

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

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

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

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

GT/IC: Gas turbine and internal combustion plants.

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

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

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

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

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

Hydroelectric Pumped Storage: Hydroelectricity that is generated during peak load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Hydrogen (H): The lightest of all gases, hydrogen occurs chiefly in combination with oxygen in water. It also exists in acids, bases, **alcohols**, **petroleum**, and other **hydrocarbons**.

Imports: Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

Independent Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an **electric utility**.

Industrial Sector: An **energy**-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (**NAICS** codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air

conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes **generators** that produce **electricity** and/or **useful thermal output** primarily to support the above-mentioned industrial activities. Various EIA programs differ in sectoral coverage-for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebind.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

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

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

Isobutylene: An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isopentane: A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Jet Fuel: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

Jet Fuel, Kerosene-Type: A kerosene-based product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It isused primarily for commercial turbojet and turboprop aircraft engines.

Jet Fuel, Naphtha-Type: A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290° to 470° F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

Kerosene: A petroleum distillate having a maximum distillation temperature of 401º F at the 10-percent recovery point, a final boiling point of 572º F, and a minimum flash point of 100º F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

Kilowatt: A unit of electrical power equal to 1,000 **watts**.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 **kilowatt** (1,000 **watts**) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu. See **Watthour**.

Landed Costs: The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).

Lease and Plant Fuel: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. Note: This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

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

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

Liquefied Petroleum Gases (LPG): Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

Low-Power Testing: The period of time between a nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during that period is 5 percent of the unit's design thermal rating.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those

used in greases. Lubricant categories are paraffinic and naphthenic.

Marketed Production (Natural Gas): Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations.

Methane: A colorless, flammable, odorless, hydrocarbon gas (CH_4) that is the principal constituent of natural gas. It is also an important source of hydrogen in various industrial processes.

Methyl Tertiary Butyl Ether (MTBE): An ether, $(CH_3)_3COCH_3$, intended for motor gasoline blending. See **Oxygenates**.

Methanol: A light, volatile alcohol (CH_3OH) eligible for motor gasoline blending. See **Oxygenates**.

Miscellaneous Petroleum Products: All finished petroleum products not classified elsewhere-for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline Blending: Mechanical mixing of **motor gasoline blending components** and **oxygenates** as required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components: Naphtha (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. *Note*: oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Motor Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122ºF to 158ºF at the 10-percent recovery point to 365ºF to 374ºF at the 90-percent recovery point. "Motor gasoline" includes conventional gasoline, all types of oxygenated gasoline including gasohol, and reformulated gasoline, but excludes aviation gasoline. Note: Volumetric data on blending components, as well as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

Motor Gasoline Grades: The classification of gasoline by octane ratings. Each type of gasoline (conventional, oxygenated, and reformulated) is classified by three grades: regular, midgrade, and premium. *Note*: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.

Regular Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Midgrade Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Premium Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Motor Gasoline, Oxygenated: Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 2.7 percent or higher by weight and required by the U.S. Environmental Protection Agency (EPA) to be sold in areas designated by EPA as carbon monoxide (CO) nonattainment areas. Note: Oxygenated gasoline excludes oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB). Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside CO nonattainment areas are included in data on oxygenated gasoline. Other data on gasohol are included in data on conventional gasoline.

Motor Gasoline, Reformulated: Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. Note: This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Motor Gasoline Retail Prices: Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). Those prices are collected in 85 urban areas selected to represent all urban consumers-about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service.

Motor Gasoline (Total): For stock level data, a sum including finished motor gasoline stocks plus stocks of motor gasoline blending components but excluding stocks of oxygenates.

MTBE: See **Methyl Tertiary Butyl Ether**.

NAICS (North American Industry Classification System): A coding system developed jointly by the United States, Canada, and Mexico to classify businesses and industries according to the type of economic activity in which they are engaged. NAICS replaces the Standard Industrial Classification (SIC) codes. For additional information on NAICS, go to http://www.census.gov/eos/www/naics/.

Naphtha: A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400º F.

Natural Gas: A gaseous mixture of hydrocarbon compounds, primarily methane, used as a fuel for electricity generation and in a variety of ways in buildings, and as raw material input and fuel for industrial processes.

Natural Gas, Dry: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. *Note:* Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Natural Gas (Dry) Production: The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the production site include 1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and 2) gas vented and flared. Processing losses include 1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and 2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less extraction loss.

Natural Gas Marketed Production: Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring; nonhydrocarbon gases removed in treating and processing operations; and quantities vented and flared.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Material as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Wellhead Price: The wellhead price of natural gas is calculated by dividing the total reported value at the wellhead by the total quantity produced as reported by the appropriate agencies of individual producing States and the U.S. Minerals Management Service. The price includes all costs prior to shipment from the lease, including gathering and compression costs, in addition to State production, severance, and similar charges.

Natural Gasoline: A mixture of hydrocarbons (mostly pentanes and heavier) extracted from natural gas that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Summer Capacity: The maximum output, commonly expressed in **kilowatts** (kW) or megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of June 1 through September 30). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

Neutral Zone: A 6,200 square-mile area shared equally between Kuwait and Saudi Arabia under a 1992 agreement. The Neutral Zone contains an estimated 5 billion barrels of oil and 8 trillion cubic feet of natural gas.

Nominal Dollars: A measure used to express **nominal price**.

Nominal Price: The price paid for a product or service at the time of the transaction. Nominal prices are those that have not been adjusted to remove the effect of changes in the purchasing power of the dollar; they reflect buying power in the year in which the transaction occurred.

Non-Biomass Waste: Material of non-biological origin that is a byproduct or a discarded product. "Non-biomass waste" includes municipal solid waste from non-biogenic sources**,** such as plastics, and tire-derived fuels.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Nonrenewable Fuels: Fuels that cannot be easily made or "renewed," such as **crude oil**, **natural gas**, and **coal**.

Nuclear Electric Power (Nuclear Power): Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.

Nuclear Electric Power Plant: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

Nuclear Reactor: An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

OECD: See **Organization for Economic Cooperation and Development**.

Offshore: That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

Oil: See **Crude Oil**.

OPEC: See **Organization of the Petroleum Exporting Countries.**

Operable Unit (Nuclear): In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

Organization for Economic Cooperation and Development (OECD): An international organization helping governments tackle the economic, social and governance challenges of a globalized economy. Its membership comprises about 30 member countries. With active relationships with some 70 other countries, non-governmental organizations (NGOs) and civil society, it has a global reach. For details about the organization, see http://www.oecd.org.

Organization of the Petroleum Exporting Countries (OPEC): An intergovernmental organization whose stated objective is to "coordinate and unify the petroleum policies of member countries." It was created at the Baghdad Conference on September 10–14, 1960. Current members (with years of membership) include Algeria (1969–present), Angola (2007–present), Ecuador (1973–1992 and 2007–present), Iran (1960–present), Iraq (1960–present), Kuwait (1960–present), Libya (1962–present), Nigeria (1971–present), Qatar (1961–present), Saudi Arabia (1960–present), United Arab Emirates (1967–present), and Venezuela (1960–present). Countries no longer members of OPEC include Gabon (1975–1994) and Indonesia (1962–2008).

Oxygenates: Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. **Ethanol, Methyl Tertiary Butyl Ether (MTBE),** Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

PAD Districts: Petroleum Administration for Defense Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

Pentanes Plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Petrochemical Feedstocks: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics.

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: See **Coke, Petroleum**.

Petroleum Consumption: See **Products Supplied (Petroleum).**

Petroleum Imports: Imports of petroleum into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Stocks, Primary: For individual products, quantities that are held at refineries, in pipelines, and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.

Photovoltaic Energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquid at gas inlet separators or scrubbers in processing plants.

Primary Energy: **Energy** in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy. For example, **coal** can be converted to synthetic gas, which can be converted to **electricity**; in this example, coal is primary energy, synthetic gas is secondary energy, and electricity is tertiary energy. See **Primary Energy Production** and **Primary Energy Consumption**.

Primary Energy Consumption: Consumption of **primary energy**. (Energy sources that are produced from other energy sources—e.g., **coal coke** from **coal**—are included in primary energy consumption only if their energy content has not already been included as part of the original energy source. Thus, U.S. primary energy consumption does include net imports of coal coke, but not the coal coke produced from domestic coal.) The U.S. Energy Information Administration includes the following in U.S. primary energy consumption: coal consumption; coal coke net imports; **petroleum consumption** (**petroleum products supplied**, including **natural gas plant liquids** and **crude oil** burned as fuel); **dry natural gas**—excluding **supplemental gaseous fuels**—consumption; **nuclear electricity net generation** (converted to **Btu** using the nuclear plants **heat rate**); **conventional hydroelectricity** net generation (converted to Btu using the fossil-fueled plants heat rate); **geothermal** electricity net generation (converted to Btu using the geothermal plants heat rate), and geothermal heat pump energy and geothermal direct use energy; **solar thermal** and **photovoltaic** electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; **wind** electricity net generation (converted to Btu using the fossil-fueled plants heat rate); **wood and wood-derived fuels** consumption; **biomass waste** consumption; **fuel ethanol** and **biodiesel** consumption; losses and co-products from the production of fuel ethanol and biodiesel; and electricity net imports (converted to Btu using the electricity heat content of 3,412 Btu per kilowatthour). See **Total Energy Consumption**.

Primary Energy Production: Production of **primary energy**. The U.S. Energy Information Administration includes the following in U.S. primary energy production: **coal** production, **waste coal** supplied, and coal refuse recovery; **crude oil** and **lease condensate** production; **natural gas plant liquids** production; **dry natural gas**—excluding **supplemental gaseous fuels**—production; **nuclear electricity net generation** (converted to **Btu** using the nuclear plants **heat rate**); **conventional hydroelectricity** net generation (converted to Btu using the fossil-fueled plants heat rate); **geothermal** electricity net generation (converted to Btu using the geothermal plants heat rate), and geothermal heat pump energy and geothermal direct use energy; **solar thermal** and **photovoltaic** electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; **wind** electricity net generation (converted to Btu using the fossil-fueled plants heat rate); **wood and wood-derived fuels** consumption; **biomass waste** consumption; and **biofuels** feedstock.

Prime Mover: The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly.

Products Supplied (Petroleum): Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas-processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted-for crude oil (plus net receipts when calculated on a PAD District basis) minus stock change, minus crude oil losses, minus refinery inputs, and minus exports.

Propane: A normally gaseous straight-chain hydrocarbon (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67º F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene: An olefinic hydrocarbon (C_3H_6) recovered from refinery or petrochemical processes.

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

Real Price: A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar.

Real prices, which are expressed in constant dollars, usually reflect buying power relative to a base year.

Refiner Acquisition Cost of Crude Oil: The cost of crude oil to the refiner, including transportation and fees. The composite cost is the weighted average of domestic and imported crude oil costs.

Refinery and Blender Net Inputs: Raw materials, **unfinished oils**, and blending components processed at refineries, or blended at refineries or petroleum storage terminals to produce finished **petroleum products**. Included are gross inputs of **crude oil**, **natural gas plant liquids**, other **hydrocarbon** raw materials, **hydrogen**, **oxygenates** (excluding **fuel ethanol**), and renewable fuels (including fuel ethanol). Also included are net inputs of unfinished oils, **motor gasoline blending components**, and **aviation gasoline blending components**. Net inputs are calculated as gross inputs minus gross production. Negative net inputs indicate gross inputs are less than gross production. Examples of negative net inputs include reformulated gasoline blendstock for oxygenate blending (RBOB) produced at refineries for shipment to blending terminals, and unfinished oils produced and added to inventory in advance of scheduled maintenance of a refinery crude oil distillation unit.

Refinery and Blender Net Production: Liquefied refinery gases, and finished **petroleum products** produced at a **refinery** or petroleum storage terminal blending facility. Net production equals gross production minus gross inputs. Negative net production indicates gross production is less than gross inputs for a finished petroleum product. Examples of negative net production include reclassification of one finished product to another finished product, or reclassification of a finished product to **unfinished oils** or blending components.

Refinery (Petroleum): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Refuse Mine: A surface site where **coal** is recovered from previously mined coal. It may also be known as a silt bank, culm bank, refuse bank, slurry dam, or dredge operation.

Refuse Recovery: The recapture of **coal** from a **refuse mine** or the coal recaptured by that process. The resulting product has been cleaned to reduce the concentration of noncombustible materials.

Renewable Energy: Energy obtained from sources that are essentially inexhaustible (unlike, for example, the **fossil fuels**, of which there is a finite supply). Renewable sources of energy include **conventional hydroelectric power**, **biomass**, **geothermal**, **solar**, and **wind**.

Repressuring: The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

Residential Sector: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. *Note:* Various EIA programs differ in sectoral coverage for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebres.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

Residual Fuel Oil: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, for electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

Road Oil: Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

Rotary Rig: A machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

Short Ton (Coal): A unit of weight equal to 2,000 pounds.

SIC (Standard Industrial Classification): A set of codes developed by the U.S. Office of Management and Budget which categorizes industries into groups with similar economic activities. Replaced by **NAICS (North American Industry Classification System)**.

Solar Energy: See **Solar Thermal Energy** and **Photovoltaic Energy**.

Solar Thermal Energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or **electricity**.

Special Naphthas: All finished products within the naphtha boiling ranges that are used as paint thinner, cleaners or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

Station Use: Energy that is used to operate an **electric power plant**. It includes energy consumed for plant lighting, power,

and auxiliary facilities, regardless of whether the energy is produced at the plant or comes from another source.

Steam Coal: All nonmetallurgical coal.

Steam-Electric Power Plant: A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Still Gas (Refinery Gas): Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and, petrochemical feedstock.

Stocks: See **Coal Stocks**, **Crude Oil Stocks**, or **Petroleum Stocks, Primary**.

Strategic Petroleum Reserve (SPR): Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Subbituminous Coal: A **coal** whose properties range from those of **lignite** to those of **bituminous coal** and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million **Btu** per **short ton** on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Supplemental Gaseous Fuels: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to **natural gas**, resulting from the conversion or reforming of **hydrocarbons** that may easily be substituted for or interchanged with pipeline-quality natural gas.

Thermal Conversion Factor: A factor for converting data between physical units of measure (such as **barrels**, **cubic feet**, or **short tons**) and thermal units of measure (such as **British thermal units**, calories, or joules); or for converting data between different thermal units of measure. See **Btu Conversion Factor.**

Total Energy Consumption: **Primary energy consumption** in the **end-use sectors**, plus **electricity retail sales** and **electrical system energy losses**.

Transportation Sector: An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. Note: Various EIA programs differ in sectoral coverage-for more information see http://www.eia.gov/neic/datadefinitions/Guideforwebtrans.htm See **End-Use Sectors** and **Energy-Use Sectors**.

Underground Storage: The storage of natural gas in underground reservoirs at a different location from which it was produced.

Unfinished Oils: All oils requiring further refinery processing except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Stream: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

Union of Soviet Socialist Republics (U.S.S.R.): A political entity that consisted of 15 constituent republics: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. The U.S.S.R. ceased to exist as of December 31, 1991.

United States: The 50 States and the District of Columbia. Note: The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

Useful Thermal Output: The thermal energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

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

Vented Natural Gas: Gas released into the air on the production site or at processing plants.

Vessel Bunkering: Includes sales for the fueling of commercial or private boats, such as pleasure craft,

fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

Waste Coal: Usable material that is a byproduct of previous **coal** processing operations. Waste coal is usually composed of mixed coal, soil, and rock (mine waste). Most waste coal is burned as-is in unconventional fluidized-bed combustors. For some uses, waste coal may be partially cleaned by removing some extraneous noncombustible constituents. Examples of waste coal include fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste.

Waste: See **Biomass Waste** and **Non-Biomass Waste**.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A watt is equal to 1/746 horsepower.

Watthour (Wh): The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.

Waxes: Solid or semisolid material derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

Wellhead Price: The value of crude oil or natural gas at the mouth of the well.

Wind Energy: Kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.

Wood and Wood-Derived Fuels: Wood and products derived from wood that are used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, paper pellets, railroad ties, utility poles, **black liquor**, red liquor, sludge wood, spent sulfite liquor, and other wood-based solids and liquids.

Working Gas: The volume of gas in a reservoir that is in addition to the base gas. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.