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Monthly Energy Review

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U.S. Energy Information Administration
Independent Statistics and Analysis

Monthly Energy Review

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

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

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

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

Related Monthly Publications: Other monthly EIA reports are *Petroleum Supply Monthly*, *Petroleum Marketing Monthly*, *Natural Gas Monthly*, *Electric Power Monthly*, and *International Petroleum Monthly*. For more information, contact the National Energy Information Center at 202-586-8800 or infoctr@eia.doe.gov.

Important Notes About the Data

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

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

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

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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: *MER* updates are usually posted electronically by the third-to-the-last workday of each month.

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Monthly Energy Review

December 2009

U.S. Energy Information Administration
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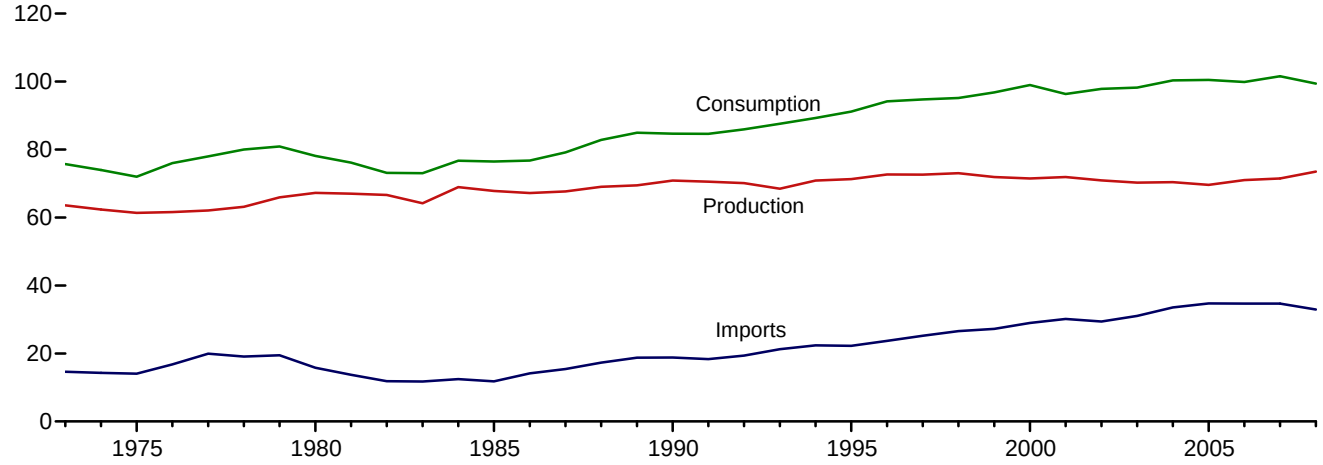
1 Energy Overview

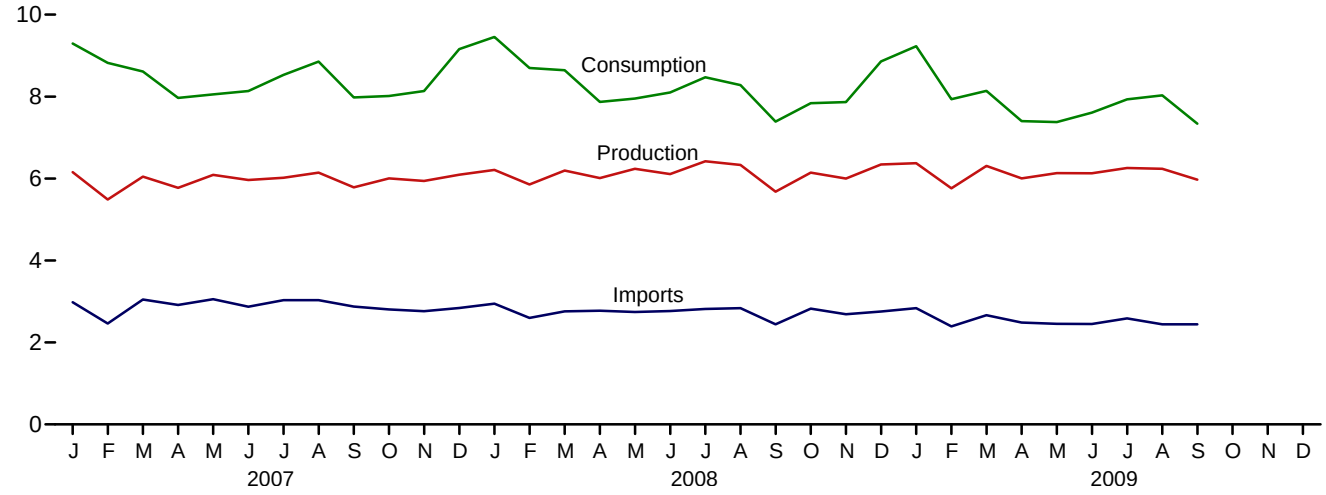
The continental United States at night from orbit. Source: National Oceanic and Atmospheric Administration satellite imagery; mosaic provided by U.S. Geological Survey.

Figure 1.1 Primary Energy Overview
(Quadrillion Btu)

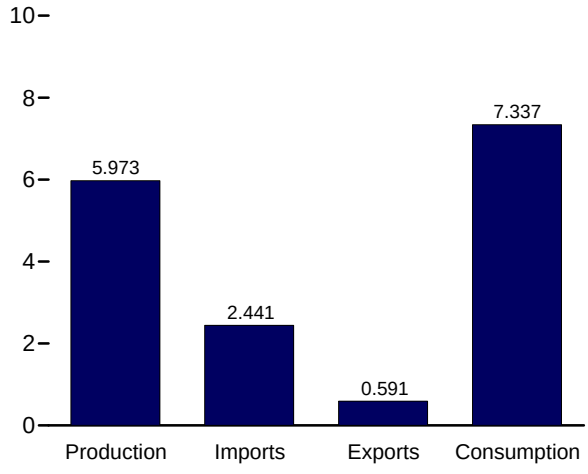
Consumption, Production, and Imports, 1973-2008



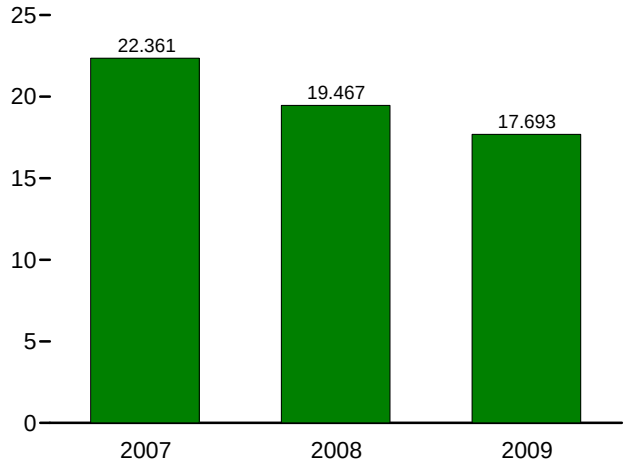
Consumption, Production, and Imports, Monthly



Overview, September 2009



Net Imports, January-September



Web Page: http://www.eia.doe.gov/emeu/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**	**-0.456**	**70.316**	**0.910**	**4.433**	**75.708**
1975 Total	**54.733**	**1.900**	**4.723**	**61.357**	**14.032**	**2.323**	**11.709**	**-1.067**	**65.355**	**1.900**	**4.723**	**71.999**
1980 Total	**59.008**	**2.739**	**5.485**	**67.232**	**15.796**	**3.695**	**12.101**	**-1.212**	**69.826**	**2.739**	**5.485**	**78.122**
1985 Total	**57.539**	**4.076**	**6.187**	**67.801**	**11.781**	**4.196**	**7.584**	**1.107**	**66.091**	**4.076**	**6.187**	**76.493**
1990 Total	**58.560**	**6.104**	**6.208**	**70.872**	**18.817**	**4.752**	**14.065**	**-.283**	**72.333**	**6.104**	**6.208**	**84.654**
1995 Total	**57.540**	**7.075**	**6.705**	**71.320**	**22.260**	**4.511**	**17.750**	**2.104**	**77.258**	**7.075**	**6.707**	**91.174**
1996 Total	**58.387**	**7.087**	**7.168**	**72.642**	**23.702**	**4.633**	**19.069**	**2.466**	**79.783**	**7.087**	**7.169**	**94.176**
1997 Total	**58.857**	**6.597**	**7.181**	**72.635**	**25.215**	**4.514**	**20.701**	**1.430**	**80.874**	**6.597**	**7.178**	**94.766**
1998 Total	**59.314**	**7.068**	**6.659**	**73.041**	**26.581**	**4.299**	**22.281**	**-.139**	**81.370**	**7.068**	**6.658**	**95.183**
1999 Total	**57.614**	**7.610**	**6.683**	**71.907**	**27.252**	**3.715**	**23.537**	**1.373**	**82.428**	**7.610**	**6.681**	**96.817**
2000 Total	**57.366**	**7.862**	**6.262**	**71.490**	**28.973**	**4.006**	**24.967**	**2.518**	**84.733**	**7.862**	**6.264**	**98.975**
2001 Total	**58.541**	**8.033**	**5.318**	**71.892**	**30.157**	**3.770**	**26.386**	**-1.952**	**82.903**	**8.033**	**5.316**	**96.326**
2002 Total	**56.894**	**8.143**	**5.899**	**70.935**	**29.407**	**3.668**	**25.739**	**1.184**	**83.750**	**8.143**	**5.894**	**97.858**
2003 Total	**56.157**	**7.959**	**6.148**	**70.264**	**31.061**	**4.054**	**27.007**	**.938**	**84.078**	**7.959**	**6.150**	**98.209**
2004 Total	**55.914**	**8.222**	**6.248**	**70.384**	**33.543**	**4.433**	**29.110**	**.857**	**85.830**	**8.222**	**6.260**	**100.351**
2005 Total	**55.056**	**8.160**	**6.410**	**69.626**	**34.710**	**4.561**	**30.149**	**.710**	**85.817**	**8.160**	**6.423**	**100.485**
2006 Total	**55.968**	**8.214**	**6.857**	**71.039**	**34.673**	**4.868**	**29.805**	**-.969**	**84.690**	**8.214**	**6.908**	**99.875**
2007 January	4.760	.776	.619	6.155	2.982	.447	2.536	.606	7.890	.776	.624	9.297
February	4.293	.684	.511	5.488	2.463	.349	2.114	1.220	7.613	.684	.514	8.821
March	4.774	.674	.599	6.047	3.046	.420	2.626	-.061	7.331	.674	.601	8.613
April	4.582	.601	.589	5.772	2.914	.416	2.498	-.303	6.768	.601	.589	7.967
May	4.792	.682	.617	6.091	3.056	.448	2.608	-.647	6.742	.682	.616	8.052
June	4.665	.723	.579	5.966	2.871	.423	2.448	-.280	6.819	.723	.581	8.134
July	4.671	.763	.586	6.020	3.030	.498	2.532	-.023	7.168	.763	.585	8.529
August	4.816	.763	.566	6.145	3.033	.475	2.558	.151	7.513	.763	.566	8.854
September	4.568	.709	.507	5.784	2.877	.436	2.442	-.244	6.762	.709	.506	7.981
October	4.829	.647	.526	6.002	2.806	.439	2.367	-.354	6.833	.647	.529	8.015
November	4.732	.681	.528	5.941	2.765	.559	2.206	-.012	6.919	.681	.527	8.135
December	4.764	.755	.574	6.093	2.841	.538	2.303	.760	7.818	.755	.576	9.157
Total	**56.246**	**8.458**	**6.800**	**71.504**	**34.685**	**5.448**	**29.238**	**.813**	**86.176**	**8.458**	**6.814**	**101.554**
2008 January	4.873	.742	.595	6.210	2.947	.537	2.410	.835	8.111	.742	.591	9.455
February	4.622	.683	.552	5.857	2.600	.528	2.071	.771	7.455	.683	.551	8.699
March	4.903	.679	.613	6.194	2.759	.608	2.151	.298	7.352	.679	.605	8.643
April	4.796	.601	.612	6.010	2.774	.591	2.183	-.323	6.648	.601	.612	7.871
May	4.881	.680	.679	6.240	2.742	.622	2.120	-.407	6.590	.680	.675	7.953
June	4.679	.738	.691	6.108	2.766	.622	2.144	-.151	6.663	.738	.690	8.101
July	4.980	.779	.662	6.421	2.816	.606	2.210	-.160	7.015	.779	.661	8.470
August	4.952	.762	.616	6.330	2.836	.584	2.251	-.301	6.889	.762	.614	8.280
September	4.426	.703	.549	5.679	2.443	.516	1.927	-.216	6.126	.703	.550	7.390
October	4.916	.659	.568	6.143	2.825	.589	2.236	-.540	6.605	.659	.570	7.839
November	4.766	.665	.568	5.999	2.689	.593	2.096	-.227	6.633	.665	.566	7.868
December	4.943	.765	.633	6.341	2.756	.619	2.137	.378	7.448	.765	.636	8.857
Total	**57.738**	**8.455**	**7.338**	**73.531**	**32.952**	**7.016**	**25.936**	**-.042**	**83.534**	**8.455**	**7.324**	**99.425**
2009 January	4.953	.771	.650	6.373	2.837	.593	2.243	R .611	R 7.804	.771	.647	R 9.228
February	4.529	.674	.557	5.760	2.392	.501	1.890	R .288	R 6.708	.674	.548	R 7.938
March	4.967	.702	.641	6.309	2.665	.558	2.107	R -.277	R 6.793	.702	.641	R 8.140
April	4.720	.620	.664	6.005	2.486	.506	1.980	R -.584	R 6.107	.620	.667	R 7.400
May	4.741	.684	.707	6.133	2.454	.535	1.919	R -.672	R 5.975	.684	.710	R 7.379
June	4.702	.728	.697	6.127	2.449	.564	1.885	R -.404	R 6.171	.728	.699	R 7.608
July	R 4.831	.765	.661	R 6.257	R 2.587	.618	R 1.969	R -.292	R 6.495	.765	.661	R 7.934
August	R 4.844	.758	.635	R 6.237	R 2.442	R .594	R 1.849	R -.054	R 6.625	.758	.634	R 8.032
September	4.696	.692	.586	5.973	2.441	.591	1.850	-.486	6.051	.692	.584	7.337
9-Month Total	**42.983**	**6.393**	**5.797**	**55.173**	**22.753**	**5.060**	**17.693**	**-1.869**	**58.727**	**6.393**	**5.790**	**70.996**
2008 9-Month Total	**43.113**	**6.367**	**5.569**	**55.048**	**24.682**	**5.215**	**19.467**	**.346**	**62.848**	**6.367**	**5.551**	**74.862**
2007 9-Month Total	**41.921**	**6.375**	**5.172**	**53.468**	**26.273**	**3.912**	**22.361**	**.419**	**64.606**	**6.375**	**5.182**	**76.247**

[a] Coal, natural gas (dry), crude oil, and natural gas plant liquids.

[b] Most data are estimates. See Tables 10.1-10.2c for notes on series components and estimation.

[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.

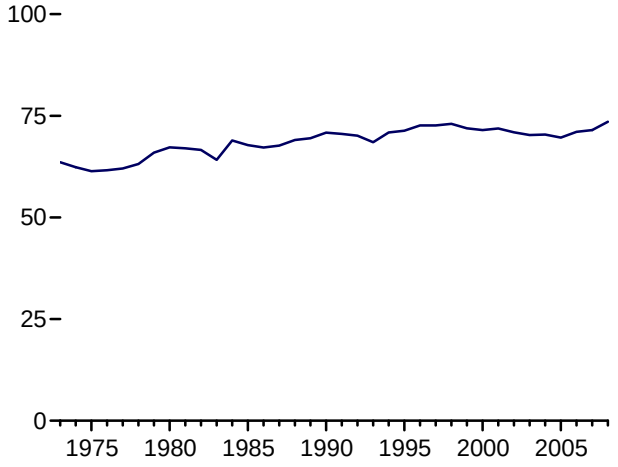
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

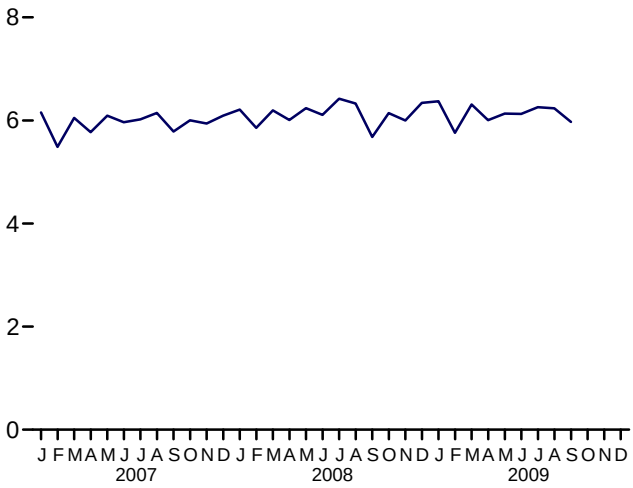
Sources: • **Production:** Table 1.2. • **Trade:** Tables 1.4a and 1.4b. • **Stock Change and Other:** Calculated as consumption minus production and net imports. • **Consumption:** Table 1.3.

Figure 1.2 Primary Energy Production
(Quadrillion Btu)

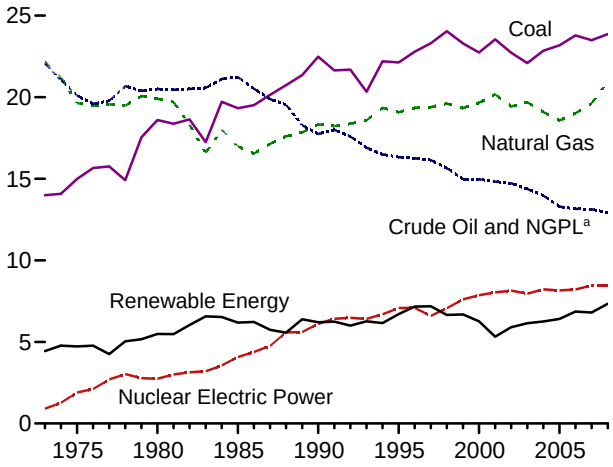
Total, 1973-2008



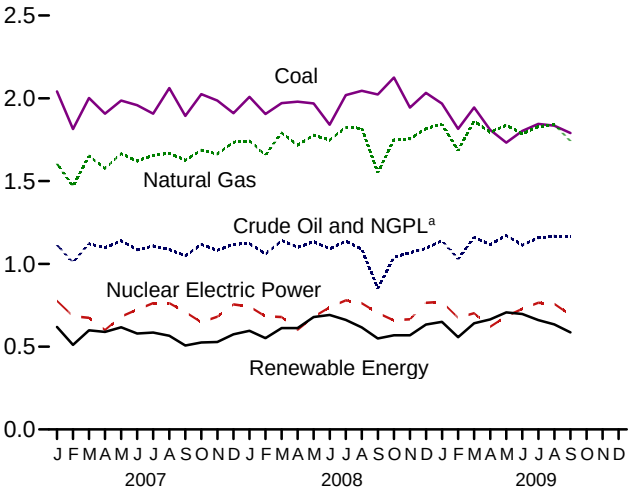
Total, Monthly



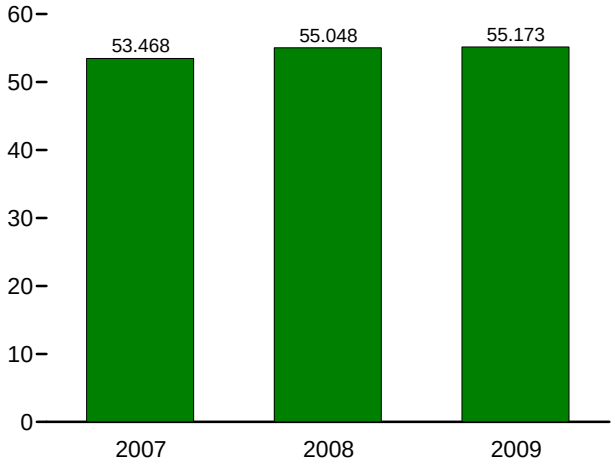
By Source, 1973-2008



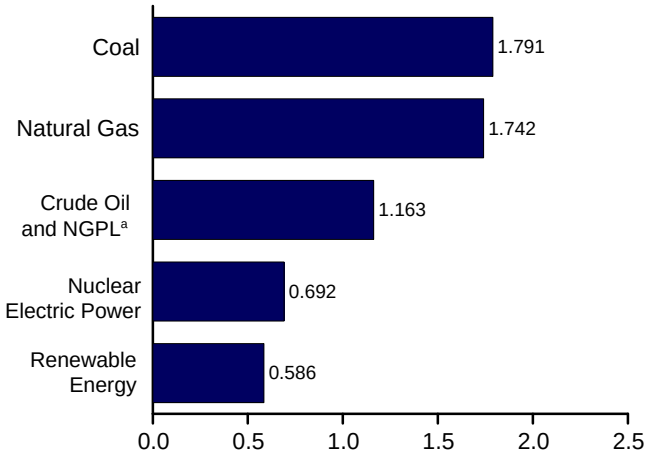
By Source, Monthly



Total, January-September



By Source, September 2009



[a] Natural gas plant liquids.
Web Page: http://www.eia.doe.gov/emeu/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)**	**3.018**	**6.187**	**67.801**
1990 Total	**22.488**	**18.326**	**15.571**	**2.175**	**58.560**	**6.104**	**3.046**	**.336**	**.060**	**.029**	**2.737**	**6.208**	**70.872**
1995 Total	**22.130**	**19.082**	**13.887**	**2.442**	**57.540**	**7.075**	**3.205**	**.294**	**.070**	**.033**	**3.103**	**6.705**	**71.320**
1996 Total	**22.790**	**19.344**	**13.723**	**2.530**	**58.387**	**7.087**	**3.590**	**.316**	**.071**	**.033**	**3.158**	**7.168**	**72.642**
1997 Total	**23.310**	**19.394**	**13.658**	**2.495**	**58.857**	**6.597**	**3.640**	**.325**	**.070**	**.034**	**3.112**	**7.181**	**72.635**
1998 Total	**24.045**	**19.613**	**13.235**	**2.420**	**59.314**	**7.068**	**3.297**	**.328**	**.070**	**.031**	**2.933**	**6.659**	**73.041**
1999 Total	**23.295**	**19.341**	**12.451**	**2.528**	**57.614**	**7.610**	**3.268**	**.331**	**.069**	**.046**	**2.969**	**6.683**	**71.907**
2000 Total	**22.735**	**19.662**	**12.358**	**2.611**	**57.366**	**7.862**	**2.811**	**.317**	**.066**	**.057**	**3.010**	**6.262**	**71.490**
2001 Total	**23.547**	**20.166**	**12.282**	**2.547**	**58.541**	**8.033**	**2.242**	**.311**	**.065**	**.070**	**2.629**	**5.318**	**71.892**
2002 Total	**22.732**	**19.439**	**12.163**	**2.559**	**56.894**	**8.143**	**2.689**	**.328**	**.064**	**.105**	**2.712**	**5.899**	**70.935**
2003 Total	**22.094**	**19.691**	**12.026**	**2.346**	**56.157**	**7.959**	**2.825**	**.331**	**.064**	**.115**	**2.815**	**6.148**	**70.264**
2004 Total	**22.852**	**19.093**	**11.503**	**2.466**	**55.914**	**8.222**	**2.690**	**.341**	**.065**	**.142**	**3.011**	**6.248**	**70.384**
2005 Total	**23.185**	**18.574**	**10.963**	**2.334**	**55.056**	**8.160**	**2.703**	**.343**	**.066**	**.178**	**3.120**	**6.410**	**69.626**
2006 Total	**23.790**	**19.022**	**10.801**	**2.356**	**55.968**	**8.214**	**2.869**	**.343**	**.072**	**.264**	**3.309**	**6.857**	**71.039**
2007 January	2.041	1.605	.921	.192	4.760	.776	.257	.031	.006	.024	.300	.619	6.155
February	1.814	1.469	.832	.177	4.293	.684	.184	.027	.006	.025	.270	.511	5.488
March	2.002	1.651	.918	.204	4.774	.674	.239	.029	.007	.030	.294	.599	6.047
April	1.907	1.577	.903	.195	4.582	.601	.236	.028	.007	.031	.287	.589	5.772
May	1.986	1.666	.934	.206	4.792	.682	.257	.028	.007	.029	.295	.617	6.091
June	1.959	1.621	.887	.198	4.665	.723	.226	.029	.007	.026	.291	.579	5.966
July	1.907	1.656	.903	.205	4.671	.763	.222	.030	.007	.021	.305	.586	6.020
August	2.062	1.667	.883	.203	4.816	.763	.197	.030	.007	.027	.305	.566	6.145
September	1.894	1.626	.850	.199	4.568	.709	.146	.029	.007	.028	.297	.507	5.784
October	2.025	1.686	.907	.211	4.829	.647	.146	.030	.007	.033	.309	.526	6.002
November	1.986	1.664	.873	.209	4.732	.681	.155	.029	.006	.031	.307	.528	5.941
December	1.910	1.735	.909	.210	4.764	.755	.181	.030	.006	.034	.322	.574	6.093
Total	**23.493**	**19.623**	**10.721**	**2.409**	**56.246**	**8.458**	**2.446**	**.349**	**.081**	**.341**	**3.583**	**6.800**	**71.504**
2008 January	2.008	E 1.742	.917	.206	4.873	.742	.201	.029	.007	.041	.317	.595	6.210
February	1.905	E 1.658	.862	.198	4.622	.683	.181	.026	.007	.037	.300	.552	5.857
March	1.971	E 1.791	.926	.215	4.903	.679	.209	.030	.008	.046	.319	.613	6.194
April	1.980	E 1.717	.890	.210	4.796	.601	.211	.029	.008	.050	.315	.612	6.010
May	1.969	E 1.778	.917	.217	4.881	.680	.261	.031	.008	.051	.328	.679	6.240
June	1.840	E 1.748	.887	.204	4.679	.738	.282	.031	.008	.049	.322	.691	6.108
July	2.019	E 1.824	.923	.214	4.980	.779	.245	.031	.008	.038	.339	.662	6.421
August	2.045	E 1.819	.880	.208	4.952	.762	.201	.031	.008	.031	.345	.616	6.330
September	2.023	E 1.551	.684	.168	4.426	.703	.155	.030	.008	.027	.329	.549	5.679
October	2.126	E 1.750	.840	.201	4.916	.659	.149	.031	.008	.043	.338	.568	6.143
November	1.944	E 1.754	.874	.193	4.766	.665	.153	.030	.007	.045	.334	.568	5.999
December	2.032	E 1.817	.909	.185	4.943	.765	.203	.030	.007	.058	.335	.633	6.341
Total	**23.863**	**E 20.948**	**10.509**	**2.419**	**57.738**	**8.455**	**2.452**	**.358**	**.091**	**.514**	**3.922**	**7.338**	**73.531**
2009 January	1.968	E 1.845	E .943	.198	4.953	.771	.232	.030	.007	.054	.326	.650	6.373
February	1.815	E 1.684	E .843	.186	4.529	.674	.175	.028	.007	.049	.299	.557	5.760
March	1.945	E 1.862	E .948	.213	4.967	.702	.211	.030	.008	.064	.327	.641	6.309
April	1.810	E 1.795	E .910	.206	4.720	.620	.249	.028	.008	.067	.312	.664	6.005
May	1.732	E 1.837	E .950	.222	4.741	.684	.288	.029	.008	.057	.325	.707	6.133
June	1.803	E 1.786	E .902	.211	4.702	.728	.285	.028	.008	.049	.327	.697	6.127
July	R 1.846	E 1.828	E .941	.216	R 4.831	.765	.230	.030	.008	.045	.349	.661	R 6.257
August	R 1.835	RE 1.841	E .950	.218	R 4.844	.758	.194	.030	.008	.049	.354	.635	R 6.237
September	1.791	E 1.742	E .947	.216	4.696	.692	.173	.029	.008	.040	.335	.586	5.973
9-Month Total	**16.544**	**E 16.220**	**E 8.334**	**1.886**	**42.983**	**6.393**	**2.038**	**.262**	**.068**	**.474**	**2.955**	**5.797**	**55.173**
2008 9-Month Total	**17.760**	**E 15.626**	**7.886**	**1.840**	**43.113**	**6.367**	**1.946**	**.268**	**.069**	**.369**	**2.916**	**5.569**	**55.048**
2007 9-Month Total	**17.572**	**14.538**	**8.032**	**1.778**	**41.921**	**6.375**	**1.964**	**.260**	**.061**	**.242**	**2.645**	**5.172**	**53.468**

[a] Most data are estimates. See Tables 10.1-10.2c for notes on series components and estimation.

[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.

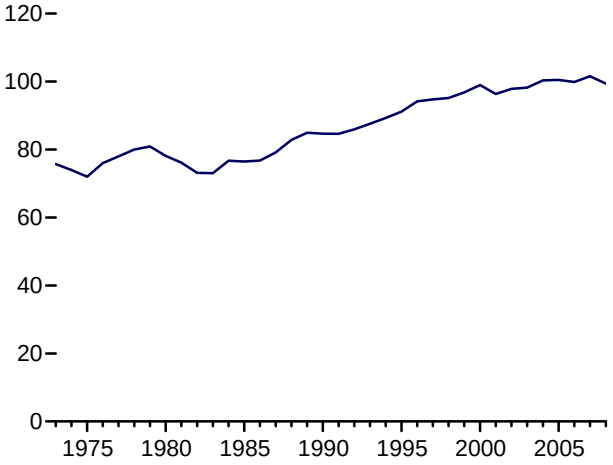
Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

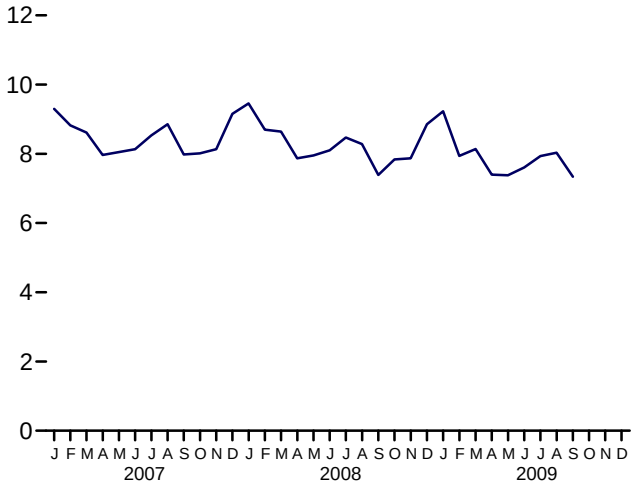
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas (Dry):** Tables 4.1 and A4. • **Crude Oil** and **Natural Gas Plant Liquids:** Tables 3.1 and A2. • **Nuclear Electric Power:** Tables 7.2a and A6 ("Nuclear Plants" heat rate). • **Renewable Energy:** Table 10.1.

Figure 1.3 Primary Energy Consumption
(Quadrillion Btu)

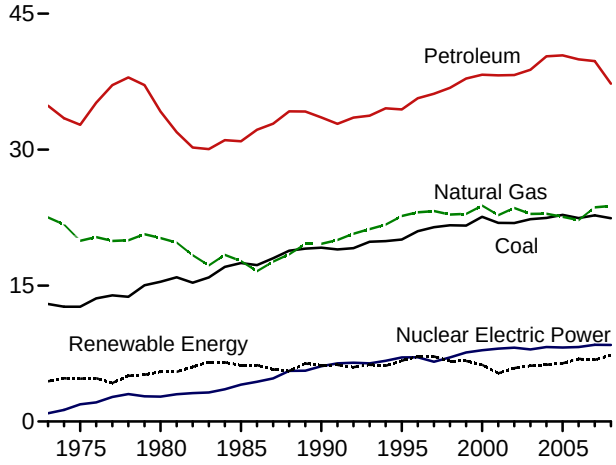
Total, 1973-2008



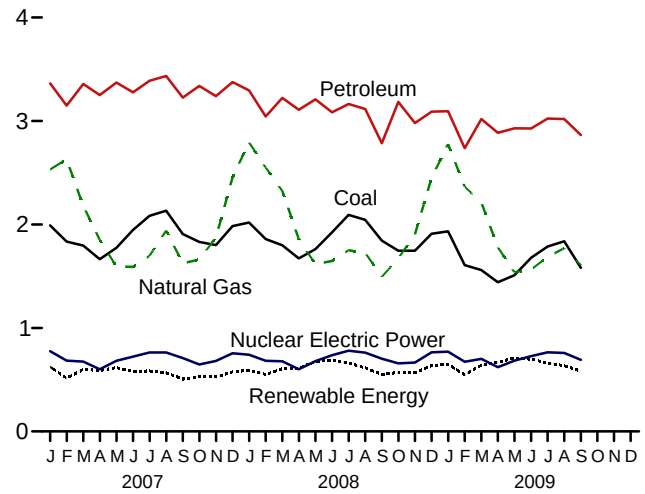
Total, Monthly



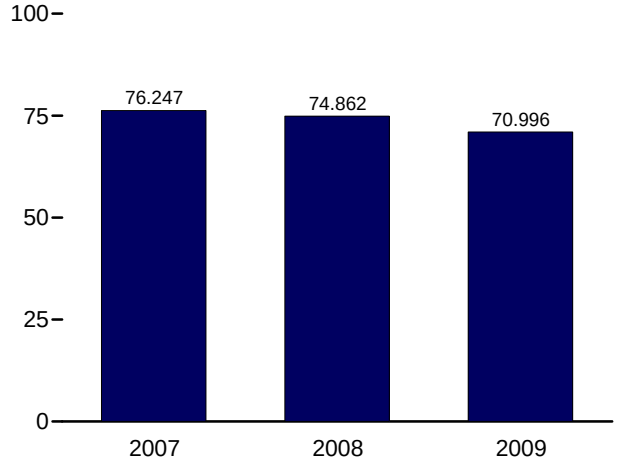
By Source[a], 1973-2008



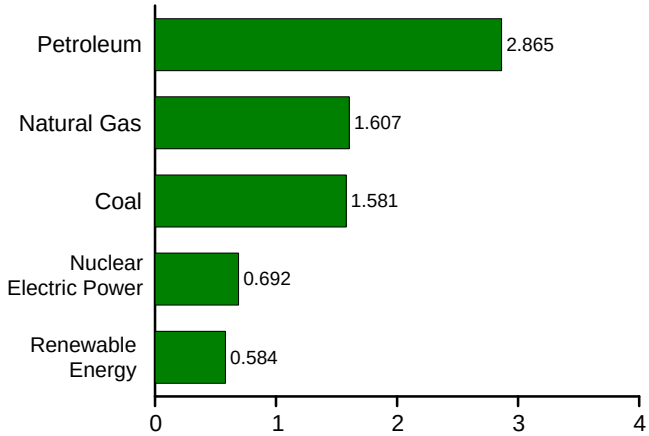
By Source[a], Monthly



Total, January-September



By Source[a], September 2009



[a] Small quantities of net imports of coal coke and electricity are not shown.
Web Page: http://www.eia.doe.gov/emeu/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]	Petro-leum[c]	Total[d]	Nuclear Electric Power	Hydro-electric Power[e]	Geo-thermal	Solar/ PV	Wind	Bio-mass	Total	Total[f]
1973 Total	**12.971**	**22.512**	**34.840**	**70.316**	**0.910**	**2.861**	**0.043**	**NA**	**NA**	**1.529**	**4.433**	**75.708**
1975 Total	**12.663**	**19.948**	**32.731**	**65.355**	**1.900**	**3.155**	**.070**	**NA**	**NA**	**1.499**	**4.723**	**71.999**
1980 Total	**15.423**	**20.235**	**34.202**	**69.826**	**2.739**	**2.900**	**.110**	**NA**	**NA**	**2.475**	**5.485**	**78.122**
1985 Total	**17.478**	**17.703**	**30.922**	**66.091**	**4.076**	**2.970**	**.198**	**(s)**	**(s)**	**3.018**	**6.187**	**76.493**
1990 Total	**19.173**	**19.603**	**33.553**	**72.333**	**6.104**	**3.046**	**.336**	**.060**	**.029**	**2.737**	**6.208**	**84.654**
1995 Total	**20.089**	**22.671**	**34.437**	**77.258**	**7.075**	**3.205**	**.294**	**.070**	**.033**	**3.105**	**6.707**	**91.174**
1996 Total	**21.002**	**23.085**	**35.673**	**79.783**	**7.087**	**3.590**	**.316**	**.071**	**.033**	**3.160**	**7.169**	**94.176**
1997 Total	**21.445**	**23.223**	**36.160**	**80.874**	**6.597**	**3.640**	**.325**	**.070**	**.034**	**3.109**	**7.178**	**94.766**
1998 Total	**21.656**	**22.830**	**36.817**	**81.370**	**7.068**	**3.297**	**.328**	**.070**	**.031**	**2.932**	**6.658**	**95.183**
1999 Total	**21.623**	**22.909**	**37.838**	**82.428**	**7.610**	**3.268**	**.331**	**.069**	**.046**	**2.968**	**6.681**	**96.817**
2000 Total	**22.580**	**23.824**	**38.264**	**84.733**	**7.862**	**2.811**	**.317**	**.066**	**.057**	**3.013**	**6.264**	**98.975**
2001 Total	**21.914**	**22.773**	**38.186**	**82.903**	**8.033**	**2.242**	**.311**	**.065**	**.070**	**2.627**	**5.316**	**96.326**
2002 Total	**21.904**	**23.558**	**38.227**	**83.750**	**8.143**	**2.689**	**.328**	**.064**	**.105**	**2.707**	**5.894**	**97.858**
2003 Total	**22.321**	**22.897**	**38.809**	**84.078**	**7.959**	**2.825**	**.331**	**.064**	**.115**	**2.817**	**6.150**	**98.209**
2004 Total	**22.466**	**22.931**	**40.294**	**85.830**	**8.222**	**2.690**	**.341**	**.065**	**.142**	**3.023**	**6.260**	**100.351**
2005 Total	**22.797**	**22.583**	**40.393**	**85.817**	**8.160**	**2.703**	**.343**	**.066**	**.178**	**3.133**	**6.423**	**100.485**
2006 Total	**22.447**	**22.224**	**39.958**	**84.690**	**8.214**	**2.869**	**.343**	**.072**	**.264**	**3.361**	**6.908**	**99.875**
2007 January	1.991	2.533	3.363	7.890	.776	.257	.031	.006	.024	.305	.624	9.297
February	1.835	2.630	3.148	7.613	.684	.184	.027	.006	.025	.273	.514	8.821
March	1.795	2.179	3.358	7.331	.674	.239	.029	.007	.030	.297	.601	8.613
April	1.665	1.851	3.250	6.768	.601	.236	.028	.007	.031	.287	.589	7.967
May	1.775	1.593	3.371	6.742	.682	.257	.028	.007	.029	.295	.616	8.052
June	1.947	1.590	3.277	6.819	.723	.226	.029	.007	.026	.293	.581	8.134
July	2.083	1.697	3.389	7.168	.763	.222	.030	.007	.021	.305	.585	8.529
August	2.134	1.942	3.435	7.513	.763	.197	.030	.007	.027	.305	.566	8.854
September	1.908	1.624	3.226	6.762	.709	.146	.029	.007	.028	.296	.506	7.981
October	1.832	1.662	3.339	6.833	.647	.146	.030	.007	.033	.312	.529	8.015
November	1.801	1.873	3.240	6.919	.681	.155	.029	.006	.031	.306	.527	8.135
December	1.984	2.454	3.377	7.818	.755	.181	.030	.006	.034	.324	.576	9.157
Total	**22.749**	**23.628**	**39.773**	**86.176**	**8.458**	**2.446**	**.349**	**.081**	**.341**	**3.597**	**6.814**	**101.554**
2008 January	2.018	2.793	3.295	8.111	.742	.201	.029	.007	.041	.313	.591	9.455
February	1.859	2.550	3.044	7.455	.683	.181	.026	.007	.037	.300	.551	8.699
March	1.799	2.323	3.223	7.352	.679	.209	.030	.008	.046	.312	.605	8.643
April	1.673	1.859	3.109	6.648	.601	.211	.029	.008	.050	.315	.612	7.871
May	1.762	1.616	3.209	6.590	.680	.261	.031	.008	.051	.325	.675	7.953
June	1.924	1.647	3.084	6.663	.738	.282	.031	.008	.049	.321	.690	8.101
July	2.093	1.751	3.165	7.015	.779	.245	.031	.008	.038	.339	.661	8.470
August	2.045	1.727	3.117	6.889	.762	.201	.031	.008	.031	.343	.614	8.280
September	1.844	1.495	2.785	6.126	.703	.155	.030	.008	.027	.331	.550	7.390
October	1.747	1.673	3.184	6.605	.659	.149	.031	.008	.043	.340	.570	7.839
November	1.747	1.904	2.980	6.633	.665	.153	.030	.007	.045	.331	.566	7.868
December	1.910	2.450	3.091	7.448	.765	.203	.030	.007	.058	.338	.636	8.857
Total	**22.421**	**23.788**	**37.285**	**83.534**	**8.455**	**2.452**	**.358**	**.091**	**.514**	**3.908**	**7.324**	**99.425**
2009 January	1.933	R 2.778	3.095	R 7.804	.771	.232	.030	.007	.054	.324	.647	R 9.228
February	1.607	R 2.365	2.737	R 6.708	.674	.175	.028	.007	.049	.289	.548	R 7.938
March	1.559	R 2.215	3.020	R 6.793	.702	.211	.030	.008	.064	.327	.641	R 8.140
April	1.442	R 1.781	2.887	R 6.107	.620	.249	.028	.008	.067	.315	.667	R 7.400
May	1.510	R 1.537	2.930	R 5.975	.684	.288	.029	.008	.057	.328	.710	R 7.379
June	1.678	R 1.566	2.928	R 6.171	.728	.285	.028	.008	.049	.328	.699	R 7.608
July	R 1.787	R 1.686	3.024	R 6.495	.765	.230	.030	.008	.045	.349	.661	R 7.934
August	R 1.838	R 1.771	3.019	R 6.625	.758	.194	.030	.008	.049	.354	.634	R 8.032
September	1.581	1.607	2.865	6.051	.692	.173	.029	.008	.040	.334	.584	7.337
9-Month Total	**14.936**	**17.304**	**26.504**	**58.727**	**6.393**	**2.038**	**.262**	**.068**	**.474**	**2.948**	**5.790**	**70.996**
2008 9-Month Total	**17.017**	**17.760**	**28.030**	**62.848**	**6.367**	**1.946**	**.268**	**.069**	**.369**	**2.898**	**5.551**	**74.862**
2007 9-Month Total	**17.133**	**17.638**	**29.818**	**64.606**	**6.375**	**1.964**	**.260**	**.061**	**.242**	**2.655**	**5.182**	**76.247**

[a] Most data are estimates. See Tables 10.1-10.2c for notes on series components and estimation.

[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 fuel ethanol and biodiesel 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.

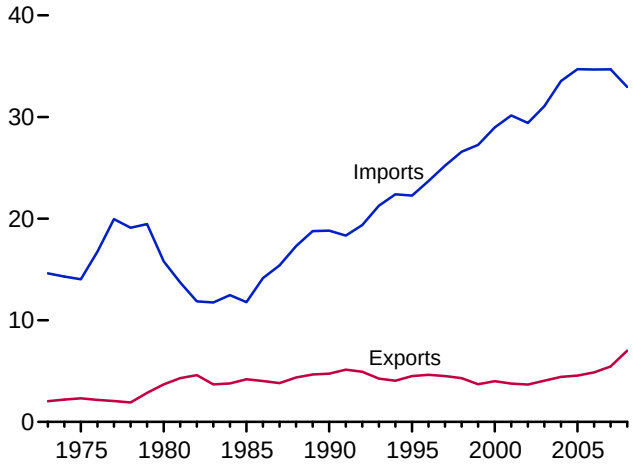
Notes: • See "Primary Energy Consumption" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

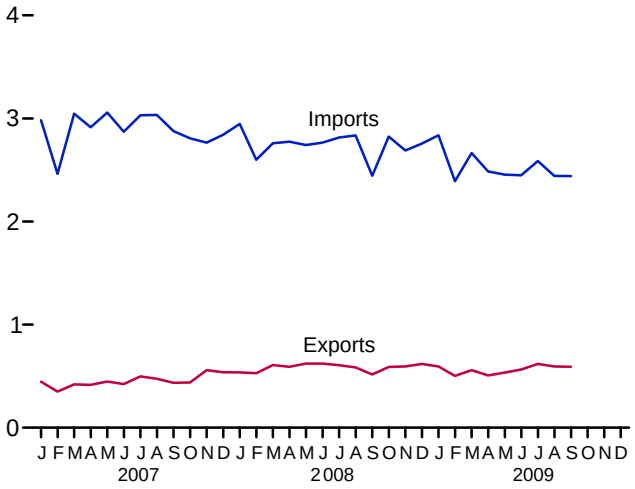
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas:** Tables 4.1 and A4. • **Petroleum:** Table 3.6. • **Nuclear Electric Power:** Tables 7.2a and A6 ("Nuclear Plants" heat rate). • **Renewable Energy:** Table 10.1. • **Net Imports of Coal Coke and Electricity:** Tables 1.4a and 1.4b.

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

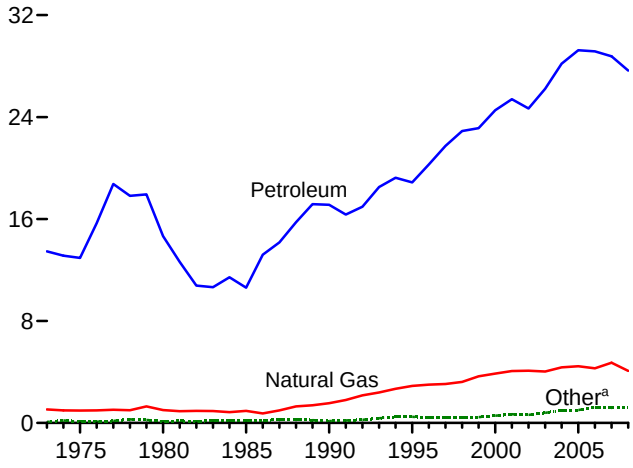
Total Imports and Exports, 1973-2008



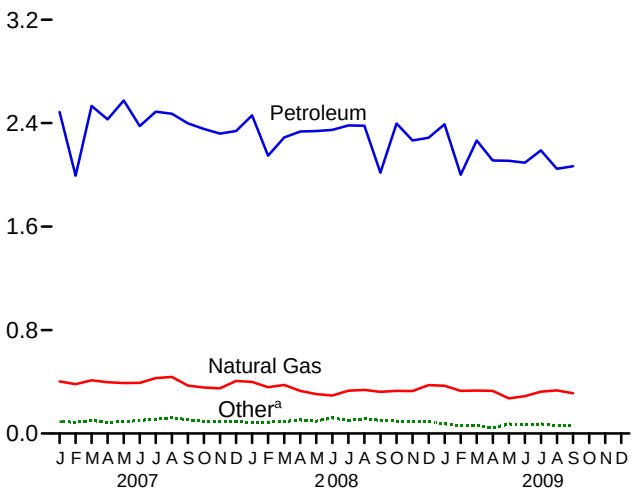
Total Imports and Exports, Monthly



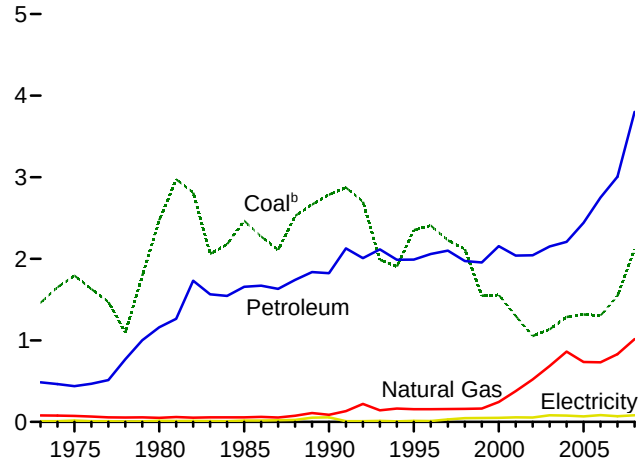
Imports by Source, 1973-2008



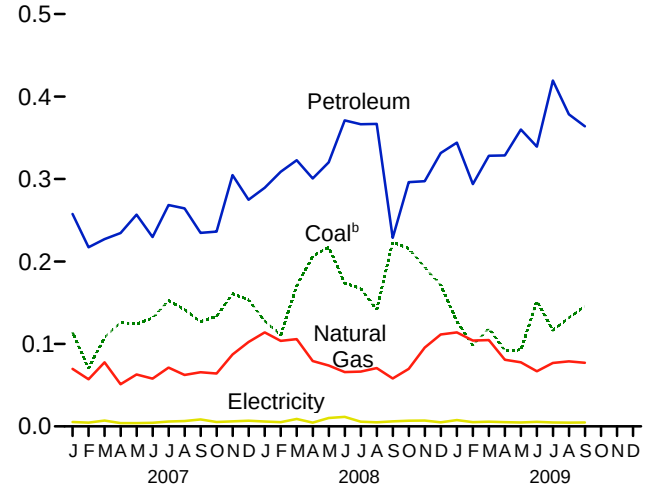
Imports by Source, Monthly



Exports by Source, 1973-2008



Exports by Major Source, Monthly



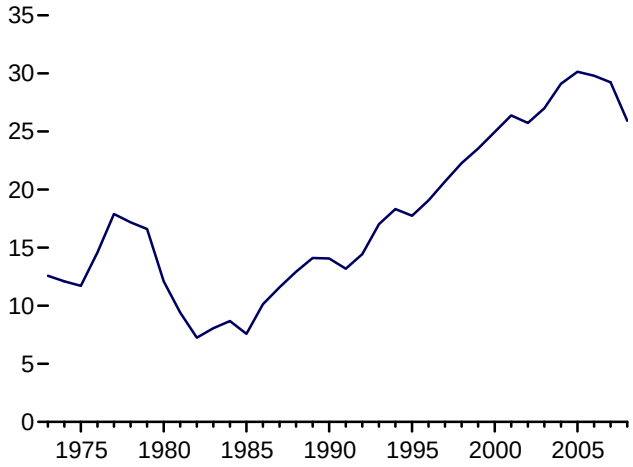
[a]Coal, coal coke, biofuels, and electricity.
[b]Includes coal coke.

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

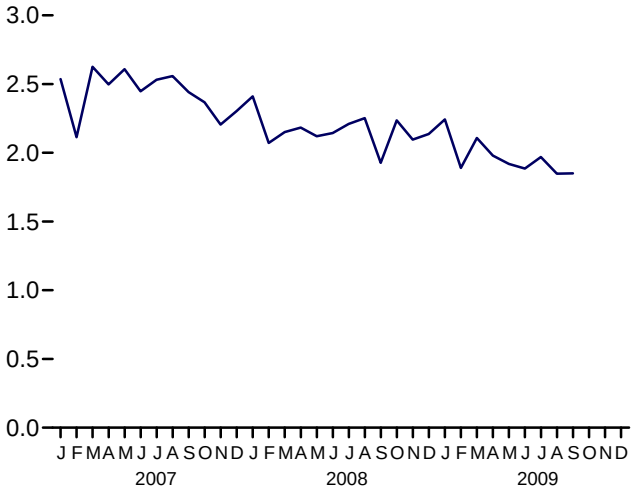
Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu, Except as noted)

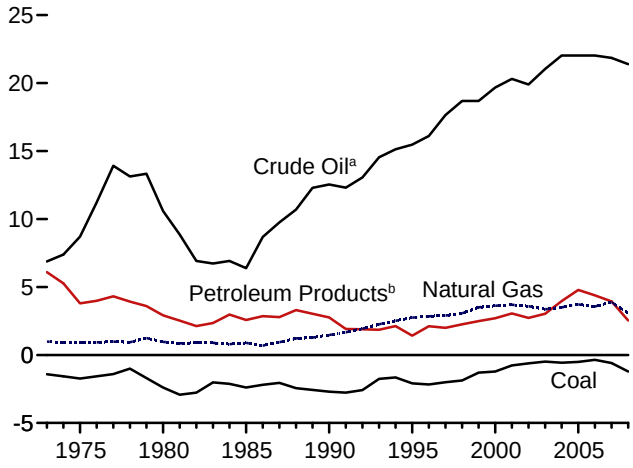
Total, 1973-2008



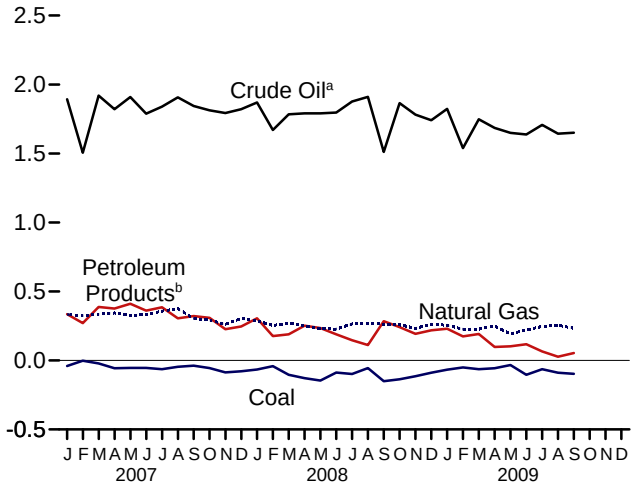
Total, Monthly



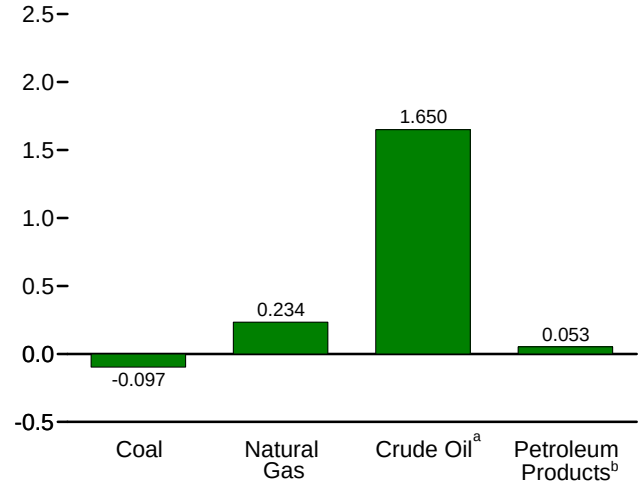
By Major Source, 1973-2008



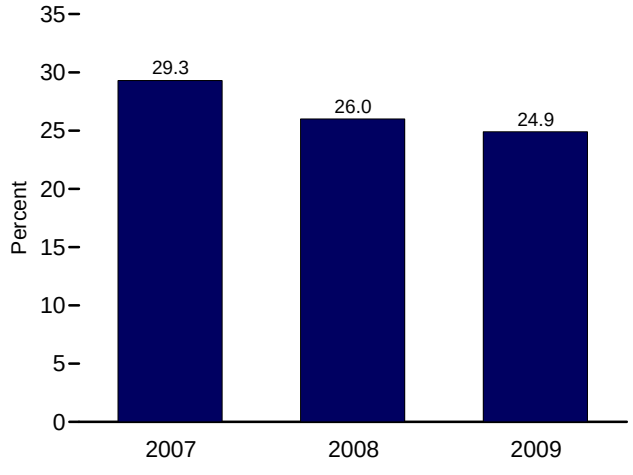
By Major Source, Monthly



By Major Source, September 2009



As Share of Consumption, January-September



[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.doe.gov/emeu/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**	**.152**	**34.710**
2006 Total	**.906**	**.101**	**4.291**	**22.085**	**7.077**	**29.162**	**.067**	**.146**	**34.673**
2007 January	.071	.006	.403	1.894	.591	2.486	.005	.012	2.982
February	.066	.003	.382	1.510	.483	1.993	.004	.014	2.463
March	.082	.003	.412	1.926	.607	2.533	.003	.013	3.046
April	.067	.004	.397	1.824	.604	2.429	.004	.014	2.914
May	.067	.006	.390	1.916	.658	2.575	.003	.016	3.056
June	.076	.007	.391	1.798	.579	2.377	.005	.015	2.871
July	.084	.003	.429	1.844	.644	2.488	.007	.019	3.030
August	.093	.005	.437	1.914	.558	2.472	.008	.018	3.033
September	.087	.005	.370	1.851	.548	2.398	.004	.013	2.877
October	.072	.005	.356	1.815	.539	2.355	.006	.012	2.806
November	.072	.007	.349	1.796	.523	2.319	.003	.015	2.765
December	.070	.008	.407	1.825	.514	2.339	.004	.014	2.841
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	2.348	.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	.479	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**	**6.196**	**27.644**	**.085**	**.195**	**32.952**
2009 January	.058	.001	.369	1.829	.561	2.390	.003	.015	2.837
February	.046	(s)	.330	1.544	.457	2.001	.001	.013	2.392
March	.054	(s)	.333	1.753	.513	2.266	.002	.010	2.665
April	.033	(s)	.330	1.690	.421	2.111	.001	.011	2.486
May	.057	.001	.271	1.658	.450	2.109	.002	.014	2.454
June	.046	.001	.289	1.648	.445	2.094	.003	.016	2.449
July	.050	.001	[R].324	1.713	.476	2.189	.004	.019	[R]2.587
August	.039	(s)	[R].333	1.649	.397	2.046	.004	.020	[R]2.442
September	.046	.001	[E].311	1.657	.409	2.066	.002	.015	2.441
9-Month Total	**.430**	**.005**	[E]**2.889**	**15.143**	**4.129**	**19.273**	**.022**	**.134**	**22.753**
2008 9-Month Total	**.628**	**.077**	**3.052**	**16.039**	**4.656**	**20.696**	**.071**	**.159**	**24.682**
2007 9-Month Total	**.694**	**.041**	**3.611**	**16.477**	**5.272**	**21.750**	**.043**	**.135**	**26.273**

[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 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.doe.gov/emeu/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**	**.068**	**4.561**	**30.149**
2006 Total	**1.264**	**.040**	**.730**	**.052**	**2.694**	**2.747**	**.004**	**.083**	**4.868**	**29.805**
2007 January	.111	.003	.070	.002	.255	.257	.001	.005	.447	2.536
February	.068	.002	.057	.004	.212	.216	.001	.005	.349	2.114
March	.104	.004	.078	.006	.220	.226	.002	.007	.420	2.626
April	.123	.003	.051	.003	.228	.231	.003	.004	.416	2.498
May	.121	.003	.063	.006	.247	.254	.003	.004	.448	2.608
June	.130	.001	.058	.009	.218	.227	.002	.004	.423	2.448
July	.148	.005	.071	.005	.259	.264	.005	.006	.498	2.532
August	.139	.002	.062	.008	.253	.261	.003	.007	.475	2.558
September	.125	.002	.066	.006	.226	.232	.003	.008	.436	2.442
October	.128	.006	.064	.002	.231	.233	.003	.005	.439	2.367
November	.159	.002	.087	.003	.296	.300	.005	.006	.559	2.206
December	.149	.004	.102	.004	.267	.271	.004	.007	.538	2.303
Total	**1.507**	**.036**	**.830**	**.058**	**2.914**	**2.972**	**.035**	**.069**	**5.448**	**29.238**
2008 January	.125	.003	.114	.002	.281	.283	.006	.006	.537	2.410
February	.107	.004	.104	.003	.298	.301	.007	.005	.528	2.071
March	.170	.001	.106	.005	.311	.317	.006	.009	.608	2.151
April	.203	.004	.079	.002	.290	.292	.009	.005	.591	2.183
May	.213	.004	.074	.003	.310	.313	.007	.010	.622	2.120
June	.170	.004	.066	.004	.358	.362	.009	.011	.622	2.144
July	.163	.005	.066	.005	.354	.359	.008	.006	.606	2.210
August	.134	.008	.071	.007	.351	.358	.009	.005	.584	2.251
September	.220	.004	.058	.007	.214	.221	.008	.006	.516	1.927
October	.209	.007	.070	.008	.281	.289	.007	.007	.589	2.236
November	.189	.004	.096	.005	.286	.291	.006	.007	.593	2.096
December	.169	.003	.111	.008	.319	.327	.004	.005	.619	2.137
Total	**2.071**	**.049**	**1.015**	**.061**	**3.653**	**3.713**	**.086**	**.082**	**7.016**	**25.936**
2009 January	.125	.003	.114	.007	.332	.338	.006	.008	.593	2.243
February	.097	.001	.104	.005	.283	.288	.006	.005	.501	1.890
March	.117	.002	.105	.005	.322	.327	.001	.006	.558	2.107
April	.089	.003	.081	.005	.323	.328	.001	.005	.506	1.980
May	.090	.002	.078	.009	.348	.358	.002	.005	.535	1.919
June	.149	.002	.067	.010	.328	.337	.002	.006	.564	1.885
July	.114	.003	.077	.006	.411	.416	.003	.005	.618	R 1.969
August	.128	.003	R .079	.006	.370	.376	.002	.005	R .594	R 1.849
September	.143	.003	E .077	.007	.355	.363	.001	.005	.591	1.850
9-Month Total	**1.053**	**.022**	E **.781**	**.060**	**3.071**	**3.131**	**.025**	**.048**	**5.060**	**17.693**
2008 9-Month Total	**1.503**	**.036**	**.738**	**.040**	**2.766**	**2.806**	**.069**	**.063**	**5.215**	**19.467**
2007 9-Month Total	**1.071**	**.024**	**.576**	**.049**	**2.119**	**2.168**	**.022**	**.050**	**3.912**	**22.361**

[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.

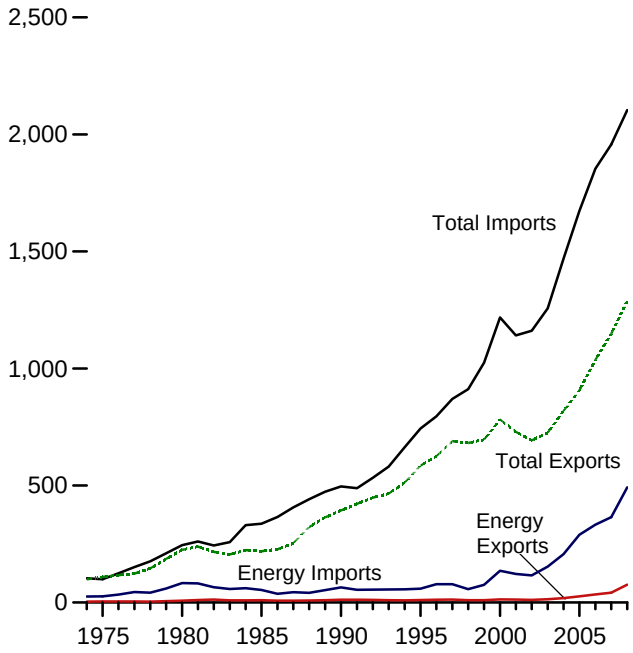
Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

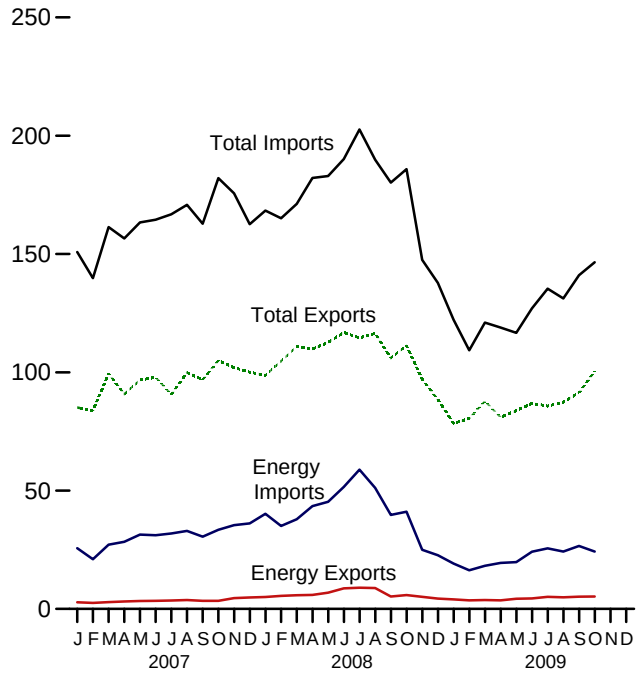
Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke: 1973-1975**—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook,* "Coke and Coal Chemicals" chapter. **1976-1980**—U.S. Energy Information Administration (EIA), *Energy Data Report,* "Coke and Coal Chemicals," annual reports. **1981 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 Nominal Dollars[a])

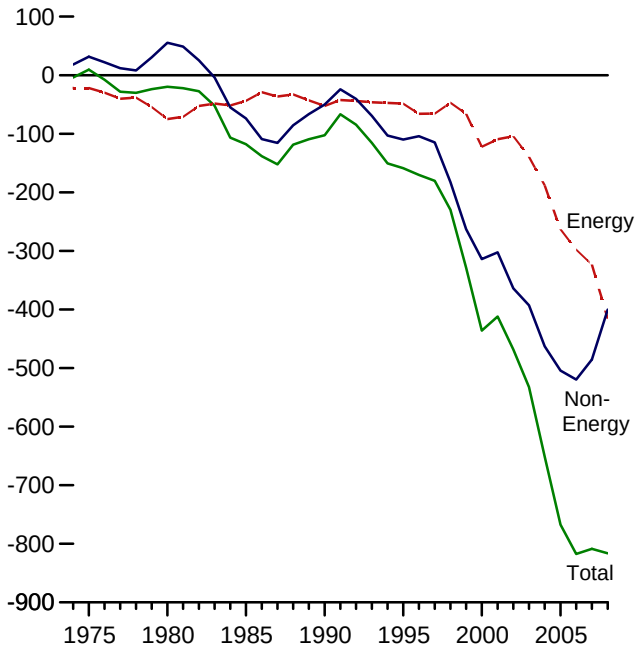
Imports and Exports, 1974-2008



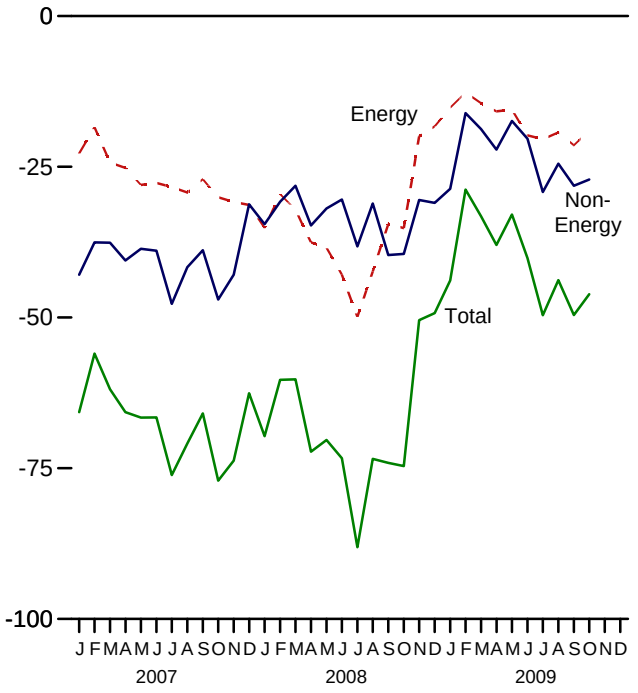
Imports and Exports, Monthly



Trade Balance, 1974-2008



Trade Balance, Monthly



[a]See "Nominal Dollars" in Glossary.
Web Page: http://www.eia.doe.gov/emeu/mer/overview.html.
Source: Table 1.5.

Table 1.5 Merchandise Trade Value

(Million Nominal 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 January	2,239	22,693	-20,454	2,833	25,630	-22,797	-42,908	85,128	150,833	-65,705
February	2,006	17,840	-15,834	2,549	20,993	-18,444	-37,552	83,797	139,793	-55,996
March	2,270	23,944	-21,674	2,871	27,170	-24,299	-37,605	99,459	161,363	-61,904
April	2,418	25,189	-22,771	3,167	28,335	-25,168	-40,538	90,877	156,583	-65,706
May	2,566	28,071	-25,505	3,375	31,380	-28,005	-38,592	96,726	163,323	-66,597
June	2,590	27,645	-25,055	3,447	31,110	-27,663	-38,913	97,886	164,462	-66,576
July	2,863	28,578	-25,715	3,517	31,902	-28,385	-47,730	90,650	166,765	-76,115
August	3,003	29,762	-26,759	3,720	32,967	-29,247	-41,652	99,867	170,766	-70,899
September	2,715	28,065	-25,350	3,447	30,514	-27,067	-38,839	96,866	162,772	-65,906
October	2,790	30,728	-27,938	3,384	33,428	-30,044	-47,025	104,976	182,044	-77,069
November	3,882	32,440	-28,558	4,569	35,384	-30,815	-42,912	101,936	175,663	-73,727
December	3,952	32,669	-28,717	4,844	36,173	-31,329	-31,234	100,030	162,594	-62,563
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	3,036	16,863	-13,827	3,994	19,192	-15,198	-28,649	78,379	122,226	-43,847
February	2,599	14,042	-11,443	3,636	16,311	-12,675	-16,102	80,503	109,279	-28,777
March	2,860	16,617	-13,757	3,730	18,191	-14,461	-18,747	87,796	121,004	-33,208
April	2,937	17,937	-15,000	3,623	19,431	-15,808	-22,156	80,969	118,933	-37,964
May	3,658	18,201	-14,543	4,262	19,795	-15,533	-17,394	83,786	116,713	-32,927
June	3,582	23,018	-19,436	4,411	24,201	-19,790	-20,348	86,860	126,998	-40,138
July	4,476	24,375	-19,899	5,138	25,563	-20,425	-29,185	85,737	135,347	-49,610
August	4,202	22,952	-18,750	4,914	24,226	-19,312	-24,483	87,429	131,224	-43,795
September	4,331	25,289	-20,958	5,162	26,598	-21,436	R -28,144	R 91,418	R 140,998	R -49,580
October	4,372	22,857	-18,485	5,229	24,236	-19,007	-27,123	100,361	146,491	-46,130
10-Month Total	**36,053**	**202,151**	**-166,098**	**44,097**	**217,745**	**-173,645**	**-232,331**	**863,238**	**1,269,212**	**-405,975**
2008 10-Month Total	**54,402**	**406,689**	**-352,287**	**66,596**	**444,169**	**-377,572**	**-338,920**	**1,101,870**	**1,818,363**	**-716,492**
2007 10-Month Total	**25,460**	**262,515**	**-237,055**	**32,310**	**293,429**	**-261,119**	**-411,354**	**946,232**	**1,618,705**	**-672,473**

[a] 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.

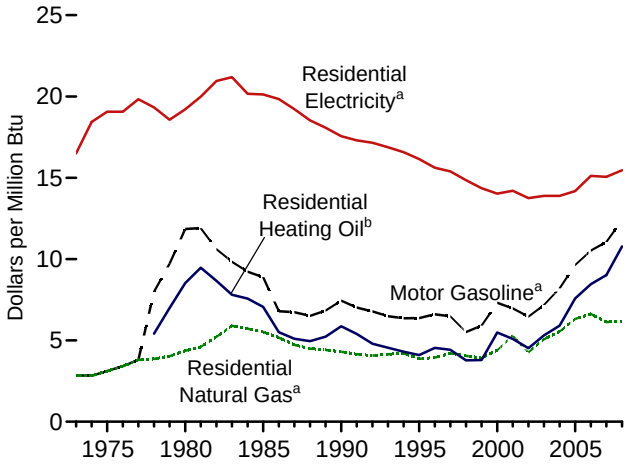
Notes: • Monthly data are not adjusted for seasonal variations. • See Note, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries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

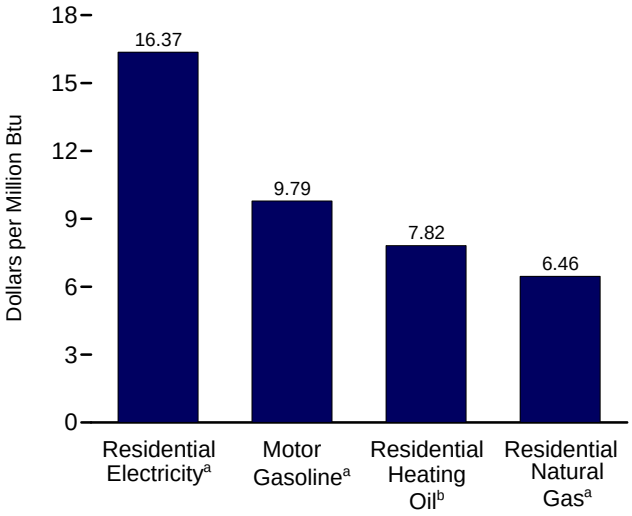
Sources: See end of section.

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

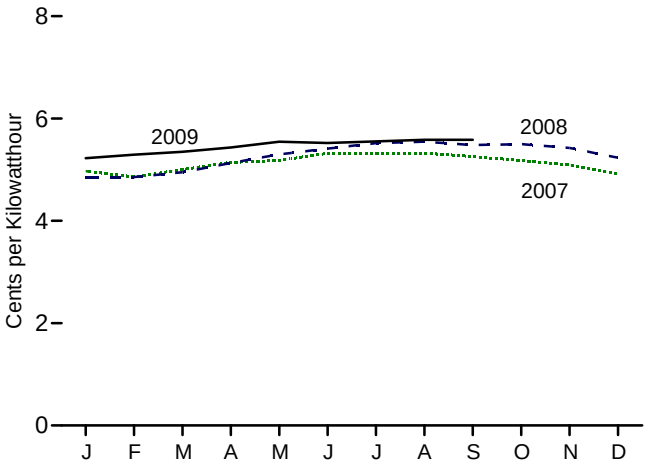
Costs, 1973-2008



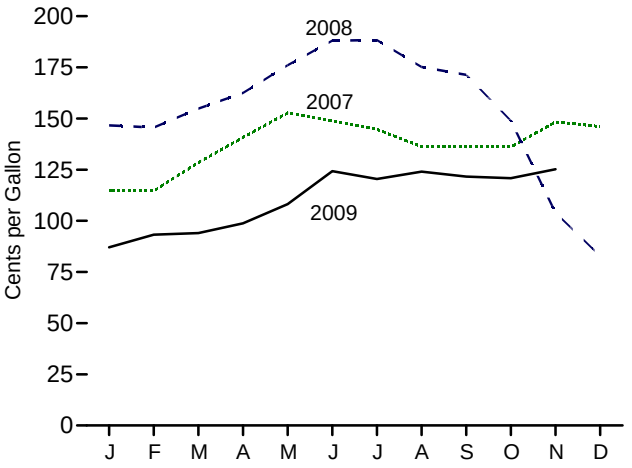
Costs, September 2009



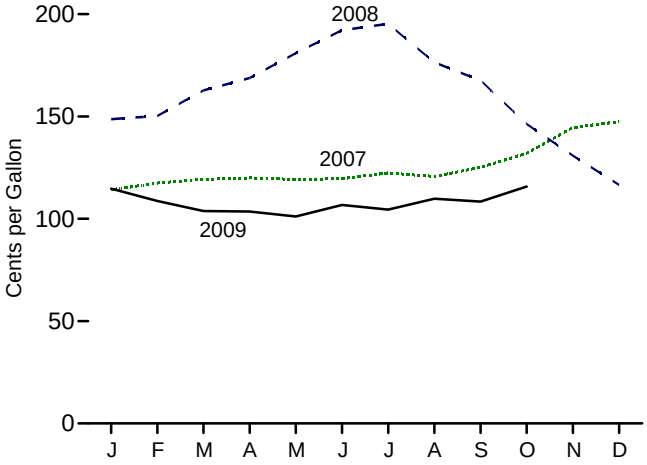
Residential Electricity[a], Monthly



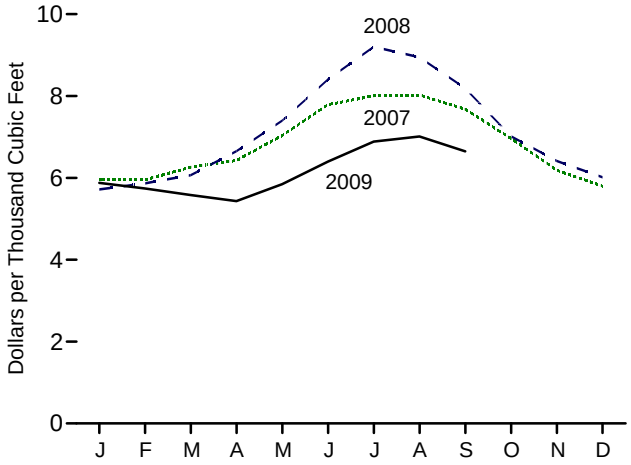
Motor Gasoline[a], Monthly



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.doe.gov/emeu/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	Cents per Gallon	Dollars per Million Btu	Cents per Gallon	Dollars per Million Btu	Cents per Thousand Cubic Feet	Dollars per Million Btu	Cents per Kilowatthour	Dollars per Million Btu
1973 Average	**44.4**	**NA**	**NA**	**NA**	**NA**	**290.5**	**2.85**	**5.6**	**16.50**
1975 Average	**53.8**	**NA**	**NA**	**NA**	**NA**	**317.8**	**3.12**	**6.5**	**19.07**
1980 Average	**82.4**	**148.2**	**11.85**	**118.2**	**8.52**	**446.6**	**4.36**	**6.6**	**19.21**
1985 Average	**107.6**	**111.2**	**8.89**	**97.9**	**7.06**	**568.8**	**5.52**	**6.87**	**20.13**
1990 Average	**130.7**	**93.1**	**7.44**	**81.3**	**5.86**	**443.8**	**4.31**	**5.99**	**17.56**
1995 Average	**152.4**	**79.1**	**6.37**	**56.9**	**4.10**	**397.6**	**3.87**	**5.51**	**16.15**
1996 Average	**156.9**	**82.1**	**6.61**	**63.0**	**4.54**	**404.3**	**3.94**	**5.33**	**15.62**
1997 Average	**160.5**	**80.4**	**6.48**	**61.3**	**4.42**	**432.4**	**4.21**	**5.25**	**15.39**
1998 Average	**163.0**	**68.4**	**5.51**	**52.3**	**3.77**	**418.4**	**4.05**	**5.07**	**14.85**
1999 Average	**166.6**	**73.3**	**5.91**	**52.6**	**3.79**	**401.6**	**3.91**	**4.90**	**14.36**
2000 Average	**172.2**	**90.8**	**7.32**	**76.1**	**5.49**	**450.6**	**4.39**	**4.79**	**14.02**
2001 Average	**177.1**	**86.4**	**6.97**	**70.6**	**5.09**	**543.8**	**5.28**	**4.84**	**14.20**
2002 Average	**179.9**	**80.1**	**6.46**	**62.8**	**4.52**	**438.6**	**4.26**	**4.69**	**13.75**
2003 Average	**184.0**	**89.0**	**7.18**	**73.6**	**5.31**	**523.4**	**5.07**	**4.74**	**13.89**
2004 Average	**188.9**	**101.8**	**8.20**	**81.9**	**5.91**	**569.1**	**5.54**	**4.74**	**13.89**
2005 Average	**195.3**	**119.7**	**9.64**	**105.1**	**7.58**	**650.3**	**6.32**	**4.84**	**14.18**
2006 Average	**201.6**	**130.7**	**10.52**	**117.3**	**8.46**	**681.1**	**6.63**	**5.16**	**15.12**
2007 January	202.416	114.7	9.23	114.2	8.23	597.3	5.80	4.97	14.57
February	203.499	114.6	9.23	117.5	8.47	595.1	5.78	4.86	14.24
March	205.352	128.5	10.34	119.3	8.60	626.2	6.09	5.00	14.66
April	206.686	140.7	11.33	120.0	8.65	642.5	6.24	5.14	15.07
May	207.949	152.7	12.29	119.3	8.60	703.5	6.84	5.18	15.18
June	208.352	148.8	11.97	119.6	8.62	779.0	7.57	5.32	15.60
July	208.299	144.6	11.64	122.4	8.82	800.3	7.78	5.31	15.58
August	207.917	136.3	10.97	120.7	8.70	802.2	7.80	5.32	15.60
September	208.490	136.2	10.96	125.1	9.02	767.4	7.46	5.26	15.41
October	208.936	136.1	10.95	132.1	9.52	696.4	6.77	5.18	15.18
November	210.177	148.4	11.94	144.6	10.43	618.5	6.01	5.09	14.92
December	210.036	146.1	11.76	147.5	10.64	579.4	5.63	4.92	14.41
Average	**207.342**	**137.4**	**11.06**	**125.0**	**9.01**	**629.9**	**6.12**	**5.14**	**15.05**
2008 January	211.080	146.7	11.81	148.7	10.72	571.8	5.56	4.85	14.22
February	211.693	145.6	11.72	150.3	10.83	586.7	5.70	4.86	14.23
March	213.528	154.9	12.47	162.7	11.73	606.5	5.89	4.95	14.51
April	214.823	162.5	13.08	168.8	12.17	665.2	6.46	5.13	15.03
May	216.632	176.0	14.17	181.0	13.05	740.0	7.19	5.30	15.53
June	218.815	188.1	15.14	192.1	13.85	840.4	8.17	5.41	15.86
July	219.964	188.3	15.16	195.3	14.08	920.2	8.94	5.52	16.18
August	219.086	175.2	14.10	176.5	12.72	894.6	8.69	5.55	16.25
September	218.783	171.4	13.79	167.6	12.09	818.6	7.96	5.48	16.06
October	216.573	148.9	11.99	146.3	10.55	701.4	6.82	5.50	16.12
November	212.425	103.9	8.37	130.8	9.43	641.2	6.23	5.42	15.89
December	210.228	82.9	6.67	116.5	8.40	601.3	5.84	5.23	15.34
Average	**215.303**	**154.1**	**12.40**	**149.5**	**10.78**	**635.4**	**6.17**	**5.28**	**15.46**
2009 January	211.143	87.1	7.01	114.7	8.27	587.8	5.71	5.22	15.31
February	212.193	93.3	7.51	108.7	7.84	574.0	5.58	5.29	15.51
March	212.709	94.0	7.57	103.8	7.48	R 558.0	R 5.42	5.35	15.68
April	213.240	98.8	7.95	103.6	7.47	R 543.1	5.28	5.44	15.93
May	213.856	108.2	8.71	101.1	7.29	584.5	5.68	5.55	16.25
June	215.693	124.3	10.00	106.7	7.70	639.8	6.22	5.52	16.18
July	215.351	120.5	9.70	104.5	7.53	R 688.6	R 6.69	5.55	16.28
August	215.834	124.0	9.98	R 109.8	R 7.92	R 701.0	R 6.81	5.58	16.36
September	215.969	121.6	9.79	R 108.4	R 7.82	R 664.9	R 6.46	R 5.58	R 16.37
October	216.177	120.9	9.73	RE 115.7	RE 8.35	NA	NA	NA	NA
November	216.330	125.2	10.08	NA	NA	NA	NA	NA	NA

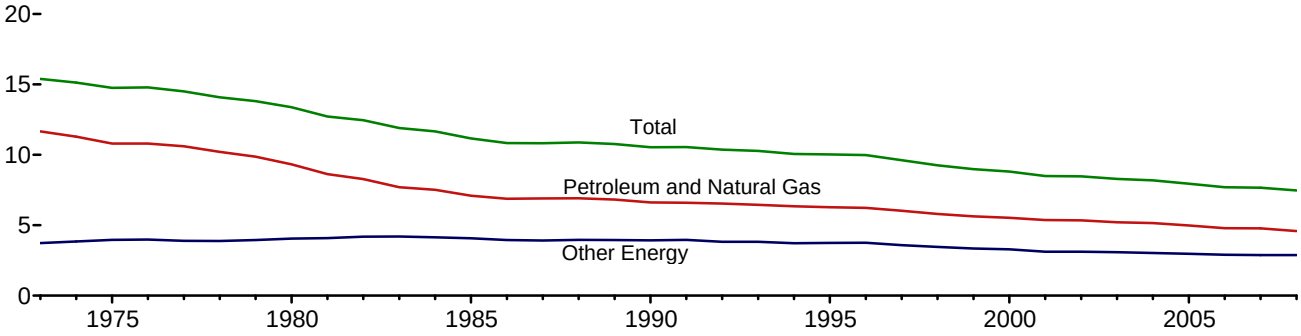
[a] Data are U.S. city averages for all items, and are not seasonally adjusted.
[b] Includes taxes.
[c] Excludes taxes.
R=Revised. E=Estimate. NA=Not available.

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.doe.gov/emeu/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.

Figure 1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product, 1973-2008
(Thousand Btu per Chained (2005) Dollar)



Note: See "Real Dollars" in Glossary.
Web Page: http://www.eia.doe.gov/emeu/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	57.352	18.356	75.708	4,917.0	11.66	3.73	15.40
1974 Year	55.187	18.804	73.991	4,889.9	11.29	3.85	15.13
1975 Year	52.678	19.321	71.999	4,879.5	10.80	3.96	14.76
1976 Year	55.520	20.492	76.012	5,141.3	10.80	3.99	14.78
1977 Year	57.053	20.947	78.000	5,377.7	10.61	3.90	14.50
1978 Year	57.966	22.021	79.986	5,677.6	10.21	3.88	14.09
1979 Year	57.789	23.114	80.903	5,855.0	9.87	3.95	13.82
1980 Year	54.438	23.684	78.122	5,839.0	9.32	4.06	13.38
1981 Year	51.678	24.490	76.168	5,987.2	8.63	4.09	12.72
1982 Year	48.588	24.566	73.153	5,870.9	8.28	4.18	12.46
1983 Year	47.275	25.764	73.039	6,136.2	7.70	4.20	11.90
1984 Year	49.445	27.271	76.715	6,577.1	7.52	4.15	11.66
1985 Year	48.626	27.867	76.493	6,849.3	7.10	4.07	11.17
1986 Year	48.787	27.971	76.759	7,086.5	6.88	3.95	10.83
1987 Year	50.505	28.670	79.175	7,313.3	6.91	3.92	10.83
1988 Year	52.670	30.151	82.822	7,613.9	6.92	3.96	10.88
1989 Year	53.813	31.133	84.946	7,885.9	6.82	3.95	10.77
1990 Year	53.156	31.498	84.654	8,033.9	6.62	3.92	10.54
1991 Year	52.878	31.731	84.609	8,015.1	6.60	3.96	10.56
1992 Year	54.240	31.718	85.958	8,287.1	6.55	3.83	10.37
1993 Year	54.973	32.632	87.605	8,523.4	6.45	3.83	10.28
1994 Year	56.290	32.972	89.261	8,870.7	6.35	3.72	10.06
1995 Year	57.108	34.066	91.174	9,093.7	6.28	3.75	10.03
1996 Year	58.758	35.418	94.176	9,433.9	6.23	3.75	9.98
1997 Year	59.383	35.383	94.766	9,854.3	6.03	3.59	9.62
1998 Year	59.647	35.536	95.183	10,283.5	5.80	3.46	9.26
1999 Year	60.747	36.070	96.817	10,779.8	5.64	3.35	8.98
2000 Year	62.089	36.887	98.975	11,226.0	5.53	3.29	8.82
2001 Year	60.959	35.367	96.326	11,347.2	5.37	3.12	8.49
2002 Year	61.785	36.073	97.858	11,553.0	5.35	3.12	8.47
2003 Year	61.706	36.502	98.209	11,840.7	5.21	3.08	8.29
2004 Year	63.226	37.125	100.351	12,263.8	5.16	3.03	8.18
2005 Year	62.977	37.508	100.485	12,638.4	4.98	2.97	7.95
2006 Year	62.182	37.693	99.875	12,976.2	4.79	2.90	7.70
2007 Year	63.401	38.153	101.554	13,254.1	4.78	2.88	7.66
2008 Year	61.073	38.353	99.425	13,312.2	4.59	2.88	7.47

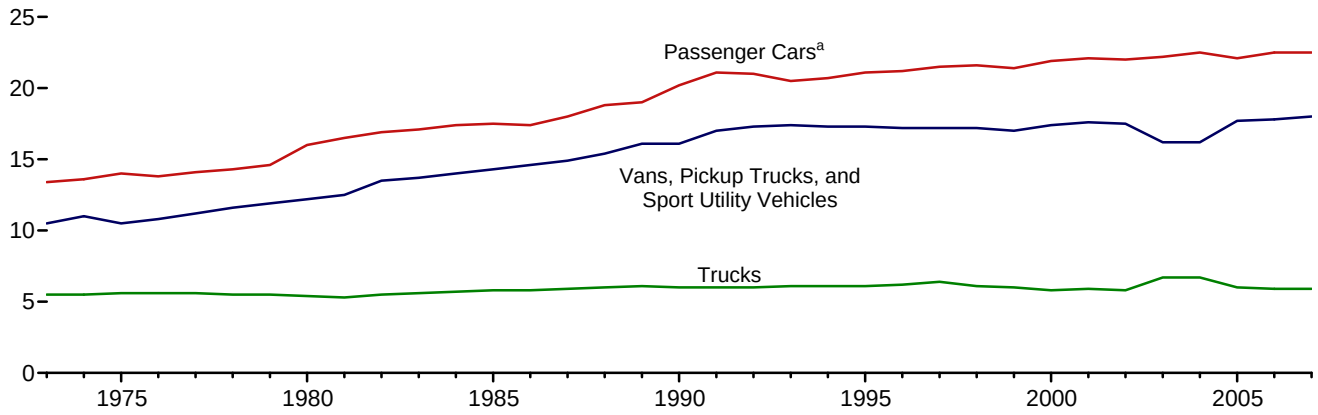
[a] Coal, coal coke net imports, nuclear electric power, renewable energy, and electricity net imports.

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.doe.gov/emeu/mer/overview.html.

Sources: • **Energy Consumption:** Table 1.3. • **Gross Domestic Product: 1973-2006**—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business,* August 2009, Table 2A. **2007 forward**—U.S. Department of Commerce, Bureau of Economic Analysis, *BEA News Release,* December 22, 2009, Table 3, which is available at website http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm.

Figure 1.8 Motor Vehicle Fuel Rates, 1973-2007
(Miles per Gallon)



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

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

	Passenger Cars[a]			Vans, Pickup Trucks, and Sport Utility Vehicles[b]			Trucks[c]			All Motor Vehicles[d]		
	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (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[P]	12,293	547	22.5	10,952	609	18.0	25,141	4,270	5.9	11,910	692	17.2

[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.doe.gov/emeu/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	November					Cumulative July through November				
				Percent Change					Percent Change	
	Normal[a]	2008	2009	Normal to 2009	2008 to 2009	Normal[a]	2008	2009	Normal to 2009	2008 to 2009
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	727	759	619	-15	-18	1,384	1,432	1,381	(s)	-4
Middle Atlantic										
New Jersey, New York, Pennsylvania	667	698	546	-18	-22	1,193	1,198	1,078	-10	-10
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	757	787	609	-20	-23	1,337	1,355	1,314	-2	-3
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	840	806	588	-30	-27	1,447	1,393	1,376	-5	-1
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	339	417	294	-13	-29	528	625	479	-9	-23
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	449	535	408	-9	-24	695	778	676	-3	-13
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	293	273	220	-25	-19	385	389	364	-5	-6
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	676	540	552	-18	2	1,219	981	1,106	-9	13
Pacific[b]										
California, Oregon, Washington	396	275	354	-11	29	690	469	606	-12	29
U.S. Average[b]	**539**	**538**	**442**	**-18**	**-18**	**922**	**899**	**865**	**-6**	**-4**

[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.doe.gov/emeu/mer/overview.html for current data. • See http://www.eia.doe.gov/emeu/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	November					Cumulative January through November				
				Percent Change					Percent Change	
	Normal[a]	2008	2009	Normal to 2009	2008 to 2009	Normal[a]	2008	2009	Normal to 2009	2008 to 2009
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	0	0	0	NM	NM	417	490	367	-12	-25
Middle Atlantic										
New Jersey, New York, Pennsylvania	0	0	0	NM	NM	656	731	581	-11	-21
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	0	0	0	NM	NM	709	645	513	-28	-20
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	0	0	0	NM	NM	927	795	705	-24	-11
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	55	33	51	NM	NM	1,931	2,023	2,042	6	1
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	6	0	0	NM	NM	1,544	1,617	1,549	(s)	-4
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	31	35	32	NM	NM	2,439	2,487	2,611	7	5
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	4	9	15	NM	NM	1,243	1,336	1,352	9	1
Pacific[b]										
California, Oregon, Washington	4	5	1	NM	NM	703	953	909	29	-5
U.S. Average[b]	**15**	**11**	**14**	**NM**	**NM**	**1,209**	**1,274**	**1,227**	**1**	**-4**

[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. 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.doe.gov/emeu/mer/overview.html for current data. • See http://www.eia.doe.gov/emeu/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 and 2009: "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 and 2009: "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 and 2009: "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.

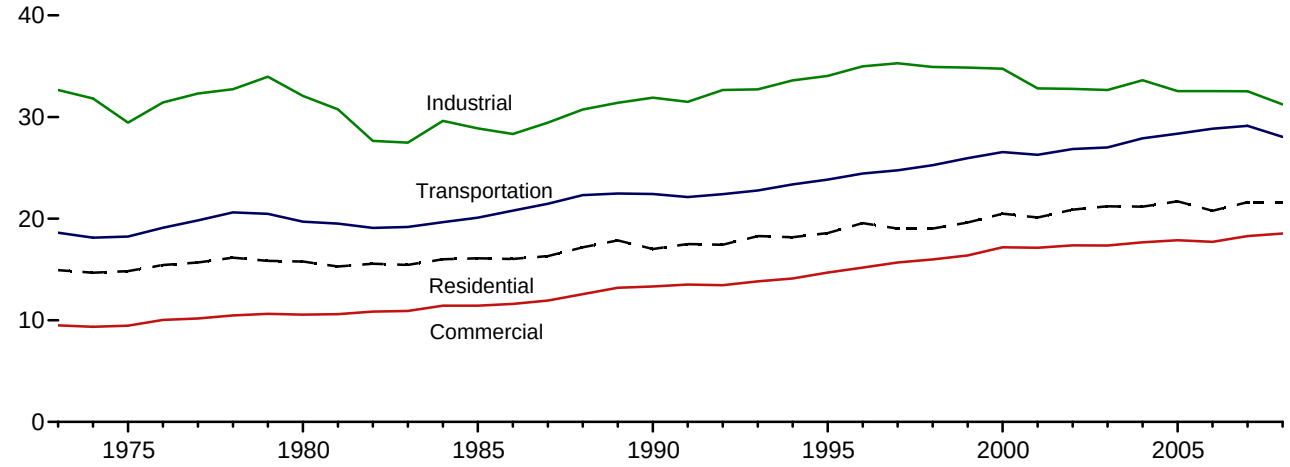
Total Merchandise
1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.
1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.
1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990.
1990: "U.S. Merchandise Trade, 1990 Final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

2 Energy Consumption by Sector

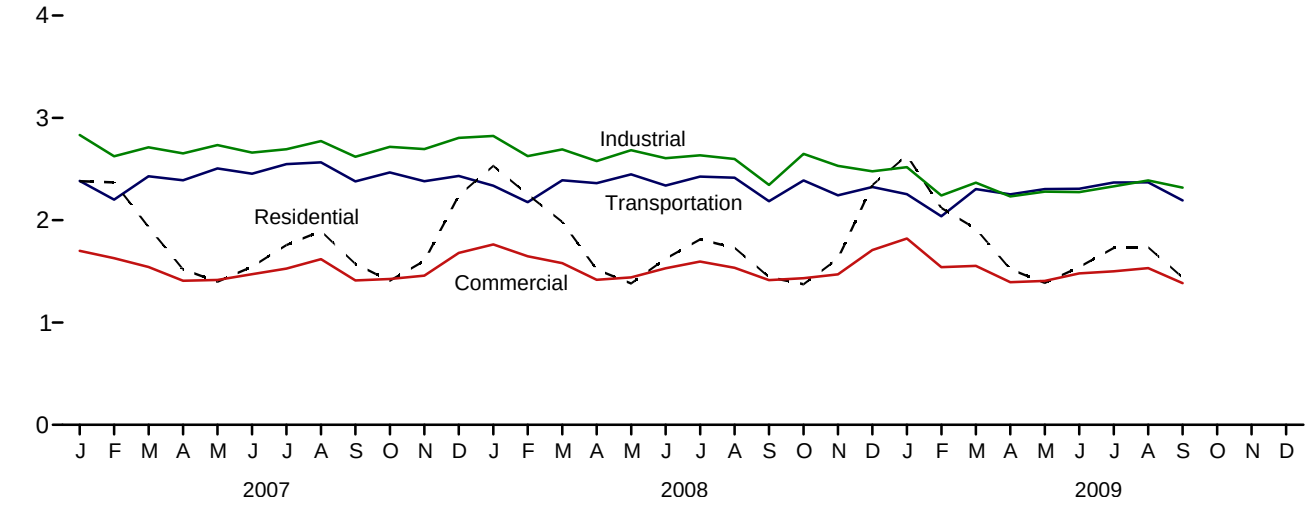
Office buildings, industries, residences, and transport systems, Baltimore, Maryland; east view from the inner harbor.
Source: U.S. Department of Energy.

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

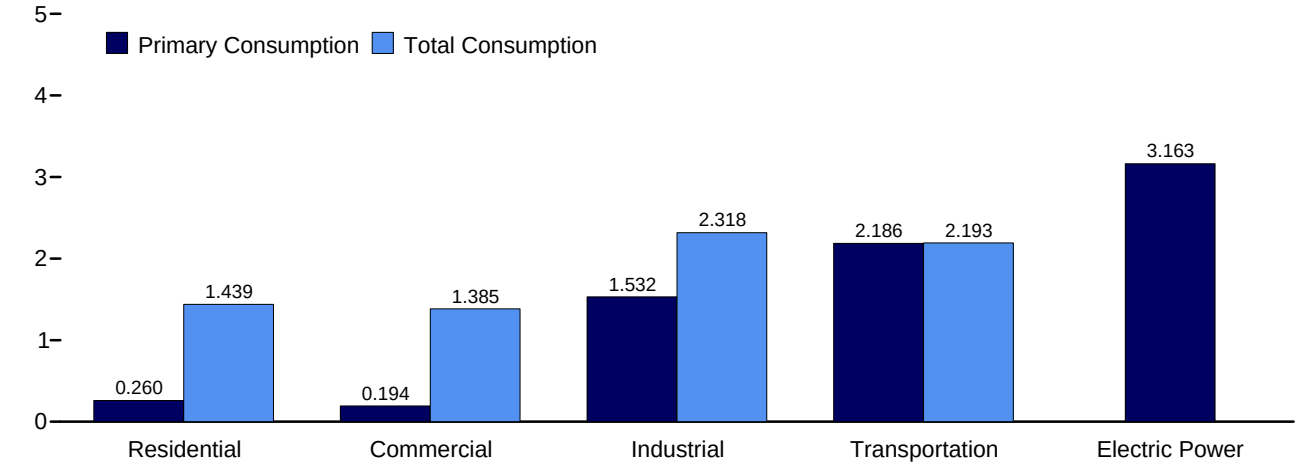
Total Consumption by End-Use Sector, 1973-2008



Total Consumption by End-Use Sector, Monthly



By Sector, September 2009



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

Table 2.1 Energy Consumption by Sector

(Trillion Btu)

	End-Use Sectors								Electric Power Sector[c,d]		
	Residential		Commercial[a]		Industrial[b]		Transportation			Balancing Item[g]	Total[h]
	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]	Total[f]	Primary[e]		
1973 Total	**8,250**	**14,930**	**4,381**	**9,507**	**24,741**	**32,653**	**18,576**	**18,612**	**19,753**	**7**	**75,708**
1975 Total	**8,006**	**14,842**	**4,023**	**9,466**	**21,454**	**29,447**	**18,209**	**18,244**	**20,307**	**1**	**71,999**
1980 Total	**7,453**	**15,787**	**4,074**	**10,563**	**22,610**	**32,077**	**19,658**	**19,696**	**24,327**	**-1**	**78,122**
1985 Total	**7,161**	**16,088**	**3,695**	**11,444**	**19,468**	**28,877**	**20,041**	**20,087**	**26,132**	**-4**	**76,493**
1990 Total	**6,570**	**17,015**	**3,858**	**13,333**	**21,208**	**31,895**	**22,366**	**22,420**	**30,660**	**-9**	**84,654**
1995 Total	**6,946**	**18,578**	**4,063**	**14,698**	**22,748**	**34,047**	**23,793**	**23,849**	**33,621**	**3**	**91,174**
1996 Total	**7,471**	**19,562**	**4,235**	**15,181**	**23,444**	**34,989**	**24,384**	**24,439**	**34,638**	**4**	**94,176**
1997 Total	**7,040**	**19,026**	**4,257**	**15,694**	**23,722**	**35,288**	**24,697**	**24,752**	**35,045**	**6**	**94,766**
1998 Total	**6,424**	**19,021**	**3,964**	**15,979**	**23,211**	**34,928**	**25,203**	**25,258**	**36,385**	**-3**	**95,183**
1999 Total	**6,784**	**19,621**	**4,007**	**16,384**	**22,991**	**34,855**	**25,894**	**25,951**	**37,136**	**6**	**96,817**
2000 Total	**7,169**	**20,488**	**4,227**	**17,176**	**22,871**	**34,758**	**26,492**	**26,552**	**38,214**	**2**	**98,975**
2001 Total	**6,879**	**20,106**	**4,036**	**17,141**	**21,836**	**32,806**	**26,216**	**26,279**	**37,366**	**-6**	**96,326**
2002 Total	**6,938**	**20,874**	**4,099**	**17,367**	**21,857**	**32,764**	**26,788**	**26,849**	**38,171**	**5**	**97,858**
2003 Total	**7,252**	**21,208**	**4,239**	**17,351**	**21,576**	**32,650**	**26,928**	**27,002**	**38,218**	**-3**	**98,209**
2004 Total	**7,019**	**21,178**	**4,180**	**17,664**	**22,455**	**33,609**	**27,820**	**27,899**	**38,876**	**(s)**	**100,351**
2005 Total	**6,921**	**21,697**	**4,014**	**17,875**	**21,466**	**32,545**	**28,280**	**28,361**	**39,799**	**6**	**100,485**
2006 Total	**6,191**	**20,770**	**3,703**	**17,724**	**21,632**	**32,541**	**28,761**	**28,841**	**39,589**	**(s)**	**99,875**
2007 January	1,000	2,381	524	1,700	1,924	2,833	2,375	2,383	3,474	(s)	9,297
February	1,099	2,370	574	1,628	1,804	2,625	2,193	2,201	3,153	-2	8,821
March	804	1,933	446	1,542	1,829	2,711	2,422	2,430	3,116	-4	8,613
April	549	1,518	323	1,408	1,759	2,653	2,383	2,390	2,956	-4	7,967
May	339	1,399	222	1,416	1,775	2,734	2,498	2,505	3,220	-2	8,052
June	262	1,546	189	1,473	1,703	2,661	2,446	2,454	3,533	(s)	8,134
July	244	1,757	178	1,526	1,725	2,694	2,541	2,549	3,839	3	8,529
August	245	1,893	186	1,618	1,762	2,773	2,558	2,566	4,099	4	8,854
September	249	1,572	186	1,411	1,727	2,620	2,372	2,379	3,448	(s)	7,981
October	320	1,408	224	1,425	1,784	2,717	2,460	2,466	3,229	-2	8,015
November	575	1,602	339	1,459	1,784	2,696	2,373	2,380	3,065	-2	8,135
December	941	2,242	506	1,680	1,877	2,805	2,424	2,432	3,409	-1	9,157
Total	**6,626**	**21,619**	**3,896**	**18,287**	**21,454**	**32,523**	**29,046**	**29,134**	**40,542**	**-10**	**101,554**
2008 January	1,103	2,531	577	1,764	1,948	2,823	2,330	2,338	3,498	(s)	9,455
February	1,025	2,251	554	1,647	1,805	2,627	2,170	2,177	3,147	-2	8,699
March	838	1,984	461	1,580	1,821	2,693	2,383	2,390	3,144	-3	8,643
April	537	1,518	320	1,417	1,706	2,578	2,355	2,361	2,956	-4	7,871
May	362	1,382	234	1,441	1,732	2,683	2,442	2,449	3,184	-3	7,953
June	275	1,624	190	1,531	1,661	2,606	2,332	2,339	3,642	1	8,101
July	250	1,812	182	1,596	1,697	2,634	2,419	2,426	3,919	2	8,470
August	239	1,731	178	1,535	1,678	2,598	2,408	2,415	3,776	1	8,280
September	236	1,444	179	1,415	1,490	2,345	2,180	2,186	3,306	(s)	7,390
October	352	1,373	241	1,433	1,775	2,648	2,382	2,389	3,093	-4	7,839
November	578	1,623	339	1,470	1,684	2,532	2,236	2,243	3,031	-1	7,868
December	965	2,343	511	1,708	1,666	2,477	2,317	2,325	3,394	3	8,857
Total	**6,758**	R **21,616**	**3,966**	**18,535**	**20,666**	**31,246**	**27,955**	**28,037**	**40,090**	**-9**	**99,425**
2009 January	1,157	2,632	R 616	R 1,821	R 1,735	R 2,519	2,245	2,253	3,471	3	R 9,228
February	936	2,119	R 509	R 1,541	R 1,539	2,241	2,031	2,038	2,923	-1	R 7,938
March	781	1,917	R 445	R 1,554	R 1,608	R 2,367	2,297	2,304	3,011	-2	R 8,140
April	546	1,521	313	R 1,394	R 1,477	R 2,232	2,246	2,252	2,817	1	R 7,400
May	336	1,387	218	R 1,406	R 1,470	R 2,279	2,298	2,305	3,054	2	R 7,379
June	266	1,541	R 184	R 1,480	R 1,465	R 2,275	2,301	2,308	3,388	5	R 7,608
July	253	1,729	180	1,500	R 1,524	R 2,330	2,361	2,368	3,609	R 7	R 7,934
August	249	1,735	R 187	R 1,532	R 1,540	R 2,388	2,364	2,370	3,686	R 6	R 8,032
September	260	1,439	194	1,385	1,532	2,318	2,186	2,193	3,163	2	7,337
9-Month Total	**4,783**	**16,021**	**2,847**	**13,612**	**13,889**	**20,949**	**20,329**	**20,390**	**29,123**	**23**	**70,996**
2008 9-Month Total	**4,864**	**16,277**	**2,876**	**13,925**	**15,540**	**23,587**	**21,019**	**21,080**	**30,572**	**-8**	**74,862**
2007 9-Month Total	**4,791**	**16,370**	**2,827**	**13,722**	**16,008**	**24,304**	**21,789**	**21,856**	**30,838**	**-5**	**76,247**

[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.

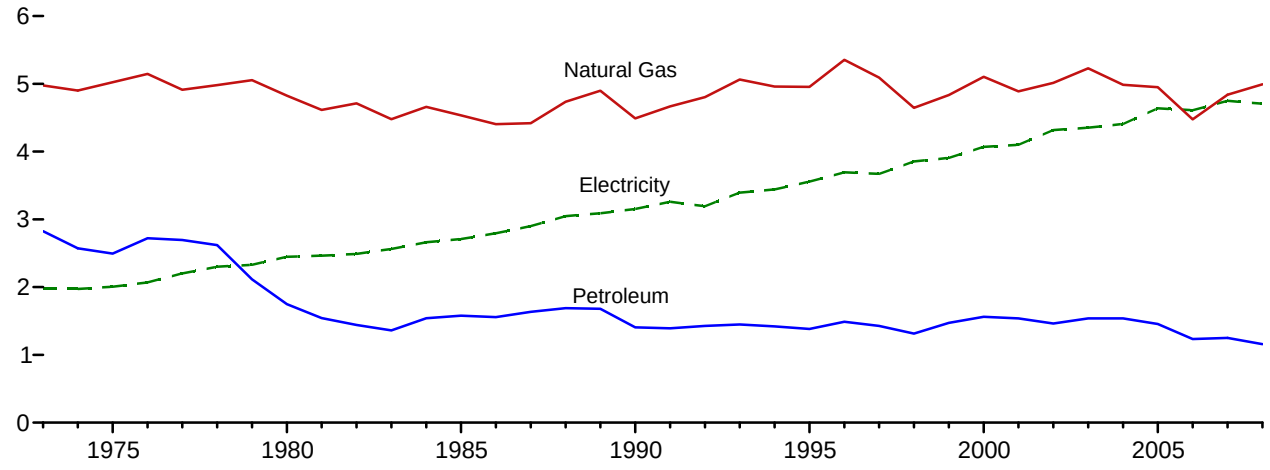
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

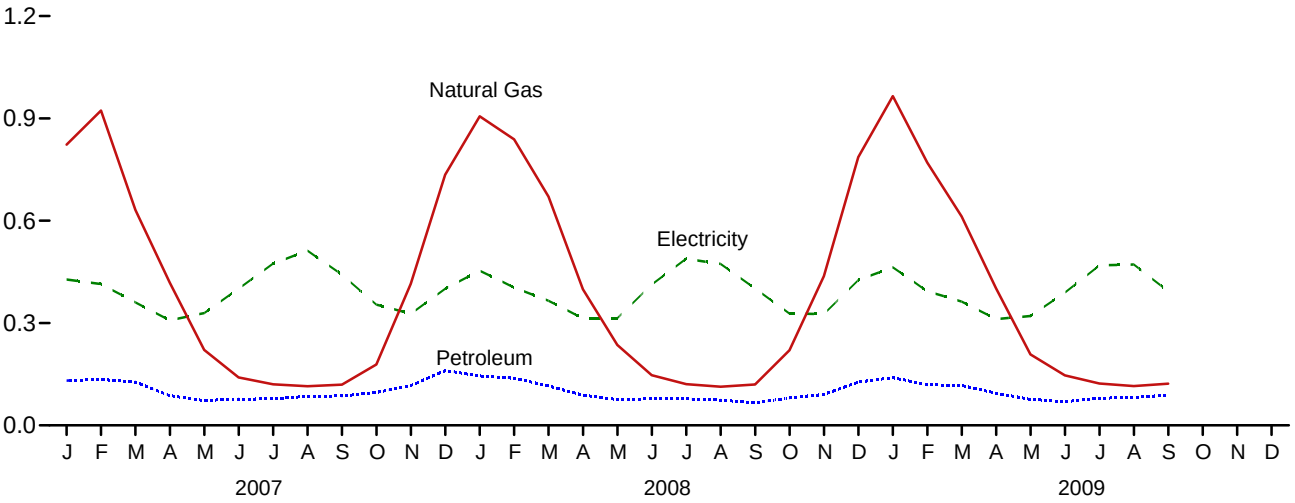
Sources: Tables 1.3 and 2.2-2.6.

Figure 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

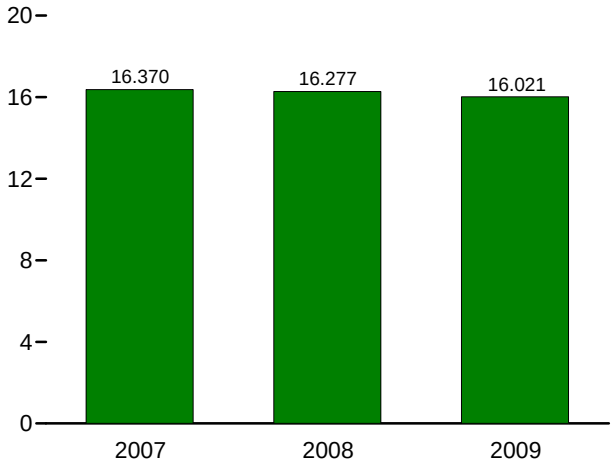
By Major Sources, 1973-2008



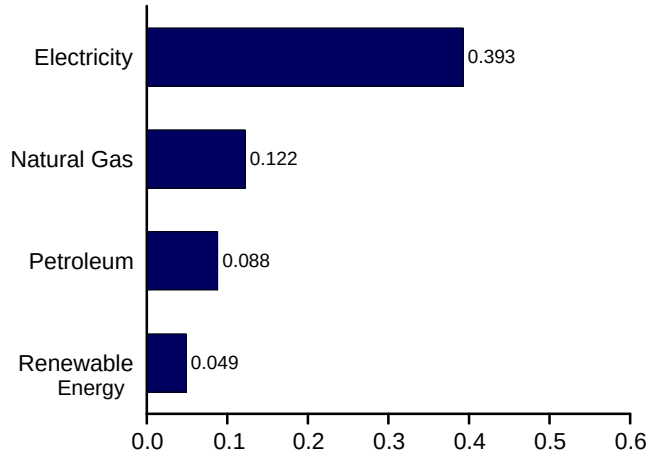
By Major Sources, Monthly



Total, January-September



By Major Sources, September 2009



Web Page: http://www.eia.doe.gov/emeu/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**	**2,825**	**7,896**	**NA**	**NA**	**354**	**354**	**8,250**	**1,976**	**4,703**	**14,930**
1975 Total	**63**	**5,023**	**2,495**	**7,580**	**NA**	**NA**	**425**	**425**	**8,006**	**2,007**	**4,829**	**14,842**
1980 Total	**31**	**4,825**	**1,748**	**6,603**	**NA**	**NA**	**850**	**850**	**7,453**	**2,448**	**5,885**	**15,787**
1985 Total	**39**	**4,534**	**1,578**	**6,151**	**NA**	**NA**	**1,010**	**1,010**	**7,161**	**2,709**	**6,219**	**16,088**
1990 Total	**31**	**4,491**	**1,407**	**5,929**	**6**	**56**	**580**	**641**	**6,570**	**3,153**	**7,291**	**17,015**
1995 Total	**17**	**4,954**	**1,383**	**6,355**	**7**	**65**	**520**	**591**	**6,946**	**3,557**	**8,075**	**18,578**
1996 Total	**17**	**5,354**	**1,488**	**6,859**	**7**	**65**	**540**	**612**	**7,471**	**3,694**	**8,397**	**19,562**
1997 Total	**16**	**5,093**	**1,428**	**6,537**	**8**	**65**	**430**	**503**	**7,040**	**3,671**	**8,315**	**19,026**
1998 Total	**12**	**4,646**	**1,314**	**5,971**	**8**	**65**	**380**	**452**	**6,424**	**3,856**	**8,741**	**19,021**
1999 Total	**14**	**4,835**	**1,473**	**6,322**	**9**	**64**	**390**	**462**	**6,784**	**3,906**	**8,931**	**19,621**
2000 Total	**11**	**5,105**	**1,563**	**6,679**	**9**	**61**	**420**	**490**	**7,169**	**4,069**	**9,250**	**20,488**
2001 Total	**12**	**4,889**	**1,539**	**6,440**	**9**	**60**	**370**	**439**	**6,879**	**4,100**	**9,127**	**20,106**
2002 Total	**12**	**5,014**	**1,463**	**6,489**	**10**	**59**	**380**	**449**	**6,938**	**4,317**	**9,619**	**20,874**
2003 Total	**12**	**5,230**	**1,539**	**6,781**	**13**	**58**	**400**	**471**	**7,252**	**4,353**	**9,603**	**21,208**
2004 Total	**11**	**4,986**	**1,539**	**6,537**	**14**	**59**	**410**	**483**	**7,019**	**4,408**	**9,750**	**21,178**
2005 Total	**8**	**4,951**	**1,455**	**6,414**	**16**	**61**	**430**	**507**	**6,921**	**4,638**	**10,139**	**21,697**
2006 Total	**6**	**4,476**	**1,233**	**5,715**	**18**	**67**	**390**	**475**	**6,191**	**4,611**	**9,968**	**20,770**
2007 January	1	823	131	955	2	6	37	45	1,000	427	954	2,381
February	1	923	134	1,058	2	6	33	40	1,099	414	857	2,370
March	1	632	127	759	2	6	37	45	804	361	769	1,933
April	1	418	87	506	2	6	35	43	549	308	661	1,518
May	1	221	73	294	2	6	37	45	339	329	731	1,399
June	1	141	77	219	2	6	35	43	262	401	884	1,546
July	1	121	78	199	2	6	37	45	244	474	1,039	1,757
August	1	115	85	200	2	6	37	45	245	512	1,136	1,893
September	(s)	119	86	206	2	6	35	43	249	442	881	1,572
October	1	178	96	275	2	6	37	45	320	354	735	1,408
November	1	415	116	532	2	6	35	43	575	327	700	1,602
December	1	735	160	896	2	6	37	45	941	401	900	2,242
Total	**8**	**4,840**	**1,251**	**6,099**	**22**	**75**	**430**	**527**	**6,626**	**4,750**	**10,243**	**21,619**
2008 January	1	906	145	1,052	2	7	42	51	1,103	453	976	2,531
February	1	838	138	977	2	7	39	47	1,025	404	822	2,251
March	1	671	116	787	2	7	42	51	838	365	781	1,984
April	1	399	88	488	2	7	40	49	537	314	667	1,518
May	1	236	76	312	2	7	42	51	362	314	705	1,382
June	1	147	78	226	2	7	40	49	275	413	936	1,624
July	1	121	78	199	2	7	42	51	250	489	1,073	1,812
August	1	113	74	188	2	7	42	51	239	473	1,019	1,731
September	(s)	120	66	187	2	7	40	49	236	401	807	1,444
October	1	220	81	302	2	7	42	51	352	328	693	1,373
November	1	438	91	529	2	7	40	49	578	326	719	1,623
December	1	787	127	914	2	7	42	51	965	426	952	2,343
Total	**7**	**4,994**	**1,158**	**6,159**	**26**	**83**	**490**	**599**	**6,758**	**4,706**	**10,152**	R **21,616**
2009 January	1	965	140	1,106	2	7	42	51	1,157	463	1,012	2,632
February	1	770	119	890	2	6	38	46	936	393	789	2,119
March	1	612	117	730	2	7	42	51	781	363	773	1,917
April	(s)	402	94	496	2	7	40	49	546	312	664	1,521
May	(s)	208	76	285	2	7	42	51	336	321	731	1,387
June	(s)	147	69	217	2	7	40	49	266	389	886	1,541
July	(s)	123	79	203	2	7	42	51	253	469	1,007	1,729
August	(s)	115	82	198	2	7	42	51	249	472	1,015	1,735
September	(s)	122	88	211	2	7	40	49	260	393	786	1,439
9-Month Total	**5**	**3,465**	**865**	**4,335**	**20**	**62**	**366**	**448**	**4,783**	**3,575**	**7,663**	**16,021**
2008 9-Month Total	**6**	**3,551**	**859**	**4,415**	**20**	**62**	**367**	**448**	**4,864**	**3,627**	**7,787**	**16,277**
2007 9-Month Total	**5**	**3,513**	**878**	**4,397**	**16**	**56**	**322**	**394**	**4,791**	**3,668**	**7,911**	**16,370**

[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.

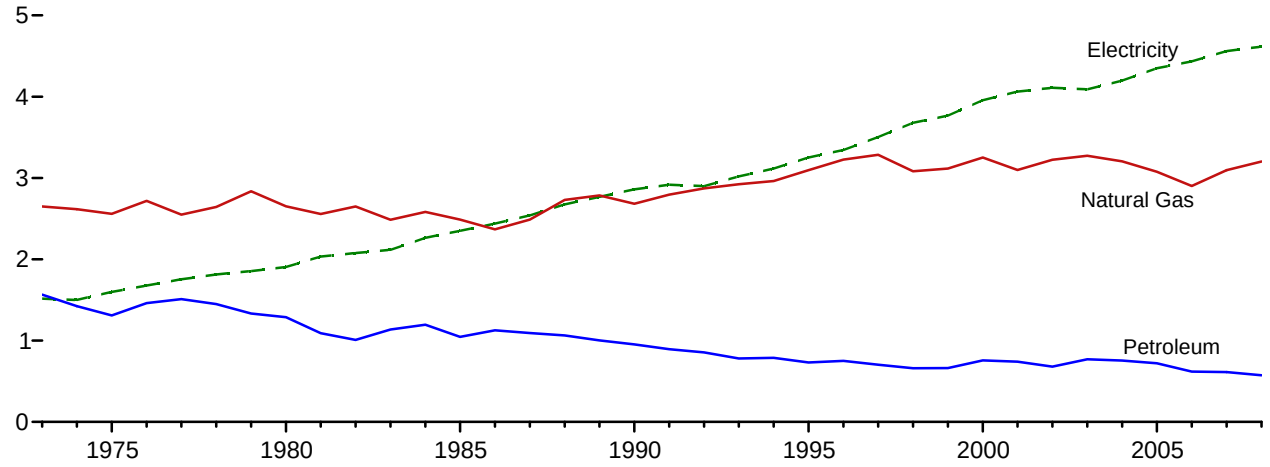
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

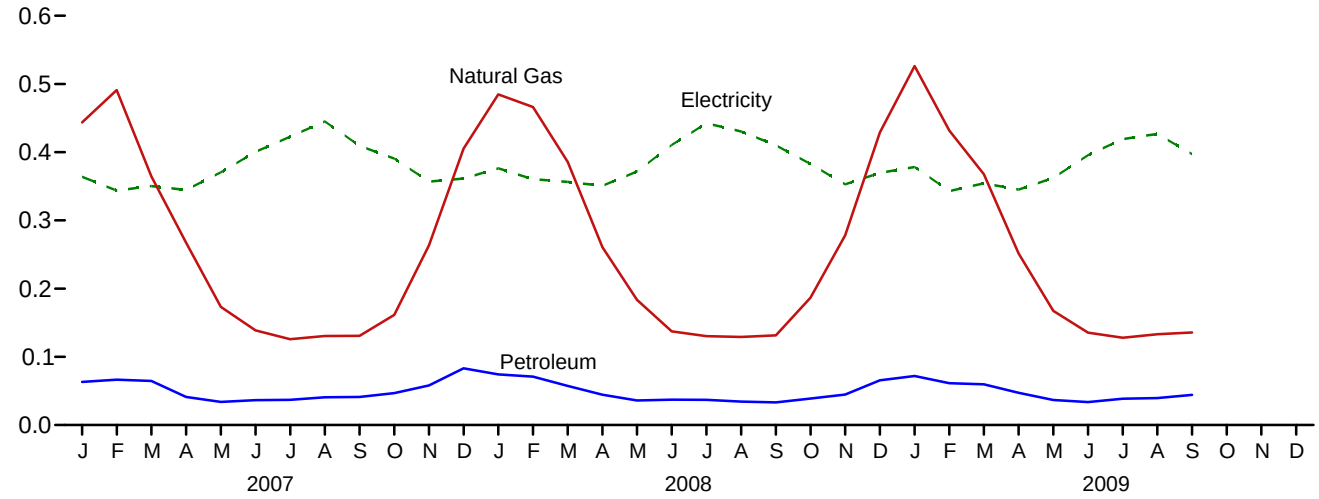
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

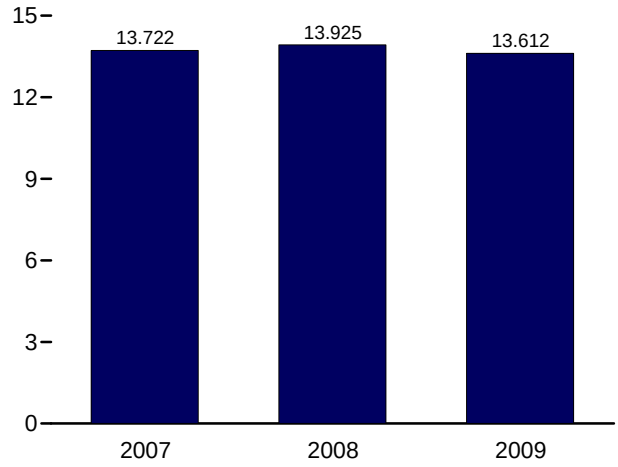
By Major Sources, 1973-2008



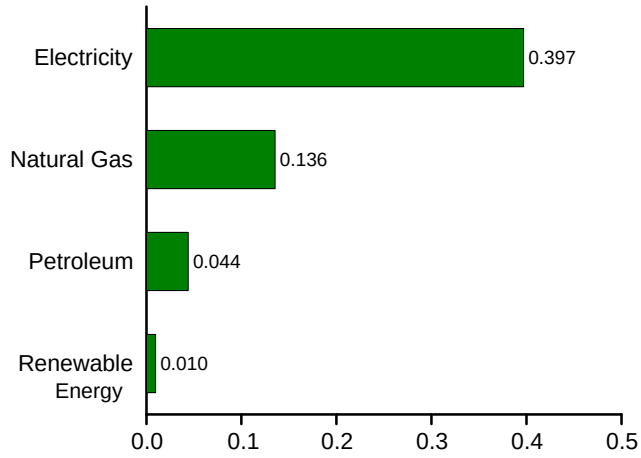
By Major Sources, Monthly



Total, January-September



By Major Sources, September 2009



Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.
Source: Table 2.3.

Table 2.3 Commercial Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]											
	Fossil Fuels				Renewable Energy[b]							
	Coal	Natural Gas[c]	Petro-leum[d]	Total	Hydro-electric Power[e]	Geo-thermal	Bio-mass	Total	Total Primary	Electricity Retail Sales[f]	Electrical System Energy Losses[g]	Total
1973 Total	**160**	**2,649**	**1,565**	**4,374**	**NA**	**NA**	**7**	**7**	**4,381**	**1,517**	**3,609**	**9,507**
1975 Total	**147**	**2,558**	**1,310**	**4,015**	**NA**	**NA**	**8**	**8**	**4,023**	**1,598**	**3,845**	**9,466**
1980 Total	**115**	**2,651**	**1,287**	**4,053**	**NA**	**NA**	**21**	**21**	**4,074**	**1,906**	**4,582**	**10,563**
1985 Total	**137**	**2,488**	**1,045**	**3,670**	**NA**	**NA**	**24**	**24**	**3,695**	**2,351**	**5,398**	**11,444**
1990 Total	**124**	**2,682**	**953**	**3,760**	**1**	**3**	**94**	**98**	**3,858**	**2,860**	**6,615**	**13,333**
1995 Total	**117**	**3,096**	**732**	**3,945**	**1**	**5**	**113**	**118**	**4,063**	**3,252**	**7,382**	**14,698**
1996 Total	**122**	**3,226**	**751**	**4,099**	**1**	**5**	**129**	**135**	**4,235**	**3,344**	**7,603**	**15,181**
1997 Total	**129**	**3,285**	**704**	**4,118**	**1**	**6**	**131**	**138**	**4,257**	**3,503**	**7,935**	**15,694**
1998 Total	**93**	**3,083**	**661**	**3,837**	**1**	**7**	**118**	**127**	**3,964**	**3,678**	**8,338**	**15,979**
1999 Total	**103**	**3,115**	**661**	**3,879**	**1**	**7**	**121**	**129**	**4,007**	**3,766**	**8,610**	**16,384**
2000 Total	**92**	**3,252**	**756**	**4,099**	**1**	**8**	**119**	**128**	**4,227**	**3,956**	**8,993**	**17,176**
2001 Total	**97**	**3,097**	**741**	**3,935**	**1**	**8**	**92**	**101**	**4,036**	**4,062**	**9,043**	**17,141**
2002 Total	**90**	**3,225**	**681**	**3,995**	**(s)**	**9**	**95**	**104**	**4,099**	**4,110**	**9,158**	**17,367**
2003 Total	**82**	**3,274**	**770**	**4,126**	**1**	**11**	**101**	**113**	**4,239**	**4,090**	**9,023**	**17,351**
2004 Total	**103**	**3,204**	**755**	**4,062**	**1**	**12**	**105**	**118**	**4,180**	**4,198**	**9,286**	**17,664**
2005 Total	**97**	**3,076**	**721**	**3,894**	**1**	**14**	**105**	**119**	**4,014**	**4,351**	**9,511**	**17,875**
2006 Total	**65**	**2,902**	**620**	**3,586**	**1**	**14**	**102**	**117**	**3,703**	**4,435**	**9,586**	**17,724**
2007 January	7	444	63	514	(s)	1	9	10	524	364	812	1,700
February	7	491	67	565	(s)	1	8	9	574	344	711	1,628
March	7	364	65	436	(s)	1	9	10	446	350	746	1,542
April	5	267	41	313	(s)	1	8	10	323	345	740	1,408
May	5	173	34	212	(s)	1	9	10	222	370	824	1,416
June	5	139	37	180	(s)	1	8	10	189	400	883	1,473
July	5	126	37	168	(s)	1	9	10	178	423	926	1,526
August	5	131	41	176	(s)	1	9	10	186	445	987	1,618
September	4	131	41	176	(s)	1	8	10	186	409	816	1,411
October	6	162	47	214	(s)	1	9	10	224	391	810	1,425
November	7	264	58	329	(s)	1	9	10	339	357	763	1,459
December	8	405	83	496	(s)	1	9	10	506	361	812	1,680
Total	**70**	**3,095**	**613**	**3,778**	**1**	**14**	**102**	**118**	**3,896**	**4,560**	**9,832**	**18,287**
2008 January	7	485	74	566	(s)	1	9	11	577	376	810	1,764
February	7	466	71	544	(s)	1	9	10	554	360	732	1,647
March	7	386	57	450	(s)	1	9	10	461	356	763	1,580
April	5	261	44	310	(s)	1	9	10	320	351	746	1,417
May	5	184	36	224	(s)	1	9	10	234	372	835	1,441
June	5	137	37	180	(s)	1	9	10	190	411	930	1,531
July	5	130	37	172	(s)	1	9	10	182	442	972	1,596
August	5	129	34	168	(s)	1	9	10	178	430	926	1,535
September	4	131	33	169	(s)	1	9	10	179	410	826	1,415
October	5	187	39	231	(s)	1	9	10	241	383	810	1,433
November	6	278	45	329	(s)	1	9	10	339	353	778	1,470
December	7	429	65	501	(s)	1	9	10	511	370	827	1,708
Total	**67**	**3,202**	**574**	**3,843**	**1**	**15**	**107**	**123**	**3,966**	**4,615**	**9,955**	**18,535**
2009 January	8	R 526	72	R 606	(s)	1	9	11	R 616	378	826	R 1,821
February	7	R 432	61	R 500	(s)	1	8	10	R 509	343	688	R 1,541
March	6	R 368	60	R 434	(s)	1	10	12	R 445	354	755	R 1,554
April	4	R 252	47	303	(s)	1	9	10	313	345	736	R 1,394
May	4	167	37	R 208	(s)	1	9	10	218	362	825	R 1,406
June	4	135	34	R 174	(s)	1	9	10	R 184	396	901	R 1,480
July	4	R 128	38	170	(s)	1	9	10	180	419	900	1,500
August	4	R 133	40	R 177	(s)	1	9	10	R 187	427	918	R 1,532
September	4	136	44	184	(s)	1	9	10	194	397	794	1,385
9-Month Total	**45**	**2,277**	**433**	**2,755**	**1**	**11**	**81**	**92**	**2,847**	**3,422**	**7,343**	**13,612**
2008 9-Month Total	**50**	**2,309**	**425**	**2,783**	**1**	**11**	**80**	**92**	**2,876**	**3,509**	**7,540**	**13,925**
2007 9-Month Total	**49**	**2,265**	**425**	**2,739**	**1**	**11**	**76**	**88**	**2,827**	**3,451**	**7,445**	**13,722**

[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 the fuel ethanol portion of motor gasoline—fuel ethanol is 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. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

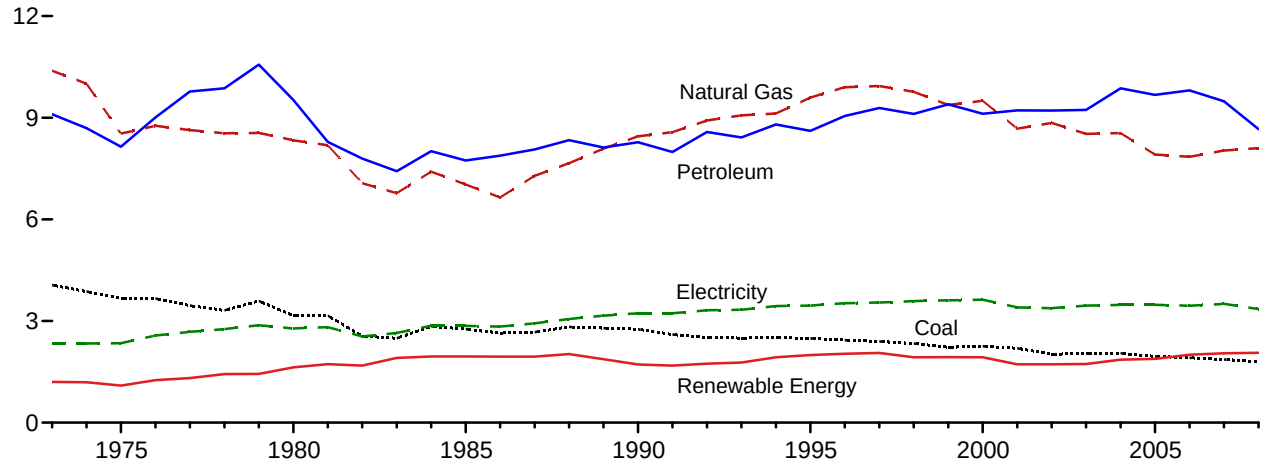
Notes: • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal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

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

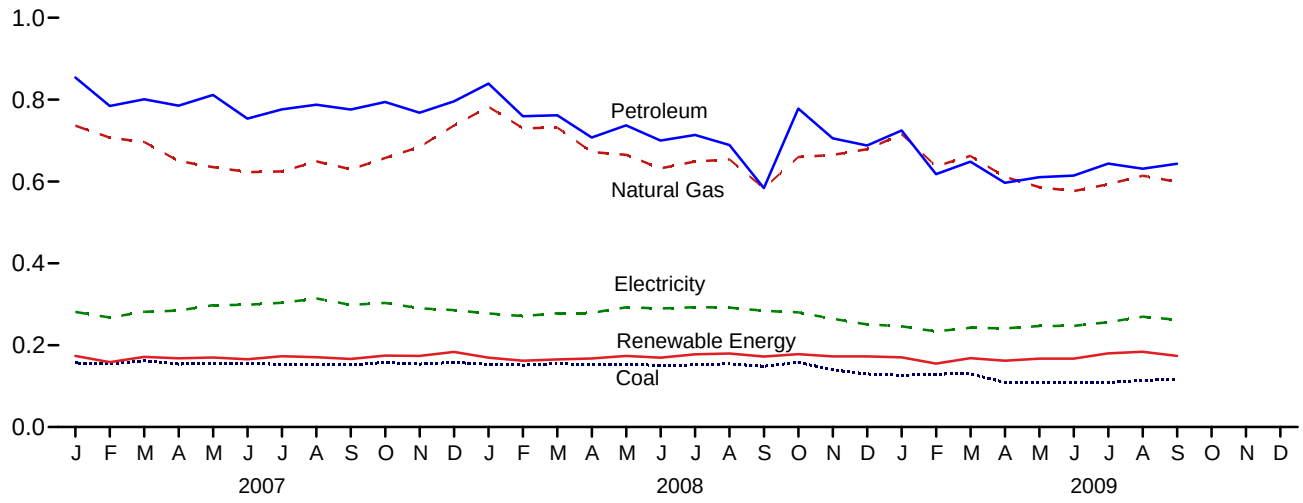
Sources: Tables 2.6, 3.8a, 4.3, 6.2, 7.6, 10.2a, A4, A5, and A6.

Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

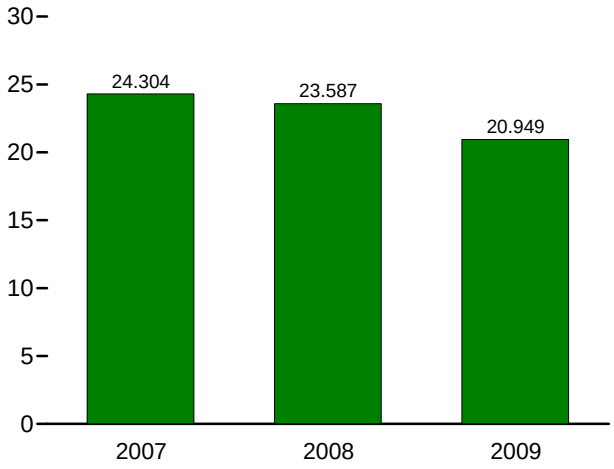
By Major Sources, 1973-2008



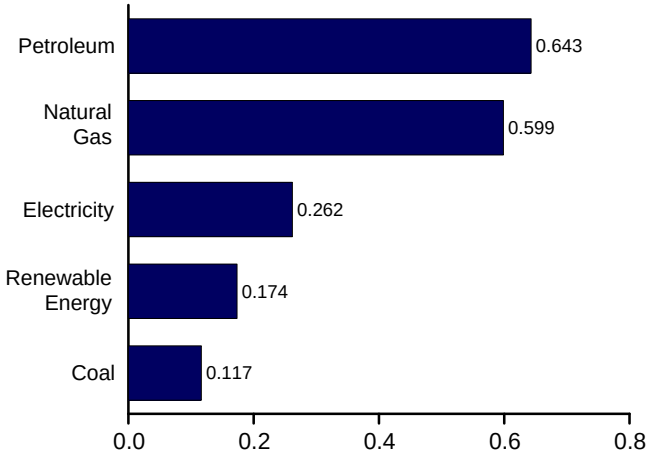
By Major Sources, Monthly



Total, January-September



By Major Sources, September 2009



Web Page: http://www.eia.doe.gov/emeu/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	Bio-mass	Total	Total Primary	Electricity Retail Sales[g]	Electrical System Energy Losses[h]	Total[e]
1973 Total	**4,057**	**10,388**	**9,104**	**23,541**	**35**	**NA**	**1,165**	**1,200**	**24,741**	**2,341**	**5,571**	**32,653**
1975 Total	**3,667**	**8,532**	**8,146**	**20,359**	**32**	**NA**	**1,063**	**1,096**	**21,454**	**2,346**	**5,647**	**29,447**
1980 Total	**3,155**	**8,333**	**9,525**	**20,977**	**33**	**NA**	**1,600**	**1,633**	**22,610**	**2,781**	**6,686**	**32,077**
1985 Total	**2,760**	**7,032**	**7,738**	**17,516**	**33**	**NA**	**1,919**	**1,952**	**19,468**	**2,855**	**6,554**	**28,877**
1990 Total	**2,756**	**8,451**	**8,278**	**19,490**	**31**	**2**	**1,685**	**1,718**	**21,208**	**3,226**	**7,461**	**31,895**
1995 Total	**2,488**	**9,592**	**8,613**	**20,754**	**55**	**3**	**1,936**	**1,994**	**22,748**	**3,455**	**7,844**	**34,047**
1996 Total	**2,434**	**9,901**	**9,052**	**21,410**	**61**	**3**	**1,970**	**2,034**	**23,444**	**3,527**	**8,018**	**34,989**
1997 Total	**2,395**	**9,933**	**9,289**	**21,663**	**58**	**3**	**1,998**	**2,059**	**23,722**	**3,542**	**8,024**	**35,288**
1998 Total	**2,335**	**9,763**	**9,114**	**21,280**	**55**	**3**	**1,873**	**1,931**	**23,211**	**3,587**	**8,131**	**34,928**
1999 Total	**2,227**	**9,375**	**9,395**	**21,054**	**49**	**4**	**1,883**	**1,936**	**22,991**	**3,611**	**8,254**	**34,855**
2000 Total	**2,256**	**9,500**	**9,119**	**20,941**	**42**	**4**	**1,884**	**1,930**	**22,871**	**3,631**	**8,256**	**34,758**
2001 Total	**2,192**	**8,676**	**9,217**	**20,115**	**33**	**5**	**1,684**	**1,721**	**21,836**	**3,400**	**7,570**	**32,806**
2002 Total	**2,019**	**8,845**	**9,209**	**20,135**	**39**	**5**	**1,679**	**1,722**	**21,857**	**3,379**	**7,528**	**32,764**
2003 Total	**2,041**	**8,521**	**9,232**	**19,845**	**43**	**3**	**1,684**	**1,730**	**21,576**	**3,454**	**7,620**	**32,650**
2004 Total	**2,047**	**8,544**	**9,865**	**20,594**	**33**	**4**	**1,824**	**1,860**	**22,455**	**3,473**	**7,682**	**33,609**
2005 Total	**1,954**	**7,911**	**9,673**	**19,583**	**32**	**4**	**1,847**	**1,883**	**21,466**	**3,477**	**7,602**	**32,545**
2006 Total	**1,914**	**7,846**	**9,806**	**19,627**	**29**	**4**	**1,972**	**2,005**	**21,632**	**3,451**	**7,459**	**32,541**
2007 January	157	736	854	1,751	2	(s)	172	174	1,924	281	627	2,833
February	154	707	784	1,646	1	(s)	157	158	1,804	267	553	2,625
March	162	696	801	1,658	2	(s)	169	171	1,829	282	600	2,711
April	154	650	785	1,591	2	(s)	166	168	1,759	284	611	2,653
May	156	635	811	1,605	2	(s)	168	170	1,775	298	662	2,734
June	156	623	753	1,538	1	(s)	164	165	1,703	299	659	2,661
July	153	625	776	1,552	1	(s)	172	173	1,725	304	665	2,694
August	152	649	787	1,591	1	(s)	170	171	1,762	314	697	2,773
September	152	629	776	1,560	1	(s)	165	166	1,727	298	595	2,620
October	158	657	794	1,609	1	(s)	173	175	1,784	303	629	2,717
November	154	684	768	1,611	1	(s)	172	174	1,784	290	621	2,696
December	158	737	796	1,694	2	(s)	182	183	1,877	286	642	2,805
Total	**1,865**	**8,030**	**9,486**	**19,406**	**16**	**5**	**2,028**	**2,048**	**21,454**	**3,507**	**7,562**	**32,523**
2008 January	154	782	839	1,779	2	(s)	167	169	1,948	278	597	2,823
February	152	730	760	1,643	2	(s)	159	162	1,805	271	551	2,627
March	155	732	762	1,656	2	(s)	162	165	1,821	278	594	2,693
April	152	672	707	1,539	2	(s)	165	167	1,706	279	593	2,578
May	153	665	737	1,559	2	(s)	172	174	1,732	293	658	2,683
June	151	632	700	1,492	1	(s)	168	170	1,661	290	656	2,606
July	152	649	714	1,520	1	(s)	176	178	1,697	293	643	2,634
August	155	654	689	1,498	1	(s)	178	180	1,678	292	628	2,598
September	148	583	584	1,318	1	(s)	171	172	1,490	284	571	2,345
October	158	660	778	1,597	1	(s)	177	178	1,775	280	593	2,648
November	140	665	706	1,512	1	(s)	171	173	1,684	264	583	2,532
December	130	679	688	1,494	2	(s)	171	173	1,666	251	561	2,477
Total	**1,799**	**8,103**	**8,663**	**R 18,605**	**19**	**5**	**2,036**	**2,060**	**20,666**	**3,351**	**7,229**	**31,246**
2009 January	127	R 715	725	R 1,565	2	(s)	168	170	R 1,735	246	537	R 2,519
February	129	637	618	R 1,384	1	(s)	153	155	R 1,539	234	469	2,241
March	130	R 663	649	R 1,440	2	(s)	166	168	R 1,608	242	516	R 2,367
April	109	R 611	597	R 1,315	2	(s)	160	162	R 1,477	241	514	R 2,232
May	108	R 586	610	R 1,303	2	(s)	165	167	R 1,470	247	562	R 2,279
June	108	R 576	615	R 1,298	2	(s)	165	167	R 1,465	247	563	R 2,275
July	R 109	R 593	644	R 1,344	1	(s)	178	180	R 1,524	256	550	R 2,330
August	R 114	614	631	R 1,356	1	(s)	182	184	R 1,540	269	579	R 2,388
September	117	599	643	1,358	1	(s)	172	174	1,532	262	524	2,318
9-Month Total	**1,052**	**5,596**	**5,731**	**12,362**	**14**	**4**	**1,510**	**1,528**	**13,889**	**2,245**	**4,815**	**20,949**
2008 9-Month Total	**1,371**	**6,099**	**6,492**	**14,003**	**15**	**4**	**1,518**	**1,537**	**15,540**	**2,556**	**5,492**	**23,587**
2007 9-Month Total	**1,395**	**5,951**	**7,128**	**14,492**	**12**	**4**	**1,501**	**1,516**	**16,008**	**2,628**	**5,669**	**24,304**

[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 the fuel ethanol portion of motor gasoline—fuel ethanol is 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.

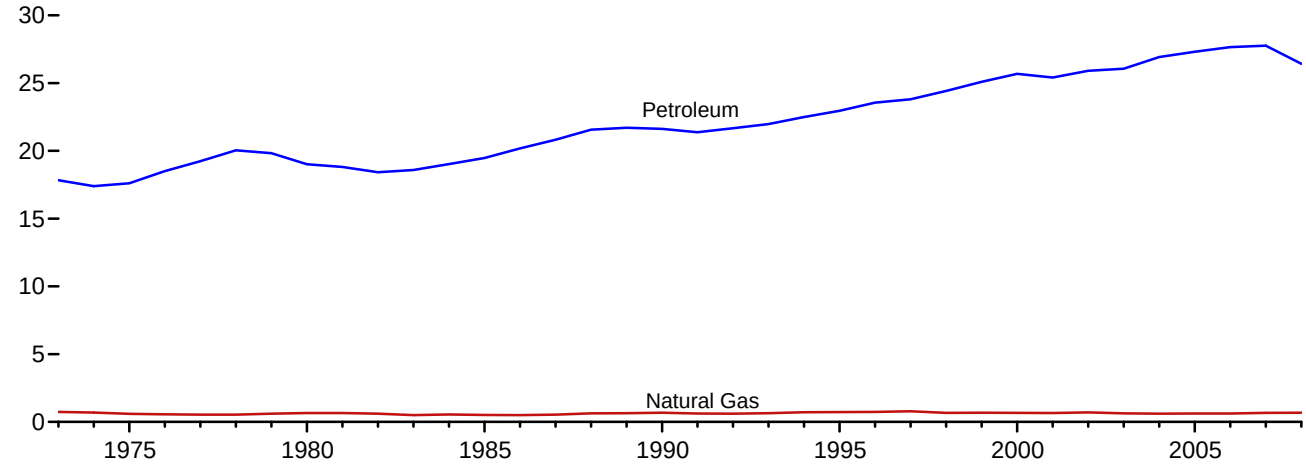
Notes: • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal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

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

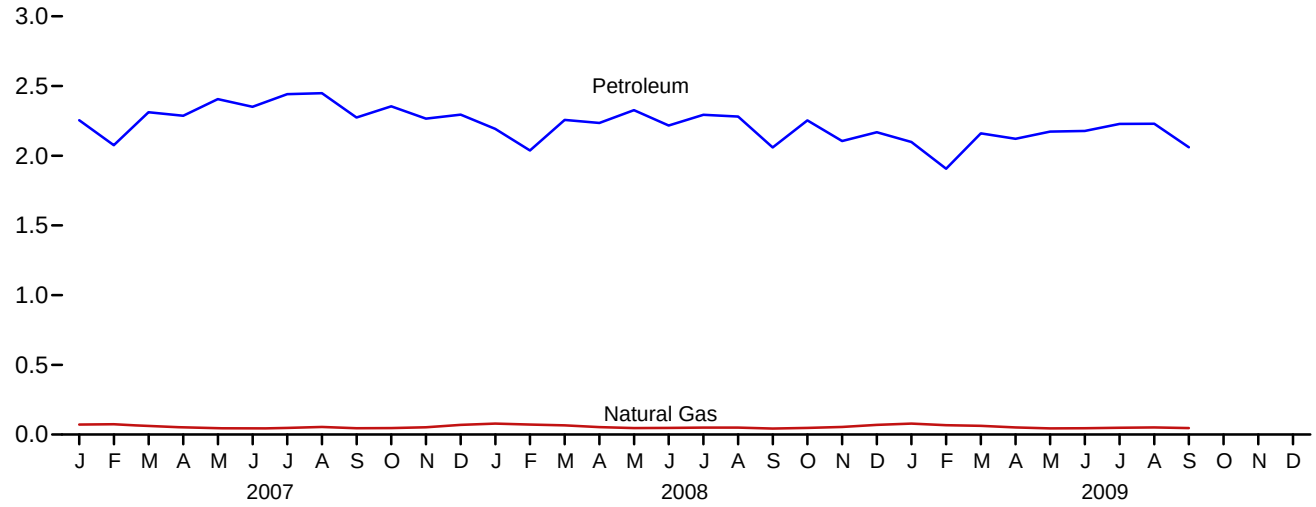
Sources: Tables 1.4a, 1.4b, 2.6, 3.8b, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

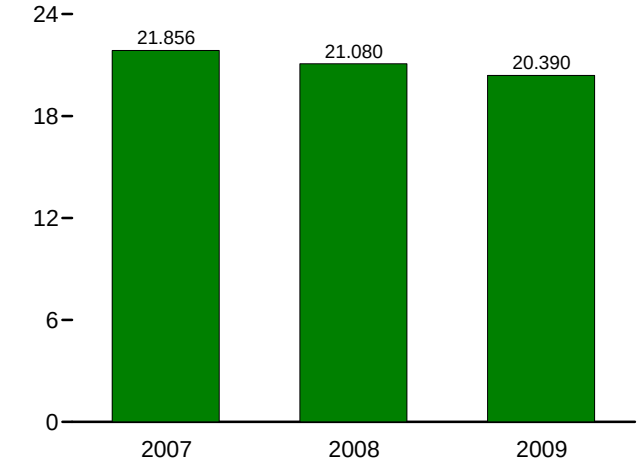
By Major Sources, 1973-2008



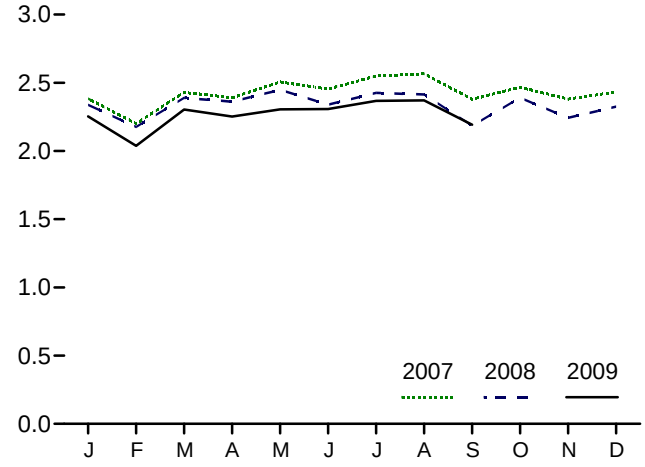
By Major Sources, Monthly



Total, January-September



Total, Monthly



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

Table 2.5 Transportation Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]						Electricity Retail Sales[e]	Electrical System Energy Losses[f]	Total
	Fossil Fuels				Renewable Energy[b]	Total Primary			
	Coal	Natural Gas[c]	Petroleum[d]	Total	Biomass				
1973 Total	**3**	**743**	**17,831**	**18,576**	**NA**	**18,576**	**11**	**25**	**18,612**
1975 Total	**1**	**595**	**17,614**	**18,209**	**NA**	**18,209**	**10**	**24**	**18,244**
1980 Total	**(g)**	**650**	**19,009**	**19,658**	**NA**	**19,658**	**11**	**27**	**19,696**
1985 Total	**(g)**	**519**	**19,471**	**19,990**	**51**	**20,041**	**14**	**32**	**20,087**
1990 Total	**(g)**	**680**	**21,625**	**22,305**	**62**	**22,366**	**16**	**37**	**22,420**
1995 Total	**(g)**	**724**	**22,954**	**23,678**	**115**	**23,793**	**17**	**39**	**23,849**
1996 Total	**(g)**	**737**	**23,565**	**24,302**	**82**	**24,384**	**17**	**38**	**24,439**
1997 Total	**(g)**	**780**	**23,813**	**24,593**	**104**	**24,697**	**17**	**38**	**24,752**
1998 Total	**(g)**	**666**	**24,422**	**25,088**	**115**	**25,203**	**17**	**38**	**25,258**
1999 Total	**(g)**	**675**	**25,098**	**25,774**	**120**	**25,894**	**17**	**40**	**25,951**
2000 Total	**(g)**	**672**	**25,682**	**26,354**	**138**	**26,492**	**18**	**42**	**26,552**
2001 Total	**(g)**	**658**	**25,413**	**26,071**	**145**	**26,216**	**20**	**43**	**26,279**
2002 Total	**(g)**	**702**	**25,913**	**26,615**	**173**	**26,788**	**19**	**42**	**26,849**
2003 Total	**(g)**	**630**	**26,063**	**26,693**	**234**	**26,928**	**23**	**51**	**27,002**
2004 Total	**(g)**	**603**	**26,922**	**27,525**	**295**	**27,820**	**25**	**55**	**27,899**
2005 Total	**(g)**	**625**	**27,309**	**27,934**	**346**	**28,280**	**26**	**56**	**28,361**
2006 Total	**(g)**	**625**	**27,652**	**28,277**	**484**	**28,761**	**25**	**54**	**28,841**
2007 January	(g)	72	2,254	2,326	49	2,375	3	6	2,383
February	(g)	75	2,075	2,150	43	2,193	2	5	2,201
March	(g)	62	2,312	2,374	48	2,422	3	5	2,430
April	(g)	52	2,287	2,339	44	2,383	2	5	2,390
May	(g)	45	2,406	2,450	48	2,498	2	5	2,505
June	(g)	45	2,351	2,396	51	2,446	2	5	2,454
July	(g)	48	2,442	2,490	52	2,541	2	5	2,549
August	(g)	55	2,449	2,504	54	2,558	2	5	2,566
September	(g)	46	2,274	2,319	52	2,372	2	5	2,379
October	(g)	47	2,354	2,401	59	2,460	2	5	2,466
November	(g)	53	2,266	2,319	54	2,373	2	5	2,380
December	(g)	69	2,295	2,364	60	2,424	2	5	2,432
Total	**(g)**	**667**	**27,766**	**28,432**	**614**	**29,046**	**28**	**60**	**29,134**
2008 January	(g)	78	2,193	2,271	59	2,330	2	5	2,338
February	(g)	72	2,038	2,110	60	2,170	2	5	2,177
March	(g)	66	2,257	2,323	61	2,383	2	5	2,390
April	(g)	53	2,235	2,288	67	2,355	2	4	2,361
May	(g)	46	2,327	2,373	69	2,442	2	5	2,449
June	(g)	47	2,216	2,264	69	2,332	2	5	2,339
July	(g)	50	2,293	2,343	76	2,419	2	5	2,426
August	(g)	49	2,280	2,330	78	2,408	2	5	2,415
September	(g)	43	2,059	2,102	77	2,180	2	4	2,186
October	(g)	48	2,254	2,302	80	2,382	2	5	2,389
November	(g)	54	2,106	2,160	76	2,236	2	5	2,243
December	(g)	69	2,168	2,237	80	2,317	2	5	2,325
Total	**(g)**	**676**	**26,427**	**27,103**	**852**	**27,955**	**26**	**56**	**28,037**
2009 January	(g)	78	2,098	2,176	69	2,245	3	5	2,253
February	(g)	67	1,907	1,973	58	2,031	2	4	2,038
March	(g)	63	2,161	2,224	73	2,297	2	5	2,304
April	(g)	51	2,121	2,172	74	2,246	2	4	2,252
May	(g)	44	2,174	2,218	80	2,298	2	4	2,305
June	(g)	45	2,177	[R] 2,223	79	2,301	2	5	2,308
July	(g)	[R] 49	2,228	2,277	84	2,361	2	5	2,368
August	(g)	51	2,229	2,280	84	2,364	2	5	2,370
September	(g)	46	2,060	2,106	80	2,186	2	4	2,193
9-Month Total	**(g)**	**494**	**19,155**	**19,649**	**681**	**20,329**	**19**	**42**	**20,390**
2008 9-Month Total	**(g)**	**505**	**19,899**	**20,404**	**615**	**21,019**	**20**	**42**	**21,080**
2007 9-Month Total	**(g)**	**498**	**20,850**	**21,348**	**441**	**21,789**	**21**	**45**	**21,856**

[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 fuel ethanol and biodiesel 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.

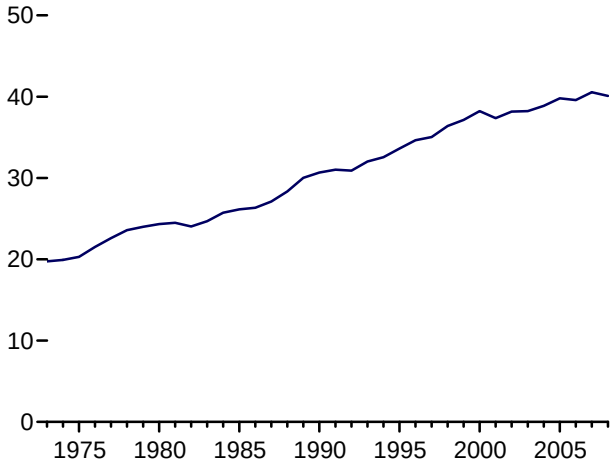
Notes: • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

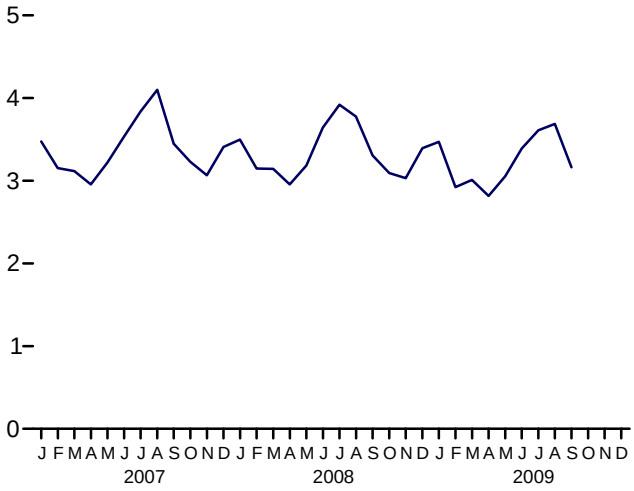
Sources: Tables 2.6, 3.8c, 4.3, 6.2, 7.6, 10.2b, A4, A5, and A6.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

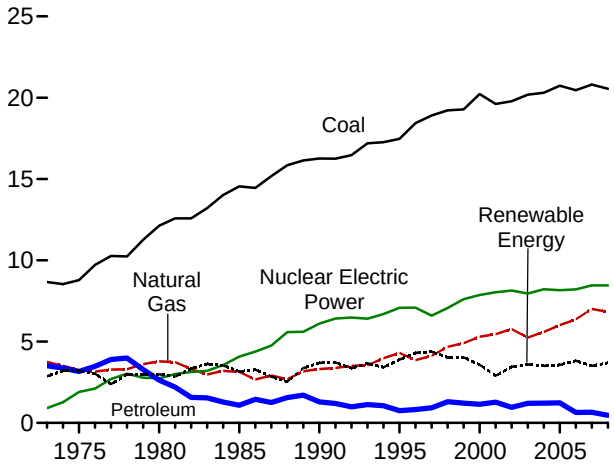
Total, 1973-2008



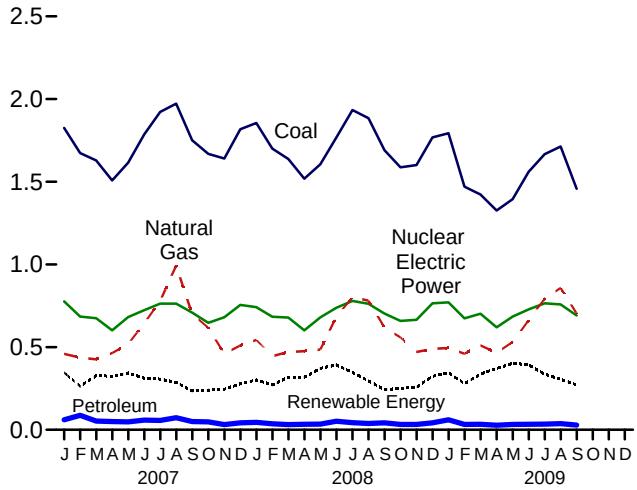
Total, Monthly



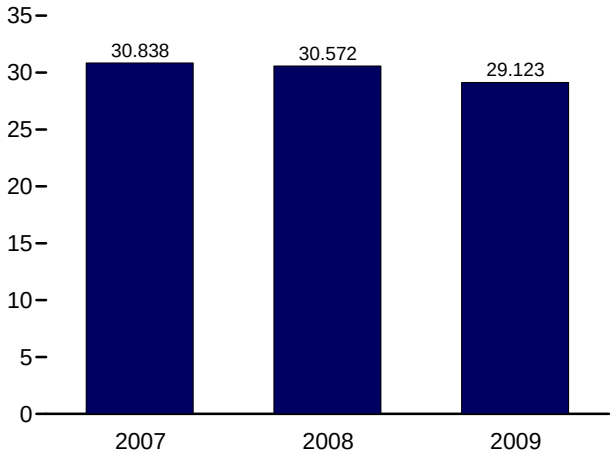
By Major Sources, 1973-2008



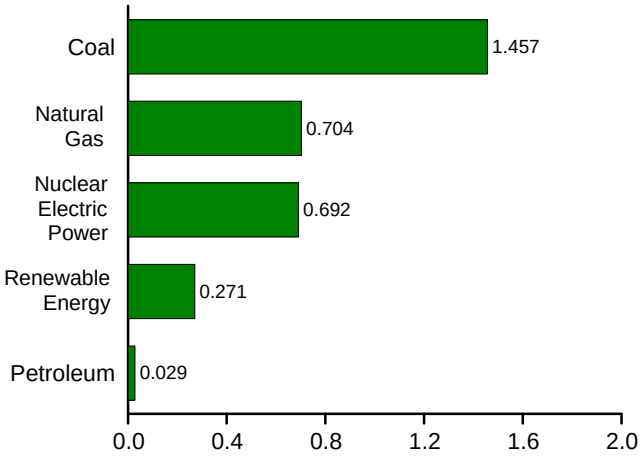
By Major Sources, Monthly



Total, January-September



By Major Sources, September 2009



Web Page: http://www.eia.doe.gov/emeu/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**	**8,033**	**2,209**	**289**	**6**	**70**	**337**	**2,910**	**75**	**37,366**
2002 Total	**19,783**	**5,767**	**961**	**26,511**	**8,143**	**2,650**	**305**	**6**	**105**	**380**	**3,445**	**72**	**38,171**
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**	**8,160**	**2,670**	**309**	**6**	**178**	**406**	**3,568**	**84**	**39,799**
2006 Total	**20,462**	**6,375**	**648**	**27,485**	**8,214**	**2,839**	**306**	**5**	**264**	**412**	**3,827**	**63**	**39,589**
2007 January	1,825	459	60	2,345	776	256	27	(s)	24	39	346	6	3,474
February	1,673	436	88	2,196	684	182	24	(s)	25	32	263	10	3,153
March	1,629	426	53	2,108	674	237	25	(s)	30	35	328	6	3,116
April	1,508	464	50	2,022	601	234	24	1	31	33	324	10	2,956
May	1,615	519	48	2,183	682	256	24	1	29	34	344	12	3,220
June	1,786	643	58	2,487	723	224	26	1	26	35	312	11	3,533
July	1,922	778	56	2,757	763	221	26	1	21	36	306	13	3,839
August	1,973	993	73	3,038	763	196	26	1	27	36	286	12	4,099
September	1,750	699	50	2,500	709	145	26	1	28	35	235	5	3,448
October	1,669	618	48	2,335	647	145	27	(s)	33	35	241	7	3,229
November	1,640	459	31	2,130	681	154	25	(s)	31	36	246	9	3,065
December	1,817	510	42	2,369	755	180	27	(s)	34	37	278	7	3,409
Total	**20,808**	**7,005**	**657**	**28,470**	**8,458**	**2,430**	**308**	**6**	**341**	**423**	**3,508**	**107**	**40,542**
2008 January	1,855	543	45	2,443	742	199	25	(s)	41	37	302	11	3,498
February	1,700	445	37	2,182	683	179	23	(s)	37	33	272	10	3,147
March	1,638	470	31	2,139	679	207	26	1	46	39	318	7	3,144
April	1,518	476	33	2,027	601	209	26	1	50	34	319	9	2,956
May	1,605	486	34	2,125	680	260	27	1	51	33	371	8	3,184
June	1,767	683	52	2,502	738	280	27	1	49	35	393	9	3,642
July	1,933	802	43	2,778	779	244	27	1	38	37	347	15	3,919
August	1,884	781	39	2,704	762	200	27	1	31	37	296	15	3,776
September	1,690	617	42	2,350	703	154	26	1	27	34	242	10	3,306
October	1,587	559	32	2,178	659	148	27	1	43	33	251	6	3,093
November	1,600	471	33	2,104	665	152	26	(s)	45	35	258	4	3,031
December	1,768	489	42	2,299	765	202	26	(s)	58	37	322	7	3,394
Total	**20,547**	**6,823**	**463**	**27,833**	**8,455**	**2,432**	**312**	**8**	**514**	**423**	**3,690**	**112**	**40,090**
2009 January	1,793	495	60	2,348	771	230	26	(s)	54	35	346	7	3,471
February	1,470	460	32	1,962	674	174	24	(s)	49	32	280	8	2,923
March	1,423	511	34	1,968	702	210	26	1	64	36	337	4	3,011
April	1,326	466	27	1,820	620	247	25	1	67	32	371	6	2,817
May	1,395	531	32	1,958	684	286	25	1	57	33	402	9	3,054
June	1,560	663	33	2,256	728	283	25	1	49	36	394	11	3,388
July	1,667	793	34	2,494	765	228	26	1	45	36	336	14	3,609
August	1,713	858	37	2,608	758	192	26	1	49	37	305	15	3,686
September	1,457	704	29	2,190	692	172	25	1	40	33	271	11	3,163
9-Month Total	**13,804**	**5,480**	**319**	**19,603**	**6,393**	**2,023**	**228**	**7**	**474**	**310**	**3,042**	**86**	**29,123**
2008 9-Month Total	**15,591**	**5,303**	**356**	**21,251**	**6,367**	**1,930**	**233**	**7**	**369**	**318**	**2,859**	**96**	**30,572**
2007 9-Month Total	**15,682**	**5,417**	**536**	**21,635**	**6,375**	**1,951**	**229**	**5**	**242**	**316**	**2,743**	**84**	**30,838**

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

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

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

[d] Conventional hydroelectric power.

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

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

Notes: • Data are for fuels consumed to produce electricity and useful thermal output. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • See Note 1, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/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.

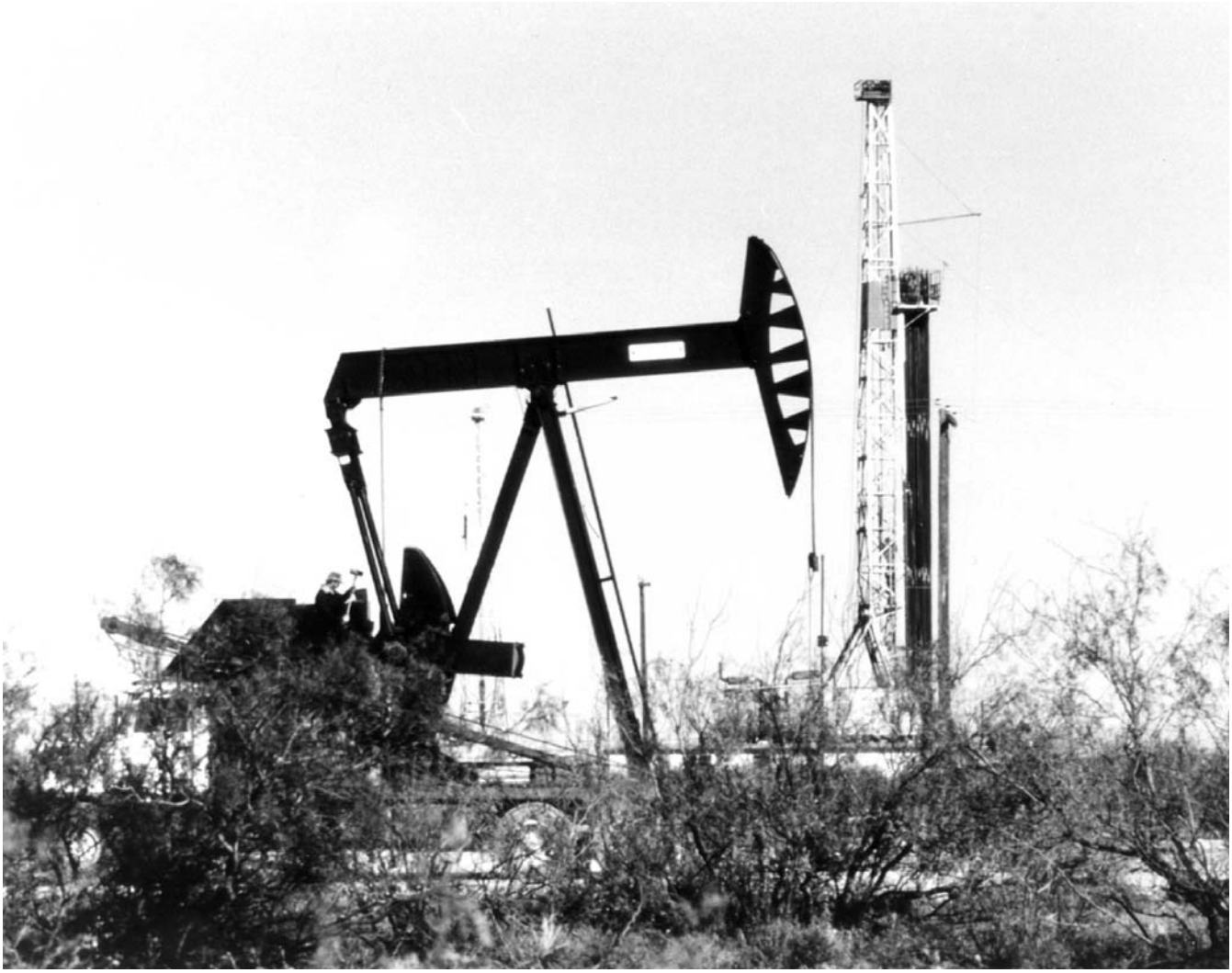
Energy Consumption by Sector

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.

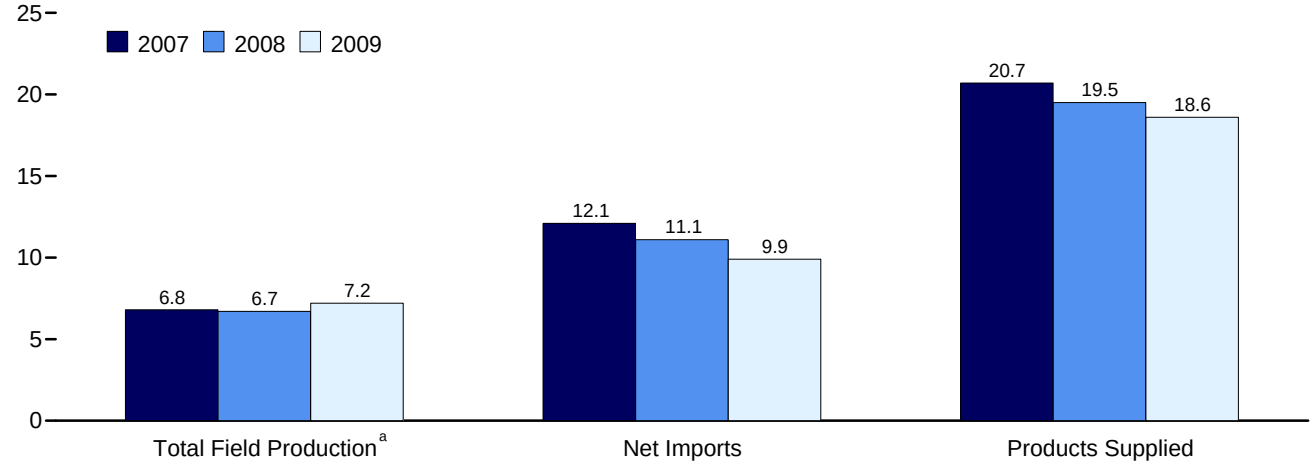
3 Petroleum



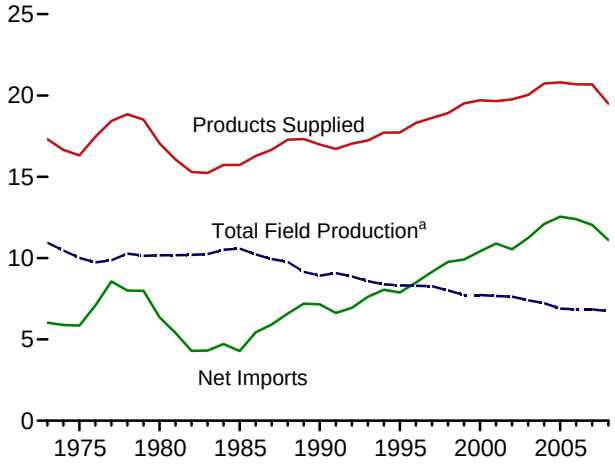
Oil pumping unit and drilling rig, Texas. Source: U.S. Department of Energy.

Figure 3.1 Petroleum Overview
(Million Barrels per Day)

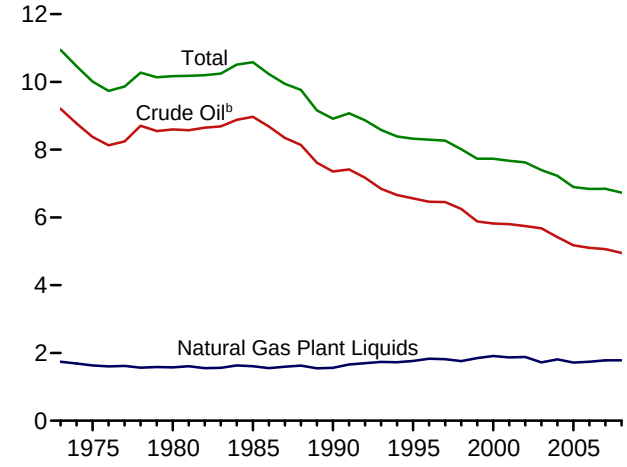
Overview, January-November



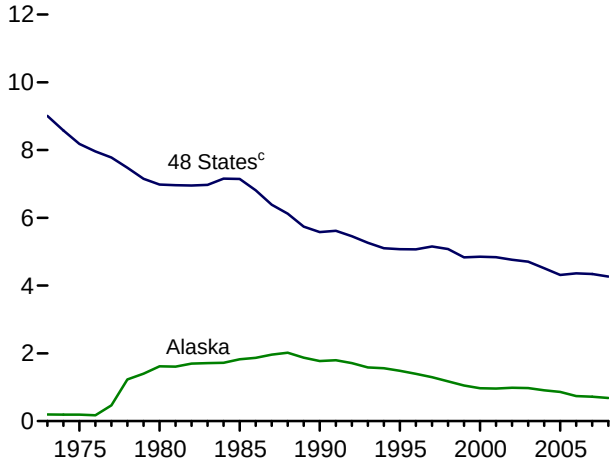
Overview, 1973-2008



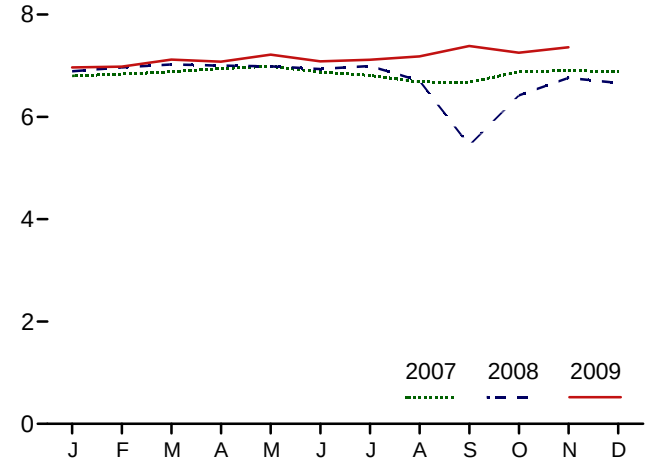
Total Field Production, 1973-2008



Crude Oil[b] Field Production, 1973-2008



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.doe.gov/emeu/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 January	4,348	775	5,123	1,677	6,800	NA	1,035	13,706	1,446	12,260	146	618	20,567
February	4,369	756	5,125	1,710	6,835	NA	961	12,173	1,350	10,823	-2,065	625	21,309
March	4,356	750	5,106	1,776	6,882	NA	944	13,956	1,274	12,682	367	396	20,536
April	4,441	748	5,189	1,755	6,944	NA	948	13,842	1,360	12,482	540	701	20,536
May	4,429	768	5,197	1,793	6,990	NA	939	14,204	1,441	12,764	966	894	20,620
June	4,379	717	5,096	1,780	6,877	NA	1,007	13,553	1,331	12,222	195	813	20,723
July	4,305	719	5,024	1,785	6,809	NA	1,023	13,754	1,506	12,248	125	792	20,747
August	4,304	610	4,914	1,768	6,682	NA	1,010	13,634	1,483	12,151	-574	608	21,025
September	4,241	642	4,884	1,793	6,677	NA	991	13,646	1,361	12,285	29	491	20,415
October	4,342	701	5,043	1,840	6,883	NA	983	12,981	1,325	11,655	-286	668	20,476
November	4,274	743	5,017	1,886	6,902	NA	1,011	13,188	1,767	11,421	-596	604	20,535
December	4,318	738	5,056	1,828	6,885	NA	1,093	12,869	1,542	11,327	-788	627	20,719
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	E 4,567	E 679	E 5,246	1,721	E 6,967	664	954	13,173	1,927	11,246	879	174	19,125
February	E 4,483	E 708	E 5,191	1,792	E 6,983	682	934	12,190	1,822	10,369	288	26	18,706
March	E 4,561	E 709	E 5,270	1,850	E 7,120	676	906	12,474	1,838	10,636	790	124	18,672
April	E 4,575	E 653	E 5,228	1,851	E 7,078	677	990	11,973	1,900	10,073	559	212	18,471
May	E 4,606	E 678	E 5,283	1,934	E 7,217	706	979	11,596	2,015	9,581	558	251	18,176
June	E 4,612	E 571	E 5,183	1,901	E 7,084	731	1,031	11,902	1,963	9,939	332	309	18,762
July	E 4,681	E 551	E 5,233	1,884	E 7,117	763	987	12,053	2,348	9,704	81	282	18,771
August	E 4,714	E 572	E 5,286	1,896	E 7,182	764	1,002	11,243	2,119	9,124	-426	234	18,732
September	RE 4,792	RE 652	RE 5,444	R 1,941	RE 7,385	R 756	R 1,012	R 11,721	R 2,105	R 9,616	R 541	R 134	R 18,362
October	E 4,720	E 662	E 5,382	E 1,871	E 7,253	NA	E 956	E 11,160	E 1,891	E 9,269	E -617	NA	E 18,783
November	E 4,797	E 665	E 5,462	E 1,900	E 7,362	NA	E 940	E 11,285	E 1,942	E 9,343	E -19	NA	E 18,484
11-Month Average	**E 4,647**	**E 645**	**E 5,292**	**E 1,868**	**E 7,160**	**NA**	**E 972**	**E 11,887**	**E 1,990**	**E 9,898**	**E 268**	**NA**	**E 18,641**
2008 11-Month Average	**4,260**	**681**	**4,940**	**1,800**	**6,741**	**NA**	**995**	**12,944**	**1,797**	**11,147**	**199**	**847**	**19,531**
2007 11-Month Average	**4,344**	**721**	**5,065**	**1,779**	**6,844**	**NA**	**987**	**13,524**	**1,422**	**12,102**	**-89**	**656**	**20,677**

[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. NA=Not available. E=Estimate.

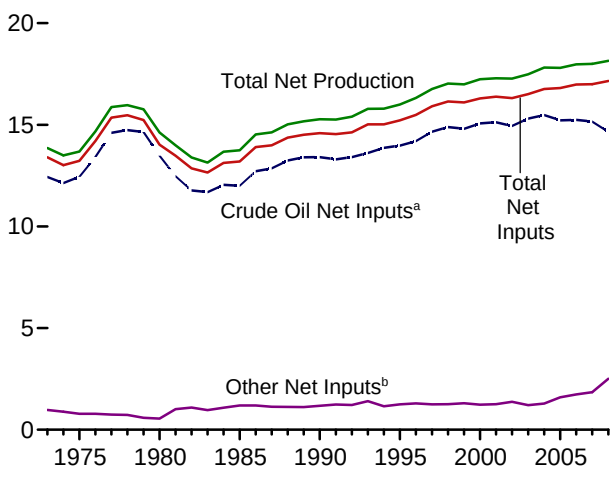
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

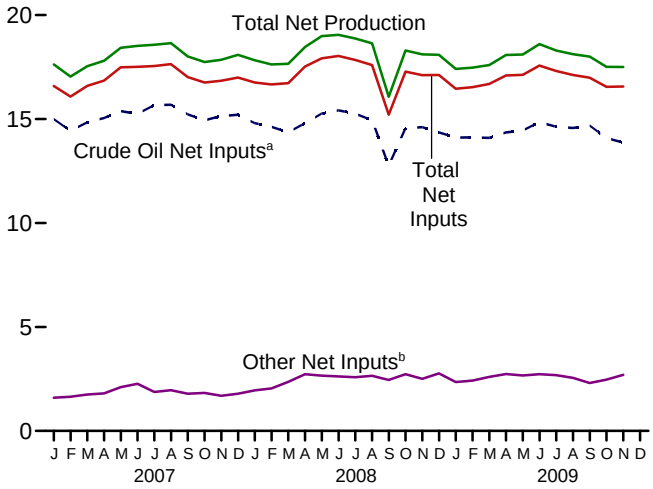
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** EIA, Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2008:** EIA, *Petroleum Supply Annual,* annual reports. • **2009:** EIA, *Petroleum Supply 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)

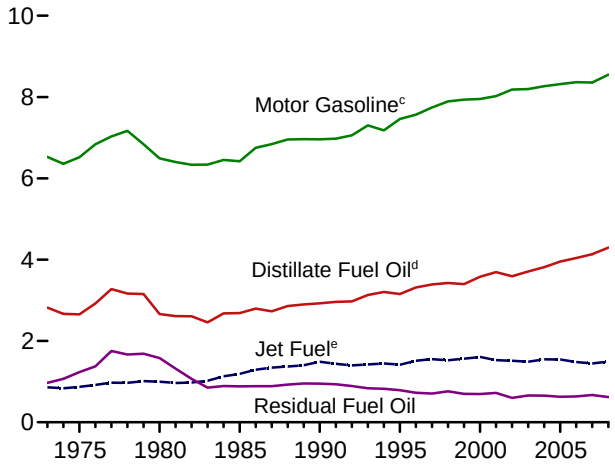
Net Inputs and Net Production, 1973-2008



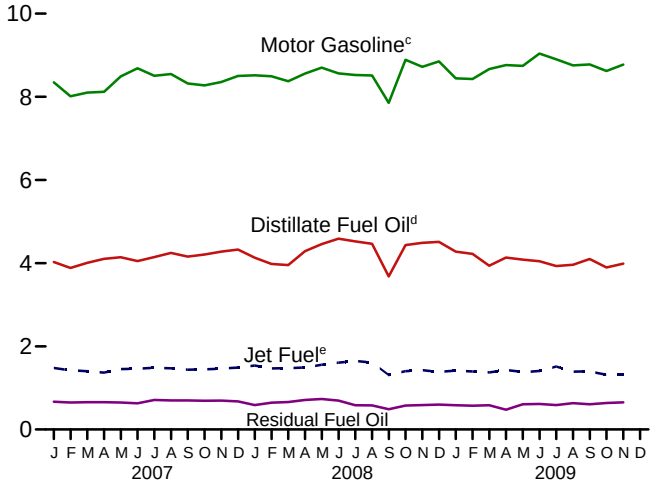
Net Inputs and Net Production, Monthly



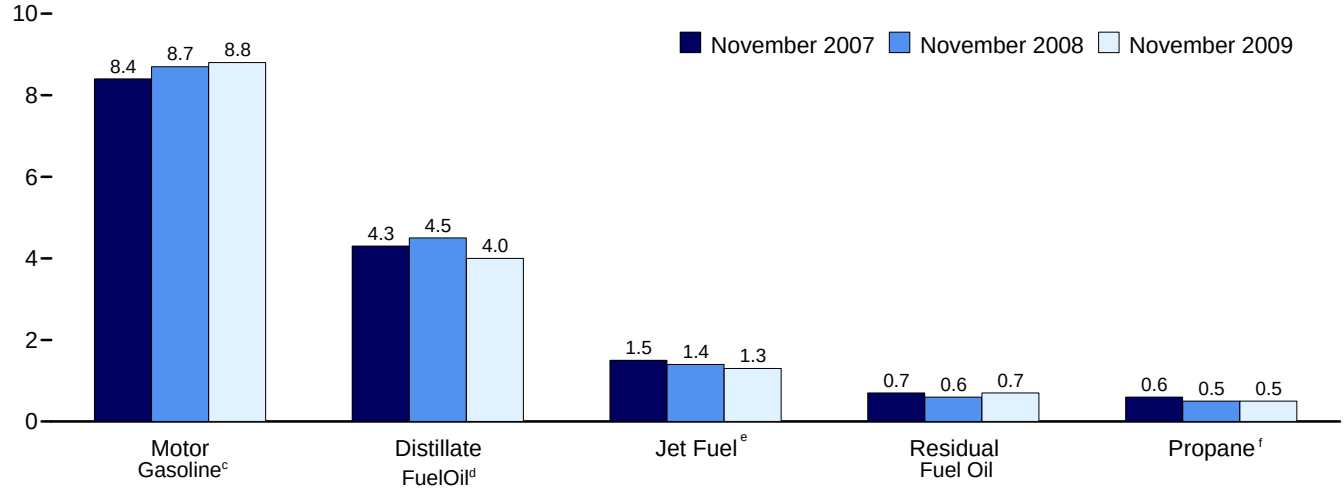
Net Production, Selected Products, 1973-2008



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 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.doe.gov/emeu/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 January	14,992	557	1,039	16,588	4,027	1,480	575	468	8,348	667	2,632	17,622
February	14,435	473	1,170	16,078	3,883	1,421	534	502	8,012	650	2,571	17,039
March	14,840	463	1,291	16,594	4,009	1,403	563	692	8,101	656	2,678	17,538
April	15,045	444	1,362	16,851	4,102	1,368	562	824	8,122	658	2,725	17,800
May	15,380	462	1,641	17,484	4,142	1,451	576	882	8,491	647	2,809	18,423
June	15,248	457	1,810	17,514	4,050	1,459	568	871	8,686	628	2,828	18,522
July	15,671	465	1,410	17,547	4,145	1,484	562	835	8,504	708	2,893	18,569
August	15,685	449	1,508	17,642	4,244	1,470	542	810	8,547	698	2,883	18,652
September	15,226	496	1,295	17,017	4,158	1,436	560	624	8,320	698	2,771	18,008
October	14,933	562	1,263	16,757	4,208	1,446	539	499	8,276	689	2,622	17,740
November	15,151	630	1,057	16,838	4,278	1,463	568	393	8,353	694	2,668	17,850
December	15,202	600	1,189	16,991	4,326	1,489	595	443	8,501	676	2,649	18,084
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	14,112	554	1,793	16,459	4,276	1,419	479	382	8,445	582	2,309	17,413
February	14,116	497	1,922	16,535	4,222	1,395	483	480	8,429	572	2,371	17,469
March	14,091	449	2,147	16,688	3,937	1,372	519	626	8,668	584	2,407	17,594
April	14,354	418	2,321	17,092	4,133	1,433	544	791	8,761	476	2,490	18,082
May	14,459	435	2,231	17,125	4,086	1,378	556	808	8,742	606	2,484	18,104
June	14,845	434	2,294	17,573	4,044	1,405	567	850	9,042	614	2,649	18,604
July	14,633	439	2,240	17,312	3,929	1,514	555	818	8,903	588	2,546	18,298
August	14,568	406	2,147	17,121	3,962	1,391	554	842	8,755	632	2,539	18,122
September	R 14,684	R 488	R 1,818	R 16,990	R 4,099	R 1,396	R 561	R 633	R 8,779	R 606	R 2,490	R 18,002
October	E 14,085	RF 525	RE 1,942	RF 16,553	E 3,895	E 1,317	RE 538	RF 523	E 8,620	E 636	RE 2,518	RE 17,509
November	E 13,869	F 571	E 2,125	F 16,565	E 3,988	E 1,317	E 528	F 424	E 8,776	E 651	E 2,349	E 17,505
11-Month Average	**E 14,348**	**E 474**	**E 2,090**	**E 16,912**	**E 4,050**	**E 1,394**	**E 535**	**E 654**	**E 8,721**	**E 596**	**E 2,469**	**E 17,884**
2008 11-Month Average	**14,676**	**476**	**2,005**	**17,156**	**4,274**	**1,503**	**522**	**656**	**8,520**	**622**	**2,576**	**18,151**
2007 11-Month Average	**15,152**	**496**	**1,351**	**16,999**	**4,115**	**1,444**	**559**	**674**	**8,345**	**672**	**2,736**	**17,986**

[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 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.

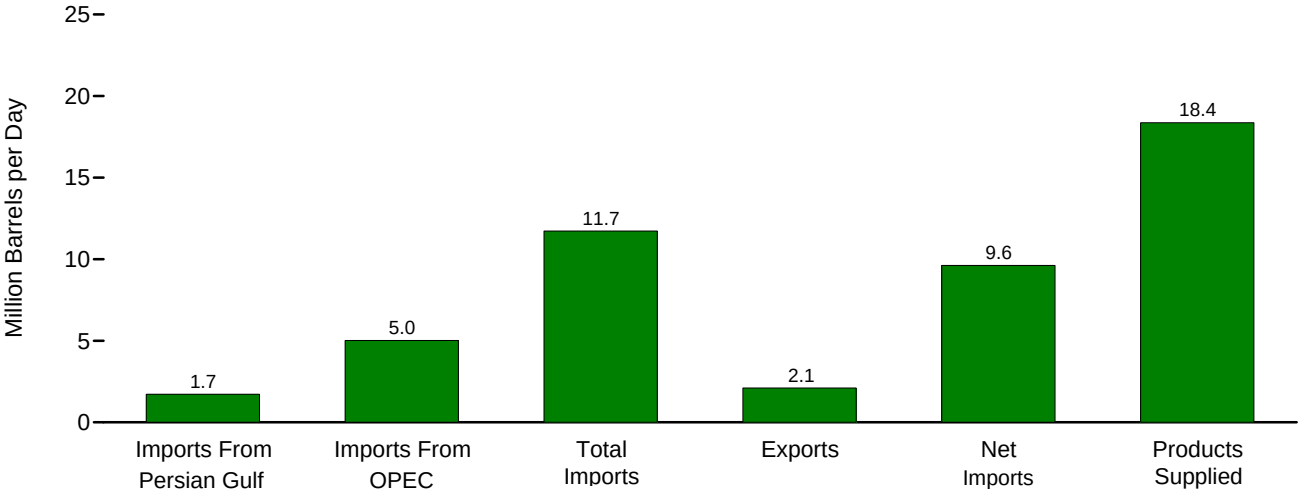
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

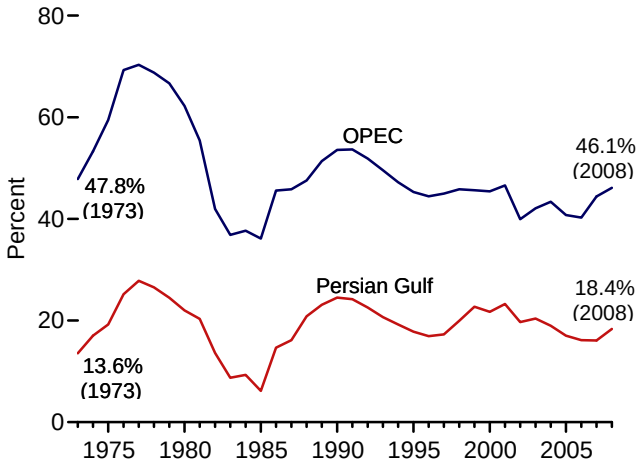
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2008:** *Petroleum Supply Annual,* annual reports. • **2009:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system, Short-Term Integrated Forecasting System, and *Monthly Energy Review* data system calculations.

Figure 3.3a Petroleum Trade: Overview

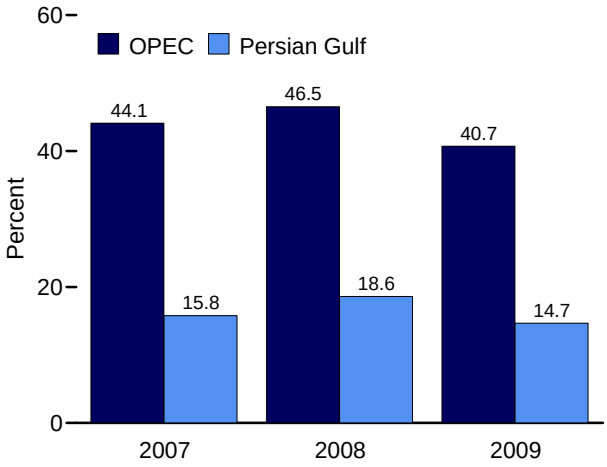
Overview, September 2009



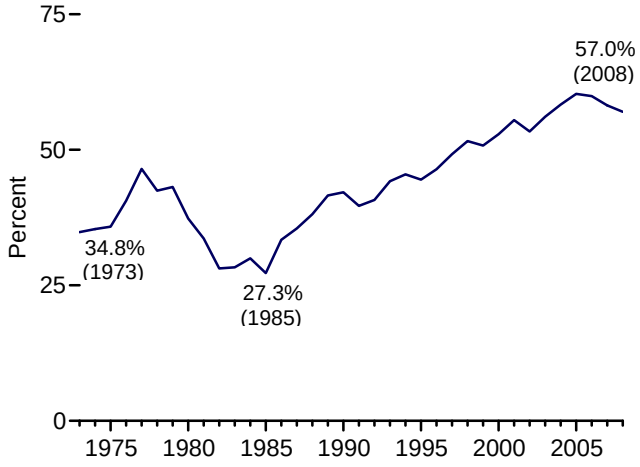
Imports From OPEC and Persian Gulf as Share of Total Imports, 1973-2008



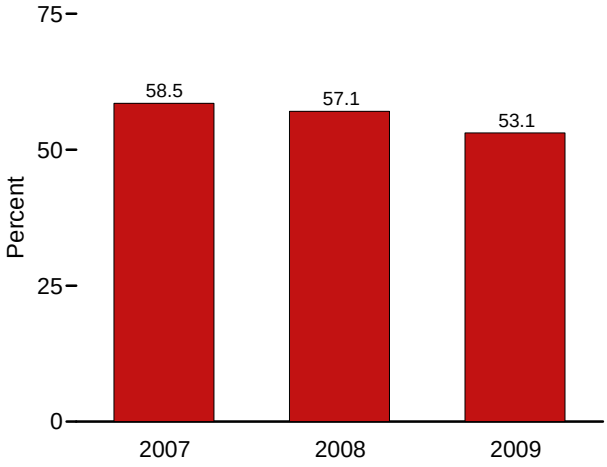
Imports From OPEC and Persian Gulf as Share of Total Imports, January-September



Net Imports as Share of Products Supplied, 1973-2008



Net Imports as Share of Products Supplied, January-November



Note: OPEC=Organization of the Petroleum Exporting Countries.
Web Page: http://www.eia.doe.gov/emeu/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 January	2,273	6,074	13,706	1,446	12,260	20,567	11.1	29.5	66.6	59.6	16.6	44.3
February	1,643	5,278	12,173	1,350	10,823	21,309	7.7	24.8	57.1	50.8	13.5	43.4
March	2,072	6,302	13,956	1,274	12,682	20,536	10.1	30.7	68.0	61.8	14.8	45.2
April	2,192	5,950	13,842	1,360	12,482	20,536	10.7	29.0	67.4	60.8	15.8	43.0
May	2,148	6,181	14,204	1,441	12,764	20,620	10.4	30.0	68.9	61.9	15.1	43.5
June	2,372	6,121	13,553	1,331	12,222	20,723	11.4	29.5	65.4	59.0	17.5	45.2
July	2,099	5,759	13,754	1,506	12,248	20,747	10.1	27.8	66.3	59.0	15.3	41.9
August	2,171	6,115	13,634	1,483	12,151	21,025	10.3	29.1	64.8	57.8	15.9	44.8
September	2,333	6,231	13,646	1,361	12,285	20,415	11.4	30.5	66.8	60.2	17.1	45.7
October	2,088	5,619	12,981	1,325	11,655	20,476	10.2	27.4	63.4	56.9	16.1	43.3
November	2,281	5,961	13,188	1,767	11,421	20,535	11.1	29.0	64.2	55.6	17.3	45.2
December	2,253	6,111	12,869	1,542	11,327	20,719	10.9	29.5	62.1	54.7	17.5	47.5
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	5,676	13,173	1,927	11,246	19,125	11.6	29.7	68.9	58.8	16.8	43.1
February	1,972	4,956	12,190	1,822	10,369	18,706	10.5	26.5	65.2	55.4	16.2	40.7
March	1,823	5,215	12,474	1,838	10,636	18,672	9.8	27.9	66.8	57.0	14.6	41.8
April	1,700	4,754	11,973	1,900	10,073	18,471	9.2	25.7	64.8	54.5	14.2	39.7
May	1,480	4,471	11,596	2,015	9,581	18,176	8.1	24.6	63.8	52.7	12.8	38.6
June	1,586	4,814	11,902	1,963	9,939	18,762	8.5	25.7	63.4	53.0	13.3	40.5
July	1,955	4,623	12,053	2,348	9,704	18,771	10.4	24.6	64.2	51.7	16.2	38.4
August	1,466	4,567	11,243	2,119	9,124	18,732	7.8	24.4	60.0	48.7	13.0	40.6
September	R 1,718	R 5,021	R 11,721	R 2,105	R 9,616	R 18,362	R 9.4	R 27.3	R 63.8	R 52.4	R 14.7	R 42.8
October	NA	NA	E 11,160	E 1,891	E 9,269	E 18,783	NA	NA	E 59.4	E 49.3	NA	NA
November	NA	NA	E 11,285	E 1,942	E 9,343	E 18,484	NA	NA	E 61.1	E 50.5	NA	NA
11-Month Average	**NA**	**NA**	E **11,887**	E **1,990**	E **9,898**	E **18,641**	**NA**	**NA**	E **63.8**	E **53.1**	**NA**	**NA**
2008 11-Month Average	**2,385**	**5,980**	**12,944**	**1,797**	**11,147**	**19,531**	**12.2**	**30.6**	**66.3**	**57.1**	**18.4**	**46.2**
2007 11-Month Average	**2,155**	**5,968**	**13,524**	**1,422**	**12,102**	**20,677**	**10.4**	**28.9**	**65.4**	**58.5**	**15.9**	**44.1**

[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.

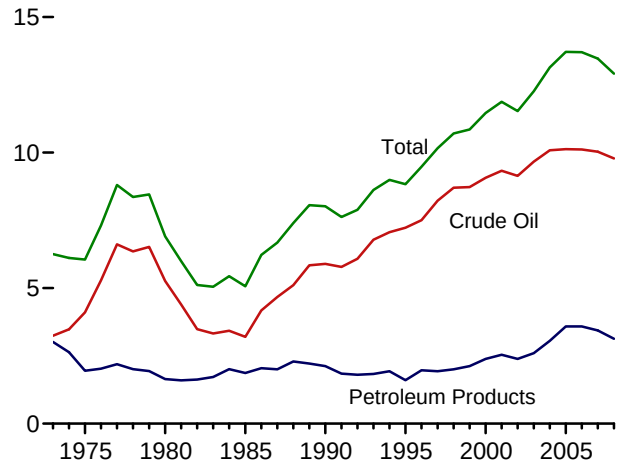
Notes: • Readers of this table may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 *Monthly Energy Review.* See http://www.eia.doe.gov/emeu/mer/pdf/pages/imported_oil.pdf. • Beginning in October 1977, data include Strategic Petroleum Reserve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

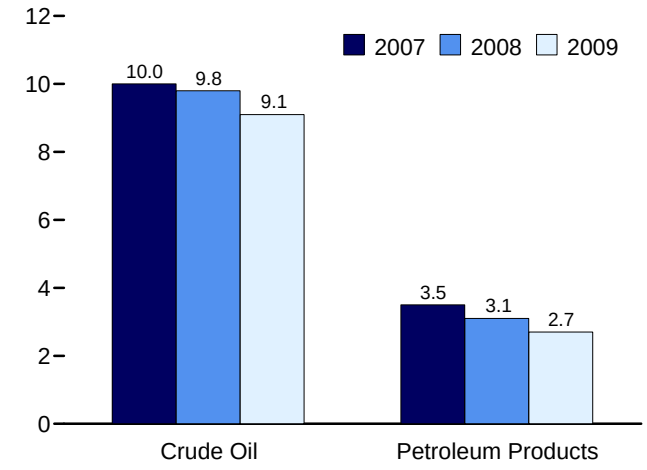
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2008:** EIA, *Petroleum Supply Annual,* annual reports. • **2009:** 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)

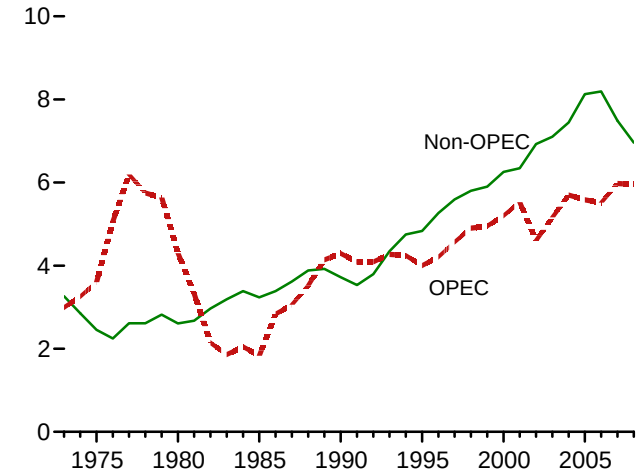
Total, 1973-2008



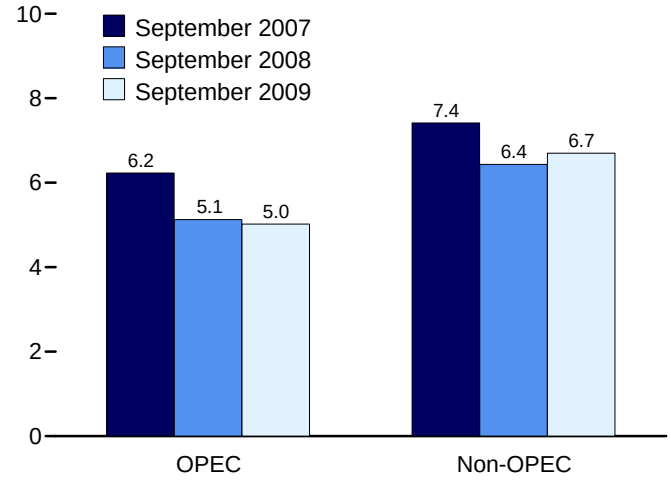
Crude Oil and Petroleum Products, January-November



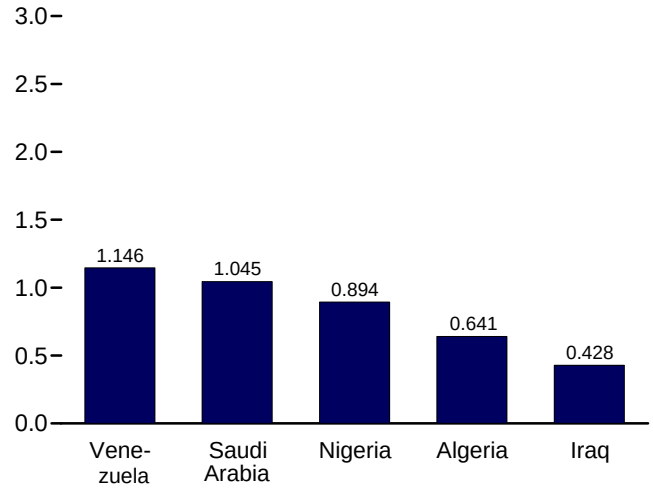
OPEC and Non-OPEC, 1973-2008



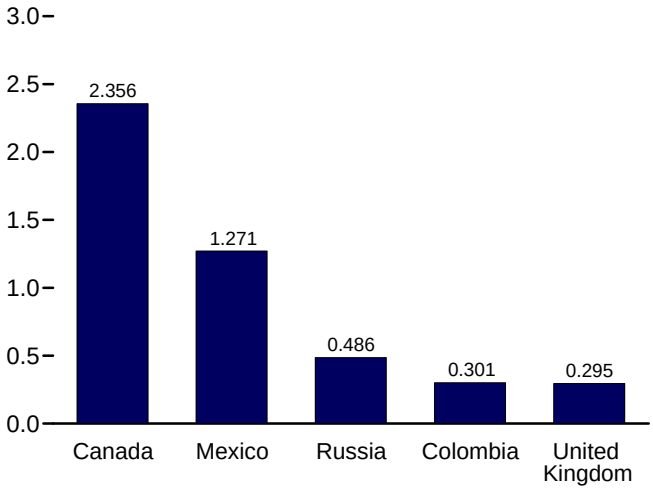
OPEC and Non-OPEC



From Selected OPEC Countries, September 2009



From Selected Non-OPEC Countries, September 2009



Note: OPEC=Organization of the Petroleum Exporting Countries.
Web Page: http://www.eia.doe.gov/emeu/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[f]	Residual Fuel Oil	Other[g]	Total	Crude Oil[a]	Petroleum Products	Total
	SPR[c,d]	Total			Propane[h]	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 January	0	10,211	352	175	244	319	408	394	1,846	13,706	9	1,436	1,446
February	0	9,009	334	227	213	258	372	314	1,660	12,173	25	1,325	1,350
March	18	10,380	360	249	185	241	361	510	1,856	13,956	34	1,241	1,274
April	0	10,161	323	316	121	189	498	374	1,981	13,842	19	1,341	1,360
May	0	10,328	274	227	146	227	581	360	2,207	14,204	36	1,405	1,441
June	0	10,015	273	215	151	273	441	360	1,976	13,553	52	1,279	1,331
July	0	9,939	335	263	135	221	434	412	2,150	13,754	27	1,479	1,506
August	0	10,316	354	226	164	224	404	344	1,765	13,634	42	1,441	1,483
September	0	10,307	270	202	232	282	478	347	1,760	13,646	34	1,327	1,361
October	52	9,784	288	184	204	256	319	299	1,850	12,981	11	1,314	1,325
November	19	10,004	245	180	200	238	303	397	1,821	13,188	20	1,747	1,767
December	0	9,835	241	136	188	240	351	342	1,724	12,869	20	1,522	1,542
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	–	9,852	368	89	210	239	236	424	1,965	13,173	36	1,890	1,927
February	–	9,205	327	69	195	211	252	372	1,754	12,190	30	1,792	1,822
March	221	9,441	268	92	209	233	263	384	1,793	12,474	30	1,807	1,838
April	130	9,406	166	90	108	133	227	396	1,555	11,973	27	1,874	1,900
May	34	8,931	206	66	103	160	244	387	1,601	11,596	53	1,962	2,015
June	90	9,172	244	65	68	87	218	384	1,731	11,902	57	1,906	1,963
July	–	9,227	191	115	98	118	230	286	1,886	12,053	31	2,317	2,348
August	16	8,883	166	92	62	89	304	263	1,447	11,243	35	2,084	2,119
September	R 32	R 9,223	R 205	R 91	R 94	R 116	R 142	R 326	R 1,618	R 11,721	R 42	R 2,063	R 2,105
October	NA	E 8,630	E 168	E 86	E 141	NA	E 154	E 319	NA	E 11,160	E 32	E 1,859	E 1,891
November	NA	E 8,578	E 176	E 76	E 175	NA	E 162	E 299	NA	E 11,285	E 32	E 1,910	E 1,942
11-Month Average	**NA**	**E 9,141**	**E 225**	**E 85**	**E 133**	**NA**	**E 221**	**E 349**	**NA**	**E 11,887**	**E 37**	**E 1,953**	**E 1,990**
2008 11-Month Average	**21**	**9,817**	**208**	**106**	**181**	**250**	**316**	**346**	**1,901**	**12,944**	**27**	**1,770**	**1,797**
2007 11-Month Average	**8**	**10,050**	**310**	**224**	**181**	**248**	**418**	**374**	**1,900**	**13,524**	**28**	**1,394**	**1,422**

[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] Finished motor gasoline. Through 1980, also includes motor gasoline blending components.

[g] 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.

[h] Includes propylene.

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

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.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.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. • **1981-2008:** EIA, *Petroleum Supply Annual,* annual reports. • **2009:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

Table 3.3c Petroleum Trade: Imports From OPEC Countries

(Thousand Barrels per Day)

	Algeria	Angola[a]	Ecuador[b]	Iraq	Kuwait[c]	Libya	Nigeria	Saudi Arabia[c]	Vene-zuela	Other[d]	Total OPEC
1973 Average	**136**	**([a])**	**48**	**4**	**47**	**164**	**459**	**486**	**1,135**	**514**	**2,993**
1975 Average	**282**	**([a])**	**57**	**2**	**16**	**232**	**762**	**715**	**702**	**832**	**3,601**
1980 Average	**488**	**([a])**	**27**	**28**	**27**	**554**	**857**	**1,261**	**481**	**577**	**4,300**
1985 Average	**187**	**([a])**	**67**	**46**	**21**	**4**	**293**	**168**	**605**	**439**	**1,830**
1990 Average	**280**	**([a])**	**49**	**518**	**86**	**0**	**800**	**1,339**	**1,025**	**199**	**4,296**
1995 Average	**234**	**([a])**	**([b])**	**0**	**218**	**0**	**627**	**1,344**	**1,480**	**98**	**4,002**
1996 Average	**256**	**([a])**	**([b])**	**1**	**236**	**0**	**617**	**1,363**	**1,676**	**62**	**4,211**
1997 Average	**285**	**([a])**	**([b])**	**89**	**253**	**0**	**698**	**1,407**	**1,773**	**64**	**4,569**
1998 Average	**290**	**([a])**	**([b])**	**336**	**301**	**0**	**696**	**1,491**	**1,719**	**73**	**4,905**
1999 Average	**259**	**([a])**	**([b])**	**725**	**248**	**0**	**657**	**1,478**	**1,493**	**93**	**4,953**
2000 Average	**225**	**([a])**	**([b])**	**620**	**272**	**0**	**896**	**1,572**	**1,546**	**72**	**5,203**
2001 Average	**278**	**([a])**	**([b])**	**795**	**250**	**0**	**885**	**1,662**	**1,553**	**105**	**5,528**
2002 Average	**264**	**([a])**	**([b])**	**459**	**228**	**0**	**621**	**1,552**	**1,398**	**83**	**4,605**
2003 Average	**382**	**([a])**	**([b])**	**481**	**220**	**0**	**867**	**1,774**	**1,376**	**61**	**5,162**
2004 Average	**452**	**([a])**	**([b])**	**656**	**250**	**20**	**1,140**	**1,558**	**1,554**	**70**	**5,701**
2005 Average	**478**	**([a])**	**([b])**	**531**	**243**	**56**	**1,166**	**1,537**	**1,529**	**47**	**5,587**
2006 Average	**657**	**([a])**	**([b])**	**553**	**185**	**87**	**1,114**	**1,463**	**1,419**	**38**	**5,517**
2007 January	778	574	([b])	531	172	59	1,136	1,542	1,195	87	6,074
February	555	464	([b])	314	150	105	1,109	1,163	1,360	58	5,278
March	727	708	([b])	523	305	150	1,347	1,244	1,287	11	6,302
April	782	514	([b])	562	135	82	948	1,488	1,412	28	5,950
May	744	692	([b])	341	168	69	964	1,614	1,522	67	6,181
June	709	514	([b])	573	263	172	968	1,534	1,364	24	6,121
July	747	404	([b])	460	202	187	906	1,436	1,399	18	5,759
August	827	412	([b])	520	139	129	1,224	1,499	1,320	43	6,115
September	702	591	([b])	603	170	74	1,181	1,560	1,315	35	6,231
October	410	342	([b])	490	157	134	1,241	1,411	1,388	46	5,619
November	447	435	([b])	508	154	103	1,306	1,620	1,381	7	5,961
December	600	439	([b])	378	158	141	1,271	1,686	1,387	50	6,111
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	543	278	568	242	64	509	1,362	1,353	38	5,676
February	372	671	243	554	251	60	498	1,115	1,139	51	4,956
March	463	657	215	587	181	61	891	967	1,106	88	5,215
April	612	462	237	484	105	118	733	1,021	891	90	4,754
May	272	505	193	263	93	92	600	1,079	1,341	33	4,471
June	458	447	154	374	179	103	830	959	1,237	75	4,814
July	329	320	122	365	261	59	879	1,153	959	176	4,623
August	551	364	131	500	148	68	917	766	1,070	51	4,567
September	641	414	153	428	246	54	894	1,045	1,146	–	5,021
9-Month Average	**491**	**486**	**191**	**457**	**189**	**75**	**752**	**1,052**	**1,139**	**67**	**4,900**
2008 9-Month Average	**540**	**512**	**218**	**661**	**197**	**110**	**1,014**	**1,542**	**1,190**	**28**	**6,012**
2007 9-Month Average	**732**	**542**	**([b])**	**493**	**190**	**114**	**1,087**	**1,456**	**1,353**	**41**	**6,008**

[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.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.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. • **1981-2008:** EIA, *Petroleum Supply Annual,* annual reports. • **2009:** 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 January	250	2,529	148	1,566	118	110	347	199	425	1,939	7,632
February	153	2,533	85	1,496	63	131	242	261	312	1,620	6,895
March	234	2,357	121	1,750	160	164	455	292	349	1,773	7,655
April	224	2,498	90	1,572	87	203	556	373	322	1,967	7,892
May	203	2,500	122	1,614	150	234	499	390	287	2,025	8,024
June	161	2,410	164	1,529	171	193	285	345	218	1,956	7,432
July	200	2,386	231	1,611	130	137	534	369	372	2,026	7,995
August	280	2,527	181	1,474	127	112	416	174	320	1,910	7,520
September	232	2,520	186	1,454	136	105	389	185	384	1,824	7,415
October	197	2,429	175	1,417	176	110	452	290	353	1,764	7,362
November	82	2,404	219	1,581	58	100	470	210	414	1,689	7,227
December	178	2,372	130	1,322	157	110	306	238	387	1,559	6,759
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	2,544	269	1,430	127	90	516	147	367	1,556	7,496
February	381	2,515	241	1,364	186	74	478	285	333	1,379	7,235
March	338	2,438	283	1,199	141	192	650	208	264	1,546	7,259
April	278	2,281	347	1,289	117	112	779	424	290	1,301	7,219
May	386	2,206	243	1,186	150	171	813	250	313	1,407	7,125
June	299	2,529	313	1,183	157	173	578	268	268	1,320	7,088
July	392	2,639	305	1,316	118	119	637	188	273	1,443	7,429
August	275	2,524	269	1,159	160	52	512	225	223	1,277	6,676
September	268	2,356	301	1,271	122	59	486	295	280	1,262	6,700
9-Month Average	**341**	**2,448**	**286**	**1,266**	**142**	**116**	**607**	**253**	**290**	**1,389**	**7,137**
2008 9-Month Average	**248**	**2,465**	**203**	**1,284**	**167**	**107**	**485**	**225**	**328**	**1,398**	**6,910**
2007 9-Month Average	**216**	**2,473**	**148**	**1,564**	**127**	**154**	**416**	**288**	**333**	**1,896**	**7,615**

[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.

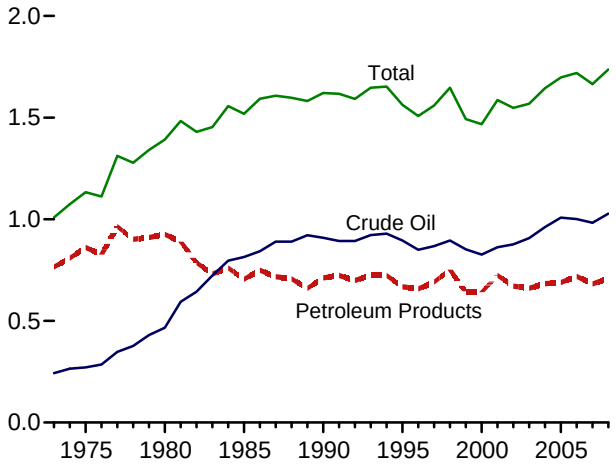
Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for membership. Petroleum imports not classified as "OPEC" on Table 3.3c are included on this table. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products 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.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html.

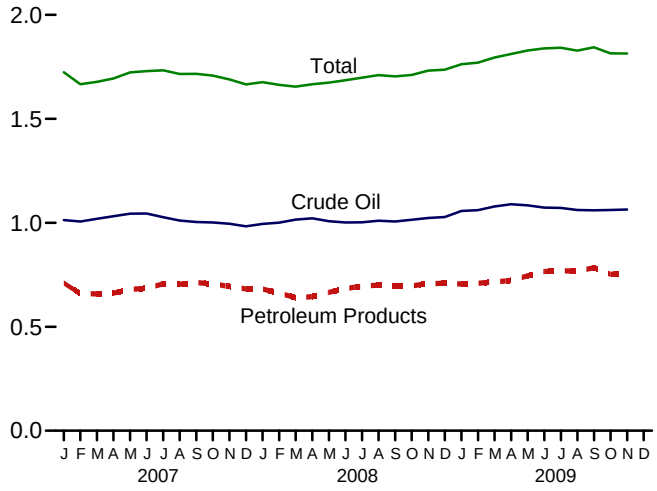
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2008:** EIA, *Petroleum Supply Annual,* annual reports. • **2009:** EIA, *Petroleum Supply Monthly,* monthly reports.

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

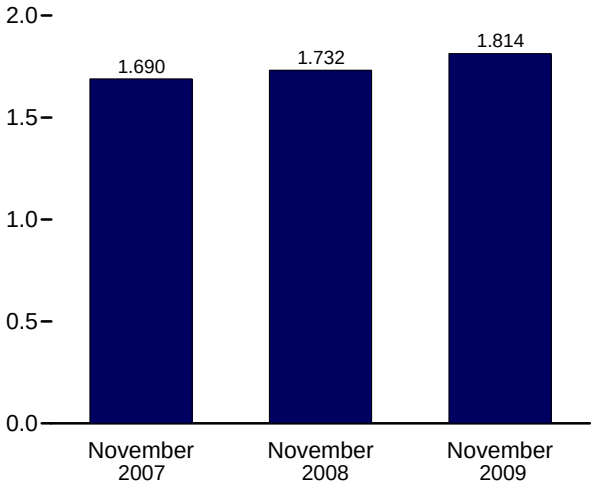
Overview, 1973-2008



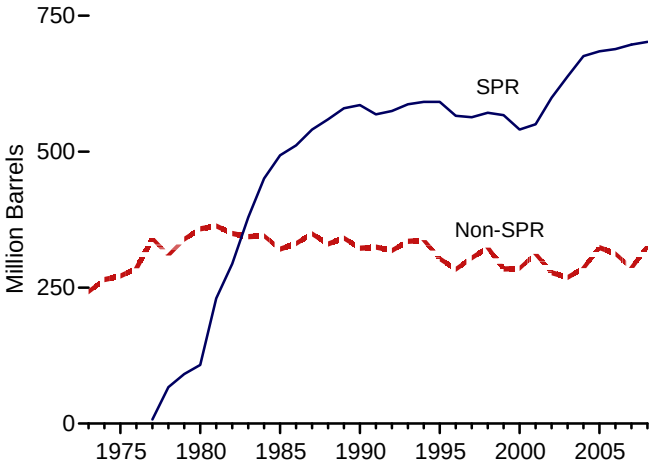
Overview, Monthly



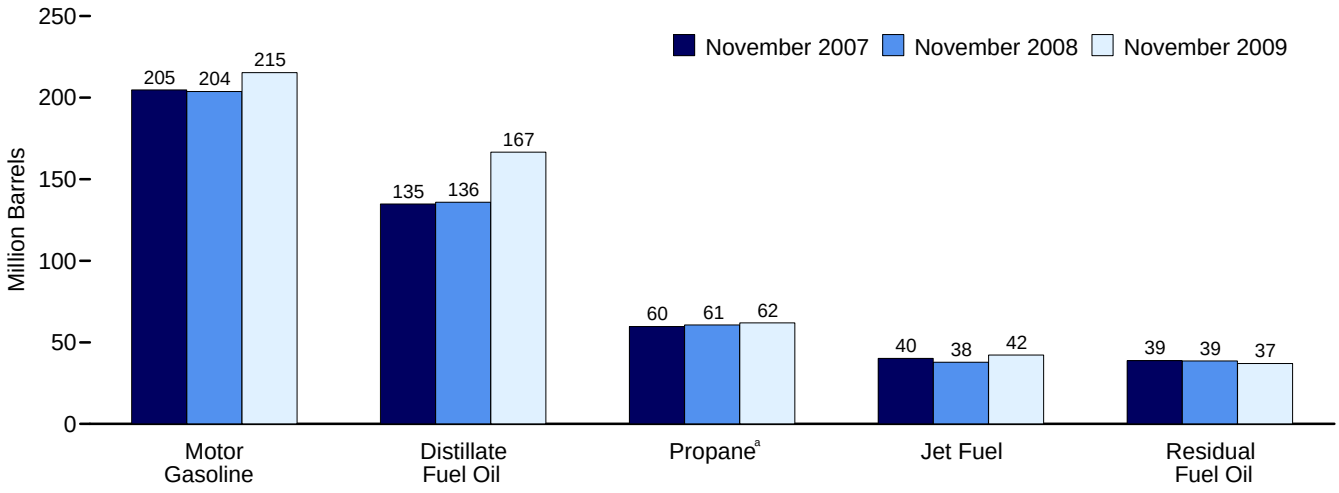
Total Stocks (Crude Oil and Petroleum Products)



SPR and Non-SPR Crude Oil Stocks, 1973-2008



Selected Products



[a] Includes propylene.
Notes: • SPR= Strategic Petroleum Reserve. • Stocks are at end of period.
Web Page: http://www.eia.doe.gov/emeu/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 January	689	325	1,013	140	39	47	91	227	42	171	1,724
February	689	318	1,006	124	39	30	70	215	36	176	1,666
March	689	331	1,019	120	40	27	70	202	40	186	1,678
April	689	342	1,031	121	40	30	77	197	38	189	1,694
May	690	353	1,044	125	41	37	91	203	37	183	1,724
June	690	354	1,044	124	41	44	103	206	36	176	1,730
July	690	337	1,027	130	42	50	112	205	40	177	1,733
August	690	321	1,011	135	41	55	122	194	36	177	1,716
September	693	311	1,004	134	43	58	126	200	37	173	1,717
October	694	307	1,001	134	42	61	124	199	39	169	1,708
November	696	300	995	135	40	60	112	205	39	164	1,690
December	**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	353	1,057	143	41	46	96	218	35	173	1,762
February	706	355	1,060	146	43	40	89	216	39	177	1,770
March	713	366	1,079	144	42	40	90	217	39	185	1,795
April	719	370	1,089	148	43	44	99	213	35	185	1,812
May	722	362	1,084	155	43	55	116	206	39	187	1,829
June	724	349	1,073	160	44	65	132	214	37	179	1,839
July	724	347	1,071	161	46	70	143	210	35	175	1,842
August	724	337	1,061	165	45	71	152	206	33	166	1,828
September	725	R 335	R 1,060	172	46	R 75	R 156	R 212	35	R 164	R 1,845
October	E 725	E 336	E 1,061	E 167	E 45	E 69	RF 150	E 209	E 35	RE 146	E 1,815
November	E 726	E 338	E 1,064	E 167	E 42	E 62	F 138	E 215	E 37	E 151	E 1,814

[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.

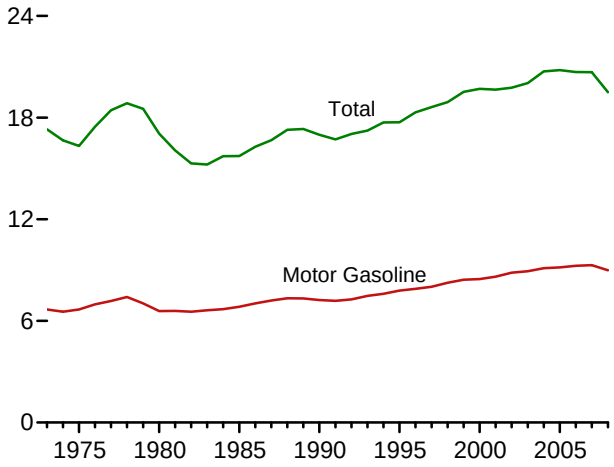
Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

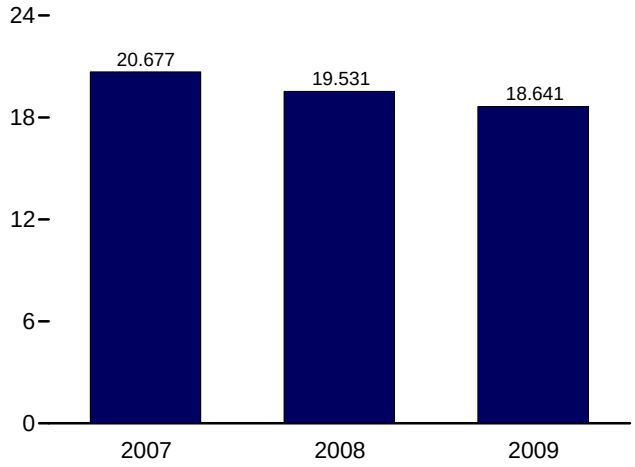
Sources: • **1973-1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976-1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981-2008:** *Petroleum Supply Annual,* annual reports. • **2009:** 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)

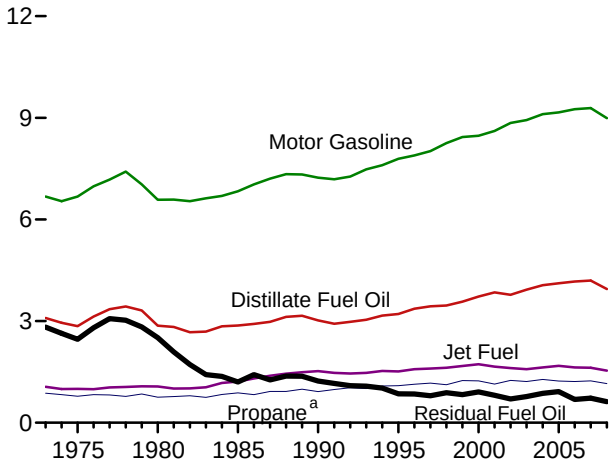
Total and Motor Gasoline, 1973-2008



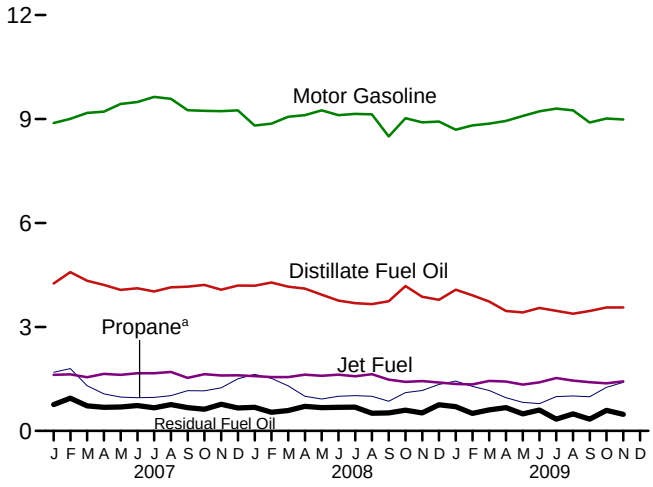
Total, January-November



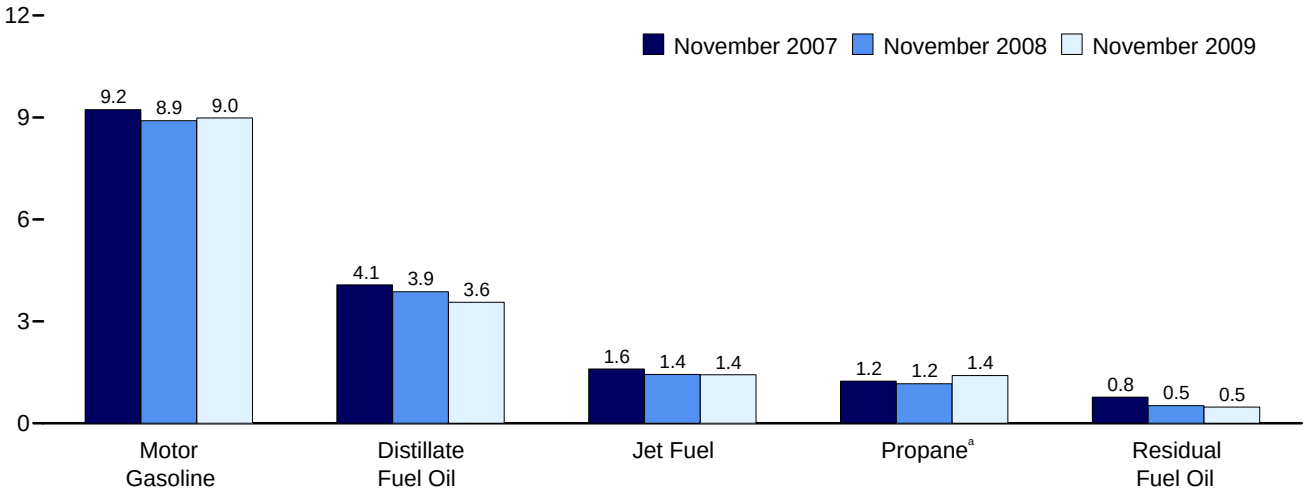
Selected Products,1973-2008



Selected Products, Monthly



Selected Products



[a] Includes propylene.
Note: SPR= Strategic Petroleum Reserve.

Web Page: http://www.eia.doe.gov/emeu/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 January	353	16	4,256	1,616	52	1,694	2,468	151	8,886	435	759	1,574	20,567
February	289	13	4,582	1,634	48	1,798	2,575	128	9,006	430	946	1,658	21,309
March	370	14	4,334	1,551	35	1,305	2,113	152	9,178	561	723	1,506	20,536
April	455	20	4,214	1,647	27	1,070	1,998	144	9,215	437	682	1,696	20,536
May	507	17	4,068	1,618	14	978	1,846	157	9,434	551	690	1,717	20,620
June	637	22	4,114	1,663	15	958	1,924	134	9,491	480	733	1,509	20,723
July	651	17	4,026	1,664	7	969	1,912	147	9,640	420	669	1,593	20,747
August	647	21	4,146	1,703	28	1,018	1,912	139	9,582	539	761	1,548	21,025
September	606	17	4,161	1,533	32	1,162	1,925	127	9,254	546	674	1,541	20,415
October	595	21	4,213	1,637	28	1,157	1,984	150	9,236	437	626	1,549	20,476
November	458	15	4,074	1,600	46	1,243	2,109	138	9,229	464	768	1,633	20,535
December	348	11	4,193	1,603	58	1,504	2,287	128	9,251	573	665	1,603	20,719
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	230	17	4,075	1,357	36	1,438	2,166	111	8,690	430	700	1,313	19,125
February	271	7	3,915	1,341	39	1,286	2,028	99	8,816	422	506	1,263	18,706
March	337	11	3,732	1,441	19	1,165	2,019	112	8,866	420	605	1,110	18,672
April	262	18	3,460	1,424	14	958	1,872	131	8,948	500	673	1,169	18,471
May	394	13	3,421	1,338	14	823	1,751	102	9,087	503	490	1,061	18,176
June	524	18	3,550	1,403	11	785	1,662	137	9,224	536	600	1,097	18,762
July	412	19	3,464	1,527	1	989	1,858	114	9,300	371	338	1,368	18,771
August	534	16	3,383	1,450	6	1,011	1,889	141	9,250	409	493	1,160	18,732
September	R 464	19	R 3,459	R 1,404	R -1	R 987	R 1,875	R 123	R 8,897	R 472	R 341	R 1,309	R 18,362
October	RF 471	F 14	E 3,560	E 1,375	RF 16	E 1,257	RF 1,903	RF 121	E 9,016	RF 483	E 593	RE 1,232	E 18,783
November	F 328	F 12	E 3,563	E 1,428	F 36	E 1,403	F 1,969	F 100	E 8,987	F 444	E 480	E 1,137	E 18,484
11-Month Average	E **385**	E **15**	E **3,597**	E **1,409**	E **17**	E **1,099**	E **1,908**	E **118**	E **9,009**	E **453**	E **529**	E **1,202**	E **18,641**
2008 11-Month Average	**430**	**15**	**3,960**	**1,552**	**11**	**1,137**	**1,956**	**134**	**8,995**	**460**	**610**	**1,407**	**19,531**
2007 11-Month Average	**508**	**18**	**4,196**	**1,624**	**30**	**1,210**	**2,066**	**143**	**9,289**	**482**	**728**	**1,593**	**20,677**

[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 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-c and 3.8a-c. • 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.

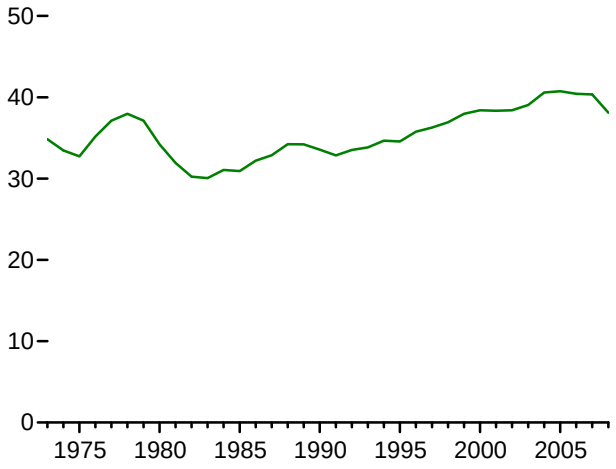
Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html.

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. • **1981-2008:** EIA, *Petroleum Supply Annual,* annual reports. • **2009:** 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.

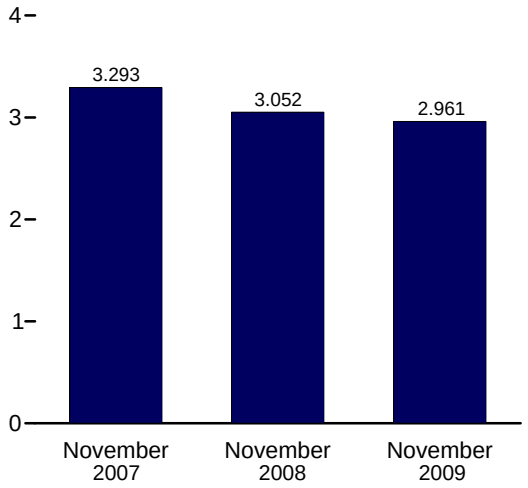
Figure 3.6 Heat Content of Petroleum Products Supplied by Type

(Quadrillion Btu)

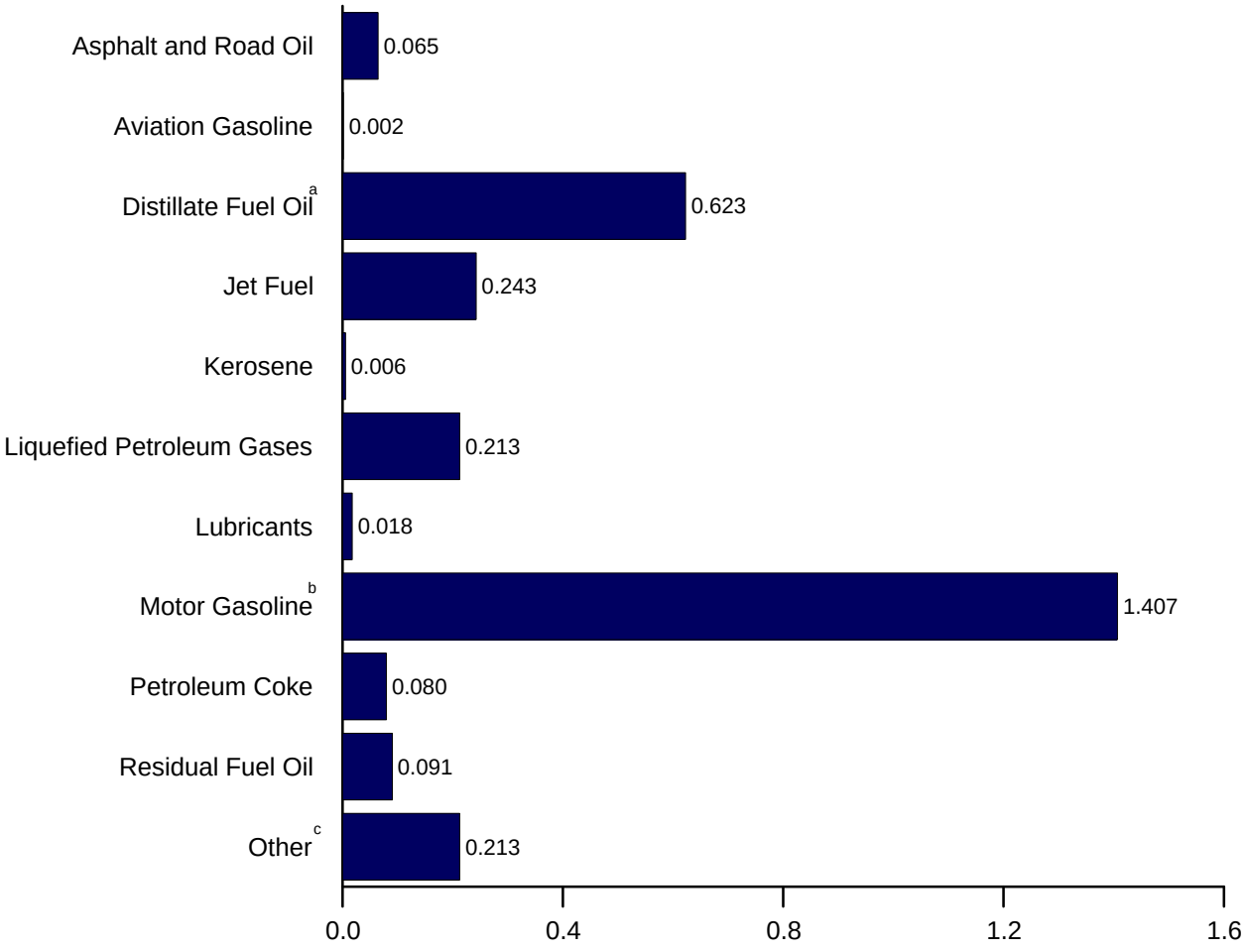
Total, 1973-2008



Total



By Product, November 2009



[a] Includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
[b] Includes ethanol blended into motor gasoline.
[c] All petroleum products not shown above.
Web Page: http://www.eia.doe.gov/emeu/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**	**2,117**	**34,840**
1975 Total	**1,014**	**71**	**6,061**	**2,047**	**329**	**1,097**	**1,807**	**304**	**12,798**	**542**	**5,649**	**2,107**	**32,731**
1980 Total	**962**	**64**	**6,110**	**2,190**	**329**	**1,059**	**1,976**	**354**	**12,648**	**522**	**5,772**	**3,275**	**34,202**
1985 Total	**1,029**	**50**	**6,098**	**2,497**	**236**	**1,236**	**2,103**	**322**	**13,098**	**582**	**2,759**	**2,149**	**30,922**
1990 Total	**1,170**	**45**	**6,422**	**3,129**	**88**	**1,284**	**2,059**	**362**	**13,872**	**745**	**2,820**	**2,840**	**33,553**
1995 Total	**1,178**	**40**	**6,818**	**3,132**	**112**	**1,534**	**2,512**	**346**	**14,825**	**802**	**1,955**	**2,834**	**34,553**
1996 Total	**1,176**	**37**	**7,175**	**3,274**	**128**	**1,594**	**2,660**	**335**	**15,064**	**837**	**1,952**	**3,119**	**35,757**
1997 Total	**1,224**	**40**	**7,304**	**3,308**	**136**	**1,638**	**2,690**	**354**	**15,254**	**829**	**1,828**	**3,298**	**36,266**
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**	**3,128**	**37,960**
2000 Total	**1,276**	**36**	**7,935**	**3,580**	**140**	**1,734**	**2,945**	**369**	**16,155**	**895**	**2,091**	**2,981**	**38,404**
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**	**3,041**	**38,401**
2003 Total	**1,220**	**30**	**8,349**	**3,265**	**113**	**1,701**	**2,747**	**309**	**16,981**	**1,000**	**1,772**	**3,260**	**39,047**
2004 Total	**1,304**	**31**	**8,652**	**3,383**	**133**	**1,791**	**2,824**	**313**	**17,379**	**1,156**	**1,990**	**3,429**	**40,594**
2005 Total	**1,323**	**35**	**8,755**	**3,475**	**144**	**1,721**	**2,682**	**312**	**17,444**	**1,133**	**2,111**	**3,320**	**40,735**
2006 Total	**1,261**	**33**	**8,864**	**3,379**	**111**	**1,701**	**2,701**	**303**	**17,622**	**1,148**	**1,581**	**3,416**	**40,420**
2007 January	73	3	769	284	9	202	275	28	1,438	81	148	302	3,409
February	54	2	747	259	8	193	259	22	1,316	73	167	284	3,190
March	76	2	783	273	6	155	235	29	1,485	105	141	270	3,403
April	91	3	736	280	5	123	215	26	1,443	79	129	287	3,294
May	104	3	735	284	2	116	205	30	1,526	103	135	290	3,417
June	127	3	719	283	3	110	207	24	1,486	87	138	246	3,324
July	134	3	727	293	1	115	213	28	1,560	78	130	272	3,438
August	133	3	749	299	5	121	213	26	1,550	101	148	257	3,484
September	121	3	727	261	5	134	207	23	1,449	99	127	253	3,274
October	122	3	761	288	5	138	221	28	1,494	82	122	267	3,393
November	91	2	712	272	8	143	227	25	1,445	84	145	282	3,293
December	72	2	757	282	10	179	255	24	1,497	107	130	299	3,434
Total	**1,197**	**32**	**8,921**	**3,358**	**67**	**1,729**	**2,733**	**313**	**17,689**	**1,077**	**1,659**	**3,308**	**40,353**
2008 January	73	2	757	278	2	194	268	26	1,425	93	133	294	3,351
February	58	2	723	255	5	168	242	23	1,342	74	98	278	3,101
March	61	2	751	273	4	155	242	27	1,467	88	115	252	3,282
April	72	3	717	276	(s)	115	201	26	1,426	87	133	232	3,174
May	95	3	710	279	1	109	206	27	1,496	85	131	243	3,277
June	114	2	658	276	1	115	207	25	1,426	81	129	233	3,152
July	114	2	666	277	(s)	121	216	26	1,480	101	133	221	3,237
August	106	3	661	288	(s)	119	214	30	1,478	88	100	223	3,190
September	106	2	654	251	2	99	154	18	1,330	64	98	178	2,857
October	96	2	755	249	2	132	204	27	1,460	87	116	262	3,260
November	63	2	677	245	3	134	205	17	1,394	79	98	269	3,052
December	56	2	683	245	8	160	215	20	1,444	94	147	254	3,168
Total	**1,012**	**28**	**8,411**	**3,193**	**30**	**1,620**	**2,574**	**291**	**17,168**	**1,022**	**1,432**	**2,940**	**38,100**
2009 January	47	3	736	239	6	171	242	21	1,406	80	136	250	3,165
February	50	1	638	213	6	138	204	17	1,288	71	89	218	2,796
March	69	2	674	253	3	139	225	21	1,434	78	118	212	3,090
April	52	3	605	242	2	110	202	24	1,401	90	127	210	2,958
May	81	2	618	235	2	98	195	19	1,470	94	96	196	3,008
June	104	3	620	239	2	90	180	25	1,444	97	113	179	3,005
July	85	3	626	268	(s)	118	207	21	1,504	69	66	257	3,107
August	110	2	611	255	1	120	211	27	1,496	76	96	215	3,100
September	R 92	3	R 604	R 239	(s)	R 114	R 203	R 22	R 1,393	R 85	R 64	R 236	R 2,941
October	RF 97	F 2	E 643	E 242	RF 3	E 149	RF 212	F 23	E 1,458	RF 90	E 116	RE 223	E 3,109
November	F 65	F 2	E 623	E 243	F 6	E 161	F 213	F 18	E 1,407	F 80	E 91	E 213	E 2,961
11-Month Total	**E 854**	**E 25**	**E 6,997**	**E 2,668**	**E 33**	**E 1,408**	**E 2,294**	**E 238**	**E 15,701**	**E 912**	**E 1,112**	**E 2,408**	**E 33,242**
2008 11-Month Total	**956**	**26**	**7,728**	**2,948**	**21**	**1,461**	**2,359**	**271**	**15,723**	**928**	**1,285**	**2,686**	**34,932**
2007 11-Month Total	**1,125**	**30**	**8,164**	**3,076**	**56**	**1,550**	**2,478**	**289**	**16,192**	**970**	**1,529**	**3,009**	**36,920**

[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 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. (s)=Less than +0.5 trillion Btu and greater than 0.5 trillion Btu. F=Forecast.

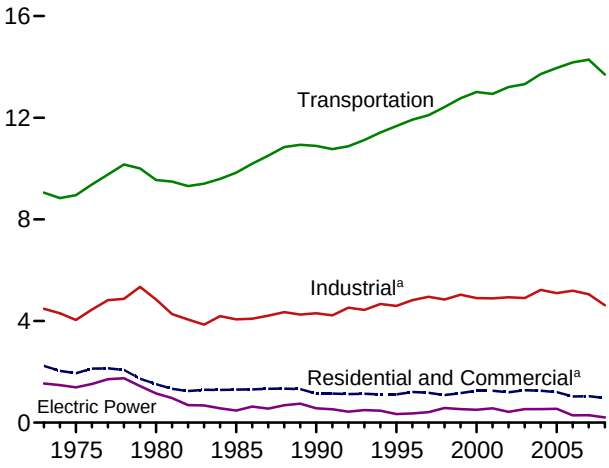
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due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

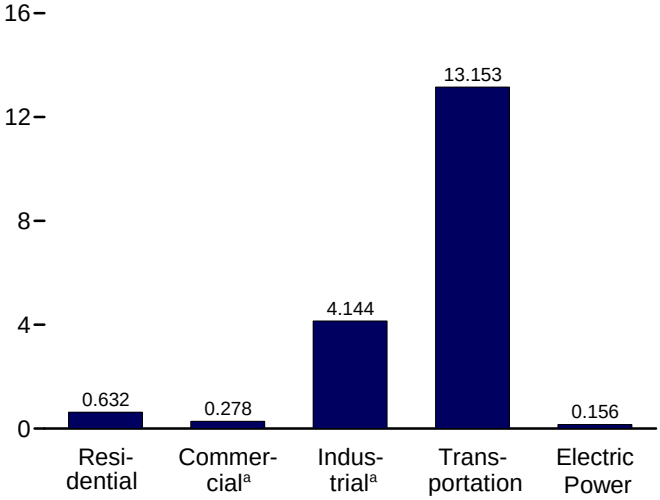
Sources: Tables 3.5, A1, and A3.

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

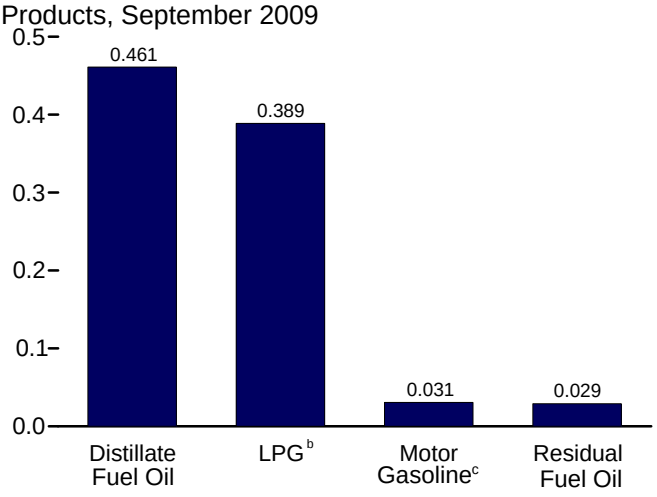
By Sector, 1973-2008



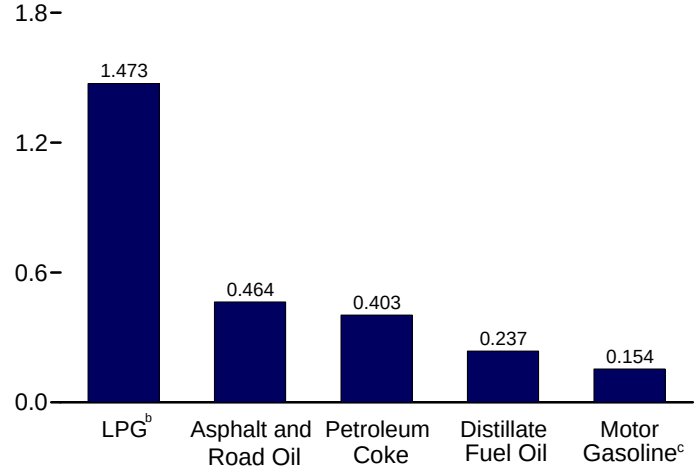
By Sector, September 2009



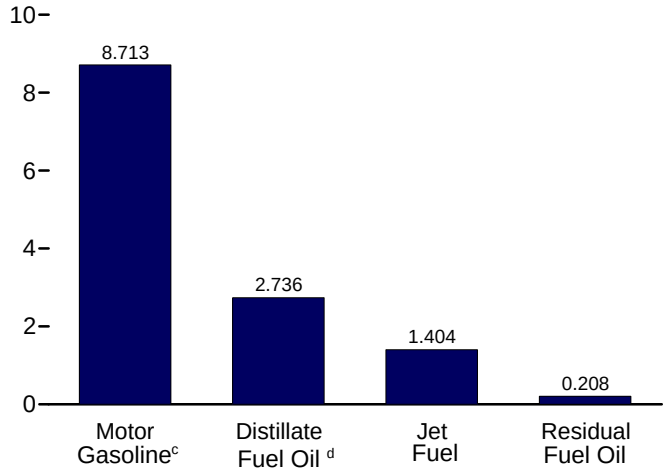
Residential and Commercial Sectors[a], Selected Products, September 2009



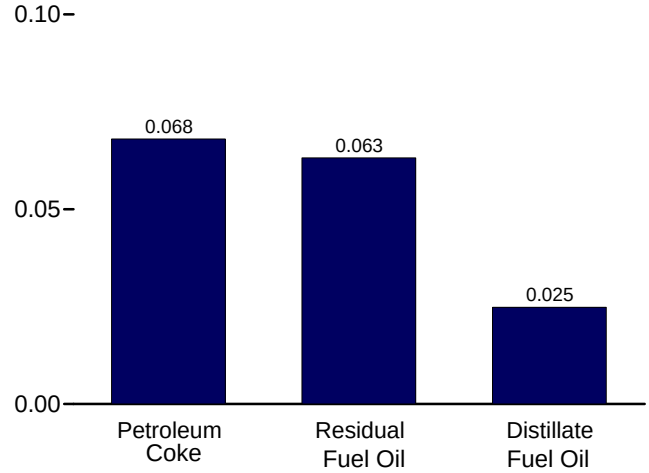
Industrial Sector[a], Selected Products, September 2009



Transportation Sector, Selected Products, September 2009



Electric Power Sector, September 2009



[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.
[b] Liquefied petroleum gases.
[c] Includes ethanol blended into motor gasoline.
[d] Includes renewable diesel fuel (including biodiesel) blended into distillate fuel oil.
Web Page: http://www.eia.doe.gov/emeu/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**	**435**	**1,487**	**303**	**31**	**77**	**45**	**NA**	**290**	**746**
1975 Average	**850**	**78**	**389**	**1,316**	**276**	**24**	**69**	**46**	**NA**	**214**	**629**
1980 Average	**617**	**51**	**242**	**910**	**243**	**20**	**43**	**56**	**NA**	**245**	**606**
1985 Average	**514**	**77**	**249**	**839**	**297**	**16**	**44**	**50**	**NA**	**99**	**506**
1990 Average	**460**	**31**	**276**	**767**	**252**	**6**	**49**	**58**	**0**	**100**	**465**
1995 Average	**426**	**36**	**306**	**767**	**225**	**11**	**54**	**10**	**(s)**	**62**	**361**
1996 Average	**434**	**43**	**358**	**835**	**227**	**10**	**63**	**14**	**(s)**	**60**	**373**
1997 Average	**411**	**45**	**349**	**805**	**209**	**12**	**62**	**22**	**(s)**	**48**	**353**
1998 Average	**363**	**52**	**329**	**744**	**202**	**15**	**58**	**20**	**(s)**	**37**	**332**
1999 Average	**389**	**54**	**404**	**847**	**206**	**13**	**71**	**15**	**(s)**	**32**	**338**
2000 Average	**424**	**46**	**427**	**897**	**230**	**14**	**75**	**23**	**(s)**	**40**	**383**
2001 Average	**427**	**46**	**406**	**879**	**239**	**15**	**72**	**20**	**(s)**	**30**	**376**
2002 Average	**404**	**29**	**412**	**845**	**209**	**8**	**73**	**24**	**(s)**	**35**	**348**
2003 Average	**425**	**34**	**426**	**885**	**226**	**9**	**75**	**32**	**(s)**	**48**	**391**
2004 Average	**433**	**41**	**401**	**875**	**221**	**10**	**71**	**25**	**(s)**	**53**	**380**
2005 Average	**402**	**40**	**391**	**833**	**210**	**10**	**69**	**24**	**(s)**	**50**	**365**
2006 Average	**335**	**32**	**345**	**712**	**189**	**7**	**61**	**26**	**(s)**	**33**	**315**
2007 January	424	34	435	893	224	7	77	31	(s)	41	380
February	514	31	454	999	272	7	80	31	(s)	49	439
March	451	23	372	847	239	5	66	32	(s)	43	385
April	263	18	352	633	139	4	62	32	(s)	25	262
May	193	9	325	527	102	2	57	33	0	19	212
June	224	10	339	573	119	2	60	33	0	22	235
July	219	4	337	560	116	1	59	33	0	21	231
August	246	19	337	601	130	4	59	33	(s)	24	250
September	262	21	339	622	139	4	60	32	(s)	25	260
October	299	18	350	667	158	4	62	32	(s)	29	285
November	408	30	372	810	216	6	66	32	(s)	39	359
December	603	38	403	1,044	319	8	71	32	(s)	58	488
Average	**342**	**21**	**367**	**730**	**181**	**4**	**65**	**32**	**(s)**	**33**	**315**
2008 January	532	9	423	964	281	2	75	30	(s)	51	440
February	546	19	409	974	289	4	72	31	(s)	52	448
March	388	17	382	786	205	3	67	31	(s)	37	345
April	302	1	328	631	160	(s)	58	32	(s)	29	279
May	214	4	325	543	113	1	57	32	0	21	224
June	235	3	337	576	125	1	60	32	0	23	239
July	222	-1	342	563	118	(s)	60	32	0	21	231
August	200	2	337	539	106	(s)	60	32	0	19	216
September	215	8	252	475	114	2	44	29	(s)	21	210
October	241	6	323	570	127	1	57	31	(s)	23	240
November	301	13	334	648	159	3	59	31	(s)	29	281
December	463	31	340	834	245	6	60	31	(s)	44	387
Average	**321**	**9**	**344**	**675**	**170**	**2**	**61**	**31**	**(s)**	**31**	**295**
2009 January	516	24	382	921	273	5	67	30	(s)	49	425
February	484	26	357	867	256	5	63	30	(s)	46	401
March	415	13	356	783	219	3	63	31	(s)	40	355
April	327	9	330	665	173	2	58	31	0	31	295
May	223	9	309	541	118	2	54	31	0	21	227
June	209	7	293	509	111	2	52	32	0	20	216
July	237	1	327	565	125	(s)	58	32	0	23	238
August	245	4	333	581	129	1	59	32	(s)	23	245
September	302	(s)	330	632	159	(s)	58	31	(s)	29	278
9-Month Average	**327**	**10**	**335**	**673**	**173**	**2**	**59**	**31**	**(s)**	**31**	**297**
2008 9-Month Average	**316**	**7**	**348**	**671**	**167**	**1**	**61**	**31**	**(s)**	**30**	**292**
2007 9-Month Average	**309**	**19**	**365**	**693**	**164**	**4**	**64**	**32**	**(s)**	**30**	**294**

[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 ethanol blended into motor gasoline.

NA=Not available. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

Notes: • Data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • 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.doe.gov/emeu/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**	**1,647**	**73**	**195**	**423**	**108**	**1,657**	**5,223**
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 January	353	777	10	1,938	78	154	345	98	1,574	5,326
February	289	790	10	2,022	66	156	351	116	1,658	5,457
March	370	663	7	1,659	78	159	489	95	1,506	5,026
April	455	675	5	1,569	74	159	364	87	1,696	5,085
May	507	607	3	1,449	81	163	475	82	1,717	5,084
June	637	538	3	1,511	69	164	389	81	1,509	4,902
July	651	469	1	1,501	76	167	342	71	1,593	4,872
August	647	496	6	1,501	72	166	457	76	1,548	4,968
September	606	597	6	1,511	66	160	467	72	1,541	5,027
October	595	602	6	1,558	77	160	369	67	1,549	4,983
November	458	509	9	1,656	71	160	397	90	1,633	4,984
December	348	434	12	1,796	66	160	493	78	1,603	4,989
Average	**494**	**595**	**6**	**1,637**	**73**	**161**	**412**	**84**	**1,593**	**5,056**
2008 January	354	712	3	1,884	71	152	421	89	1,564	5,250
February	301	738	6	1,822	67	153	347	69	1,570	5,074
March	295	711	5	1,701	74	157	409	78	1,345	4,774
April	360	668	(s)	1,460	75	158	414	92	1,403	4,630
May	461	602	1	1,449	73	160	394	87	1,422	4,648
June	570	411	1	1,503	71	158	372	82	1,405	4,572
July	556	366	(s)	1,522	71	158	471	85	1,274	4,503
August	517	362	1	1,504	81	158	399	64	1,249	4,334
September	531	484	2	1,122	50	147	283	63	1,167	3,849
October	465	739	2	1,439	75	156	393	77	1,547	4,894
November	314	578	4	1,491	47	154	372	67	1,540	4,566
December	271	401	9	1,516	53	155	438	99	1,414	4,357
Average	**417**	**564**	**3**	**1,534**	**67**	**156**	**393**	**79**	**1,408**	**4,621**
2009 January	230	653	7	1,701	57	150	364	87	1,313	4,562
February	271	529	8	1,592	51	153	355	67	1,263	4,288
March	337	421	4	1,585	58	153	344	77	1,110	4,089
April	262	258	3	1,470	67	155	431	88	1,169	3,904
May	394	283	3	1,375	53	157	436	68	1,061	3,831
June	524	315	2	1,305	71	160	466	75	1,097	4,015
July	412	219	(s)	1,459	59	161	302	39	1,368	4,018
August	534	151	1	1,484	73	160	341	59	1,160	3,963
September	464	237	(s)	1,473	63	154	403	41	1,309	4,144
9-Month Average	**382**	**340**	**3**	**1,493**	**61**	**156**	**382**	**67**	**1,205**	**4,089**
2008 9-Month Average	**439**	**561**	**2**	**1,552**	**70**	**156**	**391**	**79**	**1,377**	**4,626**
2007 9-Month Average	**503**	**622**	**6**	**1,626**	**73**	**161**	**409**	**86**	**1,593**	**5,080**

[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 ethanol blended into motor gasoline.

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

(s)=Less than +500 barrels per day and greater than -500 barrels per day.

Notes: • Data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • 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.doe.gov/emeu/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**	**8,885**	**321**	**13,718**	**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 January	16	2,785	1,616	19	74	8,701	439	13,650	45	90	182	317
February	13	2,917	1,634	19	62	8,819	441	13,906	89	79	339	507
March	14	2,941	1,551	16	74	8,987	418	14,000	40	72	167	279
April	20	3,105	1,647	15	70	9,024	406	14,286	32	73	165	269
May	17	3,134	1,618	14	76	9,238	447	14,546	32	77	143	252
June	22	3,193	1,663	14	65	9,294	446	14,698	40	91	184	316
July	17	3,184	1,664	14	72	9,439	399	14,789	38	78	179	295
August	21	3,220	1,703	14	68	9,383	416	14,826	54	81	244	380
September	17	3,131	1,533	14	62	9,062	416	14,234	32	78	161	271
October	21	3,118	1,637	15	73	9,044	383	14,291	36	68	147	250
November	15	2,910	1,600	16	67	9,038	567	14,212	31	66	72	169
December	11	2,800	1,603	17	62	9,059	424	13,975	38	80	105	223
Average	**17**	**3,037**	**1,622**	**16**	**69**	**9,093**	**433**	**14,287**	**42**	**78**	**173**	**293**
2008 January	13	2,613	1,581	18	67	8,627	438	13,356	54	79	104	237
February	12	2,668	1,553	17	64	8,682	329	13,325	41	78	89	207
March	16	2,830	1,552	16	70	8,878	400	13,761	27	64	73	165
April	17	2,947	1,622	14	71	8,923	499	14,094	28	67	87	182
May	19	2,974	1,590	14	69	9,059	476	14,202	27	63	90	180
June	16	2,946	1,623	14	67	8,921	420	14,008	46	79	158	283
July	16	2,950	1,574	15	67	8,960	453	14,035	32	67	125	224
August	18	2,966	1,639	14	76	8,945	323	13,980	26	71	105	203
September	16	2,899	1,478	11	47	8,321	305	13,076	29	69	131	229
October	12	3,052	1,417	14	71	8,837	422	13,825	22	73	75	170
November	15	2,809	1,440	14	44	8,719	339	13,380	25	66	86	177
December	14	2,634	1,395	15	50	8,742	491	13,341	40	64	119	223
Average	**15**	**2,858**	**1,539**	**15**	**64**	**8,803**	**409**	**13,701**	**33**	**70**	**103**	**207**
2009 January	17	2,573	1,357	16	54	8,509	375	12,901	61	66	189	316
February	7	2,608	1,341	15	48	8,633	310	12,962	38	67	83	188
March	11	2,638	1,441	15	55	8,682	424	13,265	39	76	64	179
April	18	2,677	1,424	14	64	8,762	498	13,456	25	69	56	150
May	13	2,764	1,338	13	50	8,899	329	13,406	33	67	72	172
June	18	2,883	1,403	12	67	9,033	425	13,841	32	69	80	181
July	19	2,854	1,527	14	55	9,107	193	13,768	29	69	83	181
August	16	2,827	1,450	14	69	9,058	313	13,746	31	68	98	196
September	19	2,736	1,404	14	60	8,713	208	13,153	25	68	63	156
9-Month Average	**15**	**2,730**	**1,410**	**14**	**58**	**8,824**	**341**	**13,392**	**35**	**69**	**88**	**191**
2008 9-Month Average	**16**	**2,867**	**1,579**	**15**	**67**	**8,815**	**405**	**13,763**	**34**	**71**	**107**	**212**
2007 9-Month Average	**18**	**3,069**	**1,625**	**16**	**69**	**9,108**	**425**	**14,330**	**44**	**80**	**195**	**319**

[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 ethanol blended into motor gasoline.

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

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

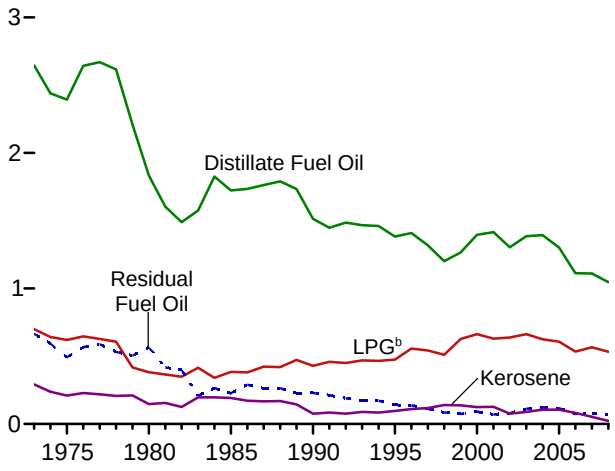
Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and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

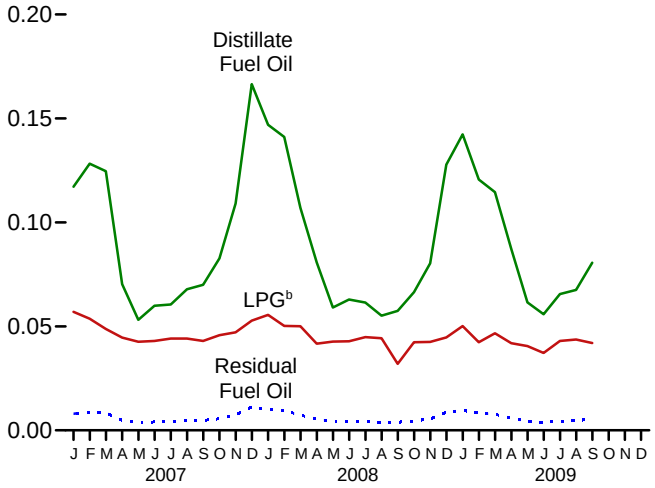
Sources: See end of section.

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

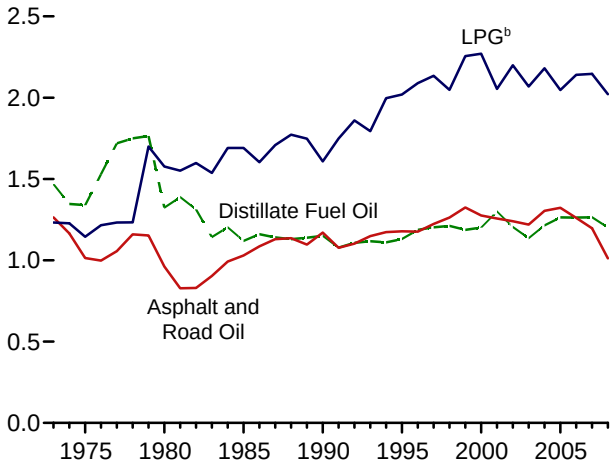
Residential and Commercial Sectors[a], 1973-2008



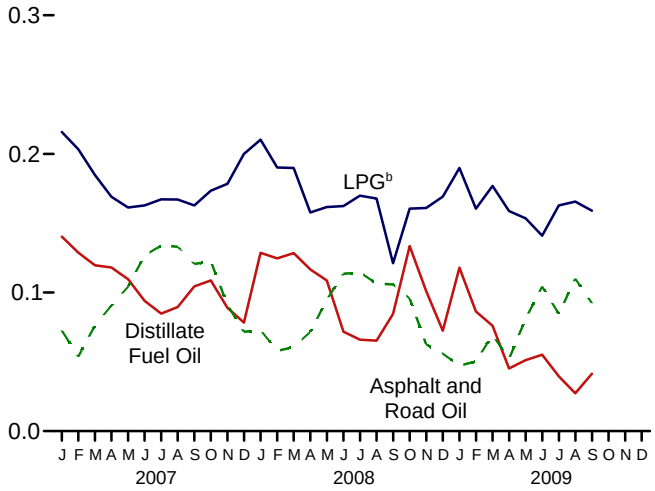
Residential and Commercial Sectors[a], Monthly



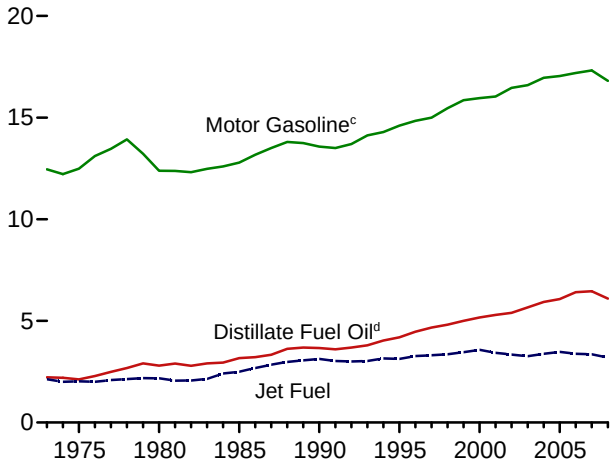
Industrial Sector[a], 1973-2008



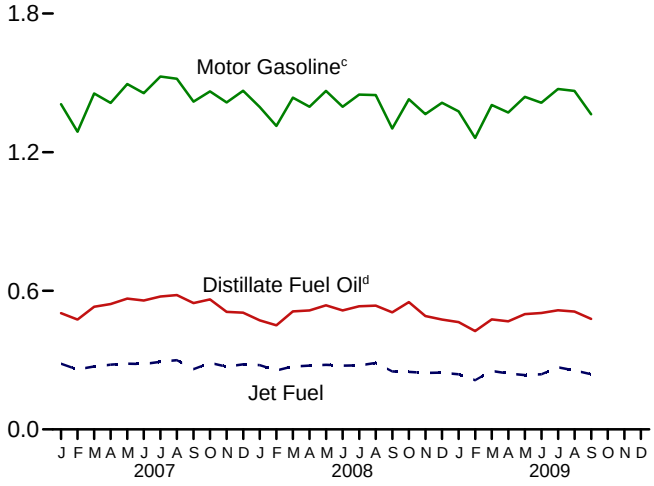
Industrial Sector[a], Monthly



Transportation Sector, 1973-2008



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 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.doe.gov/emeu/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**	**595**	**2,825**	**644**	**65**	**105**	**87**	**NA**	**665**	**1,565**
1975 Total	**1,807**	**161**	**528**	**2,495**	**587**	**49**	**93**	**89**	**NA**	**492**	**1,310**
1980 Total	**1,316**	**107**	**325**	**1,748**	**518**	**41**	**57**	**107**	**NA**	**565**	**1,287**
1985 Total	**1,092**	**159**	**327**	**1,578**	**631**	**33**	**58**	**96**	**NA**	**228**	**1,045**
1990 Total	**978**	**64**	**365**	**1,407**	**536**	**12**	**64**	**111**	**0**	**230**	**953**
1995 Total	**905**	**74**	**404**	**1,383**	**479**	**22**	**71**	**18**	**(s)**	**141**	**732**
1996 Total	**926**	**89**	**473**	**1,488**	**483**	**21**	**84**	**27**	**(s)**	**137**	**751**
1997 Total	**874**	**93**	**461**	**1,428**	**444**	**25**	**81**	**43**	**(s)**	**111**	**704**
1998 Total	**772**	**108**	**434**	**1,314**	**429**	**31**	**77**	**39**	**(s)**	**85**	**661**
1999 Total	**828**	**111**	**534**	**1,473**	**438**	**27**	**94**	**28**	**(s)**	**73**	**661**
2000 Total	**905**	**95**	**564**	**1,563**	**491**	**30**	**99**	**45**	**(s)**	**92**	**756**
2001 Total	**908**	**95**	**535**	**1,539**	**508**	**31**	**94**	**37**	**(s)**	**70**	**742**
2002 Total	**860**	**60**	**543**	**1,463**	**444**	**16**	**96**	**45**	**(s)**	**80**	**681**
2003 Total	**905**	**70**	**564**	**1,539**	**481**	**19**	**100**	**60**	**(s)**	**111**	**771**
2004 Total	**924**	**85**	**531**	**1,539**	**470**	**20**	**94**	**49**	**(s)**	**122**	**756**
2005 Total	**854**	**84**	**517**	**1,455**	**447**	**22**	**91**	**46**	**(s)**	**116**	**722**
2006 Total	**712**	**66**	**454**	**1,233**	**401**	**15**	**80**	**49**	**(s)**	**75**	**621**
2007 January	77	6	48	131	41	1	9	5	(s)	8	63
February	84	5	46	134	44	1	8	5	(s)	9	67
March	82	4	41	127	43	1	7	5	(s)	8	65
April	46	3	38	87	24	1	7	5	(s)	5	41
May	35	2	36	73	18	(s)	6	5	0	4	34
June	39	2	37	77	21	(s)	6	5	0	4	37
July	40	1	38	78	21	(s)	7	5	0	4	37
August	44	3	37	85	23	1	7	5	(s)	5	41
September	46	4	37	86	24	1	6	5	(s)	5	41
October	54	3	39	96	29	1	7	5	(s)	6	47
November	71	5	40	116	38	1	7	5	(s)	7	58
December	109	7	45	160	58	1	8	5	(s)	11	83
Total	**726**	**44**	**481**	**1,251**	**384**	**9**	**85**	**61**	**(s)**	**75**	**615**
2008 January	96	2	47	145	51	(s)	8	5	(s)	10	74
February	92	3	43	138	49	1	8	5	(s)	10	71
March	70	3	43	116	37	1	8	5	(s)	7	58
April	53	(s)	35	88	28	(s)	6	5	(s)	5	45
May	39	1	36	76	20	(s)	6	5	0	4	36
June	41	1	36	78	22	(s)	6	5	0	4	37
July	40	(s)	38	78	21	(s)	7	5	0	4	37
August	36	(s)	38	74	19	(s)	7	5	0	4	35
September	38	1	27	66	20	(s)	5	5	(s)	4	33
October	43	1	36	81	23	(s)	6	5	(s)	5	39
November	53	2	36	91	28	(s)	6	5	(s)	5	45
December	84	5	38	127	44	1	7	5	(s)	9	66
Total	**684**	**19**	**454**	**1,158**	**362**	**4**	**80**	**59**	**(s)**	**71**	**577**
2009 January	93	4	43	140	49	1	8	5	(s)	10	72
February	79	4	36	119	42	1	6	4	(s)	8	62
March	75	2	40	117	40	(s)	7	5	(s)	8	60
April	57	2	36	94	30	(s)	6	5	0	6	48
May	40	2	34	76	21	(s)	6	5	0	4	37
June	37	1	32	69	19	(s)	6	5	0	4	34
July	43	(s)	37	79	23	(s)	6	5	0	4	39
August	44	1	37	82	23	(s)	7	5	(s)	5	40
September	53	(s)	36	88	28	(s)	6	5	(s)	5	44
9-Month Total	**521**	**16**	**329**	**865**	**275**	**3**	**58**	**44**	**(s)**	**54**	**435**
2008 9-Month Total	**505**	**11**	**343**	**859**	**267**	**2**	**61**	**45**	**(s)**	**52**	**427**
2007 9-Month Total	**492**	**29**	**358**	**878**	**260**	**6**	**63**	**46**	**(s)**	**51**	**426**

[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 ethanol blended into motor gasoline.

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

Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • 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.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

Sources: Tables 3.7a, A1, and A3.

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**	**1,233**	**195**	**255**	**558**	**1,858**	**2,117**	**9,104**
1975 Total	**1,014**	**1,339**	**119**	**1,144**	**149**	**223**	**540**	**1,509**	**2,107**	**8,146**
1980 Total	**962**	**1,324**	**181**	**1,577**	**182**	**158**	**516**	**1,349**	**3,275**	**9,525**
1985 Total	**1,029**	**1,119**	**44**	**1,690**	**166**	**218**	**575**	**748**	**2,149**	**7,738**
1990 Total	**1,170**	**1,150**	**12**	**1,608**	**186**	**185**	**714**	**411**	**2,840**	**8,278**
1995 Total	**1,178**	**1,131**	**15**	**2,019**	**178**	**200**	**721**	**337**	**2,834**	**8,614**
1996 Total	**1,176**	**1,187**	**18**	**2,089**	**173**	**200**	**757**	**335**	**3,119**	**9,053**
1997 Total	**1,224**	**1,203**	**19**	**2,134**	**182**	**212**	**727**	**291**	**3,298**	**9,290**
1998 Total	**1,263**	**1,211**	**22**	**2,048**	**191**	**199**	**858**	**230**	**3,093**	**9,116**
1999 Total	**1,324**	**1,187**	**13**	**2,256**	**193**	**152**	**936**	**207**	**3,128**	**9,396**
2000 Total	**1,276**	**1,200**	**16**	**2,271**	**190**	**150**	**796**	**241**	**2,981**	**9,120**
2001 Total	**1,257**	**1,300**	**23**	**2,054**	**174**	**295**	**858**	**203**	**3,056**	**9,220**
2002 Total	**1,240**	**1,204**	**14**	**2,200**	**172**	**309**	**842**	**190**	**3,041**	**9,212**
2003 Total	**1,220**	**1,136**	**24**	**2,068**	**159**	**324**	**825**	**220**	**3,260**	**9,237**
2004 Total	**1,304**	**1,214**	**28**	**2,181**	**161**	**372**	**934**	**249**	**3,429**	**9,872**
2005 Total	**1,323**	**1,264**	**39**	**2,047**	**160**	**356**	**889**	**281**	**3,320**	**9,680**
2006 Total	**1,261**	**1,263**	**30**	**2,140**	**156**	**376**	**934**	**239**	**3,416**	**9,815**
2007 January	73	140	2	216	15	25	64	19	302	855
February	54	129	2	203	11	23	59	20	284	785
March	76	120	1	185	15	26	91	19	270	801
April	91	118	1	169	13	25	66	16	287	786
May	104	110	(s)	161	15	26	89	16	290	812
June	127	94	1	163	13	26	70	15	246	754
July	134	85	(s)	167	14	27	64	14	272	777
August	133	89	1	167	13	27	85	15	257	788
September	121	104	1	163	12	25	84	14	253	777
October	122	109	1	173	15	26	69	13	267	795
November	91	89	2	178	13	25	72	17	282	769
December	72	78	2	200	12	26	92	15	299	797
Total	**1,197**	**1,265**	**13**	**2,146**	**161**	**306**	**906**	**193**	**3,308**	**9,496**
2008 January	73	129	(s)	210	13	25	79	17	294	840
February	58	125	1	190	12	23	61	13	278	761
March	61	128	1	190	14	25	76	15	252	763
April	72	117	(s)	158	14	25	75	17	232	708
May	95	109	(s)	162	14	26	73	17	243	738
June	114	72	(s)	162	13	25	67	16	233	701
July	114	66	(s)	170	13	26	88	17	221	715
August	106	65	(s)	168	15	26	75	13	223	690
September	106	85	(s)	121	9	23	51	12	178	585
October	96	133	(s)	161	14	25	73	15	262	780
November	63	101	1	161	9	24	67	13	269	707
December	56	72	2	169	10	25	82	19	254	689
Total	**1,012**	**1,202**	**6**	**2,021**	**150**	**297**	**867**	**183**	**2,940**	**8,677**
2009 January	47	118	1	190	11	24	68	17	250	726
February	50	86	1	160	9	22	60	12	218	619
March	69	76	1	177	11	25	64	15	212	650
April	52	45	(s)	159	12	24	78	17	210	598
May	81	51	1	153	10	25	81	13	196	612
June	104	55	(s)	141	13	25	84	14	179	616
July	85	40	(s)	163	11	26	56	8	257	645
August	110	27	(s)	166	14	26	64	12	215	633
September	92	41	(s)	159	12	24	73	8	236	645
9-Month Total	**691**	**540**	**5**	**1,468**	**101**	**222**	**629**	**115**	**1,972**	**5,742**
2008 9-Month Total	**798**	**895**	**3**	**1,531**	**117**	**223**	**645**	**136**	**2,155**	**6,502**
2007 9-Month Total	**912**	**989**	**9**	**1,594**	**121**	**229**	**673**	**148**	**2,460**	**7,135**

[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 ethanol blended into motor gasoline.

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

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

Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • 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.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

Sources: Tables 3.7b, A1, and A3.

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**	**48**	**163**	**12,455**	**727**	**17,831**	**273**	**15**	**3,226**	**3,515**
1975 Total	**71**	**2,121**	**2,029**	**42**	**155**	**12,485**	**711**	**17,614**	**226**	**2**	**2,937**	**3,166**
1980 Total	**64**	**2,795**	**2,179**	**17**	**172**	**12,383**	**1,398**	**19,009**	**169**	**5**	**2,459**	**2,634**
1985 Total	**50**	**3,170**	**2,497**	**28**	**156**	**12,784**	**786**	**19,471**	**85**	**7**	**998**	**1,090**
1990 Total	**45**	**3,661**	**3,129**	**22**	**176**	**13,575**	**1,016**	**21,625**	**97**	**30**	**1,163**	**1,289**
1995 Total	**40**	**4,195**	**3,132**	**17**	**168**	**14,607**	**911**	**23,069**	**108**	**81**	**566**	**755**
1996 Total	**37**	**4,469**	**3,274**	**15**	**163**	**14,837**	**851**	**23,647**	**109**	**80**	**628**	**817**
1997 Total	**40**	**4,672**	**3,308**	**13**	**172**	**14,999**	**712**	**23,917**	**111**	**102**	**715**	**927**
1998 Total	**35**	**4,812**	**3,357**	**17**	**180**	**15,463**	**674**	**24,537**	**136**	**124**	**1,047**	**1,306**
1999 Total	**39**	**5,001**	**3,462**	**13**	**182**	**15,855**	**665**	**25,218**	**140**	**112**	**959**	**1,211**
2000 Total	**36**	**5,165**	**3,580**	**11**	**179**	**15,960**	**888**	**25,820**	**175**	**99**	**871**	**1,144**
2001 Total	**35**	**5,292**	**3,426**	**13**	**164**	**16,041**	**586**	**25,556**	**171**	**103**	**1,003**	**1,277**
2002 Total	**34**	**5,392**	**3,340**	**13**	**162**	**16,465**	**677**	**26,084**	**127**	**175**	**659**	**961**
2003 Total	**30**	**5,666**	**3,265**	**16**	**150**	**16,597**	**571**	**26,296**	**161**	**175**	**869**	**1,205**
2004 Total	**31**	**5,932**	**3,383**	**18**	**152**	**16,959**	**740**	**27,214**	**111**	**222**	**879**	**1,212**
2005 Total	**35**	**6,076**	**3,475**	**27**	**151**	**17,043**	**837**	**27,644**	**115**	**243**	**876**	**1,235**
2006 Total	**33**	**6,414**	**3,379**	**26**	**147**	**17,197**	**906**	**28,103**	**74**	**214**	**361**	**648**
2007 January	3	503	284	2	14	1,408	86	2,299	8	17	35	60
February	2	476	259	2	11	1,289	78	2,116	15	13	60	88
March	2	531	273	2	14	1,454	81	2,357	7	13	32	53
April	3	543	280	2	13	1,413	76	2,329	6	13	31	50
May	3	566	284	2	14	1,495	87	2,451	6	14	28	48
June	3	558	283	2	12	1,455	84	2,397	7	16	35	58
July	3	575	293	2	13	1,527	78	2,490	7	15	35	56
August	3	581	299	2	13	1,518	81	2,498	10	15	48	73
September	3	547	261	2	11	1,419	78	2,320	6	14	30	50
October	3	563	288	2	14	1,463	75	2,407	6	13	29	48
November	2	509	272	2	12	1,415	107	2,319	5	12	14	31
December	2	506	282	2	12	1,466	83	2,351	7	15	20	42
Total	**32**	**6,457**	**3,358**	**21**	**152**	**17,321**	**994**	**28,334**	**89**	**171**	**397**	**657**
2008 January	2	472	278	2	13	1,395	85	2,247	10	15	20	45
February	2	451	255	2	11	1,314	60	2,095	7	14	16	37
March	2	511	273	2	13	1,436	78	2,315	5	12	14	31
April	3	515	276	2	13	1,397	94	2,299	5	12	16	33
May	3	537	279	2	13	1,465	93	2,392	5	12	18	34
June	2	515	276	2	12	1,396	79	2,283	8	14	30	52
July	2	533	277	2	13	1,449	88	2,364	6	13	24	43
August	3	536	288	2	14	1,447	63	2,352	5	13	20	39
September	2	507	251	1	9	1,303	58	2,130	5	12	25	42
October	2	551	249	2	13	1,429	82	2,329	4	14	15	32
November	2	491	245	2	8	1,365	64	2,176	4	12	16	33
December	2	476	245	2	9	1,414	96	2,244	7	12	23	42
Total	**28**	**6,093**	**3,193**	**19**	**141**	**16,811**	**940**	**27,226**	**70**	**155**	**238**	**463**
2009 January	3	465	239	2	10	1,376	73	2,167	11	12	37	60
February	1	425	213	2	8	1,261	55	1,965	6	11	15	32
March	2	476	253	2	10	1,404	83	2,230	7	14	13	34
April	3	468	242	2	12	1,372	94	2,191	4	12	11	27
May	2	499	235	1	9	1,439	64	2,251	6	13	14	32
June	3	504	239	1	12	1,414	80	2,253	6	13	15	33
July	3	515	268	2	10	1,473	38	2,309	5	13	16	34
August	2	510	255	2	13	1,465	61	2,308	6	13	19	37
September	3	478	239	2	11	1,364	39	2,135	4	12	12	29
9-Month Total	**21**	**4,341**	**2,183**	**14**	**96**	**12,569**	**586**	**19,810**	**55**	**113**	**151**	**319**
2008 9-Month Total	**22**	**4,575**	**2,454**	**15**	**111**	**12,603**	**698**	**20,477**	**55**	**117**	**184**	**356**
2007 9-Month Total	**24**	**4,880**	**2,516**	**15**	**115**	**12,977**	**730**	**21,257**	**71**	**132**	**334**	**536**

[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 ethanol blended into motor gasoline.

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

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

Notes: • Transportation sector data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • 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.doe.gov/emeu/mer/petro.html for all available data beginning in 1973.

Sources: Tables 3.7c, A1, and A3.

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-c and 3.8a-c.

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."

1981–2008: EIA, *Petroleum Supply Annual*.

2009: 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 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 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 the 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 sector are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the 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 73 percent (in 1994).

LPG consumed annually by the industrial sector is estimated as the difference between LPG total supplied and the estimated consumption of LPG by the sum of the residential and commercial sector and the transportation sector. The industrial sector 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 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 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 1983–1996, 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.

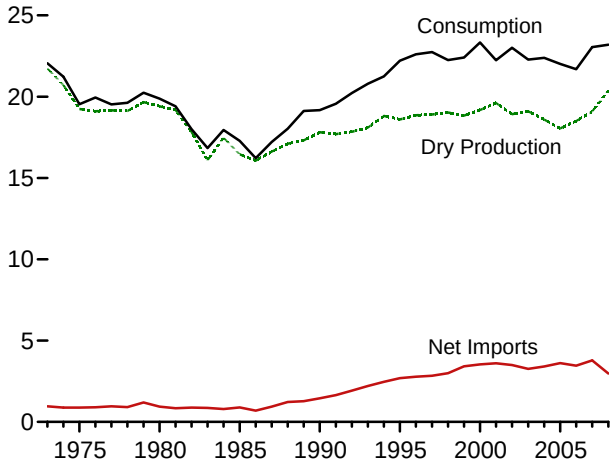
Other Petroleum Products—Consumption of all remaining petroleum products is assigned to the industrial sector. Other petroleum products include pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative 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.

4 Natural Gas

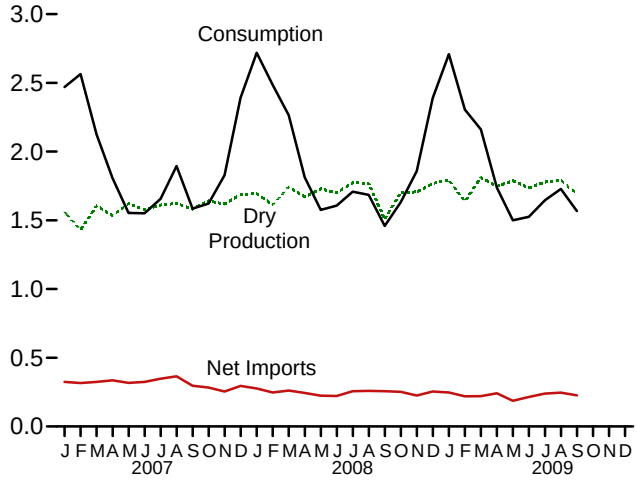
Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

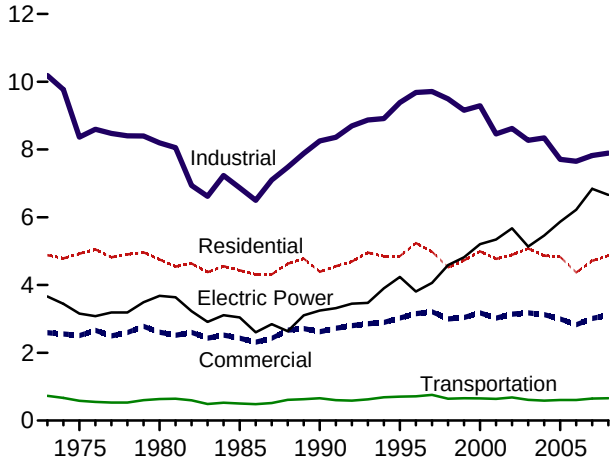
Overview, 1973-2008



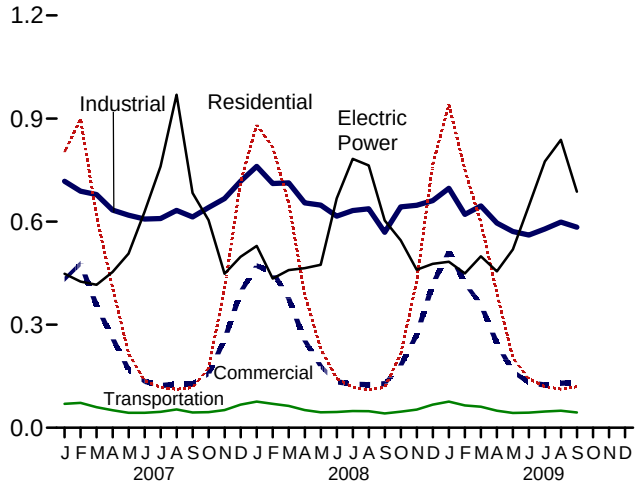
Overview, Monthly



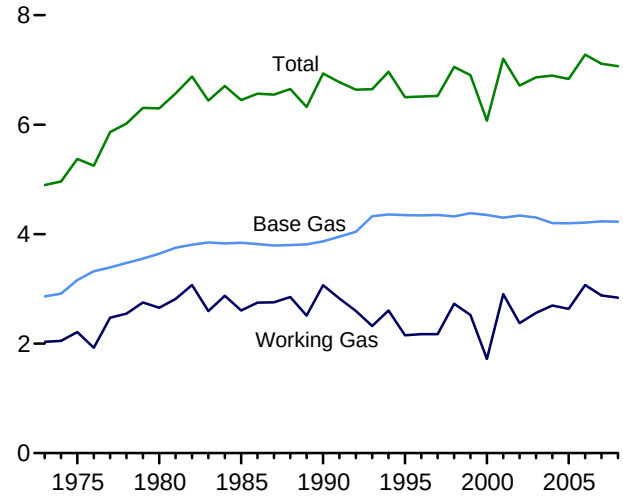
Consumption by Sector, 1973-2008



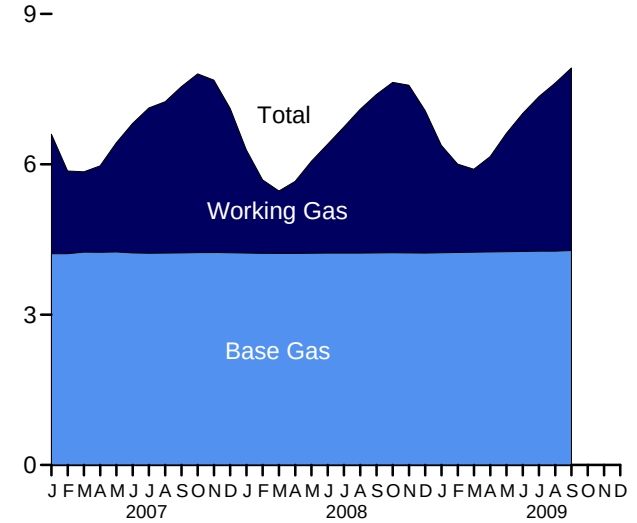
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2008



Underground Storage, End of Month



Web Page: http://www.eia.doe.gov/emeu/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**	**-305**	**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 January	2,034	1,637	76	1,561	6	393	69	324	698	-120	2,470
February	1,870	1,498	70	1,429	5	373	57	316	748	65	2,564
March	2,084	1,684	78	1,606	6	402	77	325	56	133	2,125
April	1,984	1,609	75	1,534	5	387	51	336	-125	56	1,806
May	2,053	1,700	79	1,621	4	380	62	318	-470	81	1,554
June	2,017	1,654	77	1,577	5	381	57	324	-399	44	1,552
July	2,050	1,690	79	1,611	5	419	71	348	-322	14	1,656
August	2,074	1,701	79	1,622	5	427	62	365	-133	35	1,894
September	2,034	1,659	77	1,582	5	361	65	296	-306	8	1,585
October	2,118	1,720	80	1,640	5	347	64	284	-263	-44	1,622
November	2,094	1,697	79	1,619	6	341	86	254	127	-177	1,828
December	2,179	1,770	82	1,688	4	397	101	295	582	-178	2,392
Total	**24,591**	**20,019**	**930**	**19,089**	**63**	**4,608**	**822**	**3,785**	**193**	**-83**	**23,047**
2008 January	2,179	[E] 1,769	75	[E] 1,695	2	390	113	277	824	-78	2,719
February	2,065	[E] 1,684	72	[E] 1,613	4	350	103	247	593	28	2,485
March	2,233	[E] 1,819	78	[E] 1,742	5	367	105	262	219	36	2,265
April	2,121	[E] 1,746	76	[E] 1,670	5	322	79	243	-190	85	1,813
May	2,181	[E] 1,809	80	[E] 1,730	4	297	73	224	-402	20	1,575
June	2,127	[E] 1,773	73	[E] 1,700	5	287	65	222	-339	20	1,607
July	2,203	[E] 1,852	77	[E] 1,774	4	323	66	257	-342	14	1,708
August	2,172	[E] 1,846	77	[E] 1,769	5	329	70	259	-350	2	1,685
September	1,929	[E] 1,570	62	[E] 1,509	5	314	58	256	-300	-10	1,459
October	2,173	[E] 1,776	74	[E] 1,702	5	321	69	252	-242	-84	1,632
November	2,183	[E] 1,778	72	[E] 1,706	5	320	95	226	57	-137	1,858
December	2,244	[E] 1,834	66	[E] 1,768	6	365	110	254	505	-143	2,390
Total	**25,810**	**[E] 21,258**	**881**	**[E] 20,377**	**55**	**3,984**	**1,006**	**2,979**	**32**	**-248**	**23,195**
2009 January	2,251	[E] 1,868	74	[E] 1,794	6	360	113	247	698	[R] -38	[R] 2,709
February	2,073	[E] 1,707	68	[E] 1,638	5	322	103	219	371	[R] 72	[R] 2,306
March	2,291	[E] 1,888	78	[E] 1,811	6	324	104	221	98	[R] 25	[R] 2,161
April	2,191	[E] 1,822	76	[E] 1,746	6	322	80	242	-246	[R] -10	[R] 1,738
May	2,239	[E] 1,868	81	[E] 1,787	5	264	77	187	-467	[R] -13	[R] 1,500
June	2,150	[E] 1,814	77	[E] 1,737	2	281	66	215	-387	[R] -42	[R] 1,525
July	2,188	[E] 1,857	79	[E] 1,778	5	[R] 316	76	[R] 239	-330	-48	[R] 1,645
August	[R] 2,178	[RE] 1,871	[R] 80	[RE] 1,791	6	[R] 325	[R] 78	[R] 247	-268	[R] -47	[R] 1,728
September	2,114	[E] 1,776	82	[E] 1,694	4	[E] 303	[E] 77	[E] 227	-288	-70	1,567
9-Month Total	**19,675**	**[E] 16,471**	**693**	**[E] 15,778**	**46**	**[E] 2,818**	**[E] 774**	**[E] 2,044**	**-819**	**-170**	**16,879**
2008 9-Month Total	**19,210**	**[E] 15,870**	**669**	**[E] 15,201**	**39**	**2,978**	**731**	**2,246**	**-288**	**117**	**17,316**
2007 9-Month Total	**18,200**	**14,831**	**689**	**14,142**	**48**	**3,523**	**571**	**2,952**	**-252**	**317**	**17,206**

[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 1980-2007, 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: • 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.doe.gov/emeu/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: 1973-2003—**U.S. Energy Information Administration (EIA), *Natural Gas Annual,* annual reports. **2004 forward—**EIA, *Natural Gas Monthly,* November 2009, 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]	Oman[a]	Qatar[a]	Trinidad and Tobago[a]	Other[a,c]	Total	Canada[b]	Japan[a]	Mexico[b]	Total
1973 Total	**3**	**1,028**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1,033**	**15**	**48**	**14**	**77**
1975 Total	**5**	**948**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**953**	**10**	**53**	**9**	**73**
1980 Total	**86**	**797**	**0**	**102**	**0**	**0**	**0**	**0**	**0**	**985**	**(s)**	**45**	**4**	**49**
1985 Total	**24**	**926**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**950**	**(s)**	**53**	**2**	**55**
1990 Total	**84**	**1,448**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,532**	**17**	**53**	**16**	**86**
1995 Total	**18**	**2,816**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**2,841**	**28**	**65**	**61**	**154**
1996 Total	**35**	**2,883**	**0**	**14**	**0**	**0**	**0**	**0**	**5**	**2,937**	**52**	**68**	**34**	**153**
1997 Total	**66**	**2,899**	**0**	**17**	**0**	**0**	**0**	**0**	**12**	**2,994**	**56**	**62**	**38**	**157**
1998 Total	**69**	**3,052**	**0**	**15**	**0**	**0**	**0**	**0**	**17**	**3,152**	**40**	**66**	**53**	**159**
1999 Total	**76**	**3,368**	**0**	**55**	**0**	**0**	**20**	**51**	**17**	**3,586**	**39**	**64**	**61**	**163**
2000 Total	**47**	**3,544**	**0**	**12**	**13**	**10**	**46**	**99**	**11**	**3,782**	**73**	**66**	**106**	**244**
2001 Total	**65**	**3,729**	**0**	**10**	**38**	**12**	**23**	**98**	**2**	**3,977**	**167**	**66**	**141**	**373**
2002 Total	**27**	**3,785**	**0**	**2**	**8**	**3**	**35**	**151**	**5**	**4,015**	**189**	**63**	**263**	**516**
2003 Total	**53**	**3,437**	**0**	**0**	**50**	**9**	**14**	**378**	**3**	**3,944**	**271**	**66**	**343**	**680**
2004 Total	**120**	**3,607**	**0**	**0**	**12**	**9**	**12**	**462**	**36**	**4,259**	**395**	**62**	**397**	**854**
2005 Total	**97**	**3,700**	**73**	**9**	**8**	**2**	**3**	**439**	**9**	**4,341**	**358**	**65**	**305**	**729**
2006 Total	**17**	**3,590**	**120**	**13**	**57**	**0**	**0**	**389**	**0**	**4,186**	**341**	**61**	**322**	**724**
2007 January	3	336	9	4	5	0	0	37	0	393	41	5	24	69
February	0	321	6	8	6	0	0	33	0	373	34	5	17	57
March	9	309	15	6	9	0	0	54	0	402	53	5	19	77
April	24	279	14	9	9	0	0	51	0	387	32	4	15	51
May	24	283	15	3	15	0	3	38	0	380	35	4	24	62
June	12	291	15	4	20	0	6	30	3	381	28	3	26	57
July	0	315	12	5	12	0	3	62	9	419	38	4	29	71
August	3	335	12	4	15	0	6	46	6	427	28	4	30	62
September	3	318	12	2	3	0	0	24	0	361	33	4	28	65
October	0	314	3	2	0	0	0	29	0	347	31	2	29	[d]64
November	0	311	3	3	0	0	0	24	0	341	58	3	26	86
December	0	372	0	4	0	0	0	21	0	397	72	4	25	101
Total	**77**	**3,783**	**115**	**54**	**95**	**0**	**18**	**448**	**18**	**4,608**	**482**	**47**	**292**	**[d]822**
2008 January	0	360	3	1	0	0	0	25	0	390	70	3	40	113
February	0	326	0	0	0	0	0	21	3	350	63	3	37	103
March	0	342	0	1	0	0	0	21	3	367	70	4	31	105
April	0	290	3	(s)	3	0	0	26	0	322	47	4	28	79
May	0	261	3	4	0	0	0	25	3	297	43	5	25	73
June	0	251	6	3	3	0	3	21	0	287	30	5	30	65
July	0	288	6	4	0	0	0	25	0	323	31	5	30	66
August	0	289	3	4	3	0	0	24	5	329	29	6	35	70
September	0	276	9	7	3	0	0	20	0	314	27	4	27	58
October	0	288	3	6	0	0	0	24	0	321	37	4	28	69
November	0	292	9	6	0	0	0	14	0	320	65	4	26	95
December	0	327	9	7	0	0	0	19	3	365	79	4	28	110
Total	**0**	**3,589**	**55**	**43**	**12**	**0**	**3**	**264**	**17**	**3,984**	**590**	**50**	**365**	**1,006**
2009 January	0	328	5	6	0	0	0	19	3	360	84	2	28	113
February	0	294	6	(s)	0	0	0	16	6	322	75	3	25	103
March	0	292	12	1	0	0	0	17	3	324	77	3	24	104
April	0	259	22	7	8	0	0	20	6	322	55	2	23	80
May	0	214	15	1	0	0	0	31	3	264	46	2	29	77
June	0	229	14	1	0	0	0	34	3	281	37	2	28	66
July	0	[R]269	14	2	3	0	0	21	6	[R]316	42	4	31	76
August	0	[R]287	17	[R]3	0	0	0	17	0	[R]325	[R]45	2	[R]32	[R]78
September	0	[E]271	14	[E]1	2	0	0	15	0	[E]303	[E]41	4	[E]32	[E]77
9-Month Total	**0**	**[E]2,443**	**120**	**[E]22**	**13**	**0**	**0**	**191**	**29**	**[E]2,818**	**[E]501**	**23**	**[E]251**	**[E]774**
2008 9-Month Total	**0**	**2,683**	**34**	**24**	**12**	**0**	**3**	**207**	**14**	**2,978**	**410**	**38**	**283**	**731**
2007 9-Month Total	**77**	**2,786**	**109**	**45**	**95**	**0**	**18**	**374**	**18**	**3,523**	**322**	**37**	**212**	**571**

[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 8, "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 and 2009; United Arab Emirates in 1996-2000; and Other (unassigned) in 2004.

[d] Includes 2 billion cubic feet to Russia.

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

Notes: • See Note 8, "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.doe.gov/emeu/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." • **1988-2006:** EIA, *Natural Gas Annual,* annual reports. • **2007 forward:** EIA, *Natural Gas Monthly,* November 2009, 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 January	802	432	99	96	523	619	717	68	[E] 2	70	448	2,470
February	899	478	91	79	518	598	688	70	[E] 2	72	425	2,564
March	616	355	101	81	496	577	679	58	[E] 2	60	416	2,125
April	408	261	97	80	457	537	633	49	[E] 2	51	453	1,806
May	216	169	101	84	434	518	619	41	[E] 2	44	507	1,554
June	137	135	99	85	424	509	607	41	[E] 2	43	628	1,552
July	118	123	100	90	418	508	609	44	[E] 2	46	761	1,656
August	112	127	101	101	431	531	633	51	[E] 2	53	969	1,894
September	116	128	99	89	425	514	614	42	[E] 2	44	683	1,585
October	174	158	103	89	448	538	641	43	[E] 2	45	604	1,622
November	404	257	102	85	480	565	667	49	[E] 2	51	448	1,828
December	715	395	106	90	521	611	717	65	[E] 2	67	498	2,392
Total	**4,717**	**3,017**	**1,199**	**1,050**	**5,574**	**6,625**	**7,823**	**623**	**[E] 25**	**648**	**6,841**	**23,047**
2008 January	881	471	[E] 106	88	567	655	761	[E] 73	[E] 3	[E] 76	529	2,719
February	816	454	[E] 101	79	531	610	711	[E] 67	[E] 2	[E] 70	434	2,485
March	653	376	[E] 109	81	522	604	713	[E] 61	[E] 3	[E] 64	459	2,265
April	389	254	[E] 105	74	475	550	654	[E] 49	[E] 2	[E] 51	464	1,813
May	229	179	[E] 108	79	460	540	648	[E] 43	[E] 3	[E] 45	474	1,575
June	143	134	[E] 106	76	433	510	616	[E] 43	[E] 2	[E] 46	668	1,607
July	118	127	[E] 111	84	437	521	632	[E] 46	[E] 3	[E] 49	783	1,708
August	110	126	[E] 111	85	442	527	637	[E] 46	[E] 3	[E] 48	763	1,685
September	117	128	[E] 94	68	407	475	569	[E] 39	[E] 2	[E] 42	603	1,459
October	215	182	[E] 106	80	457	537	643	[E] 44	[E] 3	[E] 47	546	1,632
November	427	271	[E] 106	75	466	541	648	[E] 50	[E] 2	[E] 53	460	1,858
December	766	418	[E] 110	77	475	551	661	[E] 65	[E] 3	[E] 67	477	2,390
Total	**4,866**	**3,120**	**[E] 1,273**	**946**	**5,673**	**6,619**	**7,891**	**[E] 627**	**[E] 30**	**[E] 657**	**6,661**	**23,195**
2009 January	940	[R] 513	[E] 112	80	[R] 505	[R] 585	[R] 697	[E] 73	[E] 3	[E] 76	483	[R] 2,709
February	750	[R] 421	[E] 102	72	446	[R] 519	[R] 621	[E] 62	[E] 2	[E] 65	449	[R] 2,306
March	597	[R] 358	[E] 113	80	[R] 452	[R] 532	[R] 645	[E] 58	[E] 3	[E] 61	499	[R] 2,161
April	392	245	[E] 109	78	[R] 409	[R] 487	[R] 596	[E] 47	[E] 3	[E] 50	455	[R] 1,738
May	203	163	[E] 112	77	[R] 382	459	[R] 571	[RE] 41	[E] 3	[E] 43	519	[R] 1,500
June	143	[R] 132	[E] 109	79	[R] 373	[R] 452	[R] 561	[E] 41	[E] 3	[E] 44	646	[R] 1,525
July	120	[R] 125	[E] 111	82	[R] 386	[R] 467	[R] 578	[E] 44	[E] 3	[E] 47	775	[R] 1,645
August	112	[R] 130	[E] 112	83	403	486	598	[E] 47	[E] 3	[E] 49	838	[R] 1,728
September	119	132	[E] 106	81	397	477	584	[E] 42	[E] 3	[E] 45	687	1,567
9-Month Total	**3,377**	**2,219**	**[E] 986**	**713**	**3,753**	**4,465**	**5,451**	**[E] 456**	**[E] 24**	**[E] 480**	**5,352**	**16,879**
2008 9-Month Total	**3,458**	**2,249**	**[E] 950**	**715**	**4,275**	**4,990**	**5,940**	**[E] 468**	**[E] 23**	**[E] 491**	**5,178**	**17,316**
2007 9-Month Total	**3,424**	**2,208**	**887**	**785**	**4,126**	**4,911**	**5,799**	**465**	**[E] 19**	**484**	**5,292**	**17,206**

[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 electrity-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, "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.doe.gov/emeu/mer/natgas.html for all available data beginning in 1973.

Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total** and **Pipelines and Distribution: 1973-2003—**U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA),* annual reports. **2004 forward—**EIA, *Natural Gas Monthly (NGM),* November 2009, Table 2. • **Industrial CHP:** Table 7.4c. • **Vehicle Fuel: 1990 and 1991—**EIA, *NGA 2000,* (November 2001), Table 95. **1992-1998—**"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). **1999-2003—**EIA, *NGA,* annual reports. **2004 forward—**EIA, *NGM,* November 2009, 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 January	4,216	2,383	6,599	12	.5	740	57	683
February	4,216	1,652	5,867	-235	-12.4	782	51	732
March	4,247	1,603	5,850	-89	-5.3	270	219	50
April	4,246	1,723	5,969	-223	-11.4	154	273	-120
May	4,250	2,181	6,432	-129	-5.6	38	498	-460
June	4,231	2,583	6,814	-34	-1.3	47	437	-389
July	4,227	2,896	7,123	117	4.2	84	397	-314
August	4,229	3,021	7,250	52	1.7	167	294	-127
September	4,233	3,315	7,549	-8	-.2	73	371	-298
October	4,238	3,565	7,804	113	3.3	75	332	-257
November	4,238	3,442	7,680	35	1.0	262	141	121
December	4,234	2,879	7,113	-191	-6.2	632	63	569
Total	**4,234**	**2,879**	**7,113**	**-191**	**-6.2**	**3,325**	**3,133**	**192**
2008 January	4,232	2,055	6,287	-327	-13.7	892	68	824
February	4,222	1,465	5,687	-186	-11.3	649	56	593
March	4,221	1,247	5,468	-356	-22.2	350	131	219
April	4,223	1,436	5,659	-287	-16.7	106	295	-190
May	4,226	1,836	6,062	-345	-15.8	56	458	-402
June	4,230	2,171	6,401	-412	-15.9	80	420	-339
July	4,228	2,516	6,745	-380	-13.1	88	430	-342
August	4,228	2,867	7,094	-154	-5.1	91	442	-350
September	4,231	3,163	7,394	-152	-4.6	98	398	-300
October	4,235	3,399	7,634	-166	-4.7	91	334	-242
November	4,231	3,346	7,578	-96	-2.8	251	194	57
December	4,229	2,840	7,069	-39	-1.4	615	110	505
Total	**4,229**	**2,840**	**7,069**	**-39**	**-1.4**	**3,367**	**3,335**	**32**
2009 January	4,236	2,141	6,377	86	4.2	778	79	698
February	4,242	1,761	6,003	296	20.2	472	100	371
March	4,246	1,656	5,902	408	32.7	296	199	98
April	4,252	1,903	6,155	467	32.5	107	354	-246
May	4,253	2,367	6,620	531	28.9	45	512	-467
June	4,260	2,752	7,012	575	26.4	62	449	-387
July	4,266	3,086	7,352	570	22.7	83	413	-330
August	4,268	3,352	7,620	486	16.9	88	356	-268
September	4,278	3,643	7,921	480	15.2	57	346	-288
9-Month Total	– –	– –	– –	– –	– –	**1,989**	**2,807**	**-819**
2008 9-Month Total	– –	– –	– –	– –	– –	**2,410**	**2,698**	**-288**
2007 9-Month Total	– –	– –	– –	– –	– –	**2,355**	**2,597**	**-242**

[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 1980-2007, 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.doe.gov/emeu/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. **1996-2003—**EIA, *Natural Gas Monthly (NGM),* monthly issues. **2004 forward—**EIA, *NGM,* November 2009, Table 6. • **All Other Data: 1973 and 1974—**American Gas Association (AGA), *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,* November 2009, Table 6.

Natural Gas

Note 1. Natural Gas Production.

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

Estimated monthly data—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*).

Preliminary monthly data—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*.

Final monthly data—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, or 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, EIA estimates the amount consumed by each energy-use sector. 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** . . . 8,415
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** . . . 8,447*
1985 . . . 8,087	**1997** . . . 8,332	
1986 . . . 8,145	**1998** . . . 8,179	

* Preliminary

Monthly underground storage data are collected from the Federal Energy Regulatory Commission (FERC) 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 1980–2006 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 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, Qatar, Trinidad and Tobago, and the United Arab Emirates. 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 Japan. 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.

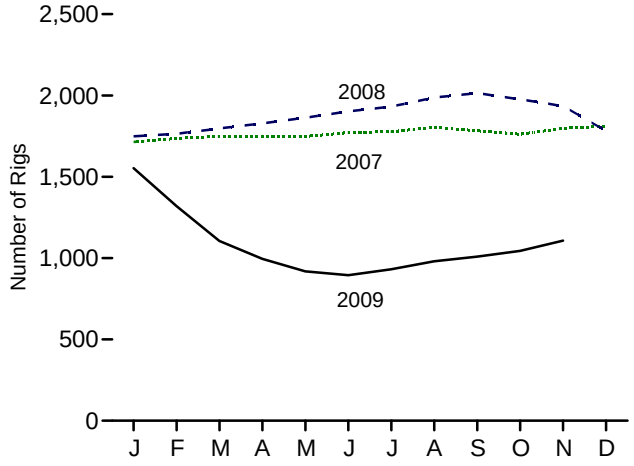
Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *NGM*. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas*.

5 Crude Oil and Natural Gas Resource Development

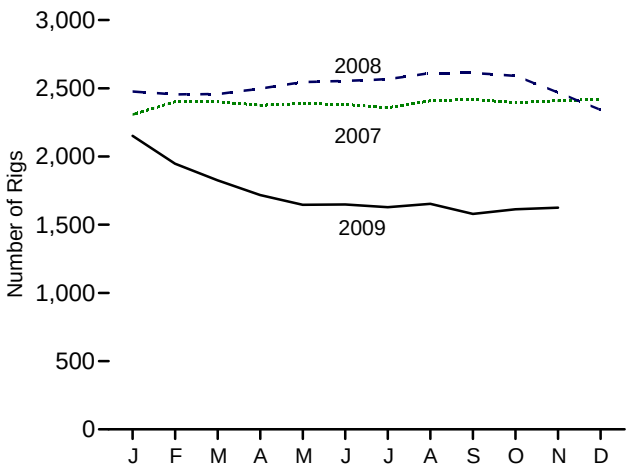
Semisubmersible drilling rig in the Gulf of Mexico. Source: U.S. Department of Energy.

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

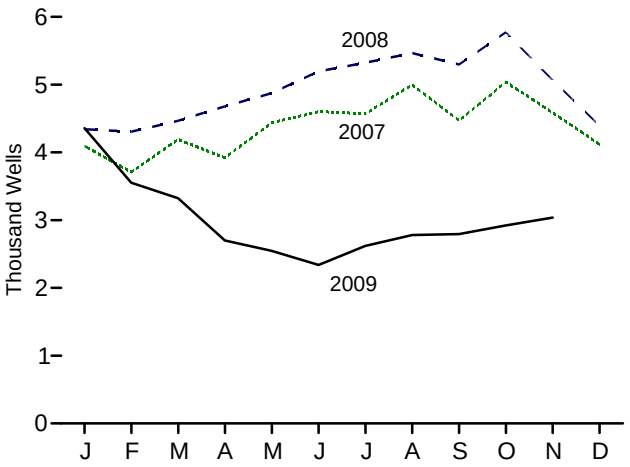
Rotary Rigs in Operation, Monthly



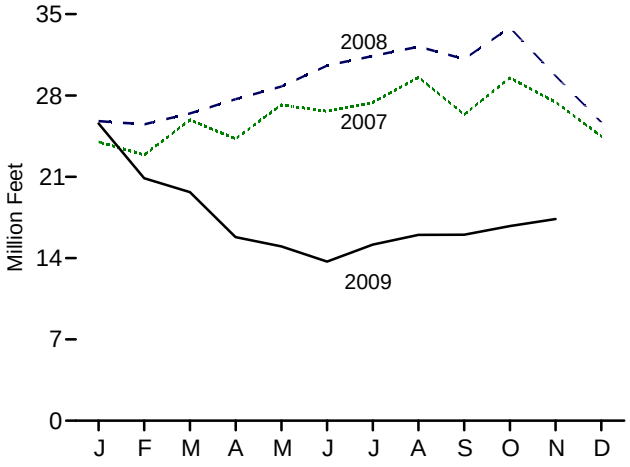
Active Well Service Rig Count, Monthly



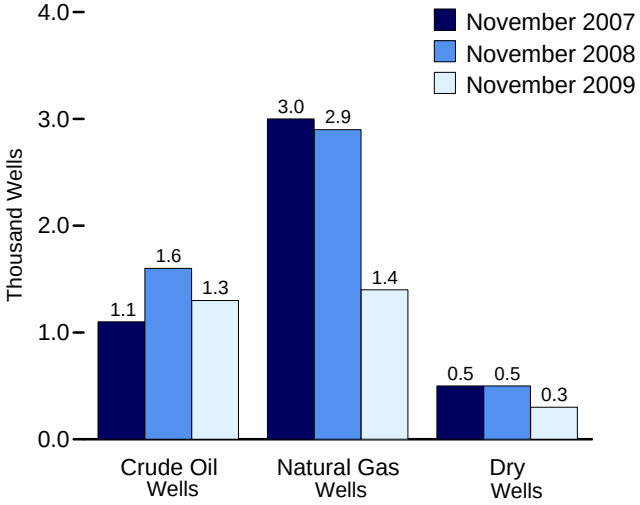
Wells Drilled, Monthly



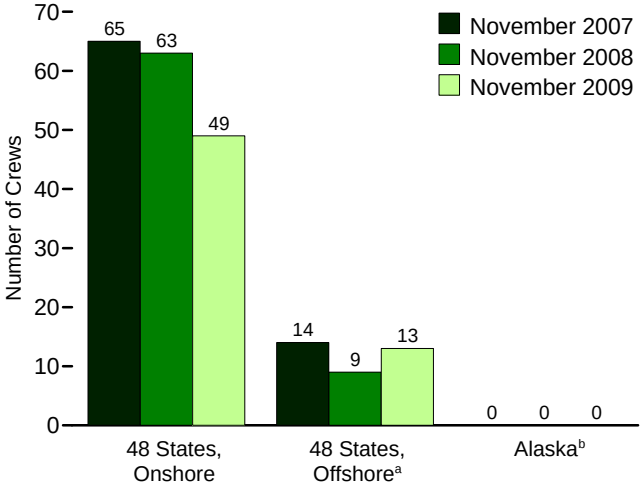
Footage Drilled, Monthly



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.doe.gov/emeu/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 January	1,630	84	270	1,440	1,714	2,307
February	1,651	85	266	1,466	1,736	2,401
March	1,667	81	282	1,461	1,749	2,401
April	1,675	75	285	1,461	1,750	2,375
May	1,671	77	282	1,464	1,748	2,387
June	1,692	79	283	1,483	1,771	2,381
July	1,698	79	285	1,486	1,777	2,358
August	1,731	73	306	1,492	1,804	2,408
September	1,718	65	302	1,475	1,783	2,418
October	1,713	49	321	1,435	1,762	2,395
November	1,737	61	341	1,451	1,798	2,408
December	1,749	62	338	1,468	1,811	2,420
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
11-Month Average	**1,036**	**45**	**264**	**806**	**1,081**	**1,730**
2008 11-Month Average	**1,822**	**65**	**378**	**1,500**	**1,887**	**2,531**
2007 11-Month Average	**1,691**	**73**	**294**	**1,466**	**1,764**	**2,385**

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

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

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

NA=Not available.

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

Web Page: See http://www.eia.doe.gov/emeu/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.

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**	**3,650**	**5,240**	**11,704**	**10,299**	**4,578**	**26,581**	**12,482**	**11,111**	**8,228**	**31,821**	**155,281**
1995 Total	**570**	**557**	**2,023**	**3,150**	**7,353**	**7,418**	**2,786**	**17,557**	**7,923**	**7,975**	**4,809**	**20,707**	**116,661**
1996 Total	**489**	**576**	**1,955**	**3,020**	**8,133**	**8,369**	**2,925**	**19,427**	**8,622**	**8,945**	**4,880**	**22,447**	**126,022**
1997 Total	**491**	**561**	**2,112**	**3,164**	**10,560**	**10,885**	**3,750**	**25,195**	**11,051**	**11,446**	**5,862**	**28,359**	**161,313**
1998 Total	**327**	**566**	**1,588**	**2,481**	**7,231**	**10,950**	**3,167**	**21,348**	**7,558**	**11,516**	**4,755**	**23,829**	**137,105**
1999 Total	**196**	**567**	**1,155**	**1,918**	**4,543**	**11,339**	**2,363**	**18,245**	**4,739**	**11,906**	**3,518**	**20,163**	**102,639**
2000 Total	**288**	**658**	**1,339**	**2,285**	**7,707**	**16,284**	**2,792**	**26,783**	**7,995**	**16,942**	**4,131**	**29,068**	**144,188**
2001 Total	**356**	**1,052**	**1,719**	**3,127**	**8,456**	**20,928**	**2,834**	**32,218**	**8,812**	**21,980**	**4,553**	**35,345**	**179,728**
2002 Total	**257**	**844**	**1,275**	**2,376**	**6,476**	**16,400**	**2,449**	**25,325**	**6,733**	**17,244**	**3,724**	**27,701**	**144,881**
2003 Total	**353**	**997**	**1,292**	**2,642**	**7,702**	**19,637**	**2,650**	**29,989**	**8,055**	**20,634**	**3,942**	**32,631**	**177,037**
2004 Total	**386**	**1,683**	**1,349**	**3,418**	**8,324**	**22,337**	**2,692**	**33,353**	**8,710**	**24,020**	**4,041**	**36,771**	**203,832**
2005 Total	**536**	**2,159**	**1,490**	**4,185**	**10,103**	**26,136**	**3,250**	**39,489**	**10,639**	**28,295**	**4,740**	**43,674**	**240,193**
2006 Total	**661**	**2,569**	**1,527**	**4,757**	**12,629**	**30,414**	**3,652**	**46,695**	**13,290**	**32,983**	**5,179**	**51,452**	**285,991**
2007 January	62	235	115	412	987	2,398	295	3,680	1,049	2,633	410	4,092	23,997
February	62	200	94	356	929	2,182	241	3,352	991	2,382	335	3,708	22,890
March	65	269	115	449	1,025	2,425	291	3,741	1,090	2,694	406	4,190	25,893
April	60	251	129	439	954	2,266	262	3,482	1,014	2,517	390	3,921	24,275
May	55	289	151	495	1,074	2,562	306	3,942	1,129	2,851	457	4,437	27,182
June	85	269	123	478	1,119	2,736	268	4,123	1,204	3,005	391	4,601	26,647
July	83	292	139	515	R 1,126	2,618	313	R 4,057	R 1,209	2,910	452	R 4,571	R 27,384
August	68	285	124	477	R 1,210	2,955	356	R 4,521	R 1,278	3,240	480	R 4,998	R 29,549
September	75	271	140	486	R 1,068	2,620	298	R 3,986	R 1,143	2,891	438	R 4,472	R 26,359
October	95	R 326	164	R 585	R 1,203	2,916	335	R 4,454	R 1,298	R 3,242	499	R 5,039	R 29,508
November	64	309	190	563	1,043	2,669	312	4,024	1,107	2,978	502	4,587	27,434
December	64	262	128	455	1,009	2,382	273	3,664	1,073	2,644	401	4,119	24,477
Total	**838**	**R 3,258**	**1,613**	**R 5,709**	**R 12,747**	**30,729**	**3,549**	**R 47,025**	**R 13,585**	**R 33,987**	**5,162**	**R 52,734**	**R 315,595**
2008 January	96	259	155	510	1,099	2,445	288	3,832	1,195	2,704	442	4,341	25,792
February	86	284	111	481	1,133	2,426	265	3,824	1,219	2,710	376	4,305	25,511
March	72	280	140	491	1,158	2,525	292	3,975	1,230	2,805	432	4,467	26,456
April	69	260	132	461	1,243	2,671	304	4,218	1,312	2,931	436	4,679	27,679
May	98	255	138	491	1,416	2,714	254	4,384	1,514	2,969	391	4,874	28,771
June	64	251	158	473	1,498	2,896	329	4,723	1,562	3,147	487	5,196	30,570
July	74	218	186	478	1,494	2,999	353	4,846	1,568	3,217	539	5,324	31,400
August	75	214	159	448	1,511	3,086	420	5,017	1,586	3,300	579	5,465	32,202
September	58	200	179	437	1,532	2,960	369	4,861	1,590	3,160	548	5,298	31,143
October	100	290	187	577	1,748	3,070	377	5,195	1,848	3,360	564	5,772	33,844
November	104	236	177	517	1,544	2,649	356	4,549	1,648	2,885	533	5,066	29,689
December	69	205	153	427	1,339	2,299	328	3,966	1,408	2,504	481	4,393	25,693
Total	**965**	**2,952**	**1,874**	**5,790**	**16,715**	**32,740**	**3,935**	**53,390**	**17,680**	**35,692**	**5,809**	**59,180**	**348,749**
2009 January	98	190	107	395	1,334	2,340	289	3,963	1,432	2,530	396	4,358	25,579
February	77	158	99	334	1,064	1,920	235	3,219	1,141	2,078	334	3,553	20,881
March	71	182	108	361	904	1,851	208	2,963	975	2,033	316	3,324	19,670
April	46	83	103	231	817	1,429	223	2,469	863	1,512	326	2,700	15,806
May	R 62	121	77	R 260	737	1,379	170	2,286	R 799	1,500	247	R 2,546	R 15,006
June	45	107	75	227	716	1,228	168	2,112	761	1,335	243	2,339	13,696
July	53	106	77	236	933	1,275	176	2,384	986	1,381	253	2,620	15,163
August	60	115	81	256	1,050	1,294	180	2,524	1,110	1,409	261	2,780	16,004
September	65	115	82	262	1,110	1,238	185	2,533	1,175	1,353	267	2,795	16,008
October	70	122	84	276	1,157	1,298	192	2,647	1,227	1,420	276	2,923	R 16,752
November	74	112	87	273	1,238	1,328	199	2,765	1,312	1,440	286	3,038	17,363
11-Month Total	**721**	**1,410**	**980**	**3,111**	**11,060**	**16,580**	**2,225**	**29,865**	**11,781**	**17,990**	**3,205**	**32,976**	**191,927**
2008 11-Month Total	**896**	**2,747**	**1,721**	**5,363**	**15,376**	**30,441**	**3,607**	**49,424**	**16,272**	**33,188**	**5,328**	**54,787**	**323,057**
2007 11-Month Total	**774**	**2,996**	**1,484**	**5,254**	**11,738**	**28,347**	**3,276**	**43,361**	**12,512**	**31,343**	**4,761**	**48,616**	**291,118**

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.doe.gov/emeu/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.,

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
2000 November	4	40	1	46	7	8	0	16	0	0	0	0	62
2001 November	7	34	1	42	7	10	0	17	0	0	0	0	59
2002 November	8	27	0	35	8	5	0	13	1	1	0	2	50
2003 November	7	24	0	31	4	3	0	7	0	0	0	0	38
2004 November	9	33	0	42	1	4	0	5	0	2	0	2	49
2005 November	5	40	0	45	6	5	0	11	0	1	0	1	57
2006 January	5	38	0	43	6	5	0	11	0	1	0	1	55
February	5	39	0	44	6	6	0	12	0	1	0	1	57
March	4	42	0	46	6	6	0	12	0	1	0	1	59
April	4	42	0	46	5	6	0	11	0	1	0	1	58
May	4	42	0	46	5	6	0	11	0	1	0	1	58
June	9	35	0	44	7	5	0	12	0	1	0	1	57
July	5	51	0	56	4	5	0	9	0	1	0	1	66
August	4	49	0	53	3	5	0	8	0	1	0	1	62
September	4	51	0	55	2	5	0	7	0	1	0	1	63
October	5	51	0	56	2	5	0	7	0	1	0	1	64
November	5	51	0	56	3	5	0	8	0	1	0	1	65
December	5	50	0	55	3	5	0	8	0	1	0	1	64
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

[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.doe.gov/emeu/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.

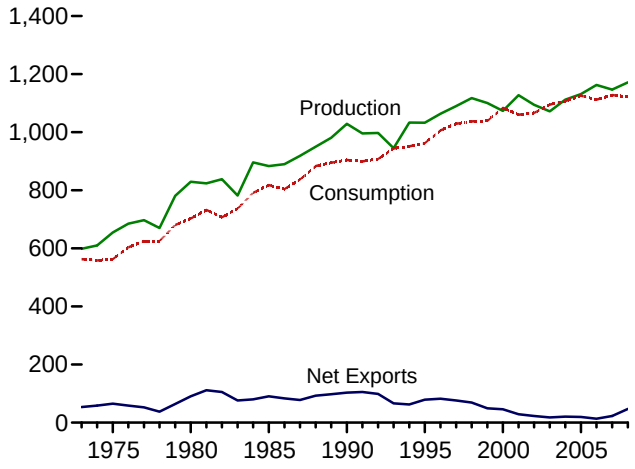
Prior to the March 1985 *MER*, drilling statistics consisted of completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported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

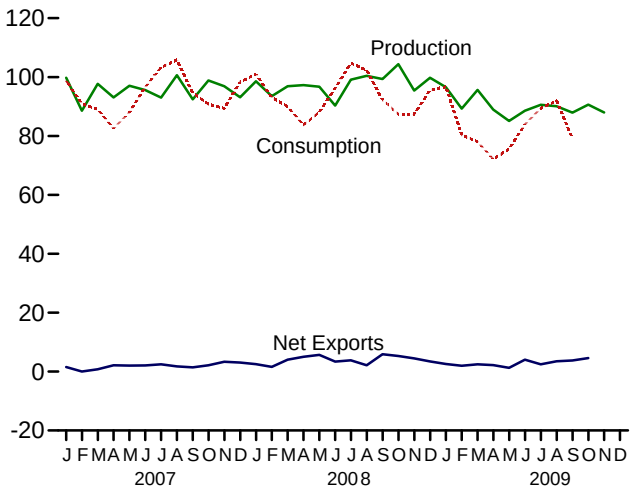
Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

Figure 6.1 Coal
(Million Short Tons)

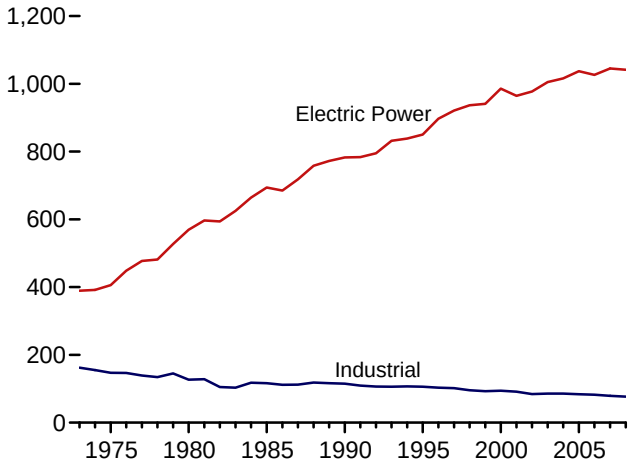
Overview, 1973-2008



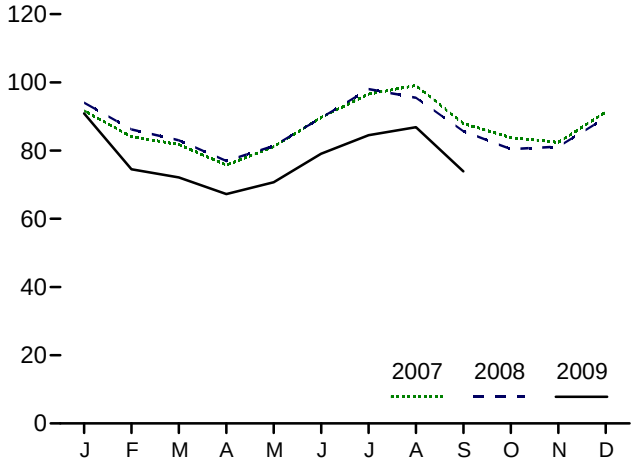
Overview, Monthly



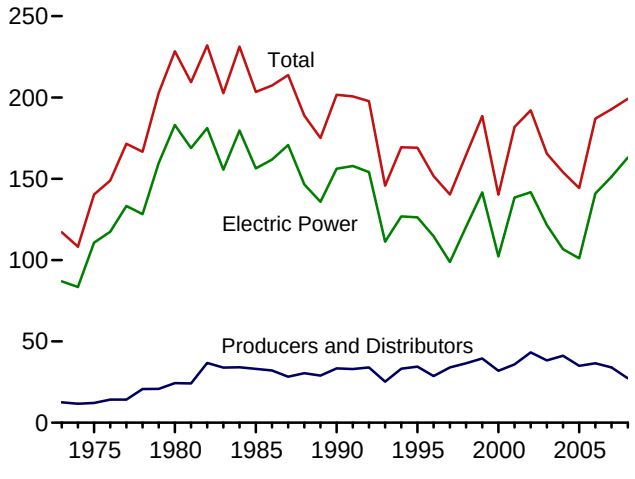
Consumption by Sector, 1973-2008



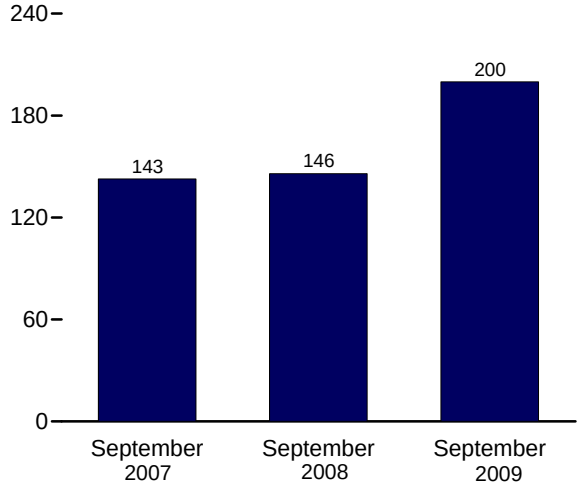
Electric Power Sector Consumption, Monthly



Stocks, End of Year, 1973-2008



Electric Power Sector Stocks, End of Month



Web Page: http://www.eia.doe.gov/emeu/mer/coal.html.
Sources: Tables 6.1, 6.2, and 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 January	99,784	976	2,844	4,368	-1,524	-5,583	6,081	98,738
February	88,580	1,038	2,656	2,685	-28	-4,877	3,497	90,970
March	97,677	1,250	3,285	4,086	-801	7,109	1,997	89,019
April	93,084	1,115	2,687	4,841	-2,154	7,902	1,602	82,540
May	97,038	1,039	2,691	4,747	-2,056	4,435	3,575	88,010
June	95,566	1,233	3,027	5,114	-2,087	-600	-1,243	96,555
July	93,003	1,250	3,373	5,812	-2,438	-9,987	-1,481	103,282
August	100,627	1,278	3,716	5,471	-1,756	-5,938	301	105,787
September	92,404	1,170	3,470	4,914	-1,445	1,129	-3,597	94,596
October	98,825	1,226	2,896	5,019	-2,123	8,357	-1,249	90,820
November	96,910	1,222	2,889	6,245	-3,355	5,100	366	89,311
December	93,138	1,279	2,812	5,861	-3,050	-1,237	-5,765	98,370
Total	**1,146,635**	**14,076**	**36,347**	**59,163**	**-22,816**	**5,812**	**4,085**	**1,127,998**
2008 January	98,587	1,210	2,381	4,915	-2,535	-9,938	6,219	100,982
February	93,525	1,121	2,619	4,205	-1,586	-2,340	2,377	93,023
March	96,903	939	2,640	6,682	-4,041	5,714	-1,906	89,993
April	97,287	1,028	2,985	7,979	-4,994	8,675	957	83,689
May	96,725	1,089	2,702	8,394	-5,692	4,158	-192	88,156
June	90,319	1,134	3,295	6,695	-3,401	-6,499	-1,700	96,251
July	99,132	1,193	2,569	6,404	-3,835	-11,176	2,947	104,720
August	100,428	1,165	3,144	5,264	-2,120	-4,393	1,560	102,306
September	99,351	1,176	2,772	8,653	-5,881	6,804	-4,402	92,243
October	104,390	1,240	2,921	8,233	-5,312	11,122	1,790	87,406
November	95,405	1,206	2,988	7,460	-4,472	7,429	-2,697	87,407
December	99,758	1,241	3,192	6,636	-3,444	-3,113	5,130	95,538
Total	**1,171,809**	**13,743**	**34,208**	**81,519**	**-47,311**	**6,445**	**10,082**	**1,121,714**
2009 January	96,568	1,219	2,329	4,907	-2,578	-5,901	4,413	96,697
February	89,266	852	1,855	3,822	-1,968	3,107	4,661	80,383
March	95,610	959	2,141	4,605	-2,464	17,052	-965	78,019
April	88,944	920	1,303	3,513	-2,210	14,396	1,106	72,152
May	85,122	884	2,283	3,552	-1,269	11,064	-1,890	75,563
June	88,582	982	1,840	5,886	-4,045	-1,464	3,012	83,970
July	[R] 90,606	[R] 1,105	2,018	4,477	-2,459	[R] -5,150	[R] 5,011	[R] 89,391
August	[R] 90,069	[R] 1,091	1,568	5,056	-3,488	[R] -4,367	[R] 73	[R] 91,967
September	[R] 87,945	[R] 1,014	1,854	5,625	-3,771	[R] 3,477	[R] 2,611	[R] 79,099
October	90,634	NA	[R] 1,762	[R] 6,364	[R] -4,603	NA	NA	NA
November	87,991	NA	NA	NA	NA	NA	NA	NA
11-Month Total	**991,336**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
2008 11-Month Total	**1,072,051**	**12,503**	**31,015**	**74,883**	**-43,868**	**9,558**	**4,952**	**1,026,176**
2007 11-Month Total	**1,053,497**	**12,797**	**33,535**	**53,302**	**-19,767**	**7,049**	**9,850**	**1,029,629**

[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. 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.

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.doe.gov/emeu/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 January	37	191	141	332	1,818	2,003	2,861	4,864	6,682	([h])	91,686	98,738
February	36	186	137	323	1,730	1,876	2,978	4,855	6,585	([h])	84,026	90,970
March	33	171	126	297	2,027	1,956	2,904	4,859	6,887	([h])	81,803	89,019
April	24	146	71	217	1,865	1,850	2,832	4,682	6,547	([h])	75,751	82,540
May	24	143	70	213	1,950	1,857	2,827	4,684	6,634	([h])	81,140	88,010
June	23	137	67	205	1,921	1,845	2,862	4,707	6,629	([h])	89,699	96,555
July	23	151	58	209	1,913	1,868	2,721	4,589	6,501	([h])	96,548	103,282
August	25	162	62	224	1,883	1,912	2,657	4,569	6,452	([h])	99,086	105,787
September	22	145	56	201	1,882	1,765	2,803	4,568	6,450	([h])	87,922	94,596
October	30	142	131	274	1,957	1,830	2,919	4,749	6,706	([h])	83,810	90,820
November	36	169	156	326	1,810	1,830	2,915	4,746	6,556	([h])	82,393	89,311
December	39	183	169	353	1,958	1,945	2,799	4,744	6,702	([h])	91,276	98,370
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	38	196	150	346	1,834	2,009	2,703	4,712	6,546	([h])	94,052	100,982
February	36	184	140	324	1,792	1,966	2,706	4,672	6,464	([h])	86,199	93,023
March	37	188	143	331	1,910	2,000	2,688	4,688	6,598	([h])	83,027	89,993
April	24	156	58	214	1,864	1,924	2,703	4,627	6,490	([h])	76,962	83,689
May	24	156	58	214	1,911	1,978	2,643	4,621	6,532	([h])	81,386	88,156
June	27	176	66	242	1,805	1,915	2,697	4,612	6,417	([h])	89,565	96,251
July	25	178	44	223	1,915	2,041	2,501	4,542	6,457	([h])	98,015	104,720
August	24	174	43	217	2,034	1,982	2,551	4,533	6,567	([h])	95,498	102,306
September	23	166	41	207	1,818	1,965	2,536	4,501	6,319	([h])	85,694	92,243
October	28	162	92	253	2,208	1,950	2,525	4,475	6,683	([h])	80,442	87,406
November	31	176	100	275	1,626	1,882	2,467	4,349	5,974	([h])	81,127	87,407
December	35	198	112	311	1,353	1,955	2,251	4,205	5,558	([h])	89,635	95,538
Total	**351**	**2,109**	**1,047**	**3,155**	**22,070**	**23,566**	**30,970**	**54,536**	**76,606**	**([h])**	**1,041,603**	**1,121,714**
2009 January	39	202	152	354	1,390	1,909	2,117	4,027	5,417	([h])	90,887	96,697
February	34	176	133	309	1,449	1,769	2,314	4,083	5,532	([h])	74,507	80,383
March	33	170	128	298	1,559	1,849	2,140	3,989	5,548	([h])	72,140	78,019
April	22	135	67	202	1,150	1,611	1,926	3,537	4,687	([h])	67,240	72,152
May	21	126	63	189	1,118	1,606	1,926	3,532	4,650	([h])	70,704	75,563
June	23	138	69	207	1,134	1,672	1,846	3,518	4,651	([h])	79,089	83,970
July	[R] 20	141	[R] 41	[R] 182	[R] 1,032	1,768	[R] 1,897	[R] 3,665	[R] 4,697	([h])	84,493	[R] 89,391
August	[R] 22	151	[R] 44	[R] 195	[R] 1,168	1,786	[R] 1,939	[R] 3,725	[R] 4,894	([h])	86,856	[R] 91,967
September	20	140	41	181	1,250	1,694	2,068	3,762	5,012	([h])	73,887	79,099
9-Month Total	**235**	**1,379**	**737**	**2,116**	**11,250**	**15,664**	**18,173**	**33,838**	**45,088**	**([h])**	**699,801**	**747,241**
2008 9-Month Total	**257**	**1,573**	**743**	**2,316**	**16,883**	**17,780**	**23,727**	**41,507**	**58,390**	**([h])**	**790,400**	**851,363**
2007 9-Month Total	**247**	**1,432**	**790**	**2,221**	**16,990**	**16,932**	**25,444**	**42,377**	**59,367**	**([h])**	**787,663**	**849,498**

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

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

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

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

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

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

[g] Included in "Commercial Other."

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

R=Revised.

Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are from Table 7.4b; all other monthly values are estimates derived from collected quarterly and annual data. See Note 2, "Coal Consumption," at end of section. • Data 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.doe.gov/emeu/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 January	35,986	NA	2,745	6,256	9,001	9,001	136,377	181,363
February	34,450	NA	2,561	6,006	8,568	8,568	133,468	176,486
March	34,007	NA	2,444	5,756	8,200	8,200	141,389	183,595
April	33,695	NA	2,417	5,728	8,145	8,145	149,657	191,498
May	33,107	NA	2,391	5,700	8,091	8,091	154,735	195,933
June	32,484	NA	2,364	5,672	8,037	8,037	154,812	195,333
July	31,967	NA	2,211	5,719	7,929	7,929	145,450	185,346
August	30,885	NA	2,091	5,765	7,856	7,856	140,668	179,409
September	30,090	NA	1,972	5,811	7,783	7,783	142,666	180,538
October	31,112	NA	1,960	5,748	7,708	7,708	150,075	188,895
November	32,069	NA	1,948	5,686	7,634	7,634	154,292	193,995
December	**33,977**	**NA**	**1,936**	**5,624**	**7,560**	**7,560**	**151,221**	**192,758**
2008 January	28,258	[F] 463	1,778	5,355	7,133	7,596	146,966	182,820
February	30,009	[F] 456	1,620	5,087	6,707	7,162	143,309	180,480
March	32,464	448	1,462	4,818	6,280	6,728	147,002	186,194
April	33,569	458	1,560	4,873	6,433	6,891	154,409	194,869
May	32,047	468	1,658	4,928	6,586	7,055	159,926	199,027
June	31,395	478	1,756	4,983	6,740	7,218	153,915	192,528
July	29,744	490	1,828	5,058	6,886	7,376	144,231	181,352
August	28,019	502	1,899	5,133	7,033	7,535	141,405	176,959
September	30,235	514	1,971	5,208	7,179	7,693	145,835	183,763
October	29,478	508	2,091	5,475	7,565	8,074	157,334	194,886
November	28,206	503	2,211	5,741	7,952	8,455	165,654	202,315
December	**27,311**	**498**	**2,331**	**6,007**	**8,338**	**8,836**	**163,056**	**199,202**
2009 January	26,404	491	2,260	5,787	8,048	8,539	158,358	193,301
February	25,366	485	2,190	5,568	7,758	8,243	162,799	196,408
March	28,875	478	2,119	5,349	7,468	7,946	176,639	213,460
April	31,494	480	2,000	5,264	7,263	7,744	188,618	227,856
May	33,406	483	1,880	5,179	7,058	7,541	197,972	238,919
June	31,902	485	1,760	5,093	6,853	7,339	198,215	237,455
July	28,955	[R] 498	[R] 1,703	[R] 5,097	[R] 6,800	[R] 7,299	196,052	[R] 232,306
August	26,535	[R] 511	[R] 1,647	[R] 5,101	[R] 6,747	[R] 7,258	194,145	[R] 227,938
September	24,333	524	1,590	5,104	6,694	7,218	199,864	231,415

[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.doe.gov/emeu/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 and 2009, 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 333; 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 EIA's Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

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

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

Table 6.1 Sources

Production

1973–September 1977: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977 forward: U.S. Energy Information Administration (EIA), *Weekly Coal Production*.

Waste Coal Supplied

1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."
2004–2007: EIA, Form EIA-906, "Power Plant Report," Form EIA-920, "Combined Heat and Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants."
2008 and 2009: 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 and 2009: 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 and 2009: 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 and 2009: 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 and 2009: 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 and 2009: 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.

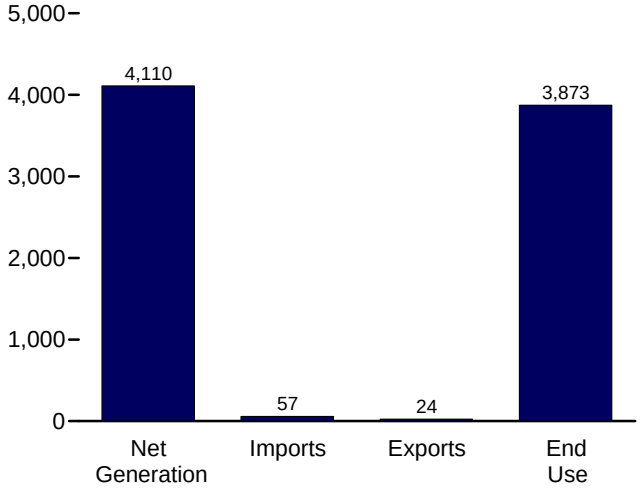
Electric Power
Table 7.5.

7 Electricity

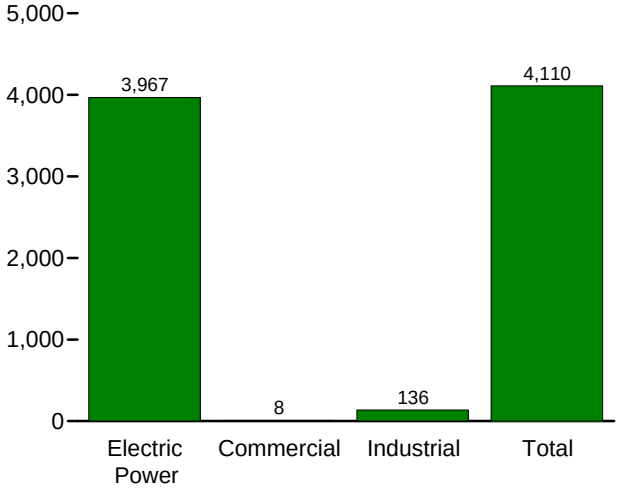
High-tension power lines and towers. Source: U.S. Department of Energy.

Figure 7.1 Electricity Overview
(Billion Kilowatthours)

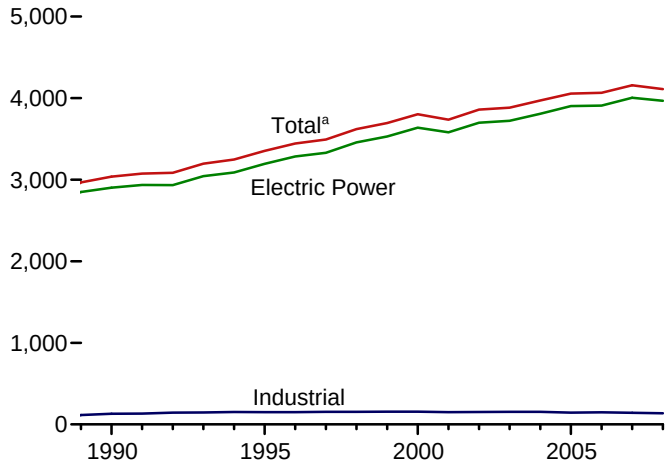
Overview, 2008



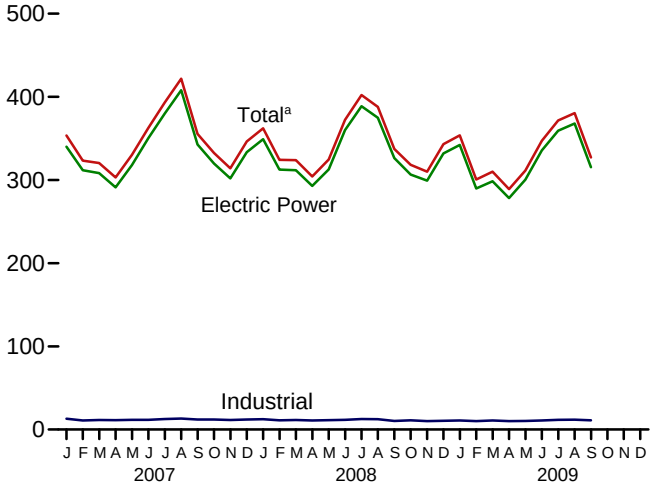
Net Generation, 2008



Net Generation by Sector, 1989-2008

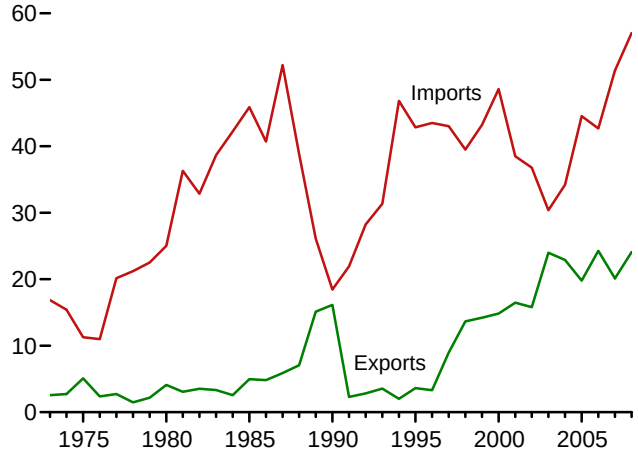


Net Generation by Sector, Monthly



End Use, 2008

Trade, 1973-2008



[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.doe.gov/emeu/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**	**45**	**20**	**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 January	340	1	13	354	3	2	2	26	315	E 14	329
February	312	1	11	323	4	1	3	13	301	E 12	313
March	308	1	11	320	4	2	2	18	292	E 13	304
April	291	1	11	303	4	1	3	18	275	E 12	288
May	318	1	12	330	5	1	3	28	293	E 13	306
June	350	1	12	363	4	1	3	30	323	E 13	336
July	380	1	13	393	6	2	4	30	353	E 14	367
August	408	1	13	422	5	2	3	37	373	E 15	388
September	343	1	12	355	4	2	1	6	338	E 13	351
October	320	1	12	333	4	2	2	13	308	E 13	321
November	302	1	12	314	4	2	3	18	286	E 13	299
December	334	1	12	346	4	2	2	27	308	E 13	321
Total	**4,005**	**8**	**143**	**4,157**	**51**	**20**	**31**	**264**	**3,765**	**159**	**3,924**
2008 January	349	1	12	362	5	2	3	26	325	E 14	339
February	313	1	11	324	5	2	3	11	304	E 12	317
March	312	1	12	324	5	3	2	20	293	E 13	306
April	293	1	11	304	4	1	3	18	277	E 12	289
May	313	1	11	325	5	3	2	27	287	E 13	300
June	360	1	12	372	6	3	3	35	327	E 13	340
July	389	1	13	402	6	2	4	33	359	E 14	373
August	375	1	12	388	6	1	4	28	351	E 14	365
September	326	1	10	337	5	2	3	7	322	E 11	333
October	307	1	11	318	4	2	2	17	291	E 12	303
November	299	1	10	310	3	2	1	23	277	E 11	288
December	332	1	10	343	3	1	2	26	307	E 12	319
Total	**3,967**	**8**	**136**	**4,110**	**57**	**24**	**33**	**271**	**3,722**	**E 151**	**3,873**
2009 January	342	1	11	354	4	2	2	24	320	E 12	332
February	290	1	10	301	4	2	2	7	285	E 11	296
March	298	1	11	310	3	2	1	17	282	E 12	294
April	278	1	10	289	3	1	2	16	264	E 11	275
May	300	1	10	311	4	1	3	29	273	E 12	285
June	336	1	11	347	5	2	3	35	303	E 12	315
July	359	1	12	372	6	1	4	27	336	E 13	349
August	368	1	12	380	6	1	5	29	343	E 13	356
September	315	1	11	327	4	1	3	9	309	E 12	321
9-Month Total	**2,887**	**6**	**98**	**2,991**	**39**	**14**	**25**	**193**	**2,714**	**E 109**	**2,823**
2008 9-Month Total	**3,029**	**6**	**104**	**3,139**	**47**	**19**	**28**	**205**	**2,846**	**E 116**	**2,962**
2007 9-Month Total	**3,050**	**6**	**108**	**3,164**	**39**	**15**	**25**	**206**	**2,863**	**E 120**	**2,982**

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

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

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

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

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

[f] Data collection frame differences and nonsampling error.

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

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

E=Estimate. NA=Not available.

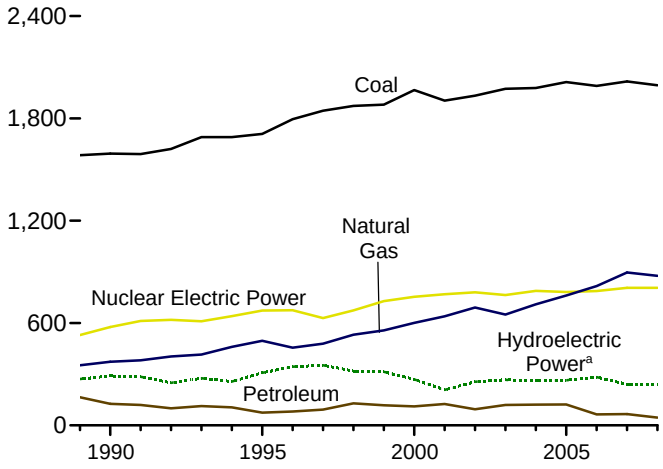
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

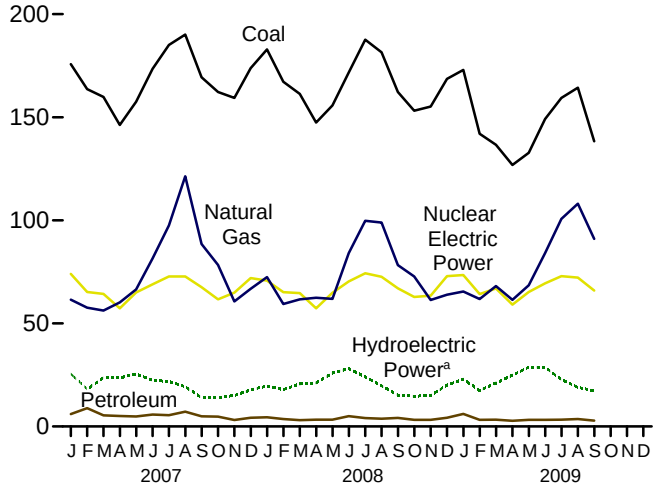
Sources: See end of section.

Figure 7.2 Electricity Net Generation
(Billion Kilowatthours)

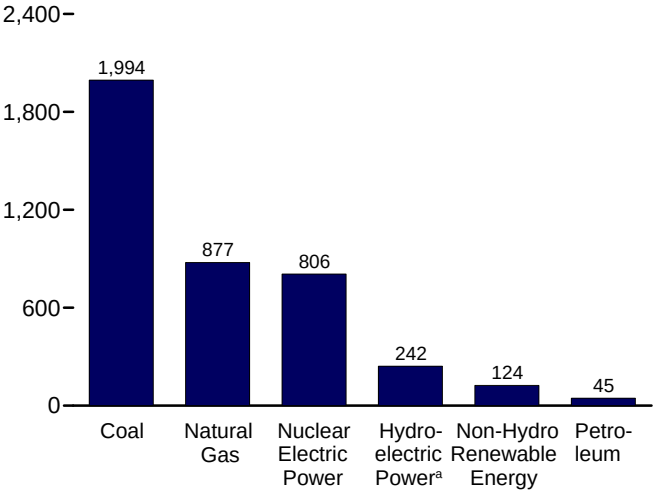
Total (All Sectors), Major Sources, 1989-2008



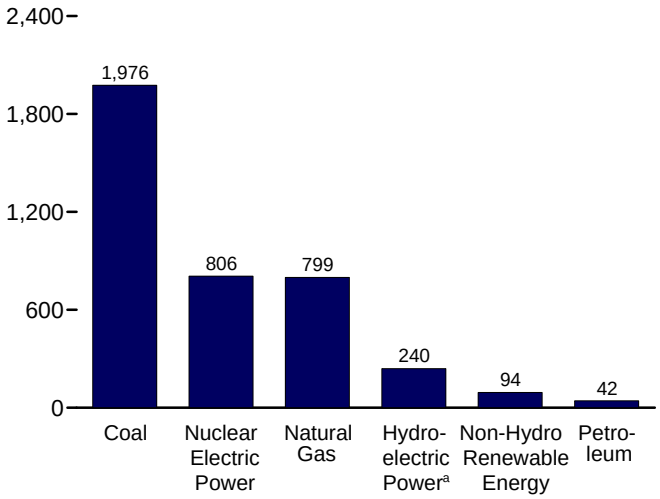
Total (All Sectors), Major Sources, Monthly



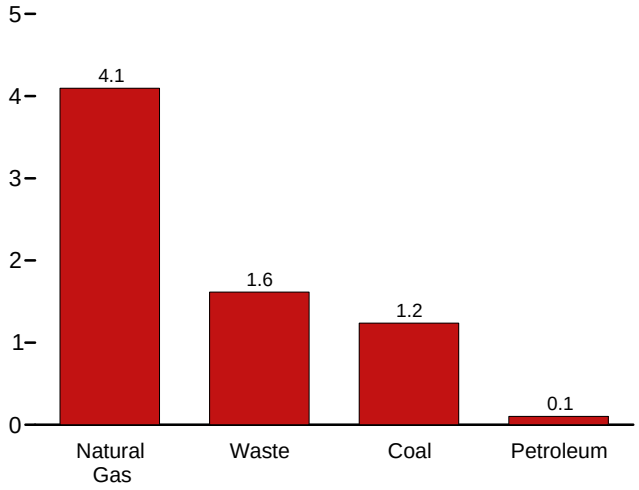
Total (All Sectors), Major Sources, 2008



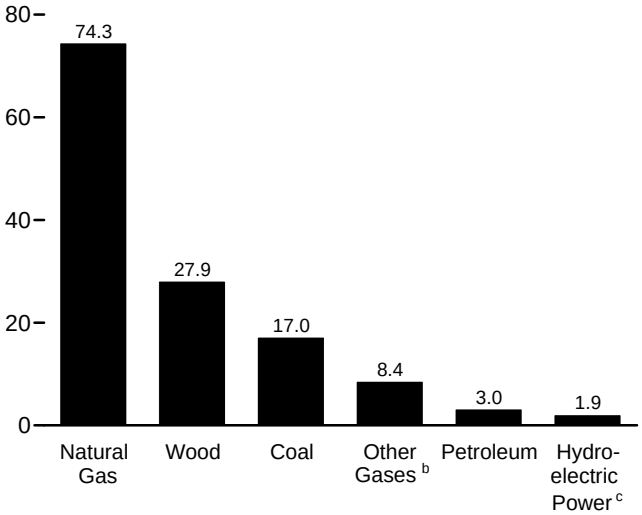
Electric Power Sector, Major Sources, 2008



Commercial Sector, Major Sources, 2008



Industrial Sector, Major Sources, 2008



[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.doe.gov/emeu/mer/elect.html.
Sources: Tables 7.2a, 7.2b, and 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 January	175,739	5,994	61,475	1,154	74,006	-572	26,045	3,536	1,371	1,296	13	2,452	353,531
February	163,603	8,884	57,622	981	65,225	-447	18,567	3,015	1,200	1,122	19	2,520	323,230
March	159,811	5,416	56,204	1,234	64,305	-458	24,163	3,106	1,373	1,204	48	3,047	320,471
April	146,250	5,080	60,153	1,163	57,301	-374	23,891	3,055	1,254	1,158	54	3,172	303,129
May	157,513	4,873	66,470	1,175	65,025	-547	26,047	3,081	1,349	1,155	84	2,952	330,203
June	173,513	5,777	81,511	1,154	68,923	-523	22,817	3,213	1,392	1,238	84	2,620	362,755
July	185,054	5,494	97,483	1,154	72,739	-595	22,478	3,434	1,443	1,250	86	2,158	393,226
August	190,135	7,187	121,338	1,132	72,751	-651	19,941	3,426	1,440	1,255	75	2,699	421,797
September	169,391	4,936	88,532	1,120	67,579	-743	14,743	3,290	1,400	1,218	68	2,867	355,394
October	162,234	4,747	78,358	1,134	61,690	-760	14,796	3,246	1,426	1,265	49	3,377	332,615
November	159,382	3,136	60,637	1,031	64,899	-662	15,682	3,273	1,425	1,211	24	3,095	314,103
December	173,830	4,215	66,808	1,022	71,983	-565	18,342	3,339	1,452	1,266	5	3,490	346,290
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	182,899	4,437	72,415	1,064	70,736	-746	20,340	3,410	1,415	1,200	15	4,127	362,142
February	167,178	3,637	59,443	943	65,130	-403	18,323	3,139	1,275	1,071	34	3,730	324,275
March	161,281	3,058	61,654	1,112	64,716	-553	21,160	3,223	1,427	1,233	70	4,697	323,932
April	147,391	3,286	62,407	986	57,333	-132	21,306	3,041	1,505	1,217	86	5,013	304,334
May	155,703	3,310	61,888	1,010	64,826	-587	26,437	3,077	1,520	1,273	94	5,113	324,589
June	171,683	4,983	84,122	1,120	70,319	-372	28,493	3,262	1,503	1,280	129	4,977	372,443
July	187,613	4,095	99,781	1,165	74,318	-799	24,811	3,457	1,475	1,304	114	3,813	402,088
August	181,469	3,763	98,880	1,148	72,617	-648	20,385	3,493	1,464	1,285	107	3,092	387,975
September	162,248	4,149	78,305	817	67,054	-513	15,662	3,224	1,349	1,243	94	2,781	337,259
October	153,143	3,204	72,767	777	62,793	-497	15,120	3,127	1,332	1,278	58	4,309	318,232
November	155,146	3,203	61,386	690	63,408	-492	15,479	3,188	1,341	1,238	27	4,538	309,930
December	168,632	4,229	63,901	739	72,931	-498	20,567	3,145	1,480	1,237	15	5,837	343,061
Total	**1,994,385**	**45,354**	**876,948**	**11,573**	**806,182**	**-6,238**	**248,085**	**38,789**	**17,086**	**14,859**	**843**	**52,026**	**4,110,259**
2009 January	172,924	6,102	65,474	767	73,479	-522	23,476	3,150	1,347	1,256	5	5,431	353,690
February	142,007	3,213	61,826	751	64,227	-243	17,705	2,902	1,263	1,147	27	4,997	300,613
March	136,625	3,324	68,084	793	66,920	-315	21,394	2,985	1,445	1,254	69	6,507	310,024
April	126,840	2,783	61,446	787	59,129	-342	25,224	2,809	1,429	1,167	88	6,758	289,065
May	132,723	3,243	68,471	737	65,229	-368	29,142	2,822	1,381	1,197	98	5,755	311,411
June	149,156	3,251	84,098	864	69,435	-226	28,866	3,027	1,420	1,170	94	4,957	347,069
July	159,404	3,323	100,664	945	72,949	-439	23,225	3,238	1,470	1,225	108	4,519	371,631
August	164,336	3,633	108,062	1,013	72,245	-613	19,591	3,367	1,497	1,222	102	4,970	380,439
September	138,325	2,833	90,968	1,016	65,941	-237	17,525	3,033	1,376	1,202	83	4,072	327,070
9-Month Total	**1,322,341**	**31,705**	**709,093**	**7,673**	**609,553**	**-3,305**	**206,148**	**27,334**	**12,628**	**10,840**	**673**	**47,966**	**2,991,012**
2008 9-Month Total	**1,517,465**	**34,719**	**678,894**	**9,366**	**607,050**	**-4,751**	**196,919**	**29,328**	**12,934**	**11,106**	**744**	**37,342**	**3,139,036**
2007 9-Month Total	**1,521,009**	**53,640**	**690,787**	**10,266**	**607,853**	**-4,909**	**198,690**	**29,156**	**12,222**	**10,896**	**533**	**24,488**	**3,163,736**

[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 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.doe.gov/emeu/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 January	174,253	5,574	53,809	375	74,006	-572	25,853	1,145	1,184	1,296	13	2,452	339,968
February	162,199	8,427	51,626	312	65,225	-447	18,420	845	1,037	1,122	19	2,520	311,810
March	158,273	4,988	50,026	345	64,305	-458	23,969	839	1,182	1,204	48	3,047	308,331
April	144,799	4,673	54,126	315	57,301	-374	23,694	727	1,081	1,158	54	3,172	291,254
May	155,991	4,475	59,991	316	65,025	-547	25,867	793	1,165	1,155	84	2,952	317,826
June	171,994	5,417	74,888	331	68,923	-523	22,690	888	1,209	1,238	84	2,620	350,339
July	183,483	5,142	90,157	339	72,739	-595	22,387	939	1,248	1,250	86	2,158	379,914
August	188,516	6,815	113,395	341	72,751	-651	19,865	962	1,253	1,255	75	2,699	407,865
September	167,888	4,650	81,511	322	67,579	-743	14,666	906	1,220	1,218	68	2,867	342,713
October	160,696	4,446	71,321	379	61,690	-760	14,696	868	1,228	1,265	49	3,377	319,830
November	157,936	2,835	54,031	332	64,899	-662	15,554	882	1,225	1,211	24	3,095	301,907
December	172,361	3,864	59,872	337	71,983	-565	18,180	918	1,262	1,266	5	3,490	333,586
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	181,400	4,123	65,021	285	70,736	-746	20,118	965	1,241	1,200	15	4,127	349,063
February	165,797	3,384	52,969	239	65,130	-403	18,079	904	1,095	1,071	34	3,730	312,548
March	159,723	2,803	55,088	346	64,716	-553	20,898	930	1,250	1,233	70	4,697	311,759
April	145,918	3,065	56,286	273	57,333	-132	21,123	796	1,303	1,217	86	5,013	292,870
May	154,175	3,108	55,437	301	64,826	-587	26,255	765	1,309	1,273	94	5,113	312,659
June	170,110	4,719	77,447	320	70,319	-372	28,348	887	1,291	1,280	129	4,977	360,064
July	185,889	3,846	92,425	335	74,318	-799	24,673	983	1,268	1,304	114	3,813	388,761
August	179,840	3,520	91,605	309	72,617	-648	20,256	1,006	1,275	1,285	107	3,092	374,864
September	160,634	3,874	72,779	189	67,054	-513	15,558	943	1,175	1,243	94	2,781	326,365
October	151,617	2,965	66,326	215	62,793	-497	15,022	804	1,181	1,278	58	4,309	306,623
November	153,820	2,990	55,446	166	63,408	-492	15,365	940	1,176	1,238	27	4,538	299,165
December	167,249	3,904	57,744	218	72,931	-498	20,406	979	1,307	1,237	15	5,837	331,928
Total	**1,976,173**	**42,301**	**798,574**	**3,196**	**806,182**	**-6,238**	**246,100**	**10,902**	**14,872**	**14,859**	**843**	**52,026**	**3,966,670**
2009 January	171,533	5,728	59,038	218	73,479	-522	23,301	955	1,167	1,256	5	5,431	342,150
February	140,761	2,931	55,687	209	64,227	-243	17,557	911	1,117	1,147	27	4,997	289,839
March	135,303	3,072	61,526	236	66,920	-315	21,205	812	1,262	1,254	69	6,507	298,431
April	125,591	2,549	55,463	235	59,129	-342	25,028	739	1,267	1,167	88	6,758	278,255
May	131,451	2,985	62,363	229	65,229	-368	28,940	751	1,207	1,197	98	5,755	300,408
June	147,823	3,002	77,618	249	69,435	-226	28,676	927	1,242	1,170	94	4,957	335,546
July	157,952	3,099	93,713	287	72,949	-439	23,078	938	1,283	1,225	108	4,519	359,319
August	162,996	3,384	101,003	274	72,245	-613	19,445	1,012	1,292	1,222	102	4,970	367,941
September	137,100	2,606	84,328	294	65,941	-237	17,417	856	1,194	1,202	83	4,072	315,421
9-Month Total	**1,310,511**	**29,358**	**650,739**	**2,231**	**609,553**	**-3,305**	**204,647**	**7,899**	**11,031**	**10,840**	**673**	**47,966**	**2,887,310**
2008 9-Month Total	**1,503,487**	**32,442**	**619,058**	**2,596**	**607,050**	**-4,751**	**195,308**	**8,179**	**11,208**	**11,106**	**744**	**37,342**	**3,028,954**
2007 9-Month Total	**1,507,397**	**50,161**	**629,528**	**2,995**	**607,853**	**-4,909**	**197,412**	**8,043**	**10,580**	**10,896**	**533**	**24,488**	**3,050,020**

[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 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.doe.gov/emeu/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 January	120	27	318	131	669	1,367	394	7,348	779	180	2,390	56	12,894
February	120	44	309	109	641	1,283	412	5,686	669	138	2,169	53	10,779
March	115	24	323	128	659	1,423	404	5,855	889	183	2,266	63	11,481
April	100	16	319	127	639	1,350	391	5,708	848	185	2,327	45	11,236
May	108	9	341	138	680	1,414	390	6,137	859	168	2,287	46	11,697
June	112	11	374	136	707	1,407	349	6,249	823	121	2,325	47	11,709
July	116	8	419	146	763	1,455	344	6,907	815	89	2,494	49	12,550
August	127	13	434	136	774	1,492	358	7,510	791	76	2,463	50	13,157
September	113	7	364	134	684	1,389	278	6,657	798	76	2,383	46	11,997
October	107	7	374	142	706	1,431	294	6,663	755	97	2,376	56	12,080
November	115	6	335	139	667	1,332	295	6,270	699	123	2,390	61	11,528
December	119	17	347	133	686	1,350	334	6,590	686	154	2,419	57	12,018
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	110	14	382	126	699	1,390	299	7,011	780	216	2,443	49	12,381
February	98	10	344	113	622	1,283	244	6,129	704	238	2,234	67	11,104
March	77	6	353	125	634	1,482	249	6,213	766	251	2,290	52	11,538
April	95	5	310	149	642	1,378	216	5,811	713	171	2,244	53	10,821
May	96	4	304	153	640	1,431	199	6,147	710	175	2,311	58	11,290
June	114	9	315	155	677	1,459	256	6,360	800	139	2,373	56	11,702
July	122	10	354	145	709	1,603	238	7,001	830	131	2,472	61	12,618
August	112	7	372	143	709	1,517	237	6,903	839	125	2,485	46	12,402
September	106	7	353	136	678	1,508	268	5,173	628	102	2,279	38	10,216
October	99	7	334	116	624	1,426	232	6,107	562	95	2,321	35	10,984
November	97	9	314	126	608	1,229	203	5,626	524	110	2,245	39	10,157
December	112	14	359	128	677	1,270	310	5,799	521	155	2,165	44	10,456
Total	**1,237**	**102**	**4,095**	**1,616**	**7,920**	**16,975**	**2,950**	**74,279**	**8,377**	**1,910**	**27,862**	**598**	**135,668**
2009 January	106	28	352	125	671	1,286	345	6,084	549	165	2,194	55	10,870
February	87	10	328	101	582	1,159	272	5,811	542	141	1,989	45	10,191
March	91	9	343	133	654	1,231	243	6,215	557	177	2,170	51	10,938
April	82	11	333	126	632	1,166	223	5,650	552	185	2,068	36	10,178
May	85	13	320	143	646	1,187	245	5,788	509	192	2,069	31	10,357
June	90	10	322	141	642	1,243	239	6,157	615	180	2,099	37	10,881
July	104	10	355	141	685	1,348	213	6,597	658	143	2,298	45	11,627
August	99	14	362	151	703	1,241	235	6,697	739	144	2,354	54	11,795
September	82	11	315	137	617	1,143	216	6,325	722	106	2,176	45	11,032
9-Month Total	**826**	**117**	**3,030**	**1,198**	**5,832**	**11,003**	**2,231**	**55,324**	**5,441**	**1,434**	**19,417**	**399**	**97,869**
2008 9-Month Total	**929**	**71**	**3,088**	**1,246**	**6,011**	**13,049**	**2,205**	**56,748**	**6,770**	**1,550**	**21,131**	**480**	**104,071**
2007 9-Month Total	**1,030**	**159**	**3,201**	**1,185**	**6,215**	**12,581**	**3,320**	**58,057**	**7,272**	**1,216**	**21,102**	**457**	**107,502**

[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, 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 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).

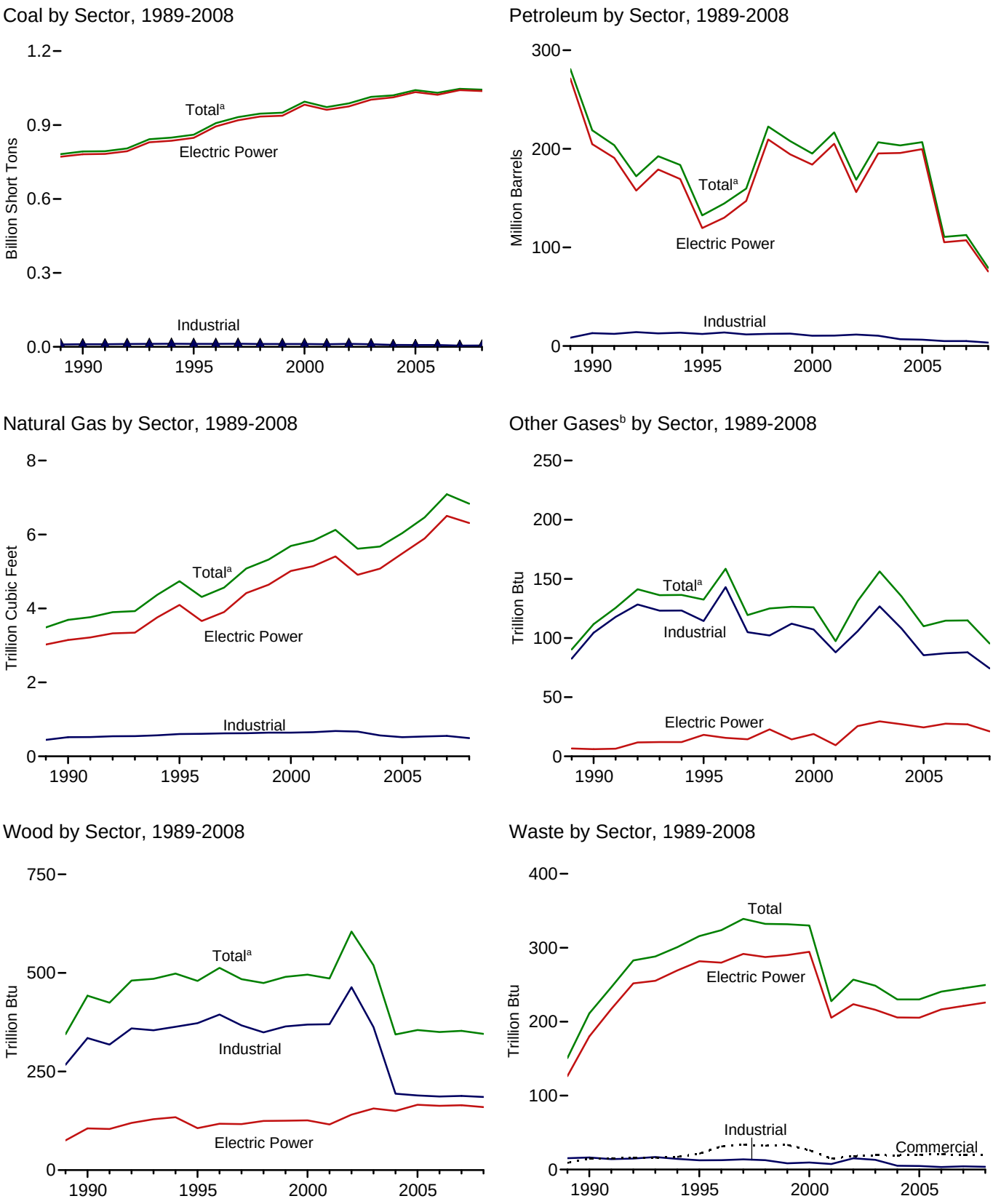
NA=Not available.

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.doe.gov/emeu/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



[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.doe.gov/emeu/mer/elect.html.
Sources: Tables 7.3a, 7.3b, and 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 January	91,776	1,445	5,770	207	585	10,349	476	10	33	20	14
February	84,100	2,502	9,671	412	470	14,934	442	8	28	18	13
March	81,932	1,262	5,333	299	475	9,270	433	10	29	20	14
April	75,918	973	5,028	255	466	8,584	471	10	27	19	13
May	81,309	1,036	4,462	261	506	8,288	528	10	28	20	14
June	89,846	1,243	5,561	219	579	9,916	648	10	29	21	14
July	96,727	1,202	5,559	201	519	9,556	782	10	31	21	14
August	99,245	1,720	7,585	268	540	12,271	992	10	30	21	15
September	88,089	985	4,830	206	493	8,484	705	10	30	21	14
October	83,995	1,147	4,555	211	446	8,143	626	10	29	21	14
November	82,495	955	2,172	175	431	5,456	469	9	29	21	13
December	91,363	1,213	3,307	204	528	7,362	517	9	31	22	15
Total	**1,046,795**	**15,683**	**63,833**	**2,917**	**6,036**	**112,615**	**7,089**	**115**	**353**	**245**	**168**
2008 January	94,173	1,705	3,250	274	515	7,805	548	9	30	21	12
February	86,290	1,192	2,618	203	473	6,377	450	8	28	18	11
March	83,185	864	2,266	193	418	5,415	474	9	30	23	14
April	77,139	857	2,566	160	425	5,707	479	8	27	21	13
May	81,572	863	2,736	160	409	5,802	489	8	27	21	13
June	89,785	1,388	4,735	218	499	8,836	678	9	29	22	14
July	98,234	1,041	3,832	149	439	7,215	798	10	31	21	14
August	95,726	852	3,196	150	475	6,574	781	10	31	21	14
September	85,895	935	3,889	199	438	7,213	614	7	28	20	12
October	80,624	702	2,273	134	474	5,481	561	7	27	19	12
November	81,245	763	2,535	148	415	5,518	472	6	28	20	12
December	89,721	1,269	3,682	271	416	7,303	489	6	28	22	13
Total	**1,043,589**	**12,431**	**37,578**	**2,259**	**5,396**	**79,246**	**6,833**	**95**	**345**	**250**	**154**
2009 January	90,986	1,899	5,907	357	428	10,304	497	6	29	20	12
February	74,574	1,153	2,337	223	392	5,673	466	6	25	18	11
March	72,268	1,221	1,995	250	495	5,941	517	7	26	21	13
April	67,370	784	1,655	180	435	4,797	472	7	24	20	13
May	70,841	1,098	2,205	194	440	5,697	535	6	25	21	14
June	79,198	1,009	2,370	145	437	5,707	666	7	27	21	14
July	84,650	952	2,540	143	448	5,876	795	8	31	21	14
August	87,034	1,027	3,001	171	442	6,407	858	8	31	22	15
September	74,041	797	1,853	152	430	4,952	708	8	26	20	13
9-Month Total	**700,963**	**9,940**	**23,864**	**1,816**	**3,947**	**55,354**	**5,513**	**62**	**243**	**183**	**120**
2008 9-Month Total	**791,999**	**9,697**	**29,088**	**1,706**	**4,091**	**60,944**	**5,311**	**77**	**261**	**189**	**117**
2007 9-Month Total	**788,942**	**12,367**	**53,799**	**2,327**	**4,632**	**91,654**	**5,477**	**88**	**264**	**182**	**125**

[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.doe.gov/emeu/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 January	91,344	1,391	5,545	189	546	9,853	421	2	18	18	10
February	83,698	2,431	9,420	398	431	14,405	399	2	13	16	9
March	81,459	1,212	5,111	271	435	8,769	389	2	13	18	10
April	75,471	934	4,847	185	424	8,087	427	2	12	17	9
May	80,840	993	4,329	179	461	7,804	481	2	12	18	10
June	89,381	1,203	5,444	170	532	9,475	600	2	14	19	10
July	96,243	1,170	5,450	158	473	9,142	729	2	14	19	10
August	98,751	1,678	7,475	218	493	11,835	935	2	14	19	10
September	87,625	950	4,737	189	453	8,138	654	2	14	19	10
October	83,515	1,099	4,460	191	407	7,783	576	2	13	19	10
November	82,082	919	2,078	161	385	5,081	422	2	14	19	9
December	90,937	1,155	3,175	189	485	6,942	468	2	14	20	10
Total	**1,041,346**	**15,135**	**62,072**	**2,496**	**5,523**	**107,316**	**6,502**	**27**	**165**	**221**	**117**
2008 January	93,718	1,647	3,127	260	481	7,437	499	2	14	19	10
February	85,872	1,160	2,523	190	439	6,069	406	2	13	16	8
March	82,683	838	2,180	167	387	5,120	430	2	14	21	11
April	76,655	838	2,496	145	393	5,447	438	2	12	19	10
May	81,064	840	2,677	146	380	5,564	446	2	12	19	10
June	89,268	1,354	4,651	200	463	8,522	633	2	13	19	10
July	97,673	986	3,758	135	408	6,917	750	2	14	19	10
August	95,189	810	3,134	137	440	6,279	732	2	15	20	10
September	85,367	854	3,823	171	406	6,882	576	1	13	18	10
October	80,120	684	2,212	114	438	5,201	518	1	12	18	9
November	80,835	740	2,466	138	385	5,270	432	1	13	18	9
December	89,294	1,229	3,558	210	385	6,920	448	1	14	20	10
Total	**1,037,738**	**11,981**	**36,606**	**2,013**	**5,005**	**75,626**	**6,309**	**21**	**160**	**226**	**118**
2009 January	90,551	1,809	5,746	331	394	9,859	453	1	14	17	9
February	74,182	1,049	2,255	199	362	5,312	424	1	12	16	8
March	71,830	1,183	1,932	205	461	5,625	473	2	12	19	10
April	66,951	746	1,605	150	402	4,512	430	2	11	18	9
May	70,400	1,006	2,149	179	405	5,359	493	2	11	19	10
June	78,753	940	2,318	125	404	5,405	621	2	13	19	10
July	84,160	885	2,497	133	415	5,588	748	2	14	19	10
August	86,583	953	2,951	151	407	6,091	810	2	15	20	10
September	73,631	739	1,812	135	398	4,676	662	2	12	18	10
9-Month Total	**697,042**	**9,310**	**23,263**	**1,609**	**3,649**	**52,426**	**5,113**	**14**	**114**	**166**	**87**
2008 9-Month Total	**787,489**	**9,329**	**28,370**	**1,552**	**3,797**	**58,235**	**4,911**	**17**	**121**	**171**	**89**
2007 9-Month Total	**784,812**	**11,962**	**52,360**	**1,956**	**4,246**	**87,509**	**5,036**	**20**	**124**	**164**	**87**

[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.doe.gov/emeu/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 January	32	38	3	2	400	458	53	7	16	(s)	3
February	32	51	2	1	371	477	41	6	14	(s)	3
March	31	34	3	2	442	467	42	8	15	(s)	4
April	27	22	3	2	420	475	41	8	15	(s)	3
May	28	15	3	2	441	469	44	8	15	(s)	3
June	29	16	3	2	436	425	45	8	15	(s)	4
July	30	12	3	2	454	402	49	8	16	(s)	3
August	33	20	3	2	462	417	54	7	16	(s)	4
September	30	11	3	2	433	335	48	7	16	(s)	3
October	28	10	3	2	452	349	47	7	16	(s)	4
November	30	9	3	2	383	366	44	7	16	(s)	3
December	31	20	3	2	395	400	47	7	16	(s)	4
Total	**361**	**258**	**34**	**19**	**5,089**	**5,041**	**554**	**88**	**188**	**4**	**41**
2008 January	32	22	3	2	424	347	47	7	16	(s)	2
February	28	14	3	2	389	294	41	6	15	(s)	2
March	24	10	3	2	478	285	41	7	15	(s)	2
April	27	8	2	2	458	252	39	6	15	(s)	2
May	28	9	2	2	480	230	41	6	15	(s)	2
June	33	15	2	2	483	299	42	7	16	(s)	2
July	35	15	3	2	525	283	46	8	16	(s)	3
August	32	10	3	2	505	285	46	8	16	(s)	2
September	31	10	3	2	497	321	34	6	15	(s)	2
October	28	9	2	1	476	271	41	5	15	(s)	2
November	28	12	2	2	382	237	37	5	15	(s)	2
December	32	18	3	2	395	364	38	5	15	(s)	2
Total	**359**	**152**	**32**	**20**	**5,493**	**3,469**	**493**	**74**	**185**	**4**	**25**
2009 January	31	38	3	2	403	408	41	5	14	(s)	2
February	28	13	3	2	363	348	39	5	13	(s)	2
March	26	12	3	2	411	304	42	5	14	(s)	3
April	24	13	3	1	395	272	39	5	13	(s)	3
May	25	16	3	2	416	322	39	4	14	(s)	3
June	27	12	3	2	419	290	42	5	14	(s)	3
July	30	13	3	2	460	275	45	6	17	(s)	3
August	27	18	3	2	423	299	45	6	16	(s)	3
September	24	14	2	2	386	262	43	6	14	(s)	3
9-Month Total	**243**	**149**	**24**	**15**	**3,677**	**2,779**	**377**	**48**	**129**	**2**	**25**
2008 9-Month Total	**271**	**112**	**24**	**16**	**4,239**	**2,597**	**376**	**60**	**140**	**3**	**20**
2007 9-Month Total	**271**	**218**	**26**	**14**	**3,859**	**3,926**	**415**	**68**	**141**	**3**	**31**

[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.

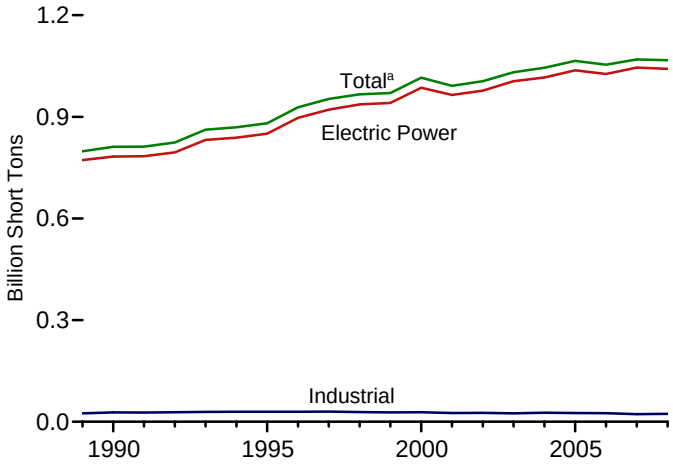
Notes: • Data are for fuels consumed to produce electricity. Through 1988, data are not available. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and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

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

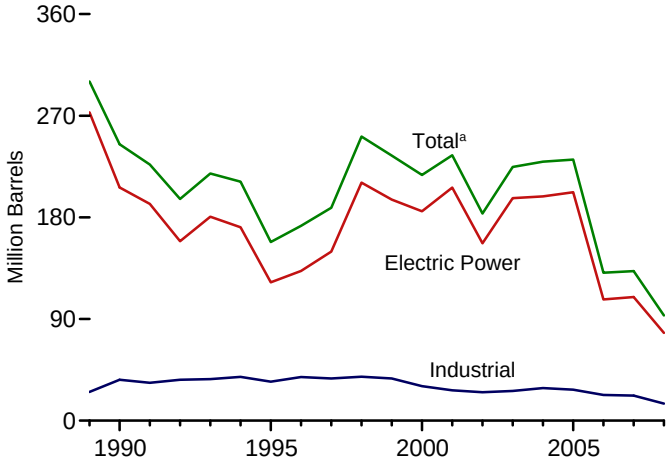
Sources: • **1989-1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 and 2009:** EIA, Form EIA-923, "Power Plant Operations Report."

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

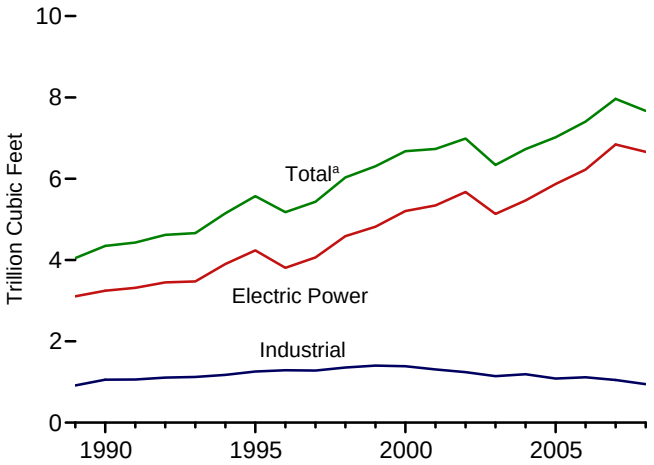
Coal by Sector, 1989-2008



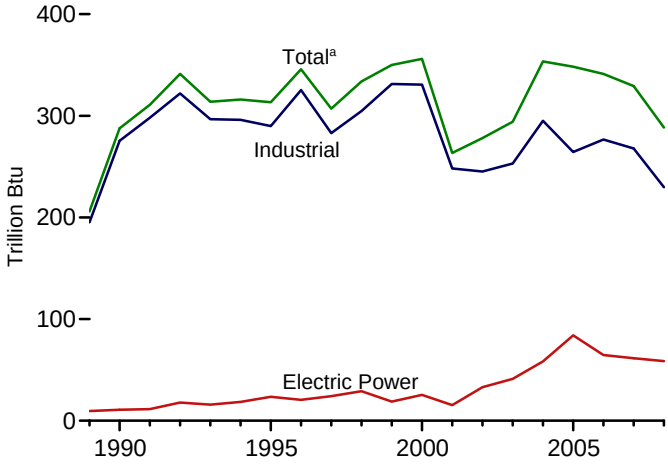
Petroleum by Sector, 1989-2008



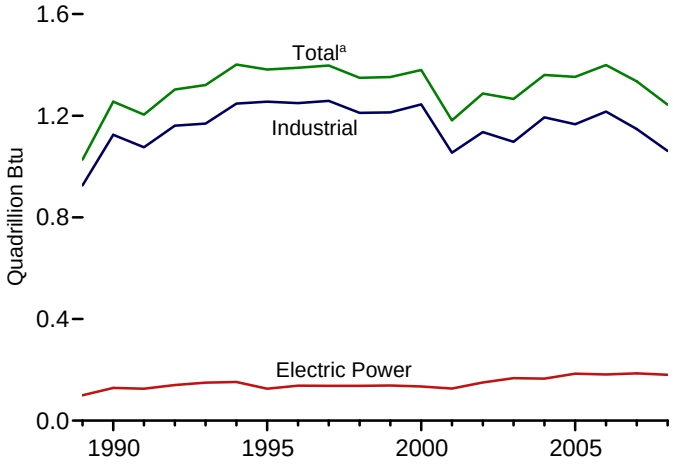
Natural Gas by Sector, 1989-2008



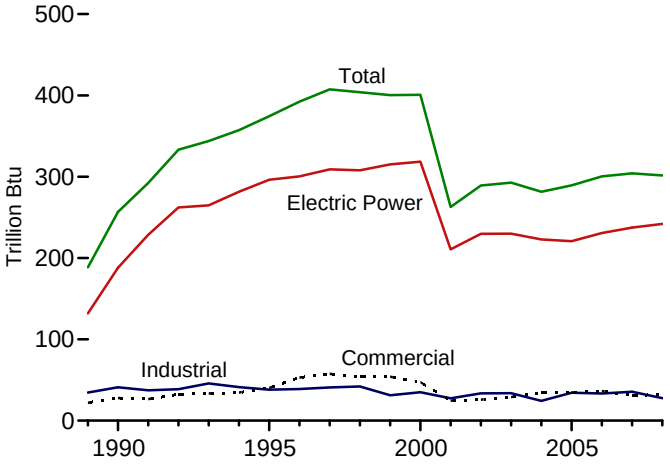
Other Gases[b] by Sector, 1989-2008



Wood by Sector, 1989-2008



Waste by Sector, 1989-2008



[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.doe.gov/emeu/mer/elect.html.
Sources: Tables 7.4a, 7.4b, and 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 January	93,880	1,580	7,045	334	686	12,390	550	30	118	27	21
February	86,088	2,727	11,358	517	571	17,455	510	25	105	24	18
March	83,929	1,385	6,575	404	577	11,250	502	28	111	28	20
April	77,747	1,088	6,066	394	564	10,371	538	28	112	23	20
May	83,140	1,198	5,254	424	607	9,911	596	28	110	25	20
June	91,682	1,334	6,330	322	686	11,416	719	27	108	24	20
July	98,568	1,272	6,194	304	636	10,953	857	27	114	25	20
August	101,160	1,814	8,347	391	666	13,881	1,077	28	111	25	21
September	89,833	1,049	5,443	279	604	9,789	779	27	108	24	19
October	85,782	1,244	5,162	306	541	9,416	700	28	111	26	20
November	84,392	1,041	2,765	257	529	6,706	539	25	111	26	19
December	93,404	1,308	4,078	304	632	8,852	594	27	118	26	21
Total	**1,069,606**	**17,042**	**74,616**	**4,237**	**7,299**	**132,389**	**7,962**	**329**	**1,336**	**304**	**239**
2008 January	96,257	1,841	3,897	381	632	9,278	623	25	108	26	15
February	88,349	1,255	3,129	295	566	7,512	519	24	102	24	14
March	85,215	934	2,774	303	505	6,537	546	27	99	28	16
April	79,041	923	3,041	231	534	6,864	544	25	102	25	15
May	83,520	928	3,178	223	520	6,930	558	26	103	25	15
June	91,656	1,463	5,275	282	595	9,996	748	26	104	26	16
July	100,235	1,109	4,335	208	544	8,370	872	28	109	26	16
August	97,654	928	3,702	204	547	7,572	853	28	109	25	16
September	87,825	1,002	4,389	266	524	8,275	676	22	103	24	15
October	82,553	785	2,675	186	581	6,550	631	22	105	23	15
November	83,184	842	3,022	190	498	6,542	539	18	101	25	14
December	91,788	1,390	4,406	383	520	8,778	559	19	100	26	15
Total	**1,067,277**	**13,400**	**43,823**	**3,151**	**6,566**	**93,204**	**7,668**	**288**	**1,243**	**302**	**181**
2009 January	92,998	2,099	6,799	477	535	12,048	569	20	100	25	14
February	76,452	1,304	2,855	301	491	6,913	526	20	91	22	13
March	74,159	1,322	2,365	341	579	6,921	584	21	94	29	16
April	68,986	898	2,005	265	515	5,742	538	20	90	24	16
May	72,436	1,212	2,752	276	510	6,789	601	19	91	24	17
June	80,899	1,123	2,686	188	517	6,583	730	19	94	25	16
July	86,401	1,071	2,853	181	534	6,773	862	22	102	25	17
August	88,794	1,127	3,374	218	532	7,382	926	23	106	26	17
September	75,720	897	2,157	207	503	5,773	772	23	97	24	16
9-Month Total	**716,845**	**11,053**	**27,846**	**2,453**	**4,714**	**64,924**	**6,109**	**187**	**864**	**224**	**141**
2008 9-Month Total	**809,752**	**10,383**	**33,720**	**2,393**	**4,968**	**71,334**	**5,939**	**229**	**937**	**228**	**138**
2007 9-Month Total	**806,027**	**13,449**	**62,611**	**3,370**	**5,597**	**107,415**	**6,129**	**249**	**996**	**226**	**179**

[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: • Data are for fuels consumed to produce electricity and useful thermal output. • 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.doe.gov/emeu/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 January	91,686	1,408	5,633	199	559	10,035	448	6	19	20	11
February	84,026	2,499	9,495	426	442	14,630	425	5	15	17	9
March	81,803	1,235	5,164	277	448	8,914	416	5	15	20	10
April	75,751	962	4,936	190	437	8,274	453	5	15	18	10
May	81,140	1,000	4,425	187	474	7,984	507	5	14	20	10
June	89,699	1,211	5,531	175	547	9,652	628	5	15	20	10
July	96,548	1,176	5,534	161	486	9,303	761	5	16	21	11
August	99,086	1,684	7,570	230	505	12,009	969	5	16	21	11
September	87,922	955	4,822	194	471	8,325	683	5	15	20	10
October	83,810	1,105	4,554	196	421	7,960	604	6	15	20	10
November	82,393	928	2,163	166	398	5,246	448	5	15	21	10
December	91,276	1,164	3,259	192	496	7,098	498	6	16	21	11
Total	**1,045,141**	**15,327**	**63,086**	**2,594**	**5,685**	**109,431**	**6,841**	**61**	**186**	**237**	**124**
2008 January	94,052	1,666	3,232	267	490	7,615	529	5	16	21	11
February	86,199	1,180	2,576	198	451	6,209	434	5	15	18	10
March	83,027	850	2,273	187	399	5,307	459	6	16	23	11
April	76,962	843	2,605	153	404	5,621	464	5	14	20	10
May	81,386	847	2,786	153	390	5,734	474	5	13	20	10
June	89,565	1,369	4,750	203	474	8,692	668	5	14	21	11
July	98,015	992	3,863	137	418	7,084	783	6	17	21	11
August	95,498	817	3,256	139	443	6,427	763	6	16	21	11
September	85,694	860	3,931	174	415	7,040	603	4	15	19	10
October	80,442	688	2,317	116	450	5,371	546	5	14	19	10
November	81,127	749	2,585	142	397	5,459	460	3	15	19	10
December	89,635	1,242	3,685	213	399	7,137	477	4	16	21	11
Total	**1,041,603**	**12,101**	**37,860**	**2,081**	**5,131**	**77,695**	**6,661**	**59**	**181**	**242**	**126**
2009 January	90,887	1,898	5,871	356	407	10,157	483	4	16	19	10
February	74,507	1,068	2,327	218	373	5,477	449	4	14	18	9
March	72,140	1,213	1,996	218	471	5,781	499	4	14	22	10
April	67,240	757	1,691	160	413	4,673	455	4	12	19	10
May	70,704	1,015	2,225	198	416	5,516	519	5	13	20	11
June	79,089	947	2,398	127	416	5,552	646	5	15	20	11
July	84,493	891	2,581	136	426	5,741	775	5	16	21	11
August	86,856	961	3,036	153	419	6,243	838	5	16	21	11
September	73,887	745	1,895	137	408	4,819	687	5	14	19	10
9-Month Total	**699,801**	**9,494**	**24,020**	**1,704**	**3,748**	**53,959**	**5,352**	**39**	**131**	**180**	**93**
2008 9-Month Total	**790,400**	**9,422**	**29,273**	**1,610**	**3,884**	**59,728**	**5,178**	**47**	**136**	**183**	**95**
2007 9-Month Total	**787,663**	**12,130**	**53,109**	**2,039**	**4,370**	**89,127**	**5,292**	**45**	**140**	**176**	**92**

[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: • 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. • 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.doe.gov/emeu/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 January	191	113	6	3	2,003	2,242	96	24	99	5	9
February	186	198	5	2	1,876	2,627	79	20	90	5	8
March	171	103	5	3	1,956	2,233	81	23	95	5	8
April	146	58	5	3	1,850	2,039	80	23	96	3	8
May	143	26	5	3	1,857	1,901	84	23	96	2	8
June	137	37	6	3	1,845	1,726	85	22	93	2	8
July	151	23	7	3	1,868	1,627	90	22	98	2	8
August	162	41	7	3	1,912	1,832	101	23	95	2	9
September	145	28	6	3	1,765	1,436	89	23	92	2	8
October	142	25	6	3	1,830	1,431	89	22	96	3	9
November	169	24	6	3	1,830	1,435	85	20	95	3	8
December	183	75	6	3	1,945	1,679	90	22	102	3	8
Total	**1,927**	**752**	**70**	**31**	**22,537**	**22,207**	**1,050**	**268**	**1,148**	**36**	**98**
2008 January	196	56	6	3	2,009	1,607	88	20	91	2	3
February	184	41	6	3	1,966	1,262	79	19	87	3	3
March	188	30	6	3	2,000	1,200	81	21	83	2	3
April	156	24	5	3	1,924	1,219	74	19	88	2	3
May	156	18	4	3	1,978	1,178	79	20	89	2	3
June	176	33	4	3	1,915	1,272	76	20	89	2	3
July	178	33	5	3	2,041	1,253	84	22	92	2	4
August	174	21	5	3	1,982	1,124	85	22	92	2	4
September	166	21	5	2	1,965	1,215	68	18	88	2	3
October	162	29	5	2	1,950	1,149	80	17	91	2	3
November	176	33	5	3	1,882	1,050	75	15	86	2	2
December	198	57	5	3	1,955	1,584	77	15	84	2	3
Total	**2,109**	**396**	**61**	**32**	**23,566**	**15,113**	**946**	**230**	**1,062**	**28**	**38**
2009 January	202	96	6	3	1,909	1,795	80	16	84	2	3
February	176	34	5	3	1,769	1,402	72	16	76	2	3
March	170	31	5	4	1,849	1,109	80	17	81	3	4
April	135	24	5	2	1,611	1,044	78	16	78	2	4
May	126	27	5	3	1,606	1,246	77	15	77	2	4
June	138	22	5	3	1,672	1,009	79	15	78	2	4
July	141	24	5	2	1,768	1,008	82	18	86	2	4
August	151	36	5	3	1,786	1,103	83	18	90	2	4
September	140	26	4	2	1,694	928	81	18	83	2	4
9-Month Total	**1,379**	**320**	**44**	**24**	**15,664**	**10,645**	**713**	**149**	**733**	**20**	**34**
2008 9-Month Total	**1,573**	**276**	**46**	**24**	**17,780**	**11,330**	**715**	**182**	**800**	**21**	**29**
2007 9-Month Total	**1,432**	**627**	**52**	**23**	**16,932**	**17,661**	**785**	**204**	**855**	**27**	**73**

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

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

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

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

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

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

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

[h] Wood and wood-derived fuels.

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

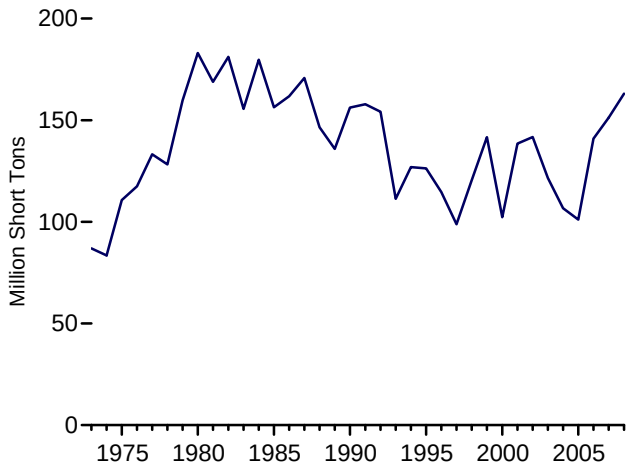
Notes: • Data are for fuels consumed to produce electricity and useful thermal output. Through 1988, data are not available. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage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

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

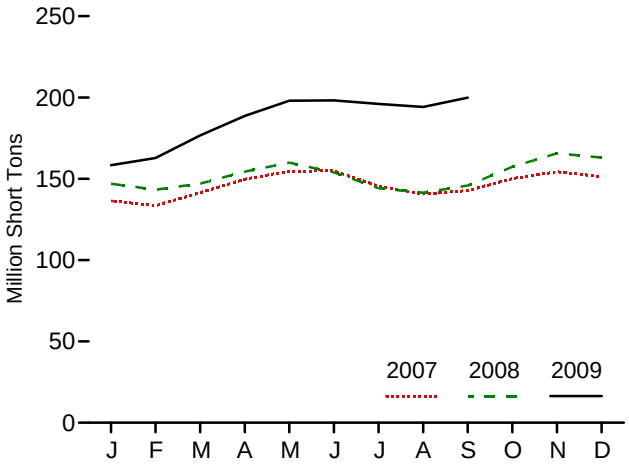
Sources: • **1989-1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001-2003:** EIA, Form EIA-906, "Power Plant Report." • **2004-2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 and 2009:** EIA, Form EIA-923, "Power Plant Operations Report."

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

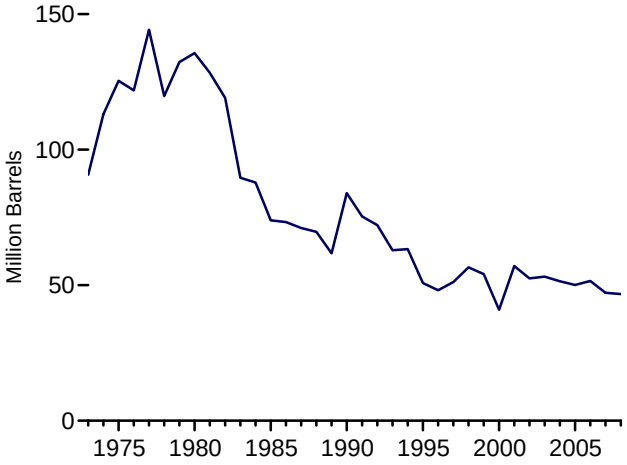
Coal, 1973-2008



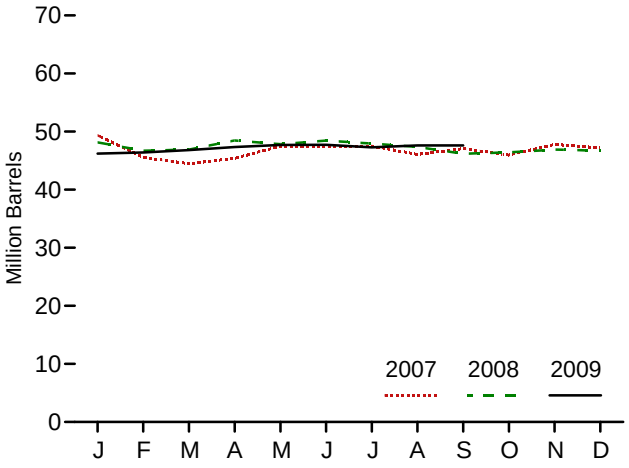
Coal, Monthly



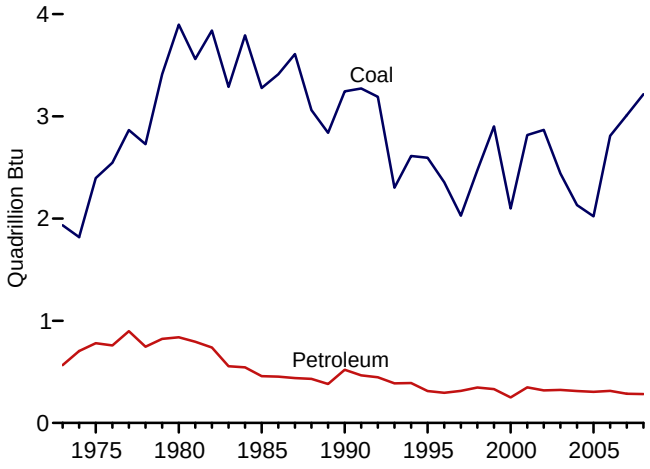
Total Petroleum, 1973-2008



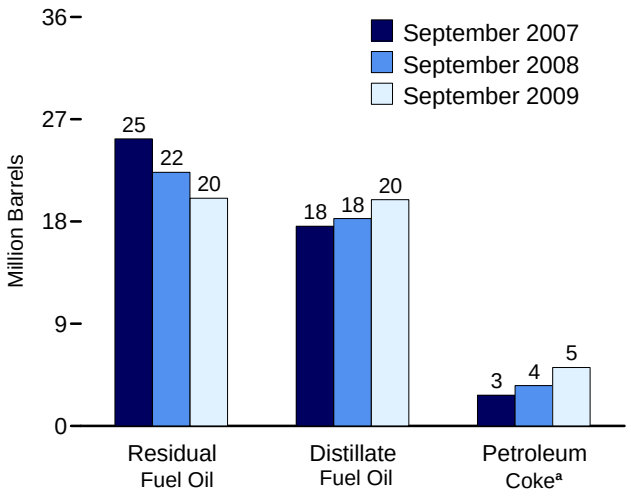
Total Petroleum, Monthly



Coal and Petroleum Stocks, 1973-2008



Petroleum by Major Type, End of Month



[a]Converted from short tons to barrels by multiplying by five.
Web Page: http://www.eia.doe.gov/emeu/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 January	136,377	17,306	27,138	1,406	699	49,346
February	133,468	17,036	23,516	1,379	723	45,546
March	141,389	16,876	23,089	1,336	636	44,480
April	149,657	16,789	23,918	1,338	669	45,389
May	154,735	16,782	26,022	1,379	660	47,481
June	154,812	17,109	26,240	1,384	543	47,445
July	145,450	17,264	25,650	1,433	631	47,504
August	140,668	17,276	24,513	1,488	562	46,087
September	142,666	17,590	25,272	1,484	543	47,059
October	150,075	17,920	23,809	1,521	545	45,973
November	154,292	18,261	24,941	1,515	612	47,777
December	**151,221**	**18,395**	**24,136**	**1,902**	**554**	**47,203**
2008 January	146,966	18,722	24,136	2,008	654	48,139
February	143,309	18,464	23,542	1,858	571	46,719
March	147,002	18,381	23,115	2,065	668	46,901
April	154,409	18,256	24,470	2,077	731	48,459
May	159,926	18,337	23,564	2,088	767	47,825
June	153,915	18,431	24,254	2,093	730	48,430
July	144,231	18,452	23,471	2,083	789	47,950
August	141,405	18,261	23,354	2,074	732	47,351
September	145,835	18,264	22,324	2,053	710	46,191
October	157,334	18,380	22,450	2,105	698	46,425
November	165,654	18,817	21,958	2,116	803	46,904
December	**163,056**	**18,876**	**21,725**	**2,135**	**794**	**46,708**
2009 January	158,358	18,612	21,449	2,142	805	46,225
February	162,799	18,544	21,682	2,256	787	46,419
March	176,639	18,667	22,020	2,297	766	46,816
April	188,618	19,439	21,842	2,316	749	47,342
May	197,972	19,433	21,737	2,374	833	47,708
June	198,215	19,482	21,820	2,431	801	47,738
July	196,052	19,683	21,328	2,450	767	47,298
August	194,145	19,745	20,758	2,469	929	47,619
September	199,864	19,930	20,045	2,487	1,031	47,615

[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.

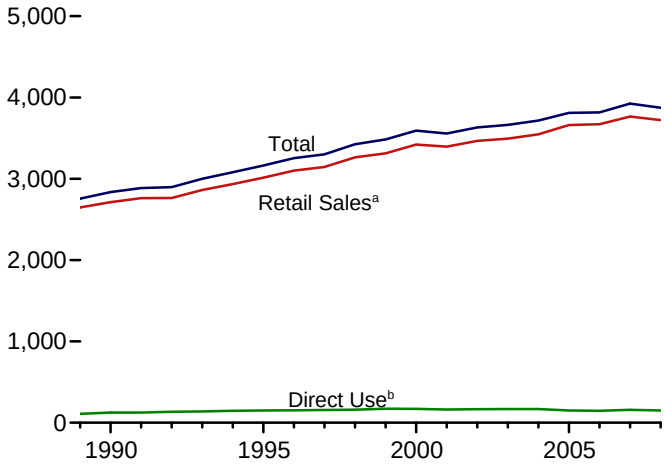
Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks are at end of period. • Totals may not equal sum of components due to independent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

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

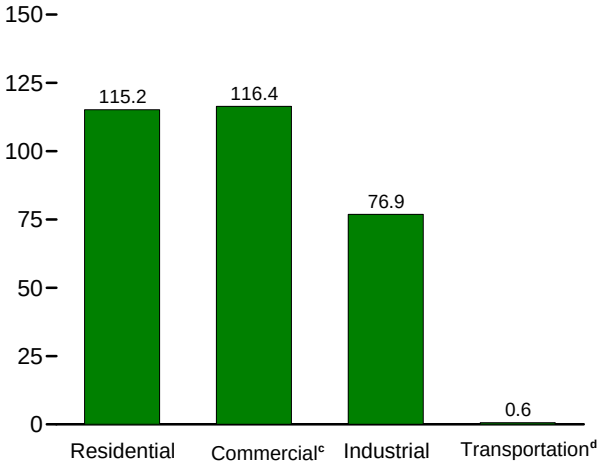
Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977-1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982-1988:** U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power 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:** 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 and 2009:** EIA, Form EIA-923, "Power Plant Operations Report."

Figure 7.6 Electricity End Use
(Billion Kilowatthours)

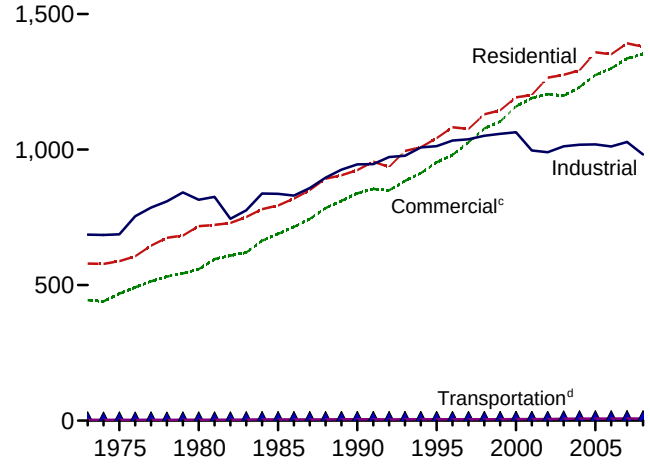
Electricity End Use Overview, 1989-2008



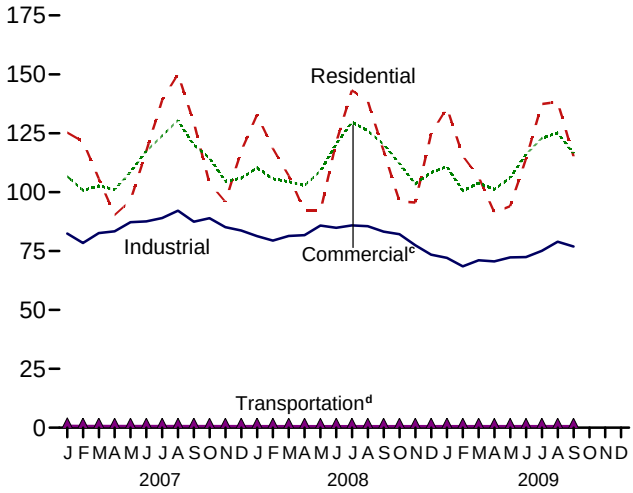
Retail Sales[a] by Sector, September 2009



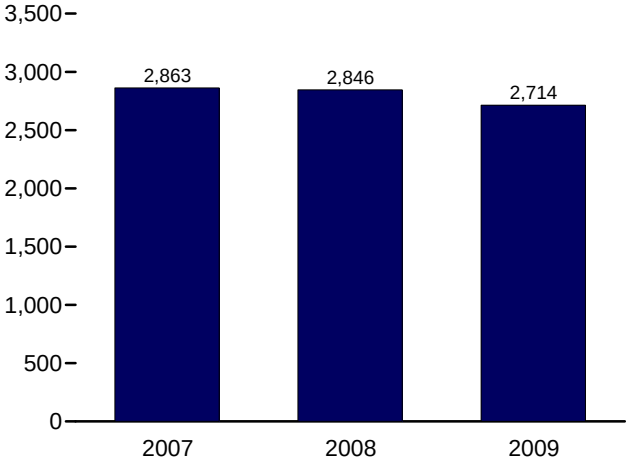
Retail Sales[a] by Sector, 1973-2008



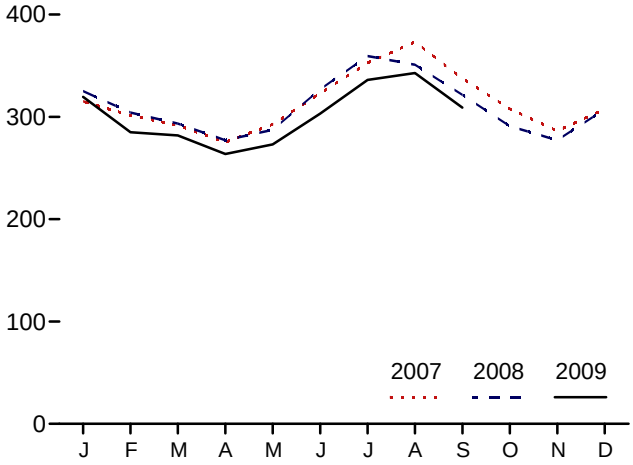
Retail Sales[a] by Sector, Monthly



Retail Sales[a] Total, January-September



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.doe.gov/emeu/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 January	125,286	106,667	82,384	766	315,104	[E] 14,266	329,370	– –	– –
February	121,464	100,756	78,392	719	301,331	[E] 12,012	313,344	– –	– –
March	105,695	102,640	82,582	743	291,660	[E] 12,770	304,431	– –	– –
April	90,282	101,051	83,361	646	275,341	[E] 12,491	287,831	– –	– –
May	96,389	108,559	87,241	611	292,800	[E] 13,019	305,819	– –	– –
June	117,418	117,352	87,572	665	323,007	[E] 13,060	336,067	– –	– –
July	139,027	123,923	89,017	675	352,642	[E] 14,003	366,645	– –	– –
August	150,101	130,475	92,115	673	373,365	[E] 14,654	388,019	– –	– –
September	129,512	119,898	87,428	687	337,525	[E] 13,339	350,864	– –	– –
October	103,754	114,481	88,896	652	307,783	[E] 13,449	321,231	– –	– –
November	95,905	104,603	85,118	673	286,299	[E] 12,828	299,127	– –	– –
December	117,408	105,909	83,725	663	307,704	[E] 13,363	321,067	– –	– –
Total	**1,392,241**	**1,336,315**	**1,027,832**	**8,173**	**3,764,561**	**159,254**	**3,923,814**	**– –**	**– –**
2008 January	132,860	110,332	81,331	710	325,234	[E] 13,758	338,992	– –	– –
February	118,503	105,615	79,428	656	304,202	[E] 12,335	316,536	– –	– –
March	107,007	104,469	81,372	635	293,483	[E] 12,804	306,286	– –	– –
April	91,979	102,796	81,711	614	277,100	[E] 12,058	289,158	– –	– –
May	91,995	108,926	85,817	595	287,332	[E] 12,548	299,880	– –	– –
June	121,093	120,349	84,855	622	326,919	[E] 13,021	339,940	– –	– –
July	143,203	129,661	85,846	644	359,355	[E] 14,018	373,373	– –	– –
August	138,699	126,088	85,535	639	350,961	[E] 13,791	364,752	– –	– –
September	117,581	120,231	83,200	622	321,634	[E] 11,459	333,093	– –	– –
October	96,051	112,147	82,117	629	290,943	[E] 12,210	303,153	– –	– –
November	95,574	103,461	77,472	616	277,123	[E] 11,323	288,446	– –	– –
December	124,764	108,379	73,464	669	307,276	[E] 11,711	318,987	– –	– –
Total	**1,379,307**	**1,352,453**	**982,150**	**7,652**	**3,721,562**	[E] **151,035**	**3,872,598**	**– –**	**– –**
2009 January	135,787	110,869	72,116	735	319,507	[E] 12,139	331,646	– –	– –
February	115,318	100,540	68,499	636	284,993	[E] 11,332	296,325	– –	– –
March	106,368	103,818	71,062	652	281,900	[E] 12,194	294,094	– –	– –
April	91,305	101,136	70,618	589	263,648	[E] 11,370	275,018	– –	– –
May	94,027	106,200	72,319	577	273,124	[E] 11,574	284,697	– –	– –
June	114,115	115,946	72,432	602	303,095	[E] 12,121	315,216	– –	– –
July	137,443	122,889	75,096	653	336,081	[E] 12,950	349,031	– –	– –
August	138,255	125,090	78,954	620	342,918	[E] 13,146	356,064	– –	– –
September	115,186	116,397	76,876	614	309,073	[E] 12,253	321,326	– –	– –
9-Month Total	**1,047,803**	**1,002,885**	**657,973**	**5,678**	**2,714,338**	[E] **109,080**	**2,823,418**	**– –**	**– –**
2008 9-Month Total	**1,062,919**	**1,028,467**	**749,096**	**5,738**	**2,846,220**	[E] **115,791**	**2,962,011**	**– –**	**– –**
2007 9-Month Total	**1,075,174**	**1,011,322**	**770,093**	**6,185**	**2,862,774**	[E] **119,614**	**2,982,389**	**– –**	**– –**

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

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

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

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

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

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

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

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

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

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

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

Web Page: See http://www.eia.doe.gov/emeu/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.doe.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 and 2009: 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 and 2009: 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 and 2009: 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 and 2009: 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*, December 2009, 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.doe.gov/emeu/states/sep_use/notes/use_elec.pdf.
2003 forward: EIA, *Electric Power Monthly*, December 2009, Table 5.1.

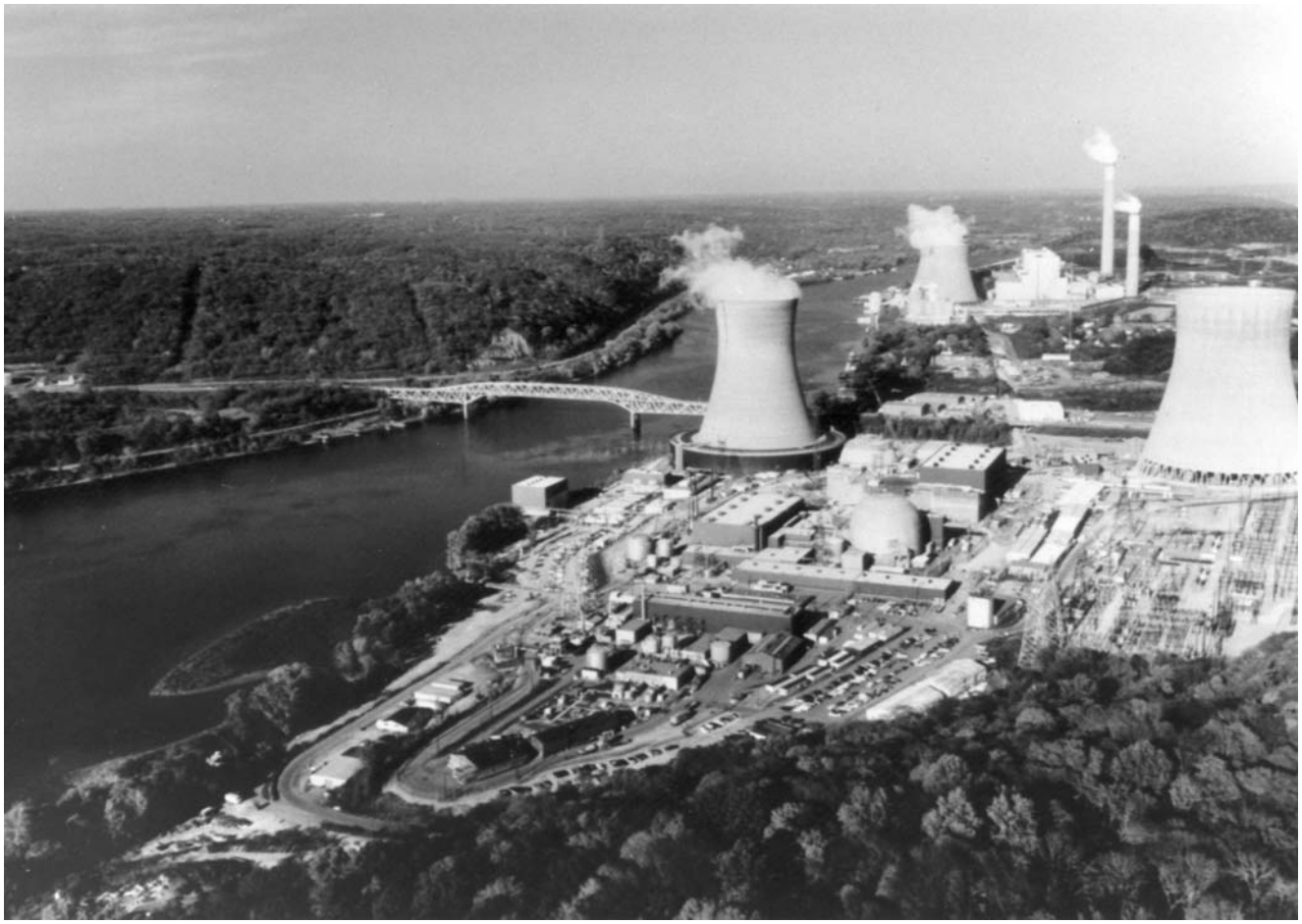
Retail Sales, Transportation
1973–2002: Estimated by EIA as the transportation portion of "Other (Old)." See estimation methodology at http://www.eia.doe.gov/emeu/states/sep_use/notes/use_elec.pdf.
2003 forward: EIA, *Electric Power Monthly*, December 2009, Table 5.1.

Direct Use, Annual
1989–1994: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1995–2007: EIA, *Electric Power Annual 2007*, January 2009, Table 7.2.
2008: Sum of monthly estimates.

Direct Use, Monthly
Annual shares are calculated as annual direct use divided by annual commercial and industrial net generation (on Table 7.1). Then monthly direct use estimates are calculated as the annual share multiplied by the monthly commercial and industrial net generation values. For 2008 and 2009, the 2007 annual share is used.

Discontinued Retail Sales Series Commercial (Old) and Other (Old) 1973–2002: See sources for "Residential" and "Industrial."

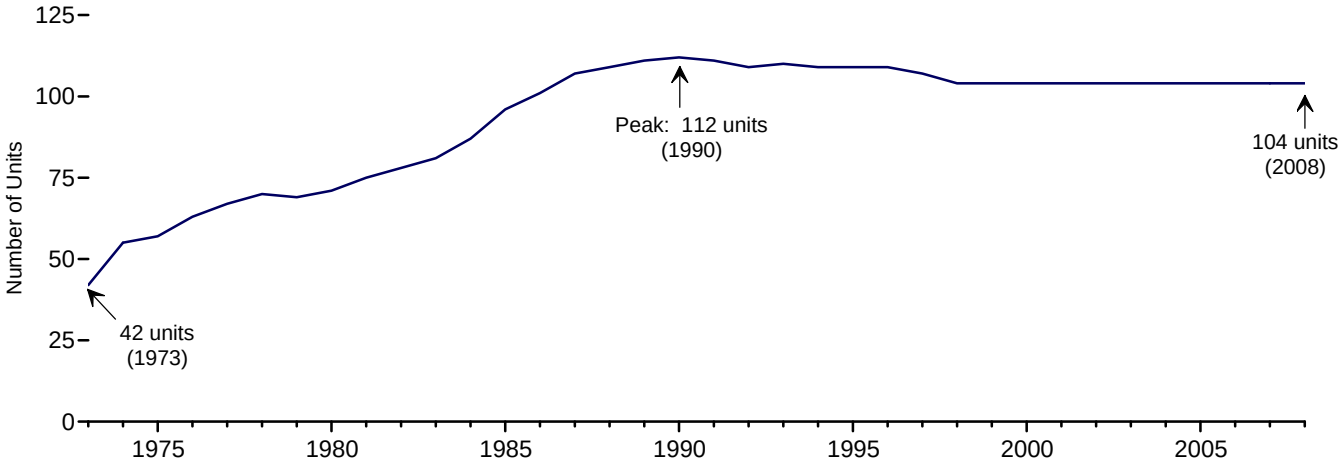
8 Nuclear Energy



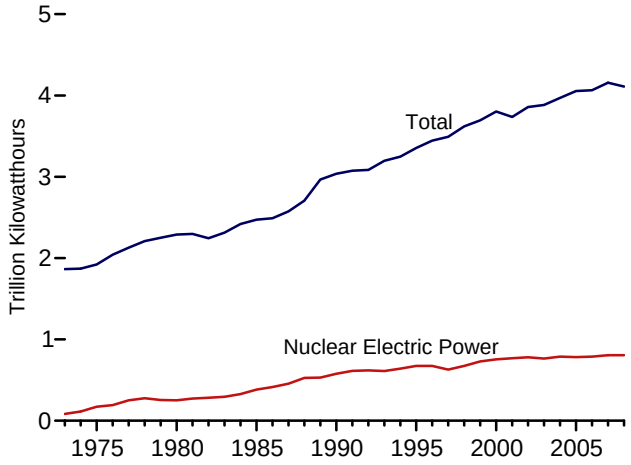
Site of Shippingport atomic power station, the first commercial nuclear power plant in the United States (rectangular reactor building and foreground); background, Beaver Valley 1 and 2 nuclear power plants and Bruce Mansfield coal-fired power plant (southwestern Pennsylvania). Source: U.S. Department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

Figure 8.1 Nuclear Energy Overview

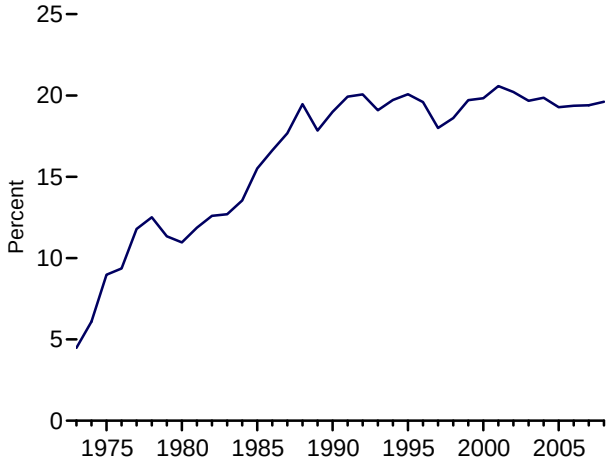
Operable Units, End of Year, 1973-2008



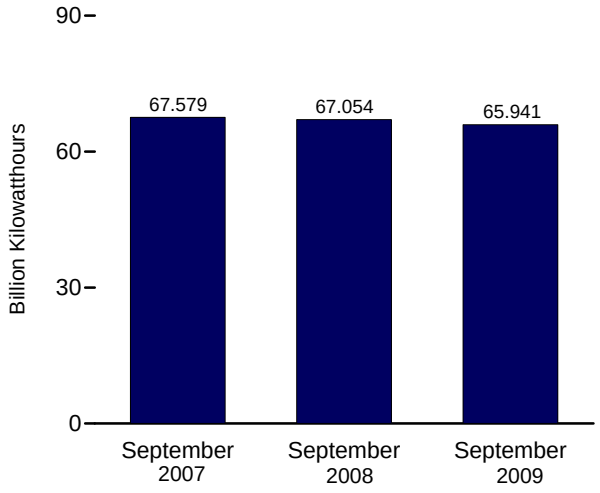
Electricity Net Generation, 1973-2008



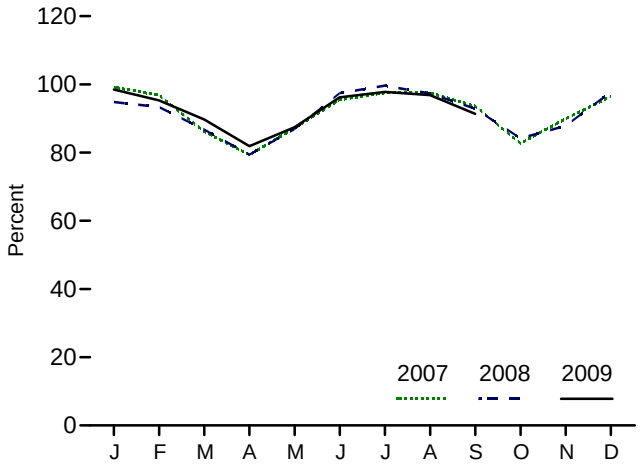
Nuclear Share of Electricity Net Generation, 1973-2008



Nuclear Electricity Net Generation



Capacity Factor, Monthly



Web Page: http://www.eia.doe.gov/emeu/mer/nuclear.html.
Sources: Tables 7.1 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 January	104	100.266	74,006	20.9	99.2
February	104	100.266	65,225	20.2	96.8
March	104	100.266	64,305	20.1	86.2
April	104	100.266	57,301	18.9	79.4
May	104	100.266	65,025	19.7	87.2
June	104	100.266	68,923	19.0	95.5
July	104	100.266	72,739	18.5	97.5
August	104	100.266	72,751	17.2	97.5
September	104	100.266	67,579	19.0	93.6
October	104	100.266	61,690	18.5	82.7
November	104	100.266	64,899	20.7	89.9
December	104	100.266	71,983	20.8	96.5
Total	**104**	**100.266**	**806,425**	**19.4**	**91.8**
2008 January	104	100.266	70,736	19.5	94.8
February	104	100.266	65,130	20.1	93.3
March	104	100.266	64,716	20.0	86.8
April	104	100.266	57,333	18.8	79.4
May	104	100.266	64,826	20.0	86.9
June	104	100.266	70,319	18.9	97.4
July	104	100.266	74,318	18.5	99.6
August	104	100.266	72,617	18.7	97.3
September	104	100.266	67,054	19.9	92.9
October	104	100.266	62,793	19.7	84.2
November	104	100.266	63,408	20.5	87.8
December	104	100.266	72,931	21.3	97.8
Total	**104**	**100.266**	**806,182**	**19.6**	**91.5**
2009 January	104	100.266	73,479	20.8	98.5
February	104	100.266	64,227	21.4	95.3
March	104	100.266	66,920	21.6	89.7
April	104	100.266	59,129	20.5	81.9
May	104	100.266	65,229	20.9	87.4
June	104	100.266	69,435	20.0	96.2
July	104	100.266	72,949	19.6	97.8
August	104	100.266	72,245	19.0	96.8
September	104	100.266	65,941	20.2	91.3
9-Month Total	**104**	**100.266**	**609,553**	**20.4**	**92.8**
2008 9-Month Total	**104**	**100.266**	**607,050**	**19.3**	**92.1**
2007 9-Month Total	**104**	**100.266**	**607,853**	**19.2**	**92.5**

[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 2008,* June 2009, Table 9.1, http://www.eia.doe.gov/emeu/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.doe.gov/emeu/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.doe.gov/cneaf/nuclear/page/nuc_reactors/operational.xls.

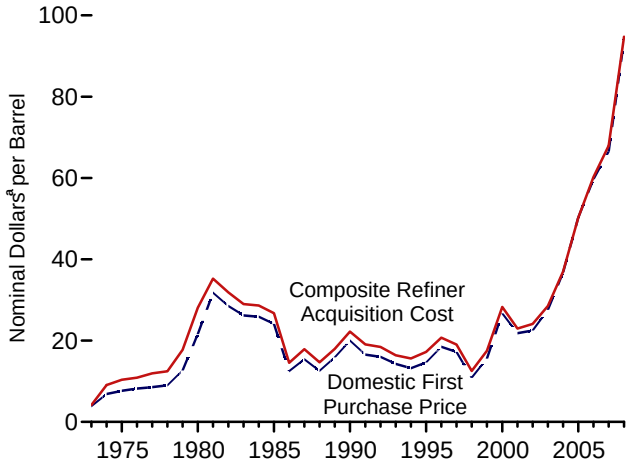
Nuclear Electricity Net Generation and **Nuclear Share of Electricity Net Generation**
See Table 7.2a.

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

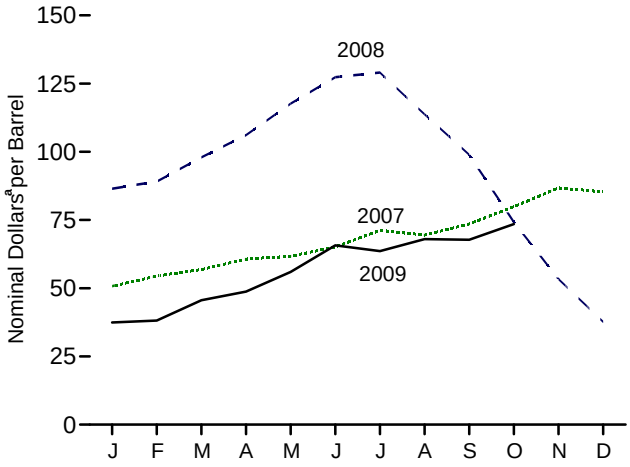
9 Energy Prices

Figure 9.1 Petroleum Prices

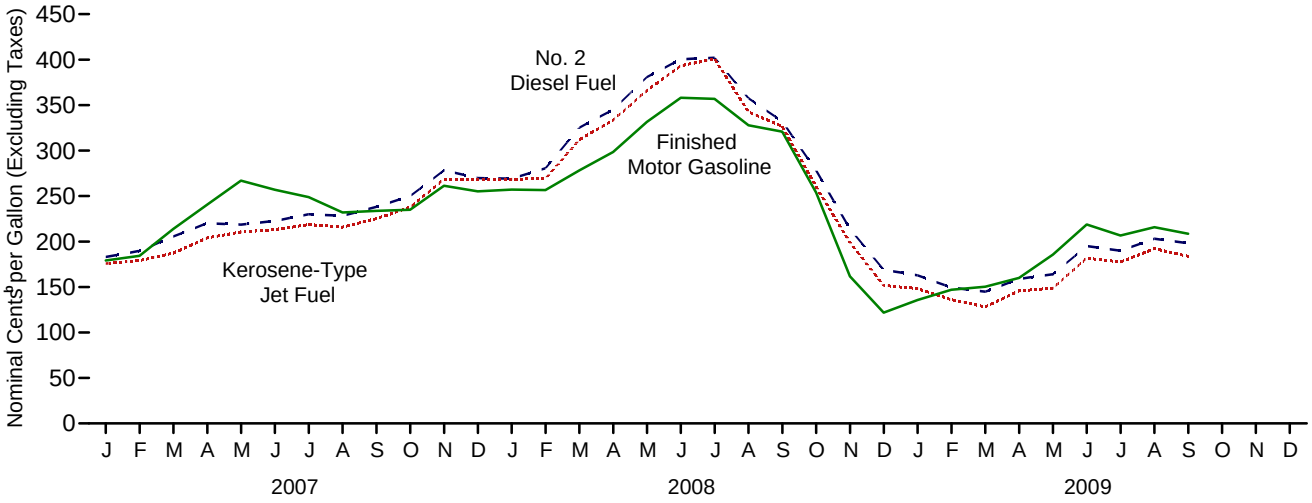
Crude Oil Prices, 1973-2008



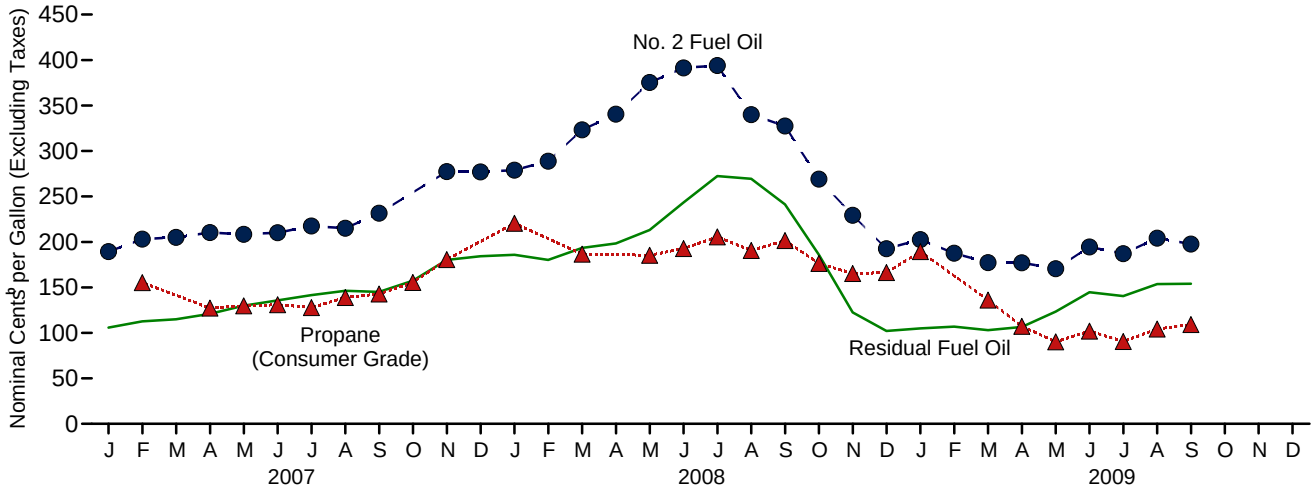
Composite Refiner Acquisition Cost, Monthly



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]See "Nominal Dollars" in Glossary.
[b]See "Nominal Price" in Glossary.

Web Page: http://www.eia.doe.gov/emeu/mer/prices.html.
Sources: Tables 9.1, 9.5, and 9.7.

Table 9.1 Crude Oil Price Summary

(Nominal 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 January	49.32	48.11	50.53	53.10	49.57	50.77
February	52.94	51.97	54.04	55.72	53.77	54.45
March	54.95	55.46	57.42	57.86	56.31	56.84
April	58.20	59.53	60.99	61.13	60.45	60.68
May	58.90	60.72	62.92	62.04	61.55	61.71
June	62.35	64.38	66.26	64.95	65.24	65.14
July	69.23	69.30	70.51	72.08	70.75	71.24
August	67.77	66.69	69.07	71.57	68.28	69.46
September	73.27	72.21	73.92	75.84	72.34	73.54
October	79.32	78.51	79.45	82.20	78.61	79.87
November	87.16	83.75	84.89	89.25	85.53	86.78
December	85.28	82.85	84.28	88.98	83.21	85.29
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	36.86	38.51	38.67	36.84	37.45
February	34.14	38.08	40.14	37.51	38.56	38.15
March	42.46	44.34	46.61	44.92	45.96	45.57
April	45.22	47.62	51.33	47.52	49.58	48.78
May	52.69	55.46	58.01	54.58	56.77	55.96
June	63.08	64.81	65.85	64.61	66.37	65.71
July	60.43	[R] 62.32	[R] 64.73	63.78	63.46	63.58
August	65.28	[R] 67.44	[R] 68.30	67.78	[R] 68.09	[R] 67.98
September	[R] 65.27	[R] 65.34	[R] 67.26	[R] 67.86	[R] 67.65	[R] 67.74
October	NA	NA	NA	[E] 72.90	[E] 74.09	[E] 73.50

[a] See "Nominal Dollars" in Glossary.
[b] See Note 4, "Crude Oil Refinery Acquisition Costs," at end of section.
[c] See Note 1, "Crude Oil Domestic First Purchase Prices," at end of section.
[d] See Note 2, "Crude Oil F.O.B. Costs," at end of section.
[e] See Note 3, "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.doe.gov/emeu/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

(Nominal 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 January	52.04	48.98	43.27	56.03	W	53.57	44.79	50.06	50.92	45.31
February	55.18	57.10	47.47	58.32	W	–	49.80	52.43	53.84	49.98
March	60.34	58.44	50.21	64.88	W	62.04	52.01	56.22	57.79	52.91
April	65.45	58.26	54.36	69.72	W	W	56.48	58.82	62.32	56.42
May	65.85	62.06	55.60	71.40	W	W	57.47	63.71	63.77	57.78
June	69.63	67.21	59.91	75.55	W	W	61.01	65.45	67.05	61.12
July	74.18	70.77	64.61	79.08	W	76.35	66.02	70.75	72.04	66.48
August	68.38	70.46	61.80	74.08	W	W	63.79	70.97	68.86	64.18
September	75.62	70.66	65.95	80.10	W	W	68.99	77.63	75.30	68.38
October	80.20	79.10	72.04	88.88	W	W	74.87	85.03	82.10	73.38
November	90.85	W	79.13	94.71	86.74	W	83.61	84.11	87.15	80.07
December	88.27	90.11	80.49	96.18	81.45	W	80.57	81.14	86.61	77.78
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	39.88	26.24	36.96	46.12	W	W	36.68	35.24	37.60	36.15
February	40.60	32.55	37.59	45.02	W	–	38.03	36.38	39.71	36.81
March	44.76	46.69	40.94	49.91	48.31	W	41.77	47.66	45.75	42.96
April	50.57	W	46.71	52.93	W	–	45.82	51.05	48.67	46.86
May	55.79	54.17	55.49	57.80	W	–	54.36	58.05	55.89	55.12
June	67.03	62.94	63.83	68.74	W	–	63.16	64.14	65.36	64.34
July	63.34	58.58	60.42	69.73	W	–	60.16	R 63.42	R 63.25	R 61.39
August	W	64.41	R 67.20	R 72.37	R 66.37	W	R 65.42	R 66.03	R 67.58	R 67.32
September	W	63.68	64.49	W	W	–	64.42	66.97	65.80	64.96

[a] 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 2, "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.doe.gov/emeu/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

(Nominal 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 January	53.12	46.86	52.22	44.32	58.55	51.21	56.59	47.20	50.65	52.81	47.56
February	57.78	50.25	59.08	48.45	61.16	54.94	59.30	51.97	54.18	56.06	51.69
March	61.91	52.58	59.37	51.07	66.47	58.22	65.96	54.34	57.49	59.60	54.71
April	67.78	54.60	61.77	55.16	71.15	61.53	65.92	58.67	60.98	63.73	57.43
May	67.51	56.46	63.70	56.40	72.99	66.15	W	60.17	65.02	66.38	58.91
June	72.40	57.54	67.87	60.68	77.15	69.53	W	63.24	68.18	69.58	61.65
July	76.73	62.66	73.15	65.46	80.84	72.37	77.73	67.95	71.29	73.63	66.95
August	70.28	64.10	72.72	62.52	76.67	74.11	W	65.64	72.79	71.73	65.76
September	77.76	66.76	77.32	66.55	81.96	80.60	79.48	70.64	78.56	77.37	69.42
October	81.92	67.36	79.74	72.68	90.13	84.73	81.77	76.74	84.29	83.58	73.62
November	92.56	76.60	80.74	79.70	95.54	86.92	W	85.23	86.17	88.53	80.39
December	90.96	69.62	94.68	81.53	97.88	83.72	94.58	82.55	84.00	88.30	79.02
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	43.88	34.17	32.08	38.08	47.68	39.78	W	39.14	39.01	39.93	36.89
February	42.83	35.83	34.49	38.16	46.71	44.46	W	39.58	42.56	42.49	38.07
March	47.80	44.22	46.70	41.76	51.86	51.71	47.44	43.86	50.35	48.29	45.09
April	53.54	47.61	46.86	47.26	58.10	57.32	52.41	48.25	57.16	54.08	48.70
May	56.66	54.42	54.90	56.22	62.71	61.93	58.66	56.28	61.46	59.53	56.73
June	68.42	64.00	65.65	64.39	69.19	66.24	67.33	64.52	66.27	66.63	65.11
July	R 66.73	R 62.18	63.24	60.99	R 71.08	R 65.97	W	62.11	R 66.20	R 66.13	R 63.29
August	R 72.48	R 64.23	R 66.71	R 67.71	R 73.50	R 68.88	R 72.21	R 67.23	R 68.74	R 69.76	R 66.91
September	68.41	66.61	66.36	64.96	71.43	69.89	W	65.97	69.21	68.12	66.50

[a] 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 3, "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.doe.gov/emeu/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." • **1978-2008:** EIA, *Petroleum Marketing Annual 2008,* Table 22. • **2009:** EIA, *Petroleum Marketing Monthly,* December 2009, Table 22.

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

(Nominal Cents[a] per Gallon, Including Taxes)

	Leaded Regular	Unleaded Regular	Unleaded Premium[b]	All Types[c]
1973 Average	**38.8**	**NA**	**NA**	**NA**
1975 Average	**56.7**	**NA**	**NA**	**NA**
1980 Average	**119.1**	**124.5**	**NA**	**122.1**
1985 Average	**111.5**	**120.2**	**134.0**	**119.6**
1990 Average	**114.9**	**116.4**	**134.9**	**121.7**
1995 Average	**NA**	**114.7**	**133.6**	**120.5**
1996 Average	**NA**	**123.1**	**141.3**	**128.8**
1997 Average	**NA**	**123.4**	**141.6**	**129.1**
1998 Average	**NA**	**105.9**	**125.0**	**111.5**
1999 Average	**NA**	**116.5**	**135.7**	**122.1**
2000 Average	**NA**	**151.0**	**169.3**	**156.3**
2001 Average	**NA**	**146.1**	**165.7**	**153.1**
2002 Average	**NA**	**135.8**	**155.6**	**144.1**
2003 Average	**NA**	**159.1**	**177.7**	**163.8**
2004 Average	**NA**	**188.0**	**206.8**	**192.3**
2005 Average	**NA**	**229.5**	**249.1**	**233.8**
2006 Average	**NA**	**258.9**	**280.5**	**263.5**
2007 January	NA	227.4	250.1	232.1
February	NA	228.5	250.9	233.3
March	NA	259.2	281.8	263.9
April	NA	286.0	309.3	290.9
May	NA	313.0	334.8	317.6
June	NA	305.2	328.1	310.0
July	NA	296.1	320.0	301.3
August	NA	278.2	301.8	283.3
September	NA	278.9	302.1	283.9
October	NA	279.3	303.7	284.3
November	NA	306.9	330.7	311.8
December	NA	302.0	326.4	306.9
Average	**NA**	**280.1**	**303.3**	**284.9**
2008 January	NA	304.7	329.1	309.6
February	NA	303.3	327.2	308.3
March	NA	325.8	350.2	330.7
April	NA	344.1	369.0	349.1
May	NA	376.4	400.3	381.3
June	NA	406.5	431.9	411.5
July	NA	409.0	435.0	414.2
August	NA	378.6	404.5	383.8
September	NA	369.8	394.0	374.9
October	NA	317.3	343.2	322.5
November	NA	215.1	243.3	220.8
December	NA	168.9	195.1	174.2
Average	**NA**	**326.6**	**351.9**	**331.7**
2009 January	NA	178.7	203.6	183.8
February	NA	192.8	218.2	197.9
March	NA	194.9	219.7	200.0
April	NA	205.6	230.9	210.7
May	NA	226.5	251.1	231.4
June	NA	263.1	288.3	268.1
July	NA	254.3	280.6	259.4
August	NA	262.7	288.7	267.7
September	NA	257.4	284.5	262.6
October	NA	256.1	282.6	261.3
November	NA	266.0	291.7	270.9

[a] See "Nominal Price" 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.doe.gov/emeu/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

(Nominal Cents[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	**29.3**	**31.4**	**24.5**	**27.5**	**26.3**	**29.8**
1980 Average	**60.8**	**67.5**	**47.9**	**52.3**	**52.8**	**60.7**
1985 Average	**61.0**	**64.4**	**56.0**	**58.2**	**57.7**	**61.0**
1990 Average	**47.2**	**50.5**	**37.2**	**40.0**	**41.3**	**44.4**
1995 Average	**38.3**	**43.6**	**33.8**	**37.7**	**36.3**	**39.2**
1996 Average	**45.6**	**52.6**	**38.9**	**43.3**	**42.0**	**45.5**
1997 Average	**41.5**	**48.8**	**36.6**	**40.3**	**38.7**	**42.3**
1998 Average	**29.9**	**35.4**	**26.9**	**28.7**	**28.0**	**30.5**
1999 Average	**38.2**	**40.5**	**32.9**	**36.2**	**35.4**	**37.4**
2000 Average	**62.7**	**70.8**	**51.2**	**56.6**	**56.6**	**60.2**
2001 Average	**52.3**	**64.2**	**42.8**	**49.2**	**47.6**	**53.1**
2002 Average	**54.6**	**64.0**	**50.8**	**54.4**	**53.0**	**56.9**
2003 Average	**72.8**	**80.4**	**58.8**	**65.1**	**66.1**	**69.8**
2004 Average	**76.4**	**83.5**	**60.1**	**69.2**	**68.1**	**73.9**
2005 Average	**111.5**	**116.8**	**84.2**	**97.4**	**97.1**	**104.8**
2006 Average	**120.2**	**134.2**	**108.5**	**117.3**	**113.6**	**121.8**
2007 January	101.5	117.2	93.0	100.6	97.6	105.8
February	117.2	121.4	100.0	108.2	107.3	112.6
March	117.1	122.1	100.8	111.4	107.6	115.0
April	124.4	125.8	108.4	118.2	115.0	120.9
May	131.1	135.9	120.0	128.1	123.8	130.0
June	135.7	142.1	124.3	132.5	128.0	135.7
July	146.1	153.9	132.1	138.3	137.8	141.5
August	143.6	158.4	132.6	141.9	136.7	146.2
September	147.4	161.0	133.7	141.0	139.3	145.0
October	164.7	166.1	147.5	154.2	153.6	157.3
November	183.9	183.2	169.2	179.6	174.2	180.3
December	194.8	194.8	169.0	179.7	176.5	184.2
Average	**140.6**	**143.6**	**131.4**	**135.0**	**135.0**	**137.4**
2008 January	199.7	203.9	166.2	178.3	176.4	185.9
February	187.0	200.4	162.5	172.0	171.4	180.2
March	195.6	204.8	171.7	188.1	176.9	193.4
April	213.9	222.1	182.2	190.4	188.0	198.3
May	232.2	234.9	198.9	206.9	204.2	213.2
June	257.8	265.8	218.1	233.3	227.4	243.4
July	283.3	294.5	254.2	265.7	263.6	272.4
August	254.6	300.5	244.5	255.4	248.6	269.4
September	217.5	266.6	218.0	230.0	217.9	241.2
October	157.4	216.6	160.3	175.9	159.2	185.9
November	103.6	165.4	97.1	105.5	100.4	122.5
December	101.0	121.1	78.4	87.7	87.6	102.1
Average	**191.8**	**214.4**	**184.3**	**188.9**	**186.6**	**196.4**
2009 January	103.5	116.4	89.0	95.3	94.7	104.9
February	101.1	120.4	91.8	97.4	95.4	106.8
March	101.9	118.3	91.7	95.2	95.2	103.0
April	107.7	117.4	99.2	102.7	101.7	106.6
May	120.5	121.3	119.1	124.5	119.5	123.4
June	140.1	144.0	137.3	145.0	138.1	144.7
July	141.7	148.8	139.9	136.9	140.5	140.4
August	158.6	164.1	156.7	148.8	R 157.3	153.6
September	153.3	168.9	155.5	149.2	154.9	154.0

[a] See "Nominal Price" in Glossary.

R=Revised.

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

Sources: • **1978-2008:** EIA, *Petroleum Marketing Annual 2008,* Table 16. • **2009:** EIA, *Petroleum Marketing Monthly,* December 2009, Table 16.

Table 9.6 Refiner Prices of Petroleum Products for Resale

(Nominal Cents[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	**43.4**	**53.7**	**38.6**	**40.4**	**36.9**	**36.5**	**23.7**
1980 Average	**94.1**	**112.8**	**86.8**	**86.4**	**80.3**	**80.1**	**41.5**
1985 Average	**83.5**	**113.0**	**79.4**	**87.4**	**77.6**	**77.2**	**39.8**
1990 Average	**78.6**	**106.3**	**77.3**	**83.9**	**69.7**	**69.4**	**38.6**
1995 Average	**62.6**	**97.5**	**53.9**	**58.0**	**51.1**	**53.8**	**34.4**
1996 Average	**71.3**	**105.5**	**64.6**	**71.4**	**63.9**	**65.9**	**46.1**
1997 Average	**70.0**	**106.5**	**61.3**	**65.3**	**59.0**	**60.6**	**41.6**
1998 Average	**52.6**	**91.2**	**45.0**	**46.5**	**42.2**	**44.4**	**28.8**
1999 Average	**64.5**	**100.7**	**53.3**	**55.0**	**49.3**	**54.6**	**34.2**
2000 Average	**96.3**	**133.0**	**88.0**	**96.9**	**88.6**	**89.8**	**59.5**
2001 Average	**88.6**	**125.6**	**76.3**	**82.1**	**75.6**	**78.4**	**54.0**
2002 Average	**82.8**	**114.6**	**71.6**	**75.2**	**69.4**	**72.4**	**43.1**
2003 Average	**100.2**	**128.8**	**87.1**	**95.5**	**88.1**	**88.3**	**60.7**
2004 Average	**128.8**	**162.7**	**120.8**	**127.1**	**112.5**	**118.7**	**75.1**
2005 Average	**167.0**	**207.6**	**172.3**	**175.7**	**162.3**	**173.7**	**93.3**
2006 Average	**196.9**	**249.0**	**196.1**	**200.7**	**183.4**	**201.2**	**103.1**
2007 January	157.0	204.3	172.7	180.6	161.2	169.5	99.5
February	171.7	218.7	176.6	194.2	172.9	182.4	103.3
March	199.5	246.1	184.6	194.3	178.1	197.9	104.9
April	226.4	277.9	202.1	204.8	191.0	211.6	106.7
May	249.5	304.7	207.9	207.8	194.9	210.1	111.2
June	236.1	292.4	211.4	215.7	201.4	214.7	109.4
July	230.7	299.8	216.7	226.1	207.1	222.0	115.9
August	215.2	282.8	215.1	222.2	202.1	219.3	116.7
September	219.5	283.0	225.6	245.0	213.3	232.2	124.8
October	221.8	276.9	235.3	252.5	226.0	242.6	135.2
November	245.8	302.0	265.6	285.4	256.9	269.8	147.1
December	235.8	292.7	265.5	282.5	257.0	259.9	146.1
Average	**218.2**	**275.8**	**217.1**	**224.9**	**207.2**	**220.3**	**119.4**
2008 January	239.5	296.9	266.5	283.2	256.4	258.0	151.9
February	243.6	300.7	267.4	284.2	260.7	273.8	146.9
March	264.0	326.3	310.6	328.1	297.7	315.8	149.5
April	286.1	346.8	331.5	354.3	319.5	335.6	157.1
May	317.2	375.1	364.2	376.7	353.6	371.2	167.5
June	341.6	401.8	391.2	397.3	376.1	385.9	176.1
July	334.7	394.6	397.8	398.0	380.2	387.6	183.3
August	307.8	373.7	339.3	345.6	328.7	333.8	166.7
September	300.0	370.5	327.8	336.5	300.3	316.0	156.5
October	214.9	279.0	256.9	268.1	240.0	251.4	124.2
November	139.3	214.0	197.4	228.8	194.7	195.5	100.5
December	106.1	179.9	147.0	171.5	157.9	146.9	91.6
Average	**258.6**	**334.2**	**302.0**	**285.1**	**274.5**	**299.4**	**143.7**
2009 January	124.5	185.1	147.1	181.0	155.0	147.9	97.4
February	133.2	203.8	134.6	160.7	142.1	132.6	90.1
March	139.7	203.1	126.5	145.6	135.8	131.3	80.5
April	148.2	222.5	142.2	148.0	139.7	145.5	72.0
May	176.2	247.8	146.1	153.9	146.2	152.9	73.2
June	202.4	274.3	178.0	184.1	174.4	182.8	82.1
July	186.7	254.8	175.9	177.3	165.6	174.4	75.6
August	202.6	275.9	189.2	[R] 195.1	180.4	193.6	[R] 83.1
September	191.6	259.2	182.4	185.7	177.4	184.8	91.4

[a] See "Nominal Price" in Glossary.

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

R=Revised.

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

Sources: • **1978-2008:** EIA, *Petroleum Marketing Annual 2008,* Table 4. • **2009:** EIA, *Petroleum Marketing Monthly,* December 2009, Table 4.

Table 9.7 Refiner Prices of Petroleum Products to End Users

(Nominal Cents[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	**48.4**	**51.6**	**38.7**	**42.1**	**40.0**	**37.7**	**33.5**
1980 Average	**103.5**	**108.4**	**86.8**	**90.2**	**78.8**	**81.8**	**48.2**
1985 Average	**91.2**	**120.1**	**79.6**	**103.0**	**84.9**	**78.9**	**71.7**
1990 Average	**88.3**	**112.0**	**76.6**	**92.3**	**73.4**	**72.5**	**74.5**
1995 Average	**76.5**	**100.5**	**54.0**	**58.9**	**56.2**	**56.0**	**49.2**
1996 Average	**84.7**	**111.6**	**65.1**	**74.0**	**67.3**	**68.1**	**60.5**
1997 Average	**83.9**	**112.8**	**61.3**	**74.5**	**63.6**	**64.2**	**55.2**
1998 Average	**67.3**	**97.5**	**45.2**	**50.1**	**48.2**	**49.4**	**40.5**
1999 Average	**78.1**	**105.9**	**54.3**	**60.5**	**55.8**	**58.4**	**45.8**
2000 Average	**110.6**	**130.6**	**89.9**	**112.3**	**92.7**	**93.5**	**60.3**
2001 Average	**103.2**	**132.3**	**77.5**	**104.5**	**82.9**	**84.2**	**50.6**
2002 Average	**94.7**	**128.8**	**72.1**	**99.0**	**73.7**	**76.2**	**41.9**
2003 Average	**115.6**	**149.3**	**87.2**	**122.4**	**93.3**	**94.4**	**57.7**
2004 Average	**143.5**	**181.9**	**120.7**	**116.0**	**117.3**	**124.3**	**83.9**
2005 Average	**182.9**	**223.1**	**173.5**	**195.7**	**170.5**	**178.6**	**108.9**
2006 Average	**212.8**	**268.2**	**199.8**	**224.4**	**198.2**	**209.6**	**135.8**
2007 January	179.1	217.9	175.8	194.4	189.4	183.0	NA
February	184.2	228.5	179.0	NA	203.1	189.8	155.3
March	213.8	262.7	187.2	232.5	205.0	205.6	NA
April	240.5	296.9	203.9	236.1	210.3	220.2	127.2
May	266.9	309.6	210.5	W	208.3	218.5	129.8
June	256.9	297.8	213.2	W	210.2	222.6	130.9
July	248.8	305.3	218.5	236.2	217.6	230.1	127.8
August	232.0	282.3	216.0	246.7	215.0	228.2	138.9
September	233.7	290.0	225.0	267.3	231.6	238.1	142.8
October	235.0	285.5	237.7	280.1	NA	249.9	155.5
November	261.4	306.7	268.4	319.7	277.3	278.2	180.6
December	255.2	297.5	268.5	330.3	277.0	269.7	NA
Average	**234.5**	**284.9**	**216.5**	**226.3**	**224.1**	**226.7**	**148.9**
2008 January	257.1	298.7	268.5	338.1	279.0	269.2	220.6
February	256.6	295.4	269.3	340.4	288.8	280.5	NA
March	278.3	329.6	312.0	359.2	323.2	325.2	186.5
April	298.4	335.8	333.4	377.4	340.5	345.1	NA
May	331.6	361.5	366.1	395.0	375.3	380.8	185.3
June	358.0	396.5	393.3	415.9	391.4	400.4	192.8
July	356.8	392.9	400.8	439.3	393.9	402.1	205.5
August	327.9	379.2	342.5	405.5	339.9	357.6	190.6
September	320.7	383.7	326.6	401.3	327.5	332.0	201.5
October	253.7	297.5	260.3	299.3	269.0	278.1	176.3
November	161.7	223.0	198.8	308.5	229.3	213.9	165.2
December	121.9	181.4	151.8	282.3	192.6	169.0	166.4
Average	**277.5**	**327.3**	**305.2**	**328.3**	**298.6**	**315.0**	**189.2**
2009 January	135.7	185.7	148.2	261.3	202.6	162.9	189.4
February	146.9	196.1	136.0	263.1	187.7	149.5	NA
March	150.3	196.4	128.1	256.5	177.2	144.9	136.0
April	160.0	215.0	145.8	254.0	177.0	158.9	107.2
May	185.6	242.3	148.7	249.7	170.6	164.0	90.1
June	218.7	270.7	181.8	249.0	194.4	195.0	102.0
July	206.7	260.7	177.4	246.2	187.1	189.9	90.5
August	215.7	276.3	192.2	254.5	204.1	203.1	104.3
September	208.6	268.3	183.7	NA	197.6	198.1	109.1

[a] See "Nominal Price" in Glossary.

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

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

Notes: • Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. Sales for resale are shown in Table 9.6; they are sales made to purchasers other than ultimate consumers. • Values for the current month are preliminary. • Prices prior to 1983 are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **1978-2008:** EIA, *Petroleum Marketing Annual 2008*, Table 2. • **2009:** EIA, *Petroleum Marketing Monthly*, December 2009, Table 2.

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

(Nominal Cents[a] per Gallon, Excluding Taxes)

	Maine	New Hampshire	Vermont	Massachusetts	Rhode Island	Connecticut	New York	New Jersey	Pennsylvania
1978 Average	**48.6**	**50.3**	**50.8**	**48.8**	**50.7**	**50.1**	**50.1**	**49.6**	**48.8**
1980 Average	**96.3**	**100.4**	**101.5**	**97.8**	**101.1**	**98.3**	**98.2**	**97.9**	**96.4**
1985 Average	**99.7**	**102.4**	**107.7**	**107.0**	**106.7**	**108.0**	**111.3**	**105.9**	**102.3**
1990 Average	**98.9**	**102.8**	**107.0**	**108.4**	**108.6**	**109.8**	**112.5**	**108.7**	**102.6**
1995 Average	**78.7**	**77.9**	**85.3**	**84.4**	**87.4**	**86.4**	**95.5**	**88.8**	**82.6**
1996 Average	**97.2**	**94.0**	**96.9**	**97.6**	**98.6**	**98.6**	**106.3**	**102.4**	**95.3**
1997 Average	**94.2**	**94.2**	**98.7**	**96.0**	**98.9**	**96.3**	**106.5**	**103.3**	**95.0**
1998 Average	**78.8**	**78.8**	**87.3**	**81.8**	**86.8**	**83.1**	**94.8**	**89.2**	**81.4**
1999 Average	**81.3**	**77.0**	**85.4**	**83.6**	**85.8**	**85.2**	**96.9**	**91.3**	**81.5**
2000 Average	**129.7**	**128.1**	**125.5**	**127.3**	**125.9**	**129.1**	**144.2**	**140.4**	**122.4**
2001 Average	**121.7**	**125.6**	**126.1**	**122.1**	**123.6**	**123.9**	**136.3**	**131.4**	**115.9**
2002 Average	**112.9**	**111.9**	**117.2**	**114.1**	**112.4**	**111.8**	**121.8**	**122.0**	**106.4**
2003 Average	**131.4**	**131.2**	**130.9**	**138.6**	**134.4**	**135.5**	**143.6**	**148.9**	**130.4**
2004 Average	**151.1**	**149.7**	**150.5**	**155.9**	**151.1**	**151.8**	**162.7**	**166.2**	**148.9**
2005 Average	**198.6**	**197.2**	**198.7**	**206.4**	**200.0**	**201.2**	**210.5**	**216.6**	**197.4**
2006 Average	**229.4**	**228.3**	**240.8**	**235.5**	**236.0**	**235.7**	**245.8**	**246.7**	**228.6**
2007 January	229.5	234.5	252.6	227.7	226.9	238.4	238.6	236.2	224.7
February	234.7	232.6	257.5	237.0	236.7	242.4	249.7	247.2	234.7
March	239.7	242.3	259.3	242.5	242.5	246.3	251.6	253.2	237.0
April	243.7	244.4	260.6	245.6	247.6	249.8	254.8	256.1	239.0
May	241.7	242.5	257.1	245.8	247.2	250.5	257.1	256.6	241.7
June	241.3	239.7	253.1	246.2	247.6	251.8	263.1	253.8	241.5
July	247.6	239.2	258.9	256.9	255.1	256.2	269.1	258.6	242.8
August	250.9	239.0	255.7	251.6	252.3	250.9	260.5	258.2	238.1
September	258.2	249.4	262.6	259.8	263.7	261.3	269.6	267.8	249.4
October	272.1	264.8	269.8	272.6	276.0	276.9	282.8	281.2	261.6
November	293.1	289.3	293.7	303.2	308.1	301.3	309.1	316.8	294.6
December	299.9	301.4	302.4	311.1	313.5	305.5	315.5	326.1	300.9
Average	**254.0**	**253.5**	**267.9**	**257.6**	**260.2**	**261.5**	**267.4**	**266.4**	**250.8**
2008 January	304.6	305.1	309.5	313.6	317.3	309.1	321.8	332.5	305.7
February	305.0	305.0	310.5	319.3	320.2	312.3	325.8	335.1	309.7
March	330.9	331.1	337.1	352.5	349.5	336.2	352.1	369.0	340.3
April	349.0	347.4	357.5	370.1	366.2	349.4	364.9	385.5	355.3
May	376.3	384.3	391.3	397.7	392.7	380.6	393.4	413.5	385.1
June	419.7	425.7	425.2	429.3	417.6	411.3	416.4	447.2	416.4
July	429.0	442.7	448.4	435.9	428.7	419.4	428.9	455.4	432.6
August	395.7	404.8	417.6	389.2	384.2	NA	388.9	402.3	NA
September	375.7	376.8	393.9	362.8	357.5	368.1	371.8	376.1	357.3
October	322.8	331.8	350.2	306.7	300.0	319.9	329.5	319.8	310.3
November	279.5	285.7	313.7	264.6	273.5	288.6	296.2	272.7	275.7
December	251.3	255.9	280.2	233.9	240.8	261.3	258.9	238.1	244.9
Average	**319.9**	**320.7**	**332.3**	**319.7**	**321.0**	**319.5**	**329.3**	**326.7**	**315.7**
2009 January	250.4	248.6	273.8	236.9	235.7	256.7	253.3	239.4	242.4
February	237.9	238.0	265.4	224.7	222.6	242.4	244.0	229.1	226.7
March	224.0	224.4	251.8	217.8	213.8	235.7	232.6	216.7	220.0
April	224.4	220.8	242.0	220.8	214.0	230.9	233.0	218.8	218.0
May	217.5	212.2	236.4	216.2	207.5	222.3	228.7	219.2	217.7
June	227.5	218.0	237.2	238.0	237.6	240.6	242.0	238.2	220.7
July	225.3	213.3	232.2	232.0	227.9	234.8	241.0	232.5	213.8
August	R 234.8	R 222.8	R 239.0	245.4	R 243.8	R 248.1	251.2	R 245.2	R 225.7
September	232.8	225.5	239.9	242.9	234.7	235.8	245.9	241.3	220.0

[a] See "Nominal Price" in Glossary.

R=Revised. NA=Not available.

Notes: • States are grouped in Tables 9.8a, 9.8b, and 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.doe.gov/emeu/mer/prices.html for all available data beginning in 1978.

Sources: • **1978-2008:** EIA, *Petroleum Marketing Annual 2008,* Table 15. • **2009:** EIA, *Petroleum Marketing Monthly,* December 2009, Table 15.

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

	Delaware	District of Columbia	Maryland	Virginia	West Virginia	Ohio	Michigan	Indiana	Illinois	Wisconsin	Minnesota
1978 Average	**47.8**	**50.7**	**49.2**	**49.1**	**46.2**	**47.4**	**47.9**	**48.5**	**46.5**	**44.7**	**47.8**
1980 Average	**95.4**	**102.6**	**97.9**	**98.5**	**92.2**	**91.9**	**97.8**	**99.6**	**95.8**	**91.5**	**99.9**
1985 Average	**104.6**	**114.3**	**108.8**	**106.3**	**98.0**	**99.7**	**102.1**	**99.1**	**97.5**	**98.3**	**101.9**
1990 Average	**105.8**	**107.8**	**111.9**	**110.6**	**99.1**	**98.1**	**100.9**	**99.3**	**96.1**	**94.2**	**101.4**
1995 Average	**87.0**	**101.0**	**93.6**	**84.4**	**81.5**	**80.8**	**86.0**	**81.6**	**78.5**	**81.2**	**80.1**
1996 Average	**98.4**	**117.8**	**106.3**	**95.2**	**96.0**	**92.1**	**97.7**	**91.2**	**89.3**	**89.9**	**90.9**
1997 Average	**98.4**	**117.4**	**105.7**	**94.8**	**96.2**	**91.3**	**94.2**	**86.5**	**87.0**	**93.3**	**89.9**
1998 Average	**85.8**	**102.2**	**90.2**	**85.6**	**81.8**	**76.7**	**80.4**	**74.8**	**73.5**	**80.1**	**73.8**
1999 Average	**88.4**	**101.1**	**90.7**	**87.0**	**78.9**	**82.0**	**88.3**	**79.3**	**71.6**	**84.7**	**77.4**
2000 Average	**127.0**	**W**	**135.1**	**126.9**	**125.1**	**122.0**	**NA**	**120.7**	**109.5**	**117.1**	**115.6**
2001 Average	**123.4**	**143.1**	**134.2**	**120.2**	**113.9**	**116.0**	**NA**	**113.3**	**112.1**	**118.0**	**112.2**
2002 Average	**116.4**	**W**	**120.1**	**105.7**	**105.4**	**105.8**	**110.9**	**102.5**	**97.5**	**107.3**	**105.1**
2003 Average	**143.3**	**W**	**145.5**	**131.1**	**130.4**	**128.4**	**132.1**	**120.2**	**119.8**	**126.9**	**121.8**
2004 Average	**157.0**	**W**	**163.2**	**146.2**	**149.3**	**147.5**	**153.9**	**153.7**	**140.5**	**146.5**	**143.3**
2005 Average	**207.5**	**W**	**212.7**	**204.4**	**204.3**	**200.9**	**205.3**	**201.7**	**202.1**	**199.3**	**198.7**
2006 Average	**238.1**	**W**	**239.8**	**226.8**	**226.1**	**224.4**	**232.9**	**231.7**	**231.2**	**229.7**	**226.8**
2007 January	234.6	W	240.3	211.4	212.9	209.2	221.1	218.2	221.7	219.9	216.9
February	247.7	W	246.9	214.1	223.3	221.6	227.2	228.4	222.3	224.0	224.8
March	249.6	W	251.3	226.8	229.9	231.8	247.3	242.6	236.4	239.1	241.5
April	246.6	W	251.7	224.4	229.2	236.4	258.4	255.5	246.8	254.2	251.7
May	245.6	W	256.2	223.8	228.3	230.0	247.6	246.0	239.7	249.5	251.9
June	NA	W	255.4	232.7	236.2	238.2	245.6	246.7	243.3	251.7	249.9
July	246.4	W	258.7	236.6	241.2	244.1	254.2	255.2	252.0	254.8	258.6
August	245.1	W	258.8	236.2	240.9	247.7	257.3	258.5	256.2	261.7	262.6
September	252.6	W	266.1	245.6	253.5	257.3	266.8	263.7	258.9	271.8	273.4
October	270.7	W	283.0	266.3	266.7	273.5	280.1	280.8	275.0	281.4	282.6
November	302.8	W	312.4	295.5	300.3	308.7	310.3	313.3	307.5	310.3	305.0
December	320.0	W	322.1	300.2	306.2	307.0	304.0	309.6	303.9	306.9	296.4
Average	**258.4**	**W**	**266.8**	**240.7**	**247.8**	**249.4**	**258.8**	**255.7**	**252.8**	**257.1**	**258.7**
2008 January	322.8	W	326.4	306.4	311.5	304.6	304.6	306.3	300.5	303.9	297.1
February	326.0	W	331.1	314.8	316.3	318.4	316.9	312.3	310.0	311.4	311.1
March	354.8	W	354.5	340.6	347.9	354.8	359.1	345.3	357.4	351.2	352.8
April	362.6	W	367.2	352.8	363.9	372.6	370.2	364.3	368.5	365.7	371.3
May	390.3	W	402.9	384.8	391.6	407.6	400.0	409.1	405.0	395.6	399.7
June	423.1	W	424.6	412.6	425.2	417.5	421.4	427.4	NA	NA	417.1
July	434.5	W	441.4	412.3	430.6	414.7	417.8	426.4	401.1	399.3	416.3
August	389.8	W	408.7	376.4	386.3	379.4	373.8	379.7	NA	366.6	379.4
September	362.4	W	382.8	355.8	356.6	367.0	365.2	368.8	360.0	360.1	365.8
October	314.8	W	329.7	315.8	316.2	301.9	307.9	309.8	303.9	308.6	309.8
November	267.7	W	289.4	266.8	268.8	250.9	248.5	252.6	251.4	252.0	258.2
December	244.1	W	255.0	235.0	233.3	208.1	207.9	211.8	212.9	211.1	207.2
Average	**318.7**	**W**	**327.3**	**312.4**	**322.1**	**314.7**	**306.7**	**310.5**	**315.2**	**308.8**	**306.5**
2009 January	241.0	W	245.6	222.3	230.0	204.6	200.1	206.1	206.9	200.2	197.6
February	229.3	W	239.2	215.3	220.2	189.3	187.6	190.9	186.9	185.4	181.8
March	225.3	W	226.6	200.5	204.2	182.1	180.6	181.9	183.3	178.2	173.7
April	226.6	W	225.2	NA	203.3	190.0	181.4	192.2	198.2	187.2	189.1
May	225.3	W	221.5	182.2	199.9	192.2	180.9	197.2	NA	197.6	187.2
June	228.9	W	230.2	203.7	209.7	215.0	209.5	217.4	205.9	218.9	215.5
July	225.4	W	229.2	205.4	212.3	211.2	196.4	218.2	NA	218.3	209.2
August	234.0	W	238.2	R 214.1	R 225.2	R 228.5	215.3	NA	R 214.7	R 228.4	R 229.7
September	231.0	W	238.9	211.1	227.2	221.6	217.9	228.1	NA	226.0	222.1

[a] See "Nominal Price" 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, 9.8b, and 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.doe.gov/emeu/mer/prices.html for all available data beginning in 1978.

Sources: • **1978-2008:** EIA, *Petroleum Marketing Annual 2008,* Table 15. • **2009:** EIA, *Petroleum Marketing Monthly,* December 2009, Table 15.

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

	Idaho	Washington	Oregon	Alaska	U.S. Average
1978 Average	**43.6**	**48.6**	**45.8**	**53.2**	**49.0**
1980 Average	**91.6**	**100.8**	**97.3**	**97.8**	**97.4**
1985 Average	**97.2**	**101.1**	**97.1**	**108.3**	**105.3**
1990 Average	**97.4**	**102.9**	**97.0**	**110.1**	**106.3**
1995 Average	**83.9**	**96.2**	**89.4**	**83.4**	**86.7**
1996 Average	**93.3**	**108.0**	**98.9**	**90.9**	**98.9**
1997 Average	**95.3**	**113.9**	**103.1**	**97.3**	**98.4**
1998 Average	**78.4**	**97.8**	**86.1**	**85.2**	**85.2**
1999 Average	**76.2**	**106.5**	**93.8**	**96.6**	**87.6**
2000 Average	**117.0**	**144.5**	**136.8**	**133.7**	**131.1**
2001 Average	**103.8**	**133.6**	**121.1**	**137.7**	**125.0**
2002 Average	**91.9**	**120.4**	**106.0**	**108.7**	**112.9**
2003 Average	**118.8**	**148.7**	**130.3**	**124.3**	**135.5**
2004 Average	**149.5**	**174.9**	**159.4**	**152.4**	**154.8**
2005 Average	**212.3**	**238.5**	**214.6**	**206.1**	**205.2**
2006 Average	**239.1**	**268.1**	**241.1**	**239.5**	**236.5**
2007 January	228.4	262.7	230.9	226.0	231.1
February	224.9	262.7	224.3	220.9	239.1
March	241.7	270.0	228.2	224.0	244.9
April	254.1	281.2	231.5	238.1	248.0
May	NA	282.4	237.4	244.9	248.0
June	253.0	274.4	NA	247.7	249.2
July	257.9	275.3	NA	252.7	254.9
August	257.3	276.2	NA	256.3	250.9
September	263.6	284.6	250.7	255.8	260.9
October	287.0	321.5	298.0	276.3	275.9
November	321.3	345.9	319.5	303.2	304.0
December	302.5	335.7	304.5	301.1	309.8
Average	**259.8**	**290.9**	**250.0**	**251.8**	**259.2**
2008 January	296.0	329.1	299.3	301.3	313.8
February	305.7	339.8	311.5	308.4	318.1
March	348.7	382.3	349.5	337.7	347.5
April	375.5	404.3	374.0	365.8	362.6
May	399.8	432.0	399.1	399.9	392.1
June	417.8	454.5	423.7	430.9	420.4
July	421.6	452.5	429.3	446.5	429.6
August	384.4	412.4	383.6	422.1	386.6
September	358.2	382.4	355.2	389.7	366.7
October	312.7	327.9	300.7	NA	316.9
November	245.0	284.1	240.2	262.2	277.9
December	187.8	228.4	190.2	222.6	245.0
Average	**307.8**	**340.1**	**306.0**	**348.5**	**321.9**
2009 January	187.9	238.9	193.9	216.0	242.2
February	176.2	225.4	182.8	NA	230.7
March	167.4	212.4	173.8	194.6	220.8
April	186.3	238.3	199.7	214.0	220.9
May	187.8	247.3	204.6	225.6	216.2
June	214.8	254.2	226.8	250.6	230.2
July	212.3	237.8	214.9	236.2	225.0
August	215.8	251.9	232.5	255.4	R 237.0
September	R 227.1	R 267.3	R 235.6	NA	R 234.1
October	NA	NA	NA	NA	E 250.2

[a] See "Nominal Price" in Glossary.

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

Notes: • States are grouped in Tables 9.8a, 9.8b, and 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.

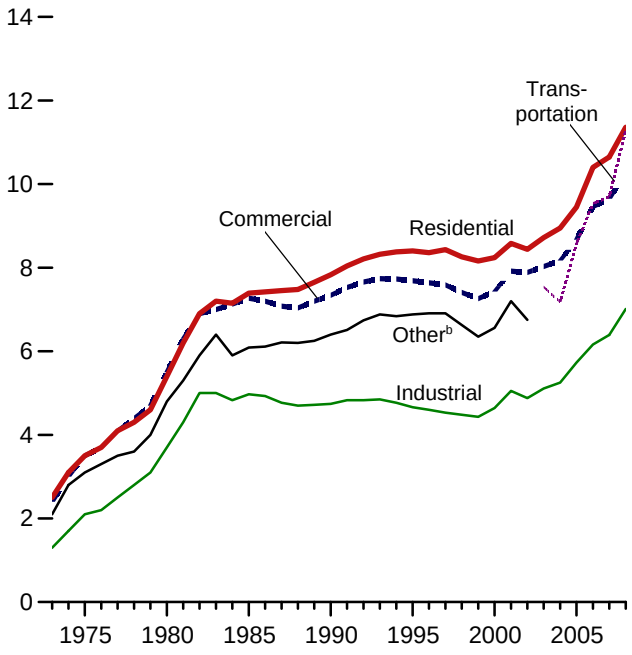
Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available data beginning in 1978.

Sources: • **1978-2008:** EIA, *Petroleum Marketing Annual 2008,* Table 15. • **2009:** EIA, *Petroleum Marketing Monthly,* December 2009, Table 15.

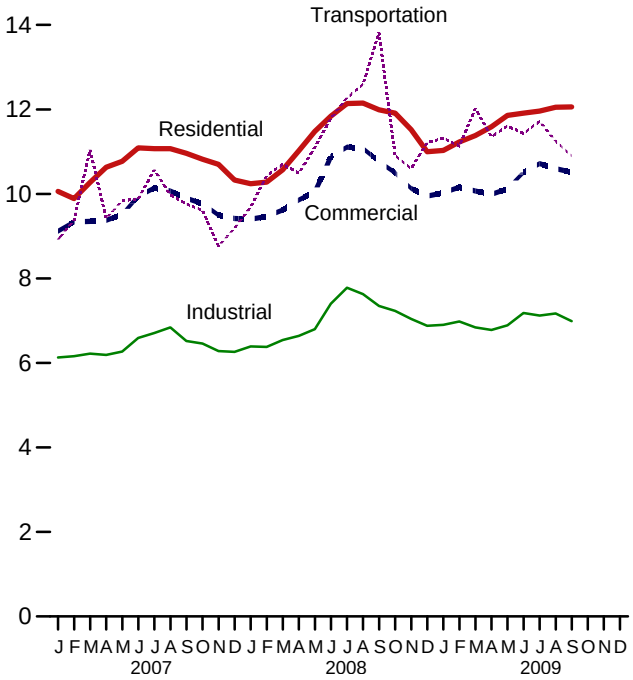
Figure 9.2 Average Retail Prices of Electricity

(Nominal Cents[a] per Kilowatthour)

By Sector, 1973-2008



By Sector, Monthly



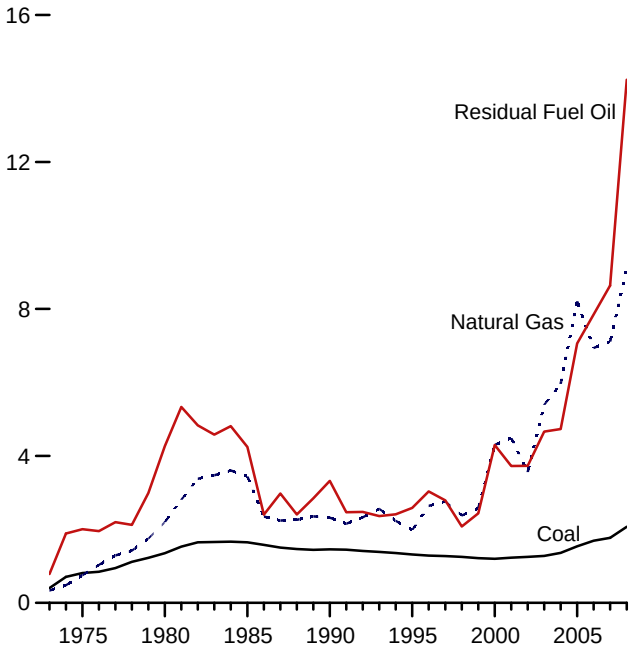
[a]See "Nominal Price" in Glossary.
[b]Public street and highway lighting, interdepartmental sales, other sales to public authorities, agricultural and irrigation, and transportation including railroads and railways.

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

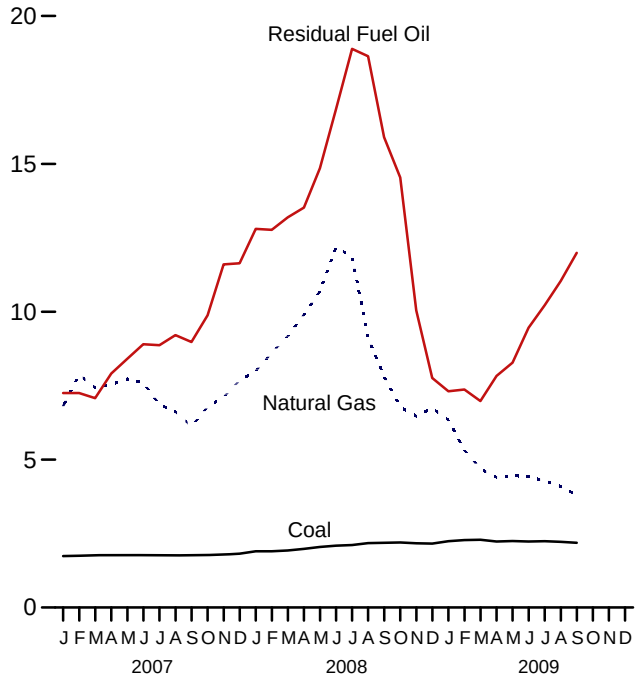
Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants

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

Costs, 1973-2008



Costs, Monthly



[a]See "Nominal Dollars" in Glossary.
Web Page: http://www.eia.doe.gov/emeu/mer/prices.html.
Source: Table 9.10.

Table 9.9 Average Retail Prices of Electricity

(Nominal 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 January	10.06	9.12	6.13	8.92	– –	8.71
February	9.89	9.34	6.16	9.38	– –	8.74
March	10.27	9.35	6.22	11.04	– –	8.80
April	10.63	9.38	6.19	9.42	– –	8.82
May	10.77	9.51	6.27	9.84	– –	8.96
June	11.09	9.95	6.59	9.88	– –	9.45
July	11.07	10.14	6.71	10.57	– –	9.64
August	11.07	10.07	6.84	9.98	– –	9.68
September	10.96	9.90	6.52	9.76	– –	9.43
October	10.82	9.77	6.46	9.61	– –	9.17
November	10.70	9.50	6.28	8.76	– –	8.94
December	10.33	9.42	6.26	9.19	– –	8.91
Average	**10.65**	**9.65**	**6.39**	**9.70**	**– –**	**9.13**
2008 January	10.24	9.40	6.39	9.69	– –	8.99
February	10.28	9.47	6.38	10.43	– –	8.98
March	10.57	9.62	6.54	10.70	– –	9.11
April	11.02	9.86	6.64	10.49	– –	9.30
May	11.48	10.05	6.80	11.10	– –	9.54
June	11.84	10.88	7.40	11.79	– –	10.34
July	12.14	11.11	7.78	12.28	– –	10.73
August	12.15	11.08	7.63	12.59	– –	10.66
September	11.99	10.77	7.35	13.82	– –	10.34
October	11.91	10.50	7.23	10.90	– –	10.04
November	11.52	10.13	7.04	10.60	– –	9.75
December	11.00	9.95	6.88	11.21	– –	9.64
Average	**11.36**	**10.28**	**7.01**	**11.28**	**– –**	**9.82**
2009 January	11.03	10.03	6.90	11.32	– –	9.75
February	11.23	10.16	6.98	11.13	– –	9.83
March	11.38	10.07	6.84	12.02	– –	9.75
April	11.59	9.99	6.78	11.36	– –	9.69
May	11.86	10.12	6.89	11.61	– –	9.87
June	11.91	10.51	7.18	11.43	– –	10.24
July	11.96	10.72	7.12	11.72	– –	10.42
August	12.05	10.60	7.17	11.25	– –	10.40
September	12.06	10.51	6.99	10.90	– –	10.21
9-Month Average	**11.67**	**10.32**	**6.99**	**11.42**	**– –**	**10.04**
2008 9-Month Average	**11.33**	**10.30**	**7.00**	**11.41**	**– –**	**9.82**
2007 9-Month Average	**10.67**	**9.67**	**6.41**	**9.86**	**– –**	**9.17**

[a] See "Nominal Price" in Glossary.

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

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

[d] Transportation sector, including railroads and railways.

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

NA=Not available. – – =Not applicable.

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

Web Page: See http://www.eia.doe.gov/emeu/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,* December 2009, Table 5.3.

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

(Nominal 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 January	1.74	7.25	11.87	1.54	5.78	6.81	2.94
February	1.75	7.25	11.95	1.64	6.63	7.87	3.23
March	1.76	7.08	12.85	1.50	6.21	7.44	3.00
April	1.77	7.91	14.04	1.53	6.64	7.54	3.18
May	1.77	8.41	14.65	1.51	7.16	7.73	3.30
June	1.77	8.90	14.79	1.57	7.75	7.60	3.44
July	1.76	8.87	15.24	1.43	6.83	6.87	3.41
August	1.77	9.21	15.25	1.54	8.05	6.62	3.50
September	1.77	8.98	15.68	1.55	7.37	6.12	3.11
October	1.77	9.88	16.61	1.37	7.39	6.78	3.13
November	1.78	11.60	18.86	1.47	8.48	7.11	3.07
December	1.82	11.64	18.65	1.45	8.14	7.68	3.28
Average	**1.77**	**8.64**	**14.85**	**1.51**	**7.17**	**7.11**	**3.23**
2008 January	1.90	12.80	18.12	1.53	9.86	8.00	3.70
February	1.90	12.77	18.73	1.65	10.31	8.61	3.67
March	1.93	13.19	19.72	1.58	9.08	9.18	3.82
April	1.98	13.52	21.06	1.65	10.67	9.90	4.12
May	2.05	14.85	24.36	1.82	12.03	10.69	4.34
June	2.09	16.84	24.70	1.85	14.01	12.17	5.46
July	2.11	18.89	26.13	1.81	14.00	11.87	5.56
August	2.18	18.64	23.87	2.56	14.06	9.12	4.56
September	2.19	15.90	21.90	2.22	12.32	7.81	3.94
October	2.20	14.54	18.42	2.19	10.17	6.78	3.52
November	2.17	10.05	14.69	2.07	7.55	6.47	3.28
December	2.16	7.76	11.52	2.12	6.82	6.74	3.40
Average	**2.07**	**14.24**	**20.08**	**1.92**	**10.96**	**9.11**	**4.14**
2009 January	2.24	7.31	11.37	2.05	6.77	6.34	3.40
February	2.28	7.37	12.08	1.80	6.54	5.32	3.12
March	2.29	6.98	10.82	1.65	5.90	4.69	2.98
April	2.23	7.83	11.64	1.18	6.19	4.40	2.85
May	2.25	8.28	11.93	1.73	6.38	4.46	2.95
June	2.23	9.46	13.61	1.57	7.69	4.42	3.03
July	2.24	10.22	13.66	1.62	7.63	4.28	3.04
August	2.22	11.04	14.76	1.85	8.01	4.09	2.99
September	2.19	11.99	14.88	1.39	6.99	3.80	2.80
9-Month Average	**2.24**	**8.56**	**12.61**	**1.66**	**6.91**	**4.56**	**3.02**
2008 9-Month Average	**2.04**	**15.54**	**22.13**	**1.84**	**11.95**	**9.82**	**4.38**
2007 9-Month Average	**1.76**	**8.25**	**13.97**	**1.53**	**6.98**	**7.09**	**3.24**

[a] 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.

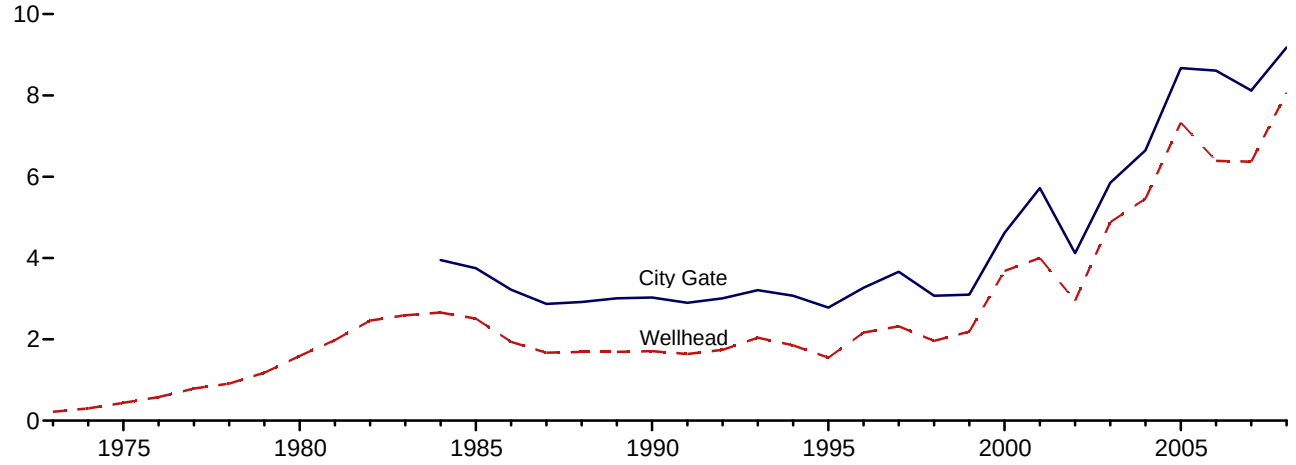
Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available data beginning in 1973.

Sources: See end of section.

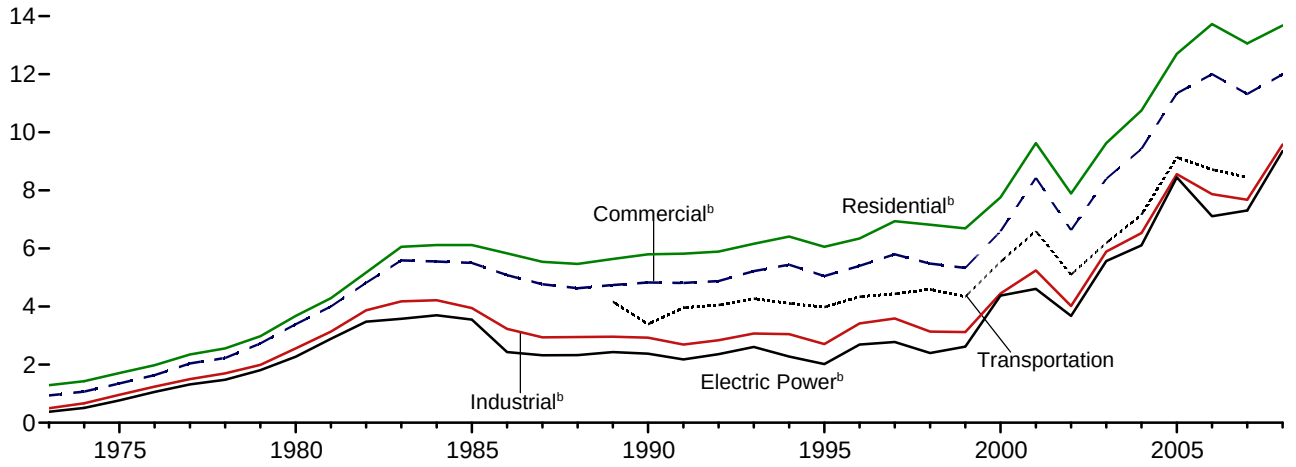
Figure 9.4 Natural Gas Prices

(Nominal Dollars[a] per Thousand Cubic Feet)

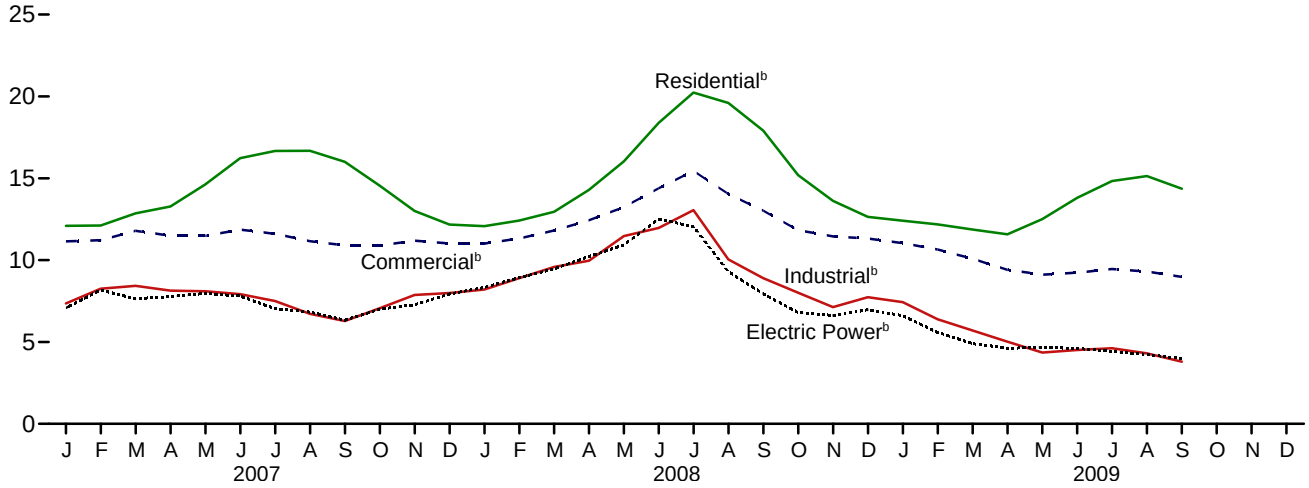
Selected Prices, 1973-2008



Consuming Sectors, 1973-2008



Consuming Sectors, Monthly



[a] See "Nominal Dollars" in Glossary.
[b] Includes taxes.

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

Table 9.11 Natural Gas Prices

(Nominal Dollars[a] per Thousand Cubic Feet)

	Wellhead Price	City Gate Price	Consuming Sectors[b]								
			Residential		Commercial[c]		Industrial[d]		Transportation	Electric Power[e]	
			Price[g]	Percentage of Sector[h]	Price[g]	Percentage of Sector[h]	Price[g]	Percentage of Sector[h]	Vehicle Fuel[f] Price[g]	Price[g]	Percentage of Sector[h,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**	**8.45**	**89.1**
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 January	5.83	7.89	12.09	NA	11.15	83.2	7.35	22.8	NA	7.08	93.0
February	6.91	8.59	12.11	NA	11.21	83.9	8.25	23.0	NA	8.18	92.3
March	6.78	8.81	12.86	NA	11.79	83.5	8.43	22.4	NA	7.64	93.8
April	6.37	8.20	13.28	NA	11.49	81.2	8.14	22.4	NA	7.77	94.2
May	6.85	8.37	14.63	NA	11.48	77.9	8.10	23.3	NA	7.96	93.2
June	6.72	8.42	16.23	NA	11.86	76.2	7.92	23.9	NA	7.80	93.0
July	6.32	7.98	16.67	NA	11.61	74.3	7.50	22.2	NA	7.03	91.7
August	5.87	7.47	16.68	NA	11.16	72.5	6.72	22.3	NA	6.83	89.0
September	5.42	6.97	16.00	NA	10.90	72.5	6.28	21.3	NA	6.33	92.0
October	5.90	7.39	14.55	NA	10.90	74.7	7.06	21.4	NA	7.00	91.8
November	6.58	8.07	13.00	NA	11.19	79.7	7.87	20.9	NA	7.28	93.1
December	6.97	8.13	12.17	NA	11.02	82.5	7.99	21.5	NA	7.93	92.9
Average	**6.37**	**8.12**	**13.06**	**98.0**	**11.32**	**80.5**	**7.68**	**22.3**	**8.45**	**7.31**	**92.2**
2008 January	[E]6.99	8.37	12.07	NA	11.01	79.0	8.20	20.3	NA	8.33	100.4
February	[E]7.55	8.91	12.42	NA	11.32	78.6	8.90	20.3	NA	8.93	100.7
March	[E]8.29	9.49	12.95	NA	11.81	78.4	9.58	21.2	NA	9.47	101.0
April	[E]8.94	9.84	14.29	NA	12.44	75.3	9.96	21.7	NA	10.22	101.4
May	[E]9.81	11.05	16.03	NA	13.24	71.4	11.47	21.1	NA	10.93	101.0
June	[E]10.82	11.85	18.39	NA	14.39	70.6	11.97	20.5	NA	12.50	100.1
July	[E]10.62	12.48	20.24	NA	15.45	66.8	13.05	20.6	NA	12.05	99.8
August	[E]8.32	10.20	19.60	NA	14.04	65.3	10.04	20.3	NA	9.30	100.4
September	[E]7.27	8.99	17.91	NA	13.02	65.8	8.90	18.7	NA	7.94	100.3
October	[E]6.36	7.80	15.19	NA	11.83	69.1	8.01	18.6	NA	6.80	101.0
November	[E]5.97	7.93	13.62	NA	11.45	74.3	7.13	19.3	NA	6.62	100.8
December	[E]5.87	8.16	12.64	NA	11.32	77.9	7.74	19.4	NA	6.96	100.7
Average	**[E]8.07**	**9.18**	**13.68**	**[E]98.1**	**11.99**	**75.1**	**9.58**	**20.2**	**NA**	**9.35**	**100.6**
2009 January	[E]5.15	7.96	12.41	NA	11.04	[R]78.9	7.43	18.9	NA	6.60	100.6
February	[E]4.19	7.25	12.18	NA	10.65	[R]78.2	6.39	[R]18.7	NA	5.59	101.2
March	[E]3.72	6.84	[R]11.87	NA	[R]10.08	[R]76.5	5.70	[R]18.2	NA	4.90	101.9
April	[E]3.43	5.68	[R]11.58	NA	[R]9.41	[R]74.5	5.02	[R]17.9	NA	4.62	101.5
May	[E]3.45	5.03	12.50	NA	9.11	[R]70.5	4.35	[R]18.0	NA	4.67	101.5
June	[E]3.45	5.54	13.80	NA	9.23	[R]68.5	4.51	[R]17.7	NA	4.61	101.0
July	[E]3.43	[R]5.69	[R]14.83	NA	[R]9.46	[R]66.4	4.62	17.8	NA	4.43	100.9
August	[E]3.14	5.59	[R]15.13	NA	[R]9.30	[R]60.7	4.31	17.3	NA	4.24	100.9
September	[E]2.92	5.38	14.36	NA	8.98	61.4	3.80	17.0	NA	3.98	100.7
9-Month Average	**[E]3.65**	**6.55**	**12.47**	**NA**	**10.13**	**73.9**	**5.24**	**18.0**	**NA**	**4.74**	**101.1**
2008 9-Month Average	**[E]8.73**	**9.67**	**13.82**	**NA**	**12.19**	**75.2**	**10.17**	**20.6**	**NA**	**10.08**	**100.5**
2007 9-Month Average	**6.34**	**8.19**	**13.14**	**NA**	**11.39**	**80.6**	**7.66**	**22.6**	**NA**	**7.30**	**92.1**

[a] 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] 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.

[g] Includes taxes.

[h] 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.

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

Sources: See end of section.

Energy Prices

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 9.1 Sources

Domestic First Purchase Price
1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.
1977: Federal Energy Administration, based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report."
1978–2008: U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual 2008*, Table 1.
2009: EIA, *Petroleum Marketing Monthly*, December 2009, Table 1.

F.O.B. and Landed Cost of Imports
October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."
October–December 1977: EIA, Form FEA-F701-M-0, "Transfer Pricing Report."
1978–2008: EIA, *Petroleum Marketing Annual 2008*, Table 1.
2009: EIA, *Petroleum Marketing Monthly*, December 2009, 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."
1978–2008: EIA, *Petroleum Marketing Annual 2008*, Table 1.
2009: EIA, *Petroleum Marketing Monthly*, December 2009, 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), Frorm FEA-F701-M-0, "Transfer Pricing Report."
1978–2008: EIA, *Petroleum Marketing Annual 2008*, Table 21.
2009: EIA, *Petroleum Marketing Monthly*, December 2009, Table 21.

Table 9.10 Sources

1973–September 1977: Federal Power Commission, Form FPC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."
October 1977–December 1977: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."
1978 and 1979: U.S. Energy Information Administration (EIA), Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."
1980–1989: EIA, *Electric Power Monthly*, May issues.
1990–2000: EIA, *Electric Power Monthly*, March 2003, Table 26.
2001–2007: EIA, *Electric Power Monthly*, October 2008, Table 4.1; Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants"; and EIA, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."
2008 and 2009: EIA, *Electric Power Monthly*, December 2009, 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*), November 2009, 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 and 2009: Form EIA-923, "Power Plant Operations Report."

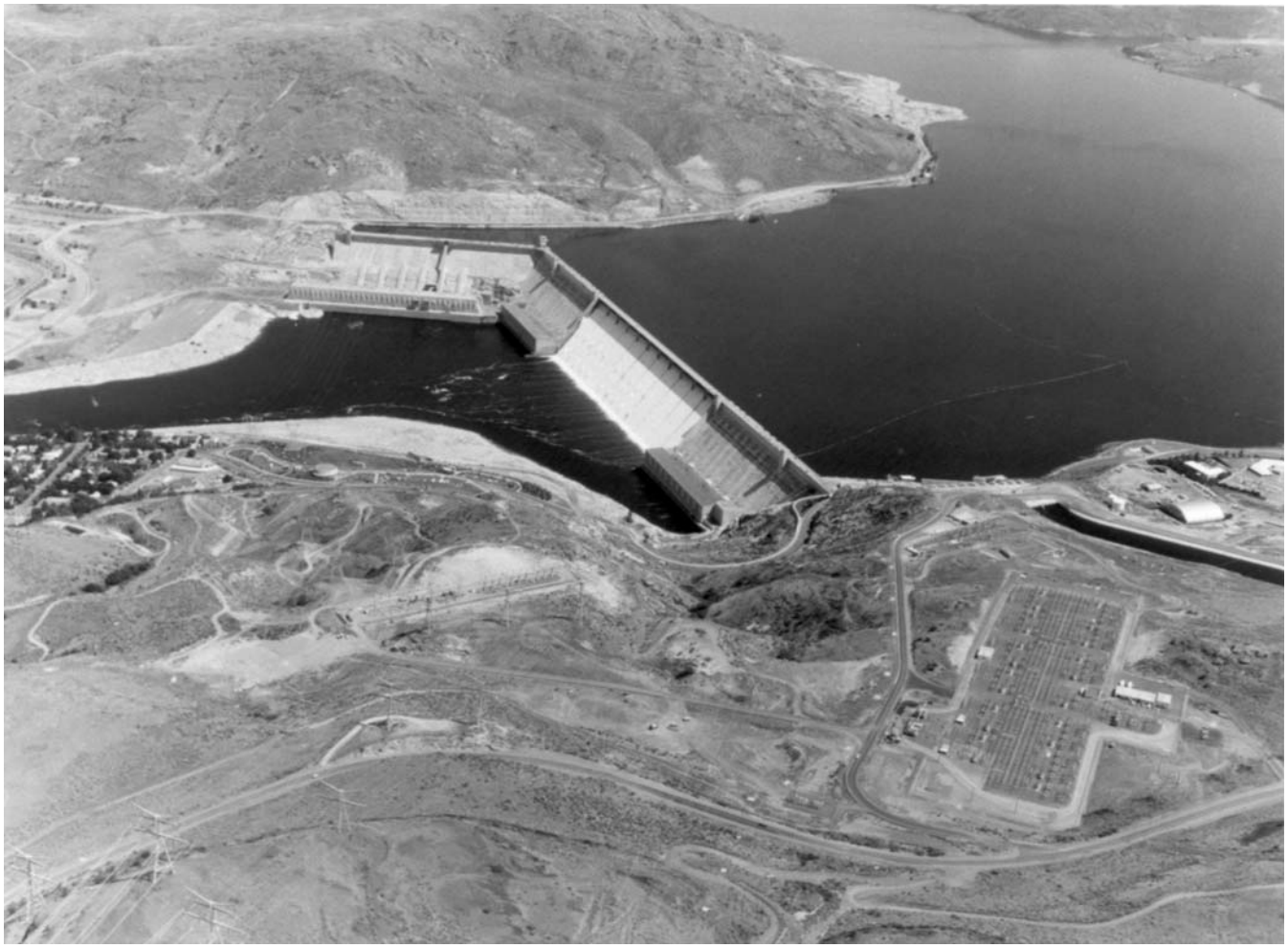
Percentage of Residential Sector
1989–2007: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."
2008: Estimated by EIA as the average of the three previous annual values.

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*, November 2009, 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*, November 2009, Table 3.

Percentage of Electric Power Sector
1973–2001: Calculated by EIA as the quantity of natural gas receipts by electric utilities reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants" (and predecessor forms) divided by the quantity of natural gas consumed by the electric power sector (for 1973-1988, see *Monthly Energy Review*, Table 7.3b; for 1989-2001, see *Monthly Energy Review*, Table 7.4b).
2002-2007: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants," and EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).
2008 and 2009: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form EIA-923, "Power Plant Operations Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).

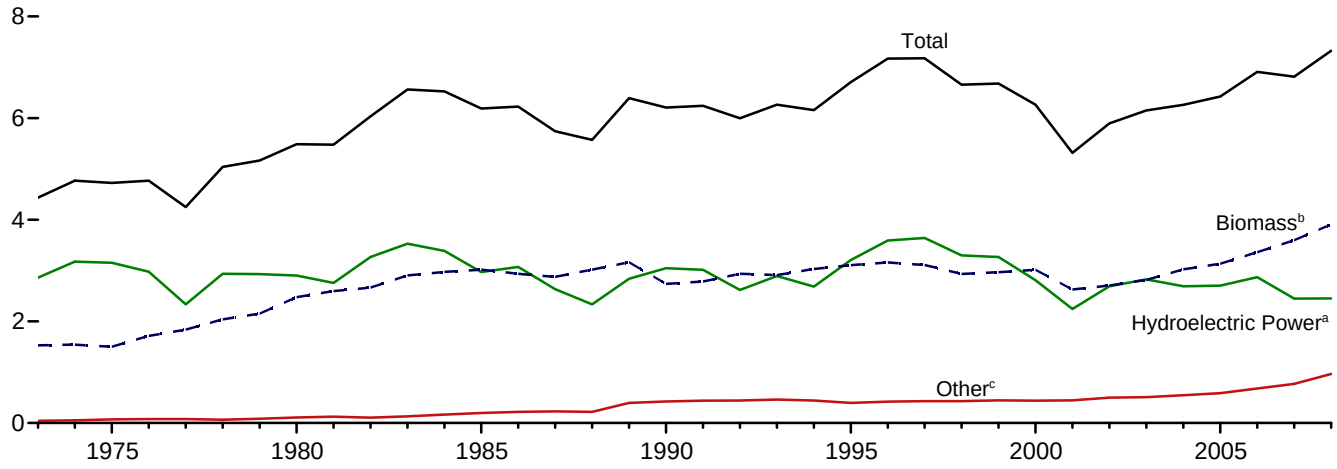
10 Renewable Energy



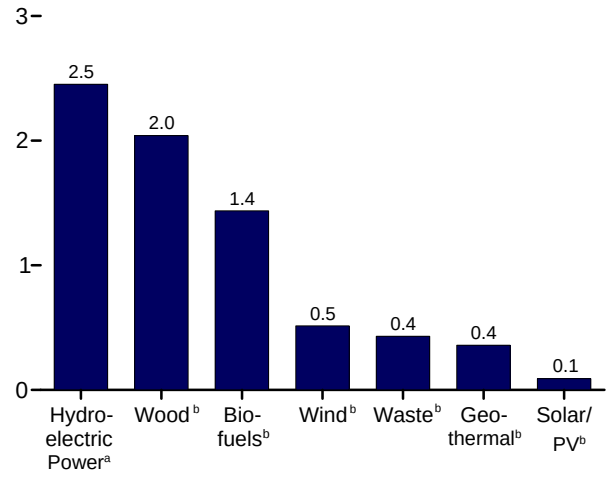
Grand Coulee Dam, Washington State. Source: U.S. Bureau of Reclamation.

Figure 10.1 Renewable Energy Consumption
(Quadrillion Btu)

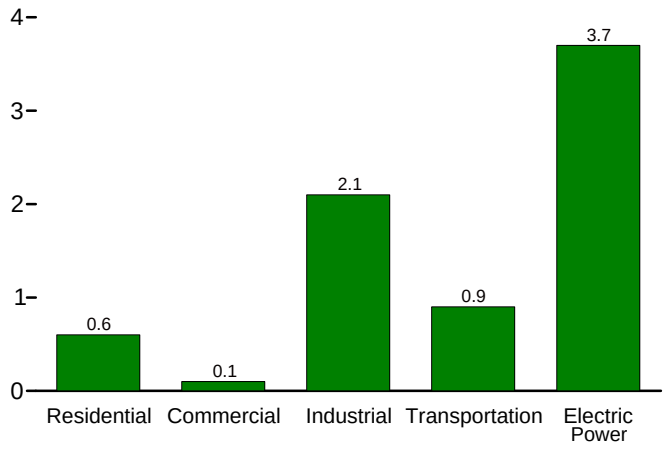
Total and Major Sources, 1973-2008



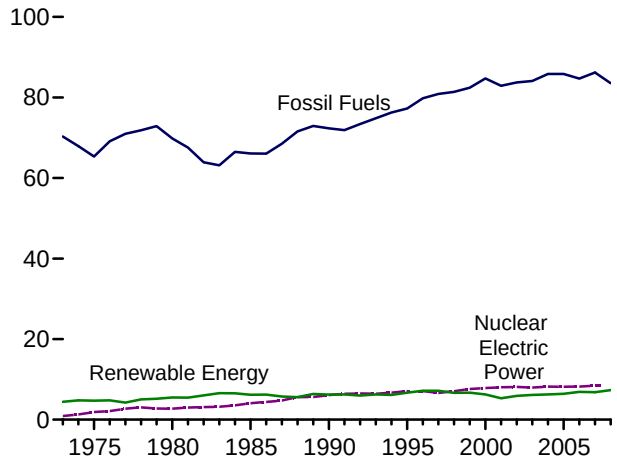
By Source, 2008



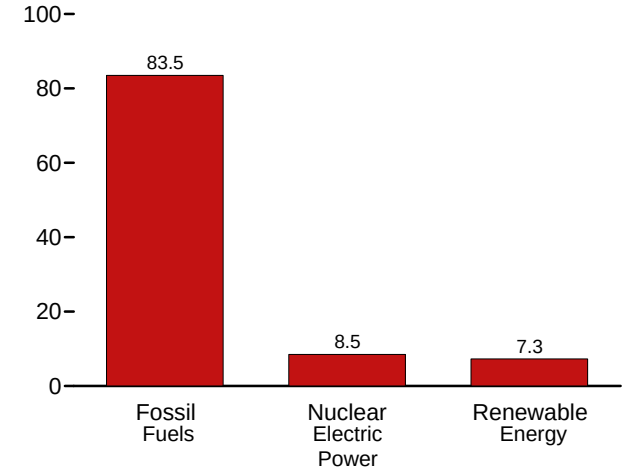
By Sector, 2008



Compared With Other Resources, 1973-2008



Compared With Other Resources, 2008



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

Web Page: http://www.eia.doe.gov/emeu/mer/renew.html.
Sources: Tables 1.3, 10.1, and 10.2a-c.

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	**95**	**3,018**	**6,187**	**2,970**	**198**	**(s)**	**(s)**	**2,687**	**236**	**95**	**3,018**	**6,187**
1990 Total	**113**	**2,737**	**6,208**	**3,046**	**336**	**60**	**29**	**2,216**	**408**	**113**	**2,737**	**6,208**
1995 Total	**202**	**3,103**	**6,705**	**3,205**	**294**	**70**	**33**	**2,370**	**531**	**204**	**3,105**	**6,707**
1996 Total	**144**	**3,158**	**7,168**	**3,590**	**316**	**71**	**33**	**2,437**	**577**	**146**	**3,160**	**7,169**
1997 Total	**190**	**3,112**	**7,181**	**3,640**	**325**	**70**	**34**	**2,371**	**551**	**187**	**3,109**	**7,178**
1998 Total	**207**	**2,933**	**6,659**	**3,297**	**328**	**70**	**31**	**2,184**	**542**	**205**	**2,932**	**6,658**
1999 Total	**215**	**2,969**	**6,683**	**3,268**	**331**	**69**	**46**	**2,214**	**540**	**213**	**2,968**	**6,681**
2000 Total	**238**	**3,010**	**6,262**	**2,811**	**317**	**66**	**57**	**2,262**	**511**	**241**	**3,013**	**6,264**
2001 Total	**260**	**2,629**	**5,318**	**2,242**	**311**	**65**	**70**	**2,006**	**364**	**258**	**2,627**	**5,316**
2002 Total	**314**	**2,712**	**5,899**	**2,689**	**328**	**64**	**105**	**1,995**	**402**	**309**	**2,707**	**5,894**
2003 Total	**411**	**2,815**	**6,148**	**2,825**	**331**	**64**	**115**	**2,002**	**401**	**413**	**2,817**	**6,150**
2004 Total	**500**	**3,011**	**6,248**	**2,690**	**341**	**65**	**142**	**2,121**	**389**	**513**	**3,023**	**6,260**
2005 Total	**581**	**3,120**	**6,410**	**2,703**	**343**	**66**	**178**	**2,136**	**403**	**594**	**3,133**	**6,423**
2006 Total	**743**	**3,309**	**6,857**	**2,869**	**343**	**72**	**264**	**2,152**	**414**	**795**	**3,361**	**6,908**
2007 January	75	300	619	257	31	6	24	187	38	80	305	624
February	69	270	511	184	27	6	25	167	34	72	273	514
March	77	294	599	239	29	7	30	179	38	79	297	601
April	76	287	589	236	28	7	31	178	34	75	287	589
May	82	295	617	257	28	7	29	178	35	81	295	616
June	82	291	579	226	29	7	26	175	35	84	293	581
July	87	305	586	222	30	7	21	183	36	86	305	585
August	90	305	566	197	30	7	27	179	36	90	305	566
September	88	297	507	146	29	7	28	174	35	88	296	506
October	93	309	526	146	30	7	33	180	36	96	312	529
November	94	307	528	155	29	6	31	177	36	93	306	527
December	99	322	574	181	30	6	34	186	37	101	324	576
Total	**1,011**	**3,583**	**6,800**	**2,446**	**349**	**81**	**341**	**2,142**	**430**	**1,025**	**3,597**	**6,814**
2008 January	105	317	595	201	29	7	41	175	37	101	313	591
February	101	300	552	181	26	7	37	165	34	101	300	551
March	114	319	613	209	30	8	46	167	39	107	312	605
April	112	315	612	211	29	8	50	167	36	112	315	612
May	122	328	679	261	31	8	51	170	36	119	325	675
June	117	322	691	282	31	8	49	169	36	115	321	690
July	126	339	662	245	31	8	38	177	37	126	339	661
August	132	345	616	201	31	8	31	176	36	131	343	614
September	127	329	549	155	30	8	27	168	34	128	331	550
October	131	338	568	149	31	8	43	173	34	133	340	570
November	132	334	568	153	30	7	45	167	35	129	331	566
December	131	335	633	203	30	7	58	167	37	134	338	636
Total	**1,451**	**3,922**	**7,338**	**2,452**	**358**	**91**	**514**	**2,041**	**431**	**1,437**	**3,908**	**7,324**
2009 January	123	326	650	232	30	7	54	168	36	121	324	647
February	115	299	557	175	28	7	49	152	32	105	289	548
March	125	327	641	211	30	8	64	162	40	125	327	641
April	122	312	664	249	28	8	67	155	34	125	315	667
May	131	325	707	288	29	8	57	158	35	135	328	710
June	132	327	697	285	28	8	49	159	36	133	328	699
July	143	349	661	230	30	8	45	169	36	143	349	661
August	144	354	635	194	30	8	49	174	36	143	354	634
September	139	335	586	173	29	8	40	163	34	137	334	584
9-Month Total	**1,174**	**2,955**	**5,797**	**2,038**	**262**	**68**	**474**	**1,461**	**320**	**1,167**	**2,948**	**5,790**
2008 9-Month Total	**1,058**	**2,916**	**5,569**	**1,946**	**268**	**69**	**369**	**1,534**	**325**	**1,040**	**2,898**	**5,551**
2007 9-Month Total	**725**	**2,645**	**5,172**	**1,964**	**260**	**61**	**242**	**1,600**	**320**	**735**	**2,655**	**5,182**

[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, fuel ethanol, and biodiesel.

[d] Hydroelectric power, geothermal, solar/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 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 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.doe.gov/emeu/mer/renew.html for all available data beginning in 1973.

Sources: Tables 10.2a-c, 10.3, and 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]	Wood[d]	Waste[f]	Fuel Ethanol[g]	Total	Total
1973 Total	**NA**	**NA**	**354**	**354**	**NA**	**NA**	**7**	**NA**	**NA**	**7**	**7**
1975 Total	**NA**	**NA**	**425**	**425**	**NA**	**NA**	**8**	**NA**	**NA**	**8**	**8**
1980 Total	**NA**	**NA**	**850**	**850**	**NA**	**NA**	**21**	**NA**	**NA**	**21**	**21**
1985 Total	**NA**	**NA**	**1,010**	**1,010**	**NA**	**NA**	**24**	**NA**	**(s)**	**24**	**24**
1990 Total	**6**	**56**	**580**	**641**	**1**	**3**	**66**	**28**	**1**	**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 January	2	6	37	45	(s)	1	6	3	(s)	9	10
February	2	6	33	40	(s)	1	5	2	(s)	8	9
March	2	6	37	45	(s)	1	6	3	(s)	9	10
April	2	6	35	43	(s)	1	6	3	(s)	8	10
May	2	6	37	45	(s)	1	6	3	(s)	9	10
June	2	6	35	43	(s)	1	6	3	(s)	8	10
July	2	6	37	45	(s)	1	6	3	(s)	9	10
August	2	6	37	45	(s)	1	6	3	(s)	9	10
September	2	6	35	43	(s)	1	6	3	(s)	8	10
October	2	6	37	45	(s)	1	6	3	(s)	9	10
November	2	6	35	43	(s)	1	6	3	(s)	9	10
December	2	6	37	45	(s)	1	6	3	(s)	9	10
Total	**22**	**75**	**430**	**527**	**1**	**14**	**69**	**31**	**2**	**102**	**118**
2008 January	2	7	42	51	(s)	1	6	3	(s)	9	11
February	2	7	39	47	(s)	1	6	3	(s)	9	10
March	2	7	42	51	(s)	1	6	3	(s)	9	10
April	2	7	40	49	(s)	1	6	3	(s)	9	10
May	2	7	42	51	(s)	1	6	3	(s)	9	10
June	2	7	40	49	(s)	1	6	3	(s)	9	10
July	2	7	42	51	(s)	1	6	3	(s)	9	10
August	2	7	42	51	(s)	1	6	3	(s)	9	10
September	2	7	40	49	(s)	1	6	2	(s)	9	10
October	2	7	42	51	(s)	1	6	2	(s)	9	10
November	2	7	40	49	(s)	1	6	3	(s)	9	10
December	2	7	42	51	(s)	1	6	3	(s)	9	10
Total	**26**	**83**	**490**	**599**	**1**	**15**	**72**	**32**	**3**	**107**	**123**
2009 January	2	7	42	51	(s)	1	6	3	(s)	9	11
February	2	6	38	46	(s)	1	6	3	(s)	8	10
March	2	7	42	51	(s)	1	6	4	(s)	10	12
April	2	7	40	49	(s)	1	6	2	(s)	9	10
May	2	7	42	51	(s)	1	6	3	(s)	9	10
June	2	7	40	49	(s)	1	6	3	(s)	9	10
July	2	7	42	51	(s)	1	6	2	(s)	9	10
August	2	7	42	51	(s)	1	6	3	(s)	9	10
September	2	7	40	49	(s)	1	6	2	(s)	9	10
9-Month Total	**20**	**62**	**366**	**448**	**1**	**11**	**54**	**24**	**2**	**81**	**92**
2008 9-Month Total	**20**	**62**	**367**	**448**	**1**	**11**	**54**	**24**	**2**	**80**	**92**
2007 9-Month Total	**16**	**56**	**322**	**394**	**1**	**11**	**52**	**23**	**1**	**76**	**88**

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

[b] Geothermal heat pump and direct use energy.

[c] Solar thermal direct use energy, and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate). Includes a small amount of commercial sector use.

[d] Wood and wood-derived fuels.

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

[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 ethanol portion of motor fuels (such as E10) consumed by the commercial sector.

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

Notes: • Data are estimates, except for commercial sector hydroelectric power 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.doe.gov/emeu/mer/renew.html for all available data beginning in 1973.

Sources: See end of section.

Table 10.2b Renewable Energy Consumption: Industrial and Transportation Sectors

(Trillion Btu)

	Industrial Sector[a]								Transportation Sector		
			Biomass						Biomass		
	Hydro-electric Power[b]	Geo-thermal[c]	Wood[d]	Waste[e]	Fuel Ethanol[f]	Losses and Co-products[g]	Total	Total	Fuel Ethanol[h]	Bio-diesel[i]	Total
1973 Total	**35**	**NA**	**1,165**	**NA**	**NA**	**NA**	**1,165**	**1,200**	**NA**	**NA**	**NA**
1975 Total	**32**	**NA**	**1,063**	**NA**	**NA**	**NA**	**1,063**	**1,096**	**NA**	**NA**	**NA**
1980 Total	**33**	**NA**	**1,600**	**NA**	**NA**	**NA**	**1,600**	**1,633**	**NA**	**NA**	**NA**
1985 Total	**33**	**NA**	**1,645**	**230**	**1**	**43**	**1,919**	**1,952**	**51**	**NA**	**51**
1990 Total	**31**	**2**	**1,442**	**192**	**1**	**50**	**1,685**	**1,718**	**62**	**NA**	**62**
1995 Total	**55**	**3**	**1,652**	**195**	**2**	**87**	**1,936**	**1,994**	**115**	**NA**	**115**
1996 Total	**61**	**3**	**1,683**	**224**	**1**	**62**	**1,970**	**2,034**	**82**	**NA**	**82**
1997 Total	**58**	**3**	**1,731**	**184**	**1**	**82**	**1,998**	**2,059**	**104**	**NA**	**104**
1998 Total	**55**	**3**	**1,603**	**180**	**1**	**88**	**1,873**	**1,931**	**115**	**NA**	**115**
1999 Total	**49**	**4**	**1,620**	**171**	**1**	**92**	**1,883**	**1,936**	**120**	**NA**	**120**
2000 Total	**42**	**4**	**1,636**	**145**	**1**	**101**	**1,884**	**1,930**	**138**	**NA**	**138**
2001 Total	**33**	**5**	**1,443**	**129**	**3**	**110**	**1,684**	**1,721**	**144**	**1**	**145**
2002 Total	**39**	**5**	**1,396**	**146**	**3**	**133**	**1,679**	**1,722**	**171**	**2**	**173**
2003 Total	**43**	**3**	**1,363**	**142**	**5**	**173**	**1,684**	**1,730**	**233**	**2**	**234**
2004 Total	**33**	**4**	**1,476**	**132**	**6**	**210**	**1,824**	**1,860**	**292**	**3**	**295**
2005 Total	**32**	**4**	**1,452**	**148**	**7**	**240**	**1,847**	**1,883**	**334**	**12**	**346**
2006 Total	**29**	**4**	**1,515**	**147**	**10**	**300**	**1,972**	**2,005**	**451**	**33**	**484**
2007 January	2	(s)	125	16	1	30	172	174	44	4	49
February	1	(s)	114	14	1	28	157	158	41	3	43
March	2	(s)	122	16	1	31	169	171	44	3	48
April	2	(s)	122	13	1	30	166	168	42	2	44
May	2	(s)	122	13	1	32	168	170	45	3	48
June	1	(s)	118	12	1	32	164	165	46	5	51
July	1	(s)	125	13	1	34	172	173	48	3	52
August	1	(s)	121	13	1	35	170	171	49	6	54
September	1	(s)	118	12	1	34	165	166	47	5	52
October	1	(s)	122	13	1	37	173	175	53	6	59
November	1	(s)	121	13	1	37	172	174	53	1	54
December	2	(s)	128	14	1	39	182	183	56	4	60
Total	**16**	**5**	**1,457**	**162**	**10**	**399**	**2,028**	**2,048**	**568**	**46**	**614**
2008 January	2	(s)	111	13	1	41	167	169	54	5	59
February	2	(s)	105	13	1	40	159	162	56	4	60
March	2	(s)	103	13	1	45	162	165	58	2	61
April	2	(s)	107	13	1	44	165	167	64	3	67
May	2	(s)	110	13	1	48	172	174	66	3	69
June	1	(s)	109	13	1	45	168	170	67	2	69
July	1	(s)	112	13	1	49	176	178	71	5	76
August	1	(s)	112	13	1	51	178	180	72	6	78
September	1	(s)	107	13	1	50	171	172	71	6	77
October	1	(s)	111	13	1	51	177	178	75	6	80
November	1	(s)	106	13	1	52	171	173	71	6	76
December	2	(s)	104	13	1	52	171	173	76	5	80
Total	**19**	**5**	**1,298**	**157**	**14**	**568**	**2,036**	**2,060**	**799**	**53**	**852**
2009 January	2	(s)	104	13	1	50	168	170	69	(s)	69
February	1	(s)	94	11	1	46	153	155	58	(s)	58
March	2	(s)	101	14	1	51	166	168	69	4	73
April	2	(s)	97	13	1	49	160	162	70	4	74
May	2	(s)	97	13	1	53	165	167	77	3	80
June	2	(s)	98	13	1	53	165	167	75	4	79
July	1	(s)	106	13	1	58	178	180	80	3	84
August	1	(s)	110	13	1	58	182	184	79	5	84
September	1	(s)	103	13	1	56	172	174	74	6	80
9-Month Total	**14**	**4**	**910**	**116**	**12**	**472**	**1,510**	**1,528**	**651**	**30**	**681**
2008 9-Month Total	**15**	**4**	**977**	**118**	**10**	**413**	**1,518**	**1,537**	**578**	**37**	**615**
2007 9-Month Total	**12**	**4**	**1,086**	**122**	**7**	**286**	**1,501**	**1,516**	**406**	**34**	**441**

[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] Wood and wood-derived fuels.

[e] 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).

[f] The ethanol portion of motor fuels (such as E10) consumed by the industrial sector.

[g] 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.

[h] The ethanol portion of motor fuels (such as E10 and E85) consumed by the transportation sector.

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

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

Notes: • Data are estimates, except for industrial sector hydroelectric power in 1973-1978 and 1989 forward. • 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.doe.gov/emeu/mer/renew.html for all available data beginning in 1973.

Sources: See end of section.

Table 10.2c Renewable Energy Consumption: Electric Power Sector

(Trillion Btu)

	Hydro-electric Power[a]	Geo-thermal[b]	Solar/PV[c]	Wind[d]	Biomass			Total
					Wood[e]	Waste[f]	Total	
1973 Total	**2,827**	**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 January	256	27	(s)	24	19	20	39	346
February	182	24	(s)	25	15	17	32	263
March	237	25	(s)	30	15	20	35	328
April	234	24	1	31	15	18	33	324
May	256	24	1	29	14	20	34	344
June	224	26	1	26	15	20	35	312
July	221	26	1	21	16	21	36	306
August	196	26	1	27	16	21	36	286
September	145	26	1	28	15	20	35	235
October	145	27	(s)	33	15	20	35	241
November	154	25	(s)	31	15	21	36	246
December	180	27	(s)	34	16	21	37	278
Total	**2,430**	**308**	**6**	**341**	**186**	**237**	**423**	**3,508**
2008 January	199	25	(s)	41	16	21	37	302
February	179	23	(s)	37	15	18	33	272
March	207	26	1	46	16	23	39	318
April	209	26	1	50	14	20	34	319
May	260	27	1	51	13	20	33	371
June	280	27	1	49	14	21	35	393
July	244	27	1	38	17	21	37	347
August	200	27	1	31	16	21	37	296
September	154	26	1	27	15	19	34	242
October	148	27	1	43	14	19	33	251
November	152	26	(s)	45	15	19	35	258
December	202	26	(s)	58	16	21	37	322
Total	**2,432**	**312**	**8**	**514**	**181**	**242**	**423**	**3,690**
2009 January	230	26	(s)	54	16	19	35	346
February	174	24	(s)	49	14	18	32	280
March	210	26	1	64	14	22	36	337
April	247	25	1	67	12	19	32	371
May	286	25	1	57	13	20	33	402
June	283	25	1	49	15	20	36	394
July	228	26	1	45	16	21	36	336
August	192	26	1	49	16	21	37	305
September	172	25	1	40	14	19	33	271
9-Month Total	**2,023**	**228**	**7**	**474**	**131**	**180**	**310**	**3,042**
2008 9-Month Total	**1,930**	**233**	**7**	**369**	**136**	**183**	**318**	**2,859**
2007 9-Month Total	**1,951**	**229**	**5**	**242**	**140**	**176**	**316**	**2,743**

[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 electricity net generation (converted to Btu using the fossil-fueled 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.doe.gov/emeu/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]	Production			Trade			Stocks[d]	Stock Change[e]	Consumption		
						Imports	Exports	Net Imports[c]					
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu
1981 Total	**13**	**6**	**1,978**	**83**	**7**	**NA**	**NA**	**NA**	**NA**	**NA**	**1,978**	**83**	**7**
1985 Total	**95**	**43**	**14,693**	**617**	**52**	**NA**	**NA**	**NA**	**NA**	**NA**	**14,693**	**617**	**52**
1990 Total	**113**	**50**	**17,802**	**748**	**63**	**NA**	**NA**	**NA**	**NA**	**NA**	**17,802**	**748**	**63**
1995 Total	**202**	**87**	**32,325**	**1,358**	**114**	**387**	**NA**	**387**	**2,186**	**-207**	**32,919**	**1,383**	**117**
1996 Total	**144**	**62**	**23,178**	**973**	**82**	**313**	**NA**	**313**	**2,065**	**-121**	**23,612**	**992**	**84**
1997 Total	**190**	**82**	**30,674**	**1,288**	**109**	**85**	**NA**	**85**	**2,925**	**860**	**29,899**	**1,256**	**106**
1998 Total	**207**	**88**	**33,453**	**1,405**	**118**	**66**	**NA**	**66**	**3,406**	**481**	**33,038**	**1,388**	**117**
1999 Total	**215**	**92**	**34,881**	**1,465**	**123**	**87**	**NA**	**87**	**4,024**	**618**	**34,350**	**1,443**	**122**
2000 Total	**238**	**101**	**38,627**	**1,622**	**137**	**116**	**NA**	**116**	**3,400**	**-624**	**39,367**	**1,653**	**139**
2001 Total	**259**	**110**	**42,028**	**1,765**	**149**	**315**	**NA**	**315**	**4,298**	**898**	**41,445**	**1,741**	**147**
2002 Total	**313**	**133**	**50,956**	**2,140**	**180**	**306**	**NA**	**306**	**6,200**	**1,902**	**49,360**	**2,073**	**175**
2003 Total	**410**	**173**	**66,772**	**2,804**	**236**	**292**	**NA**	**292**	**5,978**	**-222**	**67,286**	**2,826**	**238**
2004 Total	**497**	**210**	**81,058**	**3,404**	**287**	**3,542**	**NA**	**3,542**	**6,002**	**24**	**84,576**	**3,552**	**299**
2005 Total	**569**	**240**	**92,961**	**3,904**	**329**	**3,234**	**NA**	**3,234**	**5,563**	**-439**	**96,634**	**4,059**	**342**
2006 Total	**711**	**299**	**116,294**	**4,884**	**412**	**17,408**	**NA**	**17,408**	**8,760**	**3,197**	**130,505**	**5,481**	**462**
2007 January	71	30	11,621	488	41	1,077	NA	1,077	8,656	-104	12,802	538	45
February	66	28	10,795	453	38	1,010	NA	1,010	8,765	109	11,696	491	41
March	73	30	11,892	499	42	720	NA	720	8,539	-226	12,838	539	45
April	72	30	11,716	492	41	733	NA	733	8,807	268	12,181	512	43
May	77	32	12,573	528	44	663	NA	663	8,966	159	13,077	549	46
June	77	32	12,553	527	44	922	NA	922	9,171	205	13,270	557	47
July	80	34	13,083	549	46	1,533	NA	1,533	9,866	695	13,921	585	49
August	83	35	13,581	570	48	1,586	NA	1,586	11,011	1,145	14,022	589	50
September	82	34	13,402	563	47	610	NA	610	11,555	544	13,468	566	48
October	87	36	14,221	597	50	998	NA	998	11,449	-106	15,325	644	54
November	89	37	14,568	612	52	393	NA	393	11,218	-231	15,192	638	54
December	93	39	15,258	641	54	212	NA	212	10,535	-683	16,153	678	57
Total	**948**	**398**	**155,263**	**6,521**	**549**	**10,457**	**NA**	**10,457**	**10,535**	**1,775**	**163,945**	**6,886**	**580**
2008 January	98	41	16,058	674	57	510	NA	510	11,383	848	15,720	660	56
February	95	40	15,527	652	55	505	NA	505	11,173	-210	16,242	682	57
March	107	45	17,527	736	62	368	NA	368	12,288	1,115	16,780	705	59
April	105	44	17,152	720	61	1,491	NA	1,491	12,572	284	18,359	771	65
May	114	48	18,756	788	66	962	NA	962	13,297	725	18,993	798	67
June	108	45	17,651	741	62	1,571	NA	1,571	13,323	26	19,196	806	68
July	116	49	19,040	800	67	1,459	NA	1,459	13,448	125	20,374	856	72
August	122	51	20,059	842	71	1,931	NA	1,931	14,771	1,323	20,667	868	73
September	118	49	19,338	812	68	2,466	NA	2,466	16,110	1,339	20,465	860	72
October	122	51	20,048	842	71	606	NA	606	15,214	-896	21,550	905	76
November	123	51	20,139	846	71	278	NA	278	15,286	72	20,345	854	72
December	124	52	20,342	854	72	463	NA	463	14,226	-1,060	21,865	918	77
Total	**1,351**	**567**	**221,637**	**9,309**	**784**	**12,610**	**NA**	**12,610**	**14,226**	**3,691**	**230,556**	**9,683**	**816**
2009 January	119	50	19,545	821	69	371	–	371	14,186	[f]-33	19,949	838	71
February	110	46	18,120	761	64	51	–	51	15,688	1,502	16,669	700	59
March	121	51	19,837	833	70	78	–	78	15,652	-36	19,951	838	71
April	117	49	19,220	807	68	167	–	167	14,845	-807	20,194	848	71
May	126	53	20,752	872	73	504	–	504	13,999	-846	22,102	928	78
June	127	53	20,822	875	74	702	–	702	13,903	-96	21,620	908	77
July	137	58	22,577	948	80	1,010	–	1,010	14,294	391	23,196	974	82
August	137	57	22,552	947	80	921	–	921	15,001	707	22,766	956	81
September	132	55	21,752	914	77	307	–	307	15,688	687	21,372	898	76
9-Month Total	**1,127**	**472**	**185,177**	**7,777**	**655**	**4,111**	**–**	**4,111**	**15,688**	**1,469**	**187,819**	**7,888**	**665**
2008 9-Month Total	**982**	**412**	**161,108**	**6,767**	**570**	**11,263**	**NA**	**11,263**	**16,110**	**5,575**	**166,796**	**7,005**	**590**
2007 9-Month Total	**679**	**285**	**111,216**	**4,671**	**394**	**8,854**	**NA**	**8,854**	**11,555**	**2,795**	**117,275**	**4,926**	**415**

[a] Total corn and other biomass inputs to the production of 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] 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] Derived from the preliminary December 2008 stocks value, not the final December 2008 value 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 trillion Btu by multiplying by 0.003539 (the approximate heat content of fuel ethanol—see Table A3). • Through 1980, data are not available. For 1981-1992, data are estimates. Beginning in 1993, only data for feedstock and losses and co-products 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.doe.gov/emeu/mer/renew.html for all available data beginning in 1981.

Sources: • **Feedstock:** Calculated as fuel ethanol production in thousand barrels multiplied by the fuel ethanol feedstock factor—see Table A3. • **Losses and Co-products:** Calculated as fuel ethanol feedstock minus fuel ethanol production. • **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 U.S. Energy Information Administration (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, *Petroleum Supply Monthly (PSM),* monthly reports. • **Trade, Stocks, and Stock Change: 1992-2008—**EIA, *Petroleum Supply Annual (PSA),* annual reports. **2009—**EIA, *PSM,* monthly reports. • **Consumption: 1981-1989—**EIA, *Estimates of U.S. Biofuels Consumption 1990,* Table 10; and EIA, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), estimates. **1990-1992—**EIA, *Estimates of U.S. Biomass Energy Consumption 1992,* Table D2; and EIA, CNEAF, estimates. **1993-2004—**EIA, *PSA,* annual reports, Tables 2 and 16. Calculated as ten 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, *PSM,* monthly reports, Table 1. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

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 January	4	(s)	692	29	4	237	103	135	NA	NA	NA	827	35	4
February	3	(s)	564	24	3	148	173	-25	NA	NA	NA	539	23	3
March	4	(s)	775	33	4	114	293	-179	NA	NA	NA	596	25	3
April	4	(s)	765	32	4	179	605	-426	NA	NA	NA	339	14	2
May	5	(s)	958	40	5	110	543	-432	NA	NA	NA	526	22	3
June	5	(s)	943	40	5	364	418	-54	NA	NA	NA	889	37	5
July	7	(s)	1,237	52	7	269	895	-626	NA	NA	NA	611	26	3
August	7	(s)	1,298	55	7	409	644	-236	NA	NA	NA	1,062	45	6
September	7	(s)	1,224	51	7	299	515	-215	NA	NA	NA	1,008	42	5
October	6	(s)	1,188	50	6	428	583	-155	NA	NA	NA	1,033	43	6
November	5	(s)	993	42	5	245	965	-720	NA	NA	NA	273	11	1
December	6	(s)	1,026	43	5	539	741	-202	NA	NA	NA	824	35	4
Total	**63**	**1**	**11,662**	**490**	**62**	**3,342**	**6,477**	**-3,135**	**NA**	**NA**	**NA**	**8,528**	**358**	**46**
2008 January	7	(s)	1,369	58	7	598	1,100	-501	NA	NA	NA	868	36	5
February	7	(s)	1,228	52	7	838	1,384	-546	NA	NA	NA	683	29	4
March	7	(s)	1,359	57	7	274	1,172	-898	NA	NA	NA	461	19	2
April	8	(s)	1,451	61	8	688	1,592	-904	NA	NA	NA	547	23	3
May	8	(s)	1,478	62	8	513	1,364	-850	NA	NA	NA	628	26	3
June	9	(s)	1,653	69	9	512	1,758	-1,246	NA	NA	NA	406	17	2
July	10	(s)	1,835	77	10	526	1,421	-894	NA	NA	NA	941	40	5
August	10	(s)	1,856	78	10	907	1,606	-699	NA	NA	NA	1,157	49	6
September	9	(s)	1,716	72	9	908	1,452	-544	NA	NA	NA	1,173	49	6
October	9	(s)	1,675	70	9	721	1,333	-612	NA	NA	NA	1,064	45	6
November	9	(s)	1,645	69	9	612	1,181	-569	NA	NA	NA	1,076	45	6
December	7	(s)	1,203	51	6	404	766	-362	NA	NA	NA	841	35	5
Total	**100**	**1**	**18,468**	**776**	**99**	**7,502**	**16,128**	**-8,626**	**NA**	**NA**	**NA**	**9,842**	**413**	**53**
2009 January	4	(s)	795	33	4	304	1,150	-846	57	57	137	29	1	(s)
February	5	(s)	846	36	5	158	1,166	-1,009	119	62	254	29	1	(s)
March	4	(s)	767	32	4	383	203	180	357	238	0	709	30	4
April	5	(s)	912	38	5	52	154	-102	389	32	0	778	33	4
May	5	(s)	929	39	5	117	417	-300	375	-14	0	643	27	3
June	5	(s)	904	38	5	138	366	-229	367	-8	0	683	29	4
July	6	(s)	1,077	45	6	58	581	-523	309	-58	0	611	26	3
August	7	(s)	1,214	51	7	126	397	-271	317	8	0	935	39	5
September	6	(s)	1,123	47	6	123	224	-101	222	-95	0	1,117	47	6
9-Month Total	**47**	**1**	**8,566**	**360**	**46**	**1,457**	**4,658**	**-3,201**	**222**	**222**	**391**	**5,534**	**232**	**30**
2008 9-Month Total	**76**	**1**	**13,945**	**586**	**75**	**5,765**	**12,848**	**-7,083**	**NA**	**NA**	**NA**	**6,862**	**288**	**37**
2007 9-Month Total	**46**	**1**	**8,456**	**355**	**45**	**2,130**	**4,189**	**-2,059**	**NA**	**NA**	**NA**	**6,397**	**269**	**34**

[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.

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 trillion Btu by multiplying by 0.005359 (the approximate heat content of biodiesel—see Table A3). For other conversion factors related to biodiesel, see Table A3 (columns 11 and 12, and footnote "h"). • Through 2000, data are not available. Beginning in 2001, data 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.doe.gov/emeu/mer/renew.html for all available data beginning in 2001.

Sources: • **Feedstock:** Calculated as biodiesel production in thousand barrels multiplied by 0.005433 (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), Office of Integrated Analysis and Forecasting, estimates that 14.4 million gallons of yellow grease were consumed in methyl esters (biodiesel). **2007 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). • **Trade:** U.S. Department of Agriculture, imports data for Harmonized Tariff Schedule code 3824.90.40.20 (Fatty Esters Animal/Vegetable/Mixture), 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 those 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 estimates. • **Stocks** and **Stock Change:** EIA, *Petroleum Supply Monthly (PSM),* monthly reports, Table 1, data for renewable fuels except fuel ethanol. • **Balancing Item:** Calculated as biodiesel consumption and biodiesel stock change minus biodiesel production and biodiesel net imports. • **Consumption: 2001-2008—**Calculated as biodiesel production plus biodiesel net imports. **January and February 2009—**EIA, *PSM,* monthly reports, 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.

Renewable Energy

Note. Renewable Energy Production and Consumption. In Table 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 and biodiesel consumption; and losses and co-products from the production of fuel ethanol and biodiesel. 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), Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), 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, CNEAF, 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

EIA, *Monthly Energy Review (MER)*, Tables 7.2a–7.2c and A6. Calculated as total conventional hydroelectric power minus conventional hydroelectric power in the electric power and industrial sectors, multiplied by the fossil-fueled plants heat rate.

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, 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, CNEAF, estimate.

1985–1988: Values interpolated.

1989 forward: EIA, *MER*, Tables 7.4a–c; and EIA, CNEAF, 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

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 consumption (Table 10.3).

Table 10.2b Sources

Industrial Sector, Hydroelectric Power

U.S. Energy Information Administration (EIA), *MER* Tables 7.2c and 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, 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, *MER*, Table 7.4c; and EIA, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), 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, CNEAF, estimates for total waste consumption; 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, CNEAF, 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

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 consumption (Table 10.3).

Industrial Sector, Losses and Co-products

EIA, *MER*, Tables 10.3 and 10.4.

Transportation Sector, Fuel Ethanol

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 consumption (Table 10.3).

Transportation Sector, Biodiesel

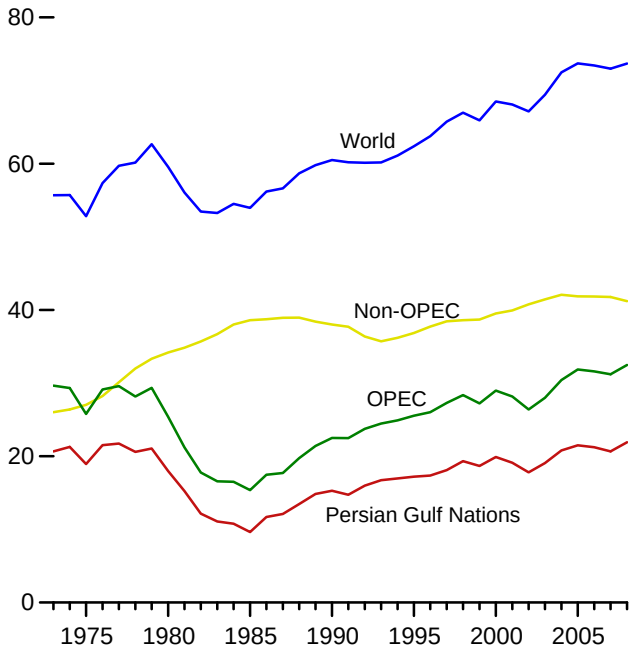
EIA, *MER*, Table 10.4. Transportation sector biodiesel consumption is assumed to equal total biodiesel consumption.

11 International Petroleum

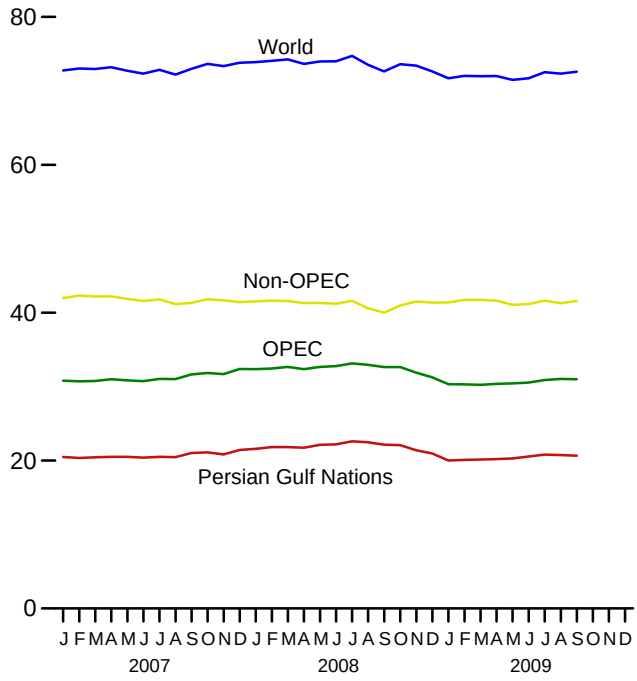
Drilling rig, Gansu Province, People's Republic of China. Source: U.S. Department of Energy.

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

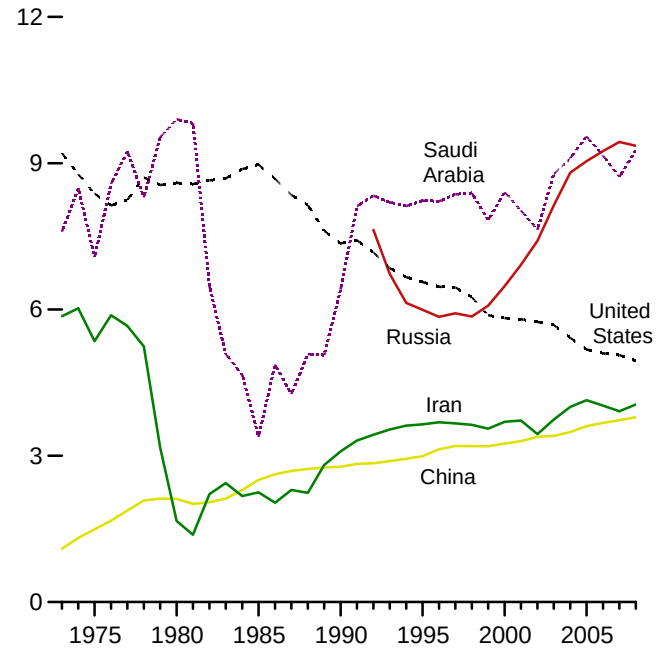
World Production, 1973-2008



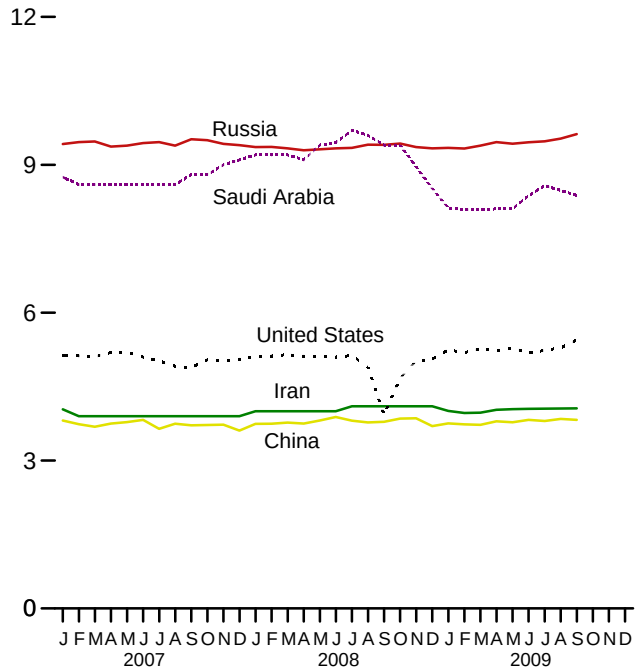
World Production, Monthly



Selected Producers, 1973-2008



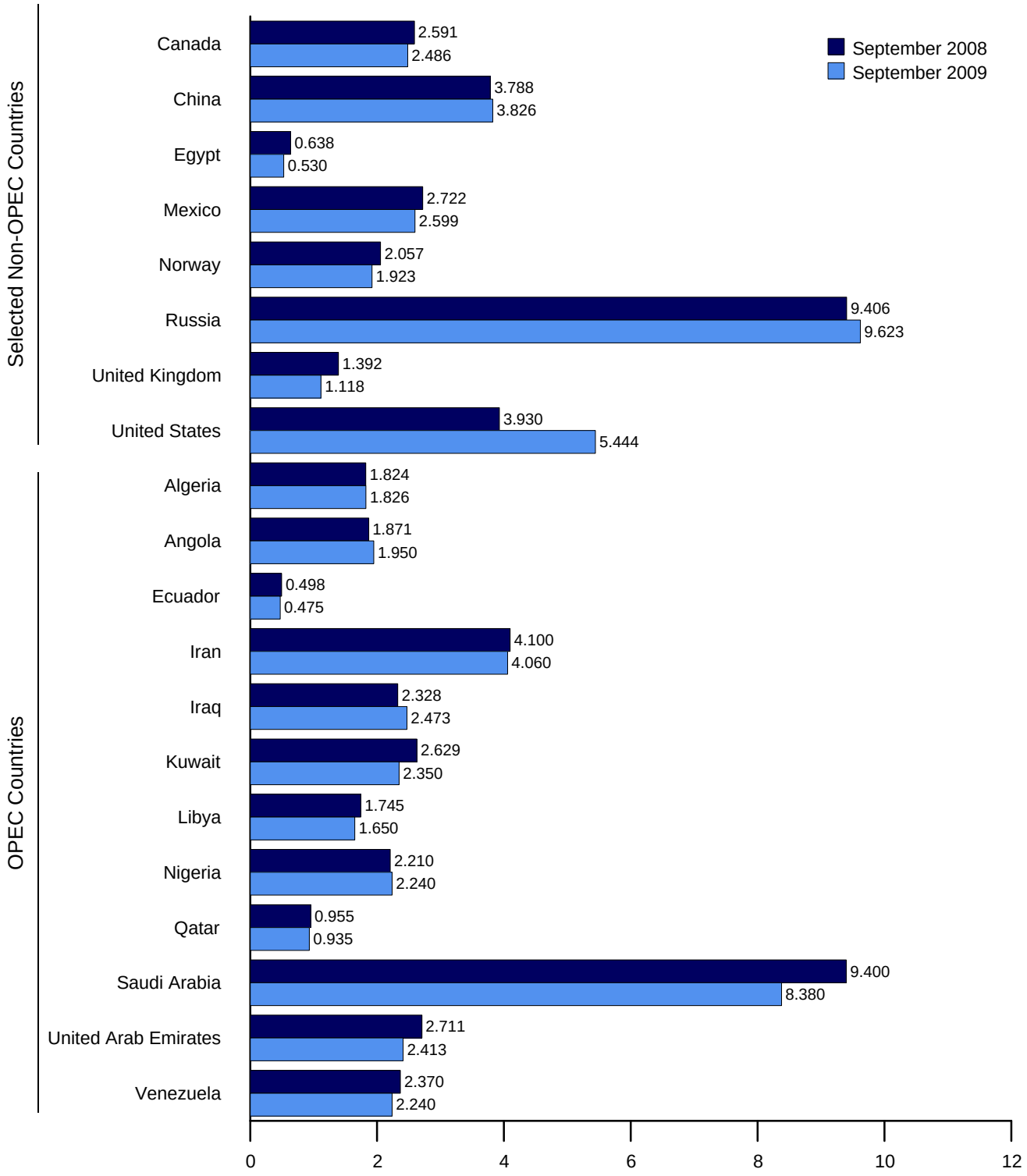
Selected Producers, Monthly



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.doe.gov/emeu/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.doe.gov/emeu/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 January	1,838	1,584	517	4,040	1,753	2,450	1,680	2,365	835	8,750	2,613	2,380	30,805
February	1,833	1,600	507	3,900	2,003	2,420	1,680	2,390	825	8,600	2,573	2,383	30,714
March	1,829	1,640	482	3,900	2,053	2,420	1,680	2,275	825	8,600	2,612	2,445	30,760
April	1,825	1,679	502	3,900	2,103	2,420	1,680	2,400	825	8,600	2,611	2,445	30,990
May	1,821	1,695	512	3,900	2,103	2,420	1,680	2,240	825	8,600	2,611	2,444	30,851
June	1,828	1,680	515	3,900	2,003	2,420	1,680	2,230	835	8,600	2,610	2,444	30,745
July	1,828	1,710	510	3,900	2,053	2,445	1,700	2,380	865	8,600	2,610	2,444	31,044
August	1,824	1,730	508	3,900	1,903	2,500	1,700	2,380	865	8,600	2,659	2,444	31,013
September	1,831	1,791	517	3,900	2,203	2,500	1,720	2,380	865	8,800	2,709	2,440	31,655
October	1,842	1,889	514	3,900	2,303	2,500	1,740	2,330	869	8,800	2,711	2,440	31,838
November	1,852	1,940	518	3,900	2,253	2,520	1,740	2,400	883	9,000	2,242	2,440	31,688
December	1,852	1,986	532	3,900	2,303	2,550	1,740	2,430	888	9,100	2,659	2,440	32,379
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	8,127	2,411	2,340	30,326
February	1,757	1,840	498	3,963	2,313	2,350	1,650	2,162	935	8,086	2,412	2,340	30,306
March	1,757	1,840	497	3,970	2,365	2,350	1,650	2,060	910	8,095	2,412	2,340	30,246
April	1,757	1,840	495	4,030	2,366	2,350	1,650	2,217	910	8,103	2,412	2,240	30,371
May	1,757	1,840	486	4,044	2,418	2,350	1,650	2,212	910	8,112	2,412	2,240	30,430
June	1,756	1,840	492	4,050	2,419	2,350	1,650	2,059	910	8,371	2,412	2,240	30,549
July	1,806	1,890	483	4,053	2,470	2,350	1,650	2,051	910	8,580	2,413	2,240	30,897
August	1,826	1,950	477	4,056	2,472	2,350	1,650	2,193	935	8,480	2,413	2,240	31,042
September	1,826	1,950	475	4,060	2,473	2,350	1,650	2,240	935	8,380	2,413	2,240	30,992
9-Month Average	**1,778**	**1,879**	**490**	**4,026**	**2,390**	**2,350**	**1,650**	**2,154**	**912**	**8,261**	**2,412**	**2,273**	**30,575**
2008 9-Month Average	**1,825**	**1,983**	**506**	**4,034**	**2,384**	**2,602**	**1,748**	**2,171**	**933**	**9,363**	**2,710**	**2,409**	**32,668**
2007 9-Month Average	**1,829**	**1,679**	**508**	**3,916**	**2,019**	**2,444**	**1,689**	**2,337**	**841**	**8,639**	**2,623**	**2,430**	**30,954**

[a] Except for the period from August 1990 through May 1991, includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In September 2009, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 505 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.doe.gov/emeu/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**	**41,849**	**73,720**
2006 Average	**21,232**	**2,525**	**3,673**	**639**	**3,256**	**2,491**	**– –**	**9,247**	**1,490**	**5,102**	**41,846**	**73,437**
2007 January	20,476	2,549	3,811	616	3,143	2,431	– –	9,420	1,512	5,123	41,962	72,767
February	20,356	2,586	3,739	614	3,148	2,454	– –	9,460	1,654	5,125	42,309	73,023
March	20,445	2,701	3,685	612	3,182	2,391	– –	9,473	1,565	5,106	42,186	72,946
April	20,494	2,605	3,749	609	3,182	2,427	– –	9,369	1,571	5,189	42,201	73,191
May	20,494	2,582	3,781	649	3,110	2,181	– –	9,390	1,580	5,197	41,870	72,721
June	20,403	2,485	3,826	679	3,206	1,921	– –	9,440	1,495	5,096	41,583	72,328
July	20,508	2,599	3,643	679	3,166	2,327	– –	9,460	1,483	5,024	41,795	72,839
August	20,462	2,795	3,746	679	2,843	2,135	– –	9,390	1,227	4,914	41,178	72,191
September	21,012	2,689	3,716	679	3,137	2,190	– –	9,520	1,388	4,884	41,314	72,969
October	21,118	2,657	3,722	609	2,983	2,273	– –	9,500	1,553	5,043	41,809	73,647
November	20,833	2,675	3,727	609	2,888	2,287	– –	9,425	1,452	5,017	41,665	73,353
December	21,434	2,469	3,607	609	2,931	2,235	– –	9,400	1,508	5,056	41,419	73,798
Average	**20,672**	**2,616**	**3,729**	**637**	**3,076**	**2,270**	**– –**	**9,437**	**1,498**	**5,064**	**41,771**	**72,981**
2008 January	21,588	2,528	3,744	609	2,928	2,209	– –	9,359	1,456	5,100	41,532	73,883
February	21,813	2,561	3,747	605	2,909	2,176	– –	9,362	1,491	5,122	41,617	74,066
March	21,818	2,654	3,769	601	2,839	2,209	– –	9,334	1,450	5,151	41,575	74,244
April	21,732	2,529	3,751	597	2,757	2,111	– –	9,296	1,491	5,117	41,292	73,652
May	22,136	2,453	3,811	593	2,791	2,247	– –	9,315	1,485	5,102	41,315	73,970
June	22,197	2,488	3,884	589	2,833	2,002	– –	9,334	1,363	5,098	41,208	73,988
July	22,610	2,677	3,808	606	2,778	2,302	– –	9,344	1,307	5,133	41,597	74,735
August	22,474	2,696	3,774	622	2,759	2,057	– –	9,409	1,099	4,894	40,575	73,520
September	22,157	2,591	3,788	638	2,722	2,057	– –	9,406	1,392	3,930	39,997	72,637
October	22,077	2,607	3,850	634	2,757	2,241	– –	9,430	1,352	4,669	40,966	73,609
November	21,384	2,711	3,859	570	2,711	2,276	– –	9,359	1,396	5,024	41,520	73,415
December	20,952	2,654	3,699	566	2,717	2,287	– –	9,333	1,423	5,056	41,369	72,628
Average	**21,913**	**2,596**	**3,790**	**603**	**2,792**	**2,182**	**– –**	**9,357**	**1,391**	**4,950**	**41,214**	**73,697**
2009 January	20,002	2,596	3,755	562	2,685	2,195	– –	9,343	1,425	E 5,246	41,378	71,704
February	20,094	2,692	3,733	558	2,663	2,260	– –	9,331	1,450	E 5,191	41,721	72,027
March	20,136	2,597	3,726	554	2,652	2,238	– –	9,388	1,453	E 5,270	41,728	71,973
April	20,206	2,483	3,795	550	2,642	2,072	– –	9,459	1,456	E 5,228	41,629	71,999
May	20,280	2,375	3,775	546	2,609	1,890	– –	9,429	1,359	E 5,283	41,052	71,482
June	20,547	2,526	3,824	542	2,519	1,850	– –	9,457	1,365	E 5,183	41,159	71,708
July	20,811	2,579	3,801	538	2,561	2,147	– –	9,476	1,328	E 5,233	41,622	R 72,518
August	20,741	2,687	3,844	534	2,542	1,970	– –	R 9,532	R 978	E 5,286	R 41,279	R 72,321
September	20,646	2,486	3,826	530	2,599	1,923	– –	9,623	1,118	E 5,444	41,590	72,582
9-Month Average	**20,387**	**2,557**	**3,787**	**546**	**2,608**	**2,060**	**– –**	**9,449**	**1,324**	**E 5,263**	**41,459**	**72,034**
2008 9-Month Average	**22,060**	**2,576**	**3,786**	**607**	**2,813**	**2,153**	**– –**	**9,351**	**1,392**	**4,962**	**41,190**	**73,858**
2007 9-Month Average	**20,517**	**2,622**	**3,744**	**646**	**3,123**	**2,272**	**– –**	**9,435**	**1,496**	**5,073**	**41,818**	**72,772**

[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.

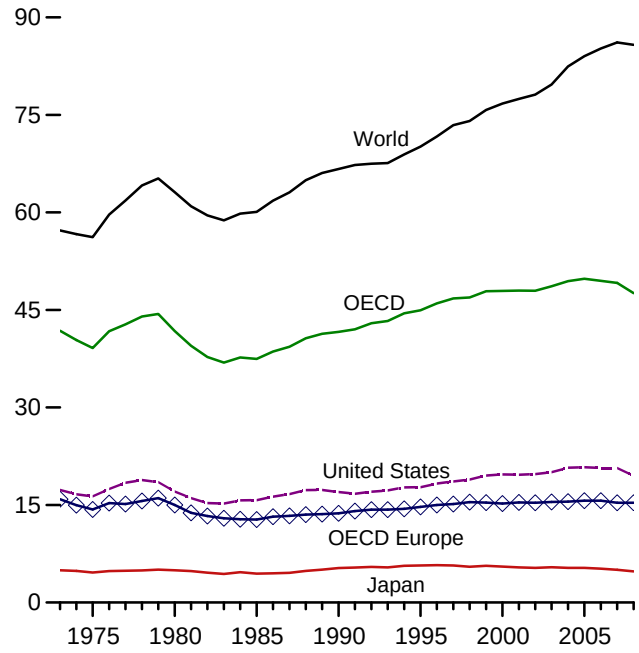
Web Page: See http://www.eia.doe.gov/emeu/mer/inter.html for all available data beginning in 1973.

Sources: See end of section.

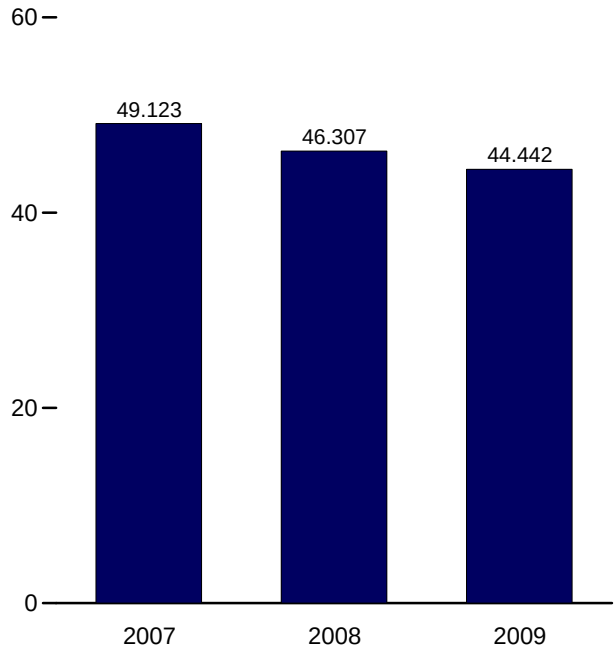
Figure 11.2 Petroleum Consumption in OECD Countries

(Million Barrels per Day)

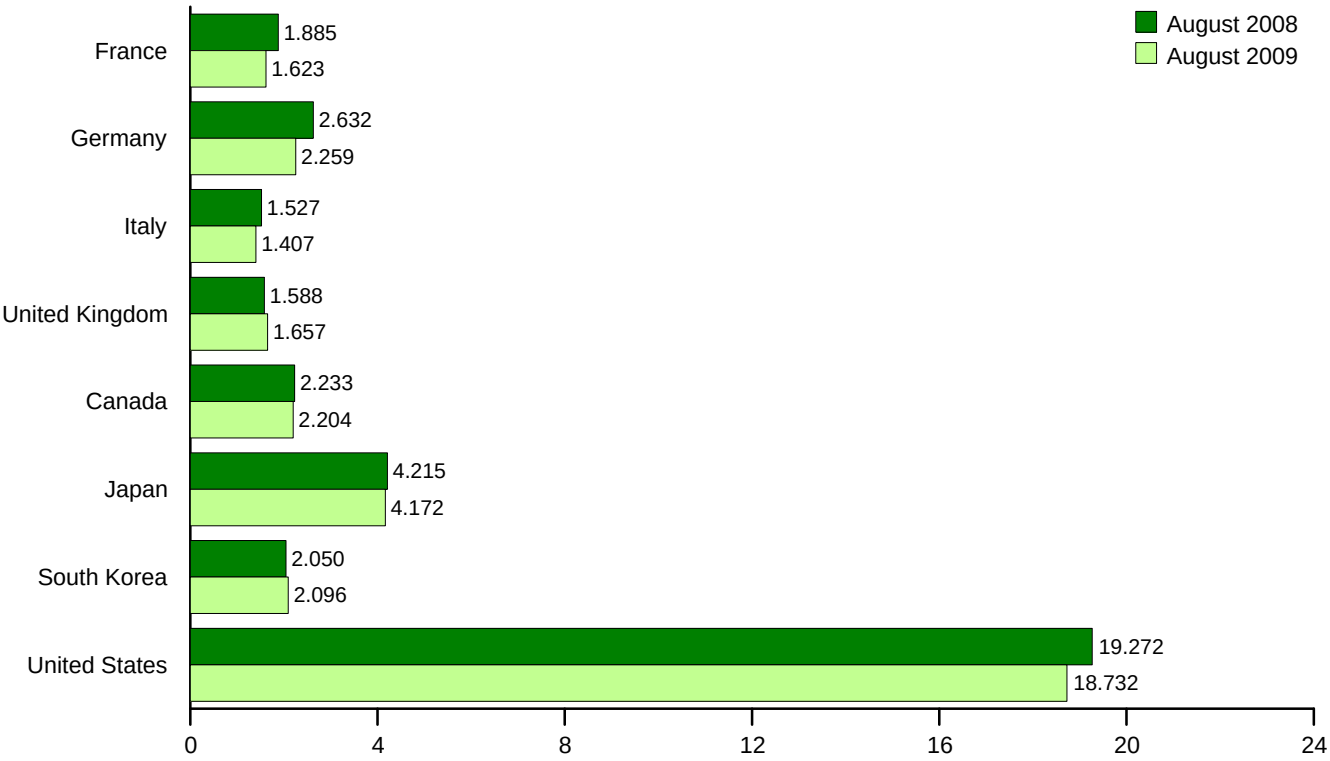
Overview, 1973-2008



OECD Total, August



By Selected OECD Country



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

Web Page: http://www.eia.doe.gov/emeu/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**	**1,658**	**41,804**	**57,237**
1975 Average	**2,252**	**2,957**	**1,855**	**1,911**	**14,314**	**1,779**	**4,621**	**311**	**16,322**	**1,794**	**39,141**	**56,198**
1980 Average	**2,256**	**3,082**	**1,934**	**1,725**	**14,995**	**1,873**	**4,960**	**537**	**17,056**	**2,342**	**41,763**	**63,113**
1985 Average	**1,753**	**2,651**	**1,705**	**1,617**	**12,772**	**1,526**	**4,436**	**552**	**15,726**	**2,469**	**37,481**	**60,085**
1990 Average	**1,826**	**2,682**	**1,868**	**1,776**	**13,729**	**1,737**	**5,315**	**1,048**	**16,988**	**2,804**	**41,621**	**66,687**
1995 Average	**1,920**	**2,882**	**1,942**	**1,816**	**14,716**	**1,817**	**5,693**	**2,008**	**17,725**	**3,001**	**44,960**	**70,132**
1996 Average	**1,949**	**2,922**	**1,920**	**1,852**	**14,997**	**1,871**	**5,739**	**2,101**	**18,309**	**2,995**	**46,012**	**71,671**
1997 Average	**1,969**	**2,917**	**1,934**	**1,810**	**15,140**	**1,959**	**5,702**	**2,255**	**18,620**	**3,089**	**46,766**	**73,431**
1998 Average	**2,043**	**2,923**	**1,943**	**1,792**	**15,447**	**1,949**	**5,507**	**1,917**	**18,917**	**3,192**	**46,929**	**74,067**
1999 Average	**2,031**	**2,838**	**1,891**	**1,811**	**15,364**	**2,036**	**5,642**	**2,084**	**19,519**	**3,235**	**47,880**	**75,758**
2000 Average	**2,000**	**2,772**	**1,854**	**1,765**	**15,217**	**2,035**	**5,515**	**2,135**	**19,701**	**3,326**	**47,930**	**76,741**
2001 Average	**2,054**	**2,815**	**1,832**	**1,747**	**15,385**	**2,066**	**5,412**	**2,132**	**19,649**	**3,337**	**47,980**	**77,468**
2002 Average	**1,985**	**2,722**	**1,870**	**1,739**	**15,336**	**2,087**	**5,319**	**2,149**	**19,761**	**3,289**	**47,942**	**78,119**
2003 Average	**2,001**	**2,679**	**1,860**	**1,759**	**15,460**	**2,217**	**5,427**	**2,175**	**20,034**	**3,324**	**48,637**	**79,681**
2004 Average	**2,009**	**2,665**	**1,794**	**1,785**	**15,529**	**2,310**	**5,318**	**2,155**	**20,731**	**3,390**	**49,434**	**82,456**
2005 Average	**1,991**	**2,647**	**1,755**	**1,823**	**15,658**	**2,342**	**5,328**	**2,191**	**20,802**	**3,481**	**49,802**	**84,038**
2006 Average	**1,985**	**2,692**	**1,743**	**1,804**	**15,673**	**2,253**	**5,197**	**2,180**	**20,687**	**3,499**	**49,490**	**85,202**
2007 January	2,063	2,307	1,627	1,737	14,979	2,253	5,257	2,423	20,567	3,464	48,943	NA
February	1,987	2,372	1,766	1,785	R 15,382	2,414	5,610	2,424	21,309	3,525	R 50,664	NA
March	1,953	2,475	1,721	1,775	R 15,329	2,303	5,447	2,315	20,536	3,639	R 49,569	NA
April	1,886	2,303	1,640	1,781	14,811	2,132	4,947	2,249	20,536	3,399	48,074	NA
May	1,818	2,392	1,713	1,677	R 14,835	2,292	4,474	2,104	20,620	3,591	R 47,918	NA
June	1,932	2,455	1,680	1,735	R 15,250	2,271	4,639	2,097	20,723	3,687	R 48,668	NA
July	1,971	2,504	1,696	1,700	15,345	2,332	4,633	2,080	20,747	3,631	48,768	NA
August	1,939	2,582	1,561	1,752	15,430	2,391	4,666	2,124	21,025	3,487	49,123	NA
September	1,960	2,604	1,661	1,728	15,628	2,315	4,931	2,062	20,415	3,401	48,751	NA
October	2,159	2,667	1,758	1,740	16,149	2,325	4,862	2,241	20,476	3,678	49,732	NA
November	2,094	2,551	1,734	1,782	15,917	2,367	5,277	2,384	20,535	3,584	50,063	NA
December	1,855	2,432	1,703	1,673	15,014	2,282	5,730	2,395	20,719	3,626	49,767	NA
Average	**1,968**	**2,471**	**1,688**	**1,738**	R **15,338**	**2,306**	**5,036**	**2,241**	**20,680**	**3,560**	R **49,161**	R **86,138**
2008 January	2,090	2,493	1,659	1,706	15,532	2,327	5,408	2,394	20,247	3,490	49,399	NA
February	2,023	2,584	1,732	1,817	15,647	2,351	5,924	2,371	20,029	3,572	49,895	NA
March	1,911	2,411	1,585	1,686	14,856	2,249	5,061	2,288	19,831	3,428	47,713	NA
April	2,036	2,525	1,643	1,833	15,594	2,138	5,035	2,121	19,815	3,694	48,397	NA
May	1,880	2,320	1,639	1,631	14,664	2,199	4,489	2,203	19,798	3,607	46,960	NA
June	1,928	2,434	1,638	1,720	14,970	2,244	4,383	2,016	19,678	3,468	46,760	NA
July	1,954	2,647	1,732	1,635	15,487	R 2,288	4,479	2,050	19,557	3,680	R 47,540	NA
August	1,885	2,632	1,527	1,588	15,024	2,233	4,215	2,050	19,272	3,511	46,307	NA
September	2,025	2,842	1,667	1,733	16,151	2,261	4,333	2,190	17,839	3,406	46,179	NA
October	2,078	2,857	1,663	1,738	15,973	2,297	4,379	2,045	19,698	3,374	47,767	NA
November	1,911	2,620	1,561	1,721	15,063	2,274	4,609	2,082	19,052	3,307	46,387	NA
December	2,116	2,470	1,628	1,721	15,258	2,220	5,150	2,293	19,142	3,571	47,635	NA
Average	**1,986**	**2,569**	**1,639**	**1,710**	**15,349**	R **2,257**	**4,785**	**2,175**	**19,498**	**3,509**	R **47,573**	R **85,773**
2009 January	2,037	2,389	1,528	1,746	14,768	2,232	4,845	2,328	19,125	3,297	46,595	NA
February	2,049	2,613	1,585	1,701	15,074	2,221	4,716	2,490	18,706	3,406	46,613	NA
March	1,966	2,723	1,531	1,742	14,932	2,154	4,611	2,218	18,672	3,365	45,952	NA
April	1,847	2,475	1,531	1,710	14,418	2,049	4,226	2,241	18,471	3,329	44,734	NA
May	1,715	2,329	1,490	1,616	R 13,727	R 2,062	3,818	2,159	18,176	3,354	R 43,296	NA
June	1,865	2,363	1,545	1,694	14,563	R 2,142	4,064	2,109	18,762	3,463	R 45,102	NA
July	1,885	2,408	1,704	1,662	R 14,696	R 2,258	3,996	R 2,036	18,771	3,505	R 45,263	NA
August	1,623	2,259	1,407	1,657	13,787	2,204	4,172	2,096	18,732	3,450	44,442	NA
8-Month Average	**1,871**	**2,443**	**1,539**	**1,691**	**14,489**	**2,165**	**4,302**	**2,206**	**18,677**	**3,396**	**45,236**	**NA**
2008 8-Month Average	**1,963**	**2,506**	**1,644**	**1,700**	**15,218**	**2,254**	**4,867**	**2,186**	**19,776**	**3,556**	**47,857**	**NA**
2007 8-Month Average	**1,943**	**2,425**	**1,675**	**1,742**	**15,169**	**2,298**	**4,953**	**2,225**	**20,752**	**3,553**	**48,950**	**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, 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.

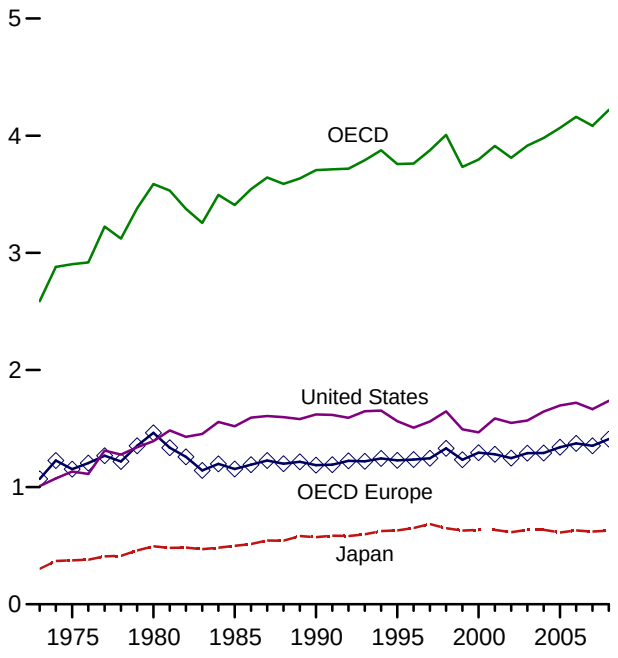
Notes: • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

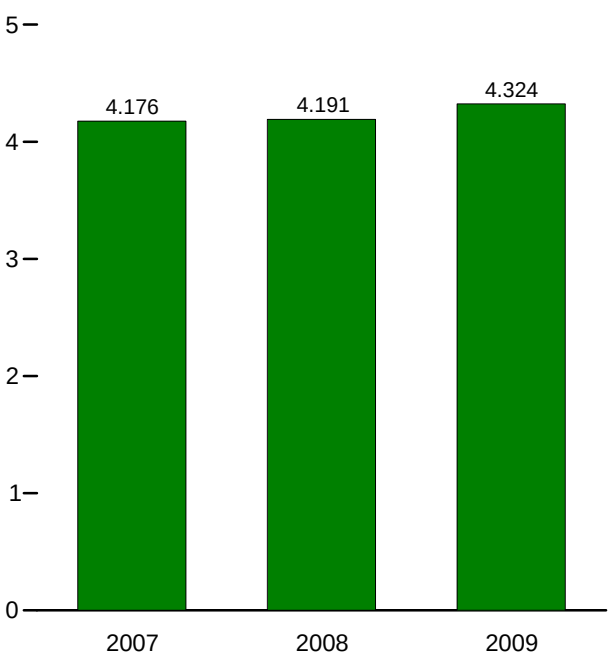
Sources: • **United States:** Table 3.1. • **U.S. Territories: 1983 forward—**U.S. Energy Information Administration (EIA), International Energy Database. • **East Germany, Former Czechoslavakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries,** and **World: 1973-1979—**EIA, International Energy Database. **1980-1983—**EIA, *International Energy Annual 2005,* August 2007, Table 1.2. • **Non-OECD Countries: 1984-2005—**EIA, *International Energy Annual 2005,* August 2007, Table 1.2. **2006 and 2007—**EIA, *Short Term Energy Outlook,* May 2008. • **World: 1984-2007—**Sum of OECD and Non-OECD Countries. • **All Other Data: 1973-1981—**International Energy Agency (IEA), *Quarterly Oil Statistics and Energy Balances in OECD Countries,* various issues. **1982-1983—**IEA, Monthly Oil and Gas Statistics Database. **1984 forward—**IEA, Monthly Oil Data Service, November 12, 2009.

Figure 11.3 Petroleum Stocks in OECD Countries
(Billion Barrels)

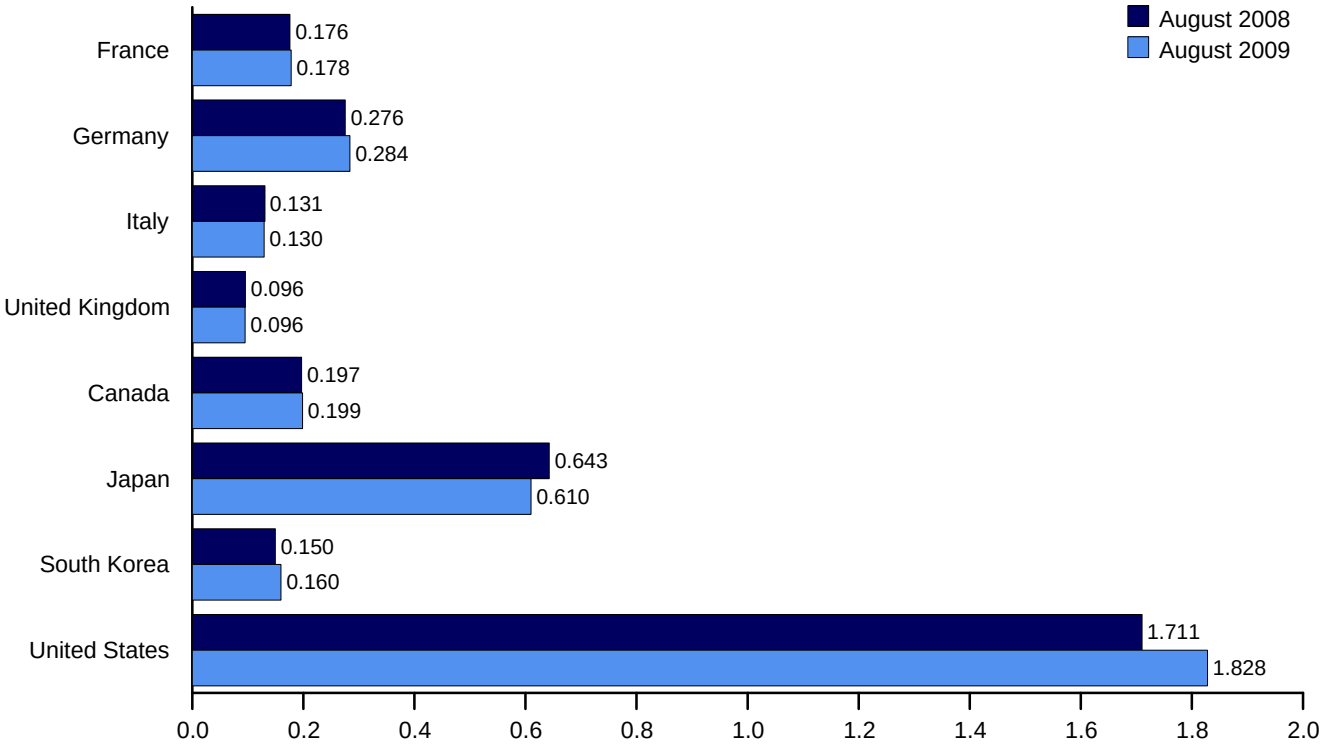
Overview, End of Year, 1973-2008



OECD Stocks, End of Month, August



By Selected OECD Country, End of Month



Note: OECD is the Organization for Economic Cooperation and Development.
Web Page: http://www.eia.doe.gov/emeu/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**	**1,340**	**178**	**612**	**135**	**1,698**	**103**	**4,067**
2006 Year	**182**	**283**	**133**	**103**	**1,373**	**181**	**631**	**152**	**1,720**	**103**	**4,160**
2007 January	176	285	128	101	1,366	187	643	153	1,724	109	4,182
February	178	292	135	103	1,384	183	636	147	1,666	107	4,123
March	166	289	134	103	1,356	186	620	156	1,678	104	4,100
April	179	290	135	102	1,372	185	619	149	1,694	110	4,130
May	178	287	132	103	1,371	189	616	159	1,724	113	4,171
June	174	283	133	97	1,348	188	622	158	1,730	115	4,162
July	175	280	132	98	1,361	192	632	165	1,733	111	4,195
August	176	278	134	98	1,358	196	641	157	1,716	108	4,176
September	175	276	134	90	1,355	196	630	157	1,717	111	4,166
October	165	273	132	96	1,328	194	629	159	1,708	115	4,132
November	166	270	130	91	1,326	194	622	149	1,690	108	4,089
December	**180**	**275**	**133**	**90**	**1,353**	**194**	**621**	**143**	**1,665**	**108**	**4,084**
2008 January	182	281	136	95	1,383	195	621	155	1,677	110	4,141
February	176	276	129	95	1,356	193	605	149	1,664	114	4,081
March	177	281	131	100	1,385	193	610	143	1,655	111	4,097
April	173	279	134	98	1,368	191	610	141	1,666	106	4,083
May	177	277	136	99	1,374	193	617	146	1,674	107	4,111
June	177	273	137	99	1,373	193	619	147	1,686	110	4,126
July	179	274	135	95	1,392	[R] 197	627	153	1,698	105	[R] 4,172
August	176	276	131	96	1,384	197	643	150	1,711	106	4,191
September	177	274	130	95	1,366	198	646	141	1,704	117	4,173
October	179	270	129	93	1,364	202	648	138	1,711	122	4,185
November	179	275	127	96	1,380	200	641	139	1,732	117	4,209
December	**179**	**277**	**128**	**99**	**1,410**	**194**	**630**	**135**	**1,737**	**114**	**4,219**
2009 January	179	280	136	100	1,415	196	618	149	1,762	115	4,255
February	178	279	128	98	1,412	196	619	157	1,770	109	4,264
March	178	278	131	100	1,415	198	611	155	1,795	110	4,284
April	173	279	132	98	[R] 1,408	[R] 199	606	152	1,812	115	[R] 4,291
May	176	281	133	92	[R] 1,403	[R] 198	609	149	1,829	112	4,300
June	173	280	129	92	1,403	[R] 198	611	149	1,839	110	4,310
July	174	277	127	97	[R] 1,392	[R] 203	607	157	1,842	108	[R] 4,309
August	178	284	130	96	1,415	199	610	160	1,828	111	4,324

[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.doe.gov/emeu/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, November 12, 2009.

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, Office of Energy Markets and End Use (EMEU), International Energy Database, December 2009.

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 EMEU, International Energy Database, December 2009.

12 Environment

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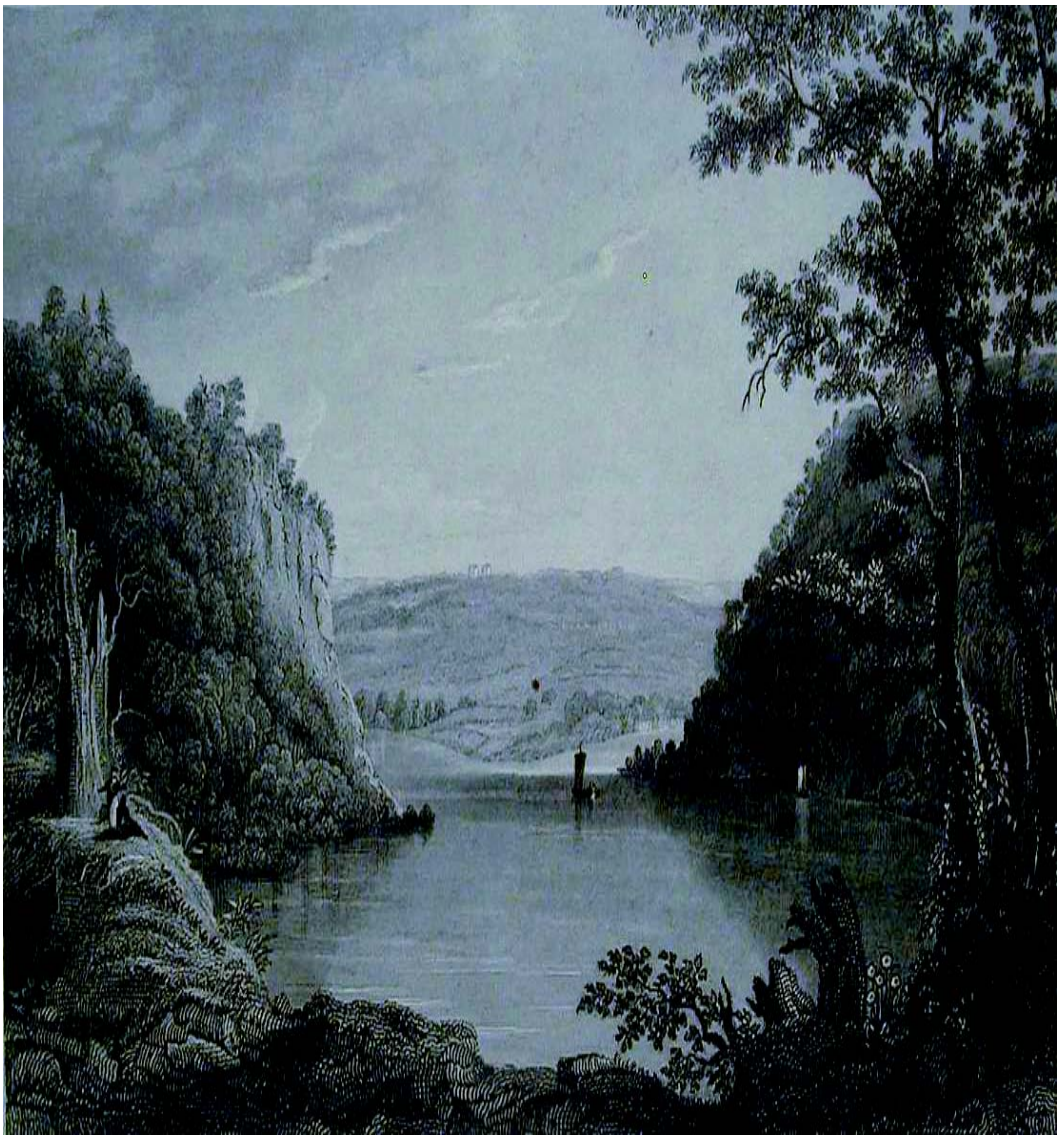
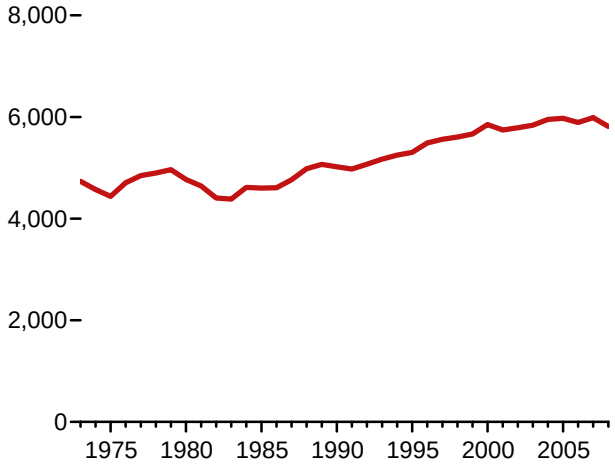


"Harpers Ferry, Junction of the Rivers Shenandoah and Potomac." Engraving by W. Goodacre and James Archer, published in *The History and Topography of the United States of North America*, by John Howard Hinton, 1852. From the collection of the National Park Service, Harpers Ferry National Historical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

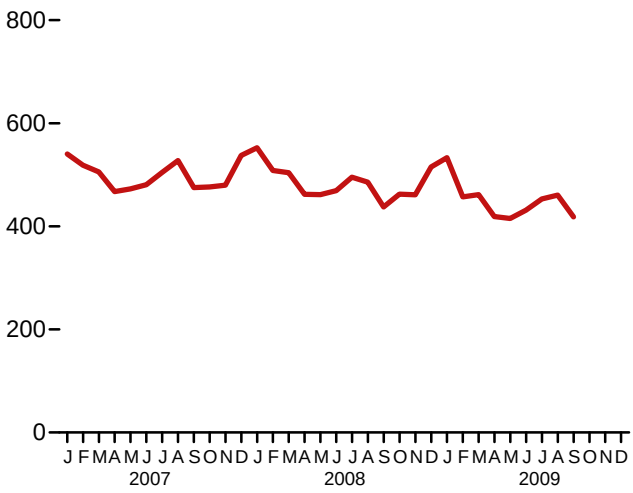
Figure 12.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide)

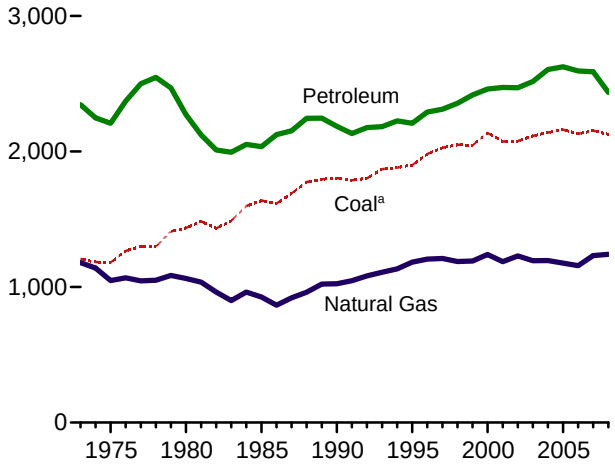
Total, 1973-2008



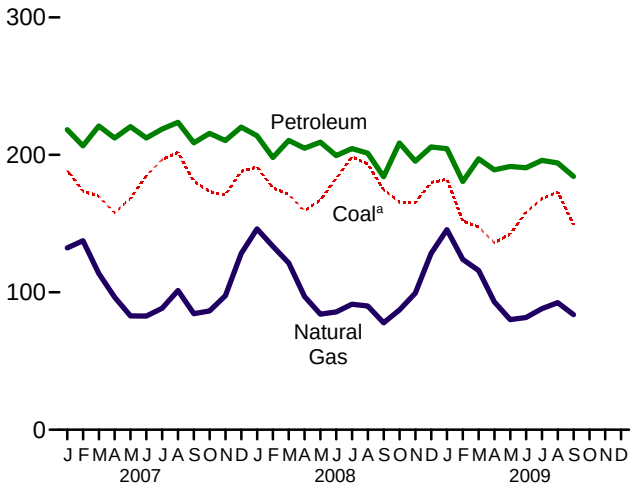
Total, Monthly



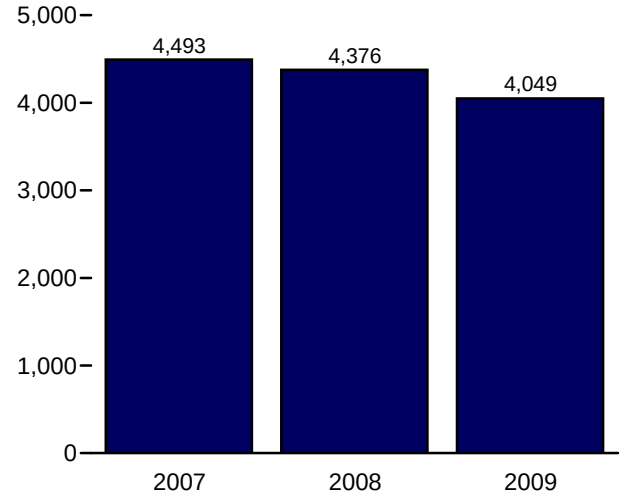
By Source, 1973-2008



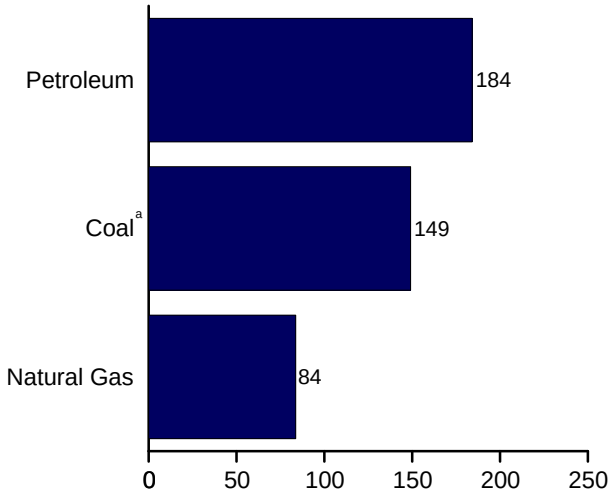
By Source, Monthly



Total, January-September



By Source, September 2009



[a] Includes coal coke net imports.
Web Page: http://www.eia.doe.gov/emeu/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]
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	**1,803**	**1,025**	**3**	**470**	**223**	**6**	**69**	**13**	**987**	**67**	**220**	**127**	**2,186**	**5,020**
1995 Total	**1,900**	**1,184**	**3**	**498**	**222**	**8**	**78**	**13**	**1,045**	**75**	**152**	**114**	**2,208**	**5,302**
1996 Total	**1,982**	**1,205**	**3**	**524**	**232**	**9**	**84**	**12**	**1,063**	**78**	**152**	**132**	**2,291**	**5,488**
1997 Total	**2,027**	**1,211**	**3**	**534**	**234**	**10**	**85**	**13**	**1,075**	**79**	**142**	**138**	**2,313**	**5,562**
1998 Total	**2,050**	**1,189**	**2**	**538**	**238**	**12**	**75**	**14**	**1,105**	**89**	**158**	**125**	**2,356**	**5,605**
1999 Total	**2,046**	**1,192**	**3**	**555**	**245**	**11**	**91**	**14**	**1,128**	**93**	**148**	**130**	**2,417**	**5,665**
2000 Total	**2,138**	**1,241**	**3**	**580**	**254**	**10**	**102**	**14**	**1,136**	**84**	**163**	**117**	**2,461**	**5,850**
2001 Total	**2,074**	**1,187**	**2**	**598**	**243**	**11**	**92**	**13**	**1,151**	**88**	**145**	**132**	**2,473**	**5,745**
2002 Total	**2,077**	**1,229**	**2**	**587**	**237**	**6**	**98**	**12**	**1,181**	**94**	**125**	**127**	**2,470**	**5,790**
2003 Total	**2,116**	**1,195**	**2**	**610**	**231**	**8**	**95**	**11**	**1,187**	**94**	**138**	**140**	**2,517**	**5,839**
2004 Total	**2,140**	**1,195**	**2**	**632**	**240**	**10**	**98**	**12**	**1,211**	**105**	**155**	**142**	**2,605**	**5,952**
2005 Total	**2,161**	**1,176**	**2**	**640**	**246**	**10**	**94**	**12**	**1,212**	**105**	**164**	**141**	**2,626**	**5,974**
2006 Total	**2,130**	**1,157**	**2**	**648**	**240**	**8**	**93**	**11**	**1,216**	**104**	**122**	**150**	**2,595**	**5,894**
2007 January	189	132	(s)	56	20	1	10	1	99	7	11	13	218	540
February	174	138	(s)	55	18	1	10	1	90	7	13	13	207	519
March	170	114	(s)	57	19	(s)	8	1	102	9	11	12	221	506
April	158	96	(s)	54	20	(s)	7	1	99	7	10	14	212	467
May	168	83	(s)	54	20	(s)	7	1	105	9	10	14	221	473
June	185	83	(s)	53	20	(s)	7	1	102	8	11	11	212	481
July	197	88	(s)	53	21	(s)	7	1	107	7	10	12	219	505
August	202	101	(s)	55	21	(s)	7	1	106	9	11	12	224	528
September	181	84	(s)	53	18	(s)	7	1	99	9	10	11	209	475
October	173	86	(s)	56	20	(s)	8	1	102	7	9	12	216	476
November	171	97	(s)	52	19	1	8	1	99	8	11	13	210	480
December	188	128	(s)	55	20	1	9	1	102	10	10	12	220	537
Total	**2,155**	**1,232**	**2**	**652**	**238**	**5**	**94**	**12**	**1,213**	**98**	**128**	**148**	**2,589**	**5,986**
2008 January	191	146	(s)	55	20	(s)	10	1	97	8	10	12	214	552
February	176	133	(s)	53	18	(s)	9	1	91	7	8	12	198	508
March	171	121	(s)	55	19	(s)	8	1	100	8	9	10	210	504
April	159	97	(s)	52	20	(s)	7	1	96	8	10	11	205	462
May	167	84	(s)	52	20	(s)	6	1	101	8	10	11	209	461
June	183	86	(s)	48	20	(s)	7	1	96	7	10	10	200	469
July	198	91	(s)	49	20	(s)	7	1	100	9	10	9	205	495
August	193	90	(s)	48	20	(s)	7	1	100	8	8	9	201	486
September	175	78	(s)	48	18	(s)	5	1	89	6	8	10	184	438
October	166	87	(s)	55	18	(s)	7	1	98	8	9	12	209	462
November	165	99	(s)	49	17	(s)	7	1	94	7	8	12	195	461
December	180	128	(s)	50	17	1	8	1	97	8	11	12	206	515
Total	**2,125**	**1,242**	**2**	**615**	**226**	**2**	**89**	**11**	**1,159**	**92**	**110**	**130**	**2,436**	**5,814**
2009 January	182	146	(s)	54	17	(s)	9	1	95	7	11	11	204	533
February	152	124	(s)	47	15	(s)	7	1	87	6	7	10	181	457
March	147	116	(s)	49	18	(s)	8	1	97	7	9	8	197	461
April	136	93	(s)	44	17	(s)	6	1	94	8	10	8	189	419
May	142	80	(s)	45	17	(s)	6	1	99	8	7	8	192	415
June	158	82	(s)	45	17	(s)	5	1	97	9	9	7	191	431
July	168	88	(s)	46	19	(s)	7	1	101	6	5	11	196	453
August	173	92	(s)	45	18	(s)	7	1	100	7	7	9	194	461
September	149	84	(s)	44	17	(s)	6	1	93	8	5	10	184	418
9-Month Total	**1,408**	**905**	**1**	**419**	**155**	**2**	**61**	**7**	**864**	**67**	**70**	**82**	**1,728**	**4,049**
2008 9-Month Total	**1,614**	**927**	**2**	**460**	**174**	**1**	**67**	**8**	**870**	**69**	**83**	**93**	**1,826**	**4,376**
2007 9-Month Total	**1,622**	**920**	**2**	**489**	**178**	**3**	**70**	**9**	**910**	**73**	**98**	**111**	**1,942**	**4,493**

[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.

(s)=Less than 0.5 million metric tons.

Notes: • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note, "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.doe.gov/emeu/mer/environ.html for all available data beginning in 1973.

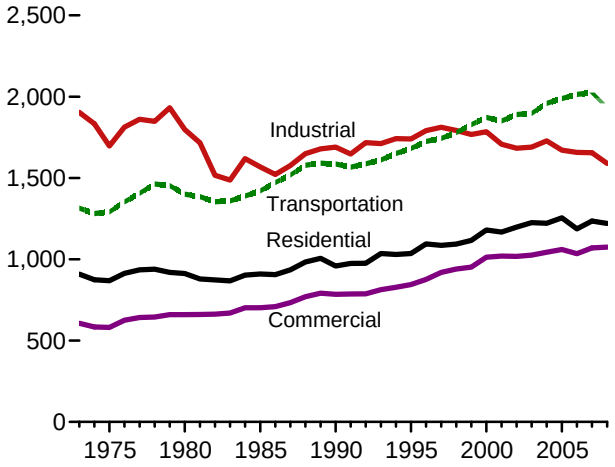
Sources: See end of section.

This table replaces previously published Table 1.11. Data for all years are revised due to a change in methodology and sources.

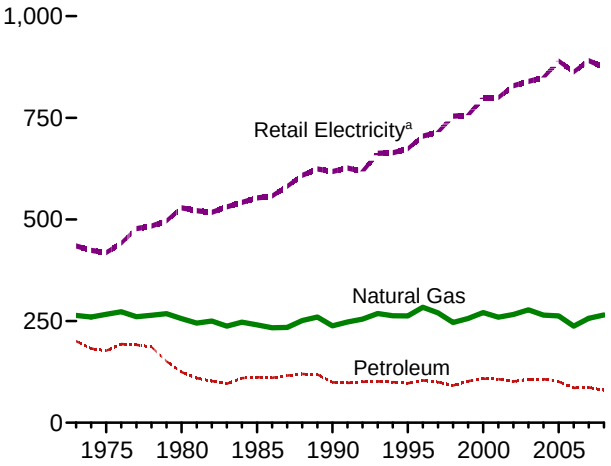
Figure 12.2 Carbon Dioxide Emissions From Energy Consumption by Sector

(Million Metric Tons of Carbon Dioxide)

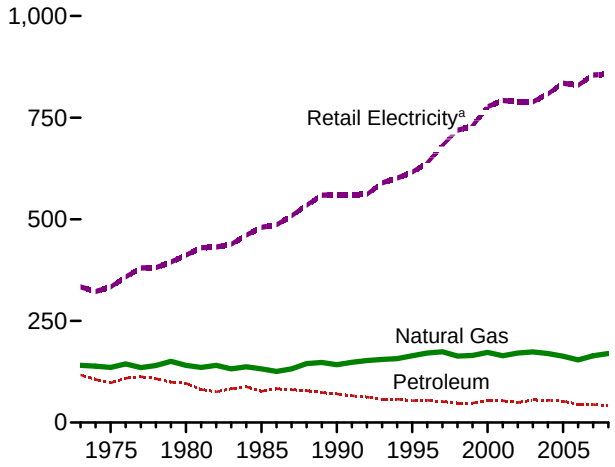
Total by End-Use Sector[a], 1973-2008



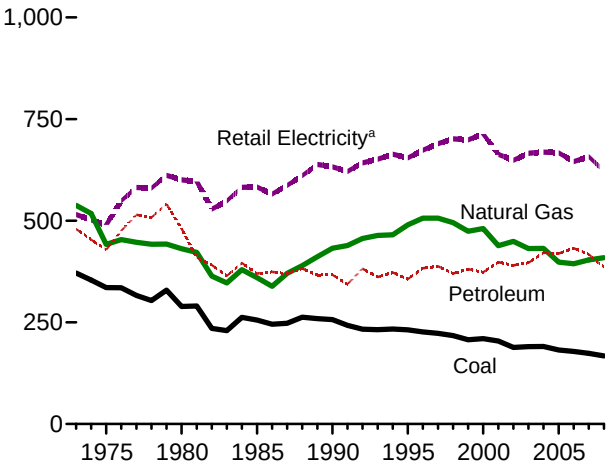
Residential Sector by Major Source, 1973-2008



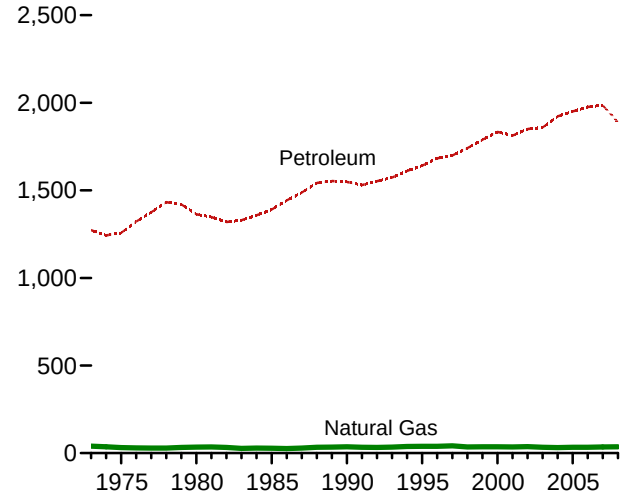
Commercial Sector by Major Source, 1973-2008



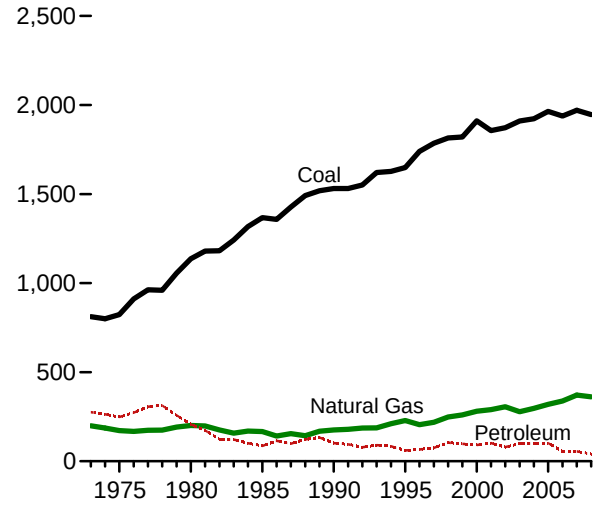
Industrial Sector by Major Source, 1973-2008



Transportation Sector by Major Source, 1973-2008



Electric Power Sector by Major Source, 1973-2008



[a] 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.doe.gov/emeu/mer/environ.html.
Sources: Table 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
			Distillate Fuel Oil[c]	Kerosene	LPG[d]	Total		
1973 Total	**9**	**264**	**147**	**16**	**38**	**200**	**435**	**909**
1975 Total	**6**	**266**	**132**	**12**	**33**	**177**	**419**	**868**
1980 Total	**3**	**256**	**96**	**8**	**21**	**124**	**529**	**912**
1985 Total	**4**	**241**	**80**	**11**	**21**	**112**	**553**	**909**
1990 Total	**3**	**238**	**72**	**5**	**23**	**99**	**618**	**959**
1995 Total	**2**	**263**	**66**	**5**	**25**	**97**	**674**	**1,035**
1996 Total	**2**	**284**	**68**	**6**	**30**	**104**	**705**	**1,095**
1997 Total	**2**	**270**	**64**	**7**	**29**	**100**	**715**	**1,086**
1998 Total	**1**	**247**	**56**	**8**	**27**	**92**	**754**	**1,093**
1999 Total	**1**	**257**	**61**	**8**	**34**	**102**	**757**	**1,117**
2000 Total	**1**	**271**	**66**	**7**	**36**	**109**	**799**	**1,180**
2001 Total	**1**	**259**	**66**	**7**	**34**	**107**	**800**	**1,167**
2002 Total	**1**	**266**	**63**	**4**	**34**	**101**	**829**	**1,198**
2003 Total	**1**	**277**	**66**	**5**	**36**	**107**	**839**	**1,225**
2004 Total	**1**	**265**	**68**	**6**	**33**	**107**	**849**	**1,222**
2005 Total	**1**	**263**	**62**	**6**	**33**	**101**	**890**	**1,255**
2006 Total	**1**	**237**	**52**	**5**	**29**	**86**	**863**	**1,187**
2007 January	(s)	44	6	(s)	3	9	81	134
February	(s)	49	6	(s)	3	9	76	135
March	(s)	34	6	(s)	3	9	66	109
April	(s)	22	3	(s)	2	6	57	85
May	(s)	12	3	(s)	2	5	61	78
June	(s)	7	3	(s)	2	5	76	89
July	(s)	6	3	(s)	2	5	90	102
August	(s)	6	3	(s)	2	6	99	111
September	(s)	6	3	(s)	2	6	80	92
October	(s)	9	4	(s)	2	7	66	82
November	(s)	22	5	(s)	3	8	61	92
December	(s)	39	8	(s)	3	11	78	128
Total	**1**	**257**	**53**	**3**	**30**	**87**	**891**	**1,235**
2008 January	(s)	48	7	(s)	3	10	86	144
February	(s)	44	7	(s)	3	10	74	128
March	(s)	36	5	(s)	3	8	67	111
April	(s)	21	4	(s)	2	6	57	85
May	(s)	12	3	(s)	2	5	58	76
June	(s)	8	3	(s)	2	5	77	91
July	(s)	6	3	(s)	2	5	92	104
August	(s)	6	3	(s)	2	5	89	100
September	(s)	6	3	(s)	2	5	72	83
October	(s)	12	3	(s)	2	6	61	78
November	(s)	23	4	(s)	2	6	62	92
December	(s)	42	6	(s)	2	9	80	131
Total	**1**	**265**	**50**	**1**	**29**	**80**	**874**	**1,220**
2009 January	(s)	51	7	(s)	3	10	86	147
February	(s)	41	6	(s)	2	8	68	117
March	(s)	32	5	(s)	3	8	63	103
April	(s)	21	4	(s)	2	7	53	81
May	(s)	11	3	(s)	2	5	56	73
June	(s)	8	3	(s)	2	5	70	83
July	(s)	7	3	(s)	2	5	83	95
August	(s)	6	3	(s)	2	6	85	97
September	(s)	6	4	(s)	2	6	67	79
9-Month Total	**(s)**	**184**	**38**	**1**	**21**	**60**	**632**	**876**
2008 9-Month Total	**1**	**188**	**37**	**1**	**22**	**59**	**671**	**920**
2007 9-Month Total	**1**	**186**	**36**	**2**	**23**	**61**	**686**	**934**

[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.

(s)=Less than 0.5 million metric tons.

Notes: • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note, "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.doe.gov/emeu/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*.

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
			Distillate Fuel Oil[c]	Kerosene	LPG[d]	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Total		
1973 Total	**15**	**141**	**47**	**5**	**7**	**6**	**NA**	**52**	**117**	**334**	**607**
1975 Total	**14**	**136**	**43**	**4**	**6**	**6**	**NA**	**39**	**97**	**333**	**581**
1980 Total	**11**	**141**	**38**	**3**	**4**	**8**	**NA**	**44**	**97**	**412**	**660**
1985 Total	**13**	**132**	**46**	**2**	**4**	**7**	**NA**	**18**	**77**	**480**	**702**
1990 Total	**12**	**142**	**39**	**1**	**4**	**8**	**0**	**18**	**70**	**561**	**785**
1995 Total	**11**	**164**	**35**	**2**	**4**	**1**	**(s)**	**11**	**54**	**616**	**845**
1996 Total	**12**	**171**	**35**	**2**	**5**	**2**	**(s)**	**11**	**55**	**638**	**876**
1997 Total	**12**	**174**	**32**	**2**	**5**	**3**	**(s)**	**9**	**51**	**682**	**920**
1998 Total	**9**	**164**	**31**	**2**	**5**	**3**	**(s)**	**7**	**48**	**719**	**940**
1999 Total	**10**	**165**	**32**	**2**	**6**	**2**	**(s)**	**6**	**48**	**729**	**952**
2000 Total	**9**	**173**	**36**	**2**	**6**	**3**	**(s)**	**7**	**55**	**777**	**1,013**
2001 Total	**9**	**164**	**37**	**2**	**6**	**3**	**(s)**	**6**	**54**	**792**	**1,019**
2002 Total	**9**	**171**	**32**	**1**	**6**	**3**	**(s)**	**6**	**49**	**789**	**1,018**
2003 Total	**8**	**174**	**35**	**1**	**6**	**4**	**(s)**	**9**	**56**	**789**	**1,026**
2004 Total	**10**	**170**	**34**	**1**	**6**	**3**	**(s)**	**10**	**55**	**809**	**1,043**
2005 Total	**9**	**163**	**33**	**2**	**6**	**3**	**(s)**	**9**	**52**	**835**	**1,060**
2006 Total	**6**	**154**	**29**	**1**	**5**	**3**	**(s)**	**6**	**45**	**830**	**1,035**
2007 January	1	24	3	(s)	1	(s)	(s)	1	5	69	98
February	1	26	3	(s)	1	(s)	(s)	1	5	63	95
March	1	19	3	(s)	(s)	(s)	(s)	1	5	64	89
April	(s)	14	2	(s)	(s)	(s)	(s)	(s)	3	63	81
May	(s)	9	1	(s)	(s)	(s)	0	(s)	2	69	81
June	(s)	7	2	(s)	(s)	(s)	0	(s)	3	76	86
July	(s)	7	2	(s)	(s)	(s)	0	(s)	3	80	90
August	(s)	7	2	(s)	(s)	(s)	(s)	(s)	3	86	96
September	(s)	7	2	(s)	(s)	(s)	(s)	(s)	3	74	84
October	1	9	2	(s)	(s)	(s)	(s)	(s)	3	73	85
November	1	14	3	(s)	(s)	(s)	(s)	1	4	67	86
December	1	21	4	(s)	(s)	(s)	(s)	1	6	70	98
Total	**7**	**164**	**28**	**1**	**5**	**4**	**(s)**	**6**	**44**	**855**	**1,070**
2008 January	1	26	4	(s)	1	(s)	(s)	1	5	71	103
February	1	25	4	(s)	(s)	(s)	(s)	1	5	66	96
March	1	20	3	(s)	(s)	(s)	(s)	1	4	65	91
April	(s)	14	2	(s)	(s)	(s)	(s)	(s)	3	64	82
May	(s)	10	1	(s)	(s)	(s)	0	(s)	3	69	82
June	(s)	7	2	(s)	(s)	(s)	0	(s)	3	77	87
July	(s)	7	2	(s)	(s)	(s)	0	(s)	3	83	93
August	(s)	7	1	(s)	(s)	(s)	0	(s)	2	81	90
September	(s)	7	1	(s)	(s)	(s)	(s)	(s)	2	74	84
October	1	10	2	(s)	(s)	(s)	(s)	(s)	3	71	84
November	1	15	2	(s)	(s)	(s)	(s)	(s)	3	67	86
December	1	23	3	(s)	(s)	(s)	(s)	1	5	70	98
Total	**6**	**170**	**26**	**(s)**	**5**	**4**	**(s)**	**6**	**41**	**857**	**1,075**
2009 January	1	28	4	(s)	(s)	(s)	(s)	1	5	70	104
February	1	23	3	(s)	(s)	(s)	(s)	1	4	59	87
March	1	20	3	(s)	(s)	(s)	(s)	1	4	61	85
April	(s)	13	2	(s)	(s)	(s)	0	(s)	3	59	76
May	(s)	9	2	(s)	(s)	(s)	0	(s)	3	64	76
June	(s)	7	1	(s)	(s)	(s)	0	(s)	2	71	81
July	(s)	7	2	(s)	(s)	(s)	0	(s)	3	75	84
August	(s)	7	2	(s)	(s)	(s)	(s)	(s)	3	77	88
September	(s)	7	2	(s)	(s)	(s)	(s)	(s)	3	67	78
9-Month Total	**4**	**121**	**20**	**(s)**	**4**	**3**	**(s)**	**4**	**31**	**604**	**760**
2008 9-Month Total	**5**	**123**	**20**	**(s)**	**4**	**3**	**(s)**	**4**	**31**	**649**	**807**
2007 9-Month Total	**5**	**120**	**19**	**(s)**	**4**	**3**	**(s)**	**4**	**31**	**645**	**801**

[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.

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

Notes: • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note, "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.doe.gov/emeu/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*.

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
				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**	**44**	**7**	**18**	**49**	**144**	**100**	**480**	**515**	**1,903**
1975 Total	**336**	**2**	**442**	**97**	**9**	**40**	**6**	**16**	**48**	**117**	**97**	**429**	**490**	**1,697**
1980 Total	**289**	**-4**	**431**	**96**	**13**	**62**	**7**	**11**	**45**	**105**	**142**	**481**	**601**	**1,798**
1985 Total	**256**	**-2**	**360**	**81**	**3**	**60**	**6**	**15**	**54**	**57**	**93**	**370**	**583**	**1,567**
1990 Total	**257**	**1**	**432**	**84**	**1**	**41**	**7**	**13**	**64**	**31**	**127**	**367**	**633**	**1,690**
1995 Total	**231**	**7**	**490**	**82**	**1**	**47**	**7**	**14**	**67**	**24**	**114**	**357**	**655**	**1,740**
1996 Total	**226**	**3**	**506**	**86**	**1**	**48**	**6**	**14**	**70**	**24**	**132**	**383**	**673**	**1,792**
1997 Total	**223**	**5**	**506**	**88**	**1**	**50**	**7**	**15**	**68**	**21**	**138**	**388**	**690**	**1,812**
1998 Total	**218**	**8**	**495**	**88**	**2**	**41**	**7**	**14**	**77**	**16**	**125**	**370**	**701**	**1,792**
1999 Total	**207**	**7**	**474**	**86**	**1**	**51**	**7**	**11**	**81**	**14**	**130**	**381**	**699**	**1,768**
2000 Total	**210**	**7**	**481**	**87**	**1**	**59**	**7**	**11**	**74**	**17**	**117**	**373**	**713**	**1,785**
2001 Total	**204**	**3**	**439**	**95**	**2**	**51**	**6**	**21**	**77**	**14**	**132**	**398**	**663**	**1,707**
2002 Total	**188**	**7**	**449**	**88**	**1**	**57**	**6**	**22**	**76**	**13**	**127**	**390**	**649**	**1,683**
2003 Total	**190**	**6**	**432**	**83**	**2**	**52**	**6**	**23**	**76**	**15**	**140**	**397**	**666**	**1,690**
2004 Total	**191**	**16**	**432**	**88**	**2**	**58**	**6**	**26**	**82**	**17**	**142**	**421**	**669**	**1,728**
2005 Total	**182**	**5**	**398**	**92**	**3**	**54**	**6**	**25**	**80**	**20**	**141**	**419**	**667**	**1,671**
2006 Total	**178**	**7**	**394**	**92**	**2**	**58**	**6**	**26**	**82**	**16**	**150**	**432**	**646**	**1,658**
2007 January	15	(s)	37	10	(s)	6	1	2	6	1	13	38	53	144
February	14	(s)	35	9	(s)	6	(s)	2	5	1	13	37	49	136
March	15	(s)	35	9	(s)	5	1	2	8	1	12	38	52	139
April	14	(s)	33	9	(s)	4	1	2	6	1	14	36	52	135
May	15	(s)	32	8	(s)	4	1	2	8	1	14	37	55	139
June	15	1	31	7	(s)	4	(s)	2	6	1	11	31	57	134
July	14	(s)	31	6	(s)	4	1	2	6	1	12	32	58	135
August	14	(s)	33	7	(s)	4	(s)	2	8	1	12	34	61	142
September	14	(s)	32	8	(s)	4	(s)	2	7	1	11	33	54	133
October	15	(s)	33	8	(s)	5	1	2	6	1	12	33	57	138
November	14	1	34	6	(s)	5	(s)	2	6	1	13	33	55	137
December	15	(s)	37	6	(s)	6	(s)	2	8	1	12	35	55	143
Total	**174**	**3**	**404**	**92**	**1**	**57**	**6**	**21**	**80**	**13**	**148**	**417**	**658**	**1,655**
2008 January	14	(s)	39	9	(s)	6	(s)	2	7	1	12	38	52	144
February	14	(s)	37	9	(s)	5	(s)	2	5	1	12	34	49	135
March	14	1	37	9	(s)	5	1	2	7	1	10	34	51	137
April	14	1	34	8	(s)	4	1	2	7	1	11	33	51	133
May	14	(s)	34	8	(s)	4	1	2	6	1	11	32	54	135
June	14	1	32	5	(s)	4	(s)	2	6	1	10	29	54	130
July	14	1	33	5	(s)	4	(s)	2	8	1	9	29	55	132
August	14	(s)	33	5	(s)	4	1	2	7	1	9	28	55	130
September	14	(s)	29	6	(s)	3	(s)	2	4	1	10	26	51	121
October	15	(s)	33	10	(s)	4	1	2	6	1	12	36	52	136
November	13	(s)	34	7	(s)	4	(s)	2	6	1	12	33	50	130
December	12	(s)	34	5	(s)	5	(s)	2	7	1	12	33	47	127
Total	**168**	**5**	**409**	**87**	**(s)**	**54**	**6**	**20**	**76**	**12**	**130**	**385**	**623**	**1,589**
2009 January	12	(s)	36	9	(s)	5	(s)	2	6	1	11	34	46	128
February	12	(s)	32	6	(s)	4	(s)	2	5	1	10	29	40	113
March	12	(s)	33	6	(s)	5	(s)	2	6	1	8	27	42	114
April	10	(s)	31	3	(s)	4	(s)	2	7	1	8	25	41	107
May	10	(s)	30	4	(s)	3	(s)	2	7	1	8	25	43	108
June	10	(s)	29	4	(s)	3	(s)	2	7	1	7	25	45	109
July	10	(s)	30	3	(s)	4	(s)	2	5	1	11	26	46	111
August	11	(s)	31	2	(s)	4	1	2	6	1	9	23	49	113
September	11	(s)	30	3	(s)	4	(s)	2	6	1	10	25	44	111
9-Month Total	**98**	**-2**	**283**	**39**	**(s)**	**36**	**4**	**15**	**55**	**8**	**82**	**239**	**396**	**1,014**
2008 9-Month Total	**128**	**5**	**308**	**65**	**(s)**	**40**	**4**	**15**	**57**	**9**	**93**	**283**	**473**	**1,196**
2007 9-Month Total	**130**	**2**	**299**	**72**	**1**	**42**	**5**	**16**	**59**	**10**	**111**	**315**	**491**	**1,237**

[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.

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

Notes: • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note, "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.doe.gov/emeu/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*.

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
			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**	**1,291**
1980 Total	**(g)**	**34**	**4**	**204**	**155**	**1**	**6**	**881**	**110**	**1,363**	**2**	**1,400**
1985 Total	**(g)**	**28**	**3**	**232**	**178**	**2**	**6**	**908**	**62**	**1,391**	**3**	**1,421**
1990 Total	**(g)**	**36**	**3**	**268**	**223**	**1**	**7**	**966**	**80**	**1,548**	**3**	**1,587**
1995 Total	**(g)**	**38**	**3**	**307**	**222**	**1**	**6**	**1,030**	**72**	**1,641**	**3**	**1,682**
1996 Total	**(g)**	**39**	**3**	**327**	**232**	**1**	**6**	**1,047**	**67**	**1,683**	**3**	**1,725**
1997 Total	**(g)**	**41**	**3**	**342**	**234**	**1**	**6**	**1,057**	**56**	**1,699**	**3**	**1,744**
1998 Total	**(g)**	**35**	**2**	**352**	**238**	**1**	**7**	**1,088**	**53**	**1,741**	**3**	**1,780**
1999 Total	**(g)**	**36**	**3**	**366**	**245**	**1**	**7**	**1,115**	**52**	**1,789**	**3**	**1,828**
2000 Total	**(g)**	**36**	**3**	**378**	**254**	**1**	**7**	**1,122**	**70**	**1,833**	**4**	**1,873**
2001 Total	**(g)**	**35**	**2**	**387**	**243**	**1**	**6**	**1,127**	**46**	**1,813**	**4**	**1,851**
2002 Total	**(g)**	**37**	**2**	**394**	**237**	**1**	**6**	**1,156**	**53**	**1,850**	**4**	**1,891**
2003 Total	**(g)**	**33**	**2**	**414**	**231**	**1**	**6**	**1,160**	**45**	**1,859**	**4**	**1,897**
2004 Total	**(g)**	**32**	**2**	**434**	**240**	**1**	**6**	**1,181**	**58**	**1,922**	**5**	**1,959**
2005 Total	**(g)**	**33**	**2**	**444**	**246**	**2**	**6**	**1,184**	**66**	**1,951**	**5**	**1,989**
2006 Total	**(g)**	**33**	**2**	**469**	**240**	**2**	**5**	**1,187**	**71**	**1,976**	**5**	**2,014**
2007 January	(g)	4	(s)	37	20	(s)	1	97	7	161	(s)	165
February	(g)	4	(s)	35	18	(s)	(s)	88	6	148	(s)	153
March	(g)	3	(s)	39	19	(s)	1	100	6	165	(s)	169
April	(g)	3	(s)	40	20	(s)	(s)	97	6	164	(s)	167
May	(g)	2	(s)	41	20	(s)	1	103	7	172	(s)	175
June	(g)	2	(s)	41	20	(s)	(s)	100	7	168	(s)	171
July	(g)	3	(s)	42	21	(s)	(s)	105	6	175	(s)	177
August	(g)	3	(s)	43	21	(s)	(s)	104	6	175	(s)	178
September	(g)	2	(s)	40	18	(s)	(s)	97	6	163	(s)	165
October	(g)	2	(s)	41	20	(s)	1	100	6	168	(s)	171
November	(g)	3	(s)	37	19	(s)	(s)	97	8	162	(s)	165
December	(g)	4	(s)	37	20	(s)	(s)	100	7	164	(s)	168
Total	**(g)**	**35**	**2**	**472**	**238**	**1**	**6**	**1,187**	**78**	**1,985**	**5**	**2,026**
2008 January	(g)	4	(s)	35	20	(s)	(s)	95	7	157	(s)	161
February	(g)	4	(s)	33	18	(s)	(s)	89	5	146	(s)	150
March	(g)	3	(s)	37	19	(s)	(s)	98	6	161	(s)	165
April	(g)	3	(s)	38	20	(s)	(s)	94	7	160	(s)	163
May	(g)	2	(s)	39	20	(s)	(s)	99	7	166	(s)	169
June	(g)	3	(s)	38	20	(s)	(s)	94	6	158	(s)	161
July	(g)	3	(s)	39	20	(s)	(s)	98	7	164	(s)	167
August	(g)	3	(s)	39	20	(s)	1	97	5	163	(s)	166
September	(g)	2	(s)	37	18	(s)	(s)	87	5	147	(s)	150
October	(g)	3	(s)	40	18	(s)	(s)	96	6	161	(s)	164
November	(g)	3	(s)	36	17	(s)	(s)	92	5	151	(s)	154
December	(g)	4	(s)	35	17	(s)	(s)	95	8	155	(s)	159
Total	**(g)**	**36**	**2**	**446**	**226**	**1**	**5**	**1,135**	**74**	**1,889**	**5**	**1,930**
2009 January	(g)	4	(s)	34	17	(s)	(s)	93	6	150	(s)	155
February	(g)	4	(s)	31	15	(s)	(s)	85	4	136	(s)	140
March	(g)	3	(s)	35	18	(s)	(s)	95	7	155	(s)	158
April	(g)	3	(s)	34	17	(s)	(s)	92	7	152	(s)	155
May	(g)	2	(s)	36	17	(s)	(s)	97	5	155	(s)	158
June	(g)	2	(s)	37	17	(s)	(s)	95	6	156	(s)	158
July	(g)	3	(s)	38	19	(s)	(s)	99	3	159	(s)	162
August	(g)	3	(s)	37	18	(s)	(s)	98	5	159	(s)	162
September	(g)	2	(s)	35	17	(s)	(s)	91	3	147	(s)	150
9-Month Total	**(g)**	**26**	**1**	**317**	**155**	**1**	**4**	**845**	**46**	**1,369**	**3**	**1,398**
2008 9-Month Total	**(g)**	**27**	**2**	**335**	**174**	**1**	**4**	**852**	**55**	**1,422**	**4**	**1,453**
2007 9-Month Total	**(g)**	**26**	**2**	**357**	**178**	**1**	**4**	**891**	**57**	**1,491**	**4**	**1,521**

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

(s)=Less than 0.5 million metric tons.

Notes: • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note, "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.doe.gov/emeu/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*.

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
			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	**1,531**	**176**	**7**	**3**	**92**	**102**	**(s)**	**6**	**1,815**
1995 Total	**1,649**	**228**	**8**	**8**	**45**	**61**	**(s)**	**10**	**1,948**
1996 Total	**1,740**	**205**	**8**	**8**	**50**	**66**	**(s)**	**10**	**2,020**
1997 Total	**1,785**	**219**	**8**	**10**	**56**	**75**	**(s)**	**10**	**2,090**
1998 Total	**1,815**	**248**	**10**	**13**	**82**	**105**	**(s)**	**10**	**2,178**
1999 Total	**1,821**	**260**	**10**	**11**	**76**	**97**	**(s)**	**10**	**2,189**
2000 Total	**1,911**	**281**	**13**	**10**	**69**	**91**	**(s)**	**10**	**2,294**
2001 Total	**1,856**	**290**	**12**	**11**	**79**	**102**	**(s)**	**11**	**2,259**
2002 Total	**1,872**	**306**	**9**	**18**	**52**	**79**	**(s)**	**13**	**2,270**
2003 Total	**1,911**	**278**	**12**	**18**	**69**	**98**	**(s)**	**11**	**2,299**
2004 Total	**1,923**	**297**	**8**	**23**	**69**	**100**	**(s)**	**11**	**2,331**
2005 Total	**1,964**	**319**	**8**	**25**	**69**	**102**	**(s)**	**11**	**2,397**
2006 Total	**1,938**	**338**	**5**	**22**	**28**	**56**	**(s)**	**11**	**2,343**
2007 January	173	24	1	2	3	5	(s)	1	203
February	158	23	1	1	5	7	(s)	1	190
March	154	23	1	1	3	4	(s)	1	182
April	143	25	(s)	1	2	4	(s)	1	173
May	153	28	(s)	1	2	4	(s)	1	186
June	169	34	1	2	3	5	(s)	1	209
July	182	41	1	1	3	5	(s)	1	229
August	187	53	1	2	4	6	(s)	1	246
September	166	37	(s)	1	2	4	(s)	1	208
October	158	33	(s)	1	2	4	(s)	1	196
November	155	24	(s)	1	1	3	(s)	1	183
December	172	27	(s)	2	2	4	(s)	1	204
Total	**1,971**	**372**	**7**	**17**	**31**	**55**	**(s)**	**11**	**2,409**
2008 January	176	29	1	2	2	4	(s)	1	209
February	161	24	1	1	1	3	(s)	1	189
March	155	25	(s)	1	1	3	(s)	1	184
April	144	25	(s)	1	1	3	(s)	1	173
May	152	26	(s)	1	1	3	(s)	1	182
June	167	36	1	1	2	4	(s)	1	209
July	183	43	(s)	1	2	4	(s)	1	230
August	178	41	(s)	1	2	3	(s)	1	224
September	160	33	(s)	1	2	4	(s)	1	197
October	150	30	(s)	1	1	3	(s)	1	184
November	152	25	(s)	1	1	3	(s)	1	180
December	167	26	1	1	2	4	(s)	1	198
Total	**1,946**	**362**	**5**	**16**	**19**	**40**	**(s)**	**11**	**2,359**
2009 January	170	26	1	1	3	5	(s)	1	202
February	139	24	(s)	1	1	3	(s)	1	167
March	135	27	1	1	1	3	(s)	1	166
April	126	25	(s)	1	1	2	(s)	1	154
May	132	28	(s)	1	1	3	(s)	1	164
June	148	35	(s)	1	1	3	(s)	1	187
July	158	42	(s)	1	1	3	(s)	1	204
August	162	45	(s)	1	2	3	(s)	1	212
September	138	37	(s)	1	1	3	(s)	1	179
9-Month Total	**1,307**	**291**	**4**	**12**	**12**	**27**	**(s)**	**8**	**1,634**
2008 9-Month Total	**1,477**	**281**	**4**	**12**	**15**	**30**	**(s)**	**8**	**1,797**
2007 9-Month Total	**1,485**	**287**	**5**	**13**	**26**	**45**	**(s)**	**8**	**1,826**

[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.

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

Notes: • Data are estimates. See "Section 12 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note, "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.doe.gov/emeu/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. Emissions of Carbon Dioxide and Other Greenhouse Gases. Greenhouse gases are those gases—such as water vapor, carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride—that are transparent to solar (short-wave) radiation but opaque to long-wave (infrared) radiation, thus preventing long-wave radiant energy from leaving Earth's atmosphere. The net effect is a trapping of absorbed radiation and a tendency to warm the planet's surface.

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

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.doe.gov/oiaf/1605/ggrpt/carbon.html.

Section 12 Methodology and Sources

To estimate carbon dioxide emissions from energy consumption for the *Monthly Energy Review* (*MER*), Tables 12.1-12.6, the U.S. Energy Information Administration (EIA) uses the following methodology and sources:

Step 1. Determine Fossil 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-c. 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 LPG and motor gasoline).

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 from EIA's Office of Integrated Forecasting and Analysis—for details, see "Documentation for *Emissions of Greenhouse Gases in the United States 2006*" at http://www.eia.doe.gov/oiaf/1605/ggrpt/documentation/pdf/0638(2006).pdf.

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

Step 4. Determine Carbon Dioxide Emissions From Energy Consumption

Carbon dioxide emissions data in million metric tons for fossil fuels 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.doe.gov/oiaf/1605/ggrpt/excel/CO2_coeff.xls. For 2007-2009, the 2006 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 using a coal coke factor of 114.14 million metric tons CO_2 per quadrillion Btu.

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. Residual fuel oil emissions are calculated using the "Residual Fuel" (not the "Residual Fuel-Electric Utility") factor.

Geothermal and Non-Biomass Waste—Annual 1989-2007 CO_2 emissions data for geothermal and non-biomass waste are from EIA's *Annual Energy Review* (*AER*), 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.)

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	Natural Gasoline and Isopentane	4.620
Aviation Gasoline	5.048	Pentanes Plus	4.620
Butane	4.326	Petrochemical Feedstocks	
Butane-Propane Mixture[a]	4.130	Naptha Less Than 401°F	5.248
Distillate Fuel Oil[b]	5.825	Other Oils Equal to or Greater Than 401°F	5.825
Ethane	3.082	Still Gas	6.000
Ethane-Propane Mixture[c]	3.308	Petroleum Coke	6.024
Isobutane	3.974	Plant Condensate	5.418
Jet Fuel, Kerosene Type	5.670	Propane	3.836
Jet Fuel, Naphtha Type	5.355	Residual Fuel Oil	6.287
Kerosene	5.670	Road Oil	6.636
Lubricants	6.065	Special Naphthas	5.248
Motor Gasoline		Still Gas	6.000
Conventional[d]	5.253	Unfinished Oils	5.825
Reformulated[d]	5.150	Unfractionated Stream	5.418
Oxygenated[d]	5.150	Waxes	5.537
Fuel Ethanol[e]	3.539	Miscellaneous	5.796

[a] 60 percent butane and 40 percent propane.
[b] Biodiesel, a fuel which is typically derived from soybean, canola, or other vegetable oils, animal fats, and recycled grease, is not a petroleum product but is blended into distillate fuel oil. The approximate heat content of biodiesel is 5.359 million Btu per barrel. See Table A3.
[c] 70 percent ethane and 30 percent propane.
[d] See Table A3 for motor gasoline annual weighted averages beginning in 1994.
[e] Fuel ethanol, which is derived from agricultural feedstocks (primarily corn), is not a petroleum product but is blended into motor gasoline.
Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.
Web Page: http://www.eia.doe.gov/emeu/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[E]	5.800	3.706	5.990	5.479	5.866	5.800	5.762	5.762

[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.doe.gov/emeu/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[e]	Motor Gasoline Consumption[f]	Fuel Ethanol	*Fuel Ethanol Feedstock Factor*[g]	Biodiesel	*Biodiesel Feedstock Factor*[h]
	Residential	Commercial[b]	Industrial[b]	Transportation[b]	Electric Power[c,d]	Total[b]						
1973	5.205	5.749	5.569	5.395	6.245	5.515	3.746	5.253	3.539	*NA*	NA	*NA*
1974	5.196	5.740	5.538	5.394	6.238	5.504	3.730	5.253	3.539	*NA*	NA	*NA*
1975	5.192	5.704	5.527	5.392	6.250	5.494	3.715	5.253	3.539	*NA*	NA	*NA*
1976	5.215	5.726	5.536	5.395	6.251	5.504	3.711	5.253	3.539	*NA*	NA	*NA*
1977	5.213	5.733	5.554	5.400	6.249	5.518	3.677	5.253	3.539	*NA*	NA	*NA*
1978	5.213	5.716	5.554	5.404	6.251	5.519	3.669	5.253	3.539	*NA*	NA	*NA*
1979	5.298	5.769	5.419	5.428	6.258	5.494	3.680	5.253	3.539	*NA*	NA	*NA*
1980	5.245	5.803	5.374	5.440	6.254	5.479	3.674	5.253	3.539	*6.586*	NA	*NA*
1981	5.191	5.751	5.312	5.432	6.258	5.448	3.643	5.253	3.539	*6.562*	NA	*NA*
1982	5.167	5.751	5.263	5.422	6.258	5.415	3.615	5.253	3.539	*6.539*	NA	*NA*
1983	5.022	5.642	5.275	5.415	6.255	5.406	3.614	5.253	3.539	*6.515*	NA	*NA*
1984	5.205	5.707	5.222	5.418	6.251	5.395	3.599	5.253	3.539	*6.492*	NA	*NA*
1985	5.153	5.661	5.215	5.422	6.247	5.387	3.603	5.253	3.539	*6.469*	NA	*NA*
1986	5.169	5.694	5.283	5.425	6.257	5.418	3.640	5.253	3.539	*6.446*	NA	*NA*
1987	5.144	5.661	5.248	5.429	6.249	5.403	3.659	5.253	3.539	*6.423*	NA	*NA*
1988	5.165	5.661	5.241	5.433	6.250	5.410	3.652	5.253	3.539	*6.400*	NA	*NA*
1989	5.105	5.621	5.234	5.437	[c]6.240	5.410	3.683	5.253	3.539	*6.377*	NA	*NA*
1990	5.027	5.621	5.270	5.442	6.244	5.411	3.625	5.253	3.539	*6.355*	NA	*NA*
1991	4.968	5.599	5.186	5.440	6.246	5.384	3.614	5.253	3.539	*6.332*	NA	*NA*
1992	5.004	5.589	5.185	5.442	6.238	5.378	3.624	5.253	3.539	*6.309*	NA	*NA*
1993	4.975	[b]5.580	[b]5.196	[b]5.436	6.230	[b]5.379	3.606	5.253	3.539	*6.287*	NA	*NA*
1994	4.983	5.592	5.166	5.424	6.213	5.361	3.635	[f]5.230	3.539	*6.264*	NA	*NA*
1995	4.940	5.554	5.137	5.417	6.188	5.341	3.623	5.215	3.539	*6.242*	NA	*NA*
1996	4.869	5.498	5.133	5.420	6.195	5.336	3.613	5.216	3.539	*6.220*	NA	*NA*
1997	4.859	5.459	5.138	5.416	6.199	5.336	3.616	5.213	3.539	*6.198*	NA	*NA*
1998	4.837	5.446	5.155	5.413	6.210	5.349	3.614	5.212	3.539	*6.176*	NA	*NA*
1999	4.761	5.369	5.113	5.413	6.205	5.328	3.616	5.211	3.539	*6.167*	NA	*NA*
2000	4.761	5.394	5.082	5.421	6.189	5.326	3.607	5.210	3.539	*6.159*	NA	*NA*
2001	4.796	5.403	5.164	5.412	6.199	5.345	3.614	5.210	3.539	*6.151*	5.359	*5.433*
2002	4.742	5.364	5.116	5.410	6.173	5.324	3.613	5.208	3.539	*6.143*	5.359	*5.433*
2003	4.763	5.407	5.161	5.408	6.182	5.340	3.629	5.207	3.539	*6.135*	5.359	*5.433*
2004	4.807	5.434	5.164	5.420	6.192	5.350	3.618	5.215	3.539	*6.127*	5.359	*5.433*
2005	4.783	5.427	5.200	5.426	6.188	5.365	3.620	5.218	3.539	*6.119*	5.359	*5.433*
2006	4.742	5.392	5.179	5.431	6.143	5.353	3.605	5.218	3.539	*6.111*	5.359	*5.433*
2007	4.696	5.350	5.146	5.433	6.151	5.346	3.591	5.219	3.539	*6.103*	5.359	*5.433*
2008	[E]4.705	[E]5.353	[E]5.129	[E]5.429	[P]6.124	5.339	3.600	5.218	3.539	*6.095*	5.359	*5.433*
2009	[E]4.705	[E]5.353	[E]5.129	[E]5.429	[E]6.124	[E]5.339	[E]3.600	[E]5.218	3.539	*6.087*	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 ethanol blended into motor gasoline.

[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.

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

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

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

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

[h] 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.doe.gov/emeu/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	1,031	1,033	1,025	1,031	1,025	1,009
2004	1,105	1,027	1,027	1,027	1,027	1,025	1,009
2005	1,105	1,029	1,029	1,028	1,029	1,025	1,009
2006	1,103	1,028	1,028	1,028	1,028	1,025	1,009
2007	1,104	1,028	1,029	1,027	1,028	1,025	1,009
2008	[E]1,104	[E]1,028	[E]1,029	[P]1,027	[E]1,028	[E]1,025	[E]1,009
2009	[E]1,104	[E]1,028	[E]1,029	[E]1,027	[E]1,028	[E]1,025	[E]1,009

[a] Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels.

[b] Residential, commercial, industrial, and transportation sectors.

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

P=Preliminary. E=Estimate.

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

Web Page: http://www.eia.doe.gov/emeu/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[P]	20.219	12.348	21.386	26.281	22.348	19.726	19.988	25.000	25.399	24.800
2009[E]	20.219	12.348	21.386	26.281	22.348	19.726	19.988	25.000	25.399	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.doe.gov/emeu/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 Electricty[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	10,448	21,017	3,412
2002	10,173	10,439	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	10,435	21,017	3,412
2006	9,919	10,434	21,017	3,412
2007	9,884	10,488	21,017	3,412
2008	[E]9,884	[E]10,488	[E]21,017	3,412
2009	[E]9,884	[E]10,488	[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.doe.gov/emeu/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 (Blended Into Motor Gasoline).**

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.doe.gov/emeu/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.doe.gov/emeu/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.doe.gov/emeu/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.doe.gov/emeu/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.

Fuel Ethanol. 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 Feedstock. EIA used corn input to the production of fuel ethanol (million Btu corn per barrel denatured ethanol) as the factor to estimate total biomass inputs to the production of fuel ethanol. U.S. Department of Agriculture observed fuel ethanol yields (gallons denatured ethanol per bushel of corn) were 2.5 in 1980, 2.666 in 1998, and 2.68 in 2002; EIA estimated the fuel 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, End-Use Sectors. Calculated annually by EIA by dividing the heat content of coal consumed by the end-use sectors (residential, commercial, industrial, and transportation) by the quantity consumed.

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 2001–2003, data are from Form EIA-906, "Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants." For 2004-2007, data are from 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." Beginning in 2008, data are from Form EIA-923, "Power Plant Operations Reports;" and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants." The computation includes data for all electric utilities and electric-only independent producers using fossil fuels.

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 reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and the generation 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. 1985-2007: 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-906, "Power Plant Report." 2008 and 2009: Calculated annually by EIA by using the heat rate and generation reported on Form EIA-923, "Power Plant Operations Report."

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.doe.gov/emeu/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.doe.gov/emeu/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.doe.gov/emeu/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.**

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.doe.gov/emeu/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.doe.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.doe.gov/emeu/mer/append_a.html and http://www.eia.doe.gov/emeu/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.

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**.

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 (CH_3-CH_2OH): A clear, colorless, flammable oxygenated **hydrocarbon**. Ethanol is typically produced chemically from **ethylene**, or biologically from fermentation of various sugars from carbohydrates found in agricultural crops and cellulosic residues from crops or wood. It is used in the United States as a gasoline octane enhancer and **oxygenate** (blended up to 10 percent concentration). Ethanol can also be used in high concentrations (E85) in vehicles designed for its use. See **Alcohol** and **Fuel Ethanol**.

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 (C_2H_5OH): An anhydrous **alcohol** (**ethanol** with less than 1% water) intended for gasoline blending. See **Oxygenates**.

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.doe.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/epcd/www/naics.html.

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

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): Members are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States and its territories (Guam, Puerto Rico, and the Virgin Islands).

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).

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.doe.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.**

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.doe.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.