

Energy Information Administration

### **Monthly Energy Review**

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

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#### **Electronic Access**

The MER is available on EIA's Web site in a variety of formats at: http://www.eia.doe.gov/mer.

- Complete MER, and individual MER sections: Portable Document Format (PDF) files.
- Individual table and graph pages: PDF files.
- Data files for individual tables: Excel (XLS) files and ASCII comma-delimited (CSV) 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.

#### **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 PDF files; however, all annual data are shown in the Excel and 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.

**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**

## **November 2008**

Energy Information Administration
Office of Energy Markets and End Use
U.S. Department of Energy
Washington, DC 20585

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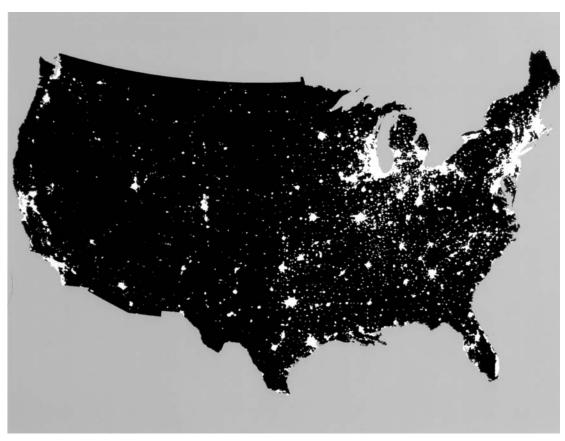
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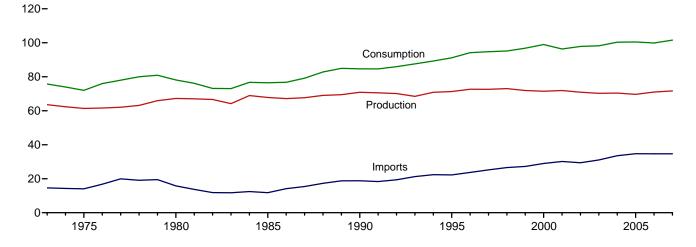
## **Energy Overview**



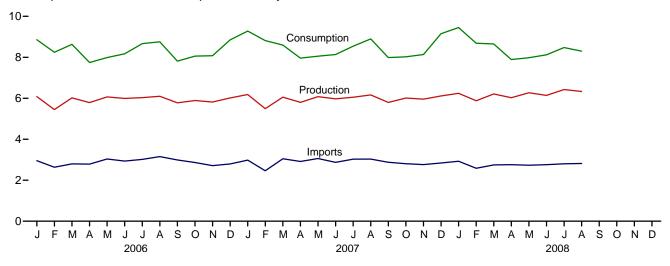
The continental United States at night from orbit. Source: National Oceanic and Atmospheric Administration satellite imagery; mosaic provided by U.S. Geological Survey.

Figure 1.1 Primary Energy Overview (Quadrillion Btu)

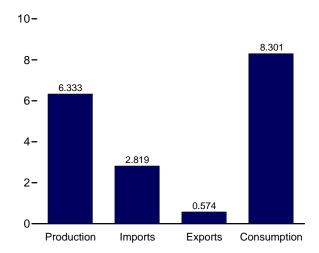
Consumption, Production, and Imports, 1973-2007



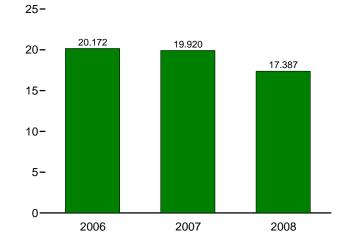
Consumption, Production, and Imports, Monthly



Overview, August 2008



Net Imports, January-August



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Sources: Tables 1.1 and 1.4b.

**Table 1.1 Primary Energy Overview** 

(Quadrillion Btu)

	Production	Imports	Exports	Stock Change and Other <sup>a</sup>	Consumption
070 T-4-I	60 505	44.040	0.000	0.450	75 700
973 Total	63.585	14.613	2.033	-0.456	75.708
975 Total	61.357	14.032	2.323	-1.067	71.999
80 Total	67.232	15.796	3.695	-1.212	78.122
85 Total	67.799	11.781	4.196	1.107	76.491
90 Total	70.870	18.817	4.752	283	84.652
95 Total	71.319	22.260	4.511	2.104	91.173
96 Total	72.641	23.702	4.633	2.466	94.175
97 Total	72.634	25.215	4.514	1.430	94.765
98 Total	73.041	26.581	4.299	139	95.183
99 Total	71.907	27.252	3.715	1.373	96.817
00 Total	71.490	28.973	4.006	2.518	98.975
01 Total	71.892	30.157	3.770	-1.952	96.326
02 Total	70.936	29.407	3.668	1.184	97.858
03 Total	70.264	31.060	4.054	.938	98.209
04 Total	70.384	33.543	4.433	.857	100.351
05 Total	69.647	34.710	4.561	.710	100.506
03 Total	03.047	34.710	4.501	.710	100.500
<b>06</b> January	6.083	2.953	.360	.184	8.860
February	5.450	2.632	.339	.502	8.245
March	6.019	2.799	.383	.196	8.631
April	5.788	2.787	.383	447	7.745
May	6.068	3.037	.436	682	7.987
June	5.992	2.935	.419	340	8.169
July	6.032	3.018	.403	.021	8.667
August	6.099	3.152	.419	077	8.755
September	5.776	2.989	.460	493	7.812
October	5.889	2.863	.436	258	8.058
November	5.815	2.712	.435	014	8.078
December	6.015	2.795	.394	.434	8.850
Total	71.025	34.673	4.868	974	99.856
<b>07</b> January	6.182	2.982	.447	.562	9.279
February	5.492	2.463	.349	1.209	8.814
March	6.054	3.046	.420	083	8.596
April	5.802	2.914	.416	340	7.960
	6.076	3.058	.448	634	8.052
May					
June	5.972	2.871	.423	285	8.135
July	6.051	3.030	.498	041	8.542
August	6.165	3.033	.475	.173	8.896
September	5.796	2.877	.436	252	7.985
October	6.011	2.806	.439	R354	R 8.024
November	5.957	2.764	.559	R029	R 8.134
December	6.111	2.841	.538	R .737	R 9.151
Total	71.668	34.685	5.448	R .663	R 101.569
08 January	6.242	2.927	.538	.820	9.452
	5.877	2.585	.567	.790	9.452 8.685
February	6.211	2.565 2.746	.612	.790	8.652
March					
April	6.029	2.757	.591	307	7.888
May	6.270	2.731	.624	400	7.977
June	6.140	2.757	.625	R153	R 8.119
July	<sup>R</sup> 6.426	<sup>R</sup> 2.801	R .604	<sup>R</sup> 146	<sup>R</sup> 8.477
August	6.333	2.819	.574	277	8.301
8-Month Total	49.528	22.122	4.735	.635	67.550
07 8-Month Total	47.793	23.396	3.476	.561	68.274

<sup>&</sup>lt;sup>a</sup> Calculated as consumption and exports minus production and imports. Includes petroleum stock change and adjustments; natural gas net storage  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ withdrawals and balancing item; coal stock change, losses, and unaccounted for; and fuel ethanol stock change.

R=Revised.

Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components

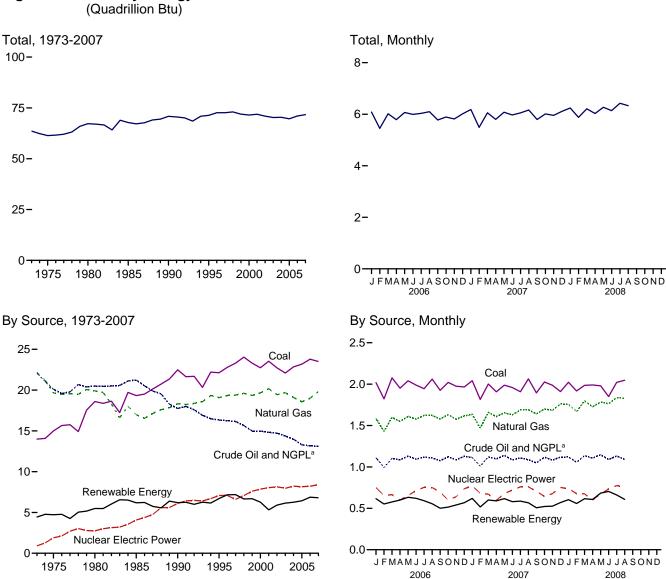
due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Table 1.4b. • Consumption: Table 1.3.

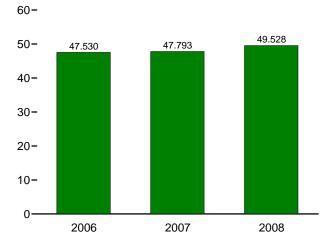
Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1973.

Sources: • Production: Table 1.2. • Imports: Table 1.4a. • Exports:

Figure 1.2 Primary Energy Production
(Quadrillion Btu)

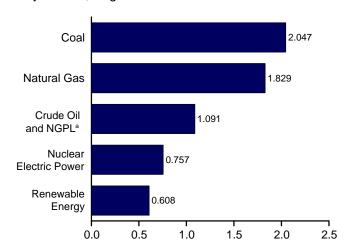


Total, January-August



<sup>a</sup> Natural gas plant liquids. Note: Because vertical scales differ, graphs should not be compared..

By Source, August 2008



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)

		F	ossil Fuels				Renewable Energy <sup>a</sup>						
	Coal <sup>b</sup>	Natural Gas (Dry)	Crude Oil <sup>c</sup>	NGPLd	Total	Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total
1973 Total	13.992	22.187	19.493	2.569	58.241	0.910	2.861	0.043	NA	NA	1.529	4.433	63.585
1975 Total	14.989	19.640	17.729	2.374	54.733	1.900	3.155	.070	NA	NA	1.499	4.723	61.357
1980 Total	18.598	19.908	18.249	2.254	59.008	2.739	2.900	.110	NA	NA	2.475	5.485	67.232
1985 Total	19.325	16.980	18.992	2.241	57.539	4.076	2.970	.198	(s)	(s)	3.016	6.185	67.799
1990 Total	22.488	18.326	15.571	2.175	58.560	6.104	3.046	.336	.060	.029	2.735	6.206	70.870
1995 Total	22.130	19.082	13.887	2.442	57.540	7.075	3.205	.294	.070	.033	3.102	6.703	71.319
1996 Total	22.790 23.310	19.344	13.723	2.530	58.387	7.087	3.590	.316	.071	.033	3.157	7.167 7.180	72.641 72.634
1997 Total 1998 Total	24.045	19.394 19.613	13.658 13.235	2.495 2.420	58.857 59.314	6.597 7.068	3.640 3.297	.325 .328	.070 .070	.034 .031	3.111 2.933	6.659	73.041
1999 Total	23.295	19.341	12.451	2.528	57.614	7.610	3.268	.326	.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		19.439	12.163	2.559	56.894	8.143	2.689	.328	.064	.105	2.712	5.899	70.936
2003 Total	22.094	19.691	12.026	2.346	56.157	7.959	2.825	.331	.064	.115	2.815	6.149	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	3.141	6.431	69.647
<b>2006</b> January	2.018	1.586	.918	.194	4.716	.750	.272	.029	.006	.024	.286	.617	6.083
February	1.822	1.428	.819	.175	4.244	.653	.246	.026	.005	.019	.256	.552	5.450
March	2.076	1.597	.907	.196	4.776	.665	.244	.030	.006	.023	.274	.578	6.019
April	1.952	1.550	.892	.193	4.587	.601	.283	.027	.006	.025	.259	.600	5.788
May	2.040	1.609	.928	.202	4.779	.655	.306	.026	.006	.024	.270	.633	6.068
June	1.988 1.945	1.577 1.622	.898 .917	.196 .202	4.658 4.687	.714 .753	.295 .252	.028 .030	.006 .006	.020	.271 .284	.621 .592	5.992 6.032
July August	2.061	1.622	.917	.199	4.792	.753 .751	.232	.030	.006	.019 .016	.287	.555	6.032
September	1.926	1.579	.876	.198	4.579	.695	.171	.029	.007	.019	.277	.501	5.776
October	2.021	1.632	.918	.204	4.775	.600	.169	.030	.006	.024	.285	.514	5.889
November	1.975	1.574	.888	.197	4.635	.641	.201	.028	.006	.025	.280	.540	5.815
December	1.966	1.616	.929	.200	4.711	.735	.214	.030	.006	.025	.293	.568	6.015
Total	23.790	18.993	10.801	2.356	55.940	8.214	2.869	.343	.072	.264	3.324	6.872	71.025
<b>2007</b> January	2.042	E 1.634	E .921	.192	4.789	.772	.262	.031	.006	.024	.296	.620	6.182
February	1.816	E 1.469	E .832	.177	4.294	.681	.185	.028	.006	.025	.272	.517	5.492
March	2.002	E 1.659	E .918	.204	4.782	.671	.241	.029	.007	.030	.293	.600	6.054
April	1.907	E 1.609	E .903	.195	4.614	.598	.237	.028	.007	.032	.287	.590	5.802
May	1.987	E 1.654	E .934	.206	4.781	.678	.257	.028	.007	.028	.296	.617	6.076
June	1.960 1.908	E 1.628 E 1.689	E .887 E .903	.198 .205	4.673 4.705	.719 .759	.227 .224	.030 .030	.007 .007	.024	.293 .307	.581 .588	5.972
July August	2.063	E 1.689	E .883	.203	4.703	.759	.198	.030	.007	.019 .024	.307	.567	6.051 6.165
September	1.895	E 1.640	E .850	.199	4.584	.705	.145	.029	.007	.024	.299	.507	5.796
October	2.026	E 1.700	E .907	.211	4.844	.644	.147	.030	.007	.030	.308	.523	6.011
November	1.986	E 1.684	E .873	.209	4.753	.678	.156	.029	.006	.027	.308	.527	5.957
December	1.910	E 1.761	E .909	.210	4.790	.751	.183	.030	.006	.028	.321	.570	6.111
Total	23.501	E 19.817	E 10.721	2.409	56.448	8.415	2.463	.353	.080	.319	3.589	6.805	71.668
2008 January	2.023	E 1.757	E .916	.205	4.900	.738	.222	.028	.006	.037	.311	.605	6.242
February	1.918	E 1.667	E .860	.196	4.642	.678	.201	.026	.006	.032	.293	.558	5.877
March	1.985	E 1.799	E .924	.212	4.921	.675	.227	.029	.007	.041	.312	.616	6.211
April	1.990	E 1.727	E .898	.209	4.824	.598	.219	.029	.007	.045	.308	.607	6.029
May	1.980	E 1.783	E .929	.219	4.910	.676	.280	.030	.007	.044	.323	.684	6.270
June	1.850	E 1.763	E .889	.201	4.703	.733	.306	.030	.007	.043	.318	.704	6.140
July	2.021	RE 1.837	E .919	.213	R 4.989	R .775	R .257	R .030	.007	R .032	R .335	R .662	R 6.426
August 8-Month Total	2.047 <b>15.815</b>	E 1.829 E <b>14.161</b>	<sup>E</sup> .880 <sup>E</sup> <b>7.215</b>	.211 <b>1.665</b>	4.968 <b>38.856</b>	.757 <b>5.629</b>	.205 <b>1.916</b>	.030 <b>.232</b>	.007 <b>.056</b>	.026 <b>.300</b>	.340 <b>2.539</b>	.608 <b>5.043</b>	6.333 <b>49.528</b>
		_											
2007 8-Month Total 2006 8-Month Total	15.684 15.901	<sup>E</sup> 13.031 12.592	<sup>E</sup> 7.182 7.189	1.579 1.557	37.477 37.240	5.637 5.542	1.831 2.114	.234 .226	.054 .049	.207 .171	2.353 2.188	4.679 4.748	47.793 47.530

<sup>&</sup>lt;sup>a</sup> Most data are estimates. See Tables 10.1-10.2c for notes on series components and estimation.

<sup>b</sup> Beginning in 1989, includes waste coal supplied. Beginning in 2001, also

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

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).

includes a small amount of refuse recovery. See Table 6.1.

<sup>&</sup>lt;sup>c</sup> Includes lease condensate.

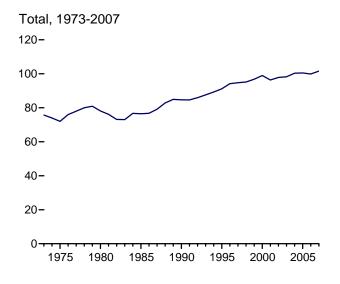
d Natural gas plant liquids.

e Conventional hydroelectric power.

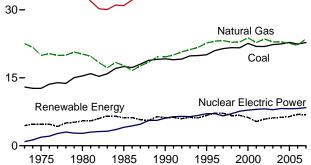
Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal

<sup>•</sup> Renewable Energy: Table 10.1.

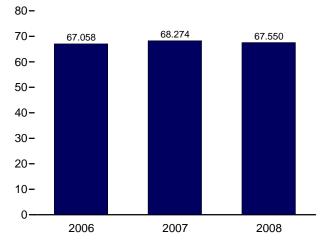
Figure 1.3 Primary Energy Consumption (Quadrillion Btu)







Total, January-August



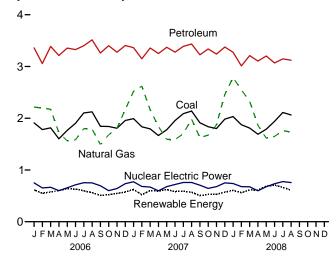
<sup>&</sup>lt;sup>a</sup> Small quantities of net imports of coal coke and electricity are not shown. Note: Because vertical scales differ, graphs should not be compared.

Total, Monthly
121086-

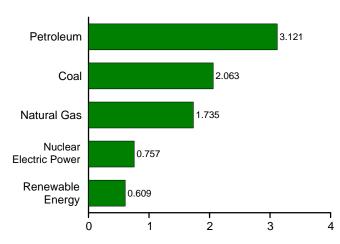
2007

2008

#### By Source<sup>a</sup>, Monthly



#### By Source<sup>a</sup>, August 2008



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 <sup>a</sup>						
	Coal	Natural Gas <sup>b</sup>	Petro- leum <sup>c</sup>	Totald	Nuclear Electric Power	Hydro- electric Power <sup>e</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Total <sup>f</sup>
1072 Total	12.971	22.512	34.840	70.316	0.010	2 064	0.043	NA	NA	1.529	4.433	75 700
1973 Total 1975 Total	12.971	19.948	32.731	65.355	0.910	2.861	.070			1.529	4.433 4.723	75.708 71.999
	15.423	20.235	34.202	69.826	1.900 2.739	3.155 2.900	.110	NA NA	NA NA	2.475	5.485	78.122
1980 Total 1985 Total	17.478	17.703	30.922	66.091	4.076	2.970	.110	NA (a)		3.016	6.185	76.122
1990 Total	19.173	19.603	33.553	72.333	6.104	3.046		(s)	(s)	2.735	6.206	84.652
1995 Total	20.089	22.671	34.437	72.333 77.258	7.075	3.205	.336 .294	.060 .070	.029 .033	3.104	6.705	91.173
	21.002		35.673	79.783								94.175
1996 Total 1997 Total	21.445	23.085 23.223	36.160	80.874	7.087 6.597	3.590	.316 .325	.071 .070	.033 .034	3.159 3.108	7.168 7.178	94.175
1998 Total	21.656	23.223	36.817	81.370	7.068	3.640 3.297	.323	.070	.034	2.931	6.657	95.183
				82.428								
1999 Total	21.623	22.909	37.838		7.610	3.268	.331	.069	.046	2.967	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	2.706	5.893	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	6.261	100.351
2005 Total	22.797	22.583	40.393	85.817	8.160	2.703	.343	.066	.178	3.154	6.444	100.506
2006 January	1.910	2.217	3.361	7.489	.750	.272	.029	.006	.024	.285	.615	8.860
February	1.781	2.195	3.056	7.036	.653	.246	.026	.005	.019	.254	.550	8.245
March	1.814	2.175	3.388	7.384	.665	.244	.030	.006	.023	.273	.576	8.631
April	1.603	1.720	3.212	6.538	.601	.283	.027	.006	.025	.261	.602	7.745
May	1.766	1.562	3.356	6.687	.655	.306	.026	.006	.024	.277	.640	7.987
June	1.903	1.585	3.326	6.820	.714	.295	.028	.006	.020	.281	.630	8.169
July	2.102	1.799	3.401	7.306	.753	.252	.030	.006	.019	.290	.598	8.667
August	2.123	1.791	3.515	7.432	.751	.216	.030	.007	.016	.293	.561	8.755
September	1.843	1.493	3.260	6.609	.695	.171	.029	.006	.019	.283	.507	7.812
October	1.840	1.680	3.402	6.935	.600	.169	.030	.006	.024	.292	.521	8.058
November	1.807	1.805	3.276	6.888	.641	.201	.028	.006	.025	.287	.547	8.078
December	1.956	2.169	3.405	7.533	.735	.214	.030	.006	.025	.299	.574	8.850
Total	22.447	22.191	39.958	84.657	8.214	2.869	.343	.072	.264	3.374	6.922	99.856
<b>2007</b> January	1.992	2.518	3.363	7.877	.772	.262	.031	.006	.024	.301	.624	9.279
February	1.834	2.621	3.148	7.604	.681	.185	.028	.006	.025	.275	.520	8.814
March	1.794	2.165	3.358	7.316	.671	.241	.029	.007	.030	.297	.604	8.596
April	1.666	1.843	3.250	6.761	.598	.237	.028	.007	.032	.289	.592	7.960
May	1.777	1.591	3.371	6.742	.678	.257	.028	.007	.028	.298	.618	8.052
June	1.954	1.585	3.277	6.822	.719	.227	.030	.007	.024	.296	.583	8.135
July	2.089	1.703	3.389	7.179	.759	.224	.030	.007	.019	.310	.590	8.542
August	2.139	1.981	3.435	7.558	.759	.198	.030	.007	.024	.309	.569	8.896
September	1.912	1.627	3.226	6.769	.705	.145	.029	.007	.026	.299	.507	7.985
October	1.836	R 1.672	3.339	<sup>R</sup> 6.847	.644	.147	.030	.007	.030	.312	.526	R 8.024
November	1.800	R 1.874	3.240	<sup>R</sup> 6.919	.678	.156	.029	.006	.027	.311	.529	R 8.134
December	1.983	R 2.457	3.377	R 7.820	.751	.183	.030	.006	.028	.324	.573	R 9.151
Total	22.776	R 23.637	39.773	R 86.212	8.415	2.463	.353	.080	.319	3.620	6.835	R 101.569
2008 January	2.032	2.785	3.276	8.097	.738	.222	.028	.006	.037	.312	.606	9.452
February	1.875	2.785	3.276	7.436	.736 .678	.222	.028	.006	.037	.312	.561	9.452 8.685
March	1.810	2.346	3.211	7.436	.675	.201	.026	.006	.032	.310	.614	8.652
April	1.690	1.865	3.106	6.669	.598	.219	.029	.007	.041	.313	.612	7.888
May	1.788	1.615	3.203	6.608	.676	.219	.029	.007	.043	.324	.685	7.000
June	1.766	1.649	3.203	R 6.668	.733	.306	.030	.007	.044	.324	.708	R 8.119
	R 2.111	R 1.759	3.148	R 7.023	.733 R .775	R .257	R .030	.007	R .032	R .337	R .663	R 8.477
July August	2.063	1.735	3.146	6.920	.757	.205	.030	.007	.026	.337	.609	8.301
8-Month Total	1 <b>5.309</b>	16.285	25.145	56.778	5.629	1.916	.030 . <b>232</b>	.056	.300	2.554	5.058	67.550
2007 8-Month Total 2006 8-Month Total	15.245 15.000	16.007 15.045	26.591 26.615	57.857 56.692	5.637 5.542	1.831 2.114	.234 .226	.054 .049	.207 .171	2.374 2.213	4.700 4.772	68.274 67.058

<sup>&</sup>lt;sup>a</sup> Most data are estimates. See Tables 10.1-10.2c for notes on series

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.

components and estimation.  $$^{\rm b}$$  Natural gas only; excludes supplemental gaseous fuels. See Note 3,

<sup>&</sup>quot;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 the fuel ethanol portion of motor gasoline-fuel ethanol is included in "Biomass."

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

<sup>&</sup>lt;sup>e</sup> Conventional hydroelectric power.

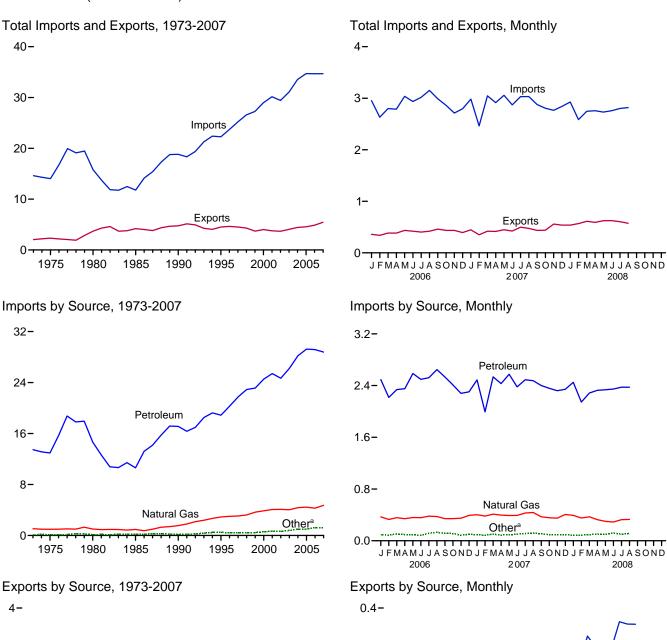
f Includes coal coke net imports and electricity net imports, which are not separately displayed. See Tables 1.4a and 1.4b.

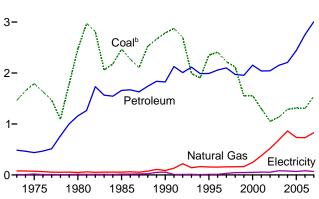
<sup>•</sup> Geographic coverage is the 50 States and the District of Columbia.

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.

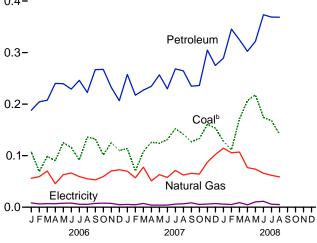
Figure 1.4a Primary Energy Imports and Exports
(Quadrillion Btu)





<sup>a</sup>Coal, coal coke, fuel ethanol, and electricity.

Note: Because vertical scales differ, graphs should not be compared.

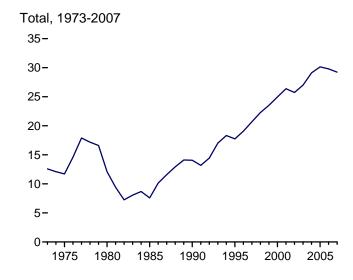


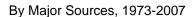
Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Sources: Tables 1.4a and 1.4b.

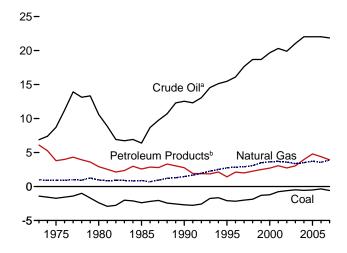
blncludes coal coke.

Figure 1.4b Primary Energy Net Imports

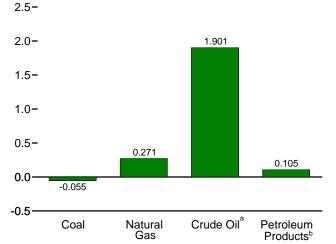
(Quadrillion Btu, Except as noted)





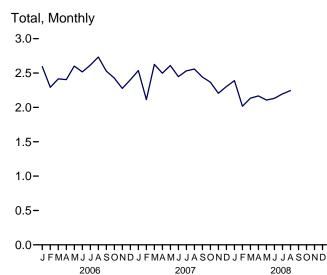


By Major Sources, August 2008

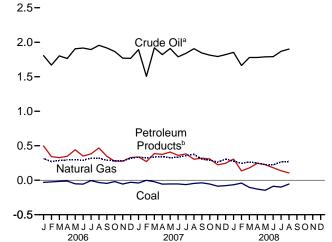


<sup>a</sup>Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

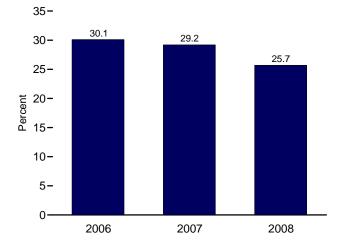
<sup>b</sup>Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include fuel ethanol.



By Major Sources, Monthly



#### As Share of Consumption, January-August



Note: Because vertical scales differ, graphs should not be compared. 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 <sup>a</sup>	Petroleum Products <sup>b</sup>	Total	Fuel Ethanol	Electricity	Total
1973 Total	0.003	0.027	1.060	6.887	6.578	13.466	NA	0.057	14.613
1975 Total	.024	.045	.978	8.721	4.227	12.948	NA	.038	14.032
1980 Total	.030	.016	1.006	11.195	3.463	14.658	NA	.085	15.796
1985 Total	.049	.014	.952	6.814	3.796	10.609	NA	.157	11.781
1990 Total	.067	.019	1.551	12.766	4.351	17.117	NA	.063	18.817
1995 Total	.237	.095	2.901	15.669	3.211	18.881	.001	.146	22.260
1996 Total	.203	.063	3.002	16.341	3.943	20.284	.001	.148	23.702
1997 Total	.187	.078	3.063	17.876	3.864	21.740	(s)	.147	25.215
1998 Total	.218	.095	3.225	18.916	3.992	22.908	(s)	.135	26.581
1999 Total	.227	.080	3.664	18.935	4.198	23.133	(s)	.147	27.252
2000 Total	.313	.094	3.869	19.783	4.749	24.531	(s)	.166	28.973
2001 Total	.495	.063	4.068	20.348	5.051	25.398	.001	.131	30.157
2002 Total	.422	.080	4.104	19.920	4.754	24.674	.001	.125	29.407
2003 Total	.626	.068	4.042	21.060	5.159	26.219	.001	.104	31.060
2004 Total	.682	.170	4.365	22.082	6.114	28.196	.013	.117	33.543
2005 Total	.762	.088	4.450	22.091	7.157	29.248	.011	.152	34.710
2006 January	.076	.003	.369	1.811	.681	2.491	(s)	.013	2.953
February	.068	.005	.329	1.672	.545	2.216	.002	.012	2.632
March	.080	.008	.357	1.807	.530	2.337	.003	.013	2.799
April	.076	.005	.341	1.769	.582	2.351	.003	.012	2.787
May	.069	.008	.359	1.910	.676	2.586	.002	.013	3.037
June	.055	.010	.357	1.922	.574	2.496	.005	.013	2.935
July	.080	.011	.380	1.896	.625	2.522	.009	.016	3.018
August	.096	.009	.374	1.958	.688	2.646	.011	.016	3.152
September	.084	.015	.342	1.921	.611	2.532	.008	.007	2.989
October	.080	.015	.342	1.873	.536	2.409	.007	.009	2.863
November	.066	.005	.348	1.774	.505	2.279	.005	.010	2.712
December	.077	.006	.393	1.771	.531	2.302	.004	.012	2.795
Total	.906	.101	4.291	22.085	7.083	29.168	.062	.146	34.673
<b>2007</b> January	.071	.006	.403	1.894	.592	2.487	.004	.012	2.982
February	.066	.003	.382	1.510	.484	1.994	.004	.014	2.463
March	.082	.003	.412	1.926	.608	2.533	.003	.013	3.046
April	.067	.004	.397	1.824	.605	2.429	.003	.014	2.914
May	.067	.006	.390	1.916	.659	2.575	.002	.017	3.058
June	.076	.007	.391	1.798	.581	2.379	.003	.015	2.871
July	.084	.003	.429	1.844	.645	2.489	.005	.019	3.030
August	.093	.005	.437	1.914	.560	2.474	.006	.018	3.033
September	.087	.005	.370	1.851	.549	2.400	.002	.013	2.877
October	.072	.005	.356	1.815	.542	2.357	.004	.012	2.806
November	.072	.007	.349	1.796	.524	2.320	.001	.015	2.764
December	.070	.008	.407	1.825	.517	2.342	.001	.014	2.841
Total	.909	.061	4.723	21.914	6.867	28.780	.037	.175	34.685
2008 January	.060	.007	.393	1.855	.594	2.449	.002	.017	2.927
February	.065	.006	.352	1.667	.477	2.144	.002	.016	2.585
March	.066	.009	.370	1.784	.499	2.283	.001	.016	2.746
April	.075	.011	.326	1.781	.545	2.326	.005	.014	2.757
May	.068	.007	.300	1.792	.544	2.335	.003	.018	2.731
June	.082	.013	.290	1.794	.551	2.346	.006	.021	2.757
July	.064	.010	R .326	1.874	.501	2.375	.005	R .021	R 2.801
August	.079	.009	.330	1.908	.467	2.375	.007	.020	2.819
8-Month Total	.558	.071	2.687	14.457	4.177	18.633	.030	.142	22.122
2007 8-Month Total 2006 8-Month Total	.607 .599	.036 .060	3.240 2.866	14.627 14.745	4.735 4.901	19.361 19.646	.029 .037	.122 .107	23.396 23.314

<sup>&</sup>lt;sup>a</sup> Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

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—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 3.1, 10.3, and A2. • Fuel Ethanol: Table 10.3. • Electricity: Tables 7.1 and A6.

b Petroleum products, unfinished oils, pentanes plus, and gasoline blending components. Does not include fuel ethanol.

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

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

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

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

(Quadrillion Btu)

				Ex	ports				Net Imports <sup>a</sup>	
					Petroleum					
	Coal	Coal Coke	Natural Gas	Crude Oil <sup>b</sup>	Petroleum Products <sup>c</sup>	Total	Electricity	Total	Total	
1973 Total	1.425	0.035	0.079	0.004	0.482	0.486	0.009	2.033	12.580	
1975 Total	1.761	.032	.074	.012	.427	.439	.017	2.323	11.709	
1980 Total	2.421	.051	.049	.609	.551	1.160	.014	3.695	12.101	
1985 Total	2.438	.028	.056	.432	1.225	1.657	.017	4.196	7.584	
1990 Total	2.772	.014	.087	.230	1.594	1.824	.055	4.752	14.065	
1995 Total	2.318	.034	.156	.200	1.791	1.991	.012	4.511	17.750	
1996 Total	2.368	.040	.155	.233	1.825	2.059	.011	4.633	19.069	
1997 Total	2.193	.031	.159	.228	1.872	2.100	.031	4.514	20.701	
1998 Total	2.092	.028	.161	.233	1.740	1.972	.047	4.299	22.281	
1999 Total	1.525	.022	.164	.250	1.705	1.955	.049	3.715	23.537	
2000 Total	1.528	.028	.245	.106	2.048	2.154	.051	4.006	24.967	
2001 Total	1.265	.033	.377	.043	1.996	2.039	.056	3.770	26.386	
	1.032	.020	.520	.019	2.023	2.042	.054		25.739	
2002 Total								3.668		
2003 Total	1.117	.018	.686	.026	2.124	2.151	.082	4.054	27.007	
2004 Total 2005 Total	1.253 1.273	.033 .043	.862 .735	.057 .067	2.151 2.374	2.208 2.442	.078 .068	4.433 4.561	29.110 30.149	
<b>2006</b> January	.107	.001	.056	.005	.183	.188	.008	.360	2.593	
February	.068	.002	.059	.002	.202	.204	.006	.339	2.293	
					.202					
March	.097	.002	.070	.005		.208	.007	.383	2.415	
April	.089	.002	.046	.005	.236	.240	.007	.383	2.405	
May	.121	.005	.063	.005	.235	.240	.008	.436	2.601	
June	.111	.004	.066	.006	.223	.229	.008	.419	2.516	
July	.085	.007	.059	.002	.244	.246	.006	.403	2.615	
August	.130	.006	.055	.003	.220	.223	.005	.419	2.733	
September	.130	.002	.053	.004	.263	.267	.007	.460	2.529	
October	.099	.002	.059	.007	.261	.267	.008	.436	2.427	
November	.121	.004	.070	.004	.228	.232	.007	.435	2.277	
December Total	.106 <b>1.264</b>	.003 <b>.040</b>	.073 <b>.730</b>	.005 <b>.052</b>	.202 <b>2.699</b>	.207 <b>2.751</b>	.005 <b>.083</b>	.394 <b>4.868</b>	2.401 <b>29.805</b>	
<b>2007</b> January	.111	.003	.070	.002	.256	.258	.005	.447	2.536	
February	.068	.002	.057	.004	.213	.217	.005	.349	2.113	
March	.104	.004	.078	.006	.221	.227	.007	.420	2.626	
April	.123	.003	.051	.003	.231	.235	.004	.416	2.498	
May	.121	.003	.063	.006	.250	.257	.004	.448	2.610	
June	.130	.001	.058	.009	.221	.230	.004	.423	2.448	
July	.148	.005	.071	.005	.264	.268	.006	.498	2.532	
August	.139	.002	.062	.008	.257	.264	.007	.475	2.558	
September	.125	.002	.066	.006	.229	.235	.008	.436	2.441	
October	.128	.006	.064	.002	.234	.236	.005	.439	2.367	
November	.159	.002	.087	.003	.301	.305	.006	.559	2.206	
December	.149	.004	.102	.004	.271	.275	.007	.538	2.303	
Total	1.507	.036	.830	.058	2.949	3.007	.069	5.448	29.238	
2008 January	.125	.003	.114	.002	.287	.289	.006	.538	2.389	
February	.107	.004	.106	.003	.342	.346	.005	.567	2.017	
March	.170	.001	.107	.005	.320	.325	.009	.612	2.134	
April	.203	.004	.077	.002	.300	.302	.005	.591	2.167	
May	.214	.004	.074	.003	.318	.322	.010	.624	2.107	
June	.171	.004	.066	.004	.370	.373	.011	.625	2.132	
July	.163	.005	R .062	.005	.364	.369	R .006	R .604	R 2.196	
August	.134	.008	.059	.007	.361	.369	.005	.574	2.245	
8-Month Total	1.287	.032	.664	.033	2.662	2.695	.057	4.735	17.387	
2007 8-Month Total	.945	.022	.510	.043	1.913	1.956	.042	3.476	19.920	
2006 8-Month Total	.806	.028	.475	.033	1.745	1.778	.055	3.142	20.172	

<sup>&</sup>lt;sup>a</sup> Net imports equal imports minus exports.

R=Revised.

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.

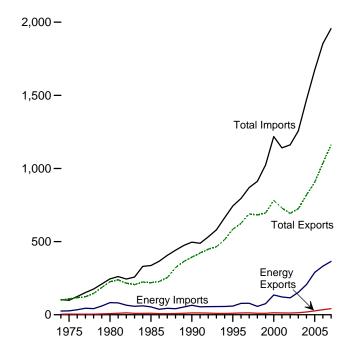
Sources: • Coal: Tables 6.1 and A5. • Coal Coke: 1973-1975—U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter. 1976-1980—Energy Information Administration (EIA), *Energy Data Report*, "Coke and Coal Chemicals," annual reports. 1981 forward—EIA, *Quarterly Coal Report*, quarterly reports. • Natural Gas: Tables 4.1 and A4. • Crude Oil and Petroleum Products: Tables 3.1 and A2. • Electricity: Tables 7.1 and A6.

<sup>&</sup>lt;sup>b</sup> Crude oil and lease condensate.

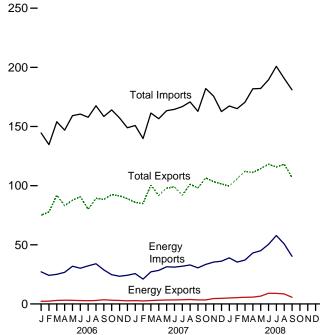
 $<sup>^{\</sup>rm C}$  Petroleum products, unfinished oils, pentanes plus, and gasoline blending components.

Figure 1.5 Merchandise Trade Value (Billion Nominal Dollars)

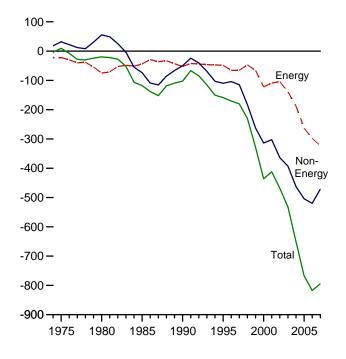
Imports and Exports, 1974-2007



Imports and Exports, Monthly

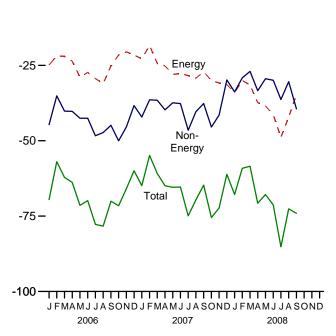


Trade Balance, 1974-2007



Trade Balance, Monthly

0



Notes: • See "Nominal Price" in Glossary.
• Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. Source: Table 1.5.

**Table 1.5 Merchandise Trade Value** 

(Million Nominal Dollars)

		Petroleum	a		Energyb		Non- Energy	1	Total Merchandise			
	Exports	Imports	Balance	Exports	Imports	Balance	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		
980 Total	2.833	78,637	-75,803	7,982	82,924	-74,942	55,246	225,566	245,262	-19,696		
985 Total	4,707	50,475	-45,768	9,971	53,917	-43,946	-73,765	218,815	336,526	-117,712		
990 Total	6,901	61,583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496,088	-102,496		
995 Total	6,321	54,368	-48,047	10,358	59.109	-48.751	-110.050	584,742	743,543	-158,801		
996 Total	7,984	72,022	-64,038	12,181	78,086	-65,905	-104,309	625,075	795,289	-170,214		
	8,592	71,152	-62,560	12,181	78,277	-65,595	-114,927	689,182	869,704	-170,214		
997 Total	6,592											
998 Total	- , -	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		
006 January	1,701	23,245	-21,544	2,263	27,130	-24,867	-44,655	75,040	144,562	-69,522		
February	1,778	21,324	-19,546	2,358	24,201	-21,843	-35,109	77,750	134,702	-56,952		
March	2,386	22,242	-19.856	3,024	25,025	-22,001	-40,175	91.864	154,040	-62,176		
April	2,531	24,086	-21,555	3,150	26,732	-23,582	-40,240	83,097	146,919	-63,822		
	2,449	29,182	-26,733	2,979	31,876	-28,897	-42,522	87,746	159,164	-71,419		
May	2,449	27,751	-25,433	2,848	30.176	-27,328	-42,522	90,622	160,487	-69,865		
June	,				,		,		,			
July	2,445	29,530	-27,085	2,832	32,231	-29,399	-48,346	80,023	157,768	-77,745		
August	2,387	30,934	-28,547	2,924	33,969	-31,045	-47,284	89,228	167,558	-78,329		
September	3,047	26,477	-23,430	3,561	28,757	-25,196	-44,865	88,408	158,470	-70,061		
October	2,650	22,671	-20,021	3,172	24,724	-21,552	-50,008	92,468	164,028	-71,560		
November	2,365	20,779	-18,414	2,935	23,432	-20,497	-45,425	91,367	157,288	-65,922		
December	2,114	21,492	-19,378	2,665	24,248	-21,583	-38,348	89,021	148,952	-59,931		
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	-42,118	85,918	150,833	-64,915		
February	2,006	17,840	-15,834	2,549	20,993	-18,444	-36,429	84,921	139,793	-54,873		
March	2,270	23,944	-21,674	2,871	27,170	-24,299	-36,552	100,511	161,363	-60,851		
April	2,418	25,189	-22,771	3,167	28,335	-25,168	-39,750	91,665	156,583	-64,918		
May	2,566	28,071	-25,505	3,375	31,380	-28,005	-37,416	97,902	163,323	-65,421		
June	2.590	27,645	-25,055	3,447	31,110	-27.663	-37,677	99,122	164,462	-65,340		
July	2.863	28,578	-25,715	3,517	31,902	-28.385	-46.523	91.857	166.765	-74.908		
August	3,003	29,762	-26,759	3,720	32,967	-29,247	-40,323	101,143	170,766	-69,623		
September	2,715	28,065	-25,350	3,447	30,514	-27,067	-37,637	98,068	162,772	-64,704		
October	2,790	30,728	-27,938	3,384	33,428	-30,044	-45,438	106,563	182,044	-75,482		
November	3,882	32,440	-28,558	4,569	35,384	-30,815	-41,486	103,362	175,663	-72,301		
December	3,952	32,669	-28,717	4,844	36,173	-31,329	-29,817	101,448	162,594	-61,146		
Total	33,293	327,620	-294,327	41,725	364,987	-323,262	-471,221	1,162,479	1,956,962	-794,483		
2008 January	3,996	36,383	-32,387	4,948	38,973	-34,025	-33,787	99,549	167,362	-67,812		
February	4,668	31,876	-27,208	5,360	35,388	-30,028	-29,123	105,930	165,081	-59,151		
March	4,453	33,645	-29,192	5,630	37,118	-31,488	-26,966	112,085	170,539	-58,454		
April	4,322	39,242	-34,920	5,749	43,100	-37,351	-33,398	111,131	181,880	-70,749		
May	5,098	41,370	-36,272	6,565	44,979	-38,414	-29,431	114,291	182,136	-67,845		
June	7,760	46,643	-38,883	9,015	50,351	-41,336	-29,927	118,184	189,447	-71,263		
July	7,819	54,451	-46,632	8,982	57,840	-48,858	-36,323	115,718	200,899	-85,181		
August	7,467	47,246	-39,779	8,510	50,718	-42,208	R -30,400	R 118,082	R 190,690	R -72,608		
September	4,086	37,206	-33,120	5,629	40,277	-34,648	-39,411	106,921	180,980	-74,059		
9-Month Total	49,669	368,062	-318,393	60,388	398,745	-338,356	-288,766	1,001,893	1,629,015	-627,122		
2007 9-Month Total	22,670	231,787	-209,117	28,926	260,001	-231,075	-354,478	851,106	1,436,661	-585,554		
2006 9-Month Total	21.042	234,771	-213,729	25,939	260,097	-234,158	-385,733	763,779	1,383,670	-619,891		

<sup>&</sup>lt;sup>a</sup> Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.

b Petroleum, coal, natural gas, and electricity.

government and nongovernment imports of merchandise from foreign countries into But the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. • See "Nominal Price" in Glossary.

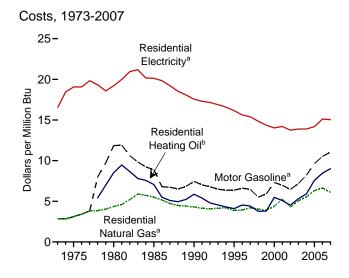
Web Page: See http://www.eia.doe.gov/emeu/mer/overview.html for all available data beginning in 1974.

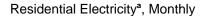
Sources: See end of section.

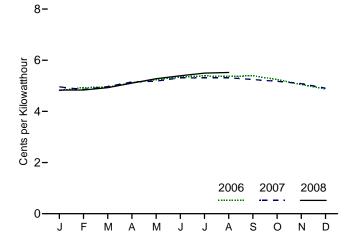
R=Revised.

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

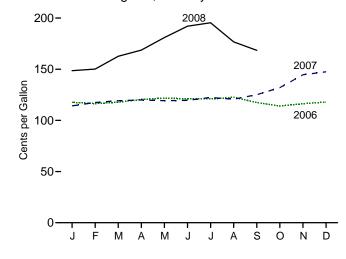
Figure 1.6 Cost of Fuels to End Users in Real (1982-1984) Dollars



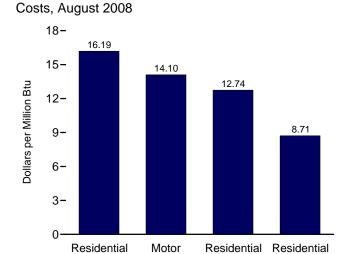




#### Residential Heating Oilb, Monthly



<sup>a</sup>Includes taxes. <sup>b</sup>Excludes taxes.



Gasolinea

Heating

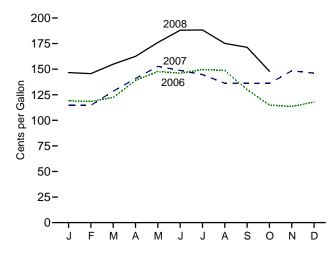
 $\mathsf{Oil}^\mathsf{b}$ 

Natural

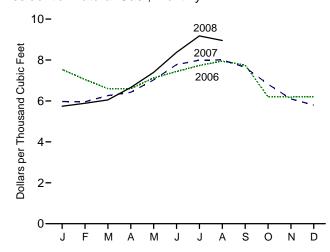
Gasa

#### Motor Gasoline<sup>a</sup>, Monthly

**Electricity**<sup>a</sup>



#### Residential Natural Gasa, Monthly



Note: Because vertical scales differ, graphs should not be compared. 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 <sup>a</sup>	Motor (	Sasolineb	1	dential ng Oil <sup>c</sup>		lential Il Gas <sup>b</sup>		lential ricity <sup>b</sup>
	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	404.1	3.93	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 2005 Average	188.9 195.3	101.8 119.7	8.20 9.64	81.9 105.1	5.91 7.58	569.1 650.3	5.54 6.32	4.74 4.84	13.89 14.18
2006 January	198.3	119.0	9.58	117.7	8.49	753.4	7.33	4.82	14.11
February	198.7	118.5	9.54	116.4	8.39	704.6	6.85	4.93	14.46
March	199.8	122.3	9.85	117.8	8.49	660.2	6.42	4.94	14.48
April	201.5	139.0	11.19	120.4	8.68	659.6	6.42	5.12	15.01
May	202.5	147.8	11.90	121.9	8.79	712.6	6.93	5.24	15.36
June	202.9	146.0	11.75	121.1	8.73	743.7	7.23	5.35	15.67
July	203.5	149.7	12.05	120.9	8.72	773.0	7.52	5.39	15.78
August	203.9	148.7	11.97	122.6	8.84	794.0	7.72	5.37	15.73
September	202.9	130.0	10.46	117.4	8.47	775.3	7.54	5.39	15.80
October	201.8	114.9	9.25	114.1	8.23	620.4	6.04	5.24	15.37
November	201.5	113.5	9.14	116.3	8.38	618.9	6.02	5.05	14.81
December	201.8	117.9	9.49	117.9	8.50	621.4	6.04	4.88	14.29
Average	201.6	130.7	10.52	117.3	8.46	682.0	6.63	5.16	15.12
<b>2007</b> January	202.416	114.7	9.23	114.2	8.23	597.3	5.81	4.96	14.54
February	203.499	114.6	9.23	117.5	8.47	595.6	5.79	4.86	14.23
March	205.352	128.5	10.34	119.3	8.60	626.2	6.09	4.97	14.57
April	206.686	140.7	11.33	120.0	8.65	642.0	6.25	5.15	15.10
May	207.949	152.7	12.29	119.3	8.60	702.6	6.83	5.18	15.18
June	208.352	148.8	11.97	119.6	8.62	777.5	7.56	5.31	15.57
July	208.299	144.6	11.64	122.4	8.82	799.3	7.78	5.31	15.56
August	207.917	136.3	10.97	120.7	8.70	800.3	7.79	5.31	15.58
September	208.490	136.2	10.96	125.1	9.02	764.5	7.44	5.25	15.38
October	208.936	136.1	10.95	132.1	9.52	682.0	6.63	5.17	15.16
November	210.177	148.4	11.94	144.6	10.43	610.0	5.93	5.09	14.91
December Average	210.036 <b>207.342</b>	146.1 <b>137.4</b>	11.76 <b>11.06</b>	147.5 <b>125.0</b>	10.64 <b>9.01</b>	579.4 <b>627.5</b>	5.64 <b>6.10</b>	4.91 <b>5.13</b>	14.39 <b>15.04</b>
2008 January	211.080	146.7	11.80	148.6	10.72	574.2	5.59	4.83	14.16
	211.693	145.6	11.72	150.1	10.72	588.6	5.73	4.84	14.18
February March	213.528	154.9	12.46	162.6	11.73	605.1	5.89	4.93	14.16
April	214.823	162.5	13.08	168.7	12.16	665.7	6.48	5.11	14.44
May	216.632	176.0	14.16	181.0	13.05	739.5	7.19	5.28	15.46
June	218.815	188.1	15.13	192.0	13.85	837.2	8.14	5.39	15.81
July	219.964	188.3	15.15	195.4	14.09	917.9	8.93	R 5.50	R 16.11
August	219.086	175.2	14.10	R 176.7	R 12.74	R 895.5	<sup>R</sup> 8.71	R 5.52	R 16.19
		171.4	13.79	RE 168.4	RE 12.14	NA	NA	NA	NA
September	218.783	1/1.4	13.13	100.4	14.14	INA	INA	IN/A	

<sup>&</sup>lt;sup>a</sup> Data are U.S. city averages for all items, and are not seasonally adjusted.

Notes: • 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.

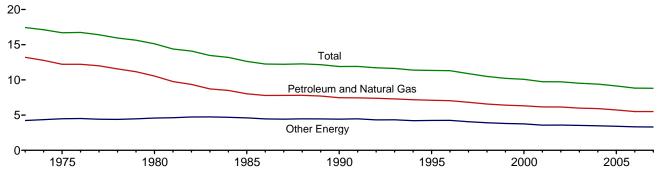
Sources: • Fuel Prices: Tables 9.4 (All Types), 9.8c, 9.9, and 9.11, adjusted by the CPI. • Consumer Price Index, All Urban Consumers: U.S. Department of Labor, Bureau of Labor Statistics, series ID CUUR0000SA0." • Conversion Factors: Tables A1, A3, A4, and A6.

b Includes taxes.

c Excludes taxes.

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

Figure 1.7 Primary Energy Consumption per Real Dollar of Gross Domestic Product, 1973-2007 (Thousand Btu per Chained (2000) Dollar)



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

	Ene	rgy Consumption	n	Gross	Energy Consum	ption per Real Do	llar of GDP		
	Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total	Domestic Product (GDP)	Petroleum and Natural Gas	Other Energy <sup>a</sup>	Total		
		Quadrillion Btu		Billion Chained (2000) Dollars	Thousand Btu per Chained (2000) Dollar				
973 Year	57.352	18.356	75.708	4,341.5	13.21	4.23	17.44		
974 Year	55.187	18.804	73.991	4,319.6	12.78	4.35	17.13		
975 Year	52.678	19.321	71.999	4,311.2	12.70	4.48	16.70		
76 Year	55.520	20.492	76.012	4,540.9	12.23	4.51	16.74		
777 Year	57.053	20.947	78.000	4,750.5	12.01	4.41	16.42		
978 Year	57.966	22.021	79.986	5,015.0	11.56	4.39	15.95		
979 Year	57.789	23.114	80.903	5,173.4	11.17	4.47	15.64		
980 Year	54.438	23.684	78.122	5.161.7	10.55	4.59	15.13		
981 Year	51.678	24.490	76.122	5,291.7	9.77	4.63	14.39		
982 Year	48.588	24.565	73.153	5,189.3	9.36	4.73	14.10		
983 Year	47.275	25.763	73.133	5,423.8	8.72	4.75	13.47		
984 Year	49.445	27.269	76.714	5,813.6	8.51	4.69	13.47		
985 Year	49.445 48.626	27.865	76.714 76.491	6,053.7	8.03	4.69	12.64		
986 Year	48.787	27.969	76.756	6,263.6	7.79	4.47	12.04		
987 Year	50.505	27.969	76.756 79.173	6,263.6 6,475.1	7.79 7.80	4.47	12.23		
988 Year	52.670 53.813	30.149	82.819 84.944	6,742.7	7.81	4.47	12.28 12.17		
989 Year		31.131		6,981.4	7.71	4.46			
990 Year	53.156	31.496	84.652	7,112.5	7.47	4.43	11.90		
991 Year	52.878	31.729	84.607	7,100.5	7.45	4.47	11.92		
992 Year	54.240	31.716	85.956	7,336.6	7.39	4.32	11.72		
993 Year	54.973	32.630	87.603	7,532.7	7.30	4.33	11.63		
994 Year	56.290	32.970	89.260	7,835.5	7.18	4.21	11.39		
995 Year	57.108	34.064	91.173	8,031.7	7.11	4.24	11.35		
996 Year	58.758	35.417	94.175	8,328.9	7.05	4.25	11.31		
997 Year	59.382	35.383	94.765	8,703.5	6.82	4.07	10.89		
998 Year	59.647	35.536	95.183	9,066.9	6.58	3.92	10.50		
999 Year	60.747	36.070	96.817	9,470.3	6.41	3.81	10.22		
000 Year	62.089	36.887	98.975	9,817.0	6.32	3.76	10.08		
01 Year	60.959	35.367	96.326	9,890.7	6.16	3.58	9.74		
02 Year	61.785	36.073	97.858	10,048.8	6.15	3.59	9.74		
003 Year	61.706	36.503	98.209	10,301.0	5.99	3.54	9.53		
004 Year	63.226	37.125	100.351	10,675.8	5.92	3.48	9.40		
005 Year	62.977	37.529	100.506	10,989.5	5.73	3.41	9.15		
006 Year	62.149	37.706	99.856	11,294.8	5.50	3.34	8.84		
007 Year	R 63.410	38.158	R 101.569	11,523.9	5.50	3.31	8.81		

 $<sup>^{\</sup>rm a}$  Coal, coal coke net imports, nuclear electric power, renewable energy, and electricity net imports.

R=Revised.

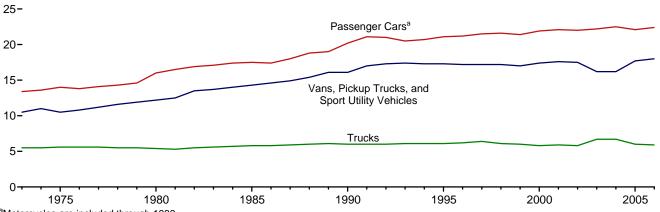
Notes: • See "Primary Energy Consumption" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: • Energy Consumption: Table 1.3. • Gross Domestic Product: 1973-2004—U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, August 2008, Table 2A. 2005 forward—U.S. Department of Commerce, Bureau of Economic Analysis, BEA News Release, October 30, 2008, Table 3, which is available at Web site http://www.bea.gov/bea/newsrel/gdpnewsrelease.htm.

Figure 1.8 Motor Vehicle Fuel Rates, 1973-2006

(Miles per Gallon)



<sup>a</sup>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

	ı	Passenger Cars	a		ns, Pickup Truc Sport Utility Veh			Trucks <sup>c</sup>		А	II Motor Vehicle	<b>s</b> d
	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	<sup>a</sup> 10,157	<sup>a</sup> 533	<sup>a</sup> 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
<b>2006</b> <sup>₽</sup>	12,427	554	22.4	10,986	612	18.0	25,290	4,300	5.9	12,016	697	17.2

a Through 1989, includes motorcycles.

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.

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.

C Single-unit trucks with 2 axles and 6 or more tires, and companied d Includes buses and motorcycles, which are not shown separately.

Table 1.9 Heating Degree-Days by Census Division

			October				July	Cumulative through Oc		
•				Percent	Change				Percent	Change
Census Divisions	Normala	2007	2008	Normal to 2008	2007 to 2008	Normala	2007	2008	Normal to 2008	2007 to 2008
New England Connecticut, Maine, Massachusetts, New Hampshire,										
Rhode Island, Vermont	467	301	491	5	63	657	470	674	3	43
Middle Atlantic New Jersey, New York, Pennsylvania	399	197	413	4	110	526	271	501	-5	85
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	424	267	434	2	63	580	382	569	-2	49
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	424	334	431	2	29	607	460	587	-3	28
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	164	83	191	16	130	189	98	208	10	112
· ·	104	03	191	10	130	109	90	200	10	112
East South Central Alabama, Kentucky, Mississippi, Tennessee	213	136	226	6	66	246	147	243	-1	65
West South Central Arkansas, Louisiana, Oklahoma, Texas	83	82	106	NM	NM	92	83	117	NM	NM
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	360	308	322	-11	5	543	406	442	-19	9
Pacific <sup>b</sup> California, Oregon, Washington	186	189	135	-27	-29	294	280	195	-34	-30
U.S. Average <sup>b</sup>	282	191	286	1	50	383	261	362	-5	39

<sup>&</sup>lt;sup>a</sup> "Normal" is based on calculations of data from 1971 through 2000.

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.

b Excludes Alaska and Hawaii.

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

Table 1.10 Cooling Degree-Days by Census Division

			October					Cumulative ry through C		
				Percent	Change				Percent	Change
Census Divisions	Normala	2007	2008	Normal to 2008	2007 to 2008	Normala	2007	2008	Normal to 2008	2007 to 2008
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	0	16	0	NM	NM	417	560	490	18	-12
Middle Atlantic	O	10		INIVI	INIVI	417	300	490	10	-12
New Jersey, New York, Pennsylvania	5	42	0	NM	NM	656	841	731	11	-13
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	8	47	3	NM	NM	709	910	646	-9	-29
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	12	29	3	NM	NM	927	1,115	796	-14	-29
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia,										
West Virginia	120	192	106	-12	-45	1,877	2,166	1,992	6	-8
East South Central Alabama, Kentucky, Mississippi, Tennessee	53	105	40	NM	NM	1,539	1,958	1,617	5	-17
West South Central Arkansas, Louisiana, Oklahoma, Texas	134	201	125	-7	-38	2,409	2,486	2,452	2	-1
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	55	57	62	NM	NM	1,239	1,504	1,326	7	-12
Pacific <sup>b</sup> California, Oregon, Washington	36	16	56	NM	NM	699	785	948	36	21
U.S. Average <sup>b</sup>	53	88	50	NM	NM	1,195	1,390	1,263	6	-9

<sup>&</sup>lt;sup>a</sup> "Normal" is based on calculations of data from 1971 through 2000.

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 ises 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.

<sup>&</sup>lt;sup>b</sup> Excludes Alaska and Hawaii.

#### **Energy Overview**

**Note:** Merchandise Trade Value. Import data presented are based on the customs value. That value does not include insurance and freight and is consequently lower than the cost, insurance, and freight (CIF) value, which is also reported by the Bureau of the Census. All export data, and import 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 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. 1993-2006: "U.S. International Trade in Goods and Services," Annual Revision.

2007 and 2008: "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.

1994-2006: "U.S. International Trade in Goods and Services," Annual Revision.

2007 and 2008: "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.

1993-2006: "U.S. International Trade in Goods and Services," Annual Revision.

2007 and 2008: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### Petroleum, Energy, and Non-Energy Balances

Calculated by the 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.

1992-2006: "U.S. International Trade in Goods and Services," Annual Revision.

2007 and 2008: "U.S. International Trade in Goods and Services," FT-900, monthly.

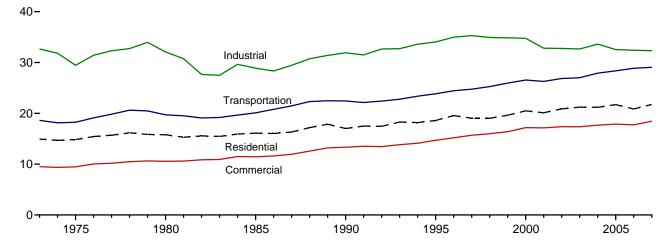
# **Energy Consumption by Sector**



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

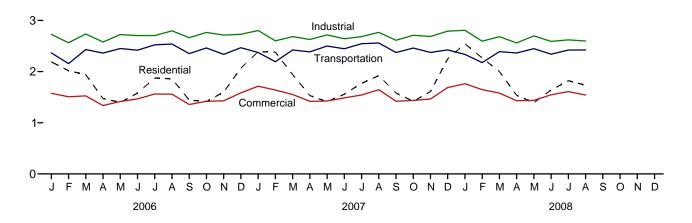
Figure 2.1 Energy Consumption by Sector (Quadrillion Btu)

Total Consumption by End-Use Sector, 1973-2007

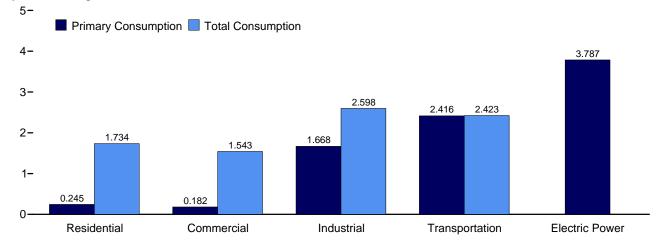


Total Consumption by End-Use Sector, Monthly

4-







Note: Because vertical scales differ, graphs should not be compared.

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		
	Reside	ential	Comme	erciala	Indus	trial <sup>b</sup>	Transpo	rtation	Sector <sup>c,d</sup>	Balancing	
	Primary <sup>e</sup>	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Total <sup>f</sup>	Primarye	Item <sup>g</sup>	Total <sup>h</sup>
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	19,466	28,875	20,041	20,087	26,132	-4	76,491
1990 Total	6,570	17,015	3,858	13,333	21,206	31,894	22,366	22,420	30,660	-9	84,652
1995 Total	6,946	18,578	4,063	14,698	22,746	34,045	23,793	23,849	33,621	3	91,173
1996 Total	7,471	19,562	4,235	15,181	23,444	34,989	24,384	24,439	34,638	4	94,175
1997 Total	7,040	19,026	4,257	15,694	23,721	35,288	24,697	24,752	35,045	6	94,765
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	26,491	26,552	38,214	2	98,975
2001 Total	6,879	20,106	4,036	17,141	21,836	32,806	26,215	26,278	37,366	-6	96,326
2002 Total		20,874	4,099	17,367	21,857	32,765	26,787	26,848	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		21,717	4,014	17,875	21,467	32,546	28,280	28,361	39,799	` <b>6</b>	100,506
2006 January	911	2,190	494	1,576	1,859	2,729	2,358	2,365	3,238	(s)	8,860
February	902	2,017	488	1,509	1,708	2,563	2,150	2,156	2,998	-1	8,245
March	819	1,941	444	1,525	1,846	2,736	2,424	2,431	3,099	-2	8,631
April		1,473	294	1,336	1,696	2,577	2,355	2,362	2,893	-3	7,745
May	349	1,399	226	1,415	1,760	2,723	2,444	2,451	3,210	-1	7,987
June	274	1,580	194	1,466	1,752	2,704	2,412	2,418	3,535	1	8,169
July	252	1,874	182	1,564	1,726	2,704	2,516	2,523	3,989	3	8,667
August	246	1,858	187	1,559	1,827	2,797	2,531	2,538	3,960	3	8,755
September	260	1,442	193	1,357	1,782	2,662	2,345	2,351	3,232	(s)	7,812
October	385	1,414	253	1,419	1,853	2,765	2,456	2,462	3,113	-2	8,058
November	566	1,599	327	1,429	1,835	2,713	2,331	2,337	3,020	-1	8,078
December	804	2,067	433	1,584	1,851	2,730	2,460	2,466	3,301	2	8,850
Total	6,276	20,855	3,716	17,737	21,494	32,404	28,781	28,861	39,589	(s)	99,856
2007 January	1,006	2,388	525	1,714	1,918	2,803	2,365	2,373	3,465	1	9,279
February	1,104	2,380	574	1,640	1,792	2,601	2,186	2,193	3,159	(s)	8,814
March	810	1,941	446	1,552	1,813	2,684	2,415	2,422	3,116	-3	8,596
April	555	1,532	322	1,419	1,748	2,627	2,379	2,385	2,959	-3	7,960
May	345	1,411	221	1,425	1,774	2,717	2,493	2,500	3,221	-2	8,052
June	267	1,558	190	1,487	1,702	2,643	2,440	2,447	3,536	1	8,135
July		1,770	178	1,542	1,731	2,682	2,537	2,544	3,843	3	8,542
August		1,921	187	1,645	1,763	2,767	2,553	2,560	4,140	4	8,896
September	254	1,580	187	1,420	1,735	2,612	2,366	2,372	3,443	1	7,985
October	326	1,417	226	1,437	R 1,793	R 2,711	2,454	2,460	3,227	-1	R 8,024
November		1,610	339	1,464	R 1,792	R 2,686	2,368	2,374	3,057	-1	R 8,134
December Total	947 <b>6,691</b>	2,249 <b>21,755</b>	507 <b>3,902</b>	1,688 <b>18,434</b>	<sup>R</sup> 1,880 <sup>R</sup> <b>21,440</b>	R 2,790 R <b>32,326</b>	2,417 <b>28,971</b>	2,424 <b>29,055</b>	3,400 <b>40,567</b>	(s) <b>-1</b>	<sup>R</sup> 9,151 <sup>R</sup> <b>101,569</b>
	•	•	•	•		·	•	•			
2008 January	1,106	2,544	584	1,764	1,910	2,807	2,328	2,335	3,522	2	9,452
February	1,034	2,267	561	1,647	1,750	2,595	2,169	2,176	3,170	(s)	8,685
March	850 553	2,002	468	1,579	1,788	2,682	2,383	2,390	3,165	-1	8,652
April	553	1,536	330	1,430	1,687	2,561	2,358	2,364	2,963	-2	7,888
May		1,393	241	1,438	1,711 <sup>R</sup> 1,635	2,699	2,442 R 2 224	2,449 R 2,341	3,212	-2	7,977
June		1,639	194	1,547	" 1,035 R 4 074	2,590 R 2,630	R 2,334		3,673	1 R 4	R 8,119
July		R 1,823	187	R 1,608	R 1,671	R 2,620	R 2,415	R 2,422	R 3,942		R 8,477
August		1,734	182	1,543	1,668	2,598	2,416	2,423	3,787	3	8,301
8-Month Total	4,700	14,937	2,746	12,556	13,819	21,152	18,845	18,900	27,434	5	67,550
2007 8-Month Total 2006 8-Month Total		14,902 14,331	2,643 2,509	12,425 11,950	14,240 14,174	21,524 21,533	19,367 19,191	19,424 19,244	27,439 26,922	(s) 1	68,274 67,058

<sup>&</sup>lt;sup>a</sup> 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

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.

industrial electricity-only plants.

<sup>&</sup>lt;sup>c</sup> 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

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

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.

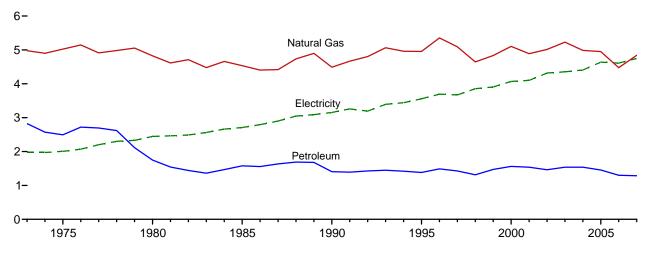
<sup>&</sup>lt;sup>g</sup> A balancing item. The sum of primary consumption in the five energy-use sectors equals the sum of total consumption in the four end-use sectors. However, total energy consumption does not equal the sum of the sectoral components due to the use of sector-specific conversion 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.

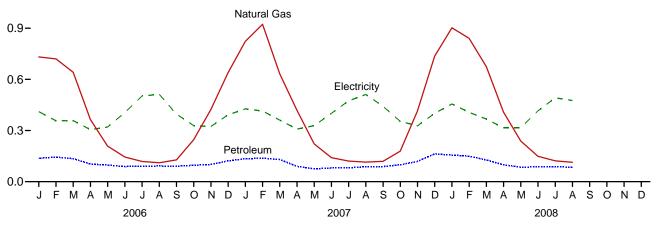
Figure 2.2 Residential Sector Energy Consumption (Quadrillion Btu)

By Major Sources, 1973-2007

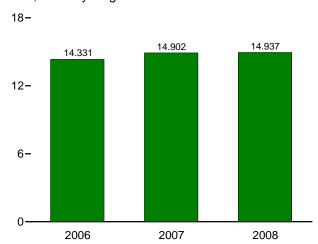


By Major Sources, Monthly

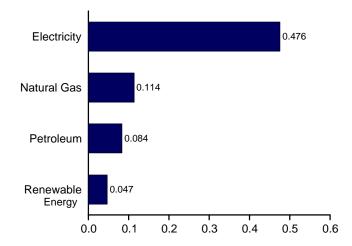
1.2-



Total, January-August



By Major Sources, August 2008



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.

Source: Table 2.2.

Table 2.2 Residential Sector Energy Consumption

(Trillion Btu)

				Prima	ry Consum	otiona						
		Fossil	Fuels			Renewal	ole Energy <sup>b</sup>			Electricity	Electrical System	
	Coal	Natural Gas <sup>c</sup>	Petro- leum	Total	Geo- thermal	Solar/ PV	Bio- mass	Total	Total Primary	Retail Sales <sup>d</sup>	Energy Losses <sup>e</sup>	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 64	380	452	6,424	3,856	8,741	19,021
1999 Total 2000 Total	14	4,835 5,105	1,473	6,322 6,679	9 9	64 61	390 420	462 490	6,784	3,906	8,931 9,250	19,621
2000 Total	11 12	4,889	1,563 1,539	6,440	9	60	370	439	7,169 6,879	4,069 4,100	9,230	20,488 20,106
2002 Total	12	5,014	1,463	6,489	10	59	380	449	6,938	4,317	9,619	20,100
2002 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	450	527	6,941	4,638	10,139	21,717
2006 January	1	732	137	869	2	6	35	42	911	411	868	2,190
February	1	720	144	864	1	5	31	38	902	357	758	2,017
March	1	641	135	777	2	6	35	42	819	358	763	1,941
April	(s)	364	103	468	2	6	34	41	509	305	659	1,473
May	(s)	209	97	306	2	6	35	42	349	321	730	1,399
June	(s)	145	89	234	2	6	34	41	274	405	900	1,580
July	(s)	118	91	210 204	2 2	6 6	35 35	42 42	252	503	1,119	1,874
August September	(s) (s)	111 128	92 91	219	2	6	35 34	42 41	246 260	512 396	1,100 786	1,858 1,442
October	(s)	246	96	343	2	6	35	42	385	328	701	1,442
November	1	423	101	525	2	6	34	41	566	324	710	1,599
December	i	639	122	762	2	6	35	42	804	392	871	2,067
Total	6	4,476	1,299	5,780	18	67	410	495	6,276	4,611	9,968	20,855
<b>2007</b> January	1	823	134	958	2	6	39	47	1,006	427	955	2,388
February	1	923	138	1,061	2	6	35	43	1,104	414	862	2,380
March	1	632	130	762	2	6	39	47	810	361	771	1,941
April	(s)	419	90	509	2	6	38	46	555	308	669	1,532
May	(s)	221	75 90	297	2	6	39	47	345	329	737	1,411
June	(s)	141 121	80 81	221 202	2 2	6 6	38 39	46 47	267 249	400 474	891	1,558
July August	(s) (s)	115	88	202	2	6	39 39	47 47	249 250	512	1,047 1,159	1,770 1,921
September	(s)	119	89	208	2	6	38	46	254	442	884	1,580
October	1	179	99	279	2	6	39	47	326	354	737	1,417
November	1	414	119	534	2	6	38	46	580	327	704	1,610
December	1	736	163	899	2	6	39	47	947	400	902	2,249
Total	6	4,842	1,286	6,134	22	74	460	556	6,691	4,749	10,316	21,755
<b>2008</b> January	1	902	156	1,059	2	6	39	47	1,106	456	982	2,544
February	1	841	149	990	2	6	36	44	1,034	406	826	2,267
March	1	675	127	803	2	6	39	47	850	367	785	2,002
April	1	408	99	507	2	6	38	46	553	316	667	1,536
May	1	239	85 97	325	2	6	39	47	372	316	706	1,393
June	(s)	149	87 80	236	2	6	38	46 47	281	415 <sup>R</sup> 491	943 R 1,073	1,639 R 1,823
July	(s)	122	89 84	211	2 2	6 6	39	47 47	258 245	476	,	,
August 8-Month Total	(s) <b>4</b>	114 <b>3,450</b>	84 <b>875</b>	198 <b>4,329</b>	1 <b>5</b>	<b>50</b>	39 <b>307</b>	47 <b>371</b>	245 <b>4,700</b>	3, <b>244</b>	1,013 <b>6,993</b>	1,734 <b>14,937</b>
2007 8-Month Total 2006 8-Month Total	4 4	3,395 3,040	816 889	4,215 3,932	15 12	50 45	306 273	370 330	4,585 4,262	3,226 3,171	7,091 6,898	14,902 14,331

 $<sup>^{\</sup>rm a}$  See "Primary Energy Consumption" in Glossary.

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.

<sup>&</sup>lt;sup>b</sup> Data are estimates. See Table 10.2a for notes on series components.

c Natural gas only; excludes the estimated portion of supplemental gaseous

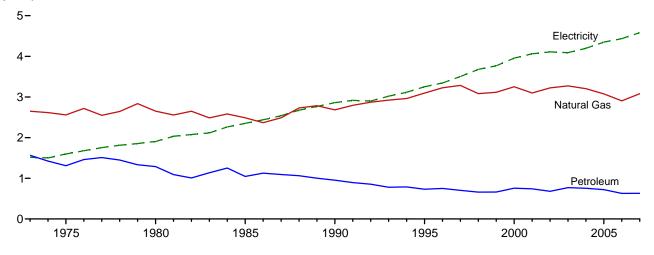
fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

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

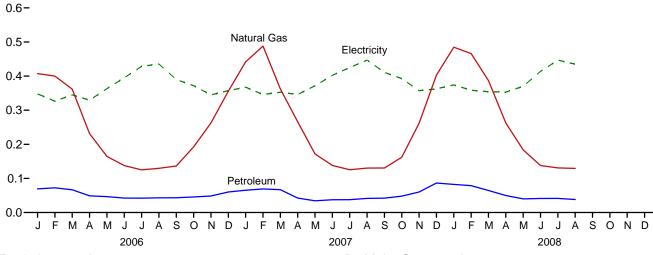
Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

Figure 2.3 Commercial Sector Energy Consumption (Quadrillion Btu)

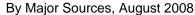


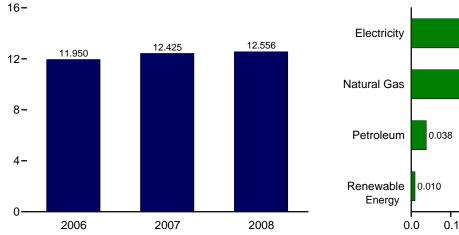


#### By Major Sources, Monthly



Total, January-August





Renewable Energy 0.010 0.0 0.1 0.2 0.3 0.4 0.5 0.6

0.129

0.435

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.

Source: Table 2.3.

**Table 2.3 Commercial Sector Energy Consumption** 

(Trillion Btu)

				Prima	ry Consum	ption <sup>a</sup>						
		Fossil	Fuels			Renewab	ole Energy <sup>b</sup>				Flantsiani	
	Coal	Natural Gas <sup>c</sup>	Petro- leum <sup>d</sup>	Total	Hydro- electric Power <sup>e</sup>	Geo- thermal	Bio- mass	Total	Total Primary	Electricity Retail Sales <sup>f</sup>	Electrical System Energy Losses <sup>9</sup>	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	751 751	4,099	1	5	129	135	4,235	3,344	7,603	15,181
1997 Total	129	3,285 3.083	704 661	4,118	1	6 7	131 118	138	4,257	3,503	7,935	15,694 15.979
1998 Total 1999 Total	93 103	3,063 3,115	661	3,837 3,879	1	7	121	127 129	3,964 4,007	3,678 3,766	8,338 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	i	8	92	101	4,036	4,062	9.043	17,170
2002 Total	90	3,225	680	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	i	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 January	7	407	69	484	(s)	1	9	10	494	348	735	1,576
February	6	400	72	479	(s)	1	8	9	488	327	694	1,509
March	6	362	67	435	(s)	1	8	10	444	345	736	1,525
April	4	231	49	285	(s)	1	8	10	294	329	712	1,336
May	4	165	47	215	(s)	1	9	10	226	363	827	1,415
June	5	138	42	185	(s)	1	8	10	194	395	877	1,466
July	5	125	42	172	(s)	1	9	10	182	428	954	1,564
August	5	130	43	177	(s)	1	9	10	187	436	936	1,559
September	4	136	43	184 244	(s)	1	8 9	9	193	390	774	1,357
October	6 7	192 263	46 48	244 318	(s)	1 1	8	10 10	253	372 345	793 757	1,419
November December	8	263 355	48 60	423	(s) (s)	1	9	10	327 433	345 357	797 794	1,429 1,584
Total	66	2,905	<b>629</b>	3,599	1	14	102	117	3,716	4,435	9,586	17,737
<b>2007</b> January	7	442	65	515	(s)	1	9	10	525	367	822	1,714
February	7	488	69	564	(s)	i	8	9	574	346	720	1,640
March	7	362	67	436	(s)	1	9	10	446	353	753	1,552
April	5	266	42	313	(s)	1	8	9	322	346	751	1,419
May	5	172	34	211	(s)	1	9	10	221	371	833	1,425
June	5	138	37	180	(s)	1	9	10	190	402	895	1,487
July	5	125	38	168	(s)	1	9	10	178	425	939	1,542
August	5	130	41	177	(s)	1	9	10	187	447	1,012	1,645
September	5	131	42	177	(s)	1	8	10	187	411	822	1,420
October	6	162	48	216	(s)	1	9	10	226	393	818	1,437
November December	7 8	262 403	60 86	329 497	(s)	1 1	9 9	10 10	339 507	357 363	768 817	1,464 1.688
Total	71	3,080	632	3,783	(s) <b>1</b>	14	104	119	<b>3,902</b>	4,581	9,951	18,434
2008 January	7	485	82	575	(s)	1	8	9	584	374	806	1,764
February	7	466	79	551	(s)	i	8	9	561	358	728	1,647
March	7	387	65	458	(s)	i	8	10	468	354	757	1,579
April	7	263	50	320	(s)	1	9	10	330	353	747	1,430
May	8	184	40	231	(s)	1	9	10	241	370	827	1,438
June	5	138	41	184	(s)	1	9	10	194	414	939	1,547
July	5	131	41	177	(s)	1	9	10	187	R 447	<sup>R</sup> 975	R 1,608
August	_5	129	38	172	(s)	1	9	10	182	435	926	1,543
8-Month Total	50	2,182	436	2,668	1	10	68	78	2,746	3,106	6,704	12,556
2007 8-Month Total 2006 8-Month Total	45 42	2,123 1,958	395 431	2,564 2,431	1 1	10 9	69 68	79 78	2,643 2,509	3,058 2,971	6,724 6,469	12,425 11,950

See "Primary Energy Consumption" in Glossary.

electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of

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

The commercial sector includes commercial combined-heat-and-Notes: 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

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

b Most data are estimates. See Table 10.2a for notes on series components

representation.

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

Does not include the fuel ethanol portion of motor gasoline—fuel ethanol is included in "Biomass."

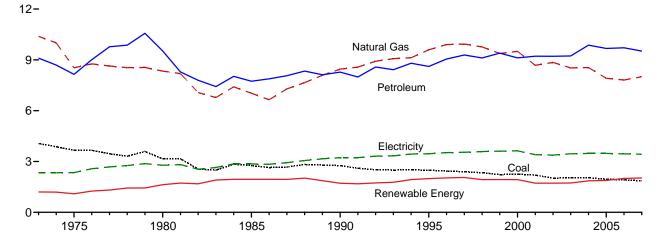
e Conventional hydroelectric power.

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

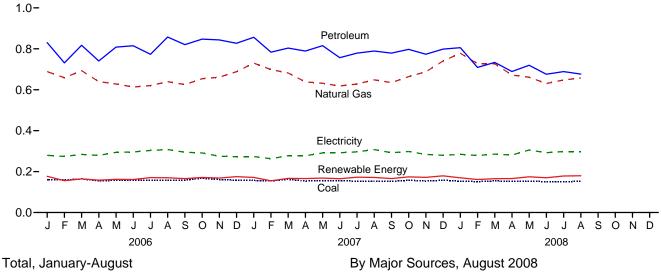
g Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

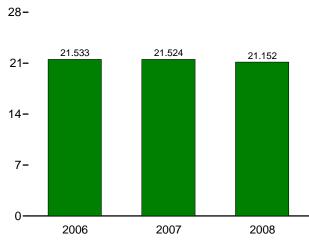
Figure 2.4 Industrial Sector Energy Consumption (Quadrillion Btu)

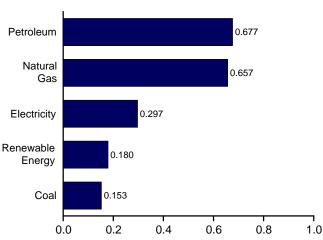




#### By Major Sources, Monthly







Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.

Source: Table 2.4.

Table 2.4 Industrial Sector Energy Consumption

(Trillion Btu)

				Prima	ry Consum	ption <sup>a</sup>						
		Fossil	Fuels			Renewab	le Energy <sup>b</sup>				Flantsianl	
	Coal	Natural Gas <sup>c</sup>	Petro- leum <sup>d</sup>	Totale	Hydro- electric Power <sup>f</sup>	Geo- thermal	Bio- mass	Total	Total Primary	Electricity Retail Sales	Electrical System Energy Losses <sup>h</sup>	Totale
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	1,917	1,950	19,466	2,855	6,554	28,875
1990 Total	2,756	8,451	8,278	19,490	31	2	1,683	1,716	21,206	3,226	7,461	31,894
1995 Total	2,488	9,592	8,613	20,754	55	3	1,935	1,992	22,746	3,455	7,844	34,045
1996 Total	2,434	9,901	9,052	21,410	61	3	1,970	2,033	23,444	3,527	8,018	34,989
1997 Total	2,395	9,933	9,289	21,663	58	3	1,997	2,058	23,721	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	1,723	21,857	3,379	7,528	32,765
2003 Total	2,041	8,521	9,232	19,845	43	3	1,684	1,731	21,576	3,454	7,620	32,650
2004 Total	2,047	8,544	9,865	20,594	33	4	1,824	1,861	22,455	3,473	7,682	33,609
2005 Total	1,954	7,911	9,673	19,583	32	4	1,848	1,884	21,467	3,477	7,602	32,546
2006 January	161	689	830	1,682	4	(s)	173	177	1,859	279	590	2,729
February	159	658	731	1,553	3	(s)	152	155	1,708	274	582	2,563
March	164	693	817	1,682	2	(s)	162	164	1,846	284	606	2,736
April	155	639	741	1,538	2	(s)	156	158	1,696	279	603	2,577
May	157	628	808	1,597	2	(s)	160	162	1,760	294	669	2,723
June	157	613	815	1,591	2	(s)	159	161	1,752	296	656	2,704
July	158	620	773	1,555	2	(s)	168	171	1,726	303	675	2,704
August	158	639	857	1,657	2	(s)	168	170	1,827	308	662	2,797
September	158	625	820	1,617	2	(s)	163	165	1,782	295	585	2,662
October	168	654	847	1,681	3	(s)	168	171	1,853	291	621	2,765
November	161	661	843	1,666	4	(s)	164	168	1,835	275	604	2,713
December	158	688	827	1,676	3	(s)	172	175	1,851	273	606	2,730
Total	<b>1,914</b>	<b>7,809</b>	<b>9,711</b>	<b>19,495</b>	<b>29</b>	<b>4</b>	<b>1,966</b>	<b>1,999</b>	<b>21,494</b>	<b>3,451</b>	<b>7,459</b>	<b>32,404</b>
2007 January	157	730	856	1,746	4	(s)	167	171	1,918	273	612	2,803
February	154	698	784	1,637	2	(s)	153	155	1,792	263	547	2,601
March	162	682	803	1,646	2	(s)	164	167	1,813	278	593	2,684
April	154	638	789	1,582	2	(s)	164	166	1,748	277	602	2,627
	156	631	815	1,606	2	(s)	166	168	1,774	291	653	2,717
	156	618	757	1,536	2	(s)	163	165	1,702	292	649	2,643
	153	628	779	1,558	1	(s)	171	172	1,731	296	655	2,682
July August September October	152	648	789	1,592	2	(s)	169	171	1,763	308	697	2,767
	152	635	779	1,569	1	(s)	165	166	1,735	292	585	2,612
	158	<sup>R</sup> 664	797	R 1,619	1	(s)	172	174	R 1,793	298	620	R 2,711
November	154	<sup>R</sup> 688	773	R 1,620	1	(s)	170	172	R 1,792	284	610	R 2,686
December	158	<sup>R</sup> 740	799	R 1,700	2	(s)	177	179	R 1,880	280	631	R 2,790
Total	<b>1,865</b>	<sup>R</sup> <b>8,002</b>	<b>9,521</b>	R <b>19,412</b>	<b>23</b>	<b>5</b>	<b>2,000</b>	<b>2,028</b>	R <b>21,440</b>	<b>3,432</b>	<b>7,454</b>	R <b>32,326</b>
2008 January	153	778	806	1,741	2	(s)	166	169	1,910	284	612	2,807
February	151	727	709	1,589	3	(s)	158	161	1,750	279	566	2,595
March	154	727	734	1,623	3	(s)	162	165	1,788	285	609	2,682
April	152	672	689	1,521	2	(s)	163	166	1.687	281	593	2,561
May	154	661	719	1,537	2	(s)	172	174	1,711	305	682	2,699
June	151	R 630	676	1,466	1	(s)	168	170	R 1,635	292	663	2,590
July	<sup>R</sup> 151	R 647	<sup>R</sup> 689	R 1,492	1	(s)	R 177	<sup>R</sup> 178	R 1,671	R 298	<sup>R</sup> 651	R 2,620
August	153	657	677	1,488	1	(s)	178	180	1,668	297	633	2,598
8-Month Total	1,219	5,500	5,697	12,455	16	3	1,345	1,364	13,819	2,322	5,010	21,152
2007 8-Month Total	1,244	5,275	6,372	12,904	18	3	1,315	1,336	14,240	2,278	5,006	21,524
2006 8-Month Total	1,270	5,181	6,373	12,855	18	3	1,298	1,319	14,174	2,317	5,042	21,533

<sup>&</sup>lt;sup>a</sup> See "Primary Energy Consumption" in Glossary.

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

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 to the Engrave Lieuwage Sectors." at end of Section 7. • See Note 1, "Energy of the Engrave Sectors." Consumption Data and Surveys," 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.

b Most data are estimates. See Table 10.2b for notes on series components

and estimation.

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

<sup>d</sup> Does not include the fuel ethanol portion of motor gasoline—fuel ethanol is

included in "Biomass. <sup>e</sup> Includes coal coke net imports, which are not separately displayed. See

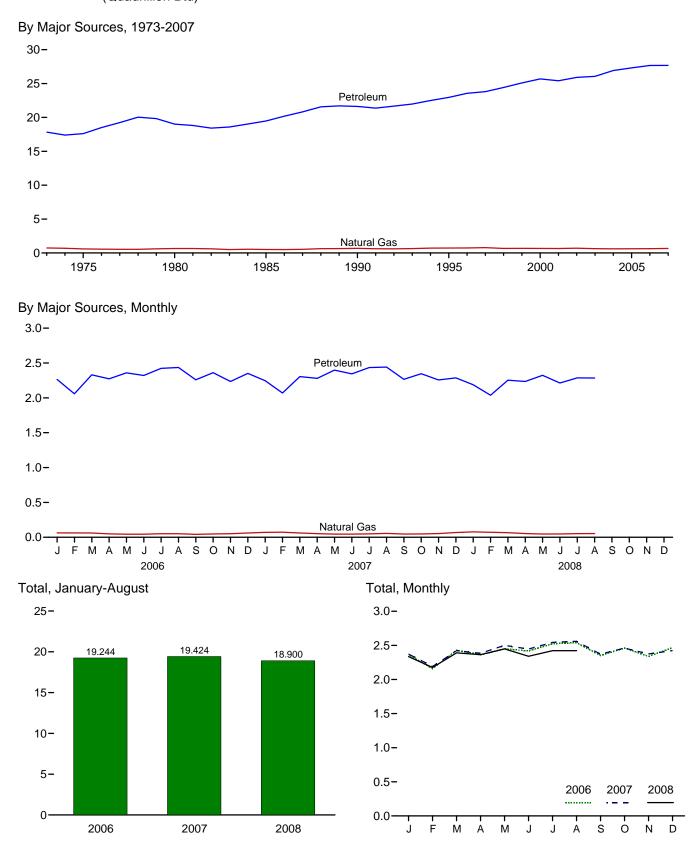
Tables 1.4a and 1.4b.

Conventional hydroelectric power.

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

Figure 2.5 Transportation Sector Energy Consumption (Quadrillion Btu)



Note: Because vertical scales differ, graphs should not be compared. 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 Cor	nsumptiona					
		Fossil	Fuels		Renewable Energy <sup>b</sup>	Total	Electricity Retail	Electrical System Energy	
	Coal	Natural Gas <sup>c</sup>	Petroleum <sup>d</sup>	Total	Biomass	Primary	Salese	Losses	Total
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	( <sup>g</sup> )	724	22,954	23,678	115	23,793	17	39	23,849
1996 Total	( <sup>g</sup> )	737	23,565	24,302	82	24,384	17	38	24,439
1997 Total	( <sup>g</sup> )	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	26,491	18	42	26,552
2001 Total	(g)	658	25,413	26,071	145	26,215	20	43	26,278
2002 Total	(g)	702	25,913	26,615	172	26,787	19	42	26,848
2003 Total	(g)	630	26,063	26,693	235	26,928	23	51	27,002
2004 Total	(g)	603	26,922	27,525	296	27,820	25	55	27,899
2005 Total	(g)	625	27,309	27,934	346	28,280	26	56	28,361
2006 January	(g)	63	2,264	2,326	31	2,358	2	5	2,365
February	(g)	62	2,059	2,121	29	2,150	2	4	2,156
March	(g)	62	2,330	2,392	33	2,424	2	5	2,431
April	(g)	49	2,273	2,322	34	2,355	2	4	2,362
May	(g)	44	2,360	2,404	41	2,444	2	4	2,451
June	(g)	45	2,322	2,366	45	2,412	2	5	2,418
July	(g)	51	2,423	2,474	42	2,516	2	5	2,523
August	(g)	51	2,436	2,486	45	2,531	2	5	2,538
September	(g)	42	2,259	2,301	44	2,345	2	4	2,351
October	(g)	47	2,362	2,409	46	2,456	2	4	2,462
November	(g)	51	2,235	2,286	45	2,331	2	4	2,337
December	( <sup>g</sup> )	61	2,351	2,412	48	2,460	2	5	2,466
Total	(g)	626	27,672	28,298	483	28,781	25	54	28,861
<b>2007</b> January	(g)	70	2,247	2,317	48	2,365	2	6	2,373
February	(g)	73	2,069	2,142	43	2,186	2	5	2,193
March	(g)	61	2,305	2,366	49	2,415	2	5	2,422
April	(g)	52	2,280	2,332	46	2,379	2	4	2,385
May	(g)	45	2,398	2,443	50	2,493	2	5	2,500
June	(g)	45	2,344	2,389	51	2,440	2	5	2,447
July	(g)	48	2,434	2,483	55	2,537	2	5	2,544
August	(g)	56	2,441	2,497	55	2,553	2	5	2,560
September	(g)	46	2,266	2,312	53	2,366	2	4	2,372
October	(g)	48	2,347	2,394	59	2,454	2	4	2,460
November	( <sup>9</sup> )	53	2,257	2,310	58	2,368	2	5	2,374
December	(g)	69	2,287	2,356	61	2,417	2	5	2,424
Total	(g)	667	27,675	28,342	629	28,971	26	57	29,055
2008 January	(g)	78	2,188	2,265	62	2,328	2	5	2,335
February	(g)	71	2,038	2,109	60	2,169	2	5	2,176
March	(g)	66	2,253	2,319	64	2,383	2	5	2,390
April	(g)	53	2,235	2,288	70	2,358	2	4	2,364
May	(g)	46	2,324	2,370	72	2,442	2	5	2,449
June	(g)	47	2,213	2,260	73	R 2,334	2	5	R 2,341
July	(g)	52	R 2,287	R 2,339	76	R 2,415	2	5	R 2,422
August	(g)	53	2,284	2,337	79	2,416	2	5	2,423
8-Month Total	(g)	467	17,822	18,289	556	18,845	17	38	18,900
2007 8-Month Total 2006 8-Month Total	( <sup>g</sup> )	451 425	18,518 18,466	18,970 18,891	398 300	19,367 19,191	18 17	39 37	19,424 19,244

<sup>&</sup>lt;sup>a</sup> See "Primary Energy Consumption" in Glossary.

electricity retail sales. See Note 2, "Electrical System Energy Losses," at end of

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.

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

<sup>&</sup>lt;sup>c</sup> Natural gas only; does not include supplemental gaseous fuels. See Note 3,

<sup>&</sup>quot;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."

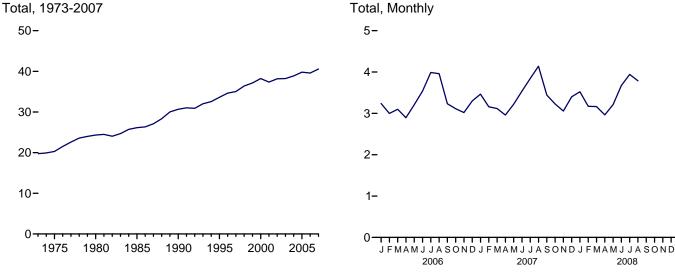
e Electricity retail sales to ultimate customers reported by electric utilities and,

beginning in 1996, other energy service providers.

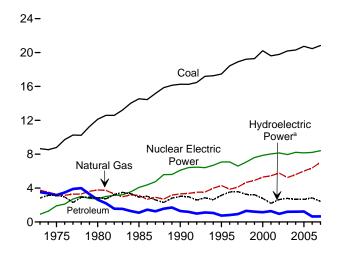
Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity retail sales. Total losses are allocated to the end-use sectors in proportion to each sector's share of total

<sup>&</sup>lt;sup>g</sup> Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

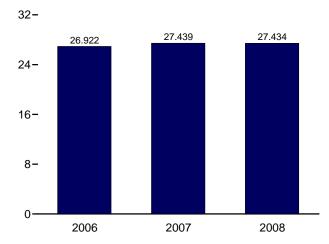
Figure 2.6 Electric Power Sector Energy Consumption (Quadrillion Btu)



By Major Sources, 1973-2007



Total, January-August

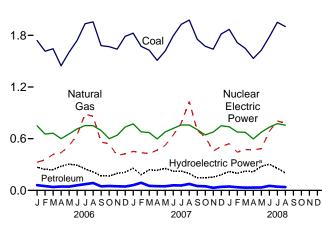


<sup>a</sup>Conventional hydroelectric power.

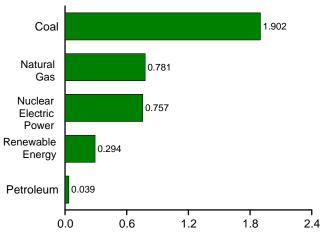
Note: Because vertical scales differ, graphs should not be compared.

By Major Sources, Monthly

2.4-



By Major Sources, August 2008



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)

						Prima	ry Consum	nptiona					
		Fossil	Fuels					Renewabl	e Energy <sup>b</sup>			Fina	
	Coal	Natural Gas <sup>c</sup>	Petro- leum	Total	Nuclear Electric Power	Hydro- electric Power <sup>d</sup>	Geo- thermal	Solar/ PV	Wind	Bio- mass	Total	Elec- tricity Net Imports	Total Primary
1973 Total 1975 Total 1980 Total	8,658 8,786 12,123	3,748 3,240 3,778	3,515 3,166 2,634	15,921 15,191 18,534	910 1,900 2,739	2,827 3,122 2,867	43 70 110	NA NA NA	NA NA NA	3 2 4	2,873 3,194 2,982	49 21 71	19,753 20,307 24,327
1985 Total		3,135	1,090	18,767	4,076	2,937	198	(s)	(s)	14	3,150	140	26,132
1990 Total <sup>e</sup>	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 4,675	927 1,306	23,957 25,197	6,597	3,581 3,241	309	5 5	34 31	446 444	4,375 4,032	116 88	35,045
1998 Total 1999 Total	19,216 19,279	4,675 4,902	1,306	25,197	7,068 7,610	3,241	311 312	5 5	46	453	4,032 4,034	99	36,385 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 January	1,740	326	61	2,128	750	268	26	(s)	24	37	355	5	3,238
February	1,615	355	50	2,020	653	243	23	(s)	19	34	319	5	2,998
March	1,644	417	39	2,101	665	242	27	(s)	23	35	327	6	3,099
April	1,446	437	46	1,928	601	281	24	1	25	30	360	5	2,893
May June	1,605 1,740	517 645	44 59	2,166 2,444	655 714	304 293	23 25	1 1	24 20	33 34	384 373	5 5	3,210 3,535
July	1,936	885	72	2,893	753	250	27	1	19	36	333	10	3,989
August	1,957	861	86	2,904	751	214	27	1	16	37	295	10	3,960
September	1,681	561	47	2,289	695	169	26	1	19	34	248	(s)	3,232
October	1,669	540	51	2,260	600	166	27	(s)	24	34	252	1	3,113
November	1,640	406	48	2,094	641	197	25	(s)	25	35	283	3	3,020
December  Total	1,789 <b>20,462</b>	425 <b>6,375</b>	46 <b>648</b>	2,259 <b>27,485</b>	735 <b>8,214</b>	211 <b>2,839</b>	27 <b>306</b>	(s) <b>5</b>	25 <b>264</b>	36 <b>412</b>	299 <b>3,827</b>	8 <b>63</b>	3,301 <b>39,589</b>
Total	20,402	0,373	040	21,403	0,214	2,033	300	3	204	712	3,021	03	33,303
<b>2007</b> January	1,826	453	60	2,339	772	258	27	(s)	24	38	347	6	3,465
February	1,672	438	89	2,199	681	183	25	(s)	25	36	269	10	3,159
March April	1,628 1,510	428 468	53 49	2,108 2,027	671 598	239 235	26 24	(s) 1	30 32	36 33	331 325	6 10	3,116 2,959
May	1,617	521	49	2,027	678	255	24 25	1	28	34	343	13	3,221
June	1,793	643	59	2,494	719	225	26	1	24	36	311	11	3,536
July	1,928	781	57	2,766	759	223	27	1	19	36	306	13	3,843
August	1,978	1,032	75	3,085	759	196	27	1	24	37	285	11	4,140
September	1,755	695	51	2,501	705	144	26	1	26	35	232	5	3,443
October	1,673	620	48	2,341	644	146	27	(s)	30	32	236	6	3,227
November December	1,640 1,817	457 510	30 42	2,127 2,368	678 751	155 182	26 27	(s) (s)	27 28	36 37	243 275	9 7	3,057 3,400
Total	20,835	7,046	660	28,542	8,415	2,440	312	6	319	427	3,503	107	40,567
<b>2008</b> January	1,869	542	45	2,455	738	219	25	(s)	37	36	318	11	3,522
February	1,716	443	37	2,196	678	198	23	(s)	32	33	286	10	3,170
March	1,649	474	32	2,155	675	224	26	1	41	36	327	7	3,165
April	1,532	470	33	2,036	598	217	25	1	45	33	321	9	2,963
May	1,628	485	34	2,147	676	278	26	1	44	32	382	8	3,212
June	1,783 R 1 052	685 R 906	53 <sup>R</sup> 43	2,521 R 2 900	733 R <b>77</b> 5	304 R 256	26 R 27	1	43 <sup>R</sup> 32	35 R 26	410 R 352	9 R <b>1</b> 5	3,673 R 2 042
July	<sup>R</sup> 1,952 1,902	<sup>R</sup> 806 781	1. 43 39	R 2,800 2,722	<sup>R</sup> 775 757	<sup>R</sup> 256 204	<sup>R</sup> 27 27	1 1	26	<sup>R</sup> 36 36	294	<sup>R</sup> 15 15	<sup>R</sup> 3,942 3,787
August 8-Month Total	14,031	4,686	31 <b>5</b>	19,032	5,629	1,900	205	6	300	<b>278</b>	2,688	85	27,434
2007 8-Month Total	13,951	4,763	490	19,205	5,637	-	207	5	207	286	2,517	80	
2007 8-Month Total	13,684	4,442	490 457	18,582	5,542	1,813 2,095	201	4	171	274	2,746	52	27,439 26,922

<sup>&</sup>lt;sup>a</sup> See "Primary Energy Consumption" in Glossary.

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.

b See Table 10.2c for notes on series components.

<sup>&</sup>lt;sup>c</sup> 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.

<sup>&</sup>lt;sup>e</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

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

Notes: • Data are for fuels consumed to produce electricity and useful thermal

### **Energy Consumption by Sector**

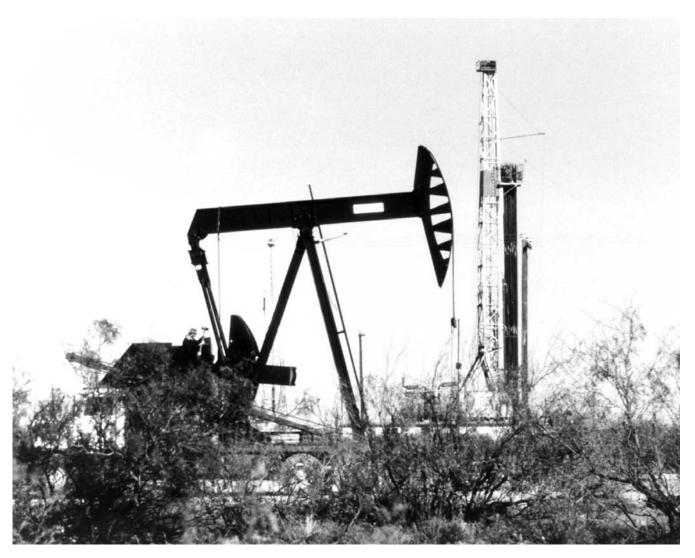
**Note 1. Energy Consumption Data and Surveys.** Most of the data in this section of the *Monthly Energy Review (MER)* are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the Energy Information Administration (EIA). Supply surveys are directed to suppliers 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, Energy Information Administration, Washington, DC, April 6, 1990.

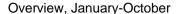
Note 2. Electrical System Energy Losses. Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector (see Table 2.6) and the total energy content of electricity retail sales (see Tables 7.6 and A6). Most of these losses occur at steam-electric 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 steamelectric 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 enduse 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, approximately 67 percent of total energy input is lost in conversion; of electricity generated, approximately 5 percent is lost in plant use and 9 percent is lost in transmission and distribution.

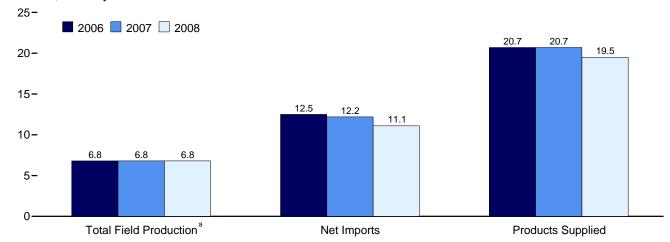
# Petroleum



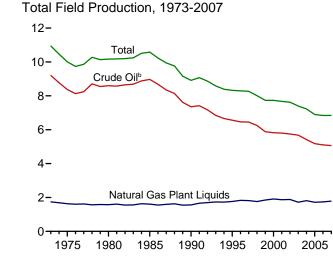
Oil pumping unit and drilling rig, Texas. Source: U.S. Department of Energy.

**Petroleum Overview** Figure 3.1 (Million Barrels per Day)





## Overview, 1973-2007 25-20-**Products Supplied** 15-Total Field Production<sup>a</sup> 10-Net Imports



Crude Oil<sup>b</sup> Field Production, 1973-2007

1985

1990

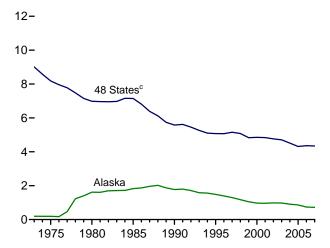
1995

2000

2005

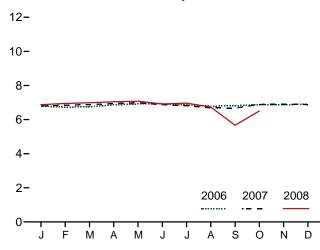
1980

1975



<sup>&</sup>lt;sup>a</sup>Crude oil, including lease condensate, and natural gas plant liquids field production.

#### Total Field Production<sup>a</sup>, Monthly



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.

Source: Table 3.1.

<sup>&</sup>lt;sup>b</sup>Includes lease condensate.

<sup>&</sup>lt;sup>c</sup>United States excluding Alaska and Hawaii.

**Table 3.1 Petroleum Overview** 

		Fie	ld Produc	tion <sup>a</sup>				Trade				
		Crude Oil <sup>b</sup>	1									Petroleum
	48 States <sup>c</sup>	Alaska	Total	NGPL <sup>d,e</sup>	Total	Processing Gain <sup>f</sup>	Imports <sup>g</sup>	Exports <sup>e</sup>	Net Imports <sup>h</sup>	Stock Change <sup>i</sup>	Adjust- ments <sup>j</sup>	Products Supplied
1973 Average	9,010	198	9,208	1,738	10,946	453	6,256	231	6,025	135	18	17,308
1975 Average	8,183 6,980	191 1,617	8,375 8,597	1,633 1,573	10,007 10,170	460 597	6,056 6,909	209 544	5,846 6,365	32 140	41 64	16,322 17,056
1980 Average 1985 Average	7,146	1,825	8,971	1,609	10,170	557	5,067	781	4,286	-103	200	15,726
1990 Average	5,582	1,773	7,355	1,559	8,914	683	8,018	857	7,161	107	338	16,988
1995 Average	5,076	1,484	6,560	1,762	8,322	774	8,835	949	7,886	-246	496	17,725
1996 Average	5,071	1,393	6,465	1,830	8,295	837	9,478	981	8,498	-151	528	18,309
1997 Average	5,156	1,296	6,452	1,817	8,269	850	10,162	1,003	9,158	143	487	18,620
1998 Average	5,077	1,175	6,252	1,759	8,011	886	10,708	945	9,764	239	495	18,917
1999 Average	4,832	1,050	5,881	1,850	7,731	886	10,852	940	9,912	-422	567	19,519
2000 Average	4,851	970	5,822	1,911	7,733	948	11,459	1,040	10,419	-69	532	19,701
2001 Average	4,839 4.761	963 984	5,801 5,746	1,868 1.880	7,670	903 957	11,871	971 984	10,900	325	501 527	19,649 19.761
2002 Average 2003 Average	4,761	964 974	5,746 5,681	1,000	7,626 7.400	957 974	11,530 12,264	1,027	10,546 11,238	-105 56	527 478	20.034
2004 Average	4,510	908	5,419	1,809	7,228	1,051	13,145	1,048	12,097	209	564	20,034
2005 Average	4,314	864	5,178	1,717	6,895	989	13,714	1,165	12,549	145	513	20,802
<b>2006</b> January	4,274	832	5,106	1,682	6,788	1,001	13,796	1,059	12,737	484	395	20,436
February	4,224	821	5,045	1,682	6,727	1,028	13,565	1,276	12,289	235	767	20,577
March	4,293	752	5,045	1,702	6,747	907	12,904	1,170	11,734	-905	316	20,608
April	4,328	800 801	5,128	1,737	6,866	944 979	13,438	1,398	12,039	311 743	663 340	20,201 20,457
May	4,360 4,379	781	5,161 5,160	1,755 1,756	6,916 6,915	979 968	14,315 14,253	1,350 1,334	12,965 12,918	743 174	340 353	20,457 20,982
June July	4,421	681	5,100	1,759	6,861	1,000	13,984	1,387	12,516	457	740	20,362
August	4.438	621	5.059	1,733	6.792	1.077	14.697	1,367	13.442	642	765	21,434
September	4,382	655	5,037	1,776	6,814	1,026	14,491	1,554	12,937	740	522	20,559
October	4,392	714	5,106	1,773	6,879	992	13,317	1,506	11,810	-515	573	20,769
November	4,450	655	5,105	1,770	6,875	959	13,005	1,353	11,651	-798	386	20,669
December	4,381	785	5,166	1,736	6,903	1,048	12,721	1,164	11,556	-825	463	20,795
Average	4,361	741	5,102	1,739	6,841	994	13,707	1,317	12,390	60	522	20,687
2007 January	4,348 4.369	775 756	5,123 5.125	1,677 1,710	6,800 6.835	1,035 961	13,706 12.173	1,446 1.350	12,260 10.823	146 -2.065	618 625	20,567 21.309
February March	4,356	750 750	5,123	1,776	6,882	944	13,956	1,274	12,682	367	396	20,536
April	4,441	748	5,189	1,755	6,944	948	13,842	1,360	12,482	540	701	20,536
May	4.429	768	5.197	1.793	6.990	939	14.204	1.441	12,764	966	894	20,620
June	4,379	717	5,096	1,780	6,877	1,007	13,553	1,331	12,222	195	813	20,723
July	4,305	719	5,024	1,785	6,809	1,023	13,754	1,506	12,248	125	792	20,747
August	4,304	610	4,914	1,768	6,682	1,010	13,634	1,483	12,151	-574	608	21,025
September	4,241	642	4,884	1,793	6,677	991	13,646	1,361	12,285	29	491	20,415
October	4,342	701	5,043	1,840	6,883	983	12,981	1,325	11,655	-286	668	20,476
November December	4,274 4.318	743 738	5,017 5,056	1,886 1,828	6,902 6,885	1,011 1,093	13,188 12,869	1,767 1,542	11,421 11,327	-596 -788	604 627	20,535 20,719
Average	4,342	<b>722</b>	5,064	1,783	6,84 <b>7</b>	996	13,468	1,433	12,036	-14 <b>8</b>	653	20,680
2008 January		<u> </u>	E 5,093	1,783	E 6,876	1,056	13,493	1,623	11,869	483	795	20,114
February		E 706	E 5,113	1,830	E 6,943	964	12,604	2,072	10,531	-506	837	19,782
March		E 726	E 5,139	1,847	E 6,986	930	12,550	1,823	10,728	-285	803	19,732
April		E 701	E 5,162	1,880	E 7,042	930	13,252	1,754	11,498	403	702	19,768
May		E 685 E 655	E 5,166 E 5,109	1,908	E 7,074 E 6,919	1,011 982	12,862	1,806 2,165	11,056 11,202	264 406	851 856	19,729
June		E 640	E 5,109	1,810 1.856	E 6,919	982 984	13,367 13.064	2,165	10.995	406 434	902	19,553 19,412
July August		RE 544	RE 4.895	R 1,839	RE 6,734	R 1.013	R 13.060	R 2.068	R 10,993	R 368	R 895	R 19,412
September	E 3.336	E 689	E 4.025	E 1.643	E 5.668	E 848	E 11,944	E 1,361	E 10.583	E -941	E 791	E 18,831
October		E 726	E 4,655	E 1,851	E 6,506	E 960	E 13,494	E 1,532	E 11,962	E 1,218	E 835	E 19,045
10-Month Average		<sup>E</sup> 678	€ 4,948	E 1,825	€ 6,773	<sup>E</sup> 968	E 12,972	E 1,826	E 11,146	E 191	E 827	E 19,523
2007 10-Month Average 2006 10-Month Average	4,351 4,350	719 745	5,070 5,095	1,768 1,736	6,838 6,831	984 992	13,557 13,877	1,388 1,329	12,169 12,548	-39 235	661 542	20,691 20,678

<sup>&</sup>lt;sup>a</sup> 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."

R=Revised. 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: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2007: EIA, Petroleum Supply Annual, annual reports. • 2008: 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.

Includes lease condensate.

United States excluding Alaska and Hawaii.

Natural gas plant liquids.

See Note 6, "Data Discrepancies," at end of section.

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

g Includes Strategic Petroleum Reserve imports. See Table 3.3b

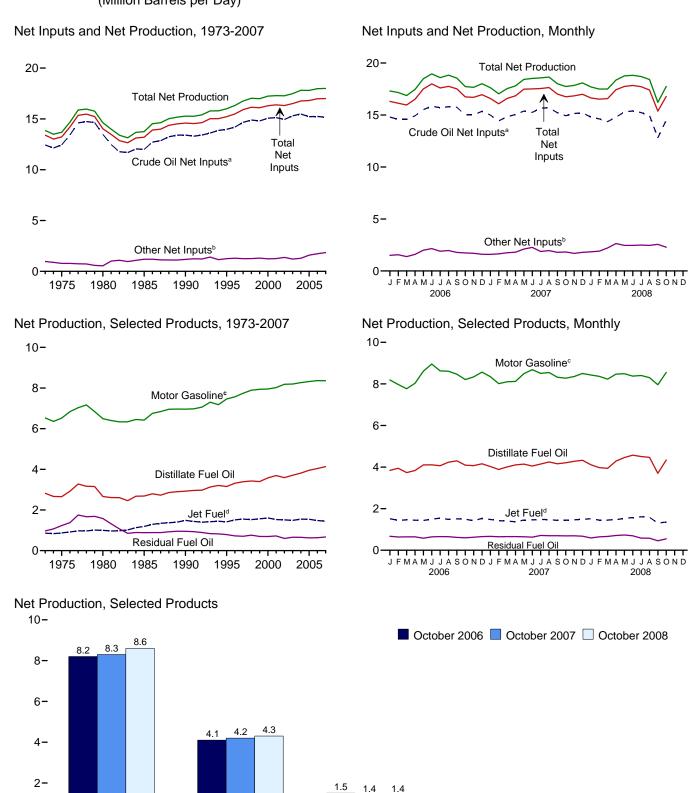
Net imports equal imports minus exports.

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, "New Stock Basis," at end of section.

j An adjustment for crude oil, finished motor gasoline, motor gasoline blending components, fuel ethanol, and distillate fuel oil. See EIA, *Petroleum Supply* Monthly, Appendix B, Note 3.

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



Motor

Gasolinec

Distillate

Fuel Oil

eIncludes propylene.

Jet Fuel<sup>d</sup>

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.

0.7

Residual

Fuel Oil

0.6

0.6

0.5 0.5

0.5

Propane<sup>e</sup>

Source: Table 3.2.

<sup>&</sup>lt;sup>a</sup>Includes lease condensate.

<sup>&</sup>lt;sup>b</sup>Natural gas plant liquids and other liquids.

<sup>&</sup>lt;sup>c</sup>Beginning in 1993, includes ethanol blended into motor gasoline.

<sup>&</sup>lt;sup>d</sup>Beginning in 2005, includes kerosene-type jet fuel only.

Table 3.2 Refinery and Blender Net Inputs and Net Production

	Refine	ery and Ble	ender Net II	nputsa			Refinery	and Blen	der Net Prod	ductionb		
							LPG	jC				
	Crude Oil <sup>d</sup>	NGPLe	Other Liquids <sup>f</sup>	Total	Distillate Fuel Oil	Jet Fuel <sup>g</sup>	Propaneh	Total	Motor Gasoline <sup>i</sup>	Residual Fuel Oil	Other Products <sup>j</sup>	Total
1973 Average	12,431	815	155	13,401	2,820	859	271	375	6,527	971	2,301	13,854
1975 Average		710	72	13,225	2,653	871	234	311	6,518	1,235	2,097	13,685
1980 Average		462	81	14,025	2,661	999	269	330	6,492	1,580	2,559	14,622
1985 Average		509	681	13,192	2,686	1,189	295	391	6,419	882	2,183	13,750
1990 Average		467	713	14,589	2,925	1,488	404	499	6,959	950	2,452	15,272
1995 Average		471	775	15,220	3,155	1,416	503	654	7,459	788	2,522	15,994
1996 Average		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		403	853	16,144	3,424	1,526	550	674	7,892	762	2,753	17,030
1999 Average		372	927	16,103	3,399	1,565	569	684	7,934	698	2,709	16,989
2000 Average		380	849	16,295	3,580	1,606	583	705	7,951	696	2,705	17,243
2001 Average		429	825	16,382	3,695	1,530	556	667	8,022	721	2,651	17,285
2002 Average		429	941	16,316	3,592	1,514	572 570	671	8,183	601	2,712	17,273
2003 Average		419	791	16,513	3,707	1,488	570 504	658	8,194	660	2,780	17,487
2004 Average		422 441	866 1,149	16,762 16,811	3,814 3,954	1,547 1,546	584 540	645 573	8,265 8,318	655 628	2,887 2,782	17,814 17,800
2005 Average	13,220	441	1,143	10,011	3,934	1,340	340	3/3	0,310	020	2,702	17,000
<b>2006</b> January		553	952	16,310	3,840	1,515	528	393	8,189	670	2,703	17,311
February		508	1,047	16,136	3,941	1,438	510	487	7,969	635	2,694	17,164
March		448	935	15,965	3,736	1,461	485	587	7,765	644	2,680	16,872
April		442	1,151	16,521	3,833	1,447	537	779	8,032	643	2,731	17,465
May		471	1,523	17,510	4,105	1,435	567	856	8,613	580	2,900	18,488
June		466 423	1,683 1,475	17,992 17,599	4,107 4,065	1,493 1,540	543 549	814 829	8,957 8,624	645 658	2,944 2,883	18,960 18,599
July August	,	423 447	1,473	17,599	4,005	1,485	574	860	8,610	652	2,003	18,835
September		498	1,285	17,730	4,300	1,511	560	622	8,465	619	3,030	18,548
October		548	1,187	16.743	4,090	1,490	531	511	8,210	597	2,836	17,735
November		573	1,122	16,703	4,070	1,422	549	393	8,335	624	2,818	17,662
December		637	969	16,959	4,159	1,529	581	387	8,567	656	2,710	18,007
Average		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		473	1,170	16,078	3,883	1,421	534	502	8,012	650	2,571	17,039
March		463	1,291	16,594	4,009	1,403	563	692	8,101	656	2,678	17,538
April		444	1,362	16,851	4,102	1,368	562	824	8,122	658	2,725	17,800
May		462	1,641	17,484	4,142	1,451	576	882	8,491	647	2,809	18,423
June		457	1,810	17,514	4,050	1,459	568	871	8,686	628	2,828	18,522
July		465 449	1,410	17,547	4,145	1,484	562 542	835	8,504	708	2,893	18,569
August September		449	1,508 1,295	17,642 17,017	4,244 4,158	1,470 1,436	560	810 624	8,547 8,320	698 698	2,883 2,771	18,652 18,008
October		562	1,263	16,757	4,208	1,446	539	499	8,276	689	2,622	17,740
November		630	1,203	16,838	4,278	1,463	568	393	8,353	694	2,668	17,740
December		600	1,189	16,991	4,326	1,489	595	443	8,501	676	2,649	18,084
Average	,	505	1,337	16,999	4,133	1,448	562	655	8,358	673	2,728	17,994
2008 January	14,799	540	1,304	16,644	4,110	1,514	567	460	8,427	591	2,598	17,700
February		506	1,398	16,529	3,973	1,447	535	504	8,364	645	2,560	17,493
March		466	1,749	16,576	3,940	1,451	526	674	8,230	664	2,548	17,506
April		453	2,185	17,437	4,287	1,467	521	809	8,471	710	2,623	18,367
May		448	2,012	17,751	4,459	1,536	546	874	8,492	734	2,666	18,761
June		437	2,018	17,839	4,572	1,567	544	867	8,375	695	2,745	18,821
July		439 R 442	2,047 R 2 045	17,722 R 17,405	4,509 R 4 466	1,612 R 1 504	534 R 536	847 <sup>R</sup> 814	8,405 R 9 201	584 8 570	2,751	18,707 R 10,410
August		<sup>R</sup> 413 <sup>RF</sup> 473	R 2,045 RE 2,083	RF 15, 360	R 4,466 E 3,699	R 1,584 E 1,302	<sup>R</sup> 526 <sup>RE</sup> 354	F 570	<sup>R</sup> 8,301 <sup>E</sup> 7,957	R 579 E 457	<sup>R</sup> 2,674 <sup>RE</sup> 2,232	<sup>R</sup> 18,418 <sup>RE</sup> 16,217
September		F 537	E 1,748	<sup>RF</sup> 15,369 <sup>F</sup> 16,786	E 4,340	E 1,302	E 493	F 475	E 8,552	E 457 E 550	E 2,232	E 17,746
October  10-Month Average		E <b>471</b>	E <b>1,748</b>	E <b>17,010</b>	E <b>4,34</b> 0	E <b>1,484</b>	E <b>515</b>	E <b>690</b>	E <b>8,358</b>	E <b>621</b>	E <b>2,474</b>	E <b>17,74</b> 6
2007 10-Month Average 2006 10-Month Average		483 480	1,380 1,277	17,015 17,011	4,099 4,025	1,442 1,482	558 539	702 675	8,344 8,346	670 634	2,743 2,840	17,999 18,003

a See "Refinery and Blender Net Inputs," in Glossary.

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: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2007: Petroleum Supply Annual, annual reports. • 2008: 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.

b See "Refinery and Blender Net Production," in Glossary.

Liquefied petroleum gases.

d Includes lease condensate.

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).

<sup>&</sup>lt;sup>9</sup> 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."

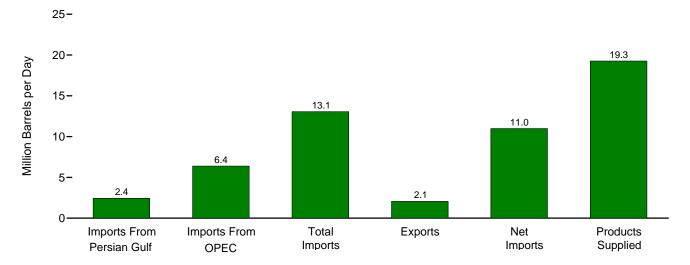
h Includes propylene.

Finished motor gasoline. Beginning in 1993, also includes ethanol blended into motor gasoline.

Asphalt and road oil, finished aviation gasoline, kerosene, lubricants,

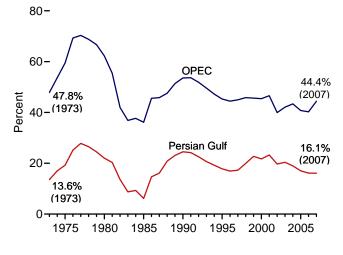
Figure 3.3a Petroleum Trade: Overview

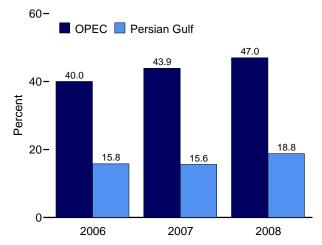
Overview, August 2008



Imports From OPEC and Persian Gulf as Share of Total Imports, 1973-2007

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



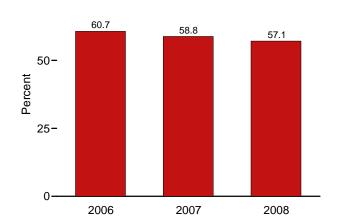


Net Imports as Share of Products Supplied, 1973-2007

Supplied, N J

Net Imports as Share of Products Supplied, January-October

75-



Notes: • OPEC=Organization of the Petroleum Exporting Countries. • Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.3a.

Table 3.3a Petroleum Trade: Overview

									are of Supplied			nare of mports
	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>	Imports	Exports	Net Imports	Products Supplied	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>	Imports	Net Imports	Imports From Persian Gulf <sup>a</sup>	Imports From OPEC <sup>b</sup>
			Thousand Ba	arrels per Da	у				Per	cent		
1973 Average 1975 Average 1980 Average 1985 Average 1990 Average 1995 Average 1997 Average 1997 Average 1998 Average 1999 Average 2000 Average	848 1,165 1,519 311 1,966 1,573 1,604 1,755 2,136 2,464 2,488	2,993 3,601 4,300 1,830 4,296 4,002 4,211 4,569 4,905 4,953 5,203	6,256 6,056 6,909 5,067 8,018 8,835 9,478 10,162 10,708 10,852 11,459	231 209 544 781 857 949 981 1,003 945 940 1,040	6,025 5,846 6,365 4,286 7,161 7,886 8,498 9,158 9,754 9,912 10,419	17,308 16,322 17,056 15,726 16,988 17,725 18,309 18,620 18,917 19,519 19,701	4.9 7.1 8.9 2.0 11.6 8.9 8.8 9.4 11.3 12.6 12.6	17.3 22.1 25.2 11.6 25.3 22.6 23.0 24.5 25.9 25.4 26.4	36.1 37.1 40.5 32.2 47.2 49.8 51.8 54.6 56.6 55.6	34.8 35.8 37.3 27.3 42.2 44.5 46.4 49.2 51.6 50.8 52.9	13.6 19.2 22.0 6.1 24.5 17.8 16.9 17.3 19.9 22.7 21.7	47.8 59.5 62.2 36.1 53.6 45.3 44.4 45.0 45.8 45.6 45.4
2001 Average	2,761 2,269 2,501 2,493 2,334	5,528 4,605 5,162 5,701 5,587	11,871 11,530 12,264 13,145 13,714	971 984 1,027 1,048 1,165	10,900 10,546 11,238 12,097 12,549	19,649 19,761 20,034 20,731 20,802	14.1 11.5 12.5 12.0 11.2	28.1 23.3 25.8 27.5 26.9	60.4 58.3 61.2 63.4 65.9	55.5 53.4 56.1 58.4 60.3	23.3 19.7 20.4 19.0 17.0	46.6 39.9 42.1 43.4 40.7
2006 January	1,994 2,068 1,958 2,361 2,389 2,355 2,078 2,314 2,481 2,132 2,339 2,079 <b>2,211</b>	5,596 5,502 5,088 5,488 5,819 5,691 5,509 5,729 5,842 5,538 5,181 5,221 <b>5,517</b>	13,796 13,565 12,904 13,438 14,315 14,253 13,984 14,697 14,491 13,317 13,005 12,721 13,707	1,059 1,276 1,170 1,398 1,350 1,334 1,387 1,255 1,554 1,506 1,353 1,164 1,317	12,737 12,289 11,734 12,039 12,965 12,918 12,596 13,442 12,937 11,810 11,651 11,556 12,390	20,436 20,577 20,608 20,201 20,457 20,982 20,740 21,434 20,559 20,769 20,669 20,669 20,795 <b>20,687</b>	9.8 10.0 9.5 11.7 11.7 11.2 10.0 10.8 12.1 10.3 11.3 10.0 <b>10.7</b>	27.4 26.7 24.7 27.2 28.4 27.1 26.6 26.7 28.4 26.7 25.1 25.1 26.7	67.5 65.9 62.6 66.5 70.0 67.9 67.4 68.6 70.5 64.1 62.9 61.2 <b>66.3</b>	62.3 59.7 56.9 59.6 63.4 61.6 60.7 62.7 62.9 56.9 55.6	14.5 15.2 15.2 17.6 16.7 16.5 14.9 15.7 17.1 16.0 18.0 16.3 <b>16.1</b>	40.6 40.6 39.4 40.8 40.7 39.9 39.4 39.0 40.3 41.6 39.8 41.0 <b>40.2</b>
2007 January	2,273 1,643 2,072 2,192 2,148 2,372 2,099 2,171 2,333 2,088 2,281 2,253 <b>2,163</b>	6,074 5,278 6,302 5,950 6,181 6,121 5,759 6,115 6,231 5,619 5,961 6,111 <b>5,980</b>	13,706 12,173 13,956 13,842 14,204 13,553 13,754 13,646 12,981 13,188 12,869 <b>13,468</b>	1,446 1,350 1,274 1,360 1,441 1,331 1,506 1,483 1,361 1,325 1,767 1,542 1,433	12,260 10,823 12,682 12,482 12,764 12,222 12,248 12,151 12,285 11,655 11,421 11,327 12,036	20,567 21,309 20,536 20,536 20,620 20,723 20,747 21,025 20,415 20,476 20,535 20,719 <b>20,680</b>	11.1 7.7 10.1 10.7 10.4 11.4 10.1 10.3 11.4 10.2 11.1 10.9	29.5 24.8 30.7 29.0 30.0 29.5 27.8 29.1 30.5 27.4 29.0 29.5 <b>28.9</b>	66.6 57.1 68.0 67.4 68.9 65.4 66.3 64.8 63.4 64.2 62.1 <b>65.1</b>	59.6 50.8 61.8 60.8 61.9 59.0 57.8 60.2 56.9 55.6 54.7 <b>58.2</b>	16.6 13.5 14.8 15.8 15.1 17.5 15.3 15.9 17.1 16.1 17.3 17.5 <b>16.1</b>	44.3 43.4 45.2 43.0 43.5 45.2 41.9 44.8 45.7 43.3 45.2 47.5 <b>44.4</b>
2008 January	2,307 2,676 2,518 2,323 2,450 2,392 2,493 R 2,438 NA NA	6,413 5,850 5,934 6,262 5,926 6,084 6,121 R 6,390 NA NA	13,493 12,604 12,550 13,252 12,862 13,367 13,064 R 13,060 E 11,944 E 13,494 E 12,972	1,623 2,072 1,823 1,754 1,806 2,165 2,069 R 2,068 E 1,361 E 1,532 E 1,826	11,869 10,531 10,728 11,498 11,056 11,202 10,995 R 10,992 E 10,583 E 11,962 E 11,146	20,114 19,782 19,732 19,768 19,729 19,553 19,412 R 19,267 E 18,831 E 19,045 E 19,523	11.5 13.5 12.8 11.7 12.4 12.2 12.8 R 12.7 NA NA	31.9 29.6 30.1 31.7 30.0 31.1 31.5 R 33.2 NA NA	67.1 63.7 63.6 67.0 65.2 68.4 67.3 R 67.8 E 63.4 E 70.9 E <b>66.4</b>	59.0 53.2 54.4 58.2 56.0 57.3 56.6 R 57.1 E 56.2 E 62.8 E 57.1	17.1 21.2 20.1 17.5 19.0 17.9 19.1 R 18.7 NA NA	47.5 46.4 47.3 47.3 46.1 46.5 46.9 R 48.9 NA NA
2007 10-Month Average 2006 10-Month Average	2,143 2,212	5,968 5,580	13,557 13,877	1,388 1,329	12,169 12,548	20,691 20,678	10.4 10.7	28.8 27.0	65.5 67.1	58.8 60.7	15.8 15.9	44.0 40.2

<sup>&</sup>lt;sup>a</sup> 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.

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.

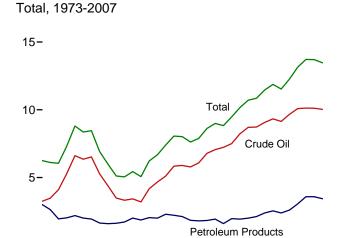
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2007: EIA, Petroleum Supply Annual, annual reports. • 2008: EIA, Petroleum Supply Monthly, monthly reports; and, for the current two months, Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations.

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

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



#### OPEC and Non-OPEC, 1973-2007

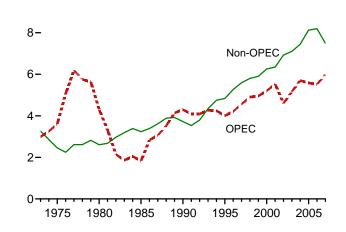
1985

1980

1975

10-

2.8-



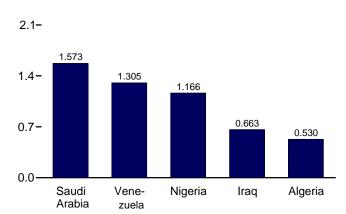
1990

1995

2005

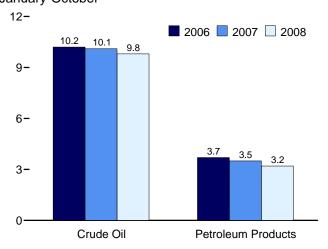
2000

From Selected OPEC Countries, August 2008

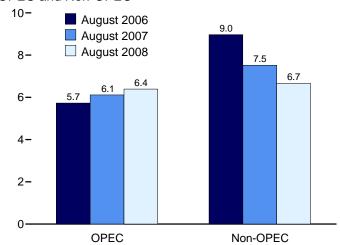


Notes: • OPEC=Organization of the Petroleum Exporting Countries. • Because vertical scales differ, graphs should not be compared.

## Crude Oil and Petroleum Products, January-October

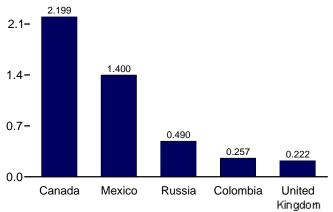


#### **OPEC and Non-OPEC**



From Selected Non-OPEC Countries, August 2008





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

					Imp	orts						Exports	
	Cru	de Oila	<b>.</b>		LPG	<b>j</b> b							
	SPR <sup>c,d</sup>	Total	Distillate Fuel Oil	Jet Fuel <sup>e</sup>	Propane <sup>h</sup>	Total	Motor Gasoline <sup>f</sup>	Residual Fuel Oil	Other <sup>g</sup>	Total	Crude Oil <sup>a</sup>	Petroleum Products	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		5,263	142	80	69	216	140	939	130	6,909	287	258	544
1985 Average		3,201	200	39	67	187	381	510	550	5,067	204	577	781
1990 Average		5,894	278	108	115	188	342	504	705	8,018	109	748	857
1995 Average		7,230	193	106	102	146	265	187	708	8,835	95	855	949
1996 Average		7,508	230	111	119	166	336	248	879	9,478	110	871	981
1997 Average		8,225	228	91	113	169	309	194	945	10,162	108	896	1,003
1998 Average		8,706	210	124	137	194	311	275	888	10,708	110	835	945
1999 Average		8,731	250	128	122	182	382	237	943	10,852	118	822	940
2000 Average		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		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 January		9,766	552	180	206	287	606	553	1,852	13,796	27	1,032	1,059
February		9,983	388	123	206	285	631	458	1,697	13,565	15	1,261	1,276
March		9,750	292	118	181	233	554	359	1,598	12,904	29	1,140	1,170
April	. 33	9,859	297	218	243	366	510	283	1,904	13,438	26	1,372	1,398
May		10,303	437	230	174	309	511	308	2,216	14,315	27	1,323	1,350
June		10,712	297	190	241	372	407	348	1,927	14,253	33	1,301	1,334
July		10,229	361	201	227	350	439	323	2,080	13,984	13	1,374	1,387
August		10,564	363	257	265	392	560	348	2,213	14,697	15	1,240	1,255
September	. 0	10,710	438	234	281	447	376	322	1,964	14,491	21	1,533	1,554
October		10,106	307	171	267	382	405	321	1,625	13,317	37	1,469	1,506
November		9,888	288	101	215	279	388	292	1,769	13,005	24	1,329	1,353
December Average		9,555 <b>10,118</b>	355 <b>365</b>	197 <b>186</b>	224 <b>228</b>	285 <b>332</b>	324 <b>475</b>	290 <b>350</b>	1,713 <b>1,881</b>	12,721 <b>13,707</b>	27 <b>25</b>	1,137 <b>1,292</b>	1,164 <b>1,317</b>
2007 January	. 0	10,211	352	175	244	319	408	394	1,846	13,706	9	1,436	1,446
February		9,009	334	227	213	258	372	314	1,660	12,173	25	1,325	1,350
March		10,380	360	249	185	241	361	510	1,856	13,956	34	1,241	1,274
April		10,161	323	316	121	189	498	374	1,981	13,842	19	1,341	1,360
May		10,328	274	227	146	227	581	360	2,207	14,204	36	1,405	1,441
June		10,015	273	215	151	273	441	360	1,976	13,553	52	1,279	1,331
July		9,939	335	263	135	221	434	412	2,150	13,754	27	1,479	1,506
August		10,316	354	226	164	224	404	344	1,765	13,634	42	1,441	1,483
September		10,307	270	202	232	282	478	347	1,760	13,646	34	1,327	1,361
October		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		10,000	307	159	253	317	412	435	1,863	13,493	12	1,612	1,623
February		9,606	248	101	205	278	354	308	1,708	12,604	20	2,052	2,072
March		9,618	241	98	216	250	374	400	1,569	12,550	29	1,793	1,823
April		9,921	255	180	154	231	386	359	1,919	13,252	14	1,740	1,754
May	. 34	9,657	188	140	159	206	383	350	1,937	12,862	19	1,787	1,806
June		9,994	179	91	97	173	461	382	2,087	13,367	22	2,143	2,165
July		10,101	181	72	128	182	323	292	1,913	13,064	29	2,040	2,069
August		R 10,284	R 109	R 76	R 185	R 300	R 205	R 332	R 1,753	R 13,060	R 40	R 2,028	R 2,068
September		E 8,618	E 166	E 97	E 195	NA	E 368	E 366	NA	E 11,944	E 26	E 1,335	E 1,361
October 10-Month Average		E 10,203 E <b>9,804</b>	E 171 E <b>204</b>	E 86	E 182 E <b>177</b>	NA <b>NA</b>	E 304 E <b>357</b>	E 293 E <b>352</b>	NA <b>NA</b>	E 13,494 E <b>12,972</b>	E 27 E <b>24</b>	E 1,505 E <b>1,802</b>	E 1,532 E <b>1,826</b>
_		•											
2007 10-Month Average 2006 10-Month Average		10,054 10,198	316 373	228 193	179 229	249 342	430 499	372 362	1,907 1,909	13,557 13,877	29 24	1,359 1,304	1,388 1,329

<sup>&</sup>lt;sup>a</sup> Includes lease condensate.

naphtha-type jet fuel.

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.

<sup>&</sup>lt;sup>d</sup> See Note 6, "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

<sup>&</sup>quot;Other."

f Finished motor gasoline. Through 1980, also includes motor gasoline blending components.

<sup>&</sup>lt;sup>9</sup> 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

h Includes propylene.

R=Revised. NA=Not available. --=Not applicable. 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: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2007: EIA, Petroleum Supply Annual, annual reports. • 2008: 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

	Algeria	Angolaa	Ecuadorb	Iraq	Kuwait <sup>c</sup>	Libya	Nigeria	Saudi Arabia <sup>c</sup>	Vene- zuela	Otherd	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	Ö	800	1,339	1,025	199	4,296
1995 Average	234	(a)	(b)	0	218	Ö	627	1,344	1,480	98	4,002
1996 Average	256	(a)	(b)	ĭ	236	ŏ	617	1,363	1,676	62	4,211
1997 Average	285	(a)	(b)	89	253	ŏ	698	1,407	1,773	64	4.569
1998 Average	290	(a)	}b	336	301	ŏ	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	Ö	896	1,572	1,546	72	5,203
-	278	(a)	\ <sub>b</sub> \	795	250	0	885	1,662	1,553	105	5,528
2001 Average	264	(a)	(b)	459	228	0	621	1,552	1,333	83	4,605
2002 Average	382	(a)	(b)	439 481	220	0	867	1,774	1,396	61	,
2003 Average		(a)	(b)		220 250						5,162
2004 Average	452		(°)	656		20	1,140	1,558	1,554	70	5,701
2005 Average	478	(a)	(°)	531	243	56	1,166	1,537	1,529	47	5,587
2006 January	713	(a)	( b )	532	78	70	1,227	1,369	1,566	41	5,596
February	452	(a)	( b )	446	160	70	1,348	1,451	1,553	22	5,502
March	429	(a)	( b )	476	118	42	1,116	1,364	1,532	10	5,088
April	543	(a)	(b)	531	225	69	1,098	1,595	1,400	28	5,488
May	675	(a)	(b)	666	231	66	1,190	1,492	1,470	30	5,819
June	774	(a)	(b)	617	201	144	1,095	1,529	1,306	26	5,691
July	743	(a)	(b)	592	155	119	1,073	1,313	1,469	46	5,509
August	803	(a)	(b)	620	155	111	1,035	1,514	1,439	52	5,729
September	796	ìa΄,	(b)	655	227	73	1,078	1,564	1,386	63	5,842
October	817	ìa΄,	Ìb΄,	505	239	107	1.088	1,382	1.356	42	5.538
November	462	(a)	Ìb΄,	573	259	110	970	1,507	1,281	20	5,181
December	662	(a)	ζb j	419	169	67	1,068	1,491	1,274	71	5,221
Average	657	(a)	(b)	553	185	87	1,114	1,463	1,419	38	5,517
<b>2007</b> January	778	574	(b)	531	172	59	1,136	1,542	1,195	87	6,074
February	555	464	ζb′	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	1,400	1,522	67	6.181
	709	514	(b)	573	263	172	968	1,534	1,364	24	6,121
June	747	404	(b)	460	202	187	906	1,436	1,304	18	5,759
July	827		(b)	520	139						,
August		412 501	(b)	603		129	1,224	1,499	1,320	43	6,115
September	702	591	(b)	603 490	170	74 124	1,181	1,560	1,315	35 46	6,231
October	410 447	342	(b)	490 508	157	134	1,241	1,411	1,388	46 7	5,619
November		435	(b)		154	103	1,306	1,620	1,381		5,961
December	600	439	( . /	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	636	578	260	543	239	105	1,191	1,503	1,290	70	6,413
February	384	350	186	780	266	87	1,025	1,627	1,131	14	5,850
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	111	918	1,604	1,171	19	5,926
June	492	649	184	693	183	115	1,020	1,493	1,215	43	6,084
July	456	652	227	696	122	128	822	1,675	1,340	5	6,121
August	530	495	298	663	203	113	1,166	1,573	1,305	47	6,390
8-Month Average	525	523	216	675	207	114	1,067	1,560	1,210	27	6,124
2007 8-Month Average	736	536	(b)	479	192	119	1,076	1,443	1,357	42	5,980
2006 8-Month Average	643	( <sup>a</sup> )	(b)	561	165	86	1,146	1,452	1,467	32	5,553

<sup>&</sup>lt;sup>a</sup> Angola joined OPEC in January 2007. For 1973-2006, Angola is included in "Total Non-OPEC" on Table 3.3d.

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: Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • 1981-2007: EIA, *Petroleum Supply Annual,* annual reports.

<sup>&</sup>lt;sup>b</sup> 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.

 $<sup>^{\</sup>rm C}$  Imports from the Neutral Zone are reported as originating in either Saudi Arabia or Kuwait depending on the country reported to U.S. Customs.

<sup>&</sup>lt;sup>d</sup> For all years, includes Indonesia, Iran, Qatar, and United Arab Emirates. For 1975-1994, also includes Gabon.

<sup>• 2008:</sup> EIA, Petroleum Supply Monthly, monthly reports.

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

	Brazil	Canada	Colombia	Mexico	Nether- lands	Norway	Russia <sup>a</sup>	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
	5	1,563	271	1,385	25	309	13	226	300	1,495	5,593
1997 Average	26		354		31	236	24	250	293	,	
1998 Average		1,598		1,351						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 January	106	2,385	195	1,798	217	205	219	223	277	2,575	8,200
February	203	2,338	168	1,891	143	199	304	206	318	2,293	8,063
March	193	2,288	170	1,801	105	209	220	300	309	2,220	7,816
April	169	2,292	176	1,750	161	206	220	315	239	2,422	7,950
May	140	2,359	204	1,711	268	199	621	350	373	2,271	8,495
June	151	2,303	223	1,855	212	140	430	358	273	2,618	8,562
July	281	2,204	156	1,709	197	236	425	340	353	2,573	8,474
August	308	2,456	131	1,793	259	273	485	272	377	2,612	8,967
September	191	2,340	185	1,569	153	159	537	239	396	2,879	8,648
October	222	2,340	133	1,644	116	181	366	195	342	2,404	7,779
	182	2,170	46	1,591	152	165	223	265	337	2,404	7,779
November	162	2,461	74	1,366	98	178	369	199	334	2,225	7,623 7,500
December  Average	193	2,461 <b>2,353</b>	155	1,300 <b>1,705</b>	174	176 196	369 369	272	334 <b>328</b>	2,259 <b>2,446</b>	8,190
<b>2007</b> 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
-								292		,	,
March	234 224	2,357	121 90	1,750	160 87	164 203	455 556	373	349 322	1,773	7,655
April		2,498		1,572						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	2,586	198	1,307	92	86	392	213	380	1,600	7,079
February	172	2,464	240	1,327	141	100	451	155	351	1,352	6,753
March	191	2,542	165	1,358	129	80	402	218	290	1,240	6,617
April	234	2,534	169	1,364	185	137	402	229	340	1,395	6,990
May	335	2,346	278	1,218	192	183	441	237	340	1,366	6,936
June	314	2,359	179	1,254	264	122	764	286	314	1,426	7,283
July	272	2,390	191	1,290	148	94	556	187	294	1,520	6,943
August	208	2,199	257	1,400	143	84	490	222	298	1,370	6,669
8-Month Average	<b>244</b>	2,427	210	1,315	161	111	<b>487</b>	218	<b>326</b>	1,409	<b>6,908</b>
2007 8-Month Average	214	2,467	144	1,578	126	161	419	300	326	1,905	7,639
2006 8-Month Average	194	2,328	178	1,787	196	209	366	296	316	2,449	8,320

 $<sup>^{\</sup>rm a}$  Through 1992, may include imports from republics other than Russia in the former U.S.S.R. See "U.S.S.R" in Glossary.

coverage is the 50 States and the District of Columbia.

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

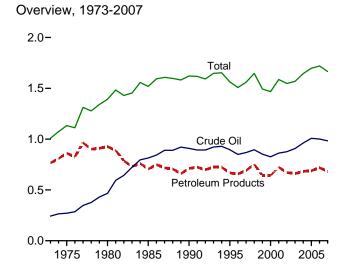
Web Pages: • For all available data beginning in 1973, see http://www.eia.doe.gov/emeu/mer/petro.html. • For related information, see http://www.eia.doe.gov/oil\_gas/petroleum/info\_glance/petroleum.html.

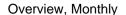
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum* 

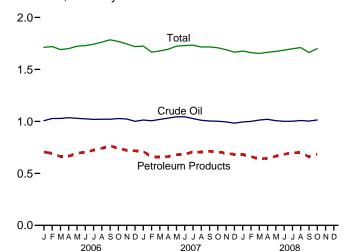
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2007: EIA, Petroleum Supply Annual, annual reports. • 2008: EIA, Petroleum Supply Monthly, monthly reports.

Figure 3.4 Petroleum Stocks

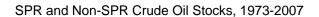
(Billion Barrels, Except as Noted)

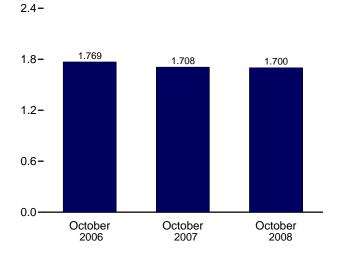


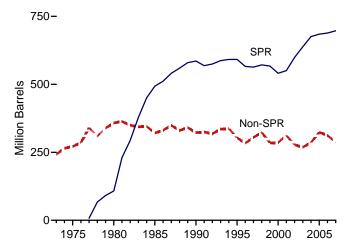




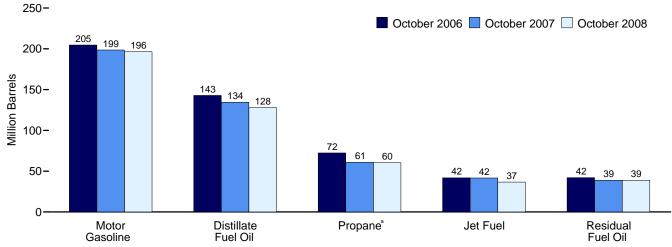
Total Stocks (Crude Oil and Petroleum Products)







#### Selected Products



<sup>&</sup>lt;sup>a</sup> Includes propylene.

Notes: • SPR= Strategic Petroleum Reserve.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.4.

Because vertical scales differ, graphs should not be compared.

Table 3.4 Petroleum Stocks

(Million Barrels)

		Crude Oila		B:		LPC	<b>3</b> b		<b>.</b>		
	<b>SPR</b> <sup>C</sup>	Non-SPR <sup>d,e,f</sup>	Total <sup>e,f</sup>	Distillate Fuel Oil <sup>f,g</sup>	Jet Fuel <sup>h</sup>	Propane <sup>f,i</sup>	Total <sup>f</sup>	Motor Gasoline <sup>f,j</sup>	Residual Fuel Oil <sup>f</sup>	Other <sup>k</sup>	Total <sup>f</sup>
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
<b>2006</b> January	683	323	1,007	139	44	48	95	220	41	166	1,713
February	685	343	1,027	136	43	36	80	222	42	170	1,719
March	686	343	1,029	121	42	30	73	209	41	177	1,691
April	688	348	1,036	116	41	35	82	207	39	179	1,700
May	689	341	1,029	124	41	42	95	214	41	179	1,724
June	688	337	1,025	130	39	50	108	213	43	171	1,729
July	688	332	1,019	138	40	58	120	209	43	174	1,743
August	688	333	1,021	145	40	64	132	209	42	175	1,763
September	688	333	1,021	149	42	71	140	214	43	175	1,785
October	689	339	1,028	143	42	72	141	205	42	169	1,769
November	689	335	1,023	141	38	69	129	204	43	167	1,745
December	689	312	1,001	144	39	62	113	212	42	169	1,720
<b>2007</b> 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	130	42	39	78	231	39	162	1,677
February	699	302	1,000	117	40	29	66	234	39	166	1,662
March	700	313	1,013	107	38	26	65	221	39	169	1,653
April	701	319	1,020	106	39	31	78	210	40	172	1,665
May	704	303	1,007	113	40	38	92	207	41	173	1,673
June	706	295	1,001	121	40	43	103	210	42	170	1,686
July	707	295	1,002	130	41	47	114	206	37	169	1,699
August	707	R 302	1,009	<sup>R</sup> 132	_ 41	_54	R 128	<sup>R</sup> 195	R 39	<sup>R</sup> 167	R 1,710
September	E 703	E 300	E 1,003	E 123	E 37	E 60	RF 131	E 185	E 37	E 151	E 1,662
October	E 702	E 312	E 1.014	E 128	E 37	E 60	F 129	E 196	E 39	E 157	E 1,700

<sup>&</sup>lt;sup>a</sup> Includes lease condensate.

petroleum coke, special naphthas, unfinished oils, waxes, other hydrocarbons and oxygenates, and miscellaneous products. Beginning in 2005, also includes naphtha-type jet fuel.

R=Revised. E=Estimate. 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.

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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."

<sup>&</sup>lt;sup>e</sup> 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, "New Stock Basis," at end of section.

g Does not include stocks that are held in the Northeast Heating Oil Reserve.

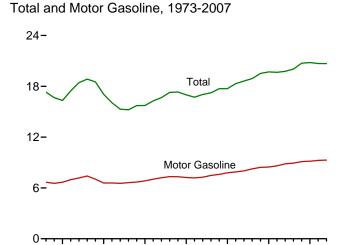
h Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other."

i Includes propylene.

<sup>&</sup>lt;sup>j</sup> Includes finished motor gasoline, motor gasoline blending components, and gasohol; excludes oxygenates.

<sup>&</sup>lt;sup>k</sup> Asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, lubricants, pentanes plus, petrochemical feedstocks,

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



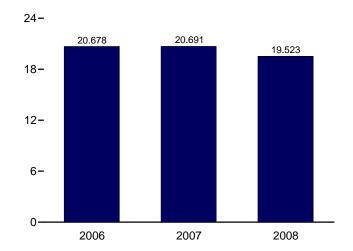
1990

1995

2000

2005

#### Total, January-October



Selected Products, 1973-2007

1980

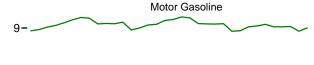
1985

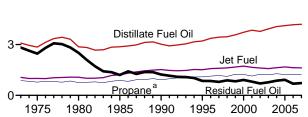
1975

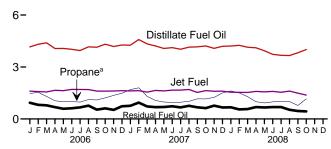
12-



Selected Products, Monthly 12-



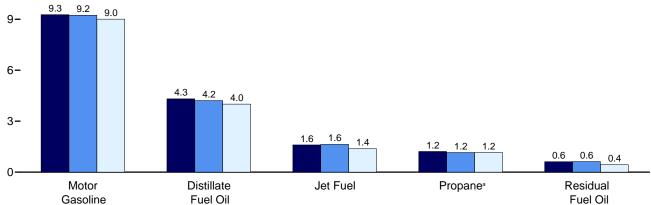




#### Selected Products

12-





<sup>a</sup> Includes propylene.

Notes: • SPR= Strategic Petroleum Reserve.

Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.5.

Table 3.5 Petroleum Products Supplied by Type

	Asphalt and	Aviation	Distillate	Jet <sub>.</sub>	Kero-	LP	<b>G</b> a	Lubri-	Motor	Petro- leum	Residual		
	Road Oil	Gasoline	Fuel Oil	Fuelb	sene	<b>Propane</b> <sup>c</sup>	Total	cants	Gasolined	Coke	Fuel Oil	Othere	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		39	2,851	1,001	159	783	1,333	137	6,675	247	2,462	1,001	16,322
1980 Average		35	2,866	1,068	158	754	1,469	159	6,579	237	2,508	1,581	17,056
1985 Average		27	2,868	1,218	114	883	1,599	145	6,831	264	1,202	1,032	15,726
1990 Average		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		19	3,461	1,622	78	1,120	1,952	168	8,253	447	887	1,508	18,917
1999 Average		21	3,572	1,673	73	1,246	2,195	169	8,431	477	830	1,532	19,519
2000 Average		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		16	3,927	1,578	55	1,215	2,074	140	8,935	455	772	1,579	20,034
2004 Average		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 January		9	4,159	1,605	76	1,465	2,128	119	8,839	490	934	1,783	20,436
February		16	4,308	1,582	118	1,540	2,344	199	8,911	407	816	1,546	20,577
March		22	4,395	1,560	99	1,299	2,157	139	9,054	520	786	1,464	20,608
April		22	4,065	1,654	83	1,050	1,967	151	9,154	442	683	1,467	20,201
May		22	4,072	1,633	48	993	1,911	124	9,308	489	587	1,630	20,457
June		18	4,019	1,704	28	1,007	1,901	148	9,478	548	618	1,805	20,982
July		20 28	3,950	1,700	38 29	970	1,969	134	9,607	492	667	1,502	20,740
August	. 743 . 667	28 18	4,162 4.141	1,696	29 27	1,119 1.094	2,011 1.937	137 119	9,564 9.236	535 624	768 538	1,761 1.644	21,434 20,559
September		19	4,315	1,608 1,605	30	1,094	1,937	164	9,230	514	612	1,654	20,339
October November		13	4,313	1,613	25	1,210	2.143	122	9,267	563	525	1,034	20,769
December		13	4,160	1,631	48	1,483	2,143	96	9,338	633	732	1,762	20,009
Average		18	4,169	1,633	54	1,215	2,052	137	9,253	522	689	1,640	20,687
<b>2007</b> January	. 353	16	4,256	1,616	52	1,694	2,468	151	8,886	435	759	1,574	20,567
February		13	4,582	1,634	48	1,798	2,575	128	9,006	430	946	1,658	21,309
March		14	4,334	1,551	35	1,305	2,113	152	9,178	561	723	1,506	20,536
April		20	4.214	1.647	27	1.070	1.998	144	9.215	437	682	1.696	20.536
May		17	4,068	1,618	14	978	1,846	157	9,434	551	690	1,717	20,620
June		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		21	4,146	1,703	28	1,018	1,912	139	9,582	539	761	1,548	21,025
September		17	4,161	1,533	32	1,162	1,925	127	9,254	546	674	1,541	20,415
October		21	4,213	1,637	28	1,157	1,984	150	9,236	437	626	1,549	20,476
November		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		13	4,209	1,546	31	1,620	2,333	132	8,814	501	672	1,561	20,114
February		13	4,251	1,537	50	1,504	2,314	131	8,842	203	552	1,576	19,782
March		13	4,140	1,533	46	1,288	2,120	143	9,069	474	571	1,328	19,732
April		19	4,108	1,592	25	995	1,855	144	9,117	482	684	1,382	19,768
May		19	3,936	1,564	28	928	1,864	142	9,216	456	661	1,398	19,729
June		16	3,728	1,589	28	988	1,872	135	9,071	450	688	1,395	19,553
July		14 R 00	3,672	1,541	29	1,017	1,932	137	9,072	522 R 474	687	1,249	19,412 R 40,007
August		R 20	R 3,657	R 1,611	R 24	R 1,002	R 1,940	R 157	R 9,090	R 471	<sup>R</sup> 526	R 1,247	R 19,267
September		F 19	E 3,822	E 1,491	RF 21	E 780	F 1,768	F 135	E 8,815	RF 433	E 461	RE 1,326	E 18,831
October 10-Month Average	. F 485 E <b>440</b>	<sup>F</sup> 17 <sup>E</sup> <b>16</b>	E 4,004 E <b>3,951</b>	E 1,376 E <b>1,538</b>	F 24 E <b>31</b>	E 1,160 E <b>1,128</b>	<sup>F</sup> 1,941 <sup>E</sup> <b>1,993</b>	<sup>F</sup> 145 <sup>E</sup> <b>140</b>	E 9,005 E <b>9,012</b>	F 450 E <b>446</b>	E 437 E <b>594</b>	E 1,162 E <b>1,361</b>	E 19,045 E <b>19,523</b>
_			-	•		-	•		•			•	
2007 10-Month Average 2006 10-Month Average	513 558	18 19	4,208 4,158	1,627 1,635	28 57	1,207 1,173	2,062 2,030	143 143	9,295 9,245	484 507	724 701	1,589 1,626	20,691 20,678

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

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. • Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2007: EIA, Petroleum Supply Annual, annual reports. • 2008: 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

b 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.'

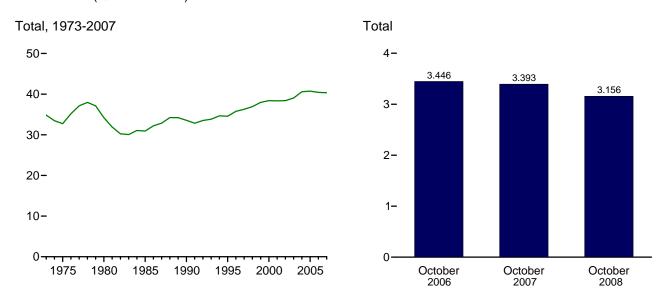
c Includes propylene.

d Finished motor gasoline. Beginning in 1993, also includes ethanol blended

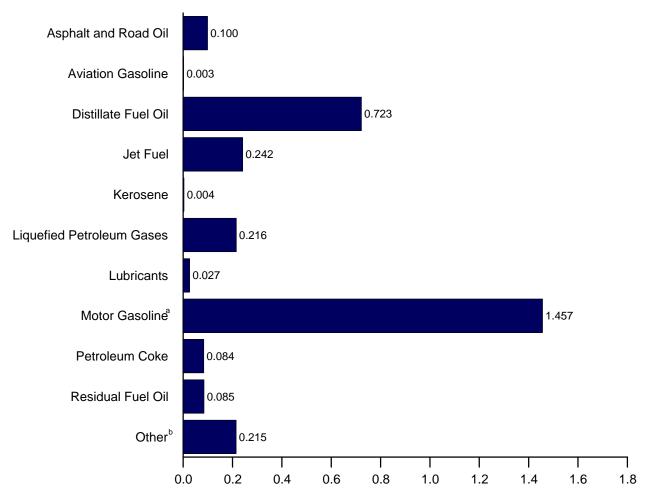
into motor gasoline.

<sup>e</sup> 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.

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



By Product, October 2008



<sup>&</sup>lt;sup>a</sup> Includes ethanol blended into motor gasoline.

<sup>b</sup> All petroleum not shown above.

Note: Because vertical scales differ, graphs should not be compared.

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	Jet Fuel <sup>b</sup>	Kero- sene	LP <sup>c</sup> Propane <sup>c</sup>	G <sup>a</sup> Total	Lubri- cants	Motor Gasoline <sup>d</sup>	Petro- leum Coke	Residual Fuel Oil	Othere	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 1.178	45 40	6,422 6.818	3,129 3,132	88 112	1,284 1.534	2,059 2.512	362 346	13,872 14.825	745 802	2,820 1.955	2,840 2.834	33,553 34,553
1995 Total 1996 Total	1,176	40 37	7,175	3,132	128	1,594	2,660	335	15,064	837	1,955	2,034 3,119	35,757
1997 Total	1,170	40	7,173	3,308	136	1,638	2,690	354	15,254	829	1,828	3,113	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 1,323	31 35	8,652 8,755	3,383 3,475	133 144	1,791 1,721	2,824	313 312	17,379 17,444	1,156 1,133	1,990 2,111	3,429 3,320	40,594
2005 Total	1,323	აⴢ	0,733	3,473	144	1,721	2,682	312	17,444	1,133	۷,111	3,320	40,735
2006 January	61	1	751	282	13	174	238	22	1,430	92	182	319	3,391
February	61	2	703	251	19	165	237	34	1,302	69	144	263	3,084
March	85	3	794	274	17	154	241	26	1,465	97	153	264	3,420
April	102	3	710	281	14	121	213	27	1,433	80	129	251	3,244
May	130 142	3 3	735 702	287 290	8 5	118 116	214 206	23 27	1,506 1,484	91 99	114 116	282 296	3,395 3,369
June July	136	3	713	290	7	115	200	27 25	1,464	99	130	263	3,369
August	153	4	713 752	298	5	133	225	26	1,547	100	150	298	3,557
September	133	3	724	274	5	126	209	22	1,446	113	101	273	3,302
October	122	3	779	282	5	145	223	31	1,499	96	119	287	3,446
November	95	2	730	274	4	157	232	22	1,447	102	99	311	3,319
December	41	2	771	287	8	176	244	18	1,510	118	143	309	3,451
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	134 133	3	727 749	293 299	1	115	213	28 26	1,560	78 404	130	272 257	3,438
August September	133	3 3	749 727	299 261	5 5	121 134	213 207	26 23	1,550 1,449	101 99	148 127	257 253	3,484 3,274
October	122	3	761	288	5	134	221	28	1,449	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	62	2	760	272	5	193	260	25	1,426	93	131	297	3,333
February	60	2	718	253	8	167	241	23	1,338	35	101	287	3,067
March	61	2	748	269	8	153	236	27	1,467	88	111	252	3,270
April	72	3	718	271	4	114	200	26	1,427	87	129	233	3,170
May	91	3	711	275	5	110	208	27	1,491	85	129	245	3,270
June	116	2	651	270	5	114	202	25	1,420	81	130	234	3,136
July	114	2	663	271	5	121	215	26	1,468	97	134	221	3,217
August	R 107	R 3	R 660	R 283	_ 4	R 119	R 216	R 29	R 1,471	88	R 103	228	R 3,193
September	RF 108	F 3	E 668	E 254	F 4	E 90	F 190	F 25	E 1,380	RF 78	E 87	RE 224	E 3,020
October	F 100	F 3	E 723	E 242	F 4	E 138	F 216	F 27	E 1,457	F 84	E 85	E 215	E 3,156
10-Month Total	<sup>E</sup> 891	<sup>E</sup> 25	E 7,020	E 2,659	<sup>E</sup> 53	E 1,319	E 2,183	<sup>E</sup> 259	E 14,346	E 819	E 1,139	E 2,438	<sup>E</sup> 31,833
2007 10-Month Total 2006 10-Month Total	1,034 1,125	28 30	7,452 7,363	2,804 2,818	49 98	1,407 1,368	2,251 2,225	264 263	14,747 14,664	887 928	1,384 1,339	2,727 2,796	33,626 33,650

a Liquefied petroleum gases.

b 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."

<sup>&</sup>lt;sup>c</sup> Includes propylene.

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

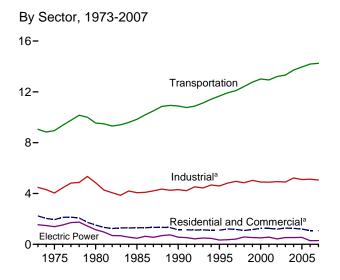
e Pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary 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.

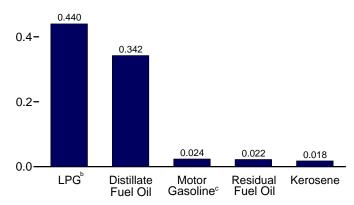
Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-c and 3.8a-c. • See Note 7, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due 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: Tables 3.5, A1, and A3.

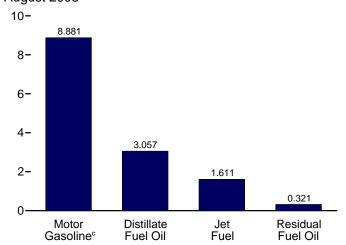
Figure 3.7 Petroleum Consumption by Sector (Million Barrels per Day)



Residential and Commercial Sectors<sup>a</sup>, Selected Products, August 2008 0.6-

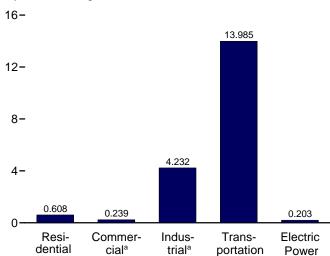


Transportation Sector, Selected Products, August 2008

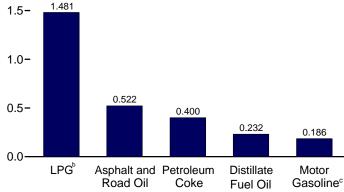


<sup>&</sup>lt;sup>a</sup> Includes combined-heat-and-power plants and a small number of electricity-only plants.

By Sector, August 2008

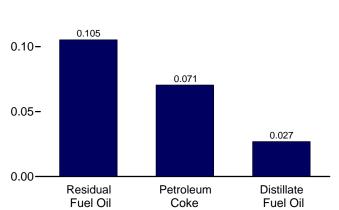


Industrial Sector<sup>a</sup>, Selected Products, August 2008 2.0-



Electric Power Sector, August 2008

0.15 -



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Sources: Tables 3.7a–3.7c.

<sup>&</sup>lt;sup>b</sup> Liquefied petroleum gases.

c Includes ethanol blended into motor gasoline.

Table 3.7a Petroleum Consumption: Residential and Commercial Sectors

		Residen	tial Sector		Commercial Sector <sup>a</sup>								
	Distillate Fuel Oil	Kero- sene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kero- sene	Liquefied Petroleum Gases	Motor Gasoline <sup>b</sup>	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 50	NA	99	506		
	460	31	276	767	252	6	49	58	110	100	465		
1990 Average1995 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 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	202	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	73 72	20	(s)	30	376		
	404	29	412	845	209	8	73	24	(s)	35	348		
2002 Average	425	34	426	885	226	9	75 75	32		48	391		
2003 Average	433	41	401	875	220	10	75 71	25	(s) (s)	53	380		
2004 Average	402	40	391	833	210	10	69	24		50	365		
2005 Average	402	40	391	033	210	10	09	24	(s)	30	303		
2006 January	461	45	410	917	260	10	72	23	(s)	45	411		
February	535	71	452	1,057	301	16	80	23	(s)	52	473		
March	433	59	416	907	244	13	73	24	(s)	42	397		
April	309	50	379	738	174	11	67	24	0	30	307		
May	284	28	368	681	160	7	65	24	0	28	284		
June	265	17	366	648	149	4	65	25	0	26	269		
July	246	23	379	648	138	5	67	25	(s)	24	260		
August	254	17	388	659	143	4	68	25	(s)	25	266		
September	272	16	373	662	153	4	66	24	(s)	27	274		
October	276	18	385	679	156	4	68	24	(s)	27	279		
November	309	15	413	737	174	3	73	24	(s)	30	305		
December	388	28	421	837	219	7	74	24	(s)	38	362		
Average	335	32	395	762	189	7	70	24	(s)	33	323		
<b>2007</b> January	421	31	476	927	237	7	84	23	(s)	43	394		
February	510	28	496	1.034	287	6	88	24	(s)	52	457		
March	447	21	407	875	252	5	72	24	(s)	46	398		
April	261	16	385	662	147	4	68	24	(s)	27	269		
May	191	8	356	555	108	2	63	25	0	19	216		
June	222	9	371	602	125	2	65	25	Ō	23	240		
July	217	4	368	589	122	1	65	25	0	22	236		
August	244	17	368	629	137	4	65	25	(s)	25	256		
September	260	19	371	649	146	4	65	24	(s)	26	267		
October	297	17	382	696	167	4	67	24	(s)	30	293		
November	404	27	406	838	228	6	72	24	(s)	41	372		
December	597	35	441	1.073	337	8	78	24	(s)	61	508		
Average	338	19	402	759	191	4	71	24	(s)	34	325		
2008 January	569	18	450	1,037	321	4	79	23	(s)	58	485		
February	579	30	446	1,057	326	7	79 79	23	(s) (s)	59	494		
March	426	27	409	862	240	6	79 72	23 24	(s)	43	386		
April	330	15	357	703	186	3	63	24	(s)	34	310		
May	235	17	359	611	132	3 4	63	24	(5)	24	248		
	255 257	17	361	634	145	4	64	24	0	26	262		
June	257 244	17	372	R 634	137	4	66	24 24	0	25	262 256		
July	219	17	372 374	608	123	3	66	24	0	22	239		
August 8-Month Average	356	19	374 <b>391</b>	<b>766</b>	201	3 <b>4</b>	69	24 <b>24</b>	(s)	36	239 <b>334</b>		
_													
2007 8-Month Average 2006 8-Month Average	312 346	17 38	402 394	731 779	176 195	4 9	71 70	24 24	(s) (s)	32 34	307 332		

 <sup>&</sup>lt;sup>a</sup> Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
 <sup>b</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended <sup>a</sup> Commercial

R=Revised. NA=Not available. (s)=Less 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

into motor gasoline.

data beginning in 1973.
Sources: See end of section.

Table 3.7b Petroleum Consumption: Industrial Sector

					maasme	I Sectora				
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>c</sup>	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	1,003	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
	484	557	9	1,580	78	105	343	146	1,518	4,819
1996 Average	505	566	9	1,617	82	111	331	127	1,605	4,953
1997 Average	505 521	570	11		86	105	390	100	1,508	4,955 4,844
1998 Average	547	558	6	1,553 1,709	87	80	426	90	1,532	5,035
1999 Average							361			
2000 Average	525 519	563 611	8	1,720	86 79	79 155	390	105	1,458	4,903 4.892
2001 Average			11	1,557				89	1,481	
2002 Average	512 503	566 534	7 12	1,668	78 72	163 171	383 375	83 96	1,474	4,934
2003 Average		534 570		1,561					1,579	4,903
2004 Average	537	570 504	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 January	295	693	20	1,625	61	180	380	149	1,783	5,185
February	330	639	31	1,789	102	182	298	131	1,546	5,049
March	413	729	26	1,646	71	185	427	131	1,464	5,092
April	513	548	22	1,502	78	187	345	109	1,467	4,770
May	633	531	13	1,459	64	190	401	93	1,630	5,014
June	715	451	8	1,451	76	194	446	85	1,805	5,231
July	662	400	10	1,503	69	196	383	86	1,502	4,811
August	743	506	8	1,536	70	195	432	91	1,761	5,342
September	667	586	7	1,479	61	189	529	82	1,644	5,243
October	592	694	8	1,525	84	189	421	90	1,654	5,257
November	478	668	7	1,636	63	189	478	83	1,762	5,364
December	199	682	13	1.666	49	191	548	122	1.656	5.126
Average	521	594	14	1,567	71	189	425	104	1,640	5,124
2007 January	353	769	14	1,884	78	181	345	121	1,574	5,320
February	289	780	13	1.966	66	184	352	127	1.658	5.434
March	370	655	9	1,613	78	187	490	117	1,506	5,026
April	455	669	7	1,526	74	188	366	110	1,696	5.092
May	507	599	4	1,409	81	193	476	109	1,717	5,094
June	637	528	4	1,469	69	194	390	106	1,509	4,905
July	651	458	2	1,460	76	197	343	94	1.593	4.873
August	647	479	8	1,459	72	196	458	97	1,548	4.964
September	606	588	8	1,469	66	189	468	96	1,541	5,031
October	595	594	7	1,515	77	189	370	90	1,549	4,986
November	458	500	12	1,610	71	188	399	127	1,633	4,999
December	348	423	15	1,746	66	189	493	104	1,603	4,987
Average	494	585	9	1,592	73	190	413	108	1,593	5,057
2008 January	302	595	8	1,781	68	180	423	101	1,561	5.019
February	313	594	13	1,766	67	181	125	82	1,576	4,717
March	295	564	12	1,700	74	185	410	88	1,376	4,717
April	360	540	7	1,416	74 74	186	415	103	1,382	4,484
May	444	482	7	1,423	73	188	394	100	1,398	4,510
June	581	259	7	1,429	69	185	372	96	1,395	4,310
July	556	R 225	8	1,429	71	185	R 455	R 102	1,249	R 4,325
August	522	232	7	1,473	81	186	400	78	1,249	4,232
8-Month Average	<b>422</b>	435	9	1,548	<b>72</b>	185	376	94	1,391	4,531
2007 8-Month Average 2006 8-Month Average	491 540	615 562	7 17	1,594 1,562	74 74	190 189	404 390	110 109	1,600 1,620	5,085 5,062

<sup>&</sup>lt;sup>a</sup> Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

<sup>b</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended

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 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.

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

Table 3.7c Petroleum Consumption: Transportation and Electric Power Sectors

				Electric Power Sector <sup>a</sup>								
	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Liquefied Petroleum Gases	Lubri- cants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total	Distillate Fuel Oil <sup>d</sup>	Petro- leum Coke	Residual Fuel Oil <sup>e</sup>	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	ż	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 January	9	2,712	1,605	21	58	8,636	565	13,604	34	110	175	319
February	16	2,799	1,582	23	96	8,706	484	13,707	33	108	149	291
March	22	2,965	1,560	21	67	8,846	523	14,004	24	93	91	208
April	22	3,001	1,654	20	73	8,943	426	14,139	33	98	117	248
May	22	3,065	1,633	19	60	9,093	356	14,248	32	88	111	230
June	18	3,116	1,704	19	72	9,260	328	14,517	38	102	178	317
July	20	3,119	1,700	20	65	9,386	333	14,642	46	109	225	379
August	28	3,207	1,696	20	66	9,343	357	14,717	53	102	296	450
September	18	3,103	1,608	19	58	9,023	296	14,125	27	95	133	255
October	19	3,158	1,605	20	80	9,053	351	14,285	31	94	144	268
November	13	2,996	1,613	21	59	9,031	268	14,003	32	85	143	260
December Average	13 <b>18</b>	2,945 <b>3,017</b>	1,631 <b>1,633</b>	22 <b>20</b>	47 <b>67</b>	9,123 <b>9,039</b>	451 <b>395</b>	14,230 <b>14,189</b>	34 <b>35</b>	85 <b>97</b>	121 <b>157</b>	240 <b>289</b>
<b>2007</b> January	16	2,785	1,616	24	74	8,681	413	13,609	45	90	182	317
February	13	2,915	1,634	26	62	8,799	422	13,871	90	78	345	513
March	14	2,942	1,551	21	74	8,966	393	13,961	38	70	167	275
April	20	3,107	1,647	20	70	9,003	381	14,248	30	70	165	266
May	17	3,137	1,618	18	76	9,217	419	14,503	33	76	143	252
June	22	3.195	1.663	19	65	9.273	420	14.657	44	90	185	319
July	17	3,186	1,664	19	72	9,418	373	14,748	43	77	180	300
August	21	3,219	1,703	19	68	9,361	392	14,783	67	80	247	394
September	17	3,132	1,533	19	62	9,041	388	14,192	35	77	163	275
October	21	3,120	1,637	20	73	9,023	357	14,251	36	67	149	251
November	15	2,912	1,600	21	67	9,017	529	14,161	29	64	71	165
December	11	2,801	1,603	23	62	9,038	396	13,933	35	80	104	219
Average	17	3,038	1,622	21	69	9,072	406	14,245	43	77	174	294
2008 January	13	2,671	1,546	23	64	8,611	408	13,337	53	78	106	237
February	13	2,711	1,537	23	64	8,638	322	13,308	41	77	89	207
March	13	2,883	1,533	21	70	8,860	362	13,742	27	63	78	168
April	19	3,023	1,592	18	70	8,907	459	14,089	28	66	88	182
May	19	3,060	1,564	19	69	9,003	446	14,180	27	62	91	180
June	16	3,019	1,589	19	66	8,862	407	13,977	49	79	159	286
July	14	R 3,033	1,541	19	67	8,863	R 436	R 13,972	R 33	R 67	R 125	R 225
August	20	3,057	1,611	19	76	8,881	321	13,985	27	71	105	203
8-Month Average	16	2,933	1,564	20	68	8,829	395	13,826	36	70	105	211
2007 8-Month Average 2006 8-Month Average	18 19	3,062 3,000	1,637 1,642	21 20	70 69	9,093 9,030	401 421	14,301 14,202	48 37	79 101	200 168	328 306

<sup>&</sup>lt;sup>a</sup> 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

amount of fuel oil no. 4.

R=Revised.

Notes: • Transportation sector data are estimates. • For total petroleum ronsumption 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.

Sources: See end of section.

are for electric utilities and independent power producers.

b 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.

<sup>&</sup>lt;sup>c</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended

into motor gasoline.

<sup>d</sup> Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>&</sup>lt;sup>e</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small

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

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

2- Distillate Fuel Oil

Residual
1- Fuel Oil

LPGb

Kerosene

1990

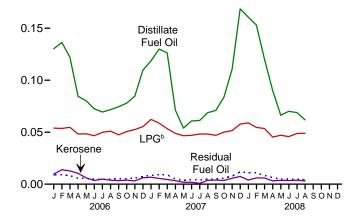
1995

2000

2005

Residential and Commercial Sectors<sup>a</sup>, 1973-2007

Residential and Commercial Sectors<sup>a</sup>, Monthly 0.20-

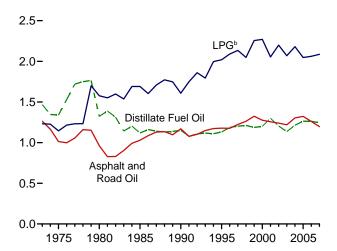


Industrial Sector<sup>a</sup>, 1973-2007

1980

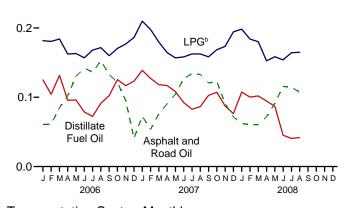
1985

1975



Industrial Sector<sup>a</sup>, Monthly

0.3-

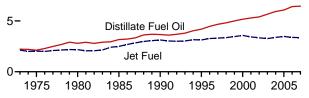


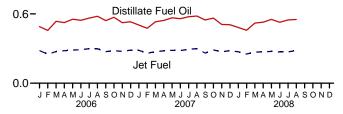
Transportation Sector, 1973-2007











<sup>a</sup> Includes combined-heat-and-power plants and a small number of electricity-only plants.

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Sources: Tables 3.8a-3.8c.

20-

<sup>&</sup>lt;sup>b</sup> Liquefied petroleum gases.

<sup>&</sup>lt;sup>c</sup> Beginning in 1983, includes ethanol blended into motor gasoline.

Table 3.8a Heat Content of Petroleum Consumption: Residential and Commercial **Sectors** (Trillion Btu)

		Residenti	ial Sector				Con	nmercial Sec	ctora		
	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Total	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Motor Gasoline <sup>b</sup>	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 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 January	83	8	46	137	47	2	8	4	(s)	9	69
February	87	11	46	144	49	3	8	3	(s)	9	72
March	78	10	46	135	44	2	8	4	(s)	8	67
April	54	8	41	103	30	2	7	4	Ò	6	49
May	51	5	41	97	29	1	7	4	0	5	47
June	46	3	40	89	26	1	7	4	0	5	43
July	44	4	42	91	25	1	7	4	(s)	5	42
August	46	3	43	92	26	1	8	4	(s)	5	43
September	48	3	40	91	27	1	7	4	(s)	5	43
October	50	3	43	96	28	1	8	4	(s)	5	46
November	54	3	45	101	30	1	8	4	(s)	6	48
December	70	5	47	122	40	1	8	4	(s)	7	60
Total	712	66	520	1,299	401	15	92	46	(s)	75	630
2007 January	76	5	53	134	43	1	9	4	(s)	8	66
February	83	5	50	138	47	1	9	3	(s)	9	69
March	81	4	45	130	46	1	8	4	(s)	9	67
April	46	3	41	90	26	1	7	4	(s)	5	42
May	34	1	40	75	19	(s)	7	4	0	4	35
June	39	1	40	80	22	(s)	7	4	0	4	37
July	39	1	41	81	22	(s)	7	4	0	4	38
August	44	3	41	88	25	1	7	4	(s)	5	42
September	45	3	40	89	26	1	7	4	(s)	5	42
October	54	3	43	99	30	1	8	4	(s)	6	48
November	71	5	44	119	40	1	8	4	(s)	8	60
December Total	108 <b>719</b>	6 <b>40</b>	49 <b>527</b>	163 <b>1,286</b>	61 <b>405</b>	1 <b>9</b>	9 <b>93</b>	4 <b>46</b>	(s) <b>(s)</b>	12 <b>79</b>	87 <b>633</b>
2008 January	103	3	50	156	58	1	9	4	(s)	11	83
February	98	5	46	149	55	1	8	4	(s)	11	79 65
March	77 50	5	45	127	43	1	8	4	(s)	8	65 50
April	58 42	3 3	39 40	99	33	1 1	7 7	4 4	(s) 0	6	50
May	42 45	3	40 39	85 87	24 25	1	7	4	0	5 5	40 41
June	45 44	3	39 41	87 89	25 25	1	7	4	0	5 5	R 42
July	44	3	42	84	25	1	7	4	0	4	38
August 8-Month Total	<b>506</b>	2 <b>7</b>	342	875	285	6	60	30	(s)	<b>56</b>	438
2007 8-Month Total	442	23	351	816	249	5	62	31		49	396
2006 8-Month Total	442 490	23 53	345	889	276	12	62 61	31	(s) (s)	49 52	432

<sup>&</sup>lt;sup>a</sup> Commercial sector fuel use, including combined-heat-and-power (CHP) and commercial electricity-only plants.

<sup>b</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended

R=Revised. NA=Not available. (s)=Less 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.

into motor gasoline.

Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector

(Trillion Btu)

					Industri	al Sectora				
	Asphalt and Road Oil	Distillate Fuel Oil	Kerosene	Liquefied Petroleum Gases	Lubricants	Motor Gasoline <sup>b</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>c</sup>	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	9,213
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 January	61	125	4	182	11	29	71	29	319	831
February	61	104	5	181	17	27	50	23	263	732
March	85	132	5	184	13	30	80	25	264	818
April	102	96	4	162	14	29	62	21	251	741
May	130	96	2	163	12	31	75	18	282	809
June	142	79	1	157	14	30	81	16	296	816
July	136	72	2	168	13	32	72	17	263	774
August	153	91	1	172	13	32	81	18	298	858
September	133	102	1	160	11	30	96	16	273	821
October	122	125	1	170	16	31	79	18	287	848
November	95	117	1	177	11	30	86	16	311	844
December Total	41 <b>1,261</b>	123 <b>1,263</b>	2 <b>30</b>	186 <b>2,062</b>	9 <b>156</b>	31 <b>360</b>	102 <b>934</b>	24 <b>239</b>	309 <b>3,416</b>	828 <b>9,720</b>
2007 January	73	139	2	210	15	29	64	24	302	857
February	54	127	2	198	11	27	59	22	284	784
March	76	118	2	180	15	30	92	23	270	804
April	91	117	1	164	13	29	66	21	287	790
May	104	108	1	157	15	31	89	21	290	816
June	127	92	1	158	13	30	71	20	246	758
July	134	83	(s)	162	14	32	64	18	272	780
August	133	87	` 1	162	13	32	86	19	257	790
September	121	103	1	158	12	30	85	18	253	780
October	122	107	1	169	15	31	69	18	267	799
November	91	87	2	173	13	30	72	24	282	774
December	72	76	3	194	12	31	92	20	299	800
Total	1,197	1,245	18	2,086	161	361	909	248	3,308	9,532
2008 January	62	107	1	198	13	29	79	20	297	807
February	60	100	2	184	12	27	22	15	287	710
March	61	102	2	180	14	30	77	17	252	735
April	72	94	1	153	13	29	75	19	233	690
May	91	87	1	158	14	30	74	20	245	721
June	116	_ 45	1	154	13	29	67	_ 18	234	_ 677
July	114	<sup>R</sup> 41	1	164	13	30	85	R 20	221	<sup>R</sup> 690
August	107	42	1	165	15	30	75	15	228	678
8-Month Total	684	619	12	1,356	107	235	553	144	1,998	5,708
2007 8-Month Total 2006 8-Month Total	791 870	871 795	10 24	1,391 1,368	109 108	241 239	591 571	168 167	2,207 2,236	6,380 6,379

<sup>&</sup>lt;sup>a</sup> Industrial sector fuel use, including that at industrial combined-heat-and-power

R=Revised. (s)=Less 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.

<sup>(</sup>CHP) and industrial electricity-only plants.

b Finished motor gasoline. Beginning in 1993, also includes ethanol blended

into motor gasoline.

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

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

				Transporta	tion Secto	r			Electric Power Sector <sup>a</sup>				
	Aviation Gasoline	Distillate Fuel Oil	Jet Fuel <sup>b</sup>	Liquefied Petroleum Gases	Lubri- cants	Motor Gasoline <sup>c</sup>	Residual Fuel Oil	Total	Distillate Fuel Oild	Petro- leum Coke	Residual Fuel Oil <sup>e</sup>	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		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		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	
<b>2006</b> January	1	490	282	2	11	1,397	110	2,293	6	21	34	61	
February	2	457	251	2	16	1,272	85	2,086	5	18	26	50	
March	3	535	274	2	13	1,431	102	2,361	4	17	18	39	
April		524	281	2	13	1,400	80	2,305	6	18	22	46	
May	3	553	287	2	11	1,471	69	2,398	6	16	22	44	
June	3 3	545	290 299	2 2	13	1,450	62	2,364	7 8	18 20	34 44	59	
July		563			12	1,518	65	2,463				72	
August	4	579 542	298	2 2	12 11	1,511	70	2,477	9 5	19	58 25	86	
September	3 3	542 570	274 282	2	11	1,412 1.464	56 68	2,299 2,405	6	17 17	25 28	47 51	
October November		570 524	262 274	2	11	1,464	51	2,405	6	17	26 27	48	
December	2	532	287	2	9	1,414	88	2,277	6	16	24	46	
Total	33	6,414	3,379	27	147	17,216	906	28,123	74	214	361	648	
2007 January	3	503	284	3	14	1,404	80	2,291	8	17	36	60	
February	2	476	259	3	11	1,286	74	2,110	15	13	61	89	
March	2	531	273	2	14	1,451	77	2,350	7	13	33	53	
April	3	543	280	2	13	1,410	72	2,322	5	13	31	49	
May		566	284	2	14	1,491	82	2,443	6	14	28	48	
June	3	558	283	2	12	1,452	79	2,390	8	16	35	59	
July	3	575	293	2	13	1,524	73	2,482	8	14	35	57	
August		581	299	2	13	1,515	76	2,490	12	15	48	75	
September	3	547	261	2	11	1,416	73	2,313	6	14	31	51	
October	3	563	288	2	14	1,460	70	2,400	6	12	29	48	
November	2	509	272	2	12	1,412	100	2,309	5	12	13	30	
December Total	2 <b>32</b>	506 <b>6,459</b>	282 <b>3,358</b>	3 <b>27</b>	12 <b>152</b>	1,462 <b>17,281</b>	77 <b>933</b>	2,343 <b>28,242</b>	6 <b>92</b>	15 <b>168</b>	20 <b>399</b>	42 <b>660</b>	
		•	•			•		,					
2008 January	2	482	272	3	12 11	1,393	79 50	2,243 2.092	10	15 14	21 16	45 27	
February March	2 2	458 521	253 269	2 2	11 13	1,307 1.433	59 71	2,092	7 5	14 12	16 15	37 32	
	3	521 528	269 271	2	13	1,433	87	2,312	5	12	15	32	
April May		528 553	271	2	13	1,395	87 87	2,298	5	12	17	33 34	
June	2	528	270	2	12	1,437	77	2,369	9	14	30	53	
July	2	R 548	270	2	13	1,367	R 85	R 2,354	R 6	R 13	R 24	R 43	
August	3	552	283	2	14	1,434	63	2,354	5	13	21	39	
8-Month Total	20	4,169	<b>2,164</b>	18	101	11,243	606	18,321	51	103	161	315	
2007 8-Month Total 2006 8-Month Total	22 24	4,334 4,246	2,255 2,263	18 18	103 102	11,532 11,450	613 643	18,877 18,746	68 52	115 148	306 257	490 457	

<sup>&</sup>lt;sup>a</sup> 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.
<sup>b</sup> Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in

R=Revised.

Notes: • Transportation sector data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a-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.

<sup>&</sup>lt;sup>b</sup> 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.

<sup>&</sup>lt;sup>c</sup> Finished motor gasoline. Beginning in 1993, also includes ethanol blended into motor gasoline.

into motor gasoline.

<sup>d</sup> Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

 $<sup>^{\</sup>rm e}$  Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

#### **Petroleum**

**Note 1. Survey Respondents.** The 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 Explanatory Note 7, "Frames Maintenance," in the *Petroleum Supply Monthly*.

**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.** 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. 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."

1981–2007: EIA, Petroleum Supply Annual.

2008: 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.

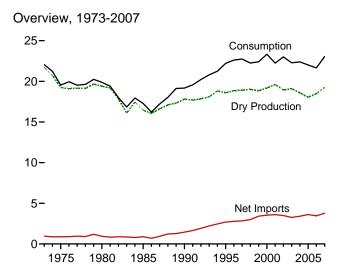
Other Petroleum Products—Consumption of all remaining petroleum products is assigned to the industrial sector. Other petroleum products include pentanes plus, petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1981, also includes negative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

### **Natural Gas**

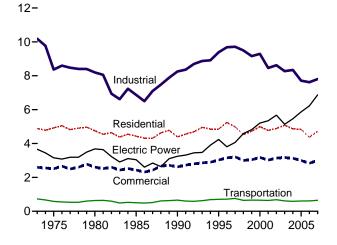


Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

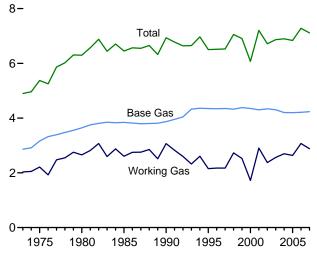
Figure 4.1 Natural Gas (Trillion Cubic Feet)



#### Consumption by Sector, 1973-2007

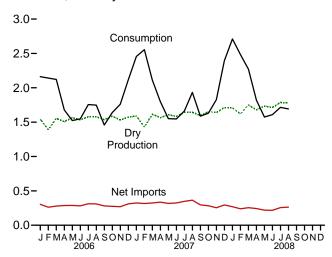


Underground Storage, End of Year, 1973-2007

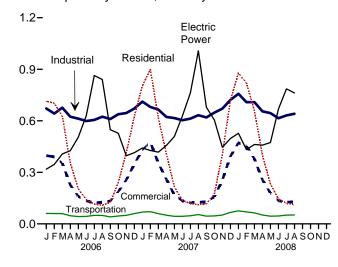


Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/natgas.html. Sources: Tables 4.1, 4.3, and 4.4.

#### Overview, Monthly



#### Consumption by Sector, Monthly



### Underground Storage, End of Month 9-

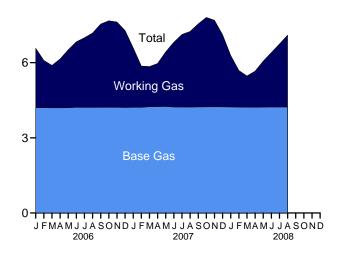


Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Gross With- drawals <sup>a</sup>	Marketed Production (Wet) <sup>b</sup>	Extraction Loss <sup>c</sup>	Dry Gas Production <sup>d</sup>	Supple- mental Gaseous Fuels <sup>e</sup>	Imports	Trade Exports	Net Imports	Net Storage With- drawals <sup>f</sup>	Balancing Item <sup>g</sup>	Consump- tion <sup>h</sup>
1973 Total 1975 Total	24,067 21,104	<sup>i</sup> 22,648 <sup>i</sup> 20,109	917 872	<sup>j</sup> 21,731 <sup>j</sup> 19,236	NA NA	1,033 953	77 73	956 880	-442 -344	-196 -235	22,049 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	<sup>j</sup> 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	22,610
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 January	1,982	1,618	76	1,543	6	360	56	305	271	39	2,162
February	1,801	1,458	68	1,390	6	321	59	262	495	-11	2,141
March	1,993	1,630	76	1,554	6	348	69	279	206	77	2,122
April	1,920	1,582	74 77	1,508	5	332	45	287	-260	139	1,678
May	1,967	1,642 1,609	77 75	1,566	4 6	351 348	63 66	288 282	-374 -317	40 43	1,524 1,547
June	1,934			1,534	5	346 371		262 312			1,547
July	1,980 1,989	1,655 1,656	77 77	1,578 1.578	5 6	365	59 55	312	-166 -194	26 48	1,756
August September	1,969	1,656	77 75	1,576	5	334	53	281	-194 -364		1,748
October	2,015	1,611	73 78	1,587	6	334	59	275	-364 -135	(s) -93	1,436
November	1,966	1,607	75 75	1,532	6	339	70	269	51	-93 -97	1,761
December	2,020	1,649	77 77	1,572	6	383	70 72	311	351	-125	2,116
Total	23,507	19,382	906	18,476	66	4,186	724	3,462	-436	85	21,653
2007 January	2,043	E 1,659	69	E 1,590	E 6	393	69	324	684	-148	2,456
February	1,841	E 1,493	64	E 1,429	<sup>E</sup> 6	373	57	316	731	73	2,555
March	2,078	E 1,687	74	E 1,614	<sup>E</sup> 6	402	77	325	48	119	2,112
April	1,999	<sup>E</sup> 1,636	71	E 1,565	<sup>E</sup> 5	387	51	336	-120	11	1,798
May	2,078	<sup>E</sup> 1,683	75	E 1,608	E 4	380	62	318	-459	81	1,552
June	1,978	<sup>E</sup> 1,655	71	<sup>E</sup> 1,584	E 5	381	57	324	-389	23	1,547
July	2,055	E 1,717	74	E 1,643	E 5	419	71	348	-313	-21	1,662
August	2,059	E 1,716	73	E 1,643	E 5	427	62	365	-126	46	1,933
September	2,006	E 1,668	72	E 1,596	E 5	361	65	296	-298	-11 P 50	1,588
October	2,107	E 1,731	77	E 1,654	E 4 E 5	347	64	284	-258	R -53	R 1,631
November	2,094	E 1,714 E 1,790	76	E 1,638	E 4	341	86	254	108	<sup>R</sup> -177 <sup>R</sup> -188	R 1,828
December Total	2,197 <b>24,536</b>	E <b>20,151</b>	77 <b>874</b>	E 1,713 E <b>19,278</b>	E 61	397 <b>4,608</b>	101 <b>822</b>	295 <b>3,785</b>	569 <b>177</b>	R <b>-246</b>	R 2,394 R <b>23,054</b>
2008 January	2,196	E 1,783	75	E 1,709	E <sub>2</sub>	383	113	270	824	-93	2.711
February	2.077	E 1.693	73 72	E 1.621	E 4	343	105	239	593	26	2.484
March	2,243	E 1.828	78	E 1,750	<sup>E</sup> 5	361	106	255	219	40	2,270
April	2.133	E 1.756	76	E 1.679	<sup>E</sup> 5	318	76	242	-190	83	1.819
May	2,188	E 1.814	80	E 1.734	E 4	292	73	219	-402	19	1,575
June	2.145	E 1,788	73	E 1,715	E 5	283	65	218	-339	R 12	1,609
July	R 2,218	RE 1,864	77	RE 1,787	E4	RE 318	R 61	RE 257	R -342	R 9	R 1,715
August	2,185	E 1,856	77	E 1,779	E 5	E 322	E 58	E 264	-350	-6	1,693
8-Month Total	17,384	E 14,382	607	E 13,775	<sup>E</sup> 34	E 2,622	<sup>E</sup> 658	E 1,963	13	90	15,876
2007 8-Month Total	16,133	E 13,248	572	E 12,676	E 43	3,161	506	2,656	56	183	15,614
2006 8-Month Total	15,566	12,850	601	12,249	43	2,796	471	2,326	-340	401	14,678

a Gas withdrawn from natural gas and crude oil wells; excludes lease

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, "Consumption, 1989-1992," at end of section.

R=Revised. E=Estimate. (s)=Less than 500 million cubic feet and greater than -500 million cubic feet. 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: 1973-2002—Energy Information Administration (EIA), Natural Gas Annual, annual reports. 2003 forward—EIA, Natural Gas Monthly, October 2008, Table 1.

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, "Production," at end of section.
c See Note 2, "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 1980-2006, also includes net

withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Storage,"

<sup>&</sup>lt;sup>9</sup> See Note 5, "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, "Consumption," at end of section.
i May include unknown quantities of nonhydrocarbon gases.

Table 4.2 Natural Gas Trade by Country

(Billion Cubic Feet)

					Impo	orts						Exp	orts	
	Algeria	Canadab	Egypt <sup>a</sup>	<b>Mexico</b> b	Nigeria	Omana	Qatara	Trinidad and Tobago <sup>a</sup>	Other <sup>a,c</sup>	Total	Canadab	Japan <sup>a</sup>	Mexico <sup>b</sup>	Total
4072 Tatal	•	4.020				•	•	•	•	4.022	45	40	44	77
1973 Total	3 5	1,028 948	0	2 0	0	0	0 0	0 0	0 0	1,033 953	15 10	48 53	14 9	77 73
1980 Total	86	797	0	102	0	0	0	0	0	985	l .	45	4	73 49
1985 Total	24	926	0	0	0	0	Ö	0	0	950	(s) (s)	53	2	55
1990 Total	84	1,448	Ö	Ö	Ö	Ö	ő	Ö	Ö	1,532	17	53	16	86
1995 Total	18	2,816	Ö	7	Ö	Ö	Ö	Ö	0	2,841	28	65	61	154
1996 Total	35	2,883	Ŏ	14	Ŏ	Ŏ	ŏ	Ŏ	5	2,937	52	68	34	153
1997 Total	66	2,899	Ö	17	Ŏ	Ŏ	Ŏ	Ŏ	12	2,994	56	62	38	157
1998 Total	69	3,052	Ŏ	15	Ŏ	Ŏ	Ŏ	Ö	17	3,152	40	66	53	159
1999 Total	76	3,368	Ŏ	55	Ō	Ō	20	51	17	3,586	39	64	61	163
2000 Total	47	3,544	Ŏ	12	13	10	46	99	11	3,782	73	66	106	244
2001 Total	65	3,729	Ö	10	38	12	23	98	2	3,977	167	66	141	373
2002 Total	27	3,785	Ö	2	8	3	35	151	5	4,015	189	63	263	516
2003 Total	53	3,437	Ö	0	50	9	14	378	3	3,944	271	66	343	680
2004 Total	120	3,607	Ö	Ö	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 January	3	320	3	1	3	0	0	30	0	360	32	6	18	56
February	3	282	5	(s)	3	0	0	28	0	321	33	6	20	59
March	3	314	0	` <u>1</u>	0	0	0	30	0	348	37	6	26	69
April	3	273	14	(s)	6	0	0	36	0	332	16	6	24	45
May	0	283	20	(s)	3	0	0	44	0	351	21	6	36	63
June	3	286	14	0	6	0	0	39	0	348	23	6	37	66
July	3	313	15	0	6	0	0	33	0	371	17	6	37	59
August	0	313	9	0	6	0	0	37	0	365	17	6	32	55
September	0	290	9	3	6	0	0	25	0	334	23	4	26	53
October	0	296	3	1	9	0	0	25	0	334	30	3	25	59
November	0	290	17	1	6	0	0	25	0	339	45	5	20	70
December Total	0 <b>17</b>	328 <b>3,590</b>	11 <b>120</b>	4 <b>13</b>	3 <b>57</b>	0 <b>0</b>	0 <b>0</b>	37 <b>389</b>	0 <b>0</b>	383 <b>4,186</b>	47 <b>341</b>	4 <b>61</b>	21 <b>322</b>	72 <b>724</b>
		•												
<b>2007</b> 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 3	380	35 28	4 3	24 26	62
June	12	291	15	4	20	0	6	30	-	381		3 4		57
July August	0 R 3	315 335	12 <sup>R</sup> 12	5 4	12 15	0	3 6	62 <sup>R</sup> 46	9 6	419 427	38 28	4	29 30	71 62
September	3	318	12	2	3	0	0	24	0	361	33	4	28	62 65
October	0	314	3	2	0	0	0	24 29	0	347	33	2	28 29	d64
November	0	314	3	3	0	0	0	29	0	341	58	3	29	86
December	0	372	0	4	0	0	0	21	0	397	72	4	25	101
Total	R 77	3,783	R 115	54	95	Ŏ	18	R 448	18	4,608	482	47	292	d <b>822</b>
2008 January	0	353	3	1	0	0	0	25	0	383	68	3	42	113
February	0	320	0	Ó	0	0	0	21	3	343	62	3	40	105
March	0	336	0	1	0	0	0	21	3	361	69	4	33	106
April	0	286	3	(s)	3	0	0	26	0	318	46	4	26	76
May	0	257	3	4	0	0	0	25	3	292	43	5	25	73
June	Ö	247	6	3	3	Ö	3	21	Ö	283	30	5	30	65
July	0	R 284	6	R 4	0	Ö	0	25	Ö	RE 318	29	5	R 28	<sup>R</sup> 61
August	Ö	E 283	3	E 4	3	Ö	Ö	24	5	E 322	E 24	6	E 28	E 58
8-Month Total	0	E 2,366	25	E 17	9	0	3	187		E 2,622	E 372	34	E 252	E 658
2007 8-Month Total	74	2,468	97	44	92	0	18	350	18	3,161	289	34	183	506
2006 8-Month Total	17	2,385	80	3	33	Ö	0	278	Ô	2,796	196	45	230	471

<sup>&</sup>lt;sup>a</sup> As liquefied natural gas.

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

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: Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • 1988-2005: EIA, Natural Gas Annual, annual reports. • 2006 forward: EIA, Natural Gas Monthly, October 2008, Table 4; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

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, "Imports and Exports," at end of section.

 $<sup>^{\</sup>rm c}$  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; 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, "Imports and Exports," at end of section. • Totals may

Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
					Industrial			Tr	ansportatio	n		
	Resi-	Com-	Lease and		Other Industr	ial		Pipelines <sup>d</sup> and Dis-	Vehicle		Electric Power	
	dential	merciala	Plant Fuel	CHPb	Non-CHP <sup>c</sup>	Total	Total	tributione	Fuel	Total	Sector <sup>f,g</sup>	Total
1973 Total 1975 Total 1980 Total	4,879 4,924 4,752 4.433	2,597 2,508 2,611 2,432	1,496 1,396 1,026	(h) (h) (h)	8,689 6,968 7,172 5,901	8,689 6,968 7,172	10,185 8,365 8,198 6.867	728 583 635 504	NA NA NA NA	728 583 635 504	3,660 3,158 3,682	22,049 19,538 19,877
1985 Total 1990 Total 1995 Total 1996 Total	4,433 4,391 4,850 5,241 4,984	2,432 2,623 3,031 3,158 3,215	966 1,236 1,220 1,250 1,203	1,055 1,258 1,289 1,282	5,963 6,906 7,146 7,229	5,901 <sup>1</sup> 7,018 8,164 8,435 8,511	9,384 9,685 9,714	660 700 711 751	(s) 5 6 8	504 660 705 718 760	3,044 13,245 4,237 3,807 4,065	17,281 19,174 22,207 22,610 22,737
1997 Total 1998 Total 1999 Total 2000 Total	4,520 4,726 4,996	2,999 3,045 3,182	1,173 1,079 1,151	1,355 1,401 1,386	6,965 6,678 6,757	8,320 8,079 8,142	9,493 9,158 9,293	635 645 642	9 12 13	645 657 655	4,588 4,820 5,206	22,246 22,405 23,333
2001 Total 2002 Total 2003 Total 2004 Total 2005 Total	4,771 4,889 5,079 4,869 4,827	3,023 3,144 3,179 3,129 2,999	1,119 1,113 1,122 1,098 1,112	1,310 1,240 1,144 1,191 1,084	6,035 6,267 6,007 6,052 5,514	7,344 7,507 7,150 7,243 6,597	8,463 8,620 8,273 8,341 7,709	625 667 591 566 584	15 15 18 21 23	640 682 610 587 607	5,342 5,672 5,135 5,464 5,869	22,239 23,007 22,277 22,389 22,011
2006 January February March	714 702 626	397 390 353	94 86 95	91 83 91	486 474 491	577 556 581	672 642 676	59 59 58	2 2 2	61 60 60	318 346 407	2,162 2,141 2,122
April	355 204 141 116	226 161 134 122	92 94 93 95	84 92 94 103	448 426 412 407	532 518 506 510	624 612 599 605	45 41 41 47	2 2 2 2	47 43 43 49	426 504 630 864	1,678 1,524 1,547 1,756
August	108 125 240 413 624	127 133 188 256 347	95 93 96 94 96	104 91 97 89 95	424 426 445 462 480	528 517 542 551 576	624 610 638 645 671	47 39 44 47 58	2 2 2 2 2	49 41 46 50 60	840 548 528 397 414	1,748 1,458 1,640 1,761 2,116
Total 2007 January	<b>4,368</b> 803	<b>2,835</b> 431	1,124 E 96	<b>1,115</b> 97	<b>5,380</b> 519	<b>6,495</b> 616	<b>7,618</b> 712	<b>584</b> E 66	<b>25</b> 2	<b>609</b> E 69	<b>6,222</b> 442	<b>21,653</b> 2,456
February	900 617 408 216 137 118	476 353 259 168 135	E 87 E 98 E 95 E 98 E 96 E 100	88 89 86 90 99	506 479 442 428 408 404	594 567 527 518 507 513	681 665 622 616 603 613	E 69 E 57 E 49 E 42 E 42 E 45	2 2 2 2 2 2 2	E 71 E 59 E 51 E 44 E 44 E 47	427 417 457 508 627 762	2,555 2,112 1,798 1,552 1,547 1,662
August September October November December Total	112 117 175 404 717 <b>4,724</b>	127 128 158 255 392 <b>3,005</b>	E 100 E 97 E 100 E 99 E 104 E <b>1,168</b>	135 109 107 91 103 <b>1,202</b>	398 413 R 440 R 480 R 515 R <b>5,432</b>	533 523 R 547 R 571 R 617 R <b>6,634</b>	632 619 R 647 R 671 R 721 R <b>7,803</b>	E 52 E 43 E 44 E 49 E 65 E <b>622</b>	2 2 2 2 2 <b>26</b>	E 54 E 45 E 46 E 51 E 67 E <b>649</b>	1,007 679 605 446 496 <b>6,874</b>	1,933 1,588 R 1,631 R 1,828 R 2,394 R 23,054
2008 January	878 819 658 398 233 145 119 111	472 454 377 256 179 134 128 126 <b>2,127</b>	E 103 E 98 E 106 E 102 E 105 E 104 E 108 E 108 E 834	93 83 86 79 84 88 88 89 92 <b>693</b>	561 528 517 474 456 424 R 435 441 <b>3,835</b>	654 610 603 553 539 511 R 523 533 <b>4,528</b>	758 709 709 655 645 615 R 631 641 <b>5,362</b>	E 73 E 67 E 61 E 49 E 43 E 43 E 48 E 49	3 2 3 2 3 2 3 3 2	E 76 E 69 E 64 E 52 E 45 RE 46 RE 51 E 52 E <b>454</b>	528 432 462 459 473 669 R 786 762 <b>4,570</b>	2,711 2,484 2,270 1,819 1,575 1,609 R 1,715 1,693 15,876
2007 8-Month Total 2006 8-Month Total	3,312 2,966	2,071 1,910	E 768 744	792 742	3,584 3,567	4,376 4,309	5,144 5,053	E 421 397	17 17	E 439 413	4,648 4,335	15,614 14,678

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 because

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.

data beginning in 1973.

Sources: • Residential, Commercial, Lease and Plant Fuel, Other Industrial Total and Pipelines and Distribution: 1973-2002—Energy Information Administration (EIA), Natural Gas Annual (NGA), annual reports. 2003 forward—EIA, Natural Gas Monthly (NGM), October 2008, 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 A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4). **1999-2002**—EIA, *NGA*, annual reports. **2003 forward**—EIA, *NGM*, October 2008, Table 2. • Electric Power Sector: Table 7.4b.

Industrial combined-heat-and-power (CHP) and a small number of industrial

<sup>&</sup>quot;CHP."

A Natural gas consumed in the operation of pipelines, primarily in compressors.

<sup>&</sup>lt;sup>e</sup> 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.

9 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."

n 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, "Consumption, 1989-1992," at end of section.

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

feet.

Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period		From Sar	Vorking Gas ne Period us Year		Storage Activity		
	Base Gas	Working Gas	Totala	Volume	Percent	Withdrawals	Injections	Net <sup>b,c</sup>
973 Total	2,864	2,034	4,898	305	17.6	1,533	1,974	-442
975 Total	3,162	2,212	5,374	162	7.9	1,760	2,104	-344
	3,642	2,655		-99	-3.6	1,910	1,896	14
980 Total			6,297			•	•	
085 Total	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
90 Total	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
95 Total	4,349	2,153	6,503	-453	-17.4	2,974	2,566	408
96 Total	4,341	2,173	6,513	19	.9	2,911	2,906	6
97 Total	4,350	2,175	6,525	2	.1	2,824	2,800	24
98 Total	4,326	2,730	7,056	554	25.5	2,379	2,905	-526
99 Total	4,383	2,523	6,906	-207	-7.6	2,772	2,598	174
00 Total	4,352	1,719	6,071	-806	-31.9	3,498	2,684	814
01 Total	4,301	2,904	7,204	1,185	68.9	2,309	3,464	-1,156
02 Total	4,340	2,375	6,715	-528	-18.2	3,138	2,670	468
	,							
03 Total	4,303	2,563	6,866	187	7.9	3,099	3,292	-193
04 Total	4,201	2,696	6,897	133	5.2	3,037	3,150	-113
05 Total	4,200	2,635	6,835	-61	-2.3	3,057	3,002	55
<b>06</b> January	4,202	2,371	6,573	377	18.9	374	110	264
February	4,202	1,886	6,089	322	20.6	539	54	485
March	4,197	1,692	5,889	407	31.7	331	131	200
April	4,198	1,945	6,143	447	29.8	77	332	-255
May	4,202	2,310	6,512	435	23.2	52	420	-367
June	4,215	2,617	6,832	419	19.1	62	373	-311
July	4,214	2,779	6,993	329	13.4	144	305	-161
August	4,213	2,969	7,182	307	11.5	113	302	-189
	,			391	13.4	37	395	-358
September	4,215	3,323	7,539					
October	4,217	3,452	7,669	258	8.1	115	246	-131
November	4,216	3,407	7,623	217	6.8	206	159	48
December	4,211	3,070	7,281	435	16.5	443	99	343
Total	4,211	3,070	7,281	435	16.5	2,493	2,924	-431
<b>07</b> January	4,215	2,379	6,594	8	.3	740	56	684
February	4,214	1,649	5,863	-238	-12.6	782	51	731
March	4,242	1,603	5,845	-89	-5.2	269	221	48
April	4,246	1,720	5,966	-225	-11.6	154	274	-120
May	4,251	2,179	6,430	-131	-5.7	39	498	-459
June	4,230	2,580	6,810	-37	-1.4	48	437	-389
July	4,229	2,894	7,123	114	4.1	84	397	-313
August	4,226	3,017	7,243	48	1.6	168	294	-126
September	4,232	3,316	7,547	-7	2	73	372	-298
October	4,236	3,567	7,803	115	3.3	76	334	-258
November	4,238	3,456	7,694	49	1.5	255	148	108
December	4,234	2,879	7,113	-191	-6.2	633	64	569
Total	4,234	2,879	7,113	-191	-6.2	3,321	3,144	177
<b>08</b> January	4,232	2,055	6,287	-324	-13.6	892	68	824
February	4,222	1,465	5,687	-184	-11.1	649	56	593
March	4,221	1,247	5,468	-356	-22.2	350	131	219
April	4,223	1,436	5,659	-284	-16.5	106	295	-190
May	4,226	1,836	6,062	-342	-15.7	56	458	-402
June	4,230	2,171	6,401	-409	-15.8	80	420	-339
July	4,228	2,516	6,745	-377	-13.0	88	430	R -342
August	4,228	2,867	7,094	-151	-5.0	91	442	-350
8-Month Total						2,312	2,300	13
07 8-Month Total						2,283	2,227	56

<sup>&</sup>lt;sup>a</sup> For total underground storage capacity at the end of each calendar year, see Note 4. "Storage." at end of section.

R=Revised. --=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—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. 1996-2002—EIA, Natural Gas Monthly (NGM), monthly issues. 2003 forward—EIA, NGM, October 2008, 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." 1999-2005—EIA, NGM, monthly issues. 2006 forward—EIA, NGM, October 2008,

Note 4, "Storage," at end of section.

b For 1980-2006, data differ from those shown on Table 4.1, which includes liquefied natural gas storage for that period

liquefied natural gas storage for that period.

<sup>c</sup> 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, "Storage," at end of section.

#### **Natural Gas**

#### Note 1. Production.

Annual data—Final annual data are from the Energy Information Aministration (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. 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. 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). 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. 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:

<b>1975</b> 6,280	<b>1986</b> 8,145	<b>1997</b> 8,332
<b>1976</b> 6,544	<b>1987</b> 8,124	<b>1998</b> 8,179
<b>1977</b> 6,678	<b>1988</b> 8,124	<b>1999</b> 8,229
<b>1978</b> 6,890	<b>1989</b> 8,120	<b>2000</b> 8,241
<b>1979</b> 6,929	<b>1990</b> 7,794	<b>2001</b> 8,415
<b>1980</b> 7,434	<b>1991</b> 7,993	<b>2002</b> 8,207
<b>1981</b> 7,805	<b>1992</b> 7,932	<b>2003</b> 8,206
<b>1982</b> 7,915	<b>1993</b> 7,989	<b>2004</b> 8,255
<b>1983</b> 7,985	<b>1994</b> 8,043	<b>2005</b> 8,268
<b>1984</b> 8,043	<b>1995</b> 7,953	<b>2006</b> 8,330
<b>1985</b> 8,087	<b>1996</b> 7,980	

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 1980–2005 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. 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 which 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. 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. 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. 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.

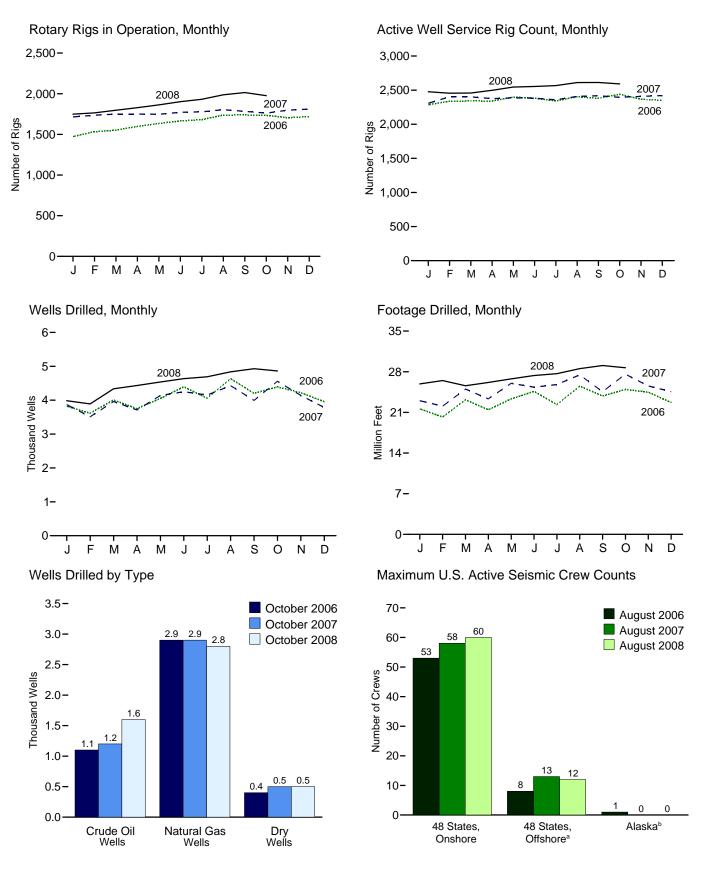
Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *NGM*. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas*.

# **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



<sup>a</sup>Federal and State Jurisdiction waters of the Gulf of Mexico. <sup>b</sup>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)

		R	otary Rigs in Operation	n <sup>a</sup>		
	Ву	Site	Ву	Туре		Active Well Service
	Onshore	Offshore	Crude Oil	Natural Gas	Total <sup>b</sup>	Rig Count <sup>c</sup>
973 Average	1,110	84	NA	NA	1.194	2.008
975 Average	1,554	106	NA NA	NA NA	1,660	2,486
	2,678	231	NA NA	NA NA	2,909	4,089
980 Average						
985 Average	1,774	206	NA	NA	1,980	4,716
990 Average	902	108	532	464	1,010	3,658
995 Average	622	101	323	385	723	3,041
996 Average	671	108	306	464	779	3,445
997 Average	821	122	376	564	943	3,499
998 Average	703	123	264	560	827	3,014
999 Average	519	106	128	496	625	2,232
000 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
003 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 January	1,396	77	242	1,228	1,473	2,285
February	1,455	79	209	1,321	1,533	2,339
March	1,464	88	244	1,305	1,551	2.342
April	1,502	95	259	1,337	1,597	2.340
May	1,536	100	261	1,373	1,635	2.398
						-,
June	1,570	95	285	1,376	1,665	2,382
July	1,587	94	298	1,379	1,681	2,342
August	1,639	99	316	1,417	1,738	2,404
September	1,646	93	305	1,429	1,739	2,380
October	1,644	90	288	1,441	1,734	2,440
November	1,620	87	288	1,414	1,706	2,366
December	1,634	84	281	1.431	1,718	2,351
Average	1,559	90	274	1,372	1,649	2,364
<b>007</b> January	1,630	84	270	1,440	1,714	2.307
February	1.651	85	266	1.466	1,736	2,401
	1.667	81	282	1,461	1,749	2,401
March						
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  Average	1,749 <b>1,695</b>	62 <b>72</b>	338 <b>297</b>	1,468 <b>1,466</b>	1,811 <b>1,768</b>	2,420 <b>2,388</b>
008 January	1.690	60	321	1.421	1.749	2.476
	1,709	56	331	1,426	, -	, -
February					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	R 1.942	R 72	417	1,585	2,014	2,612
	1,903			1,542		2,591
October  10-Month Average	1,903 1,817	73 <b>66</b>	422 <b>374</b>	1,542 1,500	1,976 <b>1,883</b>	2,591 <b>2,537</b>
-						
007 10-Month Average	1.685	75	288	1.467	1,760	2.383

<sup>&</sup>lt;sup>a</sup> 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.

<sup>b</sup> 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.

<sup>c</sup> The number of rigs doing true workovers (where tubing is pulled from the well),

or doing rod string and pump repair operations, and that are, on average, crewed

and working every day of the month. NA=Not available. R=Revised.

Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: See http://www.eia.doe.gov/emeu/mer/resource.html for all available data beginning in 1973.

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: Weatherford International, Ltd., Houston, Texas.

Table 5.2 Crude Oil and Natural Gas Exploratory and Development Wells

	Wells Drilled												
		Explo	ratory			Develo	pment			То	tal		
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Total Footage Drilled
						Nun	nber						Thousan 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	3,648	5,238	11,696	10,296	4,569	26,561	12,474	11,108	8,217	31,799	155,253
1995 Total	570	557	2,023	3,150	7,345	7,412	2,764	17,521	7,915	7,969	4,787	20,671	116,590
1996 Total	489 491	576 561	1,955	3,020	8,122 10,553	8,367 10,874	2,915	19,404	8,611	8,943	4,870	22,424	125,971
1997 Total 1998 Total	327	561 566	2,108 1,585	3,160 2,478	7,229	10,874	3,740 3,160	25,167 21,333	11,044 7,556	11,435 11,510	5,848 4,745	28,327 23,811	161,215 137,048
1999 Total	196	565	1,157	1,918	4,538	11,334	2,360	18,232	4,734	11,899	3,517	20,150	102,594
2000 Total	288	657	1,333	2.278	7,698	16,278	2,300	26.760	7.986	16.935	4,117	29.038	143.947
2001 Total	353	1.046	1,714	3,113	8,452	20,913	2,825	32,190	8,805	21,959	4,539	35,303	179,624
2002 Total	255	843	1,271	2,369	6,469	16,382	2,435	25,286	6,724	17,225	3.706	27,655	144,640
2003 Total	349	991	1,285	2,625	7,677	19,596	2,613	29,886	8,026	20,587	3,898	32,511	176,557
2004 Total	386	1,653	1,331	3,370	8,290	22,075	2,644	33,009	8,676	23,728	3,975	36,379	202,813
2005 Total	515	2,087	1,431	4,033	9,866	25,693	3,081	38,640	10,381	27,780	4,512	42,673	237,214
2006 January	64	170	91	325	940	2,257	299	3,495	1,004	2,427	390	3,821	21,611
February	51	176	107	334	843	2,176	263	3,282	894	2,353	370	3,617	20,211
March	41	193	91	325	944	2,437	300	3,681	985	2,630	391	4,006	23,170
April	44	165	120	329	936	2,197	289	3,422	980	2,362	409	3,751	21,449
May	60 77	210 217	130 128	400 422	1,004 1,090	2,393	254 316	3,650 3,973	1,064 1,167	2,602 2,783	384 444	4,050 4,395	23,318 24,628
June	36	202	122	360	1,090	2,567 2,327	282	3,696	1,107	2,763	404	4,056	22,338
July August	59	260	126	445	1,057	2,841	291	4,190	1,123	3,101	417	4,636	25,514
September	54	210	125	389	1,030	2,528	258	3,812	1,081	2,737	383	4,201	23,818
October	59	225	117	401	1,062	2,631	300	3,993	1,121	2,856	417	4,394	24,953
November	58	252	103	413	1,049	2,444	314	3,807	1,107	2,696	417	4,220	24,476
December	34	219	140	393	1,016	2,301	247	3,563	1,050	2,519	387	3,956	22,710
Total	637	2,498	1,400	4,535	12,056	29,098	3,412	44,566	12,693	31,597	4,812	49,101	278,197
2007 January	55	236	111	401	955	2,248	266	3,469	1,010	2,484	377	3,871	23,006
February	59	211	86	356	869	2,070	214	3,153	928	2,281	300	3,510	22,072
March	61	276	106	444	970	2,285	264	3,519	1,031	2,561	370	3,962	25,014
April	56	260	117	433	926	2,129	226	3,280	982	2,388	343	3,713	23,332
May	54	293	138	485	1,019	2,350	284	3,653	1,073	2,643	422	4,138	26,012
June	76	259	107	442	1,051	2,509	248	3,808	1,127	2,769	355	4,250	25,338
July	75 50	297	120	492	1,003	2,369	287	3,659	1,078	2,666	407	4,151	25,796
August September	58 72	282 273	109 128	449 474	1,041 934	2,598 2,334	340 253	3,979 3,521	1,099 1,007	2,881 2,607	449 380	4,429 3,994	27,452 24,561
October	72 70	334	143	546	1,084	2,334	253 319	3,5∠1 4,012	1,007	2,943	461	3,994 4,558	27,577
November	54	310	179	544	963	2,373	261	3,597	1,018	2,683	441	4,141	25,550
December	56	275	111	442	981	2,121	238	3,341	1,010	2,397	349	3,783	24,580
Total	747	3,307	1,455	5,509	11,796	27,996	3,200	42,992	12,543	31,303	4,655	48,501	300,290
2008 January	73	278	132	483	1,089	2,164	248	3,501	1,162	2,442	380	3,984	25,909
February	72	291	86	449	1,117	2,076	247	3,441	1,189	2,367	333	3,889	26,478
March	69	238	134	441	1,215	2,384	297	3,896	1,284	2,622	431	4,337	25,582
April	72	241	136	449	1,269	2,412	304	3,985	1,341	2,653	440	4,434	26,154
May	76	243	139	458	1,328	2,441	311	4,080	1,404	2,684	450	4,538	26,768
June	77	249	142	468	1,357	2,493	318	4,168	1,434	2,742	460	4,636	27,346
July	77	254	144	475	1,346	2,548	322	4,216	1,423	2,802	466	4,691	27,670
August	80	260	148	488	1,407	2,611	332	4,350	1,487	2,871	480	4,838	28,537
September	84	261	150	495	1,478	2,617	338	4,433	1,562	2,878	488	4,928	29,068
October 10-Month Total	85 <b>765</b>	254 <b>2,568</b>	148 <b>1,359</b>	487 <b>4,692</b>	1,495 <b>13,101</b>	2,546 <b>24,293</b>	334 <b>3,051</b>	4,375 <b>40,445</b>	1,580 <b>13,866</b>	2,800 <b>26,861</b>	482 <b>4,410</b>	4,862 <b>45,137</b>	28,679 <b>272,191</b>
2007 10-Month Total	637	2,722	1,164	4,523	9.852	23,502	2,700	36,054	10,488	26,223	3,865	40,576	250,160
2007 10-Month Total	545	2,722	1,157	3,730	9,991	24,353	2,700	37,196	10,466	26,223	4,008	40,925	231,011

Notes: • Prior to 1990, these well counts include only the original drilling of a notes. • Prior to 1990, triese well counts include only the original drilling of 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 exported data the counts shown on this page are frequently revised. See Note 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: 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 the Information Handling Services Energy Group, Inc.

<sup>&</sup>quot;Crude Oil and Natural Gas Exploratory and Development Wells," at end of section.

Table 5.3 Maximum U.S. Active Seismic Crew Counts

(Number of Crews)

		48 States	, Onshore			48 States,	Offshorea			Ala	ska <sup>b</sup>		
	I	Dimensions	s <sup>c</sup>			Dimensions	;c		D	imensions	sc.		
	2	3	4	Totald	2	3	4	Total <sup>d</sup>	2	3	4	Total <sup>d</sup>	Total
<b>000</b> August	4	40	1	45	7	7	0	15	0	1	0	1	61
2001 August	8	32	i	41	7	8	ŏ	15	Ŏ	ò	ő	Ö	56
2002 August	7	26	Ó	33	8	7	Ö	15	1	Ĭ.	Ö	2	50
2003 August	8	22	ŏ	30	7	4	Ŏ	11	i	1	Ŏ	2	43
					_	_					_	_	
2004 January	8	25 27	0	33 35	5 5	5 5	0	10	0	0	0	0	43 45
February	8	27		35 35	5	5		10		0		0	45
March	8	27 27	0	35 36	5 5	5	0	10	0	0	0	0	45 45
April	9	27 26	0	36 35	5 5	4	0	9	0	0	0	0	45 44
May	9		0			4	0	9	0	0	0	0	
June	9	30	0	39	4	4	0	8	0	2	0	2	49
July	8	30	0	38	4	4	0	8	0	2	0	2	48
August	8	31	0	39	4 4		0	8	0	2	0	2	49 48
September	8 8	32 34	0 0	40		2 2	0	6 4	0	2	0	2	48 48
October	9		0	42	2 1	4	0		0	2	0	2	48 49
November	9	33 32	0	42 41	3	4	0	5 7	0	2 2	0	2 2	50
December	9	32	U	41	3	4	U	,	U	2	U	2	50
2005 January	8	33	0	41	5	4	0	9	0	2	0	2	52
February	8	34	0	42	5	4	0	9	0	2	0	2	53
March	6	33	0	39	6	6	0	12	0	0	0	0	51
April	8	30	0	38	6	6	0	12	0	0	0	0	50
May	8	34	0	42	7	6	0	13	0	0	0	0	55
June	9	35	0	44	7	5	0	12	0	1	0	1	57
July	8	34	0	42	6	5	0	11	0	1	0	1	54
August	8	35	0	43	6	5	0	11	0	1	0	1	55
September	7	37	0	44	6	5 5	0	11	0	1	0	1	56
October	6	39	0	45	6	5	0	11	0	1	0	1	57
November	5	40	0	45	6	5	0	11	0	1	0	1	57
December	6	40	0	46	6	5	0	11	0	1	0	1	58
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	ő	11	Ö	1	Ö	i	58
June	9	35	Ö	44	5 7	5	ő	12	Ö	1	Ö	i	57
July	5	51	0	56	4	5	0	9	0	1	0	4	66
August	4	49	0	53	3	5	0	8	0	1	0	1	62
September	4	51	0	55	2	5	ő	7	Ö	1	Ö	1	63
October	5	51	Ö	56	2	5	ő	7	ŏ	i	Ö	i	64
November	5	51	Ö	56	3	5	ő	8	ŏ	i	Ö	i	65
December	5	50	ŏ	55	3	5	ŏ	8	ŏ	i	Ŏ	i	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
<b>008</b> <u>January</u>	6	55	0	61	4	10	1	15	0	0	0	0	76
February	6	55	0	61	4	11	1	16	Ö	Ö	Ö	Ö	77
March	6	54	ő	60		11	i	15	ő	Õ	0	ŏ	75
April	4	53	0	57	3	11	1	15	Ö	0	0	ő	73 72
May	4	54	Ö	58	3	11	i	15	ŏ	Ö	Ö	ŏ	73
June	2	56	Ö	58	3 3 3 3	11	i	15	ŏ	Ö	Ö	ŏ	73
July	2	58	0	60	3	8	1	12	Ö	0	Ö	ő	72
August	2	58	0	60	3	8		12	ő	0	0	ő	72

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

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.

<sup>Q</sup> Includes crews with unknown survey dimension.

Includes crews with unknown survey dimension.

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. 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 Energy Group, Denver, CO, used with permission.

Table 5.3 is not updated this month.

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 subsuriace 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, and elimination of the "ghost" or "side swipe" reflections from nearby offline features that 2D surveys

#### 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

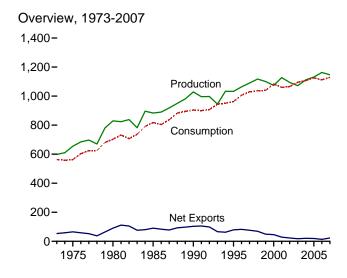
completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions proved to be an inaccurate indicator 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 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.

## Coal

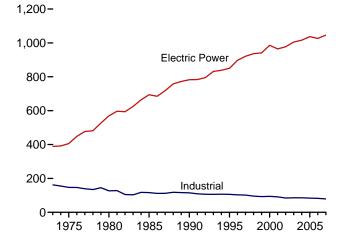


Coal yard, Curtis Bay, Maryland. Source: U.S. Department of Energy.

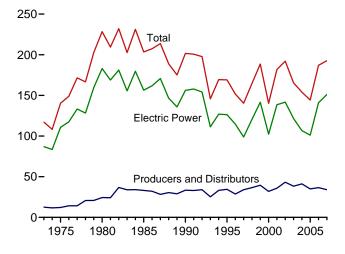
Figure 6.1 Coal (Million Short Tons)



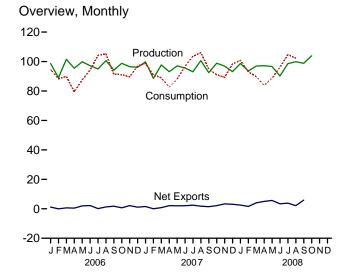




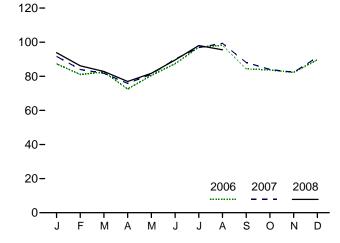
#### Stocks, End of Year, 1973-2007



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/coal.html. Sources: Tables 6.1, 6.2, and 6.3.



Electric Power Sector Consumption, Monthly



#### Electric Power Sector Stocks, End of Month

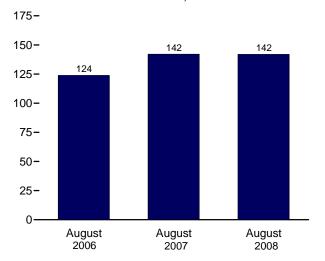


Table 6.1 Coal Overview

(Thousand Short Tons)

		Waste Coal		Trade		Stock	Losses and Unaccounted	
	Production <sup>a</sup>	Supplied <sup>b</sup>	Imports	Exports	Net Imports <sup>c</sup>	Changed	fore	Consumption
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	-20,079	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
	1.112.099	11,299	27,280	47,998	-17,970	-11.462	6.887	1,107,255
2004 Total							9,092	
2005 Total	1,131,498	13,352	30,460	49,942	-19,482	-9,702	9,092	1,125,978
2006 January	98.621	1,278	3,031	4,187	-1,155	2.671	1,451	94.621
2006 January February	89,033	1,276	2,715	2.656	-1,155 60	1,938	37	88.231
					-606			
March	101,490	1,223	3,211	3,817		6,214	6,016	89,877
April	95,413	1,137	3,030	3,481	-451	15,539	1,141	79,419
May	99,843	1,024	2,742	4,736	-1,995	6,050	5,332	87,490
June	97,160	1,202	2,185	4,373	-2,188	2,820	-944	94,298
July	94,994	1,298	3,181	3,331	-150	-4,861	-3,142	104,145
August	100,654	1,349	3,849	5,093	-1,244	-6,661	2,221	105,198
September	94,144	1,140	3,370	5,115	-1,745	939	1,266	91,334
October	98,808	1,213	3,214	3,908	-694	9,325	-1,197	91,199
November	96,526	1,188	2,630	4,768	-2,139	7,176	-1,148	89,548
December	96,063	1,245	3,089	4,182	-1,093	1,493	-2,208	96,930
Total	1,162,750	14,409	36,246	49,647	-13,401	42,642	8,824	1,112,292
2007 January	99,784	937	2,844	4,368	-1,524	-4,354	4,796	98,756
February	88,580	1,096	2,656	2,685	-28	-4,479	3,195	90,931
March	97,677	1,191	3,285	4,086	-801	7,079	2,028	88,959
April	93,084	1,087	2,687	4,841	-2,154	7,944	1,470	82,603
May	97,038	1,049	2,691	4,747	-2,056	4,416	3,524	88,091
June	95,566	1,247	3,027	5,114	-2,087	-619	-1,559	96,903
July	93,003	1,255	3,373	5,812	-2,438	-9,990	-1,750	103,560
August	100,627	1,315	3,716	5,471	-1,756	-6,135	280	106,042
September	92.404	1,203	3,470	4.914	-1.445	955	-3.611	94.818
October	98,825	1,254	2,896	5,019	-2,123	8,199	-1,269	91,027
November	96.910	1,189	2,889	6,245	-3,355	4.292	1.189	89.262
December	93,138	1,263	2,812	5,861	-3,050	-1,590	-5,386	98,328
Total	1,146,635	14,087	36,347	59,163	-22,816	5,717	2,908	1,129,281
2008 January	98,619	1,340	2,381	4,915	-2,535	<sup>R</sup> -8.105	<sup>R</sup> 4.795	100,734
February	93,555	1,208	2,619	4,205	-1.586	R -3,392	R 3.621	92,949
March	96,933	1,085	2,640	6,682	-4,041	R 4,947	R -701	89,730
April	97.149	1,121	2.985	7.979	-4.994	R 6.676	R 2.806	83.794
May	96,585	1,190	2,702	8,394	-5,692	R 4,726	R -1,281	88,638
June	90,199	F 1,227	3.295	6.695	-3,401	R -4,859	R -3,312	96.196
	98,578	F 1,258	2,569	6,404	-3,835	R -12.666	R 3.985	R 104,682
July	98,578 99.865	RF 1,258	2,569 3.144	5,264	-3,835 -2,120	R -2,632	R -667	R 102,302
August	,		3,144 R 2,772		-2,120 R -5,881			
September	98,782	NA		R 8,653		NA NA	NA	NA
October 10-Month Total	103,886 <b>974,150</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>	NA <b>NA</b>
	•							
2007 10-Month Total 2006 10-Month Total	956,588 970,161	11,635 11,976	30,646 30,527	47,057 40,697	-16,412 -10,170	3,015 33,973	7,105 12,181	941,691 925,814

<sup>&</sup>lt;sup>a</sup> 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."

<sup>c</sup> 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

<sup>&</sup>quot;Losses and Unaccounted for" is calculated as the sum of production, imports,

and waste coal supplied, minus exports, stock change, and consumption.

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

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

Notes: • For methodology used to calculate production, consumption, and stocks, see Note 1, "Production," Note 2, "Consumption," and Note 3, "Stocks," at end of section. • Data values preceded by "F" are derived from the Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "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. 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-l	Jse Sector	s					
			Commerc	ial		<b>.</b>	Industrial					
	Resi-				Coke	C	ther Industria	al		Trans-	Electric Power	
	dential	СНРа	<b>Other</b> b	Total	Plants	CHPc	Non-CHP <sup>d</sup>	Total	Total	portation	Sector <sup>e,f</sup>	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 1980 Total	2,823 1.355	(g)	6,587 5.097	6,587 5.097	83,598 66.657	( '' ) ( h )	63,646 60,347	63,646 60,347	147,244 127.004	(h)	405,962 569,274	562,640 702.730
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 1997 Total	721 711	1,660 1.738	3,625 4.015	5,285 5.752	31,706 30,203	29,434 29,853	42,254 41.661	71,689 71,515	103,395 101.718	(") (h)	896,921 921,364	1,006,321 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 2003 Total	533 551	1,405 1.816	2,506 1,869	3,912 3.685	23,656 24,248	26,232 24,846	34,515 36,415	60,747 61,261	84,403 85,509	(") (h)	977,507 1,005,116	1,066,355 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 January	27	186 169	130 118	316 287	1,879 1,830	2,217	2,866	5,083	6,961	( h )	87,317	94,621
February March	25 25	170	118	288	2,005	2,024 2,115	3,023 2,945	5,046 5,060	6,876 7,065	(h)	81,043 82,499	88,231 89.877
April	16	134	56	189	1,862	2,050	2,742	4,792	6,654	(h)	72,560	79,419
May	17	139	58	197	1,968	2,059	2,735	4,794	6,762	( h )	80,515	87,490
June	18	147	61	208	1,939	2,104	2,710	4,814	6,753	(h)	87,319	94,298
July	18 18	163 163	46 46	208 209	1,933 1,911	2,202 2,202	2,671 2,675	4,872 4,877	6,806 6,788	( '' ) ( h )	97,113	104,145 105,198
August September	15	138	46 39	209 177	1,911	2,202	2,675 2.815	4,877	6,788	(h)	98,183 84,327	91.334
October	22	136	117	254	2,094	2.074	3,031	5,105	7.199	(h)	83,724	91,199
November	26	159	137	296	1,865	2,020	3,048	5,068	6,933	( h )	82,293	89,548
December	30	183	158	341	1,733	2,136	2,949	5,085	6,818	( h )	89,742	96,930
Total	258	1,886	1,083	2,968	22,957	25,262	34,210	59,472	82,429	(h)	1,026,636	1,112,292
2007 January February	30 29	192 185	148 145	340 330	1,818 1.730	2,030 1,895	2,834 2.959	4,864 4.855	6,682 6,585	( h ) ( h )	91,704 83.988	98,756 90.931
March	26	171	133	303	2,027	1,968	2,891	4,859	6,887	(h j	81,742	88,959
April	19	145	77	222	1,865	1,832	2,850	4,682	6,547	( h )	75,815	82,603
May	19	144	73	217	1,950	1,889	2,795	4,684	6,634	( h ) ( h )	81,221	88,091
June July	18 19	137 149	73 65	210 214	1,921 1.913	1,906 1,942	2,801 2.647	4,707 4.589	6,629 6.501	( ii )	90,047 96.826	96,903 103.560
August	20	160	69	229	1.883	1,999	2,569	4.569	6.452	(h)	99.341	106,042
September	18	143	63	206	1,882	1,839	2,729	4,568	6,450	( h )	88,144	94,818
October	24	146	134	280	1,957	1,910	2,839	4,749	6,706	( h ) ( h )	84,016	91,027
November	29	170 183	163	333 360	1,810	1,790	2,956	4,746 4.744	6,556	( '' ) ( h )	82,344	89,262
December <b>Total</b>	31 <b>282</b>	1,924	177 <b>1,320</b>	<b>3,244</b>	1,958 <b>22,715</b>	3,081 <b>24,082</b>	1,662 <b>32,533</b>	56,615	6,702 <b>79,331</b>	(h)	91,235 <b>1,046,424</b>	98,328 <b>1,129,281</b>
2008 January	29	198	136	333	1,834	1,940	2,741	4,681	6,515	( h )	93,856	100,734
February	27	185	127	312	1,792	1,938	2,703	4,642	6,433	(h)	86,176	92,949
March	27 29	183 160	126 178	308 338	1,910 1.864	1,925 1,910	2,732 2,709	4,657 4.619	6,567 6,483	( h ) ( h )	82,828 76.945	89,730 83,794
April May	30	163	178	338 345	1,864	2,020	2,709 2,593	4,613	6,483	( '' ) ( h )	76,945 81,739	83,794 88,638
June	19	187	33	221	1,805	1,951	2,653	4,605	6,410	(h)	89,546	96,196
July	<sup>F</sup> 18	R 182	RF 24	<sup>F</sup> 207	RF 1,726	R 2,041	RF 2,656	RF 4,697	RF 6,422	( h )	R 98,035	R 104,682
August	F 18	188	F 21	F 209	F 1,766	1,967	F 2,799	F 4,766	F 6,532	( h )	95,542	102,302
8-Month Total	<sup>E</sup> 198	1,447	E 826	E 2,273	E 14,607	15,694	E 21,585	E 37,279	E 51,886	( h )	704,668	759,025
2007 8-Month Total 2006 8-Month Total	180 165	1,282 1,269	783 632	2,065 1,901	15,108 15,326	15,462 16,972	22,347 22,366	37,809 39,338	52,916 54,664	(h)	700,684 686,550	755,845 743,281

<sup>&</sup>lt;sup>a</sup> Commercial combined-heat-and-power (CHP) and a small number of commercial electricity-only plants, such as those at hospitals and universities. See note at end of Section 7.

<sup>b</sup> All commercial sector fuel use other than that in "Commercial CHP."

<sup>c</sup> Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants. See note at end of Section 7.

<sup>d</sup> All industrial sector fuel use other than that in "Coke Plants" and "Industrial CHP."

<sup>e</sup> The electric power sector comprises electricity-only and combined-heat-

<sup>&</sup>lt;sup>e</sup> 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. <sup>g</sup> Included in "Commercial Other."

h Included in "Industrial Non-CHP."
R=Revised. E=Estimate. F=Forecast.
Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are from Table 7.4b; all other monthly values are estimates derived from collected quarterly and annual data. See Note 2, "Consumption," at end of section. • Data values preceded by "F" are derived from the Energy Information Administration, Short-Term Integrated Expression System. Information Administration's Short-Term Integrated Forecasting System. See Note 4, "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)

			E	nd-Use Sectors	i			
	Producers	Residential		Industrial			Electric	
	and Distributors	and Commercial	Coke Plants	Othera	Total	Total	Power Sector <sup>b,c</sup>	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	° 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 January	33,486	NA	2,661	5,427	8,088	8,088	105,401	146,975
February	34,947	NA	2,708	5,272	7,980	7,980	105,986	148,913
March	35,113	NA	2,754	5,118	7,872	7,872	112,141	155,126
April	37,489	NA	2,783	5,297	8,079	8,079	125,097	170,665
May	34,587	NA	2,811	5,476	8,287	8,287	133,841	176,715
June	35,307	NA	2,839	5,655	8,494	8,494	135,734	179,535
July	38,147	NA	2,817	5,816	8,633	8,633	127,894	174,674
August	35,357	NA	2,795	5,977	8,772	8,772	123,884	168,013
September	33,170	NA	2,772	6,138	8,910	8,910	126,872	168,952
October	34,251	NA	2,824	6,261	9,085	9,085	134,941	178,277
November	35,752	NA	2,876	6,383	9,259	9,259	140,442	185,453
December	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	137,606	182,592
February	34,450	NA	2,561	6,006	8,568	8,568	135,096	178,113
March	34,007	NA	2,444	5,756	8,200	8,200	142,986	185,193
April	33,695	NA	2,417	5,728	8,145	8,145	151,296	193,136
May	33,107	NA	2,391	5,700	8,091	8,091	156,354	197,552
June	32,484	NA	2,364	5,672	8,037	8,037	156,412	196,933
July	31,967	NA	2,211	5,719	7,929	7,929	147,047	186,943
August	30,885	NA	2,091	5,765	7,856	7,856	142,067	180,808
September	30,090	NA	1,972	5,811	7,783	7,783	143,890	181,763
October	31,112	NA	1,960	5,748	7,708	7,708	151,141	189,962
November	32,069	NA	1,948	5,686	7,634	7,634	154,551	194,254
December	33,977	NA	1,936	5,624	7,560	7,560	151,127	192,663
2008 January	28,258	RF 467	1,778	5,348	7,126	R 7,593	148,707	R 184,558
February	30,009	RF 453	1,620	5,073	6,693	<sup>R</sup> 7,146	144,011	R 181,166
March	32,464	<sup>R</sup> 438	1,462	4,797	6,259	<sup>R</sup> 6,697	146,952	R 186,113
April	33,569	<sup>R</sup> 453	1,560	4,858	6,418	<sup>R</sup> 6,871	152,349	R 192,789
May	32,047	<sup>R</sup> 469	1,658	4,919	6,577	<sup>R</sup> 7,046	158,422	R 197,515
June	31,395	R 484	1,756	4,980	6,736	R 7,220	154,041	R 192,656
July	F 29,744	<sup>RF</sup> 501	RF 1,807	RF 5,074	RF 6,882	RF 7,382	R 142,863	RE 179,989
August	F 28,019	<sup>F</sup> 518	F 1,810	F 5,054	F 6,864	F 7,381	141,957	E 177,357

<sup>&</sup>lt;sup>a</sup> 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-

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 Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "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.

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.

power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

<sup>c</sup> Through 1998, data are for stocks at electric utilities only. Beginning in 1999,

data also include stocks at independent power producers.

#### Coal

**Note 1. Production.** Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the 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 ending 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 is available.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figure. 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.** 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 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 2005 share is applied to 2006-2008, 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. From 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. From 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. Quarterly consumption data were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts were 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, mining, and construction consumption data were included where appropriate. Starting 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. 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.

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

**Note 3. 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 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. From 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. From 1980 forward, 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. From 1983 forward, 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. 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 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: 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: 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 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: 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: 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: Energy Information Administration (EIA), Form EIA-6, "Coal Distribution Report," quarterly.

1998 forward: EIA, Form EIA-6A, "Coal Distribution 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: 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: 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**

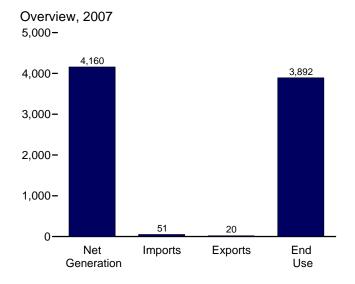
Table 7.5.

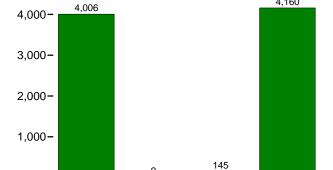
### **Electricity**



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

**Electricity Overview** Figure 7.1 (Billion Kilowatthours)



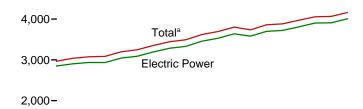


4,160

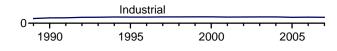
Total

Net Generation by Sector, 1989-2007

5,000-



1,000-



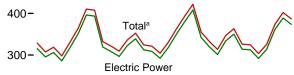
Net Generation by Sector, Monthly 500-

Electric

Power

Net Generation, 2007

5,000-



Commercial

Industrial

200-

100-

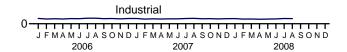
60-

50-

10-

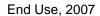
Source: Table 7.1.

Trade, 1973-2007

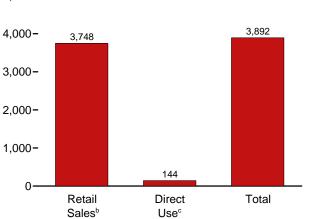


**Imports** 

**Exports** 



5,000-



40-30-20-

1975 1980 1985 1990 1995 2000 2005 Note: Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/elect.html.

<sup>a</sup>Includes commercial sector.

<sup>&</sup>lt;sup>b</sup>Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

<sup>°</sup>See "Direct Use" in Glossary.

Table 7.1 **Electricity Overview** 

(Billion Kilowatthours)

		Net Gen	eration			Trade			End Use		
	Electric Power Sector <sup>a</sup>	Com- mercial Sector <sup>b</sup>	Indus- trial Sector <sup>c</sup>	Total	Imports <sup>d</sup>	Exportsd	Net Imports <sup>d</sup>	T&D Losses <sup>e</sup> and Unaccounted for <sup>f</sup>	Retail Sales	Direct Use <sup>h</sup>	Total
1973 Total 1975 Total	1,861 1,918	NA NA	3 3	1,864 1,921	17 11	3 5	14 6	165 180	1,713 1,747	NA NA	1,713 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 9	151	3,444	43 43	3 9	40 34	231	3,101	153	3,254
1997 Total 1998 Total	3,329 3,457	9	154 154	3,492 3,620	43 40	9 14	34 26	224 221	3,146 3,264	156 161	3,302 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 January	315	1	13	329	4	2	1	13	305	E 13	317
February	295	1	11	307	3 4	2	2	17	281	E 11 E 12	292
March	306 286	1	12 11	319 298	3	2 2	2 1	19 20	290 268	E 11	302 280
April May	318	1	12	331	4	2	1	33	287	E 12	299
June	351	1	12	364	4	2	1	32	322	E 12	334
July	396	1	13	410	5	2	3	38	362	E 13	376
August	394	1	13	408	5	2	3	29	369	E 13	382
September	319	1	12	332	2	2	(s)	3	317	E 12	329
October	308	1	13	322	3	2	(s)	18	291	<sup>E</sup> 13	304
November	297	1	12	309	3	2	1	21	277	E 12	289
December	323	1	13	336	4	1	2	26	300	E 13	313
Total	3,908	8	148	4,065	43	24	18	266	3,670	147	3,817
<b>2007</b> January	339	1	13	352	3	2	2	28	314	E 12	326
February	313	1	11	324	4	1	3	16	301	E 11 E 12	312
March	309 292	1	12 11	321 304	4 4	2 1	2	20 22	291 274	E 11	303 285
April May	318	1	12	331	5	1	3 4	32	274	E 12	303
June	350	1	12	363	4	1	3	33	321	E 12	333
July	380	1	13	394	5	2	4	34	351	E 12	364
August	408	1	13	422	5	2	3	41	372	E 13	385
September	342	1	12	355	4	2	1	8	336	E 12	348
October	320	1	12	333	3	2	2	16	307	E 12	319
November	301	1	12	314	4	2	3	20	284	E 12	296
December Total	334 <b>4,006</b>	1 9	12 <b>145</b>	347 <b>4,160</b>	4 <b>51</b>	2 <b>20</b>	2 <b>31</b>	30 <b>299</b>	306 <b>3,748</b>	E 12 E <b>144</b>	318 <b>3,892</b>
									-		
2008 January	350	1	12	363	5	2	3	27	327	E 12 E 11	340
February March	314 313	1	11 11	326 325	5 5	2	3 2	11 20	307 296	⊏ 11 E 11	318 307
April	292	1	11	325 303	5 4	3 1	3	20 16	296 279	E 11	307 290
May	314	1	11	326	5	3	2	26	291	E 11	302
June	361	1	12	374	6	3	3	36	329	E 12	341
July	R 389	1	13	R 402	R 6	2	R 4	R 31	363	E 13	375
August	374	1	12	387	6	1	4	24	355	E 12	367
8-Month Total	2,706	6	94	2,806	42	17	25	191	2,547	<sup>E</sup> 93	2,640
2007 8-Month Total 2006 8-Month Total	2,709 2,661	6 6	96 99	2,812 2,766	36 31	12 16	23 15	225 199	2,514 2,484	<sup>E</sup> 96 <sup>E</sup> 98	2,610 2,582

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

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.

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.

<sup>e</sup> 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.

<sup>f</sup> Data collection frame differences and nonsampling error.

<sup>&</sup>lt;sup>9</sup> Electricity retail sales to ultimate customers by electric utilities and, beginning

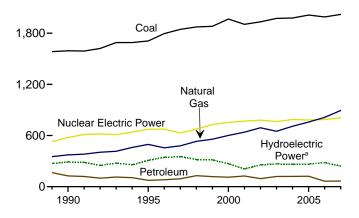
in 1996, other energy service providers.

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

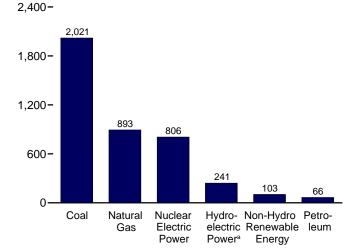
R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.5 billion kilowatthours.

Figure 7.2 Electricity Net Generation (Billion Kilowatthours)

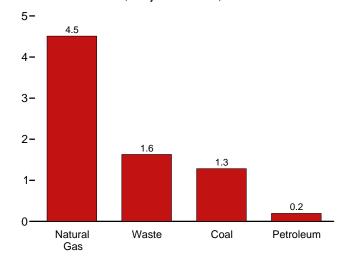
Total (All Sectors), Major Sources, 1989-2007 2,400-



Total (All Sectors), Major Sources, 2007



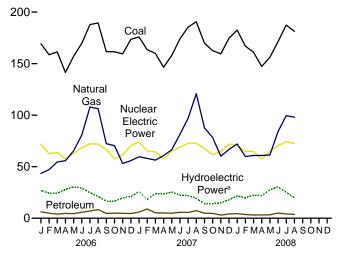
Commercial Sector, Major Sources, 2007



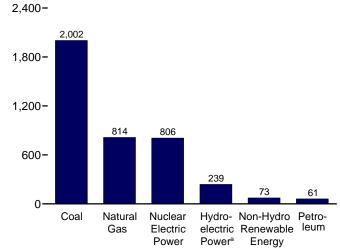
<sup>a</sup>Conventional and pumped storage hydroelectric power.

<sup>c</sup>Conventional hydroelectric power.

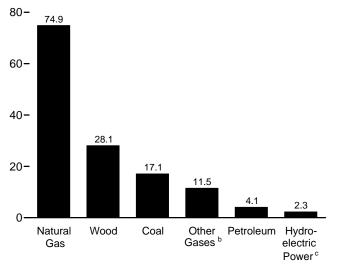
Total (All Sectors), Major Sources, Monthly



Electric Power Sector, Major Sources, 2007



Industrial Sector, Major Sources, 2007



Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Sources: Tables 7.2a, 7.2b, and 7.2c.

<sup>&</sup>lt;sup>b</sup>Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

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

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

		Fossil F	uels				Renewable Energy						
					Nuclear	Hydro- electric	Conven- tional Hydro-	Bior	mass				
	Coala	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Electric Power	Pumped Storage <sup>e</sup>	electric Power	Wood <sup>f</sup>	<b>Waste</b> <sup>g</sup>	Geo- thermal	Solar/- PV <sup>h</sup>	Wind	Total <sup>i</sup>
1973 Total 1975 Total	847,651 852,786	314,343 289,095	340,858 299,778	NA NA	83,479 172,505	(j) (j)	275,431 303,153	130 18	198 174	1,966 3,246	NA NA	NA NA	1,864,057 1,920,755
1980 Total		245,994	346,240	NA	251,116	(1)	279,182	275	158	5,073	NA	NA	2,289,600
1985 Total		100,202	291,946	NA 40.000	383,691	(1)	284,311	743	640	9,325	11	6	2,473,002
1990 Total k		126,621 74,554	372,765 496,058	10,383 13,870	576,862 673,402	-3,508 -2,725	292,866 310,833	32,522 36,521	13,260 20,405	15,434 13,378	367 497	2,789 3.164	3,037,988 3,353,487
1995 Total 1996 Total		81,411	455,056	14,356	674,729	-3,088	347,162	36,800	20,403	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 2003 Total		94,567 119,406	691,006 649,908	11,463 15,600	780,064 763,733	-8,743 -8,535	264,329 275,806	38,665 37,529	15,044 15,812	14,491 14,424	555 534	10,354 11,187	3,858,452 3,883,185
2004 Total	1,978,620	120,771	708,854	16,766	788,528	-8,488	268,417	37,576	15,497	14,424	575	14,144	3,970,555
2005 Total		122,522	757,974	16,317	781,986	-6,558	270,321	38,681	15,479	14,692	550	17,811	4,055,423
2006 January	169,258	6,144	43,529	1,326	71,912	-533	27,437	3,426	1,391	1,230	13	2,383	328,658
February	158,648	4,934	47,152	1,260	62,616	-447	24,762	3,044	1,273	1,111	20	1,922	307,333
March	161,355	4,035	54,585	1,421	63,721	-435	24,625	3,214	1,342	1,261	33	2,359	318,730
April	141,456	4,708 4.440	55,795	1,352 1,440	57,567	-587 -444	28,556	2,968 3.024	1,228	1,129 1.096	52 71	2,472	297,858
May June	157,051 169,726	5,787	65,302 80,787	1,326	62,776 68,391	-423	30,818 29,757	3,024	1,371 1,328	1,199	71	2,459 2,052	330,616 364,260
July	187,860	7,024	107,862	1,374	72,186	-638	25,439	3,419	1,401	1,261	62	1,955	410,421
August	189,488	8,388	106,289	1,474	72,016	-695	21,728	3,466	1,388	1,289	83	1,655	407,763
September	161,630	4,661	72,402	1,299	66,642	-629	17,201	3,241	1,309	1,219	54	1,879	332,055
October	161,434	4,907	70,351	1,358	57,509	-507	17,055	3,193	1,336	1,275	32	2,442	321,567
November	159,472	4,760	53,161	1,216	61,392	-553	20,272	3,166	1,360	1,207	16	2,540	309,159
December Total	173,547 <b>1,990,926</b>	4,577 <b>64,364</b>	55,829 <b>813,044</b>	1,215 <b>16,060</b>	70,490 <b>787,219</b>	-667 <b>-6,558</b>	21,596 <b>289,246</b>	3,360 <b>38,649</b>	1,385 <b>16,110</b>	1,290 <b>14,568</b>	3 <b>508</b>	2,472 <b>26,589</b>	336,283 <b>4,064,702</b>
<b>2007</b> January	175,919	5,986	59,653	1,322	74,006	-572	26,405	3,288	1,446	1,306	13	2,459	352,369
February	163,590	8,959	58,087	1,173	65,225	-447	18,648	3,046	1,320	1,193	19	2,541	324,415
March	159,904	5,333	56,363	1,419	64,305	-458	24,272	3,100	1,465	1,216	48	3,061	321,198
April	146,516	5,056	60,729	1,337	57,301	-374	23,854	3,043	1,283	1,165	54	3,194	304,309
May	157,841	4,882	66,469	1,341	65,025	-547	25,930	3,070	1,376	1,168	84	2,858	330,701
June	173,990 185,433	5,762 5,593	81,185 97,046	1,361 1,366	68,923 72,729	-523 -595	22,860 22,623	3,204 3,349	1,449 1,491	1,250 1,264	84 86	2,395 1,928	363,084 393,503
July August	190,681	7,327	120,761	1,339	72,729	-651	20,002	3,382	1,461	1,264	75	2,446	422,053
September	169,839	4,904	87,741	1,266	67,582	-756	14,667	3,247	1,432	1,230	68	2,641	354,981
October	162,642	4,714	78,321	1,164	61,690	-786	14,826	3,223	1,261	1,278	48	3,056	332,609
November	159,525	3,042	60,159	1,168	64,969	-685	15,727	3,239	1,416	1,223	23	2,705	313,561
December  Total	174,691 <b>2,020,572</b>	4,150 <b>65,708</b>	66,696 <b>893,211</b>	1,160 <b>15,414</b>	71,983 <b>806,487</b>	-601 <b>-6,994</b>	18,498 <b>248,312</b>	3,324 <b>38,515</b>	1,485 <b>16,885</b>	1,278 <b>14,839</b>	3 <b>606</b>	2,859 <b>32,143</b>	346,731 <b>4,159,514</b>
	182,579	4,449	72,090	1,249	70,686	-754	22,358	3,337	1,371	1,187	15	3,737	363,268
2008 January February	162,579	3,627	59,902	1,126	64,936	-754	20,234	3,075	1,371	1,167	33	3,737	325,906
March	161,102	3,111	60,904	1,611	64,683	-522	22,907	3,165	1,374	1,073	75	4,103	324,706
April	147,249	3,248	60,870	1,460	57,281	-98	22,106	2,940	1,465	1,200	87	4,487	303,455
May	156,098	3,264	61,350	1,358	64,794	-587	28,239	3,013	1,472	1,254	96	4,450	325,697
June	171,287	4,982	84,075	1,323	70,268	-372	30,803	3,166	1,462	1,261	120	4,349	373,632
July	R 187,377	R 4,132	R 99,535	R 1,437	R 74,266	R -799	R 25,873	R 3,349	R 1,434	R 1,281	R 105	R 3,236	R 402,139
August 8-Month Total	181,313 <b>1,354,004</b>	3,726 <b>30,541</b>	98,034 <b>596,760</b>	1,440 <b>11,005</b>	72,573 <b>539,488</b>	-648 <b>-4,155</b>	20,651 <b>193,172</b>	3,390 <b>25,435</b>	1,425 <b>11,222</b>	1,267 <b>9,742</b>	99 <b>630</b>	2,599 <b>30,236</b>	386,760 <b>2,805,565</b>
2007 8-Month Total 2006 8-Month Total	1,353,875	48,898 45,459	600,294 561,301	10,657 10,973	540,265 531,185	-4,166 -4,202	184,594 213,122	25,482	11,290 10,720	9,830 9,576	464 403	20,881	2,811,633 2,765,638

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

Included in "Conventional Hydroelectric Power."

R=Revised. NA=Not available.

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

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

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

petroleum, and waste oil.

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 Wood and wood-derived fuels.

<sup>&</sup>lt;sup>9</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

tire-derived fuels).

h Solar thermal and photovoltaic energy.

<sup>&</sup>lt;sup>i</sup> 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.

Table 7.2b Electricity Net Generation: Electric Power Sector

(Subset of Table 7.2a; Million Kilowatthours)

		Fossil F	uels						Renewabl	e Energy			
						Hydro-	Conven- tional	Bior	nass				
	Coala	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Nuclear Electric Power	electric Pumped Storage <sup>e</sup>	Hydro- electric Power	Wood <sup>f</sup>	Waste <sup>g</sup>	Geo- thermal	Solar/- PV <sup>h</sup>	Wind	Total <sup>i</sup>
1973 Total	847,651	314,343	340,858	NA	83,479	(i)	272,083	130	198 174	1,966	NA	NA	1,860,710
1975 Total 1980 Total	852,786 1 161 562	289,095 245,994	299,778 346,240	NA NA	172,505 251,116	(i)	300,047 276,021	18 275	174	3,246 5,073	NA NA	NA NA	1,917,649 2,286,439
1985 Total		100,202	291,946	NA	383,691	{i}	281,149	743	640	9,325	11	114	2,469,841
1990 Total <sup>k</sup>		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		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		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		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		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		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		119,149 89,733	554,940	586 1,970	768,826 780,064	-8,823 -8,743	213,749	8,294 9,009	12,944	13,741 14,491	543 555	6,737 10,354	3,580,053
2002 Total 2003 Total	1,910,613 1.952.714	113,697	607,683 567,303	1,970 2,647	763,733	-8,743 -8.535	260,491 271,512	9,009	13,145 13,808	14,491	534	10,354	3,698,458 3.721.159
2004 Total		114,692	627,394	3,026	788,528	-8,488	265,064	9,727	13,130	14,811	575	14,144	3,808,360
2005 Total	1,992,060	116,767	683,316	3,960	781,986	-6,558	267,040	10,568	13,130	14,692	550	17,811	3,902,192
2000 10101	1,552,000	110,707	000,010	0,500	701,300	0,550	201,040	10,500	10,000	14,032	550	17,011	3,302,132
2006 January	167,478	5,706	36,940	331	71,912	-533	27,067	925	1,194	1,230	13	2,383	315,254
February	157,019	4,539	41,285	283	62,616	-447	24,469	862	1,095	1,111	20	1,922	295,333
March	159,599	3,644	48,426	335	63,721	-435	24,402	899	1,188	1,261	33	2,359	306,041
April	139,729	4,365	50,051	324	57,567	-587	28,361	686	1,054	1,129	52	2,472	285,788
May	155,291	4,094	58,671	359	62,776	-444	30,628	760	1,171	1,096	71	2,459	317,522
June	167,907	5,447	74,192	347	68,391	-423	29,571	841	1,155	1,199	70	2,052	351,360
July	185,953	6,668	100,539	285	72,186	-638	25,216	919	1,217	1,261	62	1,955	396,263
August	187,578	7,994	98,893	394	72,016	-695	21,546	976	1,211	1,289	83	1,655	393,589
September	159,906	4,305	65,905	327	66,642	-629	16,996	866	1,135	1,219	54	1,879	319,181
October	159,684 157,819	4,605 4.405	63,526 46,953	324 315	57,509 61,392	-507 -553	16,774 19,903	844 852	1,150 1,173	1,275 1,207	32 16	2,442 2,540	308,218 296,571
November December	171,812	4,405	49,062	317	70,490	-553 -667	21,320	902	1,173	1,207	3	2,540	322,957
Total	1,969,776	59,926	734,445	3,940	787,219	-6,558	286,254	10,332	13,934	14,568	508	26,589	3,908,077
<b>2007</b> January	174,363	5,581	52,809	354	74,006	-572	25,988	928	1,256	1,306	13	2,459	339,100
February	162,144	8,541	52,023	316	65,225	-447	18,433	891	1,153	1,193	19	2,541	312,564
March	158,293	4,923	50,151	338	64,305	-458	24,051	847	1,262	1,216	48	3,061	308,636
April	145,057	4,660 4.493	54,757	307 305	57,301	-374 -547	23,645	711 791	1,135	1,165	54 84	3,194	292,179
May June	156,280 172,436	5,425	60,109 74,733	343	65,025 68,923	-547 -523	25,740 22,637	888	1,197 1.252	1,168 1,250	84	2,858 2,395	318,095 350,467
July	183,806	5,259	90,115	331	72,729	-595	22,482	900	1,232	1,264	86	1,928	380,189
August	189,024	6,976	113,383	347	72,751	-651	19,783	942	1,266	1,267	75	2,446	408,235
September	168,307	4,636	80,961	310	67,582	-756	14,560	872	1,244	1,230	68	2,641	342,234
October	161,114	4,425	71,402	301	61,690	-786	14,707	838	1,065	1,278	48	3,056	319,740
November	158,102	2,726	53,606	315	64,969	-685	15,611	872	1,218	1,223	23	2,705	301,212
December	173,217	3,803	59,791	318	71,983	-601	18,335	903	1,286	1,278	3	2,859	333,830
Total	2,002,141	61,449	813,840	3,884	806,487	-6,994	245,973	10,381	14,610	14,839	606	32,143	4,006,482
2008 January	181,028	4,167	64,786	475	70,686	-754	22,101	968	1,186	1,187	15	3,737	350,160
February	165,575	3,392	53,263	400	64,936	-375	19,942	881	1,043	1,075	33	3,275	313,948
March	159,462	2,875	54,764	540	64,683	-522	22,611	910	1,193	1,218	75 97	4,103	312,571
April	145,680 154,468	3,018 3,084	55,010	475 507	57,281 64,794	-98 -587	21,857 28,003	777 758	1,250 1,254	1,200 1,254	87 96	4,487 4,450	291,818
May June	169,699	4,734	55,083 77,466	414	70,268	-372	30,684	851	1,254	1,254	120	4,450	313,748 361,315
July	R 185,646	R 3,886	R 92,214	R 447	R 74,266	R -799	R 25,771	R 952	R 1,241	R 1,281	R 105	R 3,236	R 388,813
August	179,666	3,499	90,835	440	72,573	-648	20,554	982	1,219	1,267	99	2,599	373,684
8-Month Total	1,341,224	28,655	543,421	3,697	539,488	-4,155	191,523	7,078	9,608	9,742	630	30,236	2,706,058
2007 8-Month Total 2006 8-Month Total	1,341,402 1,320,554	45,858 42,456	548,080 508,999	2,640 2,658	540,265 531,185	-4,166 -4,202	182,760 211,260	6,897 6,869	9,796 9,284	9,830 9,576	464 403	20,881 17,256	2,709,466 2,661,150

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

R=Revised. NA=Not available.

Notes: • 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.

synfuel.

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

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.

Pumped storage facility production minus energy used for pumping. Wood and wood-derived fuels.

<sup>9</sup> 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).

Solar thermal and photovoltaic energy.

Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur,

Included in "Conventional Hydroelectric Power."

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

Sources: See end of section.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Subset of Table 7.2a; Million Kilowatthours)

	Commercial Sector <sup>a</sup>					Industrial Sector <sup>b</sup>							
		Datas	Network	Biomass			Datas	National	Other	Hydro-	Bion	nass	
	Coalc	Petro- leum <sup>d</sup>	Natural Gas <sup>e</sup>	Waste <sup>f</sup>	Totalg	Coalc	Petro- leum <sup>d</sup>	Natural Gas <sup>e</sup>	Other Gases <sup>h</sup>	electric Power <sup>i</sup>	Wood <sup>j</sup>	Waste <sup>f</sup>	Total <sup>k</sup>
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	7,169	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	715 840	154,530
2004 Total	1,323	469	4,051	1,527	8,270	20,103	5,610	77,409	13,740	3,248	27,835		153,925
2005 Total	1,329	375	4,279	1,650	8,492	19,791	5,380	70,380	12,356	3,195	28,098	789	144,739
<b>2006</b> January	117	26	322	139	684	1,664	411	6,266	994	357	2,500	57	12,720
February	112	29	298	128	643	1,516	366	5,568	975	281	2,180	49	11,357
March	99	32	333	111	643	1,656	359	5,825	1,084	210	2,313	43	12,046
April	86	24	306	129	625	1,641	319	5,438	1,026	185	2,281	45	11,445
May	98	17	363	147	713	1,662	329	6,269	1,079	182	2,262	52	12,380
June	113	15	381	129	724	1,706	326	6,213	977	177	2,284	44	12,176
July	123	18	439	130	783	1,784	338	6,884	1,087	220	2,498	54	13,375
August	127	17	437	129	780	1,784	376	6,959	1,078	182	2,488	49	13,394
September	100	13	369	127	682	1,624	343	6,128	971	202	2,374	46	12,193
October	95	11	392	133	704	1,655	291	6,433	1,032	279	2,348	54	12,645
November	108 111	15 24	347 358	134 138	682 709	1,545 1.625	339 398	5,862 6.410	898 896	358 266	2,312 2.457	53 55	11,906
December Total	1,289	242	4,345	1,574	<b>8,371</b>	19,861	4,197	<b>74,255</b>	12,096	2,899	28,296	<b>601</b>	12,617 <b>148,254</b>
<b>2007</b> January	113	29	355	140	717	1,443	376	6,489	966	402	2,359	50	12,552
February	114	28	349	121	676	1,332	391	5,716	856	207	2,153	46	11,176
March	109	25	363	144	716	1,502	384	5,849	1,079	211	2,251	60	11,846
April	93	21	350	109	651	1,366	375	5,621	1,028	200	2,330	39	11,478
May	100	13	362	132	690	1,462	377	5,998	1,035	180	2,278	47	11,916
June	99	10	394	143	719	1,456	327	6,059	1,017	218	2,314	54	11,897
July	105	10	417	152	758	1,522	324	6,513	1,033	142	2,448	63	12,556
August	117	15	432	136	770	1,541	336	6,946	990	216	2,439	59	13,048
September	104	10	379	132	690	1,428	258	6,402	954	107	2,374	57	12,057
October	106	11	392	140	724	1,423	278	6,526	861	117	2,384	56	12,145
November	110	11	351	141	683	1,312	305	6,203	852	113	2,365	57	11,666
December Total	114 <b>1,285</b>	13 <b>195</b>	367 <b>4,511</b>	143 <b>1,631</b>	709 <b>8,503</b>	1,360 <b>17,146</b>	334 <b>4,064</b>	6,538 <b>74,860</b>	841 <b>11,510</b>	157 <b>2,269</b>	2,418 <b>28,113</b>	56 <b>644</b>	12,191 <b>144,529</b>
2008 January	170	14	407	128	787	1,380	268	6,898	775	251	2,368	57	12,321
February	141	11	381	112	708	1.284	224	6.257	726	285	2,192	66	11.251
March	122	7	380	126	680	1,518	230	5,760	1,071	285	2,254	55	11,455
April	143	4	324	153	704	1,426	225	5,535	985	234	2,161	62	10,933
May	147	4	313	152	702	1,483	176	5,954	851	226	2,254	66	11,247
June	114	11	331	155	695	1,474	238	6,279	909	113	2.313	65	11,622
July	R 128	<sup>R</sup> 12	R 383	<sup>R</sup> 146	<sup>R</sup> 745	R 1,602	R 234	<sup>R</sup> 6,938	<sup>R</sup> 991	<sup>R</sup> 97	R 2,395	<sup>R</sup> 69	R 12,582
August	121	8	391	144	736	1,525	220	6,808	1,000	97	2,407	58	12,340
8-Month Total	1,087	71	2,910	1,115	5,757	11,693	1,815	50,429	7,307	1,589	18,345	499	93,750
2007 8-Month Total 2006 8-Month Total	850 875	151 178	3,022 2,879	1,076 1,042	5,698 5,594	11,623 13,413	2,889 2,825	49,192 49,423	8,003 8,299	1,775 1,794	18,572 18,806	418 393	96,470 98,893

<sup>&</sup>lt;sup>a</sup> Commercial combined-heat-and-power (CHP) and commercial electricity-only

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

R=Revised. NA=Not available.

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

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

Sources: See end of section.

plants.

b Industrial combined-heat-and-power (CHP) and industrial electricity-only

plants.

<sup>c</sup> 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.

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).

<sup>&</sup>lt;sup>9</sup> Includes a small amount of conventional hydroelectric power, other gases, wood, and other, which are not separately displayed.

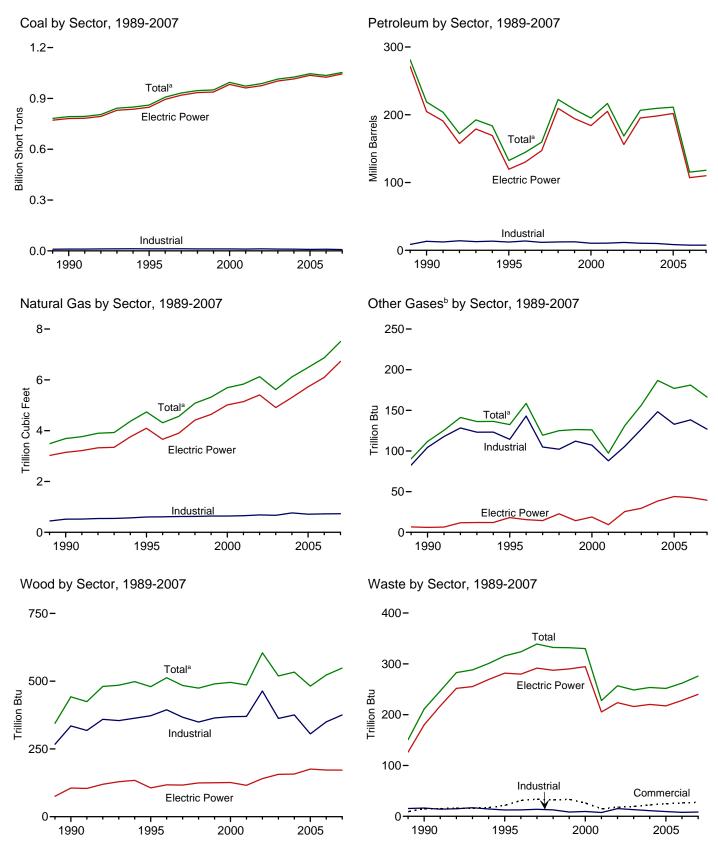
<sup>&</sup>lt;sup>h</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Conventional hydroelectric power.

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).

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation



<sup>a</sup>Includes commercial sector.

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Sources: Tables 7.3a, 7.3b, and 7.3c.

<sup>&</sup>lt;sup>b</sup>Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Table 7.3a Consumption of Combustible Fuels for Electricity Generation: Total (All Sectors) (Sum of Tables 7.3b and 7.3c)

				Petroleum					Bior	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale	Natural Gas <sup>f</sup>	Other Gases	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Ti	nousand Barre	els	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 107	231	174,571	3,044	NA 112	8	7	NA_
1990 Total k	792,457 860,594	18,143 19,615	190,849 95,507	437 680	1,914 3,355	218,997 132,578	3,692 4,738	112 133	442 480	211 316	36 42
1995 Total 1996 Total	907,209	20.252	106.055	1.712	3,322	144,626	4,736	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		20,669	145,171	3,959 3,303	7,942 8,511	209,508	6,117 6,487	187 177	534 482	254 252	176 161
2005 Total	1,045,878	21,163	144,234	3,303	6,511	211,256	0,467	177	402	252	101
2006 January	88,061	1,106	5,872	221	738	10,889	370	15	47	23	14
February	81,720	1,006	4,569	174	657	9,033	392	15	41	21	12
March		832	3,190	238	620	7,360	458	16	45	22	14
April	73,270	1,047	3,817	175	631	8,193	472	15	38	20	13
May	81,254	1,045	3,691	246	591	7,936	559	16	41	22	14
June	88,045	1,187	5,581	230	659	10,291	685	15	43	21	14
July	97,912 98,970	1,495 1,683	7,200 9,414	268 342	721 679	12,570 14,836	924 902	15 17	45 47	23 23	15 15
August September	85.051	840	9,414 4.247	225	619	8.409	603	17	47	23 21	14
October	84,479	996	4,714	161	621	8,973	585	15	44	22	13
November	82,938	1,011	4.607	151	554	8,538	448	14	43	22	13
December	90,415	1,123	4,118	181	584	8,341	472	13	46	23	14
Total	1,035,346	13,372	61,019	2,612	7,673	115,370	6,870	181	523	262	165
2007 January	92,245	1,465	6,057	241	605	10,790	500	14	46	24	14
February	84,496	2,609	10,041	578	484	15,650	478	11	44	22	12
March	82,300	1,230	5,544	280	492	9,514	469	15	43	24	14
April	76,357	973	5,257	331	471	8,915	507	14	41	21	13
May	81,774	1,096 1,375	4,665	307 308	520 597	8,667 10.417	561 682	13 15	41 42	23 23	14 14
June July	90,592 97,419	1,375	5,748 5,798	308	528	10,417	819	15	42 44	23 24	14
August	99,944	2,131	7,860	439	558	13,221	1,038	15	44	24	14
September	88,807	1,066	5,063	243	517	8,958	736	15	51	23	14
October	84,679	1,169	4,782	225	467	8,510	664	14	51	21	15
November	82,928	932	2,376	210	439	5,712	501	13	50	23	13
December	91,805	1,170	3,511	230	543	7,626	553	13	52	24	16
Total	1,053,346	16,605	66,701	3,699	6,222	118,115	7,507	166	548	276	169
2008 January	94.185	1.697	3.376	297	500	7.868	556	14	41	19	13
February	86,377	1,216	2,747	213	465	6,500	461	13	45	18	12
March	83,143	853	2,456	224	404	5,551	483	15	38	20	14
April	77,293	854	2,680	165	417	5,787	483	10	36	20	13
May	82,141	852	2,891	167	397	5,897	498	10	38	21	13
June	89,895	1,492	4,864	243	492 R 405	9,062	689	11	38	21	14
July	R 98,434	R 1,083	R 3,985	R 162	R 435	R 7,404	R 813	R 12	R 37	R 21	R 14
August 8-Month Total	95,936 <b>707,402</b>	875 <b>8,923</b>	3,348 <b>26,347</b>	151 <b>1,623</b>	461 <b>3,571</b>	6,681 <b>54,749</b>	789 <b>4,773</b>	13 <b>99</b>	39 <b>312</b>	21 <b>163</b>	14 <b>106</b>
	•	•	•	,	,	ŕ	,				
2007 8-Month Total 2006 8-Month Total	705,127 692,464	12,267 9,402	50,970 43,333	2,792 1,894	4,256 5,296	87,308 81,108	5,054 4,761	111 124	345 347	184 174	111 110

a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

tire-derived fuels).

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

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

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

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

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.

<sup>c</sup> 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.

<sup>d</sup> Jet fuel, kerosene, other petroleum liquids, and waste oil.

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

Natural gas, plus a small amount of supplemental gaseous fuels

<sup>&</sup>lt;sup>9</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Wood and wood-derived fuels.

Model and Wood extreme tues.
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

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

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

1973 Total	Coal <sup>a</sup> Thousand Short Tons  389,212 405,962 569,274 693,841 781,301 847,854 894,400	47,058 38,907 29,051 14,635	Residual Fuel Oil <sup>c</sup> nousand Barre 513,190 467,221 391,163	NA	Petroleum Coke <sup>e</sup> Thousand Short Tons	Totale Thousand Barrels	Natural Gas <sup>f</sup> Billion Cubic Feet	Other Gases <sup>9</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
1975 Total 1980 Total 1985 Total 1990 Total <sup>k</sup>	389,212 405,962 569,274 693,841 781,301 847,854	47,058 38,907 29,051 14,635	513,190 467,221	NA	Short Tons						
1975 Total 1980 Total 1985 Total 1990 Total <sup>k</sup>	405,962 569,274 693,841 781,301 847,854	38,907 29,051 14,635	467,221				Oubic i eel		Trillion Btu		
1975 Total 1980 Total 1985 Total 1990 Total <sup>k</sup>	405,962 569,274 693,841 781,301 847,854	38,907 29,051 14,635	467,221		507	562,781	3,660	NA	1	2	NA
1985 Total 1990 Total <sup>k</sup>	693,841 781,301 847,854	14,635	391.163	NA	70	506,479	3,158	NA	(s)	2	NA
1990 Total <sup>k</sup>	781,301 847,854			NA	179	421,110	3,682	NA	3	2	NA
1995 Total	847,854		<u>158,779</u> 183,285	<u>NA</u> 25	231 1,008	<u>174,571</u> 204,745	3,044 3,147	<u>NA</u> 6	8 106	<u>7</u> 180	NA (a)
		16,394 18,066	88,895	441	2,452	119,663	4,094	18	106	282	(s) 2
1996 Total	094,400	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 2000 Total	937,888 982,713	23,875 29,722	151,921 138,047	514 403	3,607 3,155	194,345 183,946	4,644 5.014	14 19	125 126	290 294	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	1,015,079	18,927 19,587	139,806 139,376	2,702 2,634	7,357 8,066	198,220 201,926	5,306 5,725	38 44	157 176	220 217	136 120
2005 Total	1,036,140	19,567	139,376	2,634	8,000	201,926	5,725	44	176	217	120
2006 January	87,182	1,043	5,430	163	685	10,060	307	4	16	20	10
February	80,920	930	4,182	127	605	8,266	336	3	15	18	9
March	82,376	738	2,820	184	572	6,601	396	4	15	19	10
April May	72,432 80,397	981 988	3,522 3,426	129 167	585 545	7,558 7,304	415 494	4 4	11 13	17 19	10 10
June	87,184	1,128	5,342	154	610	9,672	620	4	14	19	10
July	96,995	1,429	6,951	183	673	11,928	852	3	15	20	11
August	98,053	1,625	9,162	218	633	14,172	829	4	16	20	11
September	84,208	798	3,987	142	572 570	7,785	539	3	15 14	19	10 10
October November	83,616 82.142	950 947	4,469 4,293	121 113	579 508	8,434 7.895	517 387	3	14	19 19	10
December	89.602	1.056	3,739	143	525	7,562	405	3	15	20	10
Total	1,025,107	12,613	57,322	1,844	7,092	107,238	6,097	43	172	228	121
<b>2007</b> January	91,564	1,387	5,649	190	556	10,008	433	4	15	21	11
February	83,866	2,513	9,652 5,171	538 222	435 437	14,879	417 406	3	16 14	19 21	9 10
March April	81,606 75,721	1,167 906	5,171 4,944	222	437 421	8,743 8,177	406 447	3	12	18	10
May	81.099	1.026	4.437	185	469	7.992	500	3	13	20	11
June	89,914	1,310	5,541	230	541	9,787	619	4	14	20	11
July	96,714	1,335	5,591	235	475	9,537	751	3	14	21	11
August	99,220 88,034	2,068 997	7,652 4,890	356 196	498 463	12,565 8,401	964 670	4 3	15 14	21 20	11 10
September October	88,034 83,910	1,101	4,890 4,606	196	463 415	8,401 7,949	595	3	13	20 18	10
November	82,237	878	2,138	173	386	5,117	437	3	15	20	9
December	91,109	1,092	3,231	180	494	6,972	486	3	15	21	11
Total	1,044,995	15,781	63,501	2,894	5,590	110,127	6,725	39	172	240	124
2008 January	93,520	1,642	3,189	269	472	7,458	500	3	15	17	10
February	85,846	1,171	2,530	193	439	6,090	409	3	14	16	9
March	82,438	823	2,332	175	380	5,228	437	4	15	18	11
April May	76,580 81,365	834 827	2,599 2,818	136 139	383 374	5,485 5.654	436 449	3 4	12 12	18 19	10 10
June	89,173	1,451	4,757	213	461	8,727	640	3	13	19	10
July	<sup>R</sup> 97,664	R 1,024	R 3,878	R 146	R 407	R 7,080	<sup>R</sup> 758	3	R 14	R 19	R 10
August	95,218	830	3,263	133	432	6,387	734	3	14	19	10
8-Month Total	701,803	8,601	25,366	1,404	3,348	52,110	4,362	25	109	145	80
2007 8-Month Total 2006 8-Month Total	699,705 685,539	11,713 8,863	48,636 40,835	2,177 1,325	3,833 4,908	81,689 75,562	4,538 4,248	26 29	115 114	161 152	83 81

a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

tire-derived fuels).

for electric utilities and independent power producers.

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

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

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

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.

<sup>c</sup> 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.

<sup>d</sup> Jet fuel, kerosene, other petroleum liquids, and waste oil.

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

Natural gas, plus a small amount of supplemental gaseous fuels

<sup>&</sup>lt;sup>9</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Wood and wood-derived fuels.

Model and Wood edition of the Model and Model and Wood edition of the Model and Mod non-renewable waste (municipal solid waste from non-biogenic sources, and

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

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

		Commerci	ial Sectora				Indu	strial Sector	b		
			Matural	Biomass			Natural	045	Bior	nass	
	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Waste <sup>f</sup>	Coalc	Petroleumd	Natural Gas <sup>e</sup>	Other Gases <sup>9</sup>	Woodh	Wastef	Other <sup>i</sup>
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1989 Total	414	1,165	18	9	9,707	8,688	444	83	267	15	37
1990 Total	417	953	28	15	10,740	13,299	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	440 481	802 931	41 39	32	11,728	12,392	625 639	102	349 364	13 8	35
1999 Total	481 514	931 823	39 37	33 26	11,432 11,706	12,595 10,459	639 640	112 107	364 369	8 10	39 45
2000 Total	532	1,023	37 36	26 15	10,636	10,459	654	88	369 370	7	40
2001 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	602	1.188	46	22	10,337	10,424	765	148	376	11	27
2005 Total	770	939	48	25	8,969	8,392	714	133	306	9	28
2006 January	70	53	4	2	810	776	59	12	32	1	2
February	64	62	3	2	735	705	53	12	27	1	2
March	60	67	4	2	798	691	58	12	30	1	3
April		48	3	2	787	587	54	12	27	1	2
May	60	31	4	2	797	600	61	12	28	1	3
June	63	30	4	2	797	590	61	11	28	1	2
July	67	32 33	5 5	2 2	849	611	67	13	30	1 1	3
August	69 57	33 25	5 4	2	848 786	630 598	68 60	12 11	31 29	1	3
September October	57 54	25 22	4	2	809	596 517	64	12	30	1	3
November	62	29	4	2	733	615	57	10	29	1	3
December	66	48	4	2	747	731	62	10	30	i	3
Total	743	481	48	26	9,496	7,651	724	138	350	8	31
2007 January	69	59	4	2	612	723	63	10	30	1	3
February	67	58	4	2	563	713	57	8	27	1	2
March	64	52	4	2	629	718	59	11	29	1	2
April	52	43	4	2	585	695	56	11	29	1	2
May	56	23	4	2	618	652	58	10	28	1	2
June	57	19	4	2	620	610	59	11	28	1	2
July	59	19 29	5 5	2	646	580	63	11	29	1	2
August	64 63	29 20	5 4	2 2	660 710	627	69 63	12 12	29 36	1	3
September October	63 64	20 21	4	2	710	537 540	64	12	36 37	1	3
November	62	20	4	2	628	574	60	10	36	1	3
December	68	23	4	2	629	632	63	10	37	1	3
Total	745	387	50	27	7,606	7,601	733	127	376	8	31
2008 January	53	22	4	2	612	388	53	11	26	(s)	2
February	50	17	3	2	480	393	49	10	31	. 1	2
March	41	12	4	2	664	310	43	1 <u>1</u>	24	(s)	2
April	44	9	3	2	669	294	45	7	24	(s)	3
May	46	9	3	2	730	233	46	7	26	(s)	3
June	33	20	3	2	689	314	47 R 50	8	25 R 22	1 R (s)	2
July	R 37	R 18	R 3	2	R 734	R 306	R 52	R 9	R 23	(3)	3
August 8-Month Total	35 <b>338</b>	12 <b>118</b>	3 <b>25</b>	2 <b>15</b>	683 <b>5,262</b>	282 <b>2,520</b>	52 <b>386</b>	9 <b>74</b>	24 <b>203</b>	(s) <b>4</b>	2 <b>19</b>
2007 8-Month Total	489	303	33	18	4,933	5,317	483	85	230	5	19
2006 8-Month Total	504	357	32	18	6,421	5,190	481	95	232	5	20

a Commercial combined-heat-and-power (CHP) and commercial electricity-only

technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

R=Revised. (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: 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: EIA, Form EIA-923, "Power Plant Operations Report."

plants.

<sup>b</sup> Industrial combined-heat-and-power (CHP) and industrial electricity-only

<sup>&</sup>lt;sup>c</sup> 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.

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

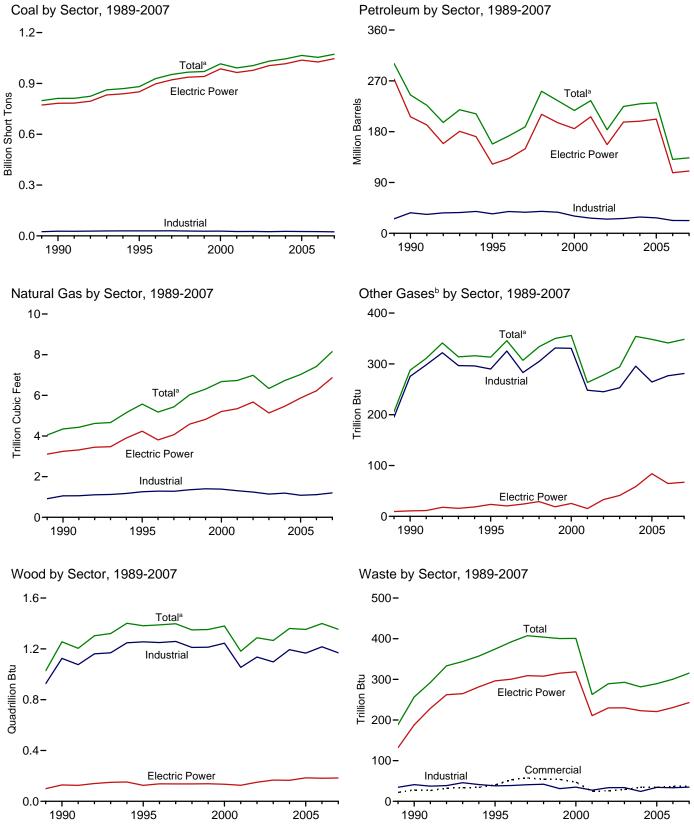
f Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

g Blast furnace gas, propane gas, and other manufactured and waste gases

Wood and wood-derived fuels.

Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous

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



<sup>a</sup>Includes commercial sector.

Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Sources: Tables 7.4a, 7.4b, and 7.4c.

<sup>&</sup>lt;sup>b</sup>Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

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)

				Petroleum					Bion	nass	
	Coal <sup>a</sup>	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	TI	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total	389,212 405,962	47,058 38.907	513,190 467,221	NA NA	507 70	562,781 506,479	3,660 3,158	NA NA	1 0	2 2	NA 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	811,538 881,012	20,194	209,314 112,168	1,332	2,832 4,590	244,998 158,140	4,346 5.572	288 313	1,256 1,382	257 374	86 97
1995 Total	928,015	21,697 22,444	124,607	1,322 2,468	4,596	172,499	5,572 5,178	346	1,382	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 2003 Total	1,005,144 1,031,778	24,749 31,825	118,637 152,859	3,257 4,576	7,353 7.067	183,409 224,593	6,986 6,337	278 294	1,287 1,266	289 293	252 262
2004 Total	1,044,798	23,520	157,478	4,764	8,721	229,364	6,727	354	1,360	293 281	226
2005 Total	1,065,281	24,446	156,915	4,270	9,113	231,193	7,028	348	1,353	289	213
2006 January	89,720	1,233	6,950	317 249	819	12,597	415	28	128	27 24	18
February March	83,236 84,783	1,141 992	5,469 4.009	318	731 703	10,516 8.835	434 503	27 30	111 116	24 25	17 19
April	74,743	1,147	4,533	224	703 708	9,444	515	29	109	23	18
May	82,713	1,148	4,324	308	668	9,121	602	31	112	26	19
June	89,570	1,273	6,146	286	740	11,403	744	28	113	24	19
July	99,478	1,589	7,784	328	803	13,715	973	30	121	26	20
August	100,548	1,785	10,004	430	762	16,030	951	31	120	26	20
September	86,525	919	4,877	280	697	9,563	645	28	116	24	19
October	85,934 84,472	1,069 1,113	5,317 5,356	193 208	690 630	10,030 9,828	631 491	29 26	118 115	25 26	19 19
November December	92,060	1,113	5,077	206 254	670	9,828	515	25	121	26	19
Total	1,053,783	14,655	69,846	3,396	8,622	131,005	7,419	341	1,399	300	225
<b>2007</b> January	93,925	1.643	6,987	331	689	12,407	544	30	117	28	19
February	86.068	2.943	10.994	675	558	17,404	522	23	109	25	17
March	83,881	1,365	6,483	355	572	11,062	512	29	112	27	19
April	77,792	1,104	6,065	431	550	10,351	548	31	113	24	19
May	83,254	1,305	5,287	418	599	10,003	603	30	111	26	20
June	92,090	1,492	6,251	378	695	11,596	733	30	110	27	18
July August	98,917 101.500	1,475 2.262	6,242 8.300	376 523	625 665	11,218 14,412	880 1,152	30 30	115 113	28 27	19 20
September	90,126	1,164	5,501	282	604	9,966	796	28	110	26	18
October	86,073	1,271	5,244	274	557	9,572	719	31	114	24	19
November	84,304	1,030	2,845	253	526	6,757	543	28	113	27	17
December Total	94,499 <b>1,072,430</b>	1,347 <b>18,401</b>	4,067 <b>74,265</b>	280 <b>4,577</b>	645 <b>7,285</b>	8,920 <b>133,668</b>	607 <b>8,160</b>	29 <b>348</b>	117 <b>1,354</b>	28 <b>315</b>	20 <b>226</b>
			-	-	-	•	•		-		
2008 January	95,994 88,299	1,765 1,274	3,953 3,140	401 312	599 561	9,116 7,530	626 520	30 28	107 100	24 24	15 14
February March	84.936	913	3,140 2.957	312	532	6.853	520 554	26 34	97	24 25	16
April	79.014	911	3,033	234	507	6,713	543	28	99	25 25	16
May	83,923	907	3,222	229	498	6,847	562	29	101	25	15
June	91.684	_ 1,551	5,280	_ 311	586	10,072	761	_ 26	_ 103	_ 26	16
July	R 100,259	R 1,143	R 4,411	R 236	R 525	R 8,413	R 880	R 29	R 108	R 26	R 16
August 8-Month Total	97,698 <b>721,808</b>	940 <b>9,405</b>	3,728 <b>29,723</b>	217 <b>2,261</b>	522 <b>4,330</b>	7,493 <b>63,037</b>	860 <b>5,305</b>	28 <b>232</b>	107 <b>823</b>	26 <b>201</b>	16 <b>124</b>
2007 8-Month Total	721,808	13,588	56,608	3,488	4,954	98,452	5,494	232	900	210	151
2006 8-Month Total	704,791	10,309	49,219	2,460	5,934	91,661	5,137	234	930	199	150

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

tire-derived fuels).

R=Revised. 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.

synfuel.

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

<sup>&</sup>lt;sup>c</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

Jet fuel, kerosene, other petroleum liquids, and waste oil.

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

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.

Wood and wood-derived fuels.

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

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.

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

				Petroleum					Bion	nass	
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	TI	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n 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 NA	70	506,479	3,158	NA	(s) <sup>'</sup>	2	NA
1980 Total		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	<u>NA</u>
1990 Total <sup>k</sup>	782,567	16,567	184,915	26 499	1,008	206,550	3,245	11	129	188 296	(s) 2
1995 Total 1996 Total	850,230 896,921	18,553 18,780	90,023 99,951	499 653	2,674 2,642	122,447 132,593	4,237 3,807	24 20	125 138	296 300	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		27,632	138,279	2,026	5,799	196,932	5,135	41	167	230	140
2004 Total		19,107	139,816	2,713	7,372	198,498	5,464	59	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 January	87,317	1,045	5,431	164	685	10,065	318	5	17	20	10
February	81,043	933	4,184	128	607	8,282	346	5	15	18	9
March	82,499	741	2,821	199	576	6,640	407	5	16	19	10
April	72,560 80.515	984 990	3,522 3.427	132 168	585 545	7,565	426 504	5 6	12 13	17 19	10 10
May June	87,319	1,131	5,427 5,342	154	610	7,308 9,676	630	5	15	19	10
July	97,113	1,431	6,963	183	673	11,943	864	5	16	20	11
August	98,183	1,628	9,164	218	634	14,181	840	6	17	20	11
September	84,327	802	3,987	142	572	7,791	548	5	15	19	10
October	83,724	951	4,469	121	580	8,441	528	5	15	19	10
November	82,293	951	4,293	114	509	7,901	397	5	15	20	10
December	89,742	1,060	3,741	146	525	7,573	414	5	16	20	11
Total	1,026,636	12,646	57,345	1,870	7,101	107,365	6,222	65	182	231	125
2007 January	91,704	1,390	5,651	195	557	10,018	442	6	16	21	11
February	83,988	2,529	9,656	564	435	14,925	427	5	17	19	10
March	81,742	1,178	5,174	224	437	8,760	417	5	15	21	11
April		915	4,946	224	421	8,191	457	5	15	19	10
May	81,221	1,029	4,441	188	469	8,002	508	5	14	20	11
June	90,047 96.826	1,312 1,336	5,543 5,592	232 236	541 476	9,793 9,546	627 762	6 6	15 15	21 21	11 11
July August	99,341	2,070	5,592 7,655	360	476 498	12,575	1,007	6	16	21	11
September	88,144	1,036	4,891	198	465	8,448	679	5	15	20	10
October	84,016	1,103	4,607	168	415	7,953	605	6	14	18	11
November	82,344	880	2,140	173	386	5,123	446	5	15	21	10
December	91,235	1,096	3,232	181	494	6,979	496	6	16	22	12
Total	1,046,424	15,874	63,529	2,943	5,594	110,314	6,874	67	184	243	128
2008 January	93,856	1,656	3,276	284	483	7,630	528	7	17	19	11
February	86,176	1,193	2,575	211	449	6,225	432	7	16	17	10
March	82,828	832	2,425	201	392	5,417	462	8	16	20	11
April	76,945	837	2,635	154	398	5,616	459	7	14	19	10
May	81,739	832	2,819	155	385	5,732	473	7	13	20	10
June	89,546	1,461	4,758	229	472	8,807	669	6	15 R 4 6	20	11 R44
July	R 98,035	R 1,027	R 3,879	R 160	R 416	R 7,146	R 786	6	R 16	R 20	R 11
August 8-Month Total	95,542 <b>704,668</b>	835 <b>8,673</b>	3,263 <b>25,629</b>	148 <b>1,542</b>	437 <b>3,432</b>	6,432 <b>53,005</b>	762 <b>4,570</b>	6 <b>54</b>	16 <b>122</b>	20 <b>155</b>	11 <b>85</b>
		•	•		-	•	-	-			
2007 8-Month Total 2006 8-Month Total	700,684 686,550	11,759 8.883	48,659 40.855	2,222 1,346	3,834 4,915	81,811 75,660	4,648 4,335	45 44	123 121	163 153	86 84

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal

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.

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.

synfuel.

b Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small

amounts of kerosene and jet fuel.

<sup>c</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

Jet fuel, kerosene, other petroleum liquids, and waste oil.

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

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.

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 Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

<sup>&</sup>lt;sup>j</sup> 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).

Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers. R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

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

		Commerci	ial Sector <sup>a</sup>				Indu	strial Sector	b		
			Natural	Biomass			Natural	Other	Biom	iass	
	Coalc	Petroleum <sup>d</sup>	Gas <sup>e</sup>	Waste <sup>f</sup>	Coalc	Petroleum <sup>d</sup>	Gas <sup>e</sup>	Gases <sup>9</sup>	Woodh	Waste <sup>f</sup>	Other <sup>i</sup>
	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	25.685	914	195	926	35	85
1990 Total	1,123	2,056	46	28	27,781	36,392	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 1.738	1,246 1.584	82 87	53 58	29,434 29.853	38,661 37,265	1,289 1,282	325 283	1,249 1,259	39 41	89 102
1998 Total	1,730	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 74	25 26	25,755	26,817	1,310	248	1,054	27 34	101 92
2002 Total	1,405 1,816	1,250 1,449	74 58	26 29	26,232 24,846	25,163 26,212	1,240 1,144	245 253	1,136 1,097	34	103
2004 Total	1,917	2.009	72	34	26,613	28.857	1,191	296	1,193	24	67
2005 Total	1,922	1,630	75	34	25,875	27,380	1,084	264	1,166	34	70
<b>2006</b> January	186	121	5	3	2,217	2,411	91	23	112	3	6
February	169	137	5	3	2,024	2,098	83	22	96	3	6
March April	170 134	126 77	5 5	3	2,115 2.050	2,070 1.802	91 84	25 24	100 97	3	7 6
May	139	51	5	3	2,059	1,762	92	24	98	3	7
June	147	51	20	3	2,104	1,677	94	23	98	2	6
July	163	55	7	3	2,202	1,717	103	25	105	3	7
August	163	58	7	3	2,202	1,791	104	25	103	3	7
September	138	49	6	3	2,061	1,722	91	23	100	3	7
October November	136 159	44 64	6 5	3	2,074 2.020	1,545 1.863	97 89	24 21	103 100	3	7 7
December	183	102	6	3	2,020	2.249	95	20	105	3	7
Total	1,886	935	82	36	25,262	22,706	1,115	277	1,216	33	79
2007 January	192	126	6	3	2,030	2,262	97	24	100	3	7
February	185	132	7	3	1,895	2,347	88	18	92	3	6
March April	171 145	111 81	6 5	3	1,968 1,832	2,192 2.078	89 86	24 26	97 99	3 2	7
May	143	41	5	3	1,889	1.960	90	25	97	3	
June	137	33	7	3	1,906	1,770	99	24	95	3	
July	149	31	9	3	1,942	1,641	109	24	100	3	6
August	160	44	10	3	1,999	1,793	135	24	97	3	7
September	143 146	37 37	8 8	3	1,839 1,910	1,481 1,582	109 107	23 25	95 99	3	7
October November	170	37 45	6	3	1,910	1,582	91	23	99	3	6
December	183	56	7	3	3.081	1.886	103	23	101	3	7
Total	1,924	774	83	37	24,082	22,580	1,202	281	1,169	35	78
2008 January	198	64	6	2	1,940	1,421	93	23	90	3	3
February	185	52	6	3	1,938	1,252	83	21	85	3	3
March	183	39 26	6 5	3	1,925 1,910	1,396 1,071	86 79	26 21	81 85	3	3
April May	160 163	26 21	5 5	3	2.020	1,071	79 84	21	88	2	3
June	187	41	5	3	1,951	1,225	88	20	88	3	3
July	R 182	R 42	R 5	R 3	R 2,041	R 1,226	R 89	R 23	R 92	3	R
August	188	26	5	3	1,967	1,035	92	23	91	3	3
8-Month Total	1,447	311	42	24	15,694	9,720	693	178	700	22	26
2007 8-Month Total 2006 8-Month Total	1,282 1,269	599 675	55 60	25 24	15,462 16,972	16,042 15,326	792 742	188 189	776 808	23 22	52 52

a Commercial combined-heat-and-power (CHP) and commercial electricity-only

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: 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: EIA, Form EIA-923, "Power Plant Operations Report."

plants.

<sup>b</sup> Industrial combined-heat-and-power (CHP) and industrial electricity-only

<sup>&</sup>lt;sup>c</sup> 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.

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

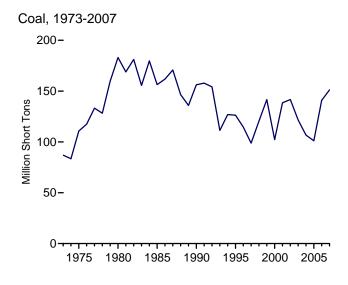
f Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

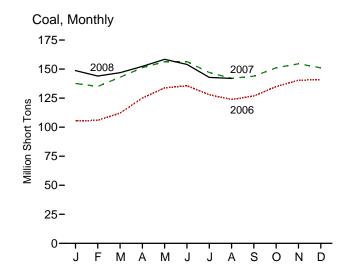
g Blast furnace gas, propane gas, and other manufactured and waste gases

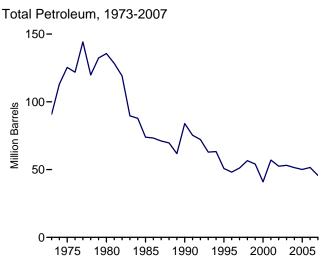
Wood and wood-derived fuels.

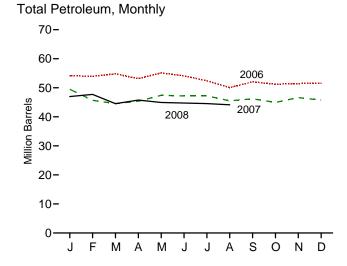
Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

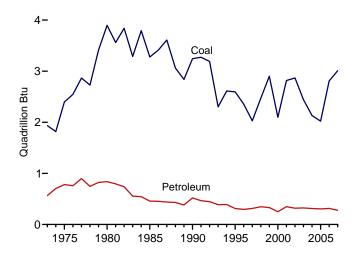




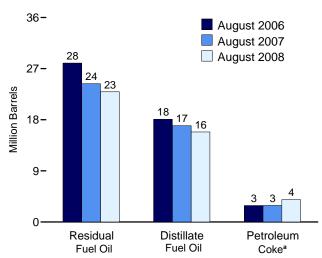




Coal and Petroleum Stocks, 1973-2007



Petroleum by Major Type, End of Month



<sup>a</sup>Converted from short tons to barrels by multiplying by five. Note: Because vertical scales differ, graphs should not be compared. 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

				Petroleum		
	Coal <sup>a</sup>	Distillate Fuel Oilb	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale
	Thousand Short Tons		Thousand Barrels		Thousand Short Tons	Thousand Barrel
973 Year	86.967	10.095	79.121	NA	312	90,776
975 Year		16,432	108,825	NA	31	125,413
980 Year		30.023	105,351	NA NA	52	135,635
985 Year		16,386	57,304	NA NA	49	73,933
990 Year		16,471	67.030	NA NA	94	83,970
		15,392	35,102	NA NA	65	50,821
995 Year		,	,			,
996 Year		15,216	32,473	NA	91	48,146
997 Year		15,456	33,336	NA	469	51,138
998 Year		16,343	37,451	NA NA	559	56,591
999 Year <sup>f</sup>		17,995	34,256	NA	372	54,109
000 Year		15,127	24,748	NA	211	40,932
001 Year		20,486	34,594	NA	390	57,031
002 Year	141,714	17,413	25,723	800	1,711	52,490
003 Year	121,567	19,153	25,820	779	1,484	53,170
004 Year	106,669	19,275	26,596	879	937	51,434
005 Year		18,778	27,624	1,012	530	50,062
006 January	105,401	18,413	31,748	1,058	587	54,151
February		18,393	31,335	1,075	633	53,966
March		18,346	31,881	1,087	700	54,813
April		18,156	30,641	1,101	650	53,148
May	,	18,156	32,462	1,094	684	55,132
June	,	18,199	31,503	1.082	665	54,110
	,	18,044	30,198	1,082	615	52,401
July	,	18,093	27,979	1.082	580	50.056
August		,	,	,		,
September		18,024	29,456	1,343	647	52,059
October		17,852	28,367	1,330	736	51,228
November  December		17,987 <b>18,013</b>	28,292 <b>28,823</b>	1,336 <b>1,380</b>	771 <b>674</b>	51,472 <b>51,583</b>
	•	•	·	·		,
<b>007</b> January		17,465	27,107	1,390	703	49,477
February		17,137	23,569	1,342	730	45,697
March		16,875	23,145	1,303	649	44,569
April	151,296	16,721	23,935	1,309	683	45,381
May	156,354	16,739	25,980	1,327	668	47,385
June	156,412	16,943	26,178	1,322	552	47,201
July	147,047	17,020	25,503	1,316	677	47,223
August		16,944	24,342	1,302	582	45,496
September		17,184	25,024	1,288	546	46,224
October		17,673	23,274	1,308	545	44,981
November	,	17,629	24,632	1,305	610	46,619
December		17,579	24,081	1,325	550	45,733
008 January	148.707	18.927	23,674	1.422	590	46,973
February	-, -	19,593	23,926	1.459	551	47,730
March	, -	16,851	22,893	1,412	676	44,537
April	,	16,355	24,238	1,412	744	45,761
•	,	16,229	23,336	1,449	744 787	44,945
May						
June		15,663	23,866	1,449	755	44,754
July		R 15,955	R 23,068	R 1,445	<sup>R</sup> 818	R 44,558
August	141,957	15,851	22,917	1,445	786	44,145

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, and lignite.

R=Revised. NA=Not available.

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

are at end of period.

• Totals may not equal sum of components due to independent rounding.

• Geographic coverage is the 50 States and the District of Columbia.

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

Sources: • 1973-September 1977: Federal Power Commission, Form FPC-4,

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: 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," and Form EIA-906, "Power Plant Report," and Form EIA-906, "Combined Heat and Power Plant Report." • 2008: EIA, Form EIA-923, "Power Plant Operations Report."

<sup>&</sup>lt;sup>b</sup> 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

include small amounts of kerosene and jet fuel.

<sup>o</sup> 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

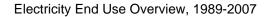
oil no. 4.

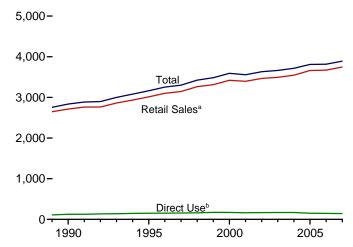
<sup>d</sup> Jet fuel and kerosene. Through 2003, data also include a small amount of waste oil

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

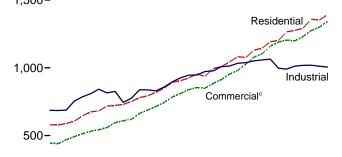
f Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and independent power producers.

Figure 7.6 Electricity End Use (Billion Kilowatthours)



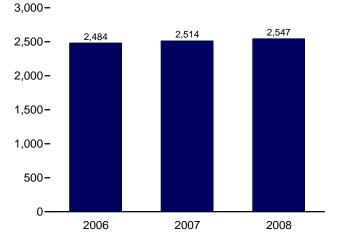


# Retail Sales<sup>a</sup> by Sector, 1973-2007 1,500-



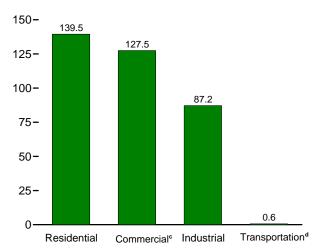


### Retail Sales<sup>a</sup> Total, January-August

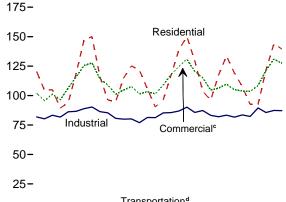


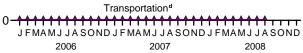
<sup>&</sup>lt;sup>a</sup>Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

### Retail Sales<sup>a</sup> by Sector, August 2008

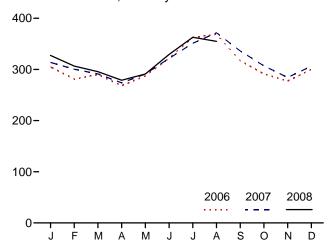


### Retail Sales<sup>a</sup> by Sector, Monthly





### Retail Sales<sup>a</sup> Total, Monthly



<sup>d</sup>Transportation sector, including sales to railroads and railways. Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Source: Table 7.6.

<sup>&</sup>lt;sup>b</sup>See "Direct Use" in Glossary.

<sup>°</sup>Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.

Table 7.6 Electricity End Use

(Million Kilowatthours)

			Retail Sales <sup>a</sup>					Discont Retail Sale	
	Residential	Commercialb	Industrial <sup>c</sup>	Transpor- tation <sup>d</sup>	Total Retail Sales <sup>e</sup>	Direct Use <sup>f</sup>	Total End Use <sup>g</sup>	Commercial (Old) h	Other (Old) <sup>i</sup>
973 Total	579,231	E 444.505	686.085	<sup>E</sup> 3.087	1,712,909	NA	1,712,909	388,266	59,320
975 Total	588,140	E 468,296	687,680	E 2,974	1,747,091	NA NA	1,747,091	403,049	68,222
980 Total	717,495	558,643	815,067	3,244	2,094,449	NA NA	2,094,449	488,155	73,73
985 Total	793,934	689,121	836,772	4,147	2,323,974	NA NA	2,323,974	605,989	87,27
990 Total	924,019	838,263	945,522	4,751	2,712,555	124,529	2,837,084	751,027	91,98
995 Total	1,042,501	953,117	1,012,693	4,975	3,013,287	150,677	3,163,963	862,685	95,40
996 Total	1,082,512	980,061	1,033,631	4,923	3,101,127	152,638	3,253,765	887,445	97,53
997 Total	1,075,880	1,026,626	1,038,197	4,907	3,145,610	156,239	3,301,849	928,633	102,90
998 Total	1,130,109	1,077,957	1,051,203			160,866	3,425,097	979,401	102,50
999 Total	,,	1,103,821	, ,	4,962 5 136	3,264,231		, ,	1,001,996	
	1,144,923	, ,	1,058,217	5,126	3,312,087	171,629	3,483,716		106,95
000 Total	1,192,446	1,159,347	1,064,239	5,382	3,421,414	170,943	3,592,357	1,055,232	109,49
001 Total	1,201,607	1,190,518	996,609	5,724	3,394,458	162,649	3,557,107	1,083,069	113,17
002 Total	1,265,180	1,204,531	990,238	5,517	3,465,466	166,184	3,631,650	1,104,497	105,552
003 Total	1,275,824	1,198,728	1,012,373	6,810	3,493,734	168,295	3,662,029		
004 Total	1,291,982	1,230,425	1,017,850	7,224	3,547,479	168,470	3,715,949		
005 Total	1,359,227	1,275,079	1,019,156	7,506	3,660,969	150,016	3,810,984		
<b>006</b> January	120,419	101,933	81,865	649	304,866	E 12,574	317,440		
February	104,511	95,713	80,207	615	281,046	E 11,257	292,304		
March	104,955	101,115	83,264	636	289,970	E 11,903	301,873		
April	89,374	96,551	81,696	587	268,208	E 11,322	279,531		
May	94,000	106,442	86,179	577	287,198	E 12,283	299,481		
June	118,815	115,785	86,630	609	321,840	E 12,101	333,941		
July	147,338	125,541	88,880	627	362,387	E 13,281	375,668		
August	150,064	127,655	90,285	630	368,634	E 13,296	381,930		
September	116,072	114,231	86,364	615	317,282	E 12,077	329,360		
October	96,246	109,000	85,337	602	291,186	E 12,522	303,708		
November	94,843	101,104	80,653	582	277,182	E 11,808	288,990		
December	114,882	104,673	79,937	627	300,119	E 12,501	312,620		
Total	1,351,520	1,299,744	1,011,298	7,358	3,669,919	146,927	3,816,845		
<b>007</b> January	125,172	107,699	80,139	724	313,735	E 12,447	326,182		
February	121,440	101,435	77,001	663	300,539	E 11,118	311,657		
March	105,785	103,342	81,385	717	291,229	E 11,784	303,013		
April	90,362	101,429	81,283	602	273,677	E 11,379	285,056		
May	96,368	108,873	85,280	597	291,118	E 11,825	302,943		
June	117,340	117,878	85,514	631	321,363	E 11,835	333,198		
July	138,960	124,611	86,870	638	351,079	E 12,490	363,569		
August	149,978	130,920	90,145	643	371,686	E 12,962	384,648		
September	129,475	120,415	85,675	648	336,214	E 11,957	348,171		
October	103,770	115,095	87,330	617	306,812	E 12,072	318,884		
November	95,892	104,651	83,188	637	284,368	E 11,584	295,953		
December	117,367	106,325	82,019	619	306.330	E 12,102	318,432		
Total	1,391,911	1,342,673	1,005,828	7,738	3,748,149	E 143,556	3,891,705		
008 January	133,623	109,646	83,368	693	327,330	E 12,296	339,626		
February	119,138	105,045	81,678	668	306,528	E 11,218	317,747		
March	107,602	103,826	83,585	634	295,647	E 11,383	307,030		
April	92,513	103,526	82,281	614	278,913	E 10,916	289,829		
May	92,559	108,472	89,497	596	291,124	E 11,210	302,333		
June	121,758	121,321	85,618	622	329,319	E 11,554	340,873		
July	R 144,003	R 130.907	<sup>R</sup> 87,370	R 644	R 362,925	RE 12,501	R 375.426		
August	139,511	127,484	87,189	640	354,824	E 12,267	367,091		
8-Month Total	950,708	910,208	680,585	5,1 <b>09</b>	2,546,610	E 93,346	<b>2,639,955</b>		
	•	•	•	-		<b>,</b>			
007 8-Month Total	945,406 929,477	896,187 870,736	667,616 679,006	5,217 4,930	2,514,425 2,484,150	E 95,841 E 98,018	2,610,266 2,582,167		
JUU O-IVIUIILII TULAI	929,411	010,130	019,000	4,930	2,404,100	- 30,010	2,502,107		

<sup>&</sup>lt;sup>a</sup> Electricity retail sales to ultimate customers reported by electric utilities and,

beginning in 1996, other energy service providers.

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

Conductivity and investment of the provider of the provi

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.

<sup>&</sup>quot;Other (Old)" is a discontinued series—data are for public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

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

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

Web Page: See http://www.eia.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 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: 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: 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: 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 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: 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: 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: 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: 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: 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: 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*, November 2008, 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*, November 2008, 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*, November 2008, Table 5.1.

### **Direct Use, Annual**

1989–1994: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1995–2006: EIA, Electric Power Annual 2006, October 2007, Table 7.2.

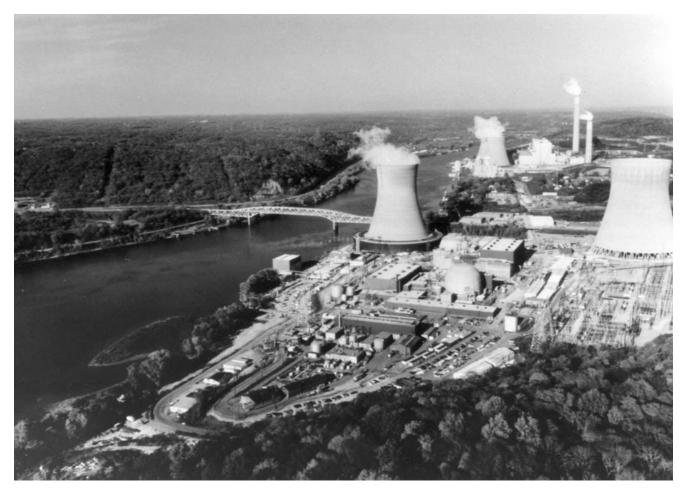
2007: Sum of monthly estimates.

### **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 2007 and 2008, the 2006 annual share is used.

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

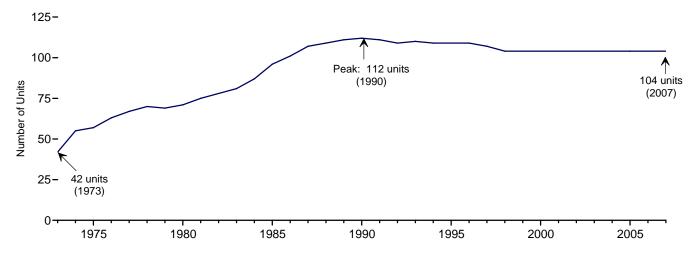
# **Nuclear Energy**



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, 1973-2007



Electricity Net Generation, 1973-2007

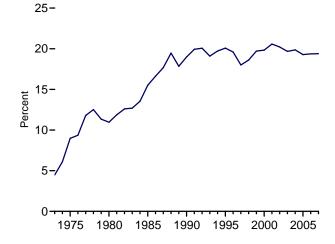
5
4STOOTHEN OF TOTAL

Total

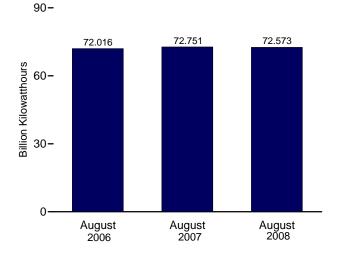
1
Nuclear Electric Power

1975 1980 1985 1990 1995 2000 2005

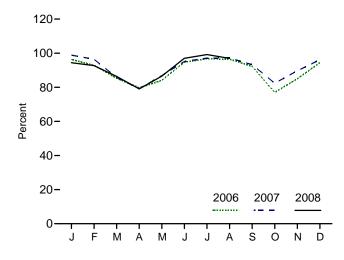
Nuclear Share of Electricity Net Generation, 1973-2007



**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 <sup>a,b</sup>	Net Summer Capacity of Operable Units <sup>b,c</sup>	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factor <sup>d</sup>
	Number	Million Kilowatts	Million Kilowatthours	Per	rcent
973 Total	42	22.683	83,479	4.5	53.5
975 Total	57	37.267	172,505	9.0	55.9
980 Total	71	51.810	251,116	11.0	56.3
	96			15.5	58.0
985 Total		79.397	383,691		
990 Total	112	99.624	576,862	19.0	66.0
995 Total	109	99.515	673,402	20.1	77.4
996 Total	109	100.784	674,729	19.6	76.2
997 Total	107	99.716	628,644	18.0	71.1
998 Total	104	97.070	673,702	18.6	78.2
999 Total	104	97.411	728,254	19.7	85.3
000 Total	104	97.860	753,893	19.8	88.1
001 Total	104	98.159	768,826	20.6	89.4
002 Total	104	98.657	780,064	20.2	90.3
003 Total	104	99.209	763,733	19.7	87.9
	104	99.628	788,528	19.9	90.1
004 Total 005 Total	104	99.988	781,986	19.3	89.3
006 January	104	100.334	71,912	21.9	96.3
February	104	100.334	62,616	20.4	92.9
March	104	100.334	63,721	20.0	85.4
April	104	100.334	57,567	19.3	79.7
May	104	100.334	62,776	19.0	84.1
June	104	100.334	68,391	18.8	94.7
July	104	100.334	72,186	17.6	96.7
August	104	100.334	72,016	17.7	96.5
September	104	100.334	66,642	20.1	92.3
	104		57.509	17.9	
October		100.334			77.0
November	104	100.334	61,392	19.9	85.0
December	104	100.334	70,490	21.0	94.4
Total	104	100.334	787,219	19.4	89.6
<b>007</b> January	104	100.635	74,006	21.0	98.8
February	104	100.635	65,225	20.1	96.4
March	104	100.635	64,305	20.0	85.9
April	104	100.635	57,301	18.8	79.1
May	104	100.635	65,025	19.7	86.8
	104	100.635	68,923	19.0	95.1
June					
July	104	100.635	72,729	18.5	97.1
August	104	100.635	72,751	17.2	97.2
September	104	100.635	67,582	19.0	93.3
October	104	100.635	61,690	18.5	82.4
November	104	100.635	64,969	20.7	89.7
December	104	100.635	71,983	20.8	96.1
Total	104	100.635	806,487	19.4	91.5
008 January	104	100.635	70,686	19.5	94.4
February	104	100.635	64,936	19.9	92.7
March	104	100.635	64,683	19.9	86.4
April	104	100.635	57,281	18.9	79.1
	104		64,794	19.9	86.5
May		100.635			
June	104	100.635	70,268	18.8	97.0
July	104	100.635	<sup>R</sup> 74,266	R 18.5	R 99.2
August	104	100.635	72,573	18.8	96.9
8-Month Total	104	100.635	539,488	19.2	91.5
07 8-Month Total	104	100.635	540,265	19.2	92.1
06 8-Month Total	104	100.334	531,185	19.2	90.8

<sup>&</sup>lt;sup>a</sup> Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at the end of the period—see Note 1 at end of section. Although Browns Ferry 1 was shut down in 1985, the unit remained fully licensed and continued to be counted as operable during the shutdown; in May 2007, the unit was restarted—see Note 1(a) at end of section. For additional information on nuclear generating units, see *Annual Energy Review 2007*, June 2008, 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(a) at end of section.

d For an explanation of the method of calculating the capacity factor, see Note 2

at end of section.

R=Revised.
Notes: • See Note 1 at end of section for discussion of reactor unit coverage.
• Nuclear electricity net generation totals may not equal sum of components due 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.** 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.** 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 DOE, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones."

1983 forward: 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.

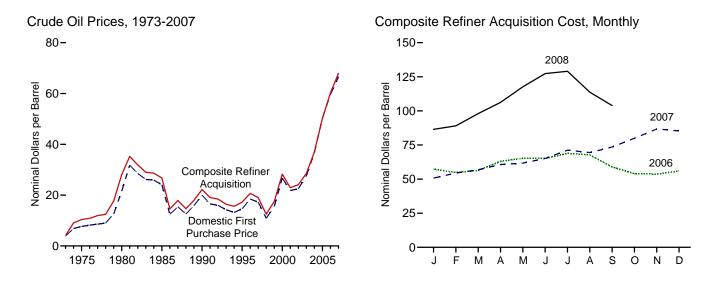
### **Capacity Factor**

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

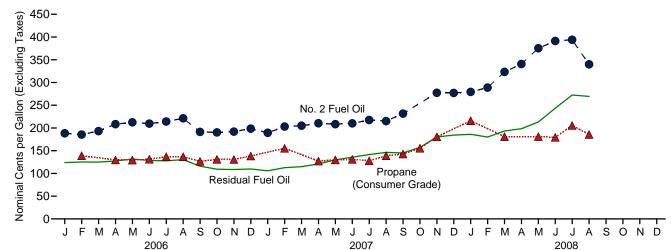
# **Energy Prices**



Figure 9.1 Petroleum Prices



Refiner Prices to End Users: Motor Gasoline, Diesel Fuel, and Jet Fuel, Monthly 450-Nominal Cents per Gallon (Excluding Taxes) 400-350-Finished 300-Motor Gasoline 250-200-Kerosene-Type 150-Jet Fuel No. 2 Diesel Fuel 100-50-0 JASONDJFMA M A MS ONDJF M A M J A S O N D F 2006 2007 2008



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

Notes: • See "Nominal Price" in Glossary. • Because vertical scales differ, graphs should not be compared. 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 per Barrel)

				R	efiner Acquisition Co	st <sup>a</sup>
	Domestic First Purchase Price <sup>b</sup>	F.O.B. Cost of Imports <sup>c</sup>	Landed Cost of Imports <sup>d</sup>	Domestic	Imported	Composite
973 Average	3.89	<sup>e</sup> 5.21	e 6.41	<sup>E</sup> 4.17	<sup>E</sup> 4.08	<sup>E</sup> 4.15
975 Average	7.67	11.18	12.70	8.39	13.93	10.38
980 Average	21.59	32.37	33.67	24.23	33.89	28.07
985 Average	24.09	25.84	26.67	26.66	26.99	26.75
990 Average	20.03	20.37	21.13	22.59	21.76	22.22
995 Average	14.62	15.69	16.78	17.33	17.14	17.23
996 Average	18.46	19.32	20.31	20.77	20.64	20.71
997 Average	17.23	16.94	18.11	19.61	18.53	19.04
998 Average	10.87	10.76	11.84	13.18	12.04	12.52
999 Average	15.56	16.47	17.23	17.90	17.26	17.51
000 Average	26.72	26.27	27.53	29.11	27.70	28.26
001 Average	21.84	20.46	21.82	24.33	22.00	22.95
002 Average	22.51	22.63	23.91	24.65	23.71	24.10
003 Average	27.56	25.86	27.69	29.82	27.71	28.53
004 Average	36.77	33.75	36.07	38.97	35.90	36.98
•	50.28	47.60	49.29	52.94	48.86	50.24
005 Average	30.20	47.00	49.29	32.94	40.00	50.24
006 January	57.85	53.93	55.49	60.22	55.85	57.33
February	55.69	51.34	53.25	58.97	52.80	54.82
March	55.64	54.67	56.59	58.48	55.31	56.38
April	62.52	62.09	63.40	64.06	62.41	62.98
May	64.40	62.95	64.64	67.11	64.39	65.34
June	64.65	61.44	64.42	67.76	63.79	65.13
July	67.71	65.67	67.88	70.55	67.99	68.86
August	67.21	62.68	65.14	70.48	66.45	67.77
September	59.37	54.63	57.20	62.51	57.29	58.92
October	53.26	50.64	52.83	56.67	52.70	54.04
November	52.42	51.48	53.01	55.36	52.70	53.61
December	55.03	52.82	54.53	57.81	54.97	55.98
Average	59.69	57.03	59.11	62.62	59.02	60.24
<b>007</b> 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
	07.00	00.40	00.04	00.57	0.4.00	00.40
008 January	87.06	83.43	86.61	89.57	84.82	86.48
February	89.41	87.81	90.67	92.25	87.41	89.07
March	98.44	96.42	100.03	99.87	97.03	98.01
April	106.64	104.20	108.47	108.46	104.94	106.21
May	118.55	115.02 R 122.62	119.55 R 125.02	119.75	116.55	117.64
June	127.47	R 123.62	R 125.93	129.45	126.22	127.32
July	R 128.08	R 123.06	R 125.40	R 131.47	127.77	R 129.03
August	R 112.83	R 108.39	R 112.02	R 118.32	R 111.21	R 113.71
September	NA	NA	NA	E 106.84	E 101.02	E 103.90

<sup>&</sup>lt;sup>a</sup> See Note 4 at end of section.

See Note 3 at end of section.
 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.

Glossary.

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

data beginning in 1973.
Sources: See end of section.

b See Note 1 at end of section.

<sup>&</sup>lt;sup>c</sup> See Note 2 at end of section.

d See Note 3 at end of section.

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. • See "Nominal Price" in

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

(Nominal Dollars per Barrel)

			s	elected Count	tries					
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>a</sup>	Total OPEC <sup>b</sup>	Total Non-OPEC <sup>b</sup>
1973 Average <sup>c</sup>	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		20.75	19.26	22.46	20.36	23.43	19.55	18.54	20.40	20.32
1995 Average		16.73	15.64	17.40	W	16.94	13.86	W	15.36	16.02
1996 Average		21.33	19.14	21.27	19.28	19.43	17.73	19.22	18.94	19.65
1997 Average		18.85	16.72	19.43	15.16	18.59	15.33	15.24	16.26	17.51
1998 Average		12.56	10.49	12.97	8.87	12.52	9.31	9.09	10.20	11.21
1999 Average		17.20	15.89	17.32	17.65	19.14	14.33	17.15	15.90	16.84
2000 Average		29.04	25.39	28.70	24.62	27.21	24.45	24.72	25.56	26.77
2001 Average		24.25	18.89	24.85	18.98	23.30	18.01	18.89	19.73	21.04 22.93
2002 Average		24.64 28.89	21.60 24.83	25.38 29.40	23.92 25.03	24.50 28.76	20.13 23.81	23.38 25.17	22.18 25.36	22.93 26.21
2003 Average		26.69 37.73		29.40 38.71			23.61 31.78	33.08		33.58
2004 Average 2005 Average		51.89	31.55 43.00	55.95	34.08 47.96	37.30 54.48	46.39	33.06 47.21	33.95 49.60	45.79
2005 Average	32.40	31.09	43.00	55.55	47.90	34.46	40.39	47.21	49.00	45.79
2006 January		60.78	50.21	63.73	W	W	52.56	52.65	56.14	52.32
February	57.55	53.07	48.33	60.20	W	W	50.93	53.66	54.39	49.19
March		54.10	50.16	64.05	W	63.13	56.29	55.84	58.34	51.87
April		62.26	57.12	71.85	W	W	62.93	61.12	65.06	59.75
May		66.17	55.62	70.83	65.35	68.98	61.70	63.45	65.31	60.81
June		63.43	55.07	69.96	65.87	69.34	60.87	63.99	64.69	59.04
July		69.24	60.24	75.63	W	W	64.60	61.76	67.61	64.23
August		65.45 55.49	59.97 52.01	72.67 62.74	54.21	_ W	60.48 52.02	56.14 52.13	62.58	62.76
September October		52.38	47.64	58.62	53.27 52.19	W	48.97	52.13	55.87 52.73	53.58 48.86
November		56.16	48.13	61.20	48.43	W	48.54	49.57	53.07	50.26
December		53.99	50.09	62.24	52.76	W	49.13	51.89	54.26	51.68
Average		59.77	<b>52.91</b>	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
2007 January		57.10	43.27 47.47	58.32	W	55.57	49.80	52.43	50.92	49.98
March		58.44	50.21	64.88	W	62.04	52.01	56.22	57.79	52.91
April		58.26	54.36	69.72	w	W	56.48	58.82	62.32	56.42
May		62.06	55.60	71.40	w	w	57.47	63.71	63.77	57.78
June		67.21	59.91	75.55	W	w	61.01	65.45	67.05	61.12
July		70.77	64.61	79.08	W	76.35	66.02	70.75	72.04	66.48
August		70.46	61.80	74.08	W	W	63.79	70.97	68.86	64.18
September		70.66	65.95	80.10	W	W	68.99	77.63	75.30	68.38
October		79.10	72.04	88.88	W	W	74.87	85.03	82.10	73.38
November		W	79.13	94.71	86.74	W	83.61	84.11	87.15	80.07
December		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	93.26	88.52	_	80.49	83.79	85.41	80.72
February	93.84	83.63	80.49	98.72	W	W	83.93	94.10	91.81	83.19
March	101.34	99.67	87.52	107.04	W	_	90.35	101.74	100.22	92.14
April	110.80	106.06	94.12	114.87	W	_	97.26	113.04	108.47	98.94
May	119.61	117.49	103.53	127.35	123.98	<del>-</del>	107.89	121.13	118.23	111.30
June		125.58	116.15	R 140.01	125.58	W	119.60	124.37	R 126.49	R 120.48
July		123.30	R 123.19	R 134.58	R 118.66	W	R 123.18	R 115.52	R 123.53	R 122.44
August	108.04	108.36	108.67	115.63	W	_	110.27	105.90	108.75	107.99

Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).
 See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary.

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See Note 2 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. • See "Nominal Price" in Glossary.

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

Sources: See end of section.

On this table, "Total OPEC" for all years includes Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; 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

<sup>&</sup>lt;sup>c</sup> Based on October, November, and December data only.
R=Revised. – =No data reported. W=Value withheld to avoid disclosure of individual company data.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Nominal Dollars per Barrel)

				Selected	Countries						
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>a</sup>	Total OPEC <sup>b</sup>	Total Non-OPEC <sup>b</sup>
1973 Average <sup>c</sup>	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 January	61.35	47.43	61.95	51.30	65.91	56.23	67.33	53.93	55.70	58.10	53.18
February	61.48	44.72	55.99	49.48	63.03	56.26	63.01	52.97	55.16	56.72	50.14
March	62.44	46.59	55.89	51.05	67.04	58.89	65.21	57.70	57.98	60.38	52.74
April	70.68	56.61	64.06	58.02	73.72	62.92	71.35	63.81	62.49	65.76	60.99
May	68.62	63.47	68.80	56.37	72.93	65.10	71.29	62.63	64.26	66.09	63.14
June	68.64	61.14	66.06	55.91	72.70	66.49	71.12	62.65	65.81	67.16	62.03
July	72.89	64.69	70.94	61.26	77.43	65.50	74.59	66.19	65.62	69.21	66.52
August	71.47	63.77	66.67	60.78	74.94	62.11	W	62.15	62.11	65.49	64.81
September	60.38	55.22	57.25	52.78	65.21	56.29	W	53.94	55.80	57.86	56.59
October	57.25	47.83	55.50	48.33	60.90	54.00	59.70	50.74	53.48	54.98	50.89
November	59.49	47.83	56.06	48.91	62.88	52.57	58.67	50.75	52.43	54.77	51.44
December	60.46	50.91	56.91	50.93	63.94	54.05	58.69	50.95	53.95	56.21	52.92
Average	64.85	53.90	62.13	53.76	68.26	59.19	67.44	57.37	58.92	61.21	57.14
<b>2007</b> 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 52.58	59.08	48.45	61.16	54.94 58.22	59.30	51.97	54.18	56.06	51.69
March	61.91		59.37	51.07	66.47		65.96	54.34	57.49	59.60	54.71
April	67.78 67.51	54.60 56.46	61.77 63.70	55.16 56.40	71.15 72.99	61.53 66.15	65.92 W	58.67 60.17	60.98 65.02	63.73 66.38	57.43 58.91
May 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	70.73	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 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	<b>78.01</b>	70.78	72.47	66.13	69.83	71.14	63.96
2008 January	93.21	77.83	85.22	81.28	96.81	92.42	W	83.23	89.70	89.61	82.10
February	97.58	81.37	85.20	81.33	101.23	97.64	W	86.22	96.02	94.64	85.13
March	106.19	93.33	102.88	88.54	109.73	108.26	W	93.59	105.39	103.94	94.65
April		103.08	105.95	95.31	118.07	118.50	W	100.57	115.52	112.31	103.20
May		111.83	118.42	104.42	130.93	127.77	128.95	111.77	125.36	123.28	114.83
June		R 119.80	127.35	117.29	R 142.39	R 125.91	W	R 122.65	R 125.61	R 128.45	R 122.78
July		R 122.88	126.58	R 124.28	R 137.22	R 122.08	W	R 124.91	R 120.68	R 126.22	R 124.37
August		111.05	113.14	109.79	124.23	112.83	-	112.68	110.79	113.11	110.85

<sup>&</sup>lt;sup>a</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and

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. • See "Nominal Price" in Glossary.

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: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 22. • 2008: EIA, Petroleum Marketing Monthly, November 2008, Table 22.

the Neutral Zone (between Kuwait and Saudi Arabia).

b See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. On this table, "Total OPEC" for all years includes Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; 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."

<sup>c</sup> 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 Note 3 at end of section. • Values for the current 2 months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then

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

	Leaded Regular	Unleaded Regular	Unleaded Premium <sup>a</sup>	All Types <sup>b</sup>
973 Average	38.8	NA	NA	NA
	56.7	NA NA	NA NA	NA NA
975 Average				122.1
980 Average	119.1	124.5	NA 101.0	
985 Average	111.5	120.2	134.0	119.6
990 Average	114.9	116.4	134.9	121.7
995 Average	NA	114.7	133.6	120.5
996 Average	NA	123.1	141.3	128.8
997 Average	NA	123.4	141.6	129.1
998 Average	NA	105.9	125.0	111.5
999 Average	NA	116.5	135.7	122.1
000 Average	NA	151.0	169.3	156.3
001 Average	NA	146.1	165.7	153.1
002 Average	NA	135.8	155.6	144.1
003 Average	NA	159.1	177.7	163.8
004 Average	NA	188.0	206.8	192.3
005 Average	NA	229.5	249.1	233.8
006 January	NA	231.5	252.1	235.9
February	NA	231.0	251.9	235.4
March	NA	240.1	260.3	244.4
April	NA	275.7	296.7	280.1
May	NA	294.7	316.9	299.3
June	NA	291.7	313.9	296.3
July	NA	299.9	321.9	304.6
August	NA NA	298.5	320.7	303.3
	NA NA	258.9	281.9	263.7
September				
October	NA	227.2	249.3	231.9
November	NA	224.1	245.9	228.7
December	NA	233.4	255.0	238.0
Average	NA	258.9	280.5	263.5
<b>007</b> 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 NA	280.1	303.3	284.9
-				
008 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
_ 0	NA NA	369.8	394.0	374.9
September				

<sup>&</sup>lt;sup>a</sup> The 1981 average (available in Web file) is based on September through December data only.

Notes: • See Note 5 at end of section. • See "Nominal Price" in Glossary. • 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

<sup>&</sup>lt;sup>b</sup> Also includes types of motor gasoline not shown separately.

NA=Not available.

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—Plati's Oil Price Handbook and Oilmanac, 1974, 51st Edition. 1974 forward—calculated by the Energy Information Administration as the simple averages of monthly data.

Table 9.5 Refiner Prices of Residual Fuel Oil

	Sulfur Co	al Fuel Oil Intent Less al to 1 Percent	Sulfur	al Fuel Oil Content an 1 Percent	Average		
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	
978 Average	29.3	31.4	24.5	27.5	26.3	29.8	
980 Average	60.8	67.5	47.9	52.3	52.8	60.7	
985 Average	61.0	64.4	56.0	58.2	57.7	61.0	
990 Average	47.2	50.5	37.2	40.0	41.3	44.4	
95 Average	38.3	43.6	33.8	37.7	36.3	39.2	
96 Average	45.6	52.6	38.9	43.3	42.0	45.5	
997 Average	41.5	48.8	36.6	40.3	38.7	42.3	
98 Average	29.9	35.4	26.9	28.7	28.0	30.5	
999 Average	38.2	40.5	32.9	36.2	35.4	37.4	
000 Average	62.7	70.8	51.2	56.6	56.6	60.2	
ū	52.3	64.2	42.8	49.2	47.6	53.1	
001 Average							
002 Average	54.6	64.0	50.8	54.4	53.0	56.9	
003 Average	72.8	80.4	58.8	65.1	66.1	69.8	
004 Average	76.4	83.5	60.1	69.2	68.1	73.9	
005 Average	111.5	116.8	84.2	97.4	97.1	104.8	
006 January	125.8	134.6	110.2	117.6	118.2	123.9	
February	122.2	137.8	115.3	119.4	119.4	125.2	
March	121.8	136.0	116.0	119.3	119.2	125.0	
April	120.2	139.7	115.8	123.5	118.0	127.5	
May	125.9	143.5	122.1	127.9	124.3	131.7	
June	125.3	148.1	113.6	123.2	116.9	128.6	
July	128.4	145.1	115.8	123.3	119.5	127.8	
August	130.9	145.1	119.2	125.5	124.6	130.3	
September	111.8	132.4	104.1	111.8	107.3	116.0	
October	107.7	120.1	98.5	105.9	102.5	109.3	
November	115.9	117.6	95.9	105.3	102.5	108.7	
	113.3	119.9	96.3	105.3	102.3	109.9	
December Average	120.2	134.2	108.5	117.3	113.6	121.8	
007 lanuari	101 5	447.0	02.0	100.6	07.6	105.0	
<b>007</b> 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	
008 January	195.8	203.9	166.2	178.2	178.0	186.0	
February	187.0	200.3	162.5	171.9	171.4	180.1	
March	195.6	200.3	171.7	188.1	176.9	193.4	
April	213.9	221.9	182.3	190.4	188.0	198.3	
'							
May	232.2	234.8	197.4	206.9	203.0	213.2	
June	257.8	265.7	218.2	233.3	227.4	243.3	
July	283.3	294.5	R 254.2	R 265.7	R 263.6	R 272.4	
August	254.6	NA	244.5	255.4	248.6	269.4	

R=Revised. NA=Not available.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary. • 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: • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 16.

• 2008: EIA, Petroleum Marketing Monthly, November 2008, Table 16.

Table 9.6 Refiner Prices of Petroleum Products for Resale

	Finished Motor Gasoline <sup>a</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
978 Average	43.4	53.7	38.6	40.4	36.9	36.5	23.7
980 Average	94.1	112.8	86.8	86.4	80.3	80.1	41.5
985 Average	83.5	113.0	79.4	87.4	77.6	77.2	39.8
	78.6	106.3	77.3	83.9	69.7	69.4	38.6
990 Average			53.9				
995 Average	62.6	97.5		58.0	51.1	53.8	34.4
996 Average	71.3	105.5	64.6	71.4	63.9	65.9	46.1
997 Average	70.0	106.5	61.3	65.3	59.0	60.6	41.6
998 Average	52.6	91.2	45.0	46.5	42.2	44.4	28.8
999 Average	64.5	100.7	53.3	55.0	49.3	54.6	34.2
000 Average	96.3	133.0	88.0	96.9	88.6	89.8	59.5
001 Average	88.6	125.6	76.3	82.1	75.6	78.4	54.0
002 Average	82.8	114.6	71.6	75.2	69.4	72.4	43.1
003 Average	100.2	128.8	87.1	95.5	88.1	88.3	60.7
004 Average	128.8	162.7	120.8	127.1	112.5	118.7	75.1
005 Average	167.0	207.6	172.3	175.7	162.3	173.7	93.3
MC January	174.9	218.7	182.4	191.7	175.6	181.0	104.4
006 January							
February	166.0	209.6	182.5	184.7	171.1	180.6	97.5
March	187.1	228.2	185.9	197.9	179.1	190.1	96.7
April	219.7	265.6	203.1	218.2	197.2	212.2	102.3
May	226.3	274.3	213.1	NA	201.4	218.6	102.9
June	227.9	274.6	213.2	219.4	198.4	218.7	106.7
July	239.5	287.3	217.3	225.8	199.9	225.1	110.8
August	226.0	284.1	221.5	229.3	206.2	234.0	111.3
September	180.0	231.9	194.7	203.7	179.7	191.1	103.2
October	164.1	212.0	181.3	193.5	171.6	182.7	100.3
November	166.7	213.9	177.4	194.4	169.9	186.7	101.3
December	172.8	217.2	190.6	200.7	175.3	188.6	103.3
Average	196.9	249.0	196.1	200.7	183.4	201.2	103.1
<b>007</b> January	157.0	204.3	172.7	180.6	161.2	169.5	99.5
	171.7	218.7	176.6	194.2	172.9	182.4	103.3
February	199.5	246.1	184.6	194.3	178.1	197.9	104.9
March							
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
INS January	239.5	295.5	266.3	283.2	256.6	258.1	148.3
008 January	243.6	295.5	267.3	284.2	260.9	273.8	143.1
February	243.6 264.0		267.3 310.5	328.0			146.0
March		324.9			297.6	315.9	
April	285.8	346.8	332.0	354.3	319.4	335.8	152.7
May	317.2	375.1	364.2	376.8	353.8	371.2	163.7
June	341.7	401.8	391.2	397.3	376.0	385.9	177.1
July	334.8	<sup>R</sup> 394.6	R 397.8	398.0	380.2	R 387.6	R 183.3
August	307.8	373.7	339.3	345.6	328.7	333.9	167.0

<sup>&</sup>lt;sup>a</sup> See Note 5 at end of section.

Notes:  $\bullet$  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 Energy

Information Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary. • 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: • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 4.

• 2008: EIA, Petroleum Marketing Monthly, November 2008, Table 4.

R=Revised. NA=Not available.

Table 9.7 Refiner Prices of Petroleum Products to End Users

	Finished Motor Gasoline <sup>a</sup>	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
	84.7	111.6	65.1	74.0	67.3	68.1	60.5
1996 Average	83.9		61.3	74.0 74.5		64.2	55.2
1997 Average		112.8			63.6		
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 January	187.2	239.1	184.2	225.1	188.4	186.3	NA
February	183.3	232.4	185.5	219.1	185.5	188.5	138.8
March	198.3	247.4	187.5	236.7	193.0	196.1	NA
April	233.1	286.9	204.8	251.6	208.3	216.9	129.7
May	245.8	301.3	215.6	255.3	212.4	229.3	129.4
June	243.6	305.7	215.9	246.9	209.6	228.1	131.3
July	252.8	310.3	217.8	NA	214.2	231.7	136.8
August	248.6	305.8	222.9	NA	221.2	241.7	136.8
September	207.6	253.2	199.8	251.3	191.3	209.0	126.6
October	178.9	238.5	183.2	255.5	190.3	191.1	131.0
	178.8			241.4		192.3	130.8
November		235.3	179.9		192.1		
December	186.8	234.9	193.5	NA 224.4	198.5	197.0	138.4
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	257.3	304.5	268.6	331.3	279.2	268.8	216.0
February	256.9	307.0	269.4	334.6	288.8	280.5	NA
March	278.4	337.0	311.9	358.2	323.2	325.5	180.9
April	298.4	359.7	333.3	376.5	340.6	345.3	NA
	296.4 331.6	382.7	365.9	376.5 393.4	340.6 375.4	345.3 380.8	181.1
May							
June	357.9	396.5	393.3	416.2	391.4	400.3	179.3
July	356.7	395.5	400.9	R 438.5	R 393.9	R 402.2	R 205.5
August	327.8	379.2	342.6	404.8	339.9	357.9	185.7

<sup>&</sup>lt;sup>a</sup> See Note 5 at end of section.

Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary. • Geographic coverage is the 50 States and the District of Columbia.

Sources: • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 2. • 2008: EIA, Petroleum Marketing Monthly, November 2008, Table 2.

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

Notes: • Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. Sales for resale are shown in Table 9.6; they are sales made to purchasers other than ultimate consumers. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information

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

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

	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 January	224.7	222.0	229.7	235.0	234.5	229.5	242.6	247.1	226.7
February	223.8	220.4	227.8	230.9	231.4	229.1	240.5	243.6	223.5
March	226.1	221.0	229.8	234.6	236.6	234.4	243.3	247.0	227.0
April	232.7	229.0	236.7	245.7	243.9	238.4	250.9	254.6	233.5
May	236.4	235.8	240.5	251.4	248.3	242.1	258.0	256.4	236.7
June	243.7	239.9	247.6	248.6	246.2	244.9	253.8	257.9	238.7
July	243.7	242.1	255.9	246.2	247.4	244.7	256.7	255.7	234.8
August	243.1	244.9	260.5	248.0	246.4	249.1	258.7	261.7	239.6
September	234.4	239.6	254.3	235.6	232.7	243.7	248.7	249.0	227.8
October	226.2	231.0	252.4	227.2	227.9	235.7	241.2	237.3	222.3
November	227.6	231.4	253.1	228.5	231.2	238.8	243.8	238.8	228.0
December	233.5	234.3	256.6	232.7	234.3	240.2	247.2	247.7	231.0
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	303.5	302.6	309.5	314.3	317.3	309.1	321.8	332.7	305.7
February	304.1	302.9	310.5	320.3	320.2	312.4	324.4	335.3	309.7
March	330.2	329.2	337.1	353.4	349.5	336.2	351.2	369.3	340.4
April	346.9	345.5	357.5	370.8	368.7	349.4	363.4	385.8	355.3
May	NA	381.2	391.3	397.9	394.9	380.6	393.8	414.0	385.1
June	419.2	421.2	425.2	429.4	419.5	411.2	416.1	447.7	416.4
July	R 429.0	R 437.7	R 448.4	R 437.8	R 428.0	R 419.4	R 428.9	R 455.9	R 432.6
August	397.8	398.6	418.0	393.6	382.0	NA	385.2	403.6	NA

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 Energy Information Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary. Web Page: See http://www.eia.doe.gov/emeu/mer/prices.html for all available

data beginning in 1978.

Sources: • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 15.
• 2008: EIA, Petroleum Marketing Monthly, November 2008, Table 15.

Table 9.8b No. 2 Distillate Prices to Residences: Selected South Atlantic and Midwestern States (Nominal Cents 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 January	238.4	W	243.1	233.9	227.1	219.0	222.7	222.4	221.5	219.2	210.5
February	234.7	W	243.0	230.6	224.4	219.1	224.0	221.7	221.2	219.1	212.2
March	238.4	W	242.8	231.6	226.5	224.9	229.1	228.0	225.2	224.8	219.7
April	241.8	W	248.5	233.7	233.4	237.2	241.6	238.1	237.3	237.3	230.6
May	244.5	W	224.5	237.2	233.9	240.8	249.4	246.4	246.7	246.7	241.8
June	246.4	W	214.3	232.4	230.3	239.7	249.6	249.5	250.3	246.7	251.4
July	240.6	W	218.7	232.4	235.0	240.9	258.0	256.9	251.2	258.2	265.3
August	240.5	W	222.3	232.6	241.9	248.0	265.9	264.9	262.8	268.8	276.7
September	234.3	W	246.9	219.8	220.2	222.8	234.6	227.5	230.8	232.9	232.9
October	229.4	W	237.8	213.0	215.7	217.3	228.7	227.2	227.6	226.1	221.8
November	235.3	W	242.0	214.1	220.9	219.9	235.5	232.8	233.2	232.1	229.7
December Average	242.7 <b>238.1</b>	W W	244.9 <b>239.8</b>	215.5 <b>226.8</b>	223.4 <b>226.1</b>	222.0 <b>224.4</b>	238.4 <b>232.9</b>	236.4 <b>231.7</b>	236.8 <b>231.2</b>	235.0 <b>229.7</b>	228.2 <b>226.8</b>
<b>2007</b> 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	321.5	W	326.1	306.4	311.1	304.9	304.6	306.3	300.5	303.7	297.1
February	325.9	W	330.4	314.8	316.1	318.4	317.1	312.4	310.0	311.0	311.1
March	354.8	W	355.1	340.6	347.8	355.2	359.1	345.2	357.4	350.7	352.8
April	362.7	W	367.1	352.7	363.7	372.8	370.8	364.5	368.5	365.3	370.8
May	390.3	W	402.7	384.8	391.5	407.4	399.7	408.7	405.0	395.2	399.7
June		W	424.5	412.5	424.9	418.4	421.7	427.4	NA	NA	417.2
July	R 434.5	W	R 441.4	R 412.3	R 430.2	R 415.5	R 417.8	R 426.3	401.1	R 398.6	R 416.1
August	389.8	W	408.7	376.4	385.5	379.7	373.9	380.2	NA	366.2	380.1

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 Energy Information Administration (EIA) estimates. See Note 6 at

end of section. • See "Nominal Price" in Glossary.

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

Sources: • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 15. • 2008: EIA, Petroleum Marketing Monthly, November 2008, Table 15.

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

	Idaho	Washington	Oregon	Alaska	U.S. Average
		<b>3</b>			
978 Average	43.6	48.6	45.8	53.2	49.0
980 Average	91.6	100.8	97.3	97.8	97.4
985 Average	97.2	101.1	97.1	108.3	105.3
990 Average	97.4	102.9	97.0	110.1	106.3
995 Average	83.9	96.2	89.4	83.4	86.7
996 Average	93.3	108.0	98.9	90.9	98.9
	95.3	113.9	103.1	97.3	98.4
997 Average				85.2	
998 Average	78.4	97.8	86.1		85.2
999 Average	76.2	106.5	93.8	96.6	87.6
000 Average	117.0	144.5	136.8	133.7	131.1
001 Average	103.8	133.6	121.1	137.7	125.0
002 Average	91.9	120.4	106.0	108.7	112.9
003 Average	118.8	148.7	130.3	124.3	135.5
004 Average	149.5	174.9	159.4	152.4	154.8
005 Average	212.3	238.5	214.6	206.1	205.2
<b>006</b> January	217.9	249.6	220.4	218.3	233.4
	222.4	253.7	218.3	223.0	231.2
February	228.1	272.8	237.6	223.0	235.3
March					
April	242.2	276.5	251.9	234.1	242.7
May	270.1	298.7	272.5	260.4	246.8
June	267.4	291.4	NA	261.0	245.7
July	266.2	287.2	262.2	258.1	246.0
August	297.4	293.0	282.1	266.3	249.9
September	269.7	274.0	239.3	261.3	238.3
October	235.8	248.0	225.1	228.1	230.2
November	243.2	270.3	254.9	224.2	234.3
December	257.9	284.6	259.3	235.7	238.0
Average	239.1	268.1	241.1	239.5	236.5
<b>007</b> 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
<b>008</b> January	296.0	329.1	301.2	301.3	313.7
February	305.7	339.8	312.9	308.4	317.8
March	348.7	382.3	351.4	337.7	347.3
April	375.5	404.2	374.7	365.8	362.3
May	399.8	432.0	398.9	399.9	392.0
June	417.8	454.5	423.5	430.9	420.2
July	421.6	452.5	429.5	446.5	<sup>R</sup> 429.8
August	R 384.4	<sup>R</sup> 412.6	<sup>R</sup> 386.7	<sup>R</sup> 422.1	<sup>R</sup> 387.2
September	NA	NA	NA	NA	E 368.5

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

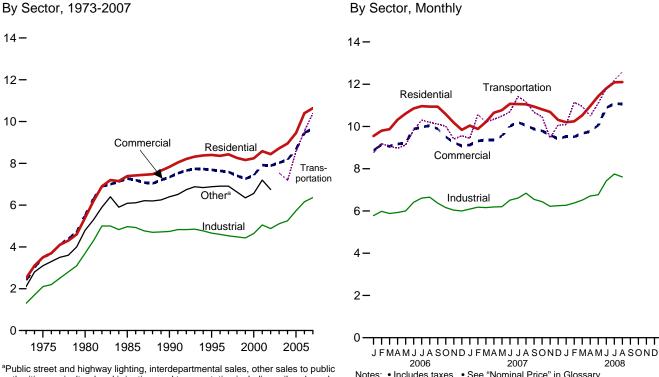
Notes: • States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. • See "Nominal Price" in Glossary.

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

Sources: • 1978-2007: EIA, Petroleum Marketing Annual 2007, Table 15.

• 2008: EIA, Petroleum Marketing Monthly, November 2008, Table 15.

Figure 9.2 Average Retail Prices of Electricity (Nominal Cents per Kilowatthour)



authorities, agricultural and irrigation, and transportation including railroads and railways.

Notes: • Includes taxes. • See "Nominal Price" in Glossary. 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 per Million Btu, Including Taxes )

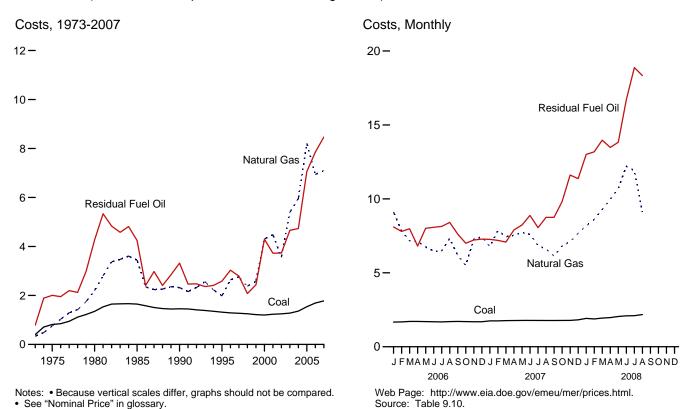


Table 9.9 Average Retail Prices of Electricity

(Nominal Cents per Kilowatthour, Including Taxes)

	Residential	Commerciala	Industrialb	Transportation <sup>c</sup>	Otherd	Total
973 Average	2.5	2.4	1.3	NA	2.1	2.0
975 Average	3.5	3.5	2.1	NA NA	3.1	2.9
	5.4	5.5	3.7	NA NA	4.8	4.7
080 Average						
85 Average	7.39	7.27	4.97	NA	6.09	6.44
90 Average	7.83	7.34	4.74	NA	6.40	6.57
95 Average	8.40	7.69	4.66	NA	6.88	6.89
96 Average	8.36	7.64	4.60	NA	6.91	6.86
97 Average	8.43	7.59	4.53	NA	6.91	6.85
98 Average	8.26	7.41	4.48	NA	6.63	6.74
99 Average	8.16	7.26	4.43	NA	6.35	6.64
000 Average	8.24	7.43	4.64	NA	6.56	6.81
001 Average	8.58	7.92	5.05	NA	7.20	7.29
	8.44	7.89	4.88	NA NA	6.75	7.20
002 Average						
003 Average	8.72	8.03	5.11	7.54		7.44
004 Average	8.95	8.17	5.25	7.18		7.61
05 Average	9.45	8.67	5.73	8.57		8.14
06 January	9.55	8.87	5.78	8.75		8.31
February	9.80	9.14	5.98	9.18		8.49
March	9.87	9.06	5.88	9.06		8.44
April	10.32	9.17	5.93	8.97		8.56
May	10.61	9.22	6.00	9.12		8.71
June	10.85	9.88	6.41	9.82		9.30
July	10.96	9.97	6.61	10.30		9.55
August	10.94	10.04	6.65	10.20		9.58
	10.94	9.89		10.20		9.32
September			6.37			
October	10.58	9.51	6.16	10.02		8.89
November	10.18	9.24	6.04	9.40		8.63
December	9.84	9.08	6.00	9.56		8.55
Average	10.40	9.46	6.16	9.54		8.90
<b>07</b> January	10.04	9.13	6.09	9.44		8.72
February	9.88	9.31	6.18	10.56		8.74
March	10.21	9.37	6.16	10.21		8.78
April	10.65	9.37	6.19	10.34		8.85
May	10.77	9.55	6.20	10.49		8.97
•						
June	11.07	10.02	6.51	10.69		9.47
July	11.06	10.20	6.61	11.42		9.65
August	11.05	10.05	6.84	11.16		9.68
September	10.94	9.88	6.55	10.67		9.44
October	10.81	9.79	6.44	10.46		9.18
November	10.69	9.60	6.22	9.46		8.98
December	10.31	9.41	6.25	10.06		8.91
Average	10.64	9.67	6.36	10.40		9.14
<b>08</b> January	10.20	9.53	6.27	10.09		8.98
February	10.24	9.51	6.38	11.14		8.96
March	10.52	9.67	6.51	10.96		9.09
						9.26
April	10.97	9.77	6.71	10.49		
May	11.43	10.06	6.77	11.10		9.49
June	11.80	10.88	7.42	11.79		10.33
July	12.09	11.08	7.75	12.19		10.68
August	12.10	11.07	7.61	12.58		10.63
8-Month Average	11.21	10.25	6.94	11.28		9.73
07 8-Month Average	10.61	9.66	6.36	10.52		9.14
06 8-Month Average	10.41	9.46	6.17	9.43		8.92

<sup>&</sup>lt;sup>a</sup> Commercial sector. For 1973-2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.

<sup>b</sup> Industrial sector. For 1973-2002, prices exclude agriculture and irrigation.

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 at end of section for plant coverage, and for information on preliminary and final values.

• See "Nominal Price" in Glossary.

• 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 1977-February 1990. Tecteral Ellegy Regulatory Confinision (FRC), Form FPC-5, Whorthly Statement of Electric Operating Revenues and Income. \* • March 1980-1982: FERC, Form FERC-5, "Electric Utility Company Monthly Statement."
1983: 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, November 2008, Table 5.3.

<sup>&</sup>lt;sup>c</sup> Transportation sector, including railroads and railways.

<sup>d</sup> Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

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

(Nominal Dollars per Million Btu, Including Taxes)

1973 Average	0.41 .81 1.35 1.65	Residual Fuel Oil <sup>a</sup> 0.79 2.01	Distillate Fuel Oil <sup>b</sup>	Petroleum Coke	Total <sup>c</sup>	Natural Gas <sup>d</sup>	All Fossil Fuels	
1975 Average	.81 1.35 1.65	2.01	NA				All Fossil Fuels <sup>e</sup>	
1975 Average	1.35 1.65			NA	0.80	0.34	0.48	
1980 Average	1.65	4 0-	NA	NA	2.02	.75	1.04	
1985 Average		4.27	NA	NA	4.35	2.20	1.93	
1995 Average 1996 Average 1997 Average 1998 Average 1999 Average 2000 Average		4.24	NA	NA	4.32	3.44	2.09	
1995 Average	1.45	3.32	5.38	.80	3.35	2.32	1.69	
1996 Average	1.32	2.59	3.99	.65	2.57	1.98	1.45	
1998 Average 1999 Average 2000 Average 2001 Average	1.29	3.03	4.87	.78	3.03	2.64	1.52	
1999 Average 2000 Average 2001 Average	1.27	2.79	4.49	.91	2.73	2.76	1.52	
2000 Average 2001 Average	1.25	2.08	3.30	.71	2.02	2.38	1.44	
2001 Average	1.22	2.44	4.03	.65	2.36	2.57	1.44	
	1.20	4.29	6.65	.58	4.18	4.30	1.74	
2002 Average	1.23	3.73	6.30	.78	3.69	4.49	1.73	
2002 Average	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 January	1.67	8.10	13.68	1.10	7.03	9.11	3.10	
February	1.68	7.80	11.69	1.17	5.44	7.84	2.95	
March	1.71	7.98	12.39	1.20	5.11	7.17	2.86	
April	1.71	6.81	14.48	1.26	4.91	7.13	2.90	
May	1.70	8.01	14.77	1.33	6.43	6.75	2.94	
June	1.69	8.08	14.45	1.32	6.41	6.47	3.05	
July	1.68	8.14	13.23	1.39	6.68	6.48	3.36	
August	1.70	8.41	15.52	1.47	7.38	7.33	3.54	
September	1.71	7.62	10.86	1.49	5.95	6.17	2.90	
October	1.70	7.00	12.06	1.34	5.05	5.51	2.65	
November	1.69	7.22	12.33	1.51	5.90	7.28	2.89	
December	1.69	7.28	12.90	1.42	6.20	7.43	2.95	
Average	1.69	7.85	13.28	1.33	6.23	6.94	3.02	
2007 January	1.75	7.26	12.00	1.54	5.89	6.78	2.93	
February	1.75	7.19	12.10	1.65	6.59	7.86	3.22	
March	1.77	7.08	13.19	1.51	6.54	7.44	3.00	
April	1.78	7.90	14.29	1.54	6.79	7.54	3.16	
May	1.78	8.23	14.44	1.58	7.28	7.73	3.31	
June	1.77	8.88	14.71	1.58	8.01	7.60	3.45	
July	1.77	8.05	14.88	1.44	6.69	6.85	3.42	
August	1.78	8.75	14.90	1.63	7.80	6.60	3.51	
September	1.78	8.75	14.47	1.59	7.52	6.14	3.13	
October	1.78	9.82	17.94	1.44	8.36	6.82	3.18	
November	1.78	11.61	18.75	1.51	9.03	7.11	3.09	
December	1.82	11.37	20.17	1.47	9.56	7.68	3.32	
Average	1.78	8.47	15.22	1.54	7.40	7.10	3.24	
2008 January	1.92	13.01	18.56	1.48	10.24	8.18	3.67	
February	1.88	13.18	18.96	1.61	10.97	8.62	3.63	
March	1.94	13.97	19.15	1.54	9.53	9.29	3.80	
April	1.97	13.48	21.94	1.61	10.83	9.96	4.06	
May	2.05	13.83	24.84	1.78	11.76	10.70	4.28	
June	2.09	16.69	25.74	1.82	14.37	12.21	5.46	
July	2.10	18.88	27.42	1.77	14.38	11.90	5.52	
August	2.18	18.34	24.84	2.42	14.14	9.11	4.51	
8-Month Average	2.02	15.45	22.69	1.75	12.21	10.14	4.40	
2007 8-Month Average 2006 8-Month Average	1.77 1.69	7.98 8.06	13.78 13.90	1.56 1.27	6.99 6.41	7.22 7.13	3.26 3.11	

 $<sup>^{\</sup>rm a}\,$  For 1973-2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).

b For 1973-2001, electric utility data are for light oil (fuel oil nos. 1 and 2).

<sup>&</sup>lt;sup>c</sup> 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.

<sup>d</sup> Natural gas, plus a small amount of supplemental gaseous fuels. For

<sup>1973-2000,</sup> data also include a small amount of blast furnace gas and other gases

derived from fossil fuels.

<sup>e</sup> Weighted average of costs shown under "Coal," "Petroleum," and "Natural

Gas."

f 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 at end of section for plant coverage. NA=Not available.

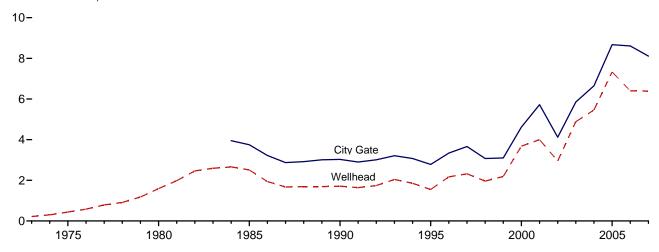
Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • Geographic coverage is the 50 States and the District of Columbia. • See "Nominal Price" in Glossary.

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

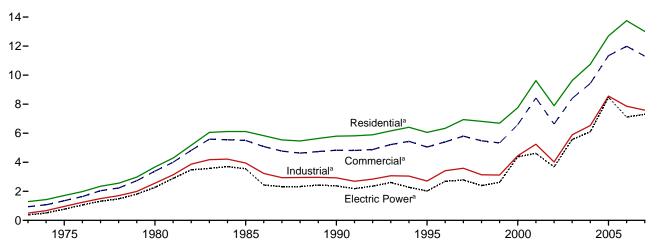
Figure 9.4 Natural Gas Prices

(Nominal Dollars per Thousand Cubic Feet)

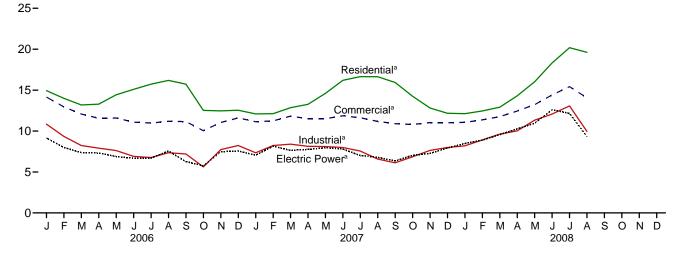
Selected Prices, 1973-2007



Consuming Sectors, 1973-2007



Consuming Sectors, Monthly



alnoludes taxes.

Notes: • Because vertical scales differ, graphs should not be compared. • See "Nominal Price" in glossary.

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

**Table 9.11 Natural Gas Prices** 

(Nominal Dollars per Thousand Cubic Feet)

			Consuming Sectors <sup>a</sup>								
		City	Res	idential	Com	mercial <sup>b</sup>	Ind	ustrial <sup>c</sup>	Electr	ic Power <sup>d</sup>	
	Wellhead Price	Gate Price	Pricee	Percentage of Sector <sup>f</sup>	Pricee	Percentage of Sector <sup>f</sup>	Pricee	Percentage of Sector <sup>f</sup>	Pricee	Percentage of Sector <sup>f</sup>	
1973 Average	0.22	NA	1.29	NA	0.94	NA	0.50	NA	0.38	92.1	
1975 Average	.44	NA	1.71	NA	1.35	NA	.96	NA	.77	96.1	
1980 Average	1.59	NA	3.68	NA	3.39	NA	2.56	NA	2.27	96.9	
1985 Average	2.51	3.75	6.12	NA	5.50	NA	3.95	68.8	3.55	94.0	
1990 Average	1.71	3.03	5.80	99.2	4.83	86.6	2.93	35.2	2.38	76.8	
1995 Average	1.55	2.78	6.06	99.0	5.05	76.7	2.71	24.5	2.02	71.4	
1996 Average	2.17	3.34	6.34	99.0	5.40	77.6	3.42	19.4	2.69	68.4	
1997 Average	2.32	3.66	6.94	98.8	5.80	70.8	3.59	18.1	2.78	68.0	
1998 Average	1.96	3.07	6.82	97.7	5.48	67.0	3.14	16.1	2.40	63.7	
1999 Average		3.10	6.69	95.2	5.33	66.1	3.12	18.8	2.62	58.3	
2000 Average	3.68	4.62	7.76	92.6	6.59	63.9	4.45	19.8	4.38	50.5	
2001 Average	4.00	5.72	9.63	92.4	8.43	66.0	5.24	20.8	4.61	40.2	
2002 Average	2.95	4.12	7.89	97.9	6.63	77.4	4.02	22.7	d <b>3.68</b>	83.9	
		5.85	9.63	97.5	8.40	77.4 78.2	5.89	22.1	5.57	91.2	
2003 Average	4.88 5.46	5.65 6.65	9.63 10.75	97.5 97.7	9.43	78.2 78.0	6.53	23.7	6.11	89.8	
2004 Average 2005 Average	7.33	8.67	12.70	97.7	9.43 11.34	76.0 82.1	8.56	23.7 24.1	8.47	91.3	
2003 Average	7.55	0.07	12.70	30.2	11.54	02.1	0.50	24.1	0.47	91.3	
2006 January	8.02	10.80	14.94	NA	14.15	84.0	10.84	23.8	9.15	93.9	
February	6.86	9.34	14.00	NA	12.95	84.2	9.35	23.9	8.00	95.5	
March	6.44	8.81	13.19	NA	12.07	83.9	8.23	24.0	7.36	94.7	
	6.38	8.29	13.19	NA NA	11.57	80.8	7.91	23.6	7.32	94.7	
April		7.99	14.43	NA NA	11.60	78.4	7.62	23.9	6.89	93.0	
May											
June		7.39	15.09	NA	11.09	75.7	6.90	23.5	6.69	93.8	
July	5.92	7.40	15.73	NA	10.98	74.3	6.77	23.8	6.69	92.9	
August	6.56	8.10	16.19	NA	11.20	72.4	7.35	23.8	7.56	91.9	
September		7.68	15.73	NA	11.16	74.5	7.20	22.2	6.27	93.6	
October		6.42	12.52	NA	10.04	77.2	5.62	23.0	5.76	92.0	
November	6.72	8.47	12.47	NA	11.05	80.2	7.74	23.1	7.48	93.9	
December	6.76	8.66	12.54	NA	11.61	82.6	8.23	23.5	7.57	93.7	
Average	6.40	8.61	13.75	98.1	11.99	80.7	7.86	23.5	7.11	93.4	
2007 January	E 5.92	7.00	12.00	NIA	44.44	02.0	7.04	22.0	7.05	05.7	
<b>2007</b> January	E 6.66	7.89	12.09	NA	11.14	83.0	7.34	22.0	7.05	95.7	
February		8.59	12.12	NA	11.24	83.7	8.23	22.1	8.16	92.5	
March		8.81	12.86	NA	11.82	83.3	8.40	21.7	7.64	93.7	
April	E 6.84 E 6.98	8.19	13.27	NA	11.51	80.9	8.14	21.9	7.76	94.6	
May	E 6.86	8.35	14.61	NA	11.51	77.9	8.11	22.6	7.96	94.1	
June		8.40	16.20	NA	11.87	73.7	7.99	23.2	7.80	94.1	
July		7.95	16.65	NA	11.63	73.9	7.56	22.5	7.01	93.0	
August	E 5.90	7.46	16.64	NA	11.18	72.0	6.58	22.2	6.80	88.1	
September	E 5.61	6.90	15.94	NA	10.90	72.1	6.12	22.0	6.35	94.7	
October	E 6.25	7.36	14.25	NA	10.80	69.2	6.86	22.4	7.04	94.7	
November	E 6.37	8.05	12.82	NA	11.04	74.4	R 7.64	21.4	7.27	94.1	
December	E 6.53	8.13	12.17	NA	11.02	78.3	R 7.99	22.0	7.93	94.1	
Average	<sup>E</sup> 6.39	8.11	13.01	<sup>E</sup> 97.9	11.31	79.1	7.59	22.2	7.31	93.2	
2000 1	F 0 00	0.00	40.46	NIA	44.00	70.0	0.40	00.5	0.40	00.0	
2008 January	E 6.99 E 7.55	8.33	12.12	NA	11.06	79.0	8.19	20.5	8.48	99.6	
February		8.87	12.46	NA	11.37	78.6	8.92	20.4	8.90	101.9	
March	E 8.29	9.45	12.92	NA	11.76	78.5	9.63	21.3	9.56	99.7	
April		9.84	14.30	NA	12.45	75.5	10.02	21.8	10.27	100.8	
May		10.97	16.02	NA	13.23	71.5	11.33	21.3	10.96	99.3	
June		11.73	18.32	NA	14.41	70.8	12.07	20.9	12.60	98.3	
July		12.39	20.19	NA	15.43	66.9	13.07	20.7	R 12.16	R 97.1	
August	E 8.32	10.16	19.62	NA	14.06	65.4	9.95	20.3	9.33	97.8	
8-Month Average	<sup>E</sup> 8.92	9.67	13.70	NA	12.17	75.8	10.30	20.9	10.43	99.0	
2007 C Month Avenue	F.C. 40	0.00	42.04	NIA	44.42	00.7	7 70	22.2	7.40	00.6	
2007 8-Month Average 2006 8-Month Average	<sup>E</sup> 6.49	8.26	13.04	NA	11.43	80.7	7.79	22.3	7.42	92.6	
ZUUD A-WONTH AVERAGE	6.53	8.93	14.20	NA	12.43	81.2	8.17	23.8	7.29	93.5	

<sup>&</sup>lt;sup>a</sup> See Note 9 at end of section.

are available. For details on how the percentages are derived, see Table. 9.11 Sources at end of section.

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 at end of gaseus rules. • Frites are lifetined to liftitude all takes. See Note set 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. • See "Nominal Price" in Glossary.

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

data beginning in 1973.

Sources: See end of section.

a See Note 9 at end of section.
 b Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of Section 7.
 c Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of Section 7.

<sup>&</sup>lt;sup>d</sup> 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 at end of section for plant coverage.

f The percentage of the sector's consumption in Table 4.3 for which price data

## **Energy Prices**

**Note 1.** 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**. 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. 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. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on 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." 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. 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. 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**. 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. 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 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, and electric power consumers. They do not include the price of natural gas delivered to industrial and commercial consumers on behalf of third parties. 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." 1978–2007: Energy Information Administration (EIA), *Petroleum Marketing Annual* 2007, Table 1.

2008: EIA, *Petroleum Marketing Monthly*, November 2008, 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."

1978–2007: EIA, Petroleum Marketing Annual 2007, Table

2008: EIA, *Petroleum Marketing Monthly*, November 2008, 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."

1978–2007: EIA, Petroleum Marketing Annual 2007, Table

2008: EIA, *Petroleum Marketing Monthly*, November 2008, 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: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report."

1978–2007: EIA, *Petroleum Marketing Annual* 2007, Table 24.

2008: EIA, *Petroleum Marketing Monthly*, November 2008, Table 24.

### **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: 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*, September 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: EIA, *Electric Power Monthly*, November 2008, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

### **Table 9.11 Sources**

### **All Prices Except Electric Power**

1973–2002: Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports.

2003 forward: EIA, *Natural Gas Monthly (NGM)*, October 2008, Table 3.

### **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: Form EIA-923, "Power Plant Operations Report."

### **Percentage of Residential Sector**

1989–2006: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

2007: 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, October 2008, 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*, October 2008, Table 3.

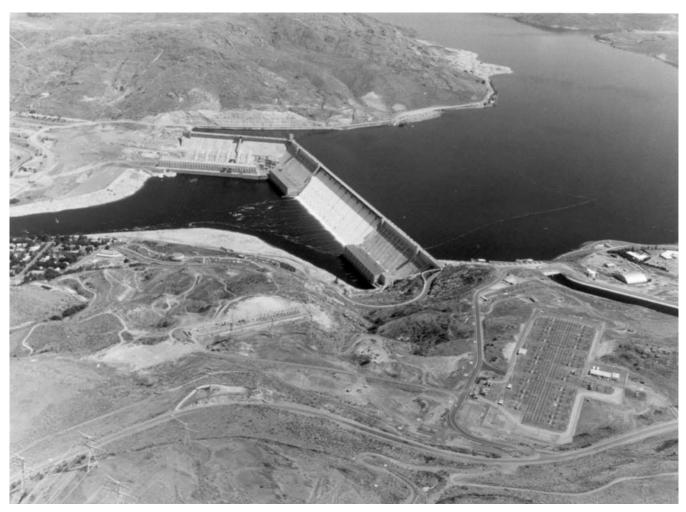
### **Percentage of Electric Power Sector**

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: 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).

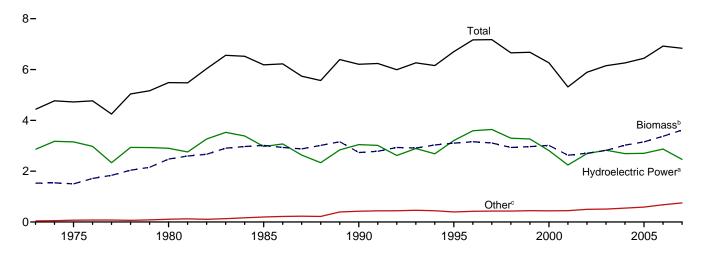
# Renewable Energy



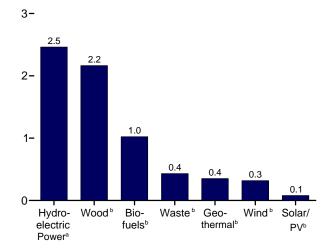
Grand Coulee Dam, Washington State. Source: U.S. Bureau of Reclamation.

Figure 10.1 Renewable Energy Consumption (Quadrillion Btu)

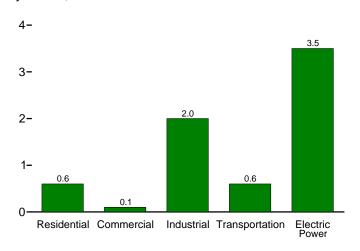
Total and Major Sources, 1973-2007



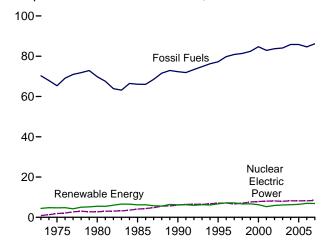
By Source, 2007



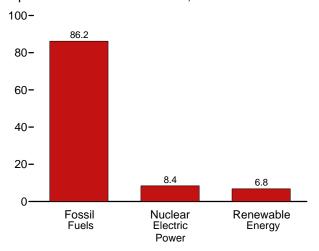
By Sector, 2007



Compared With Other Resources, 1973-2007



Compared With Other Resources, 2007



<sup>a</sup>Conventional hydroelectric power. <sup>b</sup>See Table 10.1 for definition. <sup>c</sup>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 <sup>a</sup> Biomass Total Renew-							Consumption	on			
	Bior	mass		Herden					Bion	nass		Total
	Bio- fuels <sup>b</sup>	Total <sup>c</sup>	able Energy <sup>d</sup>	Hydro- electric Power <sup>e</sup>	Geo- thermal <sup>f</sup>	Solar/ PV <sup>9</sup>	<b>Wind</b> <sup>h</sup>	Wood <sup>i</sup>	Waste <sup>j</sup>	Bio- fuels <sup>k</sup>	Total	Renew- able Energy
1973 Total 1975 Total 1980 Total 1985 Total 1990 Total 1995 Total	NA NA NA 93 111 200 143	1,529 1,499 2,475 3,016 2,735 3,102 3,157	4,433 4,723 5,485 6,185 6,206 6,703 7,167	2,861 3,155 2,900 2,970 3,046 3,205 3,590	43 70 110 198 336 294 316	NA NA (s) 60 70 71	NA NA (s) 29 33 33	1,527 1,497 2,474 2,687 2,216 2,370 2,437	2 2 2 236 408 531 577	NA NA NA 93 111 202 145	1,529 1,499 2,475 3,016 2,735 3,104 3,159	4,433 4,723 5,485 6,185 6,206 6,705 7,168
1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total	190 206 215 238 260 315 412 501 582	3,111 2,933 2,969 3,010 2,629 2,712 2,815 3,011 3,141	7,180 6,659 6,683 6,262 5,318 5,899 6,149 6,248 6,431	3,640 3,297 3,268 2,811 2,242 2,689 2,825 2,690 2,703	325 328 331 317 311 328 331 341 343	70 70 69 66 65 64 64 65 66	34 31 46 57 70 105 115 142 178	2,371 2,184 2,214 2,262 2,006 1,995 2,002 2,121 2,156	551 542 540 511 364 402 401 389 403	187 205 213 241 258 309 414 513 595	3,108 2,931 2,967 3,013 2,627 2,706 2,817 3,023 3,154	7,178 6,657 6,681 6,264 5,316 5,893 6,150 6,261 6,444
2006 January	56 53 59 55 59 62 63 66 65 67 72 <b>745</b>	286 256 274 259 270 271 284 287 277 285 280 293 <b>3,324</b>	617 552 578 600 633 621 592 555 501 514 540 568 <b>6,872</b>	272 246 244 283 306 295 252 216 171 169 201 214 <b>2,869</b>	29 26 30 27 26 28 30 29 30 28 30 30 28	6 5 6 6 6 6 6 6 6 6 6 6 7 6 6 6 6 6 7 6 6 7 7	24 19 23 25 24 20 19 16 19 24 25 25 264	194 170 182 172 177 176 186 186 179 184 179 188 2,172	36 32 34 32 35 35 33 35 35 33 34 34 35	55 51 58 57 65 71 69 72 71 75 73 78	285 254 273 261 277 281 290 293 283 292 287 299 <b>3,374</b>	615 550 576 602 640 630 598 561 507 521 547 574 <b>6,922</b>
2007 January	73 68 75 74 80 85 88 87 92 93 97	296 272 293 287 296 293 307 307 299 308 308 321 <b>3,589</b>	620 517 600 590 617 581 588 567 507 523 527 570 <b>6,805</b>	262 185 241 237 257 227 224 198 145 147 156 183 <b>2,463</b>	31 28 29 28 28 30 30 30 29 30 29 30 353	6 6 7 7 7 7 7 7 7 7 6 6 80	24 25 30 32 28 24 19 24 26 30 27 28 319	186 171 181 180 180 177 184 182 176 183 179 186 2,165	37 34 37 33 36 36 37 37 36 34 36 38 431	78 71 79 76 82 83 88 90 87 96 95 100 <b>1,024</b>	301 275 297 289 298 296 310 309 299 312 311 324 <b>3,620</b>	624 520 604 592 618 583 590 569 507 526 529 573 <b>6,835</b>
2008 January	101 96 110 108 118 113 123 129 <b>897</b>	311 293 312 308 323 318 R 335 340 <b>2,539</b>	605 558 616 607 684 704 <sup>R</sup> 662 608 <b>5,043</b>	222 201 227 219 280 306 R 257 205 1,916	28 26 29 29 30 30 8 30 8 30 232	6 7 7 7 7 7 7 <b>56</b>	37 32 41 45 44 43 R 32 26 300	175 165 166 165 170 170 R 177 176 1,364	34 33 35 35 35 35 8 36 35 278	102 98 108 112 119 118 124 130 <b>912</b>	312 295 310 313 324 323 R 337 341 <b>2,554</b>	606 561 614 612 685 708 R 663 609 <b>5,058</b>
2007 8-Month Total 2006 8-Month Total	625 474	2,353 2,188	4,679 4,748	1,831 2,114	234 226	54 49	207 171	1,440 1,444	288 271	646 498	2,374 2,213	4,700 4,772

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

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

cal derived fuels biomass waste, fuel ethanol, and biodiesel.

agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and

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

Notes: • Most data for the residential, commercial, industrial, and transportation sectors are estimates. See notes and sources for Tables 10.2a and 10.2b. • See Note, "Renewable Energy Production and Consumption," at end of section.

• Totals may not equal sum of components due to independent rounding.

• Geographic coverage is the 50 States and the District of Columbia.

Web Page: See http://www.eia.doe.gov/emeu/mer/renew.html for all available

Sources: Tables 10.2a-c, 10.3, and 10.4.

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).

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

Wood and wood-derived fuels.

j Municipal solid waste from biogenic sources, landfill gas, sludge waste,

tire-derived fuels).

k Fuel ethanol and biodiesel consumption, plus losses and co-products from the production of fuel ethanol and biodiesel.

data beginning in 1973.

Table 10.2a Renewable Energy Consumption: Residential and Commercial Sectors

(Trillion Btu)

		Resider	ntial Sector				Co	mmercial Se	ctora		
			Biomass					Bio	mass		
	Geo- thermal <sup>b</sup>	Solar/ PV <sup>c</sup>	Wood <sup>d</sup>	Total	Hydro- electric Power <sup>e</sup>	Geo- thermal <sup>b</sup>	Wood <sup>d</sup>	Waste <sup>f</sup>	Fuel Ethanol <sup>9</sup>	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	450	527	1	14	70	34	1	105	119
2006 January	2	6	35	42	(s)	1	5	3	(s)	9	10
February	1	5	31	38	(s)	1	5	3	(s)	8	9
March	2	6	35	42	(s)	1	5	3	(s)	8	10
April	2	6	34	41	(s)	1	5	3	(s)	8	10
May	2	6	35	42	(s)	1	5	3	(s)	9	10
June	2	6	34	41	(s)	1	5	3	(s)	8	10
July	2	6	35	42	(s)	1	5	3	(s)	9	10
August	2	6	35	42	(s)	1	6	3	(s)	9	10
September	2	6	34	41	(s)	1	5	3	(s)	8	9
October	2	6	35	42	(s)	1	5	3	(s)	9	10
November	2	6	34	41	(s)	1	5	3	(s)	8	10
December	2	6	35	42	(s)		6	3	(s)	9	10
Total	18	67	410	495	1	14	65	36	1	102	117
<b>2007</b> January	2	6	39	47	(s)	1	5	3	(s)	9	10
February	2	6	35	43	(s)	1	5	3	(s)	8	9
March	2	6	39	47	(s)	1	5	3	(s)	9	10
April	2	6	38	46	(s)	1	5	3	(s)	8	9
May	2	6	39	47	(s)	1	5	3	(s)	9	10
June	2	6	38	46	(s)	1	5	3	(s)	9	10
July	2	6	39	47	(s)	1	5	3	(s)	9	10
August	2	6	39	47	(s)	1	5	3	(s)	9	10
September	2	6	38	46	(s)	1	5	3	(s)	8	10
October	2	6	39	47 46	(s)	1	5	3	(s)	9	10
November December	2 2	6	38	46 47	(s)	1 1	5 6	3 3	(s)	9 9	10
Total	2 <b>2</b>	6 <b>74</b>	39 <b>460</b>	47 <b>556</b>	(s) 1	14	<b>65</b>	3 <b>7</b>	(s) <b>2</b>	104	10 <b>119</b>
2008 January	2	6	39	47	(0)	1	5	2	(0)	8	9
2008 January	2	6	39 36	47 44	(s)	1	5 5	3	(s)	8 8	9
February	2	-			(s)	-	5 5	3	(s)	8	-
March April	2	6 6	39 38	47 46	(s)	1 1	5 5	3	(s)	9	10 10
	2	6	38 39	46 47	(s)	1	5 5	3	(s) (s)	9	10
May June	2	6	38	46	(s) (s)	1	5 5	3		9	10
July	2	6	36 39	46 47	(S) (S)	1	5 5	R 3	(s) (s)	9	10
August	2	6	39	47	(s)	1	5	3		9	10
8-Month Total	15	50	307	371	1	10	43	24	(s) <b>1</b>	<b>68</b>	<b>78</b>
2007 8-Month Total	15	50	306	370	1	10	43	25	1	69	79
2006 8-Month Total	12	45	273	330	1	9	43	24	1	68	78

<sup>&</sup>lt;sup>a</sup> 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.

non-renewable waste (municipal solid waste from non-biogenic sources, and

Sources: See end of section.

b Geothermal heat pump and direct use energy.

<sup>&</sup>lt;sup>c</sup> 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.

<sup>&</sup>lt;sup>d</sup> 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

<sup>&</sup>lt;sup>g</sup> The ethanol portion of motor fuels (such as E10) consumed by the commercial sector.

R=Revised. NA=Not available. (s)=Less 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.

Table 10.2b Renewable Energy Consumption: Industrial and Transportation Sectors (Trillion Btu)

				Industria	al Sectora				Trans	sportation S	ector
					Biomass					Biomass	
	Hydro- electric Power <sup>b</sup>	Geo- thermal <sup>C</sup>	Wood <sup>d</sup>	Waste <sup>e</sup>	Fuel Ethanol <sup>f</sup>	Losses and Co- products <sup>9</sup>	Total	Total	Fuel Ethanol <sup>h</sup>	Bio- diesel <sup>i</sup>	Total
1973 Total	35 32 33 33 31	NA NA NA NA 2	1,165 1,063 1,600 1,645 1,442	NA NA NA 230 192	NA NA NA 1	NA NA NA 41 48	1,165 1,063 1,600 1,917 1,683	1,200 1,096 1,633 1,950 1,716	NA NA NA 51 62	NA NA NA NA	NA NA NA 51 62
1995 Total 1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total	55 61 58 55 49 42 33	3 3 3 4 4 5	1,652 1,683 1,731 1,603 1,620 1,636 1,443	195 224 184 180 171 145 129	2 1 1 1 1 1 3	86 61 81 88 92 101 110	1,935 1,970 1,997 1,873 1,883 1,884 1,684	1,992 2,033 2,058 1,931 1,936 1,930 1,721	115 82 104 115 120 138	NA NA NA NA NA NA	115 82 104 115 120 138 145
2002 Total 2003 Total 2004 Total 2005 Total	39 43 33 32	5 3 4 4	1,396 1,363 1,476 1,452	146 142 132 148	3 5 6 7	133 174 210 241	1,679 1,684 1,824 1,848	1,723 1,731 1,861 1,884	171 233 292 334	1 2 4 12	172 235 296 346
2006 January February March	4 3 2	(s) (s) (s)	137 119 125	12 11 12	1 1 1	23 22 24	173 152 162	177 155 164	29 27 31	2 1 2	31 29 33
April	2 2 2 2	(s) (s) (s)	121 124 122 130	11 12 11 12	1 1 1	22 24 25 25	156 160 159 168	158 162 161 171	32 38 42 39	2 3 3 3	34 41 45 42
August September October	2 2 3	(s) (s) (s)	129 125 128	12 11 12	1 1 1	27 26 27	168 163 168	170 165 171	41 41 43	4 3 3	45 44 46
November December Total	4 3 <b>29</b>	(s) (s) <b>4</b>	125 130 <b>1,515</b>	12 12 <b>140</b>	1 1 <b>9</b>	27 29 <b>301</b>	164 172 <b>1,966</b>	168 175 <b>1,999</b>	43 45 <b>451</b>	3 3 <b>32</b>	45 48 <b>483</b>
2007 January February March April	4 2 2 2	(s) (s) (s) (s)	125 114 121 122	13 12 13 12	1 1 1	28 26 29 29	167 153 164 164	171 155 167 166	44 40 44 42	4 3 4 4	48 43 49 46
May June July August	2 2 1 2	(s) (s) (s) (s)	122 118 125 122	13 13 13 13	1 1 1	31 31 32 33	166 163 171 169	168 165 172 171	45 46 48 48	5 5 7 7	50 51 55 55
September October November December Total	1 1 1 2 <b>23</b>	(s) (s) (s) (s) (s)	118 124 121 126 <b>1,457</b>	12 13 13 13 13	1 1 1 1 1	33 35 36 37 <b>381</b>	165 172 170 177 <b>2,000</b>	171 166 174 172 179 <b>2,028</b>	47 53 53 56 <b>567</b>	7 6 5 5	53 59 58 61 <b>629</b>
2008 January February	2 3	(s) (s)	114 107	13 13	1 1	39 37	166 158	169 161	56 54	6	62 60
March April May June	3 2 2 1	(s) (s) (s) (s)	105 109 113 112	12 12 12 12	1 1 1 1	43 41 45 43	162 163 172 168	165 166 174 170	58 63 65 65	6 7 7 8	64 70 72 73
July August 8-Month Total	1 1 <b>16</b>	(s) (s) <b>3</b>	<sup>R</sup> 116 115 <b>892</b>	13 12 <b>99</b>	1 1 <b>10</b>	47 49 <b>344</b>	R 177 178 <b>1,345</b>	R 178 180 <b>1,364</b>	67 70 <b>499</b>	9 9 <b>57</b>	76 79 <b>556</b>
2007 8-Month Total 2006 8-Month Total	18 18	3 3	968 1,007	100 93	8 6	240 192	1,315 1,298	1,336 1,319	359 280	39 20	398 300

<sup>&</sup>lt;sup>a</sup> 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

production of fuel ethanol and biodiesel-these are included in the industrial sector

consumption statistics for the appropriate energy source.

<sup>h</sup> The ethanol portion of motor fuels (such as E10 and E85) consumed by the

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

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

Sources: See end of section.

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

Geothermal heat pump and direct use energy.

d Wood and wood-derived fuels.

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

Does not include natural gas, electricity, and other non-biomass energy used in the

transportation sector.

i "Biodiesel" is any liquid biofuel suitable as a diesel fuel substitute, additive, or extender. See "Biodiesel" in Glossary.
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Table 10.2c Renewable Energy Consumption: Electric Power Sector

(Trillion Btu)

	Hydro-	Coo				Biomass		
	electric Power <sup>a</sup>	Geo- thermal <sup>b</sup>	Solar/PV <sup>c</sup>	Wind <sup>d</sup>	Woode	Waste <sup>f</sup>	Total	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 <sup>g</sup>	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
	269	26	(a)	24	47	20	27	255
2006 January	268 243	26 23	(s)	24 19	17 15	20 18	37 34	355 319
February			(s)					
March	242	27	(s) 1	23	16	19	35	327
April	281	24	•	25	12	17	30	360
May	304	23	1	24	13	19	33	384
June	293	25 27	1	20 19	15 16	19	34	373
July	250		1			20	36	333
August	214	27	•	16	17	20	37	295
September	169	26	1	19	15	19	34	248
October	166	27	(s)	24	15	19	34	252
November	197	25	(s)	25	15	20	35	283
December Total	211 <b>2,839</b>	27 <b>306</b>	(s) <b>5</b>	25 <b>264</b>	16 <b>182</b>	20 <b>231</b>	36 <b>412</b>	299 <b>3,827</b>
	•		•					,
<b>2007</b> January	258	27	(s)	24	16	21	38	347
February	183	25	(s)	25	17	19	36	269
March	239	26	(s)	30	15	21	36	331
April	235	24	1	32	15	19	33	325
May	255	25	1	28	14	20	34	343
June	225	26	1	24	15	21	36	311
July	223	27	1	19	15	21	36	306
August	196	27	1	24	16	21	37	285
September	144	26	1	26	15	20	35	232
October	146	27	(s)	30	14	18	32	236
November	155	26	(s)	27	15	21	36	243
December	182	27	(s)	28	16	22	37	275
Total	2,440	312	6	319	184	243	427	3,503
2008 January	219	25	(s)	37	17	19	36	318
February	198	23	(s)	32	16	17	33	286
March	224	26	1	41	16	20	36	327
April	217	25	1	45	14	19	33	321
May	278	26	1	44	13	20	32	382
June	304	26	1	43	15	20	35	410
July	<sup>R</sup> 256	R 27	1	R 32	<sup>R</sup> 16	R 20	<sup>R</sup> 36	R 352
August	204	27	1	26	16	20	36	294
8-Month Total	1,900	205	6	300	122	155	278	2,688
2007 8-Month Total	1 912	207	5	207	123	163	286	2 547
2007 8-Month Total	1,813 2,095	207 201	5 4	207 171	123	153	286 274	2,517 2,746

<sup>&</sup>lt;sup>a</sup> Conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate).

tire-derived fuels).

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

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

Web Page: See http://www.eia.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.

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

<sup>&</sup>lt;sup>c</sup> Solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate).

Wind electricity net generation (converted to Btu using the fossil-fueled plants

heat rate).

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 Through 2000, also includes

<sup>&</sup>lt;sup>9</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

Table 10.3 Fuel Ethanol Overview

	Feed- stock <sup>a</sup>	Losses and Co- products <sup>b</sup>	F	Production		Net Imp	ports <sup>c</sup>	Stocksd	Stock C	change <sup>e</sup>	C	onsumption	1
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	TBtu	Mbbl	Mbbl	TBtu	Mbbl	MMgal	TBtu
1981 Total 1985 Total	13 93	6 41	1,978 14,693	83 617	7 52	NA NA	NA NA	NA NA	NA NA	NA NA	1,978 14,693	83 617	7 52
1990 Total	111	48	17,802	748	63	NA	NA	NA	NA	NA	17,802	748	63
1995 Total	200	86	32,325	1,358	114	387	1	2,186	-207	-1	32,919	1,383	117
1996 Total	143	61	23,178	973	82	313	1	2,065	-121	(s)	23,612	992	84
1997 Total	190	81	30,674	1,288	109	85	(s)	2,925	860	3	29,899	1,256	106
1998 Total	206	88	33,453	1,405	118	66	(s)	3,406	481	2	33,038	1,388	117
1999 Total	215	92	34,881	1,465	123	87	(s)	4,024	618	2	34,350	1,443	122
2000 Total	238	101	38,627	1,622	137	116	(s)	3,400	-624	-2	39,367	1,653	139
2001 Total	259	110	42,028	1,765	149	315	1	4,298	898	3	41,445	1,741	147
2002 Total	313	133	50,956	2,140	180	306	1	6,200	1,902	7	49,360	2,073	175
2003 Total	410	174	66,772	2,804	236	292	1	5,978	-222	1	67,286	2,826	238
2004 Total	497 570	210 241	81,058 92,961	3,404 3,904	287 329	3,542 3,234	13 11	6,002 5,563	24 -439	(s) -2	84,576	3,552 4,059	299 342
2005 Total			•	•		•		•			96,634	•	
2006 January	55	23	8,935	375	32	132	(s)	6,099	536	2	8,531	358	30
February	52	22	8,463	355	30	610	2	7,268	1,169	4	7,904	332	28
March	57	24	9,333	392	33	894	3	8,626	1,358	5	8,869	372	31
April	53	22	8,663	364	31	905	3	8,990	364	1	9,204	387	33
May	56	23	9,086	382	32	682	2	7,767	-1,223	-4	10,991	462	39
June	58	25	9,531	400	34	1,550	5	6,675	-1,092	-4	12,173	511	43
July	60	25	9,791	411	35	2,637	9	7,706	1,031	4	11,397	479	40
August	63	26	10,235	430	36	3,102	11	9,133	1,427	5	11,910	500	42
September	62	26	10,088	424	36	2,268	8	9,725	592	2	11,764	494	42
October	64 64	27 27	10,512 10.442	442 439	37 37	2,044 1.376	7 5	9,723 9.232	-2 -491	(s) -2	12,558 12.309	527 517	44 44
November December	69	27 29	11,215	439 471	37 40	1,376	4	9,232 8.760	-491 -472	-2 -2	12,309	517 542	44
Total	712	301	116,294	4,884	412	17,408	62	8,760	3,197	11	130,505	5,481	462
			•	•		•		•	,		•	•	
2007 January	70 65	28	11,621 10.795	488 453	41 38	1,077 1.010	4	8,656 8.765	-104 109	(s)	12,802 11.696	538 491	45 41
February	65 71	26 29	10,795	453 499	36 42	720	3	8.539	-226	(s)	,	539	41
March	71	29 29	11,692	499 492	42 41	720	3	8,807	-226 268	-1 1	12,838	539 512	43
April May	70 75	29 31	12,573	528	41	663	2	8,966	266 159	1	12,181 13,077	512 549	43 46
June	75 75	31	12,573	527	44	922	3	9,171	205	1	13,077	557	47
July	73 78	32	13,083	549	46	1,533	5	9,866	695	2	13,270	585	49
August	81	33	13,581	570	48	1,586	6	11,011	1,145	4	14,022	589	50
September	80	33	13,402	563	47	610	2	11,555	544	2	13.468	566	48
October	85	35	14.221	597	50	998	4	11,449	-106	(s)	15,325	644	54
November	87	36	14,568	612	52	393	i	11.218	-231	-1	15.192	638	54
December	91	37	15,258	641	54	212	i	10,535	-683	- <u>2</u>	16,153	678	57
Total	930	380	155,263	6,521	549	10,457	37	10,535	1,775	6	163,945	6,886	580
2008 January	95	39	15,818	664	56	495	2	10,674	<sup>f</sup> 165	1	16,148	678	57
February	90	37	15,025	631	53	483	2	10,465	-209	-1	15,717	660	56
March	104	43	17,387	730	62	368	1	11,391	926	3	16,829	707	60
April	101	41	16,868	708	60	1,451	5	11,539	148	Ĭ	18,171	763	64
May	111	45	18,543	779	66	866	3	12,044	505	2	18,904	794	67
June	105	43	17,544	737	62	1,571	6	12,304	260	1	18,855	792	67
July	114	47	19,042	800	67	1,360	5	13,186	882	3	19,520	820	69
August	120	49	20,059	842	71	1,931	7	14,882	1,696	6	20,294	852	72
8-Month Total	840	343	140,286	5,892	496	8,525	30	14,882	4,373	15	144,438	6,066	511
2007 8-Month Total 2006 8-Month Total	586 453	239 191	97,814 74,037	4,108 3,110	346 262	8,244 10,512	29 37	11,011 9,133	2,251 3,570	8 13	103,807 80,979	4,360 3,401	367 287

Total corn and other biomass inputs to the production of fuel ethanol.

NA=Not available. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu. Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • 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: (Note: For production, net imports, stocks, stock change, and consumption, data in thousand barrels are converted to million gallons by multiplying by 0.042; and are converted to trillion Btu by multiplying by the approximate heat content of fuel ethanol—see Table A3.) Feedstock: Calculated as fuel ethanol production in thousand barrels multiplied by the

approximate heat content of fuel ethanol feedstock-see Table A3. . Losses and Co-products: Calculated as fuel ethanol feedstock minus fuel ethanol production.

• Production: 1981-1992—Fuel ethanol production is equal to fuel ethanol consumption—see sources for "Consumption." 1993-2004—Calculated as fuel ethanol consumption plus fuel ethanol stock change minus fuel ethanol net imports. ethanol consumption plus fuel ethanol stock change minus fuel ethanol net imports. These data differ slightly from the original production data from 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 forward—EIA, Form EIA-819, "Monthly Oxygenate Report."

Net Imports, Stocks, and Stock Change: 1992-2007—EIA, Petroleum Supply Annual (PSA), annual reports. 2008—EIA, Petroleum Supply Monthly (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 (CNFAF) estimates of U.S. Riomass 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). 2005-2007—EIA, PSA, annual reports, Tables 1 and 15. retinery input (1able 16). 2005-2007—EIA, PSA, annual reports, 1ables 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). 2008—EIA, PSM, monthly reports, Tables 1 and 27. 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 27).

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.

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

Stocks are at end of period.

A negative number indicates a decrease in stocks and a positive number indicates an increase

Derived from preliminary December 2007 stock value, not final December 2007 stock value shown in column 8.

**Table 10.4 Biodiesel Overview** 

	Feedstock <sup>a</sup>	Losses and Co-products <sup>b</sup>		<b>Production</b> <sup>c</sup>	
	Trillion Btu	Trillion Btu	Thousand Barrels	Million Gallons	Trillion Btu
2001 Total	1	(s)	204	9	1
2002 Total	1	(s)	250	10	1
003 Total	2	(s)	338	14	2
2004 Total	4	(s)	666	28	4
005 Total	12	(s)	2,162	91	12
<b>006</b> January	2	(s)	312	13	2
February	1	(s)	269	11	1
March	2	(s)	368	15	2
April	2	(s)	385	16	2
May	3	(s)	531	22	3
June	3	(s)	612	26	3
July	3	(s)	540	23	3
August	4	(s)	689	29	4
September	3	(s)	598	25	3
October	3	(s)	549	23	3
November	3	(s)	520	22	3
December	3	(S) (S)	590	25	3
Total	32	. ,	<b>5,963</b>	<b>250</b>	32
10tai	32	(s)	5,965	250	32
007 January	4	(s)	692	29	4
February	3	(s)	564	24	3
March	4	(s)	775	33	4
April	4	(s)	765	32	4
May	5	(s)	958	40	5
June	5	(s)	943	40	5
July	7	(s)	1,237	52	7
August	7	(s)	1,298	55	7
September	7	(s)	1,224	51	7
October	6	(s)	1,188	50	6
November	5	(s)	993	42	5
December	6	(s)	1,026	43	5
Total	63	1	11,662	490	62
008 January	7	(s)	1,208	51	6
February	6	(s)	1,030	43	6
March	6	(s)	1,168	49	6
April	7	(s)	1,258	53	7
May	7	(s)	1,250	52	7
June	8	(s)	1,509	63	8
July	9	(s)	1,605	67	9
August	9	(s)	1,588	67	9
8-Month Total	58	1	10,616	446	57
2007 8-Month Total	39	1	7,232	304	39
006 8-Month Total	20	(s)	3,705	156	20

<sup>&</sup>lt;sup>a</sup> Total vegetable oil and other biomass inputs to the production of biodiesel.

(s)=Less than 0.5 trillion Btu.

Notes: • 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 the approximate heat content of biodiesel feedstock—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," Table 3A, data for soybean oil consumed in methyl esters (biodiesel). In addition, the 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). EIA assumes that 7.65 pounds of vegetable oil are needed to make one gallon of biodiesel. 2007 and 2008—U.S. Department of Commerce, Bureau of the Census, "M311K - Fats and Oils: Production, Consumption, and Stocks," Table 3A, data for all fats and oils consumed in methyl esters (biodiesel). EIA assumes that 7.65 pounds of vegetable oil are needed to make one gallon of biodiesel. (Note: For production, data in thousand barrels are converted to million gallons by multiplying by 0.042; and are converted to trillion Btu by multiplying by the approximate heat content of biodiesel — see Table A3.)

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.

appropriate energy source.

<sup>c</sup> Production of biofuels for use as diesel fuel substitutes or additives. Biodiesel consumption equals biodiesel production.

# **Renewable Energy**

### Note. Renewable Energy Production and Consump-

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

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**

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.

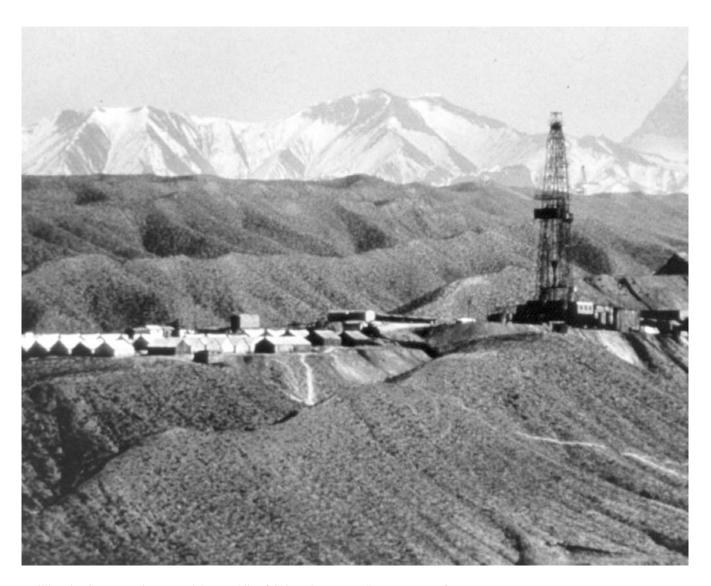
### **Transportation Sector, Fuel Ethanol**

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 set equal to biodiesel production.

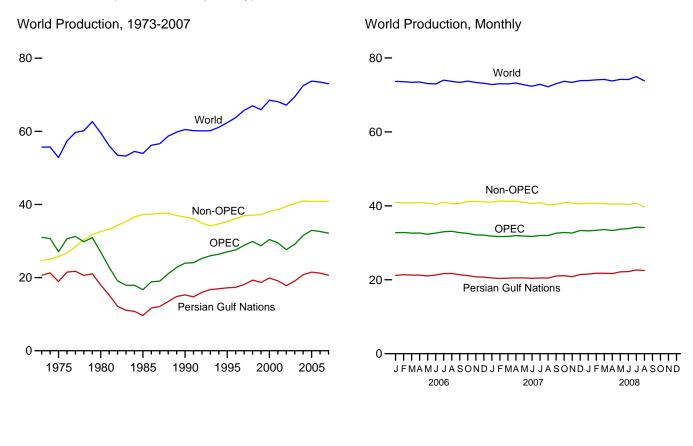
# **International Petroleum**



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

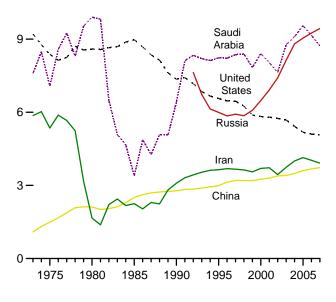
Figure 11.1a World Crude Oil Production Overview

(Million Barrels per Day)



Selected Producers, 1973-2007

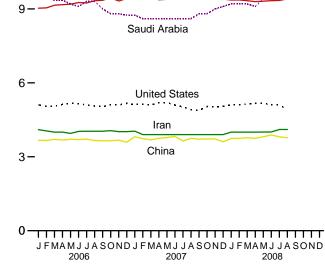
12**-**



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."

# Selected Producers, Monthly

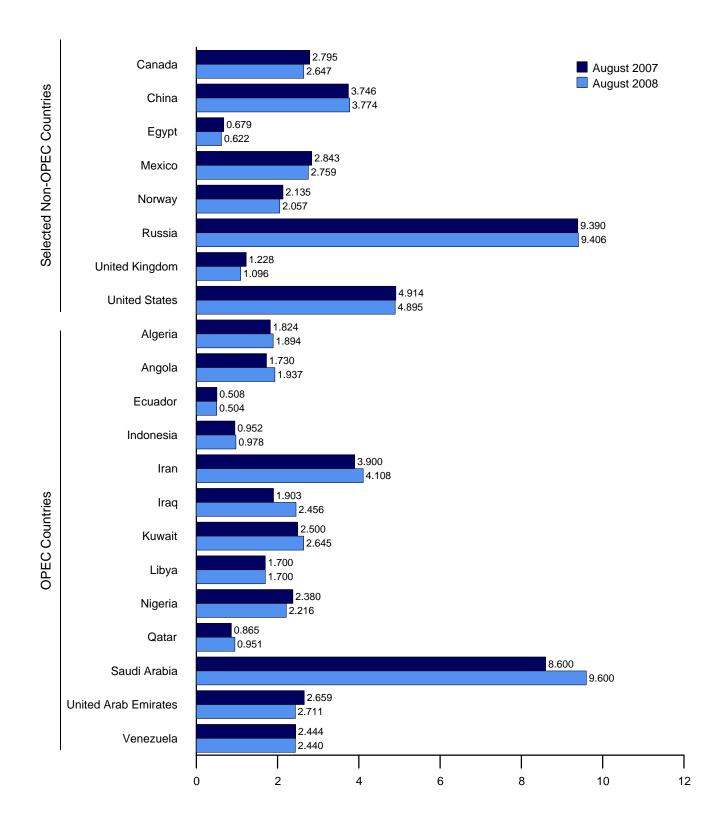
12**-**



Russia

• Because vertical scales differ, graphs should not be compared. 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	Indo- nesia	Iran	Iraq	Kuwait <sup>a</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>a</sup>	United Arab Emirates	Vene- zuela	Total OPEC
973 Average	1,097	162	209	1,339	5,861	2,018	3,020	2,175	2,054	570	7,596	1,533	3,366	31,000
975 Average	983	165	161	1,307	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	27,096
980 Average	1,106	150	204	1,577	1,662	2,514	1,656	1,787	2,055	472	9,900	1,709	2,168	26,960
985 Average	1,037	231	281	1,325	2,250	1,433	1,023	1,059	1,495	301	3,388	1,193	1,677	16,693
990 Average	1,175	475	285	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,955
995 Average	1,202	646 709	392 396	1,503	3,643	560 579	2,057	1,390	1,993	442 510	8,231	2,233	2,750	27,042
996 Average	1,242 1,277	709 714	388	1,547 1,520	3,686 3,664	1,155	2,062 2,007	1,401 1,446	2,001 2,132	550	8,218 8,362	2,278 2,316	2,938 3,280	27,566 28,812
997 Average998 Average	1,277	714	375	1,520	3,634	2,150	2,007	1,390	2,152	696	8,389	2,345	3,260	29,885
999 Average	1,202	745	373	1,472	3,557	2,508	1,898	1,319	2,130	665	7,833	2,169	2,826	28,696
000 Average	1,254	746	395	1,428	3,696	2,571	2,079	1,410	2,165	737	8,404	2,368	3,155	30,408
001 Average	1,310	742	412	1,340	3,724	2,390	1.998	1,367	2,256	714	8,031	2,205	3.010	29,499
002 Average	1,306	896	393	1,249	3,444	2,023	1,894	1,319	2,118	679	7,634	2,082	2,604	27,641
003 Average	1,611	903	411	1,155	3,743	1,308	2,136	1,421	2,275	715	8,775	2,348	2,335	29,136
004 Average	1,677	1,052	528	1,096	4,001	2,011	2,376	1,515	2,329	783	9,101	2,478	2,557	31,504
005 Average	1,797	1,250	532	1,067	4,139	1,878	2,529	1,633	2,627	835	9,550	2,535	2,565	32,938
<b>006</b> January	1,825	1,420	553	1,045	4,100	1,603	2,600	1,650	2,560	835	9,400	2,602	2,540	32,733
February	1,825	1,420	551	1,050	4,050	1,803	2,550	1,650	2,410	835	9,500	2,602	2,540	32,786
March	1,825	1,420	528	1,043	4,000	1,903	2,525	1,680	2,370	835	9,350	2,602	2,540	32,621
April	1,825	1,420	546	1,035	4,000	1,903	2,525	1,690	2,370	835	9,350	2,602	2,540	32,641
May	1,785	1,320	547	1,038	3,950	1,903	2,525	1,700	2,370	835	9,200	2,602	2,540	32,315
June	1,795	1,285	536	1,027	4,030	2,153	2,550	1,700	2,465	835	9,100	2,602	2,540	32,618
July	1,805	1,460	543	1,020	4,035	2,203	2,550	1,700	2,380	855	9,300	2,702	2,440	32,992
August	1,805	1,460	544 533	1,015 1.005	4,035 4.035	2,203 2.153	2,550	1,700 1.700	2,430	885 885	9,300 9,000	2,702	2,490 2.490	33,119
September	1,835 1,835	1,438 1,376	533 519	985	4,035	2,103	2,550 2,550	1,700	2,430 2,530	885	8,800	2,702 2,702	2,490	32,756
October November	1,805	1,452	519	985	4,080	2,103	2,500	1,700	2,530	845	8,800	2,702	2,490	32,535 32,143
December	1,805	1,432	516	985	4,020	2,003	2,450	1,650	2,480	835	8,750	2,602	2,490	32,070
Average	1,814	1,413	<b>536</b>	1,019	4,028	1,996	2,535	1,681	<b>2,440</b>	<b>850</b>	9,152	2,636	2,511	32,610
<b>007</b> January	1,838	1,584	517	988	4,040	1,753	2,450	1,680	2,365	835	8,750	2,613	2,380	31,794
February	1,833	1,600	507	984	3,900	2,003	2,420	1,680	2,390	825	8,600	2,573	2,383	31,698
March	1,829	1,640	482	969	3,900	2,053	2,420	1,680	2,275	825	8,600	2,612	2,445	31,730
April	1,825	1,679	502	965	3,900	2,103	2,420	1,680	2,400	825	8,600	2,611	2,445	31,954
May	1,821	1,695	512	965	3,900	2,103	2,420	1,680	2,240	825	8,600	2,611	2,444	31,816
June	1,828	1,680	515	958	3,900	2,003	2,420	1,680	2,230	835	8,600	2,610	2,444	31,704
July	1,828	1,710	510	953	3,900	2,053	2,445	1,700	2,380	865	8,600	2,610	2,444	31,998
August	1,824	1,730	508	952	3,900	1,903	2,500	1,700	2,380	865	8,600	2,659	2,444	31,965
September	1,831	1,791	517	950	3,900	2,203	2,500	1,720	2,380	865	8,800	2,709	2,440	32,606
October	1,842	1,889	514	960	3,900	2,303	2,500	1,740	2,330	869	8,800	2,711	2,440	32,798
November	1,852	1,940	518	960	3,900	2,253	2,520	1,740	2,400	883	9,000	2,242	2,440	32,648
December	1,852	1,986	532	960	3,900	2,303	2,550	1,740	2,430	888	9,100	2,659	2,440	33,339
Average	1,834	1,744	511	964	3,912	2,086	2,464	1,702	2,350	851	8,722	2,603	2,433	32,174
008 January	1,866	1,992	<sup>R</sup> 520	929	4,000	2,153	2,550	1,740	2,230	892	9,200	2,709	2,440	R 33,221
February	1,866	1,997	519	985	4,000	2,303	2,600	1,740	2,100	916	9,200	2,709	2,440	R 33,374
March	1,865	2,003	508	975	4,000	2,303	2,600	1,740	2,330	920	9,200	2,710	2,440	R 33,594
April	1,895	2,009	511	964	4,000	2,303	2,600	1,718	2,130	934	9,100	2,710	2,440	33,314
May	1,895	2,015	499	965	4,004	2,453	2,609	1,700	2,060	938	9,400	2,710	2,440	R 33,687
June	1,894	2,013	495	965	4,006	2,453	2,618	R 1,700	2,140	942	9,450	2,710	2,440	R 33,827
July	1,894	2,009	498	978	4,107	2,505	2,633	R 1,700	2,120	947	9,700	2,710	2,430	R 34,231
August <b>8-Mo. Avg.</b>	1,894 <b>1,884</b>	1,937 <b>1,997</b>	504 <b>507</b>	978 <b>967</b>	4,108 <b>4,029</b>	2,456 <b>2,366</b>	2,645 <b>2,607</b>	1,700 <b>1,717</b>	2,216 <b>2,167</b>	951 <b>930</b>	9,600 <b>9,358</b>	2,711 <b>2,710</b>	2,440 <b>2,439</b>	34,140 <b>33,677</b>
-	•													
007 8-Mo. Avg	1,828	1,665	507 544	967 1,034	3,918 4,025	1,996	2,437	1,685	2,332	838	8,619	2,613	2,429	31,834

<sup>&</sup>lt;sup>a</sup> Except for the period from August 1990 through May 1991, includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In August 2008, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 565 thousand barrels

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.

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" and excluded from

<sup>&</sup>quot;Total Non-OPEC" for all years.

R=Revised.

Table 11.1b World Crude Oil Production: Persian Gulf Nations, Non-OPEC, and World (Thousand Barrels per Day)

Persian Gulf Nationsb   Canada	Selected Non-OPEC <sup>a</sup> Producers										
1975 Average	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States	Total Non- OPEC <sup>a</sup>	World	
1975 Average	1,090	165	465	32	8,324	NA	2	9,208	24.679	55,679	
1980 Average 17,961 1,435 1985 Average 9,630 1,471 1990 Average 15,278 1,553 1995 Average 17,208 1,805 1996 Average 17,367 1,837 1997 Average 18,095 1,922 1998 Average 19,337 1,981 1999 Average 18,667 1,907 2000 Average 19,892 1,977 2001 Average 19,098 2,029 2002 Average 17,794 2,171 2003 Average 20,787 2,398 2005 Average 21,501 2,369 2005 Average 21,501 2,369 2006 January 21,175 2,595 February 21,375 2,504 March 21,250 2,411 April 21,250 2,411 April 21,250 2,341 June 21,305 2,336 July 21,680 2,512 August 21,710 2,543 September 21,360 2,601 October 21,135 2,602 November 20,805 2,658 December 20,695 2,669 Average 21,232 2,525 2007 January 20,476 R 2,549 February 20,356 R 2,586 March 20,445 R 2,701 April 20,494 R 2,605 May 20,494 R 2,605 May 20,494 R 2,685 July 20,508 R 2,599 August 20,403 R 2,485 July 20,508 R 2,599 August 20,462 R 2,795 September 20,833 R 2,674 December 20,833 R 2,674 December 20,833 R 2,674 December 21,434 R 2,469 Average 21,232 R,525 2008 January 21,538 R 2,529 February 20,836 R 2,586 May 20,494 R 2,685 November 20,833 R 2,674 December 21,434 R 2,469 Average 21,434 R 2,469 Average 21,434 R 2,469 Average 21,484 R 2,469 Average 21,682 R 2,556 March 21,484 R 2,469 Average 21,682 R 2,586 March 21,484 R 2,469 Average 21,682 R 2,586 March 21,484 R 2,469 Average 21,763 R 2,561 March 21,768 R 2,583 April 21,682 R 2,556 May 22,148 R 2,452 June 22,214 R 2,481 July 22,636 R 2,670	1,490	235	705	189	9,523	NA	12	8,375	25,732	52,828	
1985 Average 9,630 1,471 1990 Average 15,278 1,553 1995 Average 17,208 1,805 1996 Average 17,367 1,837 1997 Average 18,095 1,922 1998 Average 19,337 1,981 1999 Average 19,337 1,981 1999 Average 19,892 1,977 2001 Average 19,098 2,029 2002 Average 17,794 2,171 2003 Average 19,063 2,306 2004 Average 20,787 2,398 2005 Average 21,501 2,369 2006 January 21,375 2,504 March 21,250 2,411 April 21,250 2,531 May 21,050 2,341 June 21,305 2,336 July 21,680 2,512 August 21,710 2,543 September 21,360 2,601 October 21,135 2,602 November 20,805 2,669 Average 21,232 2,525 2007 January 20,476 R 2,549 February 20,494 R 2,582 June 20,494 R 2,685 May 20,494 R 2,685 April 20,494 R 2,685 November 20,695 2,669 Average 21,232 R,255 2008 January 20,462 R 2,795 September 21,012 R 2,689 October 21,118 R 2,657 November 20,833 R 2,674 December 20,833 R 2,674 December 21,434 R 2,469 Average 21,538 R 2,529 February 20,838 R 2,599 August 20,462 R 2,795 September 21,682 R 2,586 March 21,434 R 2,469 Average 20,672 R 2,616  2008 January 21,538 R 2,529 February 21,638 R 2,529 February 21,638 R 2,529 February 21,638 R 2,526 May 22,148 R 2,452 June 22,214 R 2,481 July 22,636 R 2,670	2,114	595	1,936	486	11,706	NA	1,622	8,597	32,598	59,558	
1990 Average	2,505	887	2,745	773	11,585	NA	2,530	8,971	37,273	53,966	
1995 Average         17,208         1,805           1996 Average         17,367         1,837           1997 Average         18,095         1,922           1998 Average         19,337         1,981           1999 Average         18,667         1,907           2000 Average         19,098         2,029           2002 Average         17,794         2,171           2003 Average         20,787         2,398           2005 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,411           April         21,250         2,341           June         21,305         2,336           July         21,680         2,512           August         21,050         2,341           June         21,305         2,336           July         21,680         2,612           August         21,710         2,543           September         21,360         2,601	2,774	873	2,553	1,630	10,975	NA	1,820	7,355	36,537	60,492	
1996 Average         17,367         1,837           1997 Average         18,095         1,922           1998 Average         19,337         1,981           1999 Average         18,667         1,907           2000 Average         19,098         2,029           2002 Average         17,794         2,171           2003 Average         19,063         2,306           2004 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,531           May         21,050         2,341           June         21,305         2,336           July         21,680         2,512           August         21,100         2,543           September         21,360         2,601           October         21,336         2,602           November         20,805         2,668           December         20,695         2,669           Average         21,232         2,525	2,990	920	2,618	2,766		5,995	2,489	6,560	35,343	62,385	
1998 Average         19,337         1,981           1999 Average         18,667         1,907           2000 Average         19,892         1,977           2001 Average         19,098         2,029           2002 Average         17,794         2,171           2003 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,411           April         21,250         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,135         2,602           November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586	3,131	922	2,855	3,091		5,850	2,568	6,465	36,186	63,752	
1999 Average         18,667         1,907           2000 Average         19,892         1,977           2001 Average         19,098         2,029           2002 Average         17,794         2,171           2003 Average         19,063         2,306           2004 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,511           May         21,050         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,336         2,601           October         21,135         2,602           November         20,805         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586	3,200	856	3,023	3,142		5,920	2,518	6,452	36,932	65,744	
2000 Average         19,892         1,977           2001 Average         19,098         2,029           2002 Average         17,794         2,171           2003 Average         19,063         2,306           2004 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,531           May         21,050         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,335         2,636           December         20,695         2,669           Average         21,335         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586 <tr< td=""><td>3,198</td><td>834</td><td>3,070</td><td>3,011</td><td></td><td>5,854</td><td>2,616</td><td>6,252</td><td>37,081</td><td>66,966</td></tr<>	3,198	834	3,070	3,011		5,854	2,616	6,252	37,081	66,966	
2001 Average         19,098         2,029           2002 Average         17,794         2,171           2003 Average         19,063         2,306           2004 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,431           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,135         2,658           December         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549 <t< td=""><td>3,195</td><td>852</td><td>2,906</td><td>3,019</td><td></td><td>6,079</td><td>2,684</td><td>5,881</td><td>37,226</td><td>65,922</td></t<>	3,195	852	2,906	3,019		6,079	2,684	5,881	37,226	65,922	
2002 Average         17,794         2,171           2003 Average         19,063         2,306           2004 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,135         2,602           November         20,805         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,685           May         20,494         R 2,685           July         20,508         R 2,582           July         20,508         R 2,599           <	3,249	768	3,012	3,222		6,479	2,275	5,822	38,087	68,495	
2003 Average         19,063         2,306           2004 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,411           April         21,250         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,365         2,680           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,582           June         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           Aug	3,300	720	3,127	3,226		6,917	2,282	5,801	38,602	68,101	
2004 Average         20,787         2,398           2005 Average         21,501         2,369           2006 January         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,531           May         21,050         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,360         2,601           October         21,135         2,662           November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,605           May         20,494         R 2,605           May	3,390	715	3,177	3,131		7,408	2,292	5,746	39,520	67,162	
2005 Average         21,501         2,369           2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,341           June         21,050         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,135         2,602           November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,685           May         20,494         R 2,680           Muly         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October<	3,409	713	3,371	3,042		8,132	2,093	5,681	40,299	69,434	
2006 January         21,175         2,595           February         21,375         2,504           March         21,250         2,411           April         21,250         2,531           May         21,050         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,135         2,602           November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,582           June         20,494         R 2,582           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November <td>3,485</td> <td>673</td> <td>3,383</td> <td>2,954</td> <td></td> <td>8,805</td> <td>1,845</td> <td>5,419</td> <td>40,989</td> <td>72,493</td>	3,485	673	3,383	2,954		8,805	1,845	5,419	40,989	72,493	
February 21,375 2,504 March 21,250 2,411 April 21,250 2,531 May 21,050 2,341 June 21,305 2,336 July 21,680 2,512 August 21,710 2,543 September 21,360 2,601 October 21,135 2,602 November 20,805 2,658 December 20,695 2,669 Average 21,232 2,525  2007 January 20,476 R 2,549 February 20,356 R 2,586 March 20,445 R 2,701 April 20,494 R 2,605 May 20,494 R 2,605 May 20,494 R 2,605 July 20,508 R 2,589 August 20,403 R 2,582 June 20,403 R 2,582 June 20,403 R 2,582 June 20,403 R 2,582 June 20,403 R 2,589 August 20,462 R 2,795 September 21,012 R 2,689 October 21,118 R 2,657 November 20,833 R 2,674 December 21,434 R 2,469 Average 20,672 R 2,616  2008 January 21,538 R 2,529 February 21,763 R 2,529 February 21,763 R 2,529 February 21,763 R 2,529 February 21,768 R 2,526 May 22,148 R 2,452 June 22,144 R 2,481 July 22,636 R 2,670	3,609	658	3,334	2,698		9,043	1,649	5,178	40,799	73,737	
March         21,250         2,411           April         21,250         2,531           May         21,050         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,135         2,602           November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,582           June         20,494         R 2,582           July         20,508         R 2,599           August         20,403         R 2,582           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November	3,670	654	3,372	2,657		9,030	1,707	5,106	40,939	73,673	
April 21,250 2,531 May 21,050 2,341 June 21,305 2,336 July 21,680 2,512 August 21,710 2,543 September 21,360 2,601 October 21,135 2,602 November 20,805 2,658 December 20,695 2,669 Average 21,232 2,525  2007 January 20,476 R 2,549 February 20,356 R 2,586 March 20,445 R 2,701 April 20,494 R 2,605 May 20,494 R 2,582 June 20,494 R 2,582 June 20,403 R 2,485 July 20,508 R 2,599 August 20,462 R 2,795 September 21,012 R 2,689 October 21,118 R 2,667 November 20,833 R 2,674 December 21,434 R 2,469 Average 20,672 R 2,616  2008 January 21,538 R 2,529 February 21,763 R 2,561 March 21,768 R 2,583 April 21,682 R 2,526 May 22,148 R 2,452 June 22,144 R 2,452 June 21,1682 R 2,526 May 22,148 R 2,452 June 22,144 R 2,481 July 22,636 R 2,670	3,662	657	3,311	2,620		9,040	1,639	5,045	40,797	73,583	
May         21,050         2,341           June         21,305         2,336           July         21,680         2,512           August         21,710         2,543           September         21,360         2,601           October         21,135         2,602           November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,605           May         20,494         R 2,685           July         20,508         R 2,599           August         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average<	3,710	651	3,350	2,610		9,150	1,597	5,045	40,798	73,419	
June 21,305 2,336 July 21,680 2,512 August 21,710 2,543 September 21,360 2,601 October 21,135 2,602 November 20,805 2,668 December 20,695 2,669 Average 21,232 2,525  2007 January 20,476 2,549 February 20,356 2,586 March 20,445 2,701 April 20,494 2,605 May 20,494 2,582 June 20,403 2,485 July 20,508 2,259 August 20,462 2,795 September 21,012 2,259 October 21,118 2,667 November 20,833 2,674 December 21,434 2,469 Average 20,672 2,616  2008 January 21,538 2,561 March 21,768 2,583 April 21,682 2,526 May 22,148 2,452 June 22,214 8,2452 June 22,214 R2,481 July 22,636 2,670	3,680	663	3,370	2,407		9,170	1,590	5,128	40,866	73,507	
July 21,680 2,512 August 21,710 2,543 September 21,360 2,601 October 21,315 2,602 November 20,805 2,658 December 20,695 2,669 Average 21,232 2,525  2007 January 20,476 R 2,549 February 20,356 R 2,586 March 20,445 R 2,701 April 20,494 R 2,605 May 20,494 R 2,582 June 20,403 R 2,485 July 20,508 R 2,599 August 20,402 R 2,795 September 21,012 R 2,689 October 21,118 R 2,657 November 20,833 R 2,674 December 21,434 R 2,469 Average 20,672 R 2,616  2008 January 21,538 R 2,529 February 21,763 R 2,561 March 21,768 R 2,581 March 21,682 R 2,526 May 21,763 R 2,561 March 21,768 R 2,583 April 21,682 R 2,526 May 22,148 R 2,452 June 22,144 R 2,481 July 22,636 R 2,670	3,712	655	3,329	2,535		9,190	1,500	5,161	40,753	73,068	
August 21,710 2,543 September 21,360 2,601 October 21,135 2,602 November 20,805 2,658 December 20,695 2,669 Average 21,232 2,525  2007 January 20,476 R 2,549 February 20,356 R 2,586 March 20,445 R 2,701 April 20,494 R 2,605 May 20,494 R 2,605 May 20,494 R 2,582 June 20,403 R 2,485 July 20,508 R 2,599 August 20,462 R 2,795 September 21,012 R 2,689 October 21,118 R 2,657 November 20,833 R 2,674 December 21,434 R 2,469 Average 20,672 R 2,616  2008 January 21,538 R 2,529 February 21,763 R 2,529 February 21,763 R 2,529 February 21,763 R 2,583 April 21,682 R 2,526 May 22,148 R 2,452 June 22,144 R 2,481 July 22,636 R 2,670	3,700	607	3,287	2,365		9,260	1,392	5,160	40,358	72,976	
September         21,360         2,601           October         21,135         2,602           November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,685           May         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008         January         21,538         R 2,529           February         21,763         R 2,561           March         21,763         R 2,561           May         21,768         R 2,583	3,716	620	3,232	2,571		9,240	1,453	5,102	41,004	73,997	
October         21,135         2,602           November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,685           May         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,687           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008 January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,452	3,660	630	3,252	2,430		9,330	1,202	5,059	40,557	73,677	
November         20,805         2,658           December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,588           March         20,445         R 2,701           April         20,494         R 2,605           May         20,494         R 2,582           June         20,403         R 2,599           August         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,687           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008         January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481	3,649	640	3,258	2,338		9,350	1,354	5,037	40,633	73,390	
December         20,695         2,669           Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,685           May         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008         January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,452           June         22,214         R 2,452 <td>3,650</td> <td>660</td> <td>3,173</td> <td>2,380</td> <td></td> <td>9,450</td> <td>1,482</td> <td>5,106</td> <td>41,195</td> <td>73,730</td>	3,650	660	3,173	2,380		9,450	1,482	5,106	41,195	73,730	
Average         21,232         2,525           2007 January         20,476         R 2,549           February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,685           May         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008 January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,452           June         22,636         R 2,670	3,672	615	3,163	2,466		9,320	1,504	5,105	41,218	73,362	
February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,605           May         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008         January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,592 <b>3,673</b>	619 <b>639</b>	2,978 <b>3,256</b>	2,508 <b>2,491</b>		9,420 <b>9,247</b>	1,472 <b>1,490</b>	5,166 <b>5,102</b>	41,071 <b>40,850</b>	73,141 <b>73,461</b>	
February         20,356         R 2,586           March         20,445         R 2,701           April         20,494         R 2,605           May         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008         January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,811	616	3,143	2,431		9,420	1,513	5,123	R 41,004	R 72,798	
March         20,445         R 2,701           April         20,494         R 2,605           May         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008         January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,739	614	3,148	2,454		9,460	1,654	5,125	R 41,346	R 73,045	
April 20,494 R 2,605 May 20,494 R 2,582 June 20,403 R 2,485 July 20,508 R 2,599 August 20,462 R 2,795 September 21,012 R 2,689 October 21,118 R 2,657 November 20,833 R 2,674 December 21,434 R 2,469 Average 20,672 R 2,616  2008 January 21,538 R 2,529 February 21,763 R 2,561 March 21,768 R 2,583 April 21,682 R 2,526 May 22,148 R 2,452 June 22,214 R 2,481 July 22,636 R 2,670	3,685	612	3,182	2,391		9,473	1,565	5,106	R 41,242	R 72,972	
May         20,494         R 2,582           June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008         January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,749	609	3,182	2,427		9,369	1,572	5,189	R 41,263	R 73,217	
June         20,403         R 2,485           July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008 January         21,538         R 2,529           February         21,768         R 2,583           April         21,682         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,781	649	3,110	2,181		9,390	1.580	5,197	R 40.926	R 72.741	
July         20,508         R 2,599           August         20,462         R 2,795           September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008 January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,826	679	3,206	1,921		9,440	1,495	5,096	R 40,642	R 72,345	
August 20,462 R 2,795 September 21,012 R 2,689 October 21,118 R 2,657 November 20,833 R 2,674 December 21,434 R 2,469 Average 20,672 R 2,616  2008 January 21,538 R 2,529 February 21,763 R 2,529 February 21,763 R 2,561 March 21,682 R 2,583 April 21,682 R 2,526 May 22,148 R 2,452 June 22,214 R 2,481 July 22,636 R 2,670	3,643	679	3,166	2,327		9,460	1,484	5,024	R 40,869	R 72,866	
September         21,012         R 2,689           October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008 January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,746	679	2,843	2,135		9,390	1,228	4,914	R 40,256	R 72,221	
October         21,118         R 2,657           November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008 January         21,538         R 2,529           February         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,716	679	3,161	2,190		9,520	1,389	4,884	R 40,420	R 73,025	
November         20,833         R 2,674           December         21,434         R 2,469           Average         20,672         R 2,616           2008 January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,722	609	2,995	2,273		9,500	1,556	5,043	R 40,888	R 73,686	
December         21,434         R 2,469           Average         20,672         R 2,616           2008 January         21,538         R 2,529           February         21,763         R 2,561           March         21,768         R 2,583           April         21,682         R 2,526           May         22,148         R 2,452           June         22,214         R 2,481           July         22,636         R 2,670	3,727	609	2,901	2,287		9,425	1,456	5,017	R 40,744	R 73,392	
Average       20,672       R 2,616         2008 January       21,538       R 2,529         February       21,763       R 2,561         March       21,768       R 2,583         April       21,682       R 2,526         May       22,148       R 2,452         June       22,214       R 2,481         July       22,636       R 2,670	3,607	609	2.954	2,235		9,400	1,493	5,056	R 40.532	R 73,871	
February       21,763       R 2,561         March       21,768       R 2,583         April       21,682       R 2,526         May       22,148       R 2,452         June       22,214       R 2,481         July       22,636       R 2,670	3,729	637	3,082	2,270		9,437	1,498	5,064	R 40,841	R 73,015	
February       21,763       R 2,561         March       21,768       R 2,583         April       21,682       R 2,526         May       22,148       R 2,452         June       22,214       R 2,481         July       22,636       R 2,670	3,744	609	2,957	2,209		9,359	1,463	E 5,093	R 40,689	73,910	
March     21,768     R 2,583       April     21,682     R 2,526       May     22,148     R 2,452       June     22,214     R 2,481       July     22,636     R 2,670	3,747	605	2,929	2,176		9,362	1,489	E 5,113	R 40,708	R 74,083	
April       21,682       R 2,526         May       22,148       R 2,452         June       22,214       R 2,481         July       22,636       R 2,670	3,769	601	2,847	2,209		9,334	1,453	E 5,139	R 40,599	R 74,194	
June	3,751	597	2,767	2,111		9,296	1,499	E 5,162	R 40,465	R 73,779	
June	3,811	593	2,798	2,247		9,315	1,486	E 5,166	R 40,519	R 74,206	
July 22,636 R 2,670	3,884	589	2,839	2,002		9,334	1,364	E 5,109	R 40,346	R 74,172	
August 22,506 2,647	3,808	606	2,782	2,302		9,344	1,303	E 5,110	R 40,710	<sup>R</sup> 74,941	
	3,774	622	2,759	2,057		9,406	1,096	E 4,895	39,660	73,800	
8-Mo. Avg 22,035 2,557	3,786	603	2,834	2,165		9,344	1,393	E 5,098	40,461	74,137	
2007 8-Mo. Avg	3,747 3,689	642 642	3,122 3,313	2,282 2,524		9,425 9,178	1,509 1,509	5,096 5,101	40,938 40,760	72,772 73,488	

<sup>&</sup>lt;sup>a</sup> 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" and excluded from "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.

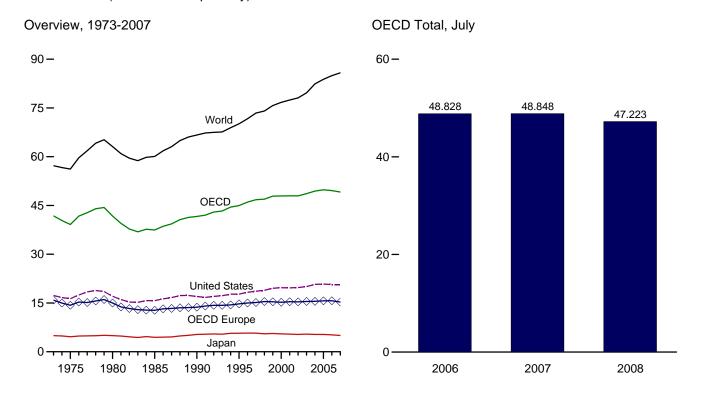
• Data for countries may not sum to World totals due to independent rounding.

• U.S. geographic coverage is the 50 States and the District of Columbia.

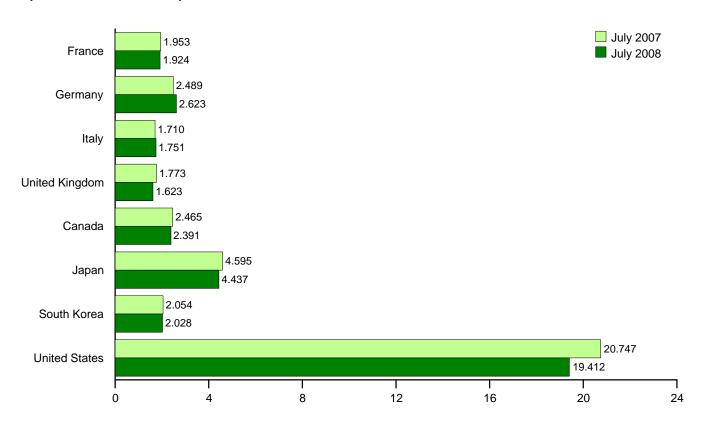
Web Page: See http://www.eia.doe.gov/emeu/mer/inter.html for all available data beginning in 1973.

Sources: See end of section.

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



# By Selected OECD Country



Notes: • OECD is the Organization for Economic Cooperation and Development. • Because vertical scales differ, graphs should not be compared.

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)

												Т
	France	Germanya	Italy	United Kingdom	OECD Europe <sup>b</sup>	Canada	Japan	South Korea	United States	Other OECD <sup>c</sup>	<b>OECD</b> 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	63,114
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	13,730	1,737	5,316	1,048	16,988	2,804	41,623	66,689
1995 Average	1,920	2,882	1,942	1,816	14,718	1,817	5,700	2,008	17,725	3,001	44,968	70,133
1996 Average	1,949	2,922	1,920	1,852	14,999	1,871	5,746	2,101	18,309	2,996	46,022	71,671
1997 Average	1,969	2,917	1,934	1,810	15,140	1,959	5,711	2,255	18,620	3,091	46,776	73,427
1998 Average	2,040	2,923	1,943	1,792	15,444	1,949	5,515	1,917	18,917	3,192	46,935	74,053
1999 Average	2,029	2,838	1,891	1,811	15,363	2,036	5,632	2,084	19,519	3,236	47,870	75,727
2000 Average	1,999	2,772	1,854	1,765	15,217	2,035	5,512	2,135	19,701	3,326	47,926	76,712
2001 Average	2,052	2,815	1,832	1,747	15,385	2,066	5,415	2,132	19,649	3,341	47,988	77,444
2002 Average	1,983	2,722	1,870	1,739	15,333	2,087	5,317	2,149	19,761	3,296	47,944	78,089
2003 Average	1,999	2,679	1,873	1,759	15,471	2,217	5,428	2,175	20.034	3,329	48,653	79,660
2004 Average	2,007	2,665	1,794	1,785	15,522	2,310	5,318	2,155	20,731	3,398	49,435	82,408
2005 Average	1,989	2,647	1,755	1,834	15,669	2,342	5,324	2,191	20,802	3,500	49,828	83,819
2006 January	2,085	2,550	1,759	1,845	15,529	2,203	5,967	2,402	20,436	3,541	50,078	NA
February	2,141	2,666	2,008	1,791	16,142	2,359	6,102	2,293	20,577	3,540	51,013	NA
March	2,104	2,676	1,938	2,020	16,375	2,319	5,676	2,205	20,608	3,672	50,855	NA
April	1,900	2,515	1,606	1,711	14,801	2,153	5,107	2,012	20,201	3,486	47,761	NA
May	1,828	2,692	1,678	1,852	15,292	2,202	4,440	2,055	20,457	3,488	47,933	NA
June	1,957	2,646	1,700	1,862	15,779	2,329	4,762	2,083	20,982	3,565	49,500	NA
July	1,966	2,627	1,721	1,799	15,420	2,340	4,986	1,914	20,740	3,429	48,828	NA
August	1,884	2,773	1,589	1,725	15,468	2,400	4,835	2,108	21,434	3,572	49,816	NA
September	2,014	2,950	1,761	1,822	16,134	2,289	4,546	2,115	20,559	3,439	49,082	NA
October	2,064	2,820	1,700	1,815	16,112	2,297	4,783	2,066	20,769	3,455	49,482	NA
November	1,933	2,806	1,777	1,838	16,033	2,385	5,261	2,369	20,669	3,589	50,305	NA
December	1,910	2,582	1,696	1,660	15,113	2,289	5,960	2,543	20,795	3,640	50,340	NA
Average	1,981	2,692	1,743	1,812	15,679	2,297	5,198	2,180	20,687	3,535	49,576	84,950
<b>2007</b> January	2,046	2,293	1,641	1,826	15,034	2,310	5,259	2,397	20,567	3,467	49,035	NA
February	1,968	2,356	1,781	1,786	15,362	2,478	5,612	2,395	21,309	3,535	50,691	NA
March	1,936	2,460	1,734	1,784	15,300	2,361	5,449	2,289	20,536	3,641	49,576	NA
April	1,868	2,287	1,655	1,775	14,727	_ 2,191	4,907	2,222	20,536	3,404	47,987	NA
May	1,800	2,377	1,727	1,800	14,905	R 2,350	4,435	2,078	20,620	3,596	<sup>R</sup> 47,985	NA
June	1,913	2,440	1,694	1,765	15,224	<sup>R</sup> 2,331	4,599	2,070	20,723	3,692	R 48,639	NA
July	1,953	2,489	1,710	1,773	15,355	2,465	4,595	2,054	20,747	3,631	48,848	NA
August	1,921	2,567	1,575	1,707	15,303	2,447	4,627	2,098	21,025	3,488	48,989	NA
September	1,942	2,588	1,675	1,761	15,573	2,364	4,891	2,035	20,415	3,404	48,681	NA
October	2,141	2,652	1,771	1,741	16,102	2,358	4,823	2,215	20,476	3,679	49,654	NA
November	2,076	2,536	1,748	1,778	15,872	2,460	5,237	2,357	20,535	3,586	50,046	NA
December  Average	1,837 <b>1,950</b>	2,417 <b>2,456</b>	1,717 <b>1,702</b>	1,663 <b>1,763</b>	14,905 <b>15,304</b>	2,341 R <b>2,371</b>	5,692 <b>5,007</b>	2,369 <b>2,214</b>	20,719 <b>20,680</b>	3,625 <b>3,563</b>	49,651 R <b>49,139</b>	NA R <b>85,807</b>
-	•		•	,	_		•	•	•	•		
<b>2008</b> January	2,060	2,504	1,626	1,695	R 15,431	2,356	5,369	2,372	20,114	3,484	R 49,127	NA
February	1,992	2,494	1,671	1,804	R 15,410	2,431	5,883	2,348	19,782	3,566	R 49,419	NA
March	1,882	2,399	1,569	1,674	14,770	2,313	5,022	2,266	19,732	3,422	R 47,524	NA
April	2,005	2,500	1,621	1,821	R 15,441	R 2,195	4,992	2,098	19,768	R 3,687	R 48,182	NA
May	1,851	2,310	1,609	1,620	R 14,464	R 2,245	4,448	2,181	19,729	3,601	R 46,667	NA
June	1,897	2,430	1,588	1,708	R 14,753	R 2,348	4,340	1,993	19,553	R 3,462	R 46,448	NA
July 7-Month Average	1,924 <b>1,944</b>	2,623 <b>2,466</b>	1,751 <b>1,633</b>	1,623 <b>1,705</b>	15,283 <b>15,076</b>	2,391 <b>2,325</b>	4,437 <b>4,921</b>	2,028 <b>2,183</b>	19,412 <b>19,727</b>	3,673 <b>3,556</b>	47,223 <b>47,788</b>	NA <b>NA</b>
_	•	•	•	,		·	•	,	,	,	•	
2007 7-Month Average	1,926 1,996	2,387 2,625	1,705 1,771	1,787 1,841	15,128 15,615	2,354 2,271	4,973 5,283	2,213 2,136	20,712 20,571	3,567 3,532	48,948 49,409	NA

<sup>&</sup>lt;sup>a</sup> Data are for unified Germany, i.e., the former East Germany and West

R=Revised. NA=Not available.

Totals may not equal sum of components due to independent Notes: • 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: forward—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, October 10, 2008.

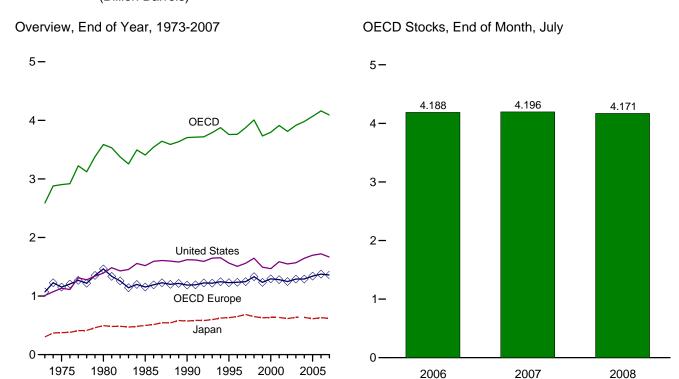
b "OECD Europe" consists of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>c</sup> "Other OECD" consists of Australia, Mexico, New Zealand, and the U.S.

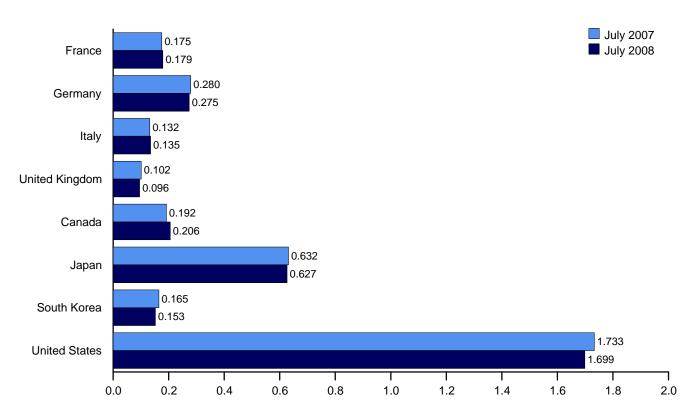
Territories.

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

Figure 11.3 Petroleum Stocks in OECD Countries (Billion Barrels)



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 <sup>a</sup>	Italy	United Kingdom	OECD Europe <sup>b</sup>	Canada	Japan	South Korea	United States	Other OECD <sup>c</sup>	<b>OECD</b> 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	130	95	1,292	178	612	135	1,645	104	4,067
2005 Teal	103	203	132	93	1,340	170	012	133	1,030	104	4,007
2006 January	186	286	128	102	1,366	180	604	138	1,713	103	4,104
February	180	283	135	104	1,365	178	600	142	1,719	104	4,108
March	184	280	132	97	1,344	171	620	137	1,691	103	4,066
April	184	283	132	102	1,350	174	618	144	1,700	108	4,095
May	183	280	130	105	1,357	170	634	152	1,724	106	4,144
June	178	283	126	99	1,346	172	627	155	1,729	108	4,137
July	181	284	131	99	1,367	177	631	158	1,743	112	4,188
August	188	281	133	97	1,366	182	641	159	1,763	107	4,218
September	177	282	134	97	1,359	185	649	160	1,785	109	4,248
October	177	282	130	104	1,355	189	654	156	1,769	110	4,233
November	180	281	133	104	1,358	184	650	158	1,745	108	4,202
December	182	283	133	105	1,375	181	631	152	1,720	103	4,161
2007 January	176	285	128	105	1,370	187	643	153	1,724	105	4,182
February	178	292	135	105	1.386	183	636	147	1.666	103	4.121
March	166	289	134	106	1,358	186	620	156	1,678	101	4.099
April	179	290	135	105	1,375	<sup>R</sup> 185	619	149	1,694	108	<sup>R</sup> 4,131
May	178	287	132	106	1,375	189	616	159	1,724	110	R 4,171
June	174	283	133	101	1,353	188	622	158	1,730	112	4.163
July	175	280	132	102	1,365	192	632	165	1,733	108	4,196
August	176	278	134	104	1,364	197	641	157	1,716	106	4,180
September	175	276	134	99	1,364	195	630	157	1,717	108	4,171
October	165	273	132	103	1,335	194	629	159	1,708	112	4,137
November	166	270	130	98	1,332	195	622	149	1,690	106	4,095
December	180	275	133	98	1,359	196	621	143	1,665	106	4,091
2008 January	182	281	136	95	1,385	196	621	155	1,677	108	4.141
2008 January	176	277	129	95 95	1,357	190	605	149	1,662	111	4,141
March	176	282	131	100	1,383	R 194	610	149	1,653	108	<sup>R</sup> 4,076
	177	282 280	134	98	1,363	194	610	143	1,665	108	4.074
April	173	280 277	134	98 99	1,361	R 193	610	141	1,663	R 105	4,074 R 4,104
May	177	277 273	136	R 99	1,371 R 1,370	R 193		146	,	108	R 4,126
June	177	273 275	137	99 96		206	619 627	153	1,686 1.699	108	4,171
July	119	210	133	90	1,383	200	021	100	1,099	104	4,171

<sup>&</sup>lt;sup>a</sup> 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.
<sup>b</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France,

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—Energy Information Administration, International Energy Database. • All Other Data: 1973-1982—International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances, various issues. 1983—IEA, Monthly Oil and Gas Statistics Database. 1984 forward—IEA, Monthly Oil Data Service, October 10, 2009.

<sup>&</sup>lt;sup>b</sup> "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.

 $<sup>^{\</sup>rm C}$  "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."

# **International Petroleum**

### Tables 11.1a and 11.1b Sources

# **United States**

See Table 3.1.

# All Other Countries and World, Monthly Data

1973-1980: Petroleum Intelligence Weekly (PIM), 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, November 2008.

# All Other Countries and World, Annual Data

1973–1979: Energy Information Administration (EIA), *International Energy Annual 1981*, Table 8. 1980–2007: EIA, Office of Energy Markets and End Use (EMEU), International Energy Database, November 2008.



# **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 <sup>a</sup>	4.130	Naptha Less Than 401°F	5.248
Distillate Fuel Oil	5.825	Other Oils Equal to or Greater Than 401°F	5.825
Ethane	3.082	Still Gas	6.000
Ethane-Propane Mixture <sup>b</sup>	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 <sup>c</sup>	5.253	Unfinished Oils	5.825
Reformulated <sup>c</sup>	5.150	Unfractionated Stream	5.418
Oxygenated <sup>c</sup>	5.150	Waxes	5.537
Fuel Ethanold	3.539	Miscellaneous	5.796

<sup>&</sup>lt;sup>a</sup> 60 percent butane and 40 percent propane.

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.

<sup>&</sup>lt;sup>b</sup> 70 percent ethane and 30 percent propane.

<sup>&</sup>lt;sup>c</sup> See Table A3 for motor gasoline annual weighted averages beginning in 1994.

<sup>&</sup>lt;sup>d</sup>Fuel ethanol, which is derived from agricultural feedstocks (primarily corn), is not a petroleum product but is blended into motor dasoline

Table A2. Approximate Heat Content of Petroleum Production, Imports, and Exports (Million Btu per Barrel)

	Pro	duction		Imports			Exports	
	Crude Oil <sup>a</sup>	Natural Gas Plant Liquids	Crude Oil <sup>a</sup>	Petroleum Products	Total	Crude Oil <sup>a</sup>	Petroleum Products	Total
1973	5.800	4.049	5.817	5.983	5.897	5.800	5.752	5.752
1974		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		3.964	5.808	5.980	5.856	5.800	5.743	5.745
1977		3.941	5.810	5.908	5.834	5.800	5.796	5.797
1978		3.925	5.802	5.955	5.839	5.800	5.814	5.808
1979		3.955	5.810	5.811	5.810	5.800	5.864	5.832
1980		3.914	5.812	5.748	5.796	5.800	5.841	5.820
1981		3.930	5.818	5.659	5.775	5.800	5.837	5.821
1982		3.872	5.826	5.664	5.775	5.800	5.829	5.820
1983		3.839	5.825	5.677	5.775 5.774	5.800	5.829	5.820
		3.839 3.812	5.823	5.613	5.745	5.800	5.867	5.850
1984								
1985		3.815	5.832	5.572	5.736	5.800	5.819	5.814
1986		3.797	5.903	5.624	5.808	5.800	5.839	5.832
1987		3.804	5.901	5.599	5.820	5.800	5.860	5.858
1988		3.800	5.900	5.618	5.820	5.800	5.842	5.840
1989		3.826	5.906	5.641	5.833	5.800	5.869	5.857
1990		3.822	5.934	5.614	5.849	5.800	5.838	5.833
1991		3.807	5.948	5.636	5.873	5.800	5.827	5.823
1992		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		3.794	5.950	5.534	5.861	5.800	5.777	5.779
1995		3.796	5.938	5.483	5.855	5.800	5.740	5.746
1996		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		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 <sup>E</sup>	5.800	3.701	5.985	5.503	5.862	5.800	5.749	5.750

<sup>&</sup>lt;sup>a</sup> 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.

**Approximate Heat Content of Petroleum Consumption and Biofuels Production** Table A3. (Million Btu per Barrel)

	Total Petroleum <sup>a</sup> Consumption by Sector					Liquefied						
	Resi- dential	Com- mercial <sup>b</sup>	Indus- trial <sup>b</sup>	Trans- portation <sup>b</sup>	Electric Power <sup>c,d</sup>	Totalb	Petroleum Gases Con- sumption <sup>e</sup>	Motor Gasoline Con- sumption <sup>f</sup>	Fuel Ethanol	Fuel Ethanol Feed- stock <sup>g</sup>	Biodiesel	Biodiesel Feed- stock <sup>h</sup>
1973	5.205	5.749	5.569	5.395	6.245	5.515	3.746	5.253	3.539	NA	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	NA
1975	5.192	5.704	5.527	5.392	6.250	5.494	3.715	5.253	3.539	NA	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	NA
1977	5.213	5.733	5.554	5.400	6.249	5.518	3.677	5.253	3.539	NA	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	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	6.486	NA	NA
1982	5.167	5.751	5.263	5.422	6.258	5.415	3.615	5.253	3.539	6.428	NA	NA
1983	5.022	5.642	5.275	5.415	6.255	5.406	3.614	5.253	3.539	6.388	NA	NA
1984	5.184	5.705	5.223	5.418	6.251	5.395	3.599	5.253	3.539	6.356	NA	NA
1985	5.153	5.661	5.215	5.422	6.247	5.387	3.603	5.253	3.539	6.331	NA	NA
1986	5.169	5.694	5.283	5.425	6.257	5.418	3.640	5.253	3.539	6.310	NA	NA
1987	5.144	5.661	5.248	5.429	6.249	5.403	3.659	5.253	3.539	6.291	NA	NA
1988	5.165	5.661	5.241	5.433	6.250	5.410	3.652	5.253	3.539	6.275	NA	NA
1989	5.105	5.621	5.234	5.438	<sup>c</sup> 6.240	5.410	3.683	5.253	3.539	6.260	NA	NA
1990	5.027	5.621	5.270	5.442	6.244	5.411	3.625	5.253	3.539	6.247	NA	NA
1991	4.968	5.599	5.186	5.440	6.246	5.384	3.614	5.253	3.539	6.235	NA	NA
1992	5.004	5.589	5.185	5.442	6.238	5.378	3.624	5.253	3.539	6.224	NA	NA
1993	4.975	<sup>b</sup> 5.580	<sup>b</sup> 5.196	<sup>b</sup> 5.436	6.230	<sup>b</sup> 5.379	3.606	5.253	3.539	6.214	NA	NA
1994	4.983	5.592	5.166	5.424	6.213	5.361	3.635	<sup>f</sup> 5.230	3.539	6.204	NA	NA
1995	4.940	5.554	5.137	5.417	6.188	5.341	3.623	5.215	3.539	6.196	NA	NA
1996	4.869	5.498	5.133	5.420	6.195	5.336	3.613	5.216	3.539	6.187	NA	NA
1997	4.859	5.459	5.138	5.416	6.199	5.336	3.616	5.213	3.539	6.180	NA	NA
1998	4.837	5.446	5.155	5.413	6.210	5.349	3.614	5.212	3.539	6.172	NA	NA
1999	4.761	5.369	5.113	5.413	6.205	5.328	3.616	5.211	3.539	6.165	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	6.152	5.359	5.433
2002	4.742	5.364	5.116	5.410	6.173	5.324	3.613	5.208	3.539	6.146	5.359	5.433
2003	4.763	5.407	5.161	5.408	6.182	5.340	3.629	5.207	3.539	6.141	5.359	5.433
2004	4.807	5.434	5.164	5.420	6.192	5.350	3.618	5.215	3.539	6.135	5.359	5.433
2005	_4.783	_5.427	5.200	_5.426	6.188	5.365	3.620	5.218	3.539	6.130	5.359	5.433
2006	E4.667	E5.343	<sup>E</sup> 5.197	E5.430	_6.143	5.353	3.605	5.218	3.539	6.125	5.359	5.433
2007	E4.640	E5.340	<sup>E</sup> 5.167	E5.432	P6.150	_5.346	_3.591	_5.219	3.539	_5.987	5.359	5.433
2008	E4.640	E5.340	E5.167	E5.432	E6.150	E5.346	E3.591	E5.219	3.539	E5.986	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.

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.

Beginning in 1993, includes ethanol blended into motor gasoline.

<sup>&</sup>lt;sup>c</sup> 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.

<sup>&</sup>lt;sup>9</sup> Corn input to the production of fuel ethanol (million Btu corn per barrel denatured ethanol), used as the approximate heat content for total biomass inputs to the production of fuel ethanol.

h Soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel), used as the approximate heat content for total biomass inputs to the production of biodiesel.

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Produ	ction		Consumptiona			
	Marketed	Dry	End-Use Sectors <sup>b</sup>	Electric Power Sector <sup>c</sup>	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	1,010
1986	1,112	1,032	1,029	1,036	1,032	997	1,008
1987	1,110	1,030	1.031	1.032	1,030	999	1,011
1988	1,112	1,031	1,029	1,032	1,029	1,002	1,011
1989	1,109	1,029	1,029	c <sub>1.028</sub>	1,029	1,002	1,019
1990	1,107	1,031	1.030	1,028	1,029	1,004	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	E1,103	E1,028	E1,028	P1,028	E1,028	E1,025	E1,009
2008	<sup>E</sup> 1,103	E1,028	E1,028	E1,028	E1,028	E1,025	E1,009

<sup>&</sup>lt;sup>a</sup> Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_a.html.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

b Residential, commercial, industrial, and transportation sectors.

<sup>&</sup>lt;sup>c</sup> 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.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

					Coal					Coal Coke
				c	onsumption					
	Waste	Residential Waste and		Industrial Sector					I	
	Productiona	Coal Supplied <sup>b</sup>	Commercial Sectors	Coke Plants	Other <sup>c</sup>	Power Sector d,e	Total	Imports	Exports	Imports and Exports
1973	23.376	NA	22.831	26.780	22.586	22.246	23.057	25.000	26.596	24.800
1974	23.072	NA	22.479	26.778	22.419	21.781	22.677	25.000	26.700	24.800
1975	22.897	NA	22.261	26.782	22.436	21.642	22.506	25.000	26.562	24.800
1976	22.855	NA	22.774	26.781	22.530	21.679	22.498	25.000	26.601	24.800
1977	22.597	NA	22.919	26.787	22.322	21.508	22.265	25.000	26.548	24.800
1978	22.248	NA	22.466	26.789	22.207	21.275	22.017	25.000	26.478	24.800
1979	22.454	NA	22.242	26.788	22.452	21.364	22.100	25.000	26.548	24.800
1980	22.415	NA	22.543	26.790	22.690	21.295	21.947	25.000	26.384	24.800
1981	22.308	NA	22.474	26.794	22.585	21.085	21.713	25.000	26.160	24.800
1982	22.239	NA	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
1983	22.052	NA	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
1984	22.010	NA	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
1985	21.870	NA	22.646	26.798	22.020	20.959	21.366	25.000	26.307	24.800
1986	21.913	NA	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
1987	21.922	NA	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
1988	21.823	NA	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
1989	21.765	b10.391	23.650	26.800	22.347	<sup>d</sup> 20.898	21.320	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	20.779	21.120	25.000	26.188	24.800
1992					22.460		21.120			24.800
	21.682	10.396	23.105	26.799	22.250	20.709		25.000	26.161	24.800
1993	21.418	10.638	22.994	26.800		20.677	21.010	25.000	26.335	
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	<sup>a</sup> 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 <sup>P</sup>	20.341	12.616	22.034	26.329	22.371	19.911	20.169	25.000	25.466	24.800
2008 <sup>E</sup>	20.341	12.616	22.034	26.329	22.371	19.911	20.169	25.000	25.466	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

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

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.

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 waste coal included in "Consumption."

<sup>&</sup>lt;sup>c</sup> 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.

Table A6. Approximate Heat Rates for Electricity, and Heat Content of Electricity (Btu per Kilowatthour)

	Approximate I	Heat Rates for Electricity	Net Generation <sup>a</sup>	
	Fossil-Fueled Plants <sup>b,c</sup>	Nuclear Plants <sup>d</sup>	Geothermal Energy Plants <sup>e</sup>	Heat Content of Electricty f,g
973	10.389	10.903	21.674	3,412
74	10.442	11.161	21.674	3.412
75	10,406	11,013	21,611	3,412
6	10,373	11,047	21,611	3,412
7	10,435	10,769	21,611	3,412
8	10,361	10,941	21,611	3,412
9	10,353	10,879	21,545	3,412
0	10,388	10,908	21.639	3,412
1	10.453	11.030	21.639	3,412
2	10,454	11,073	21,629	3,412
3	10,520	10,905	21,290	3,412
4	10,440	10,843	21,303	3,412
35	10,447	10,622	21,263	3,412
66	10,446	10,579	21,263	3,412
7	10,419	10,442	21,263	3,412
8	10,324	10,602	21,203	3,412
9	10,432	10,583	21,096	3,412
0	10,402	10,582	21,096	3,412
1	10,436	10,382	20.997	3,412
2	10,342	10,464	20,997	3,412
3	10,342	10,471	· · · · · · · · · · · · · · · · · · ·	,
14	10,309	10,504	20,914	3,412 3,412
95	10,312	10,432	20,914 20,914	3,412
			· · · · · · · · · · · · · · · · · · ·	
96	10,340 10,213	10,503 10.494	20,960	3,412 3,412
97	10,213	10,494	20,960	3,412
98		-, -	21,017	- /
99	10,226	10,450	21,017	3,412
00	10,201	10,429	21,017	3,412
01	<sup>c</sup> 10,333	10,448	21,017	3,412
2	10,173	10,439	21,017	3,412
3	10,241	10,421	21,017	3,412
)4	10,022	10,427	21,017	3,412
05	9,999	10,435	21,017	3,412
06	9,919	10,434	21,017	3,412
07	E 9,919	E 10,434	E 21,017	3,412
08	<sup>E</sup> 9,919	<sup>E</sup> 10,434	<sup>E</sup> 21,017	3,412

<sup>&</sup>lt;sup>a</sup> The values in columns 1-3 of this table are for net heat rates. See "Heat Rate" in Glossary.

F=Estimate

Web Page: http://www.eia.doe.gov/emeu/mer/append\_a.html.

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

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.

<sup>&</sup>lt;sup>c</sup> 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 independent power producers.

<sup>&</sup>lt;sup>d</sup> Used as the thermal conversion factor for nuclear electricity net generation.

<sup>&</sup>lt;sup>e</sup> Used as the thermal conversion factor for geothermal electricity net generation.

f 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.

g See "Heat Content" in Glossary.

# Thermal Conversion Factor Source Documentation

# Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

**Asphalt**. The 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 gross heat content (higher heating value) for biodiesel to be 5.359 million Btu per barrel.

**Biodiesel Feedstock.** EIA estimated the soybean oil input to the production of biodiesel to be 5.433 million Btu soybean oil per barrel biodiesel, which is used as the approximate gross heat content (higher heating value) for total biomass inputs to the production of biodiesel.

**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 estimated the corn input to the production of fuel ethanol (million Btu corn per barrel denatured ethanol), which is used as the approximate heat content for total biomass inputs to the production of fuel ethanol.

# 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 fossilfueled 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 steamelectric 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: Calculated annually by EIA by using the heat rate and generation reported on Form EIA-923, "Power Plant Operations Report."



# **Appendix**

# Metric Conversion Factors, Metric Prefixes, and Other Physical Conversion Factors

Data presented in the *Monthly Energy Review* and in other 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 37ª	kilograms (kg)
	1 pound uranium oxide (lb U <sub>3</sub> O <sub>8</sub> )	=	0.384 647 <sup>b</sup>	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 (m³)
	1 cubic yard (yd³)	=	0.764 555	cubic meters (m³)
	1 cubic foot (ft <sup>3</sup> )	=	0.028 316 85	cubic meters (m³)
	1 U.S. gallon (gal)	=	3.785 412	liters (L)
	1 ounce, fluid (fl oz)	=	29.573 53	milliliters (mL)
	1 cubic inch (in³)	=	16.387 06	milliliters (mL)
_ength	1 mile (mi)	=	1.609 344ª	kilometers (km)
	1 yard (yd)	=	0.914 4 <sup>a</sup>	meters (m)
	1 foot (ft)	=	0.304 8 <sup>a</sup>	meters (m)
	1 inch (in)	=	2.54ª	centimeters (cm)
Area	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi²)	=	2.589 988	square kilometers (km²)
	1 square yard (yd²)	=	0.836 127 4	square meters (m²)
	1 square foot (ft²)	=	0.092 903 04°	square meters (m²)
	1 square inch (in²)	=	6.451 6ª	square centimeters (cm <sup>2</sup> )
Energy	1 British thermal unit (Btu)°	=	1,055.055 852 62ª	joules (J)
	1 calorie (cal)	=	4.186 8 <sup>a</sup>	joules (J)
	1 kilowatthour (kWh)	=	3.6ª	megajoules (MJ)
Temperature <sup>d</sup>	32 degrees Fahrenheit (°F)	=	O <sup>a</sup>	degrees Celsius (°C)
	212 degrees Fahrenheit (°F)	=	100°	degrees Celsius (°C)

<sup>&</sup>lt;sup>a</sup>Exact conversion.

<sup>&</sup>lt;sup>b</sup>Calculated by the Energy Information Administration.

<sup>&</sup>lt;sup>c</sup>The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956. <sup>d</sup>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
10¹	deka	da	10 <sup>-1</sup>	deci	d
10 <sup>2</sup>	hecto	h	10 <sup>-2</sup>	centi	С
10 <sup>3</sup>	kilo	k	10 <sup>-3</sup>	milli	m
10 <sup>6</sup>	mega	М	10 <sup>-6</sup>	micro	μ
10 <sup>9</sup>	giga	G	10 <sup>-9</sup>	nano	n
10 <sup>12</sup>	tera	Т	10 <sup>-12</sup>	pico	р
10 <sup>15</sup>	peta	Р	10 <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	Е	10 <sup>-18</sup>	atto	а
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	Z
10 <sup>24</sup>	yotta	Υ	10 <sup>-24</sup>	yocto	у

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		Equiva	lent in Final Units
Petroleum	1 barrel (bbl)	=	42ª	U.S. gallons (gal)
Coal	1 short ton	=	2,000ª	pounds (lb)
	1 long ton	=	2,240 <sup>a</sup>	pounds (lb)
	1 metric ton (t)	=	1,000°	kilograms (kg)
Wood	1 cord (cd)	=	1.25 <sup>b</sup>	shorts tons
	1 cord (cd)	=	128 <sup>a</sup>	cubic feet (ft3)

<sup>&</sup>lt;sup>a</sup>Exact conversion.

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.

<sup>&</sup>lt;sup>b</sup>Calculated by the Energy Information Administration.

Web Page: http://www.eia.doe.gov/emeu/mer/append\_b.html.

# 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))<sub>n</sub>-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.

**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:** Any liquid **biofuel** suitable as a diesel fuel substitute or diesel fuel additive or extender. Biodiesel fuels are typically made from oils such as soybean, rapeseed, or sunflower, or from animal tallow. Biodiesel can also be made from **hydrocarbons** derived from agricultural products such as rice hulls.

**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 steamelectric 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 branchedchain 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 10.9° 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 31.1° 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.

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 chaineddollar 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.

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 2,000° 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 60° 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 -127.48° F. It is extracted from natural gas and refinery gas streams.

Ethanol (CH<sub>3</sub>-CH<sub>2</sub>OH): 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 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 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 Department of Energy was created. Its functions were divided between the 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 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<sub>2</sub>H<sub>5</sub>OH): 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.

**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 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.

**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 is used 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 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° 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 -260° 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<sub>4</sub>) 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<sub>3</sub>)<sub>3</sub>COCH<sub>3</sub>, intended for motor gasoline blending. See Oxygenates.

**Methanol**: A light, volatile alcohol (CH<sub>3</sub>OH) 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 122°F to 158°F at the 10-percent recovery point to 365°F to 374°F 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 consumersabout 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 petroleum policies among member countries. It was created at the Baghdad Conference on September 10–14, 1960, by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. The five founding members were later joined by nine other members: Qatar (1961); Indonesia (1962); Libya (1962); United Arab Emirates (1967); Algeria (1969); Nigeria (1971); Ecuador (1973–1992, 2007); Gabon (1975–1994) and Angola (2007).

**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 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 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 -43.67° 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, and oxygenates. 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 hydrolectric 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.

Unaccounted-for Crude Oil: Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

**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.

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.: The Union of Soviet Socialist Republics consisted of 15 constituent republics: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. As a political entity, the U.S.S.R. ceased to exist as of December 31, 1991.

**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.